PARTNER
IN VENTILATION
2VV.CZ

EN

AirGENIO

Superior EC

OPERATION AND HANDLING

CE

CONTROL

READ CAREFULLY!

Before the initial commissioning, check:

- that the device is well fastened to the support structure,
- that the device is properly closed
- that the power supply is properly connected, including the earthing and the external trigger protection,
- that all the electrical components are securely connected,
- that the installation complies with all the instructions herein,
- that no tool or any other object that may damage the unit remains within.

CAUTION!

- Interventions or changes to the internal connections are forbidden and shall result in the loss of warranty.
- We recommend the use of accessories supplied by our company. Contact your supplier in case of doubts regarding the use of non-original accessories.

START-UP

After connecting power supply, the display lights up and the data is loaded.
The device is ready to be activated once the service data has fully loaded.

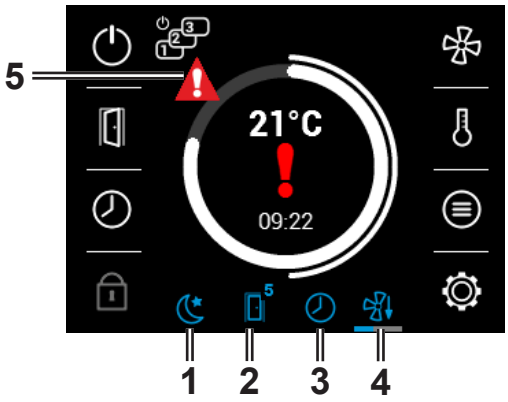
Start-up:

The unit is launched by pushing the red circle symbol

1. Turn the unit ON/OFF
2. Manual start up of Door mode
3. Timer
4. Password lock
5. Ventilation mode settings
6. Required temperature settings
7. Detailed informationof ventilation status
8. Settings
9. Display of current temperature, ventilation rate, CO2 comcentration, ventilation mode and date

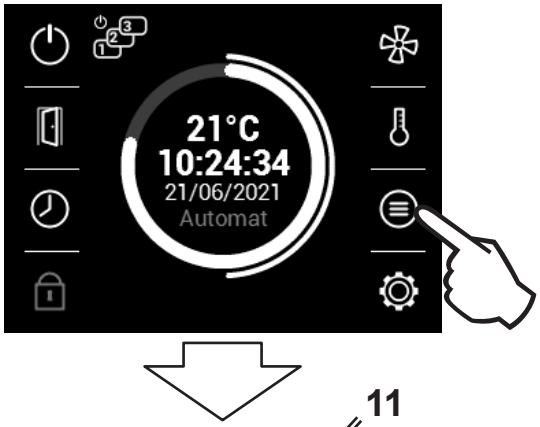
INFORMATION ICONS

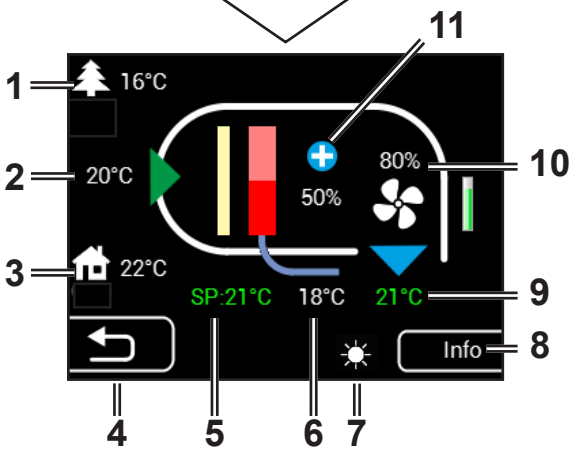
Warning icons
They inform about errors. Clicking on them opens a screen with the error report.



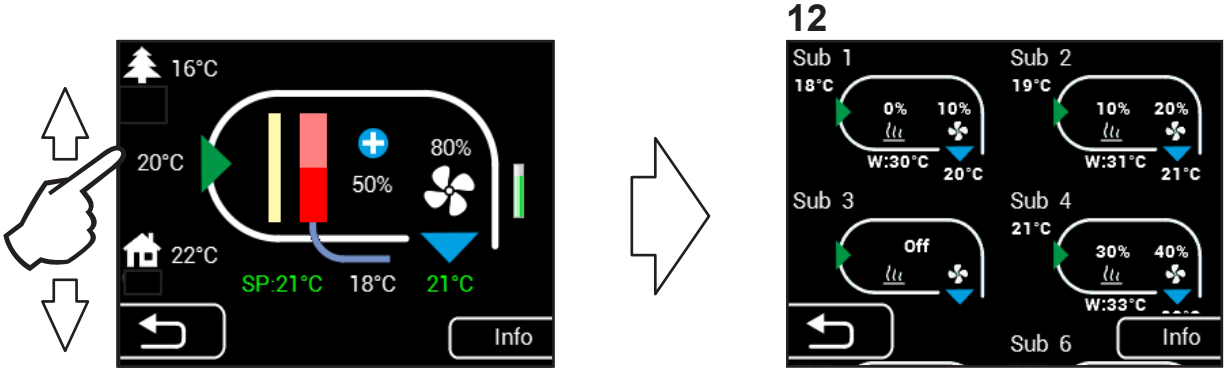
1. Night reduction
2. Door mode
3. Timer
4. Device cooling
5. Warning icon

CURRENT STATUS

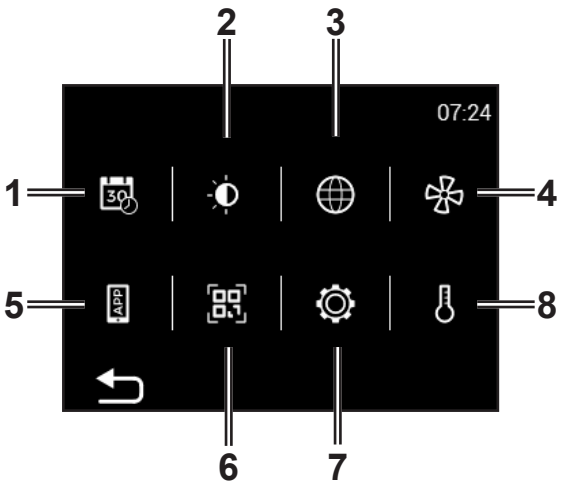




1. Outside temperature
2. Inlet temperature
3. Room temperature
4. Back to previous screen
5. SP = Temperature setpoint
6. Return water temperature
7. Blocked heating indication (summer mode)
8. Information about the type of unit
9. Green color = active sensor
10. Fan speed
11. Heating power
12. Sub units overview

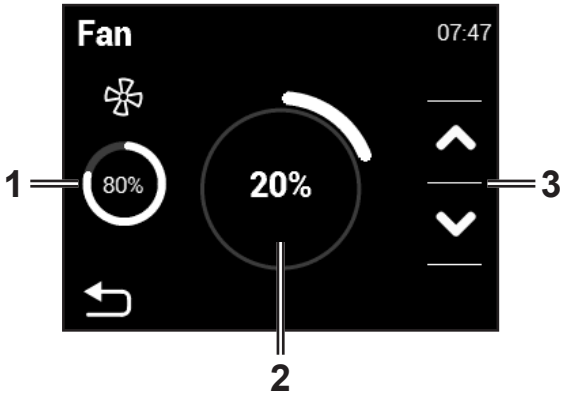


SETTINGS MENU



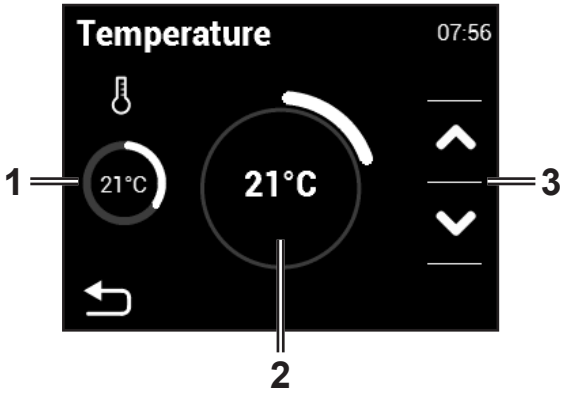
1. Date and time
2. Display backlight
3. Language
4. Air flow settings
5. Phone application
6. QR code
7. Service menu
8. Required temperature settings

