Datasheet AM 1200 V

AIRMASTER

Technical data	Filter class	30 dB(A)	33 dB(A)	35 dB(A)	Boost
Maximum capacity [1]	ePM_{10} 50%	870 m^3/h	1000 m^3/h	1130 m^3/h	1500 m^3/h
Vertical model, right/left:	ePM_1 55%	783 m^3/h	900 m^3/h	1017 m^3/h	1500 m^3/h
	ePM_1 80%	696 m^3/h	800 m^3/h	904 m^3/h	1500 m^3/h
Maximum capacity [1]	ePM_{10} 50%	980 m^3/h	1120 m^3/h	1260 m^3/h	1500 m^3/h
Vertical model, center:	ePM_1 55%	882 m^3/h	1008 m^3/h	1134 m^3/h	1500 m^3/h
	ePM_1 80%	784 m^3/h	896 m^3/h	1008 m^3/h	1500 m^3/h
Throw length (0.2 m/s) [1] - right/left		min. max. min. max.		4 m v. 1000 m^3/h 9 m v. 1000 m^3/h 5.5 m v. 1300 m^3/h 11 m v. 1300 m^3/h	
Throw length (0.2 m/s) [1] - center:		min. max. min. max.		3 m v. 1000 m^3/h 6.5 m v. 1000 m^3/h 4 m v. 1300 m^3/h 8 m v. 1300 m^3/h	
Supply air filter		ePM_{10} 50%, ePM_1 55% or ePM_1 80%			
Extract air filter		ePM_{10} 50%			
Dimensions (WxDxH)		Horizontal: Vertical:	2427 x 496 x 2098 mm 2427 x 496 x 2406 mm		
Weight, including painted panels		Right-/left model: Center model:	565 kg 630 kg		
Color casing		RAL 7024			
Counterflow heat exchanger		4 x Aluminum			
Air leakage classification cf. EN1886/EN13141-7		Class L2 / A2			
Air leakage classification main damper, cf. EN1751		Class 3			
IP code		1x			
Duct connection		Ø400 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 [2]		220-240V/50Hz, ~1N+PE 220-240V/50Hz, ~3N+PE			
Nominal power consumption [1]		254 W			
Nominal current [1]		1.4 A			
Power factor		0.6			
Maximum fuse		16 A (1 phase, type B) 3 x 16 A (3 phases, type B). When choosing a pre-heating surface, a 3-phase connection must be used			
Leakage current AC / DC		≤ 9 mA			
Recommended residual burrent bicuit breaker (RCCB)		Type F / Type B			

[1] All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.
[2] The supply can be limited to a single-phase, connected to L1. Only for air handling units without electric heating surface.

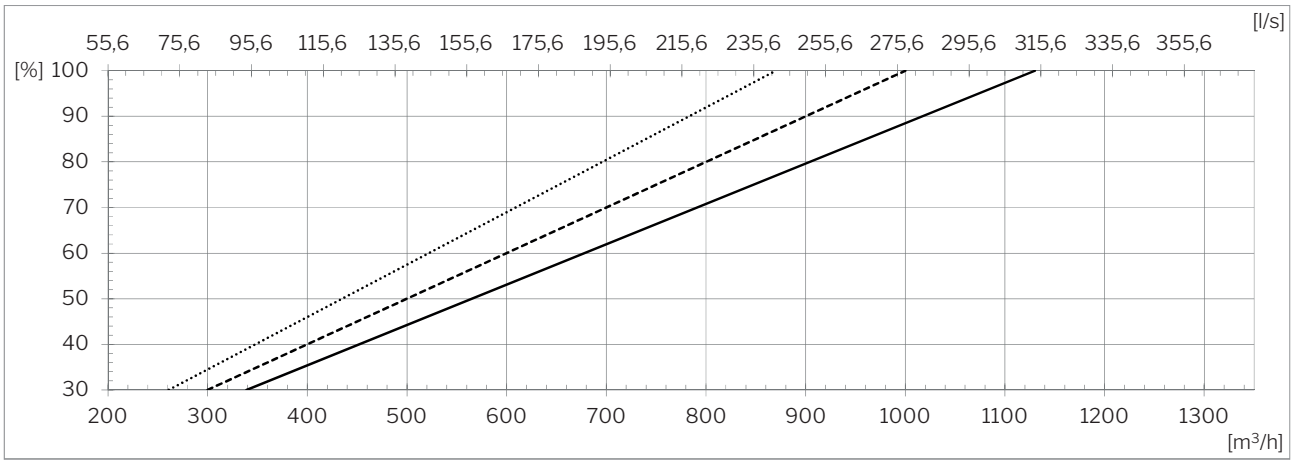
Electrical heating surfaces	Preheating surface	Comfort heating surface
Heat output	2500 W	1670 W
Nominal current	10.9 A	7.3 A
Thermal circuit breaker, manual reset	100 °C	100 °C

