

HRV unit

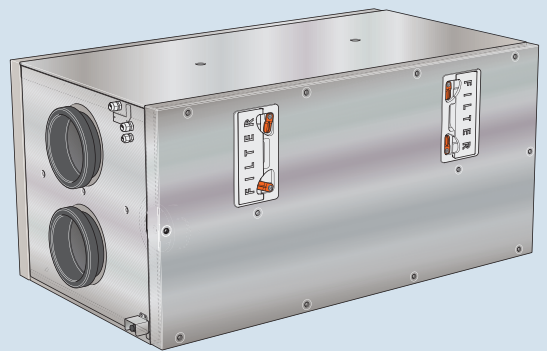
NIBE ERS 30-600

The NIBE ERS 30-600 is a heat recovery ventilation unit with high thermal efficiency up to 94% and low energy consumption.

The NIBE ERS 30-600 is intended for installation with a NIBE ground source heat pump or a NIBE air-to-water heat pump to provide a fully-integrated heating and ventilation system. The unit is simple to operate and control via the heat pump.

Thanks to smart technology, this product lets you keep track of your energy consumption and will become a key part of your connected lifestyle. The efficient control system automatically regulates the indoor climate to deliver maximum comfort. And you're doing the environment a favour too.

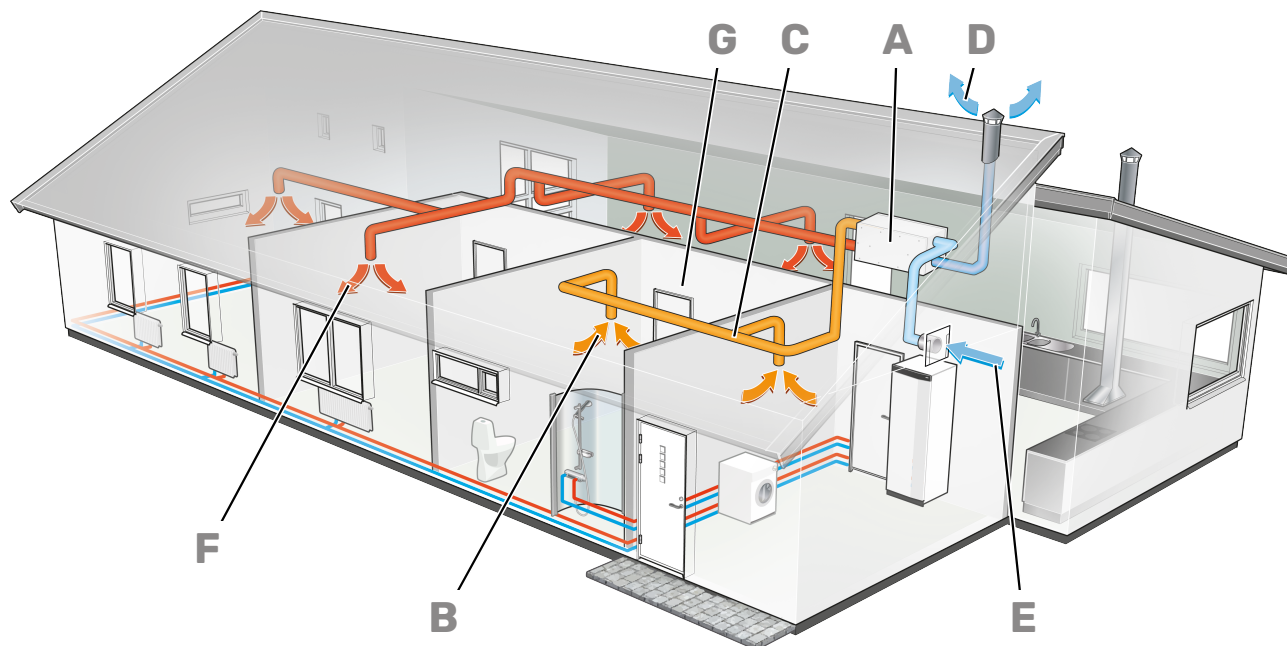
The NIBE ERS 30-600 has been specifically designed for use in attics and other cool spaces.



