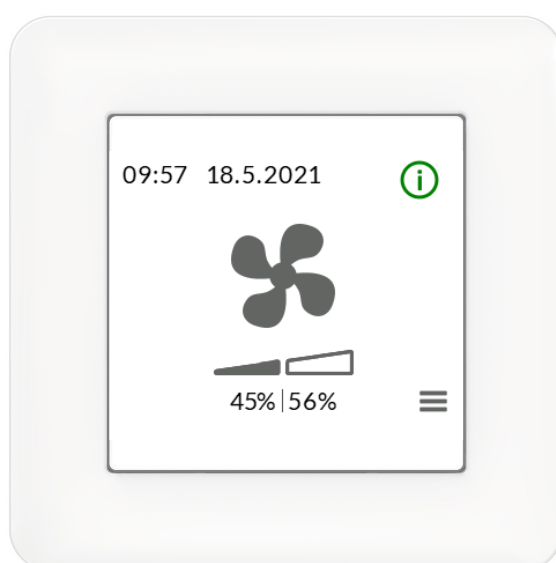


Vallox Pureo Control

Quick guide



Control panel

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SAFETY

Safe and appropriate handling requires knowledge of the basic safety regulations, and of the intended use of the ventilation system. Read this manual before operating the ventilation unit. Please keep the manual for later reference. If you lose the manual, it can be downloaded from our website.

This user manual contains all the information necessary for safe operation of the system. All persons who operate and maintain the ventilation system must follow the instructions provided in this manual. Furthermore, all local accident prevention regulations must be observed.



NOTE

For further information, go to www.vallox.com

Installation

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



WARNING

The unit is not intended for use by children under 8 or by persons with reduced sensory, physical or mental capabilities, or whose lack of knowledge and experience do not ensure safe operation of the unit.

Such persons can use the unit under supervision, or by following the instructions of someone who is responsible for their safety.

Children must be supervised and not be allowed to play with the device.

WARRANTY

The guarantee and liability exclude damage resulting from:

- Inappropriate use of the ventilation system or the control unit
- Incorrect or inappropriate installation, setup or use
- Neglect of instructions concerning transportation, installation, use, or maintenance
- Structural or electronic modifications or changes made to the software

INTENDED USE

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

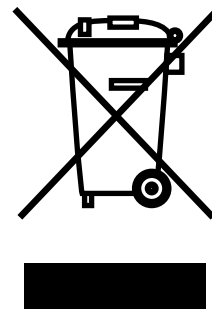


IMPORTANT

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.

DISPOSAL OF THE AIR HANDLING UNIT

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



SAFETY SIGNS USED IN THE INSTRUCTIONS

**WARNING**

Indicates a hazard that can result in death or serious 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.

COMPATIBILITY OF THE VALLOX PUREO CONTROL PANEL

The control panel is compatible with the Vallox Pureo TX 500, 900, 1300, and 1800 air handling units.

CONTROL PANEL BUTTONS

BUTTON	DESCRIPTION
	On/off status button provides more information of the unusual running status of the unit.
	The Back button takes you backwards in the menu.
	The Left arrow button takes you leftward in the menu.
	The Right arrow button takes you rightward in the menu.
	Press the OK button to confirm selection or to acknowledge active alarms.
	Press the Cancel button to cancel selection.
	Press the Select button to select the desired option.
	The Up arrow button takes you upward in the menu.
	The Down arrow button takes you downwards in the menu.
	The Menu button takes you from the main display to the menu.



















NOTE

The Vallox Pureo Control panel contains the buttons described in the adjacent table. The control panel has a touch screen.

Control panel symbols

The following icons are used in the Vallox Pureo Control panel.

