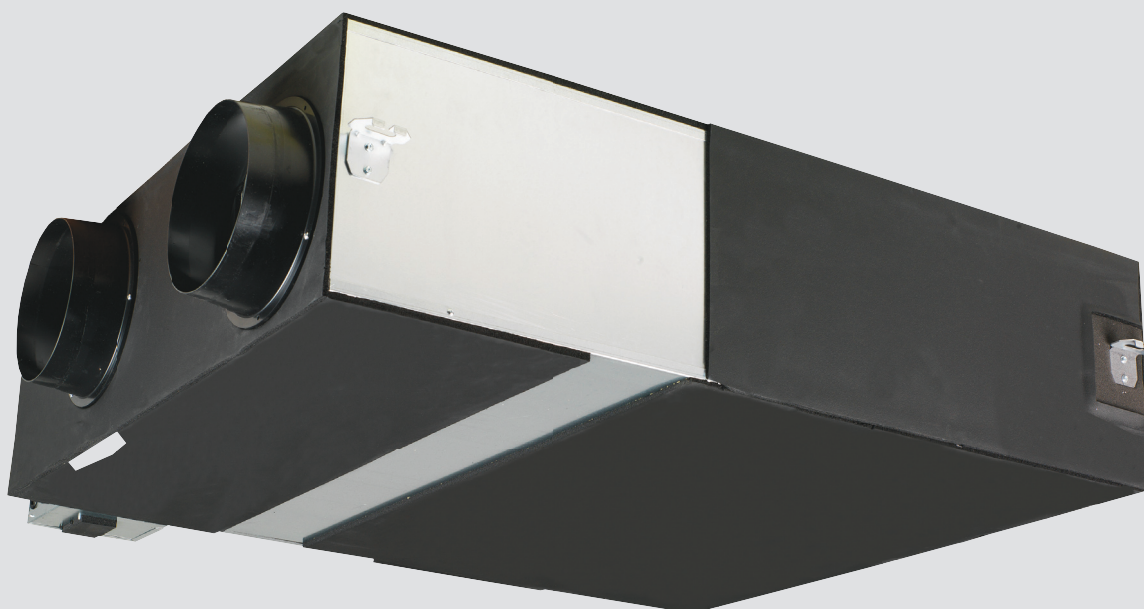


Ventilation Technical Data

VAM-J



- > VAM350J7VEB
- > VAM500J7VEB
- > VAM650J7VEB
- > VAM800J7VEB
- > VAM1000J7VEB
- > VAM1500J7VEB
- > VAM2000J7VEB

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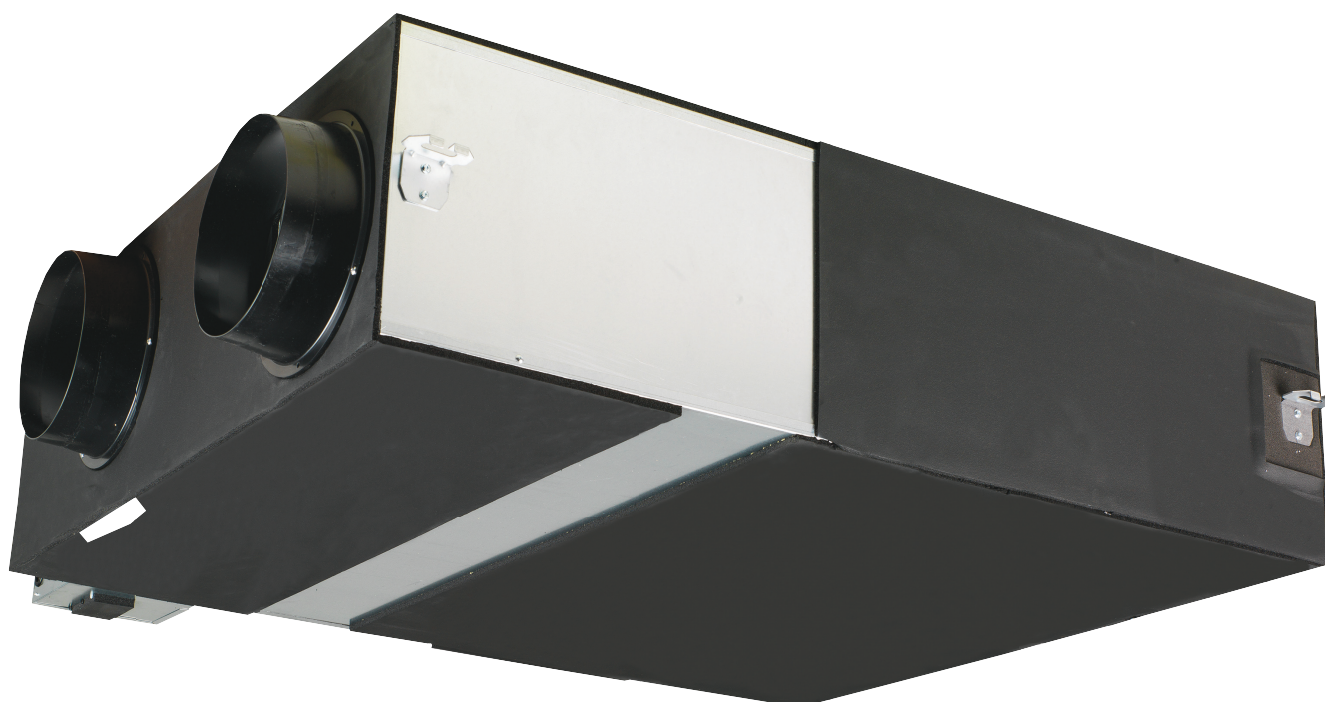
VAM-J

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1 Features

Ventilation with heat recovery as standard

- Wide range of units: air flow rate from 350 up to 2,000 m³/h
- Shorter installation time thanks to easy adjustment of nominal air flow rate, so less need for dampers compared with traditional installations
- Filter change indication based on actual filter contamination
- Energy saving ventilation using indoor heating, cooling and moisture recovery
- Ideal solution for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- Free cooling possible when outdoor temperature is below indoor temperature (eg. during nighttime)
- Reduced energy consumption thanks to specially developed DC fan motor
- Prevent energy losses from over-ventilation while improving indoor air quality with optional CO₂ sensor
- Can be used as stand alone or integrated in the Sky Air or VRV system
- Optional medium and fine dust filters ePM10 70% (M6), ePM1 60%(F7), ePM1 70% (F8) to meet customer request or legislation
- Specially developed heat exchange element with High Efficiency Paper (HEP)
- No drain piping needed
- Can operate in over- and under pressure
- Total fresh air solution with optional electrical heater



2 Specifications

2-1 Technical Specifications					VAM350J	VAM500J	VAM650J	VAM800J	VAM1000J	VAM1500J	VAM2000J
Power input - 50Hz	Heat exchange mode	Nom.	Ultra high	kW	0.097 (1)	0.164 (1)	0.247 (1)	0.303 (1)	0.416 (1)	0.548 (1)	0.833 (1)
			High	kW	0.070 (1)	0.113 (1)	0.173 (1)	0.212 (1)	0.307 (1)	0.384 (1)	0.614 (1)
			Low	kW	0.039 (1)	0.054 (1)	0.081 (1)	0.103 (1)	0.137 (1)	0.191 (1)	0.273 (1)
	Bypass mode	Nom.	Ultra high	kW	0.085 (1)	0.148 (1)	0.195 (1)	0.289 (1)	0.417 (1)	0.525 (1)	0.835 (1)
			High	kW	0.061 (1)	0.100 (1)	0.131 (1)	0.194 (1)	0.300 (1)	0.350 (1)	0.600 (1)
			Low	kW	0.031 (1)	0.045 (1)	0.059 (1)	0.086 (1)	0.119 (1)	0.156 (1)	0.239 (1)
Temperature exchange efficiency - 50Hz	Ultra high			%	85.1 (1)	80.0 (1)	84.3 (1)	82.5 (1)	79.6 (1)	83.2 (1)	79.6 (1)
	High			%	86.7 (1)	82.5 (1)	86.4 (1)	84.2 (1)	81.8 (1)	84.8 (1)	81.8 (1)
	Low			%	90.1 (1)	87.6 (1)	90.5 (1)	87.7 (1)	86.1 (1)	88.1 (1)	86.1 (1)
Enthalpy exchange efficiency - 50Hz	Cooling	Ultra high		%	65.2 (1)	59.2 (1)		67.7 (1)	62.6 (1)	68.9 (1)	62.6 (1)
		High		%	67.9 (1)	61.8 (1)	63.8 (1)	70.7 (1)	66.4 (1)	71.8 (1)	66.4 (1)
		Low		%	74.6 (1)	69.5 (1)	73.1 (1)	76.8 (1)	74.0 (1)	77.5 (1)	74.0 (1)
	Heating	Ultra high		%	75.5 (1)	69.0 (1)	73.1 (1)	72.8 (1)	68.6 (1)	73.8 (1)	68.6 (1)
		High		%	77.6 (1)	72.2 (1)	76.3 (1)	75.3 (1)	71.7 (1)	76.1 (1)	71.7 (1)
		Low		%	82.0 (1)	78.7 (1)	82.7 (1)	80.2 (1)	77.9 (1)	80.8 (1)	77.9 (1)
Operation mode					Heat exchange mode, bypass mode, fresh-up mode						
Heat exchange system					Air to air cross flow total heat (sensible + latent heat) exchange						
Heat exchange element					Specially processed non-flammable paper						
Dimensions	Unit	Height		mm	305		368			731	
		Width		mm	1,113		1,354				
		Depth		mm	866		920	1,172			
Weight	Unit			kg	46.5		61.5	76.5		160	
Casing	Material				Galvanised steel plate						
Fan	Type				Sirocco fan						
	Air flow rate - 50Hz	Heat exchange mode	Ultra high	m³/h	350 (1)	500 (1)	650 (1)	800 (1)	1,000 (1)	1,500 (1)	2,000 (1)
			High	m³/h	300 (1)	425 (1)	550 (1)	680 (1)	850 (1)	1,275 (1)	1,700 (1)
			Low	m³/h	200 (1)	275 (1)	350 (1)	440 (1)	550 (1)	825 (1)	1,100 (1)
		Bypass mode	Ultra high	m³/h	350 (1)	500 (1)	650 (1)	800 (1)	1,000 (1)	1,500 (1)	2,000 (1)
			High	m³/h	300 (1)	425 (1)	550 (1)	680 (1)	850 (1)	1,275 (1)	1,700 (1)
			Low	m³/h	200 (1)	275 (1)	350 (1)	440 (1)	550 (1)	825 (1)	1,100 (1)
	External static pressure - 50Hz	Ultra high		Pa	90.0 (1)						
		High		Pa	70.0 (1)						
		Low		Pa	50.0 (1)						
Fan motor	Quantity				2					4	
Air filter	Type				Multidirectional fibrous fleeces (G3)						
Sound power level (Lwa)				dB	51	54	58		61	62	65
Sound pressure level - 50Hz	Heat exchange mode	Ultra high		dBA	34.5 (1)	37.5 (1)	39.0 (1)		42.0 (1)		45.0 (1)
		High		dBA	32.0 (1)	35.0 (1)	36.0 (1)		38.5 (1)	39.0 (1)	41.5 (1)
		Low		dBA	29.0 (1)	30.5 (1)	31.0 (1)	30.5 (1)	32.5 (1)	33.5 (1)	36.0 (1)
	Bypass mode	Ultra high		dBA	34.5 (1)	38.0 (1)		40.0 (1)	42.5 (1)	42.0 (1)	45.0 (1)
		High		dBA	32.0 (1)	35.0 (1)	34.5 (1)	36.5 (1)	40.0 (1)	39.0 (1)	41.0 (1)
		Low		dBA	28.0 (1)	29.5 (1)	30.5 (1)		32.5 (1)		35.0 (1)
Operation range	Min.			°CDB	-10 (2)						
	Max.			°CDB	46						
	Relative humidity			%	80% or less						
	Around unit			°CDB	0°C~40°CDB, 80% RH or less						
	On coil temperature	Cooling	Max.	°CDB	-						
		Heating	Min.	°CDB	-						
Connection duct diameter				mm	200		250			2x250	
Insulation material					Closed cell						
Safety devices	Item	01			Fuse						
Control systems	Wired remote control				BRC1D52 / BRC1E53A7 / BRC1E53B7 / BRC1E53C7						
	Simplified wired remote control for hotel applications				BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)						
	VAM wired remote control				BRC301B61						

2 Specifications

2-1 Technical Specifications			VAM350J	VAM500J	VAM650J	VAM800J	VAM1000J	VAM1500J	VAM2000J
General	Supplier/ Manufacturer details	Name or trademark	Daikin Europe N.V.						
	Product description	Model identifier	VAM350J7V EB	VAM500J7V EB	VAM650J7V EB	VAM800J7V EB	VAM1000J7 VEB	VAM1500J7 VEB	VAM2000J7 VEB
Type of product			Bidirectional NRVU / (3)						
Type of drive			variable speed drive						
Heat recovery system			recuperative						
Thermal efficiency	%		77 (4)	73 (4)	74 (4)	76 (4)	73 (4)	77 (4)	73 (4)
Nominal flow rate	m ³ /s		0.097	0.139	0.181	0.222	0.278	0.417	0.556
Effective electric power input	kW		0.096	0.171	0.203	0.272	0.409	0.475	0.817
Internal specific fan power	W/(m ³ /s)		465 (3)	663 (3)	836 (3)	757 (3)	972 (3)	721 (3)	972 (3)
Maximum external leakage	%		\<9						
Maximum internal leakage	%		\<8						
Filter service warning			Displayed on controller / (5)						
Instructions for pre-/disassembly			https://www.daikin.eu/en_us/about/daikin-innovations/seasonal-efficiency.html						
Face velocity	m/s		0.520	0.740	0.720	0.670	0.830	0.620	0.830
External pressure	Pa		90.0						
Internal pressure drop	Pa		106 (3)	155 (3)	196 (3)	166 (3)	216 (3)	158 (3)	216 (3)
Fan efficiency	%		43.0 (6)		41.9 (6)	41.1 (6)			

2-2 Electrical Specifications			VAM350J	VAM500J	VAM650J	VAM800J	VAM1000J	VAM1500J	VAM2000J
Power supply	Name		VE						
	Phase		1~						
	Frequency	Hz	50/60						
	Voltage	V	220-240/220						
Voltage range	Min.	%	-10						
	Max.	%	10						
Current	Minimum circuit amps (MCA)		1.56	2.08	2.80	4.39	4.90	8.78	9.80
	Maximum fuse amps (MFA)		16.0						
	Fan motor rated output		0.08x2		0.106x2	0.210x2		0.210x4	
	Full load amps (FLA)	Fan motor	0.620	0.830	1.12	1.76	1.96	1.76	1.96
		Fan motor 2	0.620	0.830	1.12	1.76	1.96	1.76	1.96
		Fan motor 3	-					1.76	1.96
		Fan motor 4	-					1.76	1.96

Notes

(1) Measured according to JIS B 8628 - 2003

(2) When the heat reclaim ventilation unit is installed upside down, the minimal allowed outdoor air temperature is 5°C.

(3) In accordance with commission regulation (EU) No 1253/2014

(4) Measured according to EN308 : 1997

(5) Clean the filter when the filter icon appears on the controller screen. Regular filter cleaning is important for delivered air quality and for the unit's energy efficiency.

(6) In accordance with regulation (EU) No 327/2011

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

MCA= 1,25x(FLA(FM1)+FLA(FM2)+FLA(FM3)+FLA(FM4))

MCA represents maximum input current.

MFA ≤ 4 x (FLA(FM1)+FLA(FM2)+...)

Select wire size based on the value of MCA

Fan step 8 is nominal specs.

The unit complies for "Code du travail" and "ERP 5e catégorie" applications according to French legislation.

"Code du travail" applications are non-public buildings (example offices).

"ERP (Etablissement Recevant du Public) de 5e catégorie" are smaller shops, hotels etc

3 Options

3 - 1 Options

VAM-J

Type Ceiling-mounted Installation with duct

Item			Model						
			VAM350J7VEB	VAM500J7VEB	VAM650J7VEB	VAM800J7VEB	VAM1000J7VEB	VAM1500J7VEB	VAM2000J7VEB
Control systems	Remote control		BRC301B61						
	Remote control Wired type		BRC1D52						
	Centralised control systems	Central remote control	BRC1E53A7 / BRC1E53B7 / BRC1E53C7 * / BRC1H51~ / BRC1H81~						
		Unified ON/OFF controller	DCS302CS1						
		Schedule timer	DCS301B51						
		iTouch Manager	DST301B51						
		iTouch Controller	DCM601A51						
		iTab Controller	DCS601CS1						
		Modbus DIII adaptor	DCC601A51						
	Adaptor PCB	Wiring adaptor for electrical appendices	EKMBDXA7V1						
		For heaters	KRP2A51 + Installation box KRP1BA101						
		Mounting plate	BRP4A50A						
			----	EKMP65VAM**	----	EKMPVAM **			
Miscellaneous	Plenum chamber	Model	---						EKPLEN200****
		Outside diameter [mm]	---						Ø350
	High-efficiency filter	ePM10 70% (M6)	EKAFVJ50F6	EKAFVJ65F6	EKAFVJ100F6	EKAFVJ100F6 x 2			
		ePM1 60% (F7)	EKAFVJ50F7	EKAFVJ65F7	EKAFVJ100F7	EKAFVJ100F7 x 2			
		ePM1 70% (F8)	EKAFVJ50F8	EKAFVJ65F8	EKAFVJ100F8	EKAFVJ100F8 x 2			
CO2 Sensor		- RBVMA65		RBVMA100		- RBVMA200			

Notes

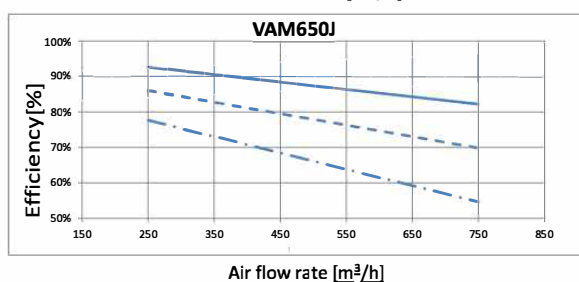
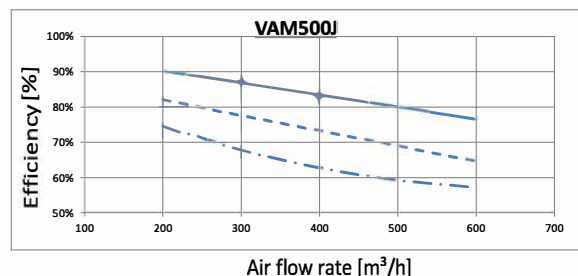
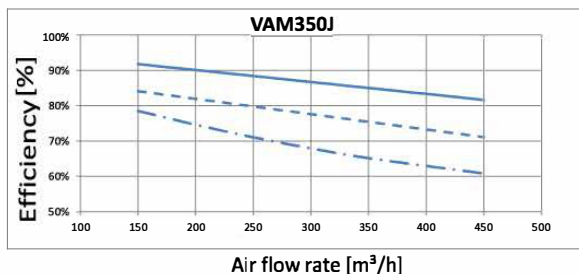
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- * BRC1E53B7 Included languages are: English, Czech, Croatian, Hungarian, Slovenian, Romanian, and Bulgarian.
- * BRC1E53C7 Included languages are: English, Russian, Greek, Turkish, Polish, Albanian, and Slovak.
- ** To install an adaptor PCB on VAM1500J/VAM2000J units, mounting plate EKMPVAM is required.
- *** To install an adaptor PCB on VAM650J units, mounting plate EKMP65VAM is required.
- **** Plenum chamber to merge either 2 air inlets or 2 air outlets. Up to 4 plenum chambers can be connected.
7. If you order 1 filter set, you can use it for either supply side or exhaust side. To provide both sides with filters, 2 filter sets are required.

