Attenuator and Distribution System

Zehnder ComfoWell 520

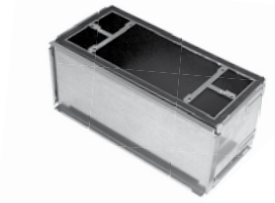
Benefits

- All air treatment functions available: attenuator, fine filter, active carbon filter, manifold box
- Modular design
- Compact dimensions
- Easy to clean
- Components connected with sliding profiles for easy mounting
- Pipes connected by end pieces with sleeves
- Directly connected to all components of the ComfoWell system
- Very good sound attenuation
- Two attenuators can be used in series for maximum sound reduction
- Mounting set available for vertical mounting of attenuators on ComfoAir 350, ComfoAir 550
- High-efficiency fine filters up to filter class F9 available
- Odour neutralisation by active carbon filter
- Components available in width of 520 mm to connect 10 ComfoTubes

Article number

Designation	Art. no.
Attenuator CW-S 520	990 323 502
Manifold box CW-D 520	990 323 532
Filter housing CW-F 520	990 323 552

ComfoWell as attenuator



ComfoWell as manifold box

ComfoWell as filter housing

Zehnder ComfoWell 520

Description

Attenuator

Zehnder ComfoWell Attenuator CW-S 520. 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 data:
Insertion loss: 13.1 dB / 250 Hz
Housing: Galvanised sheet steel
Attenuation element: Special foam with hygienic coating

Dimensions:
Length: 500 mm
Depth: 520 mm
Height: 230 mm

Manifold box

Zehnder ComfoWell Manifold Box CW-D 520. Compact sound-absorbing manifold box with closed-cell, attenuating inner lining, fits mounting plate for ComfoTube 10 x 75 or 10 x 90 ventilation pipes. 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 pipes. Mounting accessories are supplied with the unit.

Material: Galvanised sheet steel

Length: 230 mm
Width: 520 mm
Height: 230 mm

Filter housing

Zehnder ComfoWell Filter Housing CW-F 520. 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.

Material: Galvanised sheet steel

Dimensions:
Length: 300 mm
Width: 520 mm
Height: 230 mm

Zehnder ComfoWell 520

Specifications

Material:

Housing: Galvanised sheet steel
Inner lining: Closed-cell melamine resin foam
Permissible operating temperature range: -25°C to +60°C
Maximum airflow: 400 m³/h at normal ventilation level

Accessories

Designation	Art. no.
Mounting plate CW-M 520-10 x 75	990 323 524
Mounting plate CW-M 520-10 x 90	990 323 525
End plate CW-P 520 – DN 160	990 323 564
End plate CW-P 520 – DN 180	990 323 513
Mounting set CW-K 520 – CA 350	990 323 518
Mounting set CW-K 520 – CA 550	990 323 519
Spacer frame CW-DF 520	990 323 536
Fine dust filter CW-F7 520	990 323 606
Fine dust filter CW-F9 520	990 323 607

Description of accessories

Mounting plate:
Zehnder ComfoWell Mounting Plate CW-M520-10 x 75 or 90 for connecting 10x 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 520 - DN160 / DN180 (with central support) for connecting the ComfoWell attenuator and distribution system to a DN160 / DN180 round duct. Clamping rails included.

Mounting set:
A special mounting set is available for the Zehnder ComfoWell 520 attenuator and distribution system for direct mounting on the ComfoAir 350 / ComfoAir 550 ventilation unit. The set includes all the necessary accessories (screws, brackets and mounting brackets).

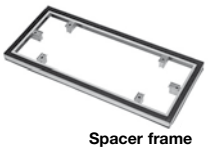
Spacer frame:
Zehnder ComfoWell Spacer Frame CW-DF520 to compensate for uneven surfaces when components and mounting plate (concreted in place) are at 90°. Spacer frame includes the necessary mounting accessories.

Filter:
Filter for mounting in filter housing CW-F 520. Available filter classes include F7 (pollen filter), F9 (fine dust filter) and an active carbon filter for odour neutralisation.

