Datasheet AM 950+ C

AIRMASTER

Technical data

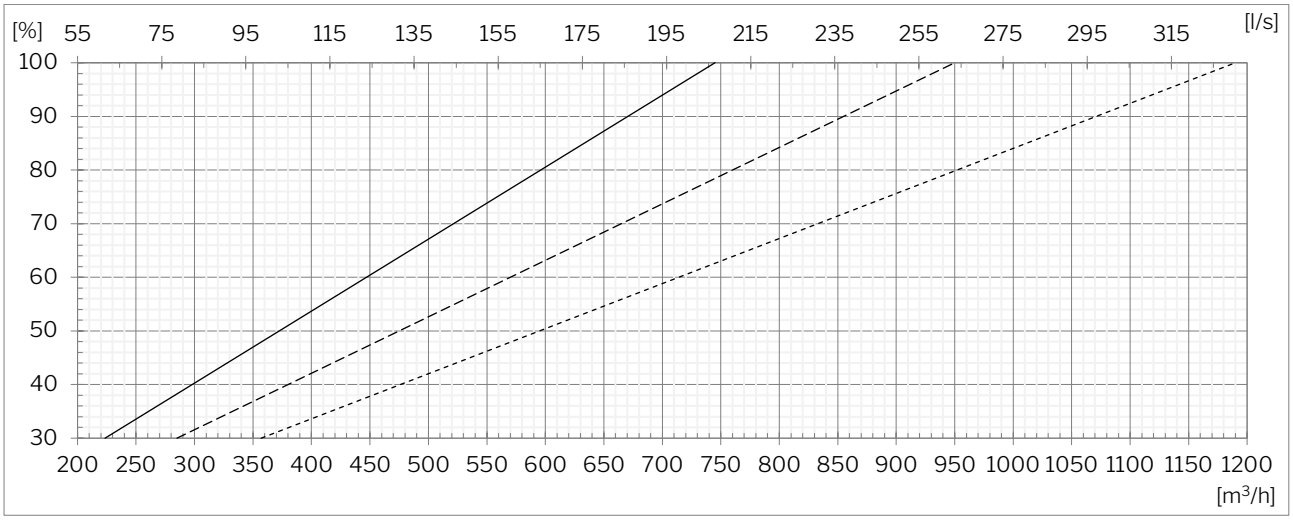
	Filter class	30 dB(A)	35 dB(A)	40 dB(A)	Boost
Maximum capacity[A] (Footnote E / Footnote G)	ePM_{10} 50%	745 / 835 m^3/h	950 / 1055 m^3/h	1190 / 1330 m^3/h	1410 m^3/h
	ePM_1 55%	740 / 820 m^3/h	940 / 1030 m^3/h	1170 / 1275 m^3/h	1400 m^3/h
	ePM_1 80%	720 / 805 m^3/h	920 / 1000 m^3/h	1155 / 1235 m^3/h	1390 m^3/h
Throw (0.2 m/s)[B] (Footnote E / Footnote G)	ePM_{10} 50%	6.3 / 7.0 m	8.0 / 8.9 m	10.0 / 11.2 m	12.0 m
	ePM_1 55%	6.2 / 6.9 m	7.9 / 8.7 m	8.9 / 10.7 m	12.0 m
	ePM_1 80%	6.1 / 6.8 m	7.8 / 8.4 m	8.8 / 10.4 m	12.0 m
Operating range (max. capacity), outside temperature		-20 °C – +40 °C			
Intake filter		ePM_{10} 50%, ePM_1 55%, ePM_1 80%			
Extract filter		ePM_{10} 50%			
Dimensions (Width x Depth x Height)		2167 x 1613 x 505 mm			
Weight: standard air handling unit, complete		340 kg			
Color: casing		RAL 9010			
Counterflow heat exchanger		Aluminium			
Air leakage classification cf. EN 1886 (external leakage)		Class L2			
Air leakage classification cf. EN 13141-7, EN 13141-8 (external leakage)		Class A1			
Air leakage classification cf. EN 308 (internal leakage)		Max. 0.5%			
Air leakage classification, main damper, cf. EN 1751		Class 3			
IP code		10			
Duct connection		Ø315 mm			
Free area, inlet opening, inner / outer		0.0956 m^2 / 0.157 m^2			
Free area, extract opening		0.088 m^2			
Condensate pump: capacity / head at 5 l/h		10 l/h / 6 m			
Condensate drain hose: internal diameter / external diameter		Ø6 mm / Ø9 mm			
Supply voltage[C]		220-240V/50Hz, ~1N+PE or 220-240V/50Hz, ~3N+PE			
Maximum power		784 W			
Maximum current		3.51 A			
Power factor		0.972			
Leakage current AC / DC		≤6mA			
Maximum fuse[C]		16 A, 1 phase, type B or 16 A, 3 phase, type B			
Recommended residual current circuit breaker (RCCB)		Type F / Type B			

[A] All measurements were performed in a normal operating mode in a standard installation in a test room, dimensioned 8.0 m x 10.0 m x 2.5 m with room attenuation of 8 dB(A).
[B] The throw is measured with a 2-3˚C subcooled intake air in a test room, dimensioned 8.0 m x 10.0 m x 2.5 m.
[C] A 3-phase connection must be used if the electric preheating surface is chosen.

