

A close-up photograph of vibrant green grass blades with several clear water droplets of varying sizes clinging to them. The background is a soft, out-of-focus green with bokeh light effects.

Product catalog ComfortAir

CA350

CA550

CA850

CA1200

The logo for TURBOVEX, featuring a stylized circular emblem with blue and green curved lines.

TURBOVEX

- fresh air for everyone

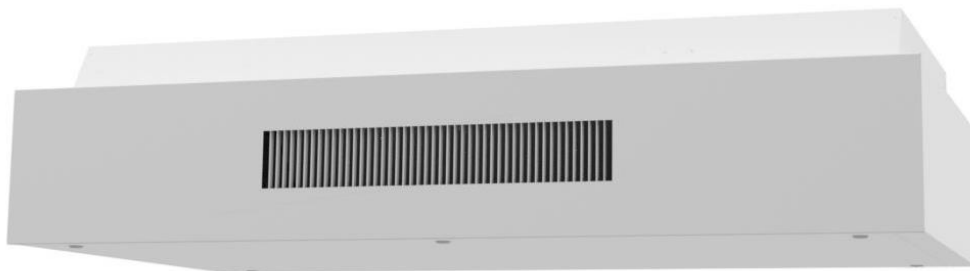
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ComfortAir

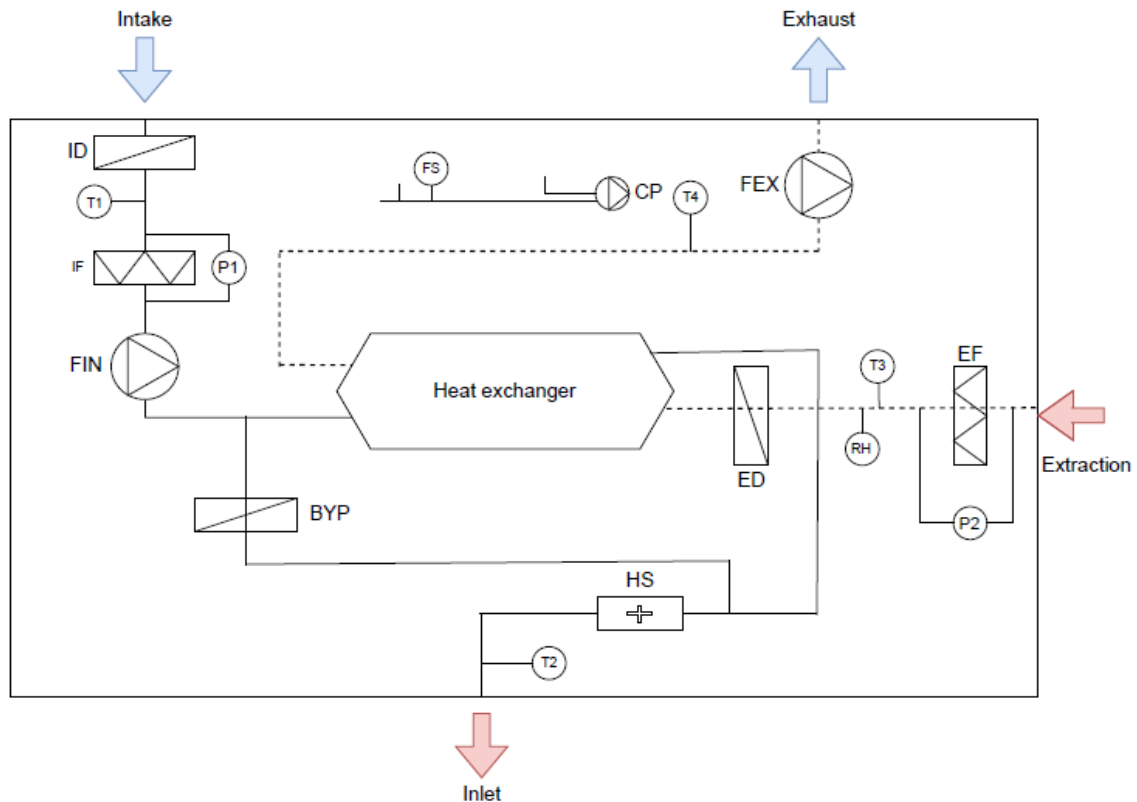
ComfortAir is a series of decentralized ventilation systems with a capacity of 350-1200 m³/h, which can be installed in various locations, such as:

- Schools
- Offices
- Meeting rooms
- Canteens
- Institutions
- Module construction
- Fitness areas



Operating principle

ComfortAir unit - new model



BYP = Bypass (90,91,92)
 HS = Heating surface (51, 52)
 CP = Condensate pump (33,34)
 FS = Float sensor (99,100)
 RH = Room humidity sensor(83,84,85,86)

ID = Intake damper (37,38,39)
 IF = Intake air filter
 FIN = Fan inlet (40,41,42)
 T1 = Temperature intake sensor (53,54)
 T2 = Temperature inlet sensor (55,56)
 P1 = Differential pressure Intake air filter (61,62)

ED = Exhaust damper (96,97,98)
 EF = Exhaust filter
 FEX = Fan extraction (43,44,45)
 T3 = Temperature extraction sensor (57,58)
 T4 = Temperature exhaust sensor (59,60)
 P2 = Differential pressure exhaust air filter (61,62)

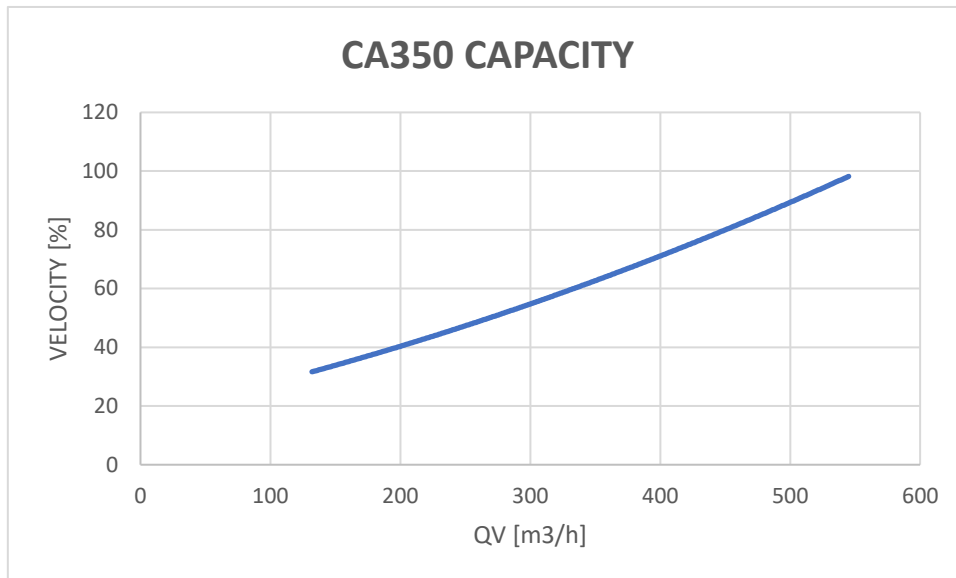
CA350 Technical specifications

Technical data	Filter class	30 dB(A)	35 dB(A)
Maximal capacity*	ePM ₁₀ 50%	243 m ³ /h	337 m ³ /h
Energy consumption		26W/0,26A	43W/0,37A
Temperature efficiency		84,5%	81,5%
Maximal consumption	153W/1,2A		
Duct connection	2 X Ø160 mm		
Supply	1x230 V + N + PE / 50 Hz		
Weight	60 kg		
Material	Aluminium		
Counterflow heat exchanger	Aluminium		
Dimensions LxWxH	1322x801x359 mm		
Supply filter	ePM ₁₀ 50% or ePM ₁ 55%		
Exhaust filter	ePM ₁₀ 50%		
Colour	RAL 9010		
Supply cable	3G 1mm ²		
Recommended fuse	10 A		
Recommended residual current device	Type A		
Leakage current	≤0,7 mA		
Leakage Tightness class	Class L2 acc. EN 1886 Class A1 acc. EN 13141-7 Class B acc. EN 13779		
Electric heating element(option)	500 W		

