

Datasheet AM 900

Displacement ventilation

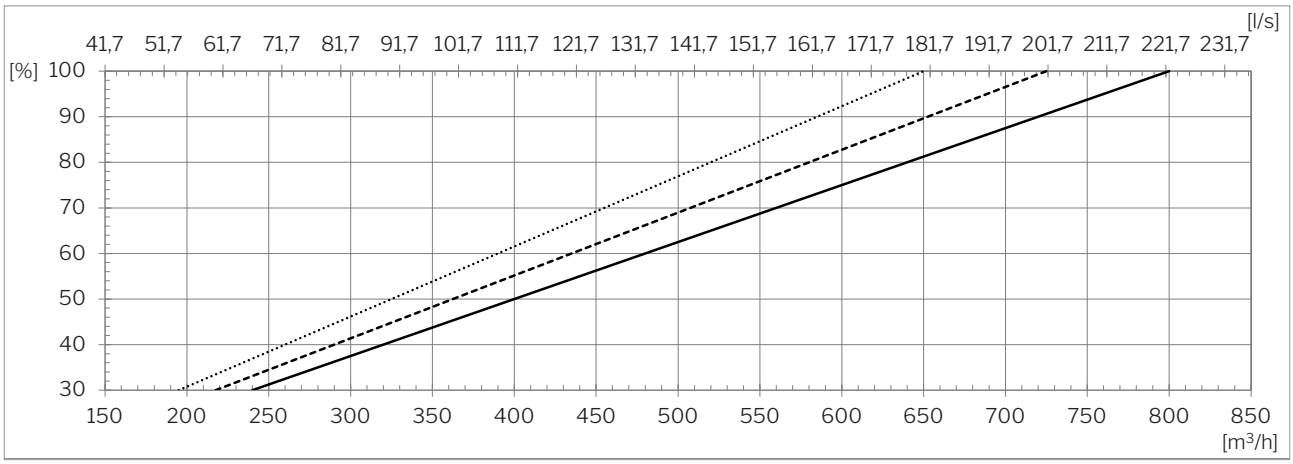
Version overview

Technical data	Filter class		30 dB(A)	33 dB(A)	35 dB(A)
Maximum capacity [1]	ePM_{10} 50%		650 m³/h	725 m³/h	800 m³/h
	ePM_1 55%		631 m³/h	703 m³/h	776 m³/h
Inlet	ePM_1 80%	Extract	611 m³/h	682 m³/h	752 m³/h
			Intake		Exhaust
Adjacent zone (0.2 m/s) [2]			approx. 1.2 m at 650 m³/h		approx. 1.5 m at 800 m³/h
Supply air filter			ePM_{10} 50%, ePM_1 55% eller ePM_1 80%		
Extract air filter			ePM_{10} 50%		
Dimensions (BxHxD)			800 x 2323 x 687 mm		
Minimum ceiling height			2490 mm		
Weight, standard air handling unit, complete			180 kg		
Color casing			RAL 9010		
Counterflow heat exchanger			3 x PET (Polyetylentereftalat)		
Air leakage classification cf. EN1886/EN13141-7			Class L2 / A1		
Air leakage classification main damper, cf. EN1751			Class 3		
IP code			10		
Duct connection			Ø315 mm		
Condensate pump (Capacity ; Lifting height at 5 l/h)			10 l/h ; 6 m		
Condensate drain hose int./ext. diameter			Ø6 mm / Ø9 mm		
Supply voltage			220-240V/50Hz, ~1N+PE		
Maximum power consumption [1]			354 W		
Maximum current [1]			2.76 A		
Power factor			0.56		
Maximum fuse			16 A (1 phase, type B)		
Leakage current AC / DC			≤ 6mA		
Recommended residual burrent bicuit breaker (RCCB)			Type F / Type B		

