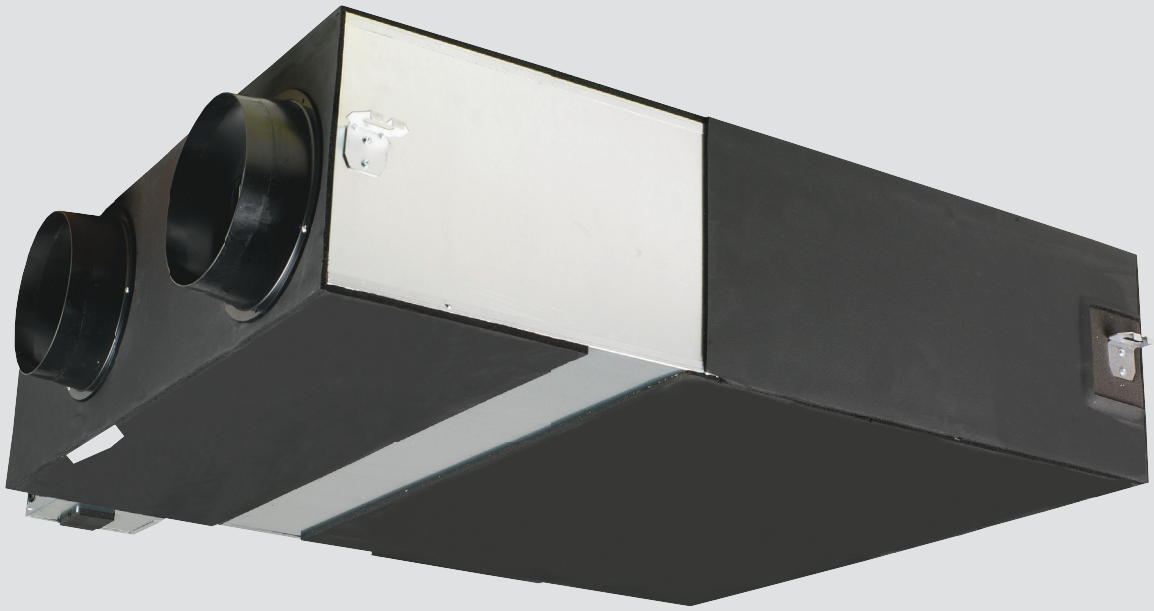
DAIKIN

Ventilation
Technical Data

VAM-J



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

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VAM-J

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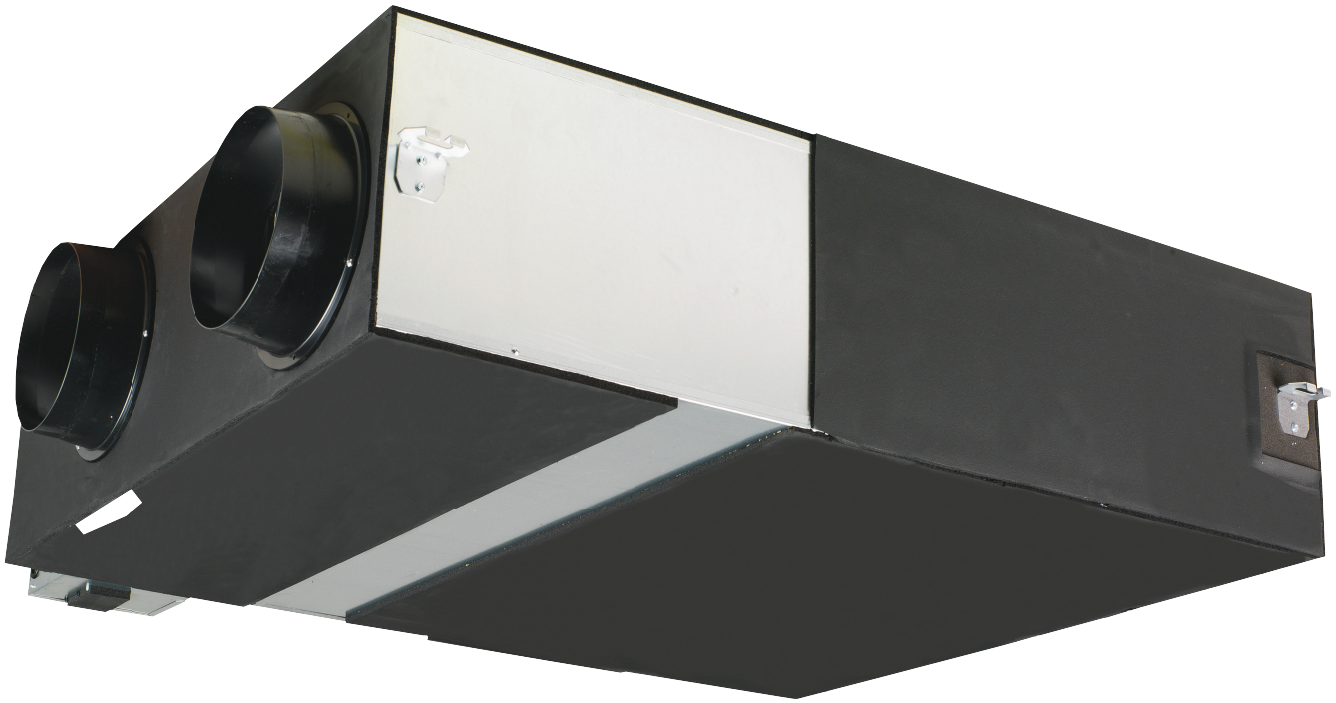
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1 Features

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	\<8					
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)		A	1.56	2.08	2.80	4.39	4.90	8.78	9.80
	Maximum fuse amps (MFA)		A	16.0						
	Fan motor rated output		kW	0.08x2		0.106x2	0.210x2		0.210x4	
	Full load amps (FLA)	Fan motor	A	0.620	0.830	1.12	1.76	1.96	1.76	1.96
		Fan motor 2	A	0.620	0.830	1.12	1.76	1.96	1.76	1.96
		Fan motor 3	A	-					1.76	1.96
		Fan motor 4	A	-					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 BRC1E53A7 / BRC1E53B7 / BRC1E53C7 */ BRC1H51~ / BRC1H81~						
	Centralised control systems		Central remote control	DCS302C51						
			Unified ON/OFF controller	DCS301B51						
			Schedule timer	DST301B51						
			iTouch Manager	DCM601A51						
			iTouch Controller	DCS601C51						
			iTab Controller	DCC601A51						
			Modbus DIII adaptor	EKMBDXA7V1						
	Adaptor PCB		Wiring adaptor for electrical appendices	KRP2A51 + Installation box KRP1BA101						
			For heaters	BRP4A50A						
			Mounting plate	----		EKMP65VAM***	----		EKMPVAM **	
Miscellaneous	Plenum chamber		Model	---					EKPLEN200**** Ø350	
			Outside diameter [mm]							
	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				BRYMA65			BRYMA100		BRYMA200	

