Datasheet AMX 4

AIRMASTER

Technical data

	Filter class	30 dB(A)	35 dB(A)	Boost
Maximum capacity[A]	ePM_{10} 50%	256 m^3/h	334 m^3/h	344 m^3/h
	ePM_1 55%	251 m^3/h	330 m^3/h	340 m^3/h
	ePM_1 80%	231 m^3/h	316 m^3/h	330 m^3/h
Throw (0,2 m/s)[B]	ePM_{10} 50%	4.5 m	5.6 m	5.8 m
	ePM_1 55%	4.5 m	5.6 m	5.8 m
	ePM_1 80%	4.1 m	5.4 m	5.6 m
Operating range (max.capacity), outside temperature		-15 ºC - 40 ºC		
Intake air filter		ePM_{10} 50%, ePM_1 55% or ePM_1 80%		
Extract air filter		ePM_{10} 50%		
Dimensions (WxHxD)		2055 x 358 x 1100 mm		
Weight: complete standard air handling unit excl. panels / panels		232 kg / 6 kg		
Weight: casing incl. middle steel plate		190 kg		
Weight: service covers (3 pcs.) / steel plates (2 pcs.)		24 kg / 18 kg		
Color: casing / panels and service cover		RAL 9005 (Jet Black) / RAL 9010 (Pure white)		
Counterflow heat exchanger		Aluminium		
Air leakage classification cf. EN 1886 / EN 13141-7		Class L2 / A1		
Air leakage classification, main damper, cf. EN 1751		Class 3		
IP code		10		
Duct connection		Ø200 mm		
Condensate pumps: capacity / lifting height (at 5 l/h)		10 l/h / 6 m		
Condensate drain hose: internal diameter / external diameter		Ø6 mm / Ø9 mm		
Supply voltage		220-240V/50Hz, ~1N+PE		
Maximum power (including heat pump)		2666 W		
Maximum current (including heat pump)		11.7 A		
Power factor (including heat pump)		0,99		
Maximum fuse		16 A, 1 phase, type C		
Leakage current AC / DC		6 mA / 0.04 mA		
Recommended residual current circuit breaker (RCCB)		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 3-5˚C subcooled supply air in a test room, dimensioned 8.0 m x 10.0 m x 2.5 m.

Electrical heating surfaces

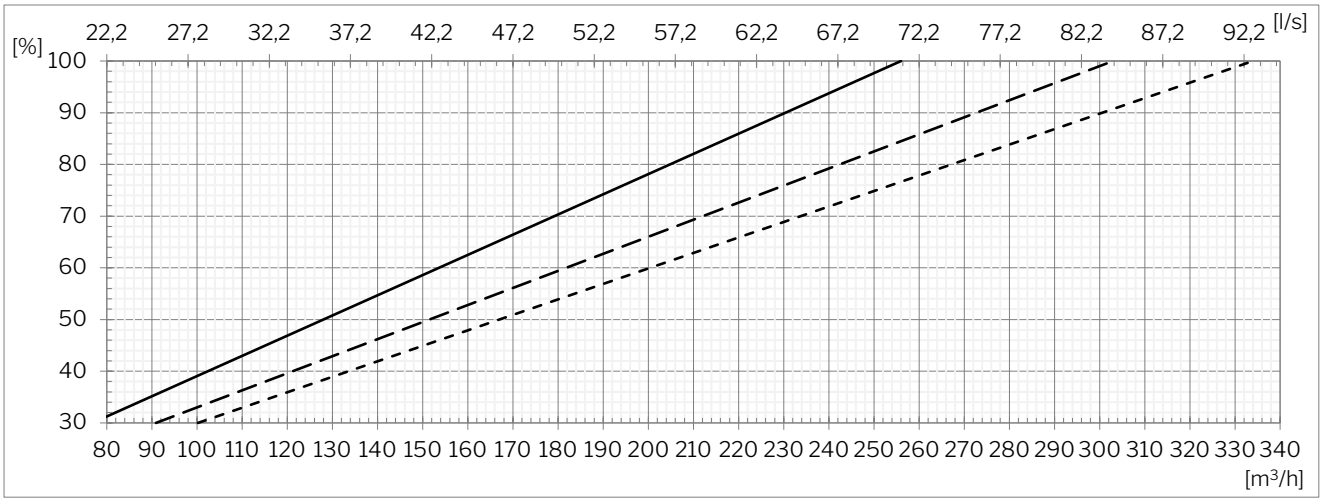
	Heating surface 1	Heating surface 2
Heat output	1150 W	1150 W
Nominal current	5 A	5 A
Thermal circuit breaker, manual reset	100°C	100°C

Heating and cooling

Heating capacity ventilation, 7 ºC (outside temperature)[C]	4000 W
Heating capacity recirculation, 7 ºC (outside temperature)[C]	3000 W
Cooling capacity ventilation, 35 ºC (outside temperature)[C]	1800 W
Cooling capacity recirculation, 35 ºC (outside temperature)[C]	1230 W
Heat output recirculation, -15 ºC (outside temperature)	2300 W
COP (heating) recirculation	3.7
EER (cooling) recirculation	3.0
SCOP	Recirculation = 2,8 / ventilation = 7,8 (see Appendix A)
SEER	Recirculation = 3,2 / ventilation = 2,4 (see Appendix A)
Materials (heat pump): pipes / fins	Copper / Aluminium
Refrigerant / GWP[D]	R290 / 0.02
Filling	330 g

[C] cf. DS/EN 308 and DS/EN 14825.
[D] cf. (EU) 2024/573.

