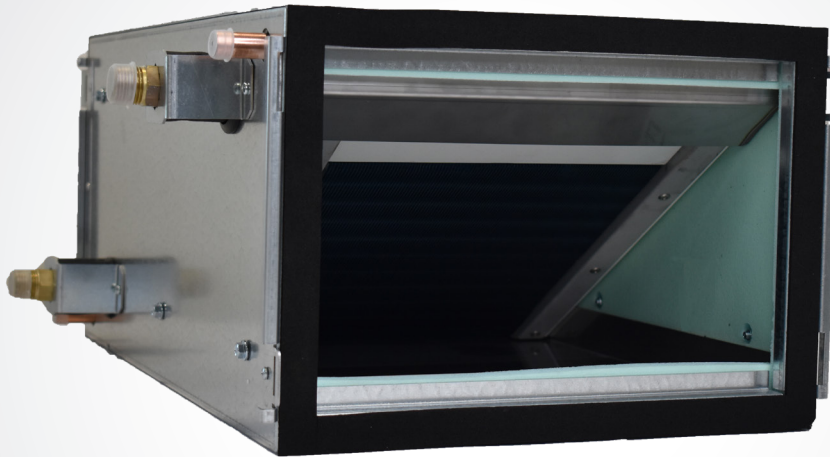


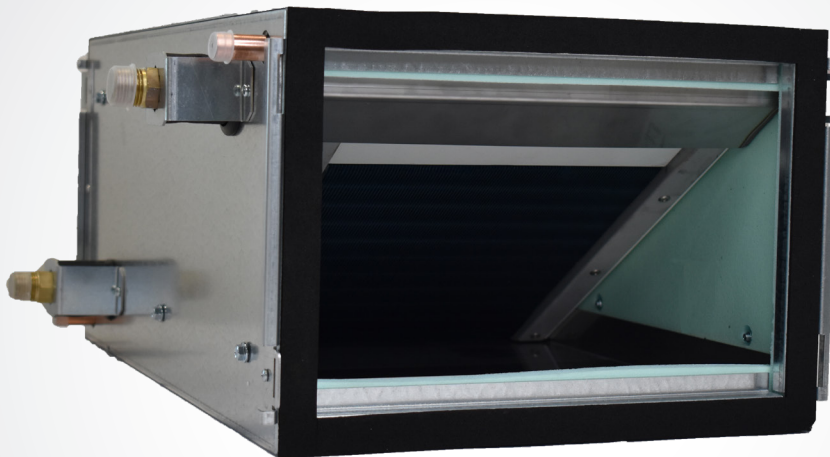
Zehnder ComfoPost Range



Designing ComfoPost

Tackling the issue of overheating requires an integrated solution, incorporating a suite of innovative products that each play their part in ensuring that indoor air quality and comfort levels are delivered during the warmer summer months, whilst also complementing heating requirements during the winter. In Passive House and Net Zero energy properties, these integrated products are likely to provide the sole source of heating.

Considering the expected increase in external temperatures predicted across the globe, being able to deliver forward thinking solutions can help mitigate the issue of overheating.



What is ComfoPost

The Zehnder ComfoPost is a range of air to water exchangers for use with ComfoWell air distribution connections. The ComfoPost helps to reduce the supply air temperature of the ComfoAir MVHR unit in the summer months and if required increase it in the winter months. Chilled water is fed into the ComfoPost during the summer months typically by a chiller or reversible heat pump to help reduce the supply air to all habitable rooms in the property resulting in comfortable supply air during warmer periods. In the winter warm water can be supplied to it to compliment any heating system, especially when using district heating to assist in reducing the return water flow temperature thus increasing efficiency.

The ComfoWell air distribution connections to the ComfoPost allows for ducting selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to be attached. The ComfoPost units are also suitable for a wide range of airflows up to 166l/s (600m³/hr). The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

The ComfoPost can be controlled by the heating/cooling system controls and thermostats. Multiple ComfoPost units could also be used in the same property to enable zonal control.

The ComfoAir Q range of MVHR units can be used with the ComfoPost. These MVHR units are ideal for use with the ComfoPost due to the automatic cold recovery function when the internal temperature is lower than the external temperature. The ComfoAir Q350 has been the first unit to be independently certified by the Passivhaus Institute for its cold recovery efficiency of 87%. The ComfoAir Q range also have a unique modulating summer bypass. If the external temperature is lower than that of the internal temperature then it will activate to bring the cooler air into the property without the need for activating the ComfoPost. This can activate down to much lower temperatures than a standard summer bypass whilst avoiding hitting the dew point due to it being able to partially recover some of the heat. The ComfoAir Q also has 3 temperature profiles which react to the average external temperature. This means during spikes in external temperature the unit is more inclined to react to these sudden changes by opening the bypass or activating the ComfoPost accordingly.

The ComfoConnect KNX C or LAN C enable the end user to control and monitor the unit using the KNX building automation infrastructure or the ComfoControl free app (available on iOS and Android). These can be used to enable remote activation and support via the ComfoControl app.

The ComfoPost cannot be compared to air conditioning since air conditioning recirculates the stale cooled air, whilst the ComfoPost delivers fresh filtered air. This helps to meet ADF ventilation rates whilst having the added benefit of air temperation.

ComfoPost in
conjunction
with the
ComfoWell
320



Design out overheating

The ComfoPost range can help to temper the supply air. However if the gains exceed the cooling capacity of the unit then the property will still overheat. Things to consider to combat overheating would be as follows:

- Improve thermal mass
- Options to cool thermal mass such as false ceiling or hollow core concrete flooring
- Reduce the size of windows and avoid too much south-facing glazing
- Solar shading through overhangs or external shutters
- Window glass type such as reflective, photochromic, thermochromic or electrochromic
- Insulate hot water pipes and tanks
- Reduce electrical appliances
- Use higher efficiency appliances that emit lower heat levels such as LED lighting
- Openable windows for purge ventilation without a security risk

Thermal modelling

It's important that thermal modelling is carried out to ensure the appropriate ComfoPost is selected and that it is sufficient to meet the cooling demands of the property. Thermal modelling is entirely reliant on the model inputs; we recommend modelling to the new TM59 guidance which draws from TM52 and CIBSE Guide A. Modelling should be based on the units running at the required ventilation rate, using the relevant ComfoPost output data found within the Performance Data table. The output will vary dependent on the conditions and water flow rate/temperature, the Performance Data table should be used as a guide for the units cooling/heating capacity.

When modelling the property it's important that any solar shading requiring user intervention, such as blinds, is modelled with and without them. Window opening modelling should also include any restrictions and take into account noise, security and air quality issues which would reduce the opening area. The windows should also only be modelled as open when rooms are scheduled to be occupied unless security isn't an issue.

Design methodology for the assessment of overheating risk in homes





ComfoAir Q600

Additional notes

All equipment should be installed by a competent person; poor or incorrect installation could result in the unit not achieving its desired cooling capacity. The ISO ePM1 >55% (F7) filters within the ComfoAir Q range of units help to reduce fine pollen and carbon black particles in the supply air, however additional filtration such as NOx filters may be required. These need to be factored into the design pressure drop and are available from Zehnder.

Selecting an appropriate ComfoAir unit relevant to the air flow required can be done by simply using our product selector www.zehnderproductselector.co.uk



Filters

Key design considerations

- Minimum design rate of 1ach per habitable room or the minimum air flow published in the relevant ComfoPost Performance Data table, whichever is higher, with pipework velocity <3m/s.
- Ductwork should be sized accordingly to equate to the ComfoAir units spigot size.
- Thermal modelling to achieve the cooling/heating capacity for the specified ComfoPost relevant to the design flow temperatures within the appropriate Performance Data table. The recommended operating water temperature range is between 7 and 55°C.
- Maximum operating water pressure 6 bar.
- The ComfoPost can be installed horizontally or vertically but the condensate drain must always be in the lower position with the water connection on the side and not on the top or bottom. When installing vertically the airflow must NOT be directed downwards.
- Insulate intake/exhaust ductwork to a minimum of 25mm of insulating material, with a thermal conductivity of 0.04W/Mk.
- Insulate supply ductwork to a minimum of 10mm of insulating material, with a thermal conductivity of 0.04W/Mk.
- Insulate the water IN and water OUT pipework with the appropriate thickness and material.
- Enthalpy cube for the relevant ComfoAir Q or ComfoAir 160/180/200/350 unit used as standard.
- A buffer tank can be used to reduce the peak phases and ensure a quicker reaction time, requirement to be confirmed by thermal modeller.
- Ensure adequate attenuation is factored in at the higher flow rate.
- Ensure the intake/exhaust terminations are separated by a minimum of 2m and terminate to the external façade.
- Locate the MVHR unit on an external wall if possible.
- If a switch live boost is desired, then a relay linked to the Option Box is required when using the ComfoAir Q.
- The ComfoPost can be used in conjunction with corresponding ComfoWell, which can only be installed directly to it.
- Intake air from north facing orientation if possible.
- Don't intake air from south facing orientation.
- Don't intake air from underneath roof tiles or solar panels.
- Use a water filled siphon with a water lock of at least 100mm for the ComfoPost condensate drain.
- Use a dry trap on the ComfoAir MVHR units capable of achieving 500Pa of pressure.
- Due to the increased risk of corrosion, installations near the coast should be avoided

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COMFOPOST DATASHEET**

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COMFOWELL DATASHEET**

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**TO DOWNLOAD OUR
COMFOAIR DATASHEET**

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Contact information

Zehnder Group UK Ltd

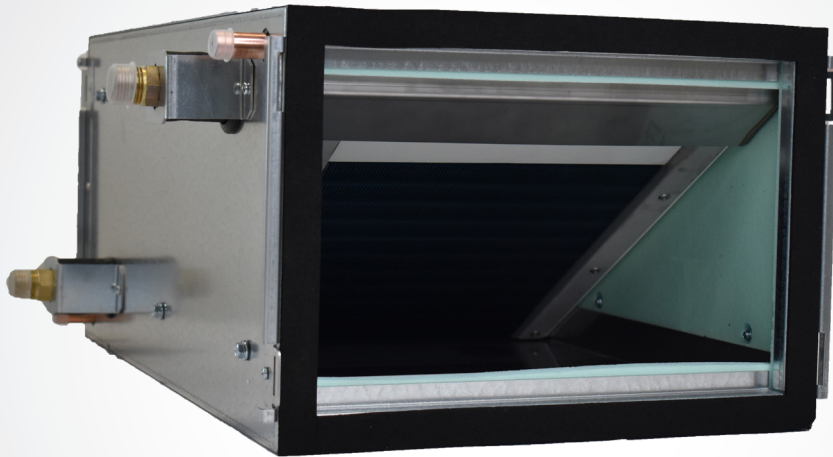
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zehnder

Zehnder ComfoPost CW6



ComfoPost CW6

The Zehnder ComfoPost is an air to water exchanger for use with ComfoWell air distribution connections. The ComfoWell connections allows for selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to attached. The ComfoPost is available in a variety of sizes to heat or cool the air supplied by the Zehnder ventilation system.

The ComfoPost units are suitable for a wide range of airflows up to 166l/s (600m³/hr), the CW6 is suitable for airflows up to 83.3l/s (300m³/hr). The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

Key Features

- Ideal for use with reversible heat pumps or chillers to meet SAP 10 or TM59 overheating demands
- Low pressure losses
- Filtered fresh supply air, not recycled stale air
- Suitable for use with the unique modular ComfoWell manifolds
- Suitable for horizontal or vertical installation
- Condensation water tray and drain as standard
- Suitable for Passive House application
- Corrosion resistant

Article Numbers

Description

Product Code

Zehnder ComfoPost CW6 post-treatment battery for heating and cooling with an airflow up to 300m³/h

398 480 002

Technical Specification

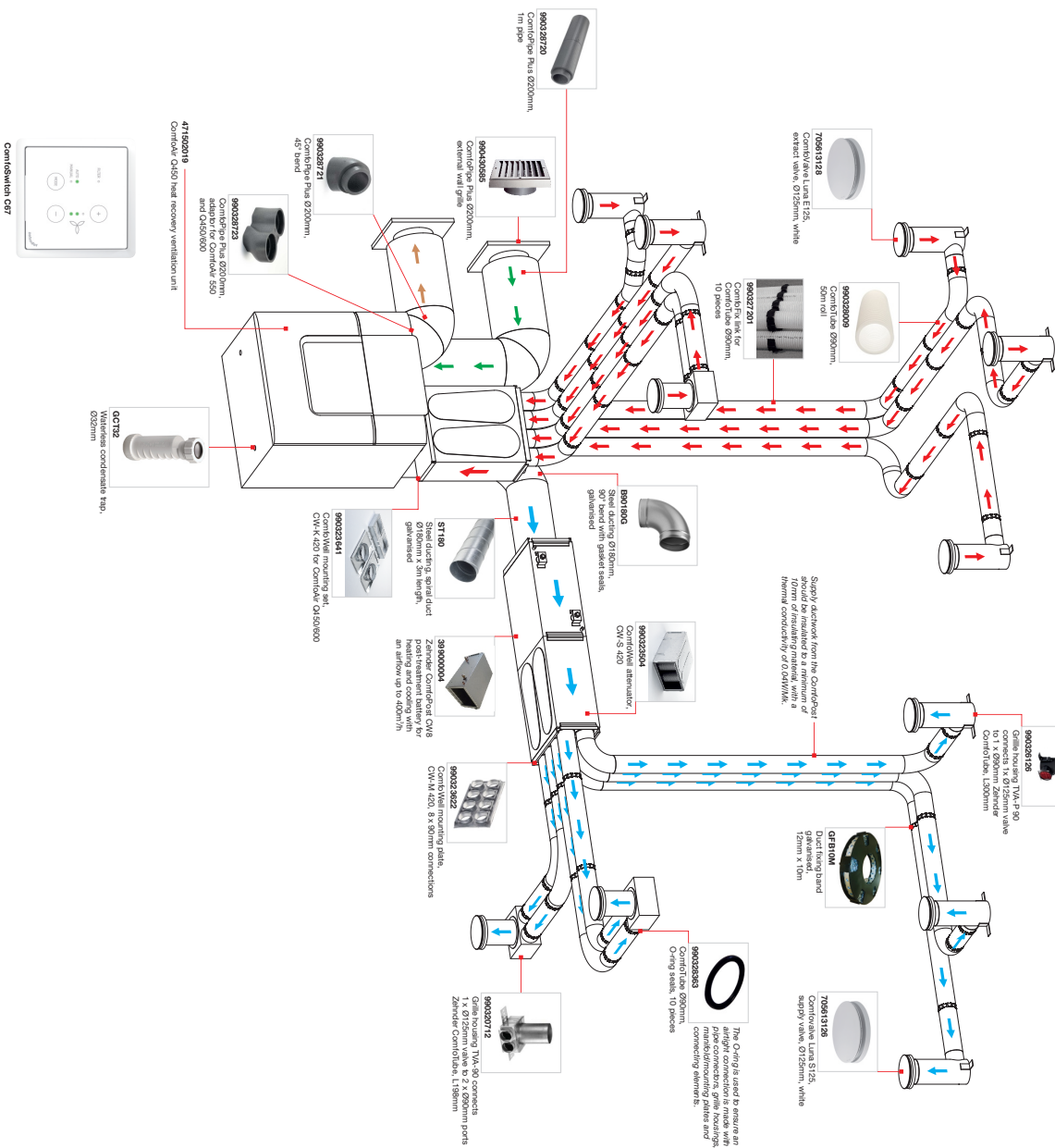
| | |
|--|---|
| Height | 230mm |
| Width | 320mm |
| Depth | 520mm |
| Water connection diameter (ø) | 1/2" |
| Water connection type | BSPT male thread |
| Condensate drain diameter OD (ø) | 14mm |
| Condensate connection type | Worm drive clip to fix to hose or crimped to copper pipe |
| ComfoWell range | ComfoWell 320 |
| ComfoWell rigid round air connection options (ø) | 125mm / 150mm / 160mm / 180mm |
| ComfoWell semi-rigid air connection options (ø) | 6 x 75mm / 6 x 90mm / 2 x 90mm + 4 x 75mm |
| Material | Casing: Galvanised sheet steel Tubes: Copper Fins: Aluminium with hydrophilic treatment |
| Recommended operating water temperature range | 7 to 55 °C |
| Recommended maximum operating air flow | <83.3l/s (<300m³/hr) |
| Maximum thermal heating output | 3.13kW* |
| Maximum thermal cooling output | 2.8kW* |
| Maximum operating water pressure? | 6 bar |
| Water volume capacity | 0.6 Litres |
| Maintenance free | Yes |
| Weight | 13.5 kg |

*Total capacity (sensible and latent) based on test conditions shown in the Performance Data table

3D System Layout

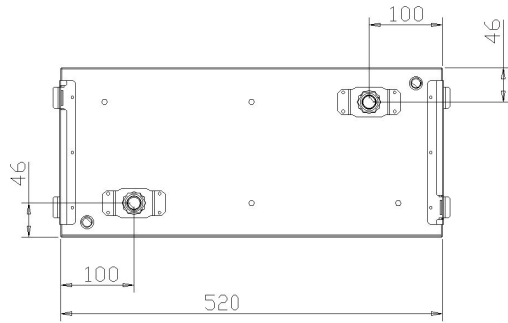
Generic Example

ComfoPost and ComfoTube Ø90mm Semi-Rigid Ductwork



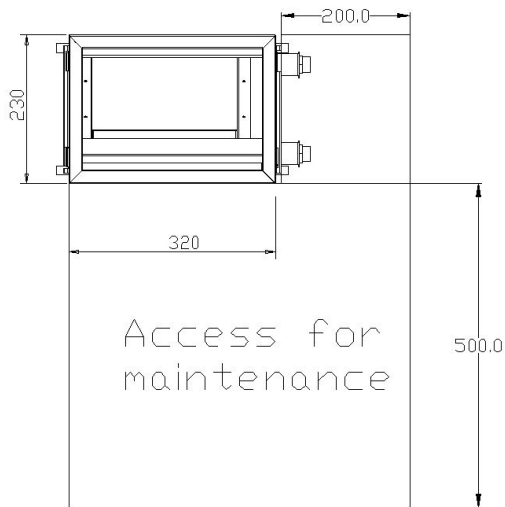
Dimensions

Rear View

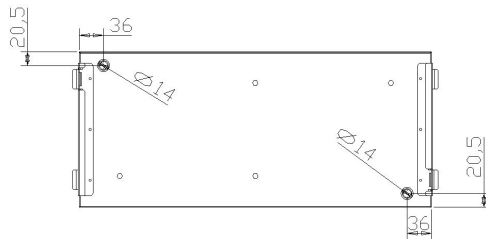


| | |
|--------|---------|
| Height | 230mm |
| Width | 320mm |
| Depth | 520mm |
| Weight | 13.5 kg |

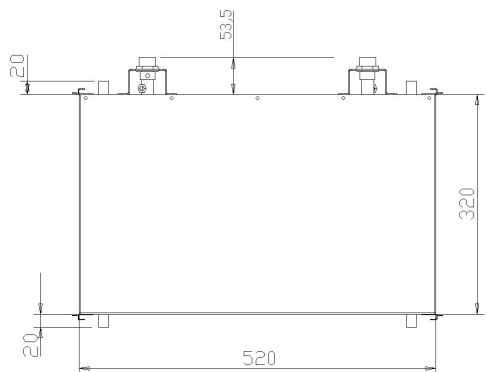
Side View



Front View



Top View

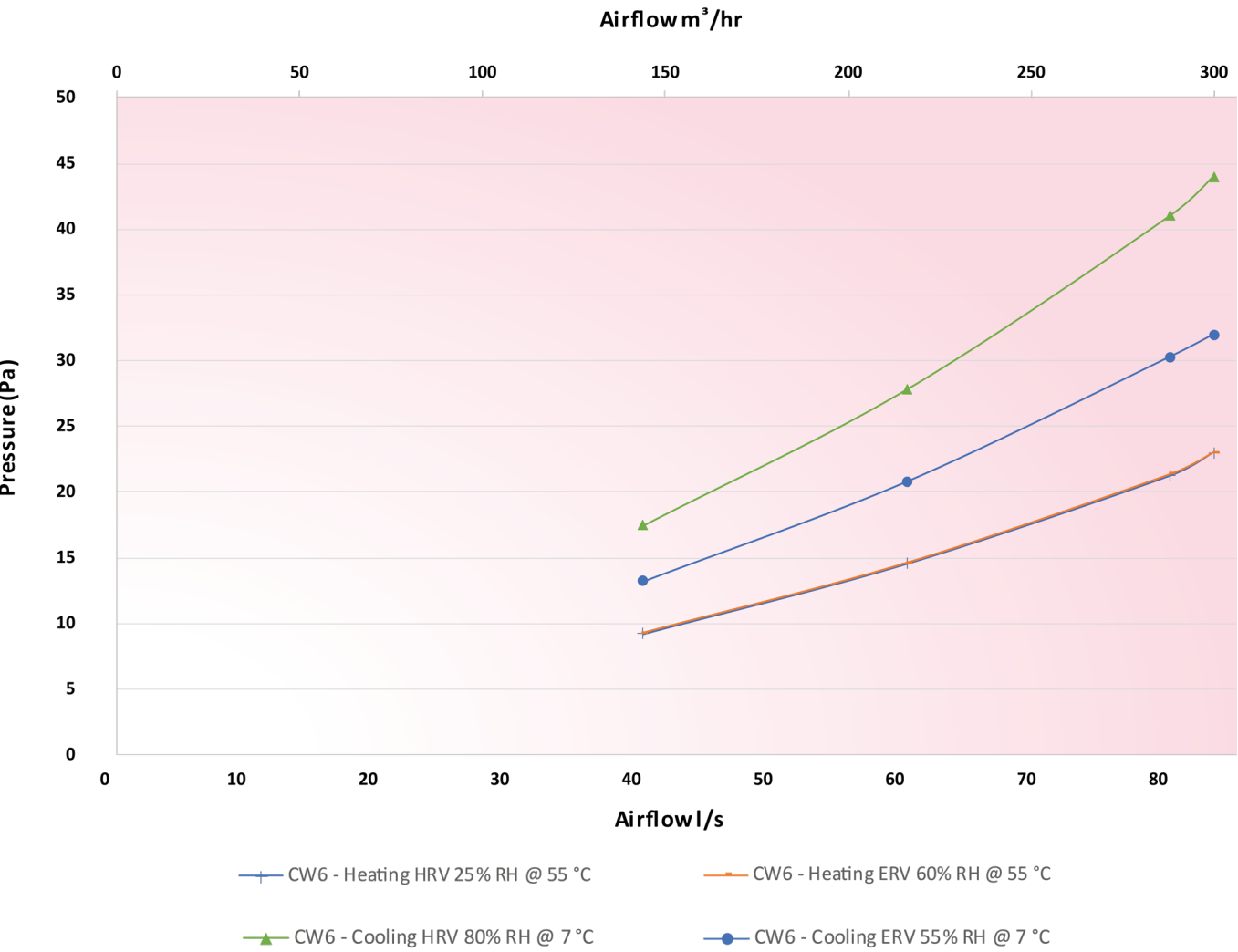


Performance Data

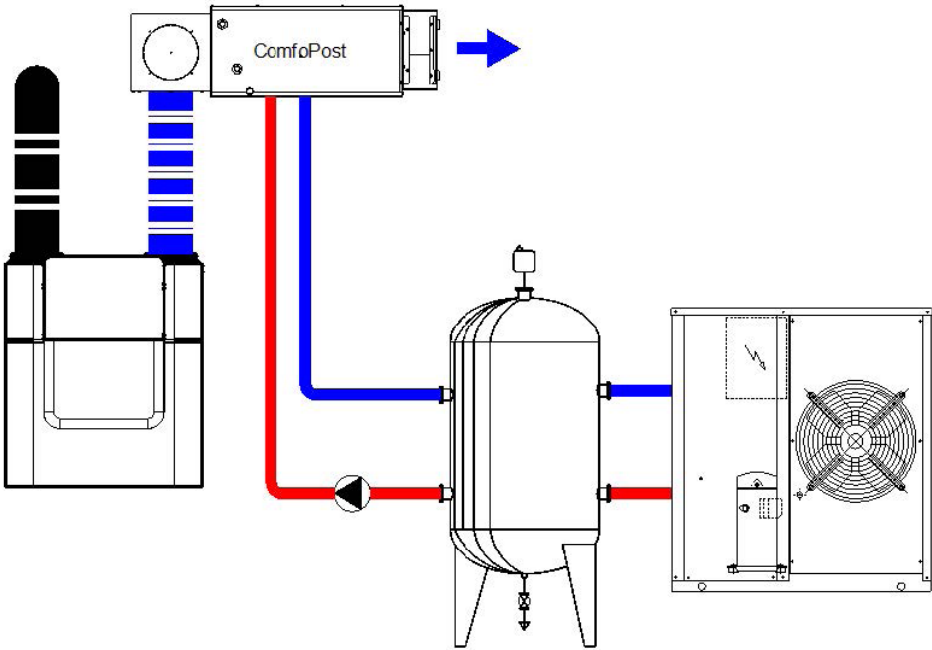
| Air conditions IN to ComfoPost | | | Heating | | | | | | | | Cooling | |
|--|---|------|---------------|------|------|------|---------------|------|------|------|-----------|-----------|
| | | | HRV exchanger | | | | ERV exchanger | | | | HRV | ERV |
| | | T °C | 18 °C | | | | 17 °C | | | | 27°C | 28°C |
| | | RH % | 25% | | | | 60% | | | | 80% | 55% |
| Water temperature IN | | °C | 55 | 50 | 45 | 40 | 55 | 50 | 45 | 40 | 18.1 g/kg | 13.1 g/kg |
| MINIMUM Air flow 40l/s (144m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 52 | 48 | 43 | 39 | 52 | 48 | 43 | 38 | 10 | 9 |
| | H ₂ O ΔP | kPa | 9 | 10 | 10 | 10 | 9 | 10 | 10 | 10 | 12 | 12 |
| | Air temperature _{OUT} | °C | 53 | 48 | 43 | 38 | 52 | 47 | 43 | 38 | 12 | 11 |
| | Air RH _{OUT} | % | 4 | 5 | 6 | 8 | 9 | 11 | 14 | 17 | 100 | 96 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 9.1 | 7.9 |
| | Air ΔP | Pa | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 17 | 13 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 1.7 | 2.1 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 0.74 | 0.4 |
| | TOTAL POWER | kW | 1.73 | 1.5 | 1.26 | 1.03 | 1.79 | 1.55 | 1.32 | 1.08 | 1.88 | 1.52 |
| Air flow 60l/s (216m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 52 | 47 | 43 | 38 | 51 | 47 | 42 | 38 | 10 | 10 |
| | H ₂ O ΔP | kPa | 9 | 10 | 10 | 10 | 9 | 10 | 10 | 10 | 12 | 12 |
| | Air temperature _{OUT} | °C | 50 | 46 | 41 | 37 | 50 | 46 | 41 | 37 | 14 | 13 |
| | Air RH _{OUT} | % | 4 | 5 | 7 | 8 | 9 | 12 | 15 | 19 | 100 | 93 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 10.3 | 8.6 |
| | Air ΔP | Pa | 15 | 14 | 14 | 14 | 15 | 14 | 14 | 14 | 28 | 21 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 2.1 | 2.1 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 0.94 | 0.63 |
| | TOTAL POWER | kW | 2.35 | 2.03 | 1.71 | 1.39 | 2.43 | 2.1 | 1.78 | 1.46 | 2.35 | 1.94 |
| Air flow 80l/s (288m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 51 | 46 | 42 | 38 | 51 | 46 | 42 | 37 | 11 | 10 |
| | H ₂ O ΔP | kPa | 9 | 10 | 10 | 10 | 9 | 10 | 10 | 10 | 12 | 12 |
| | Air temperature _{OUT} | °C | 48 | 44 | 40 | 36 | 48 | 44 | 40 | 36 | 16 | 14 |
| | Air RH _{OUT} | % | 5 | 6 | 7 | 9 | 11 | 13 | 17 | 20 | 99 | 90 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 11.3 | 9.2 |
| | Air ΔP | Pa | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 41 | 30 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 2.4 | 2.2 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.1 | 0.85 |
| | TOTAL POWER | kW | 2.93 | 2.53 | 2.13 | 1.73 | 3.03 | 2.62 | 2.22 | 1.82 | 2.74 | 2.29 |
| MAXIMUM Air flow 83.3l/s (300 m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 51 | 46 | 42 | 37 | 51 | 47 | 42 | 38 | 11 | 10 |
| | H ₂ O ΔP | kPa | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 12 | 12 |
| | Air temperature _{OUT} | °C | 48 | 44 | 40 | 36 | 48 | 43 | 39 | 35 | 16 | 15 |
| | Air RH _{OUT} | % | 5 | 6 | 7 | 9 | 10 | 12 | 15 | 19 | 99 | 90 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 11.4 | 9.3 |
| | Air ΔP | Pa | 23 | 23 | 23 | 22 | 23 | 23 | 23 | 22 | 44 | 32 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 2.4 | 2.2 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.12 | 0.89 |
| | TOTAL POWER | kW | 3.03 | 2.62 | 2.2 | 1.79 | 3.13 | 2.71 | 2.29 | 1.88 | 2.8 | 2.34 |

