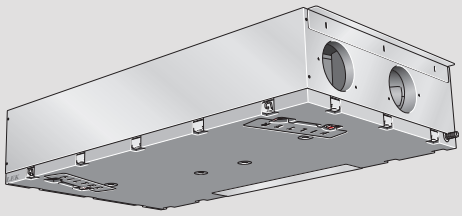
HRV unit
NIBE GV-HR 130

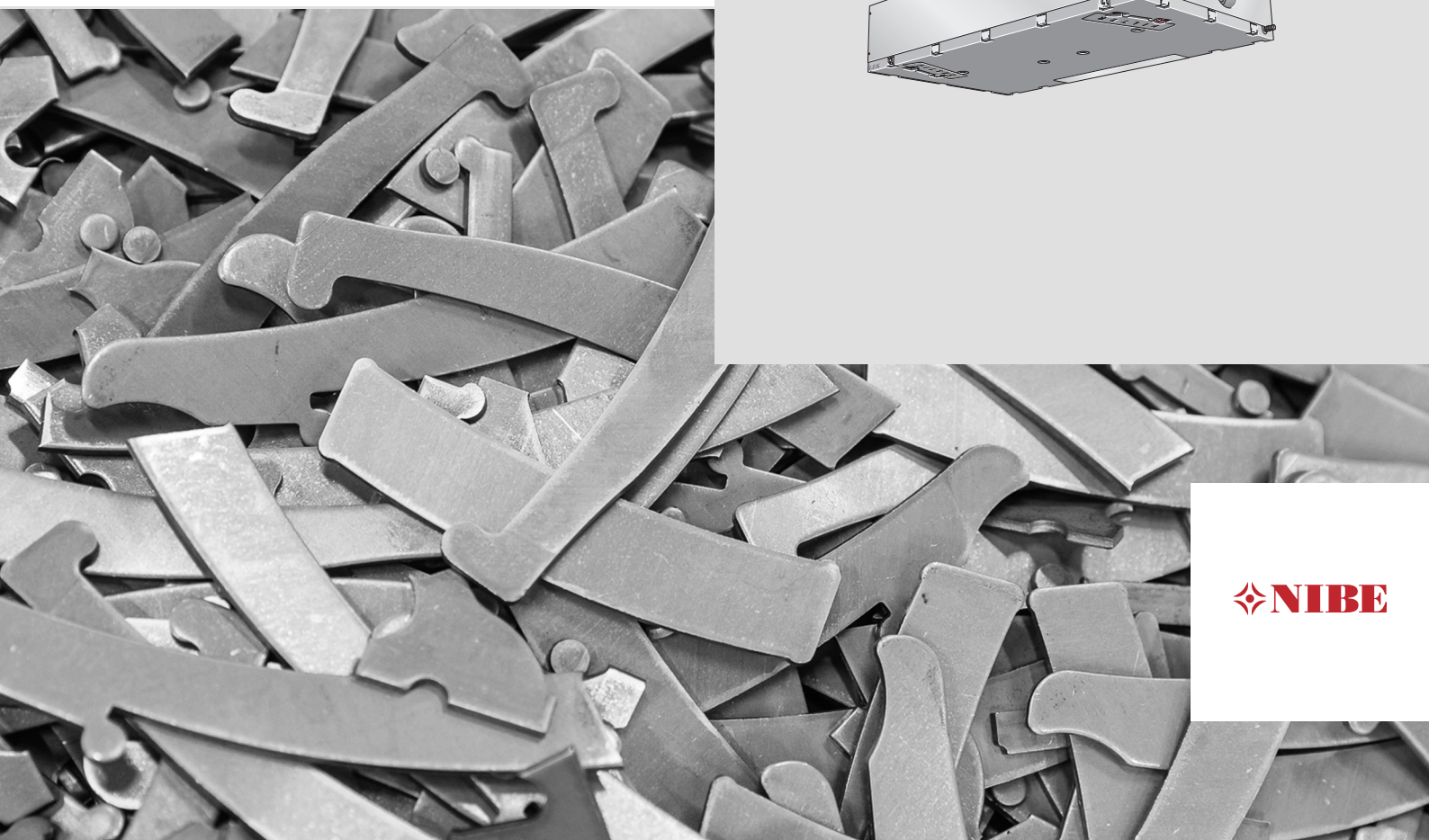
NIBE GV-HR 130 is a heat recovery ventilation unit equipped with counter flow heat exchanger with a temperature efficiency of up to 92%. NIBE GV-HR 130 is for mounting in ceilings.

