

■ Description

**Hoval HomeVent® comfort FR (360)
Comfort ventilation unit**

- Comfort ventilation unit with heat and humidity recovery for a range of installation positions.
- Sturdy, multiple-shell, heat and noise insulated casing made from coated aluzinc sheet.
- Colour:
Casing: dark red
Front and back: light red
- The casing is suitable for right-hand and left-hand mounting (rear and front cover each has inspection door with two quick-release fasteners).
- 2 fans with rotating rear-cambered wheel for outside and exhaust air. EC direct current motor with vibration-absorbing motor bracket.
- High-efficiency enthalpy recovery system with spec. sealing and purge air system. Rotor with sorption (aluminium with ion exchange resin and antibacterial coating) mounted radially and axially, driven by EC direct current motor unit with planetary gear.
- Connection nozzle made of composite plastic for connecting supply and outside air, exhaust air and extract air pipe including double-lipped seal, diameter 180 mm.
- High-grade Z filter for supply air (F7) and extract air (G4).
- Integrated prefilter (outdoor air) made from plastic, can be regenerated simply by washing.
- Filter monitoring with differential pressure monitor.
- Ready-to-connect electronics with integrated enthalpy recovery system speed control for operation in automatic mode, including mains cable and 3 m connection cable for connection of the operator terminal to the on-site RJ45 socket.

Required accessories

- Standard operator terminal BG02 or
- Design operator terminal BG03 with an expanded range of functions (time, CO₂ programme, etc.)

Recommended accessories

- Vibration damper set

Options

- LSA Building Management System connection
- Active cool recovery (CoolVent® option)
- Supply air activated carbon filter

Delivery

- Comfort ventilation unit, pre-assembled and packed

On site

- 8-pin CAT 5 patch cable (parallel, not crossed) between comfort ventilation unit and operator terminal by electrician.
- RJ45 socket
- 230 V socket



Approvals

Tested by:

- TÜV Munich in accordance with EN 13141-7
- Hochschule Luzern in accordance with EN 13141-7
- Applied for DIBt approval

Nominal data:

HomeVent® comfort FR (360) volume flow
(in operation 100 Pa ext. pressure) 360 m³/h

For reference volume flow 210 m³/h,
50 Pa ext. pressure:

Temperature ratio*	85%
Humidity ratio*	87%
Degree of heat processing/ Enthalpy difference	up to 130%
Electrical power consumption*	58 W

Use

The HomeVent® comfort ventilation unit provides centralised supply and extract air handling for flats. This can be a single family home or a residential unit in a multi-family home. The comfort ventilation unit is part of the HomeVent® ventilation system for controlled comfort ventilation, which performs the following tasks:

- supplies residential and commercial space with outside air
- extracts used air (CO₂, aerosols, excess dampness, odours, ...)
- saves energy through intelligent latent heat recovery
- cleans supply air using a fine dust filter

■ Description

Construction HomeVent® comfort FR (360)

Casing

The double-shell casing, made from aluzinc sheet, is coated on the outside (casing: dark red, front and back: light red) and sealed on the inside with a solvent-free joint sealer. The inner shell, made from aluzinc sheet, is separate from the outer shell, thus preventing thermal bridges. The high-quality 30 mm thermal insulation is made of polyurethane (PUR, Lambda 0.025 W/mK). The complete front can be removed, allowing easy access to the smooth interior for cleaning. Attachment on site is via special installation sets including vibration absorbers (see accessories).

Extract air filter (1)

The exhaust filter is a coarse filter made from a synthetic filter medium (filter class G4). It has a peripheral seal, is mounted in a filter guide and slides out. This makes changing the filter quick and easy.

**Enthalpy recovery system (2)
(Rotor with sorption)**

The enthalpy recovery system is designed as a removable module. The casing of this assembly is made from aluzinc sheet and high-quality integrated thermal insulation (EPS moulding). The rotor with sorption (aluminium with ion-exchange resin and antibacterial coating) is axial- and radial-mounted outside. The drive is transmitted via the plastic ring with outer cogs, a drive gear wheel, by means of an EC direct current motor with planetary gearing. The speed is controlled and monitored. Double elastic seals are fitted between the enthalpy recovery system and the casing. To avoid rotation air and material transfer, a highly effective double flush chamber has been integrated.

Fans (3,5)

The outside air intake fan and exhaust fan each consist of a high-efficiency rear-cambered wheel with special vibration-absorbing bearings and an EC direct current motor with an integrated electronic system.

Prefilter (4)

The prefilter consists of a washable fine-mesh polyamide net with a plastic frame. It is mounted in a guide and slides out.



