



## Datasheet AM 1200 V

| Technical data                                       | Filter class  | 30 dB(A)              | 33 dB(A)               | 35 dB(A)                        |
|--|---|-----------------------|------------------------|---------------------------------|
| Maximum capacity <sup>1</sup>                        | ePM <sub>10</sub> 50%   | 870 m <sup>3</sup> /h | 1000 m <sup>3</sup> /h | 1130 m <sup>3</sup> /h          |
| Vertical model, right/left:                          | ePM <sub>1</sub> 55%  | 783 m <sup>3</sup> /h | 900 m <sup>3</sup> /h  | 1017 m <sup>3</sup> /h          |
|  | ePM <sub>1</sub> 80%  | 696 m <sup>3</sup> /h | 800 m <sup>3</sup> /h  | 904 m <sup>3</sup> /h           |
| Maximum capacity <sup>1</sup>                        | ePM <sub>10</sub> 50%   | 980 m <sup>3</sup> /h | 1120 m <sup>3</sup> /h | 1260 m <sup>3</sup> /h          |
| Vertical model, center:                              | ePM <sub>1</sub> 55%  | 882 m <sup>3</sup> /h | 1008 m <sup>3</sup> /h | 1134 m <sup>3</sup> /h          |
|  | ePM <sub>1</sub> 80%  | 784 m <sup>3</sup> /h | 896 m <sup>3</sup> /h  | 1008 m <sup>3</sup> /h          |
| Throw length (0.2 m/s) <sup>1</sup> - right/left     | min.  |                       |                        | 4 m v. 1000 m <sup>3</sup> /h   |
|  | max.  |                       |                        | 9 m v. 1000 m <sup>3</sup> /h   |
|  | min.  |                       |                        | 5.5 m v. 1300 m <sup>3</sup> /h |
|  | max.  |                       |                        | 11 m v. 1300 m <sup>3</sup> /h  |
| Throw length (0.2 m/s) <sup>1</sup> - center:        | min.  |                       |                        | 3 m v. 1000 m <sup>3</sup> /h   |
|  | max.  |                       |                        | 6.5 m v. 1000 m <sup>3</sup> /h |
|  | min.  |                       |                        | 4 m v. 1300 m <sup>3</sup> /h   |
|  | max.  |                       |                        | 8 m v. 1300 m <sup>3</sup> /h   |
| Supply air filter                                    | ePM <sub>10</sub> 50%, ePM <sub>1</sub> 55% or ePM <sub>1</sub> 80%                                 |                       |                        |                                 |
| Extract air filter                                   | ePM <sub>10</sub> 50%   |                       |                        |                                 |
| Dimensions (BxHxD)                                   | Horizontal:   | 496 x 2098 x 2427 mm  |                        |                                 |
|  | Vertical:   | 496 x 2406 x 2427 mm  |                        |                                 |
| Weight, including painted panels                     | Right-/left model:  | 565 kg                |                        |                                 |
|  | Center model:   | 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  | 10  |                       |                        |                                 |
| Duct connection                                      | Ø400 mm   |                       |                        |                                 |
| Condensate pump (Capacity ; Lifting height at 5 l/h) | 10 l/h ; 6 m  |                       |                        |                                 |
| Condensate drain hose int./ext. diameter             | Ø4 mm / Ø6 mm   |                       |                        |                                 |
| Supply voltage <sup>2</sup>                          | 220-240V/50Hz, ~1N+PE   |                       |                        |                                 |
|  | 220-240V/50Hz, ~3N+PE   |                       |                        |                                 |
| Nominal power consumption <sup>1</sup>               | 254 W   |                       |                        |                                 |
| Nominal current <sup>1</sup>                         | 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 current breaker (RCCB)          | Type B  |                       |                        |                                 |

<sup>1</sup> All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.

<sup>2</sup> The supply can be limited to a single-phase, connected to L1. Only for air handling units without electric heating surface.

