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Zehnder ComfoWell 220

Comfowell 220

The Zehnder ComfoWell 220 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 220mm it can be used for connecting up to 4 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 air tight 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 220	990 323 500
Manifold	
Zehnder ComfoWell manifold box CW-D 220	990 323 530
Filter Housing	
Zehnder ComfoWell filter housing CW-F 220	990 323 550
Mounting Plates	
Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections	990 323 610
Zehnder ComfoWell mounting plate, CW-M 220, 4 x 90mm connections	990 323 611
End Plates	
Zehnder ComfoWell end plate, CW-P 220, ø 125mm	990 323 510
Zehnder ComfoWell end plate, CW-P 220, ø 150mm	990 323 563
Spacer Frame	
Zehnder ComfoWell spacer frame, CW-DF 220	990 323 537

Article Numbers

Mounting Set

|	
Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160	990 323 569
Zehnder ComfoWell connection plate, CW-P DK 220, for Zehnder ComfoAir 180 downward supply spigot	990 323 577

Filters

Filter for ComfoWell 220, CW-F7 220, ISO ePM1 >80% (F7), 1 Piece	990 323 600
Filter for ComfoWell 220, CW-F9 220, ISO ePM1 >90% (F9), 1 Piece	990 323 601
Filter for ComfoWell 220, CW-AC 220, active carbon filter, 1 Piece	990 323 602

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	44.4l/s (160 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

Individual Components / Combination Options	ComfoAir 160 right handed (factory setting) with mounting set, 2 x attenuators and 2 x 6 port ø 75mm mounting plates	Stand alone attenuator with 2 x ø 125mm end plates	Stand alone manifold with 1 x ø 125mm end plate and 4 x ø 75mm mounting plate	Stand alone filter housing with 2 x ø 125mm	Stand alone silencer and manifold combined with 1 x ø 125mm end plate and 4 x ø 75mm mounting plate	Stand alone 2 x attenuator with 1 x ø 125mm end plate and 4 x ø 75mm mounting plate
Silencer — Article Number: 990 323 500	2 x Zehnder ComfoWell attenuator, CW-S 220	1 x Zehnder ComfoWell attenuator, CW-S 220	———	———	1 x Zehnder ComfoWell attenuator, CW-S 220	2 x Zehnder ComfoWell attenuator, CW-S 220
Manifold Box — Article Number: 990 323 530	———	———	1 x Zehnder ComfoWell manifold box, CW-D 220	———	———	———
Filter Housing — Article Number: 990 323 550	———	———	———	1 x Zehnder ComfoWell filter housing, CW-F 220	———	———
Mounting Plate -ø 75 — Article Number: 990 323 610	2 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections	———	1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections	———	1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections	1 x Zehnder ComfoWell mounting plate, CW-M 220, 4 x 75mm connections
End Plate - ø 125 — Article Number: 990 323 510	———	2 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm	1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm	2 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm	1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm	1 x Zehnder ComfoWell end plate, CW-P 220, ø 125mm
Mounting Set — Article Number: 990 323 569	1 x Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160	———	———	———	———	———
Filter — Article Number: 990 323 601	———	———	———	1 x Filter for Comfowell 220, CW-F(220, ISO ePM1 > 90% (F9), 1 piece	———	———
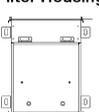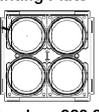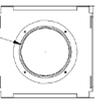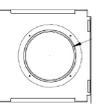
Dimensions

Zehnder ComfoWell attenuator, CW-S 220

Article number: 990 323 500

Description
Attenuator:
Zehnder ComfoWell attenuator CW-S 220.
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	236mm
Depth	232.5mm
Weight	5.1 kg

Side view

Front view
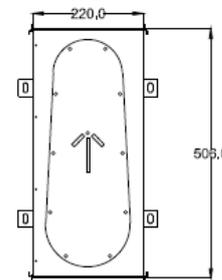
Top View
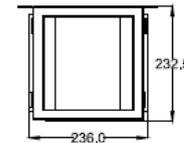
Zehnder ComfoWell manifold box CW-D 220

Article number: 990 323 530

Description
Manifold Box:
Zehnder ComfoWell manifold box CW-D 220.
Rectangular compact design with closed pore
internal lining.
Suitable for use with the mounting plate for
ComfoTube 75mm x 4 connections or 90mm 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	232.8mm
Width	236mm
Depth	253.8mm
Weight	3.51 kg

