

# Zehnder ComfoWell 420

Technical specification for a modular system comprising an attenuator and manifold system



## Advantages

Zehnder ComfoWell 420 is a modular system comprising an attenuator, fine filter, active carbon filter and manifold box. At a width of 420 mm, it can be used for connecting eight ComfoTube tubes. The system features compact dimensions and good attenuation, and is also easy to clean. The pipework is connected to the end pieces via connectors. All other components can easily be connected with sliding profiles. There is a direct connection between all components. Optimal sound reduction can be achieved with a series circuit of two attenuators. High-efficiency fine filters up to filter class F9 are available for the system. Neutralisation of odours can be ensured by using active carbon filters.



ComfoWell as attenuator



ComfoWell as manifold box



ComfoWell as filter housing



Mounting plate



End plate



Mounting set



Spacer frame



Fine dust filter F7



Fine dust filter F9



Active carbon filter FC

## Technical specifications

### Zehnder ComfoWell 420

Housing	Galvanised sheet steel
Inner lining	Closed-cell melamine resin foam
Permissible operating temperature	-25 to +60 °C
Maximum air volume	320 m <sup>3</sup> /h at normal ventilation level

## Benefits

- Everything from a single source: with attenuator, fine filter, active carbon filter and manifold boxes, all functions are available for air treatment
- Easy installation owing to the modular structure, compact dimensions and connection of the components with sliding profiles

## Article numbers

Description	Article number
Attenuator CW-S 420	990 323 504
Manifold box CW-D 420	990 323 620
Filter housing CW-F 420	990 323 554
Mounting plate CW-M 420-8 x 75	990 323 621
Mounting plate CW-M 420-8 x 90	990 323 622
End plate CW-P 420 – DN 150	990 323 626
End plate CW-P 420 – DN 160	990 323 627

End plate CW-P 420 – DN 180	990 323 628
End plate CW-P 420 – DN 200	990 323 629
Spacer frame CW-DF 420	990 323 624
Fine dust filter CW-F7 420	990 323 650
Fine dust filter CW-F9 420	990 323 651
Active carbon filter CW-FC 420	990 323 652
Mounting set CW-K-420 – ComfoAir Q350/450 TR	990 323 640
Mounting set CW-K-420 – ComfoAir Q600 ST	990 323 641

## Tender specification

### Attenuator:

Zehnder ComfoWell attenuator CW-S 420. Compact rectangular attenuator with high-efficiency special sound attenuation pack and low pressure losses. The attenuator can be used on its own or in combination with any add-on from the ComfoWell system. It is connected to all add-ons with a folded joint and clamping rail to create an airtight seal. The attenuation element can be removed for inspection and cleaning. The attenuator is mounted on a wall or ceiling with height-adjustable mounting brackets. Mounting accessories are supplied with the unit.

Technical specifications:

- Insertion loss: from 6.4 dB / 250 Hz
- Housing: galvanised sheet steel
- Attenuation element: special foam with hygienic coating
- Dimensions: length: 500 mm; depth: 420 mm; height: 230 mm

### Manifold box:

Zehnder ComfoWell manifold box CW-D 420. Compact sound-absorbing manifold box with closed-cell, attenuating inner lining, fits mounting plate for ComfoTube 8 x 75 or 8 x 90 ventilation tubes. The mounting plate connection can be moved from the front to the side. The manifold box can be used on its own or in combination with any add-on. It is connected to all add-ons with a folded joint and clamping rail to create an airtight seal.

The manifold box features an access panel for easy cleaning and adjustment of the ComfoTube ventilation tubes. Mounting accessories are supplied with the unit.

Technical specifications:

- Material: galvanised sheet steel
- Dimensions: length: 230 mm; width: 420 mm; height: 230 mm

### Filter housing:

Zehnder ComfoWell filter housing CW-F 420. Compact filter housing for mounting in supply line, to accommodate pollen filter F7 or active carbon filter element.

Filter elements are not supplied with the unit. The manifold box can be used on its own or in combination with any add-on from the ComfoWell system. It is connected to all add-ons with a folded joint and clamping rail to create an airtight seal. It is mounted with adjustable mounting brackets; mounting accessories are included.