AUL = Fresh air
ZUL = Supply air
FOL = Exhaust air
ABL = Extract air

Supply air filter (6)

The supply air filter is a pollen-fine dust filter made from a synthetic filter medium (filter class F7). It has a peripheral seal, is mounted in a filter guide and slides out. This makes changing the filter quick and easy.

Electrical fittings (7)

The comfort ventilation unit is supplied ready wired. The electrical fittings consist of:

- mains cable (3 m)
- mains plug including fuse
- electrical box with integrated printed circuit board
- cable for the operator terminal (3 m)

The cables for the internal electrical components are all fitted with plugs.

Filter monitoring (8)

A differential pressure monitor is installed to monitor the supply air filter.

The following operator terminals are designed for operation of a HomeVent® comfort FR (360):

Standard operator terminal BG02

The operator terminal consists of an attractively designed plastic casing for on-wall mounting with display and operating elements.

Design operator terminal BG03, on-wall

This operator terminal features a white plastic design casing. The front consists of coated glass with a colour capacitive LCD touch display. The unit offers an expanded range of functions (time, CO₂ programme, connection for bath/WC button, etc.). The operator terminal is designed for on-wall installation.

Design operator terminal BG03, in-wall

This operator terminal features a white plastic design casing. The front consists of coated glass with a colour capacitive LCD touch display. The unit offers an expanded range of functions (time, CO₂ programme, connection for bath/WC button, etc.). The operator terminal is designed for in-wall installation.

All operator terminals (BG02, BG03 on-wall, BG03 in-wall) are equipped with an RJ45 socket for connecting the connection cable to the comfort ventilation unit.

LSA Building Management System connection

Interface for connecting a HomeVent® unit to an on-site control system. A HomeVent® operator terminal (BG02 or BG03) is still required. Control system options: Switching off the HomeVent® unit, overriding the air flow rate setting on the operator terminal, displays filter change and faults.

Vibration absorber

Vibration absorbers are required for sound-insulated attachment of the comfort ventilation unit. The corresponding accessory pack consists of 4 rubber buffers with screws and various fixing angles for all installation positions.

Option CoolVent®

Active-controlled cool recovery for energy-saving supply and extract air handling in air-conditioned buildings. Installed by trained Hoval service technicians during commissioning.

Optional activated carbon filter

High-capacity bag filter (F7) with high efficiency against particles (pollen, fine dust) and against gaseous pollutants and odours (agriculture, traffic). It is inserted in place of the standard supply air filter.

■ Description

Function HomeVent® comfort FR (360)

The outside air fan draws in outside air via the main line. In the first stage, this air is cleaned via a prefilter. In the downstream enthalpy recovery system, the supply air is heated, depending on the temperature, and humidified. The extent to which heat and humidity are recovered is dependent on the temperature and humidity differences between the exhaust air and the outside air as well as on the rotor speed. Then the pre-treated outside air is cleaned by means of a pollen fine dust filter. The exhaust fan sucks in the used air via the coarse dust filter. In the enthalpy recovery system, heat and humidity are extracted from the air and passed to the supply air depending on temperature.