Side view
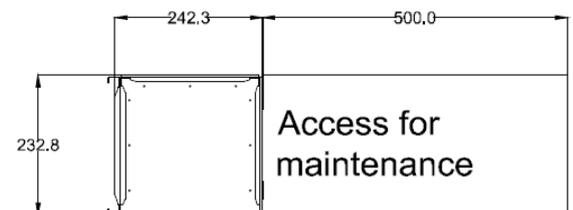
Front view
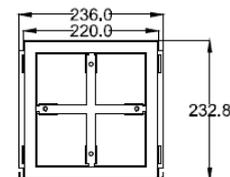
Top View
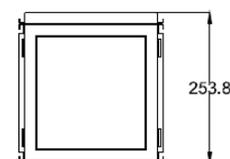
Dimensions

Zehnder ComfoWell filter housing CW-F 220

Article number: 990 323 550

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	236mm
Depth	242.2mm

Side view
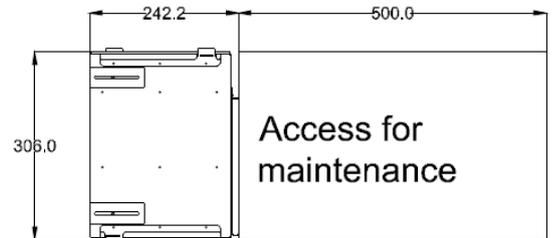
Front view
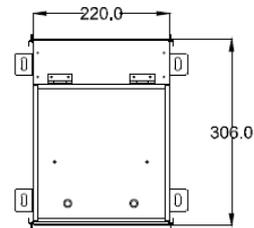
Top View
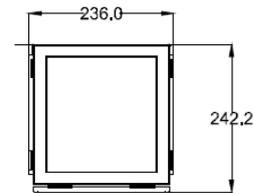
Zehnder ComfoWell mounting plate CW-M 220

Article number   990 323 610

Description

Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 220-4 x 75.

Manifold mounting plate for connection of 4 x ComfoTube 75mm semi-rigid ducting. The mounting plate includes a protective film and the necessary mounting accessories including locking slides.

Dimensions

| Height	45.1mm
Width	236mm
Depth	230mm
Weight	<0.73 kg

Side view

Front view
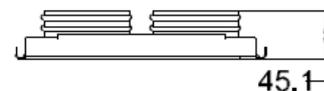
Top View
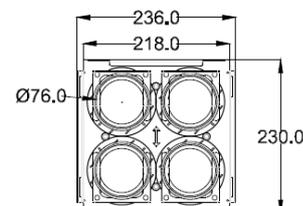
Dimensions

## Zehnder ComfoWell mounting plate CW-M 220

Article number: 990 323 611

Description
Mounting Plate:
Zehnder ComfoWell mounting plate CW-M 220-4 x 90.

Manifold mounting plate for connection of
4 x ComfoTube 90mm semi-rigid ducting.
The mounting plate includes a protective film and the
necessary mounting accessories including locking
slides.

Height	45.1mm
Width	236mm
Depth	230mm
Weight	<0.73 kg

Side view

45.1

Front view

45.1

Top View

Ø90.9
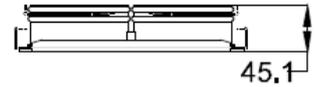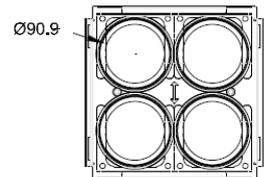

Zehnder ComfoWell end plate CW-P
220 -ø 125

Article number: 990 323 510

Description
End Plate:
Zehnder ComfoWell end plate CW-P 220 - 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	236mm
Depth	230mm
Diameter	125mm

Side view

42.3

Front view

42.3

Top View

236.0

218.0

Ø124.0

230.0
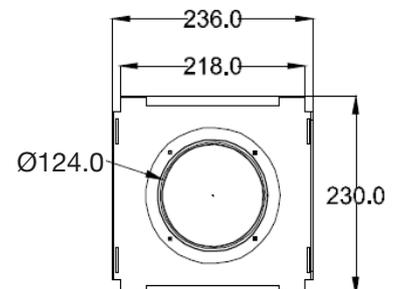
Dimensions

**Zehnder ComfoWell end plate CW-P
220 -ø 150mm**

Article number: 990 323 563

Description
End Plate:
Zehnder ComfoWell end plate CW-P 220 - 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.

Side view

42.3

Front view

42.3

Dimensions

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

Top View

236.0
218.0
Ø149.0
230.0

**Zehnder ComfoWell spacer frame,
CW-DF 220**

Article number: 990 323 537

Description
Spacer Frame:
Zehnder ComfoWell spacer frame CW-DF220.
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.

