

Use

The decentralised Zehnder ComfoAir 100 ventilation unit was specially developed for refurbishment in residential and commercial buildings with high ventilation demand. It combines maximum comfort, simple operation and high heat output. The Zehnder ComfoAir 100 can move up to 100 m³/h of air at an external pressure of 50 Pa. The ventilation unit can be used in one or more rooms. Lateral connections on the ventilation unit (special design) allow integration of neighbouring rooms.



Efficiency

The Zehnder ComfoAir 100 ventilation unit is fitted with a counterflow heat exchanger with a heat output of approximately 80%. In addition to the minimised heat demand for warming air, it also aids user comfort.

Fans

The two supply and extract fans, which can be independently controlled, are driven by efficient DC motors (48 V). By positioning the fans upstream of the heat exchanger and thanks to the use of a special acoustic insulation material, only minor sound emissions occur.

The air volumes of the seven selectable stages can be set to between 30 m³/h minimum and 100 m³/h maximum on the Zehnder ComfoAir 100.

Filters

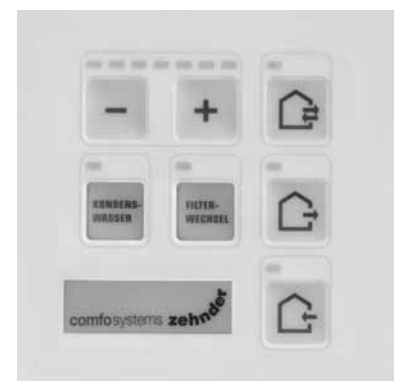
The Zehnder ComfoAir 100 has two coarse dust filters (G4) as standard. Filter replacement is displayed at defined intervals. The time of the next due filter replacement is shown on the control panel. Optionally, a higher grade F8 pollen filter can be installed in the supply air.

Frost protection

The ventilation unit can be operated without an earth tube collector. The frost protection setting allows safe operation of the ventilation unit. The supply air fan is reduced when the exhaust air temperature falls to around freezing.

Operation

The ventilation unit is controlled via a control panel integrated in the unit. Three operating modes and seven ventilation stages can be selected. Balanced supply and extract air mode, pure supply air mode or pure extract air operation are available. The defined fan stages and operating modes are shown by LEDs on the display. The unit can initiate an intermittent ventilation function via an external button. During a defined period, the unit operates on the highest stage and then switches back to the originally defined stage. The intermittent ventilation can be interrupted by pressing the button on the control panel. The intermittent or party ventilation can be initiated by pressing an additional button on the external control panel. Optionally, the control panel can be installed in a concealed box. Condensate forms on the exhaust air side due to the efficient heat recovery. It can be captured in an integrated condensate tray or discharged directly. The full condensate tray is signalled by the control panel and the unit is switched off. The condensate tray can be drained through a cock.



Remote control

The Zehnder ComfoAir 100 has an integrated control panel on the top of the ventilation unit. The defined fan stage, the operating mode, the upcoming filter replacement and the condensate drainage requirement are shown on the control panel by LEDs. This enables to have an overview of all functions.

Installation

The decentralised Zehnder ComfoAir 100 ventilation unit is ideally suited for installation on an outside wall due to its slim installation depth. The outside and exhaust air elements installed on the unit allow direct connection to the wall breakthroughs. This unit lends itself especially to modernisations, but also to new buildings.

Servicing

Zehnder ComfoAir 100 ventilation unit servicing is limited to regular filter replacement and draining the condensate tray. The filters are normally replaced on a quarterly basis. Depending on the climate and season, the user is requested to drain the condensate tray. The heat exchanger must be cleaned every 2-3 years depending on the dust load of the outside air. This can be done by removing it from the unit and cleaning it with luke warm soapy water.

Summer setting

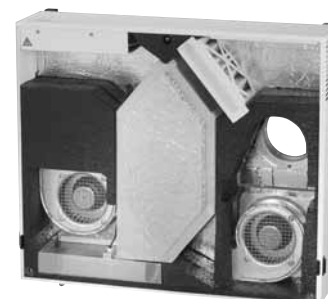
The Zehnder ComfoAir 100 ventilation unit can be switched to pure supply air or extract air operation, depending on the user's wishes. A simple button press on the control panel is enough.