Electrical heating surfaces

	Preheating surface	Comfort heating surface
Heat output	2300 W	1800 W
Nominal current	10.00 A @ 230 V	7.83 A @ 230 V
Thermal circuit breaker, automatic reset	50 ºC	50 ºC
Thermal circuit breaker, manual reset	100 ºC	100 ºC

Capacity with intake filter ePM$_{10}$ 50% + extract filter ePM$_{10}$ 50%[D]

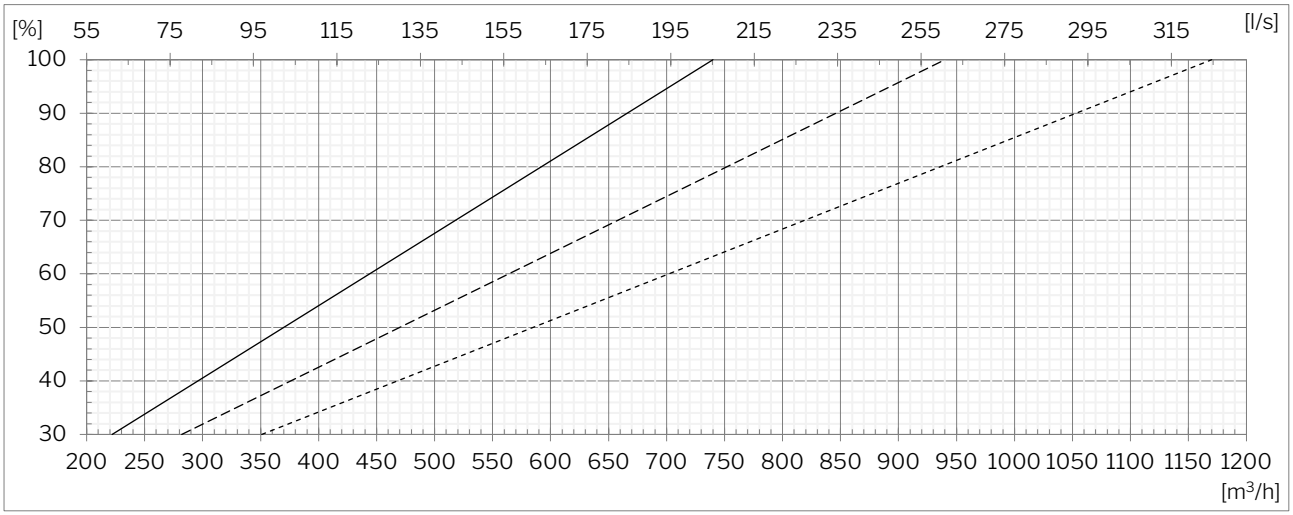


——— 30 dB(A)

– – – – – 35 dB(A)

- - - - - - 40 dB(A)

Capacity with intake filter ePM$_{1}$ 55% + extract filter ePM$_{10}$ 50%[D]



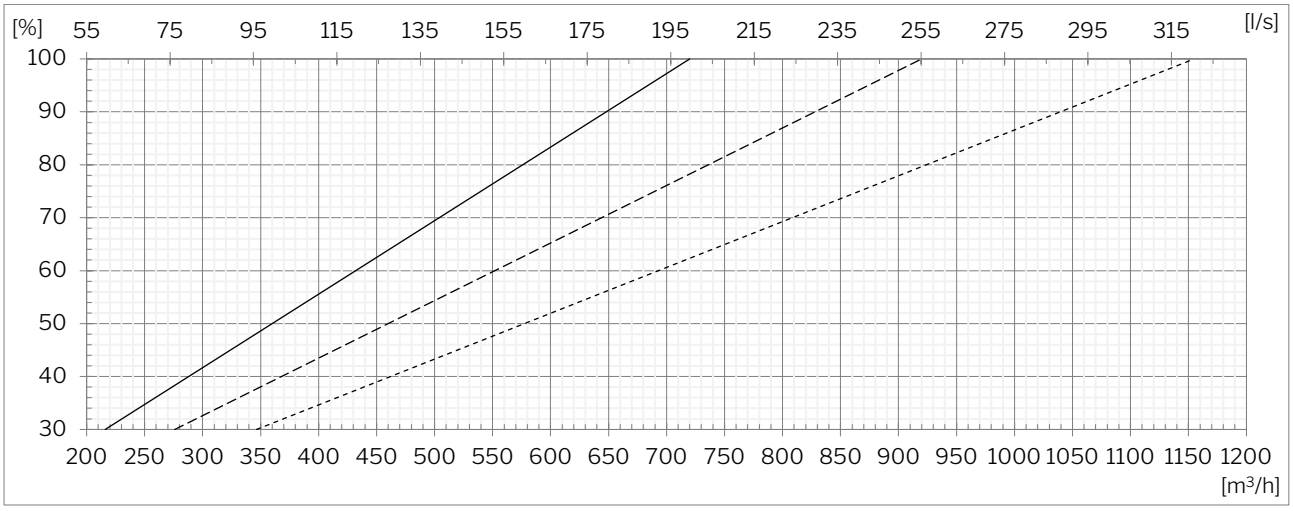
——— 30 dB(A)

– – – – – 35 dB(A)

- - - - - - 40 dB(A)

[D] All measurements were performed in normal operating mode in a standard installation using the Ø315 mm Airmaster Boomerain® façade grilles.

