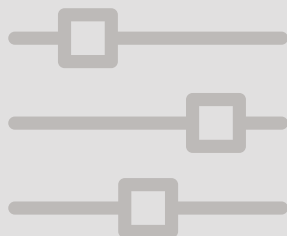
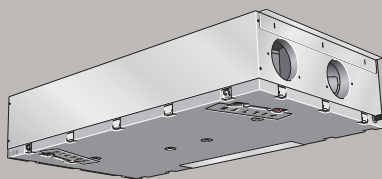


UHB EN 2127-3
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USER MANUAL

HRV unit NIBE ERS 20



 **NIBE**

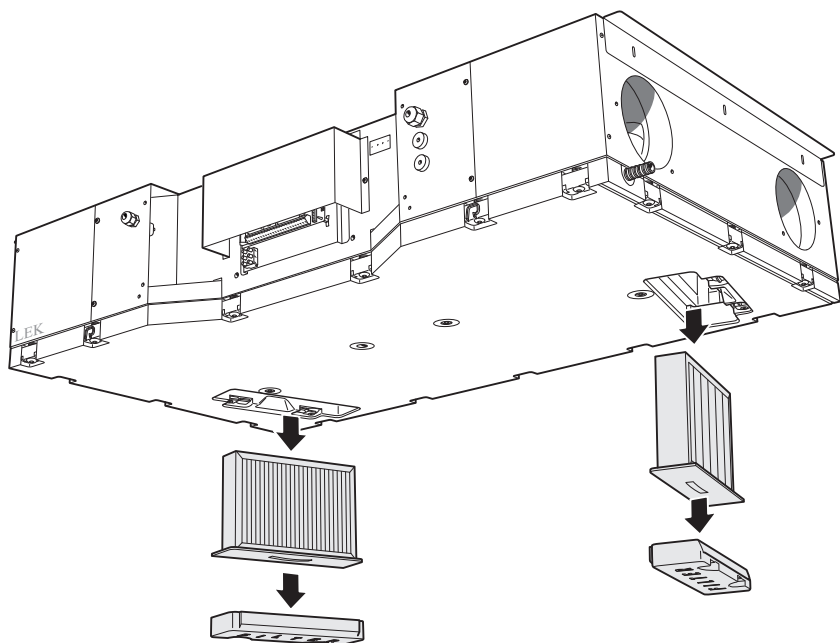
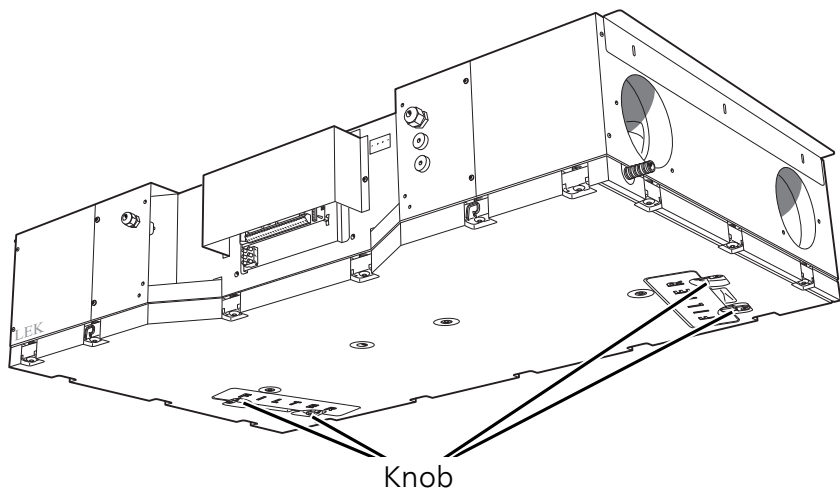


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1 Important information

Installation data

| | |
|-------------------|---------------|
| <i>Product</i> | <i>ERS 20</i> |
| Serial number | |
| Installation date | |
| Installer | |

S-Series

| <i>No.</i> | <i>Name</i> | <i>Fact. sett.</i> | <i>Set</i> |
|------------|------------------------------|--------------------|------------|
| 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

| <i>No.</i> | <i>Name</i> | <i>Fact. sett.</i> | <i>Set</i> |
|------------|------------------------------|--------------------|------------|
| 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 _____

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.

This is an original manual. It may not be translated without the approval of NIBE.

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SYMBOLS

Explanation of symbols that may be present in this manual.



NOTE

This symbol indicates danger to person or machine .



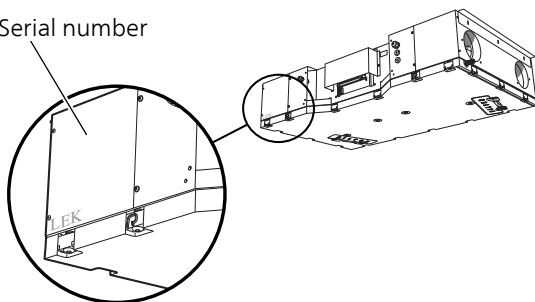
Caution

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 left.