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

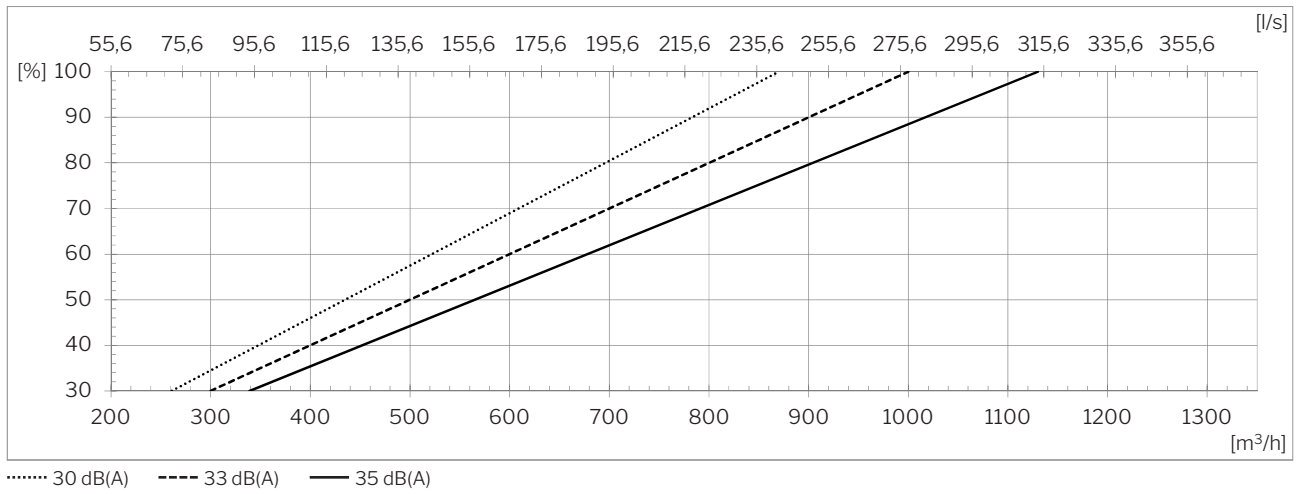
  

| <b>Water heating surface</b>     |                 |
|----------------------------------|-----------------|
| Nominal heat output <sup>3</sup> | 2454 W          |
| Connection dimension             | 1/2" (DN 15)    |
| Materials pipes/fins             | Copper/aluminum |
| Opening/closing time motor valve | 60 s            |
| Maximum operating temperature    | 90 °C           |
| Maximum operating pressure       | 5 bar           |

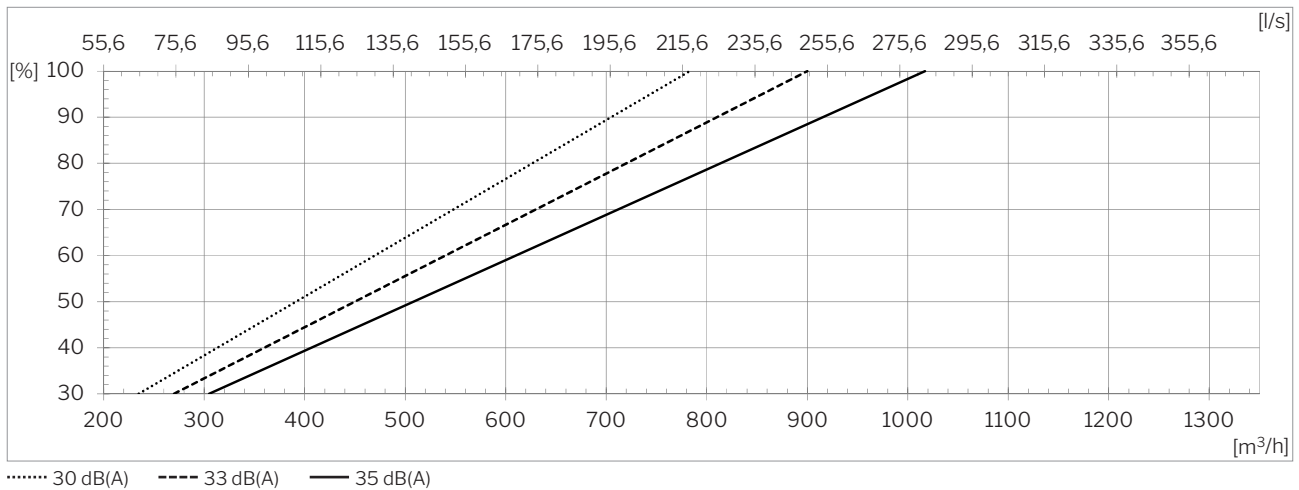
<sup>3</sup> Heat output for maximum capacity at 35 dB(A), delivery/return temperature 60/40°C and a liquid flow of 107 l/h.