- **A heat recovery ventilation unit with high thermal efficiency and low energy consumption.**
- **Combined with a NIBE ground source heat pump or air-to-water heat pump, the unit provides a fully-integrated solution in properties with balanced ventilation.**
- **Simple to operate and part of your smart home in combination with a NIBE heat pump.**

This is how ERS 30 works

Principle



ERS 30 is an HRV unit with inbuilt fans and counter-current heat exchanger.

Energy is recovered from the ventilation air and supplied to your home, which reduces energy costs considerably.

The unit is intended for both new installations and replacement in houses or similar.

ERS 30 is suitable for ventilation systems where high thermal efficiency and low energy consumption are required.

- A** ERS 30 ventilates your home and heats the supply air.
- B** The warm room air is drawn into the air duct system.
- C** The warm room air is fed to ERS 30.
- D** The room air is released when it has passed ERS 30. The air temperature has then been reduced as ERS 30 has extracted the energy in the room air.
- E** Outdoor air is drawn into ERS 30.
- F** Air is blown out into rooms with supply air inlets.
- G** Air is transferred from rooms with supply air valves to rooms with exhaust air valves.

Good to know about ERS 30

Transport and storage

ERS 30 should be transported and stored in the dry.

Installation and positioning

ERS 30 must be placed on a stable surface to minimise the risk of vibrations.

- Wherever the unit is located, any joists that back onto a sound-sensitive room should be fitted with soundproofing.
- Condensation water comes from the HRV unit. A condensation outlet with a water seal must be installed and routed to an internal drain.
- The HRV unit's installation area always has to have a temperature of at least -25 °C and max. 50 °C.

INSTALLATION AREA

Leave a free space of 600 mm in front of the product.

Ensure that there is sufficient space (300 mm) for connecting ventilation ducts.

Installation

Condensation water drain

ERS 30 can produce several litres of condensation water per day. It is therefore important that the condensation outlet is correctly executed and the HRV unit installed horizontally.

Check that the water seal is airtight and firmly in position. The connection must be made so that the user can check and top up the water seal, without opening ERS 30.

The connection for the condensation outlet measures $\varnothing 15$ mm.

If the HRV unit will be installed in a cold area, the condensation water drain pipe must be insulated so the condensation water in the pipe does not freeze. It is also recommended that the water seal is mounted in a warm area to guarantee that the water in the water seal does not freeze. If it cannot be guaranteed that insulation will protect the condensation water drain pipe against frost, a thermostat-controlled heating cable must be installed around the condensation water drain pipe. The installation from the water seal to the drain must be carried out with a requisite slope of at least 1%.

Ventilation



Connect ERS 30 so that all the exhaust air, except kitchen duct air (kitchen fan), passes through the heat exchanger in the product.

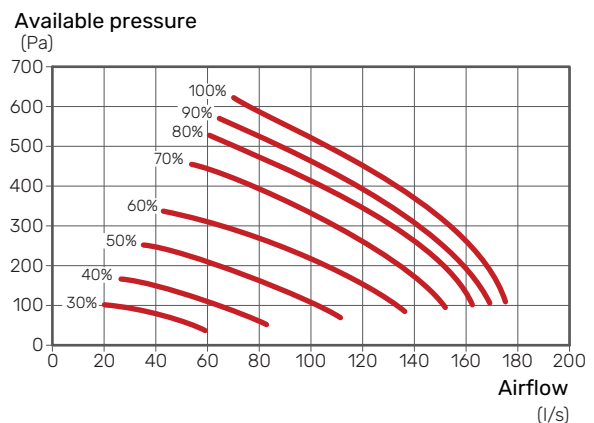
- The ventilation flow must comply with the applicable national standards.
- The supply air flow must be lower than the exhaust air flow to prevent over pressure in the house.
- Provision must be made for inspection and cleaning of the duct.
- The air duct system must be a minimum of air tightness class B.
- To prevent fan noise being transferred to the ventilation devices, install silencers in suitable locations in the duct system.
- Because the extract air and outdoor air temperature is/becomes cold, the extract air and outdoor air duct must be insulated using diffusion-proof material along its entire length.
- Exhaust and supply air ducts that are routed in cold areas must be insulated.
- All joins in the ducting must be sealed to prevent leakage.

