

MyVallox Control

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**VALLOX** 

### User Manual





# **MyVallox Control**

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## 1. Introduction

## 1.1. General Safety Instructions

Read these instructions before operating the ventilation unit. Safe and appropriate handling of the unit requires knowledge of the basic safety regulations, and of the intended use of the ventilation unit.

These instructions contain all the information needed for the safe operation of the unit. All persons who install, operate, and maintain the ventilation unit must follow the provided instructions. Furthermore, all local accident prevention regulations must be observed.

#### 1.1.1. Installation



Installation and setup should only be carried out by a qualified specialist. Electrical installations and connections must only be carried out by an electrician and in compliance with local regulations.

## 1.2. Warranty and liability

The guarantee and liability exclude damage resulting from:

- Inappropriate use of the ventilation unit or the control panel
- · Incorrect or inappropriate installation, setup, or use
- · Failure to follow instructions regarding transport, installation, operation, or maintenance
- · Structural or electronic modifications or changes made to the software

## 1.3. Intended use

All MyVallox ventilation units have been designed to provide appropriate and continuous ventilation so as to present no threat to health of people and to maintain structures in good condition.

• IMPORTANT: In order to ensure that the indoor air presents no harm to health and remains optimal also for the structures of the building, ventilation must be kept on without disruptions. It is recommended that ventilation be left turned on during long holidays also. This keeps the indoor air fresh and prevents humidity from condensing in the ventilation ducts and structures. It also reduces the risk of moisture damage.



**IMPORTANT:** 

Prolonged overpressure can result in damage to the structures of the building.

# 1.4. Disposal of the ventilation unit

Do not dispose of electronic devices with household waste. Follow local laws and regulations on safe and ecological disposal of the product.

See the MyVallox ventilation unit recylcing instructions at: <a href="https://res.cloudinary.com/vallox/image/upload/v1704800151/FileStock/ValidManuals/Recycling\_Instructions\_Vallox\_Ventilation\_units.pdf">https://res.cloudinary.com/vallox/image/upload/v1704800151/FileStock/ValidManuals/Recycling\_Instructions\_Vallox\_Ventilation\_units.pdf</a>.



# 1.5. Safety signs used in the instructions

⚠ DANGER:	Indicates a hazard that will result in death or serious injury if not avoided.
<b>⚠</b> WARNING:	Indicates a hazard that can result in death or serious injury if not avoided.
▲ CAUTION:	Indicates a hazard that can result in minor or moderate injury if not avoided.
IMPORTANT:	Indicates a hazard that can result in damage to property or loss of data if not avoided.
• NOTE:	Indicates essential information about the product.

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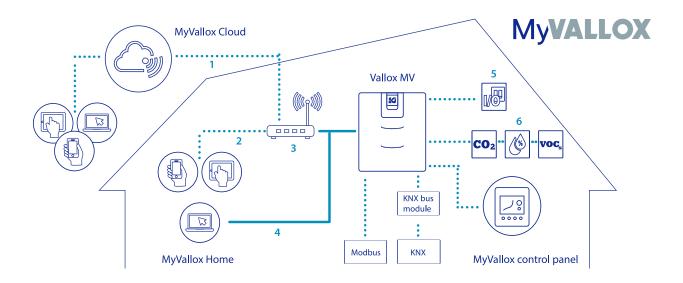


TID.	Provides additional information about the use of
TIP:	the product and its benefits.

# 1.6. Compatibility of the MyVallox Control panel

The control panel is compatible with all MyVallox ventilation units.

# 1.7. System description



1	Internet
2	WLAN
3	Router
4	WLAN/LAN
5	Additional switch
6	Sensors



## 1.8. Ventilation unit control options

The Vallox ventilation unit can be controlled by the following means:

- · Through the MyVallox control panel installed to the building
- Through the MyVallox Home LAN connection and the MyVallox Home/Cloud user interface
- · Through the MyVallox Cloud service and the MyVallox Home/Cloud user interface
- Through a remote monitoring or building automation system that uses voltage signals or Modbus messages.

The ventilation unit's integrated humidity and carbon dioxide sensors control ventilation automatically, as necessary. Ventilation can also be adjusted automatically by using an optional carbon dioxide, humidity, or VOC (air quality) sensor. When these sensors are used, ventilation remains optimal even when the apartment is unoccupied. The standard equipment and available optional accessories vary from country to country.

Each user can use the week clock to adjust the ventilation to fit their lifestyle and schedule.

#### TIP:

The MyVallox control panel automatically switches to the sleep mode when the pre-set Sleep time has elapsed. To reactivate the MyVallox control panel, press any button.

## 1.8.1. Connecting the ventilation unit to the cloud service

You can connect the ventilation unit to the MyVallox Cloud service. In the cloud service, you can control ventilation remotely with a smartphone or tablet, for example. The unit software is updated automatically through the cloud service. To connect to the cloud service, the ventilation unit must be connected to the internet through LAN and registered for the cloud service. By registering the unit, you create a MyVallox Cloud account for yourself. Read more about the service at <a href="https://cloud.vallox.com">https://cloud.vallox.com</a>.

To register a Vallox ventilation unit with the MyVallox Cloud service:

- 1. Connect one end of the network cable to the grey connector of the Vallox ventilation unit and the other end to the router.
- Open the computer's network settings by selecting Start → My Computer → Network. You can see a computer icon with the text Vallox and a series of numbers. Open the MyVallox Home user interface by double clicking on the icon. The MyVallox Home user interface opens.

  OR

Select on the MyVallox control panel Service menu → Diagnostics display → IP address.

Type in the IP address and press Enter. The MyVallox Home user interface opens.



- 3. Select Special functions.
- 4. The MyVallox Cloud area will open and you can see whether you are signed in to the cloud service.
- 5. Select Connect.
- 6. The registration page of the MyVallox Cloud cloud service opens, Ventilation unit ID i.e. the unique identification number of the unit will be automatically generated into the field.
- 7. Enter the following information in the form:
  - Ventilation unit name Enter the ventilation unit name of your choice in this field.
  - Language Select the desired language from the menu.
  - Country Select the desired country from the menu.
  - Choose username Enter the username of your choice in this field.
  - Email Enter the email address of your choice in this field.
  - Password Enter the password of your choice in this field.
  - Retype your password Retype your password in this field.
- 8. Select the I want to receive notifications related to my ventilation unit box if you wish to receive email notifications related to your ventilation unit.
- 9. Read the terms and conditions of use of the service and select I have read and accepted the terms and conditions of use of the MyVallox Cloud cloud service. The use of the service requires that the user has accepted the terms and conditions.
- 10. Select Create MyVallox Cloud account. The ventilation unit generates a unique identification code and sends it to the service. The service will remember the unit the next time you sign into the cloud service.
- 11. A confirmation message will be sent to your email address. Click on the link in the message to confirm your email address and to sign in to the cloud service for the first time.
- 12. Once you have signed in, the MyVallox Cloud service will open and the main page of the MyVallox Cloud account will be displayed in your browser.

## 1.9. MyVallox Control panel buttons

The MyVallox Control panel contains the buttons described in the following table.



Press the buttons below the display to activate the buttons in the graphic user interface. The control panel is not a touch screen.

Table 1. MyVallox Control panel buttons

Button	Description	
Q	The Change mode button allows you to change the operating mode of the ventilation unit.	



Button	Description
$\Diamond$	The At Home information button displays the At Home mode information.
₹■	The Away information button displays the Away mode information.
~	The Boost information button displays the Boost mode information.
	The Custom information button displays the Custom mode information.
(i) (E) (5)	The Info button displays information about temperatures and optional sensors.
=	The Settings button opens the settings menu.
t)	The Back button takes you backwards in the menu.
◀	The Left arrow button takes you leftwards in the menu.
> ×	The Right arrow button takes you rightwards in the menu.
<b>~</b>	The OK button accepts the selected option.
×	The Cancel button cancels the selected option.
•	The Select button selects the desired option.
	The Edit button allows you to edit settings.
+	<ul> <li>The Plus button allows you to:</li> <li>Increase the value of the selected setting</li> <li>Move to the next menu item</li> <li>Move from a one-day view to a week view in the temperature, relative humidity or carbon dioxide content graphs.</li> </ul>
_	The Minus button allows you to:  Decrease the value of the selected setting  Return to the previous menu item  Move from a week view to a one-day view in the temperature, relative humidity or carbon dioxide content graphs.
	The Up arrow button takes you upwards in the menu.
•	The Down arrow button takes you downwards in the menu.
<u>~</u>	The Statistics button opens the temperature, relative humidity or carbon dioxide content graph (one-day/week).
<b>•</b> /	These icons indicate the setting hierarchy



Button	Description
	This icon indicates that this function cannot be used at your access level

## 1.10. Unit software

We recommend that the latest software version be always used. Check and download the latest version at <a href="https://cloud.vallox.com">https://cloud.vallox.com</a> either before or immediately after setup.

The current software version of the ventilation unit is shown on the control panel display when the unit is connected to the mains or factory settings are restored. Alternatively, the current software version can be checked from the Unit information display of the Service menu.

Updating the unit software:

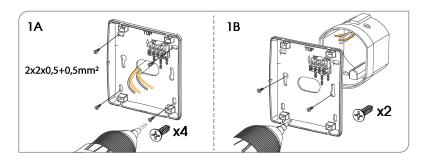
- 1. Unplug the ventilation unit from the mains or turn off the fuse.
- Connect the computer to the control panel of the ventilation unit using a USB MicroB connector.
- 3. Start the ventilation unit. A USB sign will appear on the display of the control panel and the control panel of the ventilation unit cannot be used when it is connected to the computer.
- 4. Transfer the update file you have downloaded onto the ventilation unit. Copy the update file HSWUPD.BIN (Please note! Do not alter the file name!) you have downloaded at the root of the control panel (the control panel will be displayed on your computer as a mass memory or a removable disk drive). When the file has uploaded onto the control panel, remove the USB cable. Next, the control panel will take a while to load the update. The control panel will now start to load the update file onto the motherboard. This can take several hours. The control panel will remain turned on, but it is recommended that the control panel be not used during that time. When the update is ready, the unit will restart automatically.



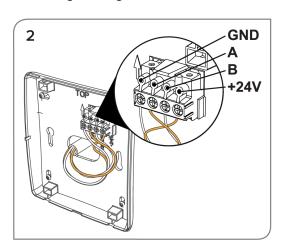
# 2. MyVallox CFi ventilation units

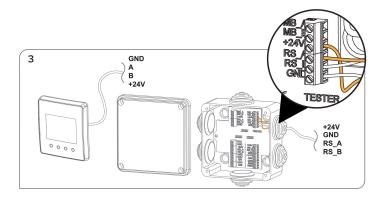
## 2.1. Installation of the MyVallox Control panel

1. Screw the back of the control panel to a wall according to image 1A or to an outlet box according to image 1B.



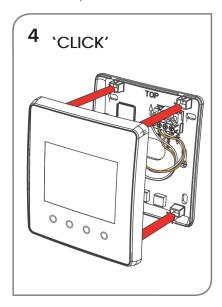
2. Connect the wires to the control panel and the ventilation unit's external connection box according to images 2 and 3.



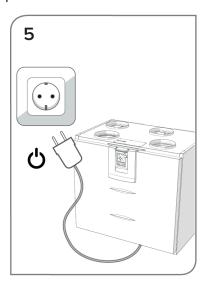


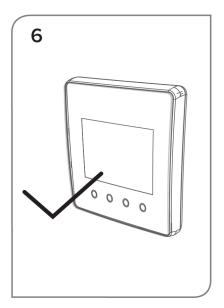


3. Push in the panel's front cover. You can hear a click when the cover is locked in place.



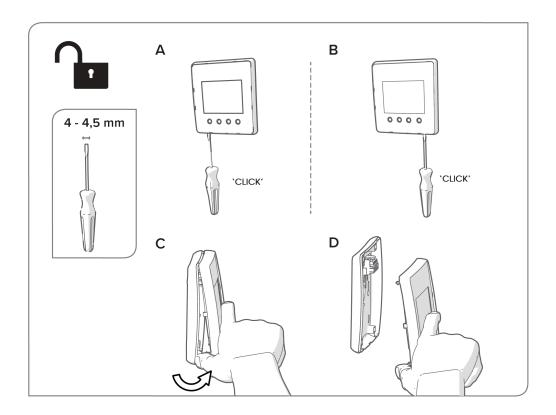
4. Plug in the ventilation unit. If the wires are connected correctly, both the unit and the control panel are turned on.





If you must remove the control panel's front cover, unplug the unit first. Remove the front cover by turning the pawls at the bottom of the panel 90° with a screwdriver and pull out the front cover bottom first.







## 2.2. MyVallox Control setup

Use one of the following to set up the ventilation unit

- MyVallox Control panel
- · MyVallox Touch panel
- MyVallox Home user interface.

#### **MPORTANT:**

The basic fan settings must be set according to the ventilation plan. Do not change these settings.

This section describes the setup of the MyVallox CFi ventilation unit on the MyVallox Control panel step by step.

#### TIP:

If you make a mistake when configuring the settings during guided setup and move to the next phase, finish the guided setup and then change the incorrect setting.

#### **IMPORTANT:**

We recommend you always use the latest software version. Check and download the latest version at <a href="http://cloud.vallox.com">http://cloud.vallox.com</a> either before or immediately after setup. See section *Updating the unit software*.

## 2.2.1. Start guided setup

- 1. Turn on the Vallox ventilation unit.
- 2. When you turn on the unit for the first time, the control panel displays a language menu.

### 2.2.2. Language

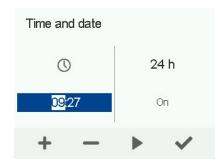
Select the desired language.



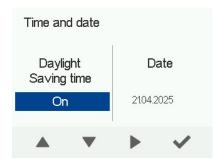


## 2.2.3. Time and date

1. Set the time and select the 24-hour or 12-hour clock.



2. Use the arrow button to switch to/from daylight saving time and set the date.



3. Proceed with the setup by selecting OK:

## 2.2.4. Air flow unit

The air flow unit options are:

- I/s
- m<sup>3</sup>/h
- %



1. Set the air flow unit.





2. Proceed with the setup by selecting OK:

If you use the % unit (fan speed % control), go to Fan speed % control.

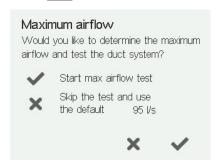


## 2.2.5. Settings (air flow adjustment)

#### 2.2.5.1. Maximum air flow

You can measure the ventilation unit's maximum air flow in the duct system in use. The test takes no longer than one minute and it is not mandatory. To skip the test, select Cancel: X. If the test is skipped, the default maximum air flow value is used.

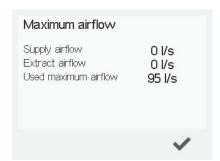
1. Select OK: and start the maximum air flow test.



2. Open the valves. To carry out the maximum air flow test, all the valves/terminal devices must be fully open.



3. The maximum air flow has been determined.



If the maximum air flow is low, the supply or extract air flow may be blocked. In that case, check the ventilation unit and ducts for obstructions.

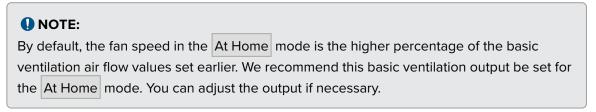


### 2.2.5.2. At Home mode settings

To set the At Home mode settings:

1. Set the supply and extract air flows for the At Home mode and adjust the valves according to the ventilation plan.





2. You can adjust the supply air temperature setting and disable the humidity and carbon dioxide control.



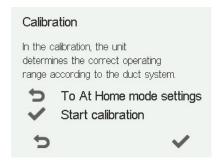
3. Proceed with the setup by selecting OK:



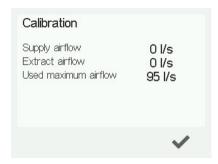
#### 2.2.5.3. Calibration

During calibration, the unit's actual operating range is determined in relation to the ducts in use. This test is mandatory. The test takes no longer than one minute.

1. The calibration screen opens after the At Home mode settings have been configured.



2. After calibration, the unit's actual maximum air flow is shown in relation to the ducts in use.



If the unit indicates that the Away or At Home modes cannot be activated, go back and adjust the air flows for the At Home mode.



#### 2.2.5.4. Away mode settings

The air flows in the Away mode are automatically 30% lower than the air flows in the At Home mode, but they can be adjusted. Other Away mode settings are configured identically to the settings of the At Home mode.

To set the Away mode settings:

1. Set the supply and extract air flows for the Away mode and adjust the valves according to the ventilation plan.



2. You can adjust the supply air temperature setting and disable the humidity and carbon dioxide control.





#### 2.2.5.5. Boost mode settings

The air flows in the Boost mode are automatically 30% higher than the air flows in the At Home mode, but they can be adjusted. Other Boost mode settings are configured identically to the settings of the At Home mode. A timer can also be set for the Boost mode.

To set the Boost mode settings:

1. Set the supply and extract air flows for the Boost mode and adjust the valves according to the ventilation plan.

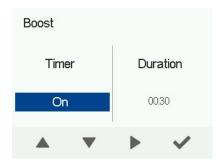


2. You can adjust the supply air temperature setting and disable the humidity and carbon dioxide control.



3. Set a timer for the Boost mode (optional).

When the timer goes off, the ventilation unit switches back to the previous mode.





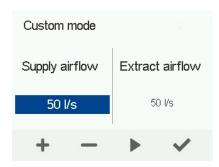
#### 2.2.5.6. Custom mode settings

The Custom mode is used in special circumstances, for example, to compensate for temporary negative pressure caused by a fireplace or cooker hood. In such situations, the difference between the supply and extract air flows should not exceed 30%.

You can set a timer and adjust the air flows and supply air temperature in the Custom mode.

To set the Custom mode settings:

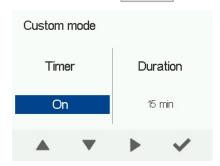
1. Set the supply and extract air flows for the Custom mode and adjust the valves according to the ventilation plan.



2. You can adjust the supply air temperature setting and disable the humidity and carbon dioxide control.



3. Set a timer for the Custom mode (optional).





### 2.2.6. Fan speed % control

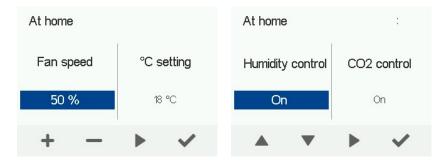
#### 2.2.6.1. At Home mode settings

First, configure the basic fan settings to set the At Home mode's fan speeds.

1. Adjust the valves and set the supply and extract air fans such control percentages that enable the At Home mode's air flows.



2. You can adjust the fan speed and supply air temperature of the At Home mode and disable the humidity and carbon dioxide control.



3. Proceed with the setup by selecting OK:

### 2.2.6.2. Away mode settings

The air flows in the Away mode are automatically 30% lower than the air flows in the At Home mode, but they can be adjusted. Other Away mode settings are configured identically to the settings of the Away mode.

You can also adjust the fan speed and supply air temperature of the Away mode and disable the humidity and carbon dioxide control.



1. Set the Away mode's fan speed and supply air temperature.



2. Set the carbon dioxide and humidity settings for the Away mode.



3. Proceed with the setup by selecting OK:

#### 2.2.6.3. Boost mode settings

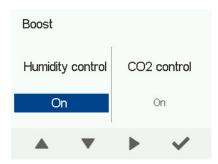
Set the Boost mode's fan speed, supply air temperature and carbon dioxide and humidity control settings. The fan speed in the Boost mode is automatically 30% higher than the fan speed in the At Home mode. You can adjust the fan speed and supply air temperature of the Boost mode and disable the humidity and carbon dioxide control. A timer can also be set for the Boost mode.

1. Set the Boost mode's fan speed and supply air temperature.



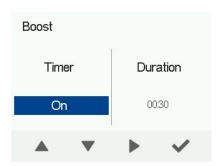


2. Configure the carbon dioxide and humidity settings.



3. Set a timer for the Boost mode (optional).

When the timer goes off, the ventilation unit switches back to the previous mode.

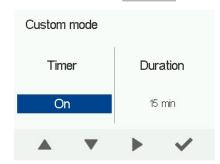


4. Proceed with the setup by selecting OK:

### 2.2.6.4. Custom mode settings

The Custom mode is used in special circumstances, for example, to compensate for temporary negative pressure caused by a fireplace or cooker hood. A timer can also be set for the Custom mode. In such situations, the difference between the supply and extract air flows should not exceed 30%.

1. Set a timer for the Custom mode (optional).





2. Set the Custom mode's fan speeds and supply air temperature.



3. Proceed with the setup by selecting OK:

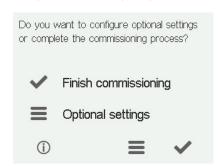
## 2.2.7. Completion of setup or configuration of additional settings

You can either complete the setup or proceed to configure additional settings.

The available additional settings are:

- Modbus settings
- Relay settings
- Input settings
- Access rights
- Control settings

Complete the setup or proceed to configure additional settings.

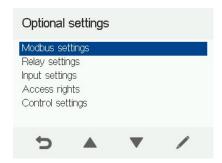


### 2.2.7.1. Configuration of Modbus settings

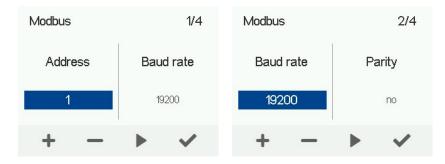
Configuring the Modbus settings is necessary if an external Modbus (e.g. building automation) is used to control the ventilation unit.



1. Open Modbus settings.



2. Configure the Modbus settings.

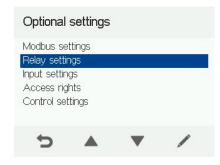


3. Proceed with the setup by selecting OK:

### 2.2.7.2. Configuration of relay settings

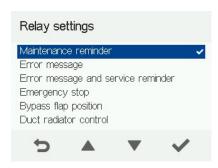
The relay is used to control devices connected to the duct radiator, such as the pump or solenoid valve. Please note that the relay's voltage is only 24 V, so a contactor, for example, must be used to control the 230 VAC feed.

1. Open Relay settings.





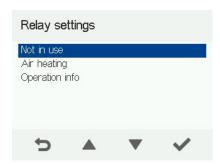
2. Select a relay setting.



- Select Maintenance reminder to notify e.g. the cooker hood or building automation system of the need for filter replacement.
- Select Error message to notify e.g. the cooker hood or building automation system of ventilation unit errors.
- Select Error message and maintenance reminder to notify e.g. the cooker hood or building automation system of ventilation unit errors and the need for filter replacement.
- Select Emergency stop to notify e.g. the cooker hood or building automation system when the emergency stop is activated.
- Select Position of the bypass damper to notify the building automation system of the position of the ventilation unit's bypass damper. The position options are heat recovery or bypass mode.
- Select Duct radiator control to control the ventilation unit's external liquid radiator,
   e.g. an MLV radiator, with the unit. This setting is selected in special situations, when a duct radiator has been installed in the ventilation duct system.
- Select Air heating to control e.g. a liquid heating radiator in the supply air duct with the ventilation unit.
- Select On/off status to notify e.g. the building automation system when the ventilation unit has been turned off or the fans have stopped. The On/off status setting can also be used to control external gate valves.



3. Configure the relay setting.

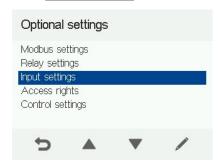


4. Proceed with the setup by selecting OK:

### 2.2.7.3. Configuration of input settings

The following inputs can be configured:

- · Analog input
- Digital input 1
- Digital input 2
- 1. Open Input settings.



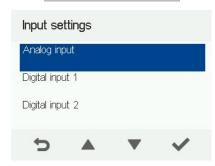
2. Proceed to configure the settings.

#### 2.2.7.3.1. Analog input settings

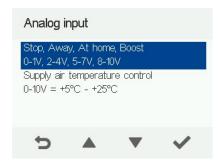
Analog inputs are used when the ventilation unit is controlled with voltage signals. When voltage signals are used, the ventilation mode is changed according to an external voltage from the cooker hood, external controller or building automation system. The analog input is connected to the AN/I and GND terminals in the ventilation unit's connection box.



1. Open Analog input settings.



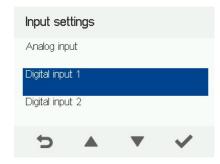
2. Configure the analog input settings.



#### 2.2.7.3.2. Digital input settings

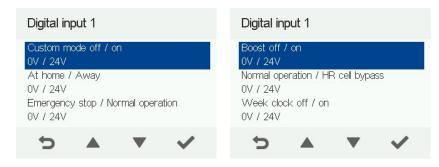
Digital inputs are used when the ventilation unit is controlled with external contact data. The digital inputs are connected to the D/I 1 and +24 V or D/I 2 and +24 V terminals of the ventilation unit's connection box. Please note that the programmable input can be connected to either digital input but they always have identical settings.

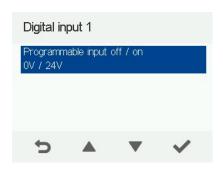
1. Open Digital input settings.





2. Configure the digital input settings.





#### Digital input settings:

- Custom mode off / on Used to compensate for negative pressure caused by e.g. a fireplace, cooker hood or central vacuum system.
- At Home / Away Switches the ventilation unit to the At Home or Away mode according to external contact data from e.g. a switch.
- Emergency stop / Normal Switches off the ventilation unit based on an external emergency stop message from e.g. an automation substation system or switch. Do not select the emergency stop function if the digital input is not connected to a voltage of 24 V.
- Boost off / on Switches the ventilation unit to the Boost mode according to external contact data from e.g. a cooker hood or switch.
- Normal operation / Heat recovery cell bypass Forces the heat recovery cell bypass to activate. Please note that the bypass is only activated if the outdoor temperature is above 5°C.
- Week clock off / on Switches the week clock control on or off according to external contact data from e.g. a switch.
- Programmable input off / on



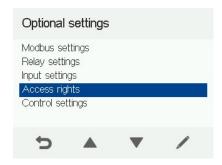
### 2.2.7.4. Determination of access rights

There are three access right tiers:

- Extensive The user can change all the settings of the ventilation unit.
- Normal The user can view the ventilation unit information and make limited changes to the settings.
- Limited The user can change the ventilation mode and view the ventilation unit details.

For more information about access rights, see Access level diagrams.

1. Open Access rights.



2. Use the arrow buttons to select the access level.



The access level has now been set.

3. You can also set a lock code.



#### 2.2.7.5. Control settings

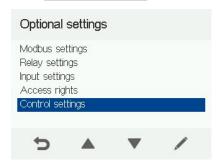
The unit's control method can be selected in the control settings.

The control settings are:

- Temperature selection
- Humidity control
- Humidity limit
- CO2 limit
- Constant air flow limiter

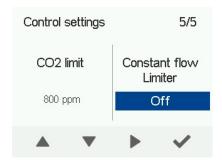
For more information, see *Control settings*.

1. Open Control settings.



2. Configure the Control settings.







Temperature selection (Supply air / Extract air / Cooling)

The supply air temperature control method defines how the ventilation unit controls the temperature of inflowing air. The control method determines how the unit reacts to changes in indoor and outdoor air temperature. The temperature setting (+5...+25°C, recommendation: +18°C) is set in the ventilation mode (At Home, Away, Boost, Custom) settings.

- Supply air (factory setting) The supply air temperature is maintained at the set target value (+5...+25°C). The unit uses automatic heat recovery and, if necessary, post-heating to maintain the target temperature.
- Extract air The supply air temperature is adjusted automatically according to the temperature of air extracted from indoors. The unit reacts to changes in indoor air temperature and maintains balanced indoor air conditions. If the apartment is warm, the supply air is cooled down automatically and vice versa.
- Cooling This control method is based on the extract air temperature. In addition, ventilation is boosted when necessary to keep the supply air temperature close to the target temperature, especially in warm weather. This control method is ideal for situations, in which the indoor temperature rises easily.