Technical specifications:

- Material: galvanised sheet steel
- Dimensions: length: 300 mm; width: 420 mm; height: 230 mm

### Mounting plate:

Zehnder ComfoWell mounting plate CW-M 420-8 x 75 or 90 for connecting 8x Zehnder ComfoTube 75 or 90 flexible ducts. Supplied with guard and clamping rails. Mounting plate can also be used for mounting in concrete.

### End plate:

Zehnder ComfoWell end plate CW-P 420 – DN150 / DN160 / DN180 / DN200 (with central support) for connecting the ComfoWell attenuator and distribution system to a DN150 / DN160 / DN180 / DN200 round duct.

Clamping rails included.

### Spacer frame:

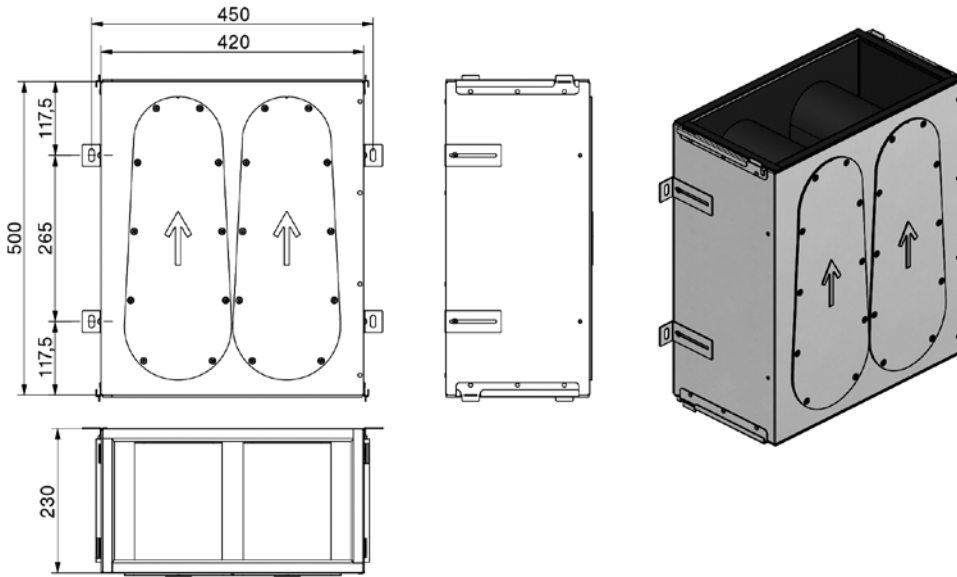
Zehnder ComfoWell Spacer Frame CW-DF 420 to compensate for uneven surfaces when components and mounting plate (concreted in place) are at 90°. Spacer frame includes the necessary mounting accessories.

### Filter:

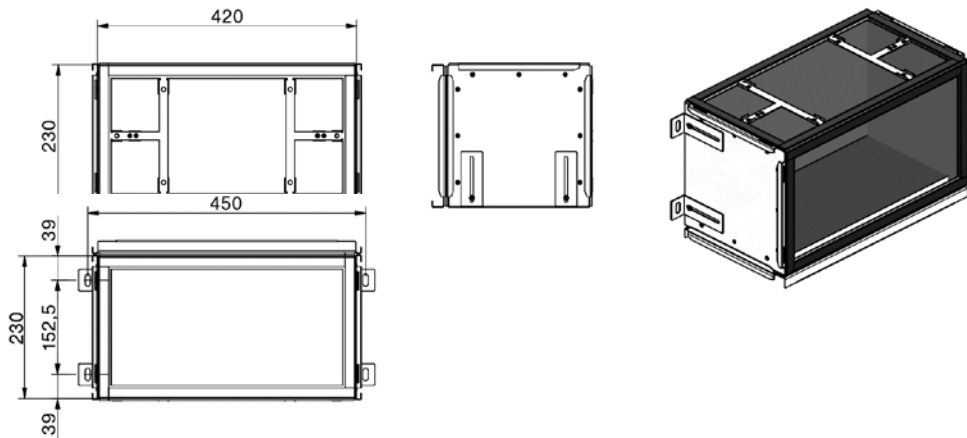
Filter for mounting in filter housing CW-F 420. Available filter classes include F7 (pollen filter), F9 (fine dust filter) and an active carbon filter for odour neutralisation.