## AM 1200 V - R/L

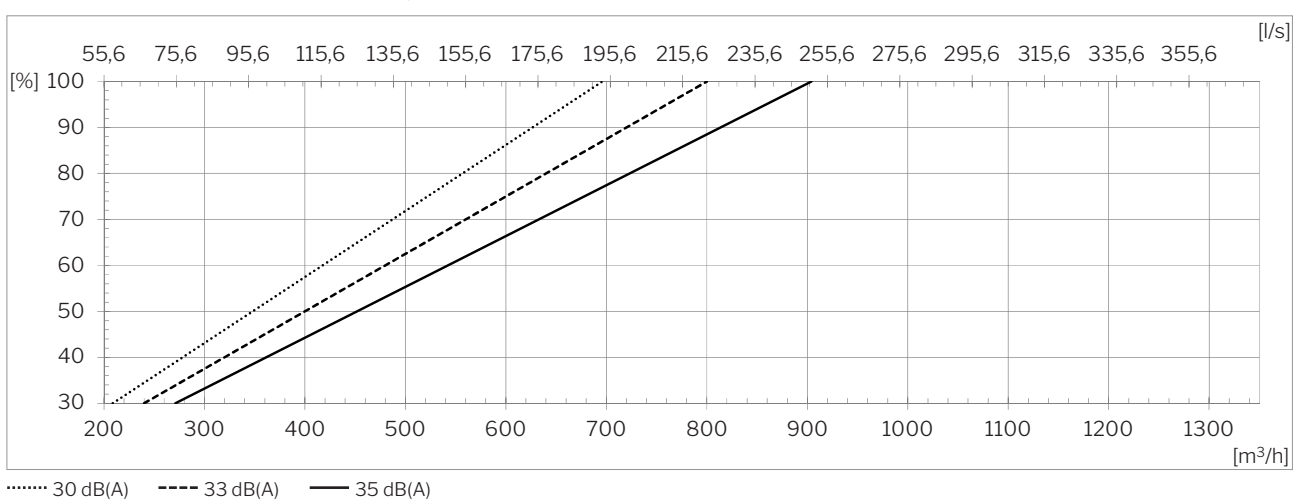
### Capacity with ePM<sub>10</sub> 50% / ePM<sub>10</sub> 50% filters <sup>4</sup>



### Capacity with ePM<sub>1</sub> 55% / ePM<sub>10</sub> 50% filters <sup>4</sup>



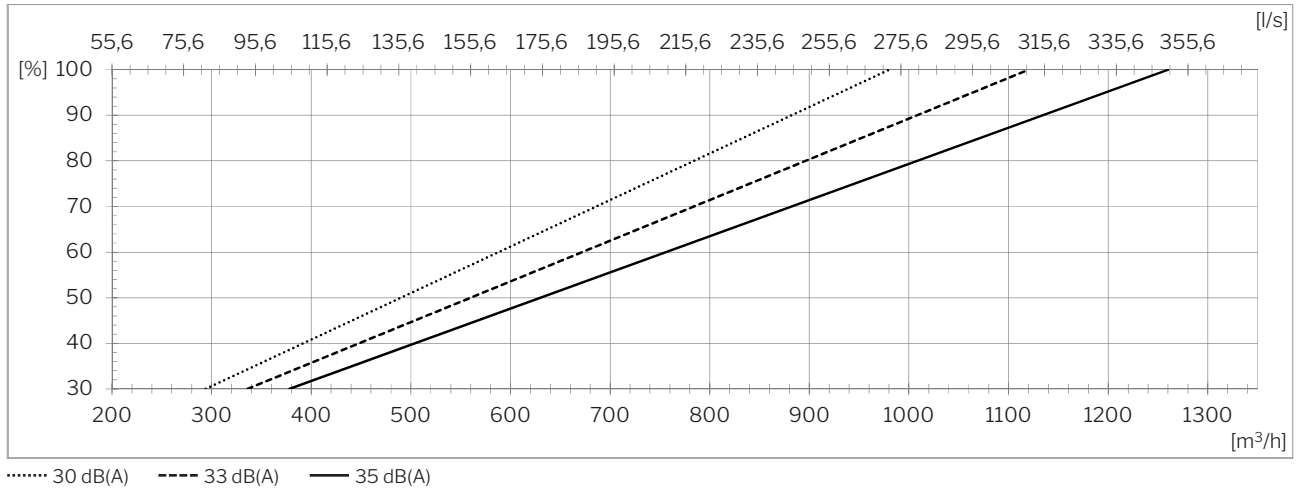
### Capacity with ePM<sub>1</sub> 80% / ePM<sub>10</sub> 50% filters <sup>4</sup>



