Product catalog
ComfortAir

CA350

CA550

CA850

CA1200

TURBOVEX

~ fresh air for everyone

Contents

ComfortAir

A decentralized ventilation with a capacity from 300-1000 m3/h can be used in the following locations:

· Schools

· Offices

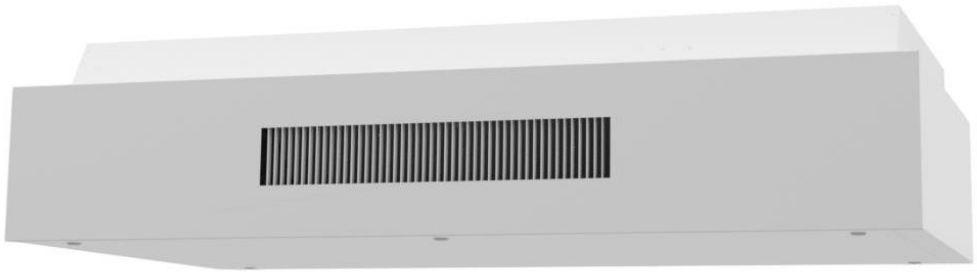
· Meeting rooms

· Canteens

· Institutions

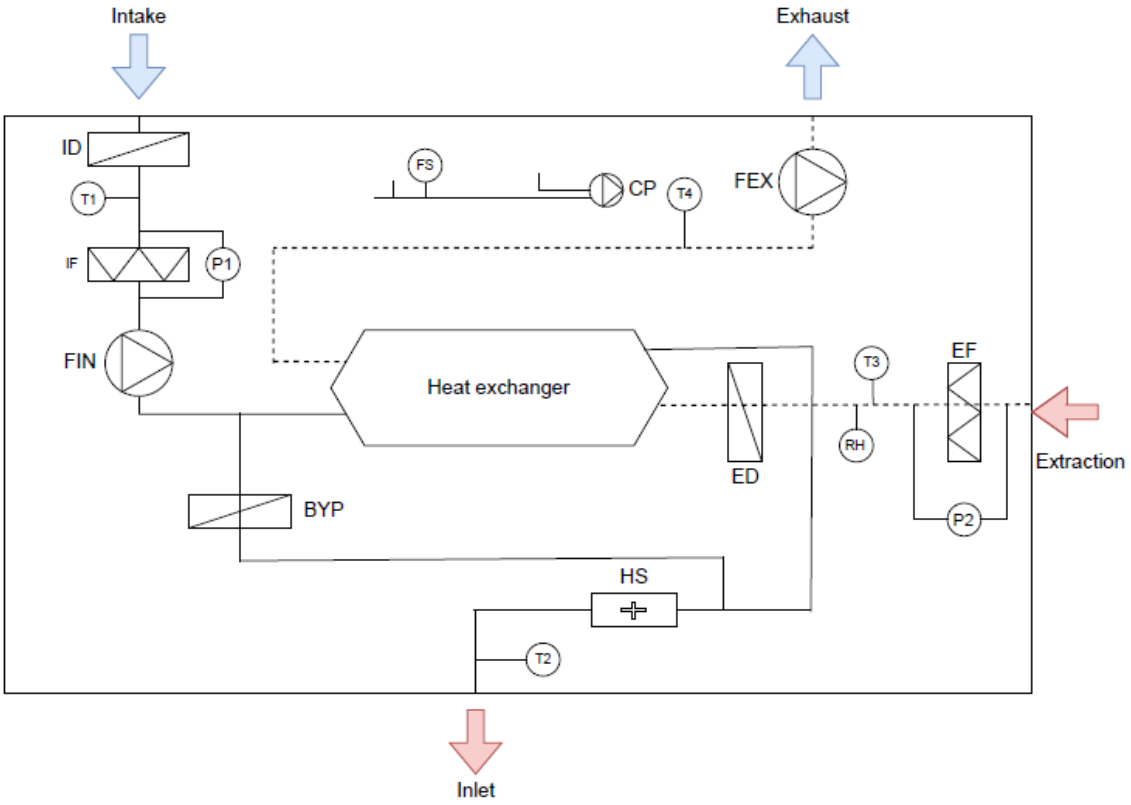
· Module contruction

· 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)