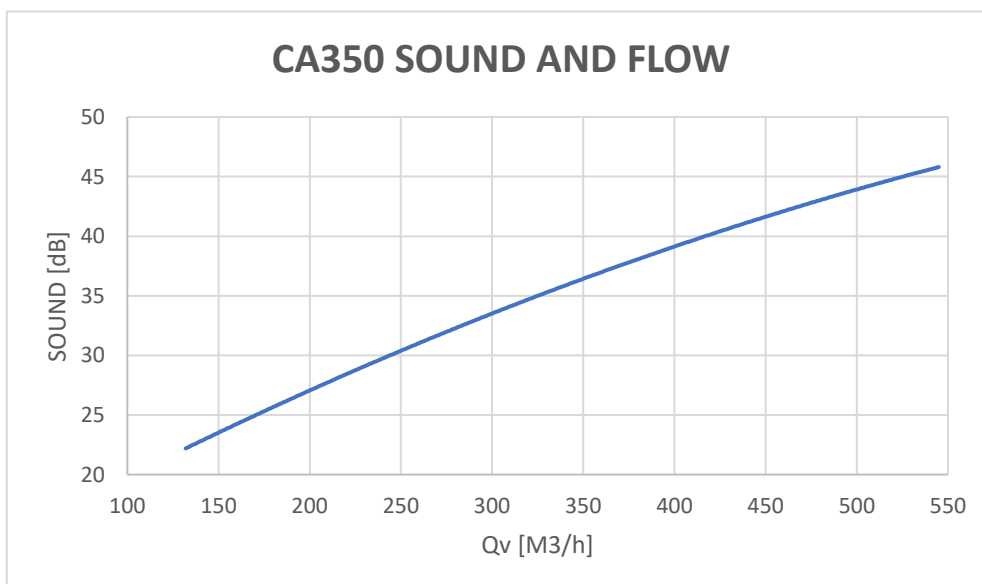
* All measurements were taken during normal operation in a standard installation situation with filter class, for air/exhaust air: ePM10 50% / ePM10 50% and for air/exhaust air ePM1 55% / ePM10 50%. Sound measurements were made in a test room of 70 m³ 1m horizontally and 1,5m vertically from the unit. Sound measurements are prepared based on DS/EN ISO 10052

Data curves for CA350

Capacity with $ePM_{10}50\%$ [M5] / $ePM_{10}50\%$ [M5]

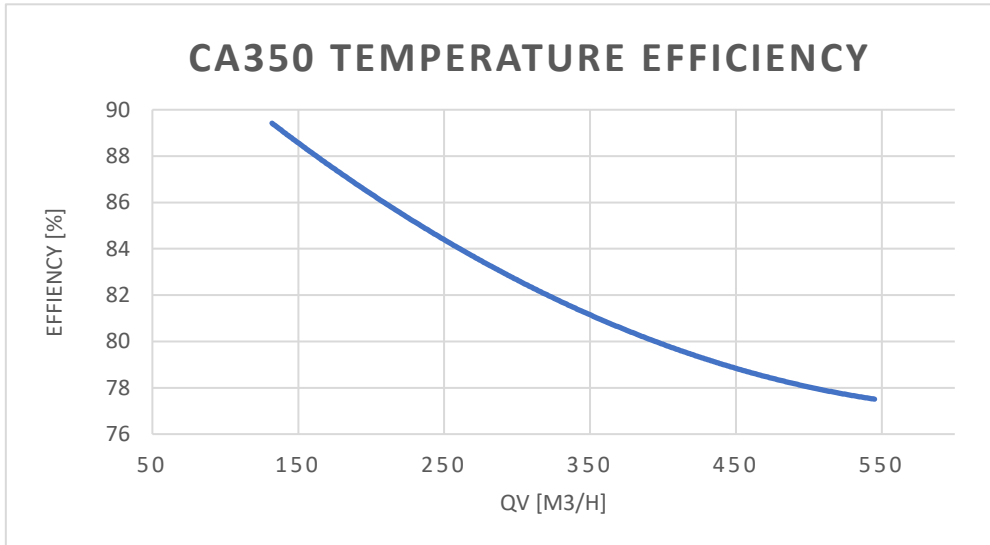


Sound and flow



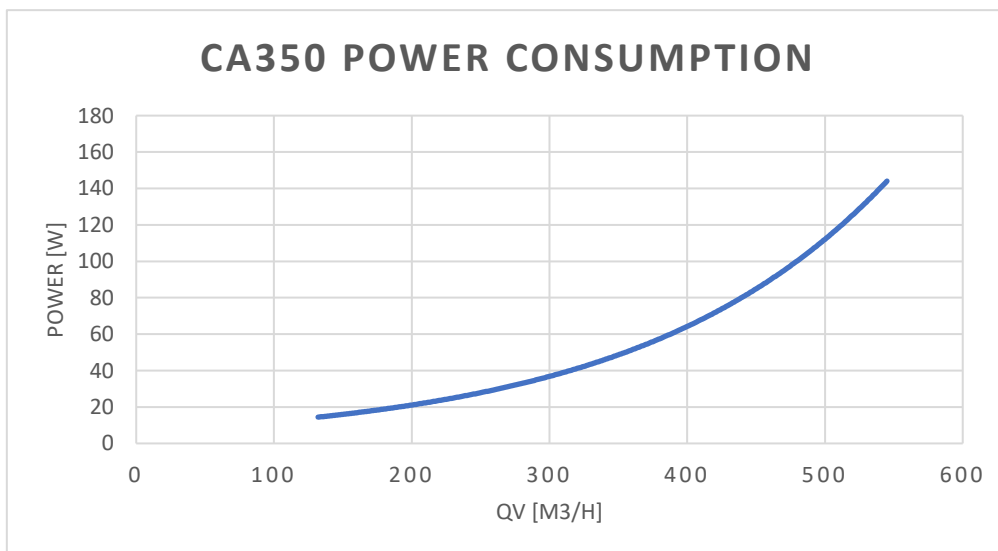
Temperature efficiency heat exchanger, according to. EN 308

EN308 conditions: balanced operation; indoor air: 25 °C, 28 % RH; outside air: 5 °C, 50 % RH