Initial temperature and humidity outdoor/indoor: winter 2°C 70% R.H. / 20°C 60% R.H.; summer 35°C 50% R.H. / 25°C 50% R.H.
The calculations include the cold recovery efficiency of an enthalpy exchanger as extrapolated from the results provided by the PHI certification

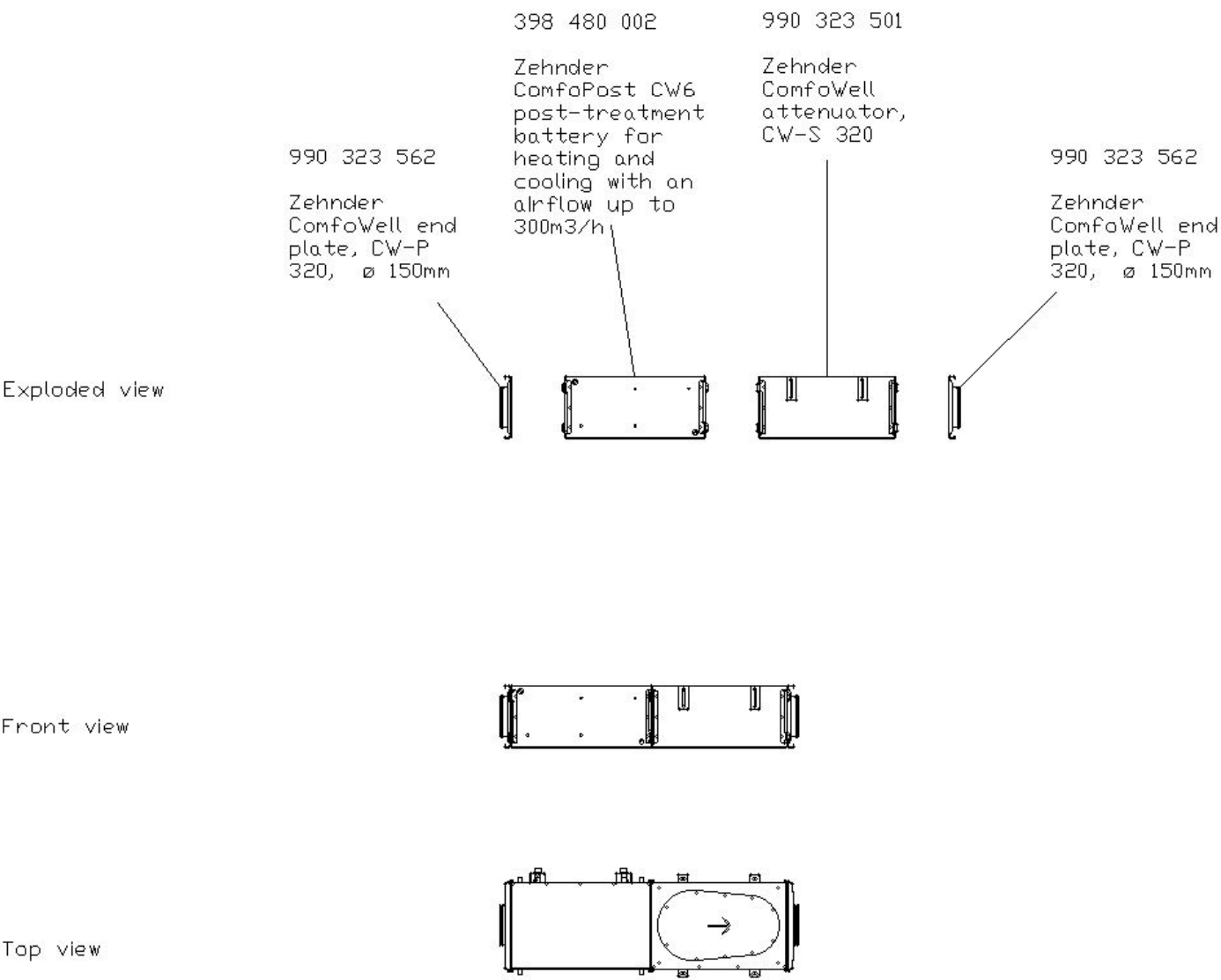
Performance Data



Schematics

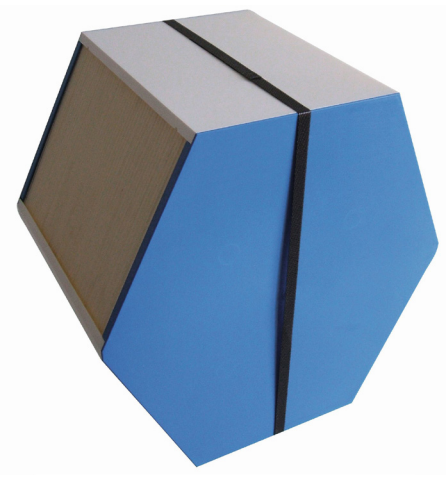


Example Connection



For Use With

Our range of ComfoPost products can be used in conjunction with our ComfoAir units, complete with enthalpy cube for improved sensible cooling capacity. The unit shall be manufactured by Zehnder.



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CUBE DATASHEET**

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Installation Instructions

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Consultant specification

Specification

The air to water exchanger shall be constructed of galvanised sheet steel with copper tubes and aluminum fins with hydrophilic treatment to enhance thermal transfer. It shall be connected to the MVHR units supply ductwork with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm. It shall have the option for horizontal or vertical mounting.

The unit shall be manufactured by Zehnder.

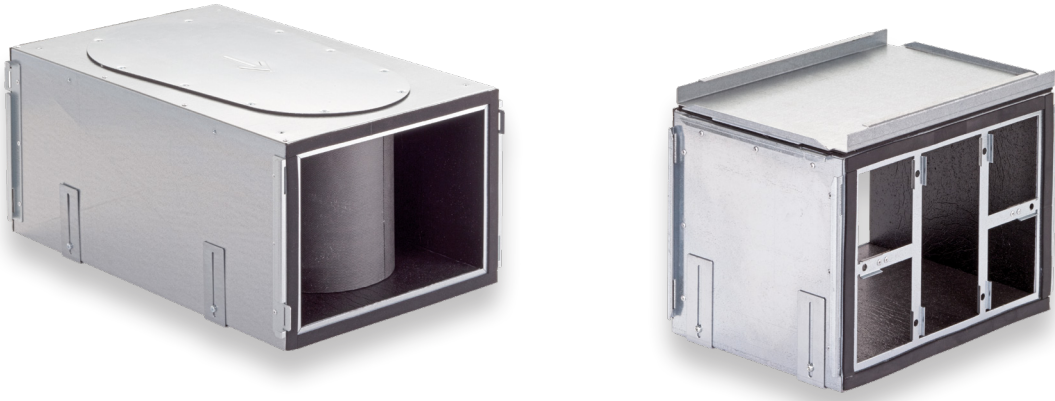
Zehnder ComfoWell 320



Comfowell 320

The Zehnder ComfoWell 320 is a modular system consisting of attenuators, fine grade filters and active carbon filters all integrated for use with a rigid or semi-rigid ductwork approach. With a width of 320mm it can be used for connecting up to 6 ComfoTube connections. The systems compact dimensions ensure good sound absorption and also make it easy to clean. Rigid pipe can be connected to the end plate securely by utilising the gasket seal connection. All other components are fitted using the locking slide connections to form an airtight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 >80% (F7) or ISO ePM1 >90% (F9) grade in addition to an odour neutralising active carbon filter.



Key Features

- Attenuator, fine grade filter, active carbon filter and manifold all combined into one space saving combination with the option to bespoke build exactly what is required.
- Easy to assemble thanks to its modular and compact design.

Article Numbers

| Description | Product Code |
|--|--------------|
| Attenuator | |
| Zehnder ComfoWell attenuator, CW-S 320 | 990 323 501 |
| Manifold | |
| Zehnder ComfoWell manifold box CW-D 320 | 990 323 531 |
| Filter Housing | |
| Zehnder ComfoWell filter housing CW-F 320 | 990 323 551 |
| Mounting Plates | |
| Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections | 990 323 612 |
| Zehnder ComfoWell mounting plate, CW-M 320, 6 x 90mm connections | 990 323 613 |
| End Plates | |
| Zehnder ComfoWell end plate, CW-P 320, ø 125mm | 990 323 511 |
| Zehnder ComfoWell end plate, CW-P 320, ø 150mm | 990 323 562 |
| Zehnder ComfoWell end plate, CW-P 320, ø 160mm | 990 312 512 |
| Zehnder ComfoWell end plate, CW-P 320, ø 180mm | 990 312 527 |

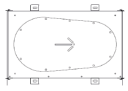
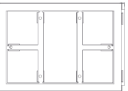

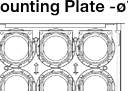
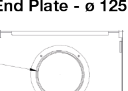
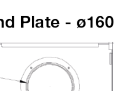

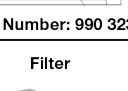
Article Numbers

| | |
|---|-------------|
| Spacer Frame | |
| Zehnder ComfoWell spacer frame, CW-DF 320 | 990 323 538 |
| Mounting Set | |
| Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 160 | 990 323 570 |
| Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 200 | 990 323 517 |
| Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir Q350 | 990 323 647 |
| Filters | |
| Filter for ComfoWell 320, CW-F7 320, ISO ePM1 >80% (F7), 1 Piece | 990 323 603 |
| Filter for ComfoWell 320, CW-F9 320, ISO ePM1 >90% (F9), 1 Piece | 990 323 604 |
| Filter for ComfoWell 320, CW-AC 320, active carbon filter, 1 Piece | 990 323 605 |

Technical Specification

| | |
|--------------------------------------|--|
| Housing material | Galvanised Sheet Steel |
| Operating temperature range | -25 to +60 °C |
| Inner lining | Closed-cell melamine resin foam |
| Recommended maximum air volume | 66.6l/s (240 m³/h) at normal ventilation level |
| Air tightness class to EN 1507:2006 | B |
| Air tightness class to EN 12237:2003 | B |
| Fire rating to ISO13501 | C |

Example Connections

| Combination Options | | | | | | |
|------------------------|--|---|--|---|--|---|
| | Individual Components | | | | | |
| |  Article Number: 990 323 501 | ComfoAir 200 Left handed with mounting set, 2 x attenuators and 2 x 6 port ø 75mm mounting plates | Stand alone attenuator with 2x ø 160mm end plates | Stand alone manifold with 1 x ø 125mm end plate and 6 x ø 75mm mounting plate | Stand alone filter housing with 2 x ø 160mm end plate | Stand alone attenuator and manifold combined with 1 x ø 160mm end plate and 6 x ø 75mm mounting plate |
| |  Article Number: 990 323 531 | 2 x Zehnder ComfoWell attenuator, CW-S 320 | 1 x Zehnder ComfoWell attenuator, CW-S 320 | | | Stand alone 2 x attenuator with 1 x ø 160mm end plate and 6 x ø 75mm mounting plate |
| |  Article Number: 990 323 551 | | | | 1 x Zehnder ComfoWell filter housing, CW-F 320 | |
| |  Article Number: 990 323 612 | 2 x Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections | | 1 x Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections | | 1 x Zehnder ComfoWell mounting plate, CW-M 320, 6 x 75mm connections |
| |  Article Number: 990 323 511 | | | 1 x Zehnder ComfoWell end plate, CW-P 320, ø 125mm | | |
| |  Article Number: 990 323 512 | | 2 x Zehnder ComfoWell end plate, CW-P 320, ø 125mm | | 2 x Zehnder ComfoWell end plate, CW-P 320, ø 160mm | 1 x Zehnder ComfoWell end plate, CW-P 320, ø 160mm |
| |  Article Number: 990 323 517 | 1 x Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 160 | | | | |
| |  Article Number: 990 323 604 | | | | 1 x Filter for ComfoWell 320, CW-F9 320, ISO ePM1 >90% (F9), 1 Piece | |

Dimensions

Zehnder ComfoWell attenuator, CW-S 320

Article number: 990 323 501

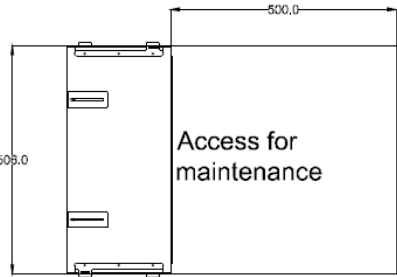
Description
Attenuator:
Zehnder ComfoWell attenuator CW-S 320. Rectangular compact attenuator with highly efficient sound insulation combined with low pressure losses. The attenuator can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

For cleaning purposes the sound absorbing element can be removed.
Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

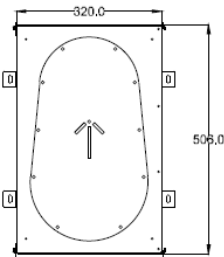
| | |
|--------|---------|
| Height | 506mm |
| Width | 336mm |
| Depth | 232.5mm |
| Weight | 6.6 kg |



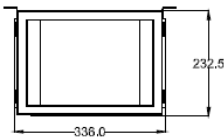
Side view



Front view



Top View



Zehnder ComfoWell manifold box CW-D 320

Article number: 990 323 531

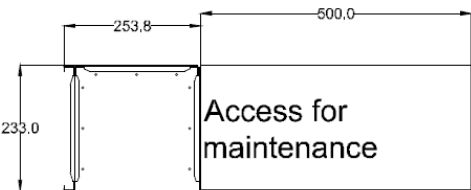
Description
Manifold Box:
Zehnder ComfoWell manifold box CW-D 320. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for ComfoTube 75mm x 6 connections, 90mm x 6 connections or a combination of 90mm x 2 and 75mm x 4 connections. The mounting plate can be mounted on the top or side of the manifold box. The airtight connection between components is via a clamping strip.

For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

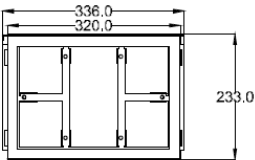
| | |
|--------|---------|
| Height | 233mm |
| Width | 336mm |
| Depth | 253.8mm |
| Weight | 4.52 kg |



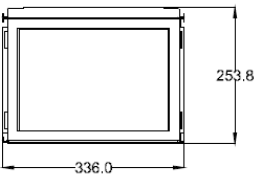
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell filter housing CW-F 320

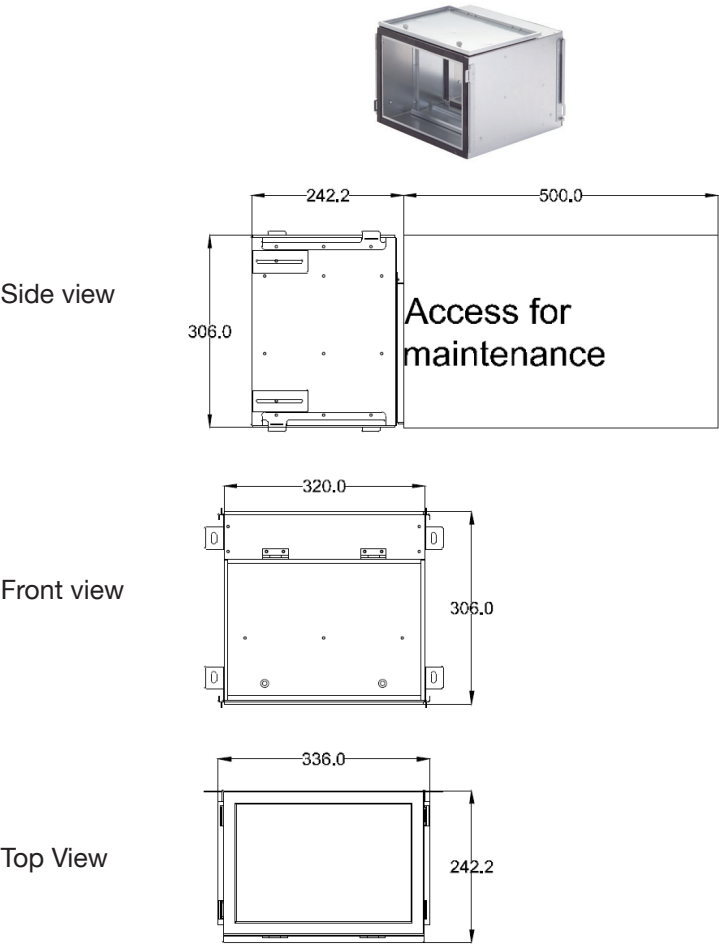
Article number: 990 323 551

Description

Filter Housing:
Zehnder ComfoWell filter housing CW-F 220. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

Dimensions

| | |
|--------|---------|
| Height | 306mm |
| Width | 336mm |
| Depth | 242.2mm |
| Weight | 4.73 kg |



Zehnder ComfoWell mounting plate CW-M 320

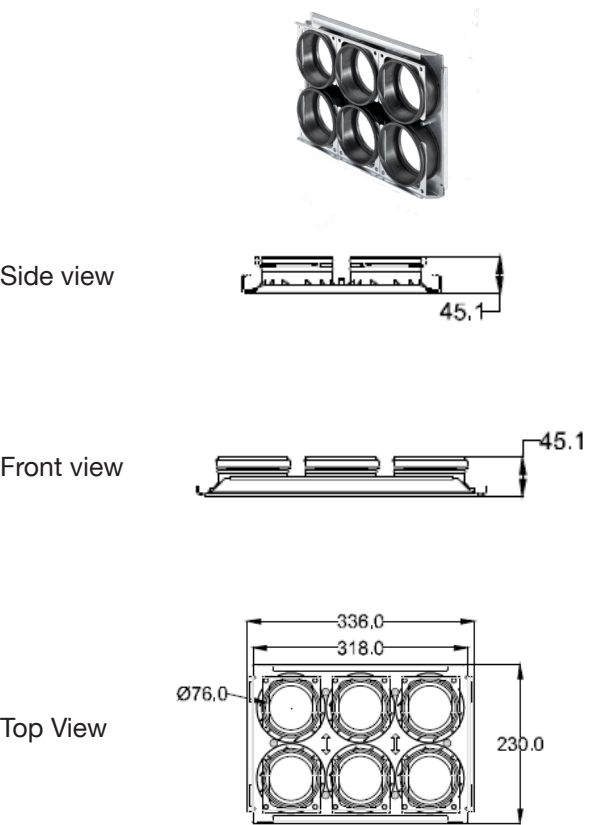
Article number: 990 323 612

Description

Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 320-6 x 75. Manifold mounting plate for connection of 6 x ComfoTube 75mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

| | |
|--------|----------|
| Height | 45.1mm |
| Width | 336mm |
| Depth | 230mm |
| Weight | <1.53 kg |



Dimensions

Zehnder ComfoWell mounting plate CW-M 320

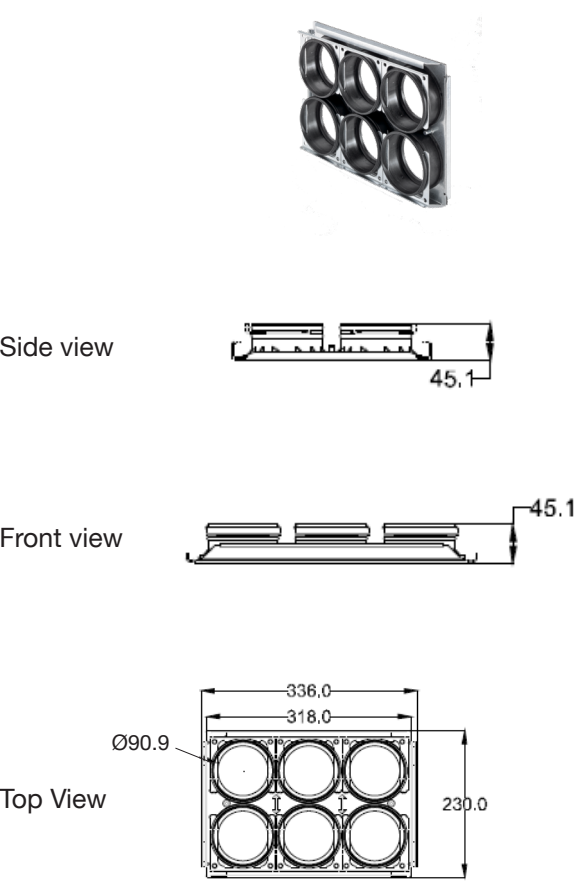
Article number: 990 323 613

Description

Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 320-6 x 90. Manifold mounting plate for connection of 6 x ComfoTube 90mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

| | |
|--------|----------|
| Height | 45.1mm |
| Width | 336mm |
| Depth | 230mm |
| Weight | <1.53 kg |



Dimensions

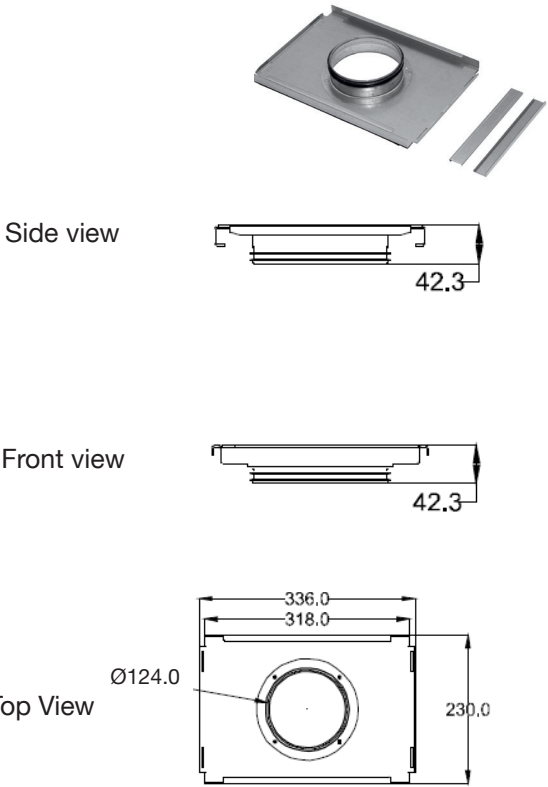
Zehnder ComfoWell end plate CW-P 320 -ø 125

Article number: 990 323 511

Description
End Plate:
Zehnder ComfoWell end plate CW-P 320 - DN125 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 336mm |
| Depth | 230mm |
| Diameter | 125mm |



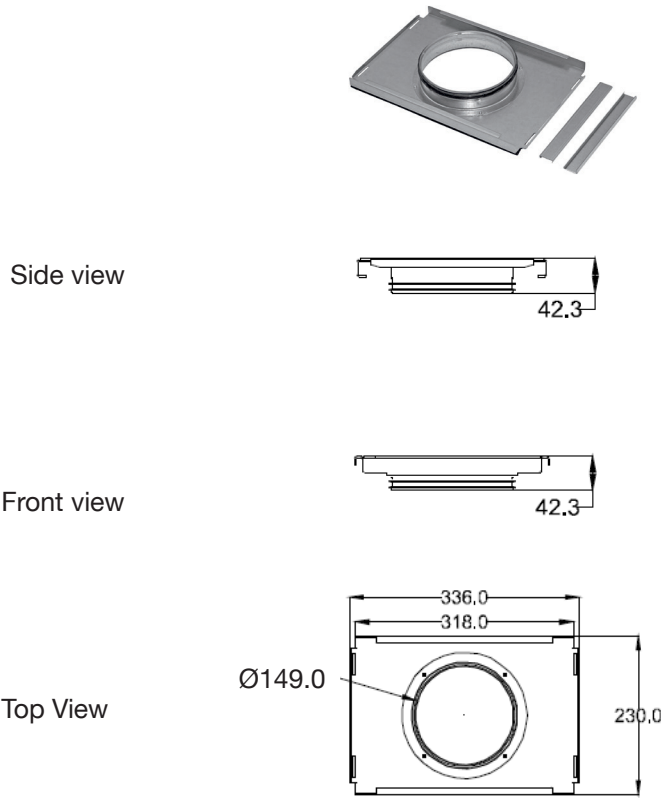
Zehnder ComfoWell end plate CW-P 320 -ø 150mm

Article number: 990 323 562

Description
End Plate:
Zehnder ComfoWell end plate CW-P 320 - DN150 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 236mm |
| Depth | 230mm |
| Diameter | 150mm |



Dimensions

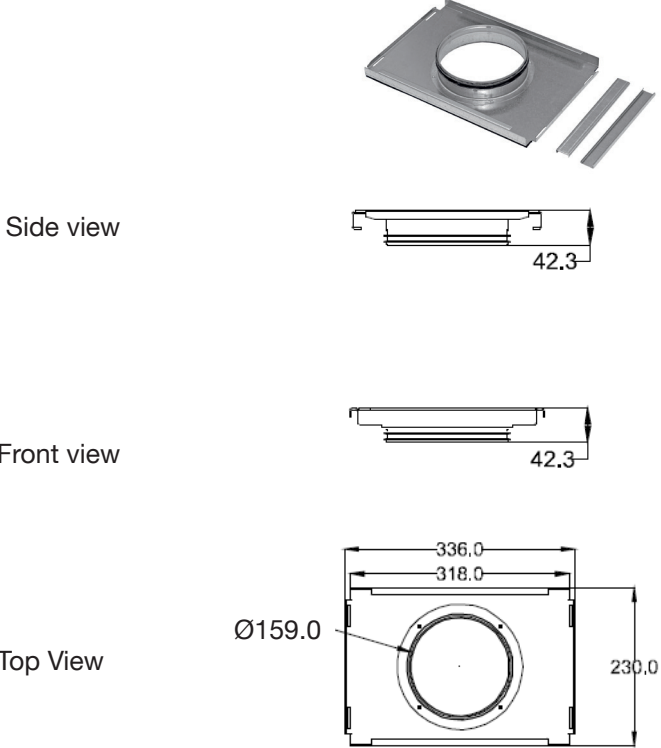
Zehnder ComfoWell end plate CW-P 320 -ø 160mm

Article number: 990 323 512

Description
End Plate:
Zehnder ComfoWell end plate CW-P 320 - DN160 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 236mm |
| Depth | 230mm |
| Diameter | 160mm |



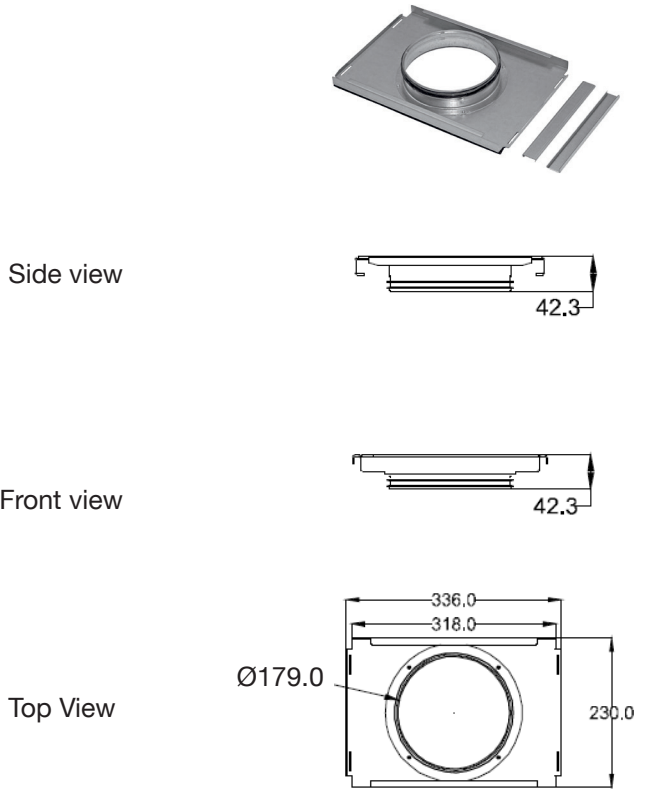
Zehnder ComfoWell end plate CW-P 320 -ø 180mm

Article number: 990 323 527

Description
End Plate:
Zehnder ComfoWell end plate CW-P 320 - DN180 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 236mm |
| Depth | 230mm |
| Diameter | 180mm |



Dimensions

Zehnder ComfoWell spacer frame, CW-DF 320

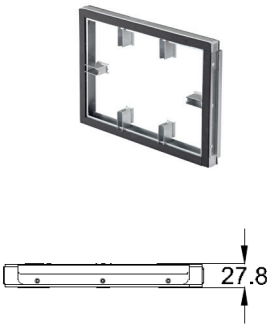
Article number: 990 323 538

Description
Zehnder ComfoWell spacer frame CW-DF320. Rectangular frame for use in the event of uneven surfaces when connecting components and mounting plate (concreted in place) are at 90 degrees. The spacer frame includes the necessary mounting accessories.