Capacity with intake filter ePM$_1$ 80% + extract filter ePM$_{10}$ 50%^{D}

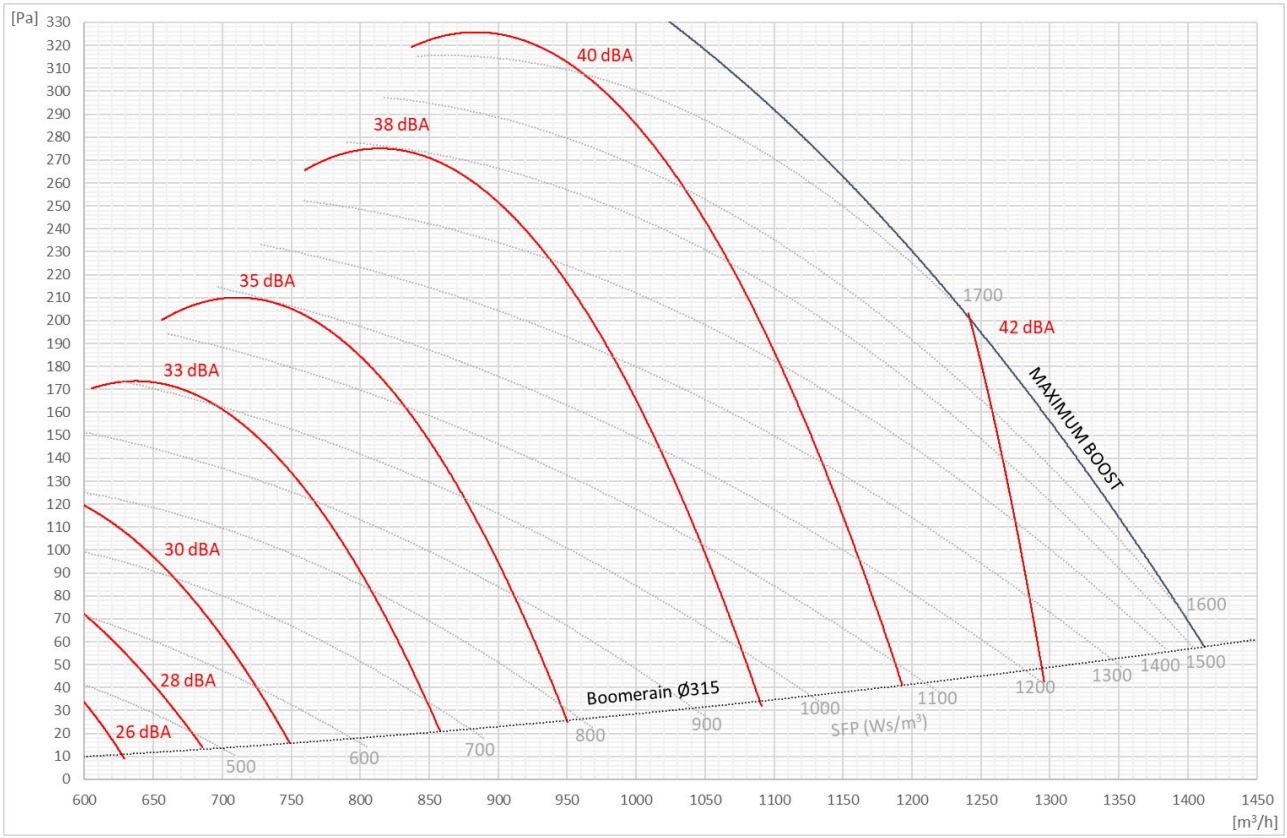


——— 30 dB(A)

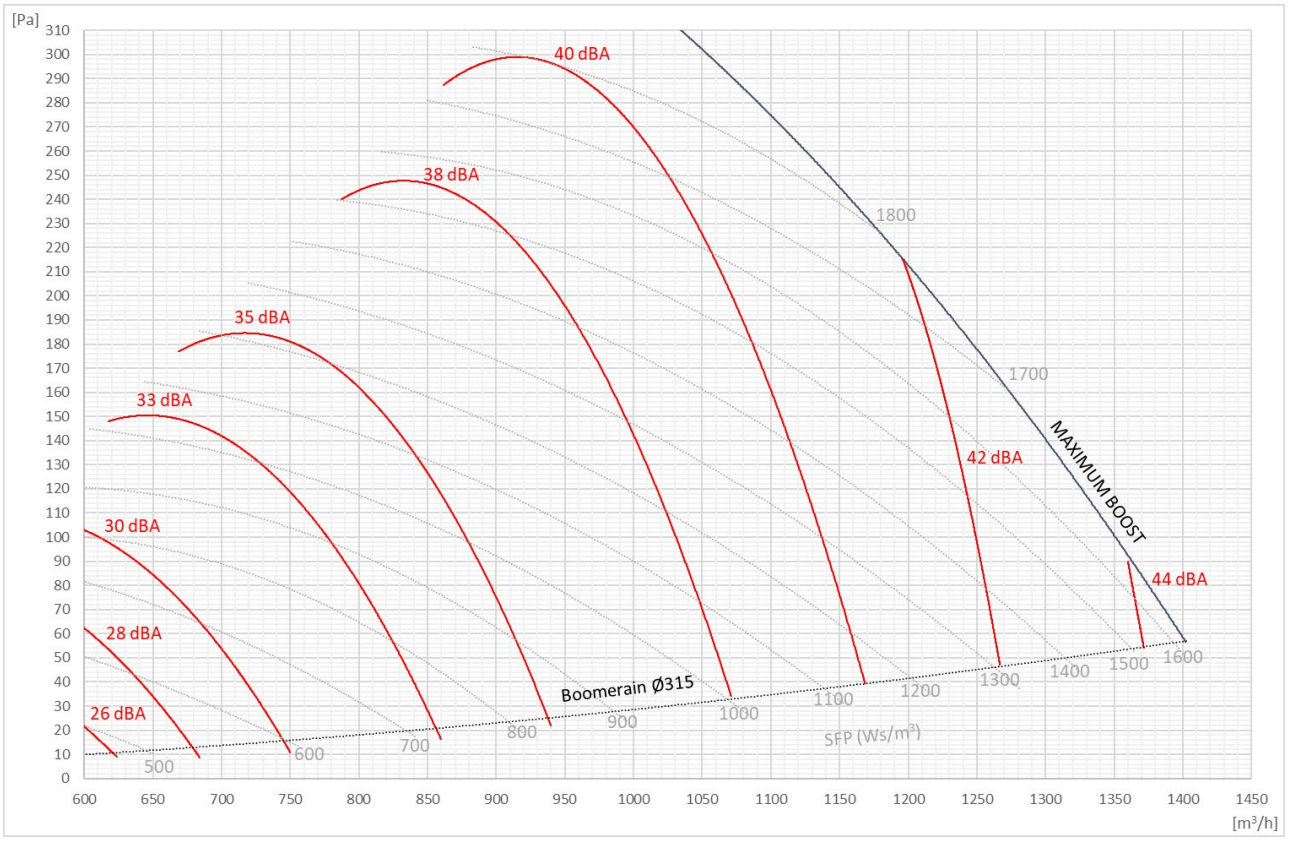
– – – – – 35 dB(A)