SYMBOL	DESCRIPTION
	The used running status is slow
	The used running status is fast
	The week clock is in use
	On/off status information of the unusual running status of the unit
	Alarm class 1: An alarm that stops the unit has been activated
	Alarm class 2: An alarm that does not stop the unit has been activated
	Fan speeds
	Temperatures
	Settings
	Alarms
	Adjustment chart
	Time settings
	Week clock
	Language
	Unit information and measurements
	Turn unit off

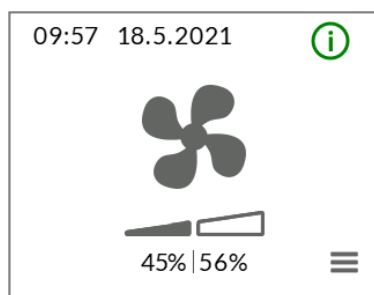
VENTILATION SPEED SETTINGS

Ventilation speed is controlled by pressing the fan symbol on the display. The available speed options are slow, fast, and week clock.

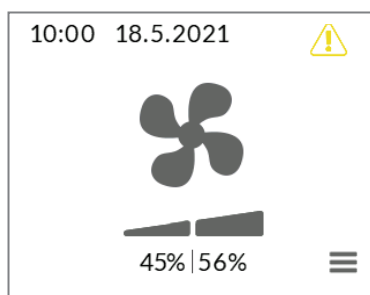


NOTE

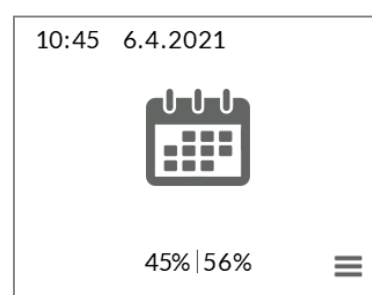
The week clock is activated from the week clock menu; the week clock icon is not shown on the main display at other times.



Slow



Fast



Week clock

If the running status of the unit deviates from the setting shown on the control panel, the on/off status information icon will appear in the right top corner of the control panel. The on/off status options are:

- Starting up
- Stopping
- Stopped
- Outdoor air efficiency limit restricts the operating speed
- Supply air efficiency limit restricts the operating speed
- Extra time switch controls the speed
- Night cooling controls the speed

FAN SPEEDS

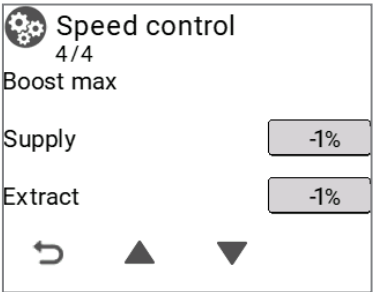
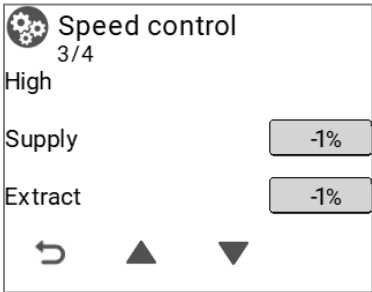
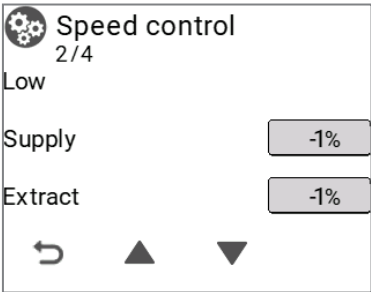
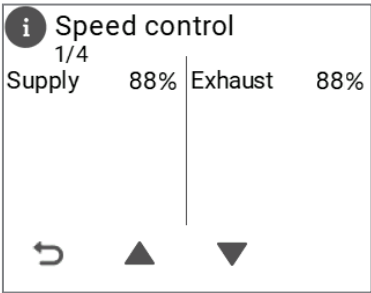
The fan speeds menu enables setting the control method to speed control, pressure control, or air volume control and the running status to either slow or fast, as required by the control method, or setting the maximum boost speed.




NOTE
The fan settings menu shows and enables editing the settings of the selected control method of the fan. The control method is selected from the fan settings and boost menu.






Speed control



Pressure control



Pressure control
1/4

Supply	45%	Exhaust	56%
88Pa -1Pa		78Pa -1Pa	







IMPORTANT
Pressure control requires external duct pressure sensors.