Technical specifications

Unit type	Zehnder ComfoAir 100
Max. air volume (at 50 Pa)	100 m ³ /h
Min. air volume	30 m ³ /h
Efficiency	80%
Height	685
Width	175
Depth	585

Benefits

- Ventilation of single rooms with up to 100 m³/h
- Comfortable supply temperature thanks to 80% efficiency
- Simple and space-saving wall installation
- Direct connection to wall terminations
- User-friendly foil keyboard with status display
- Air volume control with 7 stages
- Pure supply or extract air mode for comfortable summer operation
- Frost protection function for operation without preheating
- Low power consumption thanks to EC direct current motors


Article numbers

The positions of the connections are given in the dimensional drawing.

Product	Art. no.
Zehnder ComfoAir 100 with external control unit	990 202 020
Zehnder ComfoAir 100 with external control unit	990 202 022
Zehnder ComfoAir 100 with external control unit and lateral supply air connection (left)	990 202 024
Zehnder ComfoAir 100 with external control unit and lateral supply air connection (right)	990 202 025
Zehnder ComfoAir 100 with external control unit and lateral supply/extract air connection	990 202 023

Accessories

Wall sleeve set DN 125 for outside and exhaust air, 2 pcs.	990 202 033
Outside wall grille set DN 125 plastic (white), 2 pcs.	990 202 031
Outside wall grille set DN 125 aluminium, 2 pcs.	990 202 032

Filters

Filter set for ComfoAir 100 G4 (2 pieces)	990 202 070
Pollen filter for ComfoAir 100 F8 (1 piece)	990 202 074