3D112829A

4 Exchange efficiency

4 - 1 Exchange efficiency

VAM350-650J



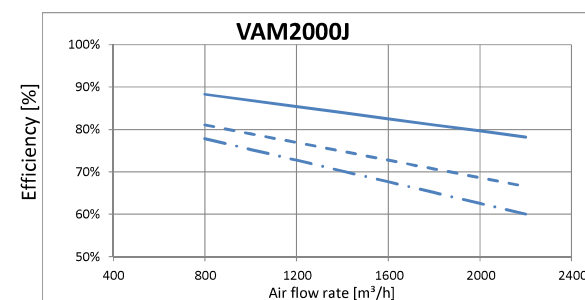
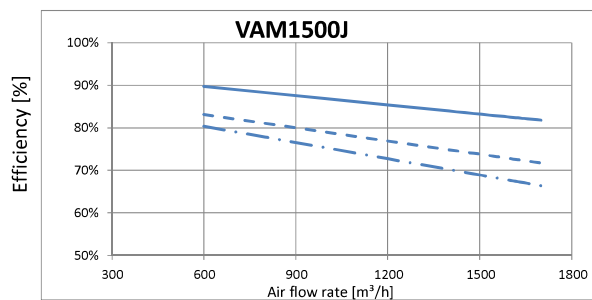
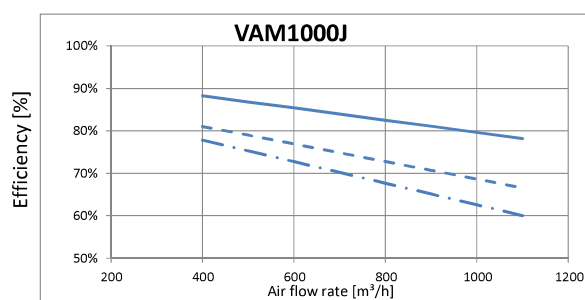
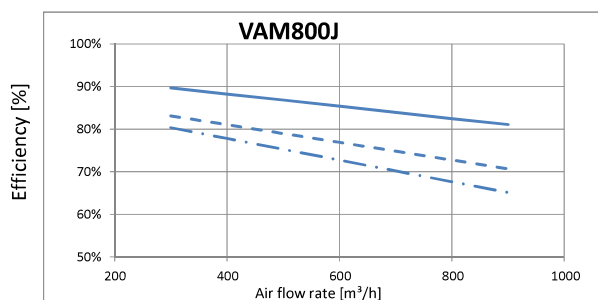
— Temperature exchange efficiency (heating)
- - - Enthalpy exchange efficiency (heating)
- · - Enthalpy exchange efficiency (cooling)

Notes

1. Efficiency according to JIS B 8628-2003.

3D113504

VAM800-2000J



— Temperature exchange efficiency (heating)
- - - Enthalpy exchange efficiency (heating)
- · - Enthalpy exchange efficiency (cooling)

Notes

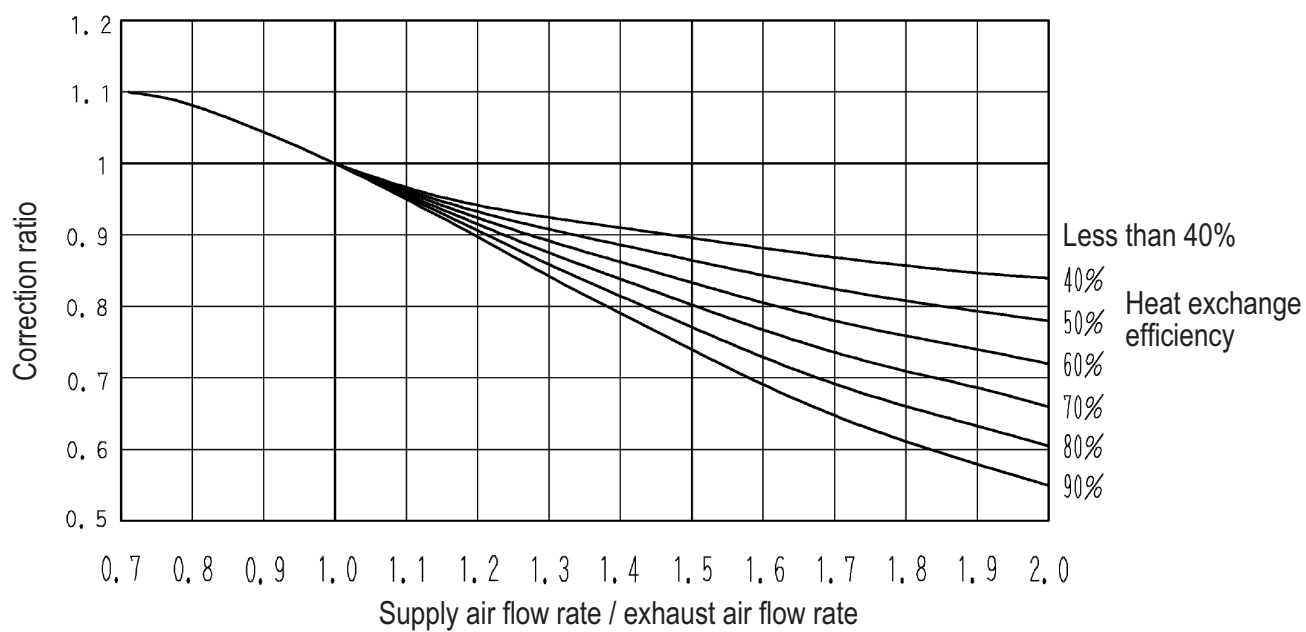
1. Efficiency according to JIS B 8628-2003.

3D112834

4 Exchange efficiency

4 - 1 Exchange efficiency

VAM800-2000J

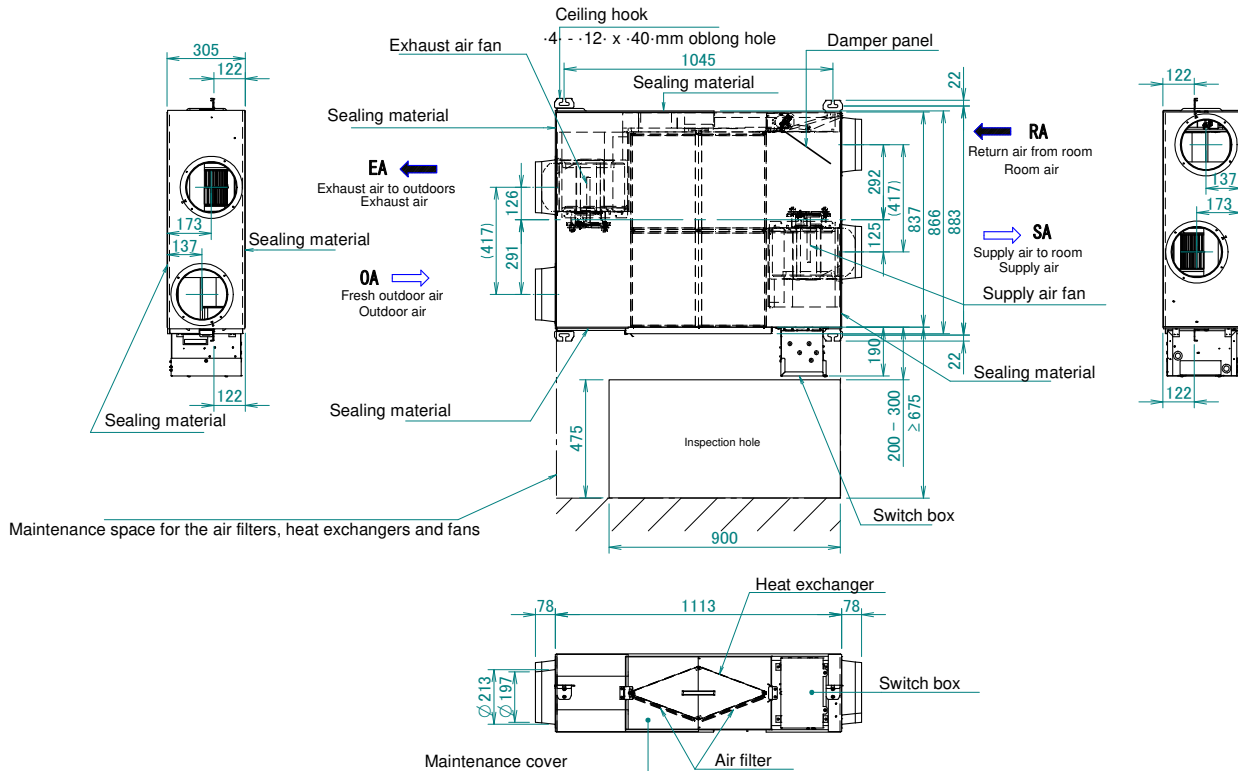


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5 Dimensional drawings

5 - 1 Dimensional Drawings

VAM350-500J

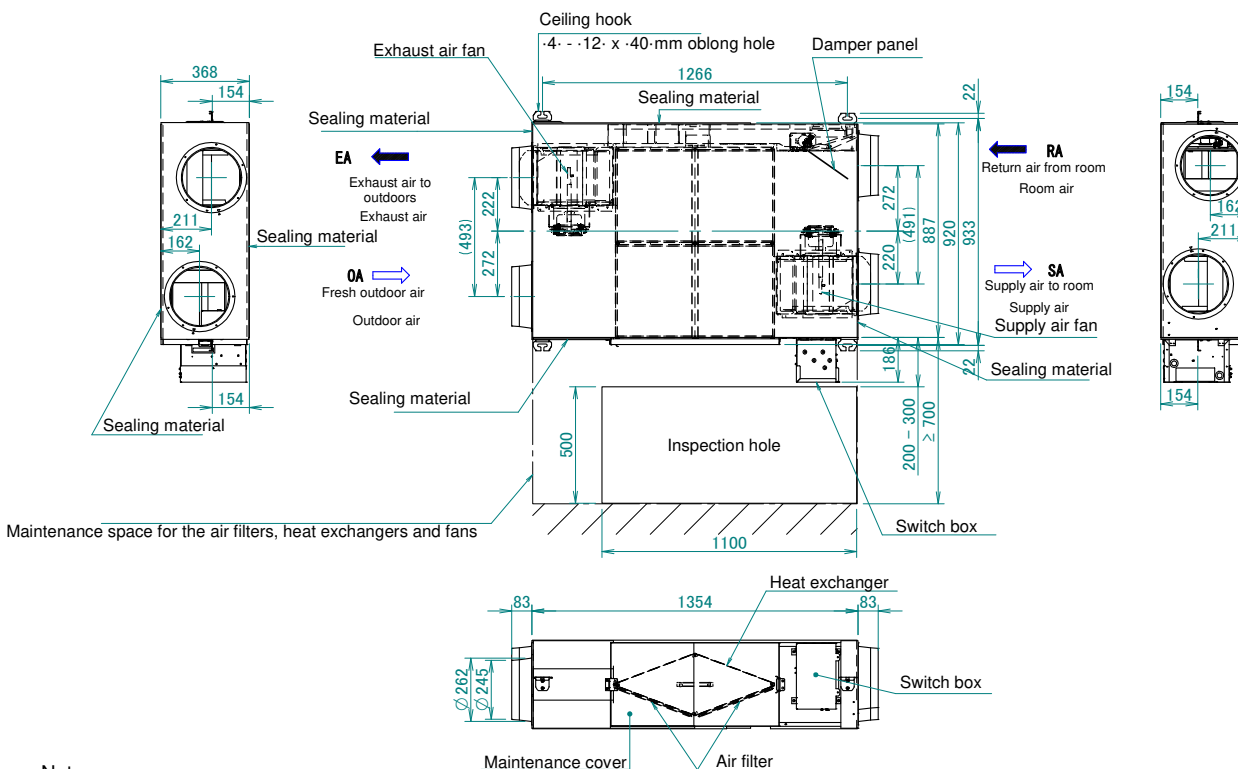


Notes :

1. To allow for the inspection of the air filters, heat exchangers, and fans, be sure to provide the inspection hole.

3D112815C

VAM650J



Notes :

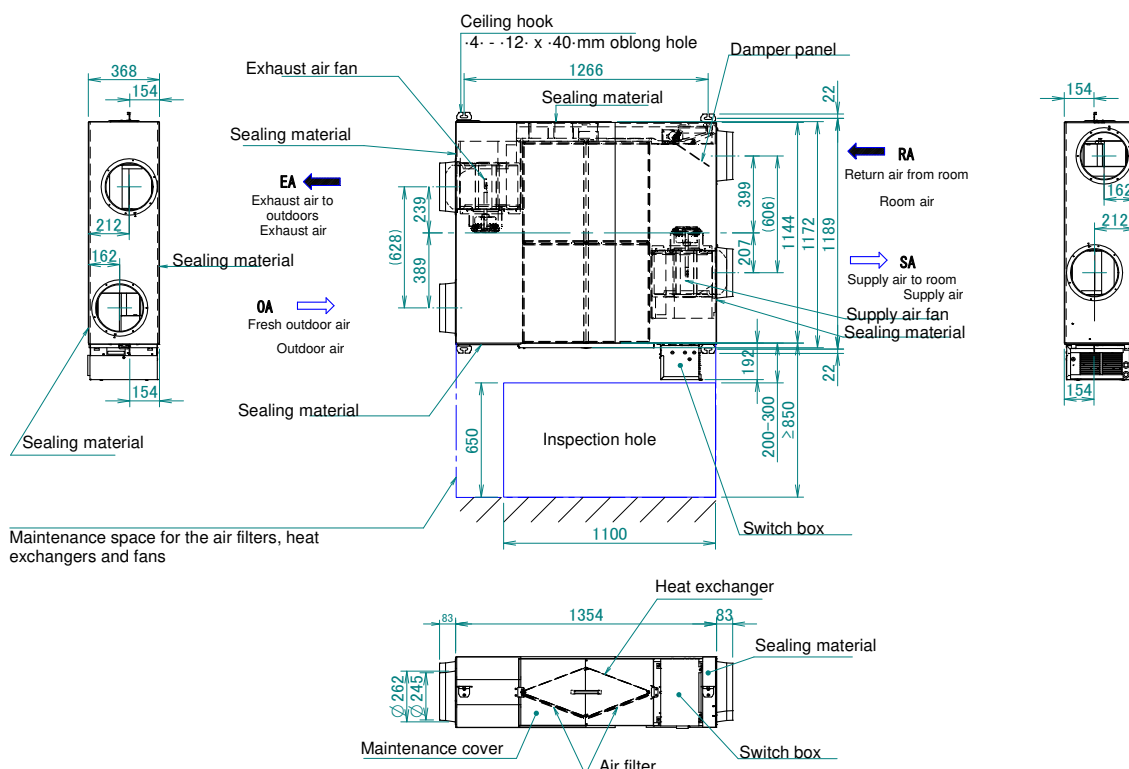
1. To allow for the inspection of the air filters, heat exchangers, and fans, be sure to provide the inspection hole.