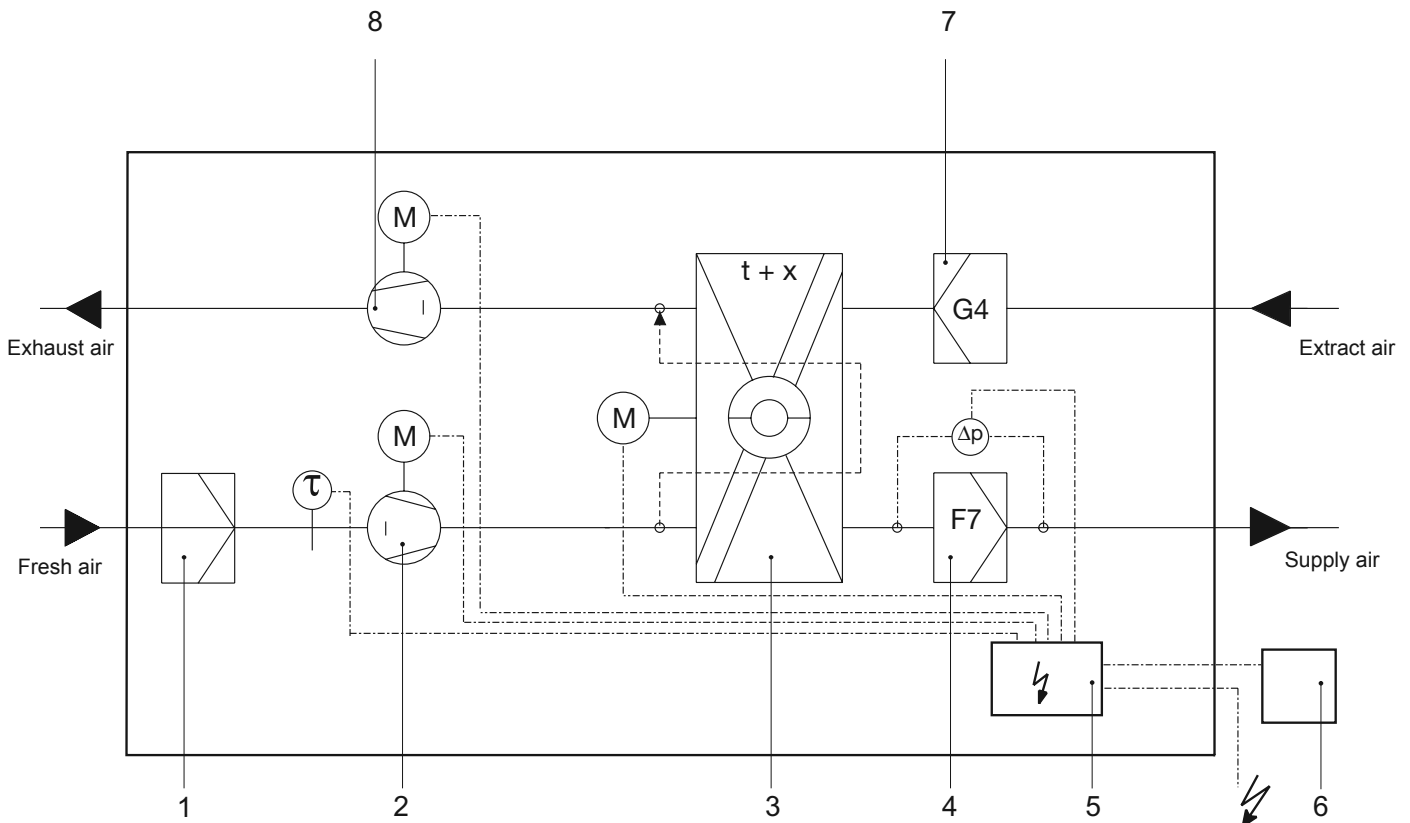
In the double flush chamber the rotation air is conducted to the exhaust air side. The waste air is passed on to the exhaust duct. The way the fans are positioned – with overpressure on the outside air side and underpressure on the exhaust air side – no waste air can find its way to the supply air.

These functions are set via the operator terminal and monitored automatically by the Electronics.

The electronic controls and the operator terminal feature the following additional functions:

- The speed of the enthalpy recovery system is regulated by the outside air temperature. In this way, the heat and humidity recovery is adjusted automatically.
- The humidity control in the operator terminal adjusts the volume flow. Thus, if the humidity indoors is too high, for instance, more dry air is introduced from the outside.
- The fan function is monitored continually. In case of a malfunction, the device is switched to 'fault' mode (both fans and the enthalpy recovery system are switched off; signal on the operator terminal).
- If the pressure drop caused by the supply air filter pressure drop is too great, the differential pressure monitor displays a signal on the operator terminal (display on the operator terminal).

1	Prefilter	5	Electrical fittings
2	Outside air fan	6	Operator terminal BG02 or BG03
3	Enthalpy recovery system	7	Exhaust air fan
4	Supply air filter	8	Extract air filter



■ Part No.



**Hoval HomeVent®
Comfort ventilation unit**

Part No.

HomeVent® comfort FR (360)

With high-efficiency heat and moisture recovery for a range of installation positions in apartments within the insulated building shell. Including regenerable prefilter, mains cable and connection cable (3 m) for operator terminal.

Type	Nominal volume flow m ³ /h	Ext. pressure Pa*	
A* HomeVent® comfort FR (360)	360	100	7015 807

It is **essential** to have an operator terminal for operating a Hoval HomeVent® comfort ventilation device.

Required accessories



Standard operator terminal BG02

2044 525

for operating a HomeVent® comfort ventilation unit. Plastic casing for on-wall mounting with display and operating elements and integrated humidity sensor. Mounting in reference room. Connection of connecting cable with comfort ventilation unit via RJ45 socket.