- - - - - - 40 dB(A)

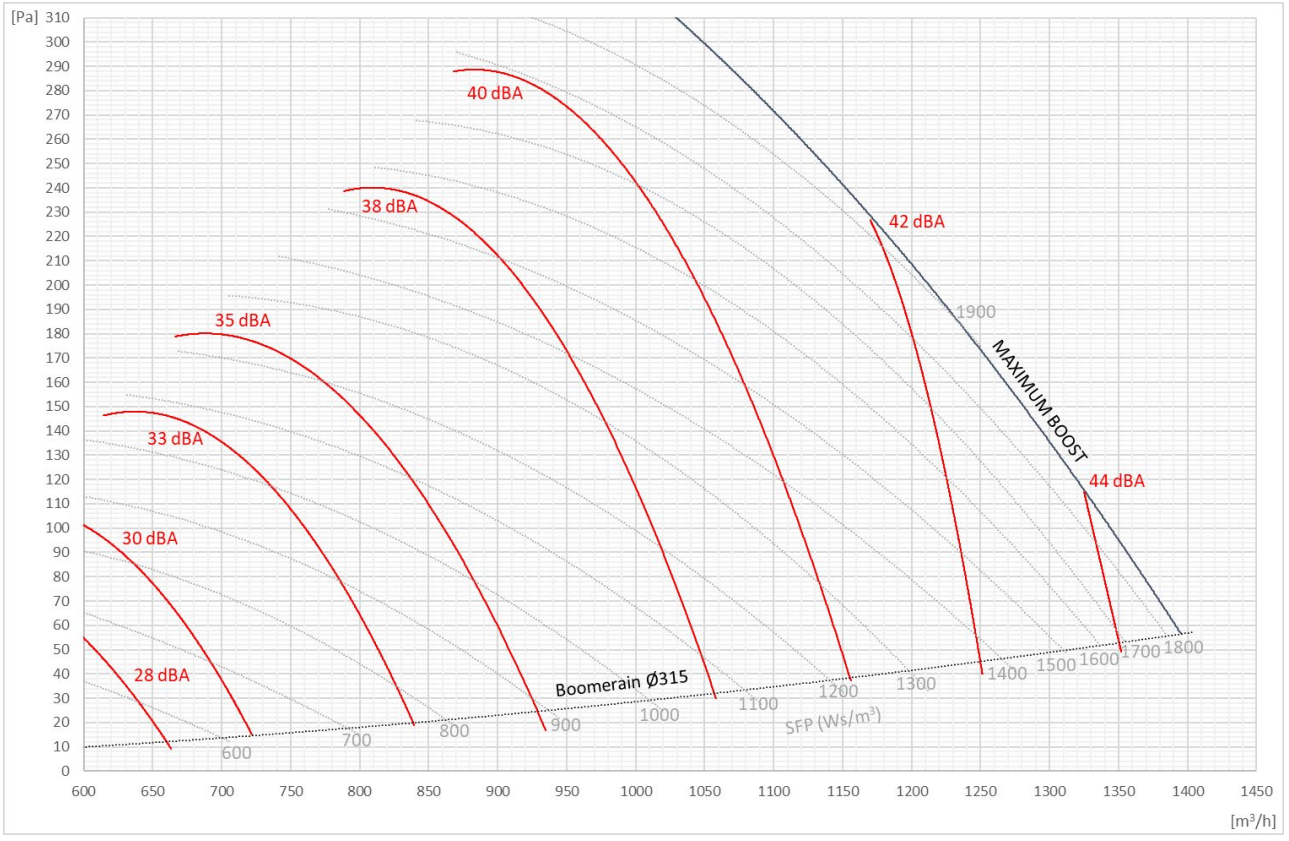
Performance chart with intake filter ePM$_{10}$ 50% + extract filter ePM$_{10}$ 50%



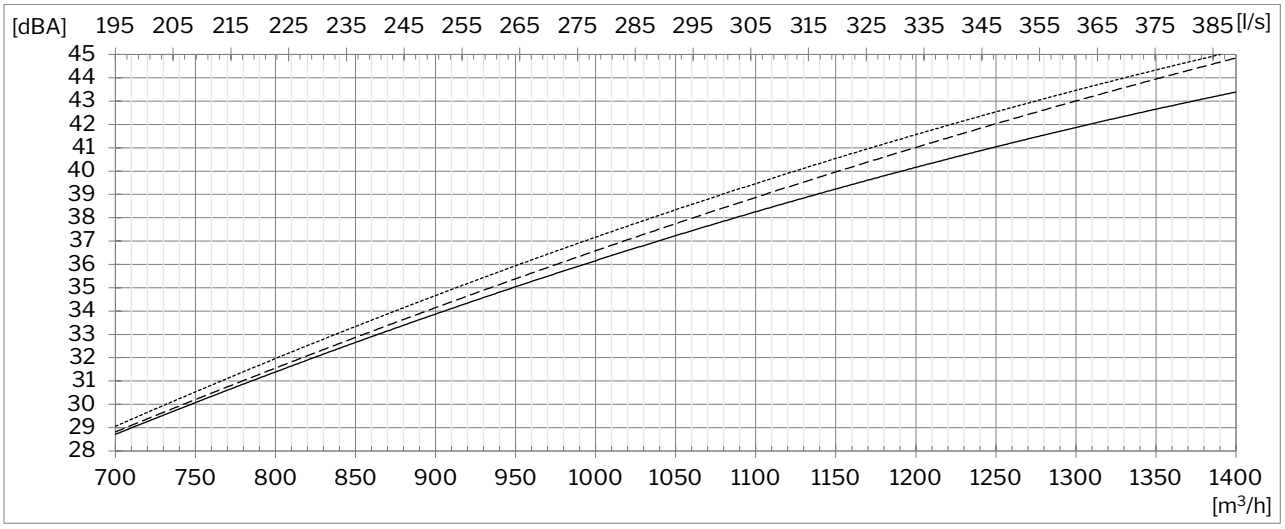
Performance chart with intake filter ePM$_1$ 55% + extract filter ePM$_{10}$ 50%