AIR FLOW SETTINGS WITH CLOSED DOORS



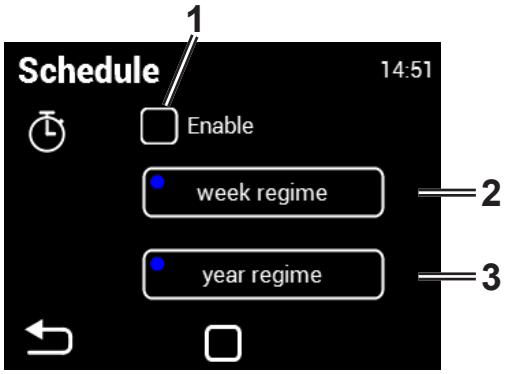
1. Display the current air flow status
2. Display required air flow (20% steps)
3. Reduce or increase opening's air flow (with closed doors)

REQUIRED TEMPERATURE SETTINGS WITH CLOSED DOORS



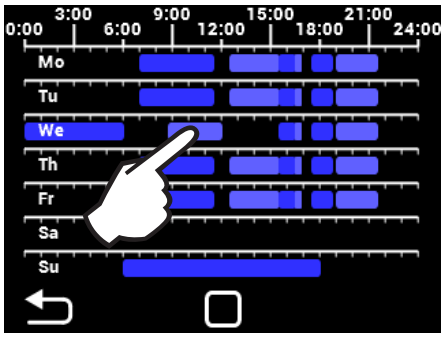
1. Actual temperature at selected sensor in menu 09
2. Required output Manual mode = % Automatic mode = °C
3. Reduce or increase required temperature

UNIT‘S TIME SWITCH

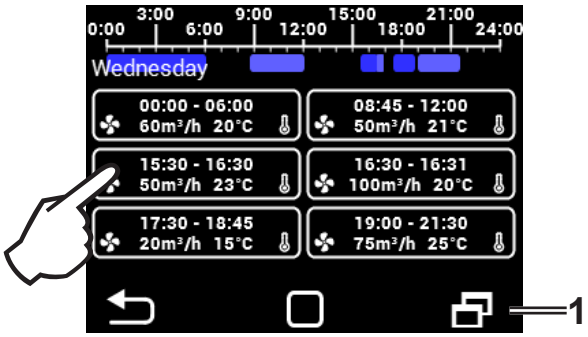


1. Actiavtion / deactivation of time switch
2. Week regime
3. Year regime

Week mode



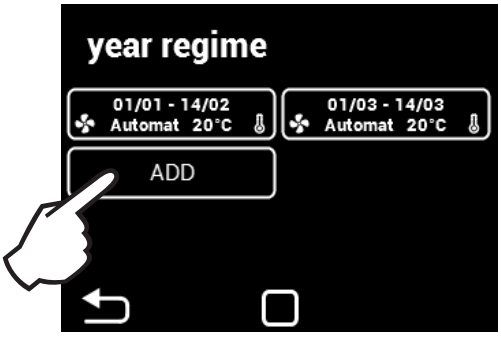
Touch a day to set ventilation modes



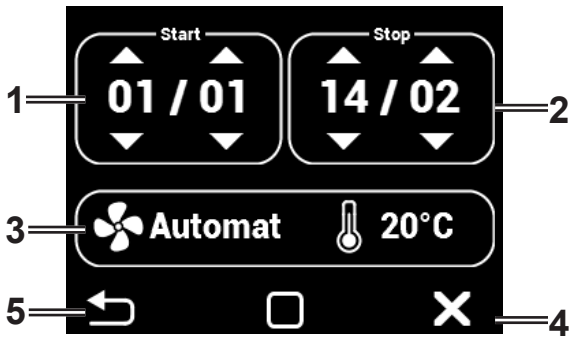
Touch to set individual intervals of ventilation (time ON/OFF, vent. mode, vent. level, temperature)

1. Touch for copying time interval

Year mode



Add a time mode

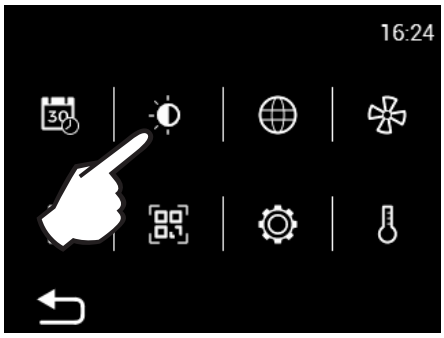


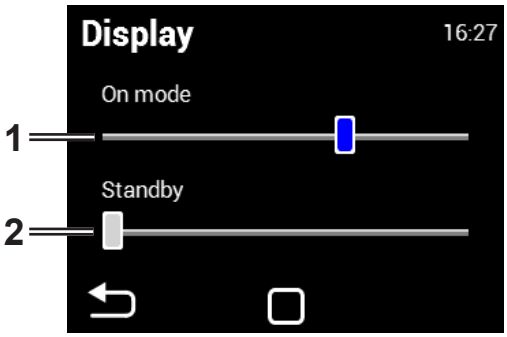
In manual mode it is possible to set the desired temperature and fan power.
In automatic mode only the desired temperature may be set.

1. Beginning of time interval (Day/Month)
2. End of time interval (Day/Month)
3. Values setting
4. Delete time interval
5. Back

- When the time interval ends, the unit goes into stand-by mode.

DISPLAY SETTINGS

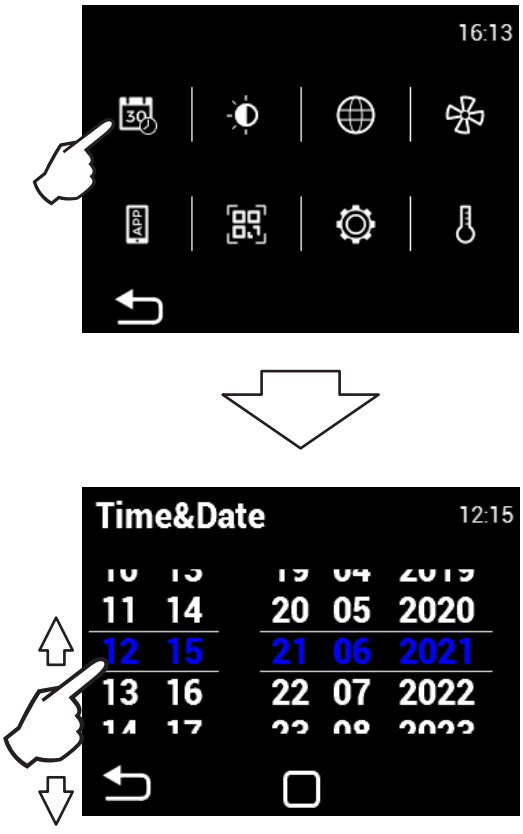




1. Display brightness in active mode
2. Display brightness in Standby mode

LANGUAGE SETTINGS

TIME AND DATE SETTINGS



1. Scroll up and down on the numbers to set the date and time

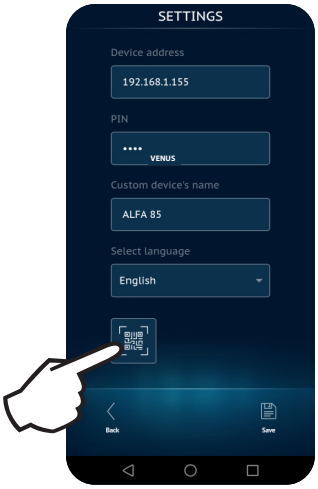
AirGENIO APP

1. QR code for downloading the AirGENIO application for smart devices
2. Pairing mobile device with unit using QR code

The IP address and PIN of the unit can be entered manually or by using a QR code for quick pairing of the unit.