Mounting plate

End plate

Mounting set


Spacer frame

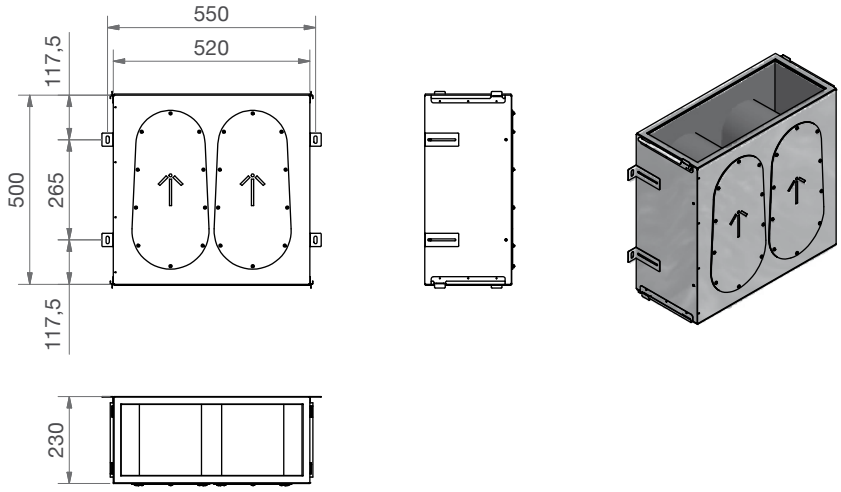
Fine dust filter F7

Fine dust filter F9

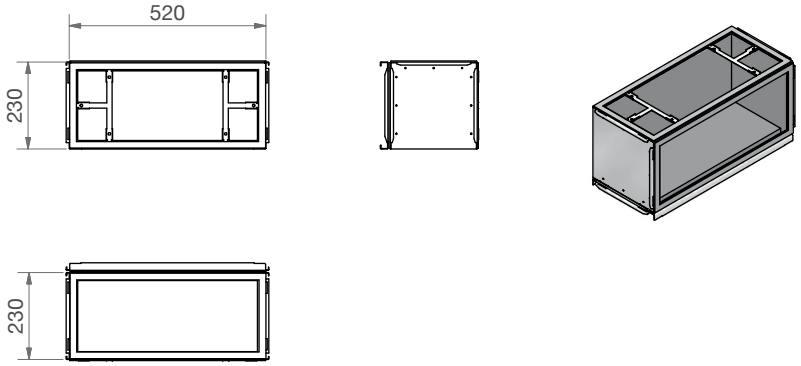
Active carbon filter FC

Dimensional drawings

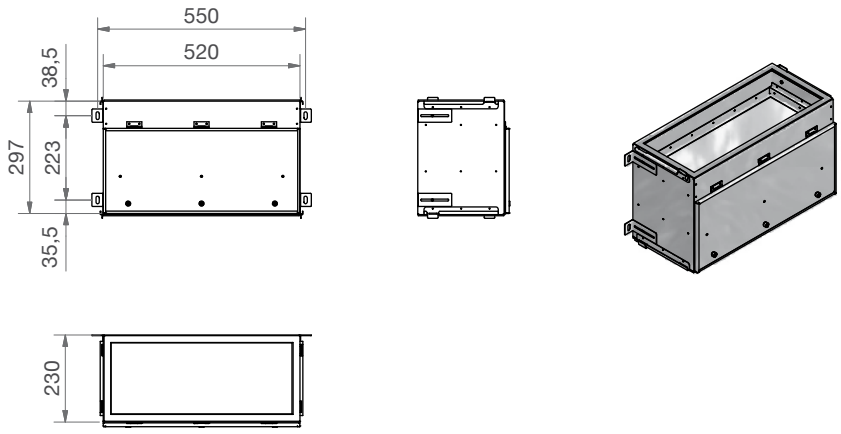
Attenuator



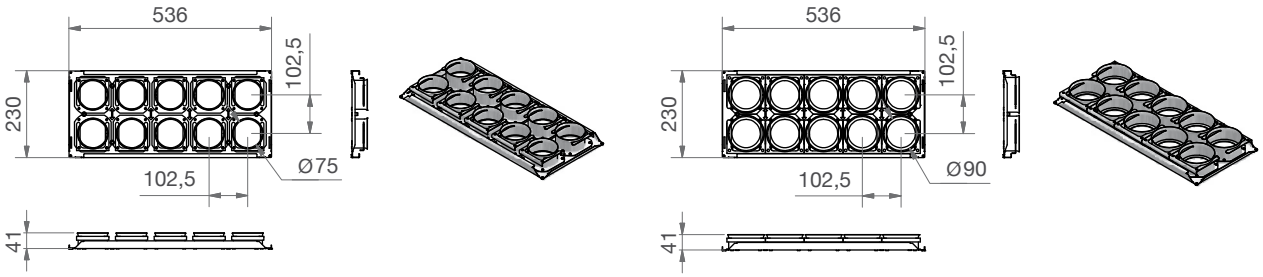
Manifold box



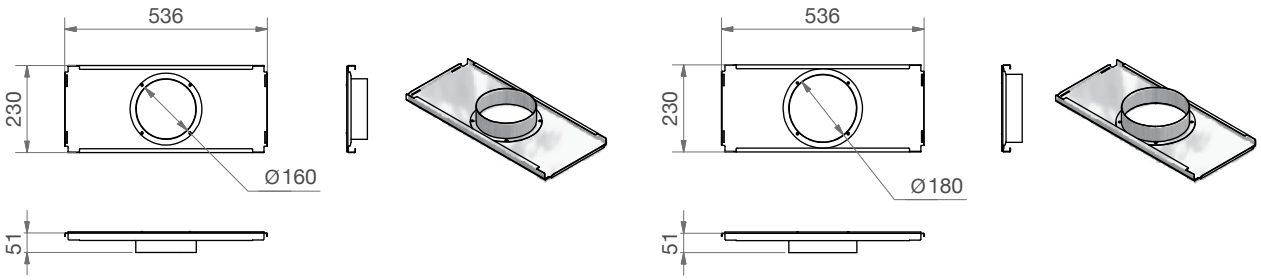
Filter housing



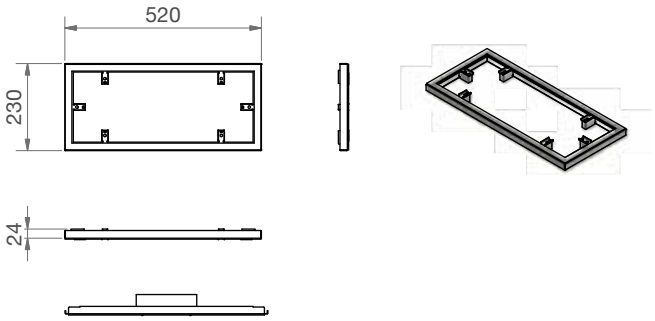