Capacity at ePM_{10} 50% / ePM_{10} 50% filter[A]

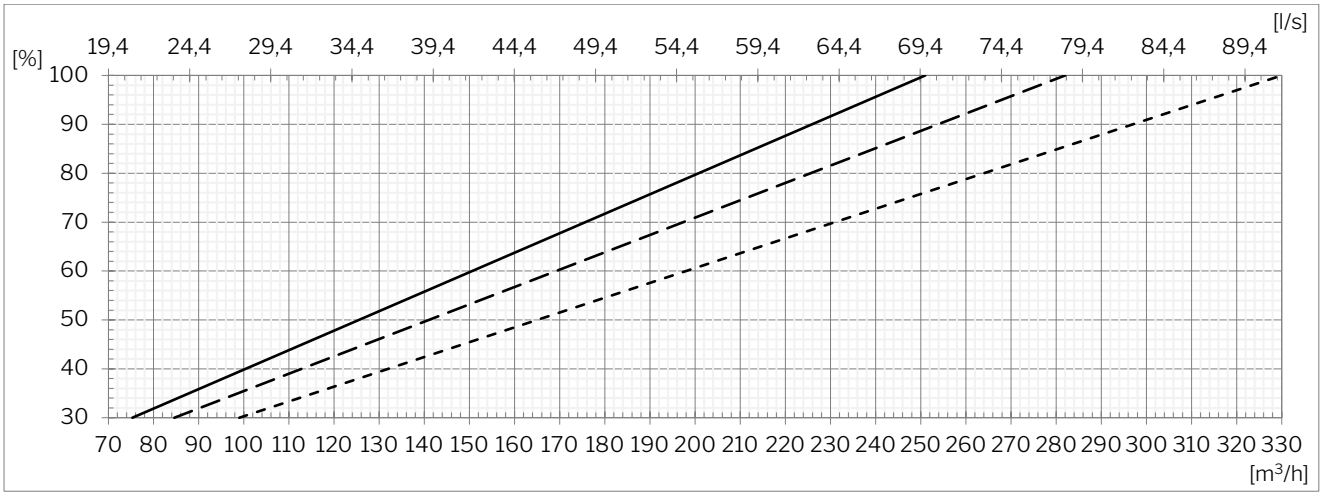


—— 30 dB(A)

---- 33 dB(A)

- - - 35 dB(A)

Capacity at ePM_1 55% / ePM_{10} 50% filter[A]

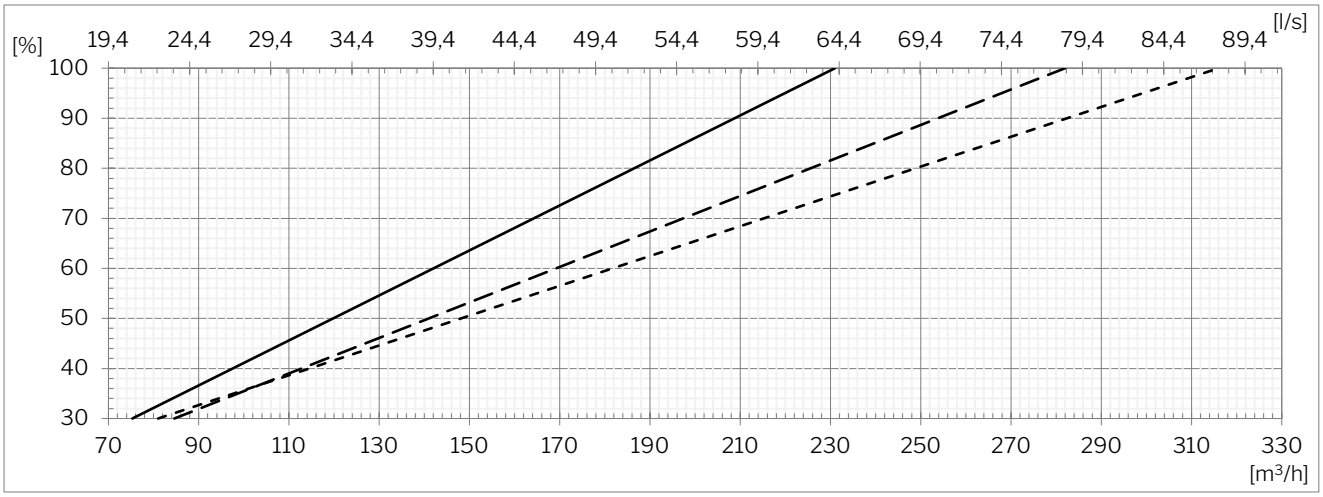


—— 30 dB(A)

---- 33 dB(A)

- - - 35 dB(A)

Capacity at ePM_1 80% / ePM_{10} 50% filter[A]