Water heating surface	
Nominal heat output [3]	2454 W
Connection dimension	1/2” (DN 15)
Materials pipes/fins	Copper/aluminum
Opening/closing time motor valve	60 s
Maximum operating temperature	90 °C
Maximum operating pressure	5 bar

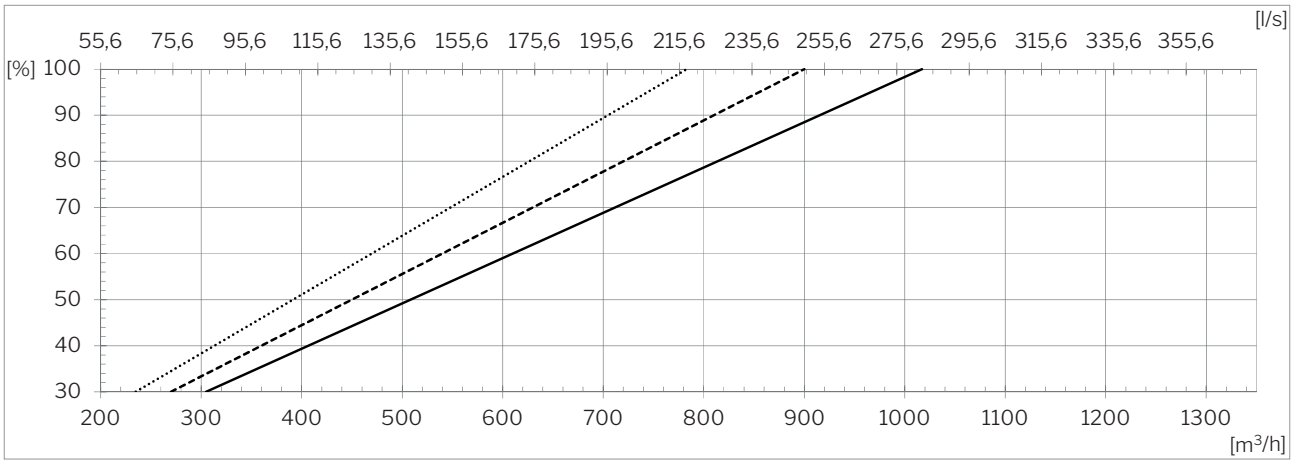
[3] Heat output for maximum capacity at 35 dB(A), delivery/return temperature 60/40°C and a liquid flow of 107 l/h.

