always the best climate

Zehnder ComfoAir Standard

Technical specification for comfort ventilation unit

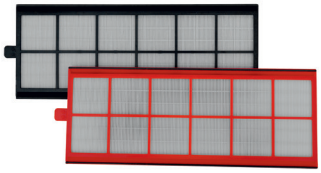
General

The Zehnder ComfoAir Standard has been developed as an ideal solution to improve the indoor air quality in renovation and new build projects. Thanks to the backwards compatibility, the Zehnder ComfoAir Standard offers the possibility to upgrade an existing ventilation system with just a few simple steps. The unit is the ideal replacement to the Zehnder ComfoAir Basic 350 and could also be used as a replacement for competitor systems. The Zehnder ComfoAir Standard has excellent energy efficiency, low noise level and low maintenance requirements, all for an affordable price. The residential ventilation unit, with its modern discreet design, is available in two versions with air volumes up to 300 m^3/h and 375 m^3/h.

Its new powerful heat exchanger and a fan with low specific fan power (SFP), make it possible for the Zehnder ComfoAir Standard to achieve a high level of energy efficiency with low energy consumption. In addition, the fan technology provides an optimal air flow, as well as an improved acoustic performance to ensure high customer satisfaction. In combination with the enhanced filter concept with standard ePM1 (F7) / Coarse (G4) filter for supply and extract air, the Zehnder ComfoAir Standard delivers dust and pollen free fresh air. For even more comfort, the by-pass system ensures that the supply air in the living space is always at the perfect temperature. The filter replacement is always at the right time, due to a time-based filter alert. Furthermore the unit impresses with an easy and flexible installation, due to the 90 degrees turnable bends. Beyond that the unit can easily be commissioned using the inbuilt display and guarantees an easy and convenient operation with various control options like the Zehnder ComfoSense.

Both versions are available in a left or right handed version, with or without a preheater, or with a built-in enthalpy exchanger in the ComfoAir Standard 375 version. The advantage of the preheater is that it ensures trouble-free ventilation at low temperatures.

The built-in enthalpy exchanger is available in the ComfoAir Standard 375 ERV, which reduces excessively dry and humid air for the best possible indoor air quality.



ComfoAir Standard filter ISO Coarse >60% / ISO ePM1 >50% (G4 / F7)

Accessory:
Zehnder ComfoAir Standard mounting base

Benefits

- Available in two versions with air volumes up to 300 m^3/h and 375 m^3/h
- Suitable for use in new build and renovations
- **High level of energy efficiency and heat recovery:** due a powerful heat exchanger
- **Summer comfort:** summer bypass creates the optimum supply air temperature
- **Low noise level:** thanks to the improved fan with low specific fan power
- **Reduce pollutants entering the home:** enhanced filter concept with standard ePM1 (F7) / Coarse (G4) filter for supply and extract air
- **Filter replacement as needed:** notified by a time-based filter alert
- **Easy and flexible installation:** due to 90 degrees turnable bends
- **Easy and convenient operation:** direct control on the display or with various control panels
- **100 % Backwards compatible:** with Zehnder G90 and 91, JEStorkAir, ComfoAir Basic 350 and many other ventilation systems that require an upgrade to meet today's building regulations
- **Even better indoor air quality:** with built-in enthalpy exchanger, which reduces excessively dry and humid air (optionally ComfoAir Standard 375 ERV)