Notes

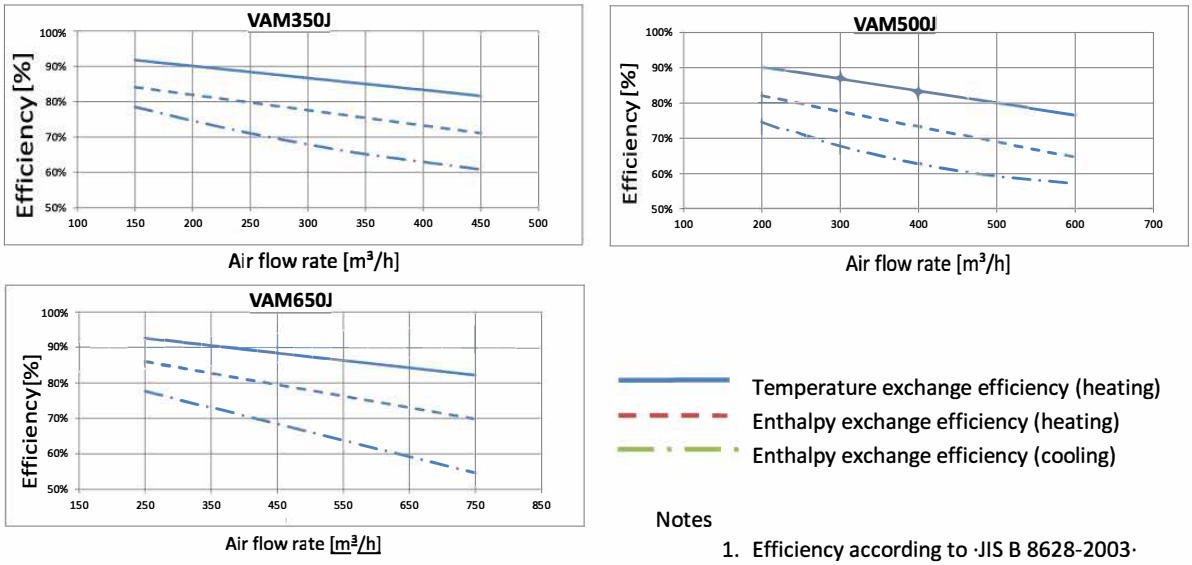
1. * BRC1E53A7 Included languages are: English, German, French, Italian, Spanish, Portuguese, and Dutch.
2. * BRC1E53B7 Included languages are: English, Czech, Croatian, Hungarian, Slovenian, Romanian, and Bulgarian.
3. * BRC1E53C7 Included languages are: English, Russian, Greek, Turkish, Polish, Albanian, and Slovak.
4. ** To install an adaptor PCB on VAM1500J/VAM2000J units, mounting plate EKMPVAM is required.
5. *** To install an adaptor PCB on VAM650J units, mounting plate EKMP65VAM is required.
6. **** 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

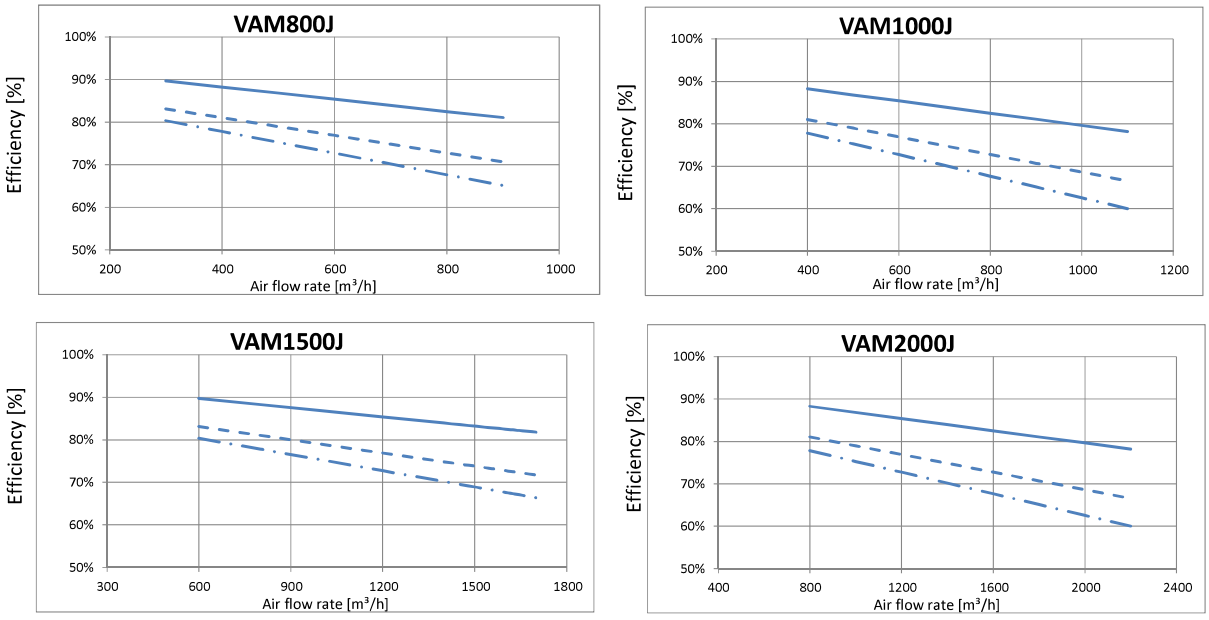


Notes

1. Efficiency according to ·JIS B 8628-2003·

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VAM800-2000J



Notes

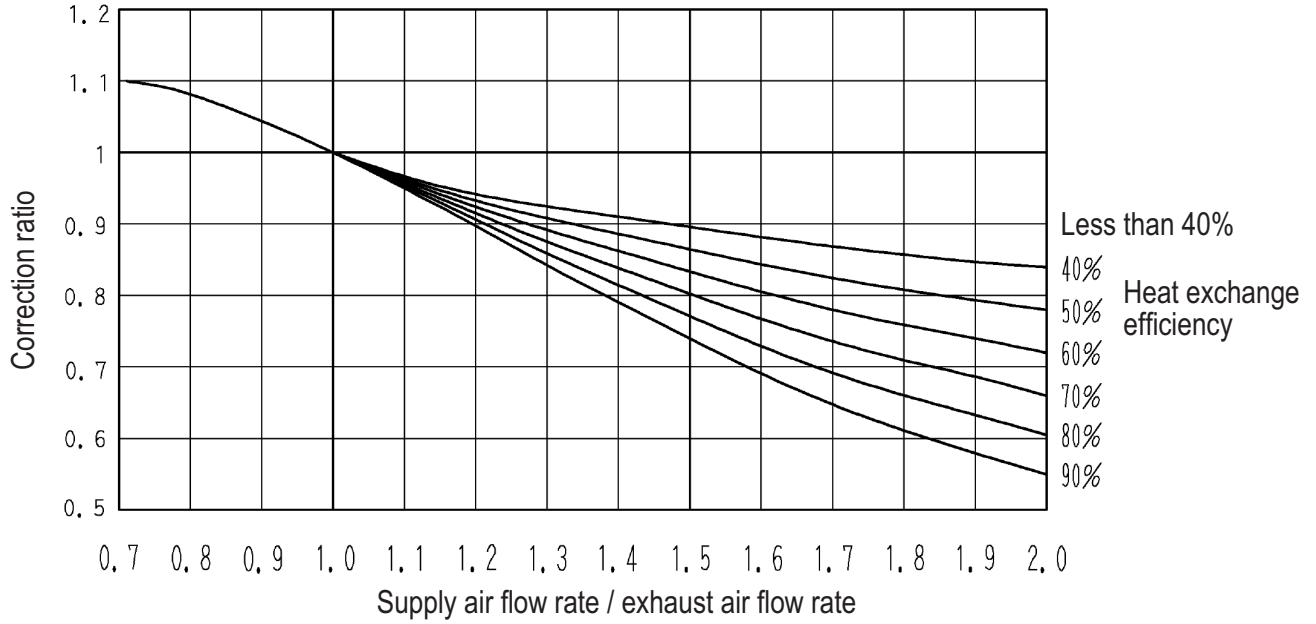
1. Efficiency according to ·JIS B 8628-2003·