Humidity control (Automatic / Manual)

The humidity control method determines how the ventilation unit reacts to the humidity level of indoor air. The unit's integrated humidity sensor is located in the extract air chamber. The unit can also be connected to an external humidity sensor (optional) installed in the apartment.

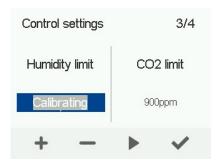
The humidity control boosts the fan speed to the speed set for the Boost mode. If the Boost mode is activated, the speed can be increased to the maximum fan speed. In any case, the humidity control does not reduce the fan speed below the level set for the active ventilation mode (e.g. At Home, Away). The humidity control can be disabled from the ventilation mode settings.

**•• NOTE:** The humidity control does not increase the humidity level in the apartment but removes excess humidity more efficiently.

Adjustment options:



Automatic (factory setting) — The automatic mode is suitable for regular household ventilation. The ventilation unit determines the normal humidity level automatically and updates it seasonally. The ventilation unit strives to restore the normal humidity level after a shower or cooking, for example. When the unit is started up for the first time, it takes approximately 3–10 hours for the unit to determine the humidity level. During this time, the humidity level cannot be adjusted and the screen says Calibrating. When automatic adjustment is enabled, the humidity limit is not set separately.



Manual — The manual mode is ideal for spaces, in which the humidity level of indoor air stays constant around the year, for example in indoor pool facilities. The humidity level is set between 1 and 99%RH, and the ventilation unit strives to maintain this level. When manual adjustment is used, the humidity limit must be set separately (see Setting the humidity limit).

#### Humidity limit

- When the humidity control is set to Automatic, the unit determines the base level automatically. This mode is ideal for regular household ventilation, and the user does not have to set the humidity level separately. If the screen says Calibrating, the unit is in the middle of determining the normal humidity level.
- When the humidity control is set to Manual, the user must set the humidity limit between 1 and 99%RH. Usually, the suitable humidity level for a normal living environment is around 40–60%RH. A higher humidity limit (e.g. over 70%RH) is suitable for spaces with a naturally high humidity level, such as indoor pool facilities or humid work environments.

#### CO<sub>2</sub> limit

The ventilation unit adjusts the fan speed automatically according to the carbon dioxide content of indoor air. The carbon dioxide level can be set between 500 and 2000 ppm, and the factory setting is 800 ppm. This level is suitable for regular household use and ensures a good indoor air quality.



You can set the level higher if, for example, there is a large number of people in the apartment simultaneously and ventilation seems to activate too easily. A lower carbon dioxide level improves the indoor air quality further, as the system reacts quickly to minor increases in carbon dioxide content and activates the ventilation.

The ventilation unit is equipped with a carbon dioxide sensor, which is located in the unit's extract air chamber. A separate carbon dioxide sensor (optional) can also be installed in the apartment. The carbon dioxide control boosts the fan speed to the speed set for the Boost mode. If the Boost mode is activated, the speed can be increased to the maximum fan speed. In any case, the carbon dioxide control does not reduce the fan speed below the level set for the active ventilation mode (e.g. At Home, Away).

#### Constant airflow limit

By default, the constant air flow limiter is deactivated. When the function is activated, it monitors the ventilation unit's operation automatically, and the unit runs as usual with the constant air flow function enabled. If ventilation performance becomes weaker due to, for example, a blocked filter, the constant air flow limiter stops the fan speed from spiking to avoid excessive noise. The limiter icon indicates when the function is active.

When the air flow returns to normal (e.g. after the blocked filter has been cleaned), the constant air flow limiter is deactivated automatically and the unit continues to adjust the constant air flow normally. The function remains in stand-by mode. The function is used in locations, where the filters are replaced centrally, for example, in apartment blocks.

# 2.3. Using MyVallox Control

# 2.3.1. Starting the unit

If you are starting the ventilation unit for the first time or after a maintenance procedure, first connect it to the mains. This will start the unit.

If the ventilation unit was turned off from the control panel (see *Turning the unit off*), you can start it by pressing any control panel button.

#### 2.3.2. Ventilation modes

The Vallox ventilation unit has four ventilation modes:

- At Home Use this mode when the apartment is occupied. The Vallox ventilation unit has been set up according to the ventilation plan. The At Home mode changes the indoor air at the recommended rate approximately once in two hours.
- Away Use this mode when the apartment is vacant for a longer period of time, e.g. during a

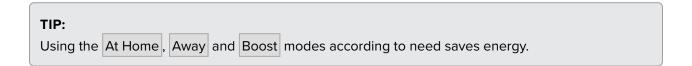


trip or longer absence. By default, the Away mode's ventilation speed is 30% lower than the speed of the At Home mode.

- Boost Use this mode to enhance ventilation when there is a large number of people in the apartment or for other reasons. By default, the Boost mode's ventilation speed is 30% higher than the speed of the At Home mode.
- Custom Use this mode e.g. when lighting a fire in a fireplace. The mode is primarily used to create a momentary overpressure in the apartment.

**① IMPORTANT:** Prolonged overpressure can damage the building structures.





### 2.3.2.1. Symbols related to ventilation modes

The image below is an example of a ventilation mode screen:



The following symbols are used on the ventilation mode screens:



Table 2. Symbols for ventilation modes

Symbol	Description
	The mode in use is either At Home, Away or Boost. The week clock is turned off.
0	The mode in use is either At Home, Away or Boost. The week clock is on.
•	The Custom mode is used. The week clock might be turned on.
	The mode in use is either At Home, Away or Boost. The programmable input has been activated.
An An	The constant air flow limiter is activated and it prevents the fan speed from increasing excessively.
<b>% % %</b>	The fan symbols indicate the currently used mode.  • Fan and one shaded bar — The Away mode is in use.  • Fan and two shaded bars — The At Home mode is in use.  • Fan and three shaded bars — The Boost mode is in use.
	<ul> <li>The droplet symbols indicate the relative humidity of air.</li> <li>Droplet and one shaded bar — A humidity sensor has been installed and the relative humidity of air is normal.</li> <li>Droplet and two shaded bars — The relative humidity of air is slightly higher than normal. If automatic adjustment is enabled, the fan speed increases.</li> <li>Droplet and three shaded bars — The relative humidity of air is significantly higher than normal. If automatic adjustment is enabled, the fan speed increases.</li> </ul>
CO <sub>2</sub> CO <sub>2</sub> CO <sub>2</sub>	The CO <sub>2</sub> symbols indicate the carbon dioxide or VOC content of air.  • CO <sub>2</sub> and one shaded bar — A carbon dioxide or VOC sensor has been installed and the level is normal.



Symbol	Description
	CO <sub>2</sub> and two shaded bars — The carbon dioxide or VOC
	level is slightly higher than normal. If automatic adjustment is
	enabled, the fan speed increases.
	CO <sub>2</sub> and three shaded bars — The carbon dioxide or VOC
	level is significantly higher than normal. If automatic
	adjustment is enabled, the fan speed increases.

# 2.3.2.2. Changing the ventilation mode

1. Tap on the Change mode button until the icon of the desired ventilation mode appears on the display.



2. Wait until the main view of the selected ventilation mode opens.

At Home mode icon:



Use this mode when someone is actively living in the apartment.

Away mode icon:



Use this mode when the apartment is vacant for a longer period of time, e.g. during a trip or longer absence.

Boost mode icon:





Use this mode to enhance ventilation, e.g. when there is a large number of people in the apartment or property.





Use this mode e.g. when lighting a fire in a fireplace. The mode is primarily used to create a momentary overpressure in the apartment

The ventilation mode has now been changed.

# 2.3.2.3. Browsing the ventilation mode information

The next sections describe how to browse the basic information of different ventilation modes. See also *Changing the ventilation mode settings*.

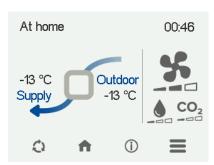
### 2.3.2.3.1. Browsing the At Home mode information

To browse the basic information of the At Home mode:

1. Press the Change mode button Q until the icon of the At Home mode appears on the display:



2. Please wait until the main view of the At Home mode opens:



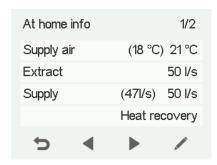
The main view shows a summary of the mode information.

3. Select At Home information:



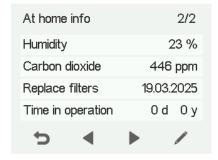


4. The first mode information screen opens:



This screen shows the following information:

- Supply air Indicates the temperature of the air blown into the building and its set value (in brackets), if the supply air is warmer than the set value.
- Extract Indicates the current extract air flow (I/s or m³/h). The extract air flow setting is determined automatically based on the supply air flow, and the user cannot adjust it.
- Supply Indicates the current supply air flow (I/s or m³/h). If the ventilation unit is automatically boosting the air flow in response to an increased humidity or carbon dioxide level or a need for cooling, the actual air flow can be higher than the set value. The set value is shown in brackets.
- Cell status The ventilation unit has the following HR cell modes:
  - Heat recovery —The HR cell heats the air flowing in from outdoors with extract air.
  - Cold recovery The HR cell cools the air flowing in from outdoors with extract air when the temperature of the air that is extracted from the apartment is two degrees lower than the outdoor temperature.
  - Bypass The inflowing air bypasses the HR cell.
  - HR cell defrost in progress The HR cell is being defrosted.
- 5. Select Right arrow. The second mode information screen opens:



This screen shows the following information:

• Humidity —Indicates the highest relative humidity value measured by the sensors.



- Carbon dioxide Indicates the highest carbon dioxide value measured by the sensors.
- Replace filters Indicates the next recommended filter replacement date.
- Time in operation Indicates for how long the unit has been running.

#### 2.3.2.3.2. Browsing the Away mode information

To browse the basic Away mode information of the Vallox CFi ventilation unit:

1. Press the Change mode button until the icon of the Away mode appears on the display:



2. Please wait until the main view of the Away mode opens:



The main view shows a summary of the mode information.

3. Select Away information:

The first mode information screen opens:



This screen shows the following information:

• Supply air — Indicates the actual temperature of the air flowing into the apartment



and the supply air temperature setting (in parentheses) if the supply air is warmer than the value set.

- Extract Indicates the current extract air flow (I/s or m³/h). The extract air flow setting is determined automatically based on the supply air flow, and the user cannot adjust it.
- Supply Indicates the current supply air flow (I/s or m³/h). If the ventilation unit is automatically boosting the air flow in response to an increased humidity or carbon dioxide level or a need for cooling, the actual air flow can be higher than the set value. The set value is shown in brackets.
- Cell status The ventilation unit has the following HR cell modes:
  - Heat recovery The HR cell heats the air flowing in from outdoors with extract air.
  - Cold recovery The HR cell cools the air flowing in from outdoors with extract air when the temperature of the air that is extracted from the apartment is two degrees lower than the outdoor temperature.
  - Bypass The inflowing air bypasses the HR cell.
  - HR cell defrost in progress The HR cell is being defrosted.
- 4. Select Right arrow. The second mode information screen opens:



This screen shows the following information:

- Humidity Indicates the highest relative humidity value measured by the sensors.
- Carbon dioxide Indicates the highest carbon dioxide value measured by the sensors.
- Replace filters Indicates the next recommended filter replacement date.
- Time in operation Indicates for how long the unit has been running.

# 2.3.2.3.3. Browsing the Boost mode information

To browse the basic information of the Boost mode:



1. Press the Change mode button until the icon of the Boost mode appears on the display:



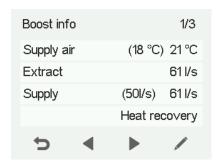
2. Please wait until the main view of the Boost mode opens:



The main view shows a summary of the mode information.

3. Select Boost information :

The first mode information screen opens:



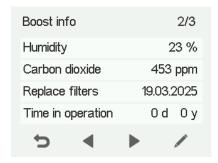
This screen shows the following information:

- Supply air Indicates the actual temperature of the air flowing into the apartment and the supply air temperature setting (in parentheses) if the supply air is warmer than the value set.
- Extract Indicates the current extract air flow (I/s or m³/h). The extract air flow setting is determined automatically based on the supply air flow, and the user cannot adjust it
- Supply Indicates the current supply air flow (I/s or m³/h). If the ventilation unit is automatically boosting the air flow in response to an increased humidity or carbon dioxide level or a need for cooling, the actual air flow can be higher than the set value.



The set value is shown in brackets.

- Cell status The ventilation unit has the following HR cell modes:
  - Heat recovery The HR cell heats the air flowing in from outdoors with extract air.
  - Cold recovery The HR cell cools the air flowing in from outdoors with extract air when the temperature of the air that is extracted from the apartment is two degrees lower than the outdoor temperature.
  - Bypass The inflowing air bypasses the HR cell.
  - HR cell defrost in progress The HR cell is being defrosted.
- 4. Select Right arrow. The second mode information screen opens:



This screen shows the following information:

- Humidity Indicates the highest relative humidity value measured by the sensors.
- Carbon dioxide Indicates the highest carbon dioxide value measured by the sensors.
- Replace filters Indicates the next recommended filter replacement date.
- Time in operation Indicates for how long the unit has been running.

#### 2.3.2.3.4. Browsing the Custom mode information

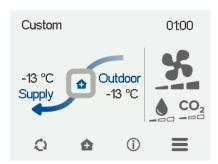
To browse the basic Custom mode information of the Vallox CFi ventilation unit:

1. Press the Change mode button until the icon of the Custom mode appears on the display:





2. Please wait until the main view of the Custom mode opens:



The main view shows a summary of the mode information.

3. Select Custom information :

The first mode information screen opens:



This screen shows the following information:

- Duration Indicates the duration of the Custom mode, when the Custom mode is activated. The duration is given in hours and minutes.
- Remaining Indicates how much time is remaining in the Custom mode.
- $\circ$  Supply air flow Indicates the current supply air flow (I/s or m $^3$ /h).
- Extract air flow Indicates the current extract air flow (I/s or m<sup>3</sup>/h).

• NOTE: Unlike in other ventilation modes, the automatic boost functions (humidity, carbon dioxide and cooling) or freeze protection are not available in the Custom mode. The Custom mode should only be used temporarily to balance ventilation when a fireplace or cooker hood is used, for example.



### 2.3.2.4. Changing the ventilation mode settings

The next sections describe how to change the ventilation settings of different ventilation modes.

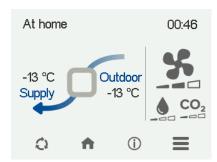
# 2.3.2.4.1. Change the At Home mode settings

To change the At Home mode settings of the Vallox CFi ventilation unit:

1. Press the Change mode button Q until the icon of the At Home mode appears on the display:



2. Please wait until the main view of the At Home mode opens:



- 3. Select At Home information:4. Select Edit.
  - The air flow control screen opens:



5. Use the Plus and Minus buttons to set the target supply air flow level. The extract air flow level is adjusted automatically according to the supply air flow, and the user does not have to adjust it separately.



6. Select Right arrow.

The temperature control screen opens:



7. Use the Plus and Minus buttons to set the target supply air temperature for this ventilation mode.

You can set the temperature between  $+5^{\circ}$ C and  $+25^{\circ}$ C. The recommended temperature is  $+18^{\circ}$ C or  $2-3^{\circ}$ C below room temperature.

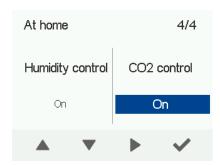
8. Select Right arrow.

The screen for automatic fan speed control based on relative humidity opens:



- 9. Use the arrow buttons to enable or disable automatic fan speed adjustment based on relative humidity.
- 10. Select Right arrow.

The screen for automatic fan speed control based on carbon dioxide content opens:





- 11. Use the arrow buttons to enable or disable automatic fan speed adjustment based on carbon dioxide content.
- 12. Select OK.

The At Home mode settings have now been set.

# 2.3.2.4.2. Change the Away mode settings

To change the Away mode settings:

1. Press the Change mode button Q until the icon of the Away mode appears on the display:



2. Please wait until the main view of the Away mode opens:



- 3. Select Away information:
- 4. Select Edit.

The air flow control screen opens:



5. Use the Plus and Minus buttons to set the target supply air flow level. The extract air flow level is adjusted automatically according to the supply air flow, and the user does not have to adjust it separately.



6. Select Right arrow.

The temperature control screen opens:



7. Use the Plus and Minus buttons to set the target supply air temperature for this ventilation mode.

The temperature range is  $+5^{\circ}\text{C} - +25^{\circ}\text{C}$ .

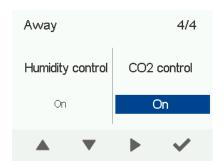
8. Select Right arrow.

The screen for automatic fan speed control based on relative humidity opens:



- 9. Use the arrow buttons to enable or disable automatic fan speed adjustment based on relative humidity.
- 10. Select Right arrow.

The screen for automatic fan speed control based on carbon dioxide content opens:





- 11. Use the arrow buttons to enable or disable automatic fan speed adjustment based on carbon dioxide content.
- 12. Select OK.

The Away mode settings have now been set.

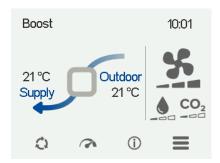
# 2.3.2.4.3. Change the Boost mode settings

To change the Boost mode settings:

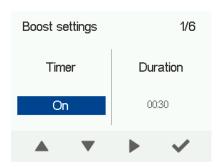
1. Press the Change mode button Q until the icon of the Boost mode appears on the display:



2. Please wait until the main view of the Boost mode opens:



- 3. Select Boost information:4. Select Edit.
  - The setup screen for the mode timer function opens:



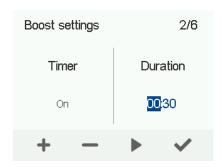
- 5. Use the arrow buttons to turn the timer function on or off. The options are:
  - On When the timer function is on, the selected ventilation mode is active for the period indicated by the timer.
  - $\circ$  Off When the timer function is off, the selected ventilation mode is active until you



change the mode (or the week clock changes the mode).

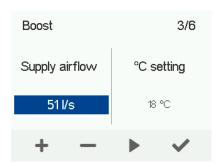
6. Select Right arrow.

The screen for setting the timer duration for the mode opens:

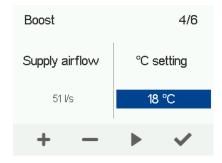


- 7. Use the Plus and Minus buttons to set the timer in hours and minutes for the mode. This value indicates the duration of boosted ventilation when the Boost mode is activated.
- 8. Select Right arrow.

The air flow control screen opens:



- 9. Use the Plus and Minus buttons to set the target supply air flow level. The extract air flow level is adjusted automatically according to the supply air flow, and the user does not have to adjust it separately.
- 10. Select Right arrow. The temperature control screen opens:



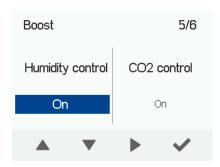


11. Use the Plus and Minus buttons to set the target supply air temperature for this ventilation mode.

The temperature range is  $+5^{\circ}$ C  $- +25^{\circ}$ C.

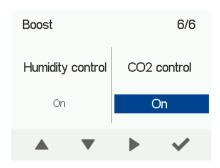
12. Select Right arrow.

The screen for automatic fan speed control based on relative humidity opens:



- 13. Use the arrow buttons to enable or disable automatic fan speed adjustment based on relative humidity.
- 14. Select Right arrow.

The screen for automatic fan speed control based on carbon dioxide content opens:



- 15. Use the arrow buttons to enable or disable automatic fan speed adjustment based on carbon dioxide content.
- 16. Select OK.

The Boost mode settings have now been set.

# 2.3.2.4.4. Change the Custom mode settings

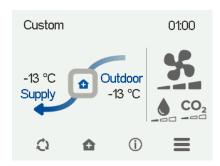
To change the Custom mode settings of the Vallox CFi ventilation unit:



1. Press the Change mode button until the icon of the Custom mode appears on the display:



2. Please wait until the main view of the Custom mode opens:



The main view shows a summary of the mode information.

- 3. Select Custom information:
- 4. Select Edit.

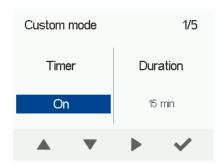
The setup screen for the mode timer function opens:



- 5. Use the arrow buttons to turn the timer function on or off. The options are:
  - On When the timer function is on, the selected ventilation mode is active for the period indicated by the timer.
  - Off When the timer function is off, the selected ventilation mode is active until you change the mode (or the week clock changes the mode).
- 6. Select Right arrow.

The screen for setting the Custom mode duration opens:





- 7. Use the Plus and Minus buttons to set the Custom mode duration in minutes. This value indicates the duration of the Custom mode, when the Custom mode is activated. The recommended duration is 15–30 min.
- 8. Select Right arrow.

The supply air flow control screen opens:



9. Use the Plus and Minus buttons to set the supply air output.

**TIP:** If you want to create temporary high pressure in the Boost mode, for example when a fireplace is lit or the cooker hood is used, increase the supply air output. Reducing the extract air output is not recommended.

10. Select Right arrow.

The extract air flow control screen opens:

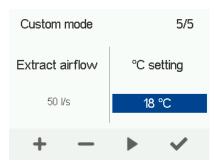


11. Use the Plus and Minus buttons to set the extract air output.



12. Use the Plus and Minus buttons to adjust the temperature of supply air. The temperature range is  $+5^{\circ}\text{C} - +25^{\circ}\text{C}$ .

The recommended temperature is +18°C, or a couple degrees cooler than the room temperature.



13. Select OK.

The Custom mode settings have now been set.

# 2.3.3. Temperatures and sensors

This section describes how to browse temperature and sensor information on the MyVallox Control panel.

# 2.3.3.1. Browsing of temperature information

To browse temperature and sensor information:

- Select Settings . \_\_\_\_\_
   Select Temperatures and sensors with the arrow buttons:
  - Temperatures and sensors



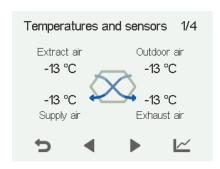
3. Select OK.

#### TIP:

You can also access the temperature and sensor information by selecting the information button on the mode screen:



A summary of the temperatures and sensors appears:



This screen shows the following information:

- Extract air Indicates the temperature of air flowing into the unit and extracted from the apartment.
- Outdoor air Indicates the temperature of air flowing into the unit from outside.
- Supply air Indicates the temperature of air flowing into the apartment from the unit.
- Exhaust air Indicates the temperature of air flowing out of the unit.

# 2.3.3.2. Browsing of temperature statistics

To browse the temperature statistics:

- Select Settings
   Select Temperatures and sensors with the arrow buttons:
  - 2/9

    Temperatures and sensors



3. Select OK.

#### TIP:

You can also access the temperature and sensor information by selecting the information button on the mode screen:



A summary of the temperatures appears:



4. Select Statistics:

A graph describing the indoor air temperature in the past 24 hours appears:



### **NOTE:**

The daily statistics are reset after a power cut.

5. Select Right arrow.

A graph describing the outdoor air temperature in the past 24 hours appears:





# 6. Select Right arrow.

A graph describing the supply air temperature in the past 24 hours appears:



# 7. Select Right arrow.

A graph describing the exhaust air temperature in the past 24 hours appears:



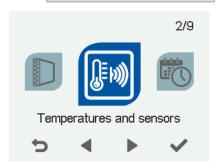
# 8. Exit the menu by selecting Back:

# 2.3.3.3. Browsing of humidity and carbon dioxide levels measured by the sensors

You can browse the humidity and carbon dioxide levels measured by individual sensors:



2. Select Temperatures and sensors with the arrow buttons:



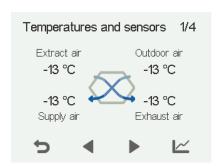
3. Select OK.

#### TIP:

You can also access the temperature and sensor information by selecting the information button on the mode screen:

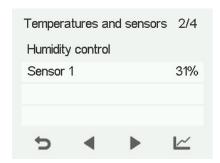


A summary of the temperatures and sensors appears.



4. Select Right arrow.

A screen showing the highest relative humidity level measured by the humidity sensors opens.

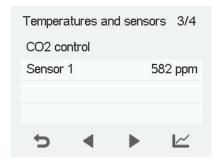




5. Select Right arrow.

A screen showing the highest relative humidity level measured by the humidity sensors opens again.

- 6. Select Right arrow.
- 7. If a carbon dioxide sensor (optional) has been installed, a screen showing the highest carbon dioxide level measured by the carbon dioxide sensors (ppm = parts per million) opens.



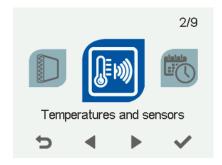
- 8. Select Right arrow.
- 9. A screen showing the highest carbon dioxide level measured by the carbon dioxide sensors opens again.
- 10. Exit the menu by selecting Back:

# 2.3.3.4. Browsing of relative humidity and carbon dioxide statistics

The ventilation unit's integrated humidity and carbon dioxide sensors control ventilation automatically, as necessary. Ventilation can also be adjusted automatically by using an optional carbon dioxide, humidity, or VOC (air quality) sensor.

To browse relative humidity and carbon dioxide statistics:

- 1. Select Settings.
- 2. Select Temperatures and sensors with the arrow buttons:





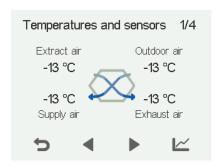
3. Select OK.

#### TIP:

You can also access the temperature and sensor information by selecting the information button on the mode screen:

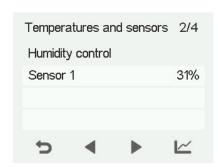


A summary of the temperatures and sensors appears:



4. Select Right arrow.

A screen showing the relative humidity level measured by humidity sensors 1–3 opens.





The daily statistics are reset after a power cut.

5. Select Statistics:

A graph opens depicting the trend of relative humidity in the last 24 hours measured by the sensor that measured the highest value:



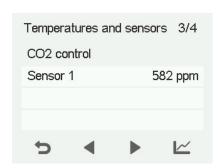


6. Select Right arrow.

A screen showing the relative humidity level measured by humidity sensors 4–6 opens. You can view the statistics like with sensors 1–3.

- 7. When you are ready, return to the sensor group menu by selecting Back:
- 8. Select Right arrow.

A screen showing the carbon dioxide level measured by carbon dioxide sensors 1–3 opens.



- 9. Select Statistics:
- 10. A graph opens depicting the trend of carbon dioxide in the last 24 hours measured by the sensor that measured the highest value:



11. Select Right arrow.

A screen showing the carbon dioxide level measured by carbon dioxide sensors 4–6 opens. You can view the statistics like with sensors 1–3.

12. When you are ready, return to the sensor group menu by selecting Back:



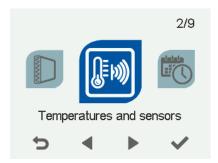
13. Exit the menu by selecting Back:

### 2.3.3.5. Monitoring the fan performance

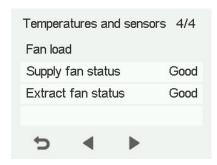
Monitoring the fan performance helps you detect when the fans are forced to increase revolutions because a filter has become blocked or there are other factors obstructing the air flow.

To view the fan performance:

- 1. Select Settings.
- 2. Select the Temperatures and sensors menu or the info button in the main view:



3. The current status of the supply air fan and extract air fan is displayed.



The fan status is depicted as follows:

- Good The fan is working normally.
- Moderate The fan is under a load that is slightly higher than normal. Check for any obstructions, such as dirty filters, a blocked outdoor air grille or ice.
- Critical The fan is under a high load and requires immediate action. Check for any obstructions and clean or repair the system as soon as possible.
- 4. Exit the menu by selecting Back:



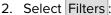
# 2.3.4. Settings

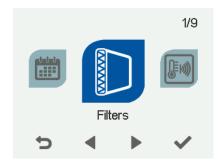
This section describes how to set and change the settings of the MyVallox Control panel and the Vallox ventilation unit.