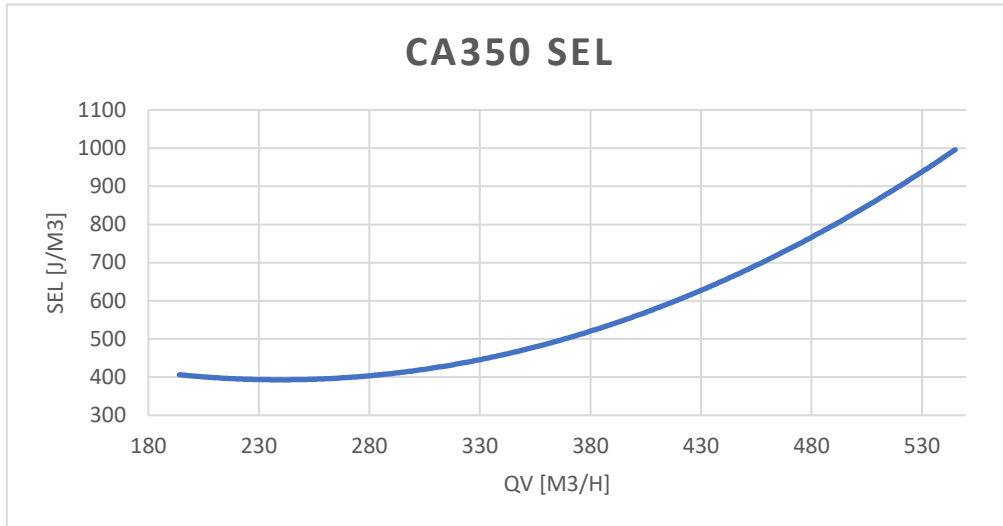
Power consumption

Measurement with $ePM_{10}50\%$ / $ePM_{10}50\%$ filter



SEL

Measurement with $ePM_{10}50\%$ / $ePM_{10}50\%$ filtre



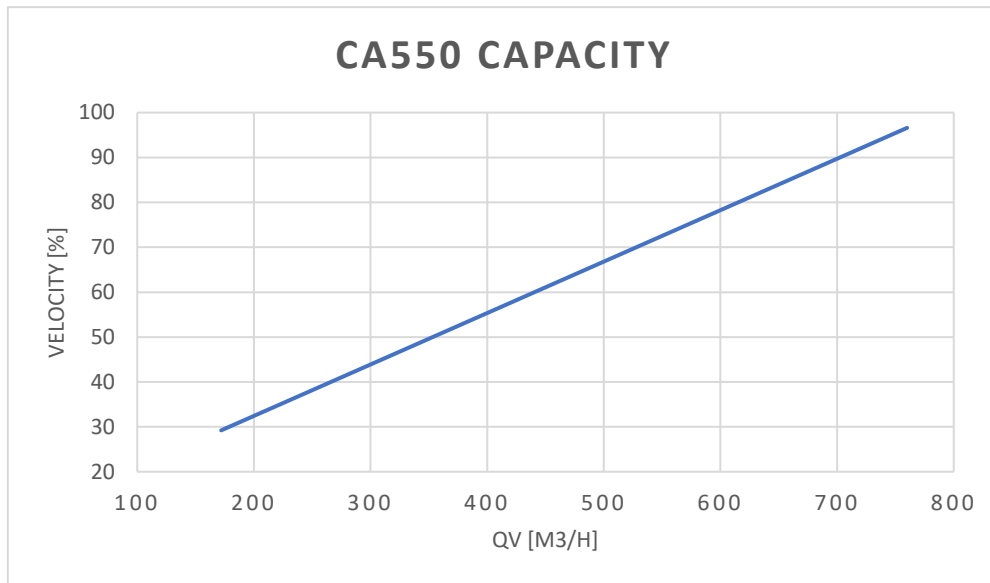
CA550 Technical specifications

Technical data	Filter class	30 dB(A)	35 dB(A)
Maximal capacity*	ePM ₁₀ 50%	350m ³ /h	560 m ³ /h
Energy consumption		37W/0,31A	83W/0,67A
Temperature efficiency		86%	83%
Maximal consumption		179W/1,34A	
Duct connection		2 x Ø200	
Supply		1x230 V + N + PE / 50 Hz	
Weight		85 kg	
Material		Aluminium	
Counterflow heat exchanger		Aluminium	
Dimensions LxWxH		1750x929x421 mm	
Supply filter		ePM ₁₀ 50% or ePM ₁ 55%	
Exhaust filter		ePM ₁₀ 50%	
Colour		RAL 9010	
Supply cable		3G 1mm ²	
Recommended fuse		10 A	
Recommended residual current device		Type A	
Leakage current		≤0,7 mA	
Leakage Tightness class		Class L2 acc. EN 1886 Class A1 acc. EN 13141-7 Class B acc. EN 13779	
Electric heating element(option)		500 W	

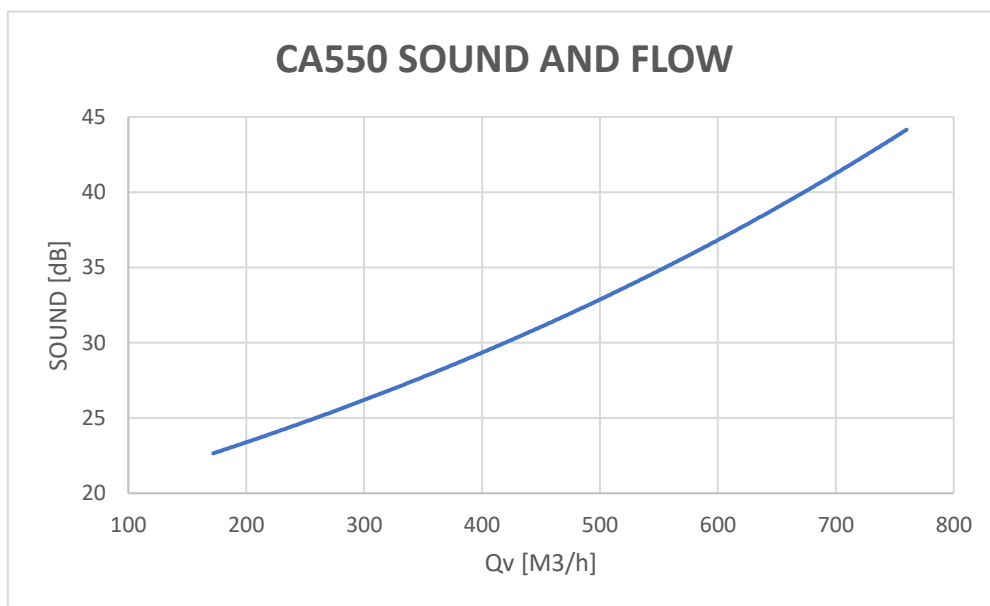
* All measurements were taken during normal operation in a standard installation situation with filter class, for air/exhaust air: ePM₁₀ 50% / ePM₁₀ 50% and for air/exhaust air ePM₁ 55% / ePM₁₀ 50%. Sound measurements were made in a test room of 70 m³ 1m horizontally and 1,5m vertically from the unit. Sound measurements are prepared based on DS/EN ISO 10052

Data curves for CA550

Capacity with $ePM_{10}50\%$ [M5] / $ePM_{10}50\%$ [M5]