3D112834

4 Exchange efficiency

4 - 1 Exchange efficiency

VAM800-2000J

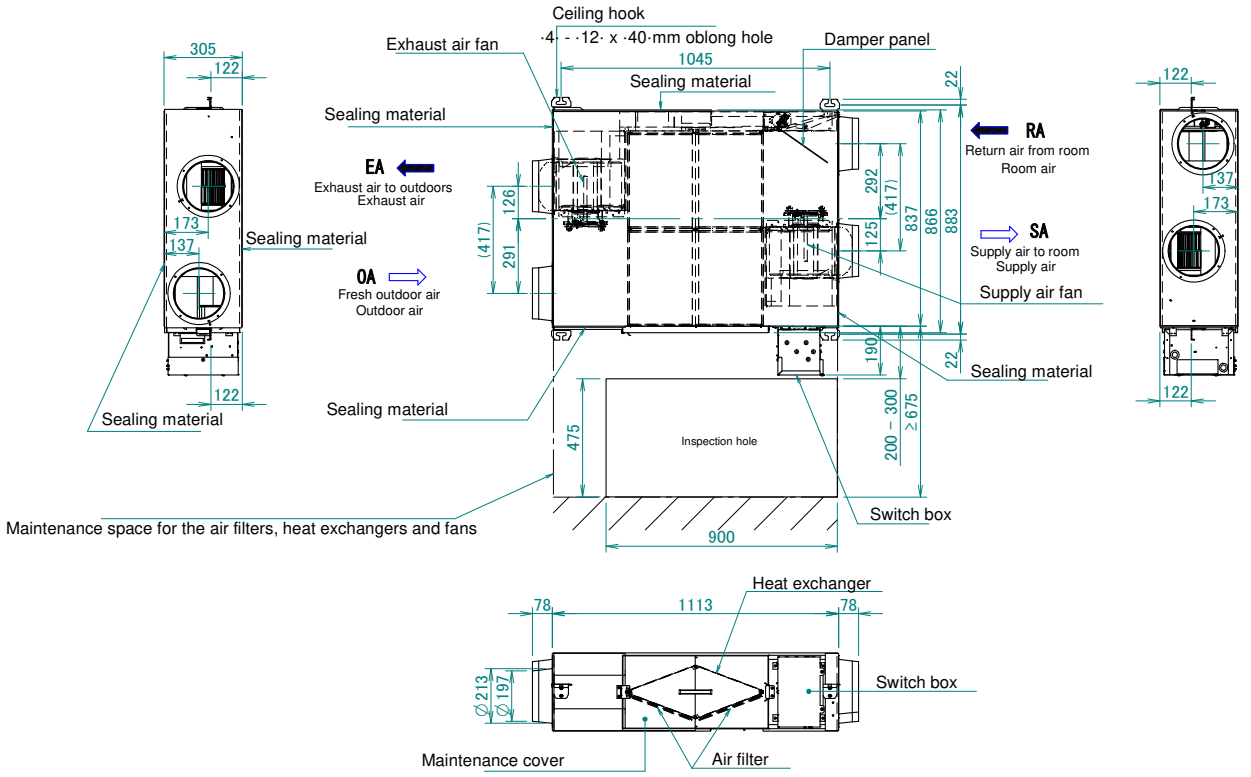


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5 Dimensional drawings

5 - 1 Dimensional Drawings

VAM350-500J

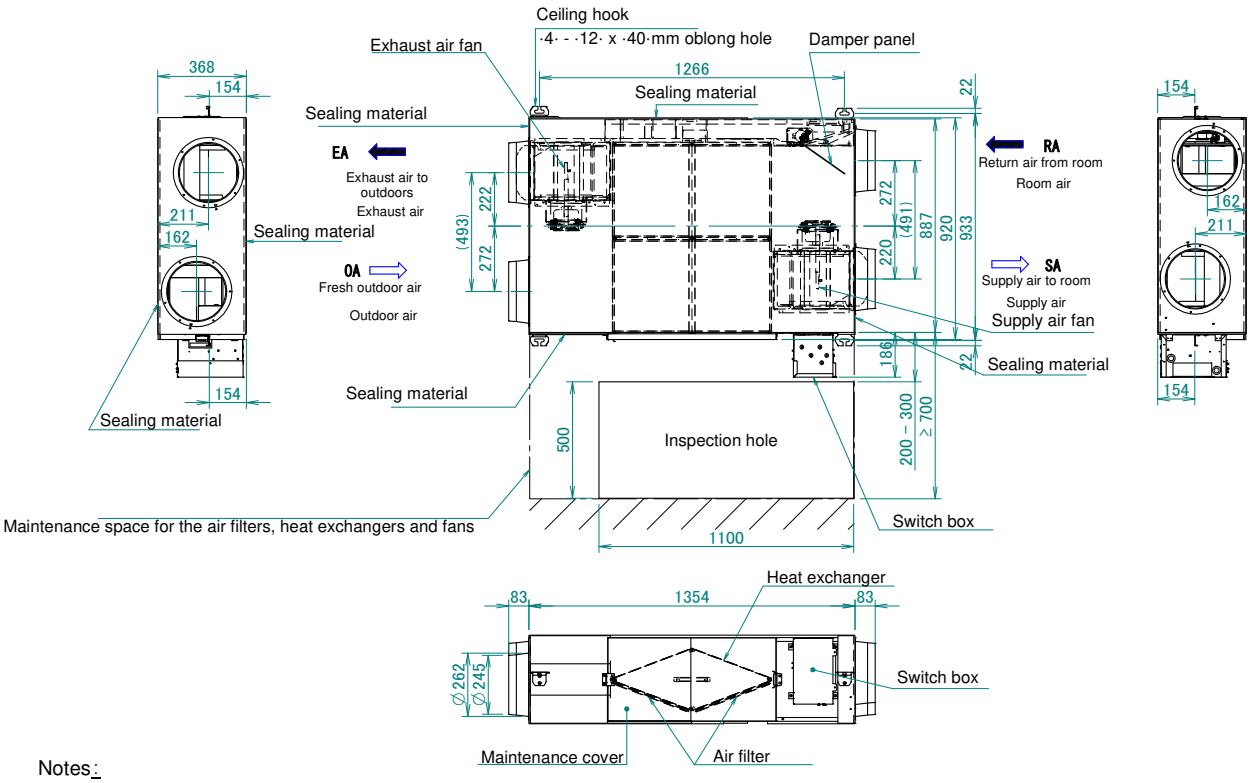


Notes :

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

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VAM650J



Notes:

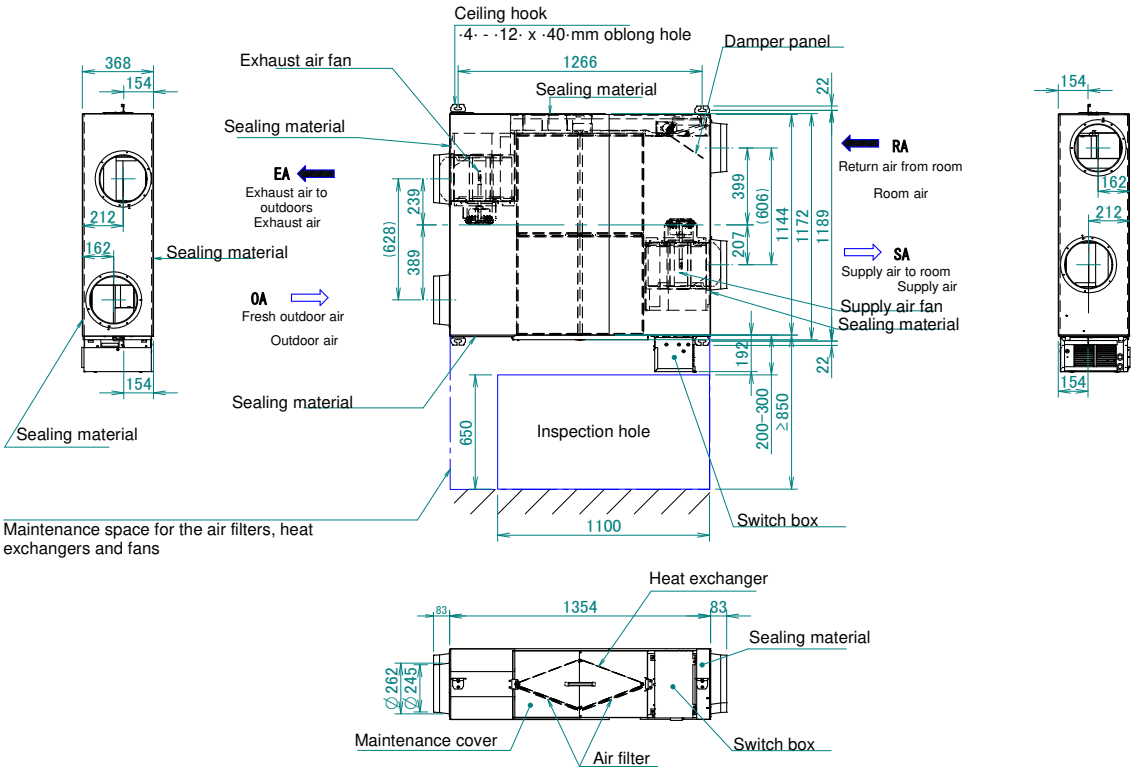
1. To allow for the inspection of the air filters, heat exchangers, and fans, be sure to provide the inspection hole.