3D112816C

5 Dimensional drawings

5 - 1 Dimensional Drawings

VAM800-1000J

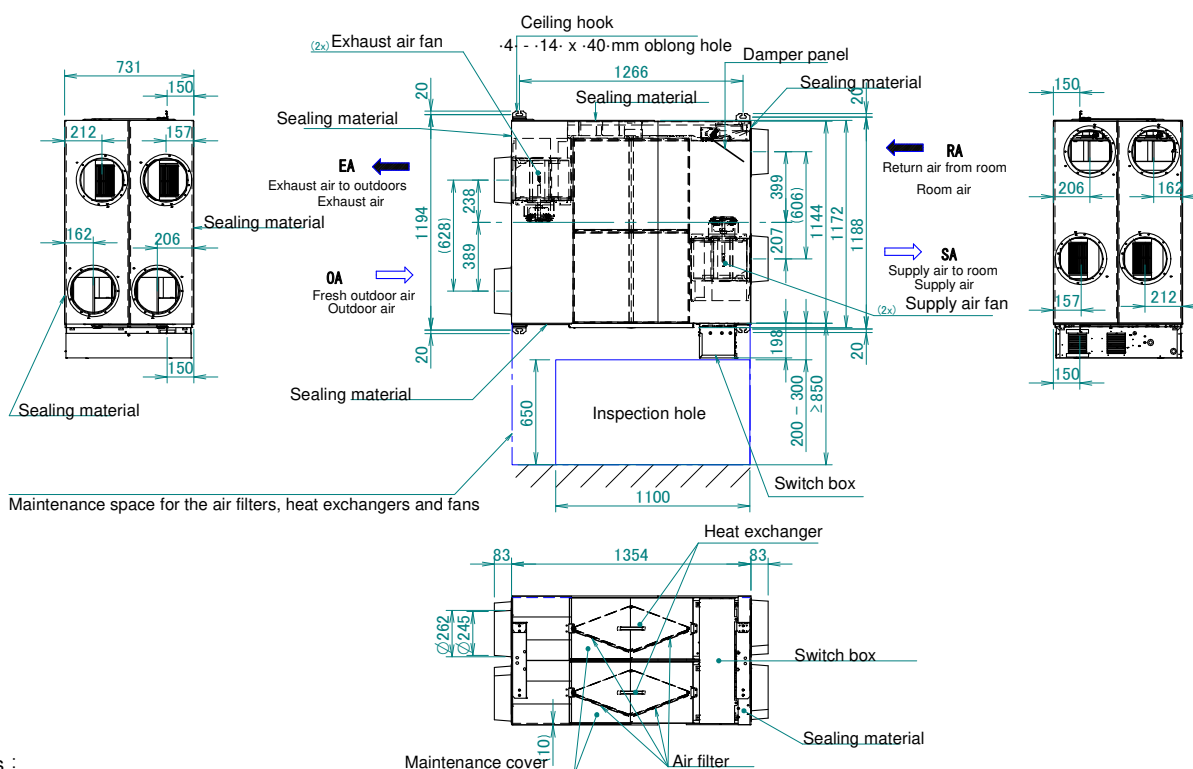


Notes

1. To perform maintenance on the air filter, it is required to provide a service access panel.

3D112817D

VAM1500-2000J



Notes

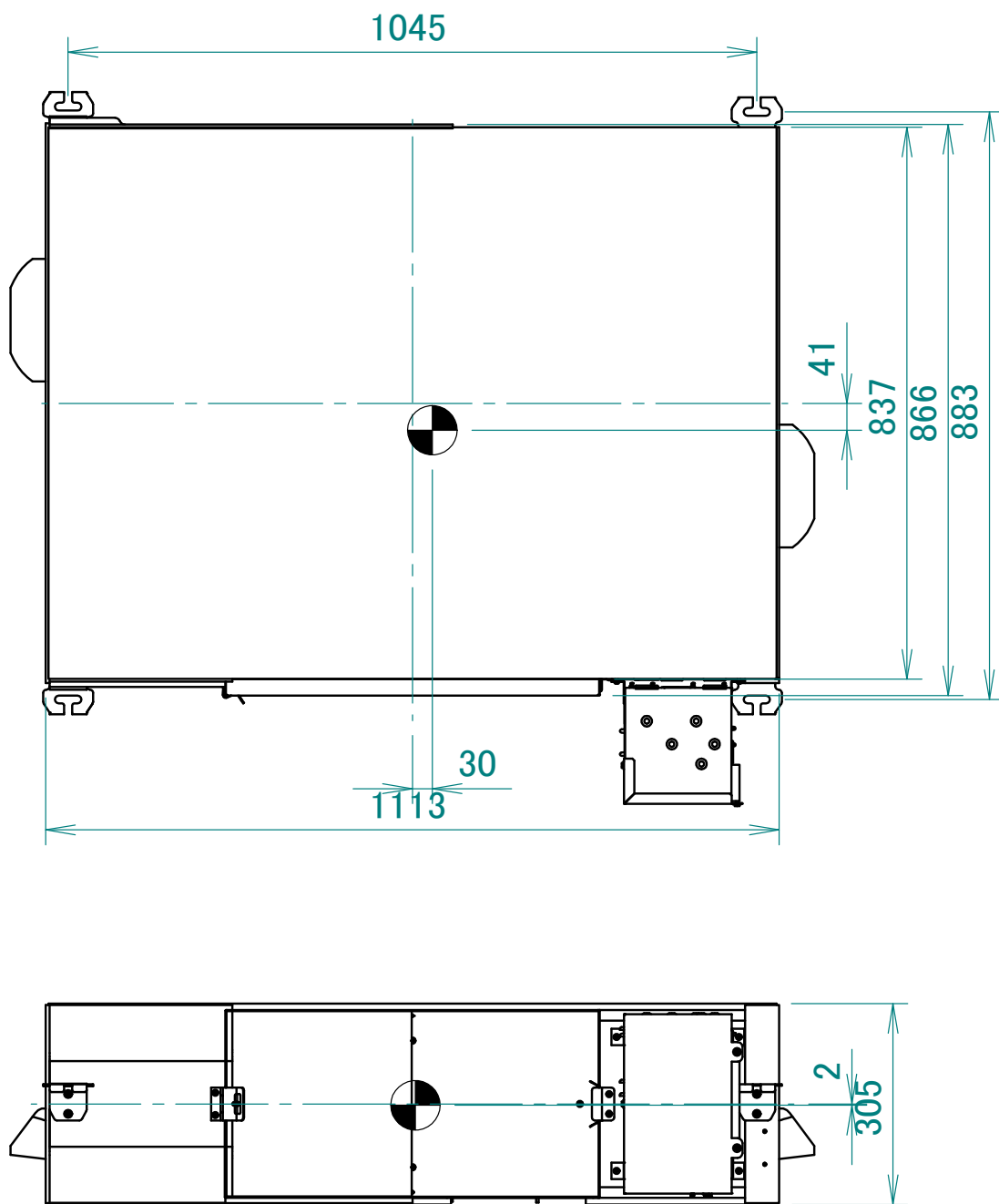
1. To perform maintenance on the air filter, it is required to provide a service access panel.

3D112828C

6 Centre of gravity

6 - 1 Centre of Gravity

VAM350-500J

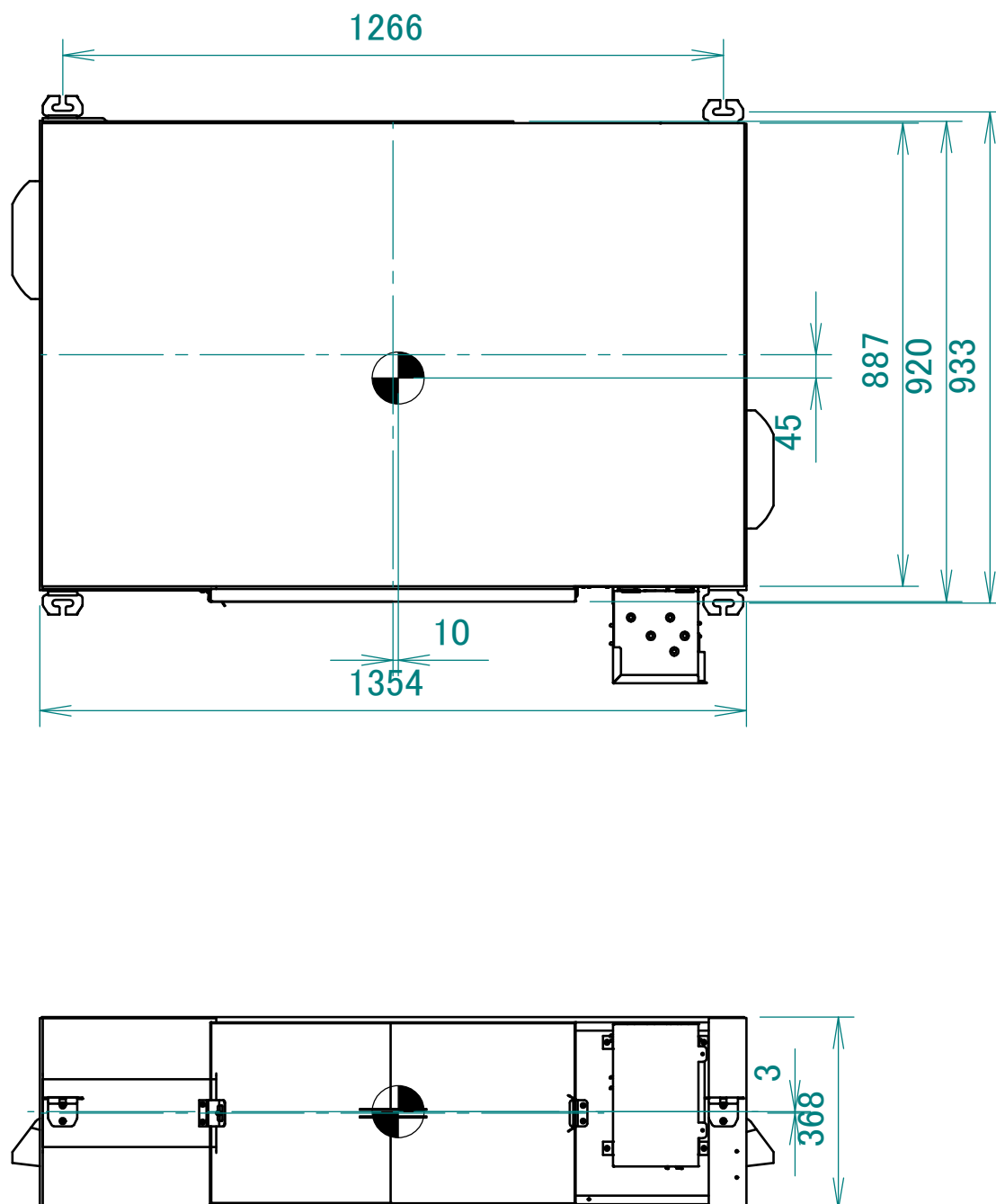


4D112821A

6 Centre of gravity

6 - 1 Centre of Gravity

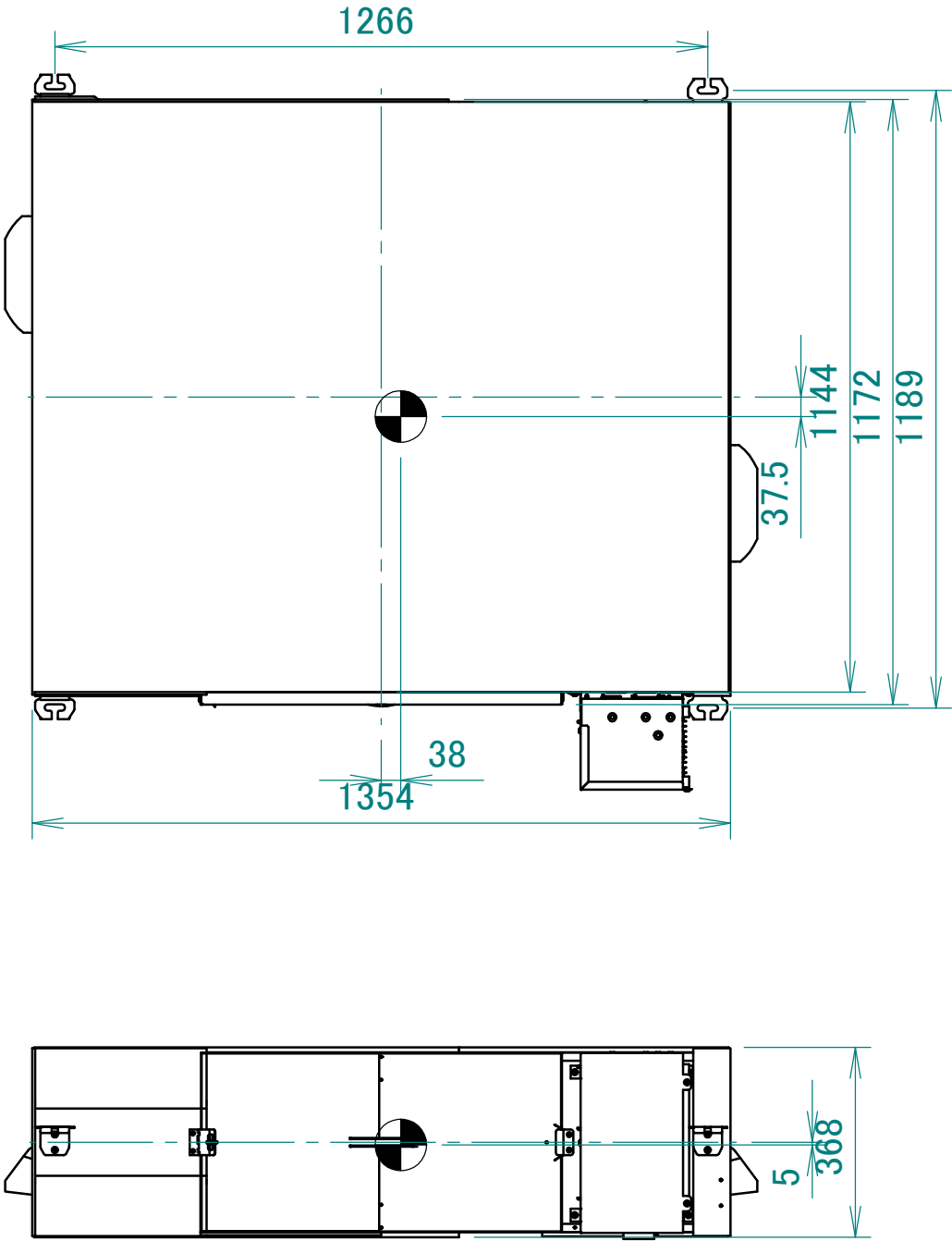
VAM650J



4D113503A

6 Centre of gravity
6 - 1 Centre of Gravity

VAM800-1000J

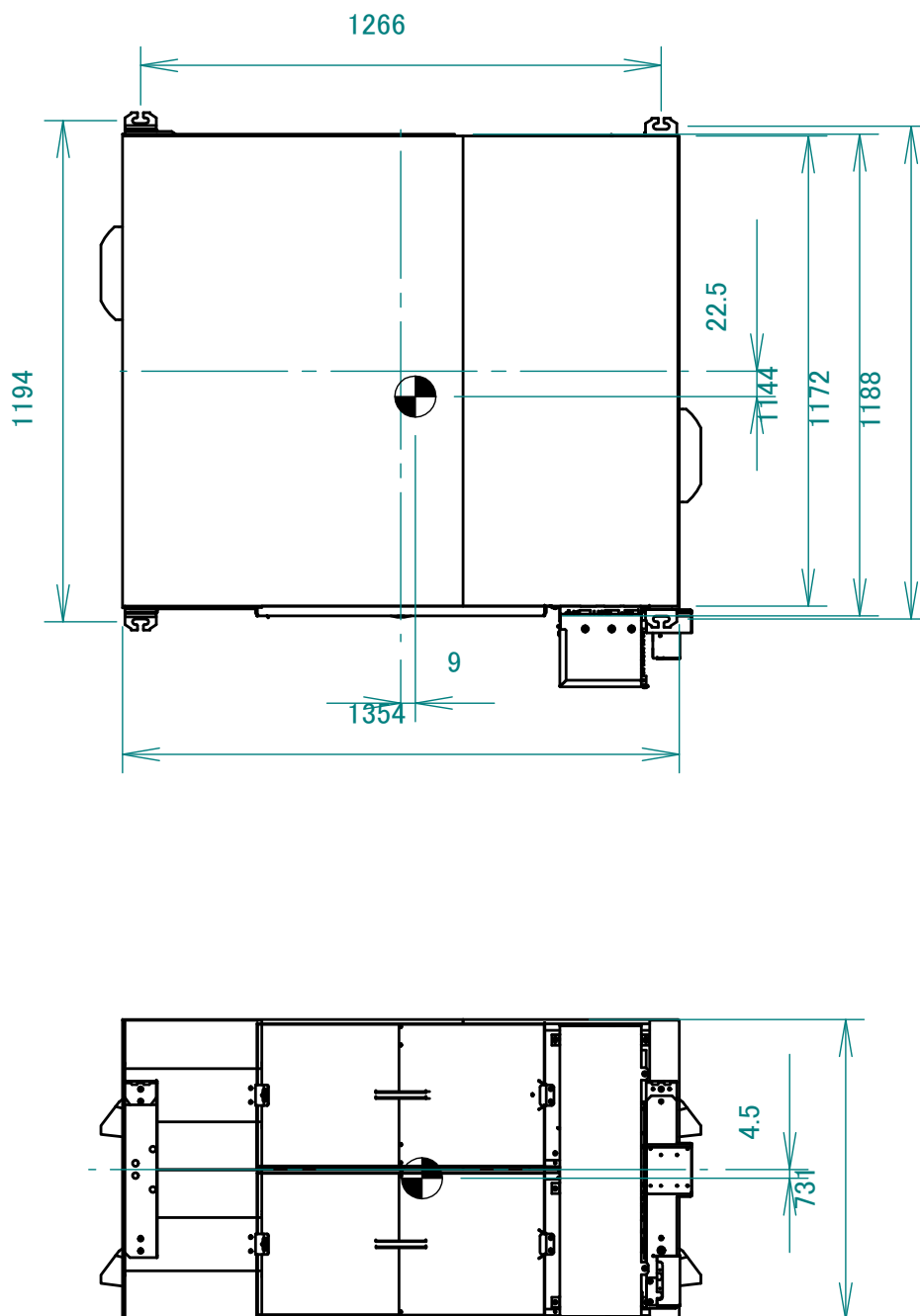


4D112820B

6 Centre of gravity

6 - 1 Centre of Gravity

VAM1500-2000J



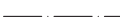
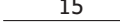
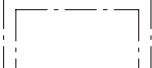
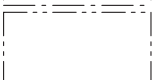
4D112822A

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

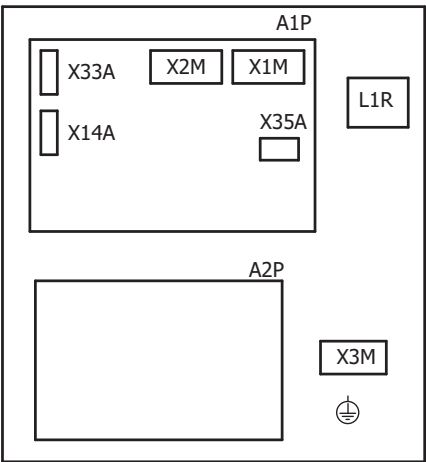
VAM350-650J

NOTES to go through before starting the unit

- Symbols:
 -  : Earth wiring
 -  : Wire number 15
 -  : Field wire
 -  : Field cable
 -  : Connection ** continues on page 12 column 2
 -  : Several wiring possibilities
 -  : Option
 -  : Wiring depending on model
 -  : Not mounted in switch box
 -  : PCB

- In case you use the central remote control, connect it to the unit in accordance with the attached manual.
- When connecting the input wires from outside, fresh-up or on/off control operation can be selected. (Contact with a minimum applicable load of 12 DC, 1mA)
- For details of connection see the attached manual of the option kit.
- SS1 has already been set to 'NOR.' at the factoryset. The unit will not run if the setting is changed.