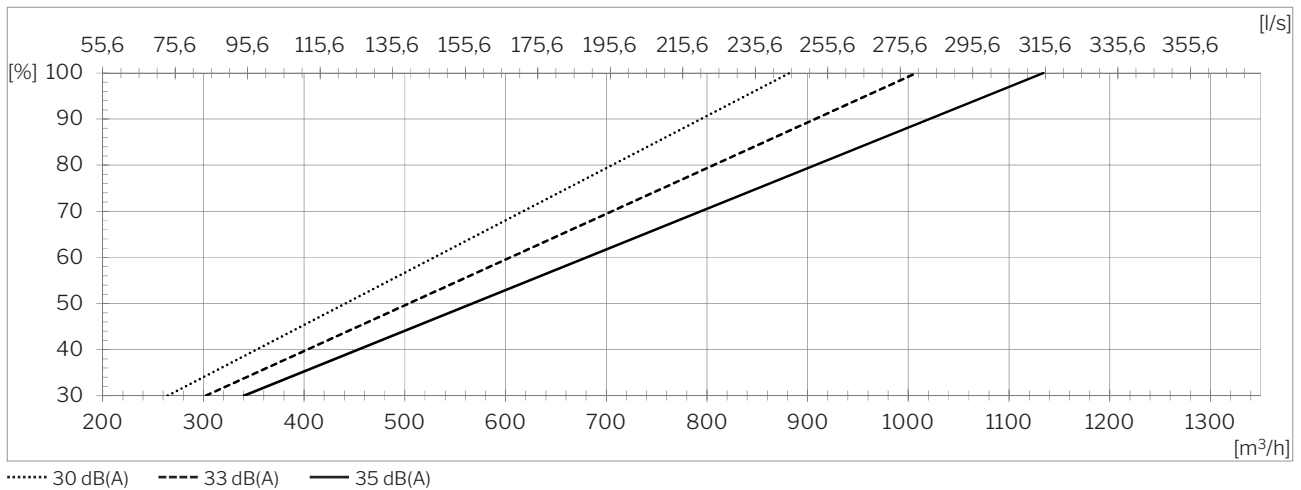
<sup>4</sup> All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.

## AM1200 V - C

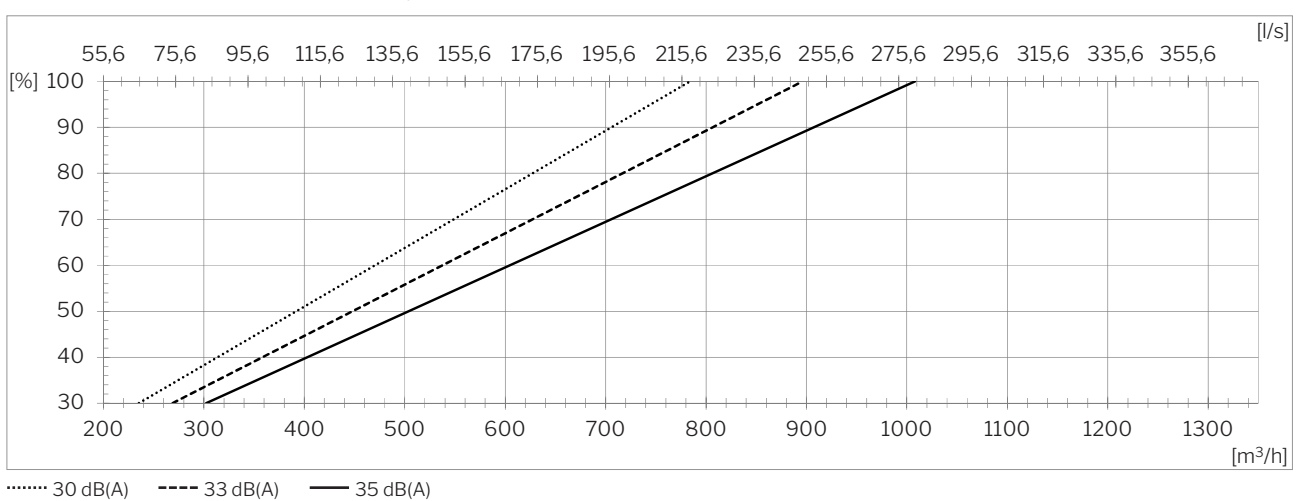
### Capacity with ePM<sub>10</sub> 50% / ePM<sub>10</sub> 50% filters <sup>5</sup>