# 2.3.4.1. Filter settings

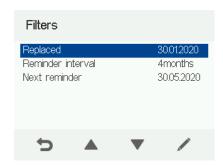
To browse the filter settings:







- 3. Select OK.
- 4. A summary view of filter replacement appears:

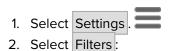


This screen shows the following information:

- Reminder Indicates whether the reminder is enabled or disabled or in special mode.
- Replaced The day on which the filters were last replaced.
- Next reminder The day on which the system will remind about the next filter replacement.
- Reminder interval The reminder interval for filter replacement in months.
- Automatic reset interval The number of days the filter reminder is active. After this,
   the filter reminder is acknowledged automatically.



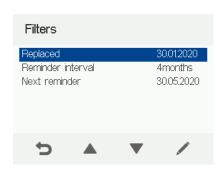
### 2.3.4.1.1. Setting the reminder interval for filter replacement





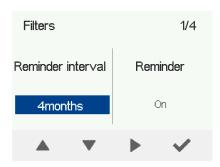
3. Select OK.

A summary view of filter replacement appears:



- 4. Select Down arrow
- 5. Select Edit.

The Reminder interval screen opens:



- 6. Set the reminder interval in months in the Reminder interval field with the **Arrow** buttons. You can set the reminder interval between 1–12 months. The factory setting is 6 months.
- 7. Select OK.



The reminder interval for filter replacement has now been set.

### 2.3.4.1.2. Setting the filter reminder

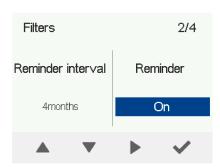
- 1. Select Settings.
- 2. Select Filters:



- 3. Select OK.4. Select Down arrow
- 5. Select Edit.

Select the filter reminder mode:

- o On The filter reminder is enabled and acknowledged manually.
- off The filter reminder is disabled.
- Special mode The filter reminder is enabled and acknowledged manually or automatically within the time set in the Automatic reset interval field.



6. Select OK.

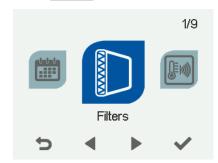
### 2.3.4.1.3. Setting the automatic filter reset interval

**•• NOTE:** You can set the automatic filter reset interval if the reminder is a Special mode reminder.

1. Select Settings.



# 2. Select Filters:



- Select OK.
   Select Down arrow.
   Select Edit.
   Select Right arrow → Automatic reset interval.
- 7. Set the automatic acknowledgement interval in days. You can set the reminder interval between 1–10 days. The factory setting is 14 days.



8. Select OK.

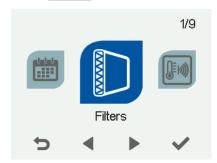
### 2.3.4.1.4. Setting the filter replacement date

For more information about replacing the filters, see the maintenance instructions of the Vallox ventilation unit (see *Maintenance*).

1. Select Settings.

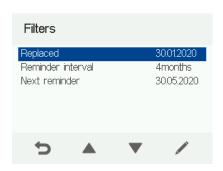


2. Select Filters:



3. Select OK.

A summary view of filter replacement appears:



4. Select Edit.

The Replacing the filters screen opens:



5. Select OK to update the filters as replaced today.

The filter replacement day has now been set.



The unit sets an automatic maintenance reminder to remind you to replace the filters according to the maintenance interval set. See *Setting the reminder interval for filter replacement* and *Filter maintenance reminder*.



#### 2.3.4.1.5. Filter maintenance reminder

The maintenance reminder appears in a pop-up window to remind the user to replace the filter.

Acknowledge the message by selecting OK.

Select Back to postpone the reminder by a week.

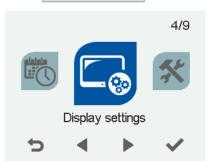
### 2.3.4.2. Display settings

The next sections describe the display settings.

### 2.3.4.2.1. Setting a sleep time

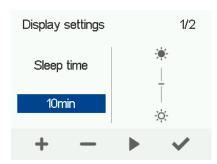
The MyVallox Control panel automatically switches to the sleep mode when the pre-set sleep time has elapsed.

- 1. Select Settings.
- 2. Select Display settings with the arrow buttons:



3. Select OK.

The Display settings 1/2 screen opens.



- 4. Use the Plus and Minus buttons to set the Sleep time in minutes.
- 5. Select OK.



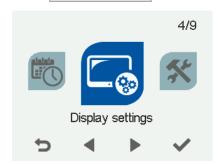
The Sleep time has now been set.

#### TIP:

The MyVallox Control panel automatically switches to the sleep mode when the pre-set Sleep time has elapsed. To reactivate the MyVallox Control panel, press any. button.

### 2.3.4.2.2. Adjusting the display brightness

- 1. Select Settings .
- 2. Select Display settings with the arrow buttons:

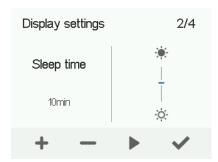


3. Select OK.

The Display settings screen opens.

4. Select Right arrow.

The Display settings 2/2 screen opens.



- 5. Use the Plus and Minus buttons to adjust the display brightness.
- 6. Select OK.

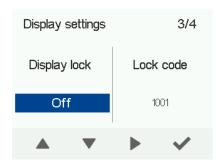
The display brightness has now been adjusted.

#### 2.3.4.2.3. Screen lock



- Select Settings.
   Select Display settings:
  - Display settings

3. You can enable or disable the screen lock. By default, the screen lock is disabled.

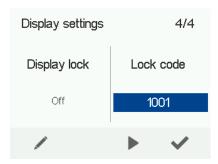


### 2.3.4.2.4. Setting a screen lock code

- Select Settings.
   Select Display settings:
  - Display settings

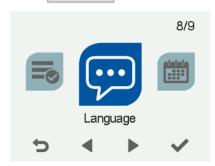


3. The default lock code is 1001. To change the code, select Modify.



# 2.3.4.3. Selecting the user interface language

- 1. Select Settings.
- 2. Select Language with the arrow buttons



- 3. Select OK.
- 4. Use the arrow buttons to select a language:



5. Select OK.

The language has now been selected.

# 2.3.4.4. Setting the time and date

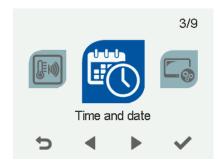


**NOTE:** 

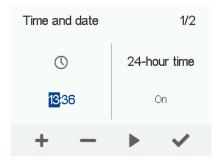
The time is not affected by a power cut of a few hours.

#### 2.3.4.4.1. Setting the time

- 1. Select Settings.
- 2. Select Time and date with the arrow buttons.



- 3. Select OK.
- 4. The Time and date settings open.



- 5. Use the Plus and Minus buttons to set the hours.
- 6. Select Right arrow.
- 7. Use the Plus and Minus buttons to set the minutes.
- 8. Select OK.

The time has now been set.

### 2.3.4.4.2. Setting the 24-hour or 12-hour clock

The 24-hour clock is used by default. To use the 12-hour clock:

1. Select Settings.

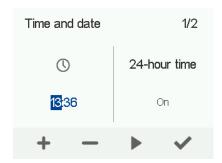


2. Select Time and date with the arrow buttons.

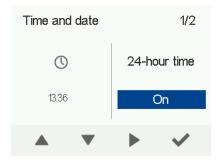


3. Select OK.

The Time and date settings open.



4. Select Right arrow.



- 5. The Select Down arrow . 24 h setting is changed to Off.
- 6. Select OK.

The 12-hour clock has now been selected.

#### TIP:

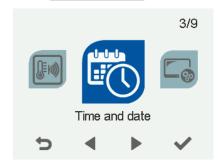
To switch back to the 24-hour clock, follow the steps above but select On at step 6.

### 2.3.4.4.3. Automatic daylight saving time



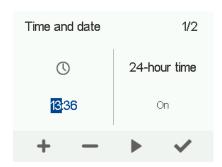
By default, automatic daylight saving time is turned on. To use the manual daylight saving time setting:

- 1. Select Settings.
- 2. Select Time and date with the arrow buttons.

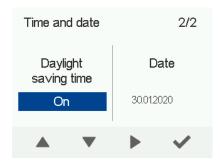


3. Select OK.

The Time and date settings open.



4. Select Right arrow .:



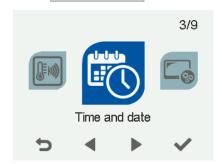
- 5. Use the Up arrow and Down arrow buttons to enable or disable automatic daylight saving time.
- 6. Select OK.

Daylight saving time has now been set.

#### 2.3.4.4.4. Setting the date

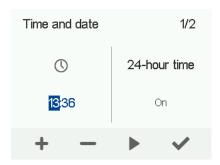


- 1. Select Settings.
- 2. Select Time and date with the arrow buttons.

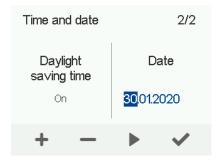


3. Select OK.

The Time and date settings open.



4. Select Right arrow.



- 5. Use the Plus and Minus buttons to set the day.
- 6. Select Right arrow.
- 7. Use the Plus and Minus buttons to set the month.
- 8. Select Right arrow.
- 9. Use the Plus and Minus buttons to set the year.
- 10. Select OK.

The date has now been set.



### 2.3.5. Week clock

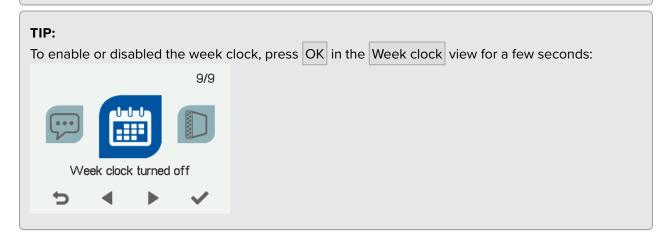
Use the week clock to set the ventilation unit a weekly ventilation programme. You can select one of the following modes for every hour of the week:

- At Home At Home mode on.
- Away Away mode on.
- Boost Boost mode on.
- Custom Custom mode on.
- Standby mode Standby mode on.
- Blank Previous mode on.

### NOTE:

If you change the mode manually when the week clock is used, the selected mode will be active until the next period programmed in the week clock.

If ventilation is controlled by the humidity, carbon dioxide or VOC sensors, the sensors adjust the fan speed regardless of the manually selected mode or week clock settings.



### 2.3.5.1. Setting and editing a weekly program

To set a new weekly program or edit an existing weekly program:

1. Select Settings.

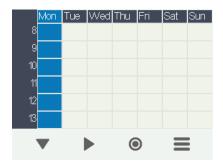


2. Select Week clock on Week clock off with the arrow buttons.



3. Select OK.

The week clock's calendar view opens:



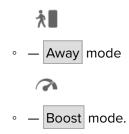
4. Select Edit the week clock:



- 5. Select OK.
- 6. Select Right arrow to set the date.
- 7. Select Down arrow to set the time.
- 8. Use the Select button to select the ventilation mode to be activated at a certain hour. Use the Select button to browse the mode icons. The icons are:







- 9. Follow the steps above to set other ventilation modes for the week clock. See also *Example of setting a weekly program*.
- 10. When you are done selecting the ventilation modes, select Settings.
- 11. Select OK to save the changes. Select Cancel to cancel the changes. Select Back to make more changes to the week clock.

The week clock is now in use and follows the weekly program.

# 2.3.5.2. Turning on the week clock

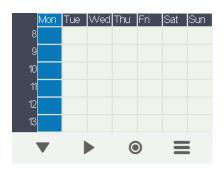
To turn on the week clock:

- 1. Select Settings.
- 2. Select Week clock off with the arrow buttons:



3. Select OK.

The week clock's calendar view opens:





4. Select Settings.

Week clock menu opens:



- 5. Select Start week clock with the arrow buttons.
- 6. Select Select:

The confirmation screen opens:



The week clock is now in use and follows the weekly program.

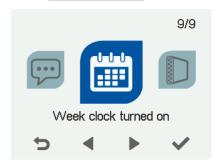
# 2.3.5.3. Turning off the week clock

To turn off the week clock:

1. Select Settings.



2. Select Week clock on with the arrow buttons:



3. Select OK.4. Select Stop week clock with the arrow buttons.5. Select OK.

The confirmation screen opens:



The week clock is now disabled. If you have set a weekly program, it is not deleted.

# 2.3.5.4. Resetting the week clock

To reset a weekly program you have set:

- Select Settings.
   Select Week clock on / Week clock off with the arrow buttons.
  - 9/9

    Week clock turned on



3. Select Remove all settings with the arrow buttons.

The unit asks you to confirm the task.

4. Select OK.

The confirmation screen opens.

The week clock has now been reset.

### 2.3.5.5. Example of setting a weekly program

In this example, the following weekly program has been set:

- Mon-Fri 08-16, you are away from home.
- Mon-Fri 17-07, you are home.
- Sat 08–17, you are home.
- Sat 18–20, you are home and need a ventilation boost e.g. for cooking.
- Sat 21–Mon 08, you are home.

In the images below, the week clock has been set according to the example:



Set the week clock:

- 1. Open the week clock (see. Setting and editing a weekly program)
- 2. Select Monday, and make the following settings:
  - 08:00: select the Away mode.
  - 17:00: select the At Home mode.
- 3. Then make the corresponding settings for the other weekdays.
- 4. Then select Saturday, and make the following settings:
  - 18:00: select the Boost mode.
  - 21:00: select the At Home mode.



5. Make sure the week clock is turned on. If not, see *Turning on the week clock*.

The weekly program has now been set.

### NOTE:

Do not set a ventilation mode separately for every hour. Only include the hours during which you want the ventilation mode to change.

### 2.3.6. Timed function

This section describes the timed function and its settings on the MyVallox Control panel.

### 2.3.6.1. Enabling/disabling the timed function

The timed function allows you to adjust ventilation for a specific period of time, for example, for the duration of a holiday. You can select a ventilation mode and set a start and end date for this mode.

If the timed function is enabled and you switch the ventilation unit to another mode manually, the unit returns to the timed mode at the next midnight. When the pre-set period ends, the unit switches automatically back to the At Home mode.

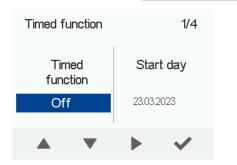
**NOTE:** When the timed function activates, the weekly program is disabled. If the weekly program was active before the activation of the timer function, it reactivates automatically after the pre-set period.

- Select Settings.
   Select Timed function:
  - 10/10

    Timed function



3. Enable or disable the Timed function:

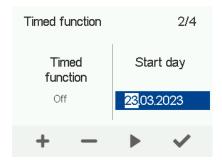


# 2.3.6.2. Setting the timed function's start and end date

Select Settings.
 Select Timed function:

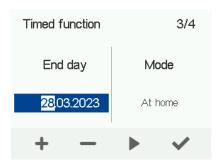


3. Set the timed function's start date:





4. Set the timed function's end date:



# 2.3.6.3. Selecting a timed ventilation mode

The timed function allows you to adjust ventilation in advance for a specific period of time, for example, for the duration of a holiday or another absence. You can pre-set any of the following ventilation modes:

- Away The ventilation unit operates at a lower intensity to save energy during your absence.
- At Home The ventilation unit operates at a normal intensity like in normal use.
- Standby mode: The ventilation unit is stopped (not recommended for constant use).

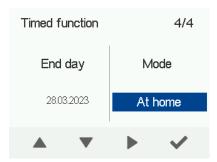
**IMPORTANT:** Stopping the ventilation can deteriorate the indoor air quality, increase the accumulation of moisture in the building structures and potentially lead to mildew or ice. If you want to reduce ventilation, it is better to use the Away mode. In this mode, the ventilation unit operates at a lower intensity but does not stop completely.

- 1. Select Settings.
- 2. Select Timed function:





#### 3. Select a ventilation mode:



# 2.3.7. Expert settings

This section describes how to set and change the expert settings of the MyVallox Control panel and the Vallox ventilation unit.

### 2.3.7.1. I/O and bus settings

The next sections describe the configuration of I/O and bus settings.

### 2.3.7.1.1. Control panel address

If two control panels have been connected to the ventilation unit, the panel addresses must be different. In other words, each control panel must have a unique address. If only one control panel is used, its address can be any number between 10 and 19.

#### **IMPORTANT:**

If your system uses multiple control panels, connect them one at a time.

To set a control panel address:

- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.

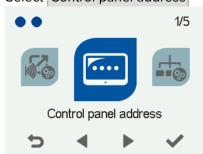




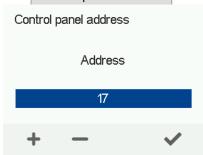
- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



- 5. Select OK.
- 6. Select Control panel address



- 7. Select OK.
- 8. The Control panel address screen opens.



- 9. Use the Plus and Minus buttons to set the control panel address. You can set the address between 10 and 19.
- 10. Select OK.

The control panel address has now been set.

# 2.3.7.1.2. Modbus settings

If the ventilation unit is connected to e.g. a building automation system via Modbus, configure the Modbus settings. The Modbus settings are:

· Ventilation unit's Modbus address

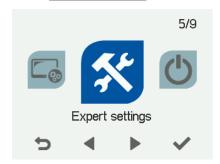


- · Modbus baud rate
- · Modbus parity
- · Modbus stop bit.

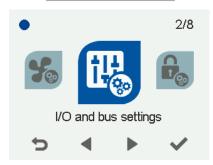
The configuration of all Modbus settings is described below in the above-mentioned order. You can also refer to these instructions when configuring individual settings, such as the Modbus address.

To configure the Modbus settings:

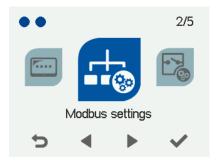
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



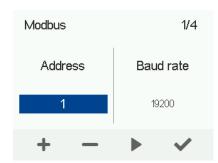
5. Select Modbus settings with the arrow buttons:



6. Select OK.

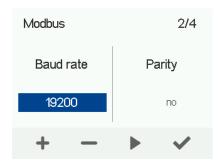
The Modbus 1/4 screen opens.





- 7. Use the Plus and Minus buttons to set the ventilation unit's Modbus address. You can set the address between 1 and 247.
- 8. Select Right arrow.

The Modbus 2/4 screen opens.



- 9. Use the Plus and Minus buttons to set the Modbus Baud rate. The options are 9600, 19200, 38400, 57600 and 115200.
- 10. Select Right arrow.
- 11. The Modbus 3/4 screen opens.

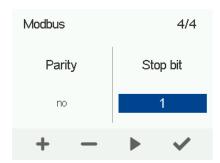


- 12. Use the Up arrow and Down arrow buttons to set the Modbus Parity . The options are:
  - ∘ no No parity
  - even Even parity
  - ∘ odd Odd parity.



13. Select Right arrow.

The Modbus 4/4 screen opens.



- 14. Use the Plus and Minus buttons to set the Modbus Stop bit. The options are 1 or 2.
- 15. Select OK.

The Modbus settings have now been set.

### 2.3.7.1.3. Relay settings

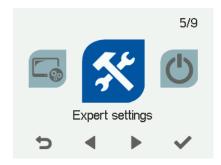
In the Relay settings menu, you can choose the operating mode of the ventilation unit's 24 V relay. Only one operating mode can be selected at a time.

### **•** NOTE:

The information is also accessible through the Modbus.

To set the operating mode of the ventilation unit's relay:

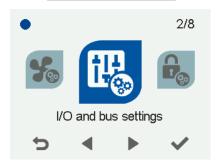
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



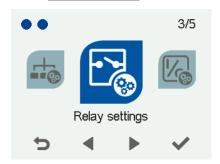
3. Select OK.



4. Select I/O and bus settings with the arrow buttons.

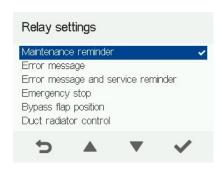


- 5. Select OK.
- 6. Select Relay settings with the arrow buttons.



7. Select OK.

The Relay settings screen opens.





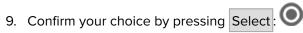
8. Use the arrow buttons to select the operating mode of the 24 V relay. The options are described in the table below:

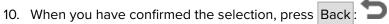
Table 3. Relay functions

Function	Ends closed	Ends open
Maintenance reminder — When the unit's maintenance reminder is activated, the relay changes its mode. This change of mode can be read by the building automation system, for example.	Normal operation	Maintenance reminder
Error message — If there is an error in the ventilation unit, the relay changes its mode. This change of mode can be read by the building automation system, for example. The error is also recorded in the error log.	Normal operation	Error situation
Error message and maintenance reminder — If the unit's maintenance reminder is activated or if there is an error in the ventilation unit or the unit has been turned off, the relay changes its mode. This change of mode can be read by the building automation system, for example. The maintenance reminder notifies the user of the need for maintenance every four months (factory setting). For more information, see <i>Maintenance</i> .	Normal operation	Maintenance reminder/error
Emergency stop — If the unit's emergency stop is activated, the relay changes its mode. The emergency stop is usually activated by an external signal received through the digital input. The emergency stop information can be sent to the building automation system, for example.	Normal operation	Emergency stop
Position of the bypass damper — The relay indicates the bypass damper position. This change of mode can be read by the building automation system, for example.	Heat recovery	Cell bypass
Duct radiator control — This setting is used in special situations, in which a duct radiator has been installed in the ventilation duct. The relay can be used to control devices connected to the duct radiator, such as the pump, solenoid valve etc. For more information, see Duct radiator control.	On	Off



Function	Ends closed	Ends open
NOTE: The relay's voltage is only 24 V, so the information cannot be directly used to control the 230 VAC feed and e.g. a contactor is needed in between.		
None — The relay function is not in use.	Normal operation	Normal operation
Air heating — This setting is used in the warm-air heater. Use the relay to control the liquid radiator actuator of the warm-air heater.	On	Off
On/off status — The relay will change the mode in error situations or when the unit has stopped.	Normal operation	Error situation/ the unit has stopped





The operating mode of the ventilation unit's 24 V relay has now been set.

#### 2.3.7.1.4. Duct radiator control

The duct radiator can be placed in the outdoor or supply air duct. If the duct radiator is placed in the outdoor air duct, it can be used for pre-heating and/or cooling. If the duct radiator is placed in the supply air duct, it can only be used for cooling.

The duct radiator can be set to work automatically or manually.

- Automatic In summer, the set supply air temperature is maintained. In winter, the duct radiator is switched on when the outdoor air temperature drops below the winter setting.
- Manual In summer, the duct radiator is switched on when the outdoor air temperature rises
  above the summer setting. In winter, the duct radiator is switched on when the outdoor air
  temperature drops below the winter setting.

To eliminate the supply air duct's condensation risk, decide whether the supply air limit is adjusted automatically or manually:

- Automatic The supply air limit is adjusted automatically according to the extract air dew point. When the supply air temperature drops too low, the duct radiator is switched off.
- Manual The supply air limit can be set manually. When the supply air temperature drops below the set value, the duct radiator is switched off.



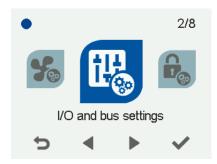
### **!** IMPORTANT:

Please note the risk of condensation when changing the duct radiator settings.

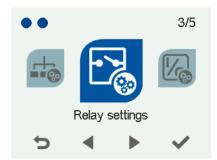
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



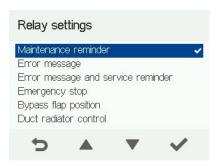
- 5. Select OK.
- 6. Select Relay settings with the arrow buttons.



7. Select OK.

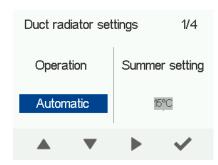
The Relay settings screen opens.





8. Select Duct radiator control as the relay's operating mode with the arrow buttons.

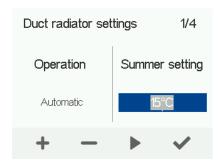
The Duct radiator settings screen opens.



9. Set the duct radiator operation with the arrow buttons. The options are:



- 10. Select Right arrow
- 11. Use the Plus and Minus buttons to set the summer setting.



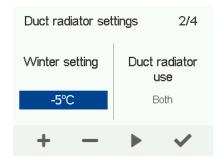


If you have selected automatic duct radiator operation, you cannot change the summer setting. The summer setting is set between  $+10^{\circ}$ C and  $+25^{\circ}$ C. The factory setting is  $+15^{\circ}$ C.

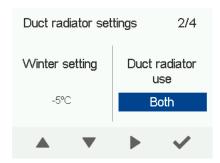
12. Select Right arrow.



13. Use the Plus and Minus buttons to set the winter setting. The winter setting is set between -10°C and +5°C. The factory setting is -5°C.



- 14. Select Right arrow.
- 15. Use the arrow buttons to select the duct radiator operating mode.



#### The options are:

- Both The duct radiator is used for pre-heating and cooling.
- Pre-heating The duct radiator is only used for pre-heating.
- Cooling The duct radiator is only used for cooling.
- 16. Select Right arrow.
- 17. Use the arrow buttons to configure how the supply air limit is adjusted. The options are:
  - Automatic The supply air limit is adjusted automatically according to the extract air dew point.
  - Manual The supply air limit can be set manually.
- 18. Select Right arrow.
- 19. Use the arrow buttons to configure how the supply air limit is adjusted. The supply air limit is adjusted between +12°C and +25°C.

#### NOTE:

If you have selected automatic supply air limit adjustment, you cannot adjust the supply air limit manually.

- 20. Select Right arrow.
- 21. The External sensor settings screen opens.

Use the arrow buttons to configure the operating mode of the external sensor. The options are:



- None The duct radiator is in the outdoor air duct and no external sensor has been connected.
- Outdoor air duct radiator control The duct radiator and external sensor are in the outdoor air duct.
- Air heating control Not used to control the duct radiator.
- Supply air duct radiator control The duct radiator and external sensor are in the supply air duct.

#### 2.3.7.1.5. Input settings

The ventilation unit has three inputs: one analog input and two digital inputs. You can assign different functions to each input according to the table below. The digital controls can be implemented by a push button or rocker switch. Both digital inputs recognise the switch type automatically.

Potential uses of the analog and digital inputs include a request to boost ventilation from the cooker hood/central vacuum system or a button for activating the Custom mode next to the fireplace.

The push button functions are activated whenever the push button is released. To cancel a push button function, press the button for five seconds. The rocker switch function is triggered by the switch position. When the switch is turned to ON, the function is activated. When the switch is turned to OFF, the function is deactivated. You can cancel the rocker switch function by pressing the switch for five seconds.

#### **I** NOTE:

When you turn the rocker switch to ON for the first time, the function is activated after a five-second delay. After the first time, the function is activated immediately.

The rocker switch can also be used to activate a push button function. To do this, turn the switch to ON for less than five seconds. To cancel the push button function, turn the rocker switch to the ON position for more than five seconds.

The mode selected last from any user interface stays active.

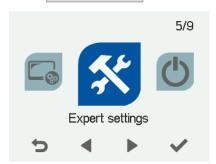
You can make changes to the three inputs in the Input settings menu.

To make changes to the ventilation unit's analog input or digital inputs:

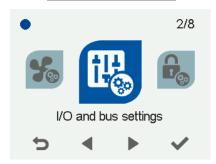
1. Select Settings.



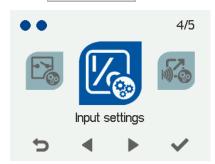
2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



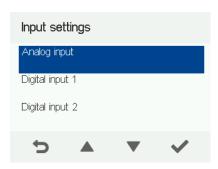
5. Select Input settings with the arrow buttons



6. Select OK.

The Input settings screen opens:





- 7. Select an input by browsing the menu with the arrow buttons. Press OK at the input you want to select. The options are:
  - Analog input Select an analog input function.