Design operator terminal BG03, on-wall

2038 024

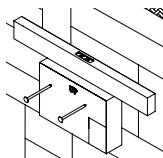
for operating a HomeVent® comfort ventilation unit. Plastic casing for on-wall mounting with colour touch display, integrated humidity sensor and expanded range of functions (time, CO₂ programme, connection for bath/WC button, etc.). Mounting in reference room. Connection of connecting cable with comfort ventilation unit via RJ45 socket.



Design operator terminal BG03, in-wall

2038 025

for operating a HomeVent® comfort ventilation unit. Plastic casing for in-wall mounting with colour touch display, integrated humidity sensor and expanded range of functions (time, CO₂ programme, connection for bath/WC button, etc.). Mounting in reference room. Connection of connecting cable with comfort ventilation unit via RJ45 socket. Recommended accessories: insert block



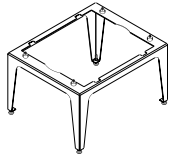
Insert block

6024 174

for design operator terminal BG03, in-wall Placeholder for easier in-wall installation. Dimensions: 130 x 87 x 30 mm

Technical information
see separate chapter.

■ Part No.



Optional accessories

Part No.

Cool recovery unit CoolVent®
for HomeVent® comfort FR (150, 300, 360)
and FR (201, 251, 301)
Active-controlled cool recovery for
air-conditioned buildings.
Installed by Hoval service technicians
during commissioning.

6035 255

Unit base GS-300
Steel painted red, 4 vibration dampers,
height-adjustable feet
Height: 390 - 410 mm

6040 077

LSA building management system connection
Interface for connecting a HomeVent®
comfort ventilation unit to an
on-site control system.
The possibilities of the Building
Management System are: switching off the
comfort ventilation unit, overriding the
air flow rate setting on the operator
terminal and displaying the filter
contamination and device faults.
Dimensions: 80 x 80 x 50 mm

2039 014

An operator terminal is still required.

Recommended accessories

Vibration damper S-WH
for HomeVent comfort FR (300, 360)
Wall mounting horizontal
For sound-insulated attachment
of the ventilation unit.
Consisting of 4 pcs. brackets,
4 vibration dampers with screws

6034 815

Vibration damper S-WV
for HomeVent comfort FR (300, 360)
Wall mounting vertical
For sound-insulated attachment
of the ventilation unit.
Consisting of 4 pcs. brackets,
4 vibration dampers with screws

6034 814

Vibration damper S-D
for HomeVent comfort FR (300, 360)
Ceiling mounting
For sound-insulated attachment
of the ventilation unit.
Consisting of 2 pcs. brackets
4 vibration dampers with screws

6034 813

Vibration damper S-B
for HomeVent comfort FR (300, 360)
Floor mounting
For sound-insulated attachment
of the ventilation unit.
Consisting of 4 vibration dampers
with screws.

6034 770

Additional accessories see separate chapter
Components.

■ Part No.



Filter HomeVent® comfort FR (360)

Part No.

Supply air filter ZF-300
 for HomeVent® comfort FR (300, 360)
 pollen fine dust Z-filter
 filter class F7

5033 323



Supply air activated carbon filter AKF-300
 for HomeVent® comfort FR (300, 360)
 High-capacity Z-filter F7 against
 particles (pollen, fine dust, etc.)
 and against gaseous pollutants
 and odours. Filter class F7
 alternative to supply air filter ZF-300

5033 324



Extract air filter AF-300
 for HomeVent® comfort FR (300, 360)
 coarse dust Z-filter
 filter class G4