## Dimensional drawings

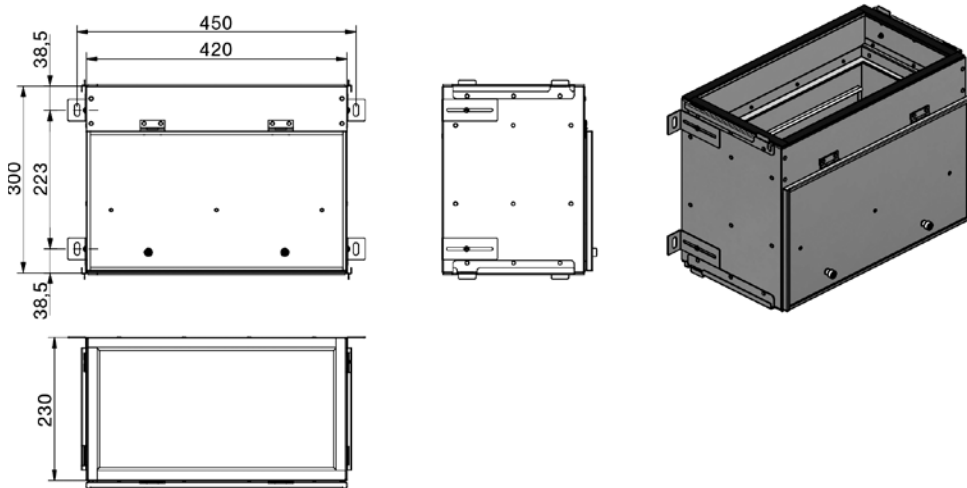
### Attenuator



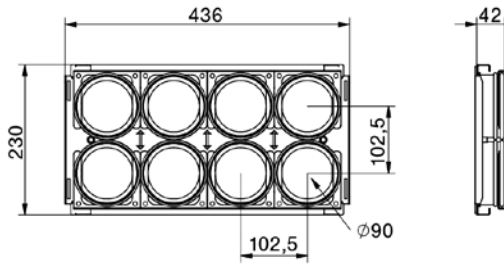
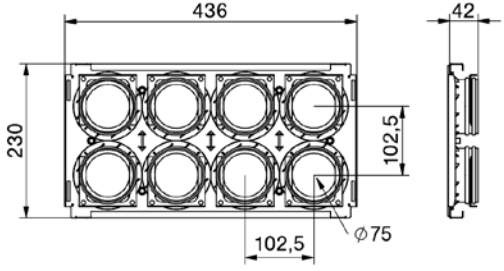
### Manifold box



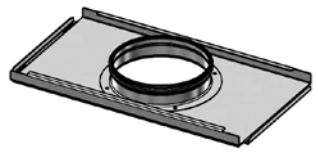
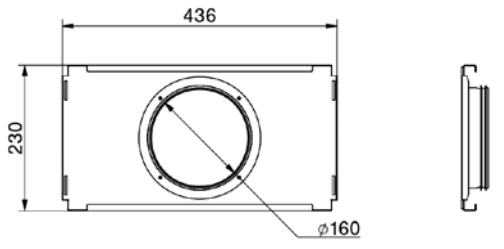
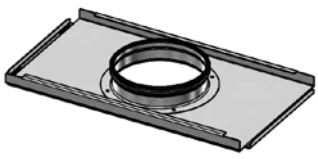
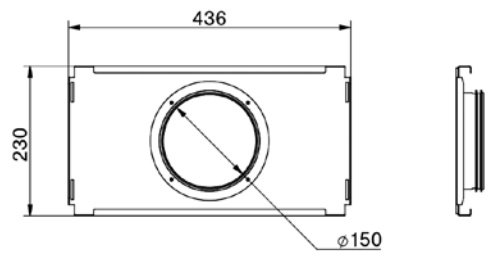
### Filter housing