Serial number



Caution

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

Compatible products

S-SERIES

- | | | |
|---------|------------|-----------|
| • S1155 | • VVM S320 | • SMO S40 |
| • S1255 | • VVM S325 | |

F-SERIES

- | | | |
|---------|-----------|----------|
| • F1145 | • VVM 310 | • SMO 40 |
| • F1155 | • VVM 320 | |
| • F1245 | • VVM 325 | |
| • F1255 | • VVM 500 | |
| • F1345 | | |
| • F1355 | | |

ERS 20 - An excellent choice

ERS 20 is an HRV unit with high temperature efficiency and low energy consumption.

EXCELLENT PROPERTIES FOR ERS 20:

- *DC fans*

Two energy-efficient DC fans (Class A) are integrated in the HRV unit.

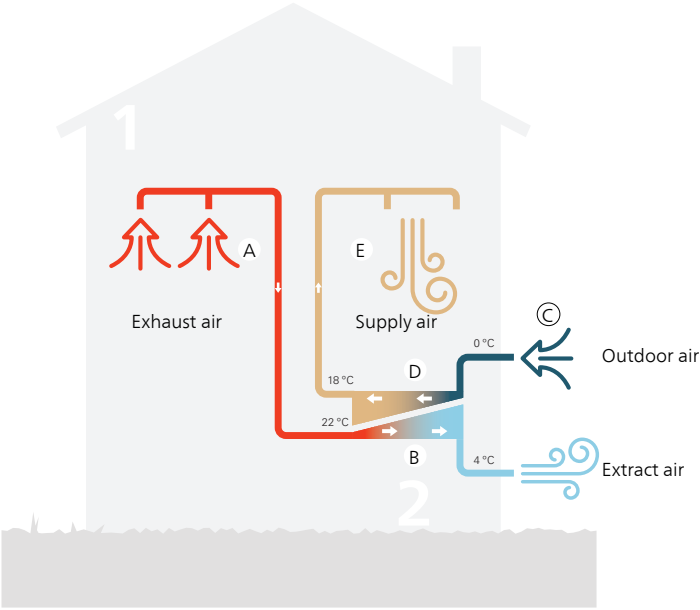
- *Low noise level*

The HRV unit has a very low noise level.

- *Easy to install*

The HRV unit is easy to install together with a NIBE heat pump or indoor module. During installation, the HRV unit is connected to the main product, which enables you to read off the HRV unit's values in the main product's display.

2 The heating installation – the heart of the house



HRV unit function

An HRV unit is a ventilation heat exchanger that utilises the heat in the building's ventilation air to heat the incoming outdoor air. From the outgoing ventilation air (1), heating energy is recovered from the dwelling and transported to the HRV unit. In the heat exchanger (2), the heat from the indoor air is transferred to the incoming outdoor air.

Ventilation air

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

Outdoor air

- C** The outdoor air is transferred to the HRV unit via the building's ventilation system.
- D** In the HRV unit, the air absorbs the heat energy and the temperature is raised.
- E** A fan blows the heated air into those rooms that have supply air inlets.

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

Maintenance of ERS 20

REGULAR CHECKS

Your HRV unit requires minimal maintenance after commissioning. However, it is recommended that you check your installation regularly. If something unusual occurs, messages about the malfunction, in the form of different alarm texts, appear in the main product display.



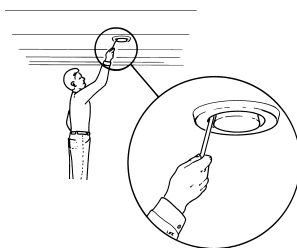
NOTE

Always switch off the power and wait until the fans have stopped before opening ERS 20.

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.

Replacing the air filter

The filters in ERS 20 are of a type that should not be cleaned; they have to be replaced instead. These must be replaced regularly, although how often depends of factors such as the amount of particles 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.

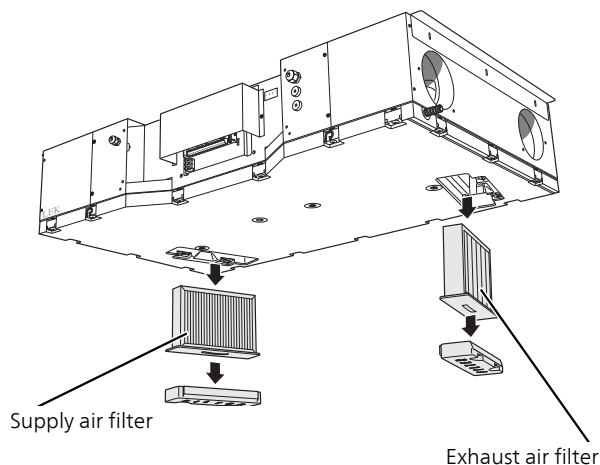
In the main product's display, you will receive a reminder to check the filters. The factory setting for the reminder is every three months, although the countdown begins again if the power to the main product is interrupted.

1. Switch off the main product.
2. Release the air filters by turning the knobs on the covers a quarter of a turn.
3. Remove the covers.
4. Pull out the filter cassettes.
5. Check the condition of the filters and replace if needed.
6. Carry out assembly in reverse order.