AM 1200 V - R/L

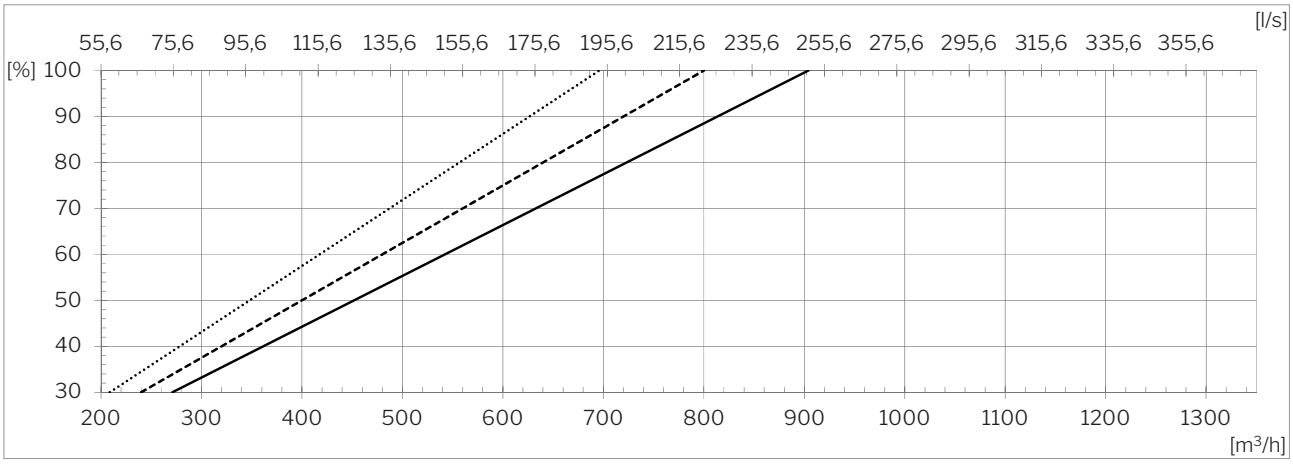
Capacity with ePM_{10} 50% / ePM_{10} 50% filters [4]



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



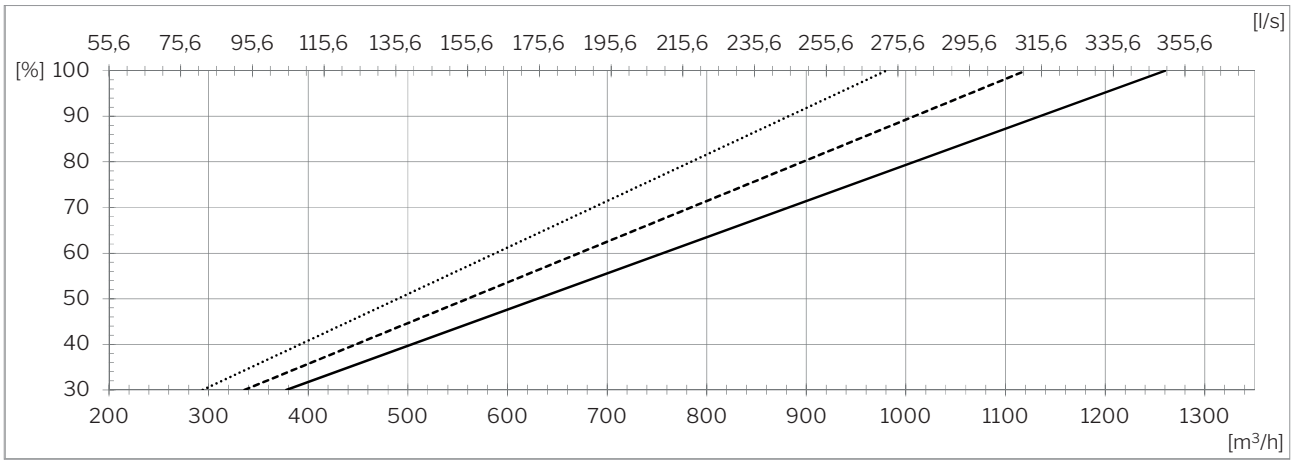
Capacity with ePM_1 80% / ePM_{10} 50% filters [4]