Side view


27.8

Front view

27.8

Dimensions

Height	27.8mm
Width	236mm
Depth	230mm
Weight	0.84 kg
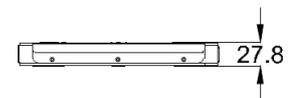
Top View

236.0
220.0
230.0
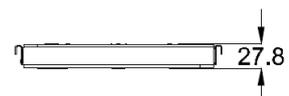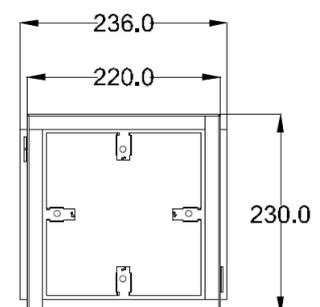
Dimensions

Zehnder ComfoWell mounting set, CW-K 220, for Zehnder ComfoAir 160

Article number: 990 323 569

Description

Mounting set:
A special mounting set is available for the Zehnder ComfoWell 220 for direct mounting to the ComfoAir 160 ventilation unit.
The mounting set includes all the necessary accessories (screws, brackets and mounting brackets)

Side view 94.3

Front view 94.3

Top View

Dimensions

Height	94.3mm
Width	236mm
Depth	230mm
Weight	1.7 kg
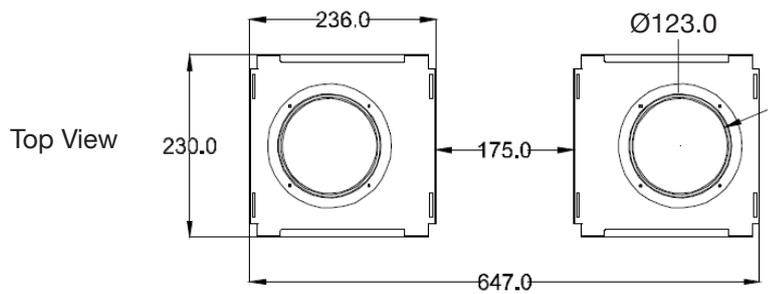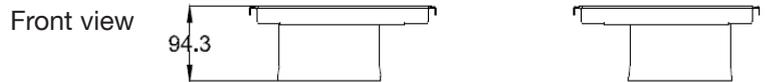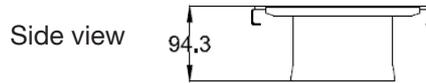
236.0 · Ø123.0 · 230.0 · 175.0 · 647.0

**Zehnder ComfoWell connection plate, CW-P DK 220, for Zehnder ComfoAir 180 downward supply spigot**

Article Number: 990 323 577

Description

Connection Plate:
A special mounting set is available for the Zehnder ComfoWell 220 for direct mounting to the ComfoAir 180 ventilation units alternative supply spigot. The mounting set includes all the necessary accessories (screws, brackets and mounting brackets).

Side view 42.3

Top View 230.0 · 236.0 · Ø124.0

Dimensions

Height	42.3mm
Width	236mm
Depth	230mm
Weight	0.7 kg
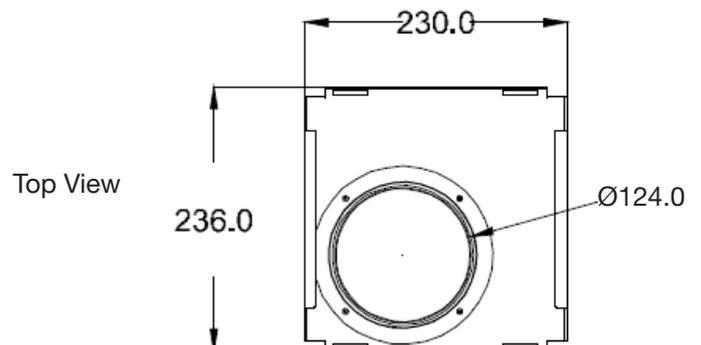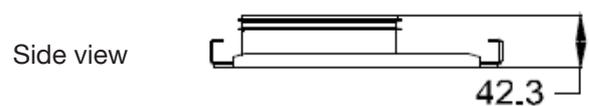
Pressure Curve

Comfowell 220

Airflow (m3/hr)