The options are given in the table below:

Table 4. Analog input functions

Function	Voltage rating
Stop, Away, At Home, Boost, 0.1–1.0 V, 2–4 V, 5–7 V, 8–10 V — The remote monitoring system uses these voltage signals to control ventilation by changing the ventilation mode.	Stop=0.1–1.0 V, Away= 2–4 V, At Home= 5–7 V, Boost= 8–10 V
Supply air temperature control, 0–10 V = +5°C - +25°C — The remote monitoring system uses these voltage signals to control ventilation by adjusting the supply air temperature.	0–10 V = +5°C – +25°C

Digital input 1/Digital input 2 — Assign a function for digital input 1 or 2.

The options are given in the table below:

Table 5. Digital input control functions

Function	Rocker switch		Push button
	0 V	24 V	24 V pulse for less than 5 seconds
Custom mode off/ on OV / 24V	Off	On	On for the set time



Function	Rocker switch		Push button
	0 V	24 V	24 V pulse for less than 5 seconds
At Home/Away OV / 24V Does not work in the Boost mode.		Away	Switches the mode between . and Away.
Forced Custom mode off/on OV / 24V	Off	On	On for the set time
Emergency stop / Normal operation OV / 24V	Unit shuts down	Normal operation	-
Boost off/on OV / 24V When the Boost mode is deactivated, the unit switches back to the previous ventilation mode.	Off	On	On for the set time.
Normal operation / HR cell bypass OV / 24V	Automatic	Bypass	Switches the bypass mode
Week clock off/on OV / 24V	Off	On	Switches the week clock mode
Programmable input off/on OV / 24V	Off	On	On for the set time

# **•** NOTE:

Only one function per input can be active at a time.

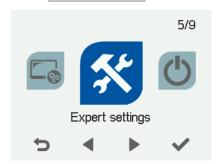
8. When you are done, select Back two times:

The ventilation unit's input settings have now been configured.

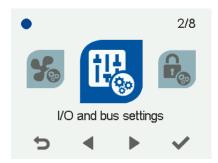
# 2.3.7.1.6. External sensor settings



- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



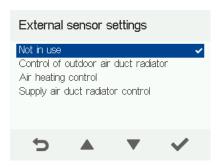
- 5. Select OK.
- 6. Select External sensor settings with the arrow buttons:



7. Select OK.

The External sensor settings screen opens:





- 8. Use the arrow buttons to select the external sensor's operating mode. The options are:
  - None No external sensor in use.
  - Outdoor air duct radiator control The duct radiator and external sensor are in the outdoor air duct.
  - Air heating control Only used for air heating control.
  - Supply air duct radiator control The duct radiator and external sensor are in the supply air duct.

#### 2.3.7.1.7. Programmable input

The programmable input can be used to compensate for negative pressure caused by a central vacuum system or cooker hood, for example. When the building automation system detects that the device has been turned on, it sends a signal to the digital programmable input. The ventilation unit adjusts the air flows according to the values set.



The ventilation unit has two digital inputs (digital input 1 and digital input 2). You can set the programmable input to activate from either digital input, but there is only one programmable input profile. Therefore, both digital inputs have the same settings.

To programme an input:

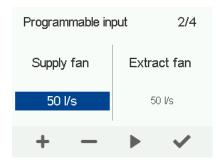
- 1. Select **Programmable input**, **0 V / 24 V**, for one digital input. See section *Input settings*.
- 2. Set the duration of the programmable input in hours and minutes.





3. Set the air flows of the programmable input's supply air fan and extract air fan (l/s or m<sup>3</sup>/h).

**•• NOTE:** When compensating for differences in pressure, the difference between the supply and extract air flows should not exceed 30%.



4. Set the target supply air temperature for the programmable input. The temperature range is  $+5^{\circ}\text{C} - +25^{\circ}\text{C}$ . The factory setting is  $15^{\circ}\text{C}$ .



In addition to the aforementioned expert settings, the MyVallox MyVallox Home/Cloud user interface can be used to enable or disable a timer.

### 2.3.7.2. Access rights

The next sections describe how to set an access code and enable the access code prompt and how to set the access level.

#### 2.3.7.2.1. Acess code

The access code is used to restrict the use of the ventilation unit functions at different access levels. If the access code prompt is enabled and the access level is limited or normal, the user is required to enter the access code before certain settings can be changed.

When the access code prompt is active, a lock icon appears on the screen. The access code consists of four digits.



NOTE:

If you do not change the default access code 0000, the access code prompt is disabled.

To set a new access code:

Select Settings.
 Go to Expert settings and select Access rights.



3. Go to Access code and select Modify to change the access code. The default access code is 0000, and the access code prompt is disabled.



#### 2.3.7.2.2. Access level

The access level determines which settings the user can change and access. The access levels are:

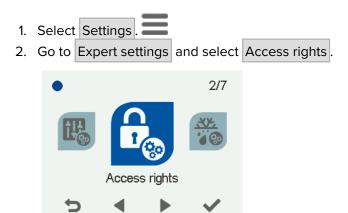
- Limited The user can change the ventilation mode and view the ventilation unit information. However, the user cannot change the system settings.
- Normal The user can view the ventilation unit information and make limited changes to the settings. Access to expert settings is restricted.
- Extensive The user can change all settings of the ventilation unit.

The factory-set access level is Extensive.

TIP: See also Access level diagrams.



To change the access level of the ventilation unit:



3. Select the desired access level.



**① NOTE:** To confirm the access level restrictions, enter the access code.

## 2.3.7.3. Defrost settings

The next sections describe the settings related to the ventilation unit's defrosting feature.

#### 2.3.7.3.1. Defrosting method

The HR cell is defrosted when it becomes frozen. The defrosting method determines how the HR cell is defrosted. Depending on the accumulation of ice, the defrosting process takes 15–45 minutes. This function is used in winter.

The defrosting methods:

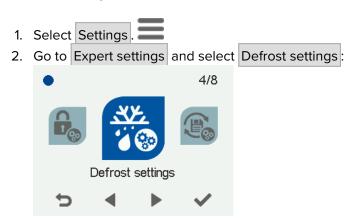


- Bypass (factory setting) The HR cell is bypassed from the supply air side. The supply and extract air fans function normally, and the ventilation balance remains constant during defrosting. This prevents drafts or air breaks caused by differences in pressure. This setting is recommended for tightly sealed buildings that may experience negative pressure. When the bypass function is used, the ventilation unit's post-heating resistor and optional additional heating resistor must be activated.
- Supply fan stop The supply air fan stops during defrosting. This causes temporary negative pressure in the apartment. This setting is recommended if the indoor air temperature is exceptionally low (<15°C) or if you want to reduce the use of the heating resistors during defrosting.</li>

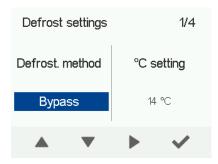
## **IMPORTANT:**

It is usually not necessary to adjust the defrosting settings. The factory settings suffice in normal household use. In exceptional situations, for example, in indoor pool facilities or when a great amount of ice accumulates in the exhaust air duct, the settings could be adjusted.

To set the defrosting method:



3. Select a defrosting method.

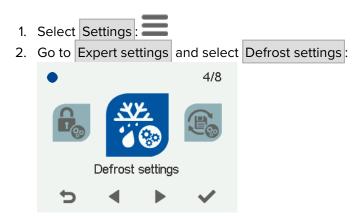


**•• NOTE:** If post-heating and additional heating is not used, the fan is automatically stopped for defrosting and no other defrosting method can be selected.

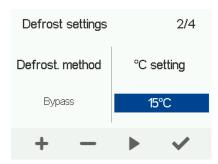


## 2.3.7.3.2. Supply air temperature during defrosting

The supply air temperature setting determines the supply air temperature during bypass defrosting. The temperature range is 12–20°C (factory setting: 15°C). In severe frost, if the heating resistor's capacity is not enough, the ventilation unit does not allow the supply air temperature to drop below 12°C.

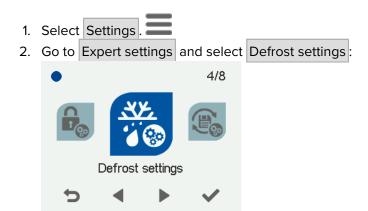


3. Set the target supply air temperature during defrosting. The temperature range is  $\pm 12^{\circ}\text{C} - \pm 20^{\circ}\text{C}$ . The factory setting is  $\pm 15^{\circ}\text{C}$ .



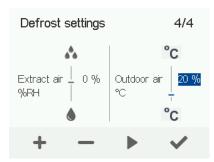
## 2.3.7.3.3. Defrost sensitivity

The defrost sensitivity setting determines how easily the ventilation unit starts to defrost the HR cell.





3. If necessary, adjust the defrost sensitivity. The factory setting is 0, which is usually sufficient in normal use.

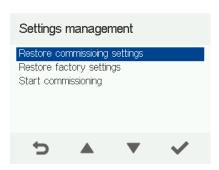


### 2.3.7.4. Settings management

- 1. Select Settings:
- 2. Go to Expert settings and select Settings management:



3. Select the desired function:



- Restore setup settings Restores the ventilation unit settings configured during setup.
- Restore factory settings Restores the ventilation unit's original settings. All changes made by the user are reset.
- Start commissioning Launches the ventilation unit's setup process.



## 2.3.7.5. Control settings

The ventilation unit's sensors measure the air temperature, relative humidity and carbon dioxide content.

This section describes how to adjust the following sensor settings:

- · Adjustment of the temperature of air flowing into the apartment
- · Adjustment of humidity control

Humidity control refers to a function the ventilation unit uses to control ventilation based on the relative humidity of room air. If more than one humidity sensor is in use, the fan speed is adjusted according to the highest level.

· Humidity limit

The humidity limit refers to the air's relative humidity level. If this level is exceeded, the ventilation unit boosts ventilation.

· Carbon dioxide limit

The carbon dioxide limit refers to the air's carbon dioxide content. When the limit value is exceeded, the ventilation unit boosts ventilation. If more than one carbon dioxide sensor is in use, the fan speed is adjusted according to the highest level. The carbon dioxide sensor is an optional accessory.

#### NOTE:

The indicative maximum carbon dioxide content of good room air is 900 ppm.

Other limits related to carbon dioxide content:

- 1200 ppm Limit of acceptable indoor air
- 700 ppm Limit of excellent indoor air

Source: Classification of Indoor Environment 2018

· Constant air flow limiter

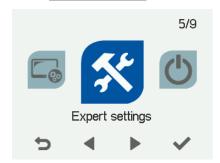
#### 2.3.7.5.1. Setting the supply air temperature control method

The supply air temperature control method defines how the ventilation unit controls the temperature of inflowing air. The control method determines how the unit reacts to changes in indoor and outdoor air temperature. The temperature setting (+5...+25°C, recommendation: +18°C) is set in the ventilation mode (At Home, Away, Boost, Custom) settings.

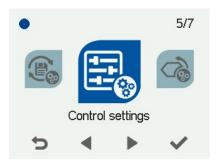
To change the supply air temperature control method:



- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select Control settings with the arrow buttons.



5. Select OK.

The Control settings screen opens:



6. Use the arrow buttons to select the control method of the supply air temperature.

The options are Supply air, Extract air, and Cooling.

- Supply air (factory setting) The supply air temperature is maintained at the set target value (+5...+25°C). The unit uses automatic heat recovery and, if necessary, post-heating to maintain the target temperature.
  - If the air temperature is lower than the target supply air temperature after the air has passed through the HR cell, the ventilation unit activates the post-



heating resistor.

- If heating the supply air is not necessary, the HR cell is bypassed.
- Extract air The supply air temperature is adjusted automatically according to the temperature of air extracted from indoors. The unit reacts to changes in indoor air temperature and maintains balanced indoor air conditions. If the apartment is warm, the supply air is cooled down automatically and vice versa.
  - If the extract air temperature is lower than the supply air temperature set for the active ventilation mode, the unit increases the supply air temperature (max. 10°C). If necessary, the unit uses the post-heating resistor.
  - If the extract air temperature is higher than the supply air temperature set for the active ventilation mode, the unit reduces the supply air temperature (max. 10°C). If heating the supply air is not necessary, the HR cell is bypassed.
- Cooling This control method is based on the extract air temperature. In addition, ventilation is boosted when necessary to keep the supply air temperature close to the target temperature, especially in warm weather. This control method is ideal for situations, in which the indoor temperature rises easily.

#### NOTE:

If the outdoor air is warmer than the indoor air, the ventilation unit is not able to cool the supply air. If the outdoor air is colder than the indoor air, it is recommended partial bypass be activated to maintain the target supply air temperature.

7. Select OK.

The temperature control method has now been set.

#### 2.3.7.5.2. Humidity control (Automatic / Manual)

The humidity control method determines how the ventilation unit reacts to the humidity level of indoor air. The unit's integrated humidity sensor is located in the extract air chamber. The unit can also be connected to an external humidity sensor (optional) installed in the apartment.

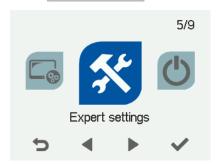
The humidity control boosts the fan speed to the speed set for the Boost mode. If the Boost mode is activated, the speed can be increased to the maximum fan speed. In any case, the humidity control does not reduce the fan speed below the level set for the active ventilation mode (e.g. At Home, Away). The humidity control can be disabled from the ventilation mode settings.

**•• NOTE:** The humidity control does not increase the humidity level in the apartment but removes excess humidity more efficiently.

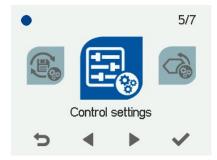
1. Select Settings.



2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select Control settings with the arrow buttons.



- 5. Select OK.6. Select Right arrow.
  - The Control settings screen opens:



7. Use the arrow buttons to select the humidity control adjustment method.

The options are:

Automatic (factory setting) — Use the Automatic setting for regular apartment ventilation. If automatic humidity control is in use, the unit determines the normal humidity level and records it. The unit strives to restore this humidity level after a shower, for example. The normal humidity level changes automatically seasonally. If you are using the Automatic setting, you do not have to manually adjust the humidity



limit.

**•• NOTE:** Automatic humidity control is selected during unit setup. It takes 3–10 hours to determine the relative humidity level. The humidity level cannot be adjusted during this period.

Manual — Use the Manual setting in places, where the humidity level of indoor air stays constant around the year. For example, this setting is recommended for use in indoor swimming pools. You can set the humidity level between 1–99%RH. The unit strives to maintain this humidity level. If you are using the Manual setting, remember to set the humidity limit.

For more information about setting the humidity limit, see section Setting the humidity limit.

8. Select OK.

The humidity control adjustment method has now been set.

#### 2.3.7.5.3. Setting the humidity limit

The humidity limit means the relative humidity content of air that triggers boosted ventilation when exceeded.

#### NOTE:

The humidity level must only be set if manual humidity control adjustment is enabled.

When the humidity control is set to Automatic, the unit determines the base level automatically. This mode is ideal for regular household ventilation, and the user does not have to set the humidity level separately. If the screen says Calibrating, the unit is in the middle of determining the normal humidity level.

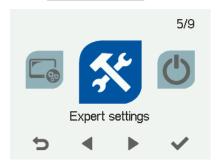
When the humidity control is set to Manual, the user must set the humidity limit between 1 and 99%RH. Usually, the suitable humidity level for a normal living environment is around 40–60%RH. A higher humidity limit (e.g. over 70%RH) is suitable for spaces with a naturally high humidity level, such as indoor pool facilities or humid work environments.

To set the humidity limit:

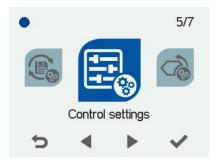
1. Select Settings.



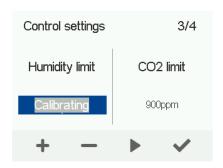
2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select Control settings with the arrow buttons.



- 5. Select OK.6. Select Right arrow two times.
  - The Control settings screen opens:



- 7. Use the Plus and Minus buttons to set the humidity level as a percentage.
- 8. Select OK.

The humidity level has now been set.

### 2.3.7.5.4. Setting the carbon dioxide limit



The carbon dioxide limit refers to the air's carbon dioxide content. When the limit value is exceeded, the ventilation unit boosts ventilation. If more than one carbon dioxide sensor is in use, the fan speed is adjusted according to the highest level. The carbon dioxide sensor is an optional accessory.

## NOTE:

The indicative maximum carbon dioxide content of good room air is 900 ppm. Other limits related to carbon dioxide content:

- 1200 ppm Limit of acceptable indoor air
- 700 ppm Limit of excellent indoor air

Source: Classification of Indoor Environment 2018

The ventilation unit adjusts the fan speed automatically according to the carbon dioxide content of indoor air. The carbon dioxide level can be set between 500 and 2000 ppm, and the factory setting is 800 ppm. This level is suitable for regular household use and ensures a good indoor air guality.

You can set the level higher if, for example, there is a large number of people in the apartment simultaneously and ventilation seems to activate too easily. A lower carbon dioxide level improves the indoor air quality further, as the system reacts quickly to minor increases in carbon dioxide content and activates the ventilation.

The ventilation unit is equipped with a carbon dioxide sensor, which is located in the unit's extract air chamber. A separate carbon dioxide sensor (optional) can also be installed in the apartment.

The carbon dioxide control boosts the fan speed to the speed set for the Boost mode. If the Boost mode is activated, the fan speed can be increased to the maximum fan speed. In any case, the carbon dioxide control does not reduce the fan speed below the level set for the active ventilation mode (e.g. At Home, Away).

To set the carbon dioxide limit:

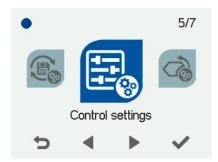
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



3. Select OK.



4. Select Control settings with the arrow buttons.



- 5. Select OK.6. Select Right arrow three times.
  - The Control settings screen opens:



- 7. Use the Plus and Minus buttons to set the carbon dioxide limit in parts per million (ppm). You can set the limit between 500 and 2000 ppm. The factory setting is 900 ppm.
- 8. Select OK.

The carbon dioxide limit has now been set.

#### 2.3.7.5.5. Activating the constant air flow limiter

By default, the constant air flow limiter is deactivated. When the function is activated, it monitors the ventilation unit's operation automatically and the unit runs as usual with the constant air flow function enabled. If ventilation performance becomes weaker due to, for example, a blocked filter, the constant air flow limiter stops the fan speed from spiking to avoid excessive noise. The limiter icon in the main view indicates when the function is active:

When the air flow goes back to normal (e.g. after the blocked filter has been cleaned), the constant air flow limiter is deactivated automatically and the unit continues to adjust the constant air flow normally. The function remains in stand-by mode.

The function is used in locations where the filters are replaced centrally, for example, in apartment blocks.



To enable the constant air flow limiter:

Select Settings .
 Go to Expert settings and select Control settings .

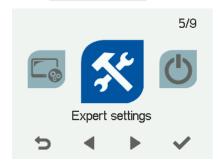


3. Enable or disable the constant air flow limiter.



## 2.3.7.6. Bypass settings of the HR cell

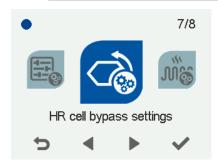
Select Settings.
 Select Expert settings with the arrow buttons.



3. Select OK.

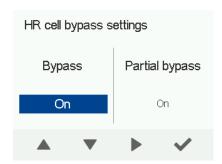


4. Select Bypass settings of the HR cell with the arrow buttons



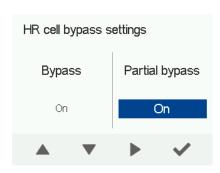
- 5. Select OK.

  The Bypass settings of the HR cell screen opens.
- 6. Select with the arrow buttons:



- Bypass On Bypass automatics are in use.
- Bypass Off Bypass automatics are not in use. The Heat recovery mode is active.
- 7. Select Right arrow.

Select with the arrow buttons:



- Partial bypass On Partial bypass is enabled when bypass is activated and the outdoor air temperature exceeds the value set for the heating season.
- Partial bypass Off Partial bypass is not in use.



• Special modes — Partial bypass is always in use.

## **IMPORTANT:**

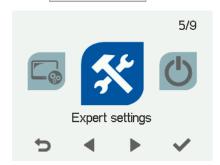
The Special modes mode is only used in special modes when the heat load is large. Do not select Special modes without consulting an HVAC expert.

## 2.3.7.7. Heating settings

## **()** IMPORTANT:

Do not change the heating settings without consulting an HVAC expert.

- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select Heating settings with the arrow buttons:

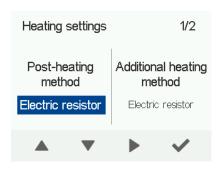


5. Select OK.

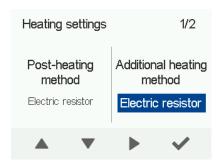
The Heating settings screen opens:



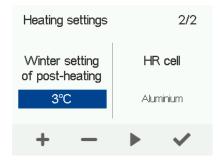
6. Select the heating method with the arrow buttons:



- Electrical resistorWater heaterNone
- 7. Select Right arrow.
- 8. Select the additional heating method with the arrow buttons:



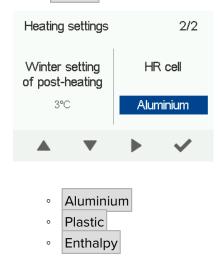
- Electrical resistorWater heaterNone
- 9. Select Right arrow
- 10. Use the Plus and Minus buttons to select the heating season setting. The temperature range is  $0^{\circ}\text{C} +19^{\circ}\text{C}$ . The factory setting is  $+12^{\circ}\text{C}$ . Seasonal heating is triggered by the outdoor air temperature. When the outdoor air temperature drops below the set value, post-heating may be used to heat the supply air. 100% bypass is always used for heat recovery.





**① NOTE:** When the outdoor air temperature is below the reference value:

- Seasonal heating is not in use.
- The supply air heater is not in use.
- Bypass and partial bypass are in use.
- 11. Select Right arrow.
- 12. Select HR cell with the arrow buttons:



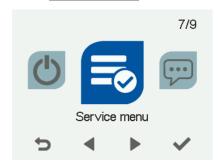
## 2.3.8. Service menu

This section describes the Service menu of the MyVallox Control panel.

#### 2.3.8.1. Unit information

Unit information is a list of all the ventilation unit properties and different ventilation events.

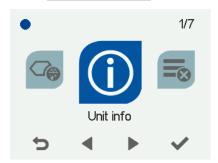
- 1. Select Settings.
- 2. Select Service menu with the arrow buttons.



3. Select OK.

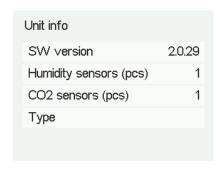


4. Select Unit information with the arrow buttons:



5. Select OK.

The Unit information screen opens:



- 6. The information appears on six different screens. Use the arrow buttons to move between the screens. The information is:
  - Software version Software version of the ventilation unit
  - Humidity sensors (pcs) Number of humidity sensors connected to the unit
  - CO2 sensors (pcs) Number of carbon dioxide sensors connected to the unit
  - Type Type code of the ventilation unit
  - Model Model of the ventilation unit
  - Serial number Serial number of the ventilation unit
  - Time in operation The operating time of the ventilation unit in days and in years
  - Latest power cut Time elapsed since the latest power cut
  - Handedness Ventilation unit handedness. The ventilation unit is either right-handed (R) or left-handed (L).
  - IP address The IP address of the ventilation unit
  - Gateway The gateway of the ventilation unit
  - Mask The mask of the ventilation unit
  - Extract air The temperature of extract air.
  - Exhaust air The temperature of exhaust air.
  - Outdoor air The temperature of outdoor air.
  - Supply air The temperature of supply air.
  - Supply air temperature The temperature of air from the HR cell.
  - External sensor External sensor temperature.



- Cloud connection status:
  - Not connected The ventilation unit has not been connected to the MyVallox Cloud service.
  - Connected The ventilation unit is connected to the MyVallox Cloud service.
  - Connection error Failed to connect to the MyVallox Cloud service.
  - Bad Gateway error Invalid gateway address.
  - DNS error The DNS name service is not working.
  - Certificate error Invalid ventilation unit certificate. Please contact the service centre.
  - Handshake error Failed to connect to the MyVallox Cloud service.
  - Internal error Internal error in the ventilation unit. Please contact the service centre.
  - Old software version The ventilation unit uses an old software version.
  - Software update in progress Updating the ventilation unit software.
- MyVallox Cloud UUID The unique ID of the ventilation unit in the MyVallox Cloud service.

#### TIP:

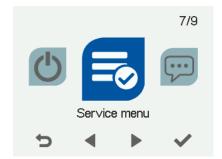
If the ventilation unit fails to connect to MyVallox Cloud, check that:

- The ventilation unit is connected directly to a router.
- The router assigns the ventilation unit a private IP address (starting with 192, 172 or 10).
- You can access <a href="https://cloud.vallox.com">https://cloud.vallox.com</a> on a computer browser via LAN.
- The router input ports 80 and 443 are available.
- 7. Select Back.

#### 2.3.8.2. Error log

To view and acknowledge errors:

- 1. Select Settings.
- 2. Select Service menu with the arrow buttons.



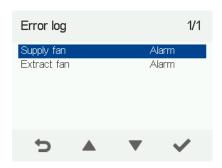


- 3. Select OK.
- 4. Select Error log with the arrow buttons:



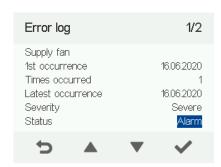
5. Select OK.

The Error log screen displaying a list of errors opens:



- 6. Use the arrow buttons to browse the error messages in the error log. To acknowledge error messages in the error log:
  - a. Select an error message.
  - b. Select OK.

A detailed error message screen opens:



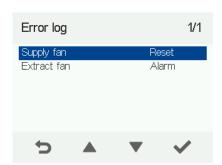
The detailed error message contains the following information:

• Error name — The top row in the detailed error notification describes the



- error.
- 1st occurrence Time when the error occurred for the first time.
- Times occurred The number of times the error has occurred.
- Latest occurrence Time when the error last occurred.
- Severity Seriousness of the error.
- Status Error alarm status. The status options are:
  - Acknowledged Error acknowledged. No active alarm for the error.
  - Alarm The alarm is active until the error is acknowledged.
- c. To acknowledge the error message, select OK:

The error is shown acknowledged in the error list:



d. To acknowledge more error messages, select Back:



#### 2.3.8.3. Fan test

Carry out the fan test to easily check the operation of the ventilation unit's fans.

- 1. Select Settings.
- 2. Go to the Maintenance menu and select Fan test.





3. Select the fan to be tested (Supply air or Extract air) and adjust the fan's airflow (I/s or m<sup>3</sup>/h).

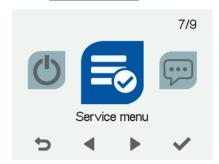
You can hear when the fan speed changes according to the value set. The fan's rotational speed is shown in the rpm field.



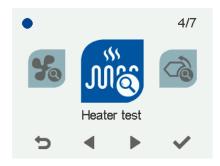
### 2.3.8.4. Heater test

To test the operation of the ventilation unit's heaters:

- 1. Select Settings.
- 2. Select Service menu with the arrow buttons.



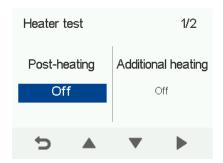
- 3. Select OK.
- 4. Select Heater test with the arrow buttons:





5. Select OK.

The Heater test 1/2 screen opens:



- 6. Use the Up arrow button to enable post-heating.
- 7. Make sure the post-heating function is working.
- 8. Use the Down arrow button to disable post-heating.
- 9. Select Right arrow.

The Heater test 2/2 screen opens:



- 10. Use the Up arrow button to turn on the additional heating resistor.
- 11. Make sure the additional heating resistor is working.
- 12. Use the Down arrow button to turn off the additional heating resistor.
- 13. Select Back.

The heater test has been completed.