3D112816C

5 Dimensional drawings

5 - 1 Dimensional Drawings

VAM800-1000J

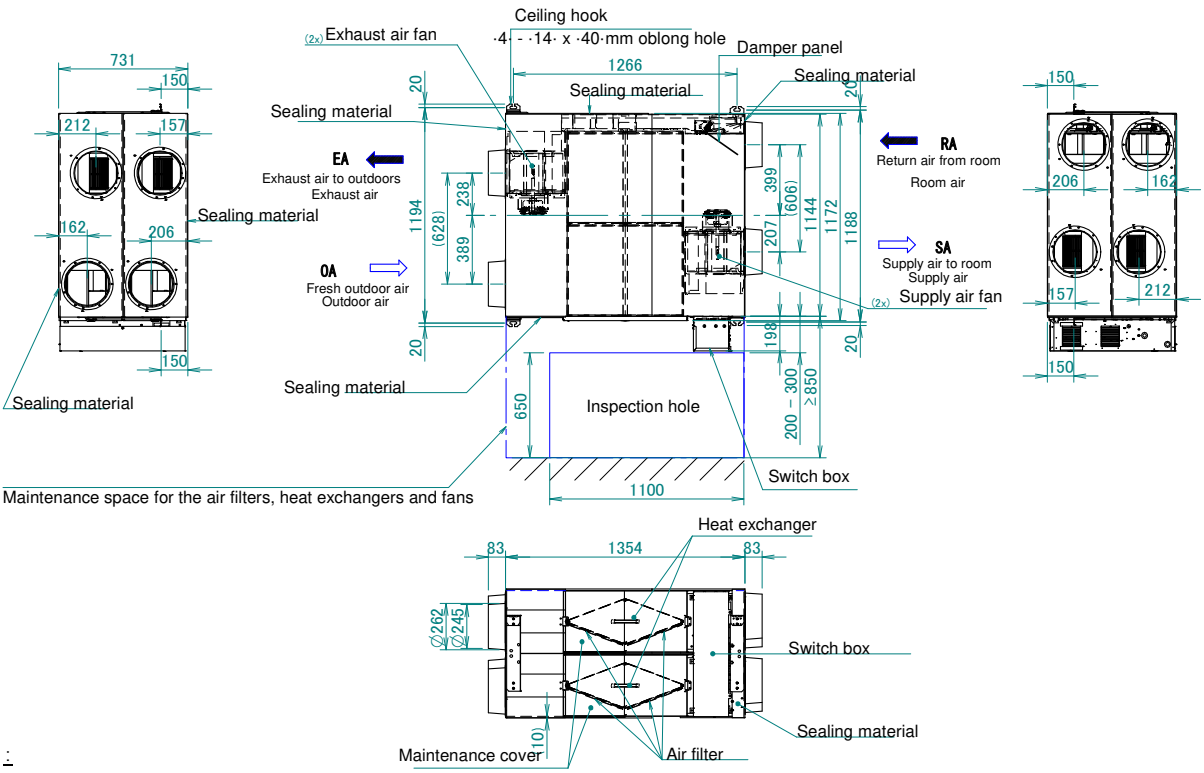


Notes :

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

3D112817D

VAM1500-2000J



Notes :

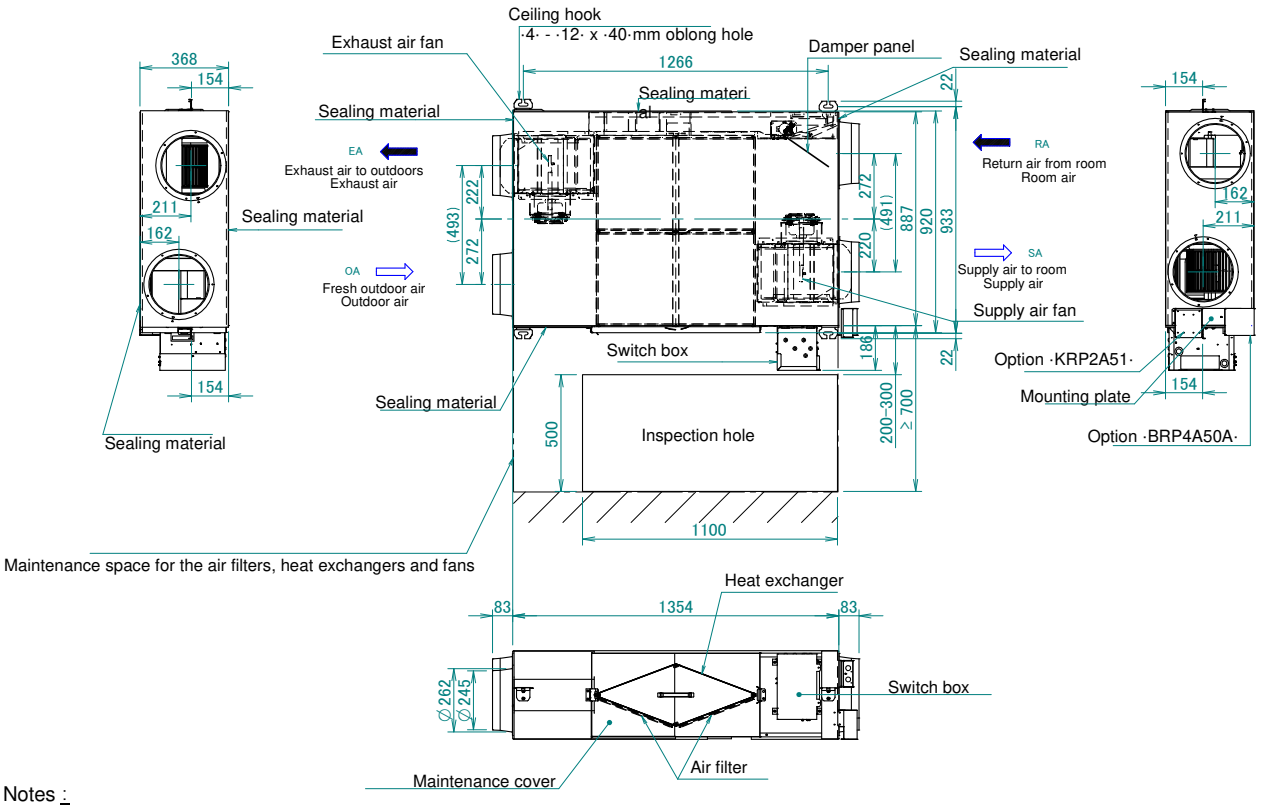
1. To perform maintenance on the air filter, it is required to provide a service access panel.