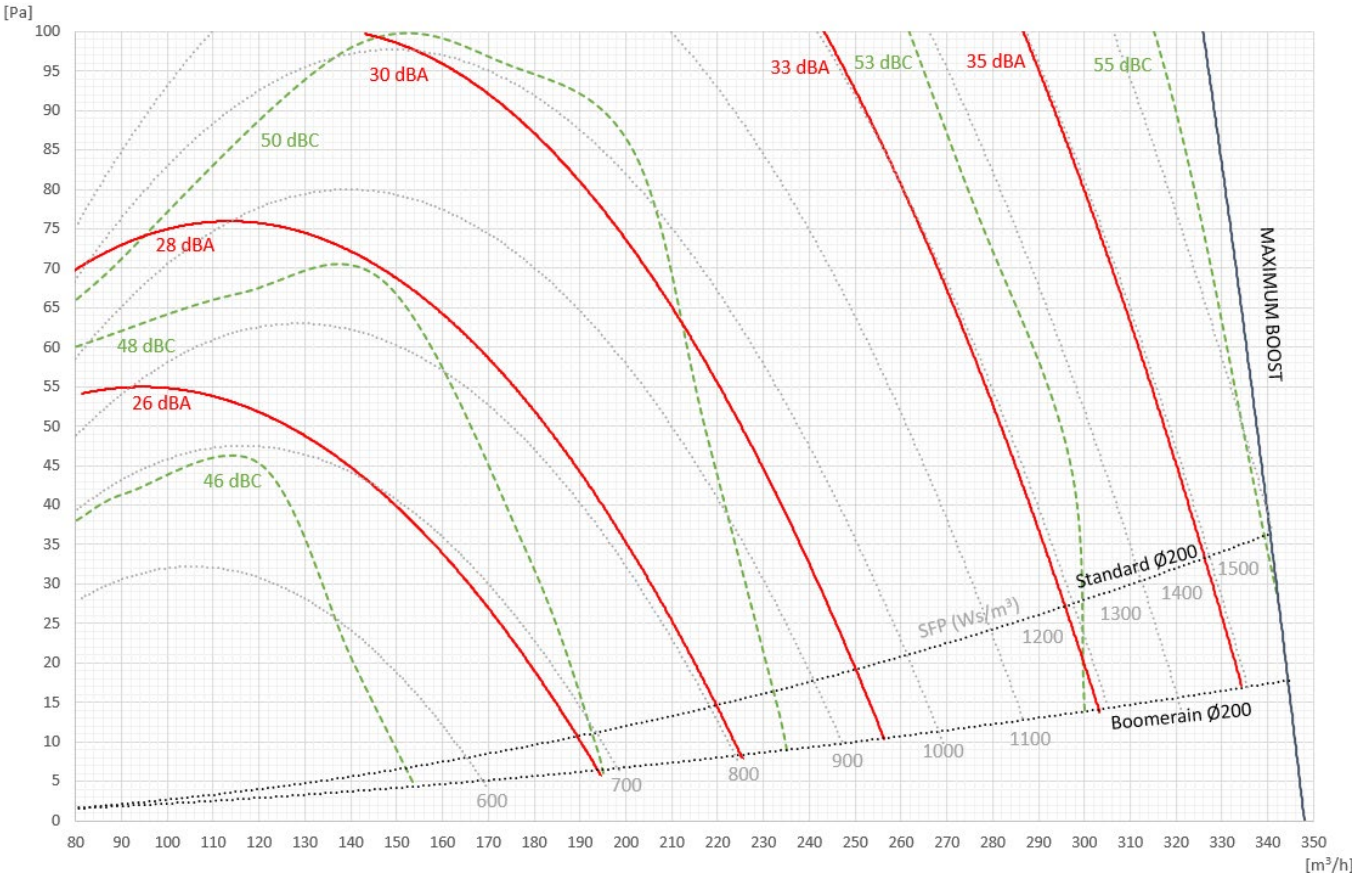


—— 30 dB(A)