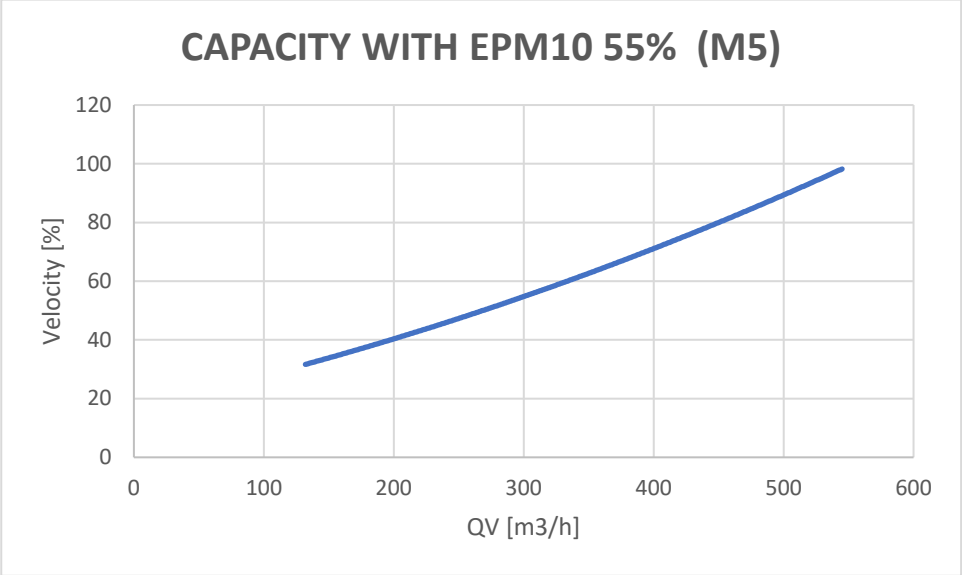
CA 350 Technical specifications

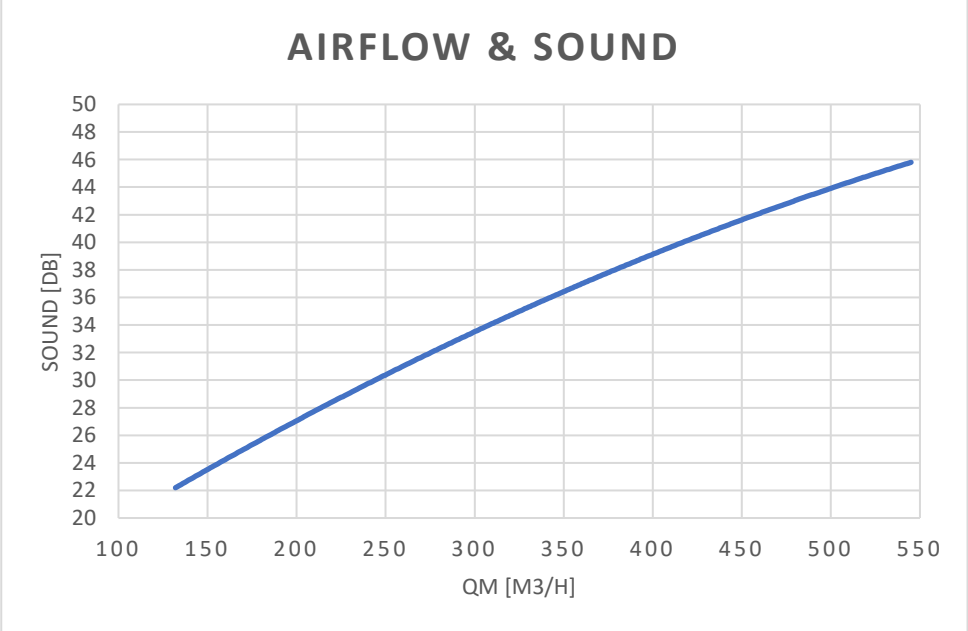
Technical data	Filter class	30 dB(A)	35 dB(A)
Maximal capacity*	ePM_{10} 50% ePM_1 55%	243 m^3/h m^3/h	337 m^3/h m^3/h
Energy consumption		26W/0,26A	46W/0,26A
Temperature efficiency		84,5%	81,5%
Max consumption	153W/1,2A		
Duct	2 X Ø160		
Supply	1x230 V + N + PE / 50 Hz		
Weigh	50 kg		
Material	Aluminum		
Counterflow exchanger	Aluminum		
Dimension LxDxH	1250x803x350 mm		
Supply filter	ePM_{10} 50% eller ePM_1 55%		
Exhaust filter	ePM_{10} 50%		
Color	RAL 9010		
Supply cable	3G 1mm^2		
Recommended fuse	10 A		
Recommended residual current device	Type A		
Leakage current	≤0,7 mA		
Tightness class leakage	Class L2 acc. EN 1886 Class A1 acc. EN 13141-7 Class B acc. EN 13779		
Strength Calculations	DS/EN 1993-1-8 DS/EN 1999-1-1		
Electrical heating surface (option)	500 W		

1 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. Sound measurements are prepared based on DS/EN ISO 10052

Data curves

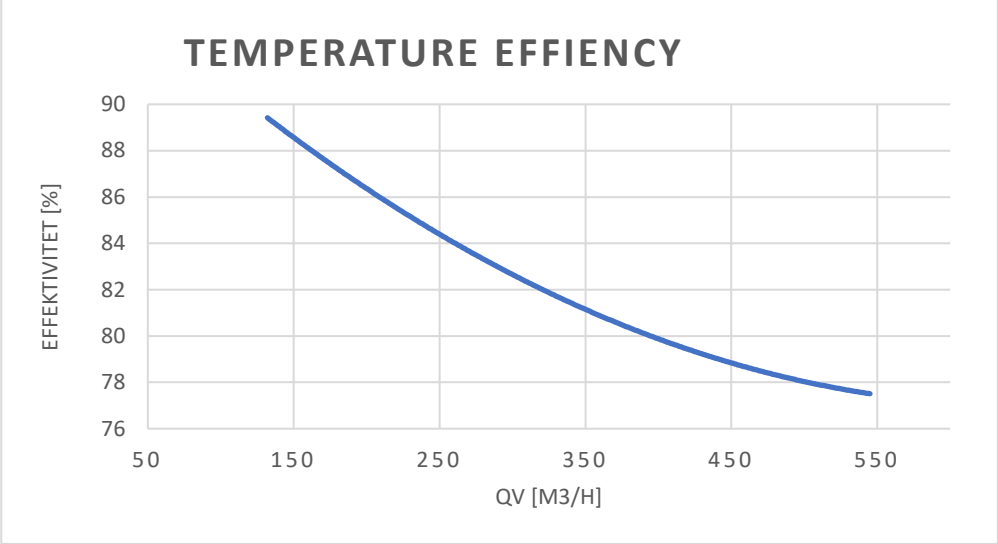
Capacity with $ePM_{10}50\%$ $[M5]$ / $ePM_{10}50\%$ $[M5]$





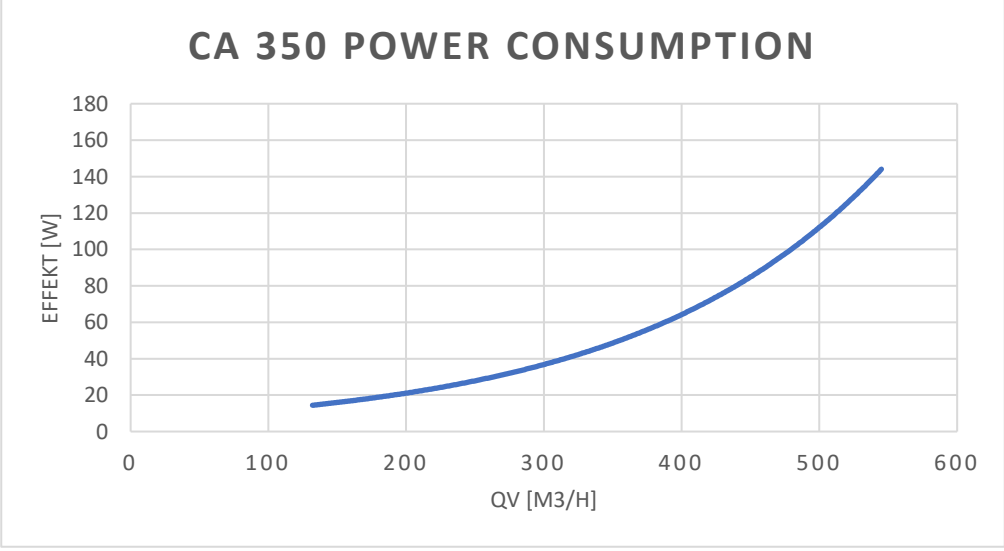
Temperature efficiency heat exchanger, according to. EN 308