Electrical heating surfaces	Preheating surface	Comfort heating surface
Heat output	1500 W	1050 W
Nominal current	6.5 A	4.4 A
Thermal circuit breaker, manual reset	100 °C	100 °C

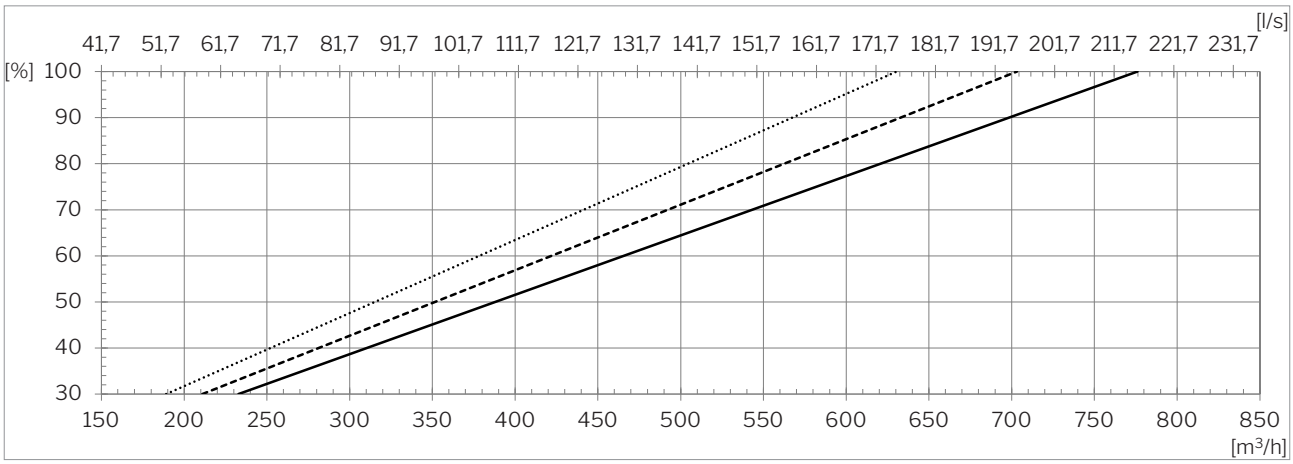
[1] All measurements were performed in normal operating mode in a standard installation using the facade grills recommended by Airmaster: Airmaster Boomerain® Ø315.
[2] Adjacent zone to outlet was measured with filter class: supply air ePM_{10} 50% | Extract air ePM_{10} 50%
[3] Heat output for maximum capacity at 35 dB(A), delivery/return temperature 60/40°C and a liquid flow of 111 l/h.

Capacity with ePM_{10} 50% / ePM_{10} 50% filters [4]



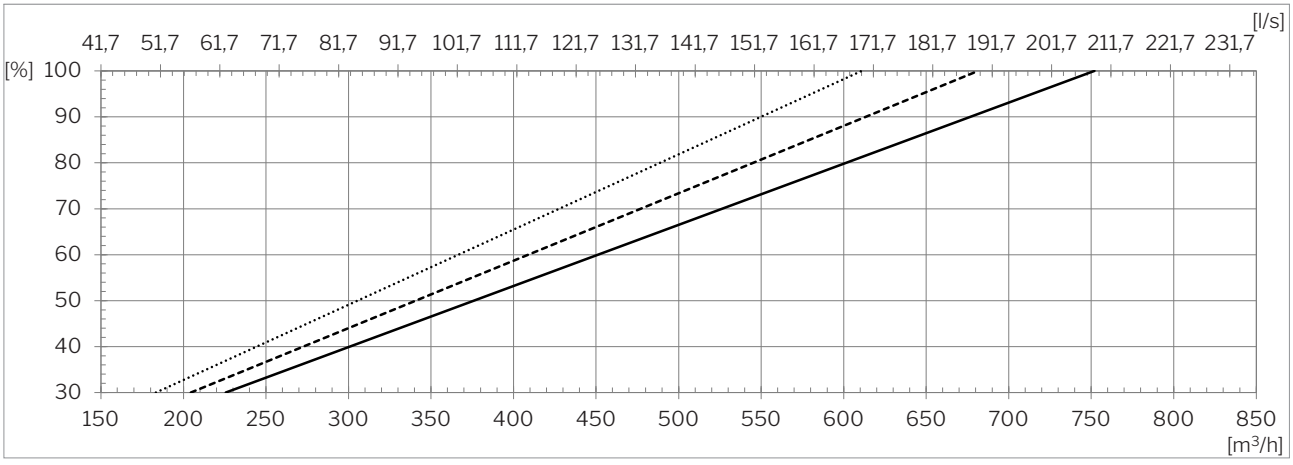
30 dB(A) 33 dB(A) 35 dB(A)

