UHB EN 1926-1
531290

USER MANUAL

Exhaust air module NIBE S135

NIBE

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1 Important information

Installation data

Product	*S135*
Serial number	
Installation date	
Installer	

No.	*Name*	*Fact. sett.*	*Set*
5.1.5	Exhaust air installation (fan sp. exhaust air, normal)	70%	

No.	*Name*	*Fact. sett.*	*Set*
5.3.14	Pump speed	70%	

Serial number must always be given

Certification that the installation is carried out according to instructions in the accompanying installer manual and applicable regulations.

Date _____ Signed _____

Safety information

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Rights to make any design or technical modifications are reserved.

If the supply cable is damaged, only NIBE, its service representative or similar authorised person may replace it to prevent any danger and damage.

SYMBOLS

NOTE

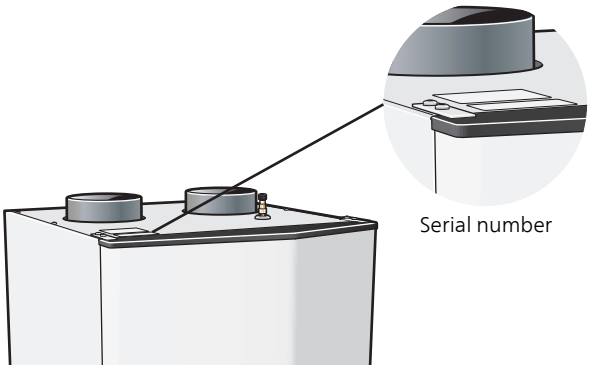
This symbol indicates danger to person or machine .

Caution

This symbol indicates important information about what you should observe when maintaining your installation.

Serial number

The serial number can be found to the left, on top of S135.



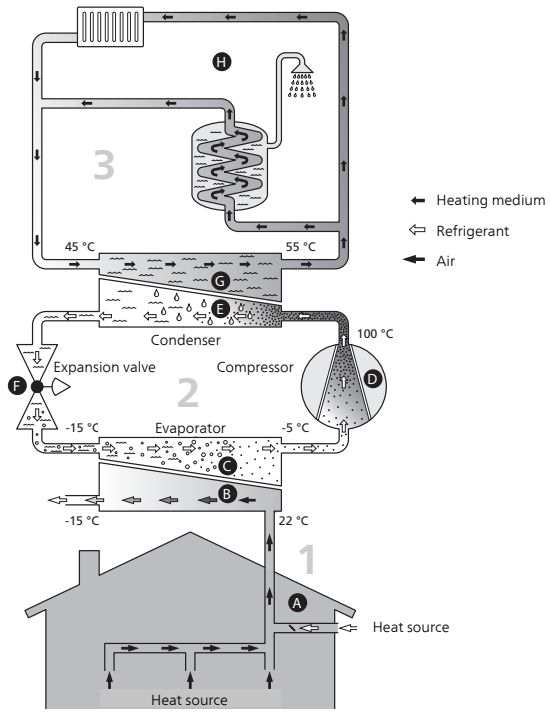
Caution

You need the product's (14 digit) serial number for servicing and support.

Compatible NIBE products

- VVM S320
- VVM S325
- SMO S40

2 The heating installation – the heart of the house



Exhaust air module function

An exhaust air module uses the heat that is in the building's ventilation air to heat up the house. The conversion of the ventilation air's energy to residential heating is done in three different circuits. From the outgoing ventilation air (1), free heating energy is retrieved from the house and transported to the exhaust air module. The exhaust air module increases the retrieved heat's low temperature to a high temperature in the refrigerant circuit, (2). The heat is distributed around the building in the heating medium circuit (3).

Ventilation air

A The hot air is transferred from the rooms to the heat pump via the exhaust air module.

B The fan then routes the air to the exhaust air module's evaporator. Here, the air releases the thermal energy to the brine and the air's temperature drops significantly. The cold air is then blown out of the house.

Refrigerant circuit

C A liquid, a refrigerant, circulates in a closed system in the exhaust air module, which also passes the evaporator. The refrigerant has a very low boiling point. In the evaporator the refrigerant receives the heat energy from the ventilation air and starts to boil.