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



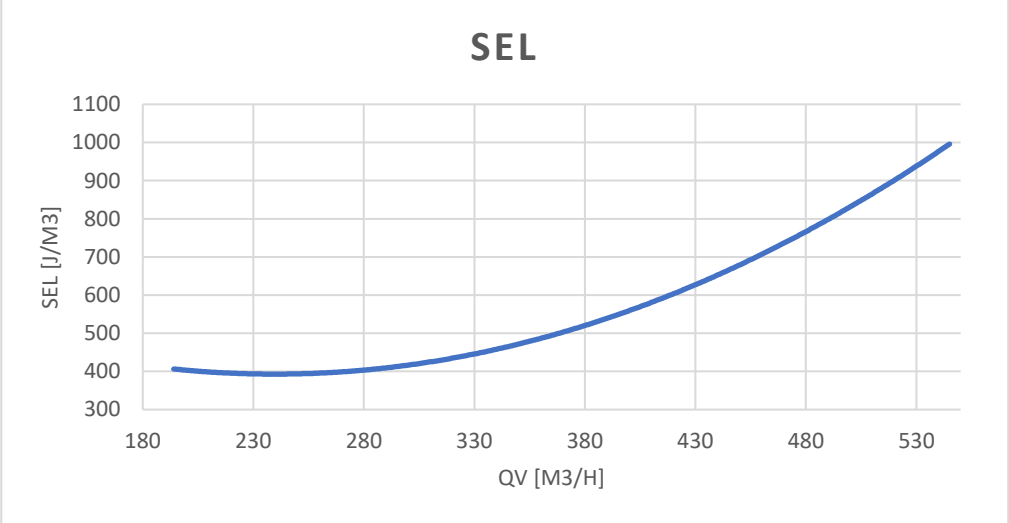
Power consumption

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



SEL

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



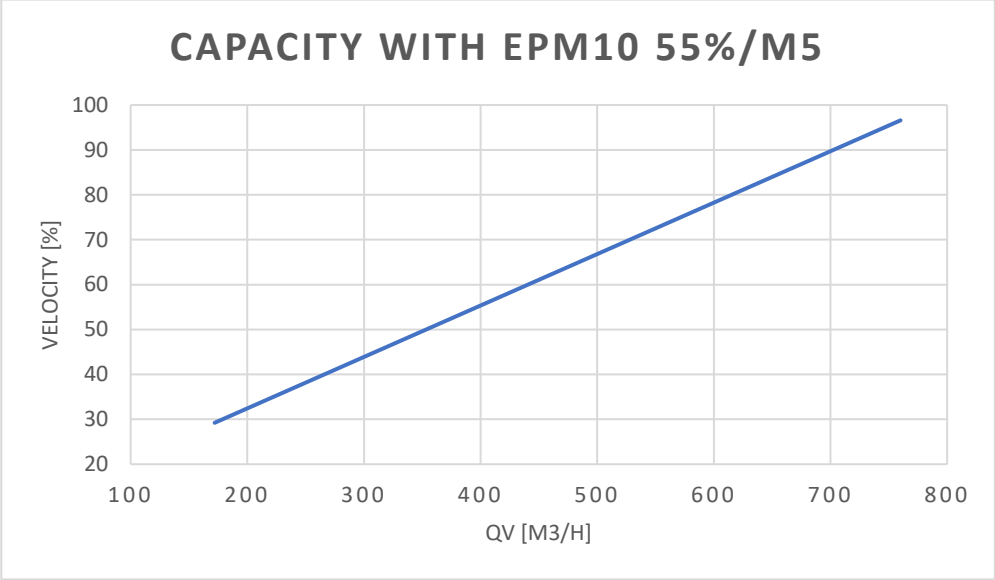
CA 550 Technical specifications

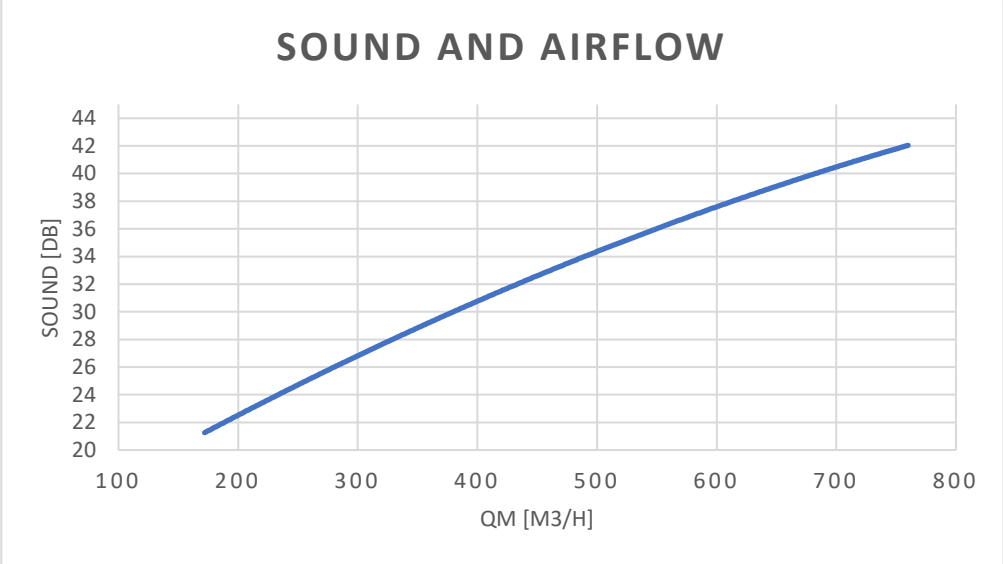
Technical data	Filter class	30 dB(A)	35 dB(A)
Maximal capacity *	ePM_{10} 50% ePM_1 55%	350 m^3/h m^3/h	560 m^3/h m^3/h
Power consumption		31W/0,31A	83W/0,67A
Temperature efficiency		85,3%	83%
Duct	2 X Ø200 mm		
Supply	1x230 V + N + PE / 50 Hz		
Weight	85 kg		
Material	Aluminum		
Counterflow exchanger	Aluminum		
Dimension LxDxH	1647x930x410 mm		
Supply filter	ePM_{10} 50% eller ePM_1 55%		
Exhaust filter	ePM_{10} 50%		
Color	RAL 9010		
Supply cable	3G 1mm^2		
Recommended fuse	10 A		
Recommended residual current device	Type A		
Leakage current	≤0,7 mA		
Tightness class leakage	Class L2 acc. EN 1886 Class A1 acc. EN 13141-7 Class B acc. EN 13779		
Strength Calculations	DS/EN 1993-1-8 DS/EN 1999-1-1		
Electrical heating (option)	750 W		

1 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. Sound measurements are prepared based on DS/EN ISO 10052