Capacity with ePM_1 55% / ePM_{10} 50% filters [4]



30 dB(A) 33 dB(A) 35 dB(A)

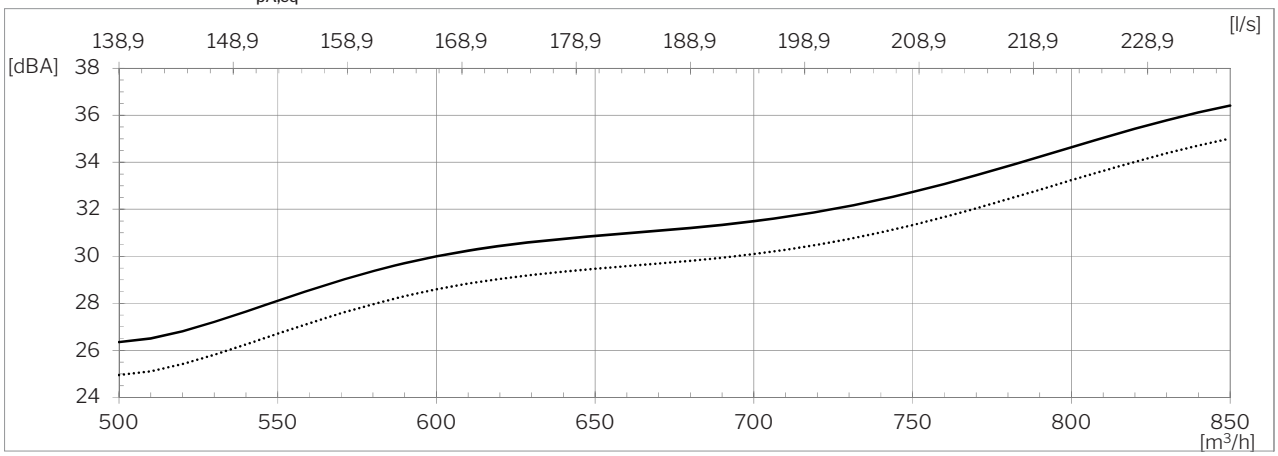
Capacity with ePM_1 80% / ePM_{10} 50% filters [4]



30 dB(A) 33 dB(A) 35 dB(A)

[4] All measurements were performed in normal operating mode in a standard installation using the facade grills recommended by Airmaster: Airmaster Boomerain® Ø315.