Even if the filters look 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 a dealer for NIBE.

Exhaust air filter: Coarse 65%

Supply air filter: ePM1 55%



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 20. Contact your installer if you are unsure of where to find it.

No condensation water is generated in the HRV unit during the warm period of the year and the water seal will dry out.

During the colder parts of the year, ERS 20 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 drawn into the HRV unit due to the negative pressure in the unit, which will then prevent the condensation water from running out.

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.

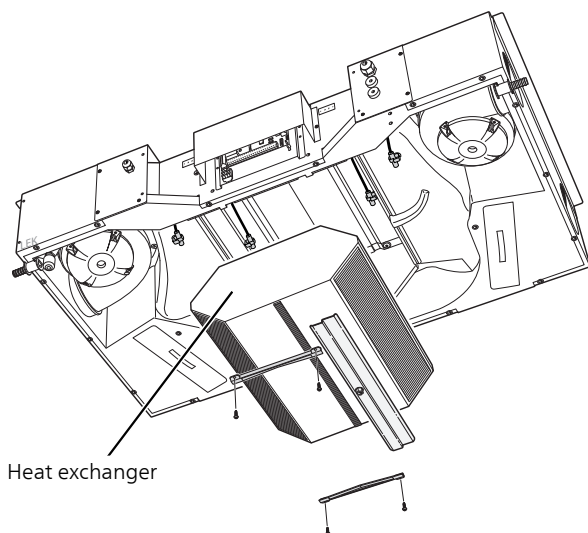
1. Remove the four screws holding the heat exchanger.
2. Remove the trim and the metal rail.
3. Carefully lift out the heat exchanger.
4. Clean the heat exchanger carefully, e.g. with a vacuum cleaner. If necessary, you can use warm water and mild soap.

Carry out assembly in reverse order.



NOTE

It is important that the metal rail is positioned on the same side, so that the heat exchanger is angled in the same direction as previously when reinstalling.



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 items:

- That the main product is running and that the supply cable to ERS 20 is connected.
- Group and main fuses of the accommodation.
- The property's earth circuit breaker.

LOW OR A LACK OF VENTILATION

- Level monitor tripped.
 - Checking the condensation water drain and water seal.
- Filters blocked.
 - Replace the filters.
- The ventilation is not adjusted.
 - Order ventilation adjustment.
- Closed, too much choke or blocked ventilation device.
 - Check and clean ventilation valves (see page 12).
- Fan speed in reduced mode.

- S-series: Enter the main product's menu 1.2.1 and select "Normal".
- F-series: Enter the main product's menu 1.2 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

- Filters blocked.
 - Replace the filters.
- The ventilation is not adjusted.
 - Order ventilation adjustment.
- Closed, too much choke or blocked ventilation device.
 - Check and clean ventilation valves (see page 12).
- Fan speed in forced mode.
 - S-series: Enter the main product's menu 1.2.1 and select "Normal".
 - F-series: Enter the main product's menu 1.2 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 20.

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 20.

EXTRACT AIR

The air from which the ERS 20 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 20 and heated.

SUPPLY AIR

The heated air that is blown from ERS 20 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.

Contact information

AUSTRIA

KNV Energietechnik
GmbH
Gahberggasse 11, 4861
Schörfling
Tel: +43 (0)7662 8963-0
mail@knv.at
knv.at

CZECH REPUBLIC

Družstevní závody Dražice
- strojírna s.r.o.
Dražice 69, 29471
Benátky n. Jiz.
Tel: +420 326 373 801
nibe@nibe.cz
nibe.cz

DENMARK

Vølund Varmeteknik A/S
Industrivej Nord 7B, 7400
Herning
Tel: +45 97 17 20 33
info@volundvt.dk
volundvt.dk

FINLAND

NIBE Energy Systems Oy
Juurakkotie 3, 01510
Vantaa
Tel: +358 (0)9 274 6970
info@nibe.fi
nibe.fi

FRANCE

NIBE Energy Systems
France SAS
Zone industrielle RD 28
Rue du Pou du Ciel,
01600 Reyrieux
Tél: 04 74 00 92 92
info@nibe.fr
nibe.fr

GERMANY

NIBE Systemtechnik
GmbH
Am Reiherpfahl 3, 29223
Celle
Tel: +49 (0)5141 75 46 -0
info@nibe.de
nibe.de

GREAT BRITAIN

NIBE Energy Systems Ltd
3C Broom Business Park,
Bridge Way, S41 9QG
Chesterfield
Tel: +44 (0)330 311 2201
info@nibe.co.uk
nibe.co.uk

NETHERLANDS

NIBE Energietechnik
B.V.
Energieweg 31, 4906 CG
Oosterhout
Tel: +31 (0)168 47 77 22
info@nibenl.nl
nibenl.nl

NORWAY

ABK-Qviller AS
Brobekkveien 80, 0582
Oslo
Tel: (+47) 23 17 05 20
post@abkqviller.no
nibe.no

NIBE Energy Systems
Hannabadsvägen 5
Box 14
SE-285 21 Markaryd
info@nibe.se
nibe.eu

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