Dimensions

| | |
|--------|---------|
| Height | 27.8mm |
| Width | 336mm |
| Depth | 230mm |
| Weight | 1.02 kg |

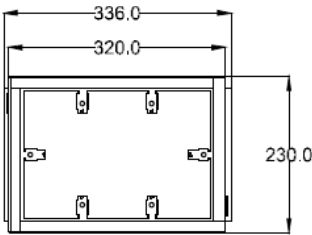
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 200

Article number: 990 323 517

Description
Mounting set:
A special mounting set is available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir 200 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

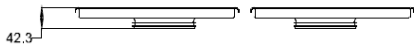
Dimensions

| | |
|--------|--------|
| Height | 42mm |
| Width | 336mm |
| Depth | 230mm |
| Weight | 1.8 kg |

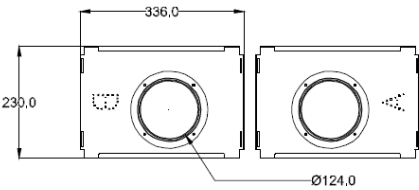
Side view



Front view



Top View



Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAir 160

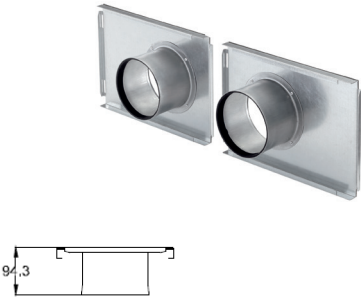
Article number: 990 323 570

Description
Mounting set:
A special mounting set is available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir 160 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets)

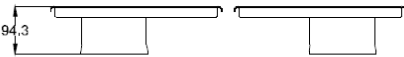
Dimensions

| | |
|--------|--------|
| Height | 94.3mm |
| Width | 336mm |
| Depth | 230mm |
| Weight | 2.3 kg |

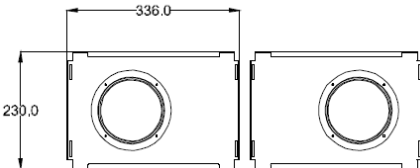
Side view



Front view



Top View



Zehnder ComfoWell mounting set, CW-K 320, for Zehnder ComfoAirQ 350

Article number: 990 323 647

Description
Mounting set:
A special mounting set is available for the Zehnder ComfoWell 320 for direct mounting to the ComfoAir Q 350 ventilation unit. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Dimensions

| | |
|--------|---------|
| Height | 61.8mm |
| Width | 336mm |
| Depth | 510.5mm |
| Weight | 3.5 kg |

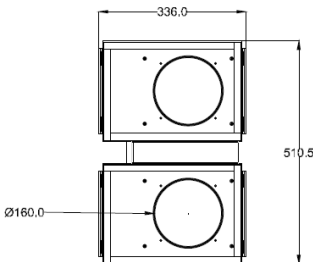
Side view



Front view

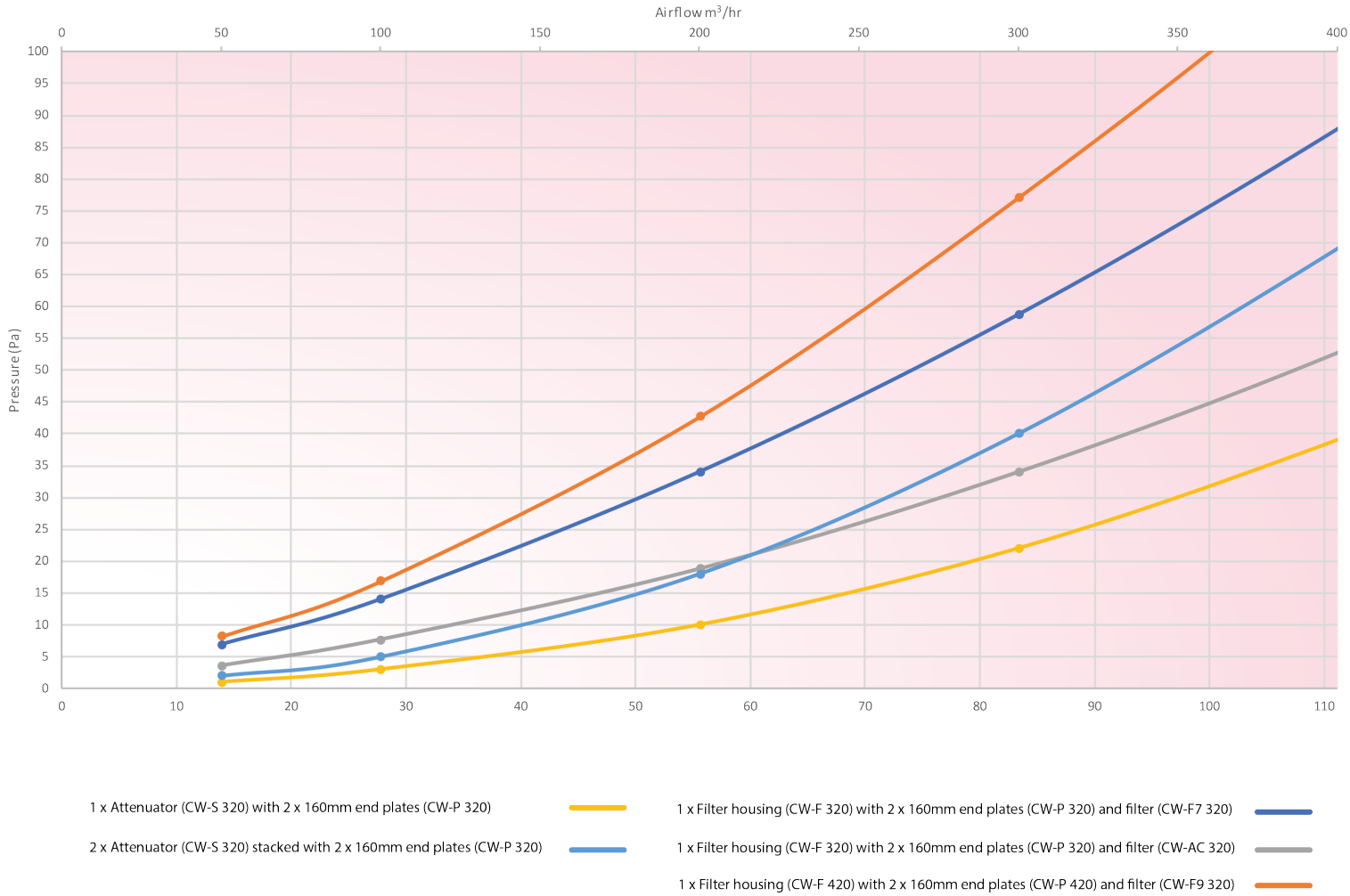


Top View



Pressure Curve

Comfowell 320



For use with

Our range of Comfowell units can be used in conjunction with our Zehnder ComfoTube ø 75mm and ø 90mm semi-rigid ductwork.



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INFORMATION
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Sound Data

Comfowell 320

| Combination | Octave Band (Hz) Insertion Loss, dB | | | | | | | |
|--|-------------------------------------|------|------|------|------|------|------|------|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 1 x Attenuator (CW-S 320) with 2 x 160mm end plates (CW-P 320) | 4,6 | 5,6 | 9,2 | 6,5 | 4,6 | 23,0 | 17,4 | 23,8 |
| 2 x Attenuator (CW-S 320) stacked with 2 x 160mm end plates (CW-P 320) | 6,0 | 10,4 | 17,8 | 14,1 | 13,6 | 47,4 | 36,8 | 34,9 |

Installation Instructions

If you would like to download the installation files for this or any other of our products then please visit our download page by following the link below.

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Consultant specification

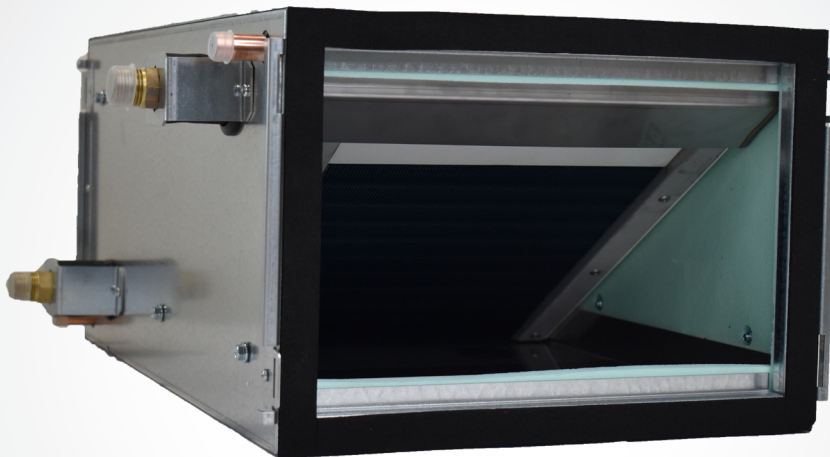
Specification

The semi-rigid ductwork manifold shall be constructed of galvanised sheet steel with a closed-cell melamine resin foam inner lining to prevent dust collection and have a fire class C rating according to EN ISO13501.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm.

It shall have the option of a mounting set for direct connection to the mechanical ventilation with heat recovery unit. The components shall be tested to BS EN 1507:2006 and BS EN 12237:2003 for airtightness and have removable elements to provide access for cleaning.

Zehnder ComfoPost CW8*



ComfoPost CW8

The Zehnder ComfoPost is an air to water exchanger for use with ComfoWell air distribution connections. The ComfoWell connections allows for selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to attached. The ComfoPost is available in a variety of sizes to heat or cool the air supplied by the Zehnder ventilation system.

The ComfoPost units are suitable for a wide range of airflows up to 166l/s (600m³/hr), the CW8 is suitable for airflows up to 111.1l/s (400m³/hr). The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

Key Features

- Ideal for use with reversible heat pumps or chillers to meet SAP 10 or TM59 overheating demands
- Low pressure losses
- Filtered fresh supply air, not recycled stale air
- Suitable for use with the unique modular ComfoWell manifolds
- Suitable for horizontal or vertical installation
- Condensation water tray and drain as standard
- Suitable for Passive House application
- Corrosion resistant

Article Numbers

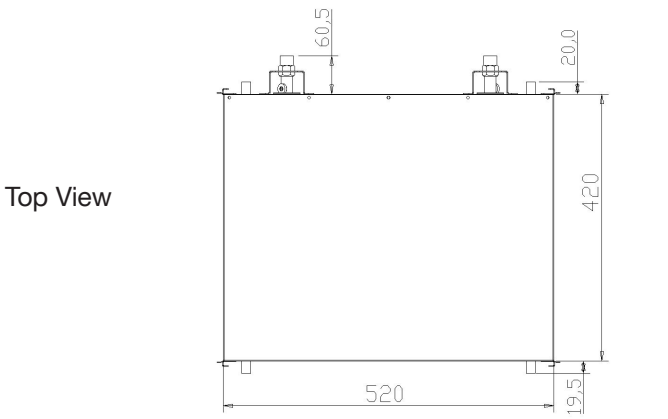
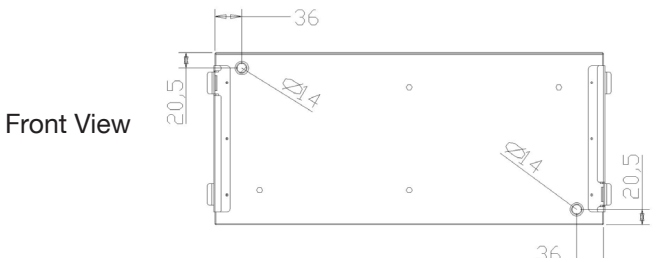
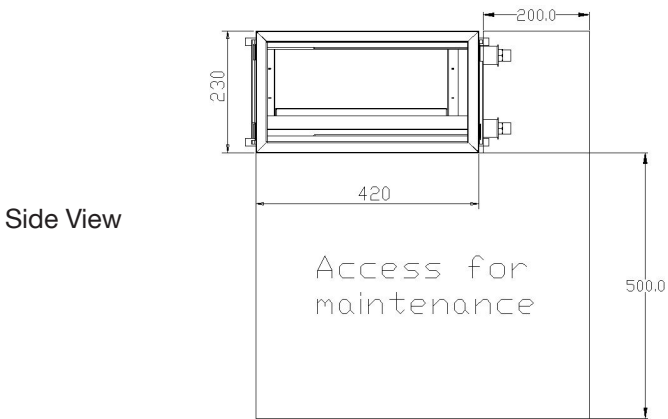
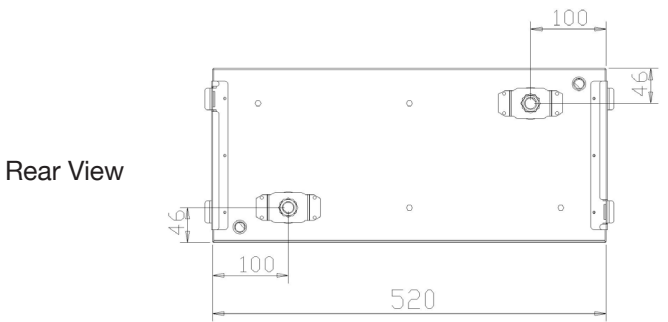
| Description | Product Code |
|--|--------------|
| Zehnder ComfoPost CW8 post-treatment battery for heating and cooling with an airflow up to 400m³/h | 399 000 004 |

Technical Specification

| | |
|--|---|
| Height | 230mm |
| Width | 420mm |
| Depth | 520mm |
| Water connection diameter (ø) | 1/2" |
| Water connection type | BSPT male thread |
| Condensate drain diameter OD (ø) | 14mm |
| Condensate connection type | Worm drive clip to fix to hose or crimped to copper pipe |
| ComfoWell range | ComfoWell 420 |
| ComfoWell rigid round air connection options (ø) | 125mm / 150mm / 160mm / 180mm / 200mm |
| ComfoWell semi-rigid air connection options (ø) | 8 x 75mm / 8 x 90mm / 4 x 90mm + 4 x 75mm |
| Material | Casing: Galvanised sheet steel Tubes: Copper Fins: Aluminium with hydrophilic treatment |
| Recommended operating water temperature range | 7 to 55 °C |
| Recommended maximum operating air flow | <111.1l/s (<400m³/hr) |
| Maximum thermal heating output | 4.18kW* |
| Maximum thermal cooling output | 3.73kW* |
| Maximum operating water pressure? | 6 bar |
| Water volume capacity | 0.8 Litres |
| Maintenance free | Yes |
| Weight | 16 kg |

*Total capacity (sensible and latent) based on test conditions shown in the Performance Data table

Dimensions



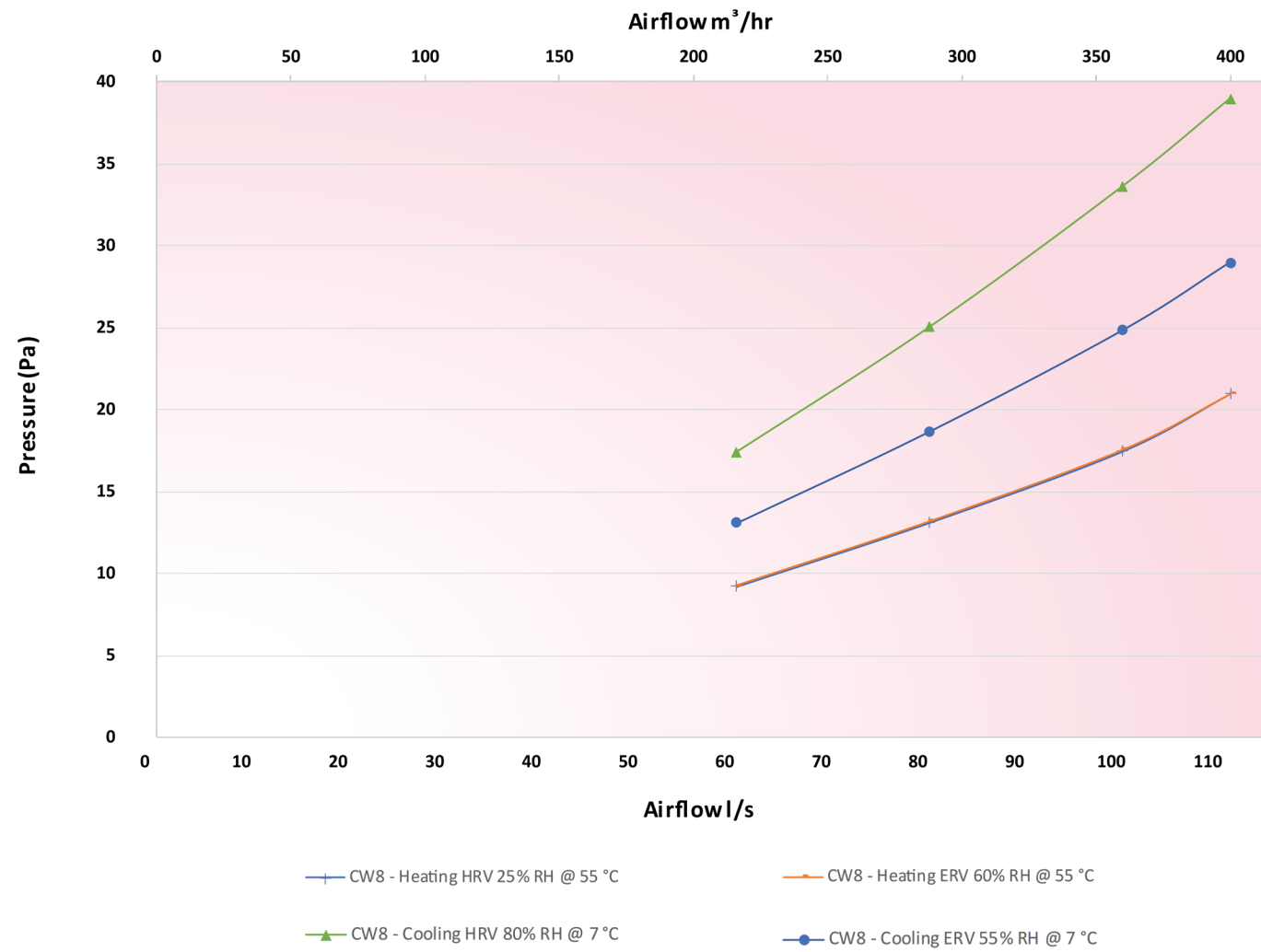
| | |
|--------|-------|
| Height | 230mm |
| Width | 420mm |
| Depth | 520mm |
| Weight | 16 kg |

Performance Data

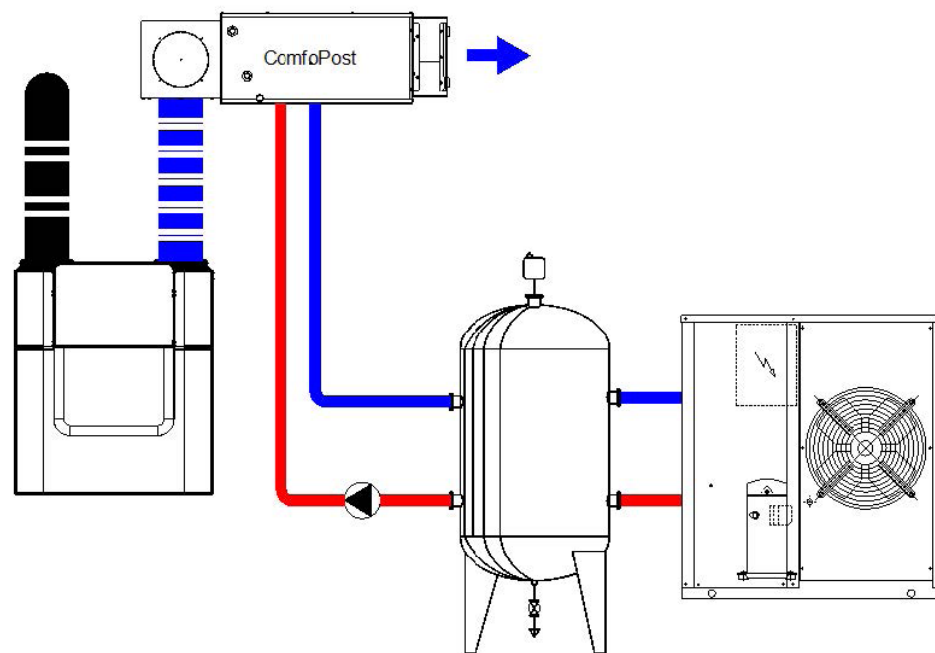
| Air conditions IN to ComfoPost | | | Heating | | | | | | | | Cooling | |
|---|---|------|---------------|------|------|------|---------------|------|------|------|-----------|-----------|
| | | | HRV exchanger | | | | ERV exchanger | | | | HRV | ERV |
| | | T °C | 18 °C | | | | 17 °C | | | | 27°C | 28°C |
| | | RH % | 25% | | | | 60% | | | | 80% | 55% |
| | | AH | 3.2 g/kg | | | | 7.3 g/kg | | | | 18.1 g/kg | 13.1 g/kg |
| Water temperature IN | | °C | 55 | 50 | 45 | 40 | 55 | 50 | 45 | 40 | 7 | 7 |
| MINIMUM Air flow 60l/s (216m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 51 | 47 | 42 | 38 | 51 | 47 | 42 | 38 | 11 | 10 |
| | H ₂ O ΔP | kPa | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 12 | 13 | 14 |
| | Air temperature _{OUT} | °C | 52 | 47 | 43 | 38 | 52 | 47 | 43 | 38 | 13 | 11 |
| | Air RH _{OUT} | % | 4 | 5 | 6 | 8 | 9 | 11 | 14 | 18 | 100 | 95 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 9.3 | 8.0 |
| | Air ΔP | Pa | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 17 | 13 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 2.3 | 1.3 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.03 | 1.23 |
| | TOTAL POWER | kW | 2.48 | 2.14 | 1.8 | 1.47 | 2.56 | 2.22 | 1.88 | 1.54 | 2.64 | 2.15 |
| Air flow 80l/s (288m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 50 | 46 | 42 | 37 | 50 | 46 | 42 | 37 | 12 | 11 |
| | H ₂ O ΔP | kPa | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 12 | 13 | 14 |
| | Air temperature _{OUT} | °C | 50 | 46 | 42 | 37 | 50 | 46 | 41 | 37 | 14 | 13 |
| | Air RH _{OUT} | % | 4 | 5 | 6 | 8 | 9 | 12 | 15 | 19 | 100 | 93 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 10.3 | 8.6 |
| | Air ΔP | Pa | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 25 | 19 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 2.7 | 1.6 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.26 | 1.5 |
| | TOTAL POWER | kW | 3.14 | 2.72 | 2.29 | 1.86 | 3.25 | 2.82 | 2.39 | 1.96 | 3.13 | 2.58 |
| Air flow 100l/s (360m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 50 | 45 | 41 | 37 | 49 | 45 | 41 | 37 | 12 | |
| | H ₂ O ΔP | kPa | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 12 | 14 | |
| | Air temperature _{OUT} | °C | 49 | 45 | 40 | 36 | 49 | 44 | 40 | 36 | 16 | 14 |
| | Air RH _{OUT} | % | 4 | 6 | 7 | 9 | 10 | 13 | 16 | 20 | 99 | 91 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 11.1 | 9.1 |
| | Air ΔP | Pa | 18 | 17 | 17 | 17 | 18 | 17 | 17 | 17 | 34 | 25 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 3.1 | 1.7 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.42 | 1.74 |
| | TOTAL POWER | kW | 3.74 | 3.23 | 2.72 | 2.21 | 3.87 | 3.35 | 2.83 | 2.32 | 3.53 | 2.94 |
| MAXIMUM Air flow 111.1l/s (400 m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 49 | 45 | 41 | 37 | 49 | 45 | 41 | 38 | 11 | 11 |
| | H ₂ O ΔP | kPa | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 14 | 14 |
| | Air temperature _{OUT} | °C | 48 | 44 | 40 | 36 | 48 | 44 | 40 | 35 | 16 | 15 |
| | Air RH _{OUT} | % | 5 | 6 | 7 | 9 | 11 | 13 | 16 | 20 | 99 | 90 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 9.1 | 9.3 |
| | Air ΔP | Pa | 21 | 21 | 20 | 20 | 21 | 21 | 20 | 20 | 39 | 29 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 1.7 | 1.8 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.5 | 1.8 |
| | TOTAL POWER | kW | 4.06 | 3.5 | 2.95 | 2.4 | 4.18 | 3.63 | 3.07 | 2.51 | 3.73 | 3.11 |

Initial temperature and humidity outdoor/indoor: winter 2°C 70% R.H. / 20°C 60% R.H.; summer 35°C 50% R.H. / 25°C 50% R.H.
The calculations include the cold recovery efficiency of an enthalpy exchanger as extrapolated from the results provided by the PHI certification

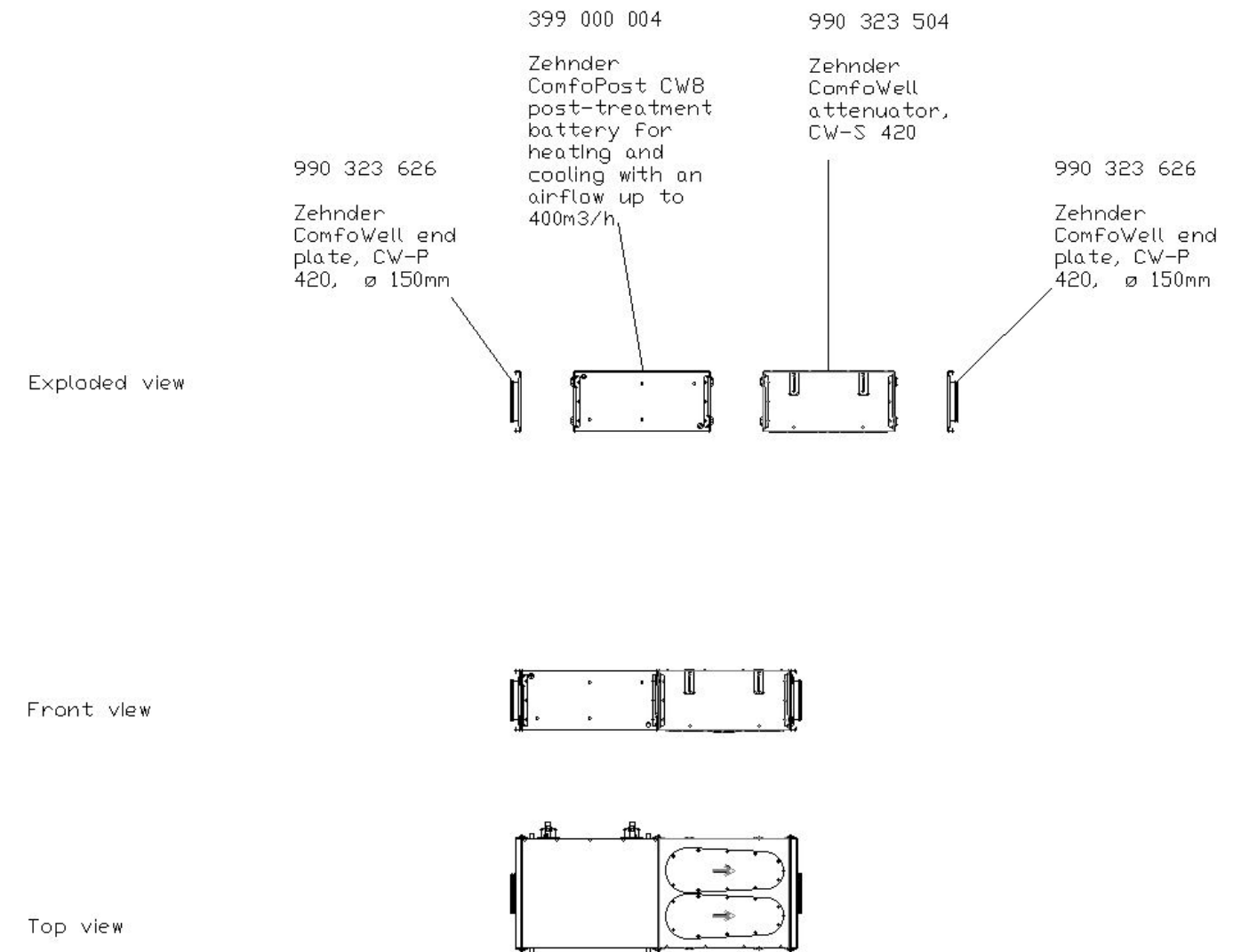
Performance Data



Schematics

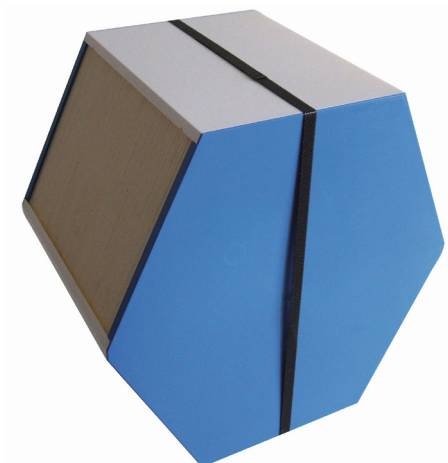


Example Connection



For Use With

Our range of ComfoPost products can be used in conjunction with our ComfoAir units, complete with enthalpy cube for improved sensible cooling capacity. The unit shall be manufactured by Zehnder.