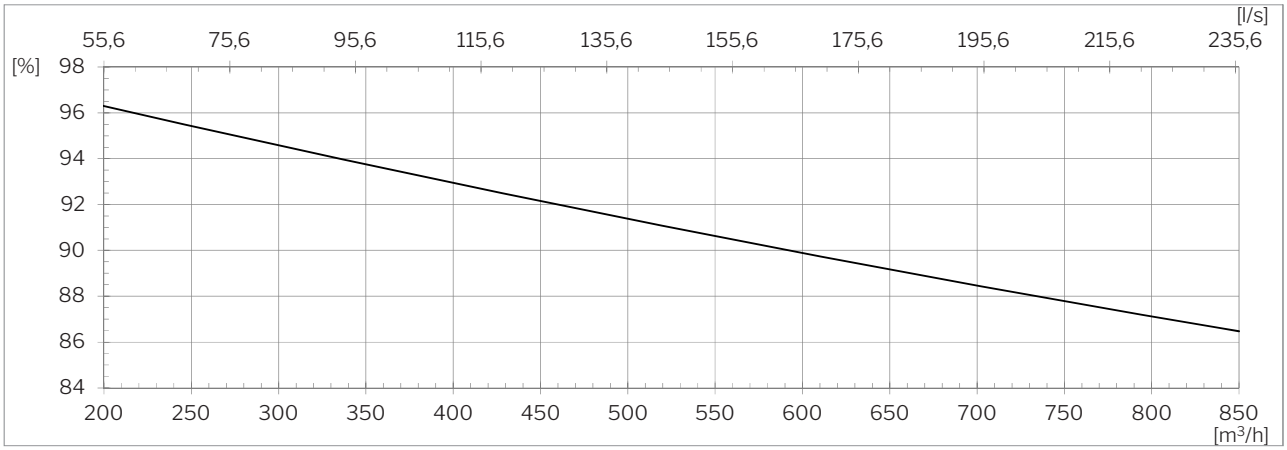
Sound pressure [5, 6] $L_{pA,eq}$ acc. Airmaster reference situation



T = 0.6 s T= 0.9 s

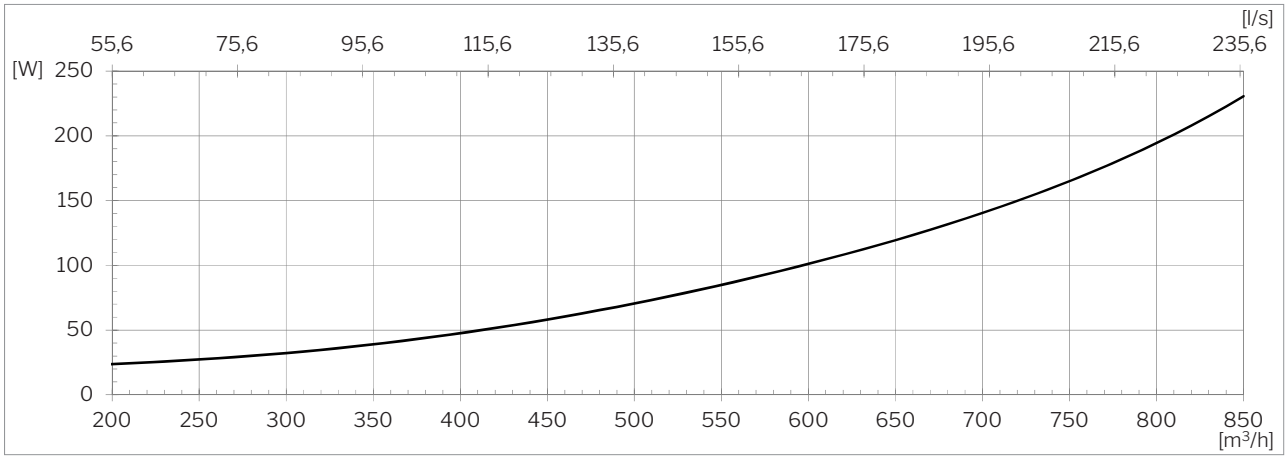
T = Reverberation time

Temperature efficiency acc. EN 308



Balanced airflow; Extraction: 25 °C, 28 % RH; Supply: 5 °C.