Data curves

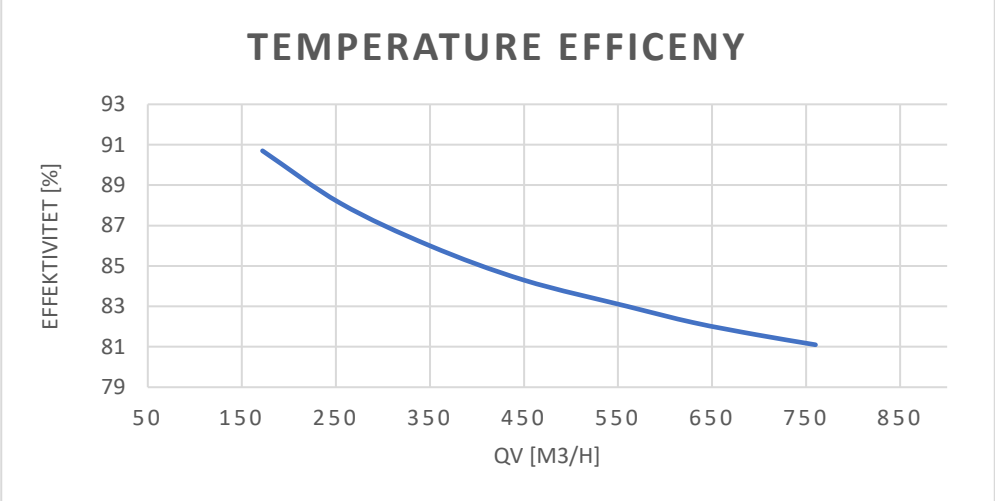
Capacity with $ePM_{10}50\%$ $[M5]$ / $ePM_{10}50\%$ $[M5]$





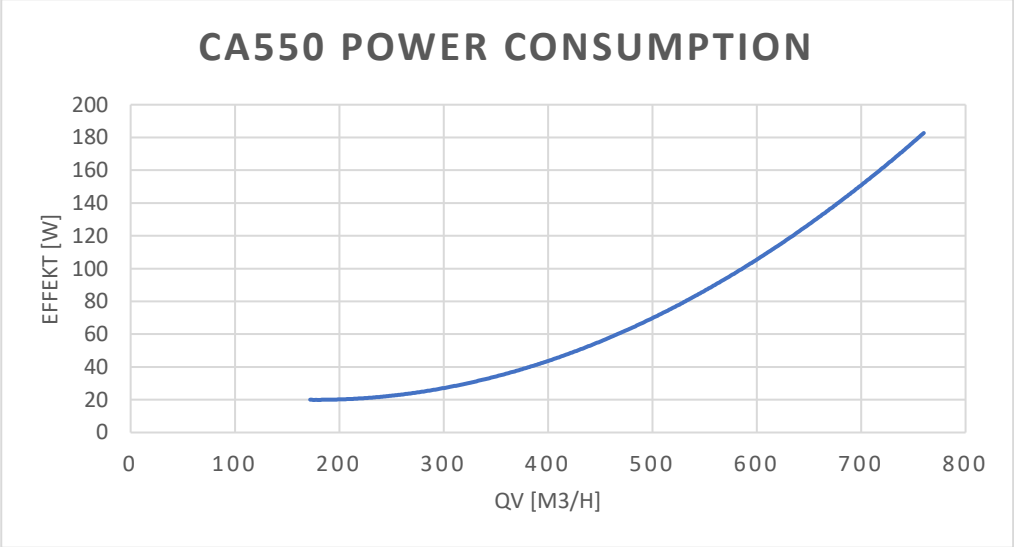
Temperature efficiency heat exchanger, according to. EN 308