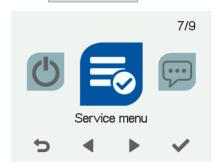
## 2.3.8.5. HR cell bypass test

To test the operation of the HR cell's bypass damper:

1. Select Settings.



2. Select Service menu with the arrow buttons.

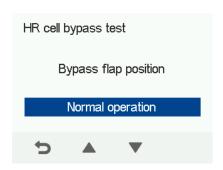


- 3. Select OK.
- 4. Select HR cell bypass test with the arrow buttons:



5. Select OK.

The Position of the bypass damper screen opens:



- 6. Use the arrow buttons to select the damper position. The options are:
  - Normal operation The HR cell bypass test is disabled, the bypass damper moves normally.
  - Heat recovery The damper is closed ("winter position") and air flows through the HR cell.
  - Bypass The damper is open ("summer position") and air passes by the HR cell.

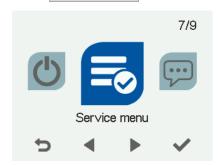


- 7. Open the ventilation unit door to make sure the damper moves to the right position.
- 8. Select Back.
- 9. The HR cell bypass test has been completed.

## 2.3.8.6. HR cell defrost

To defrost the HR cell manually:

- 1. Select Settings.
- 2. Select Service menu with the arrow buttons.



- 3. Select OK.
- 4. Select HR cell defrost with the arrow buttons:



5. Select OK.

The unit asks you to confirm the task:





6. Select OK.

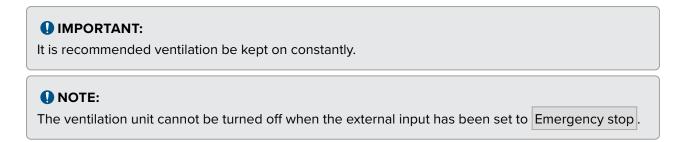
Defrosting begins:



The defrosting process takes approximately 15–45 minutes, and when complete, the ventilation unit returns to normal operation.

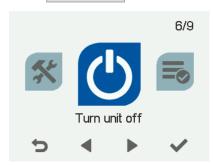
7. Select Back.

## 2.3.9. Turning the unit off



To turn the ventilation unit off e.g. for maintenance:

1. Select Turn unit off with the arrow buttons



2. Select OK.



3. The unit asks you to confirm the task:



4. Select OK.

The ventilation unit has now been turned off.

#### TIP:

To restart the ventilation unit, press any button.

## 2.4. Updating the unit software (MyVallox Control)

To update the ventilation unit software through the MyVallox Control panel:

 Download the latest update package to your computer from the home page of the MyVallox Cloud service <a href="https://cloud.vallox.com">https://cloud.vallox.com</a>. You can find the latest update under Latest firmware version.

### NOTE:

The name of the update file must always be the same: HSWUPD.BIN. If you have downloaded an older update file to your computer, delete it before downloading the new update to make sure the file name does not change.

2. Connect the computer to the ventilation unit control panel with a USB Micro-B connector.

## **I** NOTE:

- The MyVallox control panel cannot be used when it is connected to the computer.
   A USB icon is shown on the control panel.
- If the computer is unable to find the ventilation unit, you are probably using a charging cable. Try another USB Micro-B cable.
- 3. When the ventilation unit is turned on, the control panel appears as an external drive in the computer's resource management.



4. Copy the new update package HSWUPD.BIN and paste it to the control panel, i.e. the root of the external drive.

## **IMPORTANT:**

Do not change the file name.

- 5. Make sure the update package has been completely transferred to the control panel by selecting Safely Remove USB. This is an OS-specific function.
- 6. Disconnect the USB cable.
- 7. The control panel loads the update for a moment (you can see the process on the panel) and starts to transfer the update package to the ventilation unit in the background. This takes approximately 4–5 hours.
- 8. When the update is complete, the unit launches the new software and restarts itself automatically.

## NOTE:

The ventilation unit must stay on throughout the update process. If the ventilation unit's power is cut off during the process, the transfer time of 4–5 hours starts from the beginning.

## NOTE:

If a red error screen appears on the control panel, the update must downloaded again. Go back to step 1.

When the update is complete, the software version shown on the Unit information screen should be the same as the version at <a href="https://cloud.vallox.com">https://cloud.vallox.com</a>.



## 2.5. User level diagrams

The following charts specify the user rights of three different user levels.

Figure 1. Limited user level

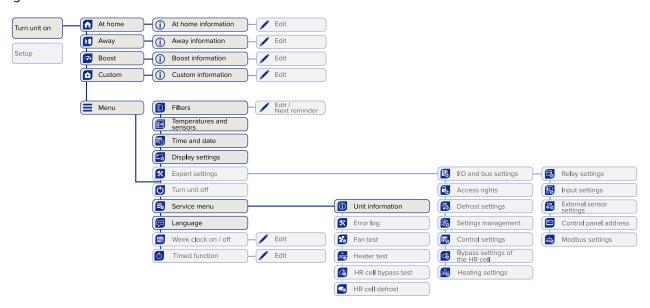


Figure 2. Normal user level

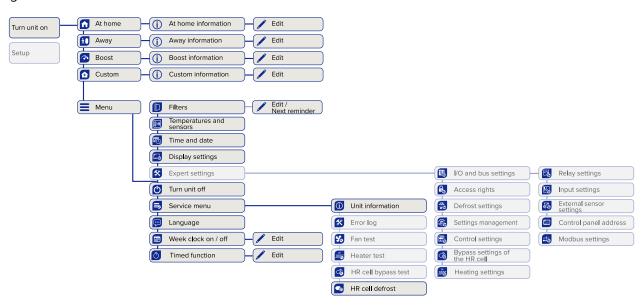
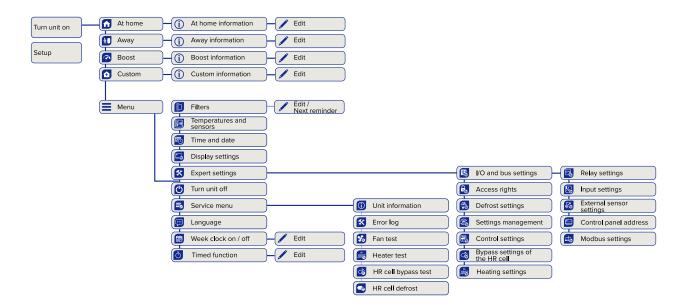


Figure 3. Extensive user level



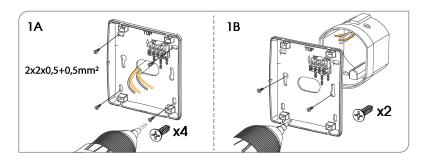




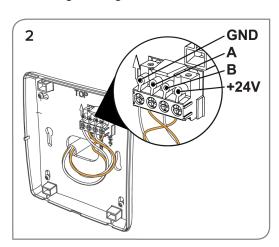
# 3. Vallox MV ventilation units

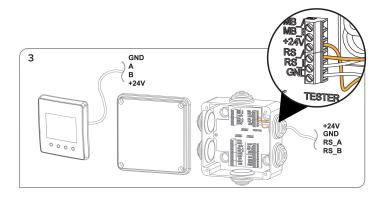
# 3.1. Installation of the MyVallox Control panel

1. Screw the back of the control panel to a wall according to image 1A or to an outlet box according to image 1B.



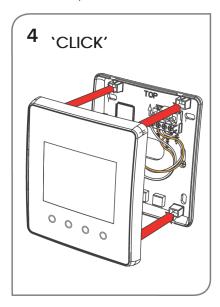
2. Connect the wires to the control panel and the ventilation unit's external connection box according to images 2 and 3.



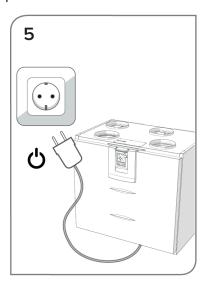


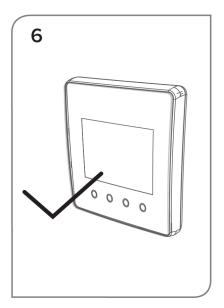


3. Push in the panel's front cover. You can hear a click when the cover is locked in place.



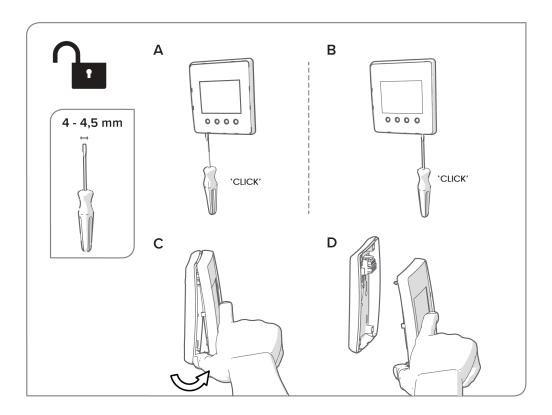
4. Plug in the ventilation unit. If the wires are connected correctly, both the unit and the control panel are turned on.





If you must remove the control panel's front cover, unplug the unit first. Remove the front cover by turning the pawls at the bottom of the panel 90° with a screwdriver and pull out the front cover bottom first.







## 3.2. MyVallox Control setup

Use one of the following to set up the ventilation unit

- · MyVallox Control panel
- · MyVallox Touch panel
- MyVallox Home user interface.

#### **MPORTANT:**

The basic fan settings must be set according to the ventilation plan. Do not change these settings.

This section describes the setup of the Vallox MV ventilation unit on the MyVallox Control panel step by step.

#### TIP:

If you make a mistake when configuring the settings during guided setup and move to the next phase, finish the guided setup and then change the incorrect setting.

#### **IMPORTANT:**

We recommend you always use the latest software version. Check and download the latest version at <a href="https://cloud.vallox.com">https://cloud.vallox.com</a> either before or immediately after setup. See section *Updating the unit software*.

## 3.2.1. Start guided setup

- 1. Turn on the Vallox ventilation unit.
- 2. When you turn on the unit for the first time, the control panel displays a language menu.

## 3.2.2. Language

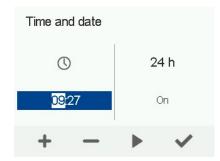
Select the desired language.



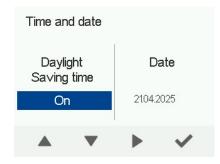


### 3.2.3. Time and date

1. Set the time and select the 24-hour or 12-hour clock.



2. Use the arrow button to switch to/from daylight saving time and set the date.



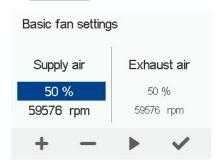
3. Proceed with the setup by selecting OK:

## 3.2.4. Ventilation mode settings

## 3.2.4.1. At Home mode settings

First, configure the basic fan settings to set the At Home mode's fan speeds.

1. Adjust the valves and set the supply and extract air fans such control percentages that enable the At Home mode's air flows.





2. You can adjust the fan speed and supply air temperature of the At Home mode and disable the humidity and carbon dioxide control.



3. Proceed with the setup by selecting OK:

## 3.2.4.2. Away mode settings

The air flows in the Away mode are automatically 30% lower than the air flows in the At Home mode, but they can be adjusted. Other Away mode settings are configured identically to the settings of the Away mode.

You can also adjust the fan speed and supply air temperature of the Away mode and disable the humidity and carbon dioxide control.

1. Set the Away mode's fan speed and supply air temperature.



2. Set the carbon dioxide and humidity settings for the Away mode.



3. Proceed with the setup by selecting OK:



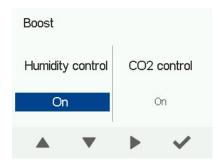
#### 3.2.4.3. Boost mode settings

Set the Boost mode's fan speed, supply air temperature and carbon dioxide and humidity control settings. The fan speed in the Boost mode is automatically 30% higher than the fan speed in the At Home mode. You can adjust the fan speed and supply air temperature of the Boost mode and disable the humidity and carbon dioxide control. A timer can also be set for the Boost mode.

1. Set the Boost mode's fan speed and supply air temperature.

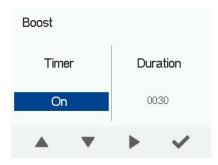


2. Configure the carbon dioxide and humidity settings.



3. Set a timer for the Boost mode (optional).

When the timer goes off, the ventilation unit switches back to the previous mode.



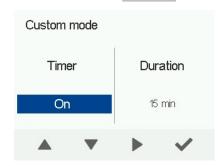
4. Proceed with the setup by selecting OK:



#### 3.2.4.4. Custom mode settings

The Custom mode is used in special circumstances, for example, to compensate for temporary negative pressure caused by a fireplace or cooker hood. A timer can also be set for the Custom mode. In such situations, the difference between the supply and extract air flows should not exceed 30%.

1. Set a timer for the Custom mode (optional).



2. Set the Custom mode's fan speeds and supply air temperature.



3. Proceed with the setup by selecting OK:

# 3.2.5. Completion of setup or configuration of additional settings

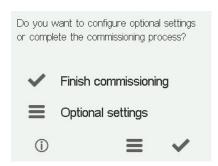
You can either complete the setup or proceed to configure additional settings.

The available additional settings are:

- Modbus settings
- Relay settings
- Input settings
- Access rights
- Control settings



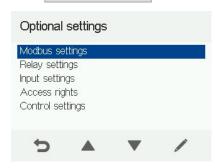
Complete the setup or proceed to configure additional settings.



# 3.2.5.1. Configuration of Modbus settings

Configuring the Modbus settings is necessary if an external Modbus (e.g. building automation) is used to control the ventilation unit.

1. Open Modbus settings.



2. Configure the Modbus settings.



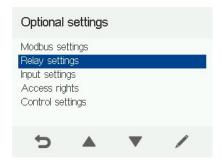
3. Proceed with the setup by selecting OK:



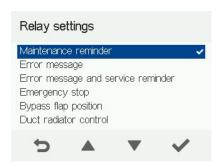
#### 3.2.5.2. Configuration of relay settings

The relay is used to control devices connected to the duct radiator, such as the pump or solenoid valve. Please note that the relay's voltage is only 24 V, so a contactor, for example, must be used to control the 230 VAC feed.

1. Open Relay settings.



2. Select a relay setting.



- Select Maintenance reminder to notify e.g. the cooker hood or building automation system of the need for filter replacement.
- Select Error message to notify e.g. the cooker hood or building automation system of ventilation unit errors.
- Select Error message and maintenance reminder to notify e.g. the cooker hood or building automation system of ventilation unit errors and the need for filter replacement.
- Select Emergency stop to notify e.g. the cooker hood or building automation system when the emergency stop is activated.
- Select Position of the bypass damper to notify the building automation system of the position of the ventilation unit's bypass damper. The position options are heat recovery or bypass mode.



- Select Duct radiator control to control the ventilation unit's external liquid radiator,
   e.g. an MLV radiator, with the unit. This setting is selected in special situations, when a duct radiator has been installed in the ventilation duct system.
- Select Air heating to control e.g. a liquid heating radiator in the supply air duct with the ventilation unit.
- Select On/off status to notify e.g. the building automation system when the ventilation unit has been turned off or the fans have stopped. The On/off status setting can also be used to control external gate valves.
- 3. Configure the relay setting.

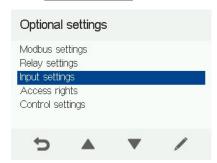


4. Proceed with the setup by selecting OK:

### 3.2.5.3. Configuration of input settings

The following inputs can be configured:

- · Analog input
- · Digital input 1
- Digital input 2
- 1. Open Input settings



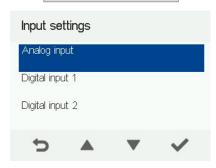
2. Proceed to configure the settings.



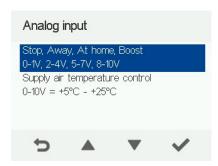
# 3.2.5.3.1. Analog input settings

Analog inputs are used when the ventilation unit is controlled with voltage signals. When voltage signals are used, the ventilation mode is changed according to an external voltage from the cooker hood, external controller or building automation system. The analog input is connected to the AN/I and GND terminals in the ventilation unit's connection box.

1. Open Analog input settings.



2. Configure the analog input settings.

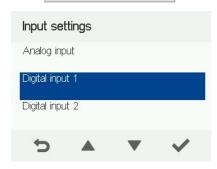


#### 3.2.5.3.2. Digital input settings

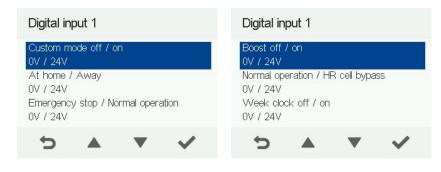
Digital inputs are used when the ventilation unit is controlled with external contact data. The digital inputs are connected to the D/I 1 and +24 V or D/I 2 and +24 V terminals of the ventilation unit's connection box. Please note that the programmable input can be connected to either digital input but they always have identical settings.

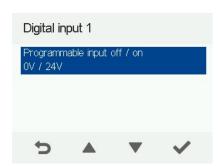


1. Open Digital input settings.



2. Configure the digital input settings.





#### Digital input settings:

- Custom mode off / on Used to compensate for negative pressure caused by e.g. a fireplace, cooker hood or central vacuum system.
- At Home / Away Switches the ventilation unit to the At Home or Away mode according to external contact data from e.g. a switch.
- Emergency stop / Normal Switches off the ventilation unit based on an external emergency stop message from e.g. an automation substation system or switch. Do not select the emergency stop function if the digital input is not connected to a voltage of 24 V.
- Boost off / on Switches the ventilation unit to the Boost mode according to external contact data from e.g. a cooker hood or switch.



- Normal operation / Heat recovery cell bypass Forces the heat recovery cell bypass to activate. Please note that the bypass is only activated if the outdoor temperature is above 5°C.
- Week clock off / on Switches the week clock control on or off according to external contact data from e.g. a switch.
- Programmable input off / on

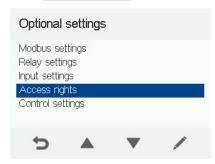
## 3.2.5.4. Determination of access rights

There are three access right tiers:

- Extensive The user can change all the settings of the ventilation unit.
- Normal The user can view the ventilation unit information and make limited changes to the settings.
- Limited The user can change the ventilation mode and view the ventilation unit details.

For more information about access rights, see Access level diagrams.

1. Open Access rights



2. Use the arrow buttons to select the access level.



The access level has now been set.



3. You can also set a lock code.

#### 3.2.5.5. Control settings

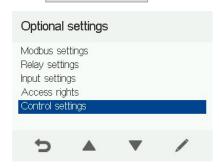
The unit's control method can be selected in the control settings.

The control settings are:

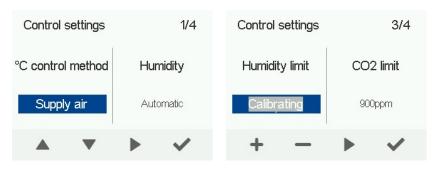
- Temperature selection
- Humidity control
- Humidity limit
- CO2 limit

For more information, see Control settings.

1. Open Control settings.



2. Configure the Control settings.



Temperature selection (Supply air / Extract air / Cooling)

The supply air temperature control method defines how the ventilation unit controls the temperature of inflowing air. The control method determines how the unit reacts to changes in indoor and outdoor air temperature. The temperature setting (+5...+25°C, recommendation: +18°C) is set in the ventilation mode (At Home, Away, Boost, Custom) settings.



- Supply air (factory setting) The supply air temperature is maintained at the set target value (+5...+25°C). The unit uses automatic heat recovery and, if necessary, post-heating to maintain the target temperature.
- Extract air The supply air temperature is adjusted automatically according to the temperature of air extracted from indoors. The unit reacts to changes in indoor air temperature and maintains balanced indoor air conditions. If the apartment is warm, the supply air is cooled down automatically and vice versa.
- Cooling This control method is based on the extract air temperature. In addition, ventilation is boosted when necessary to keep the supply air temperature close to the target temperature, especially in warm weather. This control method is ideal for situations, in which the indoor temperature rises easily.

Humidity control (Automatic / Manual)

The humidity control method determines how the ventilation unit reacts to the humidity level of indoor air. The unit's integrated humidity sensor is located in the extract air chamber. The unit can also be connected to an external humidity sensor (optional) installed in the apartment.

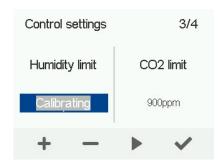
The humidity control boosts the fan speed to the speed set for the Boost mode. If the Boost mode is activated, the speed can be increased to the maximum fan speed. In any case, the humidity control does not reduce the fan speed below the level set for the active ventilation mode (e.g. At Home, Away). The humidity control can be disabled from the ventilation mode settings.

**NOTE:** The humidity control does not increase the humidity level in the apartment but removes excess humidity more efficiently.

#### Adjustment options:

Automatic (factory setting) — The automatic mode is suitable for regular household ventilation. The ventilation unit determines the normal humidity level automatically and updates it seasonally. The ventilation unit strives to restore the normal humidity level after a shower or cooking, for example. When the unit is started up for the first time, it takes approximately 3–10 hours for the unit to determine the humidity level. During this time, the humidity level cannot be adjusted and the screen says Calibrating. When automatic adjustment is enabled, the humidity limit is not set separately.





Manual — The manual mode is ideal for spaces, in which the humidity level of indoor air stays constant around the year, for example in indoor pool facilities. The humidity level is set between 1 and 99%RH, and the ventilation unit strives to maintain this level. When manual adjustment is used, the humidity limit must be set separately (see Setting the humidity limit).

## Humidity limit

- When the humidity control is set to Automatic, the unit determines the base level automatically. This mode is ideal for regular household ventilation, and the user does not have to set the humidity level separately. If the screen says Calibrating, the unit is in the middle of determining the normal humidity level.
- When the humidity control is set to Manual, the user must set the humidity limit between 1 and 99%RH. Usually, the suitable humidity level for a normal living environment is around 40–60%RH. A higher humidity limit (e.g. over 70%RH) is suitable for spaces with a naturally high humidity level, such as indoor pool facilities or humid work environments.

#### CO<sub>2</sub> limit

The ventilation unit adjusts the fan speed automatically according to the carbon dioxide content of indoor air. The carbon dioxide level can be set between 500 and 2000 ppm, and the factory setting is 800 ppm. This level is suitable for regular household use and ensures a good indoor air quality.

You can set the level higher if, for example, there is a large number of people in the apartment simultaneously and ventilation seems to activate too easily. A lower carbon dioxide level improves the indoor air quality further, as the system reacts quickly to minor increases in carbon dioxide content and activates the ventilation.



The ventilation unit is equipped with a carbon dioxide sensor, which is located in the unit's extract air chamber. A separate carbon dioxide sensor (optional) can also be installed in the apartment. The carbon dioxide control boosts the fan speed to the speed set for the Boost mode. If the Boost mode is activated, the speed can be increased to the maximum fan speed. In any case, the carbon dioxide control does not reduce the fan speed below the level set for the active ventilation mode (e.g. At Home, Away).



# 3.3. Adjusting the supply and extract air flow

#### TIP:

You can browse the Basic fan settings settings with the Right arrow button.

#### **IMPORTANT:**

Adjust the air flows according to the ventilation plan. First, set the valves to the correct adjustment positions. Next, set the fans as close to the optimal value as possible by consulting the fan diagram. You can use the gauge fittings connected to the unit or delivered with the unit when adjusting the total air flow of the system. Then, measure and adjust the air flows from the valves. Try to adjust the air flows without choking them with the valves. This makes the solution as quiet and energy-efficient as possible.

If the output ratio between the air flows is very high at first, the ventilation unit may have to carry out extra defrosting cycles in sub-zero temperatures, thus making adjustment of the air flows more complicated.

• IMPORTANT: If the ventilation unit has been set up before adjusting the air flows, we recommend you measure the air flows through the air volume adjustment menu (see **Air volume adjustment** under Save and restore settings.). This optimises the unit settings for air volume adjustment.

#### NOTE:

If the outdoor air is very cold (aluminium unit: below -10°C; plastic unit: under -3°C), the ventilation unit may have to defrost the HR cell. In that case, the air flows cannot be adjusted and the control panel displays the Defrosting icon.

Defrosting of the HR cell

Please wait.

Defrosting the HR cell.



When you want to adjust the supply and extract air flows:

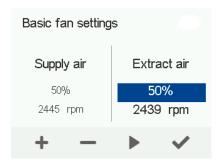
1. Select Basic fan settings



2. Use the Plus and Minus buttons to set the supply air fan ratio as a percentage of the maximum output ratio. The fan speed (rpm) will change accordingly.



- 3. Measure and adjust the supply air flows from the valves.
- 4. Select Right arrow.
- 5. Use the Plus and Minus buttons to set the extract air fan ratio as a percentage of the maximum output ratio. The fan speed (rpm) will change accordingly.



- 6. Measure and adjust the extract air flows from the valves.
- Select OK.
   Supply and extract air flow settings are now complete.
- 8. Record the set percentages in the measurement log.

# 3.4. Using MyVallox Control

# 3.4.1. Starting the unit

If you are starting the ventilation unit for the first time or after a maintenance procedure, first connect it to the mains. This will start the unit.

If the ventilation unit was turned off from the control panel (see *Turning the unit off*), you can start it by pressing any control panel button.

#### 3.4.2. Ventilation modes

The Vallox ventilation unit has four ventilation modes:



- At Home Use this mode when the apartment is occupied. The Vallox ventilation unit has been set up according to the ventilation plan. The At Home mode changes the indoor air at the recommended rate approximately once in two hours.
- Away Use this mode when the apartment is vacant for a longer period of time, e.g. during a trip or longer absence. By default, the Away mode's ventilation speed is 30% lower than the speed of the At Home mode.
- Boost Use this mode to enhance ventilation when there is a large number of people in the apartment or for other reasons. By default, the Boost mode's ventilation speed is 30% higher than the speed of the At Home mode.
- Custom Use this mode e.g. when lighting a fire in a fireplace. The mode is primarily used to create a momentary overpressure in the apartment.

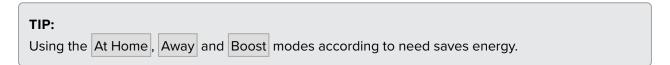
**IMPORTANT:** Prolonged overpressure can damage the building structures.

At Home mode icon:

Away mode icon:

Boost mode icon:

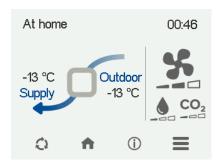
Custom mode icon:



### 3.4.2.1. Symbols related to ventilation modes

The image below is an example of a ventilation mode screen:





The following symbols are used on the ventilation mode screens:

Table 6. Symbols for ventilation modes

Symbol	Description
	The mode in use is either At Home, Away or Boost. The week clock is turned off.
0	The mode in use is either At Home, Away or Boost. The week clock is on.
	The Custom mode is used. The week clock might be turned on.
	The mode in use is either At Home, Away or Boost. The programmable input has been activated.
* * *	The fan symbols indicate the currently used mode.  • Fan and one shaded bar — The Away mode is in use.  • Fan and two shaded bars — The At Home mode is in use.  • Fan and three shaded bars — The Boost mode is in use.
	<ul> <li>The droplet symbols indicate the relative humidity of air.</li> <li>Droplet and one shaded bar — A humidity sensor has been installed and the relative humidity of air is normal.</li> <li>Droplet and two shaded bars — The relative humidity of air is slightly higher than normal. If automatic adjustment is enabled, the fan speed increases.</li> <li>Droplet and three shaded bars — The relative humidity of air is significantly higher than normal. If automatic adjustment is enabled, the fan speed increases.</li> </ul>



Symbol	Description
CO <sub>2</sub> CO <sub>2</sub> CO <sub>2</sub>	<ul> <li>The CO<sub>2</sub> symbols indicate the carbon dioxide or VOC content of air.</li> <li>CO<sub>2</sub> and one shaded bar — A carbon dioxide or VOC sensor has been installed and the level is normal.</li> <li>CO<sub>2</sub> and two shaded bars — The carbon dioxide or VOC level is slightly higher than normal. If automatic adjustment is enabled, the fan speed increases.</li> <li>CO<sub>2</sub> and three shaded bars — The carbon dioxide or VOC level is significantly higher than normal. If automatic adjustment is enabled, the fan speed increases.</li> </ul>

# 3.4.2.2. Changing the ventilation mode

1. Tap on the Change mode button until the icon of the desired ventilation mode appears on the display.



2. Wait until the main view of the selected ventilation mode opens.

At Home mode icon:

Use this mode when someone is actively living in the apartment.