POSITION IN SWITCH BOX



4D112850

VAM350-650J

LEGEND

Part n°	Description	Part n°	Description
A1P	main PCB	R2T	thermistor outdoor air
A2P	fan PCB	R3T (A1P)	thermistor PTC
C* (A*P)	capacitor	S1C	limit switch damper motor
F1U (A1P)	fuse T 6.3 A 250 V	V1R (A*P)	diode module
F2U (A2P)	fuse T 5 A 250 V	X1M (A1P)	terminal
F4U (A2P)	fuse T 6.3 A 250 V	X2M (A1P)	terminal (outside input)
HAP (A*P)	running LED (service monitor-green)	X3M	main terminal (power supply)
K*R (A*P)	magnetic relay	Z1F (A*P)	noise filter
L1R	reactor	Z*C	ferrit core
M1D	motor (damper)	REMOTE CONTROL	
M1F	supply air fan	SS1	selector switch
M2F	exhaust air fan	CONNECTORS FOR OPTION (see note 4)	
PS (A*P)	switching power supply	X14A	connector (CO2 sensor)
Q1DI	# earth leakage circuit breaker (max. 300mA)	X24A	connector (outside damper)
R* (A2P)	resistance	X33A	connector (contact PCB)
R1T	thermistor indoor air	X35A	connector (appendices PCB)

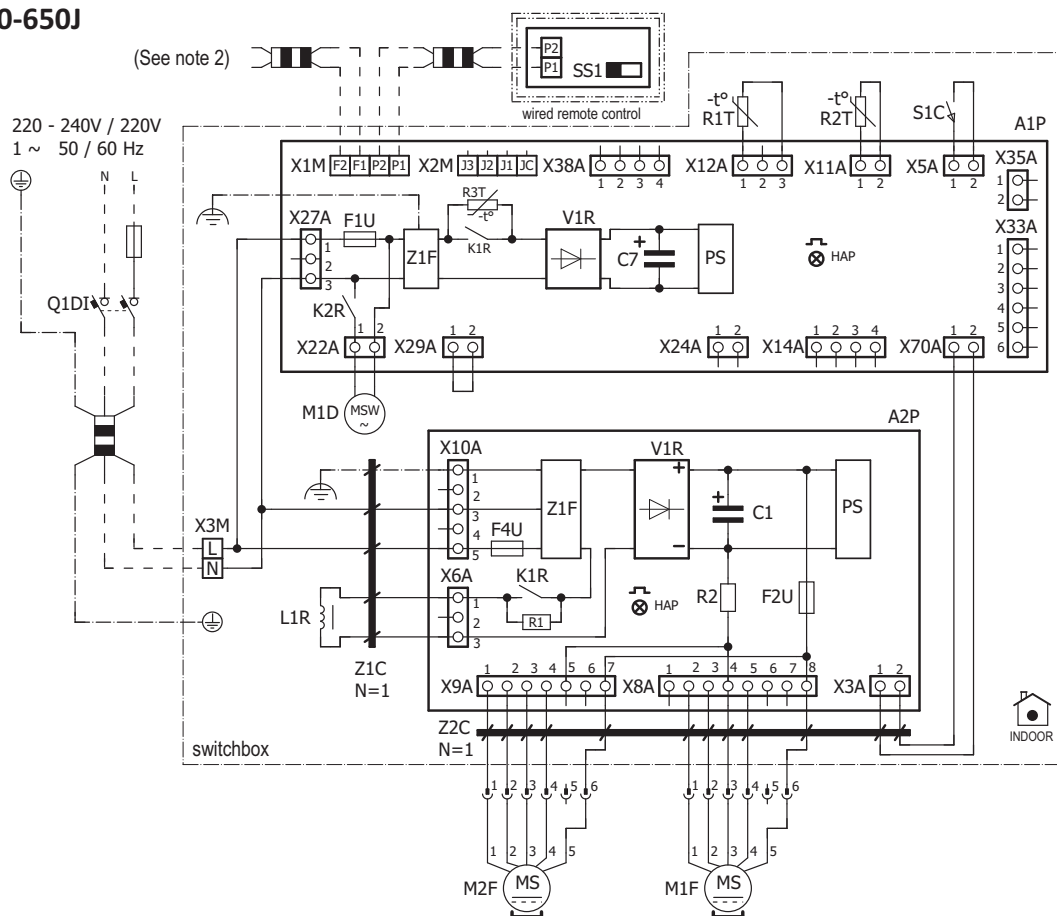
- * : optional
: field supply

4D112850

7 Wiring diagrams

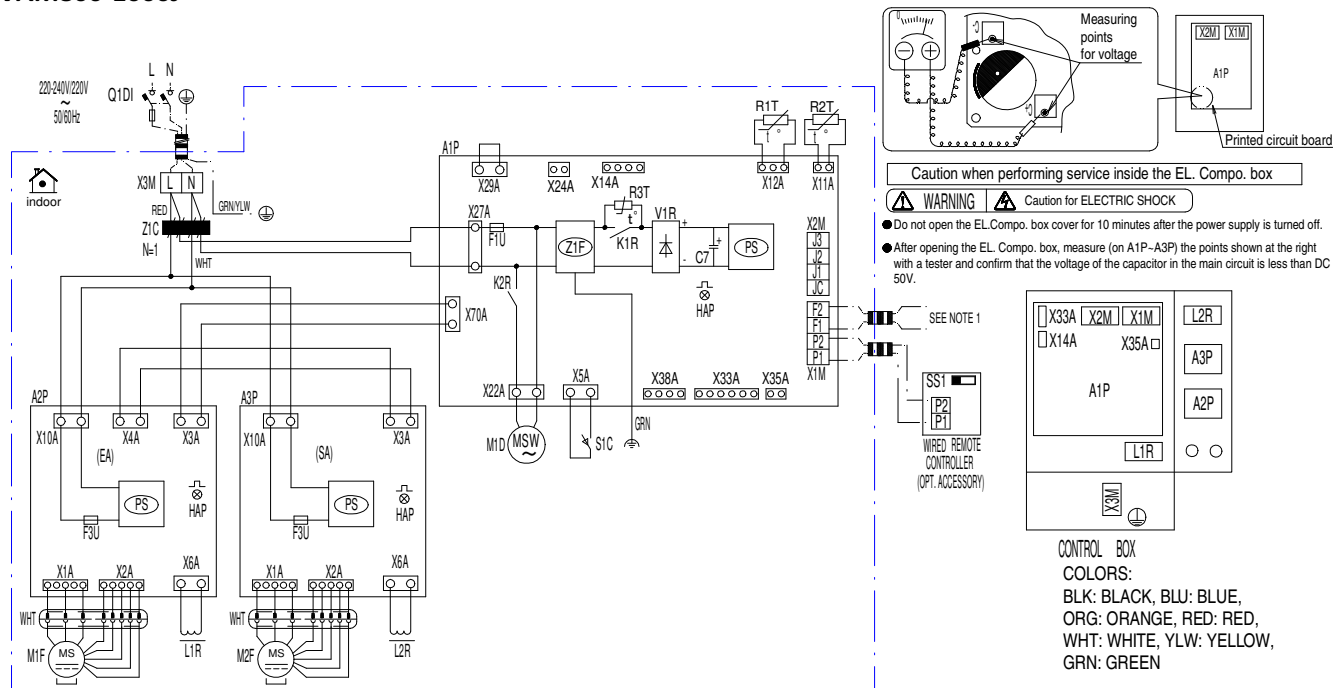
7 - 1 Wiring Diagrams - Single Phase

VAM350-650J



4D112850

VAM800-1000J



A1P	PRINTED CIRCUIT BOARD	M1D	MOTOR (DAMPER)	Z1C	NOISE FILTER (FERRIT CORE)
A3P	PRINTED CIRCUIT BOARD ASSY (FAN)	Q1D	SWITCH (POWER SUPPLY FIELD EARTH LEAK DETECTOR (MAX. 300mA)		REMOTE CONTROLLER
A3P	PRINTED CIRCUIT BOARD ASSY (FAN)			SS1	SELECTOR SWITCH
C2P	CAPACITOR (M1F)				CONNECTOR FOR OPTION (SEE NOTE 3)
F1U	FUSE T. 6.3A. 250V (A1P)	R1T	THERMISTOR (INDOOR AIR)	X14A	CONNECTOR (CO2 SENSOR)
F3U	FUSE T. 6.3A. 250V (A2P/A3P)	R2T	THERMISTOR (OUTDOOR AIR)	X24A	CONNECTOR (OUTSIDE DAMPER)
HAP	PILOT LAMP (SERVICE MONITOR-GREEN)	R3T	THERMISTOR (PTC)	X33A	CONNECTOR (CONTACT PCB)
K1P	MAGNETIC RELAY	S1C	LIMIT SWITCH DAMPER MOTOR	X35A	CONNECTOR (APPENDICES C8)
K2R	MAGNETIC RELAY	X1M	TERMINAL (A1P)		
L1R	REACTOR	X2M	TERMINAL (OUTSIDE INPUT) (A1P)		
L2R	REACTOR	X3M	TERMINAL (POWER SUPPLY)		
M1F	MOTOR (EXHAUST AIR FAN)	Z1F	DIODE BRIDGE		
M2F	MOTOR (SUPPLY AIR FAN)	V1R	NOISE FIL TER		

NOTES:

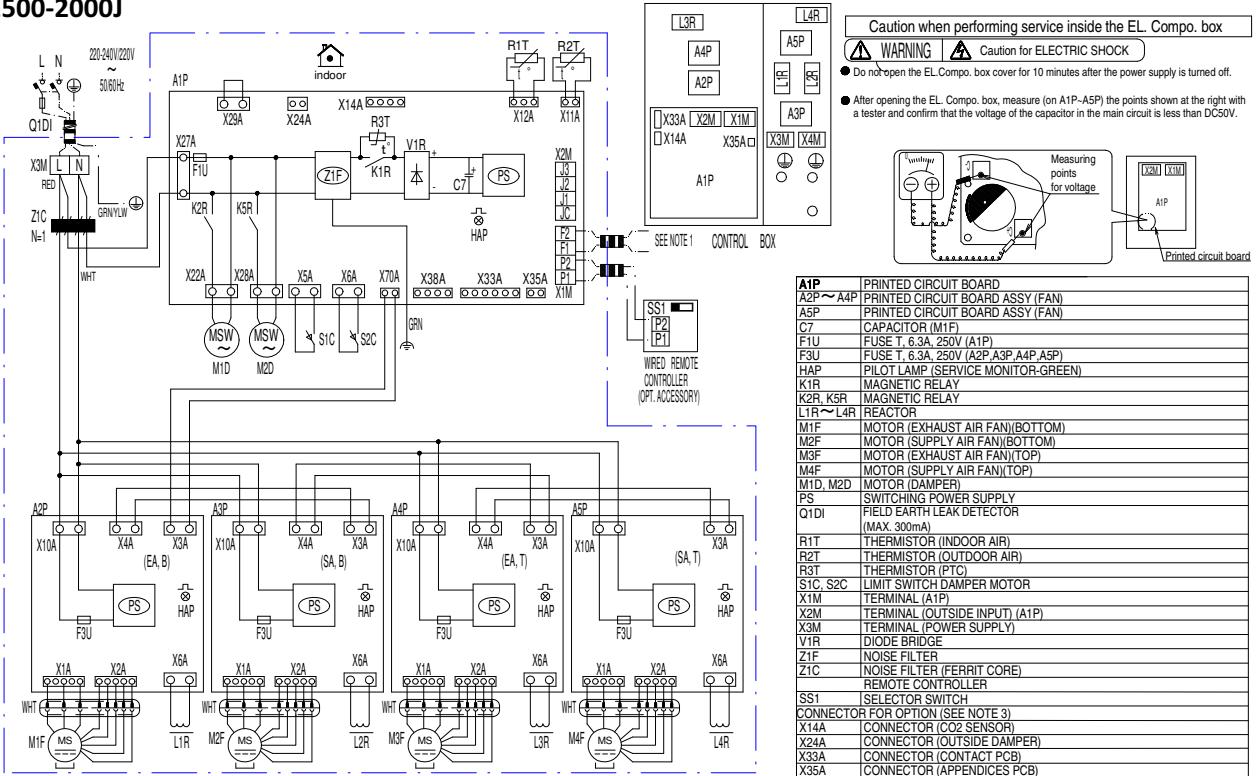
1. IN CASE YOU USE THE CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED MANUAL.
2. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FRESH-AIR OR ON/OFF CONTROL OPERATION CAN BE SELECTED.
(CONTACT WITH A MINIMUM APPLICABLE LOAD OF 12V DC, 1mA)
3. FOR DETAILS OF CONNECTION SEE THE ATTACHED MANUAL OF THE OPTION KIT.
4. SS1(A1/P) HAS ALREADY BEEN SET TO "NOR." AT FACTORY SET. THE UNIT WILL NOT RUN IF THE SETTING IS CHANGED.
5. L: LIVE; N: NEUTRAL : FIELD WIRING
6. : TERMINAL STRIP : CONNECTION : RELAY CONNECTOR
7. : PROTECTIVE EARTH (SCREEN) : NOISELESS EARTH

2D112819D

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

VAM1500-2000J



- NOTES:
- IN CASE YOU USE THE CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED MANUAL.
 - WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FRESH-UP OR ON/OFF CONTROL OPERATION CAN BE SELECTED. (CONTACT WITH A MINIMUM APPLICABLE LOAD OF 12V DC, 1mA)
 - FOR DETAILS OF CONNECTION SEE THE ATTACHED MANUAL OF THE OPTION KIT.
 - SS1(A1P) HAS ALREADY BEEN SET TO "NOR." AT FACTORY SET. THE UNIT WILL NOT RUN IF THE SETTING IS CHANGED.
 - L: LIVE, N: NEUTRAL, : FIELD WIRING
 - : TERMINAL STRIP : CONNECTOR : CONNECTION : RELAY CONNECTOR : PROTECTIVE EARTH (SCREW) : NOISELESS EARTH

COLORS:

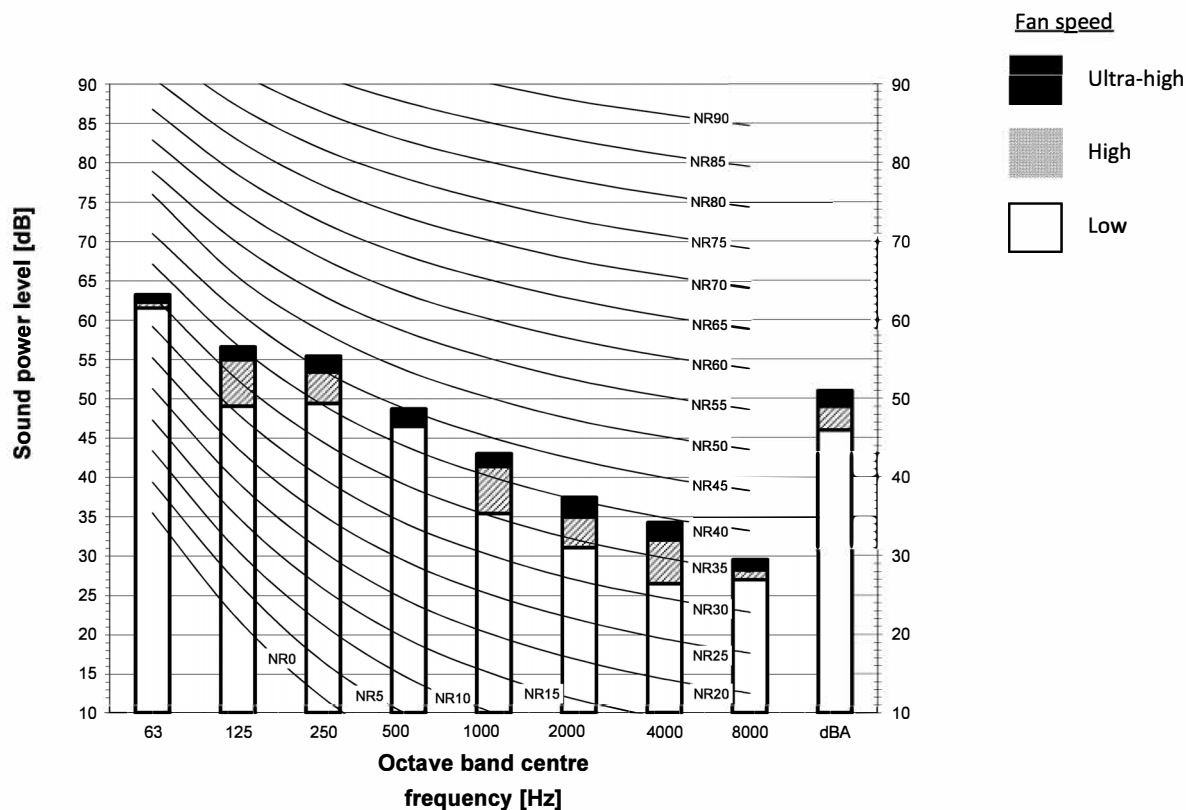
BLK: BLACK, BLU: BLUE,
ORG: ORANGE, RED: RED,
WHT: WHITE, YLW: YELLOW,
GRN: GREEN

2D112506C

8 Sound data

8 - 1 Sound Power Spectrum

VAM350J

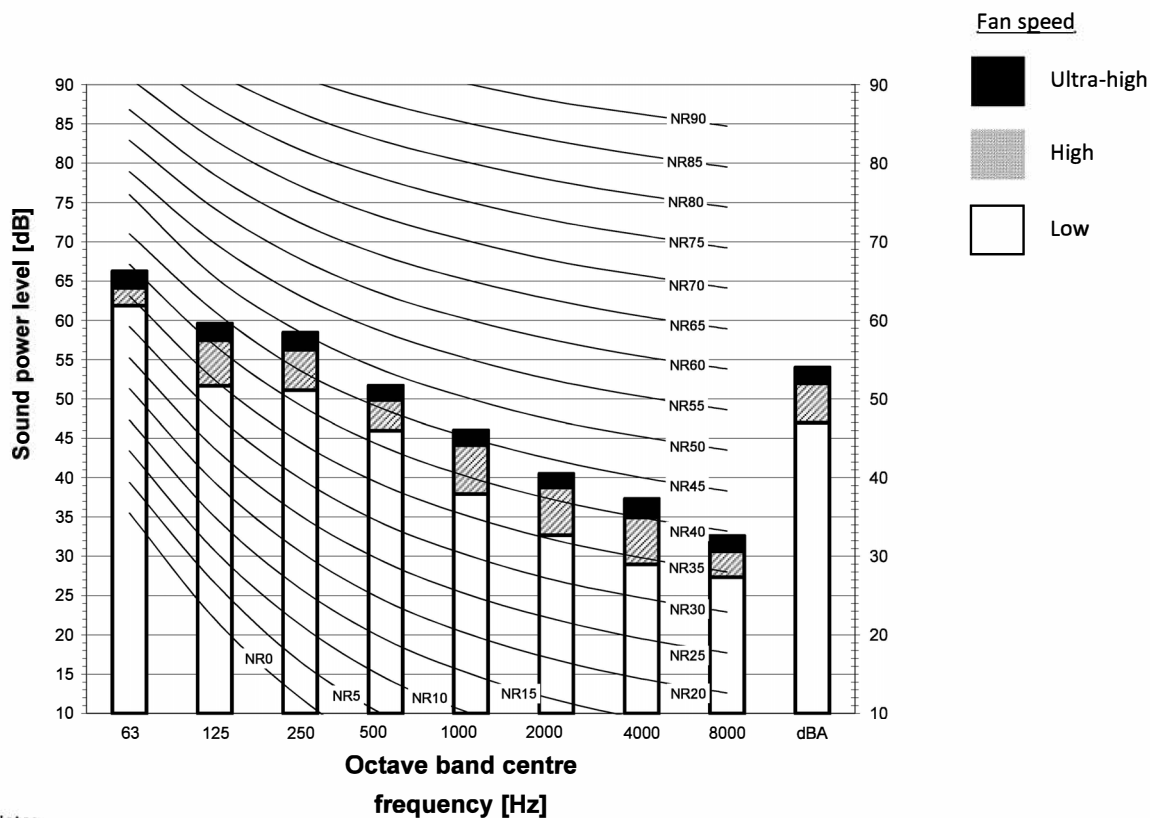


Notes

- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity $0\text{ dB} = 10^{-6} \mu\text{W/m}^2$
- Measured according to ISO 3744