**TO DOWNLOAD OUR ENTHALPY
CUBE DATASHEET**

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BIM/CAD Components

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Installation Instructions

If you would like to download the installation files for this or any other of our products then please visit our download page by clicking the link below.

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Consultant specification

Specification

The air to water exchanger shall be constructed of galvanised sheet steel with copper tubes and aluminum fins with hydrophilic treatment to enhance thermal transfer. It shall be connected to the MVHR units supply ductwork with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm. It shall have the option for horizontal or vertical mounting.

The unit shall be manufactured by Zehnder.

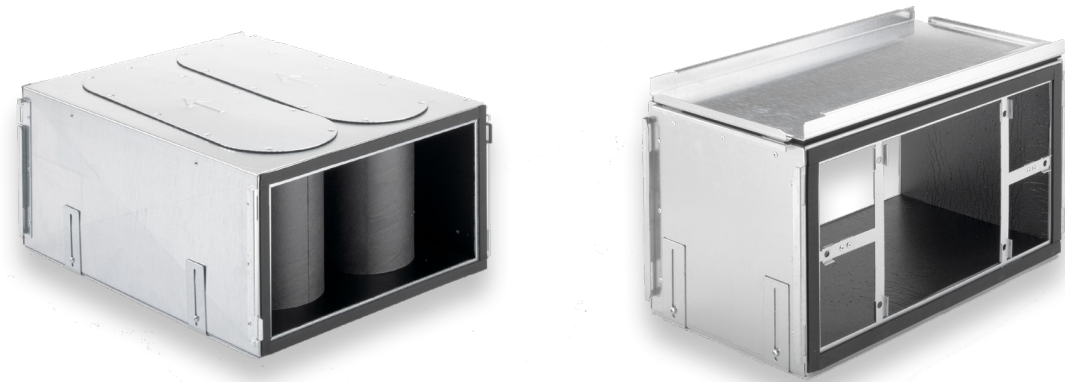
Zehnder ComfoWell 420



Comfowell 420

The Zehnder ComfoWell 420 is a modular system consisting of attenuators, fine grade filters and active carbon filters all integrated for use with a rigid or semi-rigid ductwork approach. With a width of 420mm it can be used for connecting up to 8 ComfoTube connections. The systems compact dimensions ensure good sound absorption and also make it easy to clean. Rigid pipe can be connected to the end plate securely by utilising the gasket seal connection. All other components are fitted using the locking slide connections to form an airtight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 >80% (F7) or ISO ePM1 >90% (F9) grade in addition to an odour neutralising active carbon filter.



Key Features

- Attenuator, fine grade filter, active carbon filter and manifold all combined into one space saving combination with the option to bespoke build exactly what is required.
- Easy to assemble thanks to its modular and compact design.

Article Numbers

| Description | Product Code |
|---|--------------|
| Attenuator | |
| Zehnder ComfoWell attenuator, CW-S 420 | 990 323 504 |
| Manifold | |
| Zehnder ComfoWell manifold box CW-D 420 | 990 323 620 |
| Filter Housing | |
| Zehnder ComfoWell filter housing CW-F 420 | 990 323 554 |
| Mounting Plates | |
| Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections | 990 323 621 |
| Zehnder ComfoWell mounting plate, CW-M 420, 8 x 90mm connections | 990 323 622 |
| Zehnder ComfoWell mounting plate, CW-M 420, 4 x 90mm + 4 x 75mm connections | 990 323 623 |
| End Plates | |
| Zehnder ComfoWell end plate, CW-P 420, ø 125mm | 990 323 625 |
| Zehnder ComfoWell end plate, CW-P 420, ø 150mm | 990 323 626 |
| Zehnder ComfoWell end plate, CW-P 420, ø 160mm | 990 323 627 |
| Zehnder ComfoWell end plate, CW-P 420, ø 180mm | 990 323 628 |
| Zehnder ComfoWell end plate, CW-P 420, ø 200mm | 990 323 629 |

Article Numbers

Spacer Frame

| | |
|---|-------------|
| Zehnder ComfoWell spacer frame, CW-DF 420 | 990 323 624 |
|---|-------------|

Mounting Set

| | |
|---|-------------|
| Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350 | 990 323 648 |
| Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q450/600 | 990 323 641 |

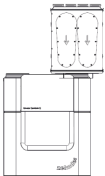
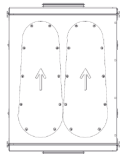
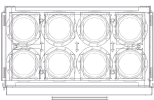
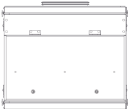
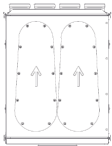
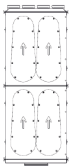
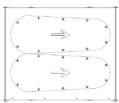
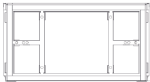

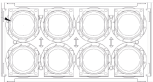

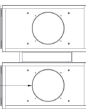
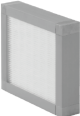
Filters

| | |
|--|-------------|
| Filter for ComfoWell 420, CW-F7 420, ISO ePM1 >80% (F7), 1 Piece | 990 323 650 |
| Filter for ComfoWell 420, CW-F9 420, ISO ePM1 >90% (F9), 1 Piece | 990 323 651 |
| Filter for ComfoWell 420, CW-AC 420, active carbon filter, 1 Piece | 990 323 652 |

Technical Specification

| | |
|--------------------------------------|--|
| Housing material | Galvanised Sheet Steel |
| Operating temperature range | -25 to +60 °C |
| Inner lining | Closed-cell melamine resin foam |
| Recommended maximum air volume | 88.8l/s (320 m³/h) at normal ventilation level |
| Air tightness class to EN 1507:2006 | C |
| Air tightness class to EN 12237:2003 | C |
| Fire rating to ISO13501 | C |

Example Connections

| <div>Combination Options</div> <div>Individual Components</div> | <div>ComfoAir Q350 right handed with mounting set, 2 x attenuators and 2 x 8 port ø 75mm mounting plates</div> <div></div> | <div>Stand alone attenuator with 2 x ø 160mm end plates</div> <div></div> | <div>Stand alone manifold with 1 x ø 160mm end plate and 8 x ø 75mm mounting plate</div> <div></div> | <div>Stand alone filter housing with 2 x ø 160mm</div> <div></div> | <div>Stand alone silencer and manifold combined with 1 x ø 160mm end plate and 8 x ø 75mm mounting plate</div> <div></div> | <div>Stand alone 2 x attenuator with 1 x ø 160mm end plate and 8 x ø 75mm mounting plate</div> <div></div> |
|--|---|--|---|---|---|---|
| <div>Attenuator</div> <div></div> <div>Article Number: 990 323 504</div> | 2 x Zehnder ComfoWell attenuator, CW-S 420 | 1 x Zehnder ComfoWell attenuator, CW-S 420 | — | — | 1 x Zehnder ComfoWell attenuator, CW-S 420 | 2 x Zehnder ComfoWell attenuator, CW-S 420 |
| <div>Manifold Box</div> <div></div> <div>Article Number: 990 323 620</div> | — | — | 1 x Zehnder ComfoWell manifold box, CW-D 420 | — | — | — |
| <div>Filter Housing</div> <div></div> <div>Article Number: 990 323 554</div> | — | — | — | 1 x Zehnder ComfoWell filter housing, CW-F 420 | — | — |
| <div>Mounting Plate -ø75</div> <div></div> <div>Article Number: 990 323 621</div> | 2 x Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections | — | 1 x Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections | — | 1 x Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections | 1 x Zehnder ComfoWell mounting plate, CW-M 420, 8 x 75mm connections |
| <div>End Plate - ø 160</div> <div></div> <div>Article Number: 990 323 627</div> | — | 2 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm | 1 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm | 2 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm | 1 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm | 1 x Zehnder ComfoWell end plate, CW-P 420, ø 160mm |
| <div>Mounting Set</div> <div></div> <div>Article Number: 990 323 648</div> | 1 x Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350 | — | — | — | — | — |
| <div>Filter</div> <div></div> <div>Article Number: 990 323 604</div> | — | — | — | 1 x Filter for ComfoWell 420, CW-F9 420, ISO ePM1 >90% (F9), 1 Piece | — | — |

Dimensions

Zehnder ComfoWell attenuator, CW-S 420

Article number: 990 323 504

Description

Attenuator:

Zehnder ComfoWell attenuator CW-S 420. Rectangular compact attenuator with highly efficient sound insulation combined with low pressure losses. The attenuator can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

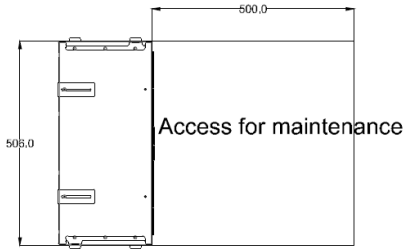
For cleaning purposes the sound absorbing element can be removed. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

Dimensions

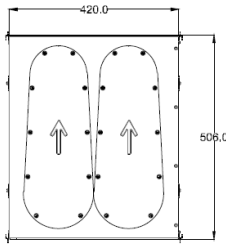
| | |
|--------|-------|
| Height | 506mm |
| Width | 436mm |
| Depth | 235mm |
| Weight | 6 kg |



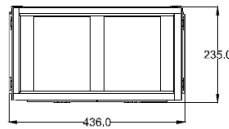
Side view



Front view



Top View



Zehnder ComfoWell manifold box CW-D 420

Article number: 990 323 620

Description

Manifold Box:

Zehnder ComfoWell manifold box CW-D 420. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for ComfoTube 75mm x 8 connections, 90mm x 8 connections or a combination of 90mm x 4 and 75mm x 4 connections.

The mounting plate can be mounted on the top or side of the manifold box. The airtight connection between components is via a clamping strip.

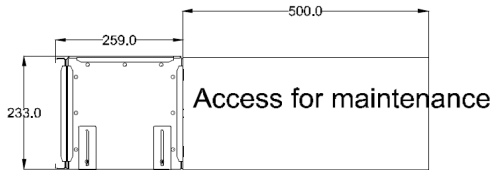
For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

Dimensions

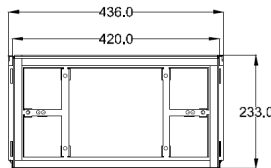
| | |
|--------|--------|
| Height | 233mm |
| Width | 436mm |
| Depth | 259 mm |
| Weight | 4.7 kg |



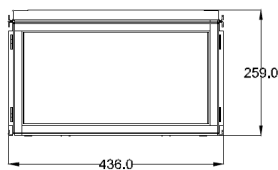
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell filter housing CW-F 420

Article number: 990 323 554

Description

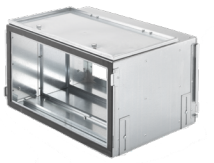
Filter Housing:

Zehnder ComfoWell filter housing CW-F 420. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

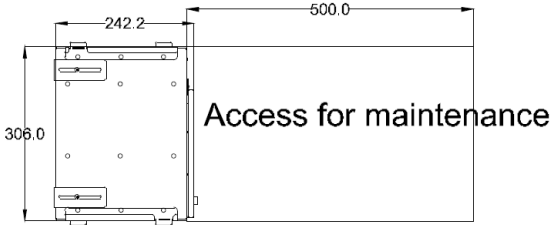
Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

Dimensions

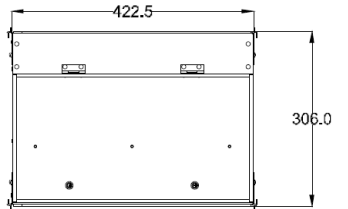
| | |
|--------|---------|
| Height | 306mm |
| Width | 436mm |
| Depth | 242.2mm |
| Weight | 1.32 kg |



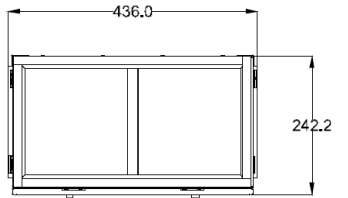
Side view



Front view



Top View



Zehnder ComfoWell mounting plate CW-M 420

Article number: 990 323 621

Description

Mounting Plate:

Zehnder ComfoWell mounting plate CW-M 420-8 x 75. Manifold mounting plate for connection of 8 x ComfoTube 75mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

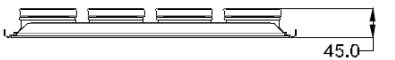
| | |
|--------|---------|
| Height | 45mm |
| Width | 436mm |
| Depth | 230mm |
| Weight | <1.5 kg |



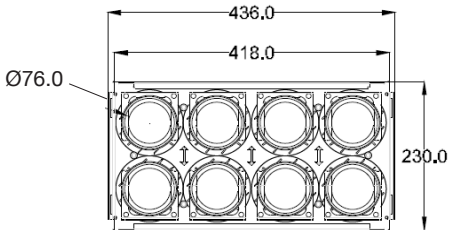
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell mounting plate CW-M 420

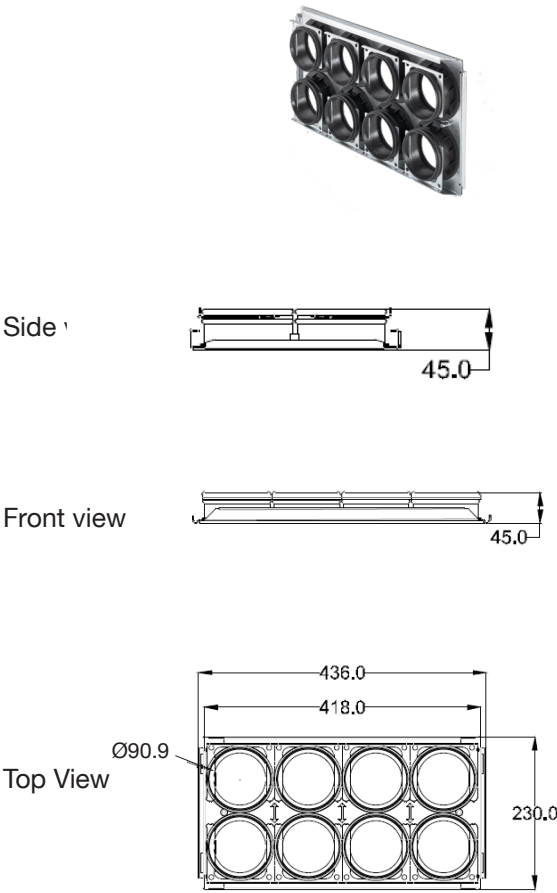
Article number: 990 323 622

Description
Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 420-8 x 90. Manifold mounting plate for connection of 8 x ComfoTube 90mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

| | |
|--------|---------|
| Height | 45mm |
| Width | 436mm |
| Depth | 230mm |
| Weight | <1.5 kg |



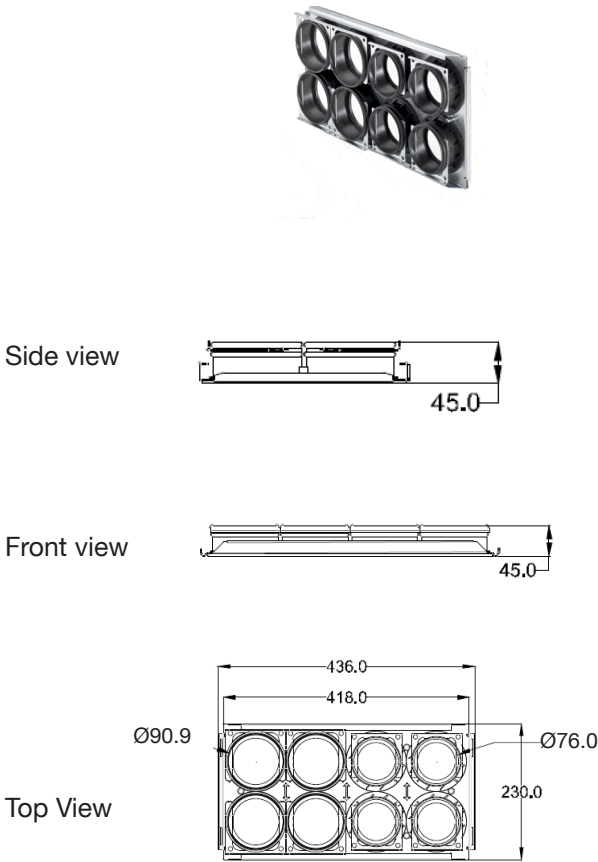
Zehnder ComfoWell mounting plate CW-M 420

Article number: 990 323 623

Description
Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 2 x 90 and 4 x 75. Manifold mounting plate for connection of 2 x 90 and 4 x 75 semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

| | |
|--------|----------|
| Height | 45mm |
| Width | 436mm |
| Depth | 230mm |
| Weight | <1.53 kg |



Dimensions

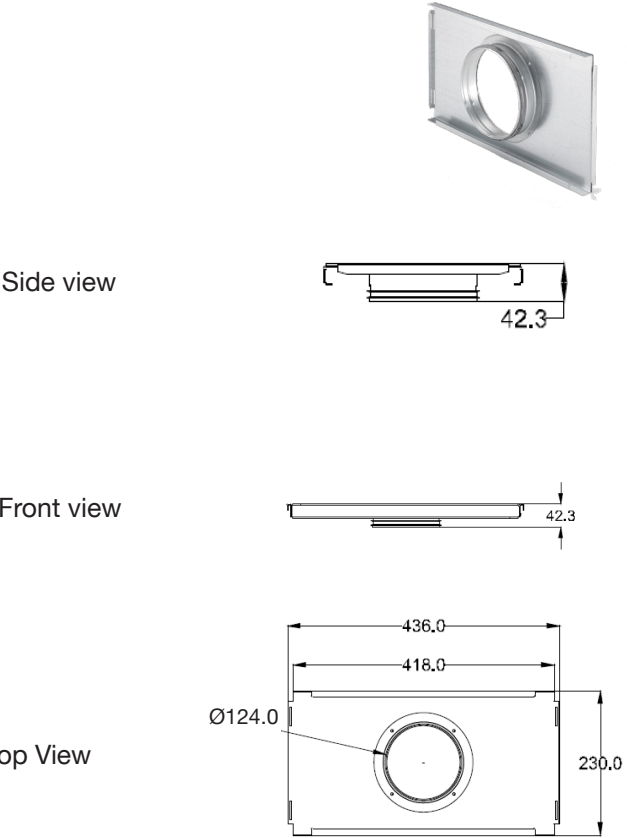
Zehnder ComfoWell end plate CW-P 420 -ø 125

Article number: 990 323 625

Description
End Plate:
Zehnder ComfoWell end plate CW-P 420 - DN125 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 436mm |
| Depth | 230mm |
| Diameter | 125mm |



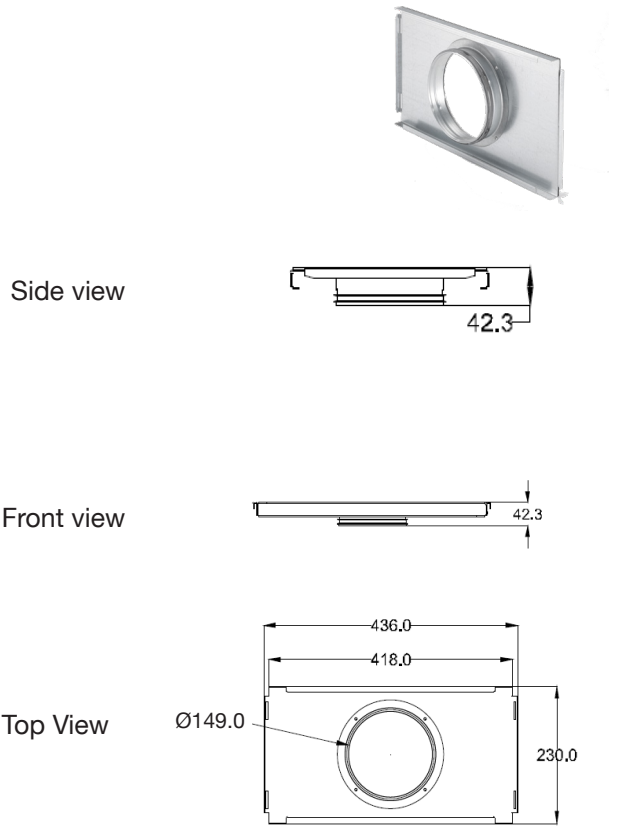
Zehnder ComfoWell end plate CW-P 420 -ø 150mm

Article number: 990 323 626

Description
End Plate:
Zehnder ComfoWell end plate CW-P 420 - DN150 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 436mm |
| Depth | 230mm |
| Diameter | 150mm |



Dimensions

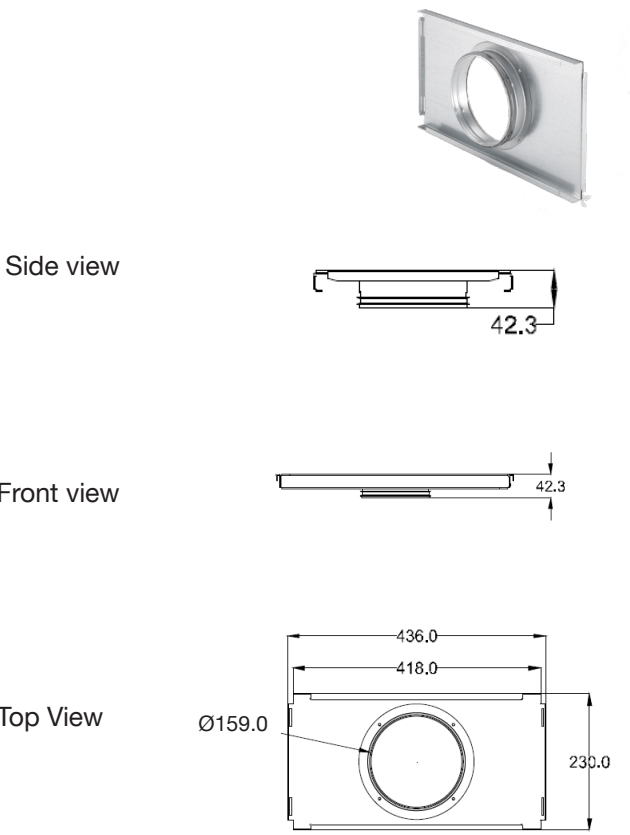
Zehnder ComfoWell end plate CW-P
420 -ø 160mm

Article number: 990 323 627

Description
End Plate:
Zehnder ComfoWell end plate CW-P 420 - DN160 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 436mm |
| Depth | 230mm |
| Diameter | 160mm |



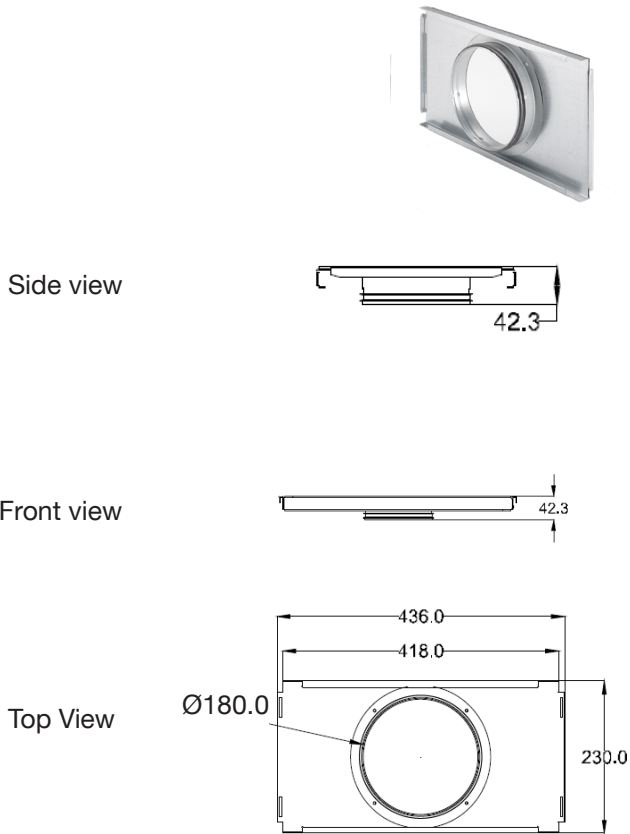
Zehnder ComfoWell end plate CW-P
420 -ø 180mm

Article number: 990 323 628

Description
End Plate:
Zehnder ComfoWell end plate CW-P 420 - DN180 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 436mm |
| Depth | 230mm |
| Diameter | 180mm |



Dimensions

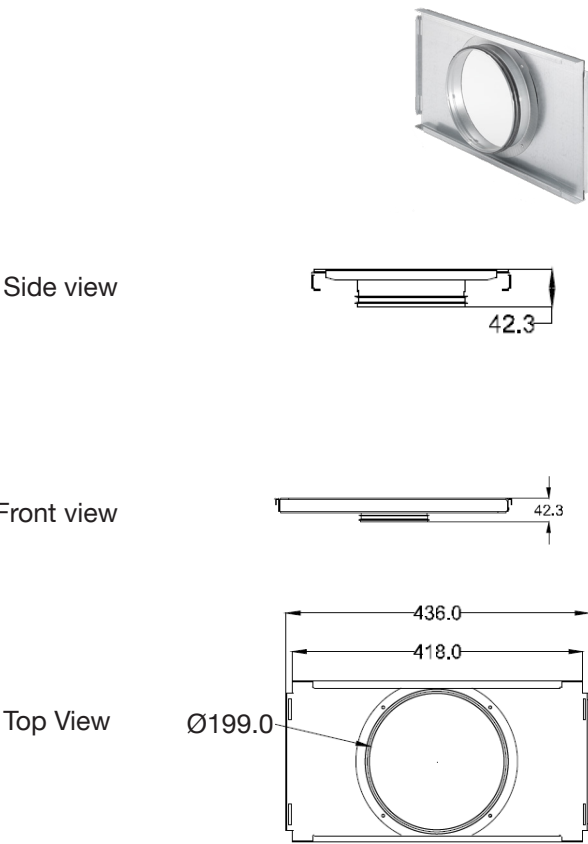
Zehnder ComfoWell end plate CW-P
420 -ø 200mm

Article number: 990 323 629

Description
End Plate:
Zehnder ComfoWell end plate CW-P 420 - DN200 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 436mm |
| Depth | 230mm |
| Diameter | 200mm |



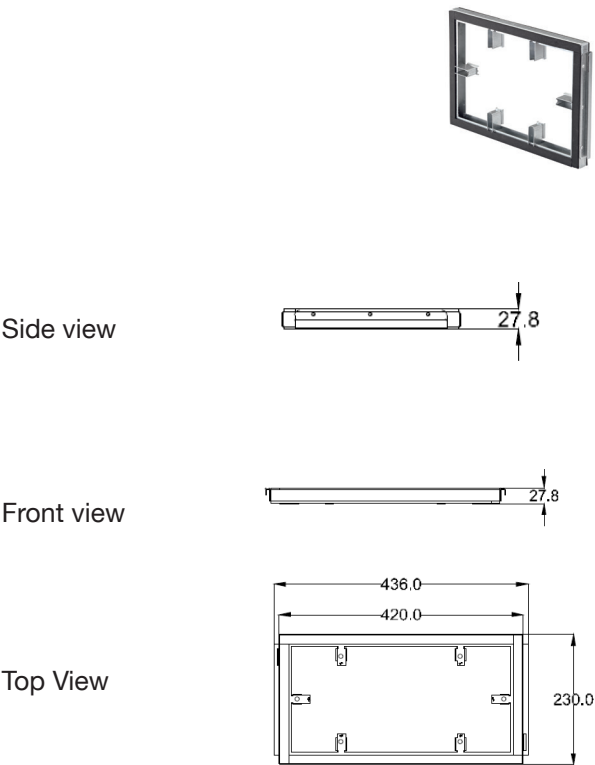
Zehnder ComfoWell spacer frame,
CW-DF 420

Article number: 990 323 624

Description
Zehnder ComfoWell spacer frame CW-DF420. Rectangular frame for use in the event of uneven surfaces when connecting components and mounting plate (concreted in place) are at 90 degrees. The spacer frame includes the necessary mounting accessories.