Pressure control
2/4

Low




Supply	-1Pa
Extract	-1Pa







Pressure control
3/4

High




Supply	-1Pa
Extract	-1Pa



Pressure control
4/4

Boost max




Supply	-1Pa
Extract	-1Pa






Air volume control


Air volume control
1/4




Supply	45%	Exhaust	56%
0l/s -1l/s		0l/s -1l/s	







Air volume control
2/4

Low




Supply	-1l/s
Extract	-1l/s







Air volume control
3/4

High




Supply	-1l/s
Extract	-1l/s


Air volume control
4/4


Boost max

Supply	-1l/s
Extract	-1l/s

TEMPERATURES


The Temperatures menu is used to set either supply air control or extract air control as the temperature control method and to set the temperature.



Temperature control met
1/2

Supply air control ☐

Extract air control ☒


Temp setting

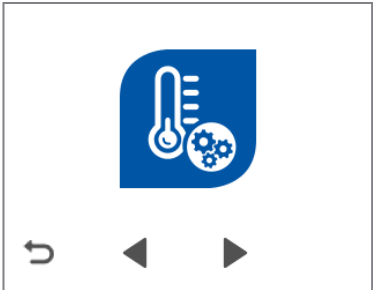



Extract air control
2/2

Min temp


Max temp





SETTINGS


The settings menu is used to modify the fan, heating/cooling, frost prevention, and efficiency limit settings and to start a test run.

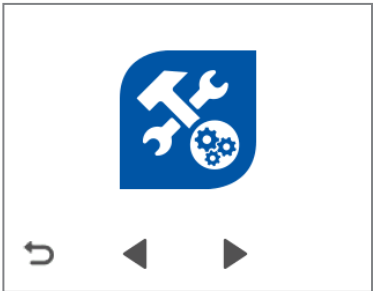

Settings
1/2

Fan settings

Heating / Cooling


Defrosting





Fan settings


The Fan settings menu is used to select speed control, pressure control, or air volume control as the control method and to specify the K factors of the fans and the boost settings.



Fan Settings
1/8

Speed control ☒

Pressure control ☐


Air volume control ☐




Fan Settings
2/8

Supply K-factor

Extrac K-factor



K factors



IMPORTANT

K factors must be set based on the type of the air handling unit.

K FACTORS

Vallox Pureo TX 500	60
Vallox Pureo TX 900	121
Vallox Pureo TX 1300	154
Vallox Pureo TX 1800	197

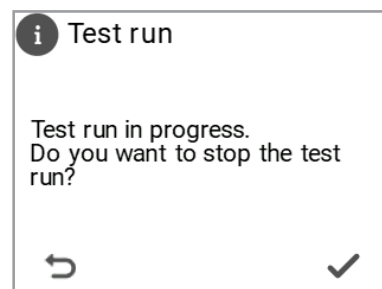
Test run

Start the test run by selecting the **Start the test run** icon. The test run is started automatically at all speeds (slow, fast, and boost). During the test run, the tested speed is shown on the display and the **Start the test run** icon is not active.

To cancel an ongoing test run, select **Return**. When the unit requests a confirmation, select **OK**. To view the results of the test run, press the **Down arrow**.

NOTE
The air handling unit must be turned on when the test run is activated. The test run does not turn on the air ventilation unit.