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



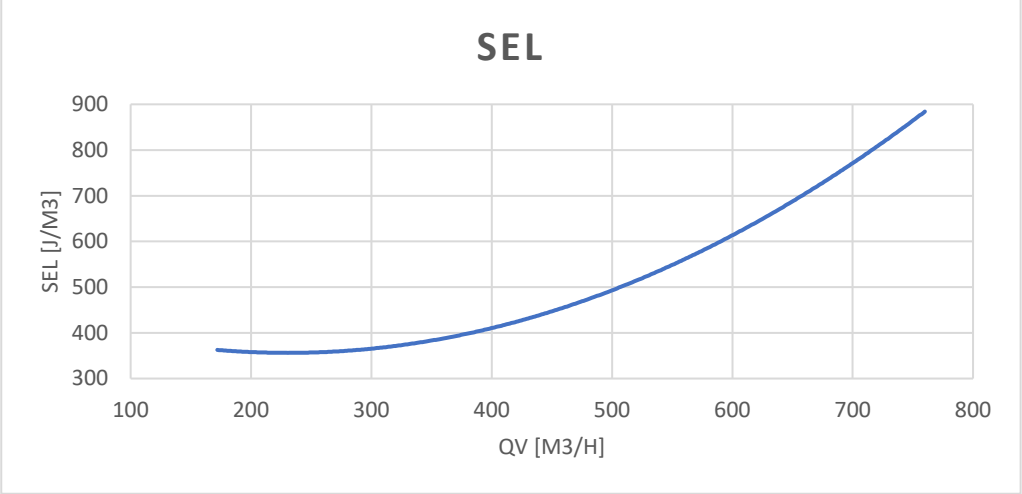
Power consumption

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



SEL

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



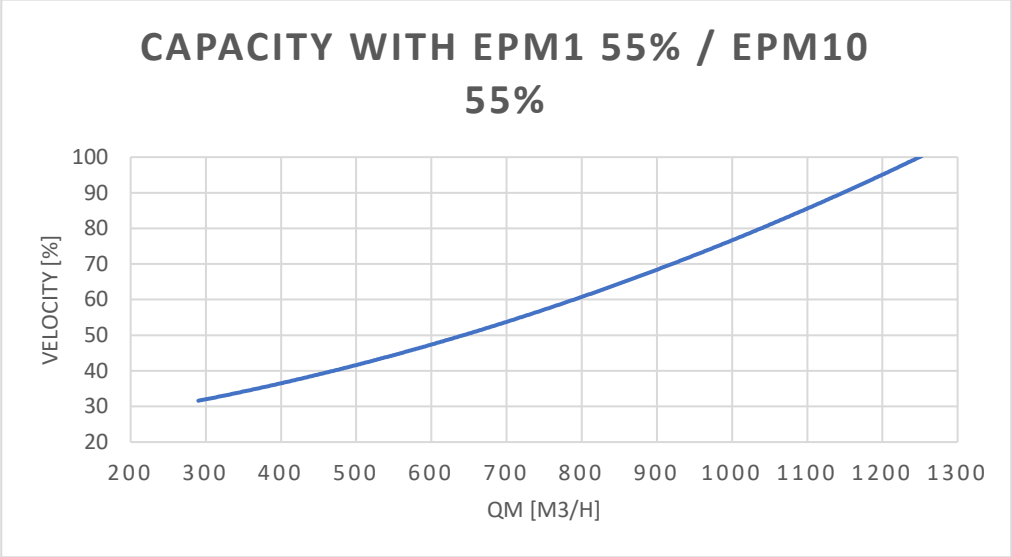
CA 850 Technical specifications

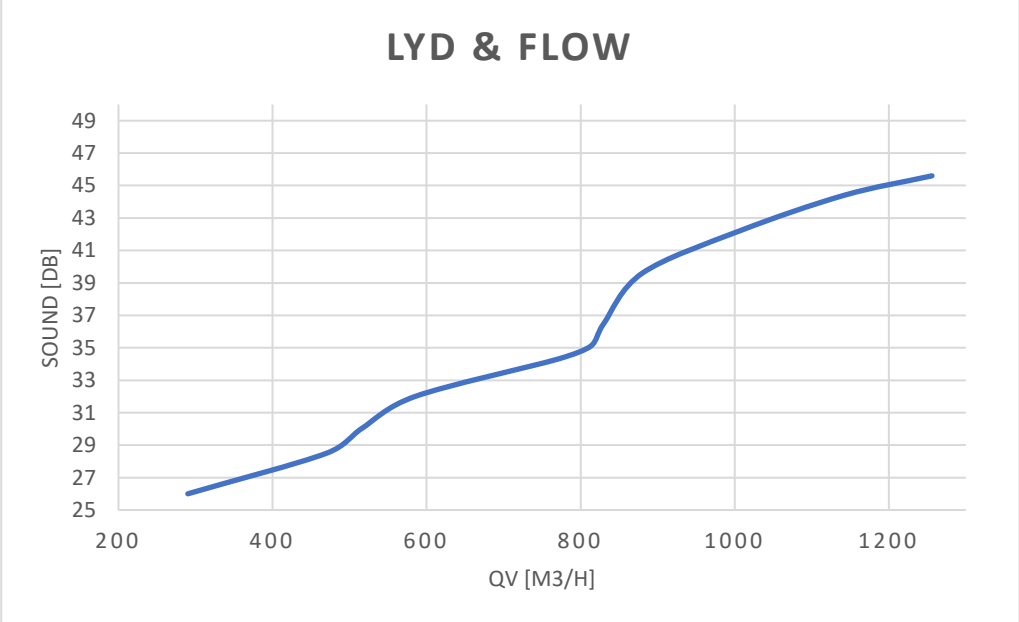
Technical data	Filter class	30 dB(A)	35 dB(A)
Maximal capacity*	ePM_{10} 50% ePM_1 55%	515 m^3/h m^3/h	813 m^3/h m^3/h
Power consumption		47W/0,41A	83W/0,41A
Temperature efficiency		83,7%	81%
Max consumption		315W/2,4A	
Duct		2 X Ø250	
Supply		1x230 V + N + PE / 50 Hz	
Weight		140 kg	
Material		Aluminum	
Counterflow exchanger		Aluminum	
Dimension LxDxH		1921x1060x471 mm	
Supply filter		ePM_{10} 50% eller ePM_1 55%	
Exhaust filter		ePM_{10} 50%	
Color		RAL 9010	
Supply cable		3G $1mm^2$	
Recommended fuse		10 A	
Recommended residual current device		Type A	
Leakage current		≤0,7 mA	
Tightness class leakage		Class L2 acc. EN 1886 Class A1 acc. EN 13141-7 Class B acc. EN 13779	
Strength Calculations		DS/EN 1993-1-8 DS/EN 1999-1-1	
Electrical heating surface (option)		1250 W	

1 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. Sound measurements are prepared based on DS/EN ISO 10052

Data curves

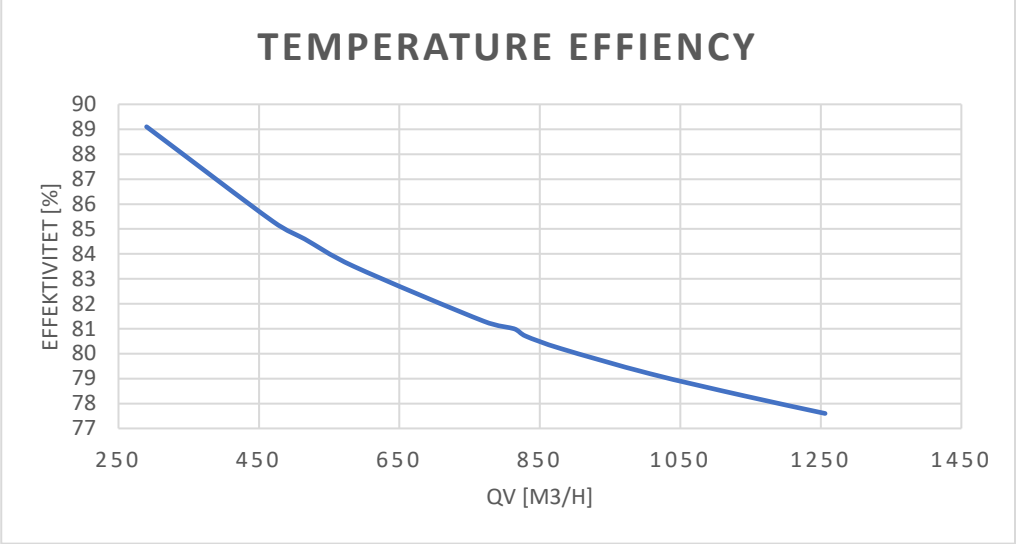
Capacity with $ePM_{10}50\%$ $[M5]$ / $ePM_{10}50\%$ $[M5]$





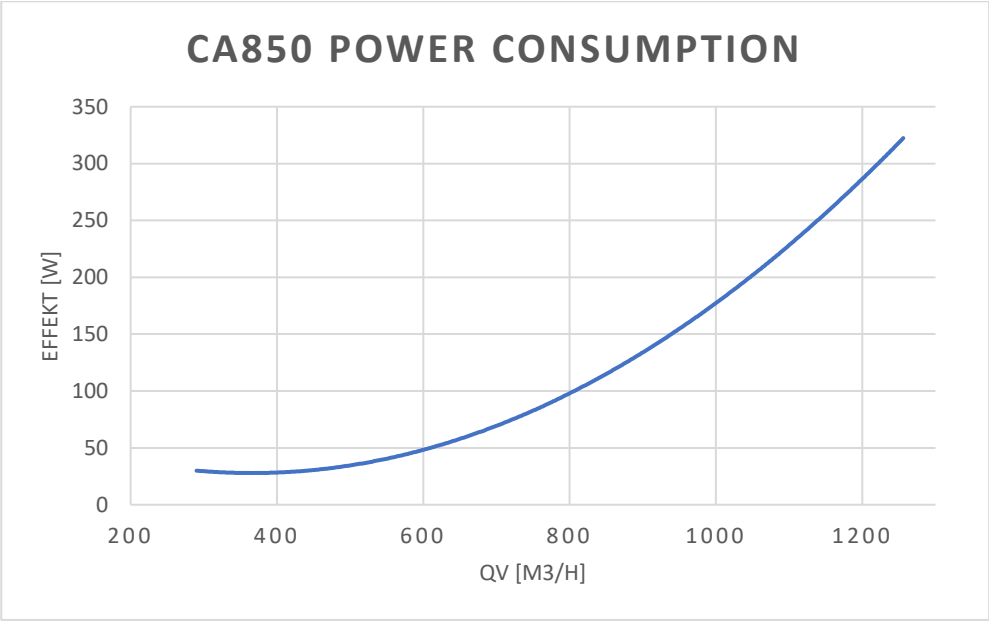
Temperature efficiency heat exchanger, according to. EN 308