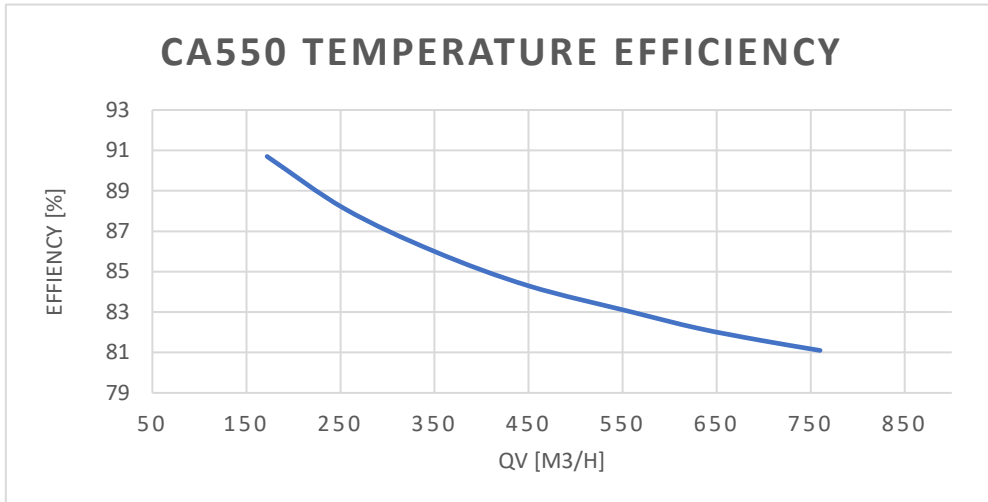


Sound and flow



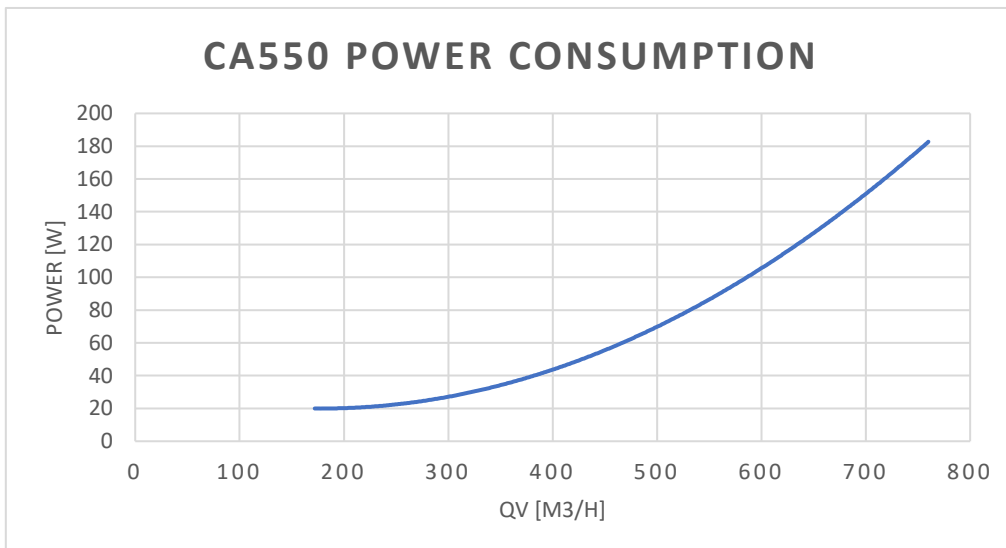
Temperature efficiency heat exchanger, according to. EN 308

EN308 conditions: balanced operation; indoor air: 25 °C, 28 % RH; outside air: 5 °C, 50 % RH



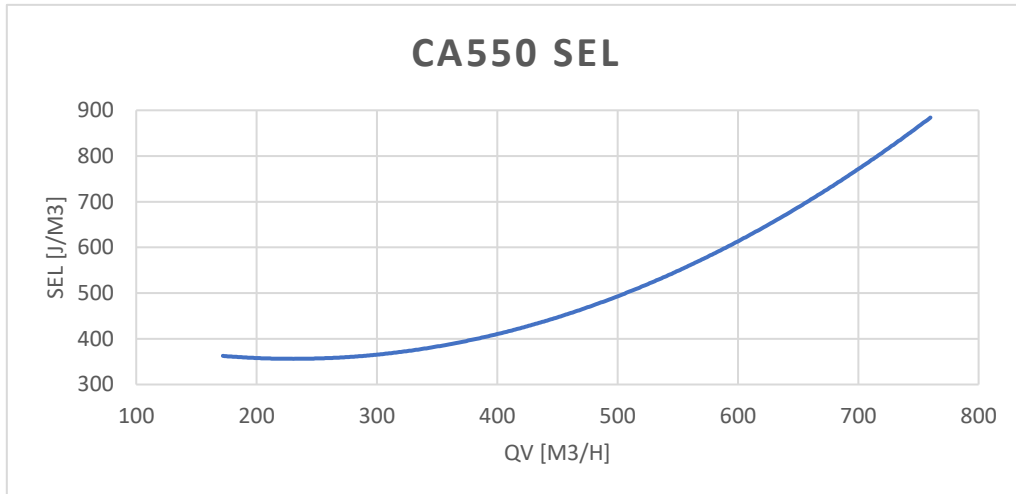
Power consumption

Measurement with $ePM_{10}50\%$ / $ePM_{10}50\%$ filter



SEL

Measurement with $ePM_{10}50\%$ / $ePM_{10}50\%$ filtre



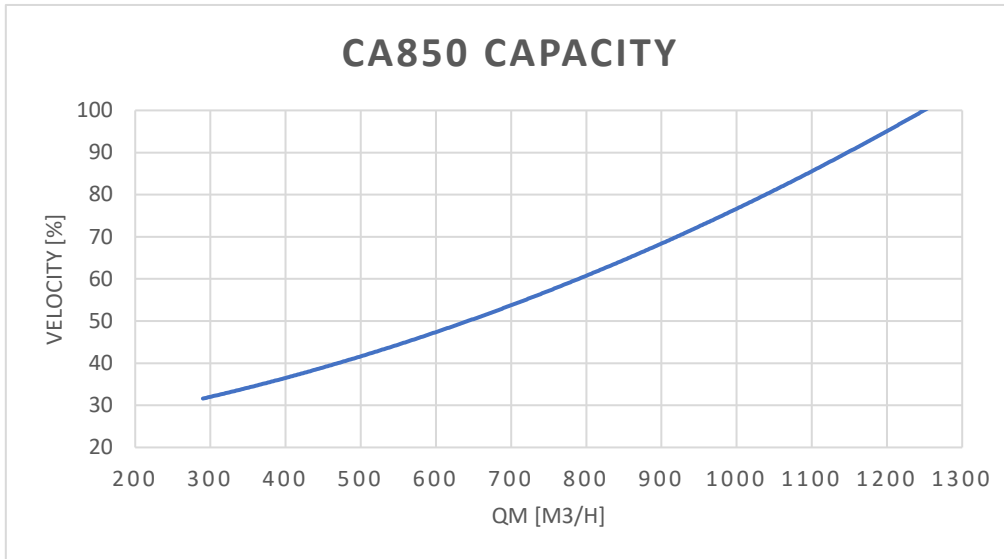
CA850 Technical specifications

Technical data	Filter class	30 dB(A)	35 dB(A)
Maximal capacity*	ePM ₁₀ 50%	515m ³ /h	813m ³ /h
Energy consumption		47W/0,41A	85W/0,7A
Temperature efficiency		84,6%	81%
Maximal consumption	315W/2,4A		
Duct connection	2 x Ø250 mm		
Supply	1x230 V + N + PE / 50 Hz		
Weight	140 kg		
Material	Aluminium		
Counterflow heat exchanger	Aluminium		
Dimensions LxWxH	2003x1057x482 mm		
Supply filter	ePM ₁₀ 50% or ePM ₁ 55%		
Exhaust filter	ePM ₁₀ 50%		
Colour	RAL 9010		
Supply cable	3G 1mm ²		
Recommended fuse	10 A		
Recommended residual current device	Type A		
Leakage current	≤0,7 mA		
Leakage Tightness class	Class L2 acc. EN 1886 Class A1 acc. EN 13141-7 Class B acc. EN 13779		
Electric heating element(option)	1000 W		