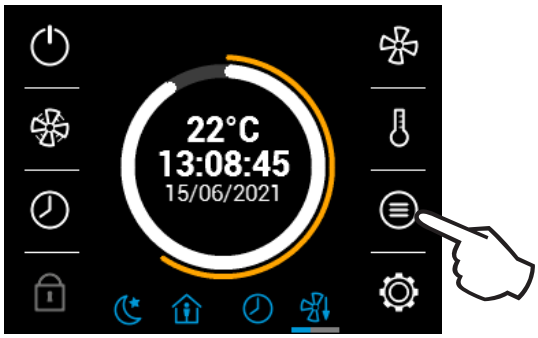
Pairing smart device with the unit using QR code

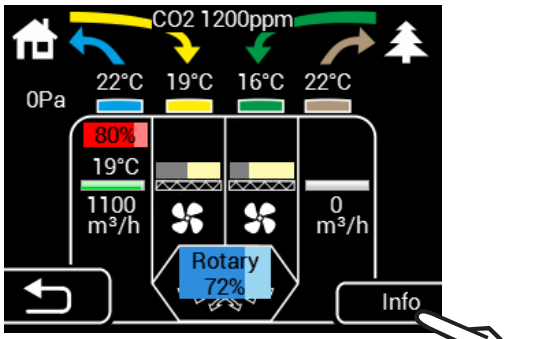
Press Google Play icon or App Store icon depending on your device type to get the app download or find it manualy in the store.



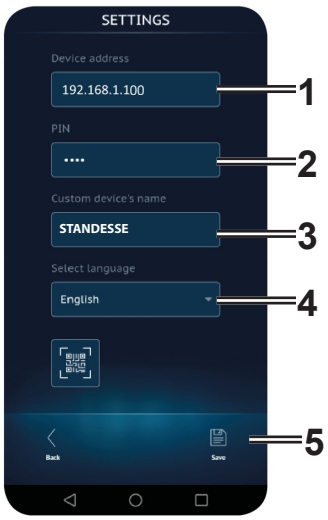
After scanning QR code from the controller press “Save” for saving the unit to the app.

Smart device manual pairing with the unit





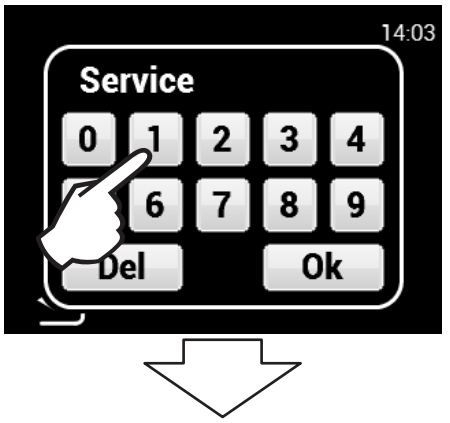
Scroll down to the Network section



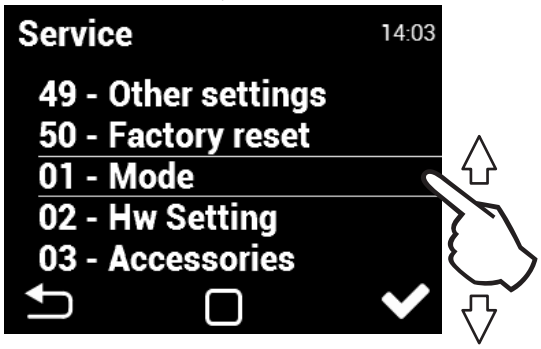
1. Enter the IP address from controller
2. Enter the PIN from the controller
3. Name the unit
4. Select language
5. After entering all the information from the controller press “Save” for saving the unit to the app.

SERVICE MENU

- Use code **1616** to access the service MENU
- This MENU is intended primarily for service technicians or users who have experience with HVAC units. Changes in this MENU can lead to improper operation of the unit. If you are uncertain, first contact your supplier for more information.

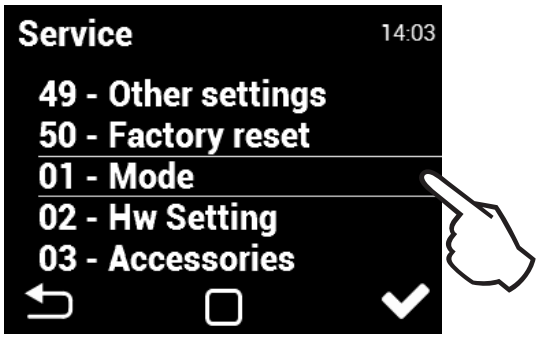


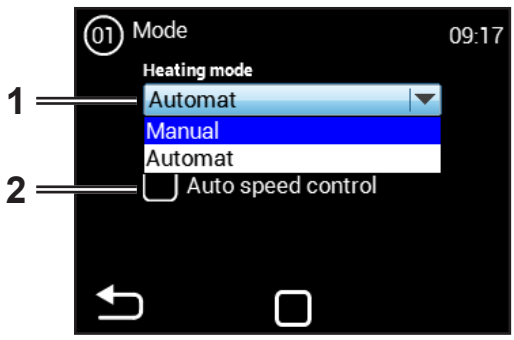
1616



Scroll up/down to select menu then tap on selected menu

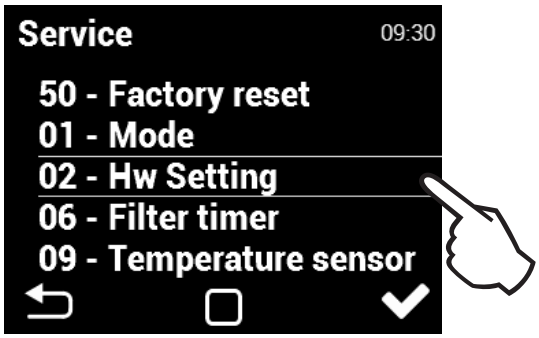
01 Mode

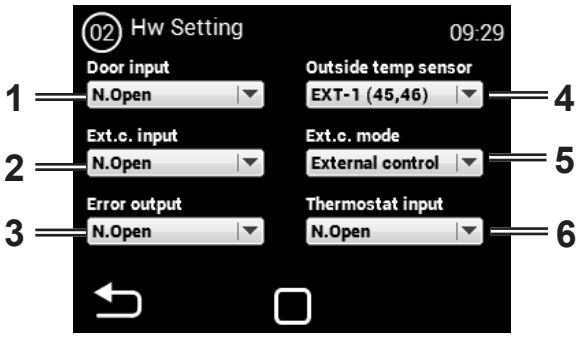




1. MANUAL or AUTOMAT control
2. Activate/deactivate automatic control of fan speed according to temperature

02 HW setting





1. Door contact (NO/NC)
2. External control contact (NO/NC)
3. Error contact (NO/NC)
4. Ad 1)
5. Ad 2).
6. Ad 3)

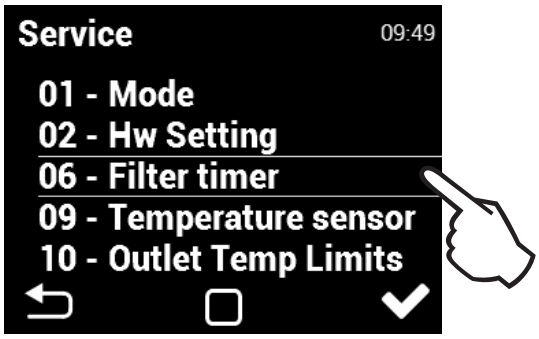
Ad 1) – External temperature sensor activation/settings
Options:
None – no sensor connected – inactive
EXT-1 (45,46) – sensor connected (must be on terminals 45 y 46)
BMS – sensor active and used from the master system

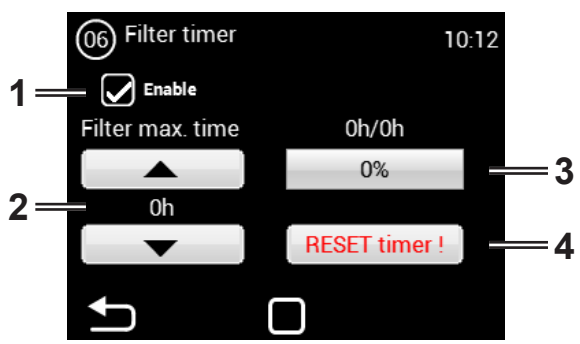
Ad 2) - Sets the external contact input behaviour. Options:
None – inactive
External control – External switching of device
Night reduction – Night reduction on/off (settings described below)

Ad 3) - Thermostat (NO/NC)

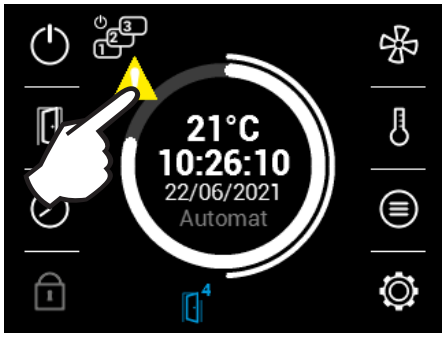
06 Filter timer

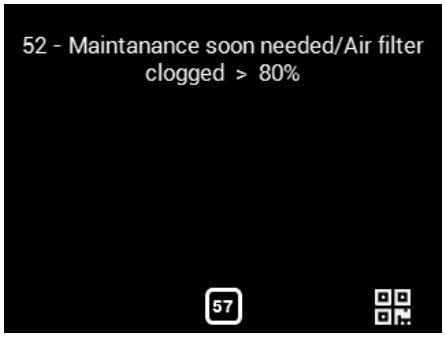
Use this menu to set the period (in motor hours) after which you will be reminded to replace the filters or reset to timer.