Mounting plate



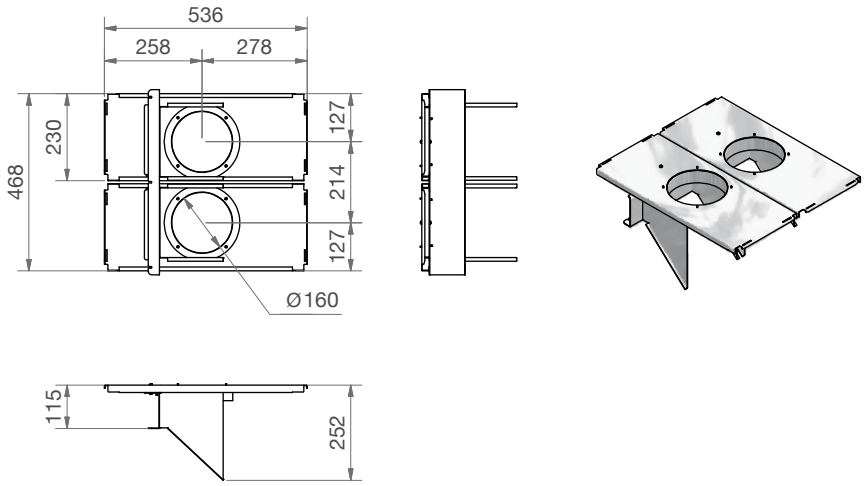
End plate



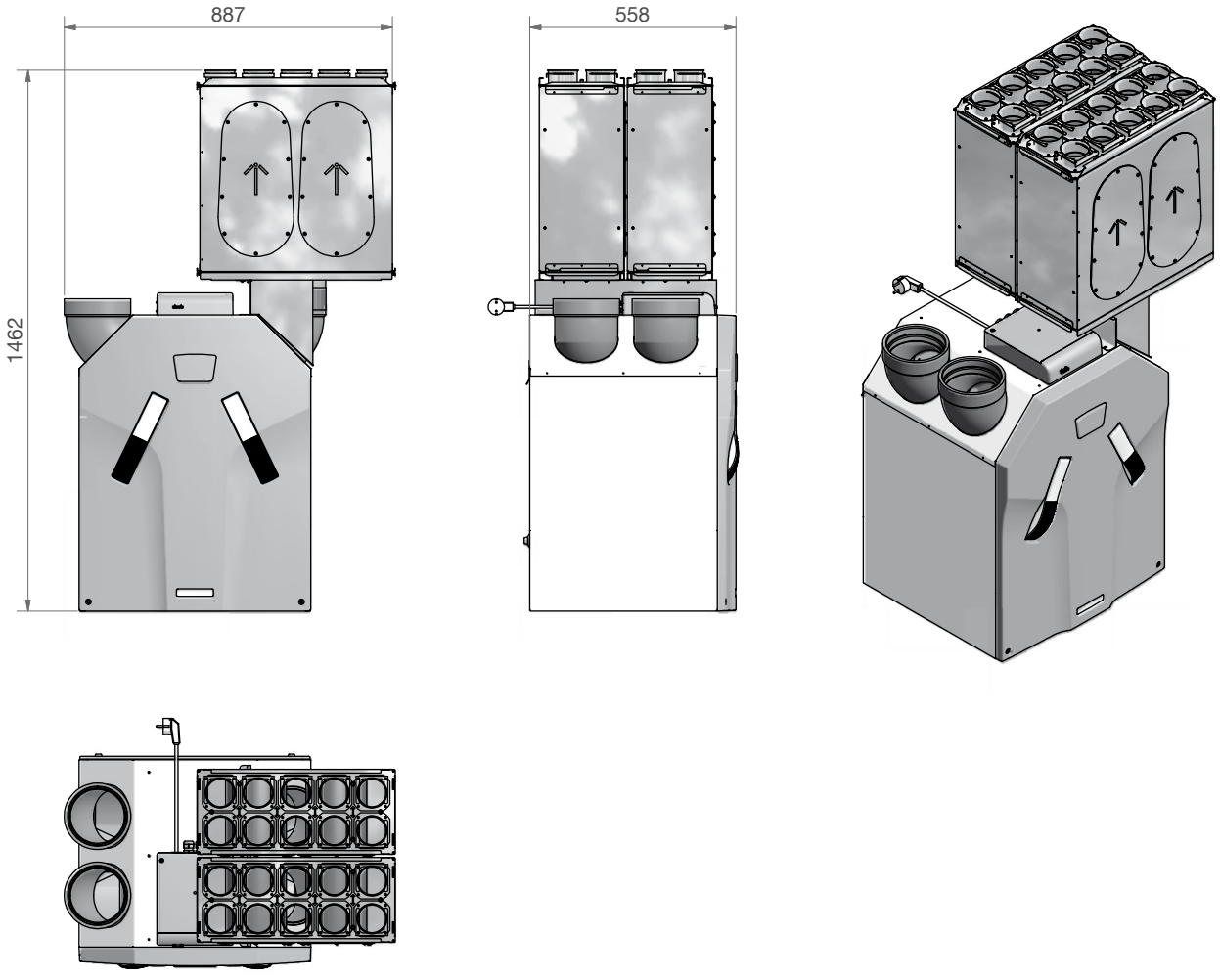
Spacer frame



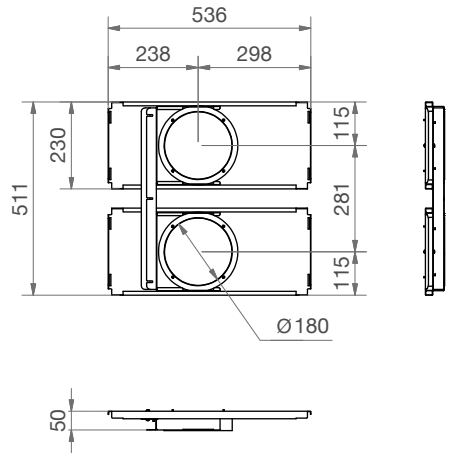
Mounting set 350

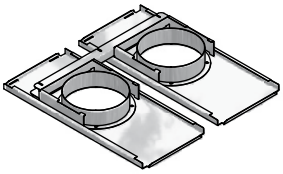


ComfoAir 350 with mounting set

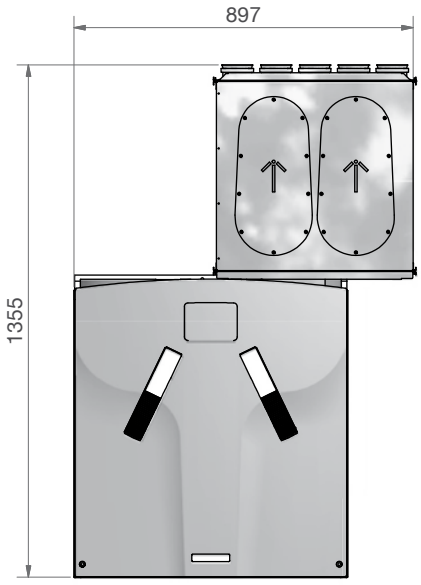


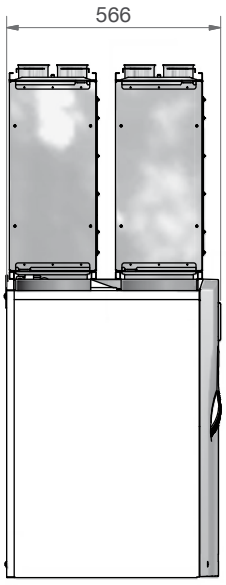
Mounting set 550

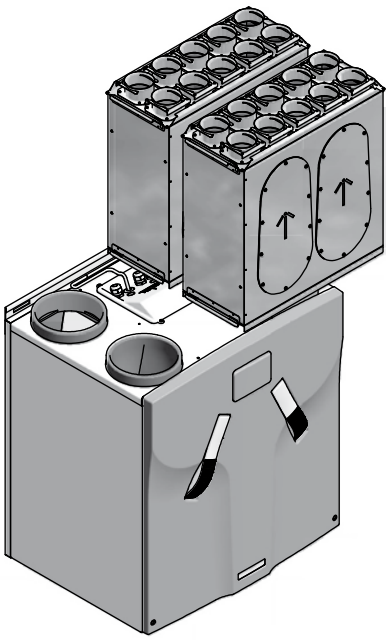


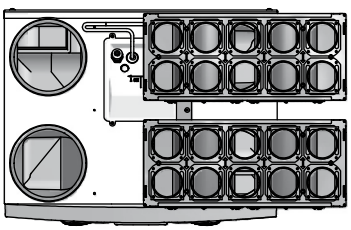