NIBE GV-HR 130 are delivered with counter flow heat exchanger, humidity sensor, energy saving fans, EC motors, supply air filter, exhaust air side filter and is complete with a control system with a user-friendly control panel.

The elegant display shows instructions, settings and operating information. You navigate easily in the menu, setting the ventilation or getting other information.

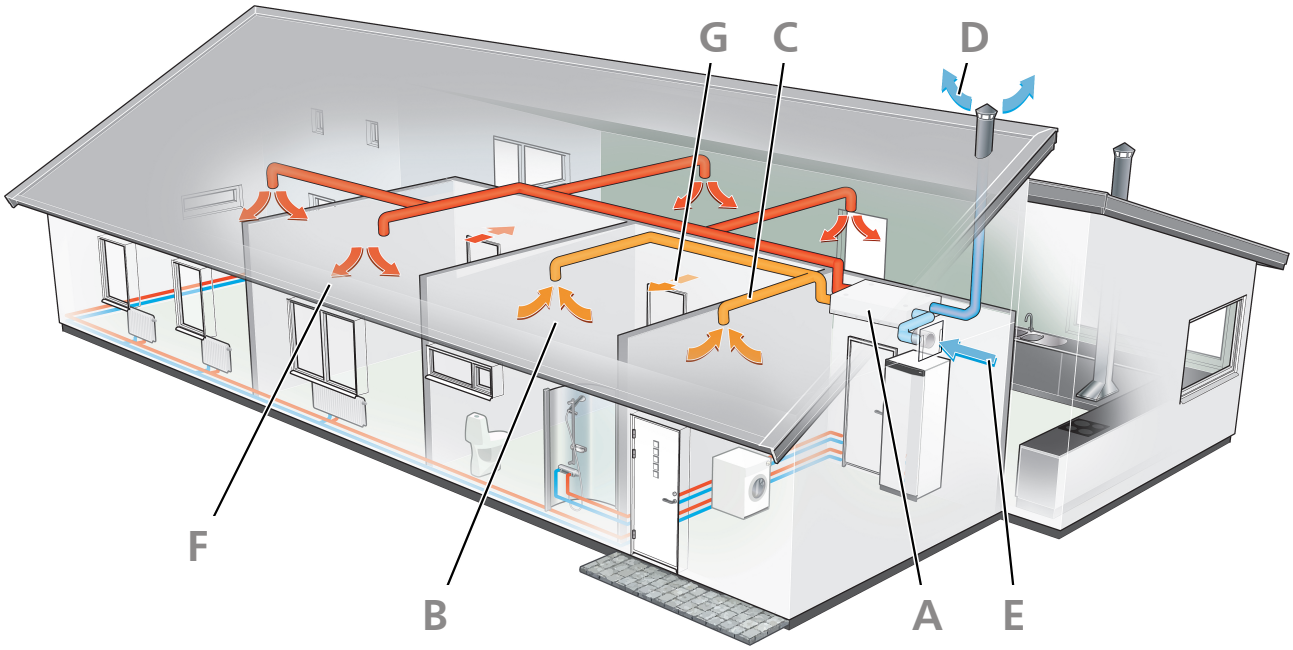
- Heat recovery ventilation unit with integrated by-pass function, humidity control and low noise level.
- Simple care and service.
- Easy to control from the stylish supplied display.





This is how GV-HR 130 works

Principle



GV-HR 130 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 re-placement in houses or similar.

GV-HR 130 is suitable for ventilation systems where high thermal efficiency and low energy consumption are required.

A GV-HR 130 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 GV-HR 130.