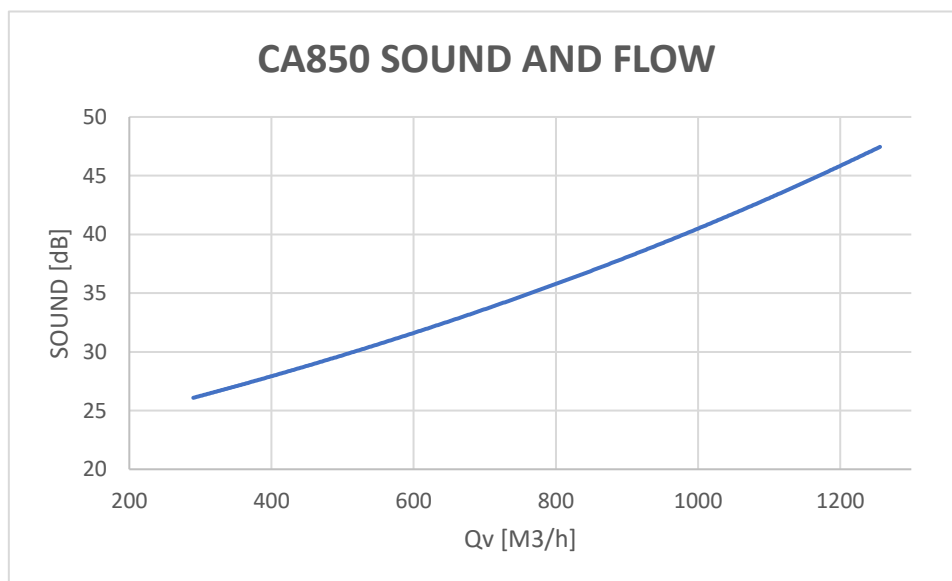
* All measurements were taken during normal operation in a standard installation situation with filter class, for air/exhaust air: ePM₁₀ 50% / ePM₁₀ 50% and for air/exhaust air ePM₁ 55% / ePM₁₀ 50%. Sound measurements were made in a test room of 70 m³ 1m horizontally and 1,5m vertically from the unit. Sound measurements are prepared based on DS/EN ISO 10052

Data curves for CA850

Capacity with $ePM_{10}50\%$ [M5] / $ePM_{10}50\%$ [M5]

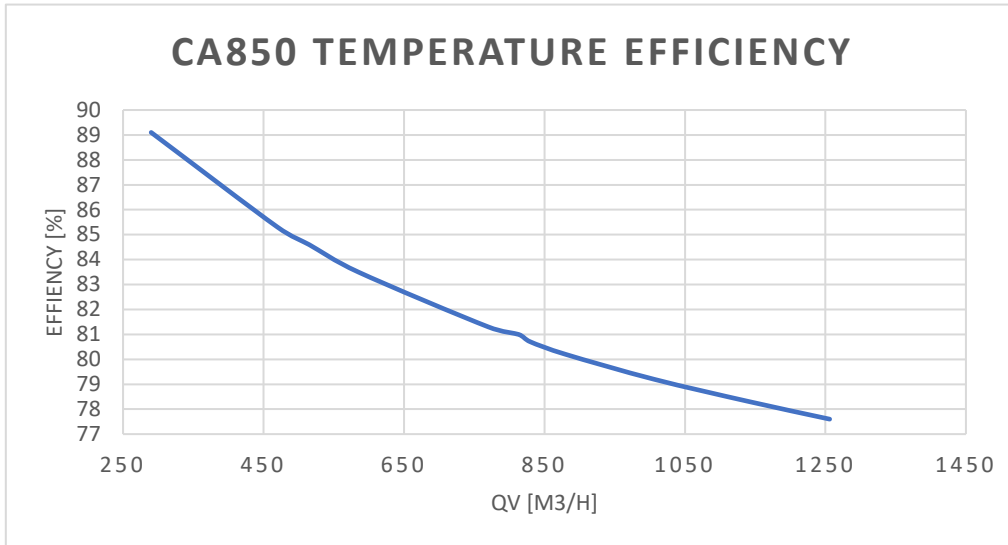


Sound and flow



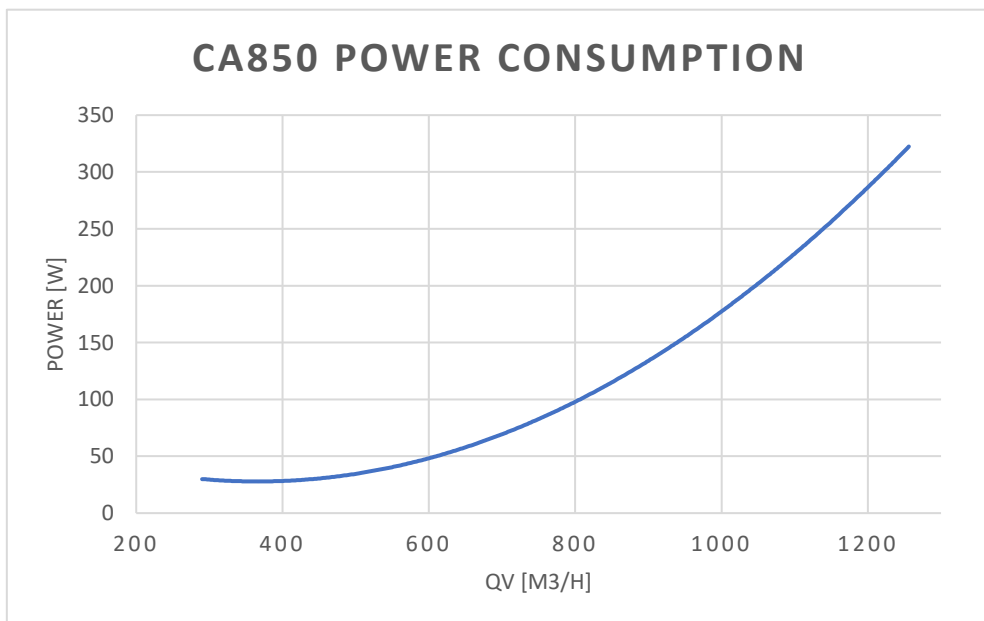
Temperature efficiency heat exchanger, according to. EN 308

EN308 conditions: balanced operation; indoor air: 25 °C, 28 % RH; outside air: 5 °C, 50 % RH