Power consumption [6]

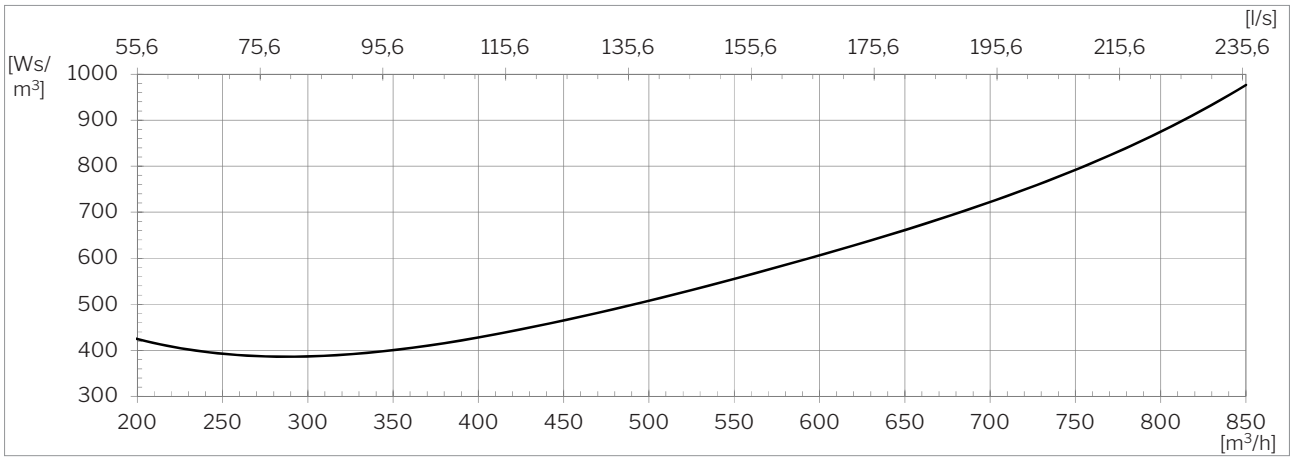


ePM_{10} 50% / ePM_{10} 50%

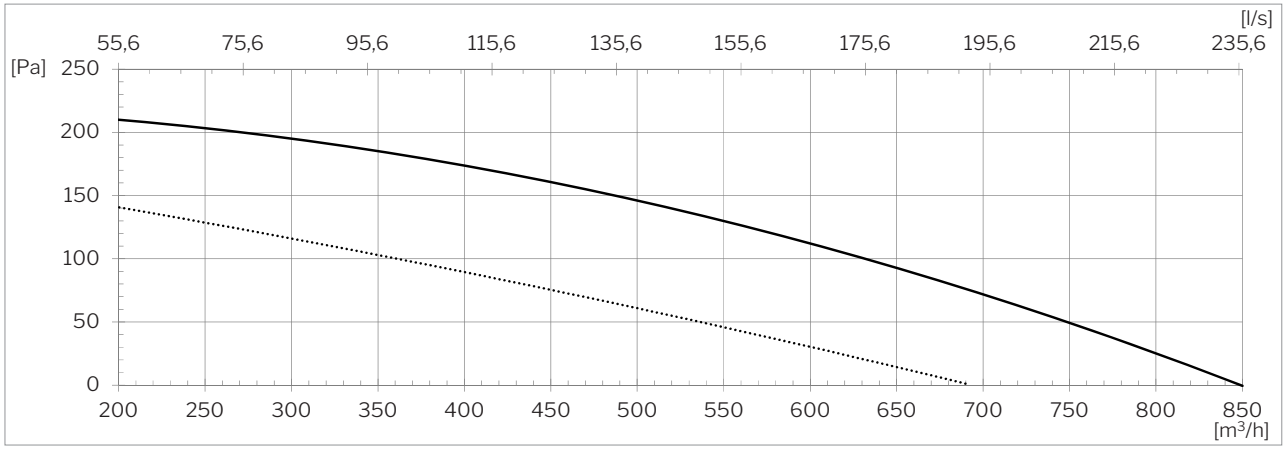
[5] Sound pressure level $L_{pA,eq}$ is measured in a height of 1.2 m with at horizontal distance of 1 m from the air handling unit in room with a size of 200 m³ and a reverberation time of T = 0.6 s, corresponding to a room attenuation of 7.5 dB.