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



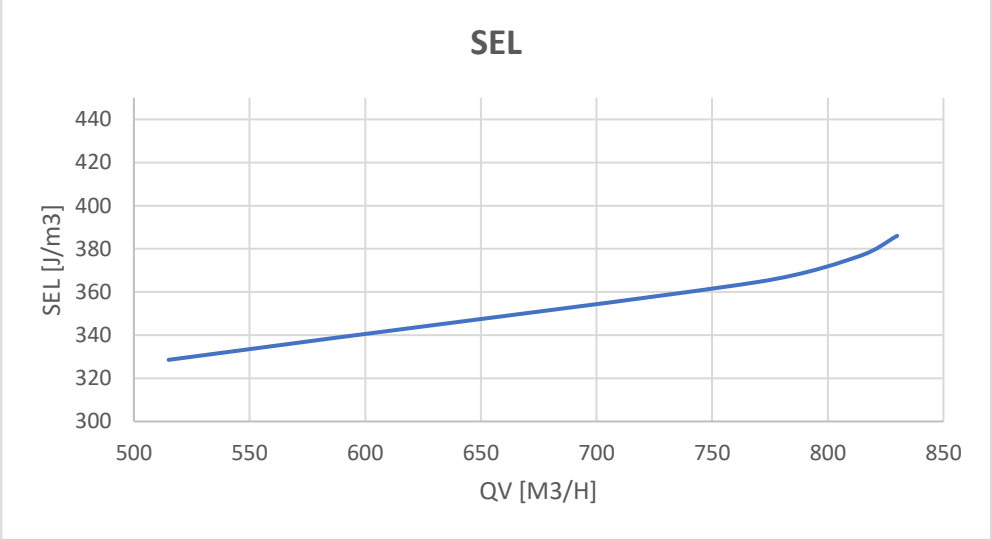
Power consumption

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



SEL

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

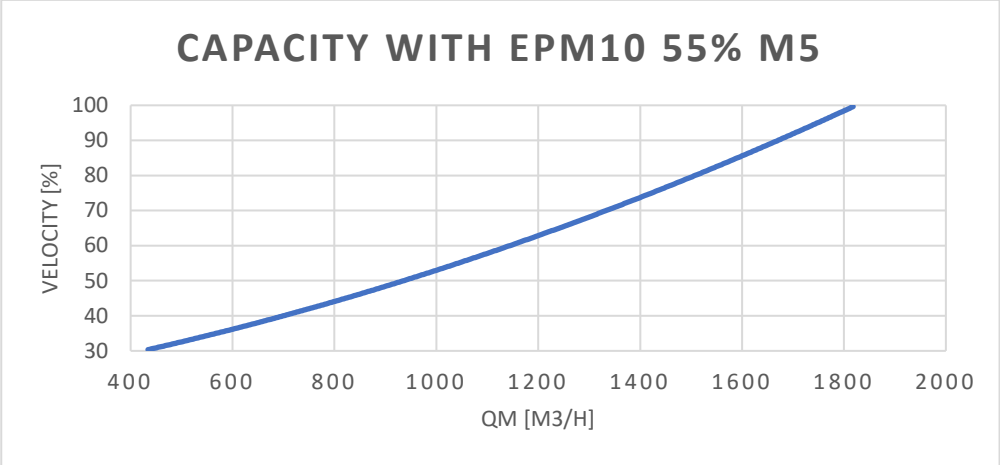


CA1200 Technical specifications

Technical data	Filter class	30 dB(A)	35 dB(A)
Maximal capacity *	ePM_{10} 50% ePM_1 55%	955 m^3/h m^3/h	1198 m^3/h m^3/h
Power consumption		65W	120W
Temperature efficiency		88%	86,6%
Duct	2 X Ø315 mm		
Supply	1x230 V + N + PE / 50 Hz		
Weight	180 kg		
Materials	Aluminium		
Counterflow exchanger	Aluminium		
Dimension LxDxH	2131x1215x623 mm		
Supply filter	ePM_{10} 50% or ePM_1 55%		
Exhaust filter	ePM_{10} 50%		
Color	RAL 9010		
Supply cable	3G 1mm^2		
Recommended fuse	10 A		
Recommended residual current device	Type A		
Leakage current	≤0,7 mA		
Tightness class leakage	Class L2 acc. EN 1886 Class A1 acc. EN 13141-7 Class B acc. EN 13779		
Electrical heating (option)	1250 W		

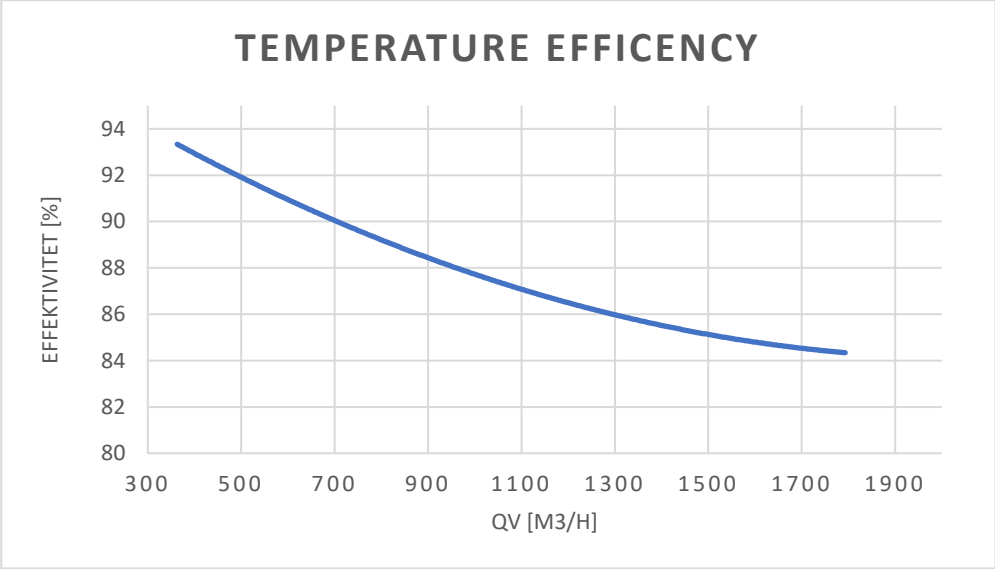
1 All measurements were taken during normal operation in a standard installation situation with filter class, for air/exhaust air: ePM10 50% / ePM10 50% and for air/exhaust air ePM1 55% / ePM10 50%. Sound measurements were made in a test room of 70 m3. Sound measurements are prepared based on DS/EN ISO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