3D113496

VAM500J



Notes

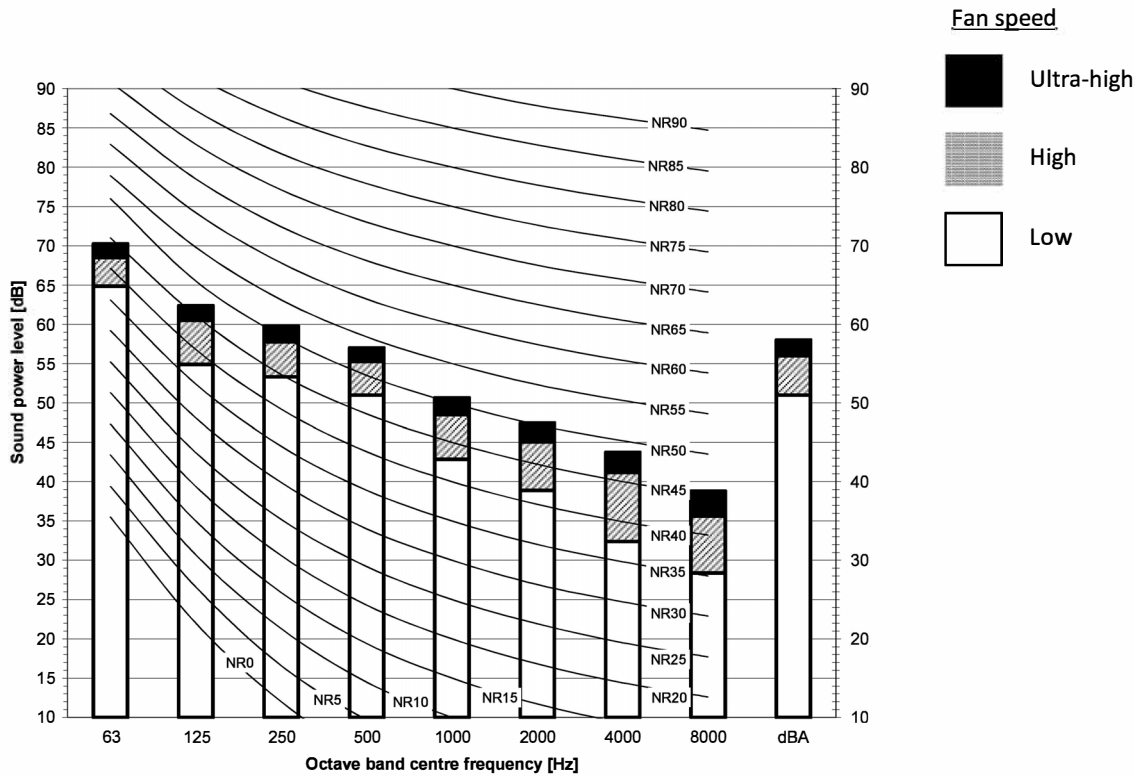
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity $0\text{ dB} = 10^{-6} \mu\text{W/m}^2$
- Measured according to ISO 3744

3D113497

8 Sound data

8 - 1 Sound Power Spectrum

VAM650J

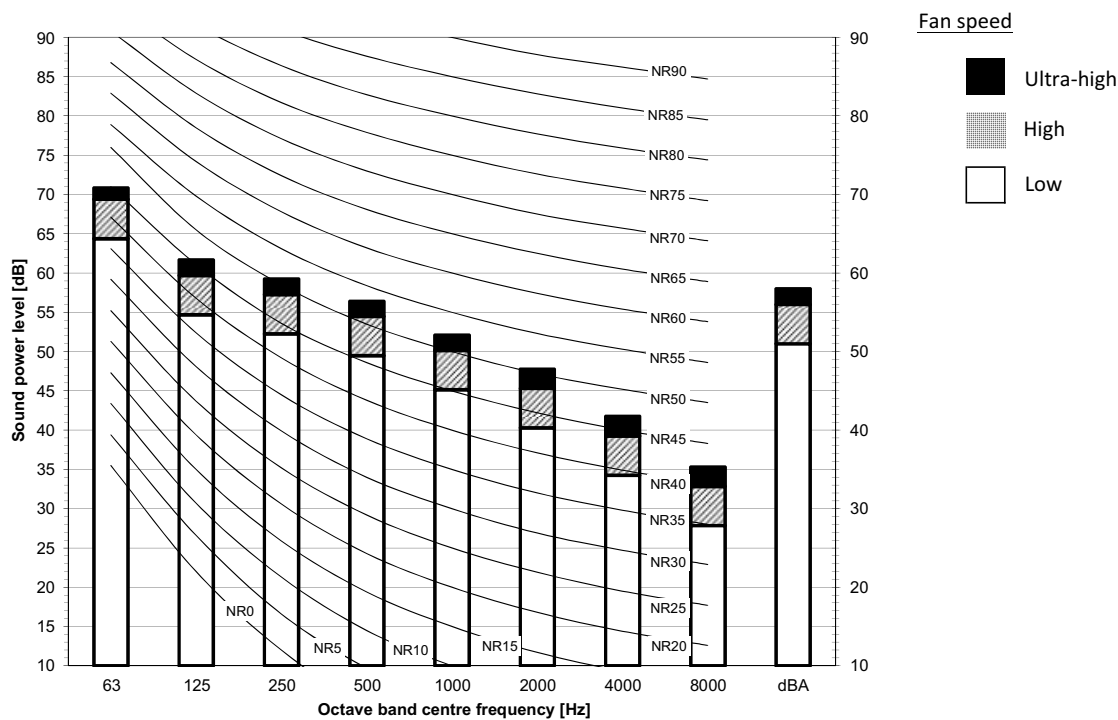


Notes

- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity $0\text{dB} = 10\text{E-}6\mu\text{W/m}^2$
- Measured according to ISO 3744

3D113498

VAM800J



Notes

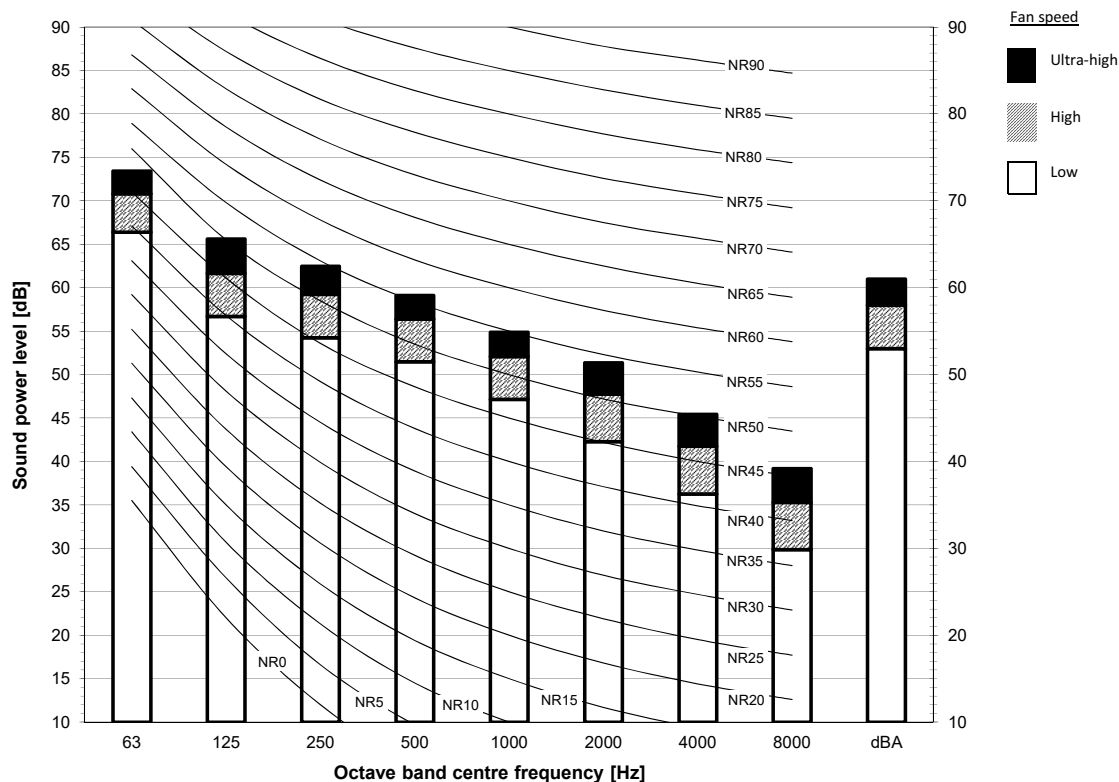
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity $0\text{dB} = 10\text{E-}6\mu\text{W/m}^2$
- Measured according to ISO 3744

3D112841

8 Sound data

8 - 1 Sound Power Spectrum

VAM1000J

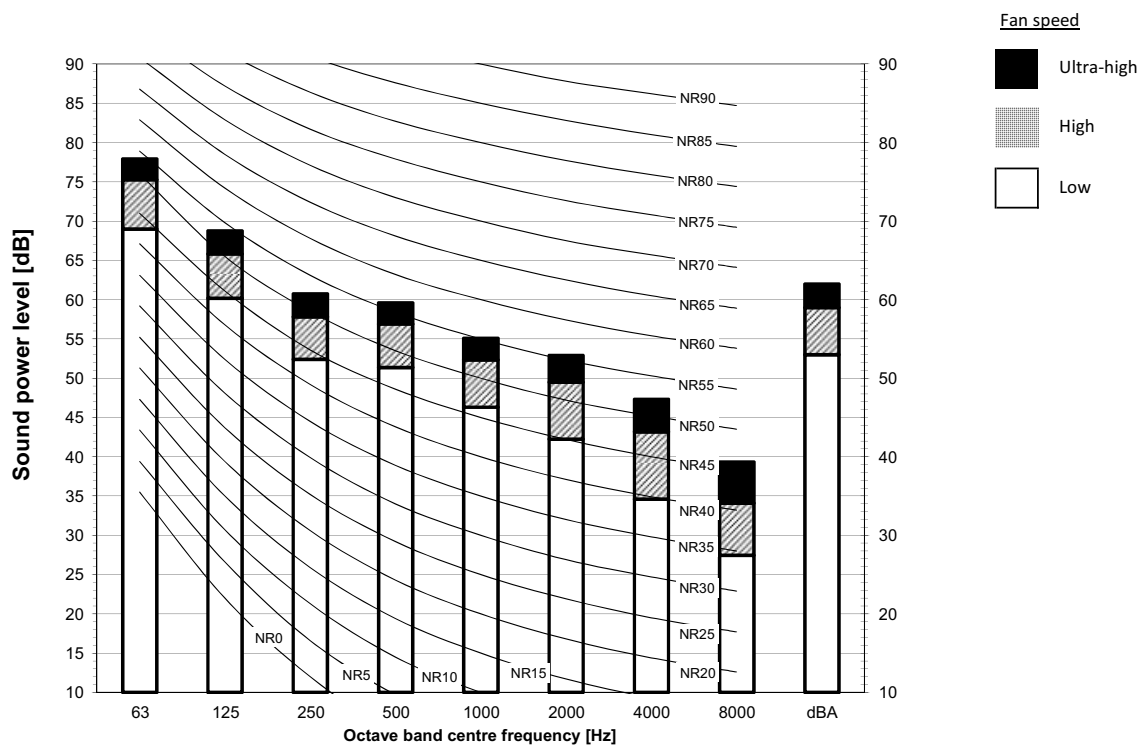


Notes

- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity $0\text{dB} = 10\text{E-}6\mu\text{W/m}^2$
- Measured according to ISO 3744

3D112842

VAM1500J



Notes

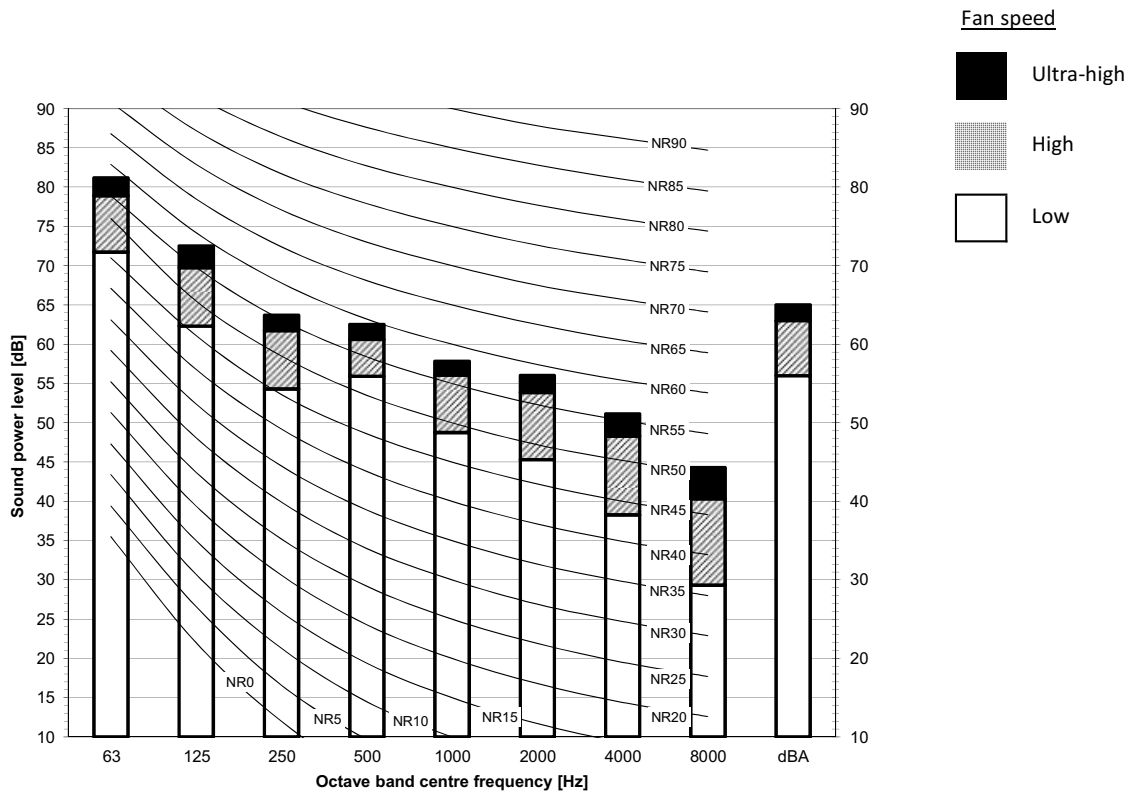
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity $0\text{dB} = 10\text{E-}6\mu\text{W/m}^2$
- Measured according to ISO 3744

3D112843

8 Sound data

8 - 1 Sound Power Spectrum

VAM2000J



Notes

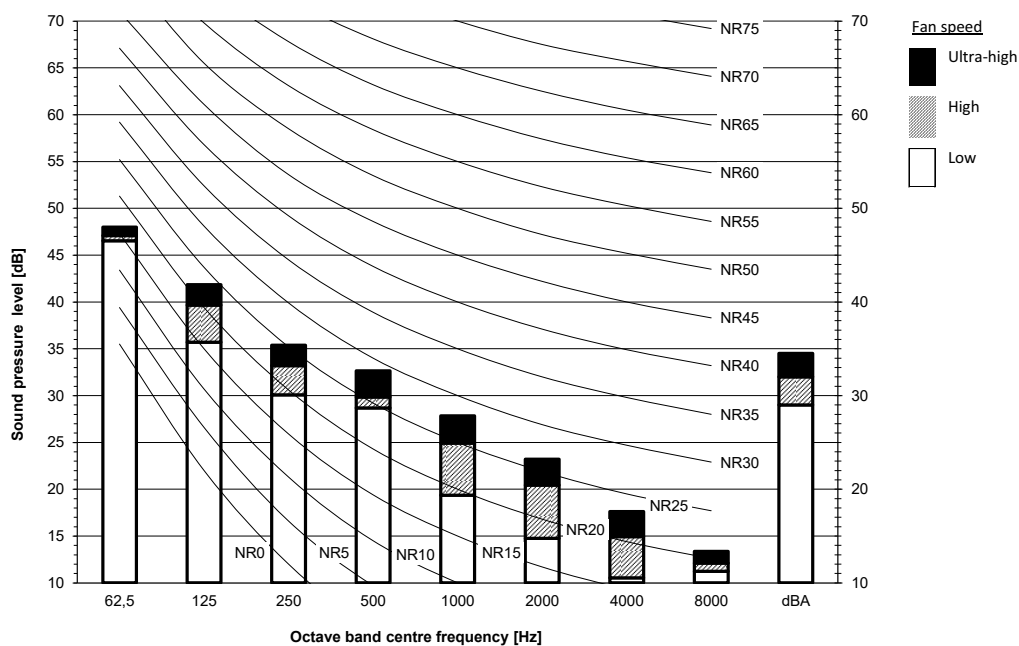
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10^{-6} W/m².
- Measured according to ISO 3744