5033 322

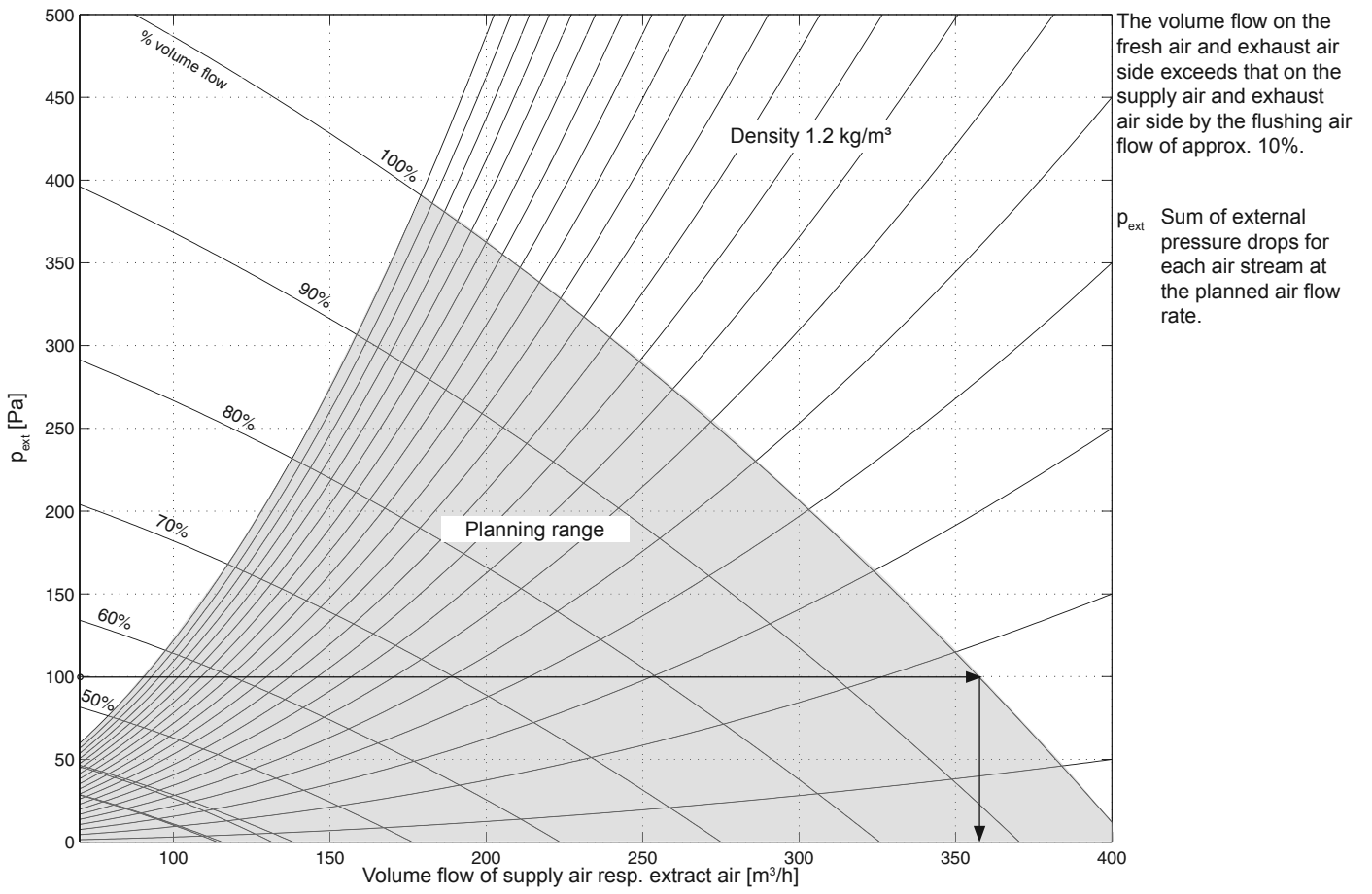
■ Technical data

Comfort ventilation unit HomeVent® comfort FR (360)

Nominal air flow rate (at 100 Pa external pressure)		
• Outside air/exhaust air	330	m³/h
• Supply air/extract air	300	m³/h
Max. external pressure	400	Pa
Air flow rate setting	variable (10-100 %)	
Humidity setpoint setting	30...65	%
Electrical connections		
• Voltage (AC)	230	V
• Frequency	50	Hz
• Max. current consumption	1.1	A
• cos phi (mean value)	0.56	
Type of protection	IP 40	
Power consumption (at 350 m³/h, 50 Pa external pressure)	58	W
Degree of heat processing as per DIN 4719	90-130	%
Temperature ratio at 350 m³/h as per EN 13141-7	85	%
Humidity ratio at 350 m³/h as per EN 13141-7	87	%
Coefficient of performance as per prEN 13142	13.3	
Filter class (as per EN 779)		
• Supply air filter	F7	
• Extract air filter	G4	
Sound power level (at 350 m³/h and 50 Pa external pressure; detailed data, see Appendix)		
• Casing	41	dB(A)
• Outside air connection	63	dB(A)
• Supply air connection	55	dB(A)
• Extract air connection	57	dB(A)
• Exhaust air connection	63	dB(A)
Leakage (as per EN 13141-7)		
• Internal	0.2	%
• External	0.7	%
Net weight	55	kg
Application limits for device setup, weather-protected (EN 60721-3-3) 3K5 as per EN 50090-2-2		
• Ambient temperature	10...45	°C
• Ambient humidity	5...65	% r.h.
• Dew point temp. in installation room	< 12	°C
Air conditions (moderate outdoor climate EN 60721-2-1)		
• Outside air intake temperature	-15...35	°C
• Outside air intake humidity	5...95	% r.h.
• Extract air temperature	5...35	°C
• Extract air humidity	5...80	% r.h.
• Max. extract air humidity	12	g/kg