Performance chart with intake filter ePM$_1$ 80% + extract filter ePM$_{10}$ 50%



A-weighted sound pressure level L_{pA}^{E}

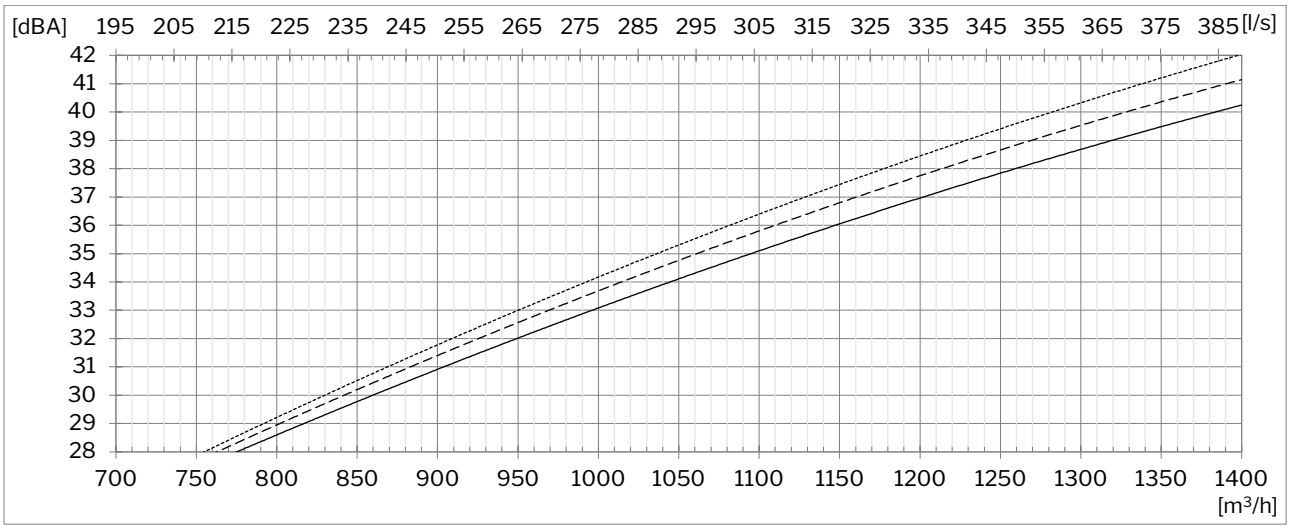


———— Intake filter ePM_{10} 50% + extract filter ePM_{10} 50%

– – – – – Intake filter ePM_{1} 55% + extract filter ePM_{10} 50%

- - - - - - Intake filter ePM_{1} 80% + extract filter ePM_{10} 50%

A-weighted sound pressure level L_{pA}^{F}



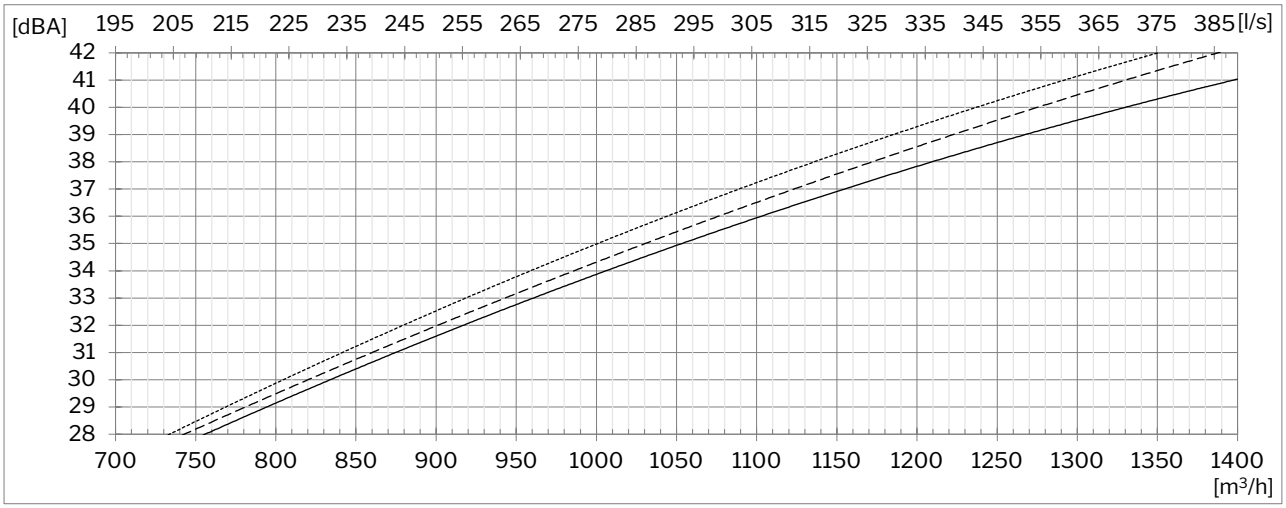
———— Intake filter ePM_{10} 50% + extract filter ePM_{10} 50%

– – – – – Intake filter ePM_{1} 55% + extract filter ePM_{10} 50%

- - - - - - Intake filter ePM_{1} 80% + extract filter ePM_{10} 50%

[E] The sound pressure level is measured at a height of 1.2 m at a horizontal distance of 1 m from the unit.
[F] The sound pressure level is measured at a height of 1.5 m at a horizontal distance of 3 m from the unit.