### Capacity with ePM<sub>1</sub> 55% / ePM<sub>10</sub> 50% filters <sup>5</sup>

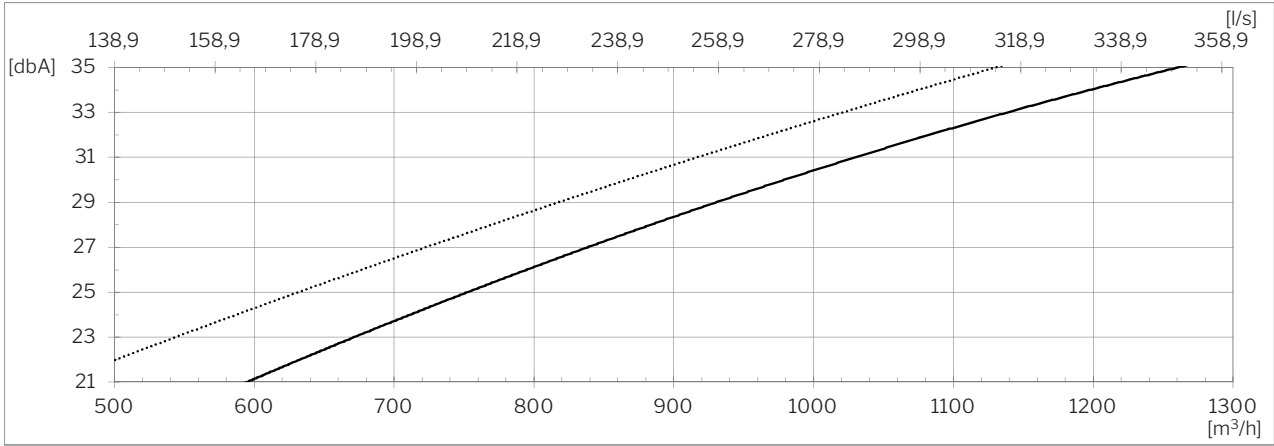


### Capacity with ePM<sub>1</sub> 80% / ePM<sub>10</sub> 50% filters <sup>5</sup>



<sup>5</sup> All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.

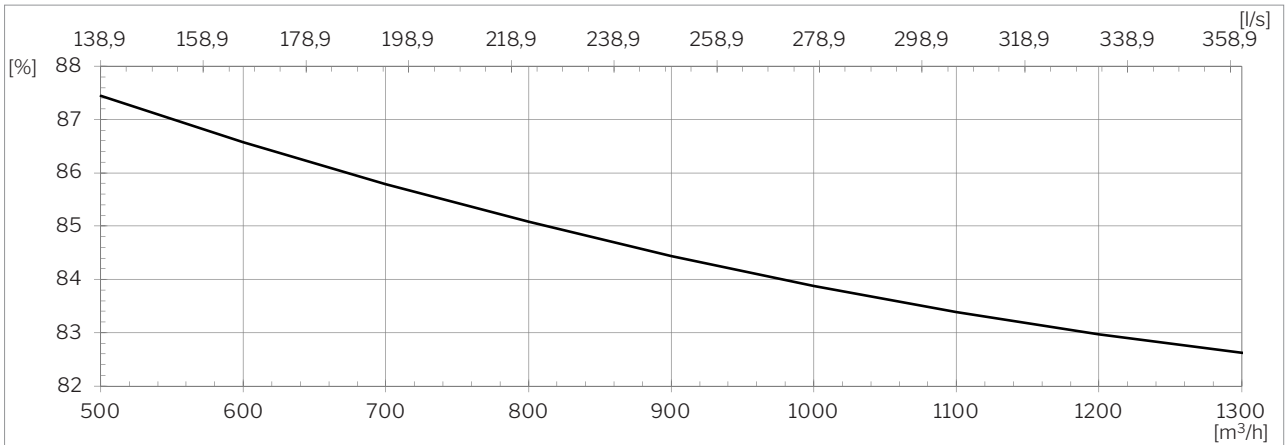
## Sound pressure <sup>6</sup>L<sub>pA,eq</sub> acc. Airmaster reference situation