D The room air is released when it has passed GV-HR 130. The air temperature has then been reduced as GV-HR 130 has extracted the energy in the room air.

E Outdoor air is drawn into GV-HR 130.

F Air is blown out into rooms with supply air inlets.

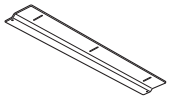
G Air is transported from rooms with supply air inlets to rooms with exhaust air valves.

Good to know about GV-HR 130

Transport and storage

GV-HR 130 should be transported and stored in the dry.

Supplied components



2 x roof brackets

Display

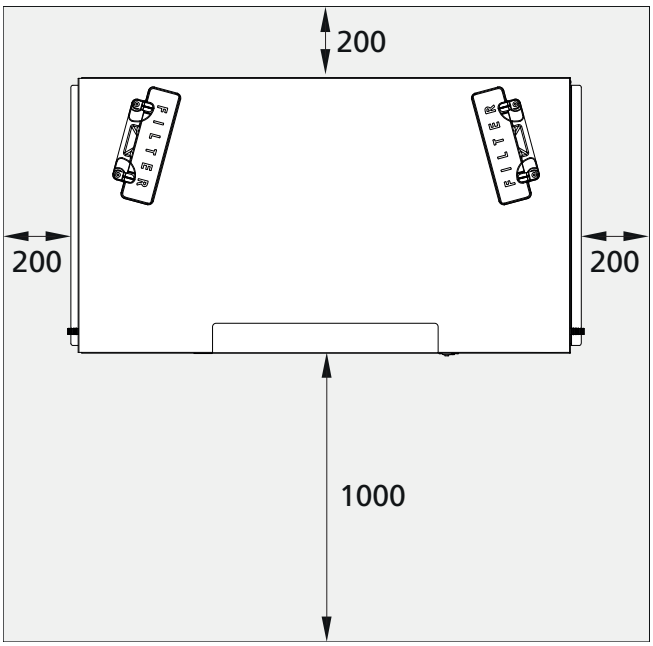
Installation and positioning

GV-HR 130 is installed in the roof using the enclosed roof brackets. Noise from the fans can be transmitted to the brackets.

- Install GV-HR 130 on an outside wall, ideally in a room where noise does not matter, in order to eliminate noise problems. If this is not possible, avoid placing it against a wall adjoining a bedroom or other room where noise may be a problem.
- Wherever the unit is located, walls to sound sensitive rooms should be fitted with sound insulation.
- 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 10 °C and max. 35 °C.

INSTALLATION AREA

Leave a free space of 1,000 mm in front of the distribution box and 200 mm in front of the other sides. Because servicing is carried out from underneath, free space of 1,600 mm is recommended below the unit.



Installation

Condensation water drain

GV-HR 130 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 GV-HR 130.

The connection for the condensation outlet measures Ø15 mm.

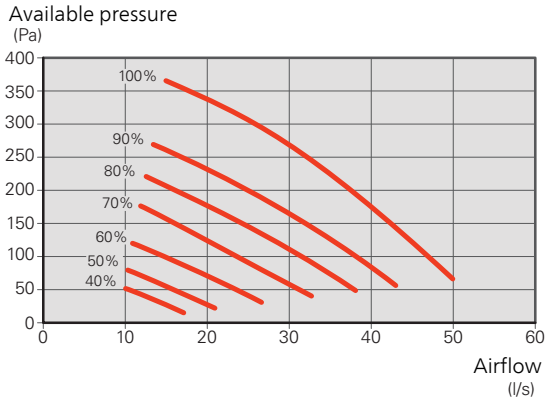
Ventilation

- Connect GV-HR 130 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.
- 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.
- When the extract air and outdoor air temperature is/becomes cold, the extract air and outdoor air duct must be insulated using diffusion-proof material (at least PE30 or equivalent) 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 GV-HR 130 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.