3D112828C

5 Dimensional drawings

5 - 2 Dimensional Drawings with Accessories

VAM650J

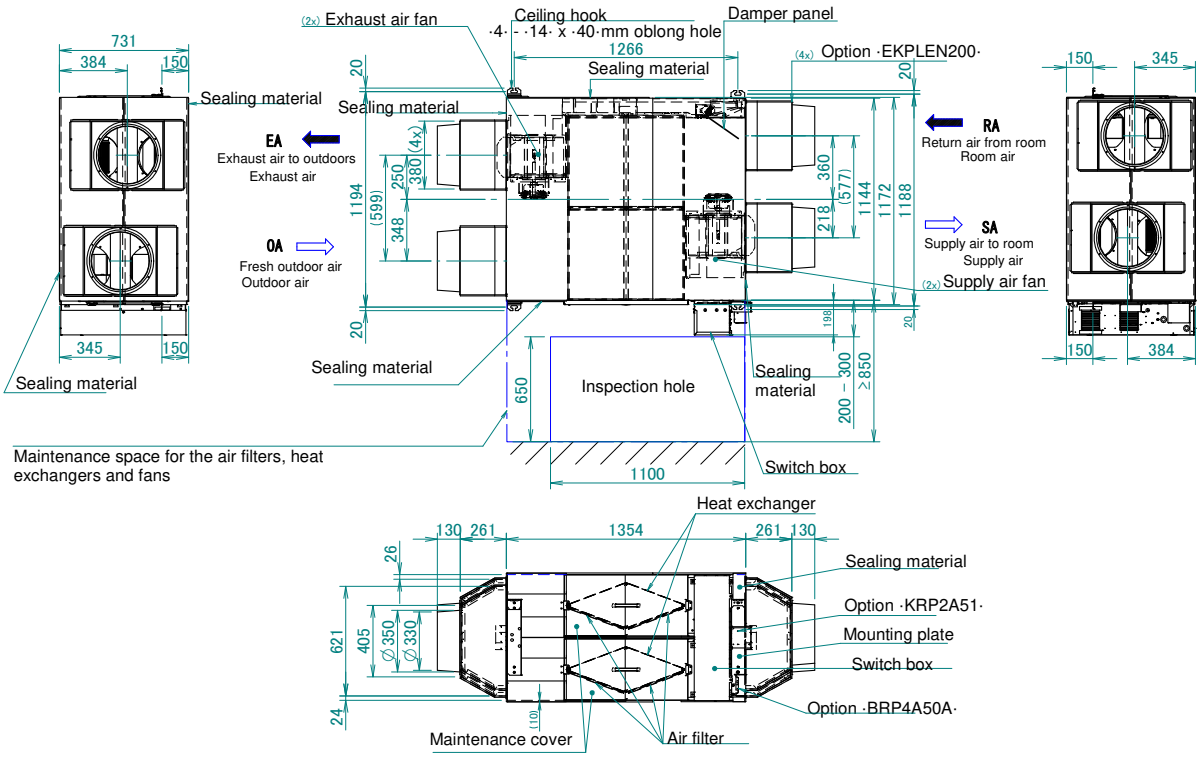


Notes :

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

3D113502A

VAM1500-2000J



Notes :

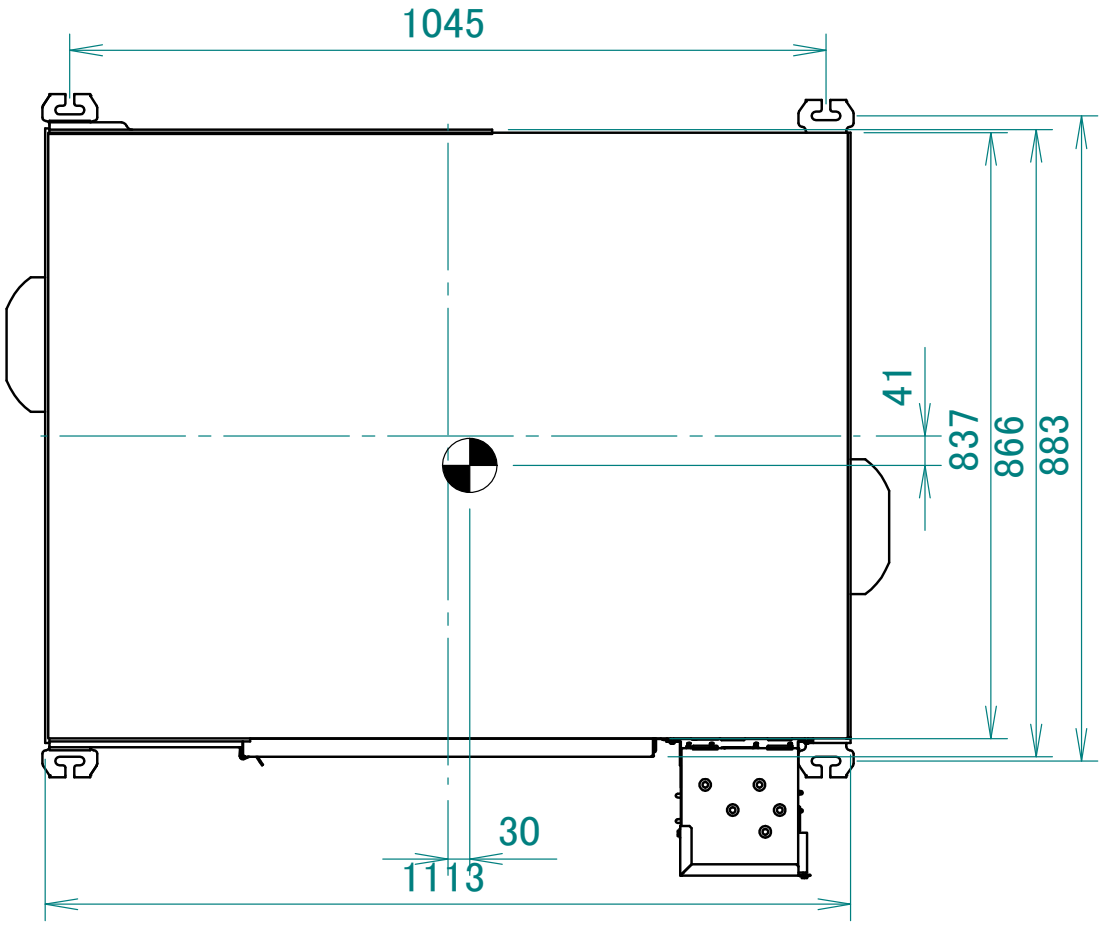
1. To allow for the inspection of the air filters, heat exchangers, and fans, be sure to provide the inspection hole.

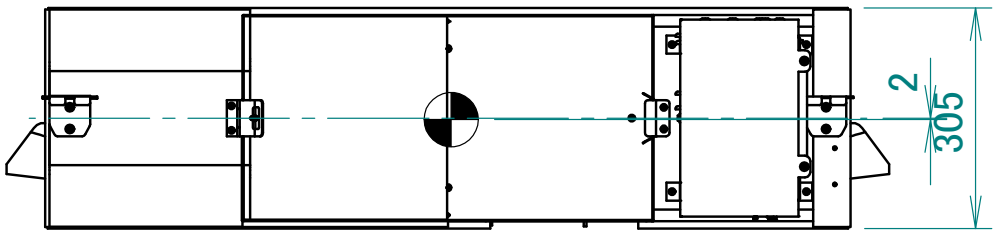
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6 Centre of gravity