A-weighted sound pressure level L_{pA}[G]



———— Intake filter ePM_{10} 50% + extract filter ePM_{10} 50%

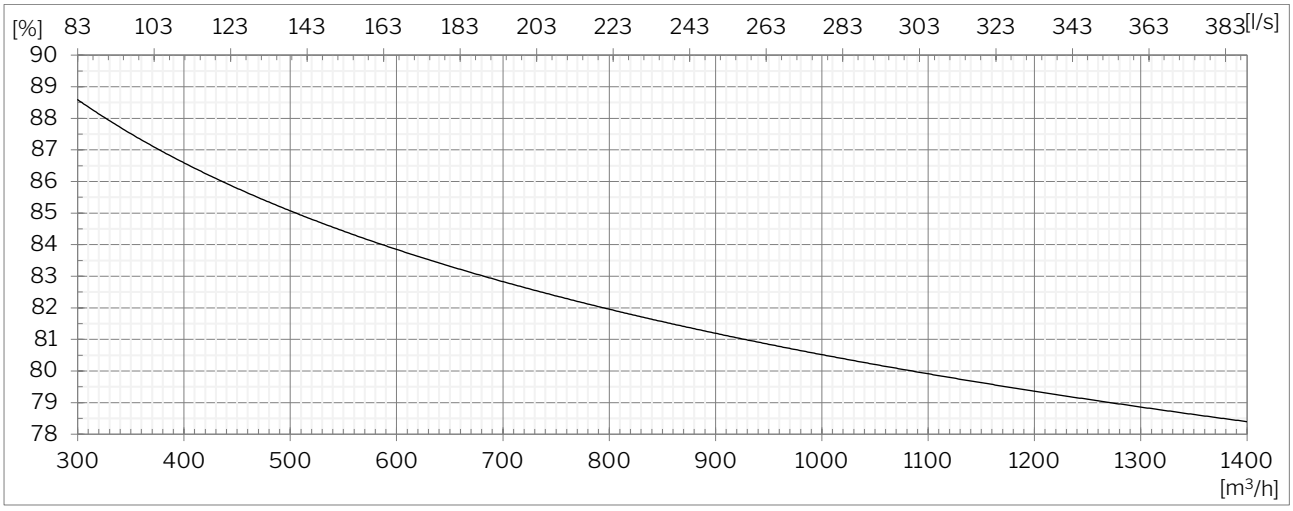
– – – – – Intake filter ePM_1 55% + extract filter ePM_{10} 50%

- - - - - - Intake filter ePM_1 80% + extract filter ePM_{10} 50%

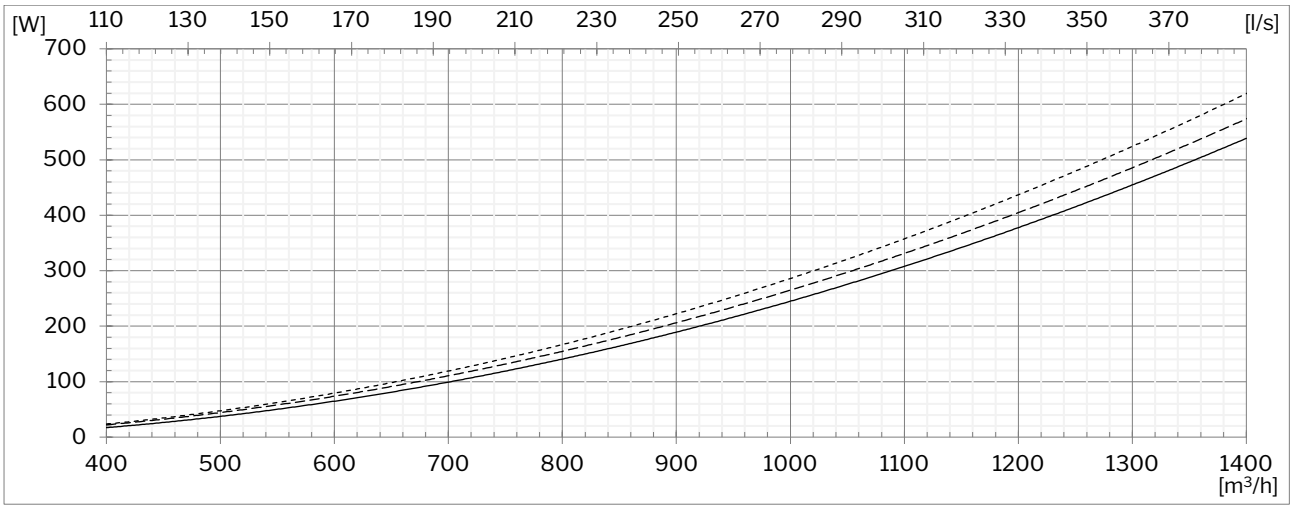
Low-frequency sound:
The sound pressure level measured with C-weighting does not exceed levels measured with A-weighting by more than 20 dB.

[G] The sound pressure level is measured in three positions, the result is based on power average.
Position 1: measured at a height of 1.2 m at a horizontal distance of 1 m from the unit.
Position 2: measured at a height of 1.5 m at a horizontal distance of 3 m from the unit.
Position 3: measured at a height of 1.5 m, far right corner in the test room, 1.5 m from each wall.