ComfoAir 550 with mounting set



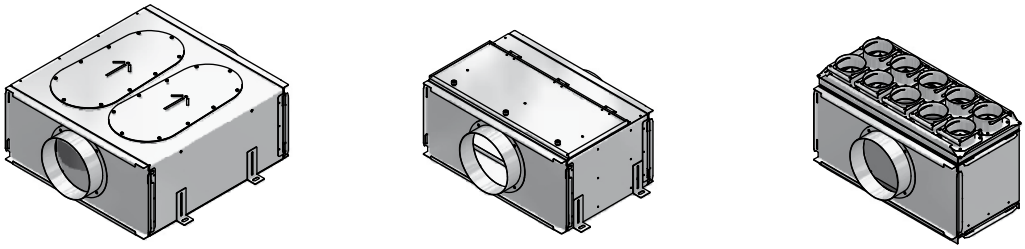




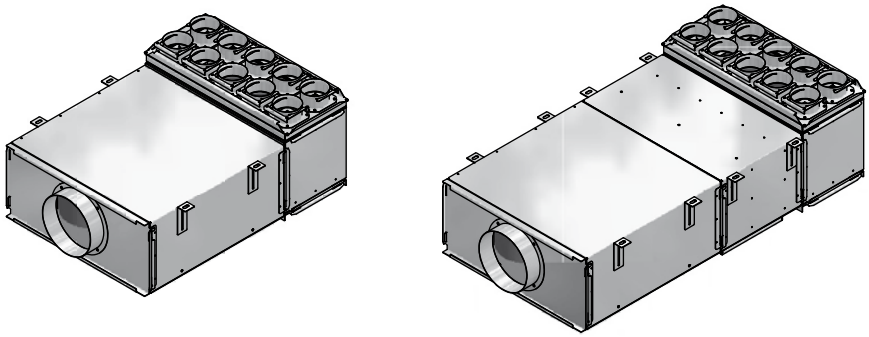


Usage scenarios

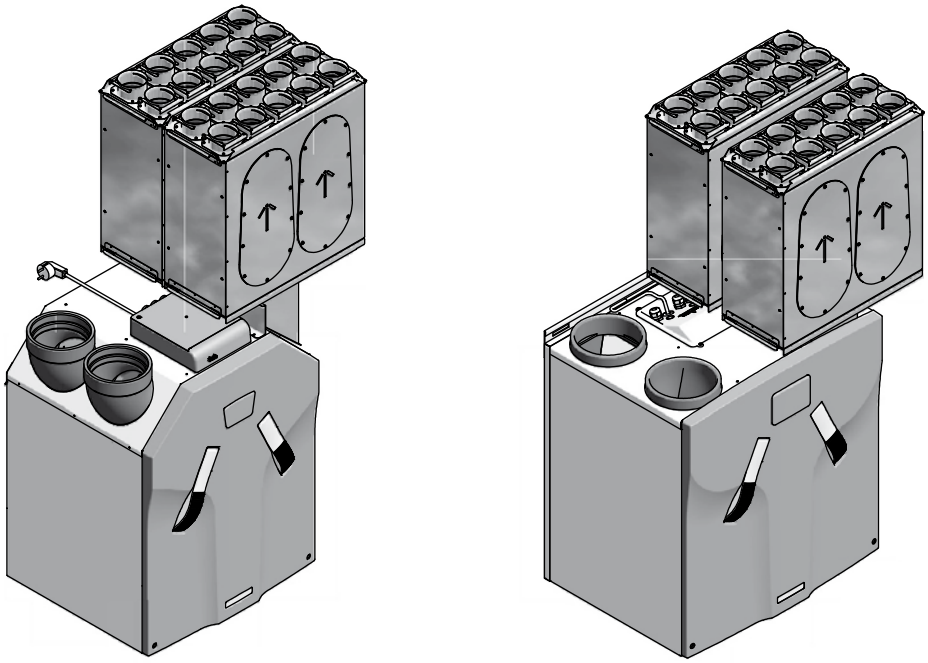
Standalone



Combined

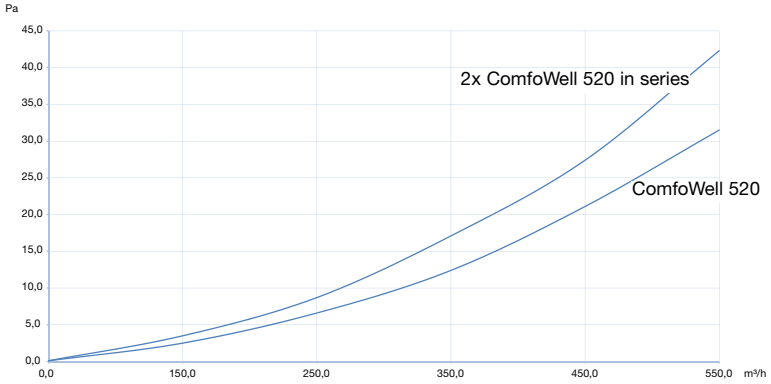


Compact with ventilation unit

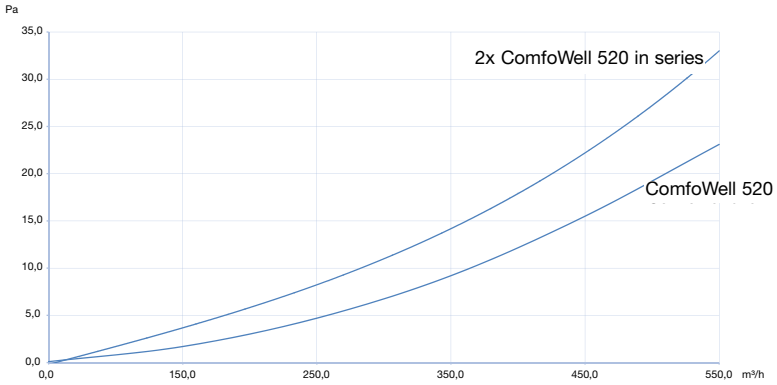


Pressure losses

ComfoWell attenuator CW-S520 with end plate CW-P520 - DN160



ComfoWell attenuator CW-S520 with end plate CW-P520 - DN180