..... Right/left

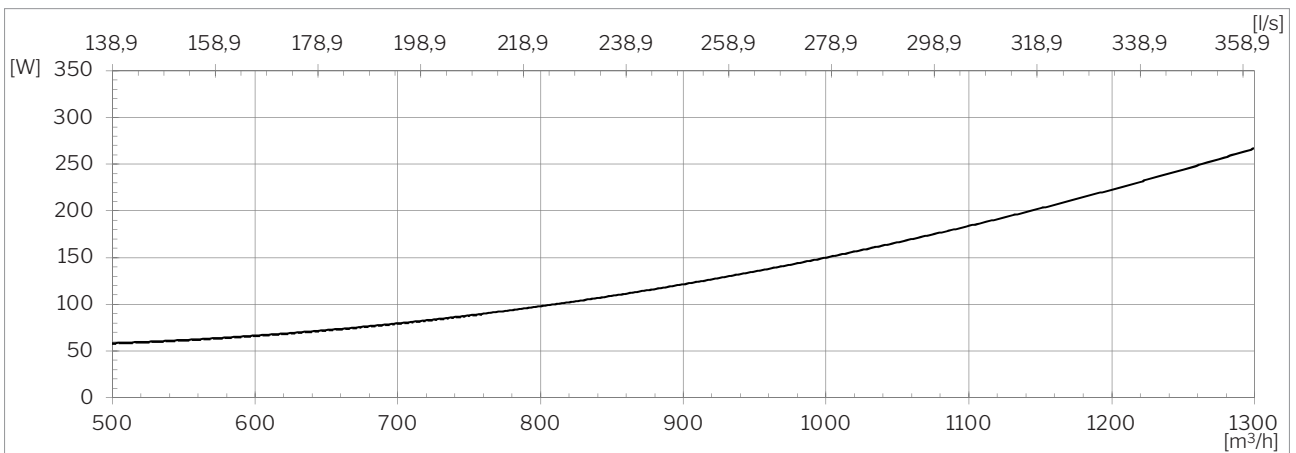
— Center

## Temperature efficiency acc. EN 308



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

## Power consumption <sup>7</sup>

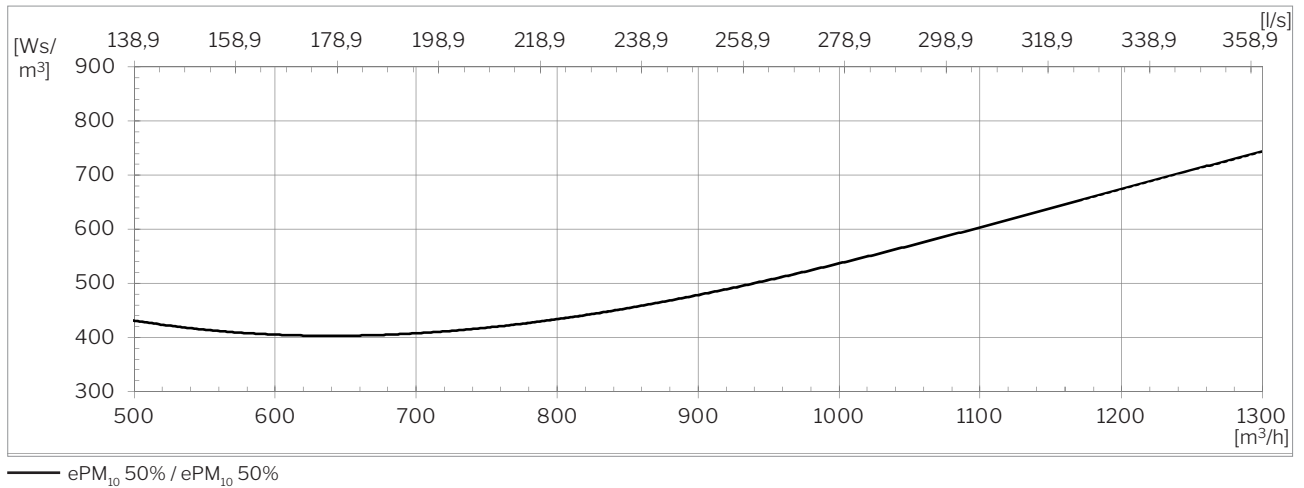


— ePM<sub>10</sub> 50% / ePM<sub>10</sub> 50%

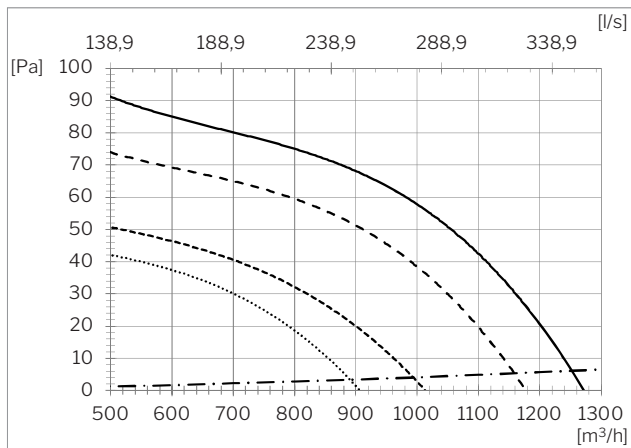
<sup>6</sup> Sound pressure level L<sub>pA,eq</sub> is measured in a height of 1.2 m with at horizontal distance of 1 m from the air handling unit in room with a size of 200 m<sup>3</sup> and a reverberation time of T = 0.6 s, corresponding to a room attenuation of 7.5 dB.

<sup>7</sup> All measurements were performed in normal operating mode in a standard installation using the facade grilles Ø400 recommended by Airmaster.