6 - 1 Centre of Gravity

VAM350-500J



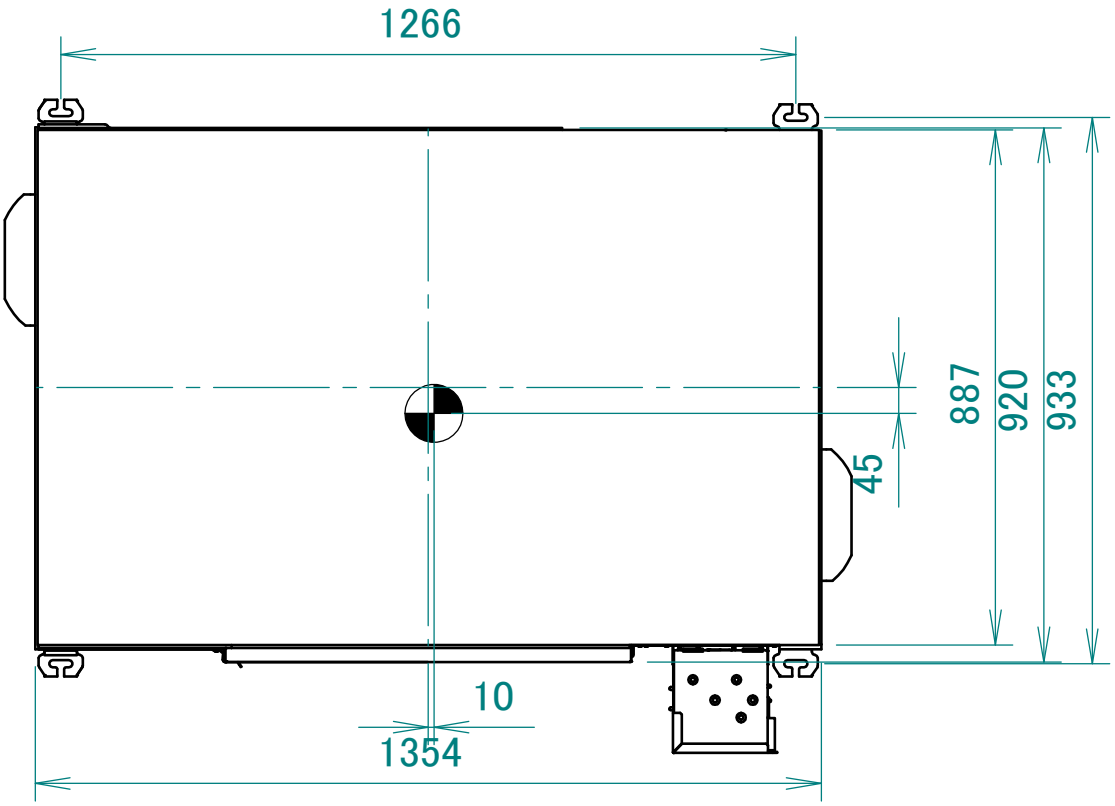


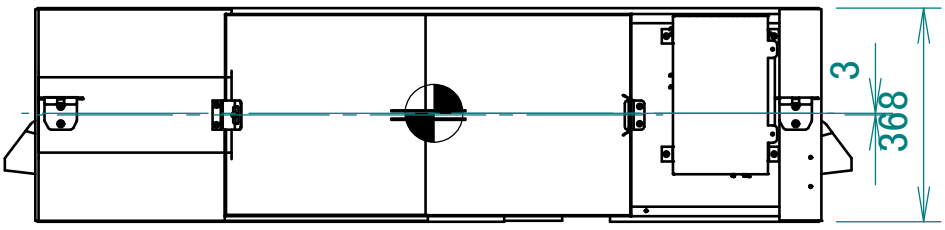
4D112821A

6 Centre of gravity

6 - 1 Centre of Gravity

VAM650J



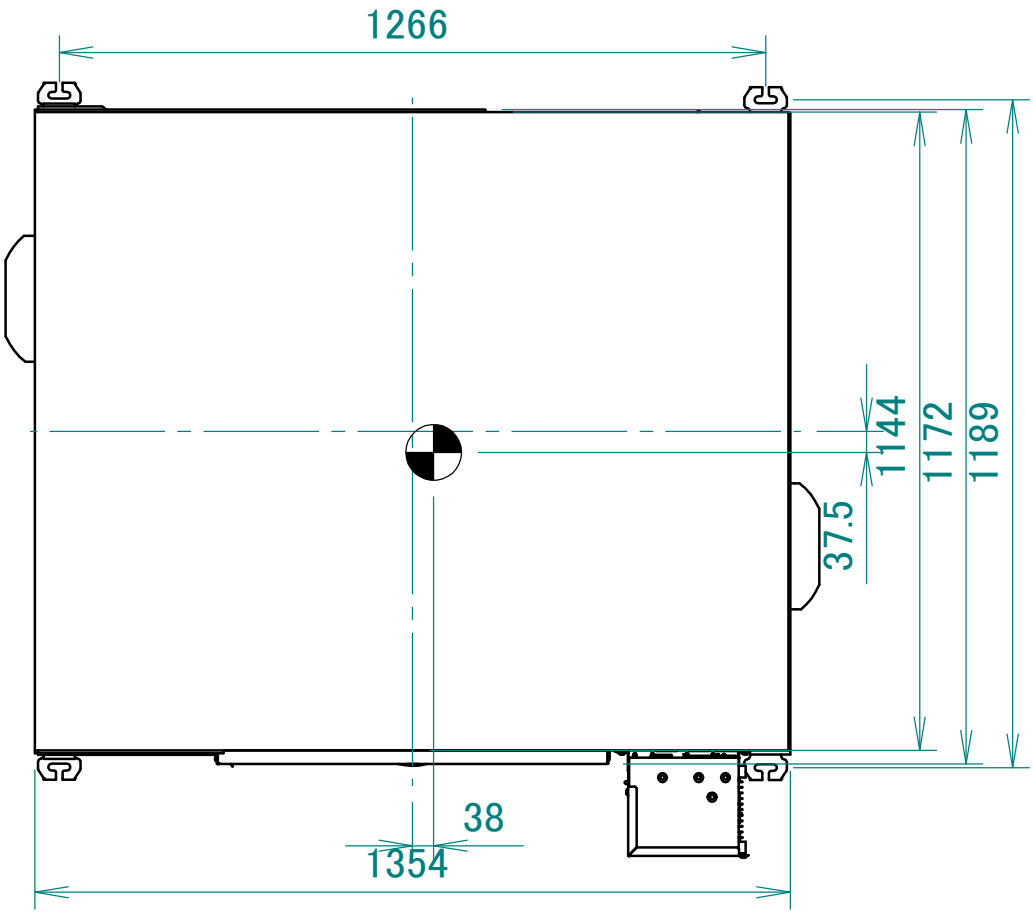


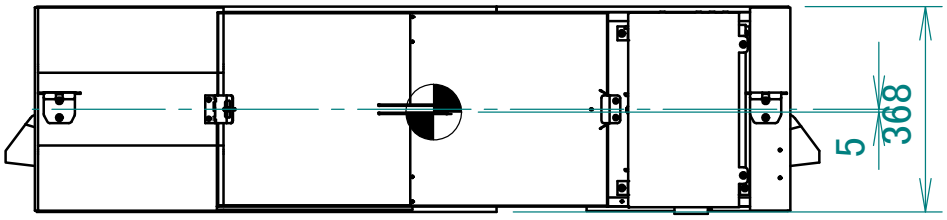
4D113503A

6 Centre of gravity

6 - 1 Centre of Gravity

VAM800-1000J



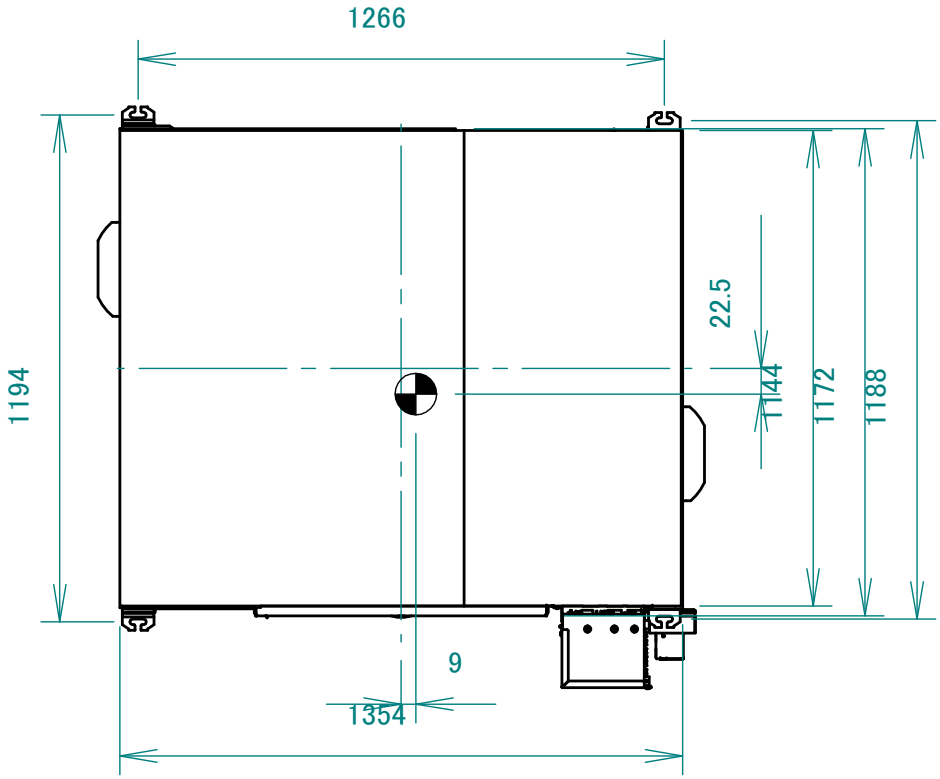


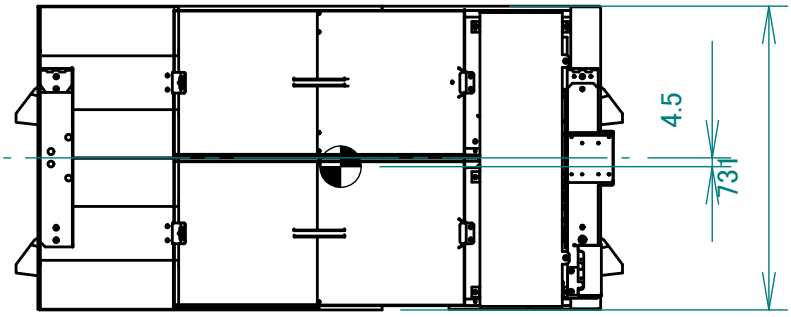
4D112820B

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

1. Symbols:

: Earth wiring

15 : Wire number 15

: Field wire

: Field cable

→ **/12.2 : Connection ** continues on page 12 column 2

(1) : Several wiring possibilities

: Option

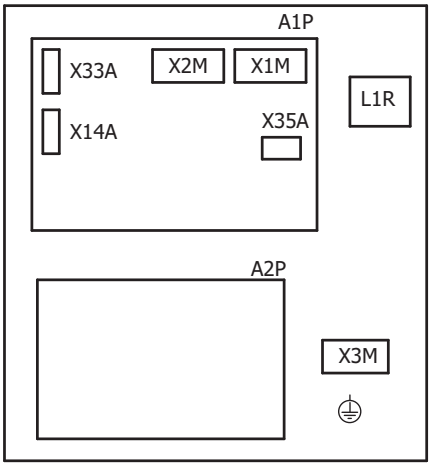
: Wiring depending on model

: Not mounted in switch box

: PCB

2. In case you use the central remote control, connect it to the unit in accordance with the attached manual.
3. 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)
4. For details of connection see the attached manual of the option kit.
5. 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
A1P		main PCB
A2P		fan PCB
C* (A*P)		capacitor
F1U (A1P)		fuse T 6.3 A 250 V
F2U (A2P)		fuse T 5 A 250 V
F4U (A2P)		fuse T 6.3 A 250 V
HAP (A*P)		running LED (service monitor-green)
K*R (A*P)		magnetic relay
L1R		reactor
M1D		motor (damper)
M1F		supply air fan
M2F		exhaust air fan
PS (A*P)		switching power supply
Q1DI	#	earth leakage circuit breaker (max. 300mA)
R* (A2P)		resistance
R1T		thermistor indoor air

Part n°		Description
R2T		thermistor outdoor air
R3T (A1P)		thermistor PTC
S1C		limit switch damper motor
V1R (A*P)		diode module
X1M (A1P)		terminal
X2M (A1P)		terminal (outside input)
X3M		main terminal (power supply)
Z1F (A*P)		noise filter
Z*C		ferrit core
REMOTE CONTROL		
SS1		selector switch
CONNECTORS FOR OPTION (see note 4)		
X14A		connector (CO_2 sensor)
X24A		connector (outside damper)
X33A		connector (contact PCB)
X35A		connector (appendices PCB)