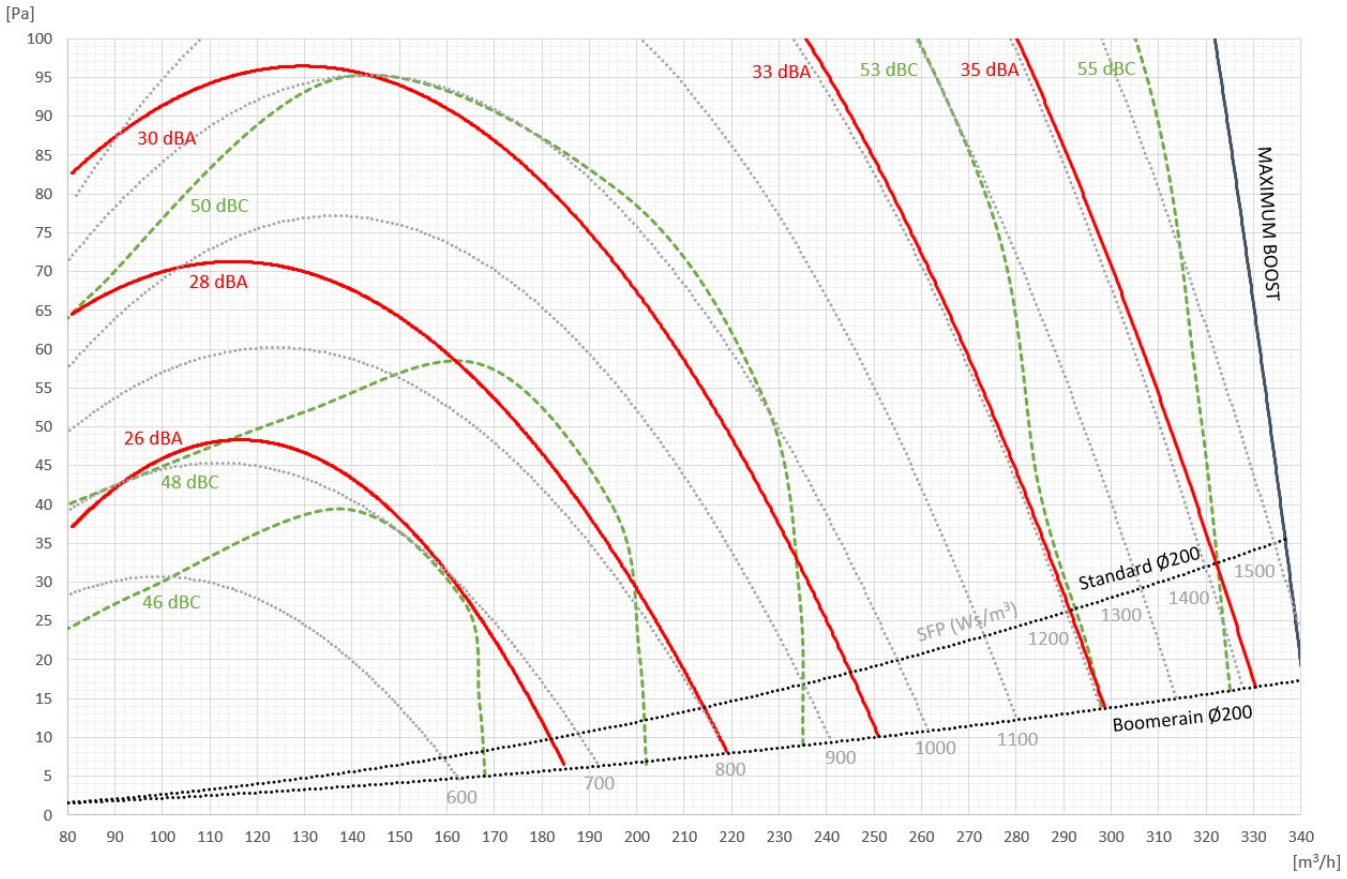
---- 33 dB(A)

– – – 35 dB(A)

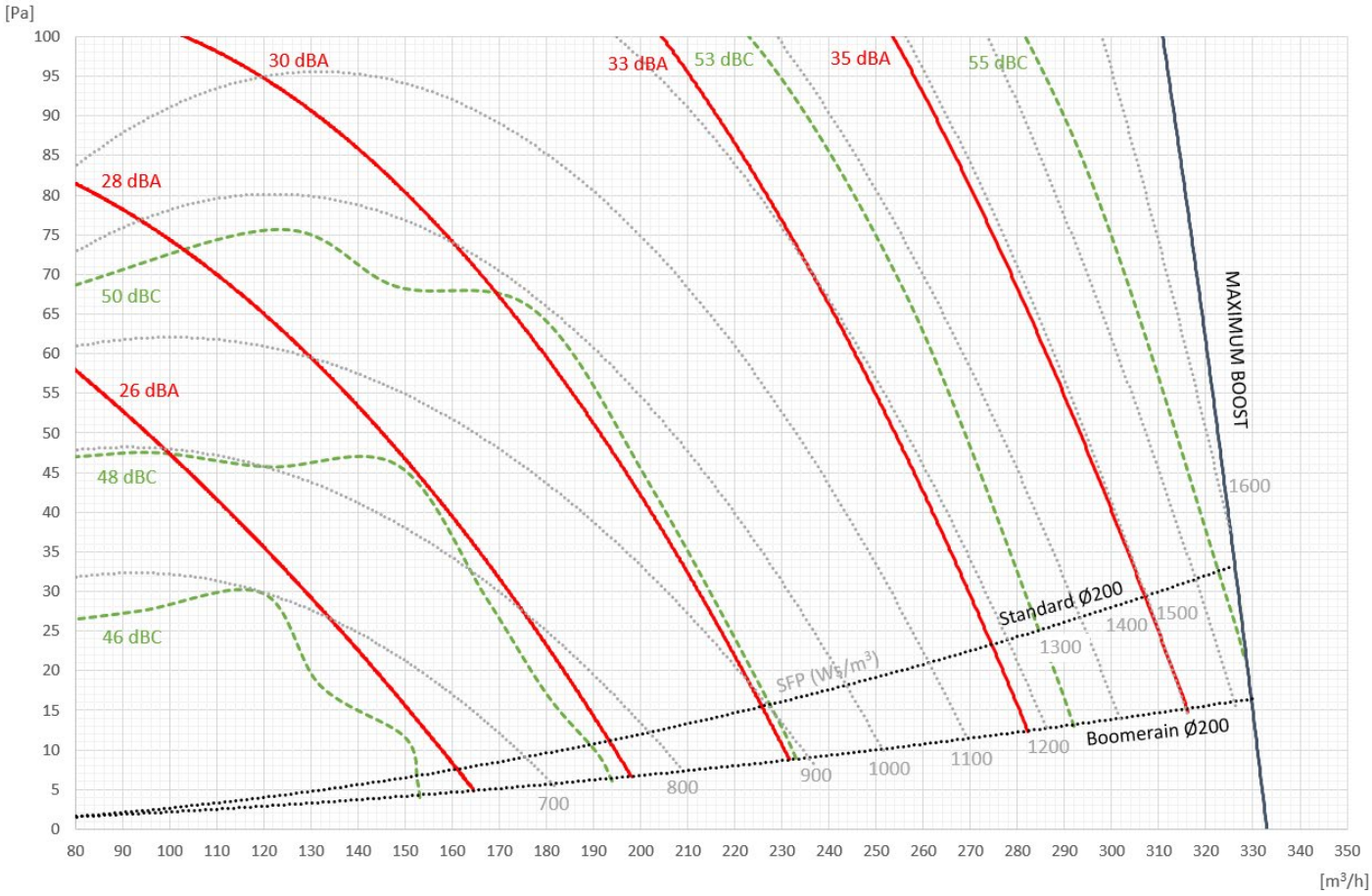
External pressure loss with intake air filter ePM$_{10}$ 50% + extract air filter ePM$_{10}$ 50%