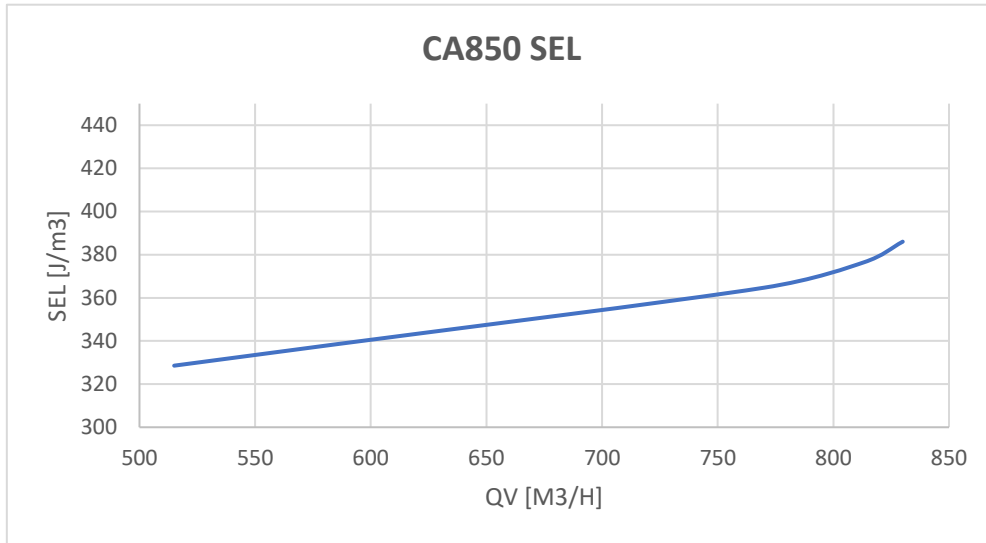
Power consumption

Measurement with $ePM_{10}50\%$ / $ePM_{10}50\%$ filter



SEL

Measurement with $ePM_{10}50\%$ / $ePM_{10}50\%$ filtre



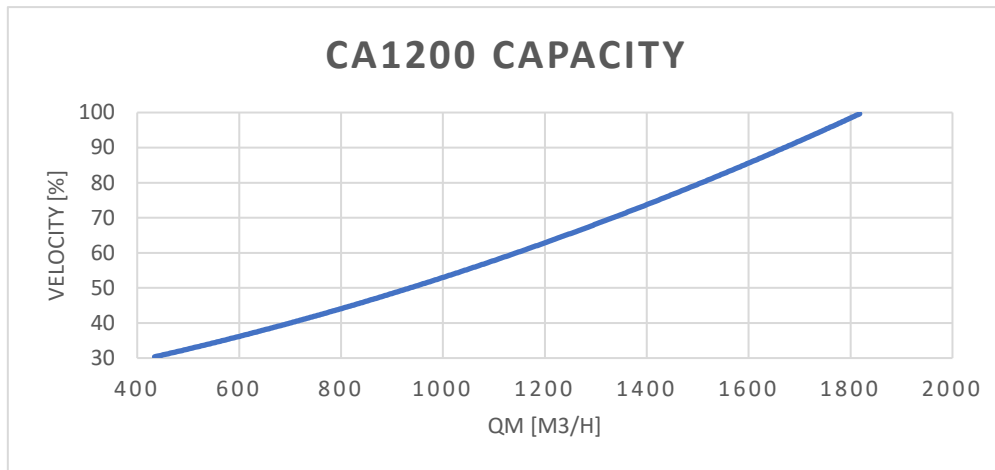
CA1200 Technical specifications

Technical data	Filter class	30 dB(A)	35 dB(A)
Maximal capacity*	ePM ₁₀ 50%	955m ³ /h	1198m ³ /h
Energy consumption		65W/ 0,52A	120W/0,9A
Temperature efficiency		88%	86,6%
Maximal consumption	300W/2,3A		
Duct connection	2 x Ø315 mm		
Supply	1x230 V + N + PE / 50 Hz		
Weight	180 kg		
Material	Aluminium		
Counterflow heat exchanger	Aluminium		
Dimensions LxDxH	2131x1215x632 mm		
Supply filter	ePM ₁₀ 50% or ePM ₁ 55%		
Exhaust filter	ePM ₁₀ 50%		
Colour	RAL 9010		
Supply cable	3G 1mm ²		
Recommended fuse	10 A		
Recommended residual current device	Type A		
Leakage current	≤0,7 mA		
Leakage Tightness class	Class L2 acc. EN 1886 Class A1 acc. EN 13141-7 Class B acc. EN 13779		
Electric heating element(option)	1250 W		

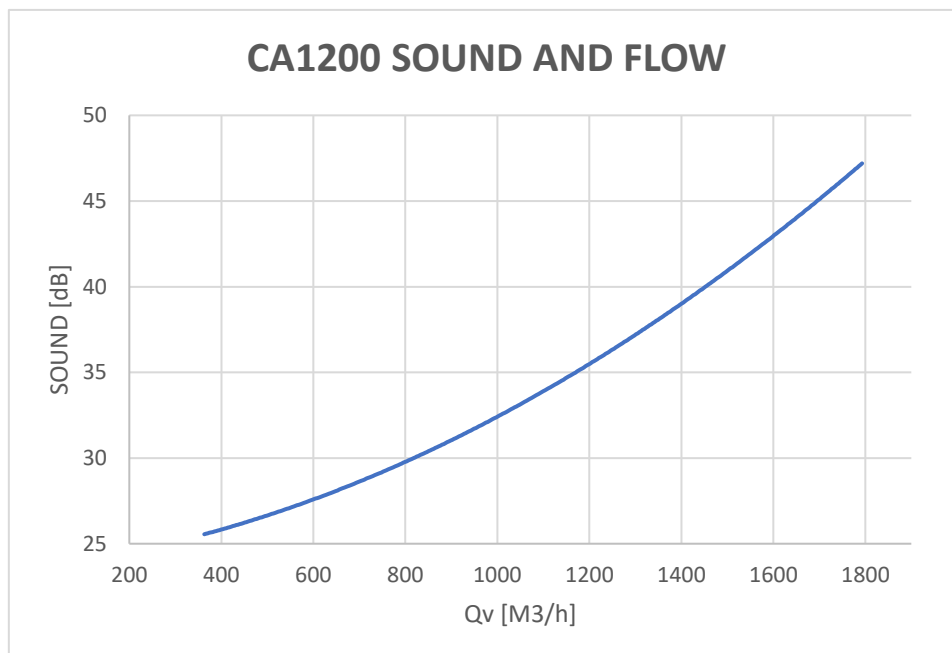
* All measurements were taken during normal operation in a standard installation situation with filter class, for air/exhaust air: ePM₁₀ 50% / ePM₁₀ 50% and for air/exhaust air ePM₁ 55% / ePM₁₀ 50%. Sound measurements were made in a test room of 70 m³ 1m horizontally and 1,5m vertically from the unit. Sound measurements are prepared based on DS/EN ISO 10052

Data curves for CA1200

Capacity with $ePM_{10}50\%$ [M5] / $ePM_{10}50\%$ [M5]