ComfoWell attenuator CW-S520 with end plate CW-P520 - DN200

Insertion loss

1x end plate CW-P520 - DN160/180/200 + 1x attenuator CW-S520 +
1x end plate CW-P520 - DN160/180/200

Frequency Hz	63	125	250	500	1000	2000	4000	8000
Connection DN 160 [dB]	6.1	12.7	16.4	16.7	24.4	26.2	28.5	20
Connection DN 180 [dB]	8.3	11	13.1	15.5	25.1	25.9	27.2	19.4
Connection DN 200 [dB]	8.5	11	13.4	15.8	25.7	25.5	26.1	19.5

1x end plate CW-P520 - DN160/180/200 + 2x attenuator CW-S520 +
1x end plate CW-P520 - DN160/180/200

Frequency Hz	63	125	250	500	1000	2000	4000	8000
Connection DN 160 [dB]	10.2	19.5	26.1	26.4	37.3	48.9	53.7	38.8
Connection DN 180 [dB]	12.4	19.6	22.7	25.2	37.7	49.3	52.6	37.8
Connection DN 200 [dB]	12.8	20.5	22.4	25.8	37.1	49.4	51.4	37.5

1x end plate CW-P520 - DN160/180/200 + 1x attenuator CW-S520 +
1x mounting plate CW-M520-10 x 75/90

Frequency Hz	63	125	250	500	1000	2000	4000	8000
Connection DN 160/180/200 [dB]	16.6	14.6	14	17.3	29.9	31.6	33.3	29.4

1x end plate CW-P520 - DN160/180/200 + 2x attenuator CW-S520 +
1x mounting plate CW-M520-10 x 75/90

Frequency Hz	63	125	250	500	1000	2000	4000	8000
Connection DN 160/180/200 [dB]	17.5	16.9	25.8	28.2	40	50.6	53.1	46.2

CDE-FLYERTS223, V0911, en, subject to change without notice

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