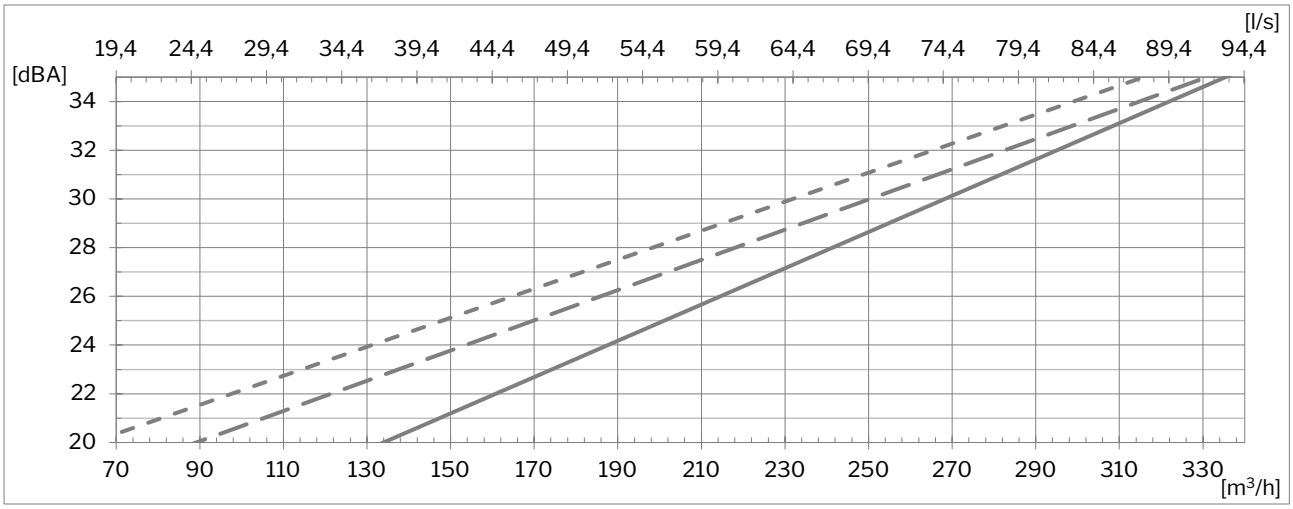
External pressure loss with intake air filter ePM$_{1}$ 55% + extract air filter ePM$_{10}$ 50%



External pressure loss with intake air filter ePM$_1$ 80% + extract air filter ePM$_{10}$ 50%



A-weighted sound pressure level L_{pA} acc. to Airmaster reference situation[E]