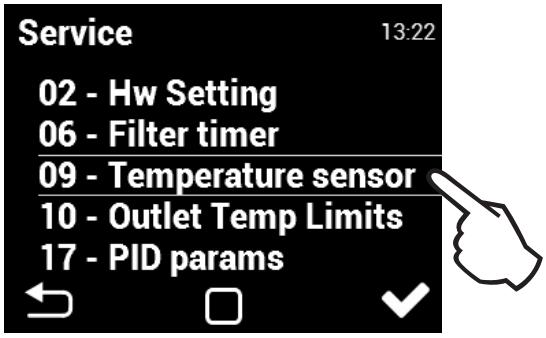
1. Enable filter timer
2. Set the time after which a notice will appear in the main screen. 1000h ~ 5000h
3. Current timer status
4. RESET button (use after replacing filters)





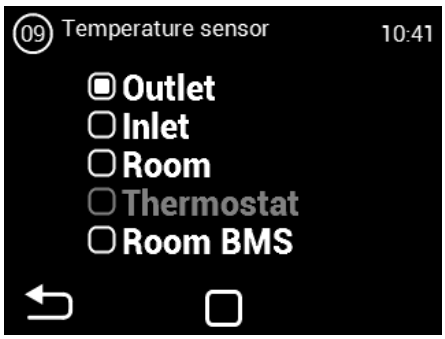
09 Temperature sensor

Available only in automatic mode
Use this menu to select the sensor to be used for primary temperature control

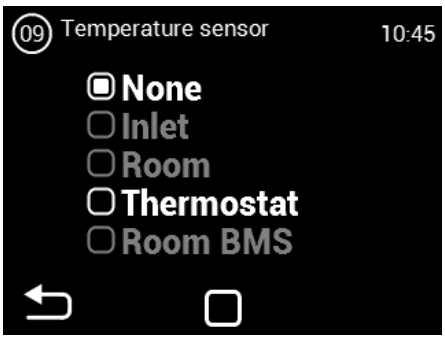


Options:
- **Outlet** – Temperature sensor at the outlet (behind the exchanger)
- **Inlet** – Temperature sensor at the inlet (before the exchanger)
- **Room** – Room temperature sensor
- **Thermostat** – Room thermostat (ON/OFF)
- **Room BMS** – Room temperature recieved from building management system

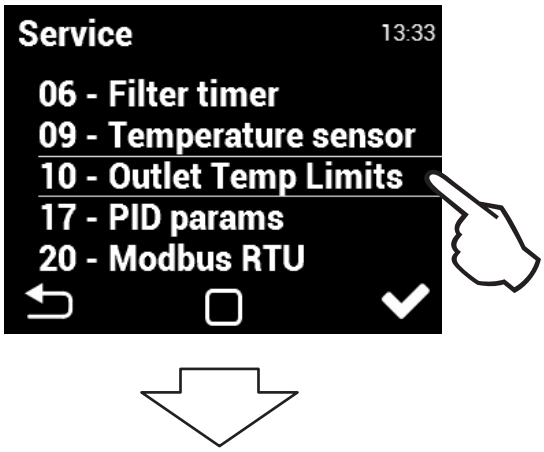
Automatic mode.



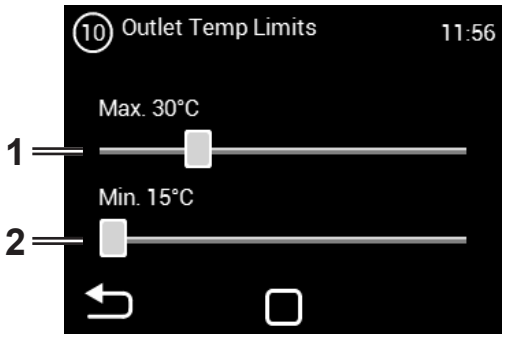
Manual mode.



10 Outlet temperature limits



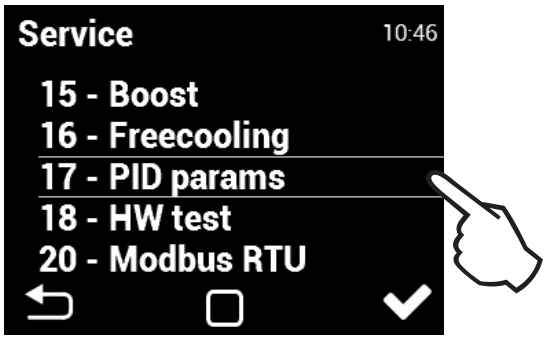
Use this menu to set the limits of the exhaust temperature

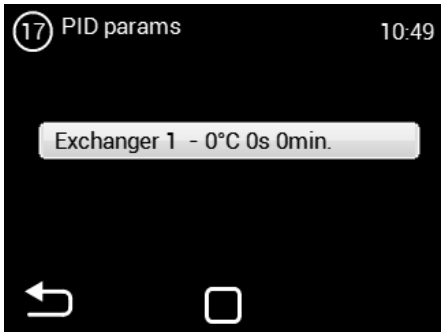


1. Maximum temperature limit: 25°C - 45°C
2. Minimum temperature limit: 15°C - 20°C

If “OUTLET” is selected in the 09 - TEMPERATURE SENSOR MENU, it will not be possible to set values as they are already defined by the sensor.

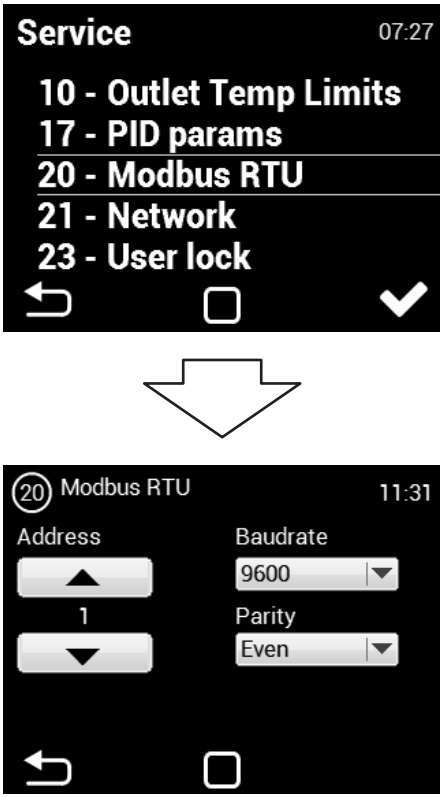
17 PID parameters





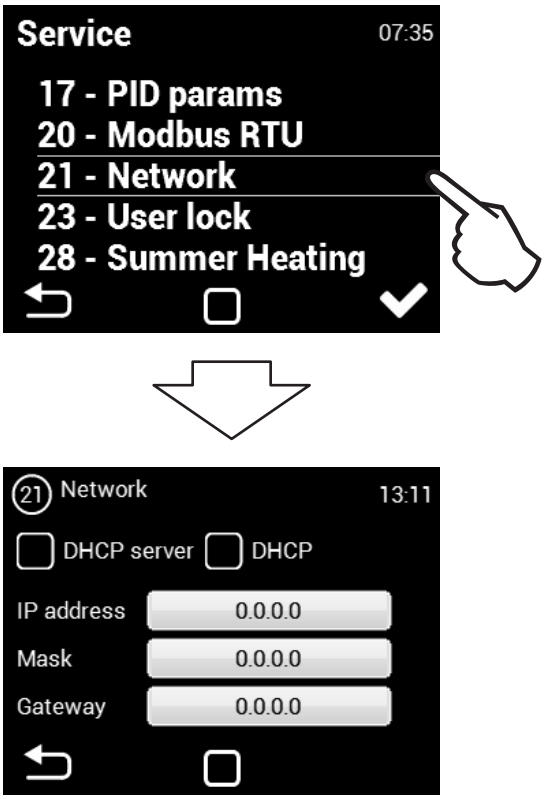
Setting the regulation characteristics If regulation is variable or inconsistent. This setting may be carried out solely following consultation with the manufacturer.