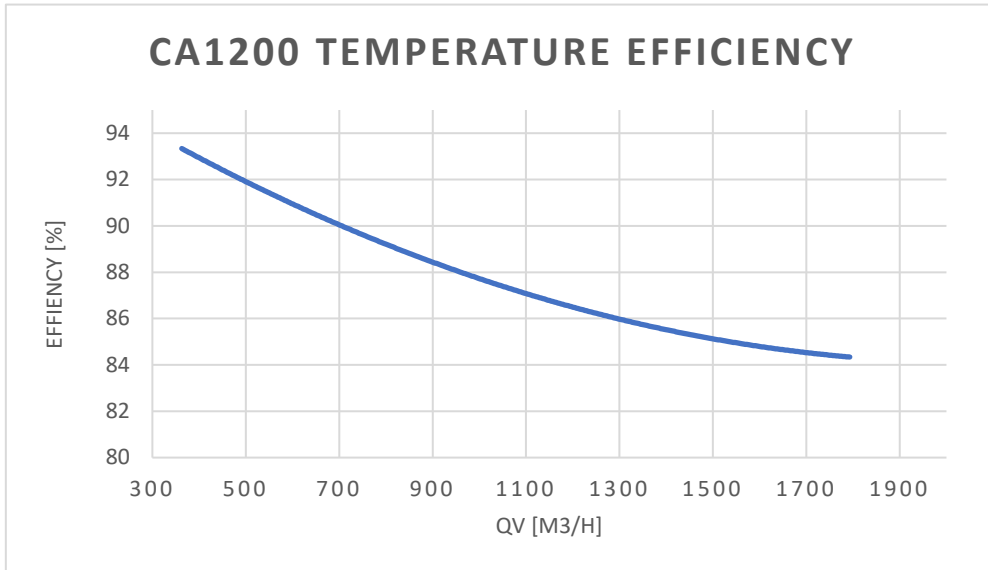


Sound and flow



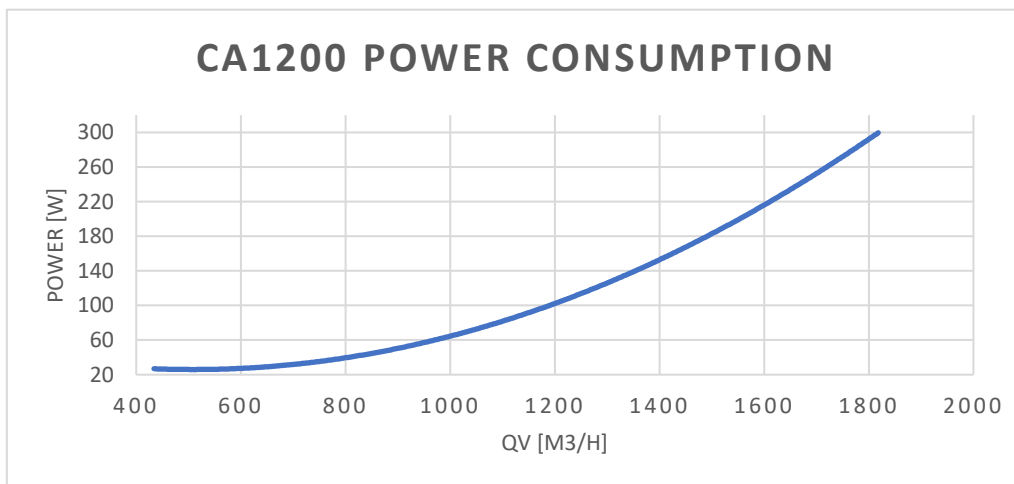
Temperature efficiency heat exchanger, according to. EN 308

EN308 conditions: balanced operation; indoor air: 25 °C, 28 % RH; outside air: 5 °C, 50 % RH



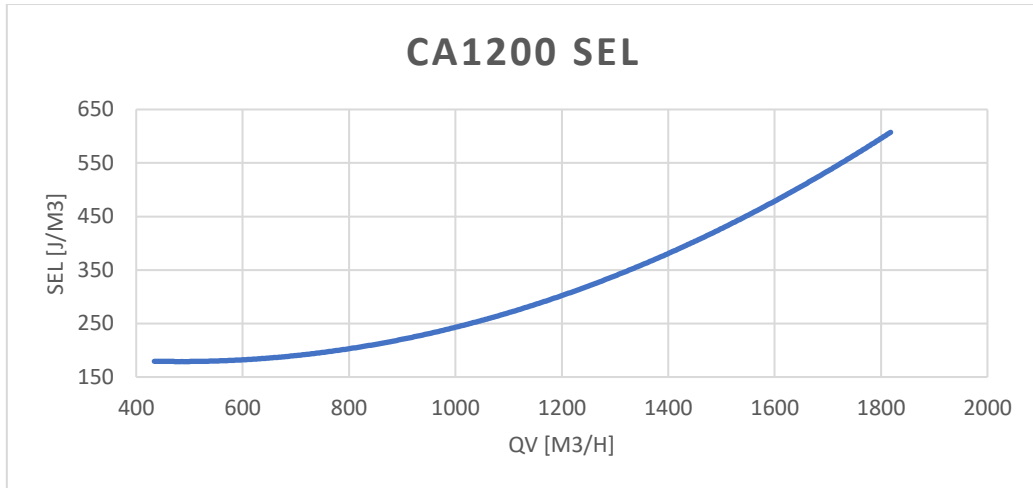
Power consumption

Measurement with $ePM_{10}50\%$ / $ePM_{10}50\%$ filter



SEL

Measurement with $ePM_{10}50\%$ / $ePM_{10}50\%$ filtre

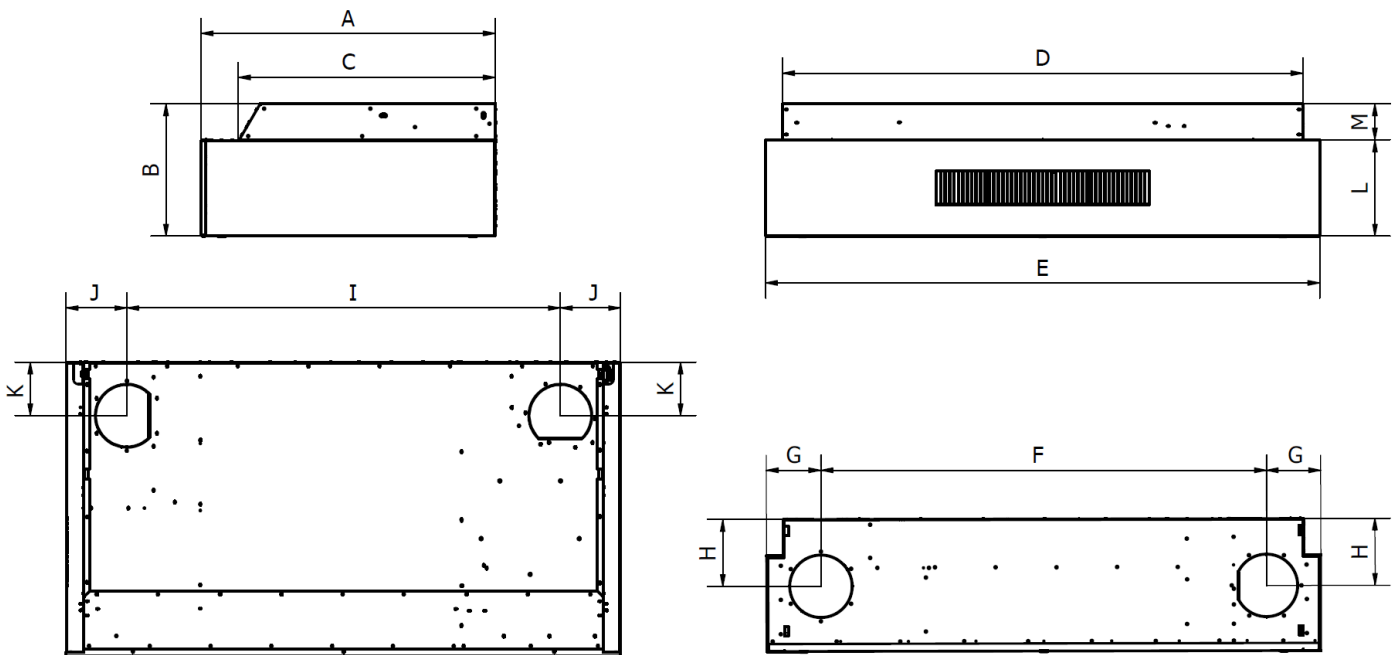


Comparison of CA units

		CA350	CA550	CA850	CA1200	unit
Dimensions:	Length	1322	1750	203	2131	mm
	width	801	929	1057	1215	mm
	Height	359	421	482	632	mm
Duct connection		2 x Ø160	2 x Ø200	2 x Ø250	2 x Ø315	mm
Weight		60	85	140	180	kg
Capacity	Nominal	337	560	813	1198	m ³ /h
	Forced	545	760	1256	1800	m ³ /h
Sound		35				dB(A)
Filters		ePM10 50%				
Power consumption	Nominal	43	89	85	120	W
	Forced	153	179	315	300	W
Colour		RAL 9010				
Temperature efficiency		81,5	83	81	86,6	%
Electric heating element (option)		500	500	1000	1250	W

The nominal values are at a sound level of 35 dB(A), while the values for forced operation represent the maximum capacity without consideration of the sound level.