Temperature efficiency acc. to EN 308



Power consumption

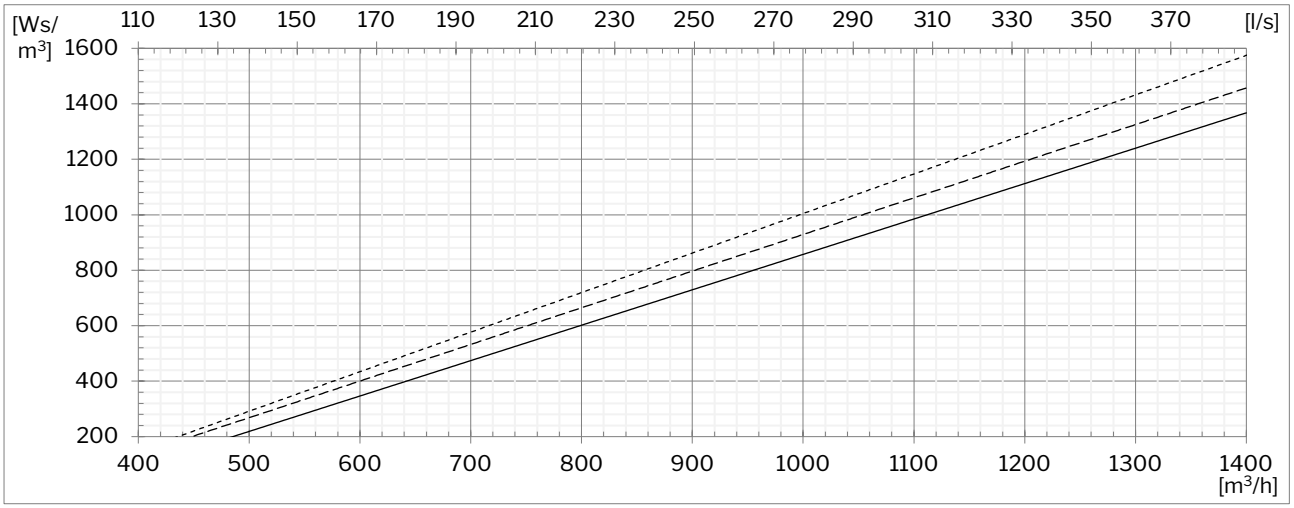


——— Intake filter ePM_{10} 50% + extract filter ePM_{10} 50%

– – – – – Intake filter ePM_1 55% + extract filter ePM_{10} 50%

- - - - - - Intake filter ePM_1 80% + extract filter ePM_{10} 50%

SFP[H]

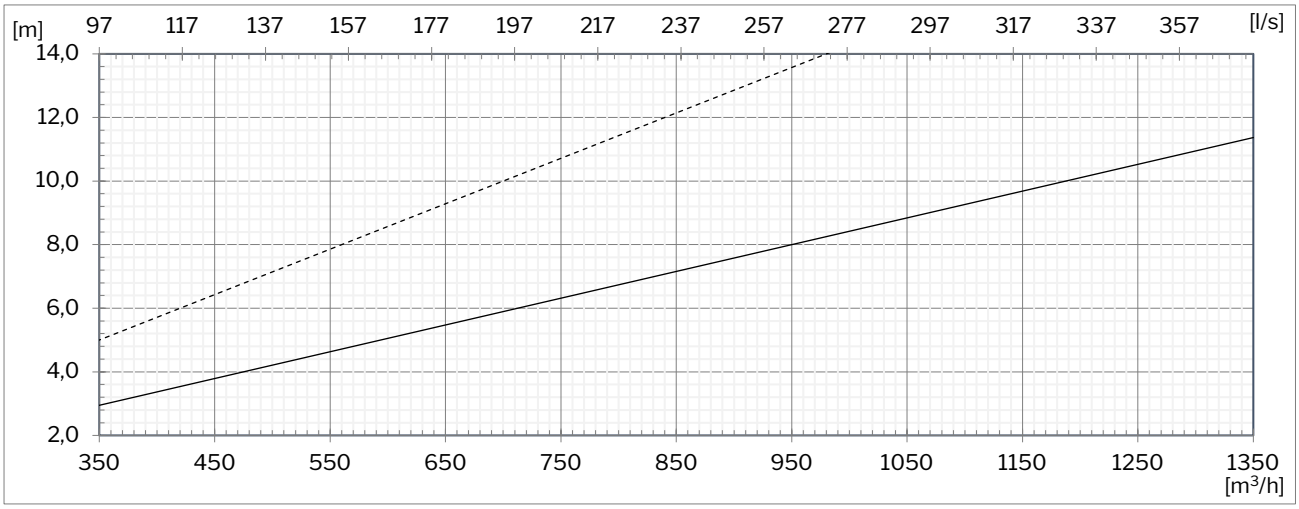


———— Intake filter ePM$_{10}$ 50% + extract filter ePM$_{10}$ 50%

– – – – – Intake filter ePM$_1$ 55% + extract filter ePM$_{10}$ 50%

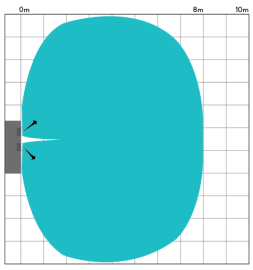
- - - - - - Intake filter ePM$_1$ 80% + extract filter ePM$_{10}$ 50%

Throw (0.2 m/s)

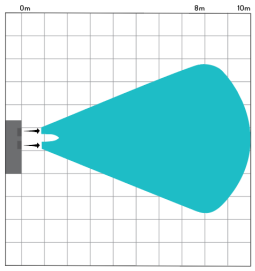


———— Diffuser standard factory configuration @ 0.2 m/s

- - - - - - Diffuser long throw configuration @ 0.2 m/s



Standard



Long throw

[H] The SFP calculation includes power consumption for operating fans but not controls, display panels, etc.