Technical Specifications

	ComfoAir Standard 300	ComfoAir Standard 375	ComfoAir Standard 375 ERV
Performance (EN 13141-7)			
Maximum declared airflow (q_{vd})	300 m^3/h	375 m^3/h	422 m^3/h
Thermal Efficiency (humidity) (0,7 x q_{vd})	87%	86%	80%
Specific fan power	0.20 W/(m^3/h)	0.23 W/(m^3/h)	0.27 W/(m^3/h)
Power consumption (q_{vd})	93.2 W	142.3 W	202 W
Width	625 mm	625 mm	625 mm
Width including spigots	702 mm	702 mm	702 mm
Height	801 mm	801 mm	801 mm
Height including spigots	845 mm	845 mm	845 mm
Depth	572 mm	572 mm	572 mm
Connection data			
Shape air connection	Round	Round	Round
Ducting connection ø	Internal: 160 mm (151 mm) External: 180 mm	Internal: 160 mm (151 mm) External: 180 mm	Internal: 160 mm (151 mm) External: 180 mm
Condensate connection ø	32 mm / $1^1/_4$"	32 mm / $1^1/_4$"	32 mm / $1^1/_4$"
Condensate connection type	Tube / thread connection	Tube / thread connection	Tube / thread connection
Electrical data			
Maximum power consumption	230 V ± 10%, single-phase, 50 Hz	230 V ± 10%, single-phase, 50 Hz	230 V ± 10%, single-phase, 50 Hz
Fuse rating	10 A	10 A	10 A
Material specifications			
External	Coated sheet steel and ABS	Coated sheet steel and ABS	Coated sheet steel and ABS
Internal	EPP and ABS	EPP and ABS	EPP and ABS
Heat exchanger	Polystyrene	Polystyrene	Polystyrene
Enthalpy exchanger	n.a.	n.a.	Polystyrene-polyether copolymer
General			
IP-classification	IP40	IP40	IP40
ISO-classification	B	B	B
Weight	40 kg	40 kg	42 kg
Filter grade	ISO Coarse >60% / ISO ePM1 >50% (G4 / F7)	ISO Coarse >60% / ISO ePM1 >50% (G4 / F7)	ISO Coarse >60% / ISO ePM1 >50% (G4 / F7)

Condensate drain

During the operation, condensate could be formed inside the unit and the ductwork of the exhaust air. For a trouble-free operation, a condensate drain with a Ø 32 mm connection is fitted to the bottom of the unit. To prevent condensation the outdoor and exhaust air ductwork must be insulated and have a vapor-tight barrier.

Air connections and airflow directions

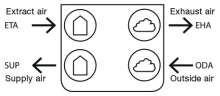
The ComfoAir Standard is equipped with 4 x 45° turnable bend air connections (inner Ø150 mm). Due to these turnable bends, each connection can individually be directed upwards or to the side for an easy and flexible installation.

ComfoAir Standard
with turnable bends

Air connections
R version = residential connections Right
L version = residential connections Left

Right

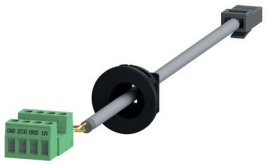
Left



Accessories

ComfoSense includes a built-in time control and can be connected directly on the main PCB using the ComfoSense connection cable, so this remote control with all necessary information on the display can be used.