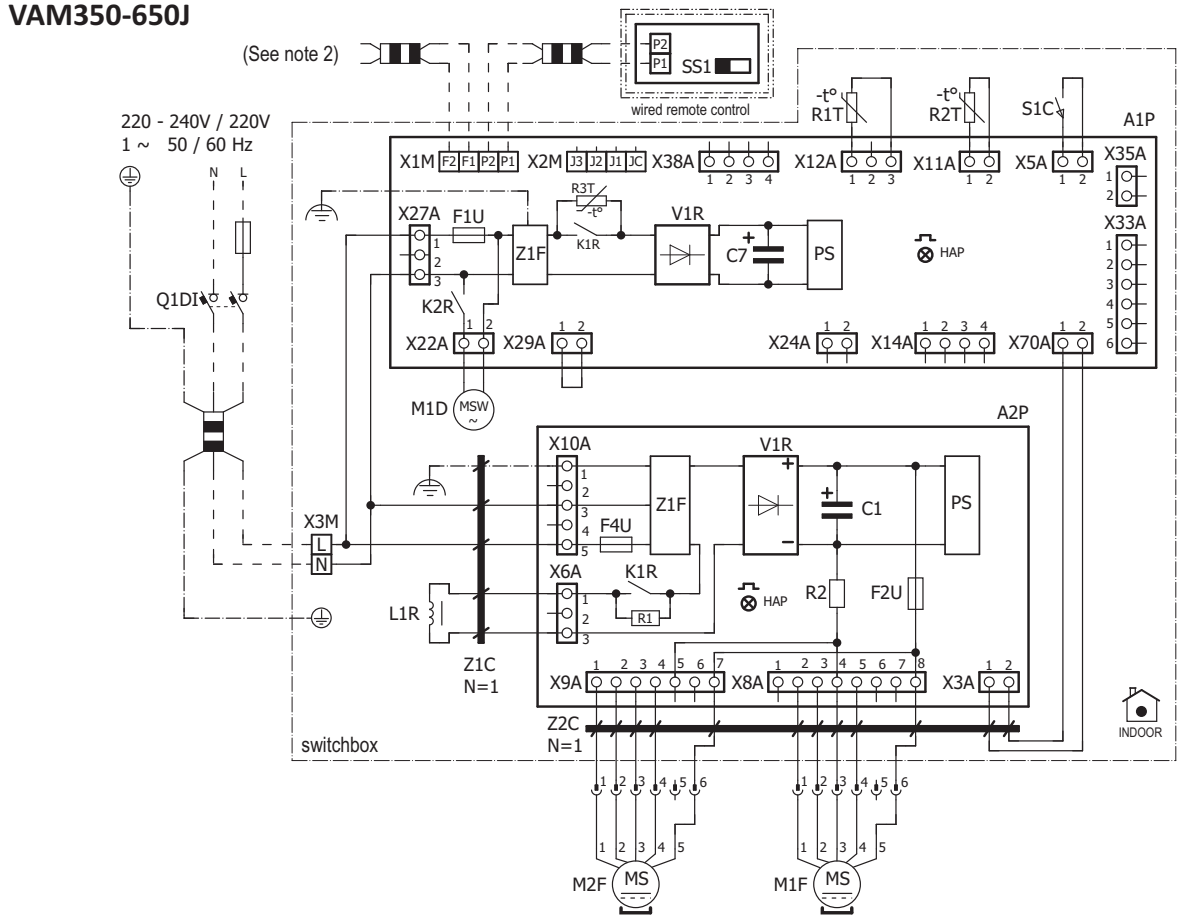
* : optional
\# : field supply

4D112850

7 Wiring diagrams

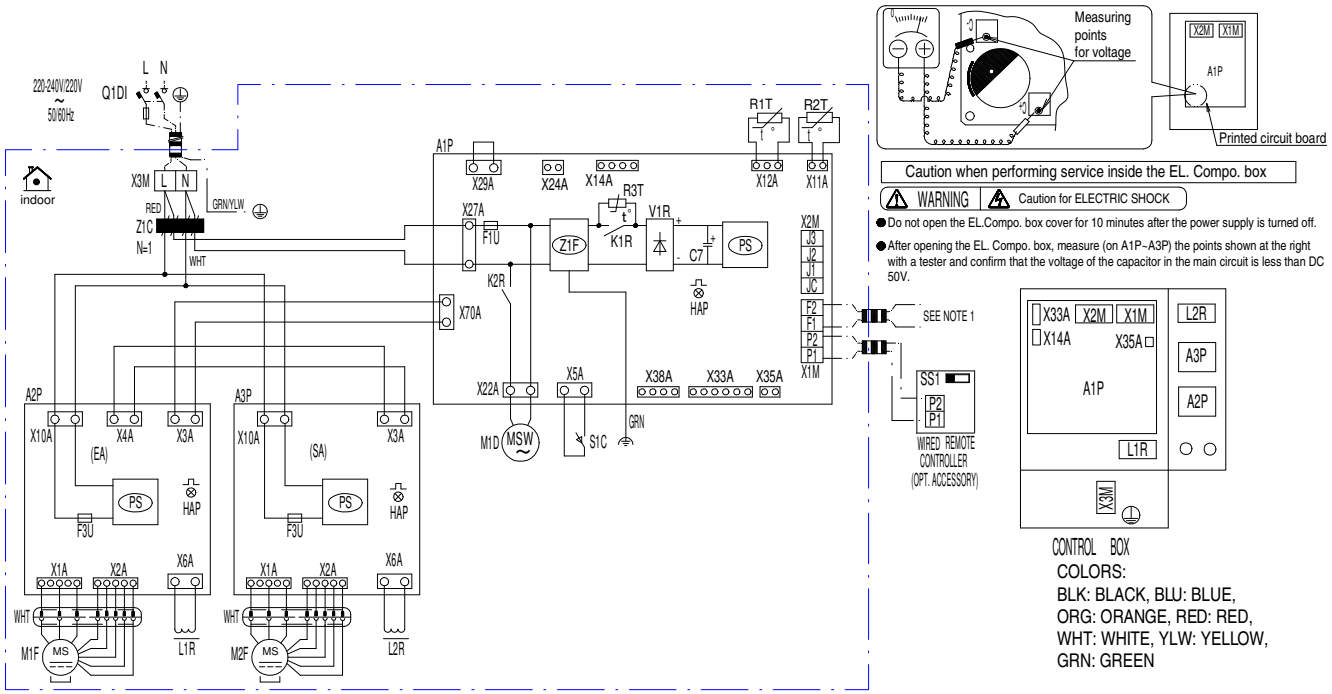
7 - 1 Wiring Diagrams - Single Phase

VAM350-650J



4D112850

VAM800-1000J



A1P	PRINTED CIRCUIT BOARD	M1D	MOTOR (DAMPER)	Z1C	NOISE FILTER (FERRIT CORE)
A2P	PRINTED CIRCUIT BOARD ASSY (FAN)	PS	SWITCHING POWER SUPPLY		REMOTE CONTROLLER
A3P	PRINTED CIRCUIT BOARD ASSY (FAN)	Q1DI	FIELD EARTH LEAK DETECTOR (MAX. 300mA)	SS1	SELECTOR SWITCH
C7	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)
K1R	MAGNETIC RELAY	S1C	LIMIT SWITCH DAMPER MOTOR	X35A	CONNECTOR (APPENDICES PCB)
K2R	MAGNETIC RELAY	X1M	TERMINAL (A1P)		
L1R	REACTOR	X2M	TERMINAL (OUTSIDE INPUT) (A1P)		
L2R	REACTOR	X3M	TERMINAL (POWER SUPPLY)		
M1F	MOTOR (EXHAUST AIR FAN)	V1R	DIODE BRIDGE		
M2F	MOTOR (SUPPLY AIR FAN)	Z1F	NOISE FILTER		

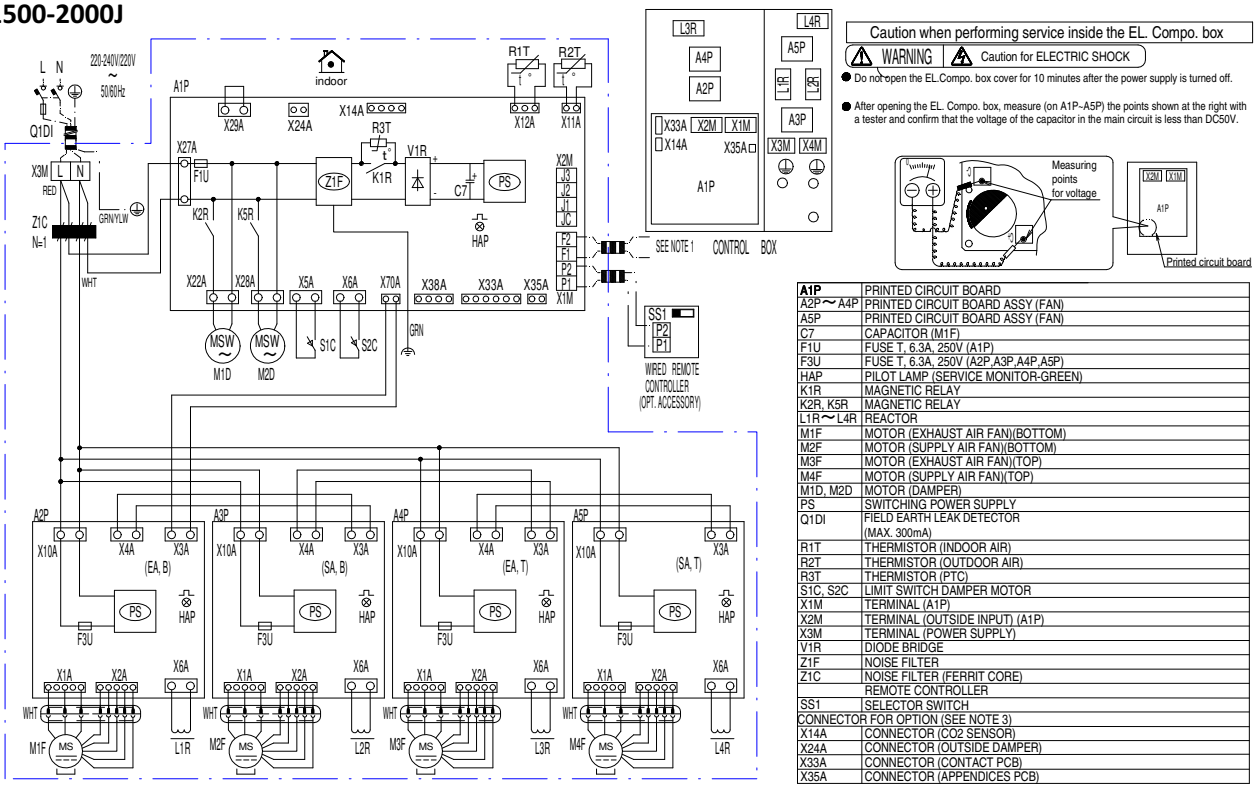
NOTES:
1. IN CASE YOU USE THE CENTRAL REMOTE CONTROLLER, CONNECT IT TO THE UNIT IN ACCORDANCE WITH THE ATTACHED MANUAL.
2. WHEN CONNECTING THE INPUT WIRES FROM OUTSIDE, FRESH-UP OR ON/OFF CONTROL OPERATION CAN BE SELECTED. (CONTACT WITH A MINIMUM APPLICABLE LOAD OF 12V DC, 1mA)
3. FOR DETAILS OF CONNECTION SEE THE ATTACHED MANUAL OF THE OPTION KIT.
4. SS1(A1P) 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 ⊂⊃ :CONNECTOR ⊷ :CONNECTION ⊸ :RELAY CONNECTOR ⏚ :PROTECTIVE EARTH (SCREW) ⏚ :NOISELESS EARTH