3D112848

8 Sound data

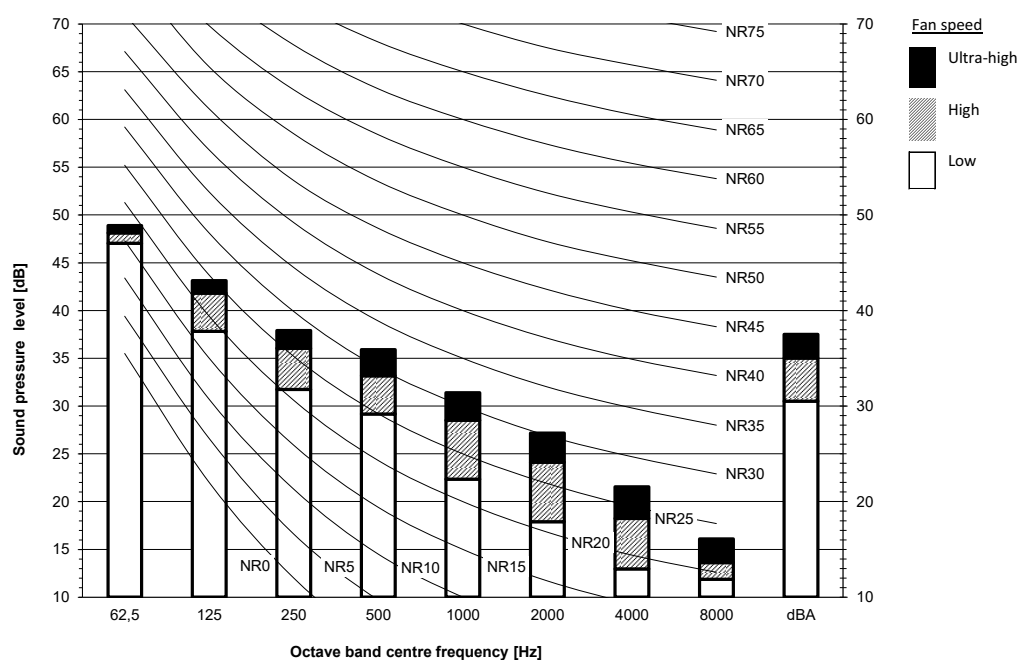
8 - 2 Sound Pressure Spectrum

VAM350J



3D113499

VAM500J

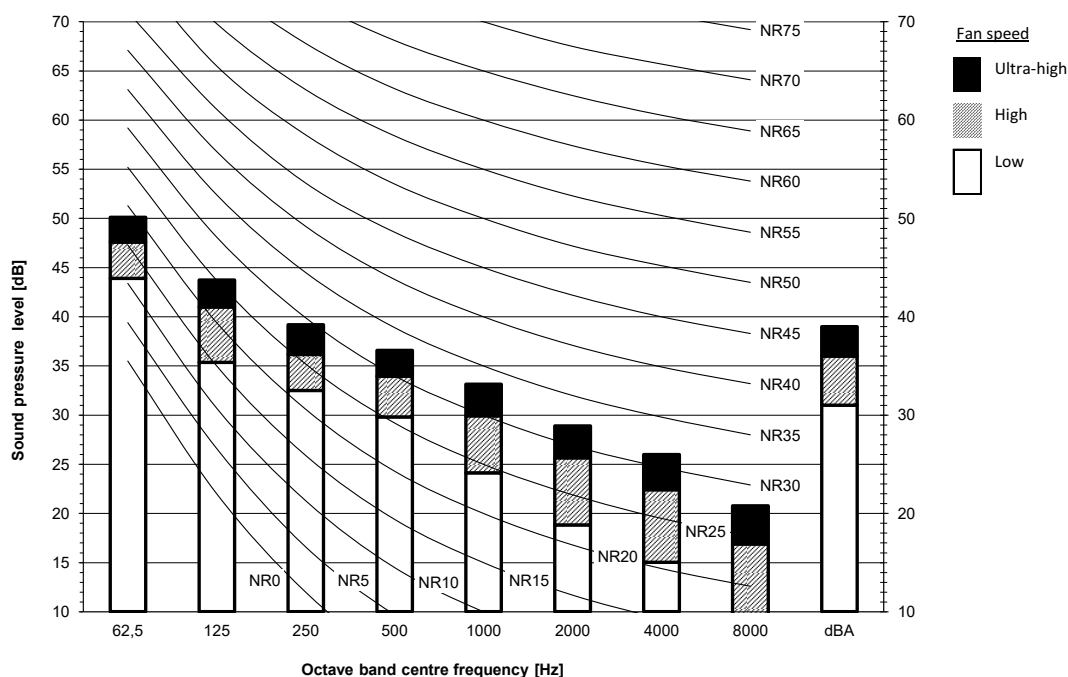


3D113500

8 Sound data

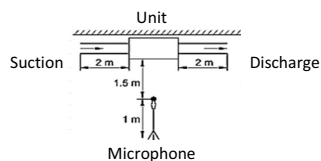
8 - 2 Sound Pressure Spectrum

VAM650J



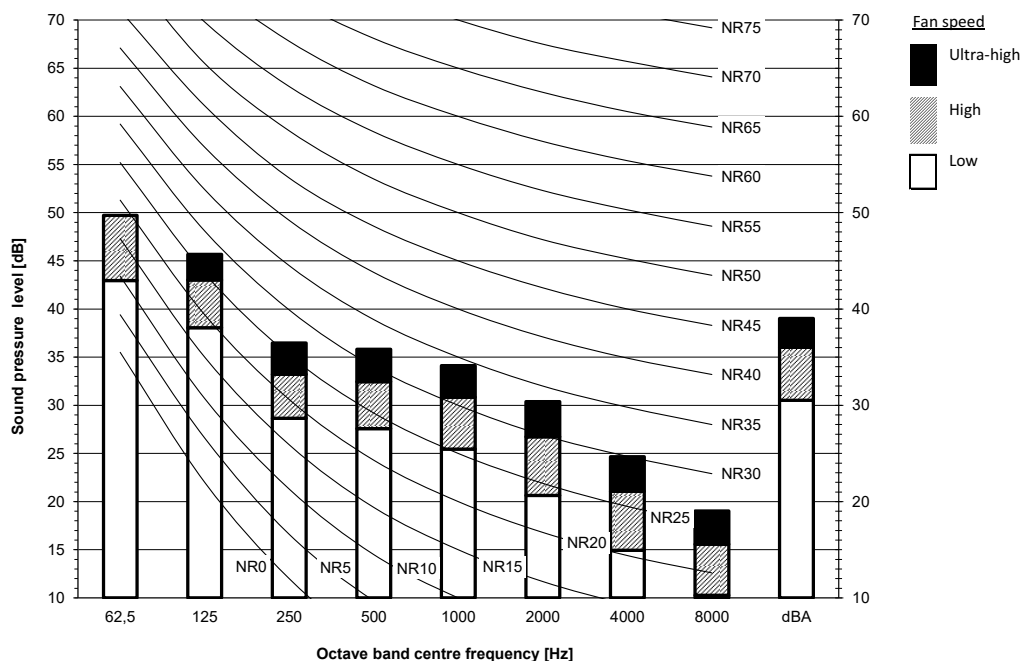
Notes

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μ Pa



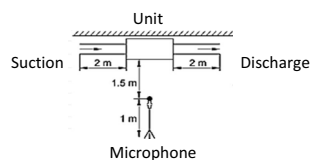
3D113501

VAM800J



Notes

- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 μ Pa

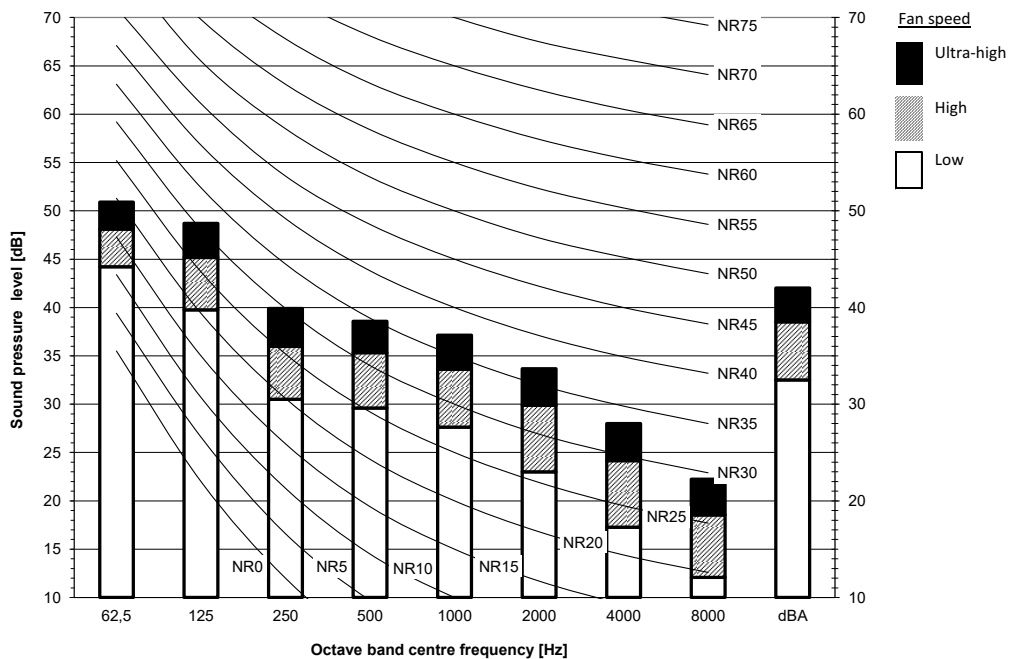


3D112844

8 Sound data

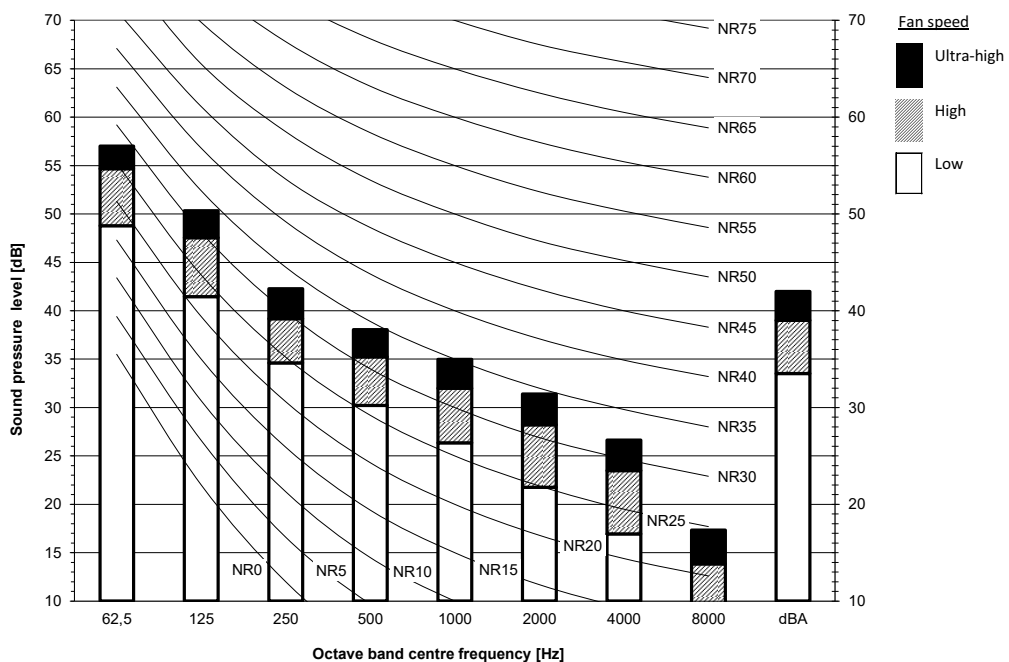
8 - 2 Sound Pressure Spectrum

VAM1000J



3D112845

VAM1500J

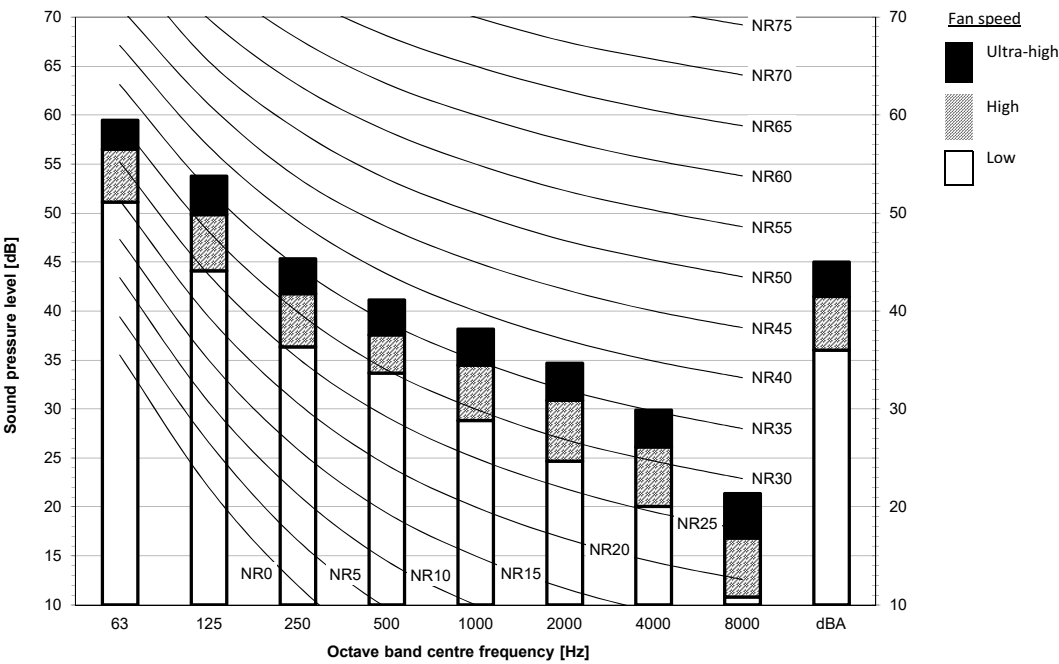


3D112846

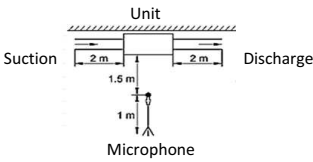
8 Sound data

8 - 2 Sound Pressure Spectrum

VAM2000J



- Notes**
- Data is valid at free field condition.
 - Data is valid at nominal operation condition.
 - dBA = A-weighted sound pressure level (A scale according to IEC).
 - Reference acoustic pressure 0 dB = 20 µPa

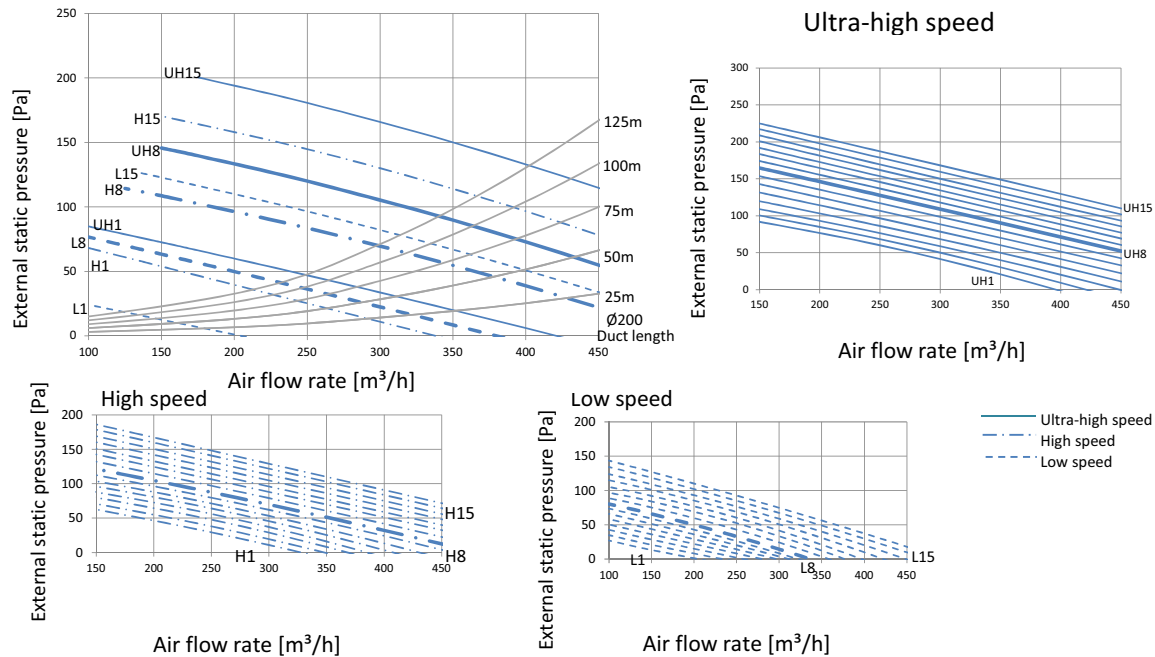


3D112847

9 Fan characteristics

9 - 1 Fan Characteristics

VAM350J



Notes

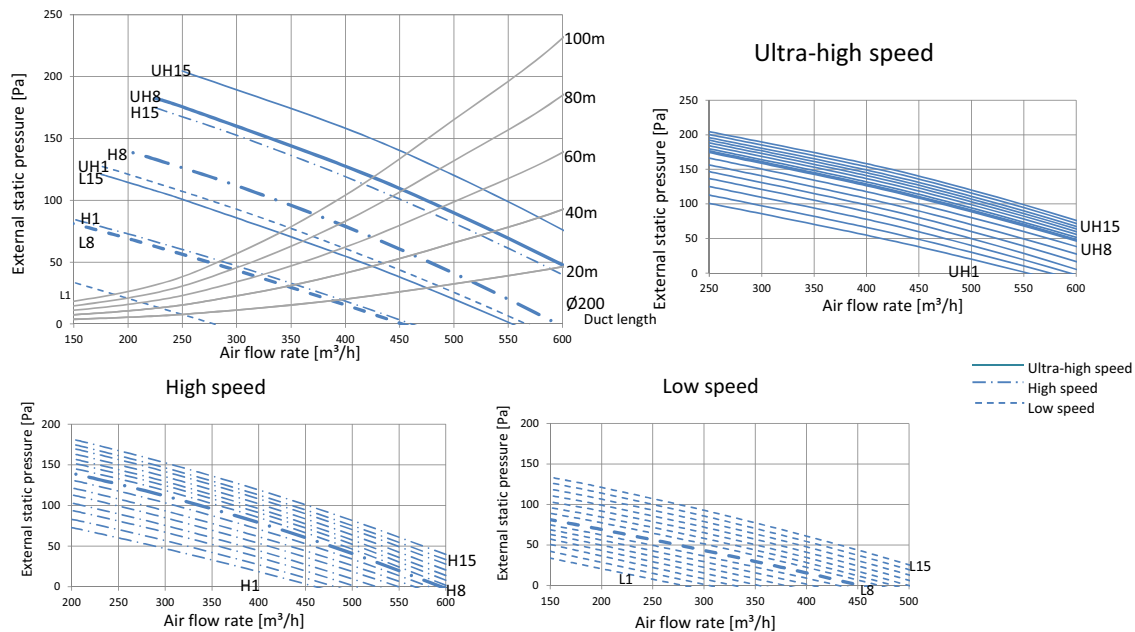
- The fan curves are determined with $\cdot 1/3 \cdot$ of the ESP on the outdoor side (-EA & OA-), and $\cdot 2/3 \cdot$ of the ESP on the indoor side (-RA & SA-).
EA = Exhaust air
OA = Outdoor air
RA = Room air
SA = Supply air
- Measured according to JIS B 8628 - 2003.