■ Technical data

Performance chart for air flow rate HomeVent® comfort FR (360)



■ Technical data

Diagram of the electrical power consumption

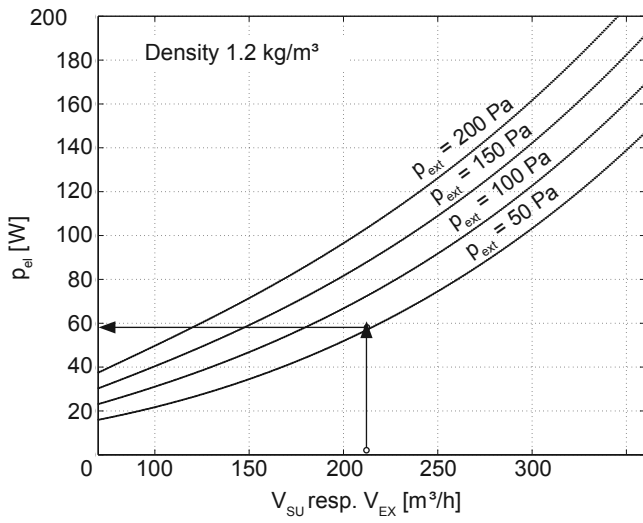
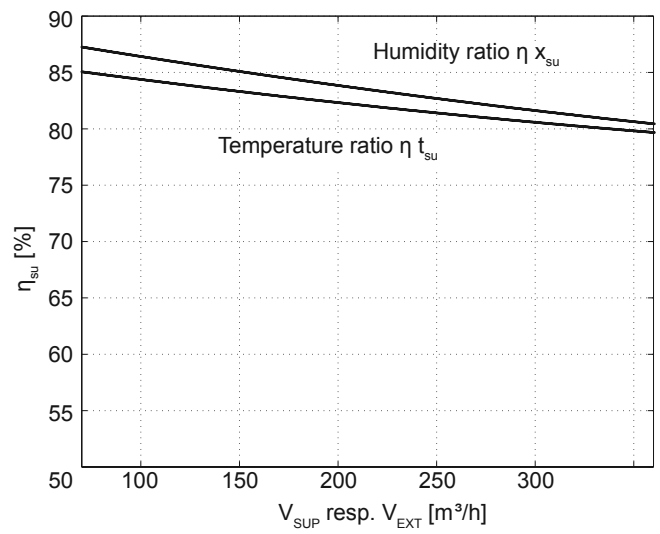


Diagram of the temperature and humidity ratio



■ Technical data

Sound levels

Casing

Volume flow SUP/EXT [m³/h]	External pressure [Pa]	L _w [dB]								Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		63	125	250	500	1 k	2 k	4 k	8 k	
210	50	43	42	43	41	36	26	17	16	41
300	100	47	45	48	47	42	34	27	26	47

Fresh air

Volume flow [m³/h]	External pressure [Pa]	L _w [dB]								Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		63	125	250	500	1 k	2 k	4 k	8 k	
210	50	72	70	70	51	53	48	38	28	63
300	100	75	76	73	58	60	57	47	33	68

Supply air

Volume flow [m³/h]	External pressure [Pa]	L _w [dB]								Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		63	125	250	500	1 k	2 k	4 k	8 k	
210	50	69	63	62	45	40	37	27	19	55
300	100	79	68	64	52	46	44	36	21	60

Extract air

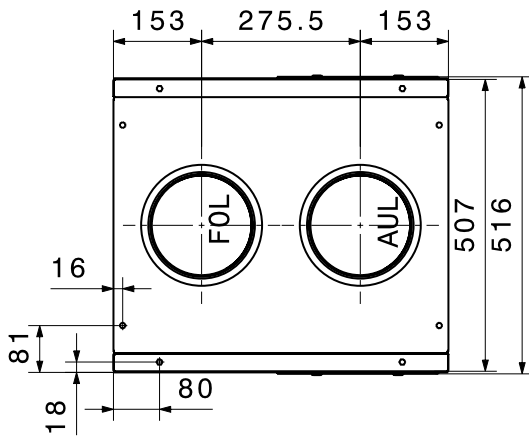
Volume flow [m³/h]	External pressure [Pa]	L _w [dB]								Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		63	125	250	500	1 k	2 k	4 k	8 k	
210	50	68	65	64	45	40	33	23	19	57
300	100	70	70	69	55	48	42	30	22	62