Dimensions

| | |
|--------|---------|
| Height | 27.8mm |
| Width | 436mm |
| Depth | 230mm |
| Weight | 1.12 kg |



Dimensions

Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q350

Article number: 990 323 648

Description

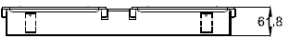
Mounting set:

A special mounting set is available for the Zehnder ComfoWell 420 for direct mounting to the ComfoAir Q350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

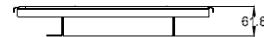
Dimensions

| | |
|--------|---------|
| Height | 61.8mm |
| Width | 436mm |
| Depth | 510.5mm |
| Weight | 4.04 kg |

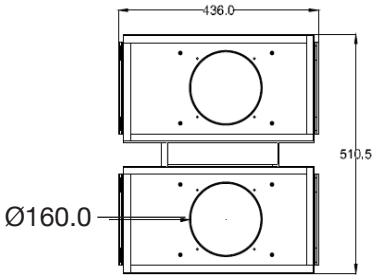
Side view



Front view



Top View



Zehnder ComfoWell mounting set, CW-K 420, for Zehnder ComfoAir Q450/600

Article number: 990 323 641

Description

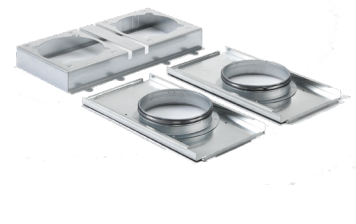
Mounting set:

A special mounting set is available for the Zehnder ComfoWell 420 for direct mounting to the ComfoAir Q450/ ComfoAir Q600 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Dimensions

| | |
|--------|---------|
| Height | 61.8mm |
| Width | 436mm |
| Depth | 510.5mm |
| Weight | 4.04 kg |

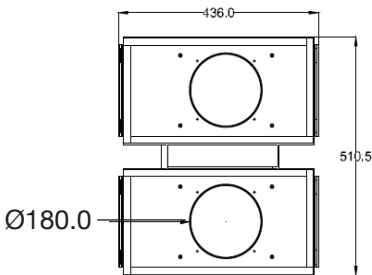
Side view



Front view

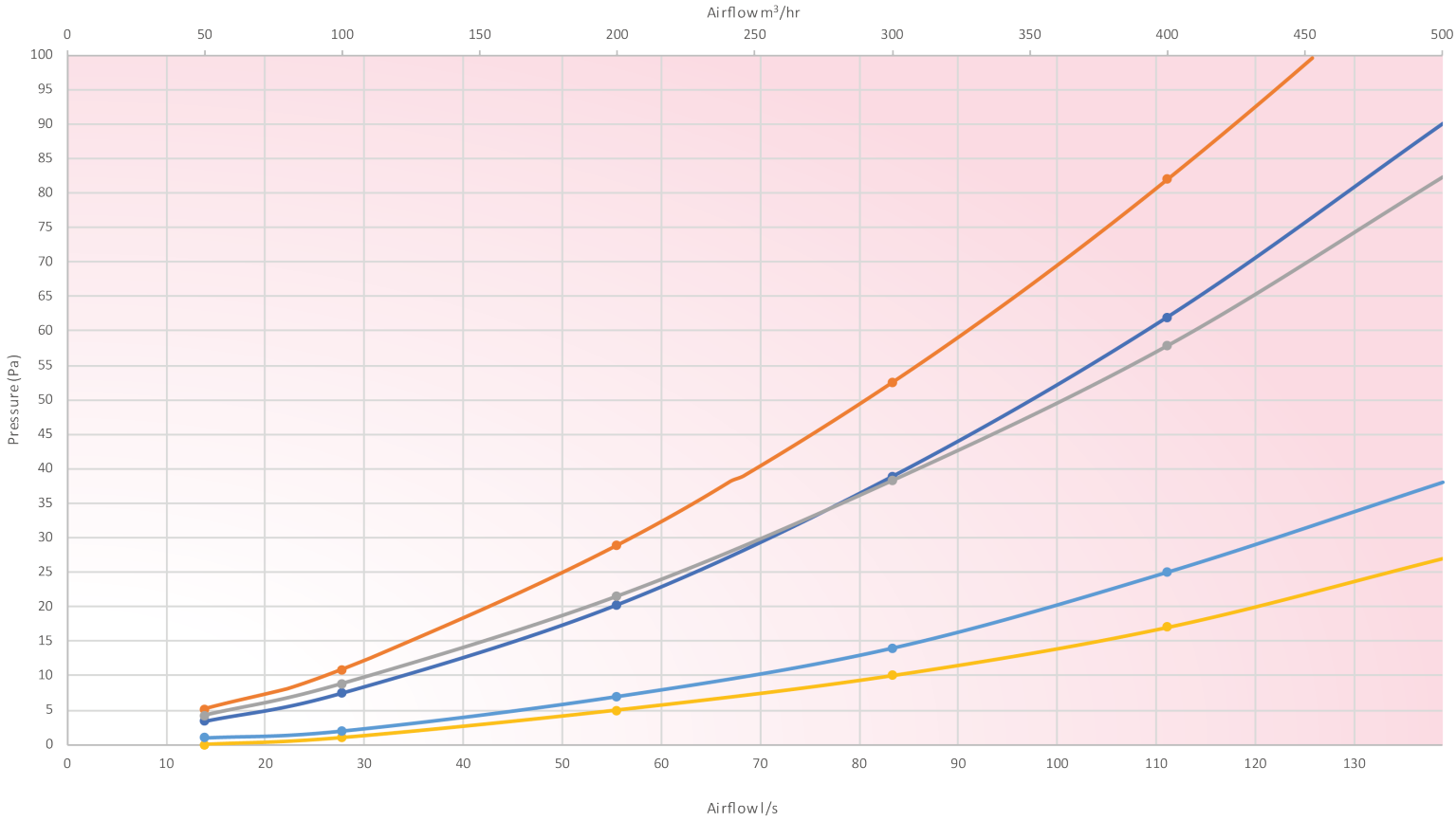


Top View



Pressure Curve

Comfowell 420



1 x Attenuator (CW-S 420) with 2 x 160mm end plates (CW-P 420)

2 x Attenuator (CW-S 420) stacked with 2 x 160mm end plates (CW-P 420)

1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-F7 420)

1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-AC 420)

1 x Filter housing (CW-F 420) with 2 x 160mm end plates (CW-P 420) and filter (CW-F9 420)

Sound Data

Comfowell 420

| Combination | Octave Band (Hz) Insertion Loss, dB | | | | | | | |
|--|-------------------------------------|------|------|------|------|------|------|------|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 1 x Attenuator (CW-S 420) with 2 x 160mm end plates (CW-P 420) | 3.0 | 4.6 | 6.4 | 10.6 | 8,1 | 14,4 | 7,8 | 6,7 |
| 2 x Attenuator (CW-S 420) stacked with 2 x 160mm end plates (CW-P 420) | 4,8 | 11,7 | 16,7 | 23,3 | 17,3 | 32,4 | 21,8 | 18,3 |

For use with

Our range of Comfowell units can be used in conjunction with our Zehnder ComfoTube ø 75mm and ø 90mm semi-rigid ductwork.



**TO VIEW OUR COMFOTUBE
INFORMATION**

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BIM/CAD Components

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CLICK HERE

Installation Instructions

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Consultant specification

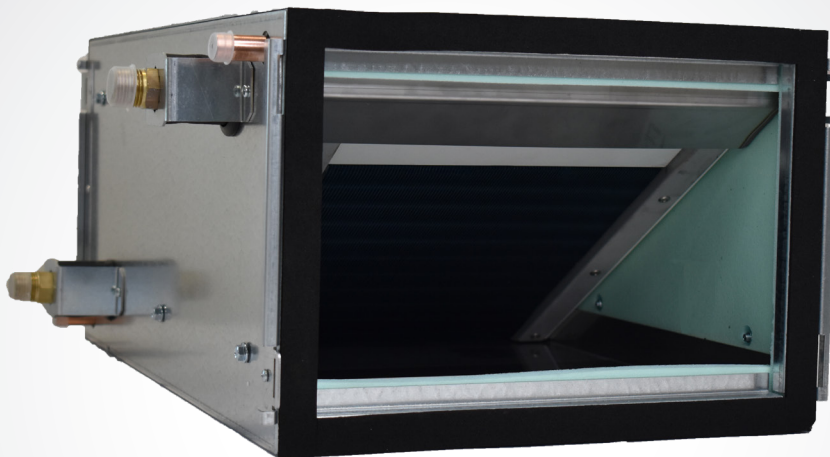
Specification

The semi-rigid ductwork manifold shall be constructed of galvanised sheet steel with a closed-cell melamine resin foam inner lining to prevent dust collection and have a fire class C rating according to EN ISO13501.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm.

It shall have the option of a mounting set for direct connection to the mechanical ventilation with heat recovery unit. The components shall be tested to BS EN 1507:2006 and BS EN 12237:2003 for airtightness and have removable elements to provide access for cleaning.

Zehnder ComfoPost CW10*



ComfoPost CW10

The Zehnder ComfoPost is an air to water exchanger for use with ComfoWell air distribution connections. The ComfoWell connections allows for selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to attached. The ComfoPost is available in a variety of sizes to heat or cool the air supplied by the Zehnder ventilation system.

The ComfoPost units are suitable for a wide range of airflows up to 166l/s (600m³/hr), the CW10 is suitable for airflows up to 138.9l/s (500m³/hr) The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

Key Features

- Ideal for use with reversible heat pumps or chillers to meet SAP 10 or TM59 overheating demands
- Low pressure losses
- Filtered fresh supply air, not recycled stale air
- Suitable for use with the unique modular ComfoWell manifolds
- Suitable for horizontal or vertical installation
- Condensation water tray and drain as standard
- Suitable for Passive House application
- Corrosion resistant

Article Numbers

| Description | Product Code |
|---|--------------|
| Zehnder ComfoPost CW10 post-treatment battery for heating and cooling with an airflow up to 500m³/h | 398 480 003 |

Technical Specification

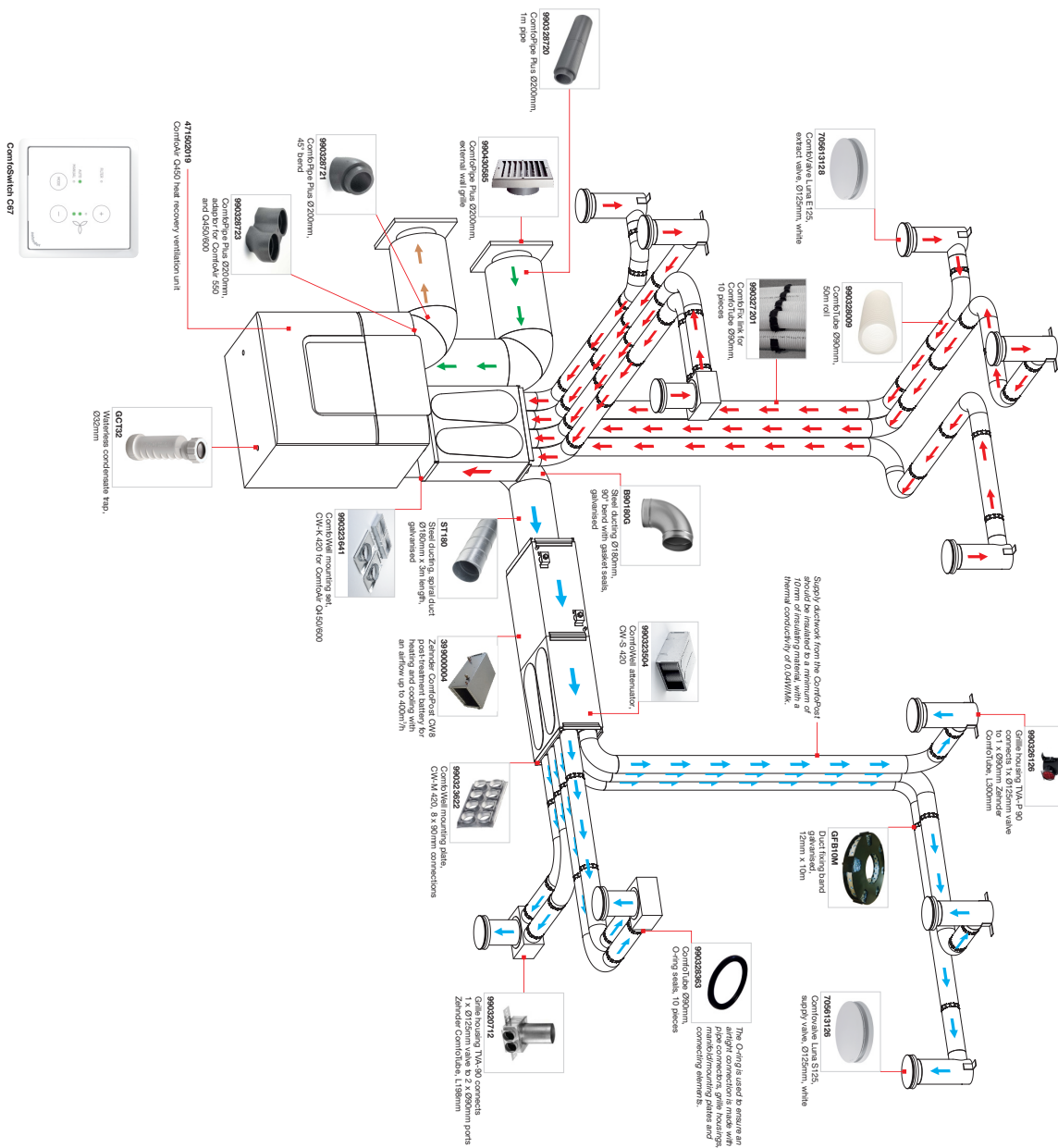
| | |
|--|---|
| Height | 230mm |
| Width | 520mm |
| Depth | 520mm |
| Water connection diameter (ø) | 1/2" |
| Water connection type | BSPT male thread |
| Condensate drain diameter OD (ø) | 14mm |
| Condensate connection type | Worm drive clip to fix to hose or crimped to copper pipe |
| ComfoWell range | ComfoWell 520 |
| ComfoWell rigid round air connection options (ø) | 150mm / 160mm / 180mm / 200mm |
| ComfoWell semi-rigid air connection options (ø) | 10 x 75mm / 10 x 90mm / 4 x 90mm + 6 x 75mm |
| Material | Casing: Galvanised sheet steel Tubes: Copper Fins: Aluminium with hydrophilic treatment |
| Recommended operating water temperature range | 7 to 55 °C |
| Recommended maximum operating air flow | <138.9l/s (<500m³/hr) |
| Maximum thermal heating output | 5.21kW* |
| Maximum thermal cooling output | 4.57kW* |
| Maximum operating water pressure? | 6 bar |
| Water volume capacity | 1 Litres |
| Maintenance free | Yes |
| Weight | 19 kg |

*Total capacity (sensible and latent) based on test conditions shown in the Performance Data table

3D System Layout

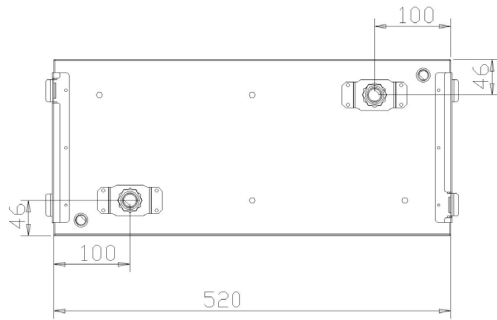
Generic Example

ComfoPost and ComfoTube Ø90mm Semi-Rigid Ductwork



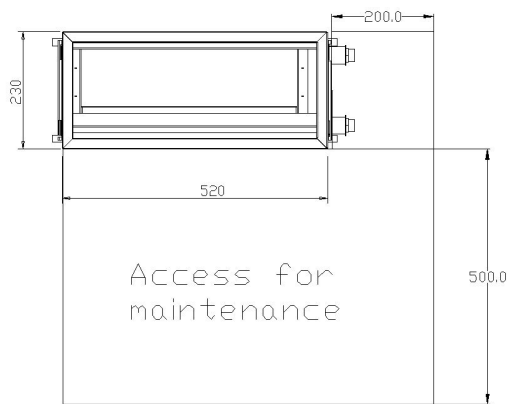
Dimensions

Rear View

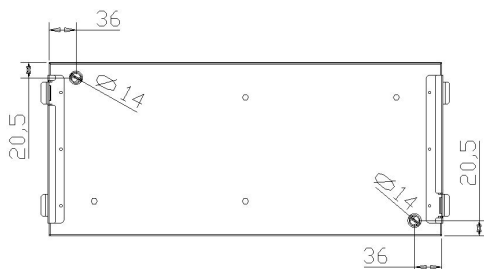


| | |
|--------|-------|
| Height | 230mm |
| Width | 520mm |
| Depth | 520mm |
| Weight | 19 kg |

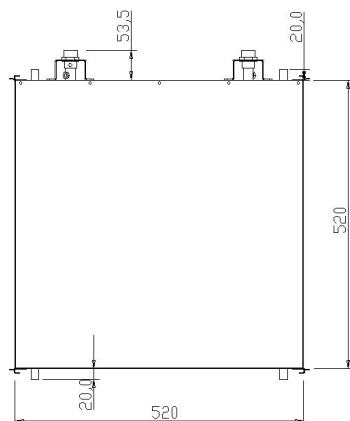
Side View



Front View



Top View

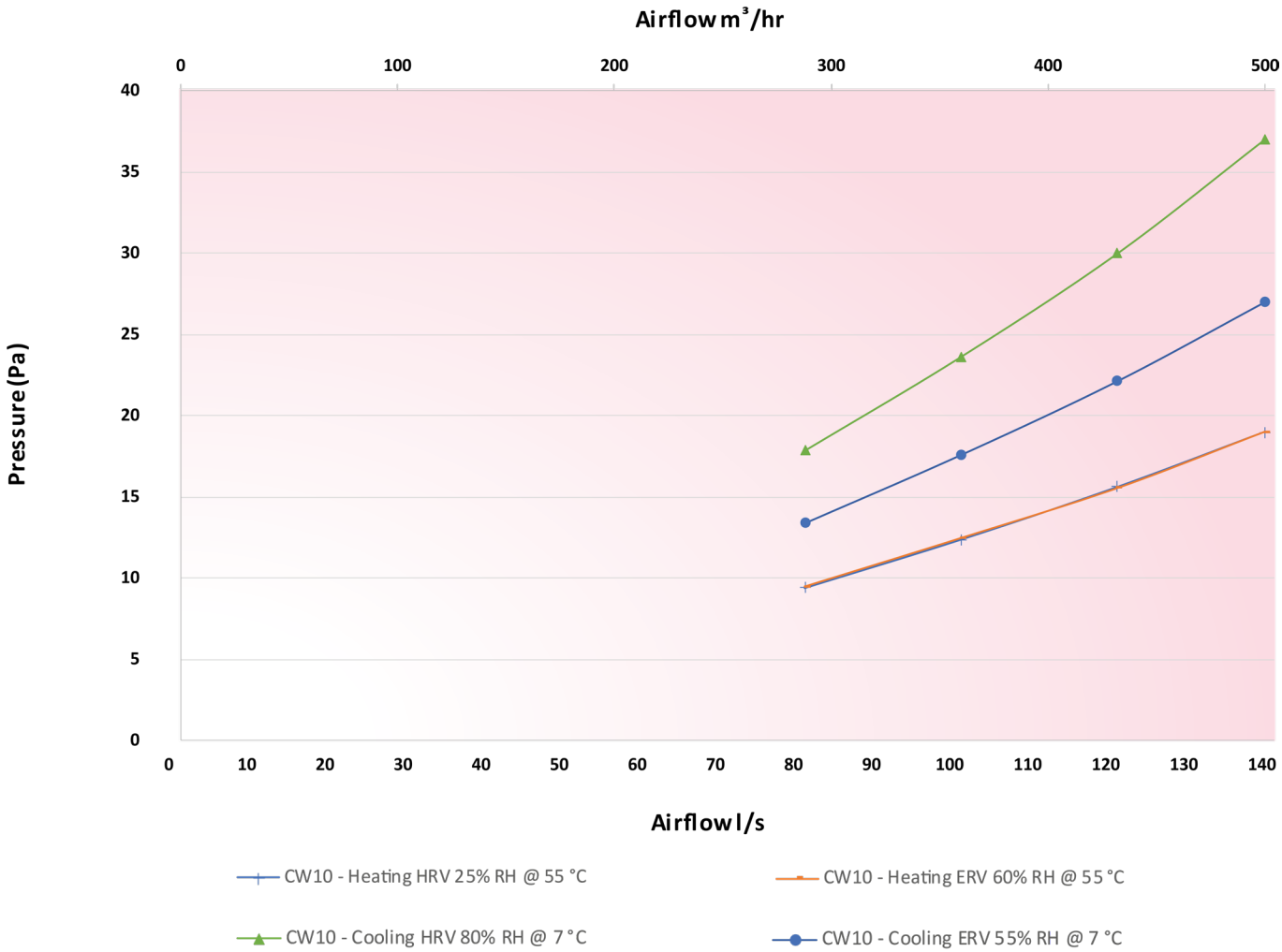


Performance Data

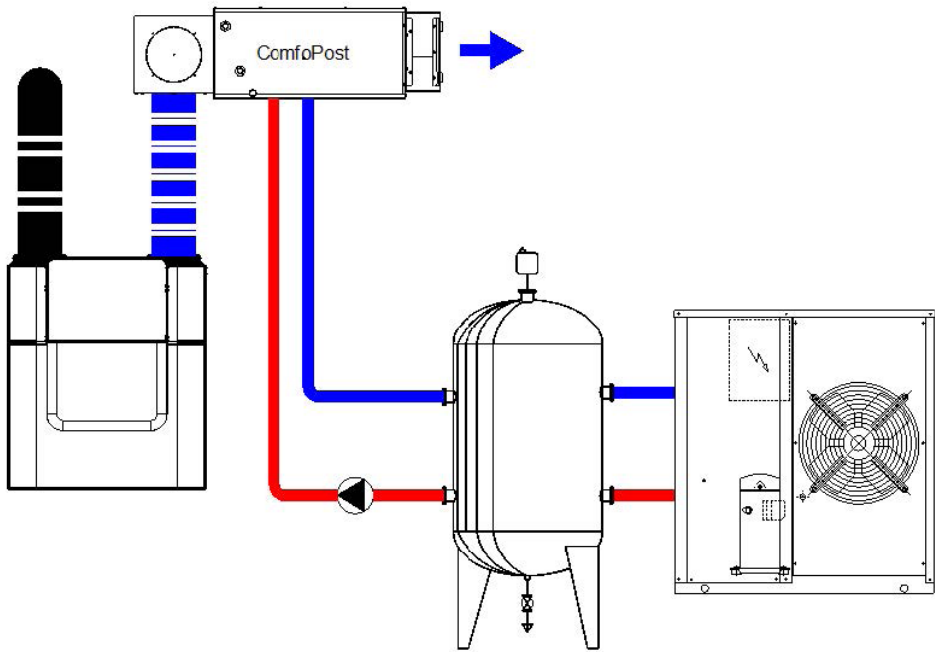
| Air conditions IN to ComfoPost | | | Heating | | | | | | | | Cooling | |
|---|---|------|---------------|------|------|------|---------------|------|------|------|-----------|-----------|
| | | | HRV exchanger | | | | ERV exchanger | | | | HRV | ERV |
| | | T °C | 18 °C | | | | 17 °C | | | | 27 °C | 28 °C |
| | | RH % | 25% | | | | 60% | | | | 80% | 55% |
| Water temperature IN | | AH | 3.2 g/kg | | | | 7.3 g/kg | | | | 18.1 g/kg | 13.1 g/kg |
| Water temperature IN | | °C | 55 | 50 | 45 | 40 | 55 | 50 | 45 | 40 | 7 | 7 |
| MINIMUM Air flow 80l/s (288m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 50 | 46 | 42 | 37 | 50 | 46 | 41 | 37 | 12 | 11 |
| | H ₂ O ΔP | kPa | 12 | 12 | 13 | 13 | 12 | 13 | 13 | 13 | 16 | 16 |
| | Air temperature _{OUT} | °C | 52 | 47 | 42 | 38 | 51 | 47 | 42 | 38 | 13 | 12 |
| | Air RH _{OUT} | % | 4 | 5 | 6 | 8 | 9 | 11 | 14 | 18 | 100 | 95 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 9.6 | 8.2 |
| | Air ΔP | Pa | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 18 | 13 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 3 | 1.7 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.33 | 1.59 |
| | TOTAL POWER | kW | 3.27 | 2.82 | 2.38 | 1.94 | 3.38 | 2.93 | 2.48 | 2.04 | 3.41 | 2.78 |
| Air flow 100l/s (360m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 49 | 45 | 41 | 37 | 49 | 45 | 41 | 36 | 13 | 12 |
| | H ₂ O ΔP | kPa | 12 | 13 | 13 | 13 | 12 | 13 | 13 | 13 | 15 | 16 |
| | Air temperature _{OUT} | °C | 50 | 46 | 41 | 37 | 50 | 46 | 41 | 37 | 15 | 13 |
| | Air RH _{OUT} | % | 4 | 5 | 6 | 8 | 9 | 12 | 15 | 19 | 100 | 93 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 10.4 | 8.7 |
| | Air ΔP | Pa | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 24 | 18 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 3.4 | 1.9 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.55 | 1.86 |
| | TOTAL POWER | kW | 3.93 | 3.39 | 2.86 | 2.32 | 4.05 | 3.52 | 2.98 | 2.44 | 3.86 | 3.19 |
| Air flow 120l/s (432m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 48 | 44 | 40 | 36 | 48 | 44 | 40 | 36 | 13 | 12 |
| | H ₂ O ΔP | kPa | 12 | 13 | 13 | 13 | 12 | 12 | 13 | 13 | 15 | 15 |
| | Air temperature _{OUT} | °C | 49 | 45 | 41 | 36 | 49 | 45 | 40 | 36 | 16 | 14 |
| | Air RH _{OUT} | % | 4 | 5 | 7 | 9 | 10 | 12 | 16 | 19 | 99 | 92 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 11.0 | 9.1 |
| | Air ΔP | Pa | 16 | 15 | 15 | 15 | 16 | 16 | 15 | 15 | 30 | 22 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 3.7 | 2.1 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.7 | 2.09 |
| | TOTAL POWER | kW | 4.52 | 3.91 | 3.29 | 2.67 | 4.67 | 4.05 | 3.43 | 2.81 | 4.25 | 3.54 |
| MAXIMUM Air flow 138.9l/s (500 m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 48 | 44 | 40 | 36 | 47 | 44 | 40 | 36 | 14 | 12 |
| | H ₂ O ΔP | kPa | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 16 | 16 |
| | Air temperature _{OUT} | °C | 48 | 44 | 40 | 36 | 48 | 44 | 39 | 35 | 16 | 15 |
| | Air RH _{OUT} | % | 5 | 6 | 7 | 9 | 11 | 13 | 16 | 20 | 99 | 90 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 11.6 | 9.4 |
| | Air ΔP | Pa | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 37 | 27 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 3.9 | 2.2 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.83 | 2.3 |
| | TOTAL POWER | kW | 5.06 | 4.37 | 3.67 | 2.98 | 5.21 | 4.52 | 3.82 | 3.13 | 4.57 | 3.82 |