Legend

- L1 = Low speed lower limit
- L8 = Low speed factory setting
- L15 = Low speed upper limit
- H1 = High speed lower limit
- H8 = High speed factory setting
- H15 = High speed upper limit
- UH1 = Ultra-high speed lower limit
- UH8 = Ultra-high speed factory setting
- UH15 = Ultra-high speed upper limit

3D113493A

VAM500J



Notes

- The fan curves are determined with $\cdot 1/3 \cdot$ of the ESP on the outdoor side (-EA & OA-), and $\cdot 2/3 \cdot$ of the ESP on the indoor side (-RA & SA-).
EA = Exhaust air
OA = Outdoor air
RA = Room air
SA = Supply air
- Measured according to JIS B 8628 - 2003.

Legend

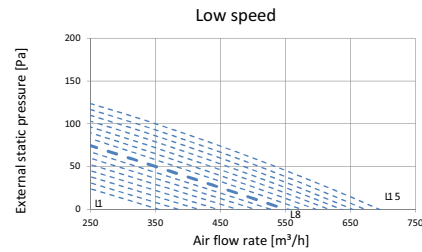
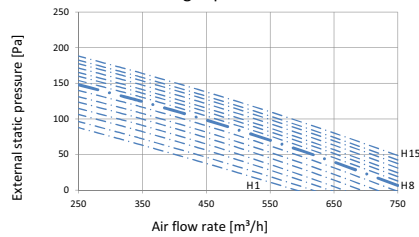
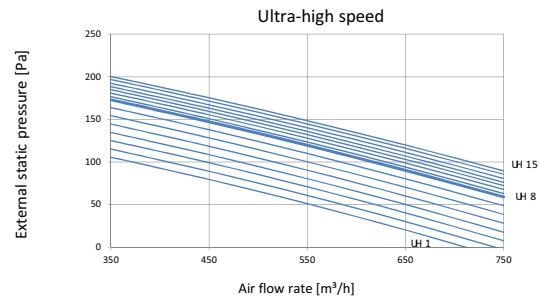
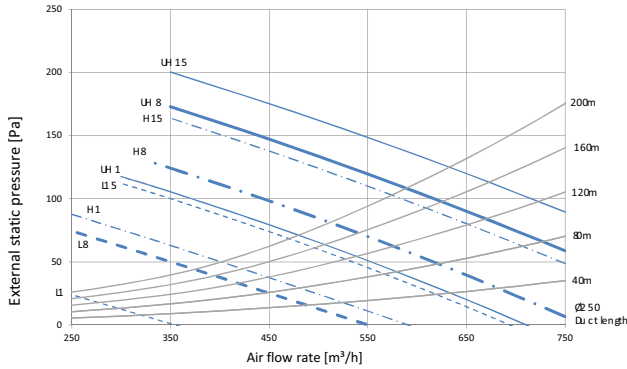
- L1 = Low speed lower limit
- L8 = Low speed factory setting
- L15 = Low speed upper limit
- H1 = High speed lower limit
- H8 = High speed factory setting
- H15 = High speed upper limit
- UH1 = Ultra-high speed lower limit
- UH8 = Ultra-high speed factory setting
- UH15 = Ultra-high speed upper limit

3D113494A

9 Fan characteristics

9 - 1 Fan Characteristics

VAM650J



Notes

1. The fan curves are determined with 1/3 of the ESP on the outdoor side (EA & OA), and 2/3 of the ESP on the indoor side (RA & SA).

EA = Exhaust air
OA = Outdoor air
RA = Room air
SA = Supply air

2. Measured according to JIS B 8628 - 2003

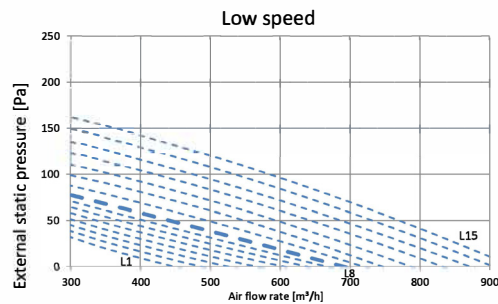
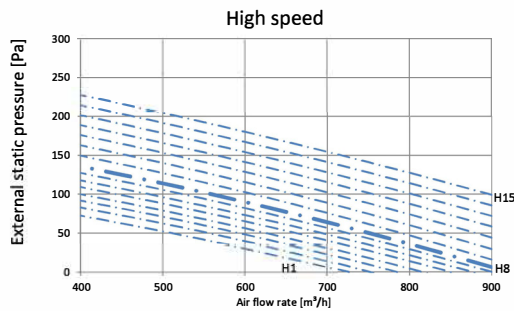
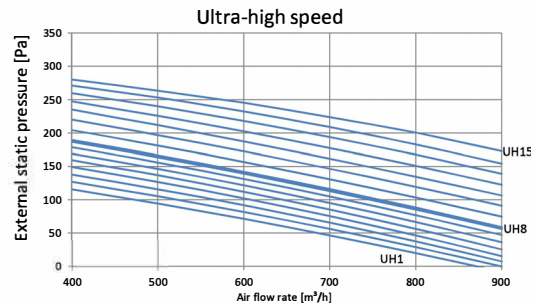
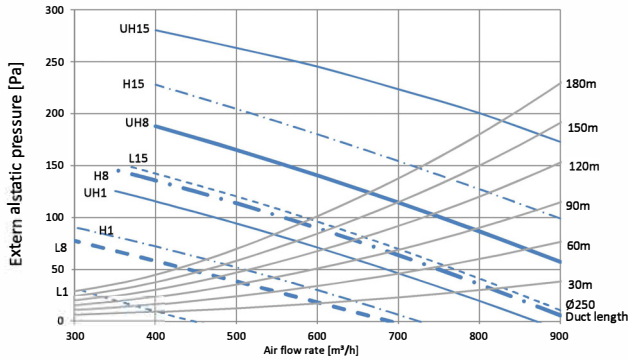
Legend

L1 = Low speed lower limit
L8 = Low speed factory setting
L15 = Low speed upper limit
H1 = High speed lower limit
H8 = High speed factory setting
H15 = High speed upper limit
UH1 = Ultra-high speed lower limit
UH8 = Ultra-high speed factory setting
UH15 = Ultra-high speed upper limit

— Ultra-high speed
- - - High speed
- - - Low speed

3D113495A

VAM800J



Notes

1. The fan curves are determined with 1/3 of the ESP on the outdoor side (-EA & OA-), and 2/3 of the ESP on the indoor side (-RA & SA-).

EA = Exhaust air
OA = Outdoor air
RA = Room air
SA = Supply air

2. Measured according to JIS B 8628 - 2003

Legend

L1 = Low speed lower limit
L8 = Low speed factory setting
L15 = Low speed upper limit
H1 = High speed lower limit
H8 = High speed factory setting
H15 = High speed upper limit
UH1 = Ultra-high speed lower limit
UH8 = Ultra-high speed factory setting
UH15 = Ultra-high speed upper limit

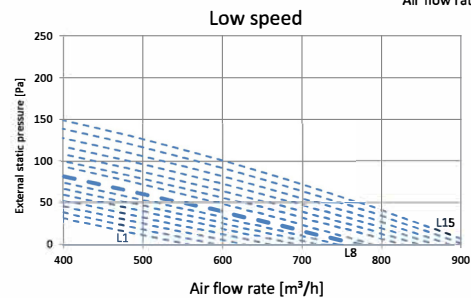
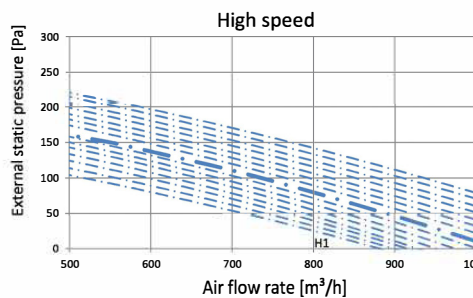
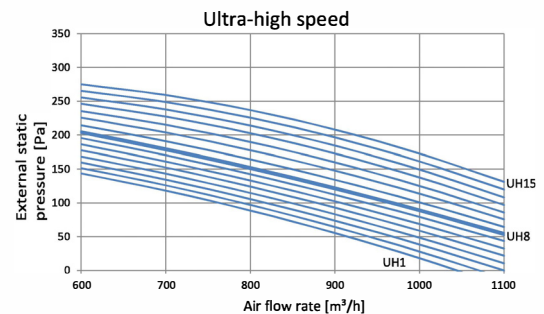
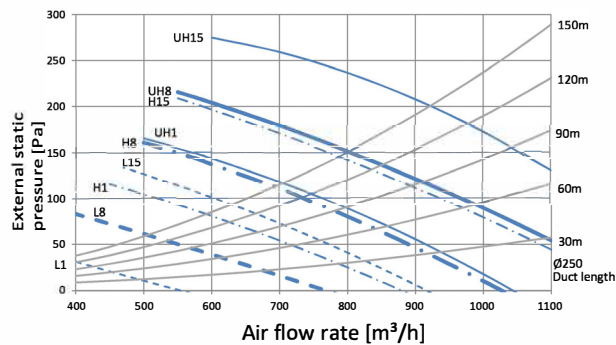
— Ultra-high speed
- - - High speed
- - - Low speed

3D112837

9 Fan characteristics

9 - 1 Fan Characteristics

VAM1000J



Notes

- The fan curves are determined with $\cdot 1/3 \cdot$ of the ESP on the outdoor side (-EA & OA-), and $\cdot 2/3 \cdot$ of the ESP on the indoor side (-RA & SA-).

EA = Exhaust air

OA = Outdoor air

RA = Room air

SA = Supply air

- Measured according to JIS B 8628 - 2003.

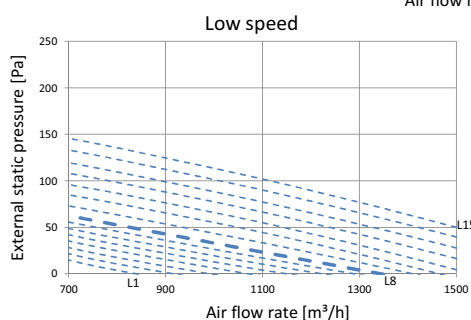
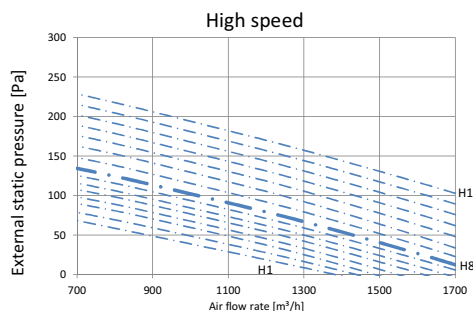
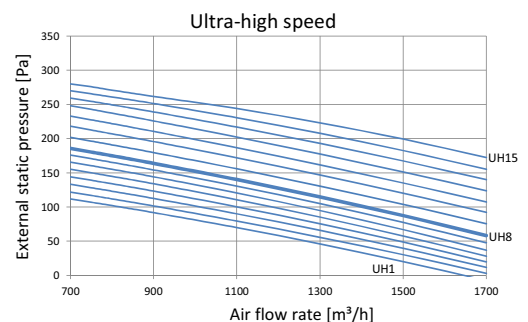
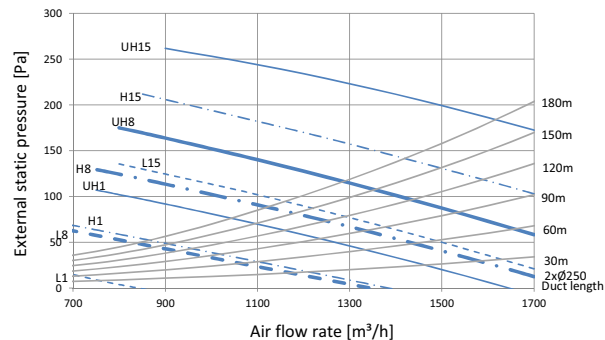
Legend

- L1 = Low speed lower limit
- L8 = Low speed factory setting
- L15 = Low speed upper limit
- H1 = High speed lower limit
- H8 = High speed factory setting
- H15 = High speed upper limit
- UH1 = Ultra-high speed lower limit
- UH8 = Ultra-high speed factory setting
- UH15 = Ultra-high speed upper limit

— Ultra-high speed
- - - High speed
- - - Low speed

3D112832

VAM1500J



Notes

- The fan curves are determined with $\cdot 1/3 \cdot$ of the ESP on the outdoor side (-EA & OA-), and $\cdot 2/3 \cdot$ of the ESP on the indoor side (-RA & SA-).

EA = Exhaust air

OA = Outdoor air

RA = Room air

SA = Supply air

- Measured according to JIS B 8628 - 2003.

Legend

- L1 = Low speed lower limit
- L8 = Low speed factory setting
- L15 = Low speed upper limit
- H1 = High speed lower limit
- H8 = High speed factory setting
- H15 = High speed upper limit
- UH1 = Ultra-high speed lower limit
- UH8 = Ultra-high speed factory setting
- UH15 = Ultra-high speed upper limit

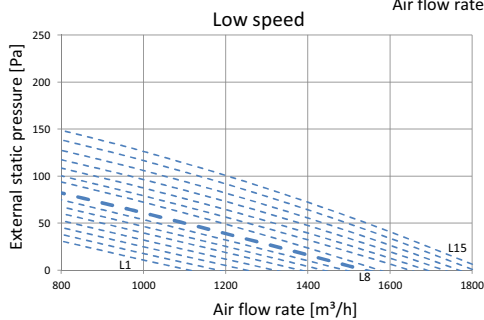
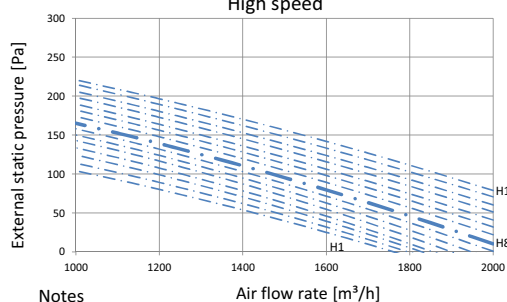
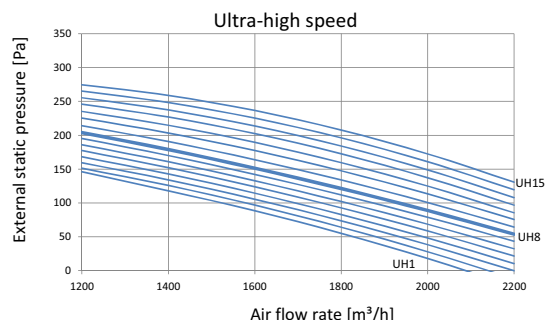
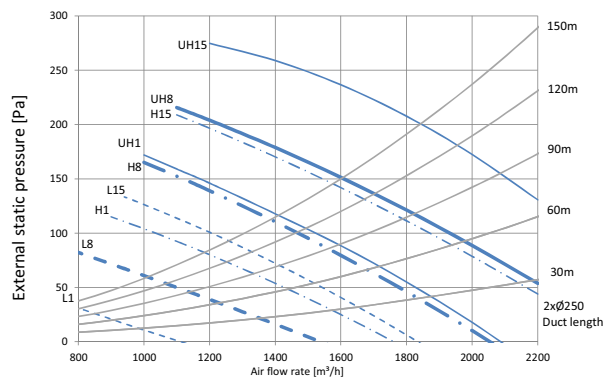
— Ultra-high speed
- - - High speed
- - - Low speed

3D112838

9 Fan characteristics

9 - 1 Fan Characteristics

VAM2000J



Notes

1. The fan curves are determined with $\cdot 1/3 \cdot$ of the ESP on the outdoor side (-EA & OA-), and $\cdot 2/3 \cdot$ of the ESP on the indoor side (-RA & SA-).

