Ventilation heat exchanger NIBE ERS 30-400



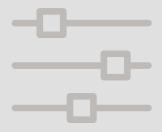




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2 Table of Contents NIBE ERS 30-400

1 Important information

Installation data

Product	ERS 30
Serial number	
Installation date	
Installer	

S-Series

No.	Name	Fact. sett.	Set
7.1.4.1	Fan speed, exhaust air	75%	
7.1.4.2	Fan speed, supply air	60%	
7.2.11	Vent heat exchanger (ERS)		
	lowest extract air temp.	5 °C	
	bypass at excess temperature	4 °C	

F-Series

No.	Name	Fact. sett.	Set
5.1.5	fan sp. exhaust air	75%	
5.1.6	fan sp. supply air	60%	
5.3.12	exhaust/supply air module	5 °C	
	lowest extract air temp.	4 °C	
	bypass at excess temperature		

Serial number must always be given

It is hereby certified that the installation has been carried out in accordance with the instructions in the Installer manual and applicable regulations.

Date		Signed	
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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.

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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 at the top, to the left of the ventilation connection for exhaust air.





Caution

You need the product's serial number for servicing and support.

ERS 30 - An excellent choice

ERS 30 is a ventilation heat exchanger with high temperature efficiency and low energy consumption.

EXCELLENT PROPERTIES FOR ERS 30:

• DC fans

Two energy efficient DC fan (Class A) are integrated in the ventilation heat exchanger.

Low noise level

The ventilation heat exchanger has a very low noise level.

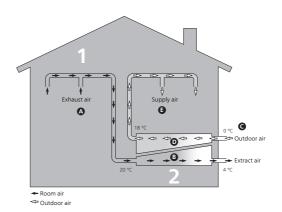
Control

The ventilation heat exchanger can be controlled from the heat pump or the main unit, which means that a single control unit can control the entire climate unit

In a cold environment

The ventilation heat exchanger has been developed for placing in a cold environment.

2 The heating installation – the heart of the house



Ventilation heat exchanger function

A ventilation heat exchanger makes use of the heat in the building's ventilation air to heat up the incoming outdoor air. The outgoing ventilation air (1) retrieves free heating energy from the home and transports it to the heat exchanger. The heat exchanger (2) transfers the heat from the indoor air to the incoming outdoor air.

Ventilation air

- A The hot air is transferred from the rooms to the heat exchanger via the building's ventilation system using a fan.
- **B** In the ventilation heat exchanger the air releases heat energy and the air's temperature drops significantly. The cold air is then blown out of the house.

Outdoor air

- The outdoor air is transferred to the ventilation heat exchanger via the house's ventilation system.
- In the ventilation heat exchanger the air releases the heating energy and the temperature is raised.
- A fan blows the heated air into those rooms that have supply air inlets.

Maintenance of ERS 30

REGULAR CHECKS

Your ventilation heat exchanger requires minimal maintenance after commissioning. On the other hand, it is recommended that you check your installation regularly.



NOTE

Always switch off the power and wait until the fans have stopped before opening ERS 30.

Cleaning the ventilation devices

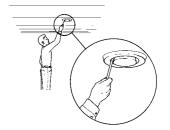
The building's ventilation devices should be cleaned regularly with, for example, a small brush to maintain the correct ventilation.

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

The supply air filter in ERS 30 is of a type that should not be cleaned, but has to be replaced instead.

The exhaust air filter in ERS 30 should be cleaned regularly; how often depends on the amount of dust in the ventilation air. Test to find out what is most appropriate for your installation.



Caution

The efficiency of the installation can be reduced by a dirty air filter.

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

You will receive a reminder to clean the filters in the main product's display. The default setting for the reminder is every three months, however, if the power to the main product is interrupted the countdown begins again.

- 1. Switch off the installation using the MCB in the fuse box or the main switch for the installation.
- 2. Pull out the filter cassette.
- 3. Remove the exhaust air filter and shake it clean.
- 4. Check the condition of the filters and replace if necessary.
- 5. Carry out assembly in reverse order.

Even if the filters appear to be clean, dirt collects in them and this affects the efficiency of the filters. For this reason, replace them after approx. 1 years. New filters can be ordered via the installer.