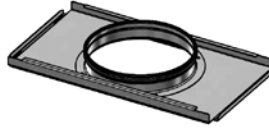
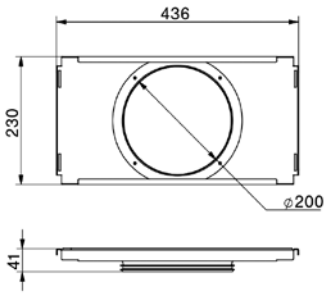
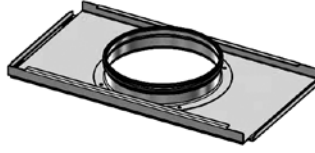
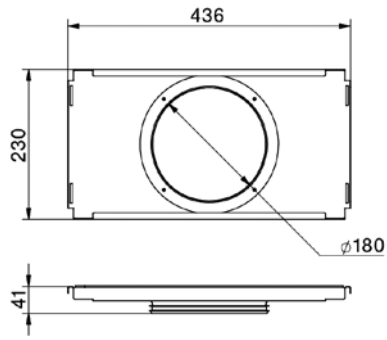


**Mounting plate**

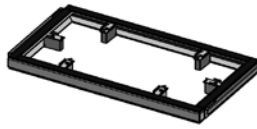
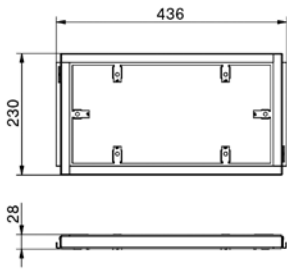