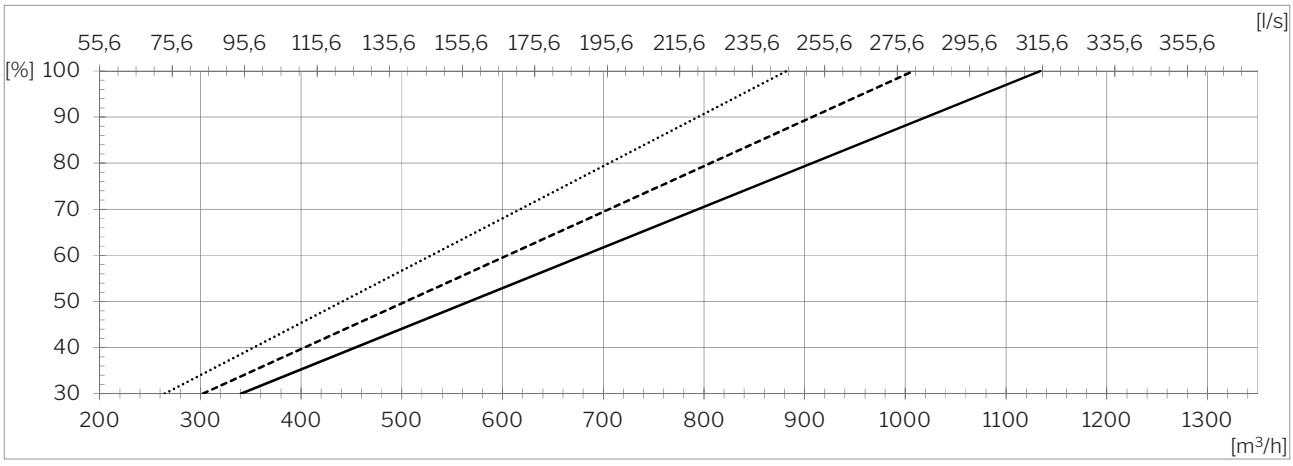
[4] All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.

AM 1200 V - C

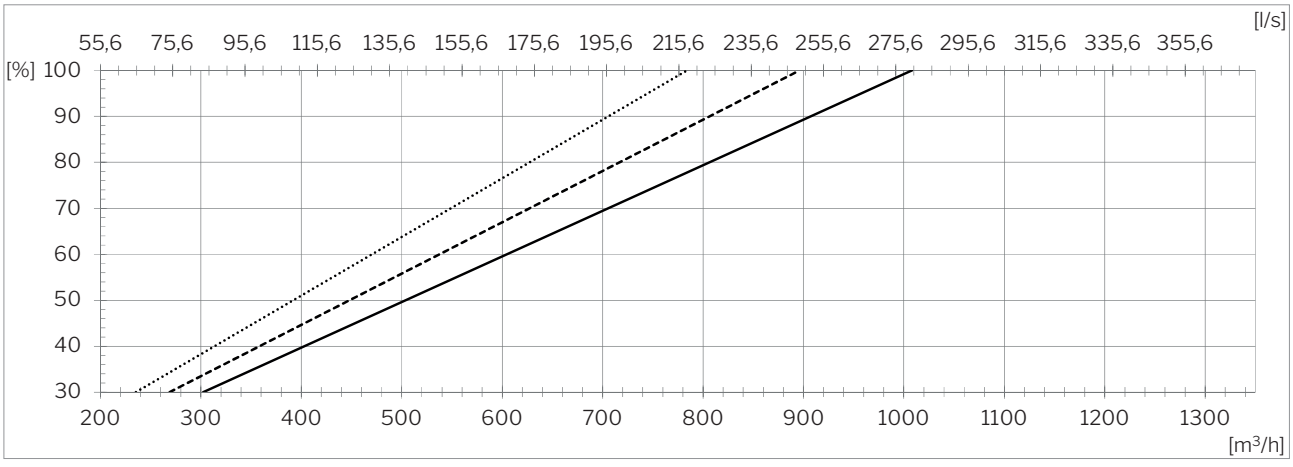
Capacity with ePM_{10} 50% / ePM_{10} 50% filters [5]



Capacity with ePM_1 55% / ePM_{10} 50% filters [5]