[6] All measurements were performed in normal operating mode in a standard installation for the filter class, supply/extract air: ePM10 50% / ePM10 50%, using the facade grills recommended by Airmaster: Airmaster Boomerain® Ø315.

SFP [7]

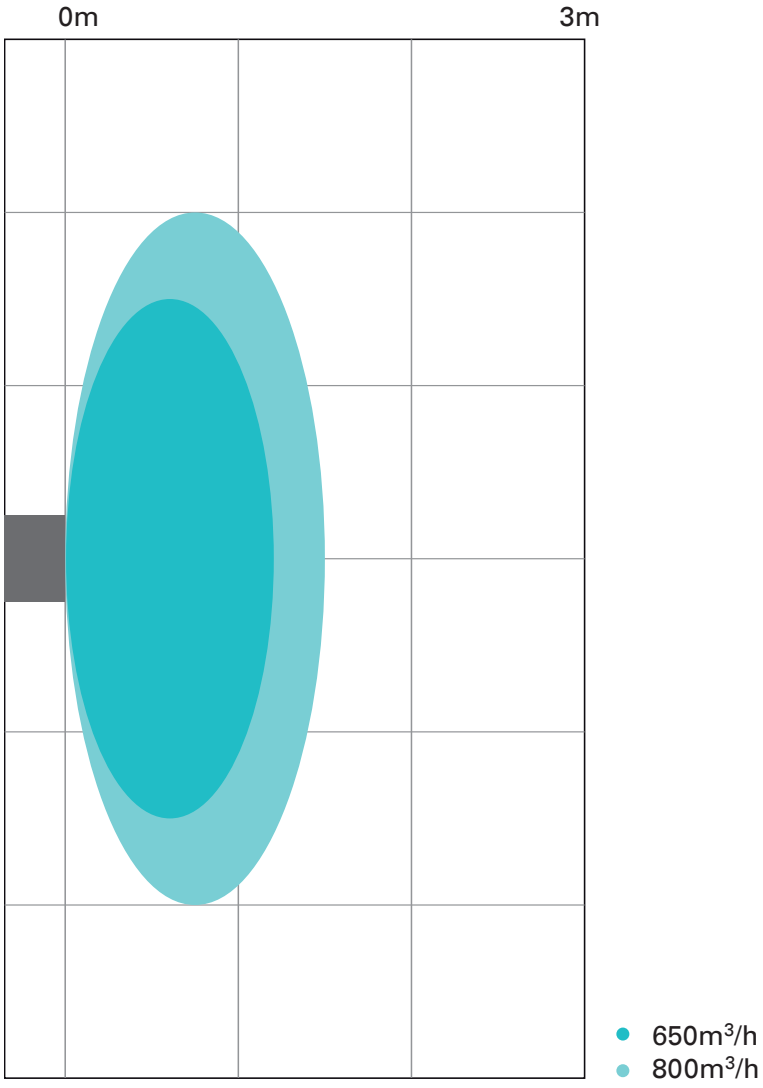


External pressure loss [7]



[7] All measurements were performed in normal operating mode in a standard installation for the filter class, supply/extract air: ePM10 50% / ePM10 50%, using the facade grills recommended by Airmaster: Airmaster Boomerain® Ø315.

Adjacent zone [8] - displacement



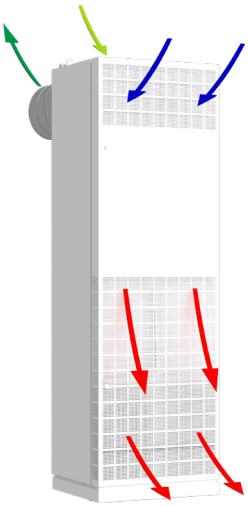
[8] The result applies to an undertemperature of the inlet air of 3-5 °C.