Initial temperature and humidity outdoor/indoor: winter 2°C 70% R.H. / 20°C 60% R.H.; summer 35°C 50% R.H. / 25°C 50% R.H.
The calculations include the cold recovery efficiency of an enthalpy exchanger as extrapolated from the results provided by the PHI certification

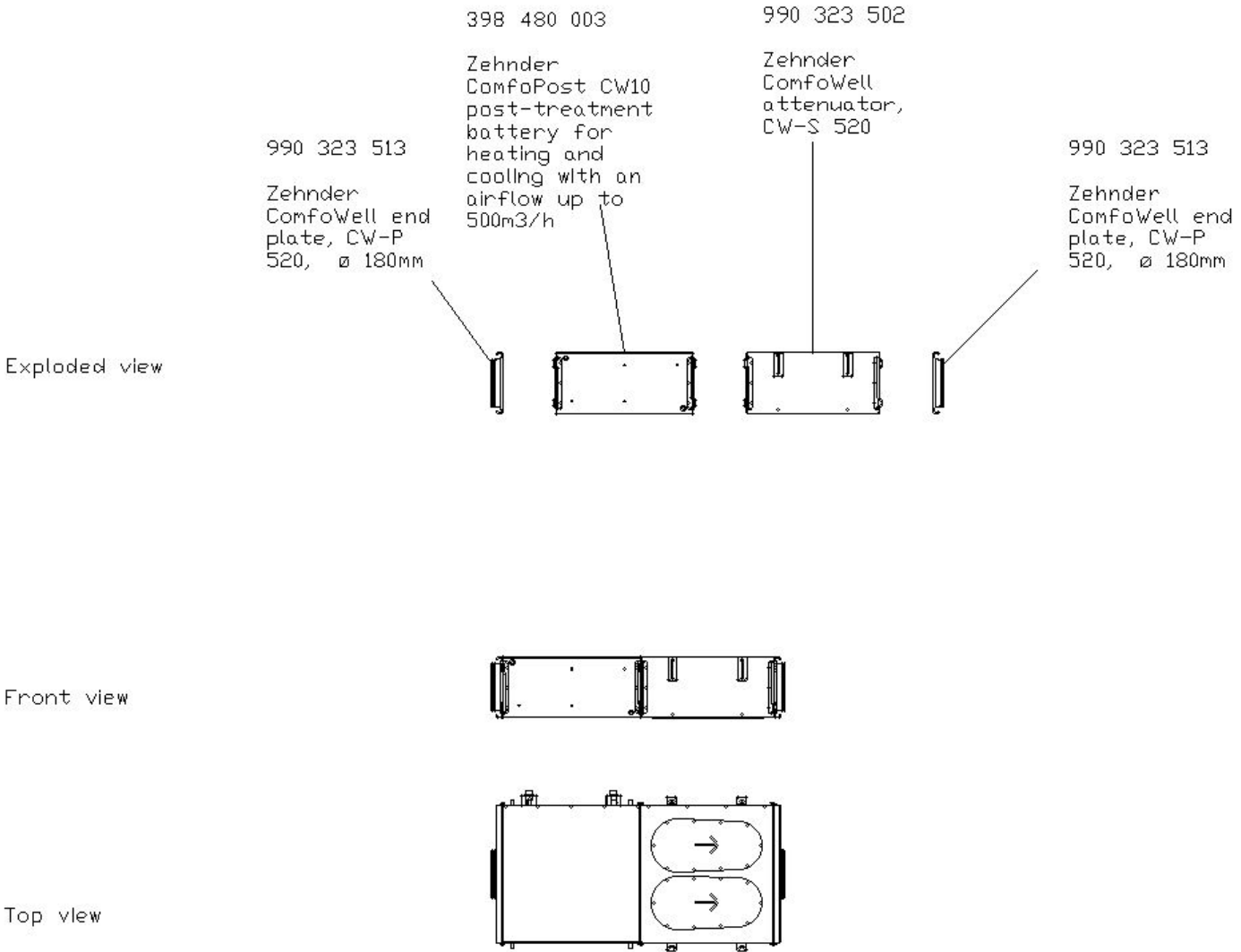
Performance Data



Schematics

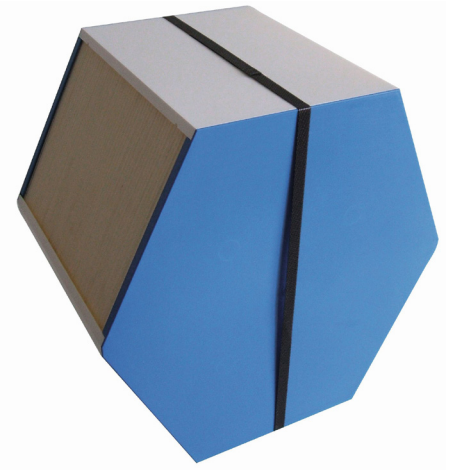


Example Connection



For Use With

Our range of ComfoPost products can be used in conjunction with our ComfoAir units, complete with enthalpy cube for improved sensible cooling capacity. The unit shall be manufactured by Zehnder.



**TO DOWNLOAD OUR ENTHALPY
CUBE DATASHEET**
CLICK HERE

BIM/CAD Components

If you would like to download the BIM / CAD files for this or any other of our products then please visit our BIM library.

TO VISIT OUR BIM/CAD LIBRARY
CLICK HERE

Installation Instructions

If you would like to download the installation files for this or any other of our products then please visit our download page by clicking the link below.

TO VISIT OUR DOWNLOAD PAGE
CLICK HERE

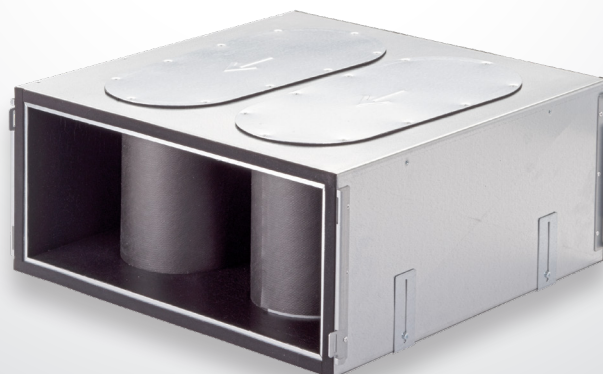
Consultant specification

Specification

The air to water exchanger shall be constructed of galvanised sheet steel with copper tubes and aluminum fins with hydrophilic treatment to enhance thermal transfer. It shall be connected to the MVHR units supply ductwork with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm. It shall have the option for horizontal or vertical mounting.

The unit shall be manufactured by Zehnder.

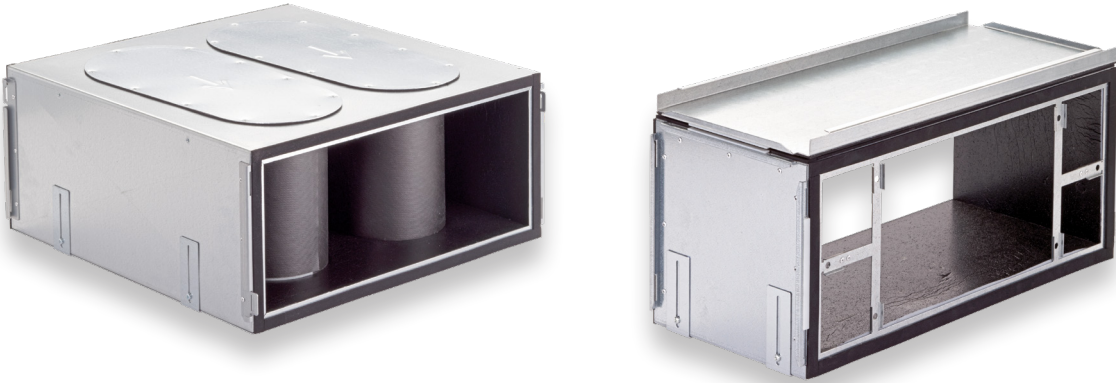
Zehnder ComfoWell 520



Comfowell 520

The Zehnder ComfoWell 520 is a modular system consisting of attenuators, fine grade filters and active carbon filters all integrated for use with a rigid or semi-rigid ductwork approach. With a width of 520mm it can be used for connecting up to 10 ComfoTube connections. The systems compact dimensions ensure good sound absorption and also make it easy to clean. Rigid pipe can be connected to the end plate securely by utilising the gasket seal connection. All other components are fitted using the locking slide connections to form an airtight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 >80% (F7) or ISO ePM1 >90% (F9) grade in addition to an odour neutralising active carbon filter.



Key Features

- Attenuator, fine grade filter, active carbon filter and manifold all combined into one space saving combination with the option to bespoke build exactly what is required.
- Easy to assemble thanks to its modular and compact design.

Article Numbers

| Description | Product Code |
|---|--------------|
| Attenuator | |
| Zehnder ComfoWell attenuator, CW-S 520 | 990 323 502 |
| Manifold | |
| Zehnder ComfoWell manifold box CW-D 520 | 990 323 532 |
| Filter Housing | |
| Zehnder ComfoWell filter housing CW-F 520 | 990 323 552 |
| Mounting Plates | |
| Zehnder ComfoWell mounting plate, CW-M 520, 10 x 75mm connections | 990 323 614 |
| Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90mm connections | 990 323 615 |
| End Plates | |
| Zehnder ComfoWell end plate, CW-P 520, ø 150mm | 990 323 568 |
| Zehnder ComfoWell end plate, CW-P 520, ø 160mm | 990 323 564 |
| Zehnder ComfoWell end plate, CW-P 520, ø 180mm | 990 312 513 |
| Zehnder ComfoWell end plate, CW-P 520, ø 200mm | 990 312 514 |

Article Numbers

Spacer Frame

| | |
|---|-------------|
| Zehnder ComfoWell spacer frame, CW-DF 520 | 990 323 539 |
|---|-------------|

Mounting Set

| | |
|---|-------------|
| Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q350 | 990 323 649 |
| Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q450/600 | 990 323 646 |

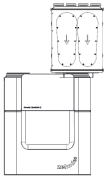
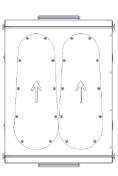
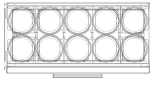

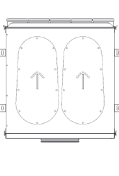
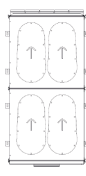
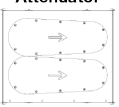


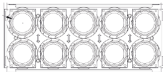
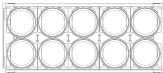
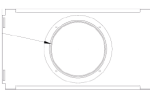
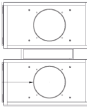

Filters

| | |
|--|-------------|
| Filter for ComfoWell 520, CW-F7 520, ISO ePM1 >80% (F7), 1 Piece | 990 323 606 |
| Filter for ComfoWell 520, CW-F9 520, ISO ePM1 >90% (F9), 1 Piece | 990 323 607 |
| Filter for ComfoWell 520, CW-AC 520, active carbon filter, 1 Piece | 990 323 608 |

Technical Specification

| | |
|--------------------------------------|---|
| Housing material | Galvanised Sheet Steel |
| Operating temperature range | -25 to +60 °C |
| Inner lining | Closed-cell melamine resin foam |
| Recommended maximum air volume | 111.1l/s (400 m³/h) at normal ventilation level |
| Air tightness class to EN 1507:2006 | C |
| Air tightness class to EN 12237:2003 | C |
| Fire rating to ISO13501 | C |

Example Connections

| <div>Combination Options</div> <div>Individual Components</div> | ComfoAir Q450 right handed with mounting set, 2 x attenuators and 2 x 10 port ø 75mm mounting plates | Stand alone attenuator with 2 x ø 180mm end plates | Stand alone manifold with 1 x ø 180mm end plate and 10 x ø 90mm mounting plate | Stand alone filter housing with 2 x ø 180mm end plate | Stand alone silencer and manifold combined with 1 x ø 180mm end plate and 10 x ø 90mm mounting plate | Stand alone 2 x attenuator with 1 x ø 180mm end plate and 10 x ø 90mm mounting plate |
|---|--|---|---|--|--|--|
| |  |  |  |  |  |  |
| <div>Attenuator</div>  <div>Article Number: 990 323 502</div> | 2 x Zehnder ComfoWell attenuator, CW-S 520 | 1 x Zehnder ComfoWell attenuator, CW-S 520 | — | — | 1 x Zehnder ComfoWell attenuator, CW-S 520 | 2 x Zehnder ComfoWell attenuator, CW-S 520 |
| <div>Manifold Box</div>  <div>Article Number: 990 323 532</div> | — | — | 1 x Zehnder ComfoWell manifold box, CW-D 520 | — | — | — |
| <div>Filter Housing</div>  <div>Article Number: 990 323 552</div> | — | — | — | 1 x Zehnder ComfoWell filter housing, CW-F 520 | — | — |
| <div>Mounting Plate -ø75</div>  <div>Article Number: 990 323 614</div> | 2 x Zehnder ComfoWell mounting plate, CW-M 520, 10 x 75mm connections | — | — | — | — | — |
| <div>Mounting Plate -ø90</div>  <div>Article Number: 990 323 615</div> | — | — | 1 x Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90mm connections | — | 1 x Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90mm connections | 1 x Zehnder ComfoWell mounting plate, CW-M 520, 10 x 90mm connections |
| <div>End Plate - ø 180</div>  <div>Article Number: 990 323 513</div> | — | 2 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm | 1 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm | 2 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm | 1 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm | 1 x Zehnder ComfoWell end plate, CW-P 520, ø 180mm |
| <div>Mounting Set</div>  <div>Article Number: 990 323 646</div> | 1 x Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q450/600 | — | — | — | — | — |
| <div>Filter</div>  <div>Article Number: 990 323 607</div> | — | — | — | 1 x Filter for ComfoWell 520, CW-F9 520, ISO ePM1 >90% (F9), 1 Piece | — | — |

Dimensions

Zehnder ComfoWell attenuator, CW-S 520

Article number: 990 323 502

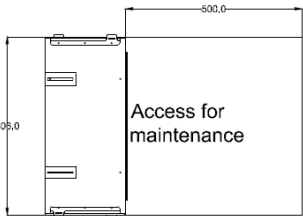
Description
Attenuator:
Zehnder ComfoWell attenuator CW-S 520. Rectangular compact attenuator with highly efficient sound insulation combined with low pressure losses. The attenuator can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

For cleaning purposes the sound absorbing element can be removed. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

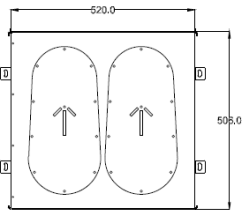
| | |
|--------|---------|
| Height | 506mm |
| Width | 536mm |
| Depth | 232.5mm |
| Weight | 8.2 kg |



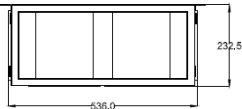
Side view



Front view



Top View



Zehnder ComfoWell manifold box CW-D 520

Article number: 990 323 532

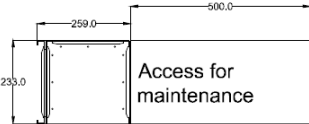
Description
Manifold Box:
Zehnder ComfoWell manifold box CW-D 520. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for ComfoTube 75mm x 10 connections, 90mm x 10 connections or a combination of 90mm x 4 and 75mm x 6 connections. The mounting plate can be mounted on the top or side of the manifold box. The airtight connection between components is via a clamping strip.

For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

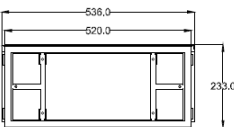
| | |
|--------|---------|
| Height | 233mm |
| Width | 536mm |
| Depth | 259 mm |
| Weight | 5.42 kg |



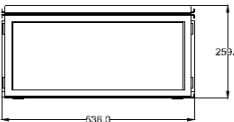
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell filter housing CW-F 520

Article number: 990 323 552

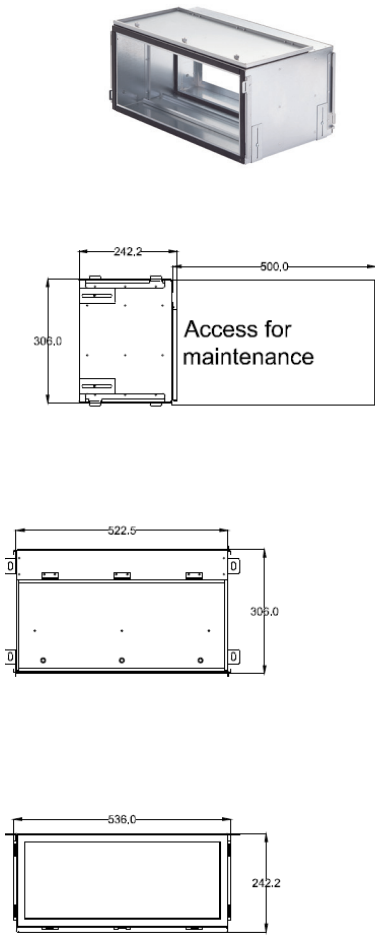
Description

Filter Housing:
Zehnder ComfoWell filter housing CW-F 520. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

Dimensions

| | |
|--------|----------|
| Height | 306 mm |
| Width | 536 mm |
| Depth | 242.2 mm |
| Weight | 6.66 kg |



Dimensions

Zehnder ComfoWell mounting plate CW-M 520

Article number: 990 323 615

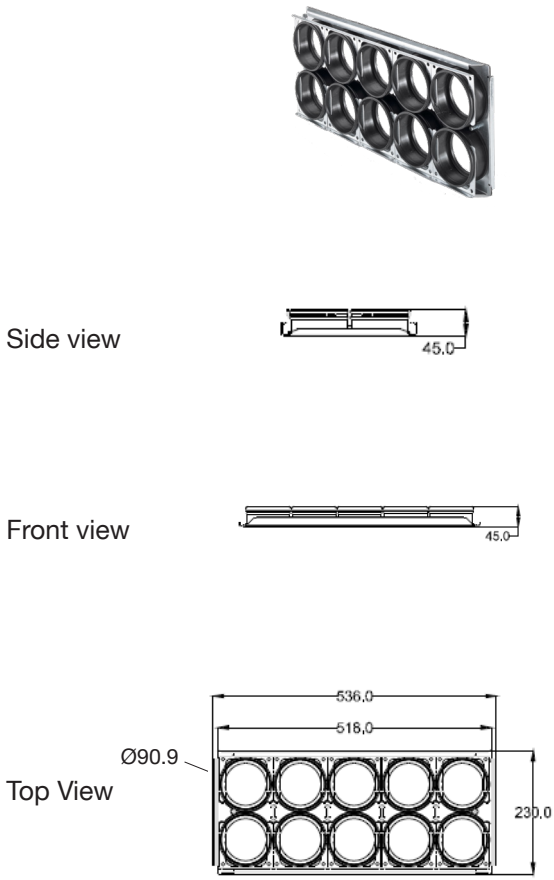
Description

Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 520-10 x 90. Manifold mounting plate for connection of 10 x ComfoTube 90mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

| | |
|--------|----------|
| Height | 45mm |
| Width | 536mm |
| Depth | 230mm |
| Weight | <2.42 kg |



Zehnder ComfoWell mounting plate CW-M 520

Article number: 990 323 614

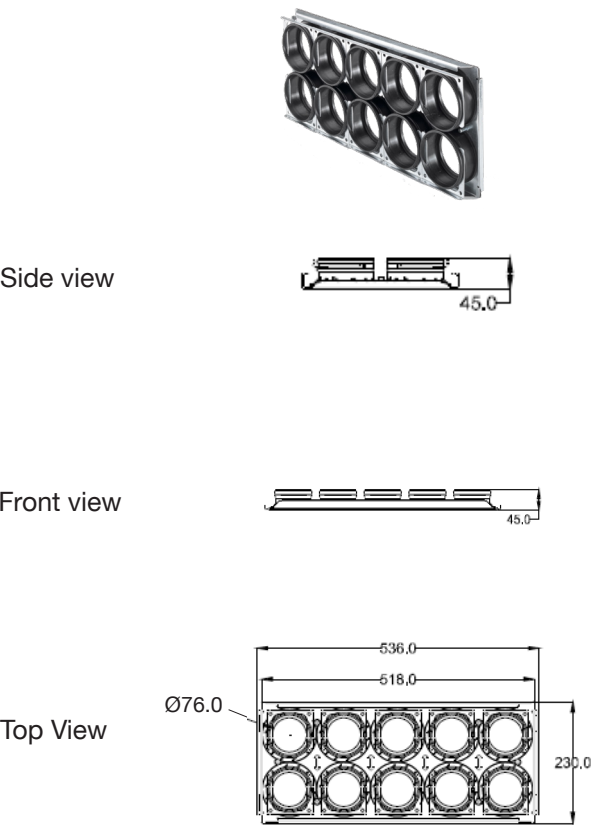
Description

Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 520-10 x 75. Manifold mounting plate for connection of 10x ComfoTube 75mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

| | |
|--------|----------|
| Height | 45mm |
| Width | 536mm |
| Depth | 230mm |
| Weight | <2.42 kg |



Dimensions

Zehnder ComfoWell end plate CW-P
520 -ø 150

Article number: 990 323 568

Description

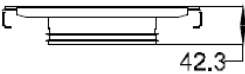
End Plate:
Zehnder ComfoWell end plate CW-P 520 - DN150 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 536mm |
| Depth | 230mm |
| Diameter | 150mm |



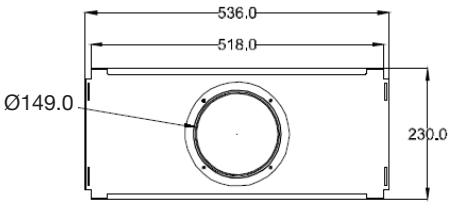
Side view



Front view



Top View



Zehnder ComfoWell end plate CW-P
520 -ø 160mm

Article number: 990 323 564

Description

End Plate:
Zehnder ComfoWell end plate CW-P 520 - DN160 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 536mm |
| Depth | 230mm |
| Diameter | 160mm |



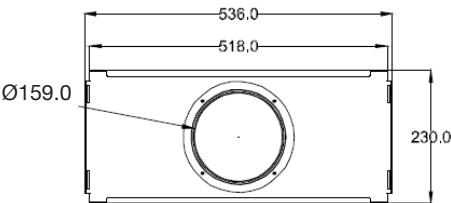
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell end plate CW-P
520 -ø 180mm

Article number: 990 323 513

Description

End Plate:
Zehnder ComfoWell end plate CW-P 520 - DN180 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 536mm |
| Depth | 230mm |
| Diameter | 180mm |



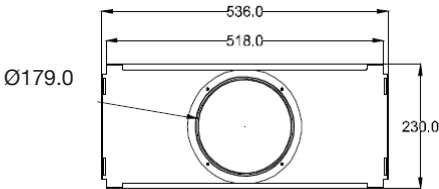
Side view



Front view



Top View



Zehnder ComfoWell end plate CW-P
520 -ø 200mm

Article number: 990 323 514

Description

End Plate:
Zehnder ComfoWell end plate CW-P 520 - DN200 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

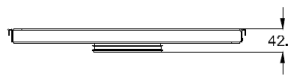
| | |
|----------|--------|
| Height | 42.3mm |
| Width | 536mm |
| Depth | 230mm |
| Diameter | 200mm |



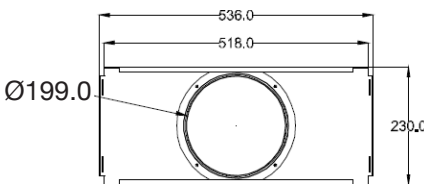
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell spacer frame, CW-DF 520

Article number: 990 323 539

Description

Zehnder ComfoWell spacer frame CW-DF520. Rectangular frame for use in the event of uneven surfaces when connecting components and mounting plate (concreted in place) are at 90 degrees. The spacer frame includes the necessary mounting accessories.