Dimensional drawing

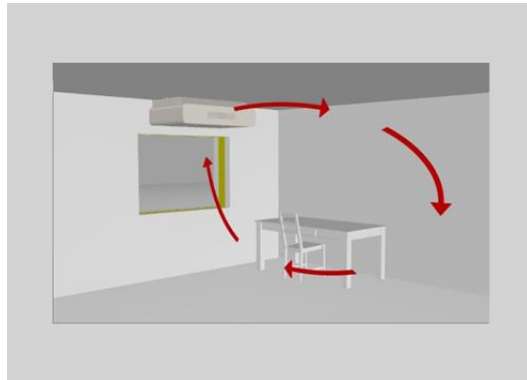
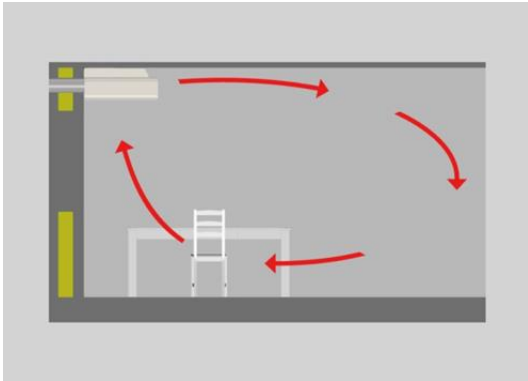


Dimension(mm)	CA350	CA550	CA850	CA1200
A	801	930	1057	1213
B	359	421	482	632
C	714	812	930	1129
D	1212	1643	1918	2020
E	1322	1751	2003	2131
F	1016	1407	1628	1675
G	153	172	188	228
H	172	212	252	352
I	978	1369	1578	1595
J	172	191	213	268
K	149	169	195	248
L	259	304	356	431
M	100	117	126	201

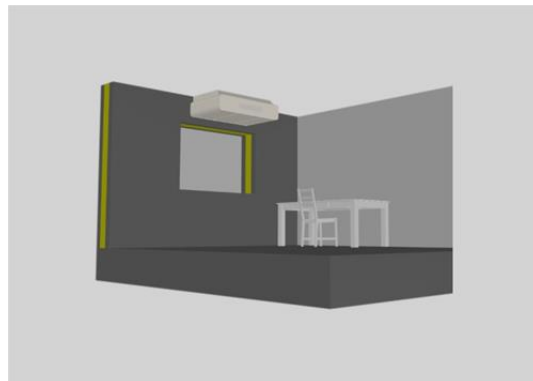
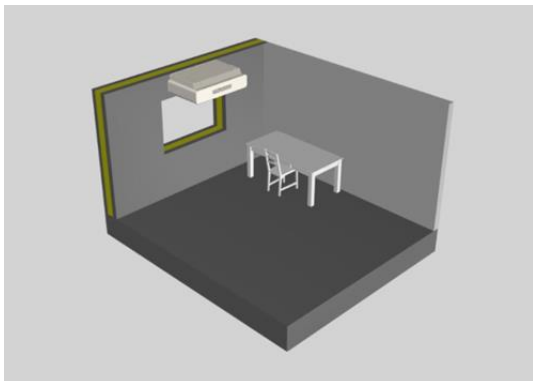
Placement

The unit is generally installed on a wall directly under the ceiling. This location utilizes the coanda effect as it leads the air further into the room along the surface of the ceiling. In this way inflowing air can mix with the room's existing air for a longer period and thereby prevent draught. This placement, as the point for supply and exhaust airflow provides optimal circulation.

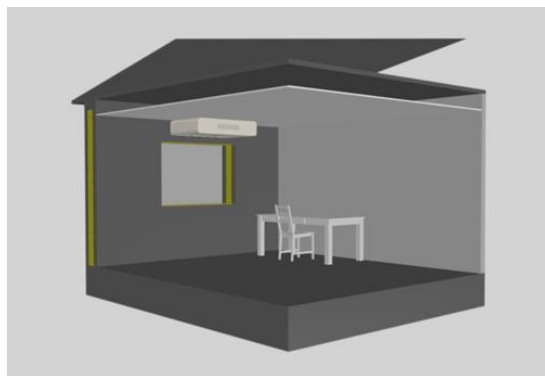
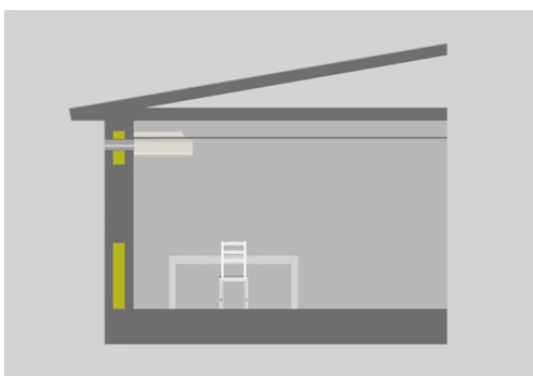
Coanda effect



Suggested installation



Installation in a false ceiling



Options ComfortAir

Components	CA350	CA550	CA850	CA1200
TX electronic controller	○	○	○	○
CO ₂ sensor T8100-E-D with display	○	○	○	○
CO ₂ sensor T8031 built-in	○	○	○	○
Hygrostat	○	○	○	○
PIR sensor	○	○	○	○
Temperature sensor	●	●	●	●
LON-interface	○	○	○	○
Master/slave PCB	○	○	○	○
MODbus PCB	○	○	○	○
MODbus converter incl. software	○	○	○	○
Filter EPM ₁₀ 50%	●	●	●	●
Filter EPM ₁ 55%	○	○	○	○
Fittings for installation in false ceiling	○	○	○	○
Angle brackets for installation in false ceiling	○	○	○	○
Condensation pump	○	○	○	○
Condensation tray	●	●	●	●
Modulating bypass	●	●	●	●
2 x dampers in & out	●	●	●	●
Electric heating element	○	○	○	○
Counter flow heat exchanger (aluminum)	●	●	●	●
Mounting brackets	●	●	●	●
Ducts	○	○	○	○
Grilles	○	○	○	○
Colour RAL9010	●	●	●	●
Other RAL colours	○	○	○	○
Filter alarm	●	●	●	●

● Standard

○ Option

See more details on
www.turbovex.dk

Control/operation

TX electronic control

With TX Electronic control / display panel there are many opportunities for individual setup parameters. Among these are:

- Forced mode
- Prolonged mode
- Temperature set points
- Keypad lock in 4 levels
- Alarm menu
- Software stops
- Day mode
- Night mode
- Calendar
- Time/ day/ date
- DST on/off
- Language
- Standby
- PIR
- Technical menu
- System info
- other

Master/Slave

The master / slave function allows communication between a unit [master] and up to 5 additional units [slaves 1-5]. The master unit controls the slave units so that all 6 units run in the same way.

The slave units send information back to the master unit. Any error that might occur in a slave unit will be displayed on the master unit with an error message and specification of the defective unit. Thus, all units must be numbered.

The master / slave option requires an additional small circuit board to be installed on the main circuit board of each unit.

LON

LON [Local Operating Network] is a network where the data is distributed to the devices connected to the system and not concentrated in a control station as in a traditional network. Thousands of Tx units can be set up on the same network and the wiring can be several kilometers long. The LON option requires an additional small circuit board to be installed on the main circuit board of each unit.

- 4 parameters can be written, 14 parameters can be read

MODbus / RS-485

MODbus is an industrial standard of serial communication for use in client/server communication between devices that can be connected through different networks. 247 TX units can be installed in the same MODbus network and cable length can be up to 500 meters which can be extended up to 1000 meters though at low data speed communication. The MODbus option requires an additional small circuit board to be installed on the main circuit board of each unit.

- 16 parameters can be written, 17 parameters can be read

MODbus with converter and PC software

MODbus is an industrial standard of serial communication for use in client/server communication between devices that can be connected through different networks. 200 TX units can be installed in the same MODbus network and cable length can be up to 500 meters which can be extended up to 1000 meters though at low data speed communication. The MODbus Network option requires an additional small circuit board to be installed on the main circuit board of each unit.

- 38 parameters can be read and written





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