20 Modbus RTU



The MODBUS menu is used to set the Modbus communication.

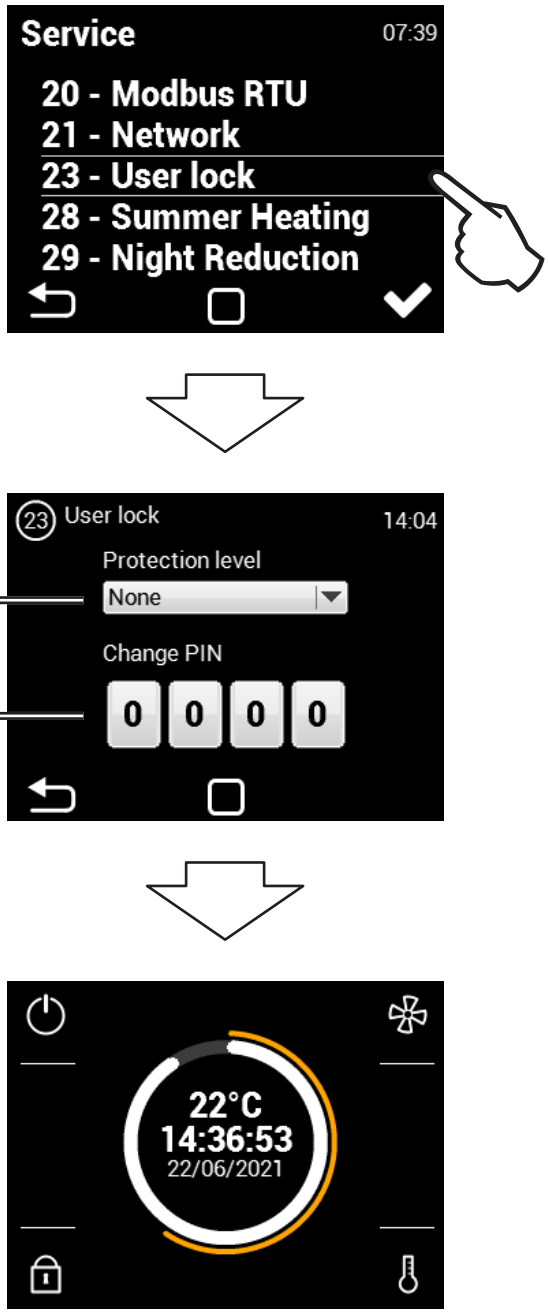
21 Network



The NETWORK menu serves for setting the network communications of the unit (TCP Modbus).

The Software reset (menu 48) must be performed to save the changes.

23 User lock



1. User security level
2. Numeric password to unlock

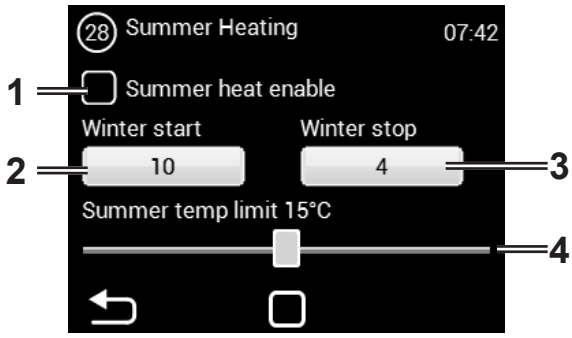
Several security levels can be chosen for possible password--free operation:
Activate/Deactivate - Enables activation and deactivation of the unit without password
Activate/Deactivate, Temperature, Flow - Enables activation
and deactivation of the unit, setting required temperature, and ventilation power without password
Temperature, Flow - Enables setting the desired temperature and ventilation power without password
Full - Does not enable any settings without entering password
User mode - Enables the unit to be operated per the following screen:

After entering the password, the unit can be fully operated and set

28 Summer heating

Use this menu to set heating limits in summer months.

If the outside temperature sensor is not set, the “summer heating” mode will operate only according to the selected time and the temperature will not be taken into account

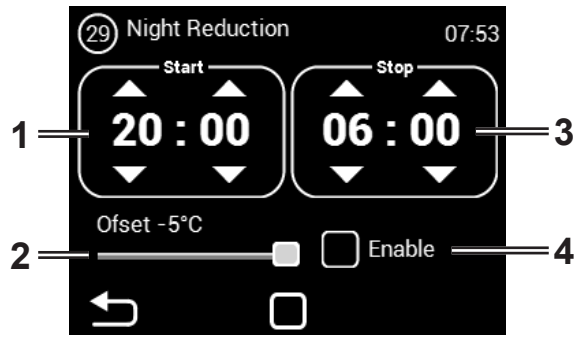


1. Enable/disable function
2. Start of winter period (month number)
3. End of winter period (month number)
4. Temperature limit – the heating is disabled if the temperature on the “Outdoor” sensor is higher than the one set here

29 Night Reduction

This MENU allows for setting reduced temperatures during night hours with closed doors.

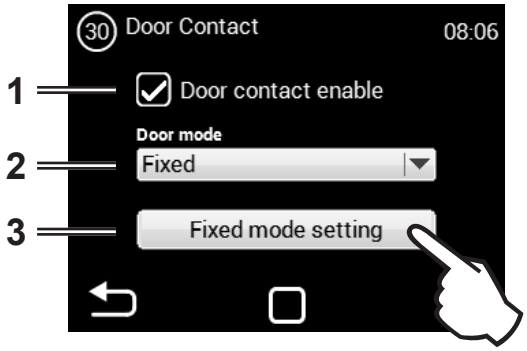
In this menu, the reduction of temperature may be set only by five degrees at the set time compared to the set (required) temperature.



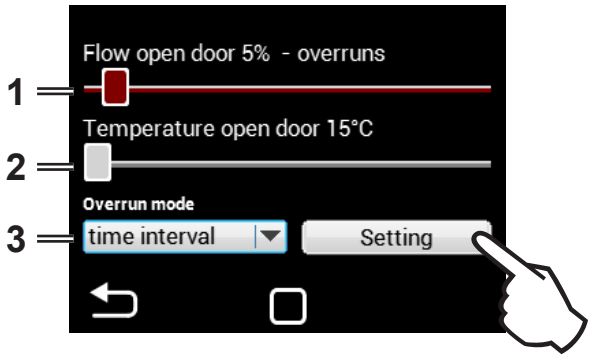
1. Setting start time for reduced temperature
2. Set reduced temperature period start (range -1 ~ -5°C)
3. Set reduced temperature period end
4. Enable / disable function

30 Door contact

This MENU allows setting of behaviour of the regulator according to door contact

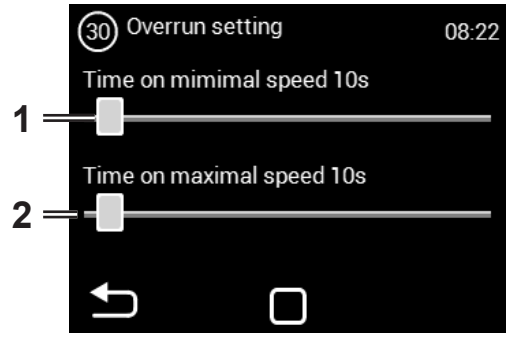


1. Enable/disable function
2. Fixed - fixed setting /Selflearning - automation menu
3. Setting Fixed mode



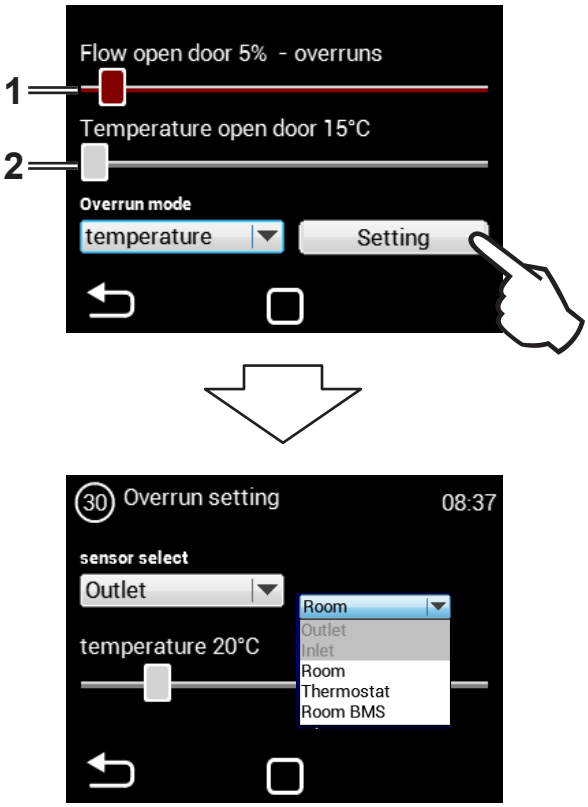
1. Setting of flowr with open doors
2. Required temperature with open doors
3. Overrun mode: at a set time, or upon achieving a specific temperature