- The air must be routed to the outdoor air duct through an outer wall grille in the facade. The outer wall grille must be installed so that it is protected from the weather and must be designed so that no rainwater and/or snow can penetrate the facade or follow the air into the duct.
- When positioning the outdoor air and extract air hood/grille, bear in mind that the two air flows must not short circuit to prevent the extract air from being drawn into ERS 30 again.
- A duct in a masonry chimney stack must not be used for extract air or outdoor air.
- If a stove or similar is installed, it must have airtight doors. It must also be able to take combustion air from outside.
- Incorrect adjustment of the ventilation may lead to reduced installation efficiency and thus poorer operating economy, a poorer indoor climate and moisture damage in the building.

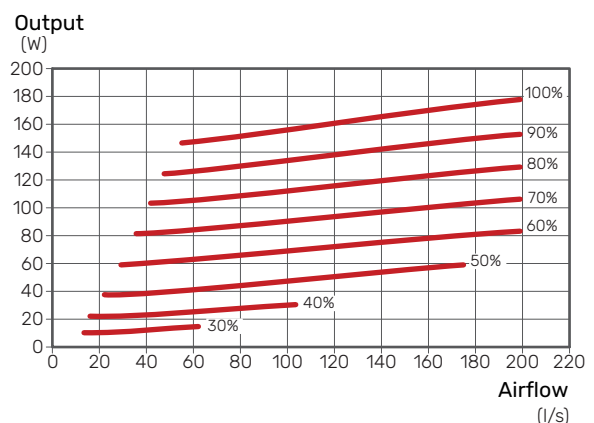
SETTING THE FAN CAPACITY

Select the ventilation capacity steplessly in the display.

Ventilation capacity

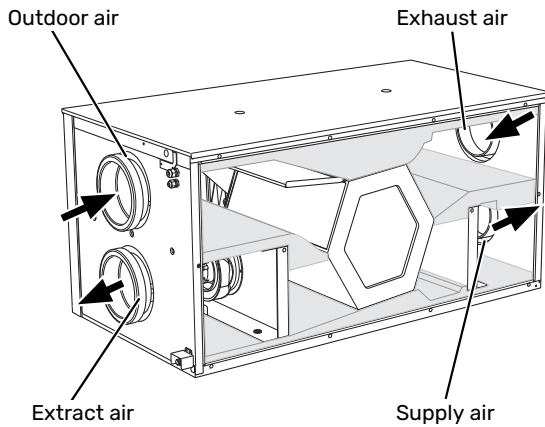


Fan rating¹



¹The diagram shows the power consumption per fan.

VENTILATION CONNECTIONS



Electrical connections



Disconnect ERS 30 before insulation testing the house wiring.

To prevent interference, sensor cables to external

- connections must not be laid close to high voltage cables.
- If the supply cable is damaged, only NIBE, its service representative or similar authorised person may replace it to prevent any danger and damage.

ERS 30 is equipped with a communication cable from the factory (cable length 2.0 m), which is connected to a circuit board in the heat pump. It is also equipped with a supply cable with a plug (cable length 2.4 m).

Electrical installation and service must be carried out under the supervision of a qualified electrician. Electrical installation and wiring must be carried out in accordance with the stipulations in force.