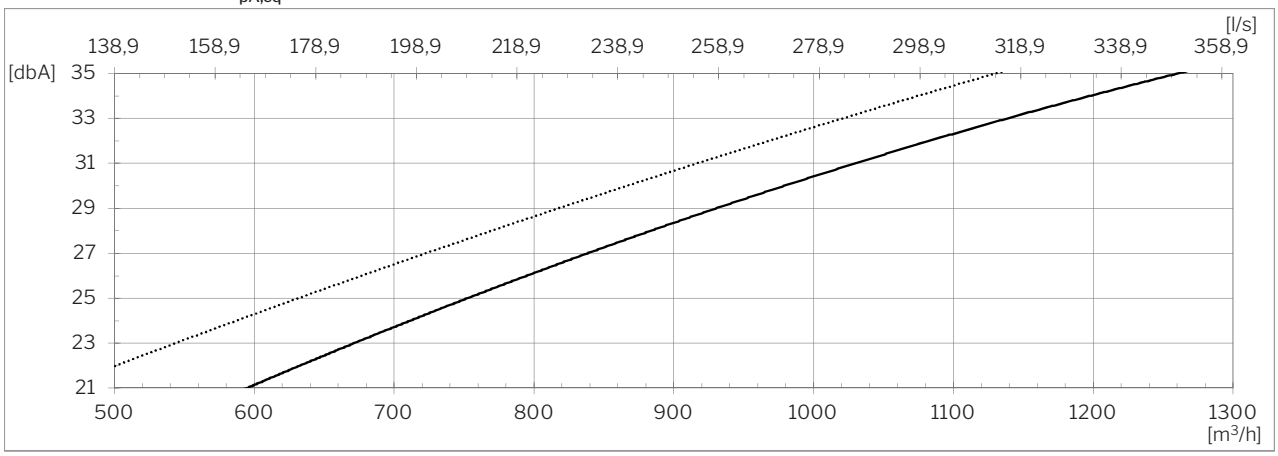


Capacity with ePM_1 80% / ePM_{10} 50% filters [5]



[5] All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.

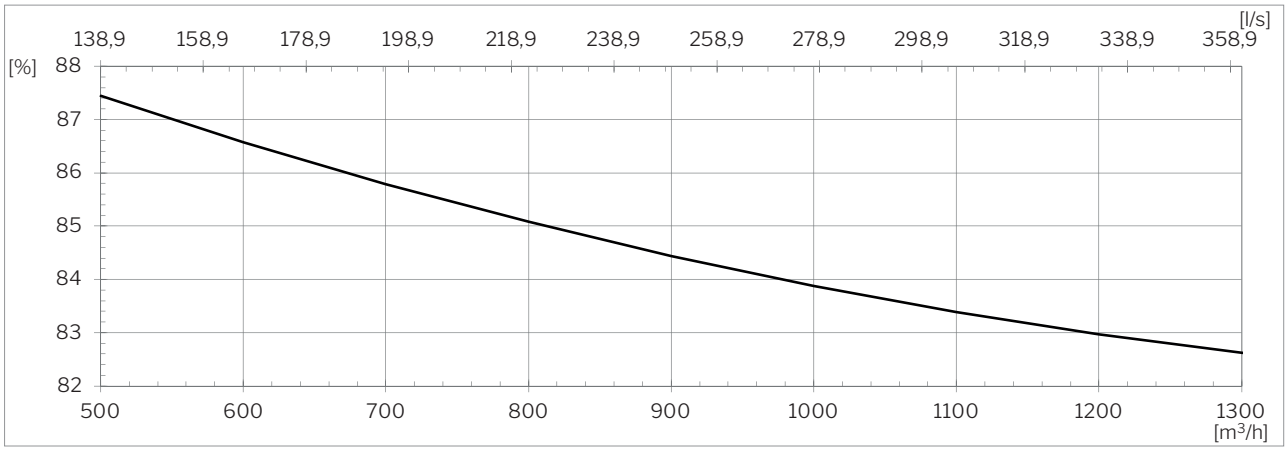
Sound pressure [6] $L_{pA,eq}$ acc. Airmaster reference situation