Time interval overrun mode setting



1. Air curtain operation time at minimum fanr speed from door closing
1. Air curtain operation time at maximal fan speed from door closing

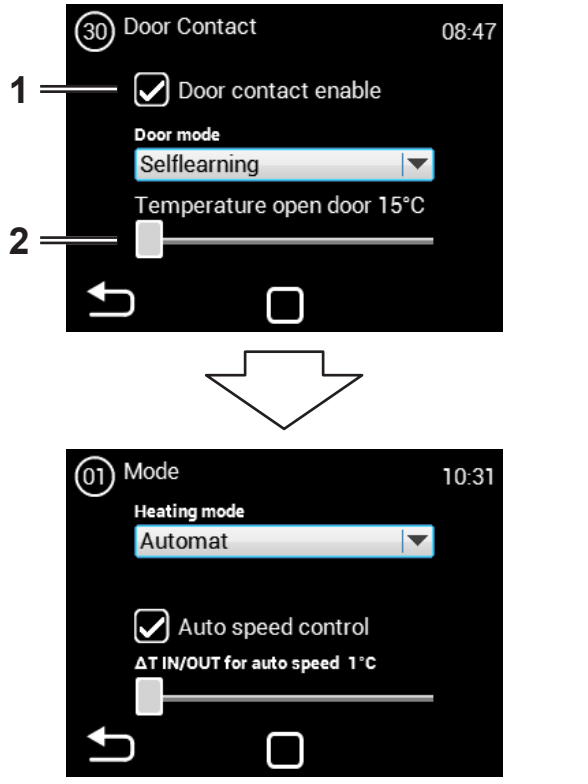
Temperature overrun mode setting



1. Fan power while open door
2. The temperature which the heater attempts to reach while open door.

In this menu it is possible to specify which sensor will be active and the temperature the air curtain attempt to reach after closing doors so as to balance temperature loss. After reaching the set temperature, the air curtain returns into the selected automatic/manual mode.

30 Door contact - Selflearning

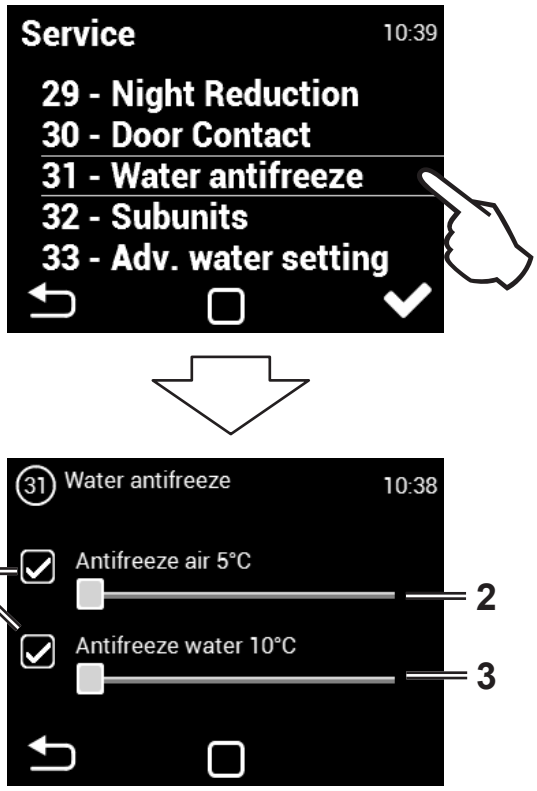


conditions for activation Selflearning mode.

1. Enable/disable function
2. required temperature with the door open.

Selflearning- available only in automation and active function mode (Auto speed control), depending on the number of open doors it optimises the period in which the shutter is in operation, even when doors are closed.

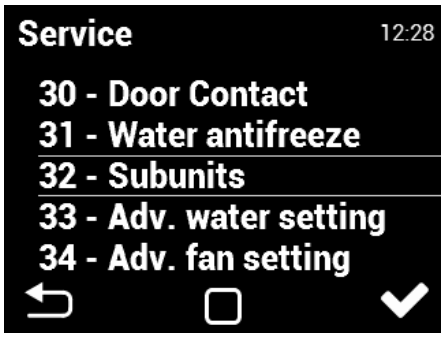
31 Water antifreeze



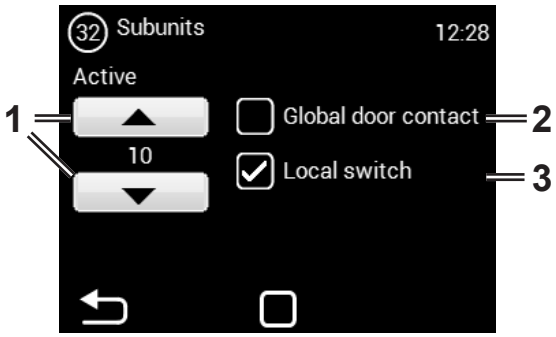
The menu is enabled only in units with water exchanger

1. Enable/disable function
2. If the air temperature is lower than the set one, the frost protection will be activated
3. If the water temperature is lower than the set one, the frost protection will be activated

32 Subunits



Use this menu to set the behaviour of the regulators connected as SLAVE

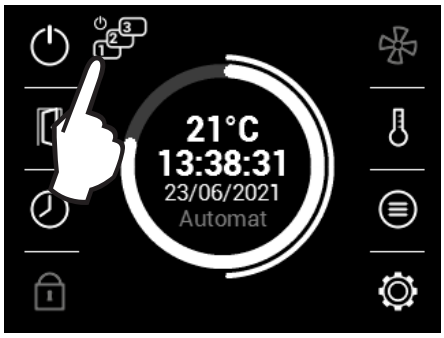


1. Number of SLAVE units: 0 ~ 10

2. Use one door contact as main. Its status will be sent to the SLAVE regulators and it will no longer be necessary to connect it to each regulator, if required.

☐ Not allowed = the door contact will not transmit to the SLAVE regulator from the MASTER

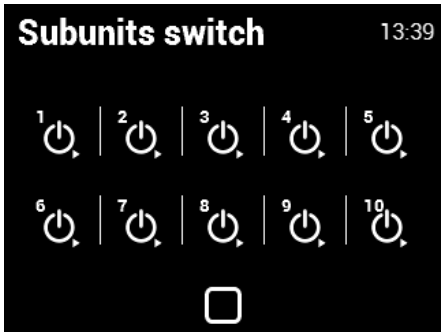
☑ Allowed = the door contact will transmit to the SLAVE regulator from the MASTER



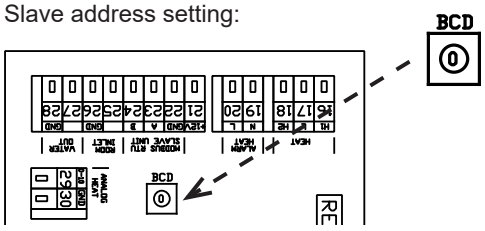
3. Activates the icon in the main screen to turn each SLAVE regulator ON/OFF. If inactive, all the SLAVE regulators will be turned on or off simultaneously

☐ Not allowed = The SLAVE regulators are turned on/ off simultaneously

☑ Allowed = The SLAVE regulators can be turned on/ off individually form the main screen