EA = Exhaust air
OA = Outdoor air
RA = Room air
SA = Supply air

2. Measured according to JIS B 8628 - 2003

Legend

L1 = Low speed lower limit
L8 = Low speed factory setting
L15 = Low speed upper limit
H1 = High speed lower limit
H8 = High speed factory setting
H15 = High speed upper limit
UH1 = Ultra-high speed lower limit
UH8 = Ultra-high speed factory setting
UH15 = Ultra-high speed upper limit

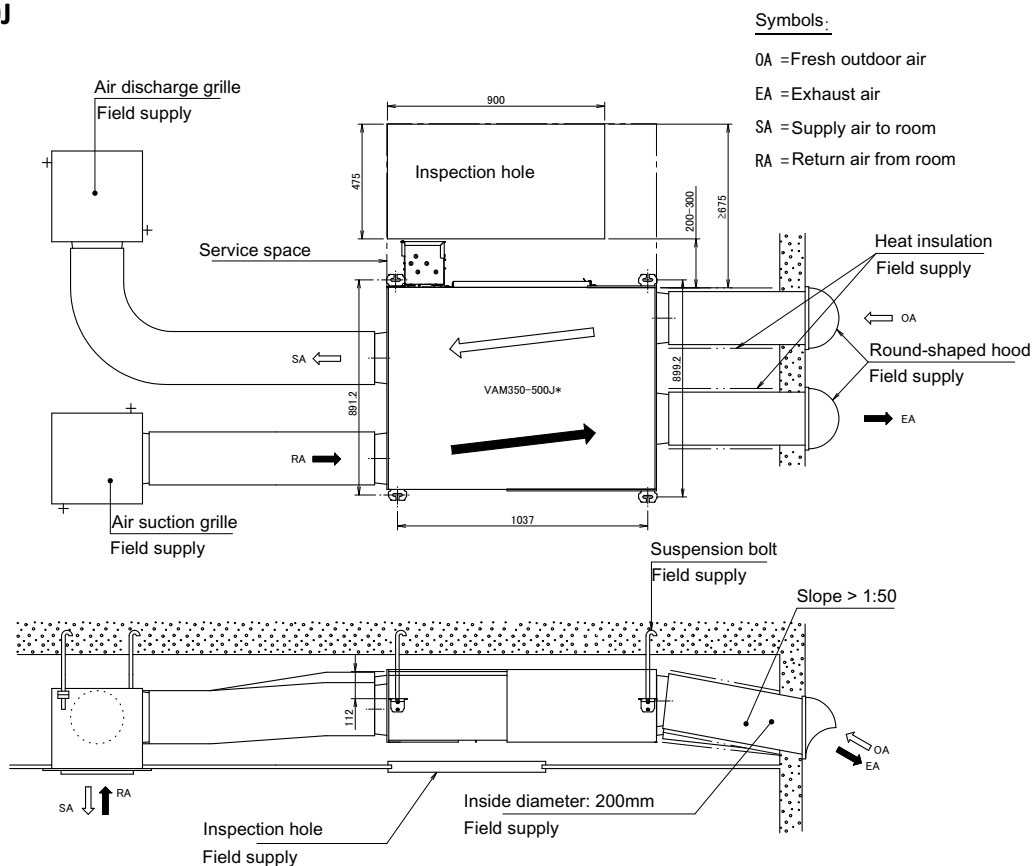
— Ultra-high speed
- - - High speed
- - - Low speed

3D112839

10 Installation

10 - 1 Installation Method

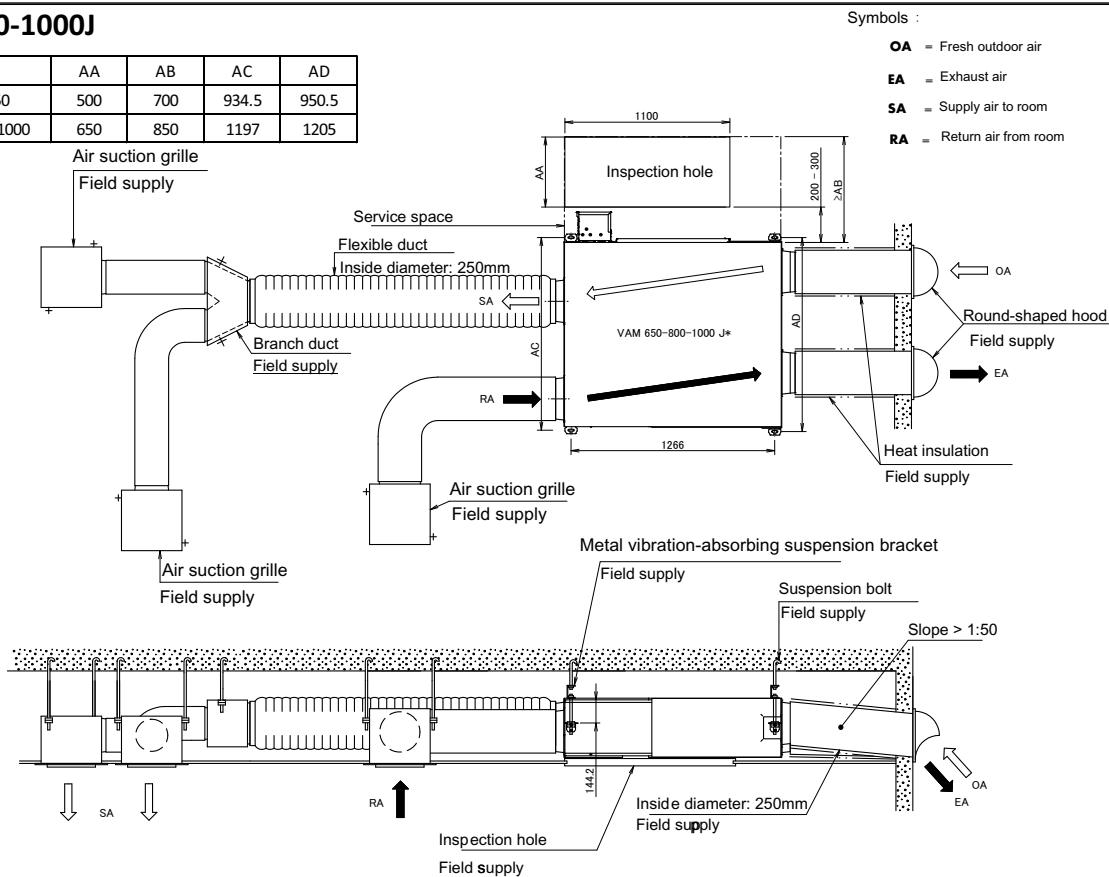
VAM350-500J



3D112823

VAM650-1000J

Model	AA	AB	AC	AD
VAM 650	500	700	934.5	950.5
VAM 800-1000	650	850	1197	1205

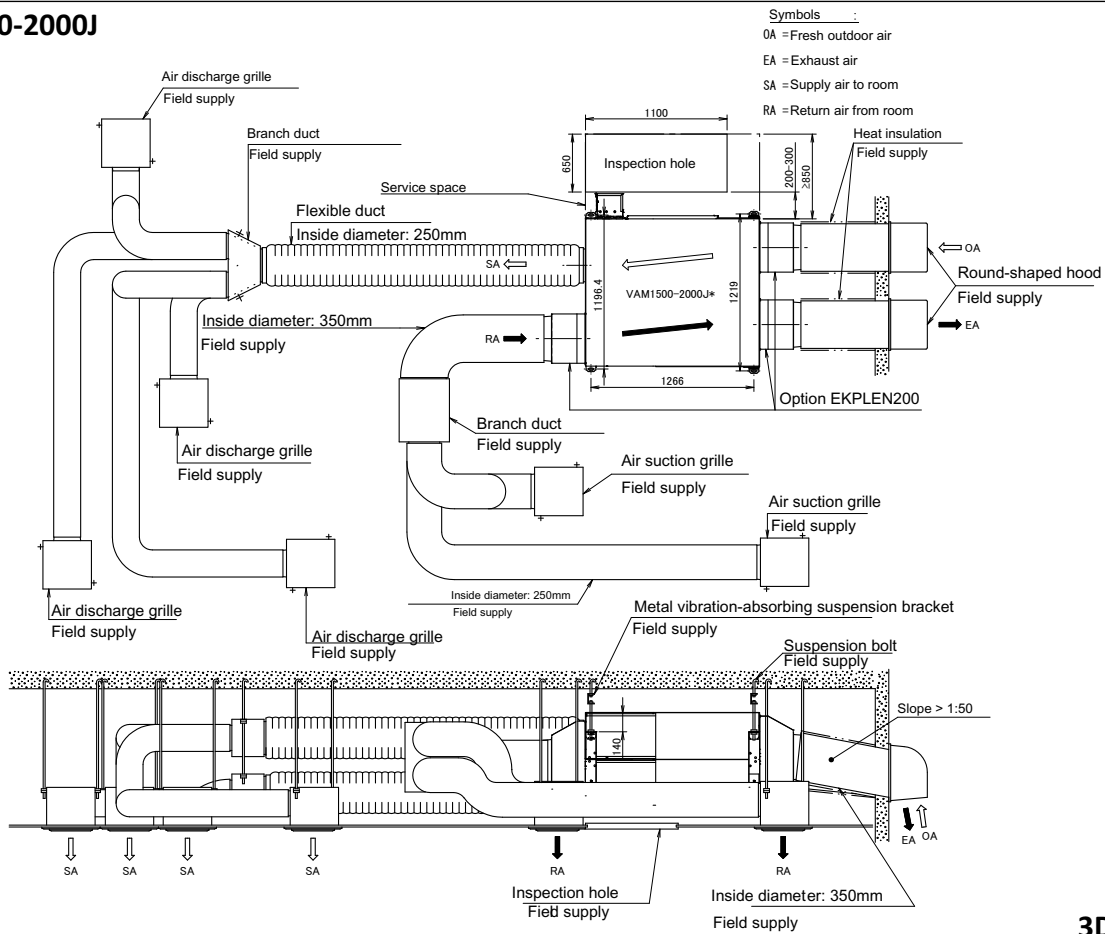


3D112824

10 Installation

10 - 1 Installation Method

VAM1500-2000J



10 Installation

10 - 2 Filter Installation Method

10

VAM350-2000

High efficiency filter / dust filter for VAM350-2000

1 Information for filter selection

1. Choose required airflow
2. Choose the filters
3. Add up all the pressure drops of the duct system on the installation site and the filters
[For filter characteristics, refer to D-drawings]
4. Compare this with the unit performance characteristics to see resulting airflow & ESP

Download the VAM selection software on the Daikin extranet for easy selection

1 - 1 Choose required airflow

Choose the required airflow based upon the application/information

1 - 2 Choose the filters

Depending on the application prefilters and/or dust filters will be needed.

Filter requirements according to EN779: 2012

Table: Recommended dust filter classes per filter section (definition of filter classes according to EN 779)

Outdoor Air Quality	Indoor Air Quality			
	IDA 1 (High)	IDA 2 (Medium)	IDA 3 (Moderate)	IDA 4 (Low)
ODA 1 (pure air)	N/A	ePM ₁ 70% (F8)	ePM ₁ 50% (F7)	ePM ₁₀ 75% (M5)
ODA 2 (dust)	N/A	ePM ₁₀ 70% (M6) + ePM ₁ 70% (F8)	ePM ₁₀ 75% (M5) + ePM ₁ 50% (F7)	ePM ₁₀ 75% (M5) + ePM ₁₀ 70% (M6)
ODA 3 (very high concentrations of dust of gases)	N/A	N/A	ePM ₁₀ 75% (M5) + ePM ₁ 50% (F7)	ePM ₁₀ 75% (M5) + ePM ₁₀ 70% (M6)

*) GF = Gas filter (carbon filter) and/or chemical filter

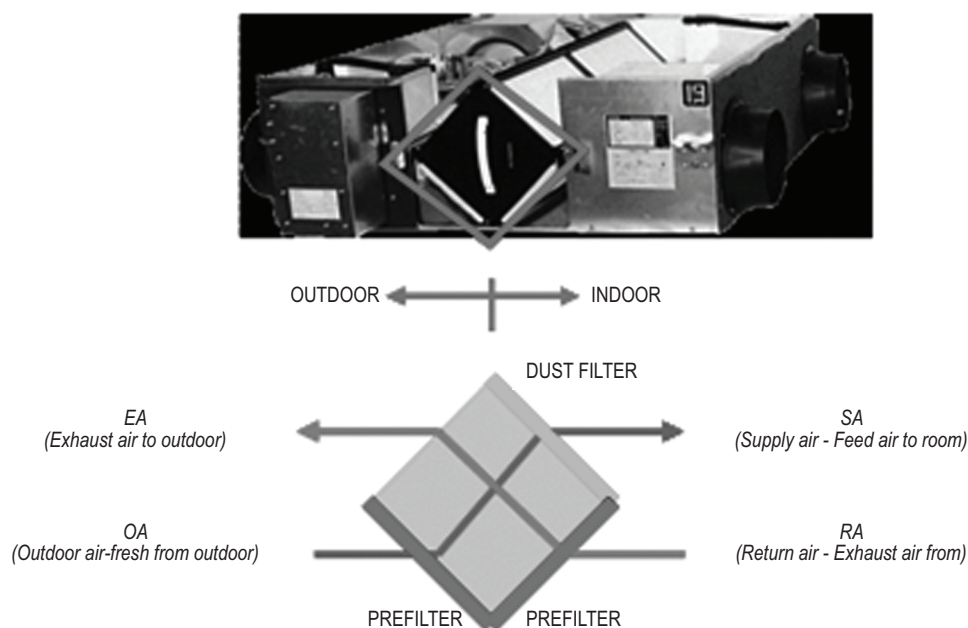
Outdoor air Quality:

- ODA 1 - Pure air
- ODA 2 - High concentration particles air
- ODA 3 - High concentration gas pollution
- ODA 4 - High concentration gas pollution and particles
- ODA 5 - Very high concentration gas pollution and particles

Indoor air Quality:

- IDA 1 - Optimum quality air (hospitals, laboratories, nursery)
- IDA 2 - Good quality air (offices, residences, museum,...)
- IDA 3 - Medium quality air (commercial buildings, cinema, theatre, room hotels, restaurants, bars, gym, computer room)

On the image below it is indicated where the standard prefilters and optional dust filters are installed. If 2 optional dust filters are used, the second one replaces the standard filter.



NOTES

Prefilters are factory mounted, ePM₁₀ 70% (M6), ePL₁ 55% (F7) and ePM₁ 70% (F8) dust filters are options

10 Installation

10 - 2 Filter Installation Method

VAM350-2000

1 - 3 Add up all the pressure drops of the duct system on the installation site and the filters
[For filter characteristics, refer to D-drawings]

unit	airflow (m³/h)	filter pressure drop		
		ePM10 70% (M6)	ePM1 55% (F7)	ePM1 70% (F8)
VAM350	350	39	52	88
VAM500	500	65	87	148
VAM650	650	61	83	140
VAM800	800	89	121	206
VAM1000	1000	80	109	185
VAM1500	1500	79	106	181
VAM2000	2000	80	109	185

NOTES

1. Table shows values at nominal level, refer to drawings for detailed information
2. Filters according to EN779:2012
3. For more information refer to VAM installation, operation manual or filter manual

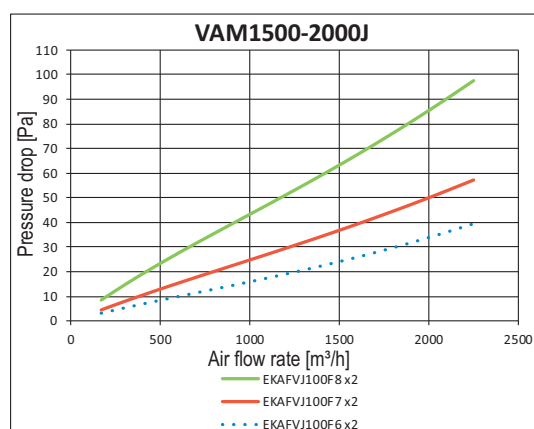
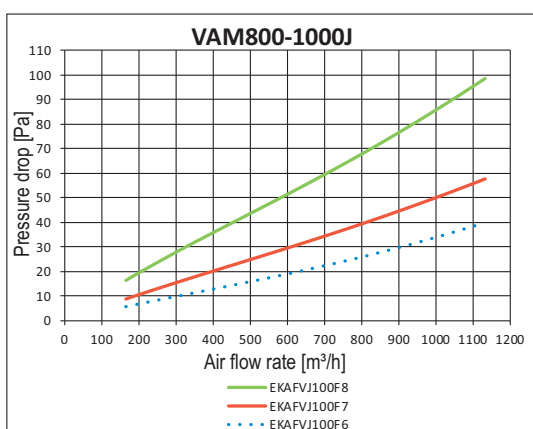
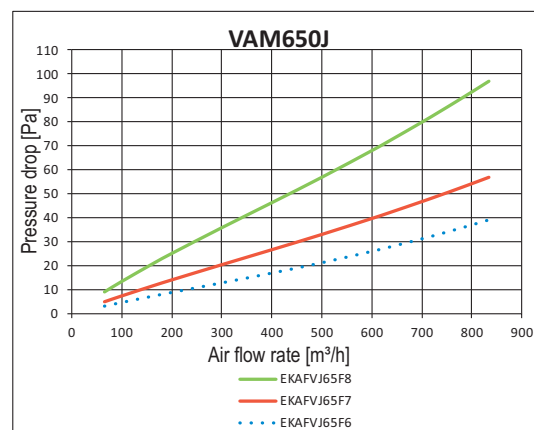
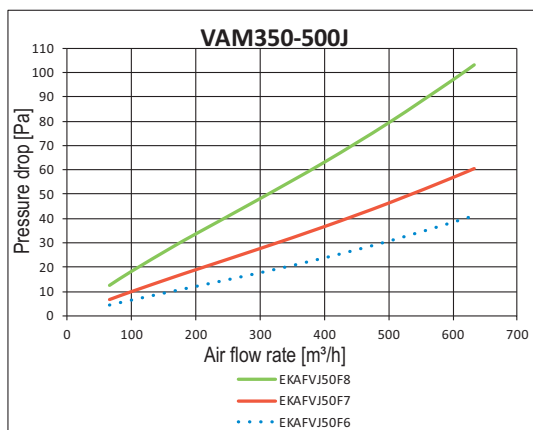
To adjust static pressure after filter placement:

Setting mode	Setting switch No.	Description of setting
19 (29)	2	SA fan speed setting
	3	EA fan speed setting

11 Air filter characteristics

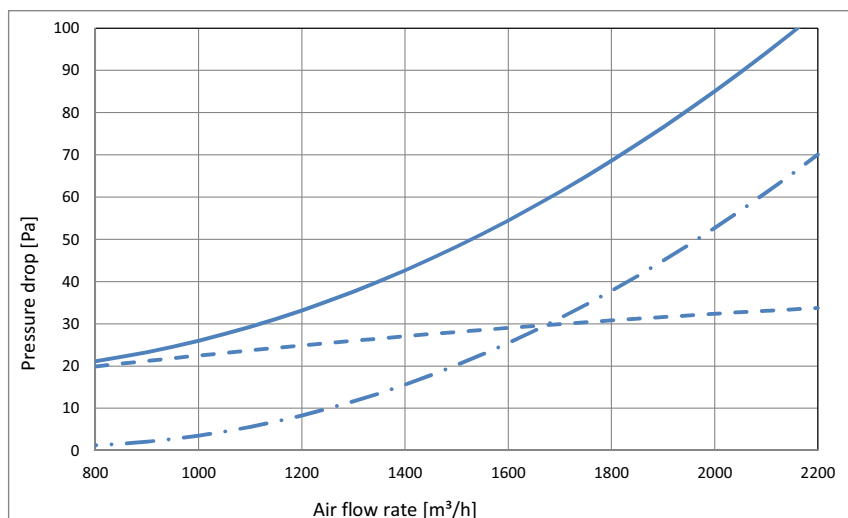
11 - 1 Air filter characteristics

VAM-J



3D112840

VAM-J



- Option kit EKPLEN200 installed on OA and SA, or RA and EA side.
- - - Option kit EKPLEN200 installed on OA or RA side.
- . - . Option kit EKPLEN200 installed on SA or EA side.

EA = Exhaust air
OA = Outdoor air
RA = Room air
SA = Supply air

Measured according to JIS B 8628 - 2003

3D113505



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