Zehnder ComfoSense



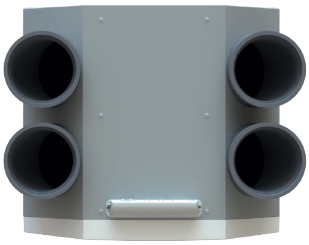
Zehnder ComfoSense connection cable

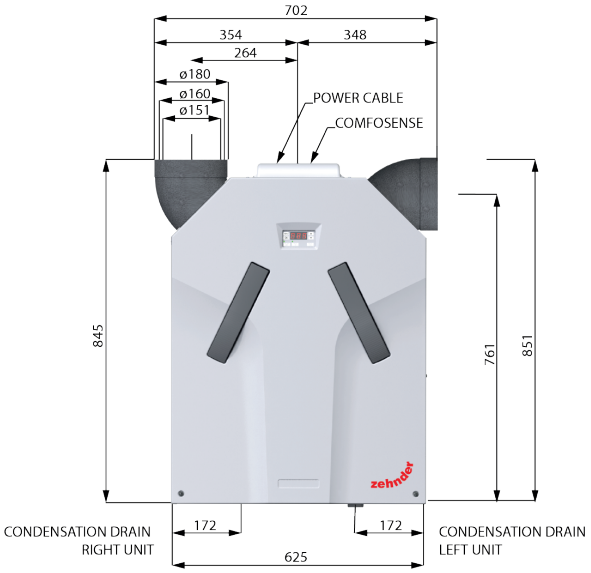
3-stage switch

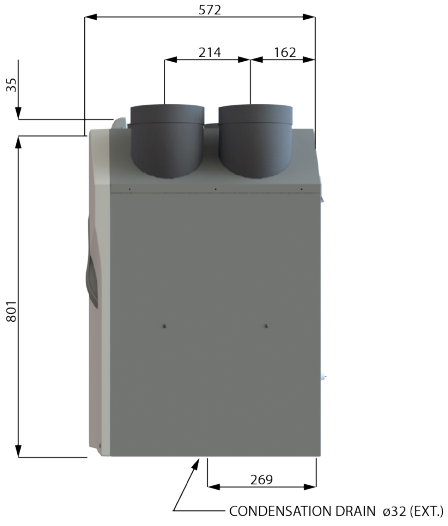
CO2 sensor C55 round

CO2 sensor C67 square

Dimensional drawing

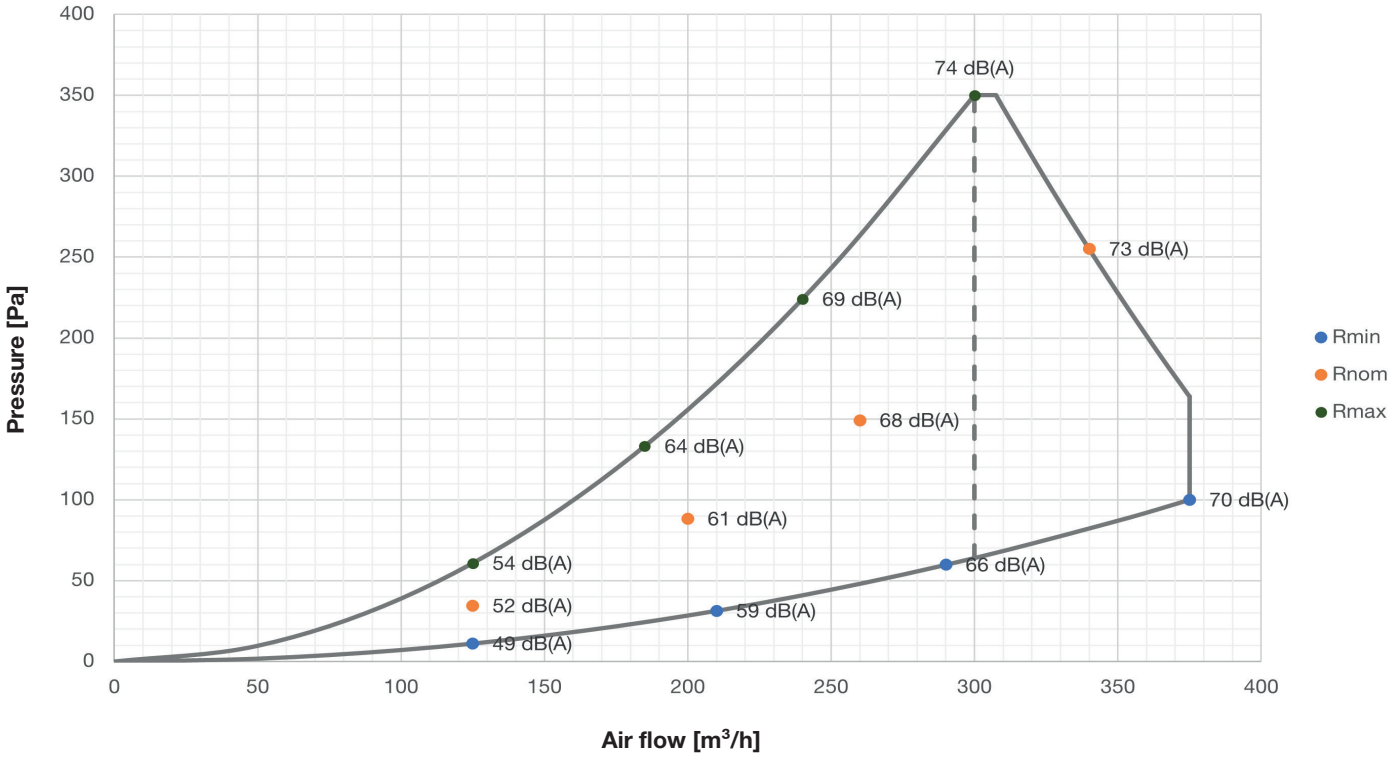






Air graph

In duct Sound Power Levels (A-weighted)
ComfoAir Standard 300/375 - Supply



Performance data

Motor [%]	QV [m³/h]	Pst [Pa]	I [A]	Pe [W]	cos phi [-]	Supply dB(A)	Extract dB(A)	Casing dB(A)
30	125	13	0.15	16	0.43	49	35	34
34	125	32	0.18	19	0.44	52	39	37
40	125	61	0.21	24	0.46	54	41	40
46	210	29	0.33	39	0.51	59	45	44
49	210	50	0.38	42	0.5	60	46	45
53	200	92	0.41	49	0.52	61	48	47
56	185	131	0.45	55	0.52	64	54	49
57	263	50	0.52	60	0.53	63	53	48
64	290	60	0.65	81	0.54	66	52	51
69	260	151	0.76	95	0.54	68	52	53
74	240	229	0.85	108	0.54	69	56	55
83	375	100	1.22	142	0.55	70	58	58
91	340	258	1.53	196	0.55	73	58	59
95	300	351	1.53	197	0.55	74	59	61

- SOUND POWER REFERENCE LEVEL IS 1PW.
- SOUND PRESSURE REFERENCE LEVEL IS 20 MPA.
- SOUND POWER LEVELS MEASURED ACCORDING TO ISO 3741:2010.
- SUPPLY NOISE MEASURED ACCORDING ISO 5135:1997 (L_w VALUES INCLUDE END REFLECTION CORRECTION (THEREFORE, VALUES ARE IN DUCT VALUES)).

Article Overview

Article number	Description	300 m³/h	375 m³/h	Supply	Preheater	HRV	ERV	Power plug
471239600	CA300-BS-L-SD-MCC7/7	x		Left		x		EU
471239601	CA300-BS-R-SD-MCC7/7	x		Right		x		EU
471239602	CA300-BS-L-SD-PRH--MCC7/7	x		Left	x	x		EU
471239603	CA300-BS-R-SD-PRH--MCC7/7	x		Right	x	x		EU
471239608	CA375-BS-L-SD-MCC7/7		x	Left		x		EU
471239609	CA375-BS-R-SD-MCC7/7		x	Right		x		EU
471239610	CA375-BS-L-SD-PRH--MCC7/7		x	Left	x	x		EU