Dimensions

| | |
|--------|---------|
| Height | 27.8mm |
| Width | 536mm |
| Depth | 230mm |
| Weight | 1.36 kg |



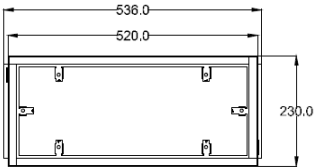
Side view



Front view



Top View



Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q350

Article number: 990 323 649

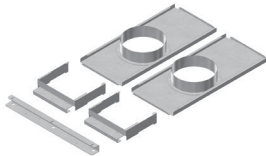
Description

Mounting set:

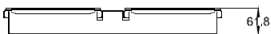
A special mounting set is available for the Zehnder ComfoWell 520 for direct mounting to the ComfoAir Q350 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Dimensions

| | |
|--------|---------|
| Height | 61.8mm |
| Width | 536mm |
| Depth | 510.5mm |
| Weight | 4.56 kg |



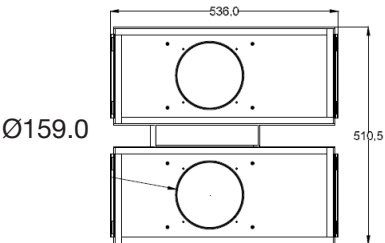
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell mounting set, CW-K 520, for Zehnder ComfoAir Q450/600

Article number: 990 323 646

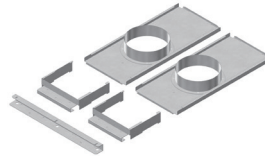
Description

Mounting set:

A special mounting set is available for the Zehnder ComfoWell 520 for direct mounting to the ComfoAir Q450/ComfoAir Q600 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Dimensions

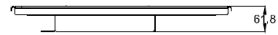
| | |
|--------|---------|
| Height | 61.8mm |
| Width | 536mm |
| Depth | 510.5mm |
| Weight | 5.5 kg |



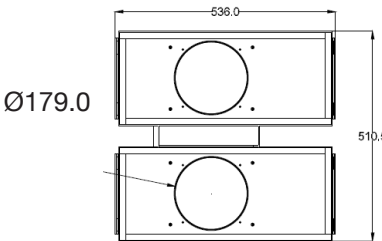
Side view



Front view

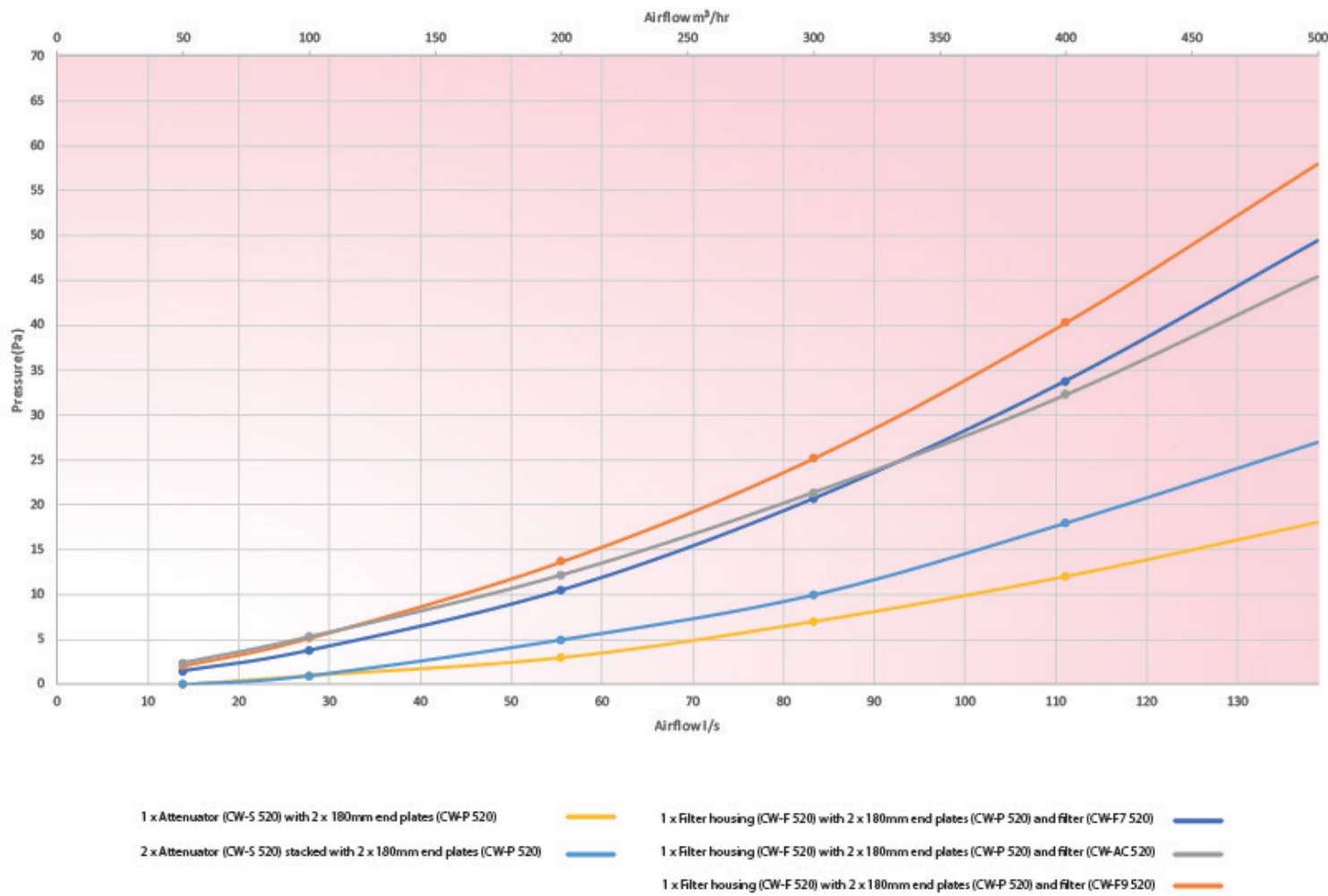


Top View



Pressure Curve

Comfowell 520



Sound Data

Comfowell 520

| Combination | Octave Band (Hz) Insertion Loss, dB | | | | | | | |
|--|-------------------------------------|------|------|------|------|------|------|------|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 1 x Attenuator (CW-S 520) with 2 x 180mm end plates (CW-P 520) | 2,0 | 6,3 | 10,3 | 16,5 | 12,0 | 20,4 | 15,0 | 13,5 |
| 2 x Attenuator (CW-S 520) stacked with 2 x 180mm end plates (CW-P 520) | 6,7 | 12,3 | 20,3 | 22,5 | 19,2 | 37,8 | 27,6 | 23,9 |

For use with

Our range of Comfowell units can be used in conjunction with our Zehnder ComfoTube ø 75mm and ø 90mm semi-rigid ductwork.



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INFORMATION

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Consultant specification

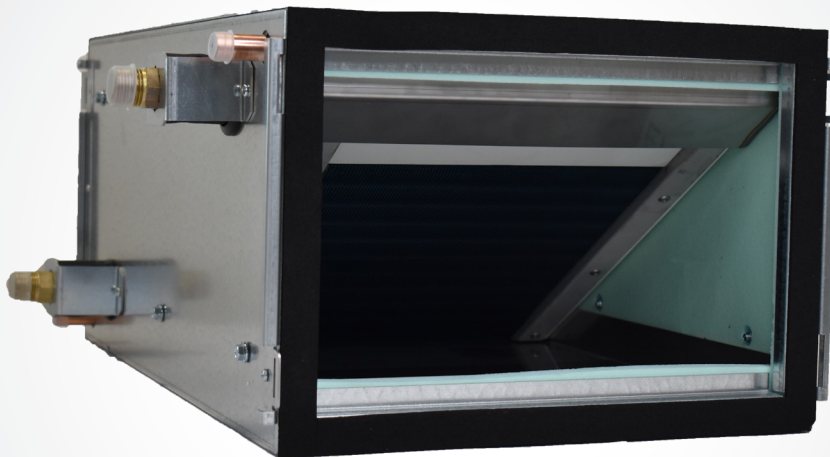
Specification

The semi-rigid ductwork manifold shall be constructed of galvanised sheet steel with a closed-cell melamine resin foam inner lining to prevent dust collection and have a fire class C rating according to EN ISO13501.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm.

It shall have the option of a mounting set for direct connection to the mechanical ventilation with heat recovery unit. The components shall be tested to BS EN 1507:2006 and BS EN 12237:2003 for airtightness and have removable elements to provide access for cleaning.

Zehnder ComfoPost CW12*



ComfoPost CW12

The Zehnder ComfoPost is an air to water exchanger for use with ComfoWell air distribution connections. The ComfoWell connections allows for selection flexibility, offering a range of rigid circular ductwork or Zehnder ComfoTube semi-rigid ductwork to attached. The ComfoPost is available in a variety of sizes to heat or cool the air supplied by the Zehnder ventilation system.

The ComfoPost units are suitable for a wide range of airflows up to 166l/s (600m³/hr), the CW12 is suitable for airflows up to 166l/s (600m³/hr). The units are made of steel with aluminium and copper pipe forming the heating and cooling coils and are maintenance free.

Key Features

- Ideal for use with reversible heat pumps or chillers to meet SAP 10 or TM59 overheating demands
- Low pressure losses
- Filtered fresh supply air, not recycled stale air
- Suitable for use with the unique modular ComfoWell manifolds
- Suitable for horizontal or vertical installation
- Condensation water tray and drain as standard
- Suitable for Passive House application
- Corrosion resistant

Article Numbers

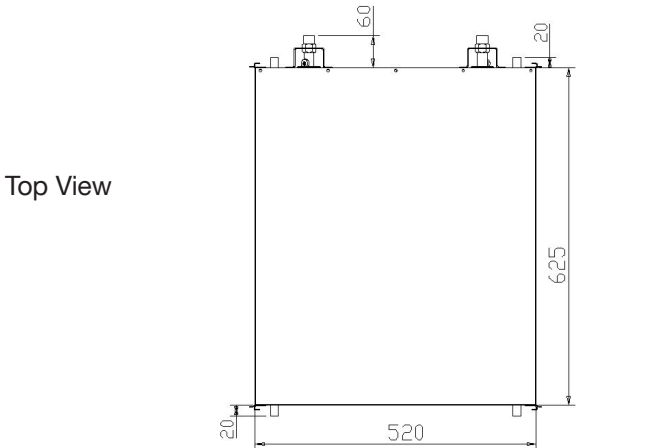
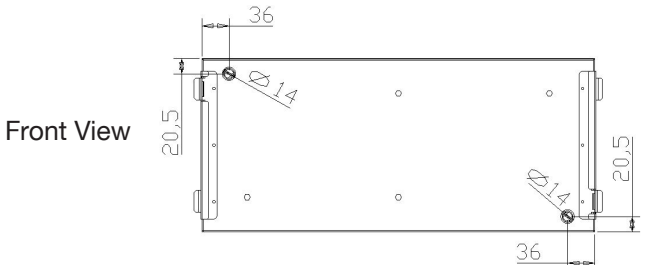
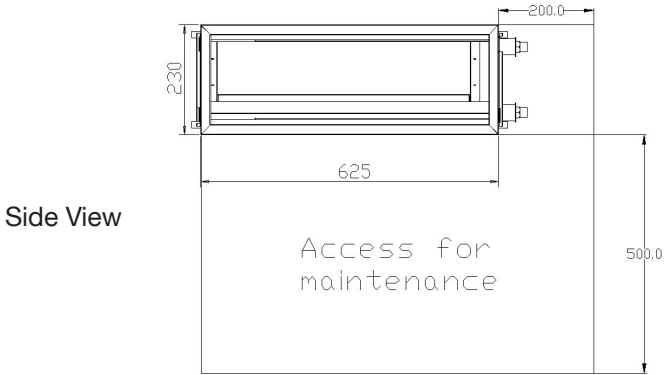
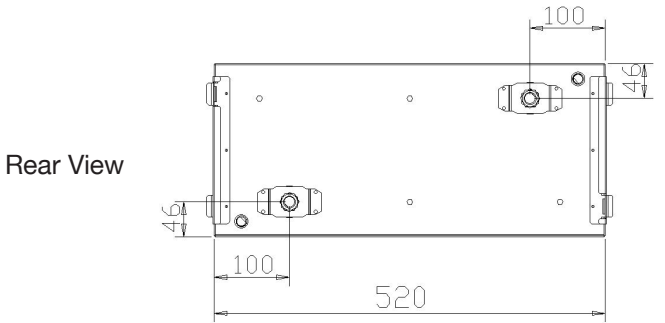
| Description | Product Code |
|--|--------------|
| Zehnder ComfoPost CW12 post-treatment battery for heating and cooling with an airflow up to 600m ³ /h | 399 000 003 |

Technical Specification

| | |
|--|---|
| Height | 230mm |
| Width | 625mm |
| Depth | 520mm |
| Water connection diameter (ø) | 1/2" |
| Water connection type | BSPT male thread |
| Condensate drain diameter OD (ø) | 14mm |
| Condensate connection type | Worm drive clip to fix to hose or crimped to copper pipe |
| ComfoWell range | ComfoWell 625 |
| ComfoWell rigid round air connection options (ø) | 150mm / 160mm / 180mm / 200mm |
| ComfoWell semi-rigid air connection options (ø) | 12 x 75mm / 12 x 90mm / 6 x 90mm + 6 x 75mm |
| Material | Casing: Galvanised sheet steel Tubes: Copper Fins: Aluminium with hydrophilic treatment |
| Recommended operating water temperature range | 7 to 55 °C |
| Recommended maximum operating air flow | <166.6l/s (<600m ³ /hr) |
| Maximum thermal heating output | 6.51kW* |
| Maximum thermal cooling output | 5.64kW* |
| Maximum operating water pressure | 6 bar |
| Water volume capacity | 1.2 Litres |
| Maintenance free | Yes |
| Weight | 22.4 kg |

*Total capacity (sensible and latent) based on test conditions shown in the Performance Data table

Dimensions



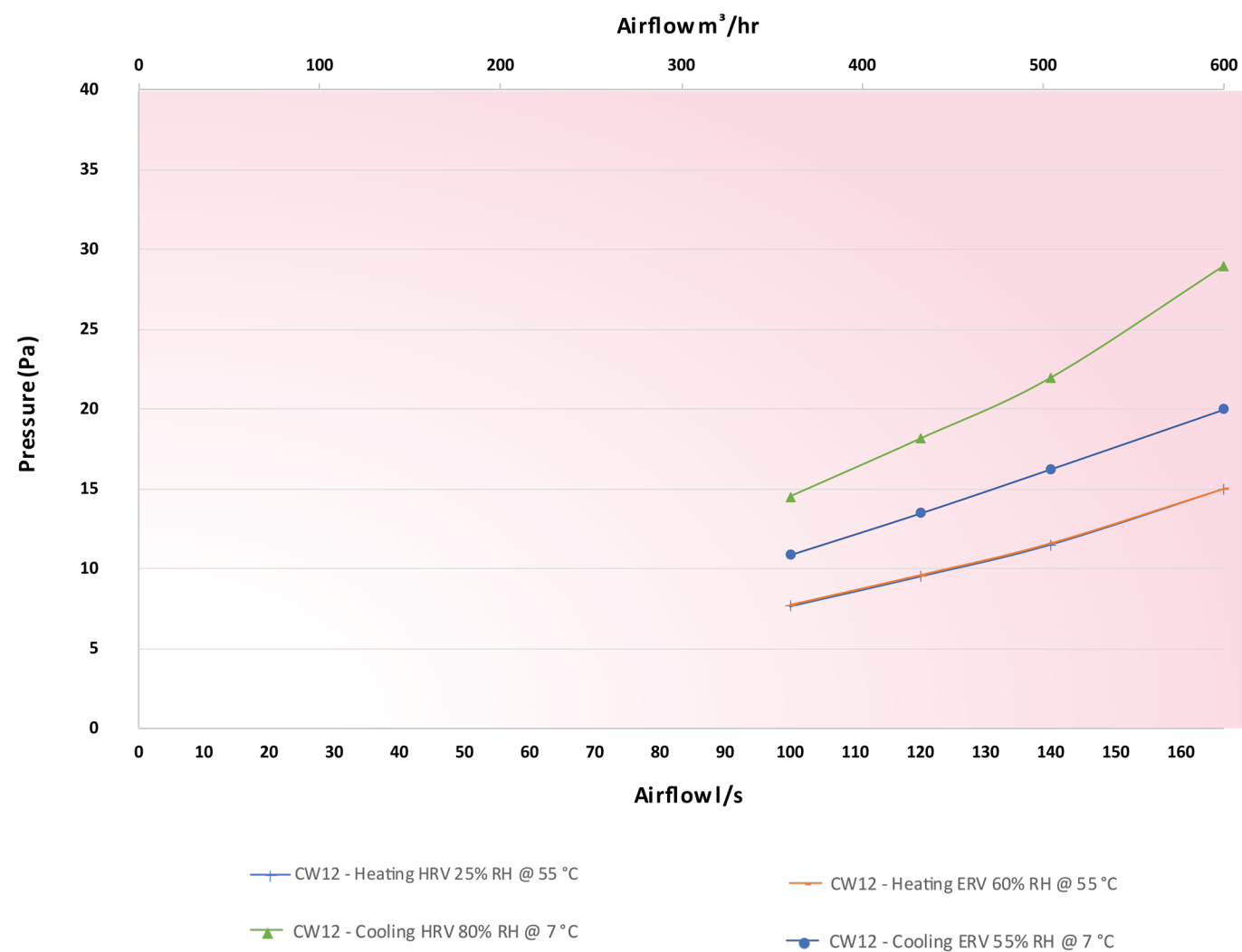
| | |
|--------|---------|
| Height | 230mm |
| Width | 625mm |
| Depth | 520mm |
| Weight | 22.4 kg |

Performance Data

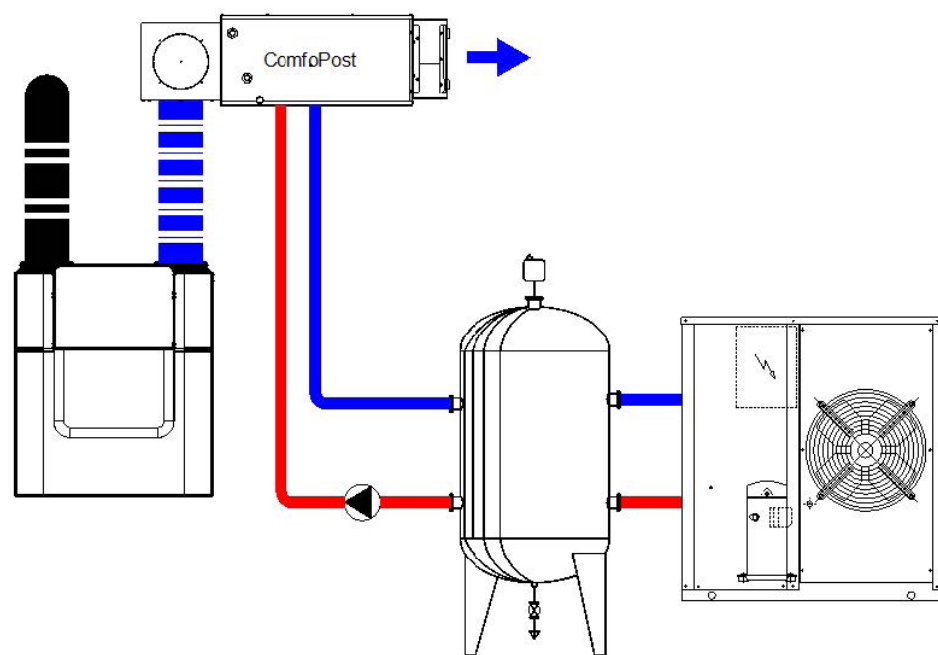
| Air conditions IN to ComfoPost | | | Heating | | | | | | | | Cooling | |
|---|---|------|---------------|------|------|------|---------------|------|------|------|-----------|-----------|
| | | | HRV exchanger | | | | ERV exchanger | | | | HRV | ERV |
| | | T °C | 18 °C | | | | 17 °C | | | | 27°C | 28°C |
| | | RH % | 25% | | | | 60% | | | | 80% | 55% |
| | | AH | 3.2 g/kg | | | | 7.3 g/kg | | | | 18.1 g/kg | 13.1 g/kg |
| Water temperature IN | | °C | 55 | 50 | 45 | 40 | 55 | 50 | 45 | 40 | 7 | 7 |
| MINIMUM Air flow 100l/s (360m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 49 | 45 | 41 | 36 | 49 | 45 | 40 | 36 | 13 | 12 |
| | H ₂ O ΔP | kPa | 15 | 15 | 16 | 16 | 15 | 15 | 16 | 16 | 19 | 19 |
| | Air temperature _{OUT} | °C | 52 | 47 | 43 | 38 | 52 | 47 | 43 | 38 | 13 | 12 |
| | Air RH _{OUT} | % | 4 | 5 | 6 | 8 | 9 | 11 | 14 | 18 | 100 | 96 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 9.5 | 8.1 |
| | Air ΔP | Pa | 8 | 8 | 8 | 7 | 8 | 8 | 8 | 7 | 15 | 11 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 3.7 | 2.2 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.69 | 2.01 |
| | TOTAL POWER | kW | 4.14 | 3.57 | 3.01 | 2.45 | 4.27 | 3.71 | 3.14 | 2.58 | 4.31 | 3.52 |
| Air flow 120l/s (432m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 48 | 44 | 40 | 36 | 48 | 44 | 40 | 36 | 14 | 13 |
| | H ₂ O ΔP | kPa | 15 | 16 | 16 | 16 | 15 | 16 | 16 | 16 | 19 | 19 |
| | Air temperature _{OUT} | °C | 51 | 47 | 42 | 38 | 51 | 46 | 42 | 37 | 14 | 12 |
| | Air RH _{OUT} | % | 4 | 5 | 6 | 38 | 9 | 11 | 14 | 18 | 100 | 95 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 10.2 | 8.5 |
| | Air ΔP | Pa | 10 | 9 | 9 | 9 | 10 | 9 | 9 | 9 | 18 | 14 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 4.1 | 2.4 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 1.92 | 2.29 |
| | TOTAL POWER | kW | 4.81 | 4.16 | 3.5 | 2.85 | 4.98 | 4.31 | 3.65 | 3 | 4.78 | 3.94 |
| Air flow 140l/s (504m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 47 | 43 | 39 | 35 | 47 | 43 | 39 | 35 | 14 | 13 |
| | H ₂ O ΔP | kPa | 15 | 16 | 16 | 16 | 15 | 15 | 16 | 16 | 19 | 19 |
| | Air temperature _{OUT} | °C | 50 | 46 | 41 | 37 | 50 | 45 | 41 | 37 | 15 | 13 |
| | Air RH _{OUT} | % | 4 | 5 | 7 | 8 | 10 | 12 | 15 | 19 | 100 | 93 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 10.8 | 8.9 |
| | Air ΔP | Pa | 12 | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 22 | 16 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 4.4 | 2.6 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 2.07 | 2.55 |
| | TOTAL POWER | kW | 5.44 | 4.7 | 3.96 | 3.22 | 5.62 | 4.87 | 4.13 | 3.38 | 5.17 | 4.31 |
| MAXIMUM Air flow 166.6l/s (600 m³/h) | H ₂ O flow | l/h | 600 | | | | 600 | | | | 600 | 600 |
| | H ₂ O temperature _{OUT} | °C | 46 | 42 | 38 | 35 | 46 | 42 | 38 | 34 | 15 | 14 |
| | H ₂ O ΔP | kPa | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 19 | 19 |
| | Air temperature _{OUT} | °C | 48 | 44 | 40 | 36 | 48 | 44 | 40 | 36 | 16 | 14 |
| | Air RH _{OUT} | % | 5 | 6 | 7 | 9 | 10 | 13 | 16 | 20 | 99 | 92 |
| | Air AH _{OUT} | g/kg | 3.2 | 3.2 | 3.2 | 3.2 | 7.2 | 7.2 | 7.2 | 7.2 | 11.3 | 9.3 |
| | Air ΔP | Pa | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 29 | 20 |
| | Condensation | l/h | - | - | - | - | - | - | - | - | 4.8 | 2.7 |
| | Sensible power | kW | - | - | - | - | - | - | - | - | 2.26 | 2.84 |
| | TOTAL POWER | kW | 6.3 | 5.44 | 4.59 | 3.73 | 6.51 | 5.64 | 4.78 | 3.92 | 5.64 | 4.73 |

Initial temperature and humidity outdoor/indoor: winter 2°C 70% R.H. / 20°C 60% R.H.; summer 35°C 50% R.H. / 25°C 50% R.H.
The calculations include the cold recovery efficiency of an enthalpy exchanger as extrapolated from the results provided by the PHI certification

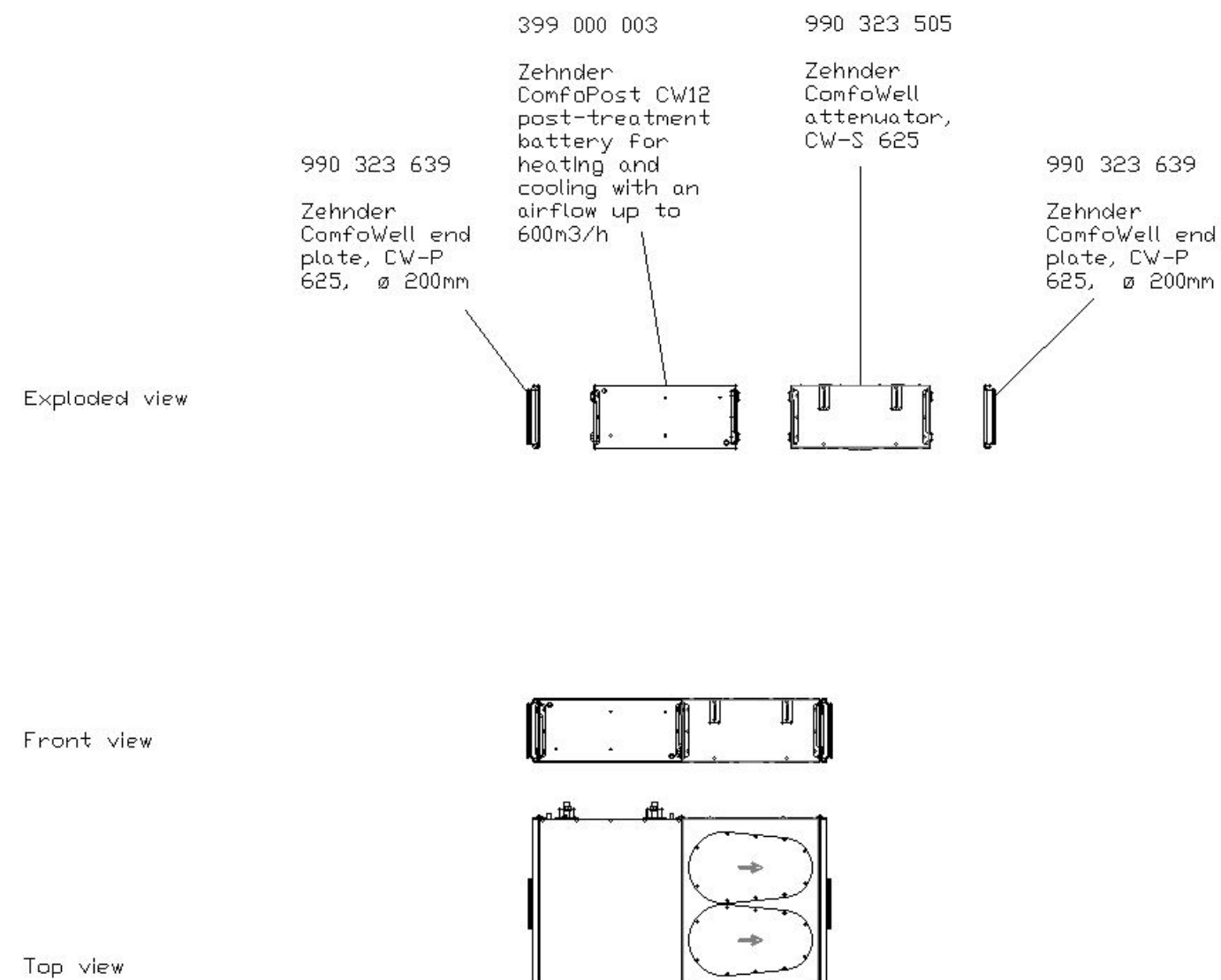
Performance Data



Schematics

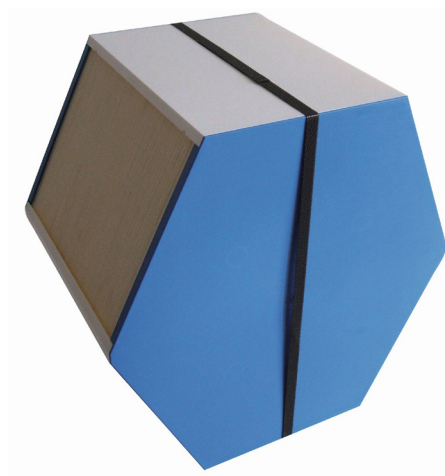


Example Connection



For Use With

Our range of ComfoPost products can be used in conjunction with our ComfoAir units, complete with enthalpy cube for improved sensible cooling capacity. The unit shall be manufactured by Zehnder.