**End plate**

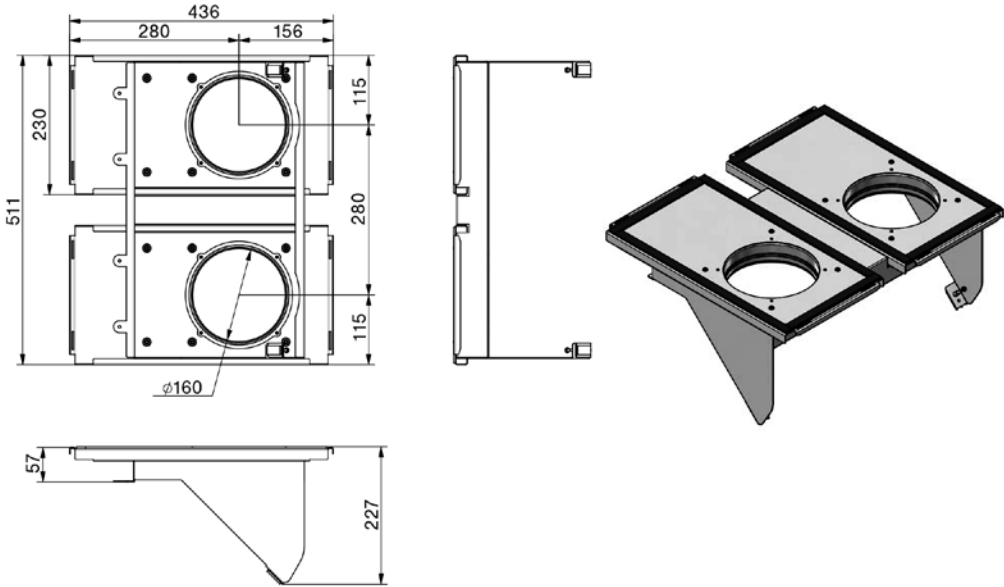




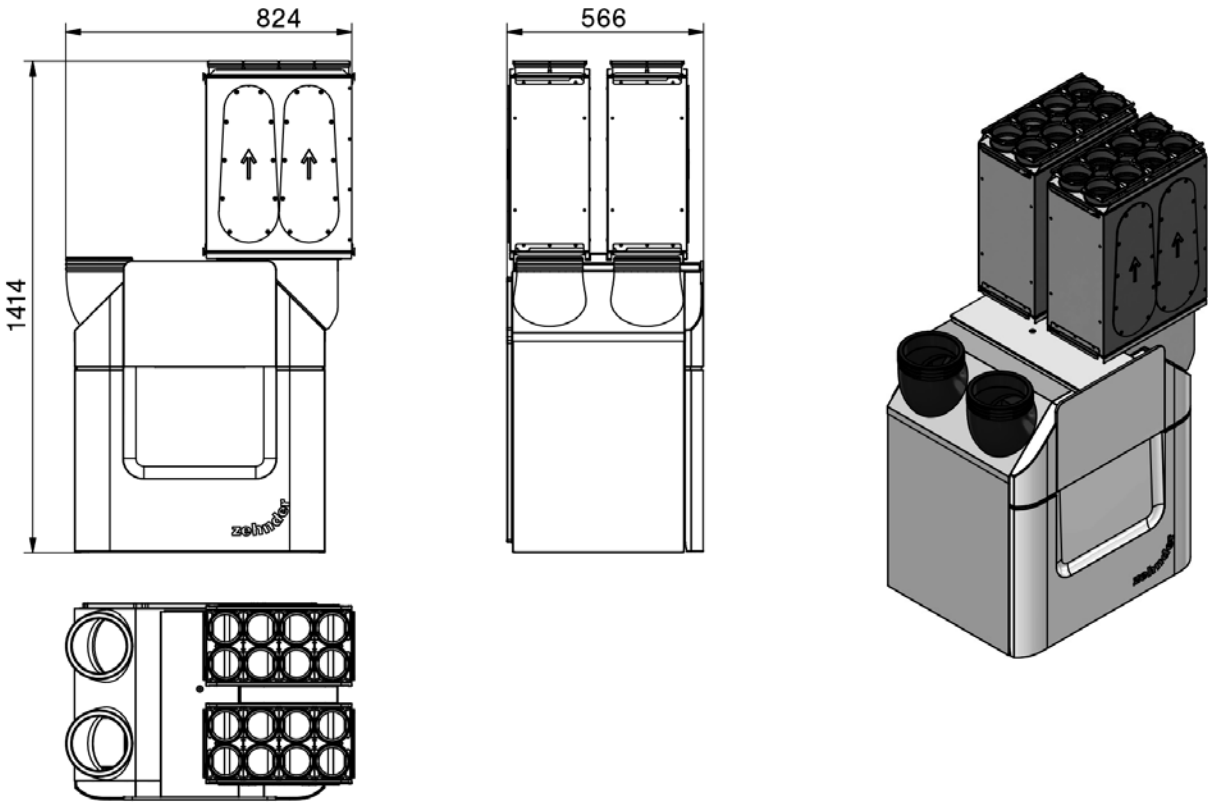
**Spacer frame**



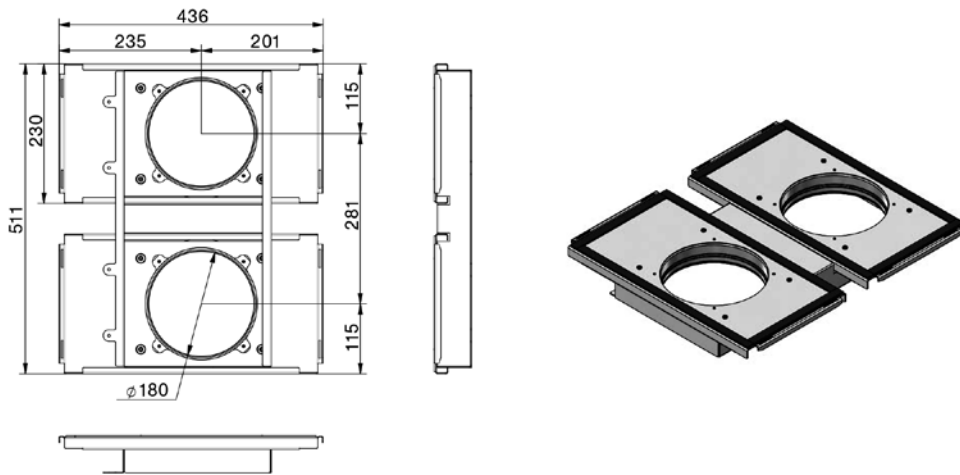
Mounting set ComfoAir Q350/450 TR



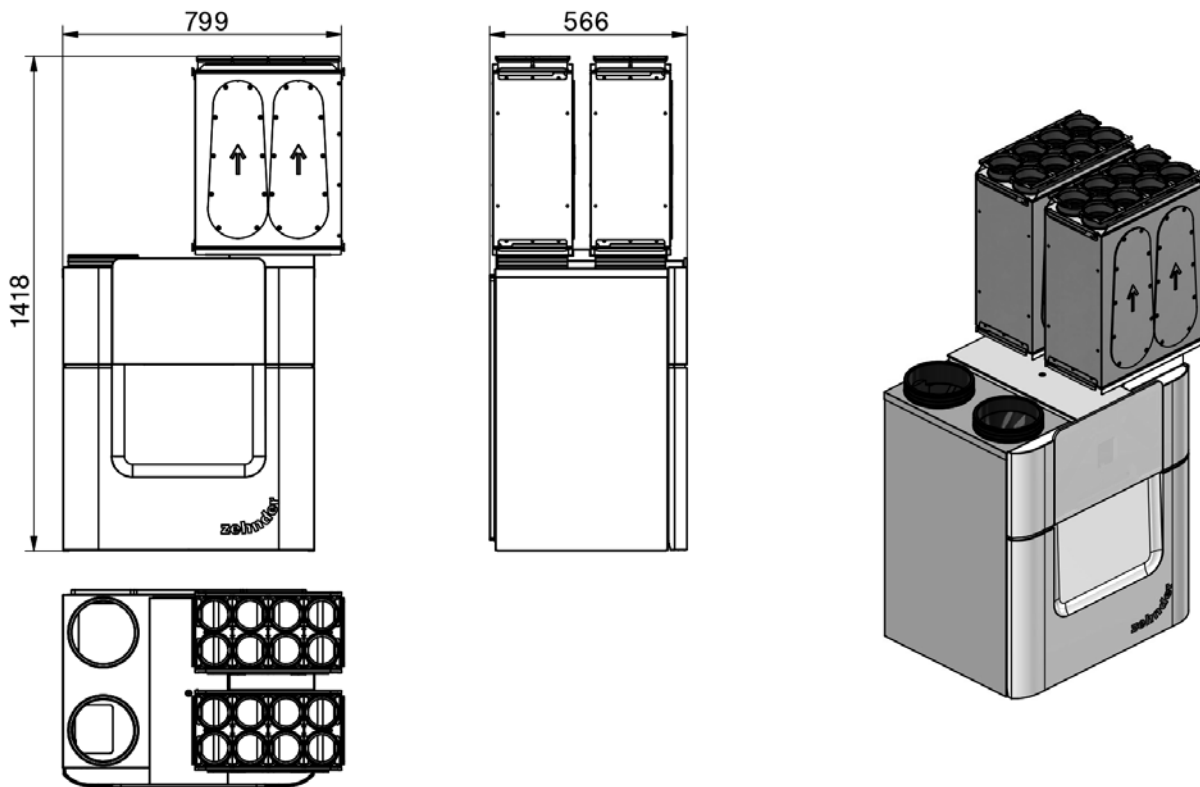
ComfoAir Q350/450 TR with mounting set



Mounting set ComfoAir Q600 ST



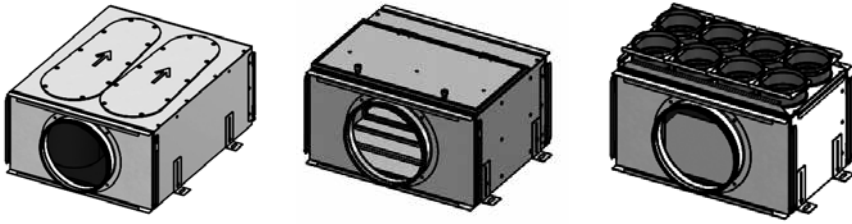
ComfoAir Q600 ST with mounting set



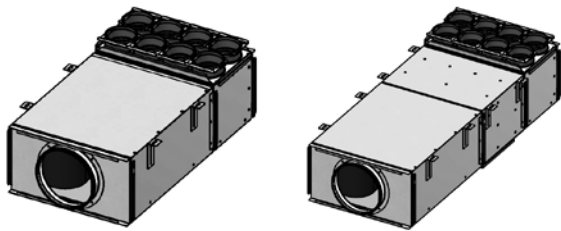