Version overview

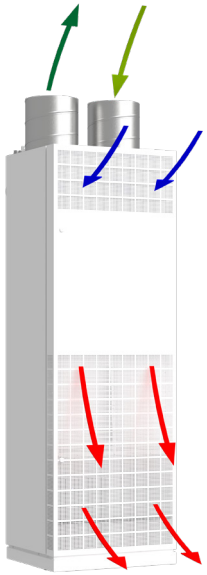
AM 900

Inlet Extract Intake Exhaust

HD



VD



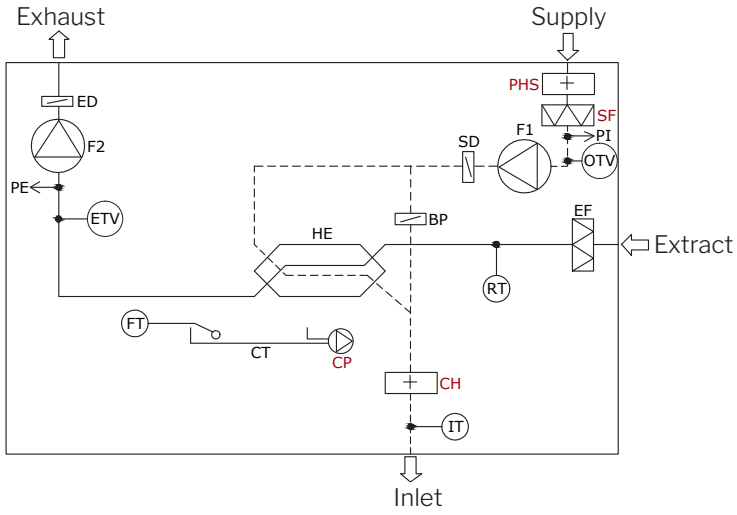
Standard and options

Counterflow heat exchanger (PET)	x
Enthalpy counterflow heat exchanger (Polymer membrane)	o
Combination counterflow heat exchanger (Polymer membrane)	o
Motor-driven bypass	x
Motor-driven supply air damper	x
Motor-driven extract air damper	x
Capacitive return for motorized exhaust and supply air dampers	•
Electric preheating surface	•
Electric comfort heating surface	•
Condensate pump	•
PIR/motion sensor (wall-mounted)	•
CO_2-sensor (wall-mounted)	•
CO_2-sensor (built-in)	•
TVOC-sensor (built-in)	•
CO_2-/TVOC-sensor (built-in)	•
Hygrostat (wall-mounted)	o

Energy meter	•
Supply air filter ePM_{10} 50%	•
Supply air filter ePM_1 55%	•
Supply air filter ePM_1 80%	o
Extract air filter ePM_{10} 50%	x
Airlinq® Viva control panel	•
Airlinq® Orbit control panel	•
Airmaster Airlinq® Online	•
Airlinq® Online API	•
Airlinq® BMS	•
LON® module	o
KNX® module	o
MODBUS® RTU RS485 module	•
BACnet™ MS/TP module	•
BACnet™ /IP module	•

X : Standard • : Optional o : Special item (not stock item)

Schematic sketch - displacement



COMPONENT DESIGNATION

BP	Bypass damper (motor-driven)
CH	Electric comfort heating surface (option)
CP	Condensate pump (option)
CT	Condensate tray
ED	Exhaust air damper (motor-driven)
EF	Extract air filter
ETV	Exhaust temperature sensor
FT	Float
F1	Supply air fan
F2	Extract air fan
HE	Counterflow heat exchanger
IT	Inlet-air temperature sensor
OTV	Supply air temperature sensor
PE	Flow meter, extracted air
PHS	Preheating surface (option)
PI	Flow meter, supply air
RT	Room temperature sensor
SD	Supply air damper (Motor-driven)
SF	Supply air filter (option)