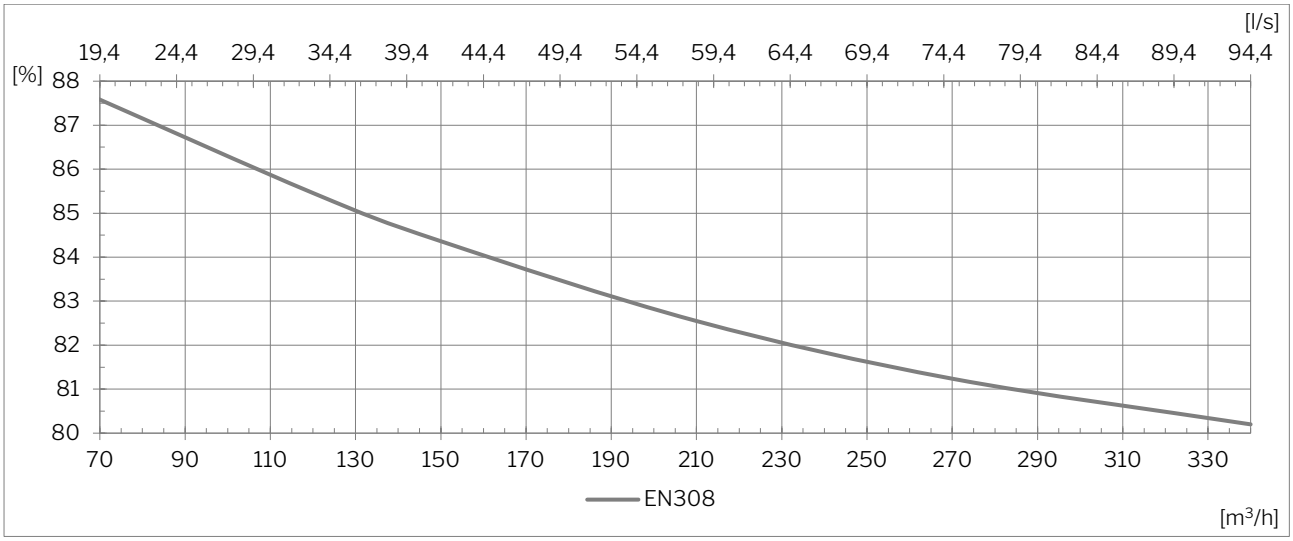


—— Intake air filter ePM_{10} 50% + extract air filter ePM_{10} 50%

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

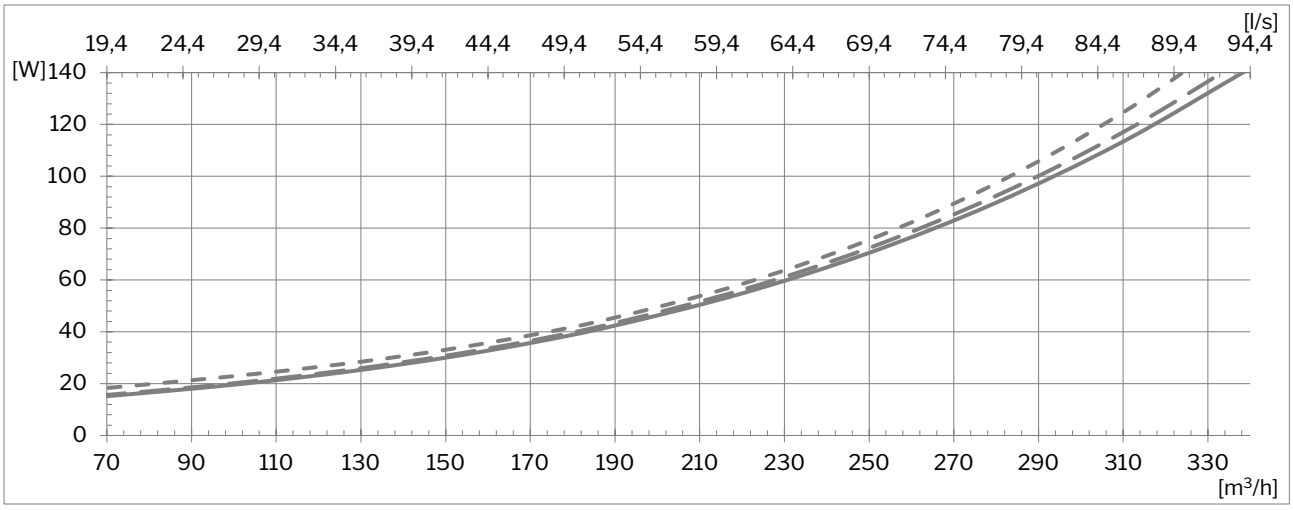
– – – Intake air filter ePM_1 80% + extract air filter ePM_{10} 50%