471239611	CA375-BS-R-SD-PRH--MCC7/7		x	Right	x	x		EU
471239616	CA375-BS-L-SD-ERV-MCC7/7		x	Left			x	EU
471239617	CA375-BS-R-SD-ERV-MCC7/7		x	Right			x	EU
471239618	CA375-BS-L-SD-PRH-ERV-MCC7/7		x	Left	x		x	EU
471239619	CA375 -BS-R-SD-PRH-ERV-MCC7/7		x	Right	x		x	EU

Accessories

Article number	Description	Comment
400300207	ComfoSense Connection cable	Can be connected directly to the main PCB
655010200	ComfoSense 55, control panel	Connection cable ComfoSense required
471230000	Retrofitting set pre-heater	Preheater kit for the ComfoAir Standard
471230005	UPGRADESET CA350 BASIC TO LUXE PCB	Can also be used for the ComfoAir Standard
655000845	CO_2 SENSOR 0-10V 55C, in-wall	Luxe PCB required
655000850	CO_2 SENSOR 0-10V 67C, in-wall	Luxe PCB required
655000855	CO_2 SENSOR 0-10V 67C, on-wall	Luxe PCB required
655000755	RFZ remote controlled controll panel	Works with ComfoSense or RF module
655010215	ComfoSense 67 control panel	Connection cable ComfoSense needed
400100085	Coarse (G4) / Coarse (G4), 2pcs	Filters Coarse (G4) / Coarse (G4)
400100084	ePM1 (F7) / Coarse (G4), 2pcs	Filters ePM1 (F7) / Coarse (G4)
900210154	Three-stage switch, in-wall, with 0 position	5-wire cable needed
659000120	Three-stage switch, in-wall, without 0 position	5-wire cable needed
659000300	Three-stage switch, in-wall, without 0 position, with fault-indication	5-wire cable needed
400300208	5-wire cable	To connect to mains supply
642300135	Mounting base	For a floor mounted installation
990201330	Dry siphon 5/4"	For ComfoAir 350/550 and ComfoFond -L Eco

Z_SI_V1220_CSY_ComfoAir Standard_TES_en, subject to change without notice

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