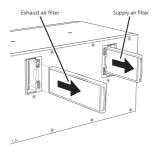
Supply air filter: ePM1 55% = Pollen filter (Fine filter) Exhaust air filter: Grov = Standard filter (Coarse filter)



NOTE

Use of a vacuum cleaner or compressed air on the filter is not recommended, as this diminishes the degree of filtration.

Water or other liquids must not be used for cleaning.



Check the water lock for condensation water

The water seal must be checked at least once a year, ideally in the autumn.

The water seal is located outside ERS 30. Contact your installer if you are unsure of where to find it.

No condensation water is generated in the ventilation heat exchanger during the warmer periods of the year and the water seal will dry out.

During the colder parts of the year, ERS 30 can produce several litres of condensation water every day. If the condensation outlet is not working, this may cause water damage inside the home.

The water seal must not dry out during this part of the year because air will be sucked into the ventilation heat exchanger due to the negative pressure in the unit, which will then prevent the condensation water from running off.

- 1. Check that the condensation drain and the water seal are not clogged with dirt.
- 2. Pour approx. one litre of water into the water seal.
- 3. Check that the water runs through unobstructed.

Cleaning the heat exchanger

Check the heat exchanger every other year and clean if necessary. Avoid contact with the fins.



Caution

Do not damage the fins. If you are unsure, contact your installer for help with cleaning.

3 Disturbances in comfort

In most cases, the main product notes a malfunction (a malfunction can lead to disturbance in comfort) and indicates this with alarms and shows action instructions in the display.

Troubleshooting

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

BASIC ACTIONS

Start by checking the following possible fault sources:

- That the main product is running and that the supply cable to ERS 30 is connected
- Group and main fuses of the accommodation.
- The property's earth circuit breaker.

HIGH OR LOW ROOM TEMPERATURE

• See user manual for the main product.

LOW OR A LACK OF VENTILATION

- Filter blocked.
 - Clean or replace filter (see page 8).
- The ventilation is not adjusted.
 - Order ventilation adjustment.
- Closed, too much choke or blocked ventilation device.
 - Check and clean ventilation valves (see page 8).
- Fan speed in reduced mode.

- Go to the main product's menu 1.2.1 for the S-series and 1.2 for the F-Series and select "normal".
- External switch for changing the fan speed activated.
 - Check any external switches.
- Fan running slow because of low incoming outdoor air temperature.
 - Contact the installer in the event of recurring problems.

HIGH OR DISTRACTING VENTILATION

- Filter blocked.
 - Clean or replace filter (see page 8).
- The ventilation is not adjusted.
 - Order ventilation adjustment.
- Closed, too much choke or blocked ventilation device.
 - Check and clean ventilation valves (see page 8).
- Fan speed in forced mode.
 - Go to the main product's menu 1.2.1 for the S-series and 1.2 for the F-Series and select "normal".
- External switch for changing the fan speed activated.
 - Check any external switches.
- Silencers not correctly installed.
 - Contact your installer!

4 Technical data

Detailed technical specifications for this product can be found in the installation manual (nibe.eu).

5 Glossary

CLIMATE SYSTEM

The climate system can also be called the heating and/or cooling system. The building is cooled or heated using radiators, under floor coils or convector fans.

DISTURBANCES IN COMFORT

Disturbances in comfort means unwanted changes in the indoor comfort, e.g. that the indoor temperature is not at the desired level.

EXHAUST AIR

The air that comes from the exhaust air device in the various rooms of the accommodation, to ERS 30.

EXHAUST AIR DEVICES

Vents, usually in the ceiling, in the kitchen/bathroom/clothes closet where the air is drawn in to be forwarded to ERS 30.

EXTRACT AIR

The air from which the ERS 30 has retrieved heat, and thereby cooled. This air is blown out of the house.

HEAT EXCHANGER

Device that transfers heat energy from one medium to another without mixing mediums.

OUTDOOR AIR

Air that is drawn into the ERS 30 and heated.

SUPPLY AIR

The heated air that is blown from ERS 30 and out into the room.

SUPPLY AIR DEVICE

Valves, usually in the ceiling, where the heated supply air is blown out and aids in heating up the accommodation.

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