Temperature efficiency acc. to EN 308



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

Power consumption

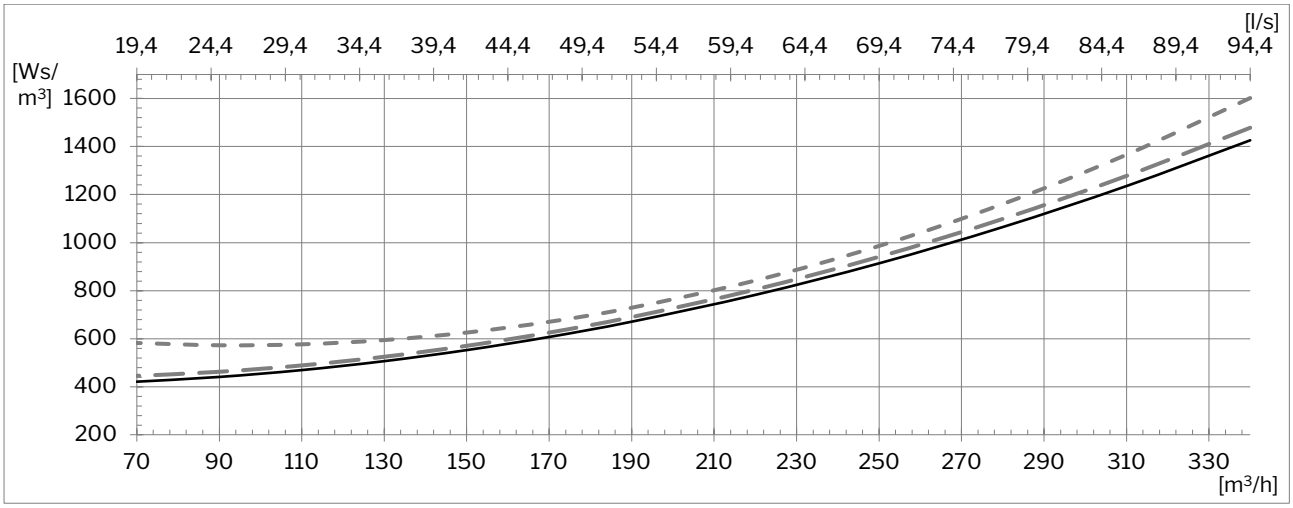


—— Intake air filter ePM_{10} 50% + extract air filter ePM_{10} 50%

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

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

SFP^F



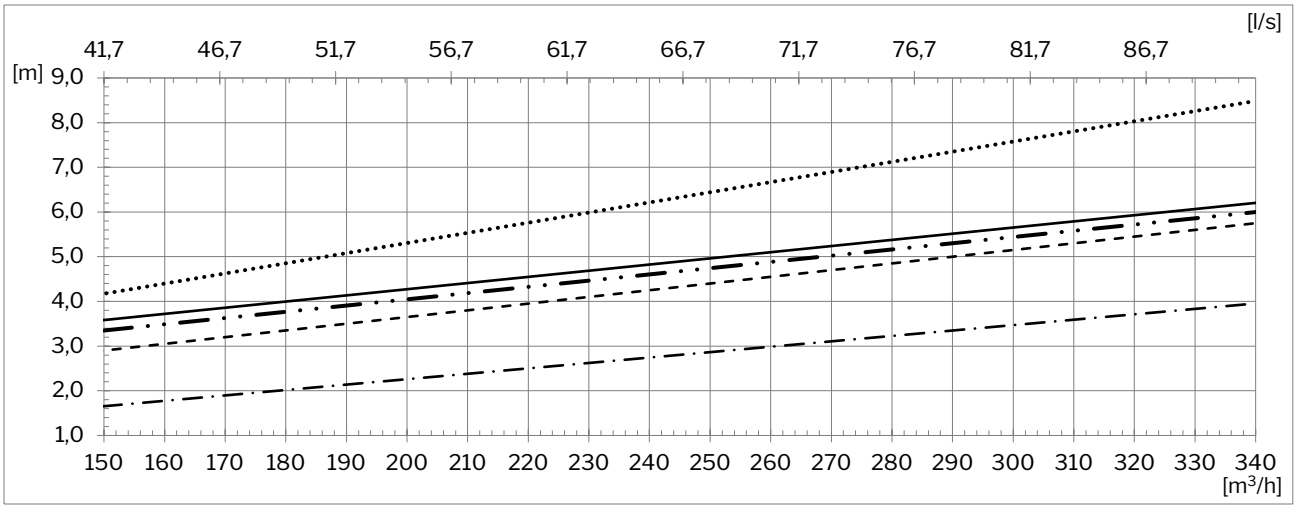
—— Intake air filter ePM_{10} 50% + extract air filter ePM_{10} 50%

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

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

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

Throw (0.2 m/s)



Reduced diffusor area. 0°/0° blade angle

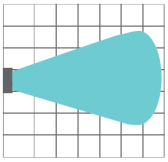
0°/0° blade angle

45°/45° blade angle. Standard factory setting

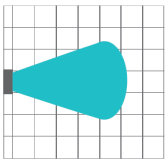
60°/60° blade angle

Asymmetric. -45°/60° blade angle

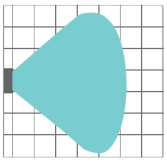
Reduced diffusor area
0°/0° blade angle



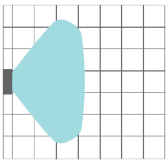
0°/0° blade angle



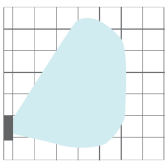
45°/45° blade angle
Standard factory setting