Exhaust air

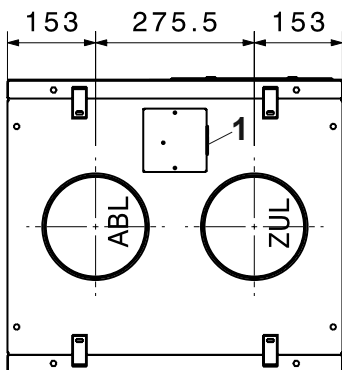
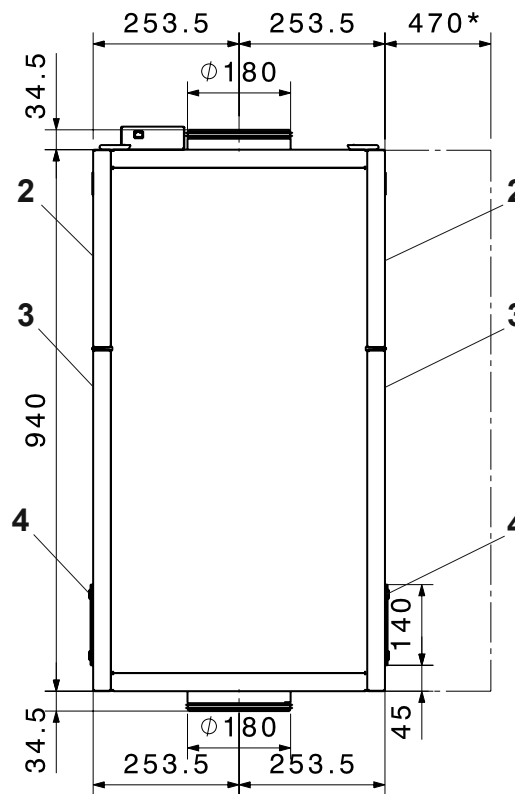
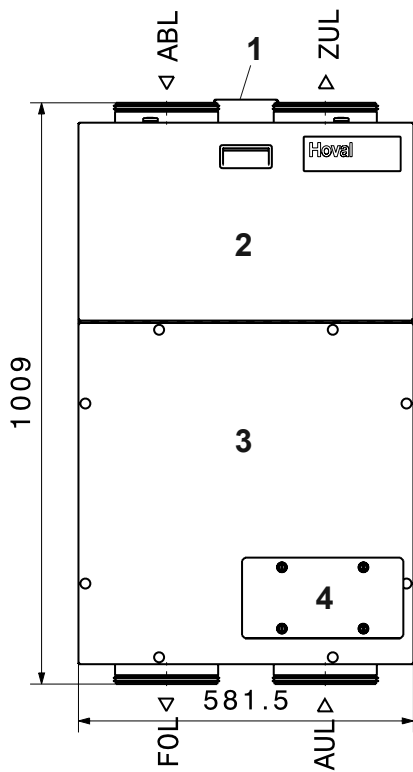
Volume flow [m³/h]	External pressure [Pa]	L _w [dB]								Sound pressure level L _{WA} 63 Hz ... 8 kHz [dB(A)]
		63	125	250	500	1 k	2 k	4 k	8 k	
210	50	73	68	71	52	49	48	37	26	63
300	100	86	75	76	62	58	57	45	32	70

■ Dimensions

HomeVent® comfort ventilation unit



ZUL = supply air
 ABL = extract air
 FOL = exhaust air
 AUL = fresh air



- 1 Electrical connection
Space is required for changing the micro fuse.
- 2 Inspection door for supply/extract air filter (quick-release fasteners)
- 3 Access panel (screw-connected)
- 4 Maintenance cover for prefilter with quick-release fasteners

Maintenance and inspection possible from the front and rear - flexible installation