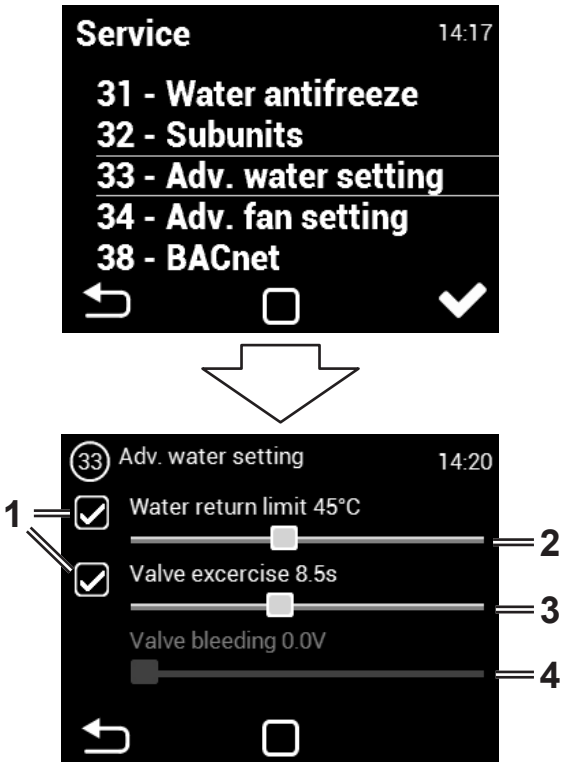


Slave address setting:



ADDRESS	SLAVE UNIT	ADDRESS	SLAVE UNIT
1	1	6	6
2	2	7	7
3	3	8	8
4	4	9	9
5	5	A	10

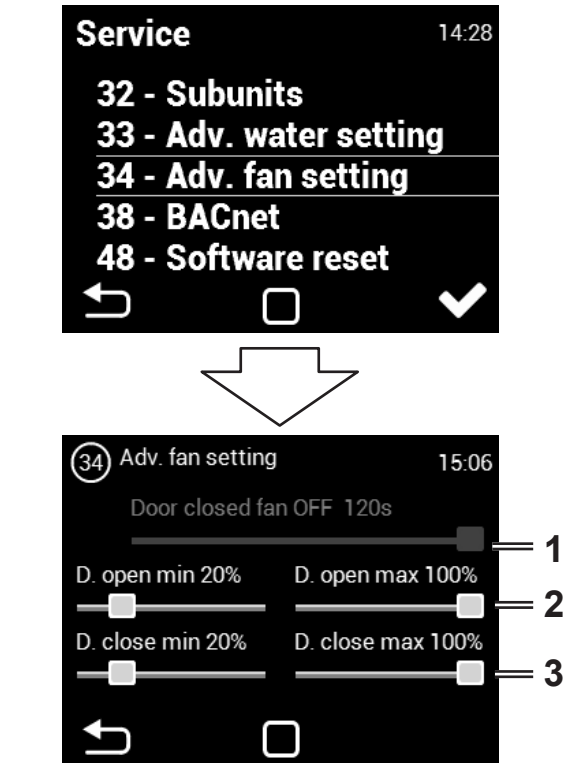
33 Advanced water setting



This MENU is available only for units with water heat exchanger it allows for advanced setting of water heat exchanger regulation

1. Enable/disable function
2. Maximum temperature for return water
3. Setting periods for water valve movement.
4. Minimum water flow can be set only for analog control of the valve.

34 Adv. fan setting

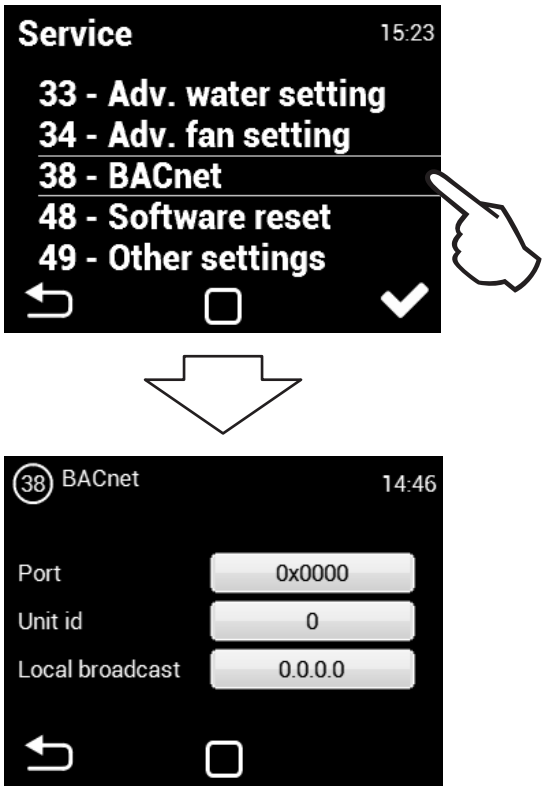


MENU for setting the fan when closing and opening the door. Allows advanced fan control settings.

1. The time for which the fan will be operational from the moment the desired temperature is achieved +0.3°C on the ROOM sensor in closed door mode. This setting is available only when the ROOM temperature sensor is selected (1616 / Temperature sensor)
2. Setting fan power limits for open doors. Min - Max
3. Setting fan power limits for closed doors.Min - Max

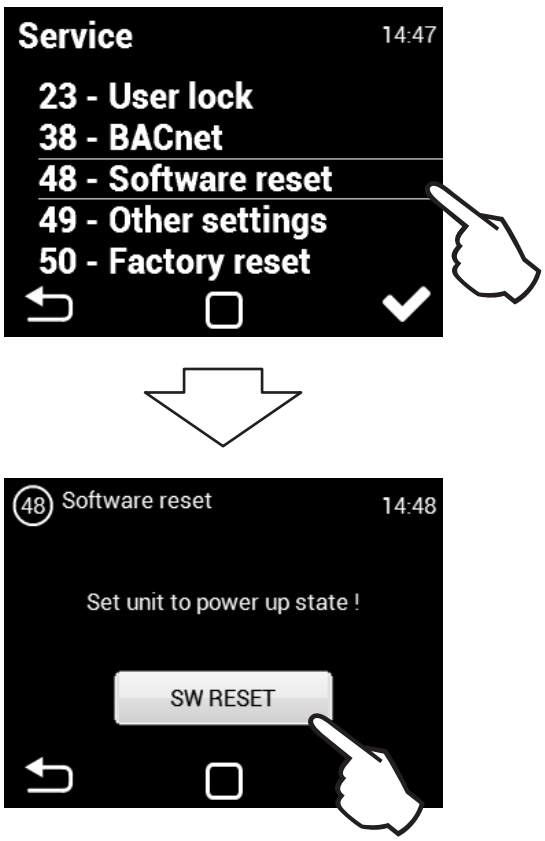
The set limits on fan power restrict the extent of fan control for open and closed door. This restriction is applied to manual and automatic control of fan power. Exceeding limits in any fan power setting is signalled when the setting element turns red with the text “overruns”.

38 BACnet



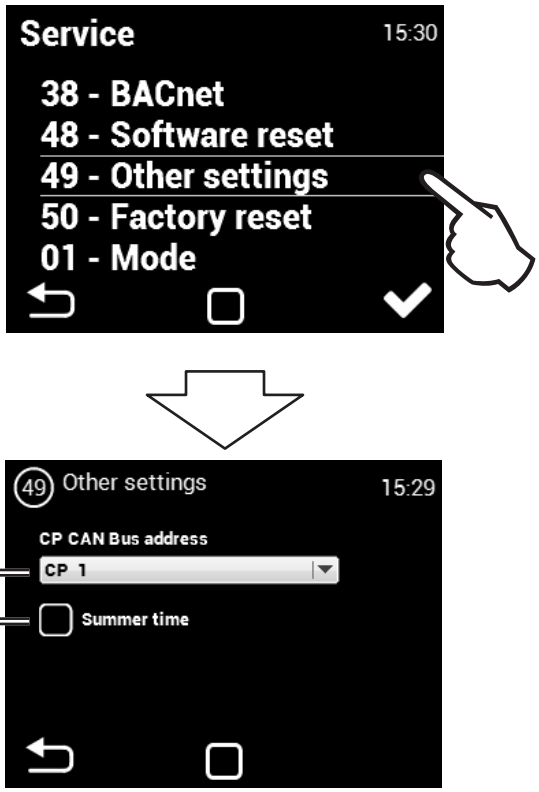
The BACnet menu is used to set the unit's network communication (ModBus TCP).