Right/left

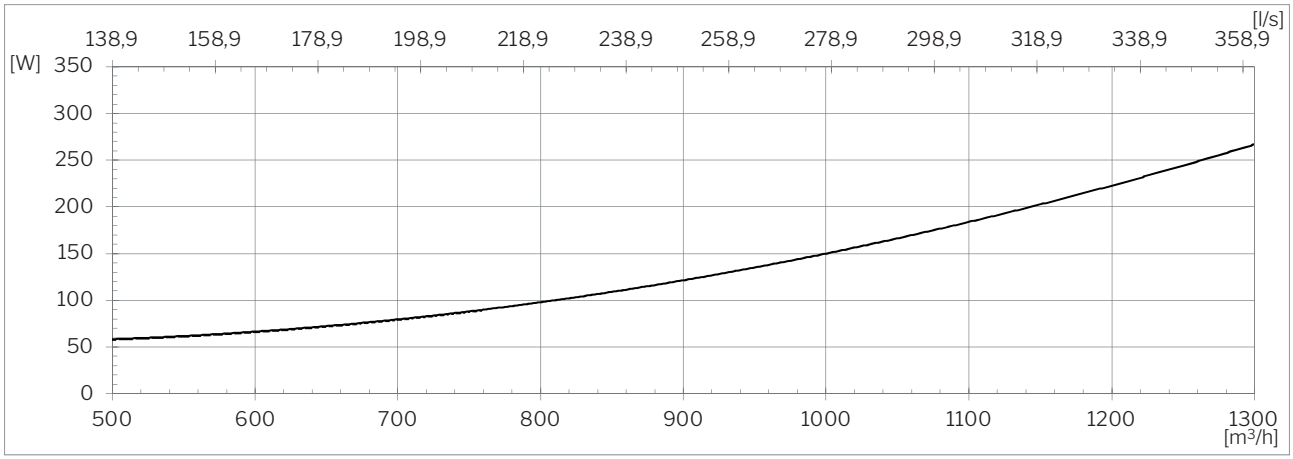
Center

Temperature efficiency acc. EN 308



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

Power consumption [7]

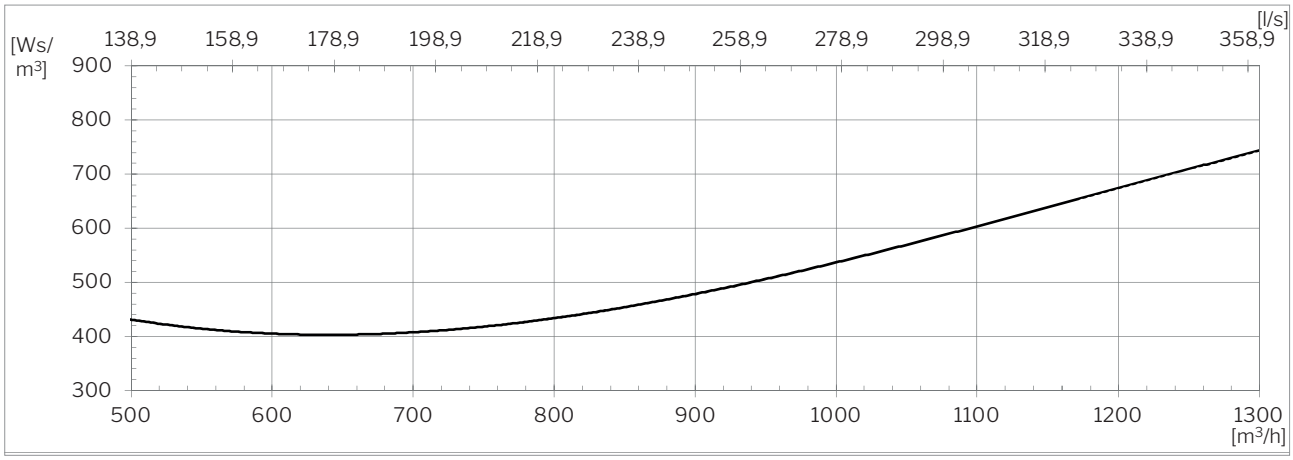


ePM_{10} 50% / ePM_{10} 50%

[6] 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.

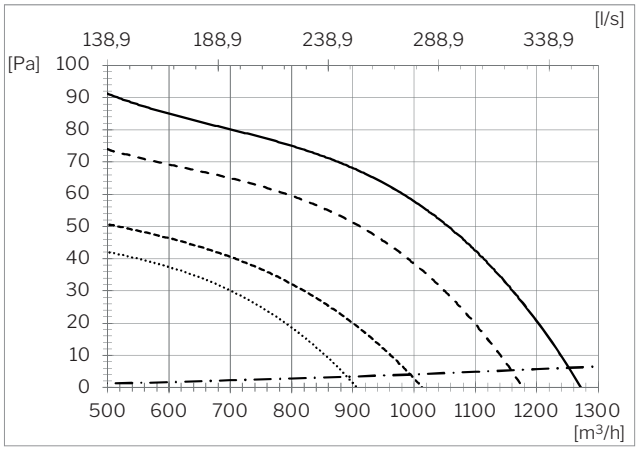
[7] All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.