Version overview

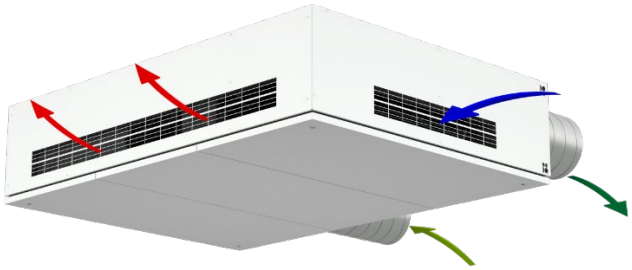
HHBB

Exhaust

Intake

Inlet

Extract



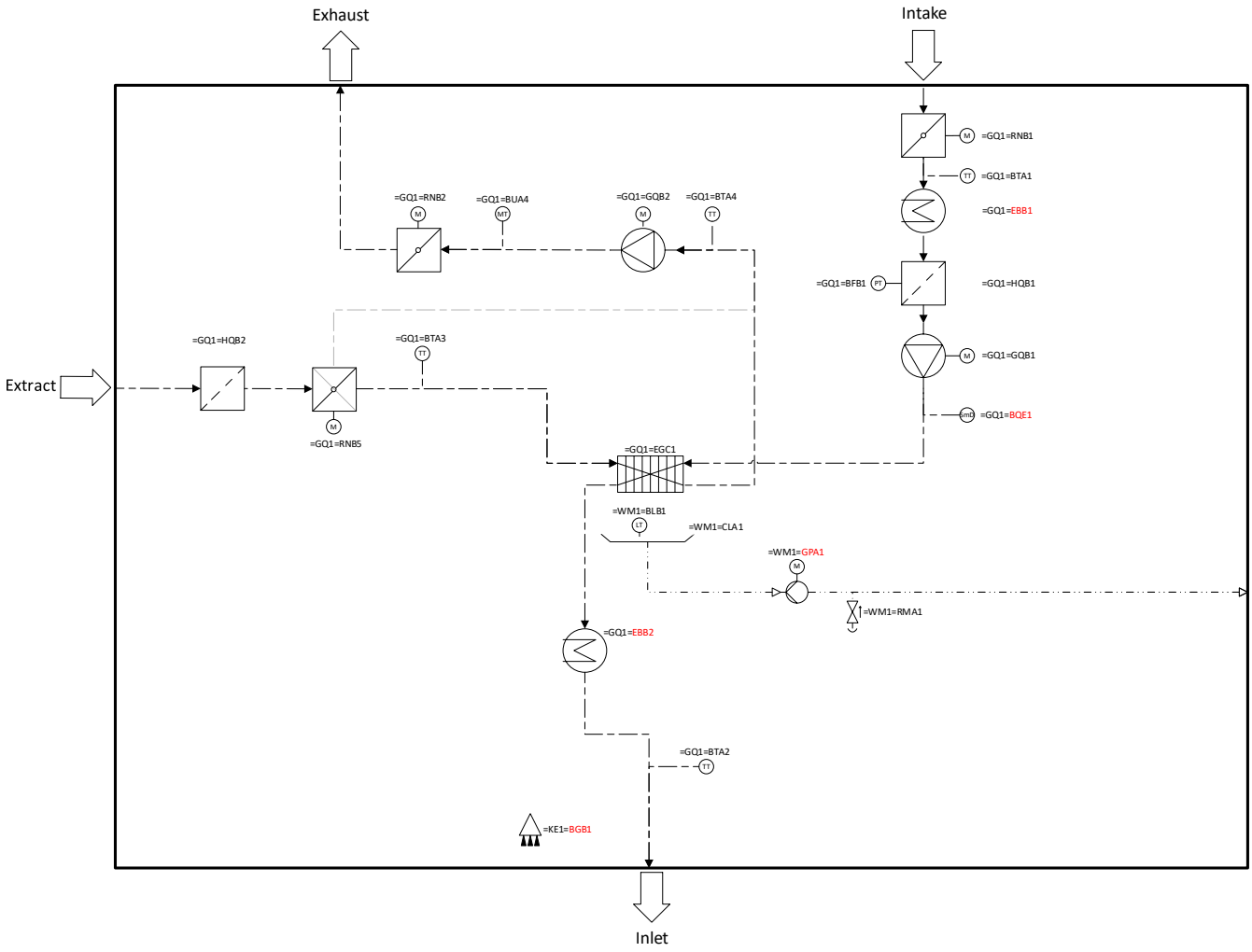
Standard and options

Counterflow heat exchanger	✓
Motor-driven bypass	✓
Motor-driven intake air damper	✓
Motor-driven exhaust air damper	✓
Electric preheating surface	opt.
Electric comfort heating surface	opt.
Condensate pump	opt.
CO_2 sensor, integrated	opt.
TVOC sensor, integrated	opt.
CO_2 & TVOC sensor, integrated	opt.
Motion sensor, integrated	opt.
Motion sensor, wall-mounted	opt.
Hygrostat, wall-mounted	si
Smoke detector, integrated	opt.
Energy Meter, single-phase	opt.
Energy Meter, three-phase	opt.

Intake filter ePM_{10} 50%	opt.
Intake filter ePM_1 55%	opt.
Intake filter ePM_1 80%	si
Extract filter ePM_{10} 50%	✓
LED (operating mode indicator)	✓
Airlinq® Viva control panel	opt.
Airlinq® Orbit control panel	opt.
Airmaster Airlinq® Online Stand-alone	opt.
Airmaster Airlinq® Online	opt.
Airlinq® Online API	opt.
Airlinq® BMS	opt.
MODBUS® RTU RS485 module	opt.
BACnet™ IP	opt.
BACnet™ MS/TP	opt.

✓: standard opt.: optional si: special item

Schematic sketch



Component designation:

=GQ1	Ventilation system
=WM1	Condensation system
=KE1	Control system

=BFB	Pressure monitor	=BQE	Smoke detector (option)	=GPA1	Condensate pump (option)
=BGB1	Motion sensor (option)	=CLA	Condensate tray	=GQB	Fan
=BLB	Float switch	=EBB1	Electric preheating surface (option)	=HQB	Filter
=BTA	Temperature sensor	=EBB2	Electric comfort heating surface (option)	=RMA	Air vent with non-return valve
=BUA	CO_2 sensor	=EGC	Heat exchanger	=RNB	Damper