D The gas that is produced during boiling is routed into an electrically powered compressor. When the gas is compressed, the pressure increases and the gas's temperature increases considerably, from approx. 5°C to approx. 80°C.

E From the compressor, gas is forced into a heat exchanger, condenser, where it releases heat energy to the heating system in the house, whereupon the gas is cooled and condenses to a liquid form again.

F As the pressure is still high, the refrigerant can pass an expansion valve, where the pressure drops so that the refrigerant returns to its original temperature. The refrigerant has now completed a full cycle. It is routed to the evaporator again and the process is repeated.

Heat medium circuit

G The heat energy that the refrigerant produces in the condenser is retrieved by the climate system's water, heating medium, which is heated to 55 °C (supply temperature).

Ventilation

J The hot air is transferred from the rooms to the heat pump via the exhaust air module.

K The fan then routes the air to the exhaust air module heat exchanger. Here, the air releases the heating energy to the brine and the air's temperature drops significantly. The cold air is then blown out of the house.

The temperatures are only examples and may vary between different installations and time of year.

Maintenance of S135

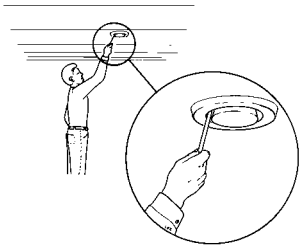
REGULAR CHECKS

Your exhaust air module requires minimal maintenance after commissioning. However, it is recommended that you check your installation regularly.

If anything unusual occurs, messages about the malfunction appear on the indoor module's display in the form of various alarm texts.

Cleaning the ventilation devices

The building's ventilation devices should be cleaned regularly with, for example, a small brush to maintain the correct ventilation.



The device settings must not be changed.

> ⚠ *NOTE*
>
> If you take down more than one ventilation device for cleaning, do not mix them up.

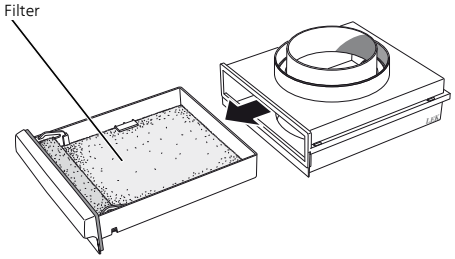
Cleaning the air filter

Clean the S135's air filter regularly, how often depends on the amount of dust in the ventilation air. Select what is most suitable for your installation.

1. Cut the power to the exhaust air module.
2. Pull out the filter cassette.
3. Remove the filter and shake/vacuum it clean.
4. Check the condition of the filter.
5. Carry out assembly in reverse order.

Even if the filter appears clean, dirt collects in it and this affects the efficiency of the filter. Therefore, replace it after 1 years. New filters can be ordered via the installer.

> ⚠ *NOTE*
>
> Water or other liquids must not be used for cleaning.



3 Disturbances in comfort

In most cases, the indoor module notes operational interference (operational interference can lead to disturbance in comfort) and indicates this with alarms and shows action instructions in the display.

If the operational interference is not shown in the display the following tips can be used:

BASIC ACTIONS

Start by checking the following items:

- That the feed cable is connected to S135.
- Group and main fuses of the accommodation.
- The property's earth circuit breaker.

LOW OR A LACK OF VENTILATION (EXHAUST AIR INSTALLATION)

- Filter blocked.
  - Clean or replace filter (see page 7).
- The ventilation is not adjusted.
  - Order ventilation adjustment.
- Exhaust air device blocked or throttled down too much.
  - Check and clean the exhaust air devices.
- Fan speed in reduced mode.
  - Enter menu 1.2.1 and select "normal".

LOUD OR DISTURBING VENTILATION (EXHAUST AIR INSTALLATION)

- Filter blocked.
  - Clean or replace filter (see page 7).
- The ventilation is not adjusted.
  - Order ventilation adjustment.
- Fan speed in forced mode.
  - Enter menu 1.2.1 and select "normal".

GURGLING SOUND

- Not enough water in the water seal.
  - Refill the water seal with water.
- Choked water seal.
  - Check and adjust the condensation water hose.

Item register

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