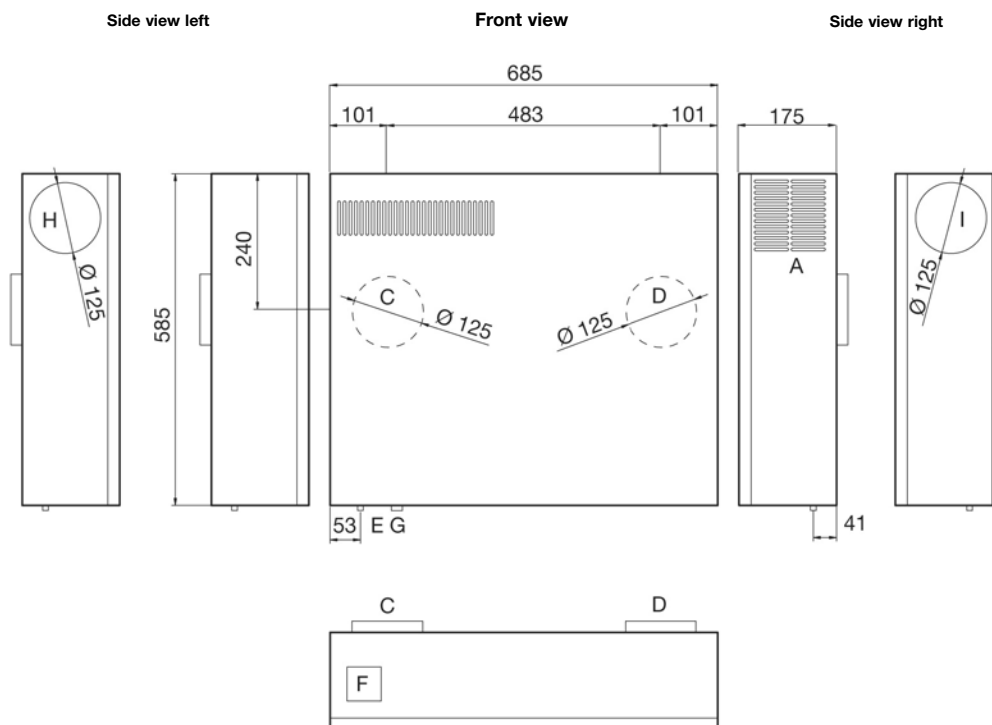
Description

Zehnder ComfoAir 100 single room ventilation unit for wall installation, thanks to its compact design it is especially suited to decentralised use in conversions and modernisations, with plastic counterflow duct heat exchanger (PET), thermal efficiency 80%, directly controlled supply and extract fans with efficient EC direct current motors. Class G4 supply and extract air filters (optionally F8), housing made of galvanised sheet steel, white, powder-coated, completely acoustically and thermally insulated with integrated (or external) control panel for seven fan stages and three operating modes. Equipped with automatic frost protection setting, standard design with grilles on the front of the unit for supply air and on the side for exhaust air, connections for outside air and exhaust air DN 125 rear, maximum air volume 100 m³/h at 50 Pa, H x W x D: 585 x 685 x 175 mm, ready-to-plug for connection via mains cable 2.5 m (230 V, 50 Hz).

Features

Unit type	Zehnder ComfoAir 100
Installation options	hanging, on outside wall
Air connections	Supply and extract air grilles on unit or DN 125, outside and exhaust air DN 125
Condensate drain	Connection at bottom DN 10 via on-site siphon
Temperature range	From -20 °C to 40 °C
Summer mode	Pure supply or extract air mode
Ventilation stage switching	Foil keyboard with 7 stages
Filter class	G4 (F8 supply air filter optional)
Frost protection function	Supply air reduction (automatic control)
Intermittent ventilation function	yes, in conjunction with external button (15 minutes run-on)
Filter replacement indicator	yes (time-based)

Dimensional drawing



- A Extract air
- B Supply air
- C Exhaust air
- D Outside air
- E Condensate drain DN 10 by means of on-site siphon
- F Foil keyboard
- G Cock for manual condensate drainage
- H Supply air connection (optional)
- I Extract air connection (optional)

Art. no.	Air connections	Control panel
990 202 020	C, D, A, B	Internal (F)
990 202 022	C, D, A, B	External
990 202 023	C, D, A, H	External
990 202 024	C, D, J, B	External
990 202 025	C, D, J, H	External

Switch setting	Speed	Air volume	Pressure	Power	Installed noise level	Weight
Factory setting (speed)	%	Qv m ³ /h	Δ P st Pa	consumption w	Lp(A) 3 m from unit dB(A)	kg
Zehnder ComfoAir 100						
1) Stage 1 - minimum	40%	30	5	12	15	22
(3) Stage 3	60%	55	16	22	24	
(5) Stage 5	80%	78	32	41	31	
(7) Stage 7 - maximum	100%	98	50	60	34	

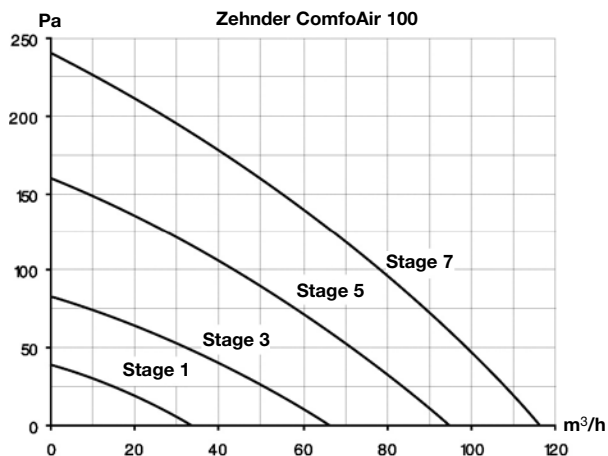
Sound

The acoustic performance level is measured in the air connection orifices directly on the unit.

Acoustic performance level (Lw at 0 m distance)

Ventilation unit	Air direction	Speed	Range						
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Zehnder ComfoAir 100	Supply air	7 - maximum	64	61	50	40	32	20	21
Zehnder ComfoAir 100	Extract air	7 - maximum	64	60	47	36	35	16	20

Power curve



CDE-FLYERTS122, V1009, en, subject to changes