Functions

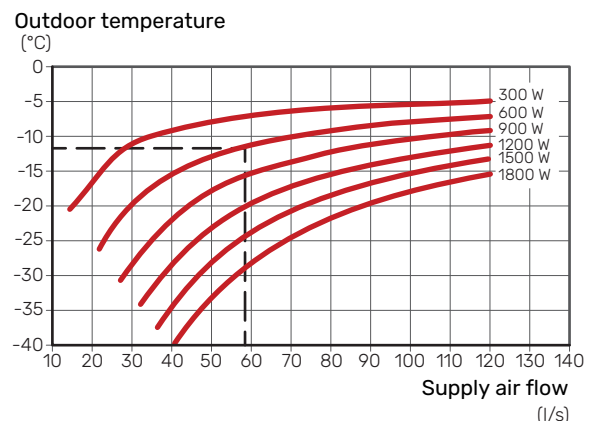
AIR HEATER EAH 20

In houses where the outdoor temperature can be continuously lower than -5°C , ERS 30 should be supplemented with an electrical air heater (EAH 20). In cold weather, EAH 20 heats the incoming outdoor air slightly to prevent the condensation in ERS 30 from freezing to form ice.

The power of EAH 20 is selected taking into consideration the needs of the building, the choice of fuse, any building regulations, and the outdoor temperature at which the supply air fan in ERS 30 is permitted to start to slow down.

The energy saving increases the lower the power of the air heater that is selected. However, this increases the outdoor air flow that enters the house via leakage (instead of through ERS 30) at low outdoor temperatures.

