



Installation instructions

Ventilation unit expansion module VC-EXT

Required ventilation device software version at least 529, connect the device to the Internet network to update and the update will be done automatically.

Internet connection is required to use the expansion module, control is possible only through the user interface of the mobile application

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Installation instructions

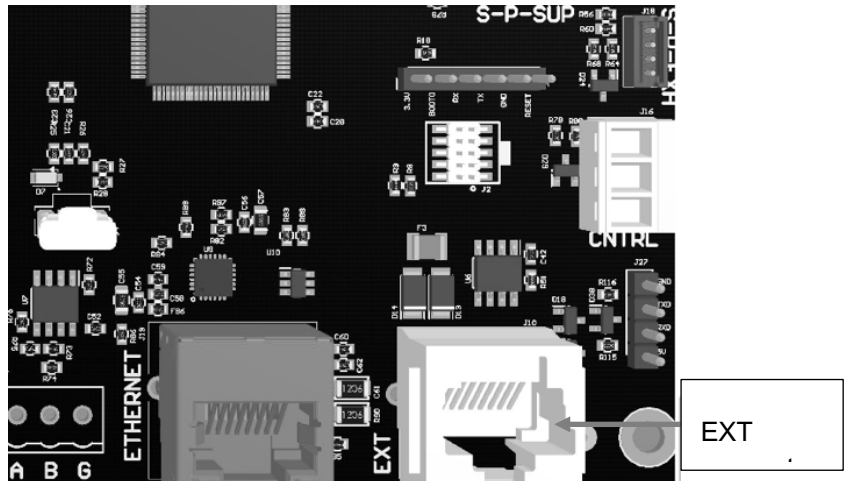
Warning! Risk of electric shock. 230 V electrical work should be carried out only by specialists with appropriate

The expansion module works only with the software version of the ventilation unit from 529

The expansion module must be installed near the ventilation unit, preferably fixed on the wall with a dedicated screw hole or left fixed on top of the ventilation unit.

Connecting a communication cable

- Unplug the ventilation unit
- Remove the hatch of the electrical switchboard of the ventilation unit
- The communication cable of the expansion board (with the end of the RJ45) must be connected to the connector marked EXT of the ventilation unit. The special cable included in the package must be used, cable extension is not allowed as the communication may be disturbed.

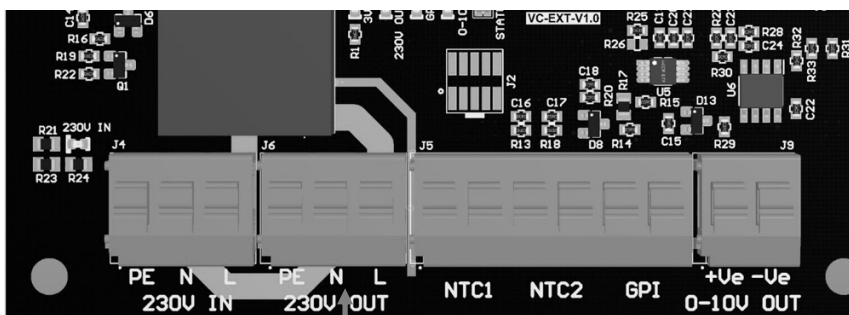


Connecting a pump, drive or valve

Connecting the ON/OFF control unit

The expansion module provides 230 V of power to the circulation pump or magnetic valve (system control unit). Such a method allows you to turn the calorifer on or off, but does not allow to regulate the supply air temperatures very accurately during cooling or heating. The minimum interval between switches is 1 minute. It is recommended to set the exact desired temperature from the heating source.

A pump or valve of the 230 V ON/OFF type must be used, which is connected to terminals marked 230 V OUT according to the designation PE / N / L. When heating or cooling is required, the relay on the expansion module is activated, and the control unit is turned on.



Control unit (drive or valve) 230 V

Connecting a 0-10V control unit

Solution 1: Circulation pump 230 V powered, 0-10 V controlled.

- Remove the power cord of the expansion module 230 V IN (this is not required)
- Connect the electrical power supply to the circulation pump from an external power source, not connect to the expansion module
- 0-10 V cables connect to expansion module 0-10 V OUT +Ve and -Ve (G) connectors

Solution 2: Valve drive 24V, 0-10V controlled

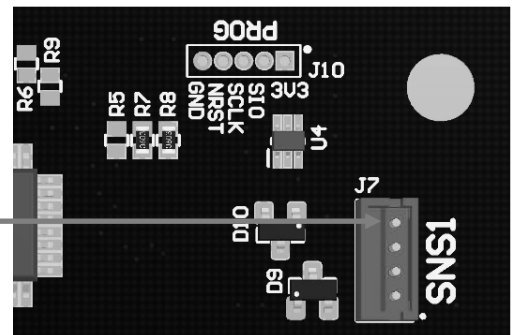
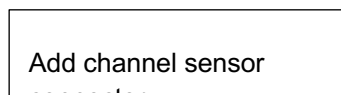
Recommended solution, allows you to very accurately adjust the calorific and air temperatures during cooling or heating.