Static Pressure (Pa) vs Airflow (l/s)
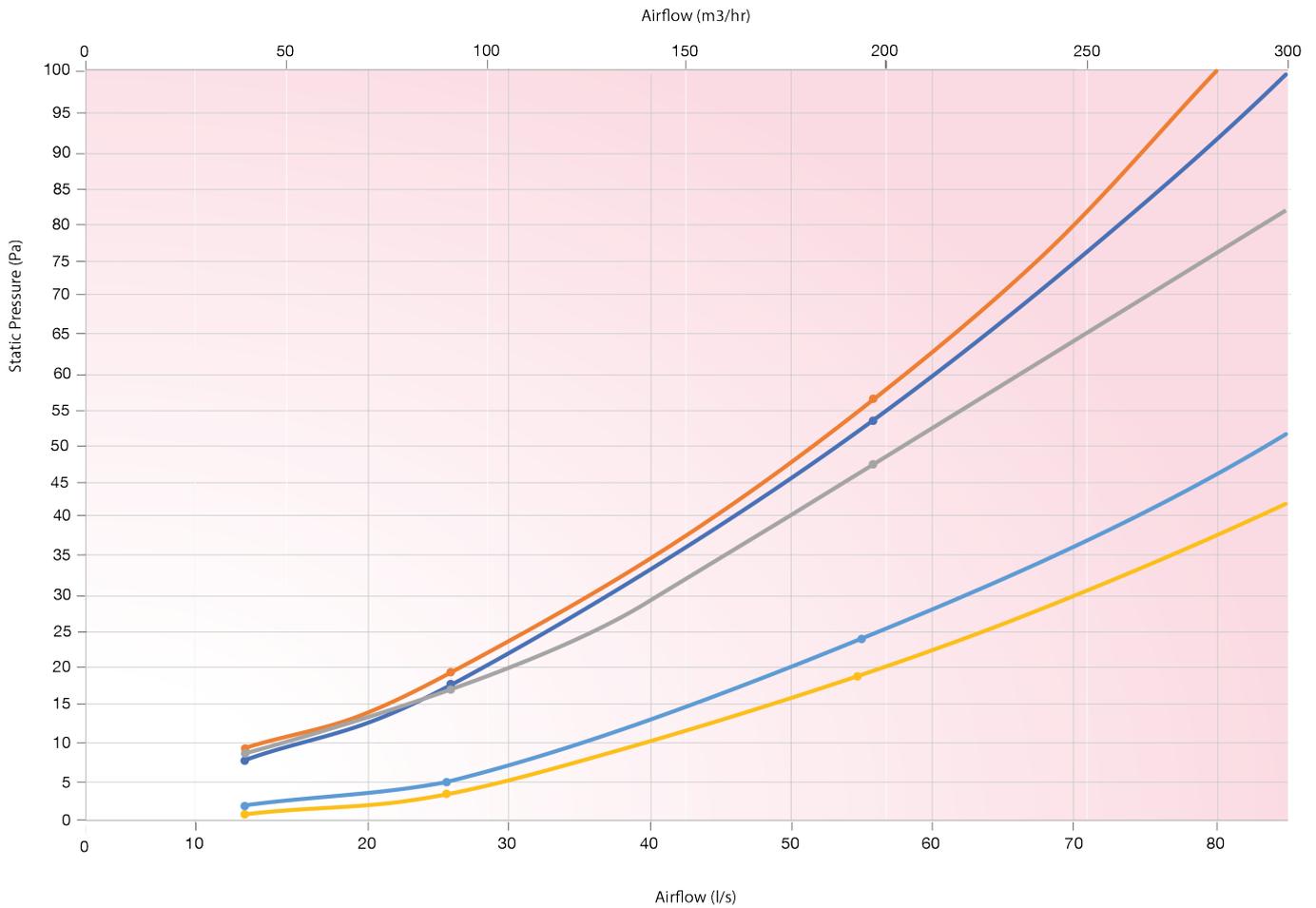
Legend:
- 1 x Attenuator (CW-S 220) with 2 x 125mm end plates (CW-P 220)
- 2 x Attenuator (CW-S 220) stacked with 2 x 125mm end plates (CW-P 220)
- 1 x Filter housing (CW-F 220) with 2 x 125mm end plates (CW-P 220) and filter (CW-F9 220)
- 1 x Filter housing (CW-F 220) with 2 x 125mm end plates (CW-P 220) and filter (AC-F9 220)
- 1 x Filter housing (CW-F 220) with 2 x 125mm end plates (CW-P 220) and filter (CW-F7 220)

Sound Data

Comfowell 220

Combination	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
1 x Attenuator (CW-S 220) with 2 x 125mm end plates (CW-P 220)	5,9	10,2	11,1	16,3	14,8	32,2	25,8	28,1
2 x Attenuator (CW-S 220) stacked with 2 x 125mm end plates (CW-P 220)	7,8	19,4	18,6	28,7	26,5	51,5	45,0	39,1

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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BIM/CAD Components

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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 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.

Comfowell220_Technical_Specification_2018_V1

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