* Space requirements for filter change and service tasks

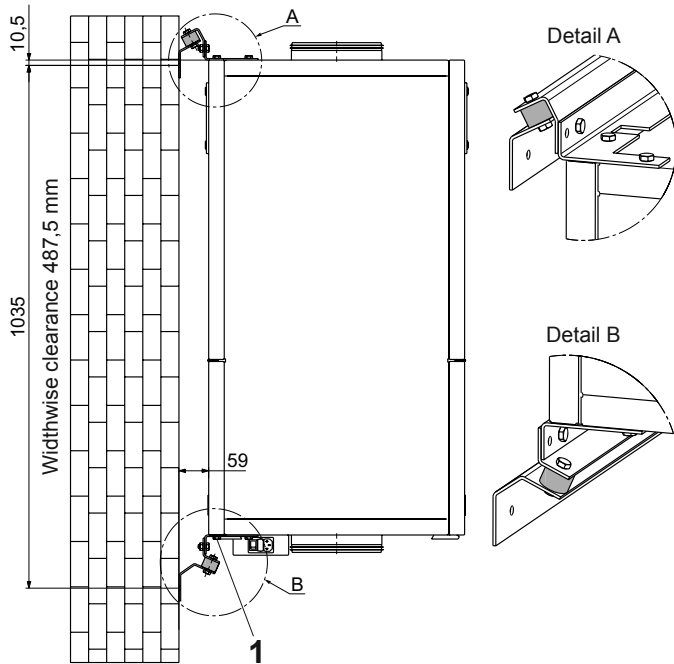
■ Dimensions

Space requirements

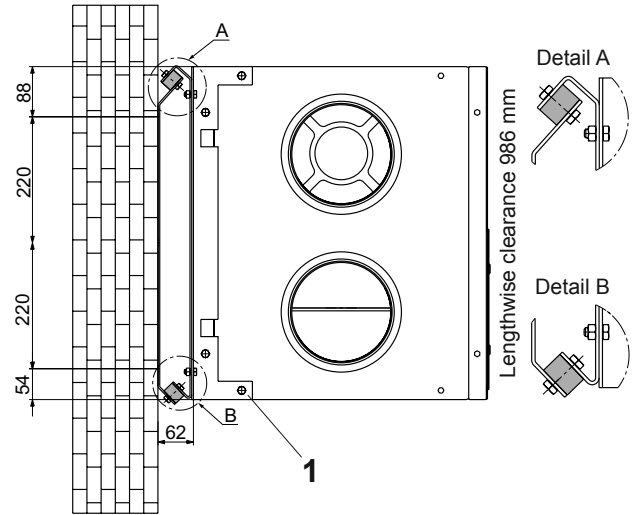
HomeVent® comfort ventilation unit

Installation with vibration absorbers

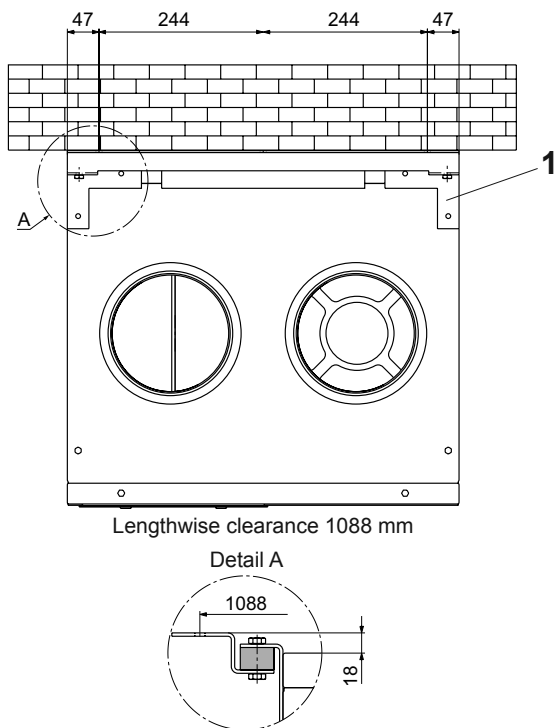
Vertical wall installation: S-WV



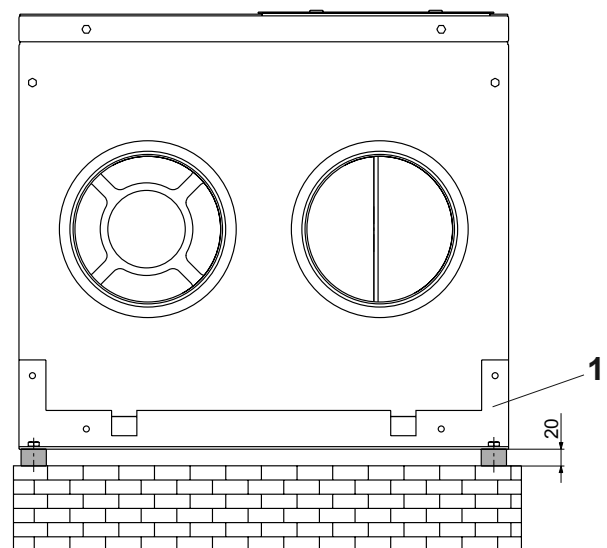
Horizontal wall installation: S-WH



Ceiling installation: S-D



Floor installation: S-B



1 Angled bracket included in the scope of delivery

Can be installed in any position.