Away mode icon:



Use this mode when the apartment is vacant for a longer period of time, e.g. during a trip or longer absence.

Boost mode icon:





Use this mode to enhance ventilation, e.g. when there is a large number of people in the apartment or property.

Custom mode icon:



Use this mode e.g. when lighting a fire in a fireplace. The mode is primarily used to create a momentary overpressure in the apartment

The ventilation mode has now been changed.

### 3.4.2.3. Browsing the ventilation mode information

The next sections describe how to browse the basic information of different ventilation modes. See also *Changing the ventilation mode settings*.

#### 3.4.2.3.1. Browsing the At Home mode information

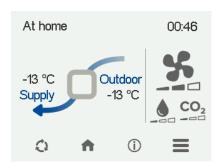
To browse the basic information of the At Home mode:

1. Press the Change mode button until the icon of the At Home mode appears on the display:





2. Please wait until the main view of the At Home mode opens:



The main view shows a summary of the mode information.

- 3. Select At Home information:
- 4. The first mode information screen opens:

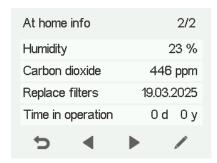


This screen shows the following information:

- Supply air Indicates the temperature of the air blown into the building and its set value (in brackets), if the supply air is warmer than the set value.
- Outdoor air Indicates the outdoor temperature.
- Fan speed Indicates the fan speed. If the automatic fan speed boost is active, the set value is shown in brackets, followed by the real fan speed.
- Cell status The ventilation unit has the following HR cell modes:
  - Heat recovery —The HR cell heats the air flowing in from outdoors with extract air.
  - Cold recovery The HR cell cools the air flowing in from outdoors with extract air when the temperature of the air that is extracted from the apartment is two degrees lower than the outdoor temperature.
  - Bypass The inflowing air bypasses the HR cell.
  - HR cell defrost in progress The HR cell is being defrosted.



5. Select Right arrow. The second mode information screen opens:



This screen shows the following information:

- Humidity —Indicates the highest relative humidity value measured by the sensors.
- Carbon dioxide Indicates the highest carbon dioxide value measured by the sensors.
- Replace filters Indicates the next recommended filter replacement date.
- Time in operation Indicates for how long the unit has been running.

#### 3.4.2.3.2. Browsing the Away mode information

To browse the basic Away mode information of the Vallox MV ventilation unit:

1. Press the Change mode button until the icon of the Away mode appears on the display:



2. Please wait until the main view of the Away mode opens:



The main view shows a summary of the mode information.

3. Select Away information:

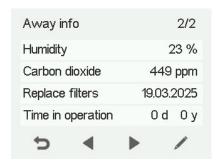
The first mode information screen opens:





This screen shows the following information:

- Supply air Indicates the actual temperature of the air flowing into the apartment and the supply air temperature setting (in parentheses) if the supply air is warmer than the value set.
- Outdoor air Indicates the outdoor temperature.
- Fan speed Indicates the fan speed. If the automatic fan speed boost is active, the set value is shown in brackets, followed by the real fan speed.
- Cell status The ventilation unit has the following HR cell modes:
  - Heat recovery The HR cell heats the air flowing in from outdoors with extract air.
  - Cold recovery The HR cell cools the air flowing in from outdoors with extract air when the temperature of the air that is extracted from the apartment is two degrees lower than the outdoor temperature.
  - Bypass The inflowing air bypasses the HR cell.
  - HR cell defrost in progress The HR cell is being defrosted.
- 4. Select Right arrow. The second mode information screen opens:



This screen shows the following information:

- Humidity Indicates the highest relative humidity value measured by the sensors.
- Carbon dioxide Indicates the highest carbon dioxide value measured by the sensors.
- Replace filters Indicates the next recommended filter replacement date.
- Time in operation Indicates for how long the unit has been running.



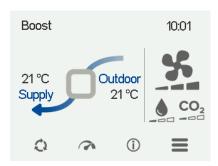
#### 3.4.2.3.3. Browsing the Boost mode information

To browse the basic information of the Boost mode:

1. Press the Change mode button until the icon of the Boost mode appears on the display:



2. Please wait until the main view of the Boost mode opens:



The main view shows a summary of the mode information.

3. Select Boost information :



The first mode information screen opens:

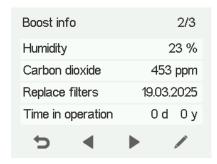


This screen shows the following information:

- Supply air Indicates the actual temperature of the air flowing into the apartment and the supply air temperature setting (in parentheses) if the supply air is warmer than the value set.
- Outdoor air Indicates the outdoor temperature.



- Fan speed Indicates the fan speed. If the automatic fan speed boost is active, the set value is shown in brackets, followed by the real fan speed.
- Cell status The ventilation unit has the following HR cell modes:
  - Heat recovery The HR cell heats the air flowing in from outdoors with extract air.
  - Cold recovery The HR cell cools the air flowing in from outdoors with extract air when the temperature of the air that is extracted from the apartment is two degrees lower than the outdoor temperature.
  - Bypass The inflowing air bypasses the HR cell.
  - HR cell defrost in progress The HR cell is being defrosted.
- 4. Select Right arrow. The second mode information screen opens:



This screen shows the following information:

- Humidity Indicates the highest relative humidity value measured by the sensors.
- Carbon dioxide Indicates the highest carbon dioxide value measured by the sensors.
- Replace filters Indicates the next recommended filter replacement date.
- Time in operation Indicates for how long the unit has been running.

#### 3.4.2.3.4. Browsing the Custom mode information

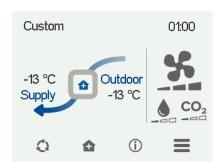
To browse the basic Custom mode information of the Vallox MV ventilation unit:

1. Press the Change mode button until the icon of the Custom mode appears on the display:





2. Please wait until the main view of the Custom mode opens:



The main view shows a summary of the mode information.

3. Select Custom information :

The first mode information screen opens:



This screen shows the following information:

- Duration Indicates the duration of the Custom mode, when the Custom mode is activated. The duration is given in hours and minutes.
- Remaining Indicates how much time is remaining in the Custom mode.
- Supply air fan speed Indicates the speed of the supply air fan as a percentage of the maximum speed.
- Extract air fan speed Indicates the speed of the extract air fan as a percentage of the maximum speed.

#### 3.4.2.4. Changing the ventilation mode settings

The next sections describe how to change the ventilation settings of different ventilation modes.

# 3.4.2.4.1. Change the At Home mode settings

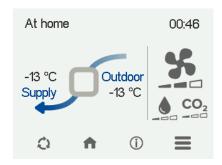


To change the At Home mode settings of the Vallox MV ventilation unit:

1. Press the Change mode button Q until the icon of the At Home mode appears on the display:

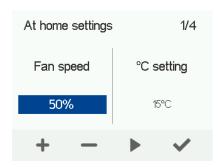


2. Please wait until the main view of the At Home mode opens:



- 3. Select At Home information:
- 4. Select Edit.

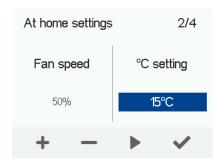
The fan speed control screen opens:



- 5. Use the Plus and Minus buttons to set the fan speed as a percentage of the maximum output for this ventilation mode.
- 6. Select Right arrow.

The temperature control screen opens:





7. Use the Plus and Minus buttons to set the target supply air temperature for this ventilation mode.

You can set the temperature between  $+5^{\circ}$ C and  $+25^{\circ}$ C. The recommended temperature is  $+18^{\circ}$ C or  $2-3^{\circ}$ C below room temperature.

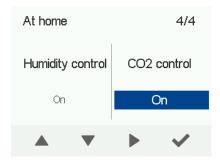
8. Select Right arrow.

The screen for automatic fan speed control based on relative humidity opens:



- 9. Use the arrow buttons to enable or disable automatic fan speed adjustment based on relative humidity.
- 10. Select Right arrow.

The screen for automatic fan speed control based on carbon dioxide content opens:



- 11. Use the arrow buttons to enable or disable automatic fan speed adjustment based on carbon dioxide content.
- 12. Select OK.



The At Home mode settings have now been set.

# 3.4.2.4.2. Change the Away mode settings

To change the Away mode settings:

1. Press the Change mode button until the icon of the Away mode appears on the display:

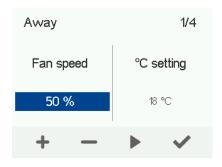


2. Please wait until the main view of the Away mode opens:



- 3. Select Away information :
- 4. Select Edit.

The fan speed control screen opens:



- 5. Use the Plus and Minus buttons to set the fan speed as a percentage of the maximum output for this ventilation mode.
- 6. Select Right arrow.

The temperature control screen opens:





7. Use the Plus and Minus buttons to set the target supply air temperature for this ventilation mode.

The temperature range is  $+5^{\circ}$ C  $- +25^{\circ}$ C.

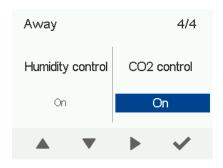
8. Select Right arrow.

The screen for automatic fan speed control based on relative humidity opens:



- 9. Use the arrow buttons to enable or disable automatic fan speed adjustment based on relative humidity.
- 10. Select Right arrow.

The screen for automatic fan speed control based on carbon dioxide content opens:



- 11. Use the arrow buttons to enable or disable automatic fan speed adjustment based on carbon dioxide content.
- 12. Select OK.



The Away mode settings have now been set.

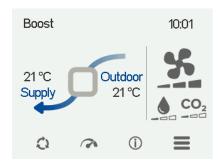
# 3.4.2.4.3. Change the Boost mode settings

To change the Boost mode settings:

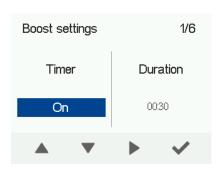
1. Press the Change mode button until the icon of the Boost mode appears on the display:



2. Please wait until the main view of the Boost mode opens:



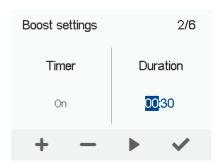
- 3. Select Boost information:4. Select Edit.
  - The setup screen for the mode timer function opens:



- 5. Use the arrow buttons to turn the timer function on or off. The options are:
  - On When the timer function is on, the selected ventilation mode is active for the period indicated by the timer.
  - Off When the timer function is off, the selected ventilation mode is active until you change the mode (or the week clock changes the mode).
- 6. Select Right arrow.

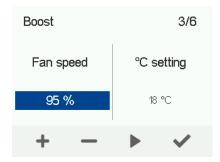
The screen for setting the timer duration for the mode opens:



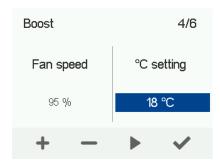


- 7. Use the Plus and Minus buttons to set the timer in hours and minutes for the mode. This value indicates the duration of boosted ventilation when the Boost mode is activated.
- 8. Select Right arrow.

The fan speed control screen opens:



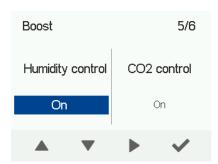
- 9. Use the Plus and Minus buttons to set the fan speed as a percentage of the maximum output for this ventilation mode.
- 10. Select Right arrow. The temperature control screen opens:



- 11. Use the Plus and Minus buttons to set the target supply air temperature for this ventilation mode.
  - The temperature range is  $+5^{\circ}$ C  $+25^{\circ}$ C.
- 12. Select Right arrow.

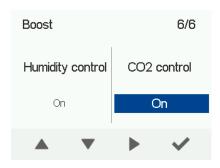
The screen for automatic fan speed control based on relative humidity opens:





- 13. Use the arrow buttons to enable or disable automatic fan speed adjustment based on relative humidity.
- 14. Select Right arrow.

The screen for automatic fan speed control based on carbon dioxide content opens:



- 15. Use the arrow buttons to enable or disable automatic fan speed adjustment based on carbon dioxide content.
- 16. Select OK.

The Boost mode settings have now been set.

# 3.4.2.4.4. Change the Custom mode settings

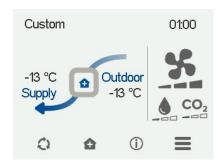
To change the Custom mode settings of the Vallox MV ventilation unit:

1. Press the Change mode button until the icon of the Custom mode appears on the display:





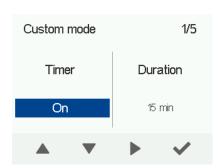
2. Please wait until the main view of the Custom mode opens:



The main view shows a summary of the mode information.

3. Select Custom information:4. Select Edit.

The setup screen for the mode timer function opens:



- 5. Use the arrow buttons to turn the timer function on or off. The options are:
  - On When the timer function is on, the selected ventilation mode is active for the period indicated by the timer.
  - Off When the timer function is off, the selected ventilation mode is active until you change the mode (or the week clock changes the mode).
- 6. Select Right arrow.

The screen for setting the Custom mode duration opens:





- 7. Use the Plus and Minus buttons to set the Custom mode duration in minutes. This value indicates the duration of the Custom mode, when the Custom mode is activated. The recommended duration is 15–30 min.
- 8. Select Right arrow.

The screen for setting the supply air fan power for the mode opens:



9. Use the Plus and Minus buttons to set the supply air fan output as a percentage of the maximum output for the Custom mode.

#### TIP:

We recommend increasing the supply air fan speed in the Boost mode to create temporary high pressure in the ventilation zone. Reducing the output of the extract air fan is not recommended.

10. Select Right arrow.

The screen for setting the extract air fan power for the mode opens:





- 11. Use the Plus and Minus buttons to set the extract air fan output as a percentage of the maximum output for the Custom mode.
- 12. Select OK.

The Custom mode settings have now been set.

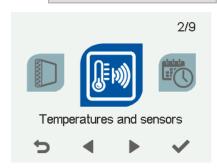
# 3.4.3. Temperatures and sensors

This section describes how to browse temperature and sensor information on the MyVallox Control panel.

### 3.4.3.1. Browsing of temperature information

To browse temperature and sensor information:

- 1. Select Settings.
- 2. Select Temperatures and sensors with the arrow buttons:



3. Select OK.

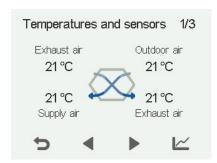
#### TIP:

You can also access the temperature and sensor information by selecting the information button on the mode screen:



A summary of the temperatures and sensors appears:





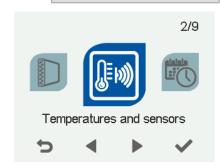
This screen shows the following information:

- Extract air Indicates the temperature of air flowing into the unit and extracted from the apartment.
- Outdoor air Indicates the temperature of air flowing into the unit from outside.
- Supply air Indicates the temperature of air flowing into the apartment from the unit.
- Exhaust air Indicates the temperature of air flowing out of the unit.

## 3.4.3.2. Browsing of temperature statistics

To browse the temperature statistics:

- 1. Select Settings.
- 2. Select Temperatures and sensors with the arrow buttons:



3. Select OK.

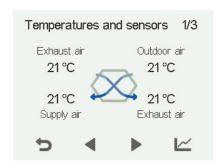
#### TIP:

You can also access the temperature and sensor information by selecting the information button on the mode screen:



A summary of the temperatures appears:





4. Select Statistics:

A graph describing the indoor air temperature in the past 24 hours appears:

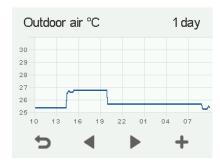


# NOTE:

The daily statistics are reset after a power cut.

5. Select Right arrow.

A graph describing the outdoor air temperature in the past 24 hours appears:



6. Select Right arrow

A graph describing the supply air temperature in the past 24 hours appears:





# 7. Select Right arrow.

A graph describing the exhaust air temperature in the past 24 hours appears:

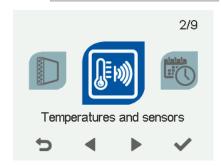


8. Exit the menu by selecting Back:

# 3.4.3.3. Browsing of humidity and carbon dioxide levels measured by the sensors

You can browse the humidity and carbon dioxide levels measured by individual sensors:

- 1. Select Settings.
- 2. Select Temperatures and sensors with the arrow buttons:





3. Select OK.

#### TIP:

You can also access the temperature and sensor information by selecting the information button on the mode screen:

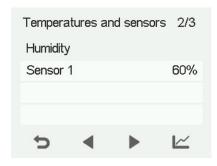


A summary of the temperatures and sensors appears.



4. Select Right arrow.

A screen showing the highest relative humidity level measured by the humidity sensors opens.



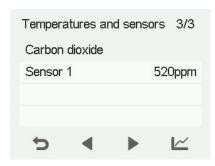
5. Select Right arrow.

A screen showing the highest relative humidity level measured by the humidity sensors opens again.

6. Select Right arrow.



7. If a carbon dioxide sensor (optional) has been installed, a screen showing the highest carbon dioxide level measured by the carbon dioxide sensors (ppm = parts per million) opens.



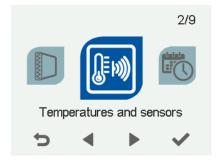
- 8. Select Right arrow
- 9. A screen showing the highest carbon dioxide level measured by the carbon dioxide sensors opens again.
- 10. Exit the menu by selecting Back:

#### 3.4.3.4. Browsing of relative humidity and carbon dioxide statistics

The ventilation unit's integrated humidity and carbon dioxide sensors control ventilation automatically, as necessary. Ventilation can also be adjusted automatically by using an optional carbon dioxide, humidity, or VOC (air quality) sensor.

To browse relative humidity and carbon dioxide statistics:

- 1. Select Settings.
- 2. Select Temperatures and sensors with the arrow buttons:



3. Select OK.

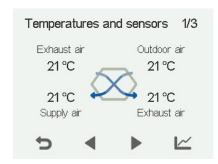
## TIP:

You can also access the temperature and sensor information by selecting the information button on the mode screen:



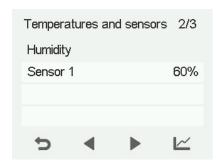


A summary of the temperatures and sensors appears:



# 4. Select Right arrow.

A screen showing the relative humidity level measured by humidity sensors 1–3 opens.



# • NOTE: The daily statistics are reset after a power cut.

# 5. Select Statistics:

A graph opens depicting the trend of relative humidity in the last 24 hours measured by the sensor that measured the highest value:



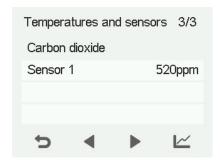


6. Select Right arrow.

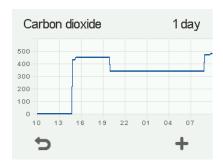
A screen showing the relative humidity level measured by humidity sensors 4–6 opens. You can view the statistics like with sensors 1–3.

- 7. When you are ready, return to the sensor group menu by selecting Back:
- 8. Select Right arrow.

A screen showing the carbon dioxide level measured by carbon dioxide sensors 1–3 opens.



- 9. Select Statistics:
- 10. A graph opens depicting the trend of carbon dioxide in the last 24 hours measured by the sensor that measured the highest value:



11. Select Right arrow.

A screen showing the carbon dioxide level measured by carbon dioxide sensors 4–6 opens. You can view the statistics like with sensors 1–3.

- 12. When you are ready, return to the sensor group menu by selecting Back:
- 13. Exit the menu by selecting Back:

# **3.4.4. Settings**

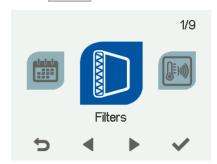
This section describes how to set and change the settings of the MyVallox Control panel and the Vallox ventilation unit.



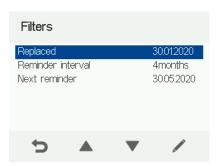
#### 3.4.4.1. Filter settings

To browse the filter settings:

- 1. Select Settings.
- 2. Select Filters:



- 3. Select OK.
- 4. A summary view of filter replacement appears:



This screen shows the following information:

- Reminder Indicates whether the reminder is enabled or disabled or in special mode.
- Replaced The day on which the filters were last replaced.
- Next reminder The day on which the system will remind about the next filter replacement.
- Reminder interval The reminder interval for filter replacement in months.
- Automatic reset interval The number of days the filter reminder is active. After this,
   the filter reminder is acknowledged automatically.

#### 3.4.4.1.1. Setting the reminder interval for filter replacement

1. Select Settings.

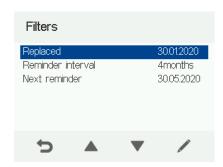


# 2. Select Filters:



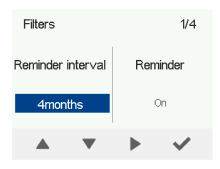
3. Select OK.

A summary view of filter replacement appears:



- 4. Select Down arrow
- 5. Select Edit.

The Reminder interval screen opens:



- 6. Set the reminder interval in months in the Reminder interval field with the **Arrow** buttons. You can set the reminder interval between 1–12 months. The factory setting is 6 months.
- 7. Select OK.

The reminder interval for filter replacement has now been set.

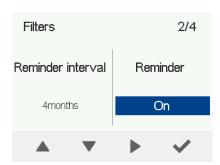
#### 3.4.4.1.2. Setting the filter reminder



- 1. Select Settings.
- 2. Select Filters:



- Select OK.
   Select Down arrow.
   Select Edit.
- Select the filter reminder mode:
  - o On The filter reminder is enabled and acknowledged manually.
  - Off The filter reminder is disabled.
  - Special mode The filter reminder is enabled and acknowledged manually or automatically within the time set in the Automatic reset interval field.



6. Select OK.

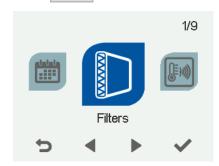
#### 3.4.4.1.3. Setting the automatic filter reset interval

**① NOTE:** You can set the automatic filter reset interval if the reminder is a Special mode reminder.

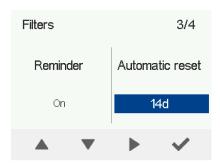
1. Select Settings.



# 2. Select Filters:



- Select OK.
   Select Down arrow.
   Select Edit.
   Select Right arrow → Automatic reset interval.
- 7. Set the automatic acknowledgement interval in days. You can set the reminder interval between 1–10 days. The factory setting is 14 days.



8. Select OK.

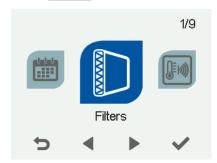
#### 3.4.4.1.4. Setting the filter replacement date

For more information about replacing the filters, see the maintenance instructions of the Vallox ventilation unit (see *Maintenance*).

1. Select Settings.

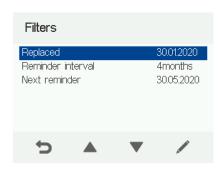


# 2. Select Filters:



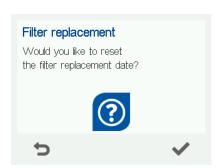
# 3. Select OK.

A summary view of filter replacement appears:



# 4. Select Edit.

The Replacing the filters screen opens:



5. Select OK to update the filters as replaced today.

The filter replacement day has now been set.



The unit sets an automatic maintenance reminder to remind you to replace the filters according to the maintenance interval set. See *Setting the reminder interval for filter replacement* and *Filter maintenance reminder*.



#### 3.4.4.1.5. Filter maintenance reminder

The maintenance reminder appears in a pop-up window to remind the user to replace the filter.

Acknowledge the message by selecting OK.

Select Back to postpone the reminder by a week.

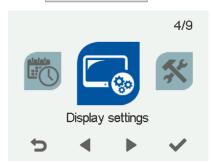
#### 3.4.4.2. Display settings

The next sections describe the display settings.

#### 3.4.4.2.1. Setting a sleep time

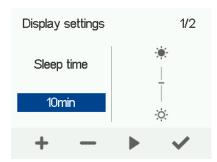
The MyVallox Control panel automatically switches to the sleep mode when the pre-set sleep time has elapsed.

- 1. Select Settings.
- 2. Select Display settings with the arrow buttons:



3. Select OK.

The Display settings 1/2 screen opens.



- 4. Use the Plus and Minus buttons to set the Sleep time in minutes.
- 5. Select OK.



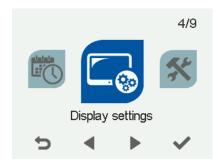
The Sleep time has now been set.

#### TIP:

The MyVallox Control panel automatically switches to the sleep mode when the pre-set Sleep time has elapsed. To reactivate the MyVallox Control panel, press any. button.

#### 3.4.4.2.2. Adjusting the display brightness

- 1. Select Settings .
- 2. Select Display settings with the arrow buttons:

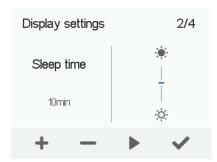


3. Select OK.

The Display settings screen opens.

4. Select Right arrow.

The Display settings 2/2 screen opens.



- 5. Use the Plus and Minus buttons to adjust the display brightness.
- 6. Select OK.

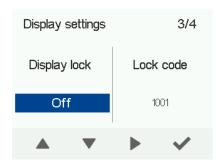
The display brightness has now been adjusted.

#### 3.4.4.2.3. Screen lock



- Select Settings.
   Select Display settings:
  - Display settings

3. You can enable or disable the screen lock. By default, the screen lock is disabled.

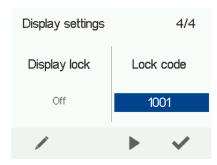


#### 3.4.4.2.4. Setting a screen lock code

- Select Settings.
   Select Display settings:
  - Display settings

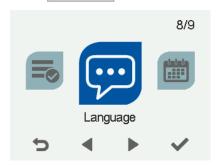


3. The default lock code is 1001. To change the code, select Modify.



# 3.4.4.3. Selecting the user interface language

- 1. Select Settings.
- 2. Select Language with the arrow buttons



- 3. Select OK.
- 4. Use the arrow buttons to select a language:



5. Select OK.

The language has now been selected.

# 3.4.4.4. Setting the time and date

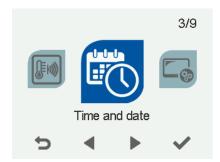


**NOTE:** 

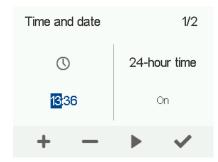
The time is not affected by a power cut of a few hours.

#### 3.4.4.4.1. Setting the time

- 1. Select Settings.
- 2. Select Time and date with the arrow buttons.



- 3. Select OK.
- 4. The Time and date settings open.



- 5. Use the Plus and Minus buttons to set the hours.
- 6. Select Right arrow.
- 7. Use the Plus and Minus buttons to set the minutes.
- 8. Select OK.

The time has now been set.

# 3.4.4.4.2. Setting the 24-hour or 12-hour clock

The 24-hour clock is used by default. To use the 12-hour clock:

1. Select Settings.

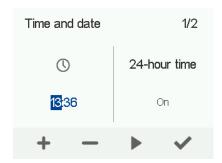


2. Select Time and date with the arrow buttons.

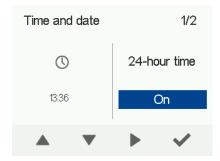


3. Select OK.

The Time and date settings open.



4. Select Right arrow.



- 5. The Select Down arrow . 24 h setting is changed to Off.
- 6. Select OK.

The 12-hour clock has now been selected.

#### TIP:

To switch back to the 24-hour clock, follow the steps above but select On at step 6.