## SFP<sup>8</sup>

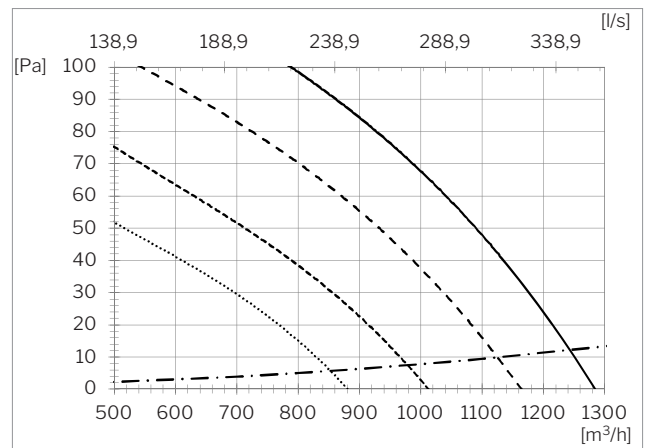


## External pressure loss - Supply air<sup>8</sup>



- 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

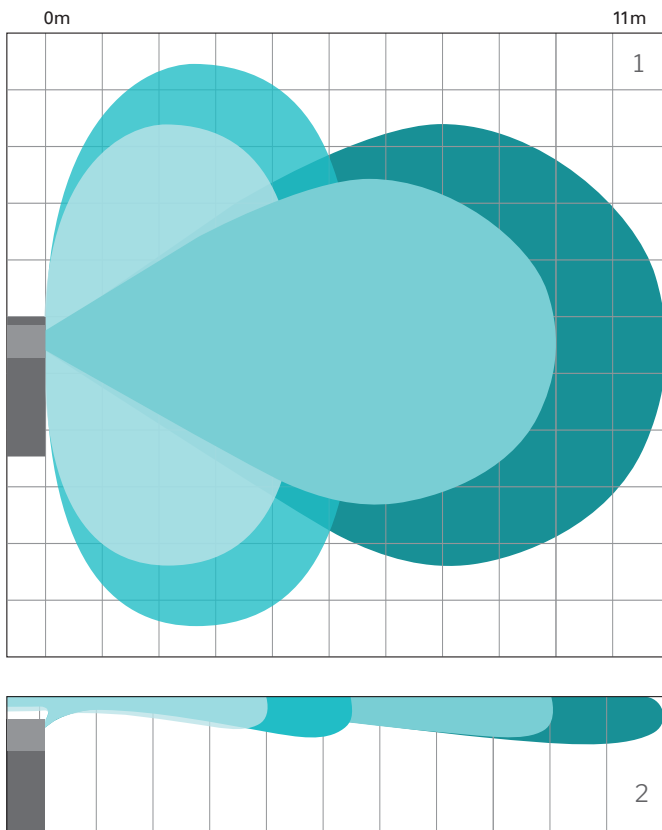
## External pressure loss - Extract air<sup>8</sup>



- 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

<sup>8</sup> 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 m<sup>3</sup>/h**

- Max.
- Min.

**1000 m<sup>3</sup>/h**

- Max.
- Min.

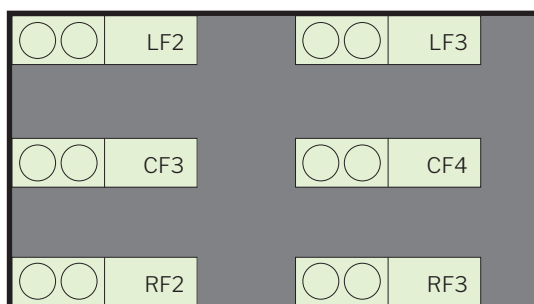
The AM 1200 unit spreads an air stream in different directions, depending on the given airflow.