The expansion module does not allow the 24 V power supply of the valve drive in the standard, if necessary, it can be ordered additionally and must be specified at the moment of order. It is also allowed to use a separate external 24 V power supply.

- Remove the expansion module 230 V IN power cord
- Connect the valve drive to the "+" and "-" terminals according to the 24 V power unit
- The "-" terminal of the 24 V power supply unit must be extended to the connector marked with the extension module "-Ve" designation
- Connect the +10 V valve drive cord to the extension module +Ve marked connector

Connecting the channel sensor

It is possible to connect a channel sensor to the expansion module to measure the temperature of the air, for example, before or after the calorifer. The extra sensor is available as an option. Connect the sensor to the connector marked SNS1.



Sensor installation location based on the installation position of the heating / cooling calorifer in the ventilation duct:

Calorifer is located in the outdoor air duct

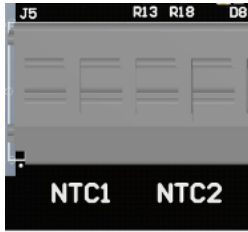
Add sensor not connected

The calorifer is located in the supply air duct

An additional sensor is mandatory, install in the supply air duct after calorifer at a distance of 1 meter

Connecting a tube attachment sensor

It is possible to connect 2pcs of the sensor to the expansion module to measure, for example, the calorifer loading and drain temperatures or the air temperature in the duct. The sensor attaches to the surface of the pipe with a clamp and measures the temperature of the pipe surface. Connect the sensors to the connectors marked NTC1 and NTC2. Sensors are available as an option: product code A-HC-SPT10K for pipe surface temperature or A-HC-SFL10K for air temperature.



Add pipe surface temperature sensor

Connecting to the mains

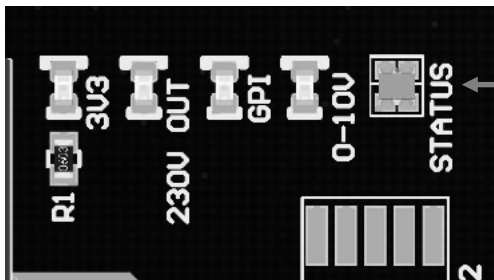
Connect the expansion module to the mains only if all previous connections have been made. Make sure that the electrical switchboard of the ventilation unit is properly closed.

To connect to the mains, connect the power cable of the expansion module to the outlet.

Initial setup

Step 1: Check if a connection has been established between the expansion module and the ventilation unit. The STATUS LED light must be permanently lit green. In case of a failed connection, the LED light will turn red or will not be on at all.

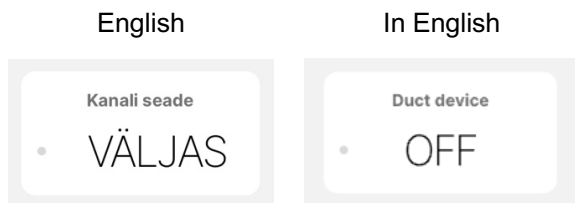
Important! The cable included in the package must be used and the ventilation unit must have at least software 529



Status LED

Step 2: Set up in the mobile app – make sure you have the latest version 2.5 of the mobile app – check the app store (Google Play or App Store) to see if an update is offered – if not you have the latest version.

If the previous connections described in the installation instructions have been made and the ventilation unit has been restarted, then in case of a successful connection of the additional module, the following view must appear in the mobile application:



Step 3: Click on the "Channel Device" module and make the following selection. When making a choice, you need to be convinced of its correctness, the wrong choice can harm the device or calorifer.

English

In English

Kanali jahuti / soojendi asend
Välisõhu kanal
Sissepuhkeõhu kanal

Duct cooler / heater position
Outside air duct
Supply air duct

Valige kanaliseadme paigutus, lugege enne valikut kindlasti kasutusjuhendit. Vale valik võib seadmeid kahjustada.

Choose the duct device positioning, make sure you read the user manual before selection. Wrong selection may harm the devices.

Choice – channel cooler / heater

In the ambient air duct	Calorifer is located in the duct of the outdoor air intake, before the ventilation unit
In the supply air duct	Calorifer is located in the supply air duct, after the ventilation unit

Step 3: Check the operation of the system: activate the cooling or heating mode (according to the season) by pressing the OFF button. The connected drive, pump or valve must start within 3 minutes after the mode is activated - the ventilation unit must be in operation mode and ventilated.

- Cooling: if the outside temperature is lower than 6 °C then the cooling mode cannot be activated
- Cooling: the desired temperature must be lower than the exhaust air temperature of the ventilation unit

Specifications

Power supply	From the outlet, liver. 1 A. Length 1.8 m
Connectivity to the ventilation unit	1 meter CAT5e cable (included in the package)
Relay output for controlling the pump, drive or valve	230 VAC
24V power supply	24V DC (bespoke only, not included in the standard)
IP protection class	IP 54
Product dimensions	157 x 95 x 40 mm

Support and contact

Due to software updates, changes may occur in the manual, the updated version can always be found on the help portal www.airobothome.com/abi.

We are grateful for any feedback on the use, characteristics, etc. of the device info@airobothome.com.

Manufacturer details

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Help portal and guides

www.airobothome.com/abi



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