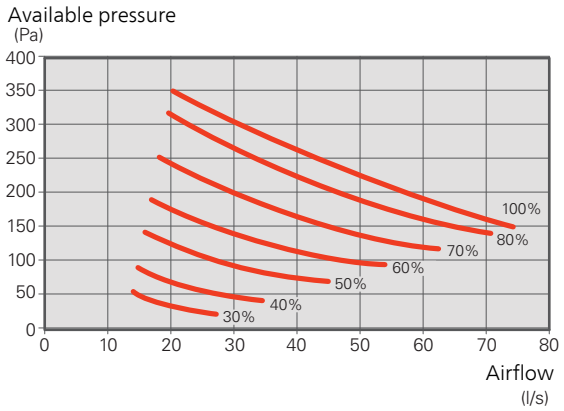
SETTING THE FAN CAPACITY

Select the ventilation capacity steplessly in the display.

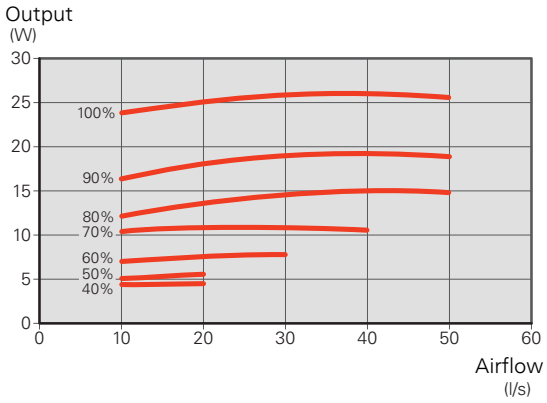
Ventilation capacity GV-HR 130-150



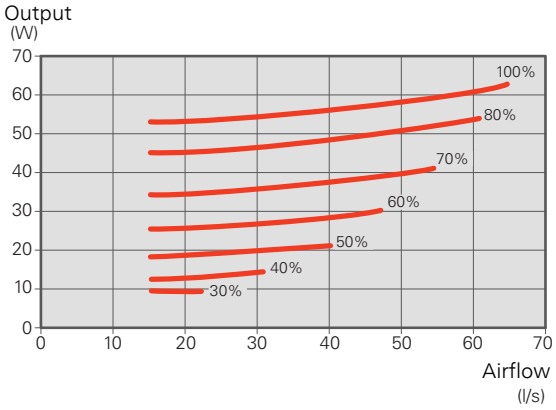
Ventilation capacity GV-HR 130-250



Fan output[1] GV-HR 130-150

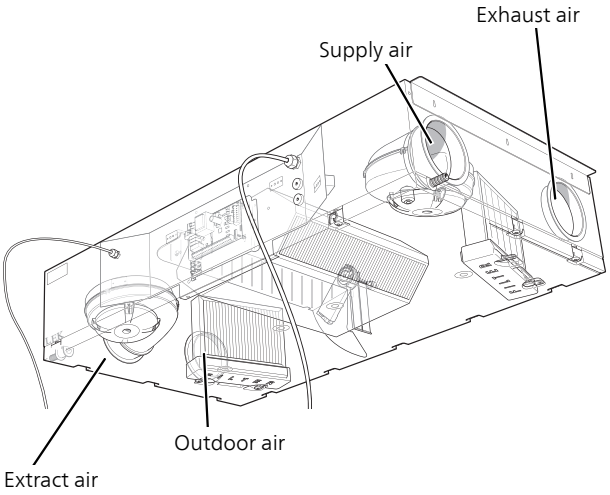


Fan output[1] GV-HR 130-250



[1]The diagram shows the power consumption per fan.

VENTILATION CONNECTIONS



Electrical connections

- Disconnect GV-HR 130 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.

GV-HR 130 is equipped from the factory 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

GV-HR 130 is controlled using a clear and easy to use display.

Instructions, settings and operational information are shown on the display. You can easily navigate between the different menus and options to set the comfort or obtain the information you require.