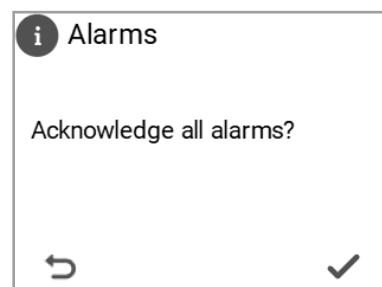
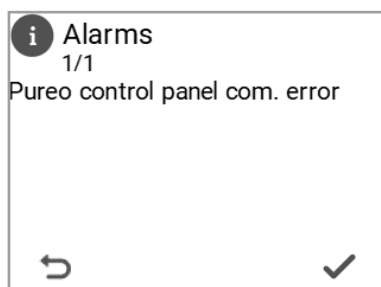
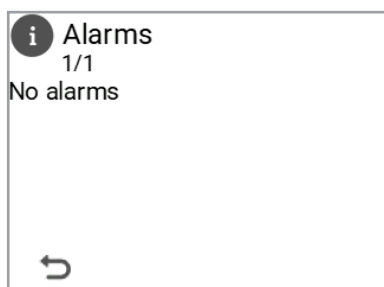
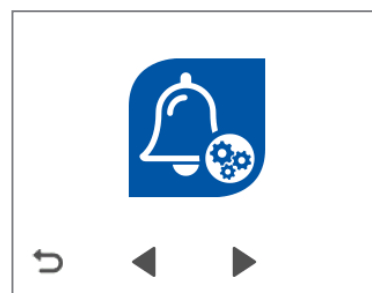
NOTE
Before starting the test run, ensure that the filters and the HR cells are clean.



Alarms

The Alarms menu shows any active alarms. Alarms can be acknowledged by pressing the **OK** button.

- Alarm class 1: An alarm that stops the unit has been activated
- Alarm class 2: An alarm that does not stop the unit has been activated

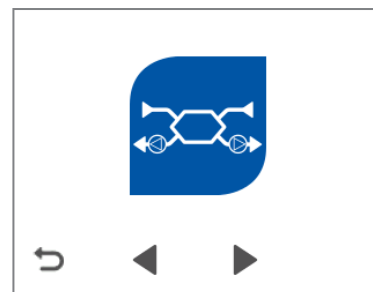
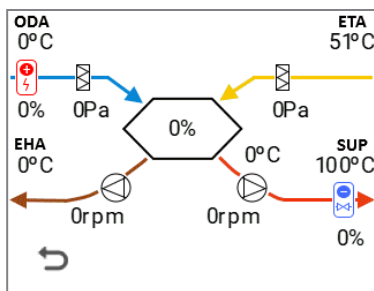


ALARM CLASS 1	CAUSE
Supply air sensor (UI3)	The supply air sensor has become damaged.
Supply air sensor / duct (UI9)	The supply air sensor located inside the duct has become damaged.
Heating radiator sensor, return water (UI6)	The sensor that measures the return water temperature has become damaged.
Emergency stop	External emergency stop has become activated.
Extract air fan	The extract air fan has stopped.
Supply air fan	The supply air fan has stopped.
Fire hazard - supply air	The supply air temperature is too high.
Fire hazard - extract air	The extract air temperature is too high.
Heating radiator, return water temperature - low	The return water temperature of the post-heating liquid heater is too low.
Supply air fan, communication error	There are problems with the data transfer bus between the supply air fan and the controller.
Extract air fan, communication error	There are problems with the data transfer bus between the extract air fan and the controller.
Differential pressure transmitter, communication error	There are problems with the data transfer bus between the differential pressure transmitter and the controller.

ALARM CLASS 2	CAUSE
Outdoor air sensor (UI1)	The outdoor air sensor has become damaged.
Outdoor air sensor / duct (UI8)	The outdoor air sensor located inside the duct has become damaged.
Extract air sensor (UI4)	The extract air sensor has become damaged.
Exhaust air sensor (UI5)	The exhaust air sensor has become damaged.
Supply air sensor after HR cell (UI2)	The supply air sensor located after the heat recovery cell has become damaged.
Frost prevention max duration	Frost prevention has been on for the max duration.
Efficiency of the HR cell	Low efficiency of the heat recovery cell.
Filter alarm - supply air	The supply air filter must be changed.
Filter alarm - extract air	The extract air filter must be changed.
Heating radiator, return water temperature - high	The return water temperature of the post-heating liquid heater is too high.
Deviation in the supply air temperature	The supply air temperature deviates from the set value.
Supply air temperature - lower limit	The supply air temperature is too low.
Deviation in the extract air temperature	The extract air temperature deviates from the set value.
Pureo control panel, communication error	There are problems with the data transfer bus between the control panel and the controller.
Deviation in the supply air volume	The supply air volume deviates from the set value.
Deviation in the extract air volume	The extract air volume deviates from the set value.
Deviation in the supply air pressure	The supply air pressure deviates from the set value.
Deviation in the extract air pressure	The extract air pressure deviates from the set value.