48 Software reset



Power reset

49 Other settings



Use this menu to set the remaining parameters

1. Sets the CAN address of the control panel so up to 2 control panels may be connected to the MASTER regulator
   Options: CP 1 = control panel's address is 1
   CP 2 = control panel's address is 2

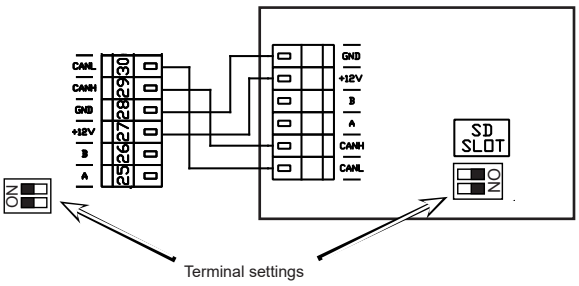
2. Enable/disable automatic switch of summer/winter time

The address is set for each controler, which then addressed according to it.

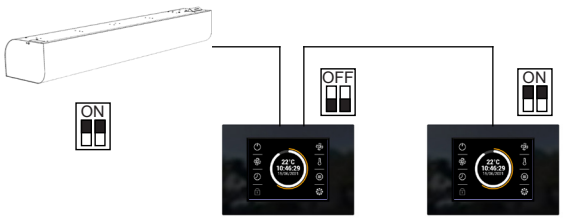
CAUTION!

Each panel must have its own address, otherwise it may result in the malfunction of the regulator.

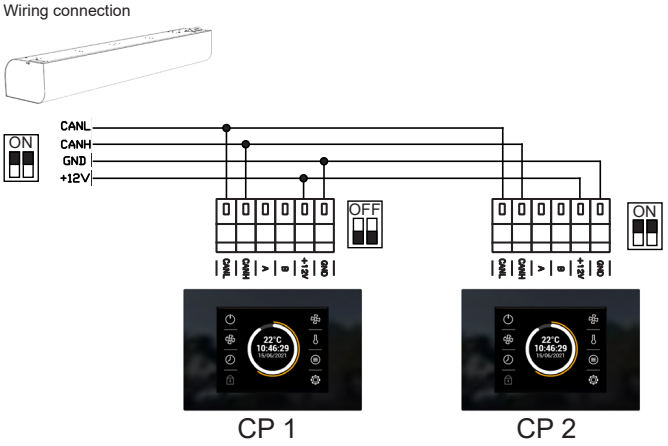
Terminals must be set if multiple panels are to be connected. They are found in the main electronics and the controller:



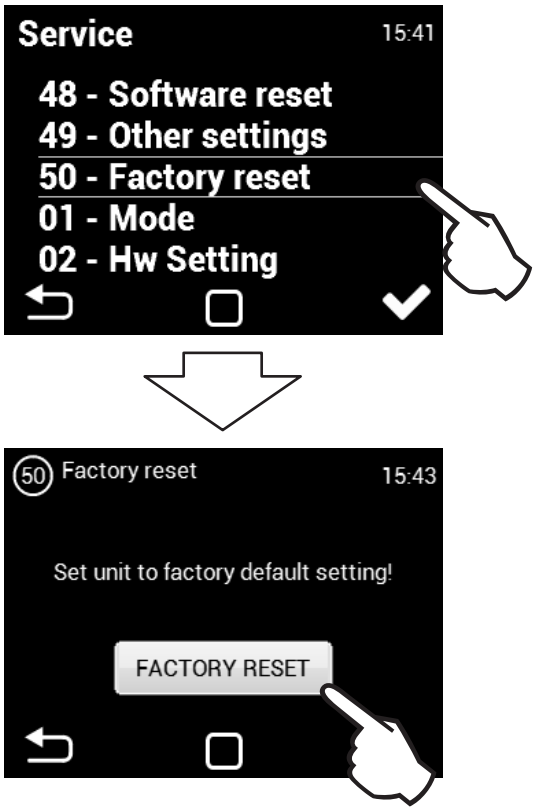
Terminal settings



Wiring connection



50 Factory reset



Pressing FACTORY RESET resets the unit to its factory settings

does not change
- ventilation mode
- HW settings
- temperature settings
- Modbus settings

TROUBLESHOOTING

Disconnect the main power supply before any intervention to the unit. If you are not sure of the correct steps, do not attempt to perform any repairs and call a professional service!

Description	Unit behaviour	Likely problem	Solution
44 – Fan error	Unit out of order	Overheated fan or defect on thermal contact of inlet fan	Determine the cause of the overheating (defective bearing, short-circuit...) or replace the motor. Check the thermal contacts from the motor to the regulator.
45 – Mandatory maintenance/filter clogged	Unit operational	Filter clogged or the time to replace it has come	Replace filters. After replacing, do not forget to reset the MENU 1616 – FILTER TIMER
46 – Heater malfunction	Unit out of order	Heater malfunction	Check the heater and the condition of the safety thermostat Does the heater have proper cooling? Check engine running.
47 - malfunction in external temperature sensor (45,46)	Unit out of order	Temperature sensor malfunction on terminals 45,46	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kΩ)
48 – Outlet temperature sensor malfunction (49,50)	Unit out of order	Temperature sensor malfunction on terminals 49,50	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kΩ)
49 – Inlet temperature sensor malfunction (51,52)	Unit out of order	Temperature sensor malfunction on terminals 51,52	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kΩ)
60 – Exchanger's return sensor malfunction (53,54)	Unit out of order	Temperature sensor malfunction on terminals 53,54	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kΩ)
61 – Room temperature sensor malfunction (55,56)	Unit out of order	Temperature sensor malfunction on terminals 55,56	Check that the sensor is correctly connected to the electronics or test it measuring its resistance (the resistance value at +20°C is around 10kΩ)
62 - malfunction in external temperature sensor from BMS	Limited operation of the device	Temperature sensor malfunction in BMS	Check that in the BMS that the address where the sensors sends the data is properly set (on the right regulator) Check the function of the sensor in the BMS
63 - malfunction in room temperature sensor from BMS	Limited operation of the device	Temperature sensor malfunction in BMS	Check that in the BMS that the address where the sensors sends the data is properly set (on the right regulator) Check the function of the sensor in the BMS
79 – Heating reduced due to low air flow	Unit operational	Only information	The air flow settings were reduced, limiting the heater output to prevent overheating
65 – Communication error	Unit out of order	Communication error	Check the communication cable for damages and if it is properly connected Observe the wiring diagram to prevent occurrences that may disrupt communication (wiring near high tension, phenomena on site causing disruptions)
Unit's not working	Unit out of order	Power supply interrupted	Check that the power supply is not interrupted
		Cracked fuse	Check the fuse in side the control module
The heating switches off automatically	Unit operational but not heating	The heater overheats	The heater overheats due to insufficient air flow. Check that the ventilators are in good order and that the air supply is not disrupted.

IF YOU ARE UNABLE TO REPAIR THE AIR CURTAIN

If you were unable to solve a problem, contact the supplier or the representative of 2VV. Warranty and post-warranty service are provided by the supplier or an authorised service included in the list available at the supplier's.

Give the following information to the supplier or service:
- type designation of the air curtain
- accessories in use
- place of installation
- serial number
- conditions of the installation (incl. electrical)
- period of operation
- detailed description of the malfunction

CLEANING

- Do not use compressed air, chemicals, solvents or water to clean the air curtain.
- Use a soft brush or a vacuum cleaner to clean the suction cover and the inside of the air curtain.
- More to see in the installation manuals of air curtains

DECOMMISSIONING THE PRODUCT – LIQUIDATOION

Before scrapping the product, make it unusable. Old products still have raw materials that can be reused. Take them to a collection centre for secondary raw materials. It is preferable to have the product liquidated by a specialist so that the recyclable materials may be reused. Take the unusable parts to an appropriate waste disposal site.

The disposal of materials must observe the applicable waste management regulations.

Once the it has been installed, read carefully the safe operation manual of the unit. That manual includes examples of possible problems and recommended solutions. In case of any requests or inquiries, contact our sales or technical support department“

CONTACT

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