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Consultant specification

Specification

The air to water exchanger shall be constructed of galvanised sheet steel with copper tubes and aluminum fins with hydrophilic treatment to enhance thermal transfer. It shall be connected to the MVHR units supply ductwork with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm. It shall have the option for horizontal or vertical mounting.

The unit shall be manufactured by Zehnder.

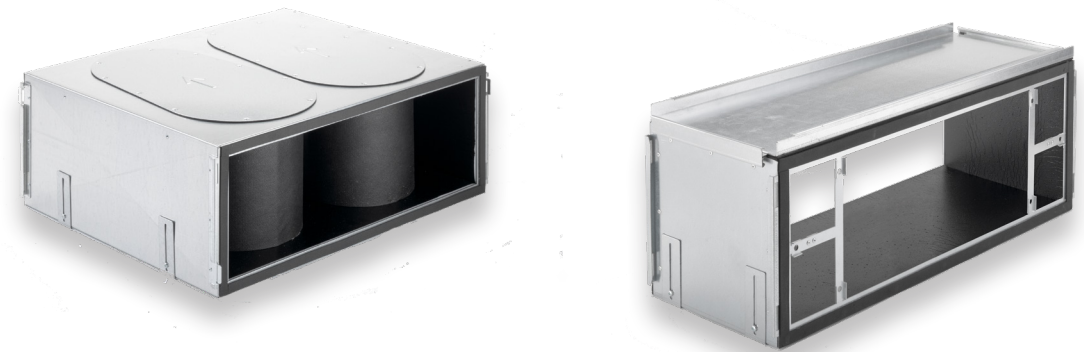
Zehnder ComfoWell 625



Comfowell 625

The Zehnder ComfoWell 625 is a modular system consisting of attenuators, fine grade filters and active carbon filters all integrated for use with a rigid or semi-rigid ductwork approach. With a width of 625mm it can be used for connecting up to 12 ComfoTube connections. The system's compact dimensions ensure good sound absorption and also make it easy to clean. Rigid pipe can be connected to the end plate securely by utilising the gasket seal connection. All other components are fitted using the locking slide connections to form an airtight and robust seal.

Noise reduction can be improved by combining two attenuators together. Filters are available in ISO ePM1 >80% (F7) or ISO ePM1 >90% (F9) grade in addition to an odour neutralising active carbon filter.



Key Features

- Attenuator, fine grade filter, active carbon filter and manifold all combined into one space saving combination with the option to bespoke build exactly what is required.
- Easy to assemble thanks to its modular and compact design.

Article Numbers

| Description | Product Code |
|---|--------------|
| Attenuator | |
| Zehnder ComfoWell attenuator, CW-S 625 | 990 323 505 |
| Manifold | |
| Zehnder ComfoWell manifold box CW-D 625 | 990 323 630 |
| Filter Housing | |
| Zehnder ComfoWell filter housing CW-F 625 | 990 323 555 |
| Mounting Plates | |
| Zehnder ComfoWell mounting plate, CW-M 625, 12 x 75mm connections | 990 323 631 |
| Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections | 990 323 632 |
| End Plates | |
| Zehnder ComfoWell end plate, CW-P 625, ø 150mm | 990 323 636 |
| Zehnder ComfoWell end plate, CW-P 625, ø 160mm | 990 323 637 |
| Zehnder ComfoWell end plate, CW-P 625, ø 180mm | 990 323 638 |
| Zehnder ComfoWell end plate, CW-P 625, ø 200mm | 990 323 639 |

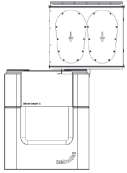
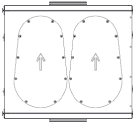
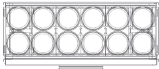
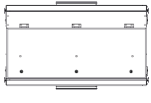
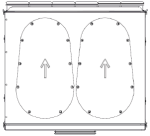
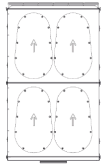
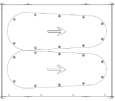


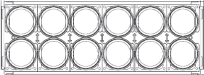
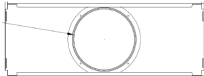
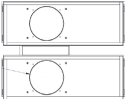

Article Numbers

| | |
|---|-------------|
| Spacer Frame | |
| Zehnder ComfoWell spacer frame, CW-DF 625 | 990 323 634 |
| Mounting Set | |
| Zehnder ComfoWell mounting set, CW-K 625, for Zehnder ComfoAir Q450/600 | 990 323 642 |
| Filters | |
| Filter for ComfoWell 625, CW-F7 625, ISO ePM1 >80% (F7), 1 Piece | 990 323 653 |
| Filter for ComfoWell 625, CW-F9 625, ISO ePM1 >90% (F9), 1 Piece | 990 323 654 |
| Filter for ComfoWell 625, CW-AC 625, active carbon filter, 1 Piece | 990 323 655 |

Technical Specification

| | |
|--------------------------------------|---|
| Housing material | Galvanised sheet steel |
| Operating temperature range | -25 to +60 °C |
| Inner lining | Closed-cell melamine resin foam |
| Recommended maximum air volume | 133.3l/s (480 m³/h) at normal ventilation level |
| Air tightness class to EN 1507:2006 | C |
| Air tightness class to EN 12237:2003 | C |
| Fire rating to ISO13501 | C |

Example Connections

| <div>Combination Options</div> <div>Individual Components</div> | <div>ComfoAir Q600 right handed with mounting set, 2 x attenuators and 2 x 12 port ø 90mm mounting plates</div> <div></div> | <div>Stand alone attenuator with 2 x ø 200mm end plates</div> <div></div> | <div>Stand alone manifold with 1 x ø 200mm end plate and 12 x ø 90mm mounting plate</div> <div></div> | <div>Stand alone filter housing with 2 x ø 200mm</div> <div></div> | <div>Stand alone silencer and manifold combined with 1 x ø 200mm end plate and 12 x ø 90mm mounting plate</div> <div></div> | <div>Stand alone 2 x attenuator with 1 x ø 200mm end plate and 12 x ø 90mm mounting plate</div> <div></div> |
|--|--|--|--|---|--|--|
| <div>Attenuator</div> <div></div> <div>Article Number: 990 323 505</div> | 2 x Zehnder ComfoWell attenuator, CW-S 625 | 1 x Zehnder ComfoWell attenuator, CW-S 625 | — | — | 1 x Zehnder ComfoWell attenuator, CW-S 625 | 2 x Zehnder ComfoWell attenuator, CW-S 625 |
| <div>Manifold Box</div> <div></div> <div>Article Number: 990 323 630</div> | — | — | 1 x Zehnder ComfoWell manifold box, CW-D 625 | — | — | — |
| <div>Filter Housing</div> <div></div> <div>Article Number: 990 323 555</div> | — | — | — | 1 x Zehnder ComfoWell filter housing, CW-F 625 | — | — |
| <div>Mounting Plate -ø90</div> <div></div> <div>Article Number: 990 323 632</div> | 2 x Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections | — | 1 x Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections | — | 1 x Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections | 1 x Zehnder ComfoWell mounting plate, CW-M 625, 12 x 90mm connections |
| <div>End Plate - ø 200</div> <div></div> <div>Article Number: 990 323 639</div> | — | 2 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm | 1 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm | 2 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm | 1 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm | 1 x Zehnder ComfoWell end plate, CW-P 625, ø 200mm |
| <div>Mounting Set</div> <div></div> <div>Article Number: 990 323 642</div> | 1 x Zehnder ComfoWell mounting set, CW-K 625, for Zehnder ComfoAir Q450/600 | — | — | — | — | — |
| <div>Filter</div> <div></div> <div>Article Number: 990 323 654</div> | — | — | — | 1 x Filter for ComfoWell 625, CW-F9 625, ISO ePM1 >90% (F9), 1 Piece | — | — |

Dimensions

Zehnder ComfoWell attenuator, CW-S 625

Article number: 990 323 505

Description

Attenuator:

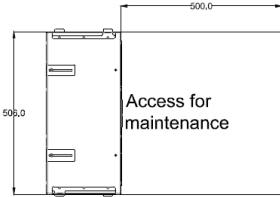
Zehnder ComfoWell attenuator CW-S 625. Rectangular compact attenuator with highly efficient sound insulation combined with low pressure losses. The attenuator can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

For cleaning purposes the sound absorbing element can be removed. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

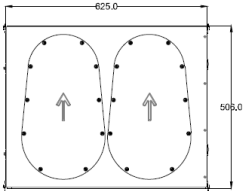
Dimensions

| | |
|--------|---------|
| Height | 506mm |
| Width | 625mm |
| Depth | 233.8mm |
| Weight | 8 kg |

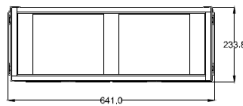
Side view



Front view



Top View



Zehnder ComfoWell manifold box CW-D 625

Article number: 990 323 630

Description

Manifold Box:

Zehnder ComfoWell manifold box CW-D 625. Rectangular compact design with closed pore internal lining. Suitable for use with the mounting plate for ComfoTube 75mm x 12 connections, 90mm x 12 connections or a combination of 90mm x 6 and 75mm x 6 connections.

The mounting plate can be mounted on the top or side of the manifold box. The airtight connection between components is via a clamping strip.

For cleaning purposes the manifold box side plate can be removed for easy access. Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

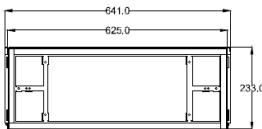
Dimensions

| | |
|--------|--------|
| Height | 233mm |
| Width | 641mm |
| Depth | 259 mm |
| Weight | 6.5 kg |

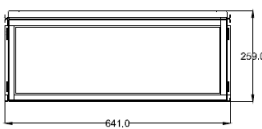
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell filter housing CW-F 625

Article number: 990 323 555

Description

Filter Housing:

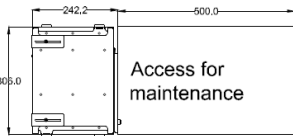
Zehnder ComfoWell filter housing CW-F 625. Rectangular compact design for use with a fine pollen filter graded ISO ePM1 >80% (F7), a fine dust filter graded ISO ePM1 >90% (F9) or an active carbon filter to neutralise odours in the supply air duct run. The filter elements are not included with the filter housing and need to be purchased separately. The filter housing can be used individually or in combination with all ComfoWell components. The airtight connection between components is via a clamping strip.

Mounting on the wall or ceiling is done using the supplied fully adjustable installation mounts.

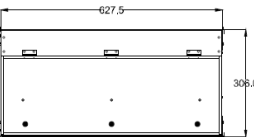
Dimensions

| | |
|--------|----------|
| Height | 306 mm |
| Width | 627.5 mm |
| Depth | 242.2 mm |
| Weight | 1.68 kg |

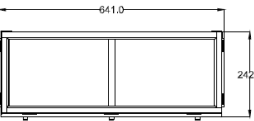
Side view



Front view



Top View



Zehnder ComfoWell mounting plate CW-M 625

Article number: 990 323 631

Description

Mounting Plate:

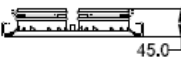
Zehnder ComfoWell mounting plate CW-M 625-12 x 75. Manifold mounting plate for connection of 12x ComfoTube 75mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

| | |
|--------|---------|
| Height | 45mm |
| Width | 641mm |
| Depth | 230mm |
| Weight | <2.2 kg |

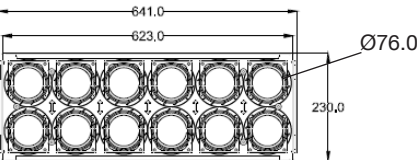
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell mounting plate CW-M 625

Article number: 990 323 632

Description
Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 625-12 x 90. Manifold mounting plate for connection of 12 x ComfoTube 90mm semi-rigid ducting.

The mounting plate includes a protective film and the necessary mounting accessories.

Dimensions

| | |
|--------|---------|
| Height | 45mm |
| Width | 641mm |
| Depth | 230mm |
| Weight | <2.2 kg |



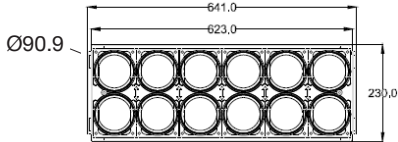
Side view



Front view



Top View



Dimensions

Zehnder ComfoWell end plate CW-P 625 -Ø 150

Article number: 990 323 636

Description
End Plate:
Zehnder ComfoWell end plate CW-P 625 - DN150 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

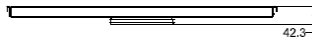
| | |
|----------|--------|
| Height | 42.3mm |
| Width | 641mm |
| Depth | 230mm |
| Diameter | 150mm |



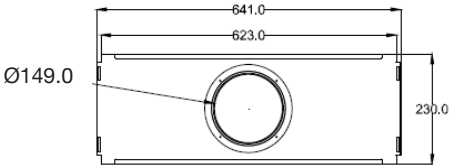
Side view



Front view



Top View



Zehnder ComfoWell end plate CW-P 625 -Ø 160mm

Article number: 990 323 637

Description
End Plate:
Zehnder ComfoWell end plate CW-P 625 - DN160 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

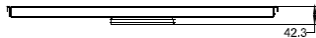
| | |
|----------|--------|
| Height | 42.3mm |
| Width | 641mm |
| Depth | 230mm |
| Diameter | 160mm |



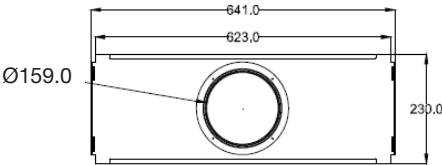
Side view



Front view



Top View



Dimensions

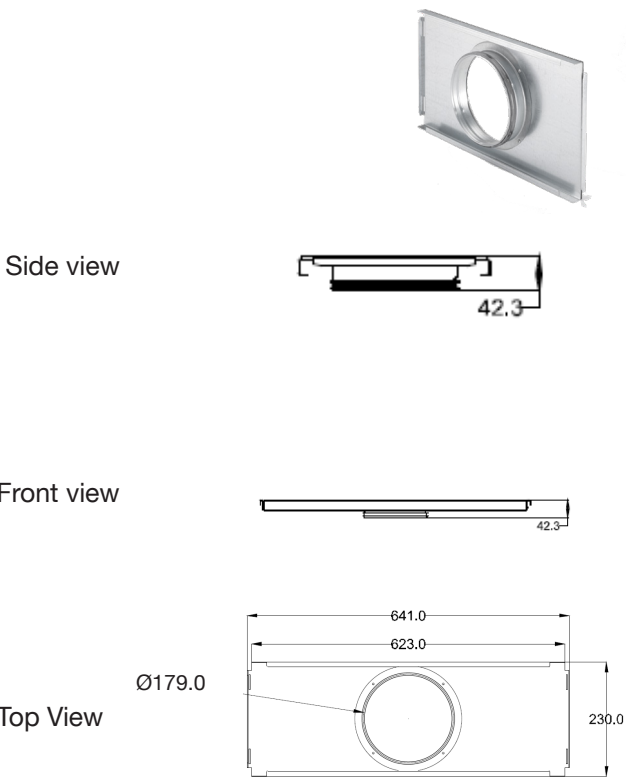
Zehnder ComfoWell end plate CW-P 625 -Ø 180mm

Article number: 990 323 638

Description
End Plate:
Zehnder ComfoWell end plate CW-P 625 - DN180 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 641mm |
| Depth | 230mm |
| Diameter | 180mm |



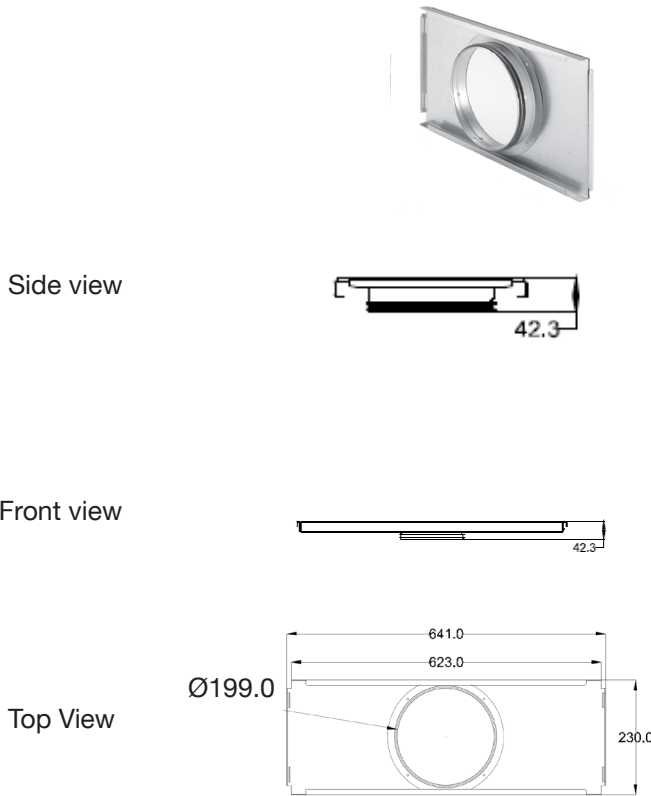
Zehnder ComfoWell end plate CW-P 625 -Ø 200mm

Article number: 990 323 639

Description
End Plate:
Zehnder ComfoWell end plate CW-P 625 - DN200 (with centre connection) for the connection to the ComfoWell attenuator/manifold box or filter housing to the matching ducting size required. The end plate includes the necessary mounting accessories.

Dimensions

| | |
|----------|--------|
| Height | 42.3mm |
| Width | 641mm |
| Depth | 230mm |
| Diameter | 200mm |



Dimensions

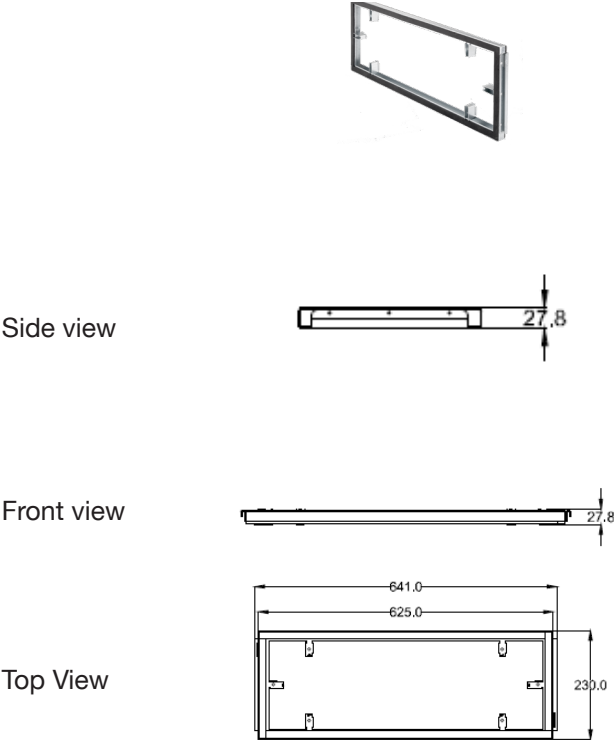
Zehnder ComfoWell spacer frame, CW-DF 625

Article number: 990 323 634

Description
Zehnder ComfoWell spacer frame CW-DF625. Rectangular frame for use in the event of uneven surfaces when connecting components and mounting plate (concreted in place) are at 90 degrees. The spacer frame includes the necessary mounting accessories.

Dimensions

| | |
|--------|---------|
| Height | 27.8mm |
| Width | 641mm |
| Depth | 230mm |
| Weight | 1.36 kg |



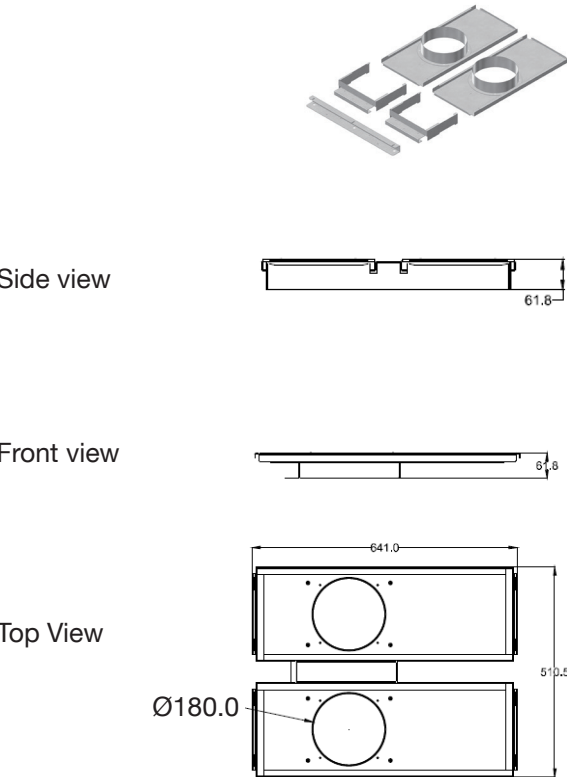
Zehnder ComfoWell mounting set, CW-K 625, for Zehnder ComfoAir 450/600

Article number: 990 323 642

Description
Mounting set:
A special mounting set is available for the Zehnder ComfoWell 625 for direct mounting to the ComfoAir Q450/600 ventilation units. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

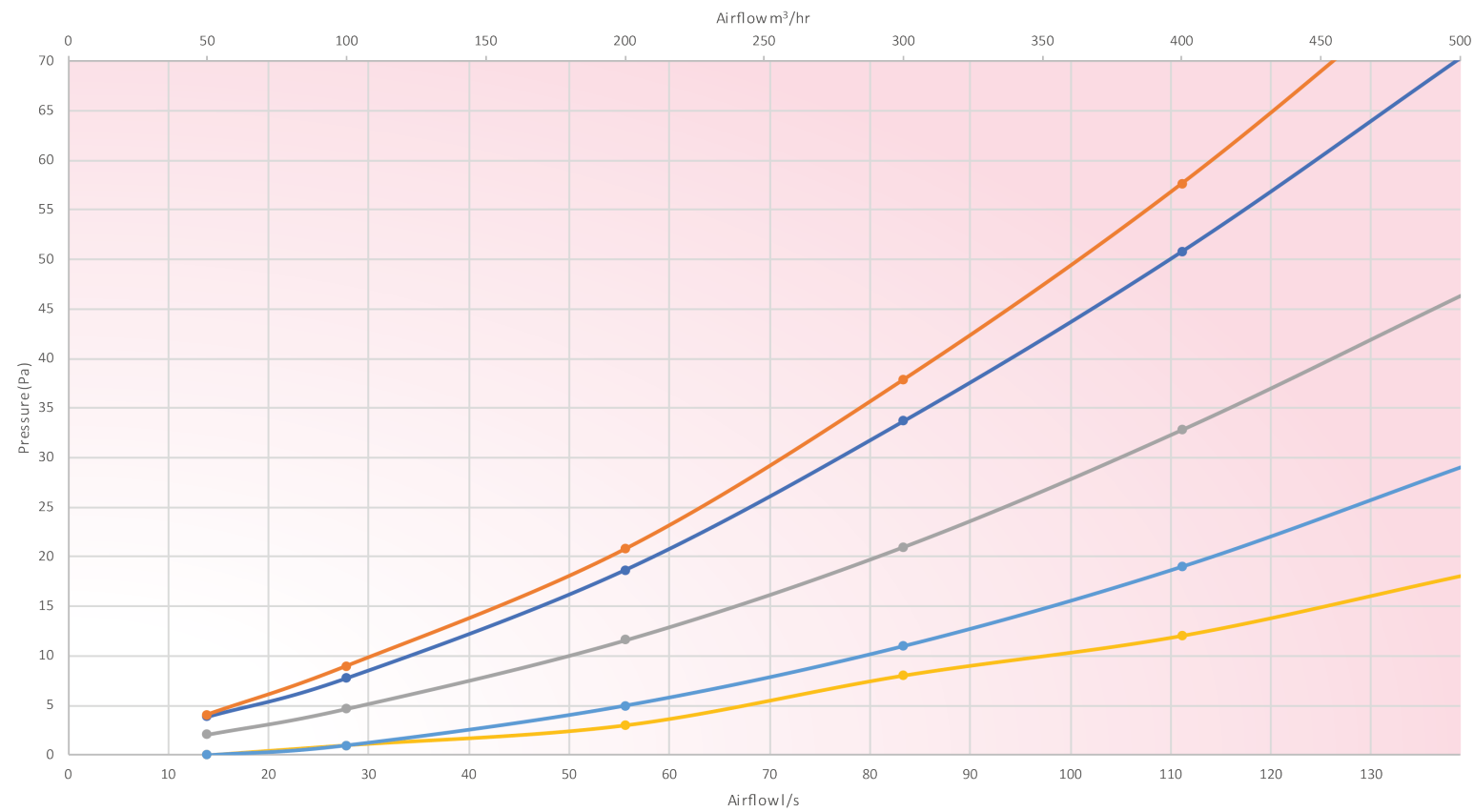
Dimensions

| | |
|--------|---------|
| Height | 61.8mm |
| Width | 641mm |
| Depth | 510.5mm |
| Weight | 5.17 kg |



Pressure Curve

Comfowell 625



- 1 x Attenuator (CW-S 625) with 2 x 180mm end plates (CW-P 625)

2 x Attenuator (CW-S 625) stacked with 2 x 180mm end plates (CW-P 625)
-
- 1 x Filter housing (CW-F 625) with 2 x 180mm end plates (CW-P 625) and filter (CW-F7 625)

1 x Filter housing (CW-F 625) with 2 x 180mm end plates (CW-P 625) and filter (CW-AC 625)

1 x Filter housing (CW-F 625) with 2 x 180mm end plates (CW-P 625) and filter (CW-F9 625)
-

Sound Data

Comfowell 625

| Combination | Octave Band (Hz) Insertion Loss, dB | | | | | | | |
|--|-------------------------------------|------|------|------|------|------|------|------|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 1 x Attenuator (CW-S 625) with 2 x 180mm end plates (CW-P 625) | 3,0 | 8,9 | 13,7 | 18,7 | 12,0 | 18,6 | 14,6 | 12,9 |
| 2 x Attenuator (CW-S 625) stacked with 2 x 180mm end plates (CW-P 625) | 9,2 | 17,0 | 23,4 | 23,8 | 21,0 | 34,2 | 26,4 | 22,6 |

For use with

Our range of Comfowell units can be used in conjunction with our Zehnder ComfoTube ø 75mm and ø 90mm semi-rigid ductwork.



TO VIEW OUR COMFOTUBE
INFORMATION

CLICK HERE

BIM/CAD Components

If you would like to download the BIM / CAD files for this or any other of our products then please visit our BIM library.

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Installation Instructions

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Consultant specification

Specification

The semi-rigid ductwork manifold shall be constructed of galvanised sheet steel with a closed-cell melamine resin foam inner lining to prevent dust collection and have a fire class C rating according to EN ISO13501.

It shall be of modular construction with options to combine attenuators, manifold box, filter housing with ISO ePM1 >80% (F7), ISO ePM1 >90% (F9) or active carbon filters and end plates ranging from ø 125mm to ø 200mm.

It shall have the option of a mounting set for direct connection to the mechanical ventilation with heat recovery unit. The components shall be tested to BS EN 1507:2006 and BS EN 12237:2003 for airtightness and have removable elements to provide access for cleaning.