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



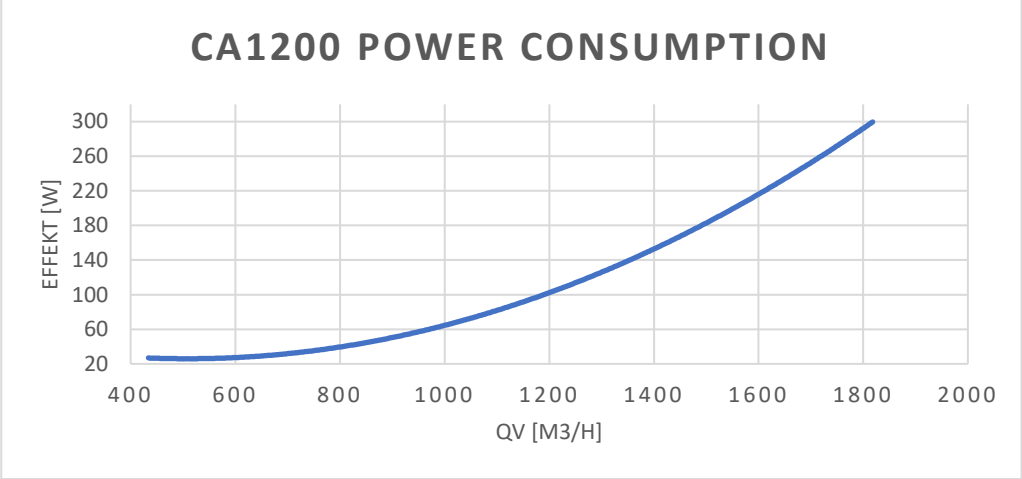
Temperature efficiency heat exchanger, according to. EN 308

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



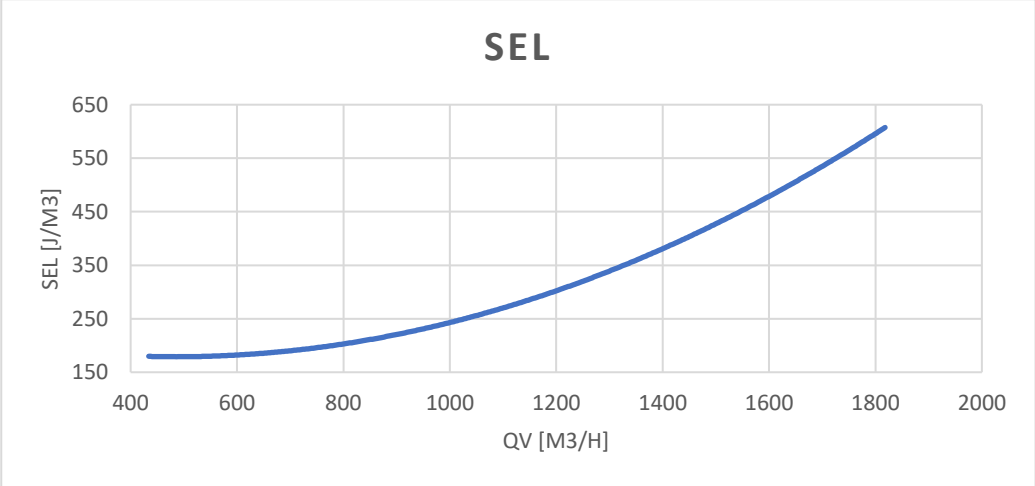
Power consumption

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



SEL

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

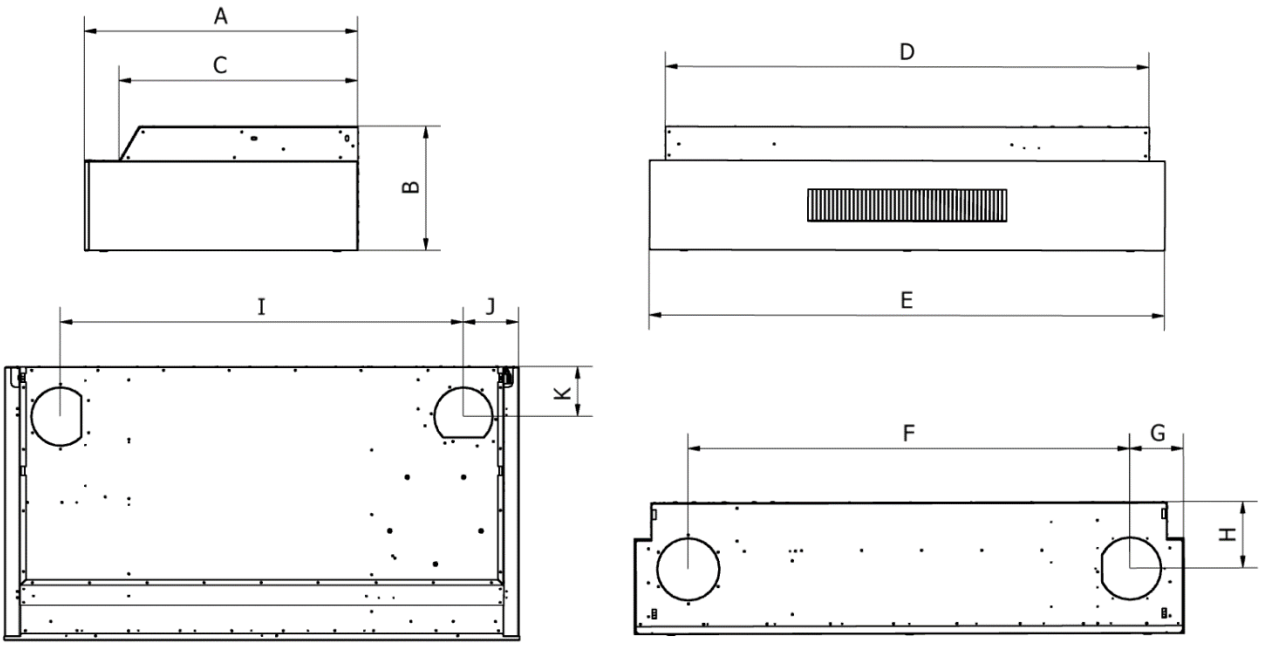


Comparison

Unit		CA350	CA550	CA850	C1200	Unit
Dimension:						
	Length	1322	1750	2003	2131	mm
	Depth	801	929	1057	1215	mm
	Height	356	418	480	623	mm
Duct		2x160	2x200	2x250	2x315	
Weight		60	85	140	180	kg
Capacity						
	Nominal	337	560	813	1200	m3/h
	Forced	545	740	1256	1800	m3/h
Sound	Nominal	35	35	35	35	dB(A)
Filter	Nominal	ePM10 50%				
Power consumption						
	Nominal	43	83	85	120	W
	forced	165	170	315	300	W
Color		Ral 9010				
Temperature efficiency		81,5	83	81	86,6	%
Electronic heating surface (option)		500	500	1000	1250	W