#### 3.4.4.3. Automatic daylight saving time



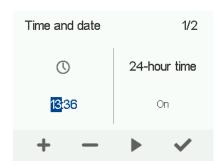
By default, automatic daylight saving time is turned on. To use the manual daylight saving time setting:

- 1. Select Settings.
- 2. Select Time and date with the arrow buttons.

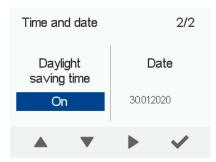


3. Select OK.

The Time and date settings open.



4. Select Right arrow .:



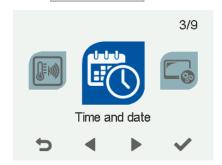
- 5. Use the Up arrow and Down arrow buttons to enable or disable automatic daylight saving time.
- 6. Select OK.

Daylight saving time has now been set.

#### 3.4.4.4. Setting the date

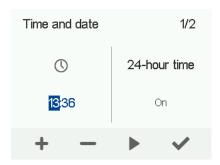


- 1. Select Settings.
- 2. Select Time and date with the arrow buttons.

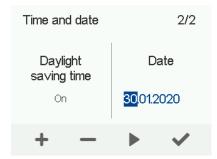


3. Select OK.

The Time and date settings open.



4. Select Right arrow.



- 5. Use the Plus and Minus buttons to set the day.
- 6. Select Right arrow.
- 7. Use the Plus and Minus buttons to set the month.
- 8. Select Right arrow.
- 9. Use the Plus and Minus buttons to set the year.
- 10. Select OK.

The date has now been set.



#### 3.4.5. Week clock

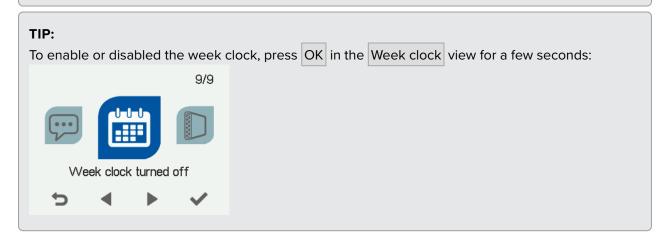
Use the week clock to set the ventilation unit a weekly ventilation programme. You can select one of the following modes for every hour of the week:

- At Home At Home mode on.
- Away Away mode on.
- Boost Boost mode on.
- Custom Custom mode on.
- Standby mode Standby mode on.
- Blank Previous mode on.

## NOTE:

If you change the mode manually when the week clock is used, the selected mode will be active until the next period programmed in the week clock.

If ventilation is controlled by the humidity, carbon dioxide or VOC sensors, the sensors adjust the fan speed regardless of the manually selected mode or week clock settings.



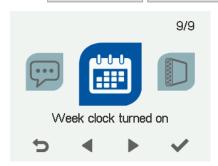
#### 3.4.5.1. Setting and editing a weekly program

To set a new weekly program or edit an existing weekly program:

1. Select Settings.

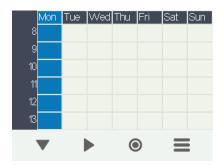


2. Select Week clock on / Week clock off with the arrow buttons.



3. Select OK.

The week clock's calendar view opens:



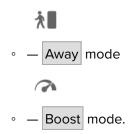
4. Select Edit the week clock:



- 5. Select OK.
- 6. Select Right arrow to set the date.
- 7. Select Down arrow to set the time.
- 8. Use the Select button to select the ventilation mode to be activated at a certain hour. Use the Select button to browse the mode icons. The icons are:







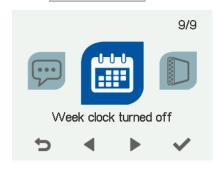
- 9. Follow the steps above to set other ventilation modes for the week clock. See also *Example of setting a weekly program*.
- 10. When you are done selecting the ventilation modes, select Settings.
- 11. Select OK to save the changes. Select Cancel to cancel the changes. Select Back to make more changes to the week clock.

The week clock is now in use and follows the weekly program.

# 3.4.5.2. Turning on the week clock

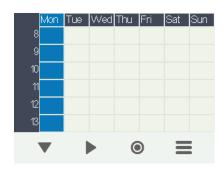
To turn on the week clock:

- 1. Select Settings.
- 2. Select Week clock off with the arrow buttons:



3. Select OK.

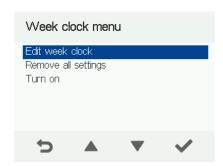
The week clock's calendar view opens:





4. Select Settings.

Week clock menu opens:



- 5. Select Start week clock with the arrow buttons.
- 6. Select Select:

The confirmation screen opens:



The week clock is now in use and follows the weekly program.

# 3.4.5.3. Turning off the week clock

To turn off the week clock:

1. Select Settings.



2. Select Week clock on with the arrow buttons:



- 3. Select OK.4. Select Stop week clock with the arrow buttons.5. Select OK.
  - The confirmation screen opens:

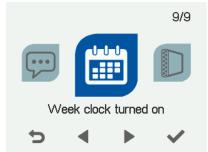


The week clock is now disabled. If you have set a weekly program, it is not deleted.

# 3.4.5.4. Resetting the week clock

To reset a weekly program you have set:

- Select Settings.
   Select Week clock on Week clock off with the arrow buttons
- 2. Select Week clock on Week clock off with the arrow buttons.





3. Select Remove all settings with the arrow buttons.

The unit asks you to confirm the task.

4. Select OK.

The confirmation screen opens.

The week clock has now been reset.

#### 3.4.5.5. Example of setting a weekly program

In this example, the following weekly program has been set:

- Mon-Fri 08-16, you are away from home.
- Mon-Fri 17-07, you are home.
- Sat 08–17, you are home.
- Sat 18–20, you are home and need a ventilation boost e.g. for cooking.
- Sat 21–Mon 08, you are home.

In the images below, the week clock has been set according to the example:



Set the week clock:

- 1. Open the week clock (see. Setting and editing a weekly program)
- 2. Select Monday, and make the following settings:
  - 08:00: select the Away mode.
  - 17:00: select the At Home mode.
- 3. Then make the corresponding settings for the other weekdays.
- 4. Then select Saturday, and make the following settings:
  - 18:00: select the Boost mode.
  - 21:00: select the At Home mode.



5. Make sure the week clock is turned on. If not, see *Turning on the week clock*.

The weekly program has now been set.

#### NOTE:

Do not set a ventilation mode separately for every hour. Only include the hours during which you want the ventilation mode to change.

#### 3.4.6. Timed function

This section describes the timed function and its settings on the MyVallox Control panel.

#### 3.4.6.1. Enabling/disabling the timed function

The timed function allows you to adjust ventilation for a specific period of time, for example, for the duration of a holiday. You can select a ventilation mode and set a start and end date for this mode.

If the timed function is enabled and you switch the ventilation unit to another mode manually, the unit returns to the timed mode at the next midnight. When the pre-set period ends, the unit switches automatically back to the At Home mode.

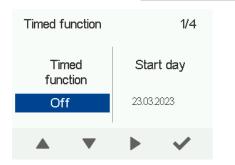
**NOTE:** When the timed function activates, the weekly program is disabled. If the weekly program was active before the activation of the timer function, it reactivates automatically after the pre-set period.

- 1. Select Settings.
- 2. Select Timed function:





3. Enable or disable the Timed function:

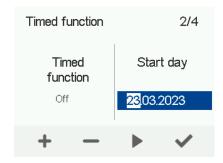


# 3.4.6.2. Setting the timed function's start and end date



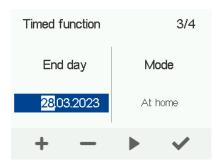


3. Set the timed function's start date:





4. Set the timed function's end date:



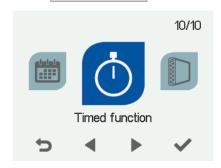
# 3.4.6.3. Selecting a timed ventilation mode

The timed function allows you to adjust ventilation in advance for a specific period of time, for example, for the duration of a holiday or another absence. You can pre-set any of the following ventilation modes:

- Away The ventilation unit operates at a lower intensity to save energy during your absence.
- At Home The ventilation unit operates at a normal intensity like in normal use.
- Standby mode: The ventilation unit is stopped (not recommended for constant use).

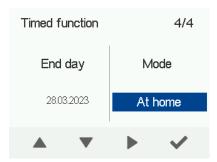
**IMPORTANT:** Stopping the ventilation can deteriorate the indoor air quality, increase the accumulation of moisture in the building structures and potentially lead to mildew or ice. If you want to reduce ventilation, it is better to use the Away mode. In this mode, the ventilation unit operates at a lower intensity but does not stop completely.

- 1. Select Settings.
- 2. Select Timed function:





#### 3. Select a ventilation mode:



# 3.4.7. Expert settings

This section describes how to set and change the expert settings of the MyVallox Control panel and the Vallox ventilation unit.

#### 3.4.7.1. I/O and bus settings

The next sections describe the configuration of I/O and bus settings.

#### 3.4.7.1.1. Control panel address

If two control panels have been connected to the ventilation unit, the panel addresses must be different. In other words, each control panel must have a unique address. If only one control panel is used, its address can be any number between 10 and 19.

#### **IMPORTANT:**

If your system uses multiple control panels, connect them one at a time.

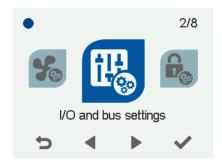
To set a control panel address:

- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.

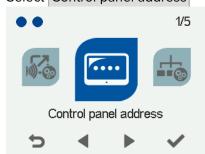




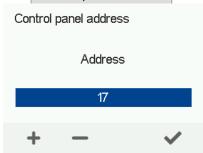
- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



- 5. Select OK.
- 6. Select Control panel address



- 7. Select OK.
- 8. The Control panel address screen opens.



- 9. Use the Plus and Minus buttons to set the control panel address. You can set the address between 10 and 19.
- 10. Select OK.

The control panel address has now been set.

# 3.4.7.1.2. Modbus settings

If the ventilation unit is connected to e.g. a building automation system via Modbus, configure the Modbus settings. The Modbus settings are:

· Ventilation unit's Modbus address

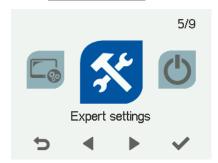


- · Modbus baud rate
- · Modbus parity
- · Modbus stop bit.

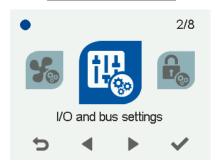
The configuration of all Modbus settings is described below in the above-mentioned order. You can also refer to these instructions when configuring individual settings, such as the Modbus address.

To configure the Modbus settings:

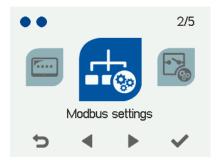
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



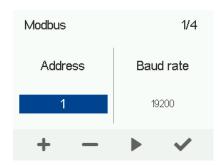
5. Select Modbus settings with the arrow buttons:



6. Select OK.

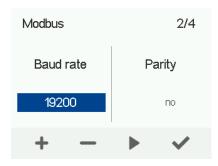
The Modbus 1/4 screen opens.



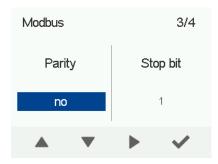


- 7. Use the Plus and Minus buttons to set the ventilation unit's Modbus address. You can set the address between 1 and 247.
- 8. Select Right arrow.

The Modbus 2/4 screen opens.



- 9. Use the Plus and Minus buttons to set the Modbus Baud rate. The options are 9600, 19200, 38400, 57600 and 115200.
- 10. Select Right arrow.
- 11. The Modbus 3/4 screen opens.

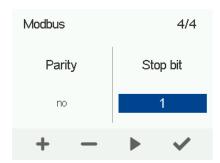


- 12. Use the Up arrow and Down arrow buttons to set the Modbus Parity . The options are:
  - ∘ no − No parity
  - even Even parity
  - ∘ odd Odd parity.



13. Select Right arrow.

The Modbus 4/4 screen opens.



- 14. Use the Plus and Minus buttons to set the Modbus Stop bit. The options are 1 or 2.
- 15. Select OK.

The Modbus settings have now been set.

#### 3.4.7.1.3. Relay settings

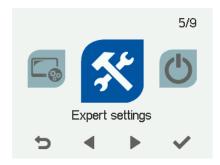
In the Relay settings menu, you can choose the operating mode of the ventilation unit's 24 V relay. Only one operating mode can be selected at a time.

## **•** NOTE:

The information is also accessible through the Modbus.

To set the operating mode of the ventilation unit's relay:

- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



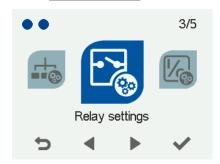
3. Select OK.



4. Select I/O and bus settings with the arrow buttons.

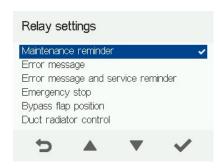


- 5. Select OK.
- 6. Select Relay settings with the arrow buttons.



7. Select OK.

The Relay settings screen opens.





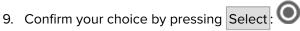
8. Use the arrow buttons to select the operating mode of the 24 V relay. The options are described in the table below:

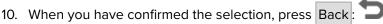
Table 7. Relay functions

Function	Ends closed	Ends open
Maintenance reminder — When the unit's maintenance reminder is activated, the relay changes its mode. This change of mode can be read by the building automation system, for example.	Normal operation	Maintenance reminder
Error message — If there is an error in the ventilation unit, the relay changes its mode. This change of mode can be read by the building automation system, for example. The error is also recorded in the error log.	Normal operation	Error situation
Error message and maintenance reminder — If the unit's maintenance reminder is activated or if there is an error in the ventilation unit or the unit has been turned off, the relay changes its mode. This change of mode can be read by the building automation system, for example. The maintenance reminder notifies the user of the need for maintenance every four months (factory setting). For more information, see <i>Maintenance</i> .	Normal operation	Maintenance reminder/error
Emergency stop — If the unit's emergency stop is activated, the relay changes its mode. The emergency stop is usually activated by an external signal received through the digital input. The emergency stop information can be sent to the building automation system, for example.	Normal operation	Emergency stop
Position of the bypass damper — The relay indicates the bypass damper position. This change of mode can be read by the building automation system, for example.	Heat recovery	Cell bypass
Duct radiator control — This setting is used in special situations, in which a duct radiator has been installed in the ventilation duct. The relay can be used to control devices connected to the duct radiator, such as the pump, solenoid valve etc. For more information, see Duct radiator control.	On	Off



Function	Ends closed	Ends open
NOTE: The relay's voltage is only 24 V, so the information cannot be directly used to control the 230 VAC feed and e.g. a contactor is needed in between.		
None — The relay function is not in use.	Normal operation	Normal operation
Air heating — This setting is used in the warm-air heater. Use the relay to control the liquid radiator actuator of the warm-air heater.	On	Off
On/off status — The relay will change the mode in error situations or when the unit has stopped.	Normal operation	Error situation/ the unit has stopped





The operating mode of the ventilation unit's 24 V relay has now been set.

#### 3.4.7.1.4. Duct radiator control

The duct radiator can be placed in the outdoor or supply air duct. If the duct radiator is placed in the outdoor air duct, it can be used for pre-heating and/or cooling. If the duct radiator is placed in the supply air duct, it can only be used for cooling.

The duct radiator can be set to work automatically or manually.

- Automatic In summer, the set supply air temperature is maintained. In winter, the duct radiator is switched on when the outdoor air temperature drops below the winter setting.
- Manual In summer, the duct radiator is switched on when the outdoor air temperature rises
  above the summer setting. In winter, the duct radiator is switched on when the outdoor air
  temperature drops below the winter setting.

To eliminate the supply air duct's condensation risk, decide whether the supply air limit is adjusted automatically or manually:

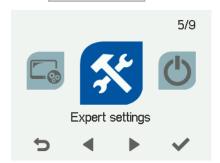
- Automatic The supply air limit is adjusted automatically according to the extract air dew point. When the supply air temperature drops too low, the duct radiator is switched off.
- Manual The supply air limit can be set manually. When the supply air temperature drops below the set value, the duct radiator is switched off.



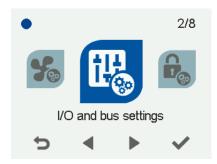
#### **!** IMPORTANT:

Please note the risk of condensation when changing the duct radiator settings.

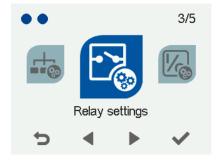
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



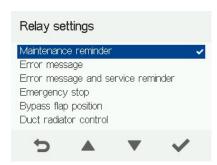
- 5. Select OK.
- 6. Select Relay settings with the arrow buttons.



7. Select OK.

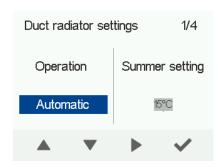
The Relay settings screen opens.





8. Select Duct radiator control as the relay's operating mode with the arrow buttons.

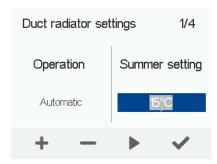
The Duct radiator settings screen opens.



9. Set the duct radiator operation with the arrow buttons. The options are:



- 10. Select Right arrow
- 11. Use the Plus and Minus buttons to set the summer setting.



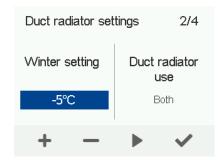
#### **NOTE:**

If you have selected automatic duct radiator operation, you cannot change the summer setting. The summer setting is set between +10°C and +25°C. The factory setting is +15°C.

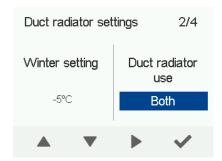
12. Select Right arrow.



13. Use the Plus and Minus buttons to set the winter setting. The winter setting is set between -10°C and +5°C. The factory setting is -5°C.



- 14. Select Right arrow.
- 15. Use the arrow buttons to select the duct radiator operating mode.



### The options are:

- Both The duct radiator is used for pre-heating and cooling.
- Pre-heating The duct radiator is only used for pre-heating.
- Cooling The duct radiator is only used for cooling.
- 16. Select Right arrow.
- 17. Use the arrow buttons to configure how the supply air limit is adjusted. The options are:
  - Automatic The supply air limit is adjusted automatically according to the extract air dew point.
  - Manual The supply air limit can be set manually.
- 18. Select Right arrow.
- 19. Use the arrow buttons to configure how the supply air limit is adjusted. The supply air limit is adjusted between +12°C and +25°C.

#### NOTE:

If you have selected automatic supply air limit adjustment, you cannot adjust the supply air limit manually.

- 20. Select Right arrow.
- 21. The External sensor settings screen opens.

Use the arrow buttons to configure the operating mode of the external sensor. The options are:



- None The duct radiator is in the outdoor air duct and no external sensor has been connected.
- Outdoor air duct radiator control The duct radiator and external sensor are in the outdoor air duct.
- Air heating control Not used to control the duct radiator.
- Supply air duct radiator control The duct radiator and external sensor are in the supply air duct.

#### 3.4.7.1.5. Input settings

The ventilation unit has three inputs: one analog input and two digital inputs. You can assign different functions to each input according to the table below. The digital controls can be implemented by a push button or rocker switch. Both digital inputs recognise the switch type automatically.

Potential uses of the analog and digital inputs include a request to boost ventilation from the cooker hood/central vacuum system or a button for activating the Custom mode next to the fireplace.

The push button functions are activated whenever the push button is released. To cancel a push button function, press the button for five seconds. The rocker switch function is triggered by the switch position. When the switch is turned to ON, the function is activated. When the switch is turned to OFF, the function is deactivated. You can cancel the rocker switch function by pressing the switch for five seconds.

#### **NOTE:**

When you turn the rocker switch to ON for the first time, the function is activated after a five-second delay. After the first time, the function is activated immediately.

The rocker switch can also be used to activate a push button function. To do this, turn the switch to ON for less than five seconds. To cancel the push button function, turn the rocker switch to the ON position for more than five seconds.

The mode selected last from any user interface stays active.

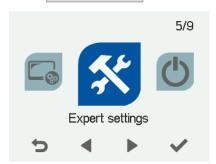
You can make changes to the three inputs in the Input settings menu.

To make changes to the ventilation unit's analog input or digital inputs:

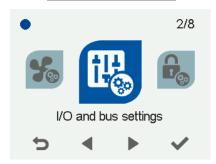
1. Select Settings.



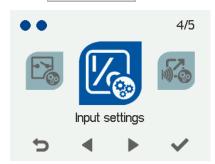
2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



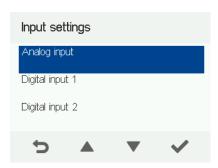
5. Select Input settings with the arrow buttons



6. Select OK.

The Input settings screen opens:





- 7. Select an input by browsing the menu with the arrow buttons. Press OK at the input you want to select. The options are:
  - Analog input Select an analog input function.

The options are given in the table below:

Table 8. Analog input functions

Function	Voltage rating
Stop, Away, At Home, Boost, 0.1–1.0 V, 2–4 V, 5–7 V, 8–10 V — The remote monitoring system uses these voltage signals to control ventilation by changing the ventilation mode.	Stop=0.1–1.0 V, Away= 2–4 V, At Home= 5–7 V, Boost= 8–10 V
Supply air temperature control, 0–10 V = +5°C - +25°C — The remote monitoring system uses these voltage signals to control ventilation by adjusting the supply air temperature.	0–10 V = +5°C – +25°C

Digital input 1/Digital input 2 — Assign a function for digital input 1 or 2.

The options are given in the table below:

Table 9. Digital input control functions

Function	Rocker	Push button	
	0 V	24 V	24 V pulse for less than 5 seconds
Custom mode off/ on OV / 24V	Off	On	On for the set time



Function	Rocker	Push button	
	0 V	24 V	24 V pulse for less than 5 seconds
At Home/Away OV / 24V Does not work in the <i>Boost</i> mode.		Away	Switches the mode between . and Away.
Forced Custom mode off/on OV / 24V	Off	On	On for the set time
Emergency stop / Normal operation OV / 24V	Unit shuts down	Normal operation	-
Boost off/on OV / 24V When the Boost mode is deactivated, the unit switches back to the previous ventilation mode.	Off	On	On for the set time.
Normal operation / HR cell bypass OV / 24V	Automatic	Bypass	Switches the bypass mode
Week clock off/on OV / 24V	Off	On	Switches the week clock mode
Programmable input off/on OV / 24V	Off	On	On for the set time

# NOTE:

Only one function per input can be active at a time.

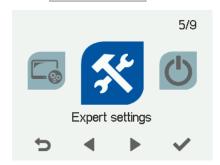
8. When you are done, select Back two times:

The ventilation unit's input settings have now been configured.

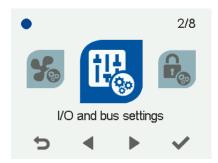
# 3.4.7.1.6. External sensor settings



- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select I/O and bus settings with the arrow buttons.



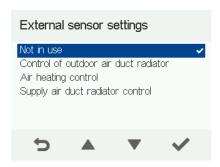
- 5. Select OK.
- 6. Select External sensor settings with the arrow buttons:



7. Select OK.

The External sensor settings screen opens:





- 8. Use the arrow buttons to select the external sensor's operating mode. The options are:
  - None No external sensor in use.
  - Outdoor air duct radiator control The duct radiator and external sensor are in the outdoor air duct.
  - Air heating control Only used for air heating control.
  - Supply air duct radiator control The duct radiator and external sensor are in the supply air duct.

#### 3.4.7.1.7. Programmable input

Use the programmable input to compensate for changes in pressure caused by a central vacuum system, for example. When the building automation system detects that the central vacuum system has been turned on, it sends a message to the digital input, which controls the unit according to the values set for the programmable input.



There are two physical digital inputs, but there is only one programmable input.

To programme an input:

Select Programmable input, 0 V / 24 V, for one digital input. See section Input settings.
 The first information screen of the programmable input opens:

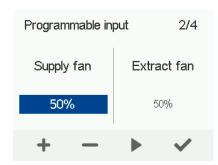


2. Use the Plus and Minus buttons to set the duration of the programmable input in hours and minutes.



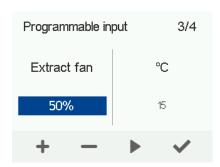
3. Select Right arrow.

The screen for setting the supply air fan output for the programmable input opens:



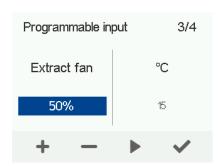
- 4. Use the Plus and Minus buttons to set the supply air fan output as a percentage of the maximum output for the programmable input.
- 5. Select Right arrow.

The screen for setting the extract air fan output for the programmable input opens:



- 6. Use the Plus and Minus buttons to set the extract air fan output as a percentage of the maximum output for the programmable input.
- 7. Select Right arrow.

The screen for setting a temperature for the programmable input opens:



8. Use the Plus and Minus buttons to set a temperature for the programmable input. The programmable input settings have now been configured. In addition to the



aforementioned expert settings, the



MyVallox MyVallox Home/Cloud user interface can be used to turn a timer on or off.

9. Select OK.

## 3.4.7.2. Access rights

The next sections describe how to set an access code and enable the access code prompt and how to set the access level.

#### 3.4.7.2.1. Acess code

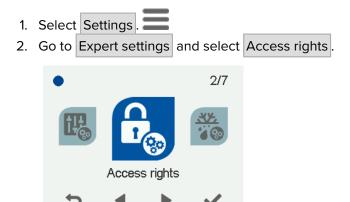
The access code is used to restrict the use of the ventilation unit functions at different access levels. If the access code prompt is enabled and the access level is limited or normal, the user is required to enter the access code before certain settings can be changed.

When the access code prompt is active, a lock icon appears on the screen. The access code consists of four digits.

# NOTE:

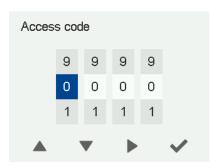
If you do not change the default access code 0000, the access code prompt is disabled.

To set a new access code:





3. Go to Access code and select Modify to change the access code. The default access code is 0000, and the access code prompt is disabled.



#### 3.4.7.2.2. Access level

The access level determines which settings the user can change and access. The access levels are:

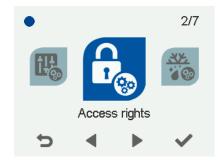
- Limited The user can change the ventilation mode and view the ventilation unit information. However, the user cannot change the system settings.
- Normal The user can view the ventilation unit information and make limited changes to the settings. Access to expert settings is restricted.
- Extensive The user can change all settings of the ventilation unit.

The factory-set access level is Extensive.

**TIP:** See also Access level diagrams.

To change the access level of the ventilation unit:

- 1. Select Settings.
- 2. Go to Expert settings and select Access rights.





3. Select the desired access level.



**NOTE:** To confirm the access level restrictions, enter the access code.

## 3.4.7.3. Defrost settings

The next sections describe the settings related to the ventilation unit's defrosting feature.

#### 3.4.7.3.1. Defrosting method

The HR cell is defrosted when it becomes frozen. The defrosting method determines how the HR cell is defrosted. Depending on the accumulation of ice, the defrosting process takes 15–45 minutes. This function is used in winter.

The defrosting methods:

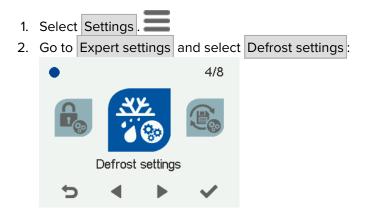
- Bypass (factory setting) The HR cell is bypassed from the supply air side. The supply and extract air fans function normally, and the ventilation balance remains constant during defrosting. This prevents drafts or air breaks caused by differences in pressure. This setting is recommended for tightly sealed buildings that may experience negative pressure. When the bypass function is used, the ventilation unit's post-heating resistor and optional additional heating resistor must be activated.
- Supply fan stop The supply air fan stops during defrosting. This causes temporary negative pressure in the apartment. This setting is recommended if the indoor air temperature is exceptionally low (<15°C) or if you want to reduce the use of the heating resistors during defrosting.</li>

## **IMPORTANT:**

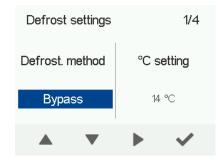
It is usually not necessary to adjust the defrosting settings. The factory settings suffice in normal household use. In exceptional situations, for example, in indoor pool facilities or when a great amount of ice accumulates in the exhaust air duct, the settings could be adjusted.