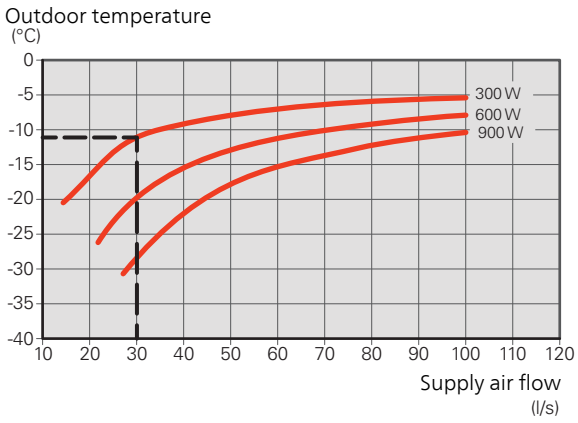
AIR HEATER EAH 21

In houses where the outdoor temperature can be continuously lower than -5°C, GV-HR 130 should be supplemented with an electrical air heater (EAH 21). In cold weather, EAH 21 heats the incoming outdoor air slightly to prevent the condensation in GV-HR 130 from freezing to form ice.

EAH 21 is connected to full power at the factory and automatically adapts the output according to the building's needs.

It is possible to reconnect the power if you want, for example due to the choice of fuse, any building regulations, etc.

Choice of power on EAH 21



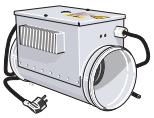
Example: In the case of a supply air flow of 30 l/s and a power of 300 W in the preheater, the supply air fan is permitted to start slowing down at an outdoor temperature of approx. -11°C.

Technical data

Accessories

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

ELECTRICAL AIR HEATER EAH 21

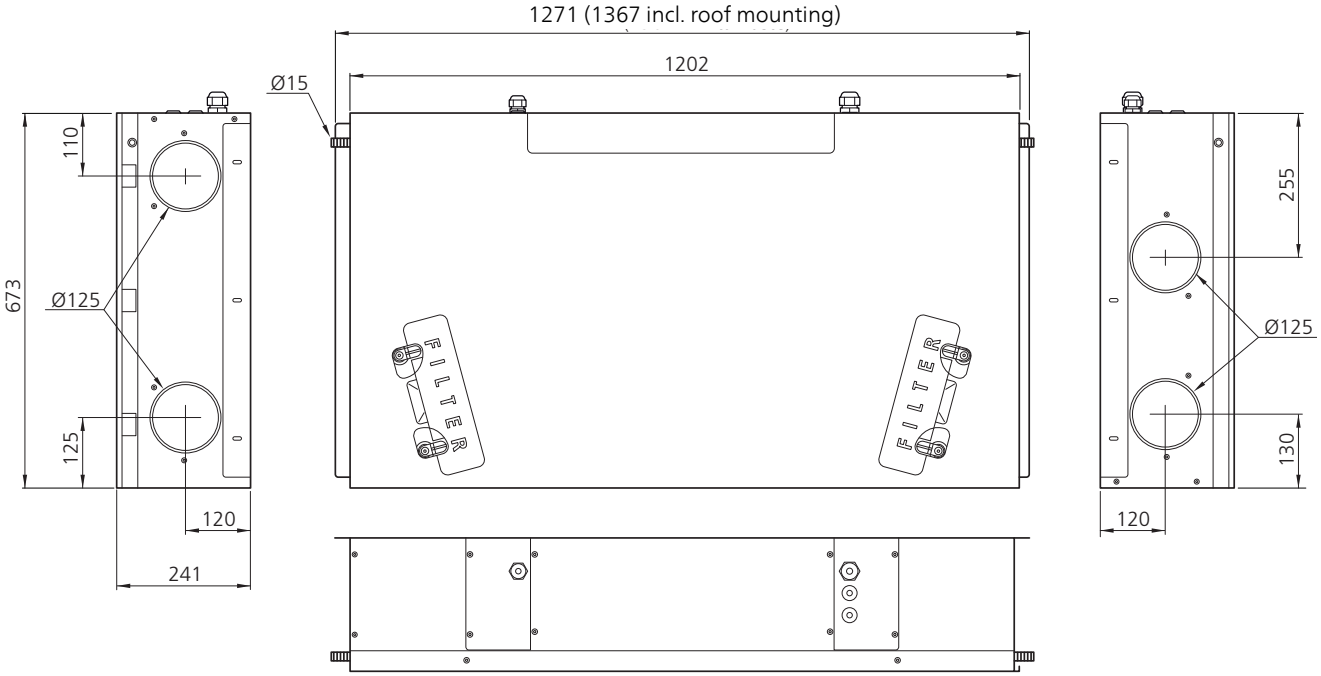


In cold weather, EAH heats the incoming outdoor air slightly to prevent the condensation in GV-HR 130 from freezing to form ice. EAH should be used in houses where the outdoor temperature can be continuously lower than -5°C.