Nominal operation is at 35 dB***

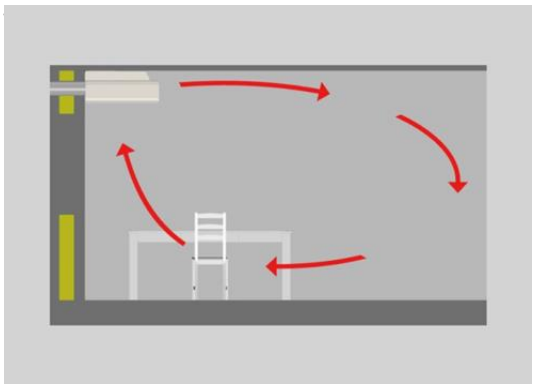
Dimensional drawing

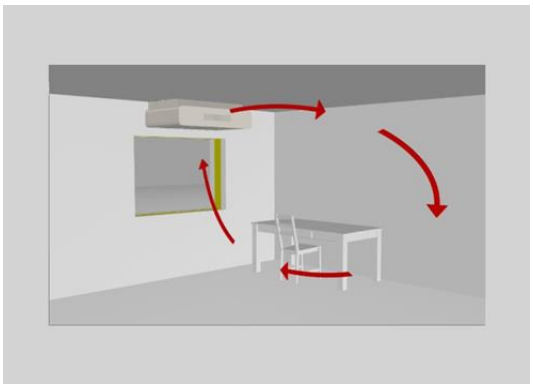


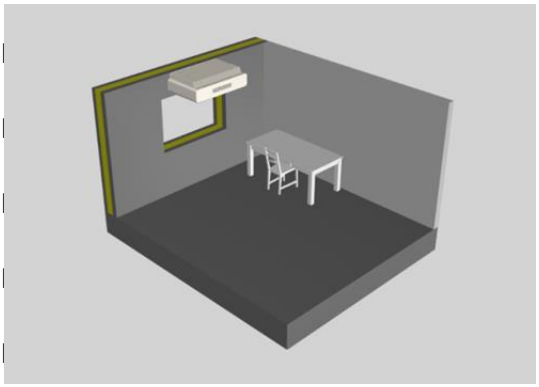
Dimension(mm)	CA350	CA550	CA800	CA1200
A	801	930	1057	1213
B	356	422	480	630
C	714	812	930	1129
D	1212	1643	1918	2020
E	1322	1751	2003	2131
F	1016	1407	1628	1675
G	153	172	188	228
H	172	212	252	352
I	978	1369	1578	1595
J	170	188	210	266
K	149	169	195	248

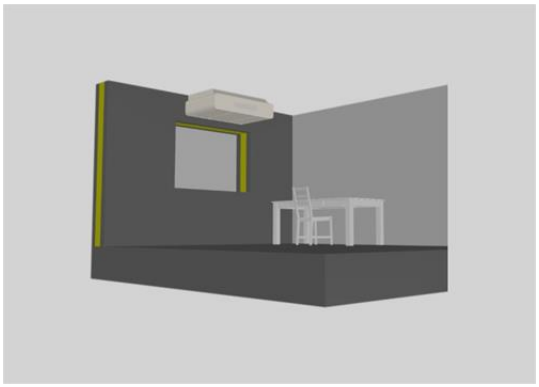
Location

The unit is generally placed on a wall directly under the ceiling. This location best exploits 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 location, as the point for supply and exhaust airflow provides optimal circulation

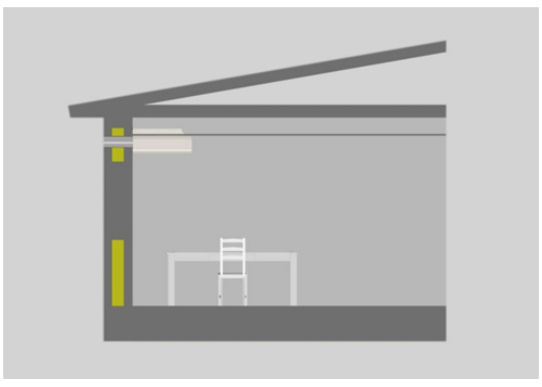


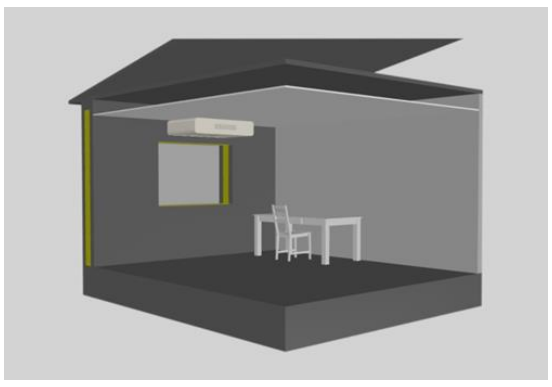






Location in a false ceiling





Options ComfortAir

Components	CA350	CA550	CA850	CA1200
TX electronic controller	○	○	○	○
Co_2 sensor T8100-E-D with display	○	○	○	○
Co_2 sensor T8031 indbygget	○	○	○	○
Hygrostat	○	○	○	○
PIR sensor	○	○	○	○
Temperature sensor	●	●	●	●
LON-interface	○	○	○	○
Master/slave print	○	○	○	○
MODbus print	○	○	○	○
MODbus converter inkl. software	○	○	○	○
Filter EPM_{10} 50%	●	●	●	●
Filter EPM_1 55%	○	○	○	○
Fittings for installation in false celling	○	○	○	○
Angle brackets for installation in false celling	○	○	○	○
Condensation pump	●	●	●	●
Condensation tray	●	●	●	●
Modulating bypass	○	○	○	○
2 x dampers in & out	○	○	○	○
Electric heater	○	○	○	○
Counter flow heat exchanger (aluminum)	●	●	●	●
Mounting brackets	●	●	●	●
Tubes	○	○	○	○
Gratings	○	○	○	○
Color RAL9010	●	●	●	●
Other RAL colors	○	○	○	○
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:

- Forced mode
- Prolonged mode
- Temperature setpoints
- Keypad lock in 4 levels
- Alarm menu
- Software stop
- Day mode
- Night mode
- Calendar
- Clock Day/date
- DST off/on
- Language
- Standby
- PIR
- Technical menu
- System info
- Others

Master/Slave

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

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

This master / slave function requires an extra small circuit board for each unit. This small circuit board should be mounted on the existing main circuit board of each unit.

LON

LON [Local operating network] is a network where the intelligence is distributed to the devices connected to the system and not concentrated in a control station as in a traditional network. Thousands of Tx plants can be set up on the same network and the wiring can be several kilometers long. In order to use the LON network and the wiring can be several kilometers long. To use the LON network, install an additional small circuit board on the main 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 extended up to 1000 meters at low data speed communication. To use the MODbus network, install an additional circuit board on the main board of each plant.

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

MODbus m/converter og 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 extended up to 1000 meters at low data speed communication. To use the MODbus network, install an additional circuit board on the main board of each plant.

● 38 parameters can be read and written

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