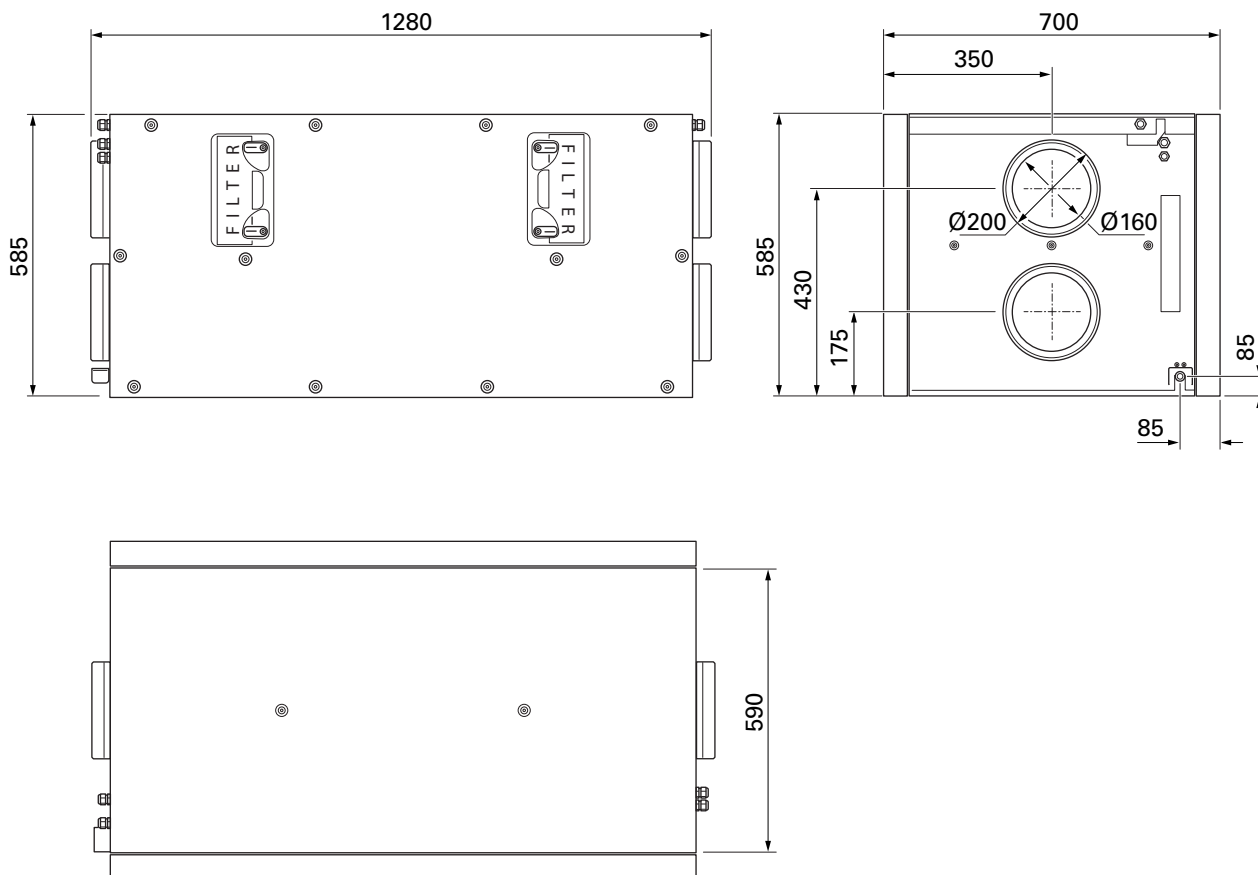
Choice of power on EAH 20



Example: In the case of a supply air flow of 58 l/s and a power of 600 W in the preheater, the supply air fan is permitted to start slowing down at an outdoor temperature of approx. -12°C .

Technical data

Dimensions



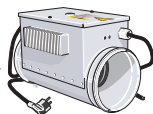
Accessories

Not all accessories are available on all markets.

Detailed information about the accessories and complete accessories list available at nibe.eu.

ELECTRICAL AIR HEATER EAH 20

In cold weather, EAH heats the incoming outdoor air slightly to prevent the condensation in ERS 30 from freezing to form ice. EAH should be used in houses where the outdoor temperature can be continuously lower than -5°C .



EAH 20-1800

(300-1800 W)

Technical specifications

Type		ERS 30
Electrical data		
Supply voltage	V	230 V ~ 50Hz
Fuse	A	10
Driving power fan	W	2 x 170
Enclosure class		IP X1B
Ventilation		
Filter type, exhaust air filter		Coarse 65%
Filter type, supply air filter		ePM1 55%
Noise		
Sound power level ($L_{W(A)}$) ¹	dB(A)	55
Sound pressure level ($L_{P(A)}$) ²	dB(A)	47
Pipe connections		
Ventilation \emptyset	mm	160
Condensation water drain \emptyset	mm	15
Miscellaneous		
Working temperature range for incoming air	°C	Min. -25 max. 40
Efficiency class ³		A
Length, supply cable	m	2.4
Length, communication cable	m	2.0
Width	mm	1,280
Height	mm	585
Depth	mm	700
Weight	kg	56
Part No.		066 241

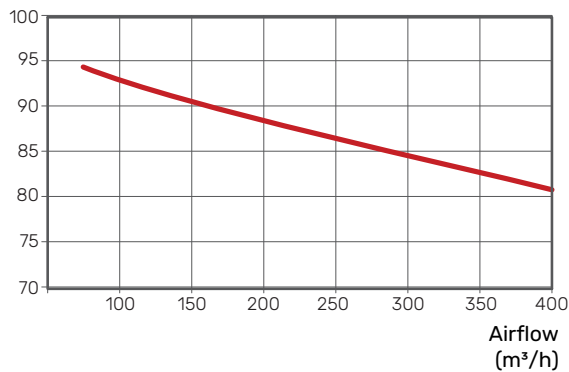
¹ 127 l/s (457 m³/h) at 50 Pa

² 93 l/s (335 m³/h) at 50 Pa

³ Scale for efficiency class: A+ to G.

Dry temperature efficiency according to EN 308

Temperature efficiency (%)



Outdoor air: 5 °C Exhaust air 25 °C RH exhaust air: <27.7 %

Sustainable energy solutions since 1952

NIBE has been manufacturing energy-efficient and sustainable climate solutions for your home for 70 years. It all began in Markaryd, in the southern Swedish province of Småland, and we recognise our Nordic heritage by utilising the power of nature. We combine renewable energy with smart technology to offer efficient solutions, allowing us to work together to create a more sustainable future.

Regardless of whether it is a chilly winter's day or a warm afternoon in the summer sun, we need a balanced indoor climate that allows us to enjoy a comfortable life, whatever the weather. Our extensive range of products supply your home with cooling, heating, ventilation and hot water, making it possible for you to create a pleasant indoor climate with little impact on the environment.



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