EAH 21-900

(300-900 W)

Dimensions


1271 (1367 incl. roof mounting)
1202
Ø15
673
110
Ø125
125
120
241
FILTER
FILTER
255
Ø125
130
120

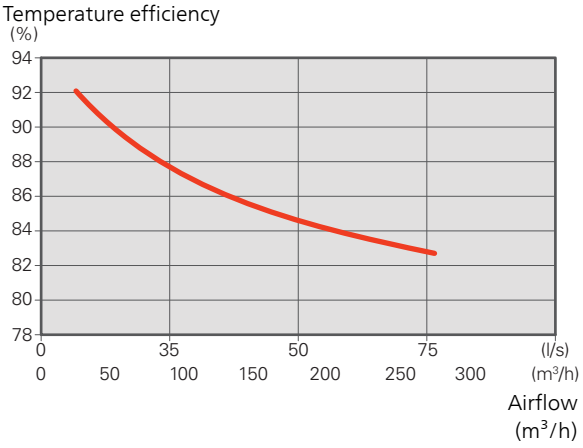
Technical specifications

Type		*GV-HR 130-150*	*GV-HR 130-250*
Electrical data			
Supply voltage	V	230 V ~ 50Hz	230 V ~ 50Hz
Fuse	A	10	10
Driving power fan	W	2 x 27	2 x 100
Enclosure class		IP X1B	IP X1B
Ventilation			
Filter type, exhaust air filter		Coarse 65%	Coarse 65%
Filter type, supply air filter		ePM1 55%	ePM1 55%
Noise			
Sound power level ($L_{W(A)}$)[1]	dB(A)	-	46
Sound pressure level ($L_{P(A)}$) at 1 m[2]	dB(A)	47.4	47.4
Sound pressure level ($L_{P(A)}$) at 1 m[3]	dB(A)	-	50.0
Pipe connections			
Ventilation Ø	mm	125	125
Condensation water drain Ø	mm	15	15
Miscellaneous			
Efficiency class[4]		A	A
Length, supply cable	m	2.4	2.4
Length, communication cable	m	2.0	2.0
Width	mm	1,202	1,202
Height	mm	241	241
Depth	mm	673	673
Weight	kg	25	25
Part No.		066 171	066 169

1 180 m³/h (50 l/s) at 50 Pa
2 GV-HR 130-150: 105 m³/h (29 l/s) at 50 Pa
GV-HR 130-250: 126 m³/h (35 l/s) at 70 Pa
3 250 m³/h (69 l/s) at 150 Pa
4 Scale for efficiency class: A+ to G.

GV-HR 130-150

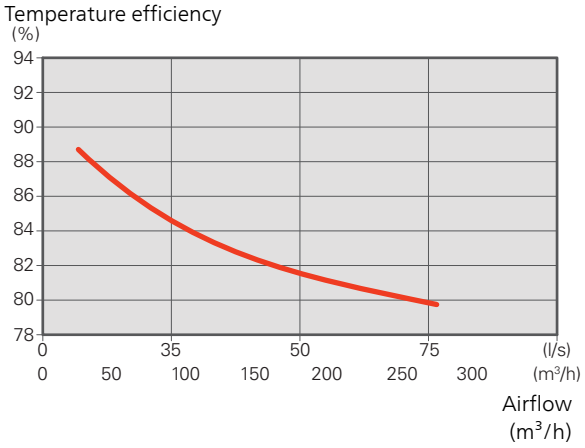
Dry temperature efficiency according to EN 308



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

GV-HR 130-250

Dry temperature efficiency according to EN 308



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

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