## Usage scenarios

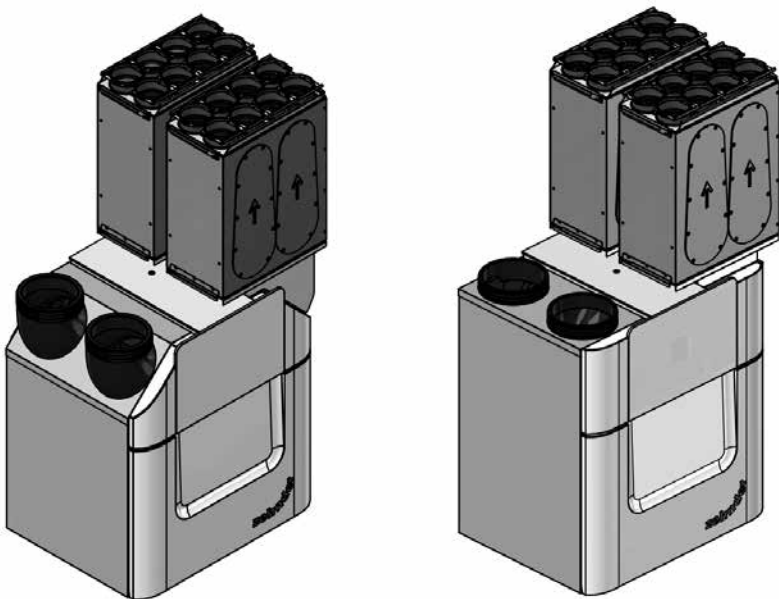
### Standalone



### Combined

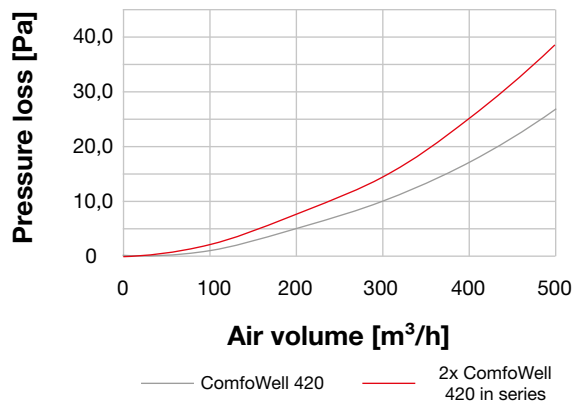


### Compact with ventilation unit



## Pressure losses

**ComfoWell attenuator CW-S 420  
with end plate CW-P – DN160**



## Insertion loss

1x end plate CW-P 420 + 1x attenuator CW-S 420 + 1x end plate CW-P420 or mounting plate CW-M 420

### Insertion loss with one attenuator\*

Frequency [Hz]	63	125	250	500	1,000	2,000	4,000	8,000
[dB]	3.0	4.6	6.4	10.6	8.1	14.4	7.8	6.7

1x end plate CW-P 420 + 2x attenuators CW-S 420 + 1x end plate CW-P 420 or mounting plate CW-M 420

### Insertion loss with two attenuators\*

Frequency [Hz]	63	125	250	500	1,000	2,000	4,000	8,000
[dB]	4.8	11.7	16.7	23.3	17.3	32.4	21.8	18.3

\* Insertion loss measured in accordance with EN ISO 7235 (pink noise)

CDE-FLYERTS224, V1116, en, subject to change without notice