SFP [8]



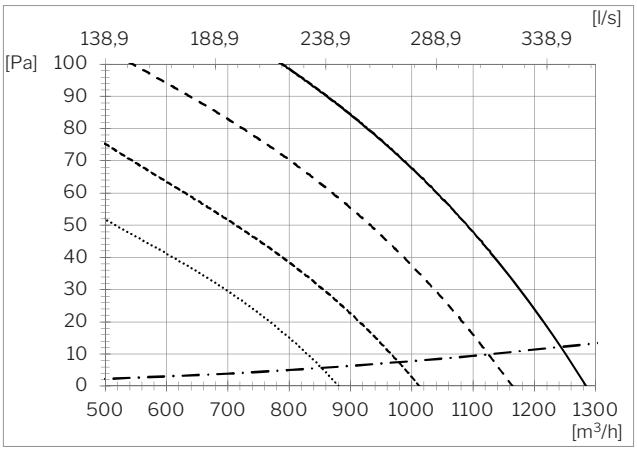
ePM$_{10}$ 50% / ePM$_{10}$ 50%

External pressure loss - Supply air [8]



- Center, 35 dB(A), ePM10 50% filter
- Right/left, 35 dB(A), ePM10 50% filter
- Center, 30 dB(A), ePM10 50% filter
- Right/left, 30 dB(A), ePM10 50% filter
- Recommended roof caps Ø400

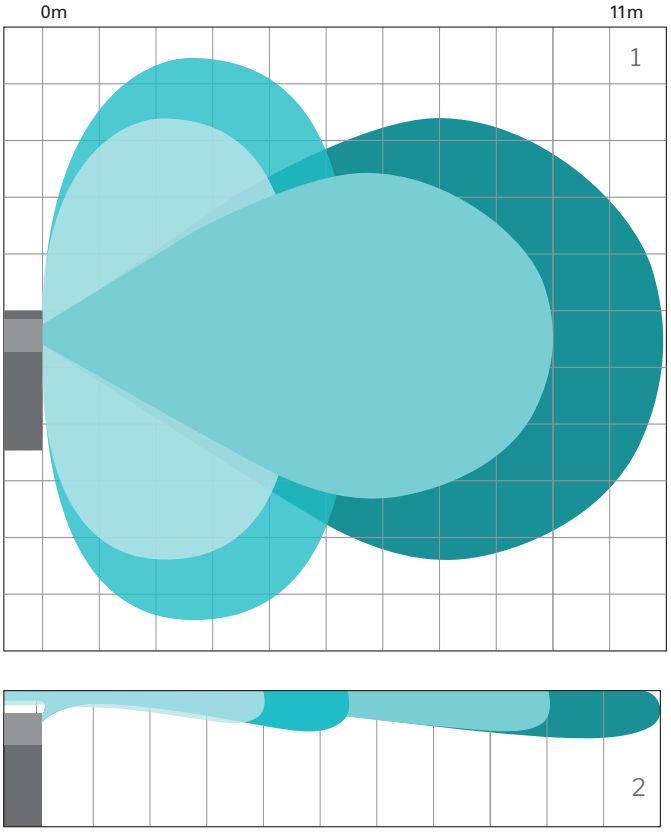
External pressure loss - Extract air [8]



- Center, 35 dB(A), ePM10 50% filter
- Right/left, 35 dB(A), ePM10 50% filter
- Center, 30 dB(A), ePM10 50% filter
- Right/left, 30 dB(A), ePM10 50% filter
- Recommended roof caps Ø400

[8] All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.

Throw length (0.2 m/s)



1300 m³/h
- Max.
- Min.