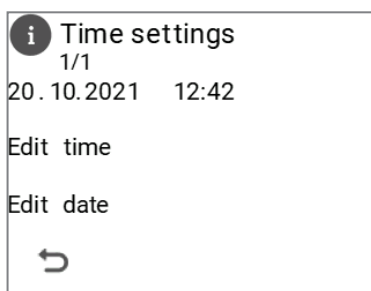
Adjustment chart

You can view the temperatures and pressure measurements of the air handling units from the adjustment chart.



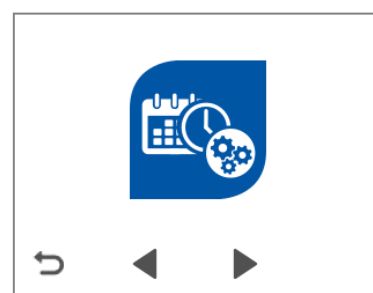
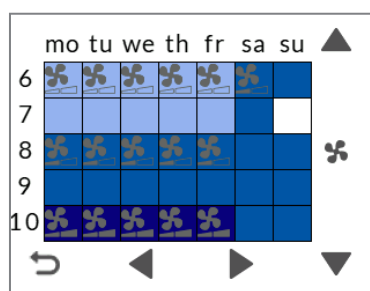
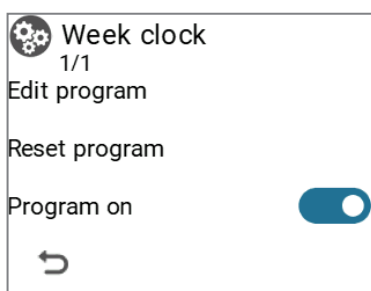
Time settings

The date and time are set from the Time settings menu.



Week clock

The week clock allows you to pre-set a weekly ventilation programme for the air handling unit. You can set one of the following speeds for every hour of the week: stop, slow, fast, or empty (the previously set speed will be used). Select the time and the day of the week by using the **Arrow** buttons and the speed by using the **Fan** icon.



Measurements

The software versions of the control panel and the unit can be found in the Unit information menu. The Measurements menu includes the following information:

- Supply air temperature
- Supply air temperature inside the duct
- Extract air temperature
- Exhaust air temperature
- Outdoor air temperature
- Supply air temperature inside the duct
- Supply air temperature after the HR cell
- Return water temperature of the heating radiator
- Efficiency of the HR cell
- Supply air fan (rpm)
- Extract air fan (rpm)
- External boost voltage
- Supply air duct pressure (Pa)
- Extract air duct pressure (Pa)
- Pressure of the HR cell (Pa)
- Supply air filter pressure (Pa)
- Extract air filter pressure (Pa)
- Carbon dioxide level of the extract air (ppm)
- VOC level of the extract air (ppm)
- Supply air volume (l/s)
- Extract air volume (l/s)
- Post-heating adjustment position
- Preheating adjustment position
- Cooling adjustment position



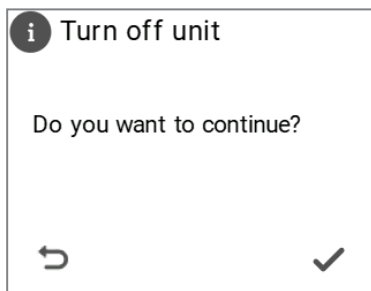
i Unit information	
1/10	
Panel software version	0.36
Unit software version	0.00

i Measurements	
2/10	
Supply air	0°C
Supply air / duct	0°C
Extract air	0°C

Turning the unit off

To turn off the air handling unit, select Turn off and confirm the selection by pressing **OK**.

If the unit has been turned off from the control panel, the air handling unit can be turned on by pressing on the display of the control panel.



VALLOX

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D10799/20.10.2021