To set the defrosting method:





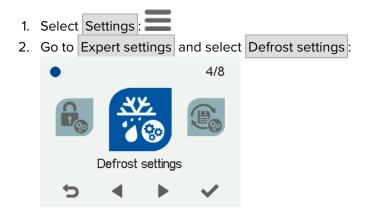
3. Select a defrosting method.



• NOTE: If post-heating and additional heating is not used, the fan is automatically stopped for defrosting and no other defrosting method can be selected.

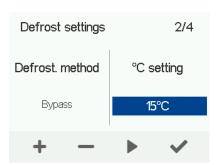
#### 3.4.7.3.2. Supply air temperature during defrosting

The supply air temperature setting determines the supply air temperature during bypass defrosting. The temperature range is 12–20°C (factory setting: 15°C). In severe frost, if the heating resistor's capacity is not enough, the ventilation unit does not allow the supply air temperature to drop below 12°C.





3. Set the target supply air temperature during defrosting. The temperature range is  $\pm 12^{\circ}$ C –  $\pm 20^{\circ}$ C. The factory setting is  $\pm 15^{\circ}$ C.



## 3.4.7.3.3. Adjusting the defrost humidity level

The humidity of indoor air affects the freezing of the HR cell significantly. The unit is optimised to operate in normal household conditions. If the unit is used in exceptional humidity conditions, for example in indoor pool facilities, the humidity level set for defrosting may have to be adjusted. The humidity percentage should be higher than zero in exceptional conditions and lower than zero in dry conditions.

# **()** IMPORTANT:

Do not change the relative humidity of indoor air without consulting an HVAC expert.

To set the relative humidity of indoor air:

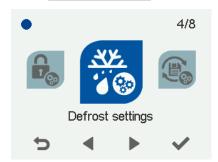
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



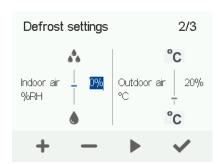
3. Select OK.



4. Select Defrost settings with the arrow buttons.



- 5. Select OK.6. Select Right arrow
  - The Defrost settings screen opens:



- 7. Use the Plus and Minus buttons to adjust the humidity level. The factory setting is 0%, which is a normal indoor air humidity level. The humidity range is -50% +50% RH.
- 8. Select OK.

The defrost humidity level has now been adjusted.

#### 3.4.7.3.4. Outdoor air temperature

The outdoor air temperature setting influences the unit's operation in very cold conditions (aluminium cell: below -20°C; plastic cell: below -5°C). The setting is optimised according to the cell type and installation conditions.

# **IMPORTANT:**

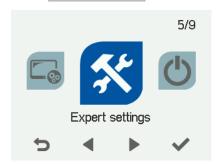
Do not change the outdoor air temperature without consulting an HVAC expert.

To set the outdoor air temperature:

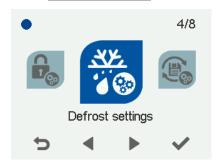
1. Select Settings.



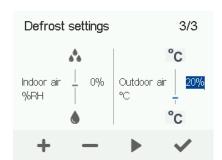
2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select Defrost settings with the arrow buttons.



- 5. Select OK.6. Select Right arrow two times.
  - The Defrost settings screen opens:



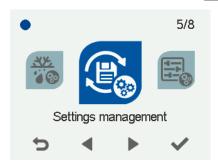
- 7. Use the Plus and Minus buttons to set the outdoor air temperature. The setting range is 0–100%. The factory setting depends on the ventilation unit type.
- 8. Select OK.

The outdoor air temperature has now been set.

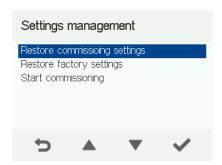


## 3.4.7.4. Settings management

- 1. Select Settings:
- 2. Go to Expert settings and select Settings management:



3. Select the desired function:



- Restore setup settings Restores the ventilation unit settings configured during setup.
- Restore factory settings Restores the ventilation unit's original settings. All changes made by the user are reset.
- Start commissioning Launches the ventilation unit's setup process.

## 3.4.7.5. Control settings

The ventilation unit's sensors measure the air temperature, relative humidity and carbon dioxide content.

This section describes how to adjust the following sensor settings:

- Adjustment of the temperature of air flowing into the apartment
- · Adjustment of humidity control

Humidity control refers to a function the ventilation unit uses to control ventilation based on the relative humidity of room air. If more than one humidity sensor is in use, the fan speed is adjusted according to the highest level.



· Humidity limit

The humidity limit refers to the air's relative humidity level. If this level is exceeded, the ventilation unit boosts ventilation.

· Carbon dioxide limit

The carbon dioxide limit refers to the air's carbon dioxide content. When the limit value is exceeded, the ventilation unit boosts ventilation. If more than one carbon dioxide sensor is in use, the fan speed is adjusted according to the highest level. The carbon dioxide sensor is an optional accessory.



The indicative maximum carbon dioxide content of good room air is 900 ppm.

Other limits related to carbon dioxide content:

- $\circ$  1200 ppm Limit of acceptable indoor air
- 700 ppm Limit of excellent indoor air

Source: Classification of Indoor Environment 2018

#### 3.4.7.5.1. Setting the supply air temperature control method

The supply air temperature control method defines how the ventilation unit controls the temperature of inflowing air. The control method determines how the unit reacts to changes in indoor and outdoor air temperature. The temperature setting (+5...+25°C, recommendation: +18°C) is set in the ventilation mode (At Home, Away, Boost, Custom) settings.

To change the supply air temperature control method:

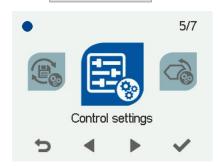
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



3. Select OK.



4. Select Control settings with the arrow buttons.



5. Select OK.

The Control settings screen opens:



6. Use the arrow buttons to select the control method of the supply air temperature.

The options are Supply air, Extract air, and Cooling.

- Supply air (factory setting) The supply air temperature is maintained at the set target value (+5...+25°C). The unit uses automatic heat recovery and, if necessary, post-heating to maintain the target temperature.
  - If the air temperature is lower than the target supply air temperature after the air has passed through the HR cell, the ventilation unit activates the postheating resistor.
  - If heating the supply air is not necessary, the HR cell is bypassed.
- Extract air The supply air temperature is adjusted automatically according to the temperature of air extracted from indoors. The unit reacts to changes in indoor air temperature and maintains balanced indoor air conditions. If the apartment is warm, the supply air is cooled down automatically and vice versa.
  - If the extract air temperature is lower than the supply air temperature set for the active ventilation mode, the unit increases the supply air temperature (max. 10°C). If necessary, the unit uses the post-heating resistor.
  - If the extract air temperature is higher than the supply air temperature set for the active ventilation mode, the unit reduces the supply air temperature (max. 10°C). If heating the supply air is not necessary, the HR cell is bypassed.



Cooling — This control method is based on the extract air temperature. In addition, ventilation is boosted when necessary to keep the supply air temperature close to the target temperature, especially in warm weather. This control method is ideal for situations, in which the indoor temperature rises easily.

## NOTE:

If the outdoor air is warmer than the indoor air, the ventilation unit is not able to cool the supply air. If the outdoor air is colder than the indoor air, it is recommended partial bypass be activated to maintain the target supply air temperature.

7. Select OK.

The temperature control method has now been set.

#### 3.4.7.5.2. Humidity control (Automatic / Manual)

The humidity control method determines how the ventilation unit reacts to the humidity level of indoor air. The unit's integrated humidity sensor is located in the extract air chamber. The unit can also be connected to an external humidity sensor (optional) installed in the apartment.

The humidity control boosts the fan speed to the speed set for the Boost mode. If the Boost mode is activated, the speed can be increased to the maximum fan speed. In any case, the humidity control does not reduce the fan speed below the level set for the active ventilation mode (e.g. At Home, Away). The humidity control can be disabled from the ventilation mode settings.

**NOTE:** The humidity control does not increase the humidity level in the apartment but removes excess humidity more efficiently.

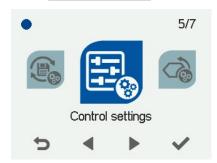
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



3. Select OK.



4. Select Control settings with the arrow buttons.



- 5. Select OK.6. Select Right arrow
  - The Control settings screen opens:



7. Use the arrow buttons to select the humidity control adjustment method.

### The options are:

Automatic (factory setting) — Use the Automatic setting for regular apartment ventilation. If automatic humidity control is in use, the unit determines the normal humidity level and records it. The unit strives to restore this humidity level after a shower, for example. The normal humidity level changes automatically seasonally. If you are using the Automatic setting, you do not have to manually adjust the humidity limit.

**Q NOTE:** Automatic humidity control is selected during unit setup. It takes 3–10 hours to determine the relative humidity level. The humidity level cannot be adjusted during this period.

Manual — Use the Manual setting in places, where the humidity level of indoor air stays constant around the year. For example, this setting is recommended for use in indoor swimming pools. You can set the humidity level between 1–99%RH. The unit strives to maintain this humidity level. If you are using the Manual setting, remember to set the humidity limit.



For more information about setting the humidity limit, see section Setting the humidity limit.

8. Select OK.

The humidity control adjustment method has now been set.

#### 3.4.7.5.3. Setting the humidity limit

The humidity limit means the relative humidity content of air that triggers boosted ventilation when exceeded.

## NOTE:

The humidity level must only be set if manual humidity control adjustment is enabled.

When the humidity control is set to Automatic, the unit determines the base level automatically. This mode is ideal for regular household ventilation, and the user does not have to set the humidity level separately. If the screen says Calibrating, the unit is in the middle of determining the normal humidity level.

When the humidity control is set to Manual, the user must set the humidity limit between 1 and 99%RH. Usually, the suitable humidity level for a normal living environment is around 40–60%RH. A higher humidity limit (e.g. over 70%RH) is suitable for spaces with a naturally high humidity level, such as indoor pool facilities or humid work environments.

To set the humidity limit:

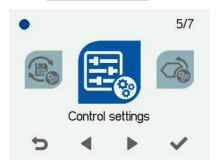
- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



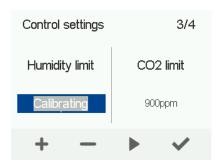
3. Select OK.



4. Select Control settings with the arrow buttons.



- 5. Select OK.6. Select Right arrow two times.
  - The Control settings screen opens:



- 7. Use the Plus and Minus buttons to set the humidity level as a percentage.
- 8. Select OK.

The humidity level has now been set.

## 3.4.7.5.4. Setting the carbon dioxide limit

The carbon dioxide limit refers to the air's carbon dioxide content. When the limit value is exceeded, the ventilation unit boosts ventilation. If more than one carbon dioxide sensor is in use, the fan speed is adjusted according to the highest level. The carbon dioxide sensor is an optional accessory.

## NOTE:

The indicative maximum carbon dioxide content of good room air is 900 ppm.

Other limits related to carbon dioxide content:

- 1200 ppm Limit of acceptable indoor air
- 700 ppm Limit of excellent indoor air

Source: Classification of Indoor Environment 2018



The ventilation unit adjusts the fan speed automatically according to the carbon dioxide content of indoor air. The carbon dioxide level can be set between 500 and 2000 ppm, and the factory setting is 800 ppm. This level is suitable for regular household use and ensures a good indoor air quality.

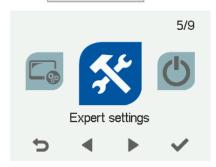
You can set the level higher if, for example, there is a large number of people in the apartment simultaneously and ventilation seems to activate too easily. A lower carbon dioxide level improves the indoor air quality further, as the system reacts quickly to minor increases in carbon dioxide content and activates the ventilation.

The ventilation unit is equipped with a carbon dioxide sensor, which is located in the unit's extract air chamber. A separate carbon dioxide sensor (optional) can also be installed in the apartment.

The carbon dioxide control boosts the fan speed to the speed set for the Boost mode. If the Boost mode is activated, the fan speed can be increased to the maximum fan speed. In any case, the carbon dioxide control does not reduce the fan speed below the level set for the active ventilation mode (e.g. At Home, Away).

To set the carbon dioxide limit:

- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.



- 3. Select OK.
- 4. Select Control settings with the arrow buttons.

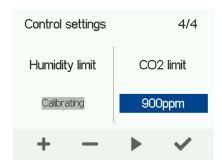


5. Select OK.



6. Select Right arrow three times.

The Control settings screen opens:

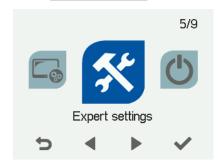


- 7. Use the Plus and Minus buttons to set the carbon dioxide limit in parts per million (ppm). You can set the limit between 500 and 2000 ppm. The factory setting is 900 ppm.
- 8. Select OK.

The carbon dioxide limit has now been set.

## 3.4.7.6. Bypass settings of the HR cell

- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.

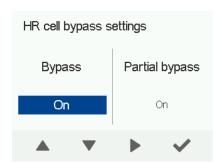


- 3. Select OK.
- 4. Select Bypass settings of the HR cell with the arrow buttons



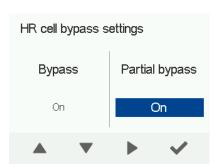


- Select OK.
   The Bypass settings of the HR cell screen opens.
- 6. Select with the arrow buttons:



- Bypass On Bypass automatics are in use.
- Bypass Off Bypass automatics are not in use. The Heat recovery mode is active.
- 7. Select Right arrow.

Select with the arrow buttons:



- Partial bypass | On | Partial bypass is enabled when bypass is activated and the outdoor air temperature exceeds the value set for the heating season.
- $\circ$  Partial bypass Off Partial bypass is not in use.
- Special modes Partial bypass is always in use.

# IMPORTANT:

The Special modes mode is only used in special modes when the heat load is large. Do not select Special modes without consulting an HVAC expert.



## 3.4.7.7. Heating settings

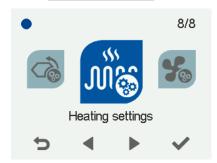
## **IMPORTANT:**

Do not change the heating settings without consulting an HVAC expert.

- 1. Select Settings.
- 2. Select Expert settings with the arrow buttons.

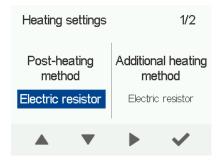


- 3. Select OK.
- 4. Select Heating settings with the arrow buttons:



- 5. Select OK.

  The Heating settings screen opens:
- 6. Select the heating method with the arrow buttons:



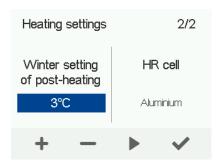
- Electrical resistor
- Water heater
- None



- 7. Select Right arrow.
- 8. Select the additional heating method with the arrow buttons:



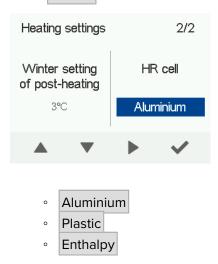
- Electrical resistorWater heaterNone
- 9. Select Right arrow.
- 10. Use the Plus and Minus buttons to select the heating season setting. The temperature range is  $0^{\circ}\text{C} +19^{\circ}\text{C}$ . The factory setting is  $+12^{\circ}\text{C}$ . Seasonal heating is triggered by the outdoor air temperature. When the outdoor air temperature drops below the set value, post-heating may be used to heat the supply air. 100% bypass is always used for heat recovery.



- **① NOTE:** When the outdoor air temperature is below the reference value:
  - Seasonal heating is not in use.
  - The supply air heater is not in use.
  - Bypass and partial bypass are in use.
- 11. Select Right arrow.



12. Select HR cell with the arrow buttons:



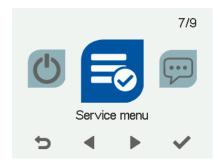
## 3.4.8. Service menu

This section describes the Service menu of the MyVallox Control panel.

## 3.4.8.1. Unit information

Unit information is a list of all the ventilation unit properties and different ventilation events.

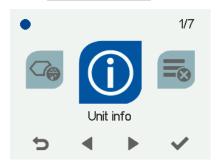
Select Settings
 Select Service menu with the arrow buttons.



3. Select OK.

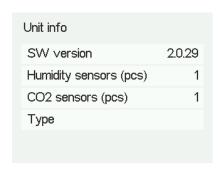


4. Select Unit information with the arrow buttons:



5. Select OK.

The Unit information screen opens:



- 6. The information appears on six different screens. Use the arrow buttons to move between the screens. The information is:
  - Software version Software version of the ventilation unit
  - Humidity sensors (pcs) Number of humidity sensors connected to the unit
  - CO2 sensors (pcs) Number of carbon dioxide sensors connected to the unit
  - Type Type code of the ventilation unit
  - Model Model of the ventilation unit
  - Serial number Serial number of the ventilation unit
  - Time in operation The operating time of the ventilation unit in days and in years
  - Latest power cut Time elapsed since the latest power cut
  - Handedness Ventilation unit handedness. The ventilation unit is either right-handed (R) or left-handed (L).
  - IP address The IP address of the ventilation unit
  - Gateway The gateway of the ventilation unit
  - Mask The mask of the ventilation unit
  - Extract air The temperature of extract air.
  - Exhaust air The temperature of exhaust air.
  - Outdoor air The temperature of outdoor air.
  - Supply air The temperature of supply air.
  - Supply air temperature The temperature of air from the HR cell.
  - External sensor External sensor temperature.



- Cloud connection status:
  - Not connected The ventilation unit has not been connected to the MyVallox Cloud service.
  - Connected The ventilation unit is connected to the MyVallox Cloud service.
  - Connection error Failed to connect to the MyVallox Cloud service.
  - Bad Gateway error Invalid gateway address.
  - DNS error The DNS name service is not working.
  - Certificate error Invalid ventilation unit certificate. Please contact the service centre.
  - Handshake error Failed to connect to the MyVallox Cloud service.
  - Internal error Internal error in the ventilation unit. Please contact the service centre.
  - Old software version The ventilation unit uses an old software version.
  - Software update in progress Updating the ventilation unit software.
- MyVallox Cloud UUID The unique ID of the ventilation unit in the MyVallox Cloud service.

#### TIP:

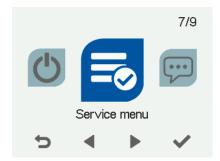
If the ventilation unit fails to connect to MyVallox Cloud, check that:

- The ventilation unit is connected directly to a router.
- The router assigns the ventilation unit a private IP address (starting with 192, 172 or 10).
- You can access <a href="https://cloud.vallox.com">https://cloud.vallox.com</a> on a computer browser via LAN.
- The router input ports 80 and 443 are available.
- 7. Select Back.

### 3.4.8.2. Error log

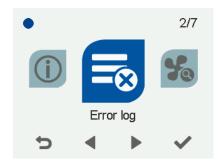
To view and acknowledge errors:

- 1. Select Settings.
- 2. Select Service menu with the arrow buttons.



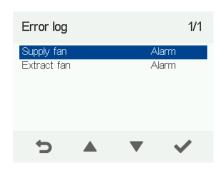


- 3. Select OK.
- 4. Select Error log with the arrow buttons:



5. Select OK.

The Error log screen displaying a list of errors opens:



- 6. Use the arrow buttons to browse the error messages in the error log. To acknowledge error messages in the error log:
  - a. Select an error message.
  - b. Select OK.

A detailed error message screen opens:



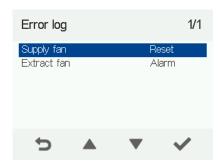
The detailed error message contains the following information:

• Error name — The top row in the detailed error notification describes the



- error.
- 1st occurrence Time when the error occurred for the first time.
- Times occurred The number of times the error has occurred.
- Latest occurrence Time when the error last occurred.
- Severity Seriousness of the error.
- Status Error alarm status. The status options are:
  - Acknowledged Error acknowledged. No active alarm for the error.
  - Alarm The alarm is active until the error is acknowledged.
- c. To acknowledge the error message, select OK:

The error is shown acknowledged in the error list:



d. To acknowledge more error messages, select Back:

7. Select Back.

### 3.4.8.3. Fan test

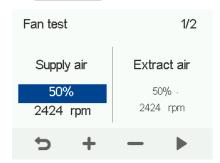
Carry out the fan test to easily check the operation of the ventilation unit's fans.

- 1. Select Settings.
- 2. Go to the Maintenance menu and select Fan test.





3. The Supply air screen opens:

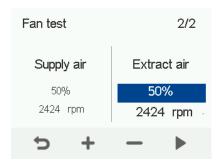


4. Use the Plus and Minus buttons to set the supply air volume as a percentage of the maximum output.

You can hear when the fan speed changes according to the value set. The fan's rotational speed is shown in the rpm field.

5. Select Right arrow.

The Extract air screen opens:



6. Use the Plus and Minus buttons to set the extract air volume as a percentage of the maximum output.

You can hear when the fan speed changes according to the value set. The fan's rotational speed is shown in the rpm field.

7. Select Back.

The fan test has been completed.

#### 3.4.8.4. Heater test

To test the operation of the ventilation unit's heaters:

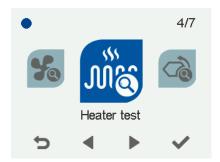
1. Select Settings.



2. Select Service menu with the arrow buttons.

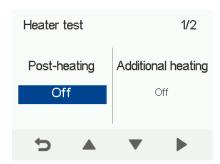


- 3. Select OK.
- 4. Select Heater test with the arrow buttons:



5. Select OK.

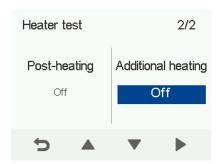
The Heater test 1/2 screen opens:



- 6. Use the Up arrow button to enable post-heating.
- 7. Make sure the post-heating function is working.
- 8. Use the Down arrow button to disable post-heating.
- 9. Select Right arrow.

The Heater test 2/2 screen opens:





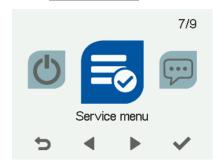
- 10. Use the Up arrow button to turn on the additional heating resistor.
- 11. Make sure the additional heating resistor is working.
- 12. Use the Down arrow button to turn off the additional heating resistor.
- 13. Select Back.

The heater test has been completed.

# 3.4.8.5. HR cell bypass test

To test the operation of the HR cell's bypass damper:

- 1. Select Settings.
- 2. Select Service menu with the arrow buttons.



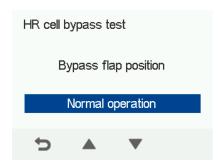
- 3. Select OK.
- 4. Select HR cell bypass test with the arrow buttons:





5. Select OK.

The Position of the bypass damper screen opens:

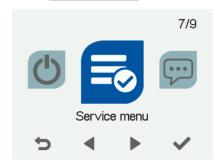


- 6. Use the arrow buttons to select the damper position. The options are:
  - Normal operation The HR cell bypass test is disabled, the bypass damper moves normally.
  - Heat recovery The damper is closed ("winter position") and air flows through the HR cell.
  - Bypass The damper is open ("summer position") and air passes by the HR cell.
- 7. Open the ventilation unit door to make sure the damper moves to the right position.
- 8. Select Back.
- 9. The HR cell bypass test has been completed.

#### 3.4.8.6. HR cell defrost

To defrost the HR cell manually:

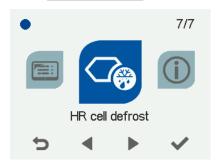
- 1. Select Settings.
- 2. Select Service menu with the arrow buttons.



3. Select OK.



4. Select HR cell defrost with the arrow buttons:



5. Select OK.

The unit asks you to confirm the task:



6. Select OK.

Defrosting begins:



The defrosting process takes approximately 15–45 minutes, and when complete, the ventilation unit returns to normal operation.

7. Select Back.



# 3.4.9. Turning the unit off



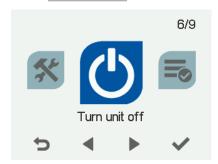
It is recommended ventilation be kept on constantly.

### **NOTE:**

The ventilation unit cannot be turned off when the external input has been set to Emergency stop.

To turn the ventilation unit off e.g. for maintenance:

1. Select Turn unit off with the arrow buttons



- 2. Select OK.
- 3. The unit asks you to confirm the task:



4. Select OK.

The ventilation unit has now been turned off.

## TIP:

To restart the ventilation unit, press any button.

# 3.5. Updating the unit software (MyVallox Control)

To update the ventilation unit software through the MyVallox Control panel:



 Download the latest update package to your computer from the home page of the MyVallox Cloud service <a href="https://cloud.vallox.com">https://cloud.vallox.com</a>. You can find the latest update under Latest firmware version.

## NOTE:

The name of the update file must always be the same: HSWUPD.BIN. If you have downloaded an older update file to your computer, delete it before downloading the new update to make sure the file name does not change.

2. Connect the computer to the ventilation unit control panel with a USB Micro-B connector.

### NOTE:

- The MyVallox control panel cannot be used when it is connected to the computer.
   A USB icon is shown on the control panel.
- If the computer is unable to find the ventilation unit, you are probably using a charging cable. Try another USB Micro-B cable.
- 3. When the ventilation unit is turned on, the control panel appears as an external drive in the computer's resource management.
- 4. Copy the new update package HSWUPD.BIN and paste it to the control panel, i.e. the root of the external drive.

## **()** IMPORTANT:

Do not change the file name.

- 5. Make sure the update package has been completely transferred to the control panel by selecting Safely Remove USB. This is an OS-specific function.
- 6. Disconnect the USB cable.
- 7. The control panel loads the update for a moment (you can see the process on the panel) and starts to transfer the update package to the ventilation unit in the background. This takes approximately 4–5 hours.
- 8. When the update is complete, the unit launches the new software and restarts itself automatically.

#### NOTE:

The ventilation unit must stay on throughout the update process. If the ventilation unit's power is cut off during the process, the transfer time of 4–5 hours starts from the beginning.



# **NOTE:**

If a red error screen appears on the control panel, the update must downloaded again. Go back to step 1.

When the update is complete, the software version shown on the Unit information screen should be the same as the version at <a href="https://cloud.vallox.com">https://cloud.vallox.com</a>.



# 3.6. User level diagrams

The following charts specify the user rights of three different user levels.

Figure 4. Limited user level

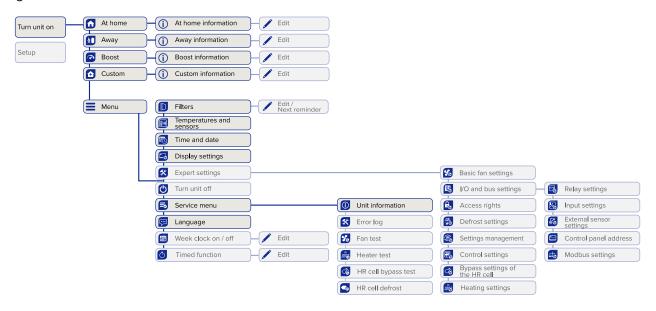


Figure 5. Normal user level

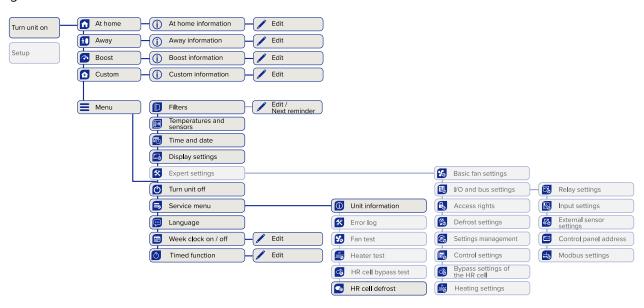


Figure 6. Extensive user level