60°/60° blade angle

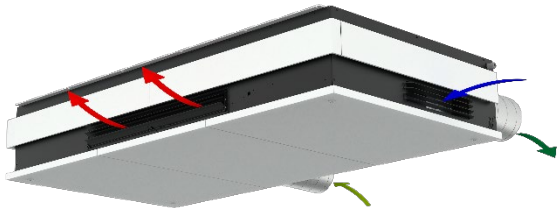


Asymmetric
-45°/60° blade angle

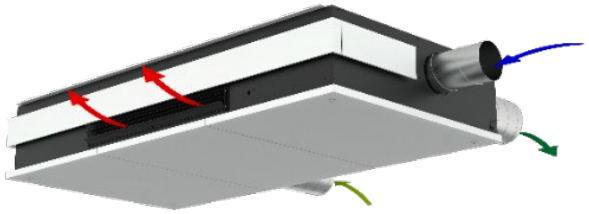


Version overview

HHBB



HHBDE



Inlet Extract Intake Exhaust

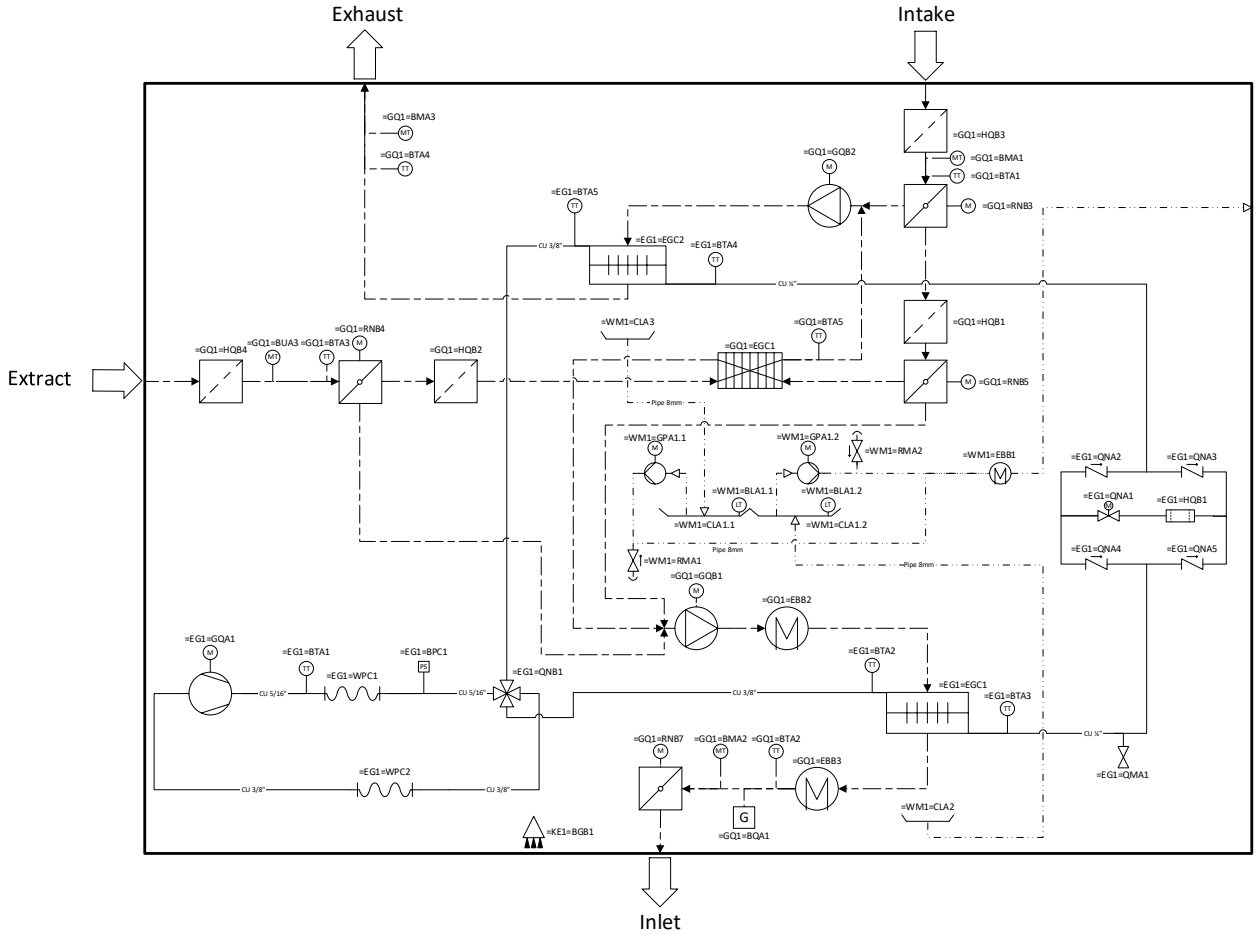
Standards and options

Counterflow heat exchanger (Aluminium)	✓
Motor-driven bypass	✓
Motor-driven intake air damper	✓
Motor-driven extract air damper	✓
Electric heating surfaces	✓
Condensate pump	✓
Electronic humidity sensor (built-in)	✓
PIR/motion sensor (wall mounted)	opt.
PIR/motion sensor (integrated)	opt.
CO_2 sensor (wall mounted)	opt.
CO_2 sensor (integrated)	✓
Propane sensor (integrated)	✓

Intake air filter ePM_{10} 50%	opt.
Intake air filter ePM_1 55%	opt.
Intake air filter ePM_1 80%	si
Extract air filter ePM_{10} 50%	✓
LED (operating mode indicator)	✓
Wall/ceiling bracket	✓
External connection module	opt.
Airmaster Airlinq® Online	opt.
Airlinq® Online API	opt.
Local Web Tool	✓

✓: standard opt.: optional si: special item

Schematic sketch



Component designation:

=EG1	Heat pump system
=KE1	Control system
=GQ1	Ventilation system
=WM1	Condensate system

=BGB	PIR
=BLB	Level sensor
=BMA	Humidity sensor
=BPA	Pressure transmitter
=BPC	Pressure switch
=BQA	Propane sensor
=BTA	Temperature sensor
=BUA	Humidity/CO_2 sensor

=CLA	Condensate tray
=EBB	Heating surface
=EGC	Heat exchanger
=GPA	Condensate pump
=GQA	Compressor
=GQB	Fan
=HQB	Filter
=RMA	Air vent with check valve

=QMA	Filling valve
=QNA	Valve
=QNB	4-way valve
=RNB	Damper
=WPC	Flexible connection