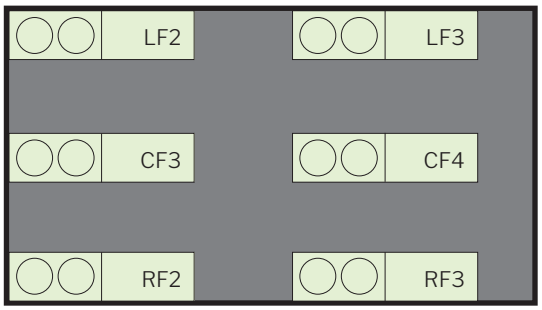
1000 m³/h
- Max.
- Min.

The AM 1200 unit spreads an air stream in different directions, depending on the given airflow.
This can be seen in the illustration, in which the blue shading indicates throw length the different airflows.

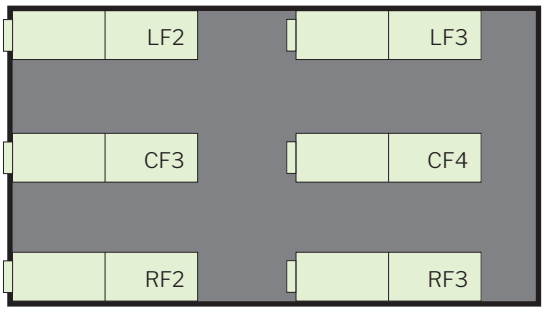
[1] Throw length seen from above.

[2] Throw length seen from the side.

Variants



AM 1200 VRF2 (right, with 2 open sides)
AM 1200 VRF3 (right, with 3 open sides)
AM 1200 VCF3 (centre, with 3 open sides)
AM 1200 VCF4 (centre, with 4 open sides)
AM 1200 VLF2 (left, with 2 open sides)
AM 1200 VLF3 (left, with 3 open sides)



AM 1200 HRF2 (right, with 2 open sides)
AM 1200 HRF3 (right, with 3 open sides)
AM 1200 HCF3 (centre, with 3 open sides)
AM 1200 HCF4 (centre, with 4 open sides)
AM 1200 HLF2 (left, with 2 open sides)
AM 1200 HLF3 (left, with 3 open sides)

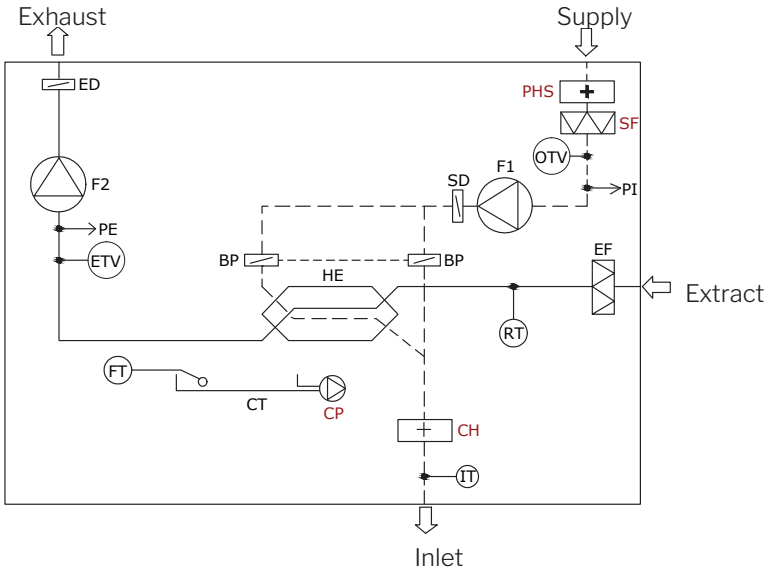
Standard and options

Counterflow heat exchanger (aluminum)	x
Enthalpy counterflow heat exchanger (Polymer membrane)	o
Combination counterflow heat exchanger (Polymer membrane)	o
Motor-driven bypass	x
Sprint-return motor driven exhaust air damper	x
Spring-return motor driven supply air damper	x
Electric preheating surface	▪
Electric comfort heating surface	▪
Water 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	▪
MODBUS® RTU RS485 module	▪
BACnet™ MS/TP module	▪
BACnet™ /IP module	▪

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

Schematic sketch



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)