This can be seen in the illustration, in which the blue shading indicates throw length the different airflows.

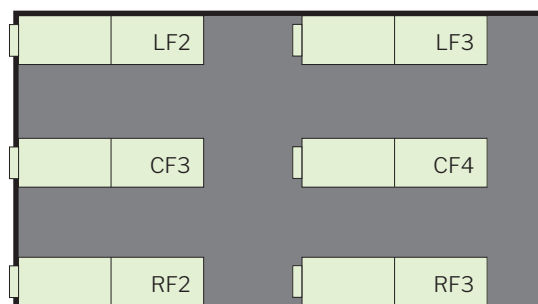
<sup>1</sup>Throw length seen from above.

<sup>2</sup>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)



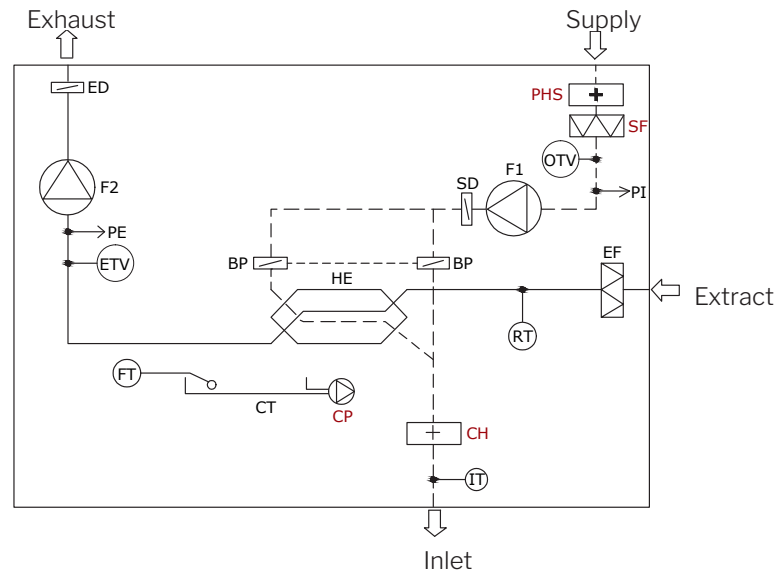
- AM 1200 HRF2 (right, with 2 open sides)
- AM 1200 HRF3 (right, with 3 open sides)
- AM 1200 HCF3 (centre, with 3 open sides)
- AM 1200 HCF4 (centre, with 4 open sides)
- AM 1200 HLF2 (left, with 2 open sides)
- AM 1200 HLF3 (left, with 3 open sides)

## Standard and options

|   |   |  |   |
|---|---|--|---|
| Counterflow heat exchanger (aluminum)                     | x | Energy meter                             | • |
| Enthalpy counterflow heat exchanger (Polymer membrane)    | o | Supply air filter ePM <sub>10</sub> 50%  | • |
| Combination counterflow heat exchanger (Polymer membrane) | o | Supply air filter ePM <sub>1</sub> 55%   | • |
| Motor-driven bypass                                       | x | Supply air filter ePM <sub>1</sub> 80%   | o |
| Sprint-return motor driven exhaust air damper             | x | Extract air filter ePM <sub>10</sub> 50% | x |
| Spring-return motor driven supply air damper              | x | Airlinq Viva control panel               | • |
| Electric preheating surface                               | • | Airlinq Orbit control panel              | • |
| Electric comfort heating surface                          | • | Airmaster Airlinq® Online                | • |
| Water heating surface                                     | • | Airlinq® Online API                      | • |
| Condensate pump   | • | Airlinq® BMS                             | • |
| PIR/motion sensor (wall-mounted)                          | • | LON® module                              | o |
| CO <sub>2</sub> -sensor (wall-mounted)                    | • | KNX® module                              | o |
| CO <sub>2</sub> -sensor (built-in)                        | • | MODBUS® RTU RS485 module                 | • |
| TVOC-sensor (built-in)                                    | • | BACnet™ MS/TP module                     | • |
| CO <sub>2</sub> -/TVOC-sensor (built-in)                  | • | BACnet™ /IP module                       | • |
| Hygostat (wall-mounted)                                   | o |  |   |

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

## Schematic sketch



### COMPONENT DESIGNATION

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