2D112819D

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

VAM1500-2000J



A1P	PRINTED CIRCUIT BOARD
A2P～A4P	PRINTED CIRCUIT BOARD ASSY (FAN)
A5P	PRINTED CIRCUIT BOARD ASSY (FAN)
C7	CAPACITOR (M1F)
F1U	FUSE T, 6.3A, 250V (A1P)
F3U	FUSE T, 6.3A, 250V (A2P,A3P,A4P,A5P)
HAP	PILOT LAMP (SERVICE MONITOR-GREEN)
K1R	MAGNETIC RELAY
K2R, K5R	MAGNETIC RELAY
L1R～L4R	REACTOR
M1F	MOTOR (EXHAUST AIR FAN)(BOTTOM)
M2F	MOTOR (SUPPLY AIR FAN)(BOTTOM)
M3F	MOTOR (EXHAUST AIR FAN)(TOP)
M4F	MOTOR (SUPPLY AIR FAN)(TOP)
M1D, M2D	MOTOR (DAMPER)
PS	SWITCHING POWER SUPPLY
Q1DI	FIELD EARTH LEAK DETECTOR (MAX. 300mA)
R1T	THERMISTOR (INDOOR AIR)
R2T	THERMISTOR (OUTDOOR AIR)
R3T	THERMISTOR (PTC)
S1C, S2C	LIMIT SWITCH DAMPER MOTOR
X1M	TERMINAL (A1P)
X2M	TERMINAL (OUTSIDE INPUT) (A1P)
X3M	TERMINAL (POWER SUPPLY)
V1R	DIODE BRIDGE
Z1F	NOISE FILTER
Z1C	NOISE FILTER (FERRIT CORE)
	REMOTE CONTROLLER
SS1	SELECTOR SWITCH
CONNECTOR FOR OPTION (SEE NOTE 3)	
X14A	CONNECTOR (CO2 SENSOR)
X24A	CONNECTOR (OUTSIDE DAMPER)
X33A	CONNECTOR (CONTACT PCB)
X35A	CONNECTOR (APPENDICES PCB)

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-UP 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(A1P) 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 ⊡ : CONNECTOR ● :CONNECTION ⊸ :RELAY CONNECTOR ⏚:PROTECTIVE EARTH (SCREW) ⏚:NOISELESS EARTH

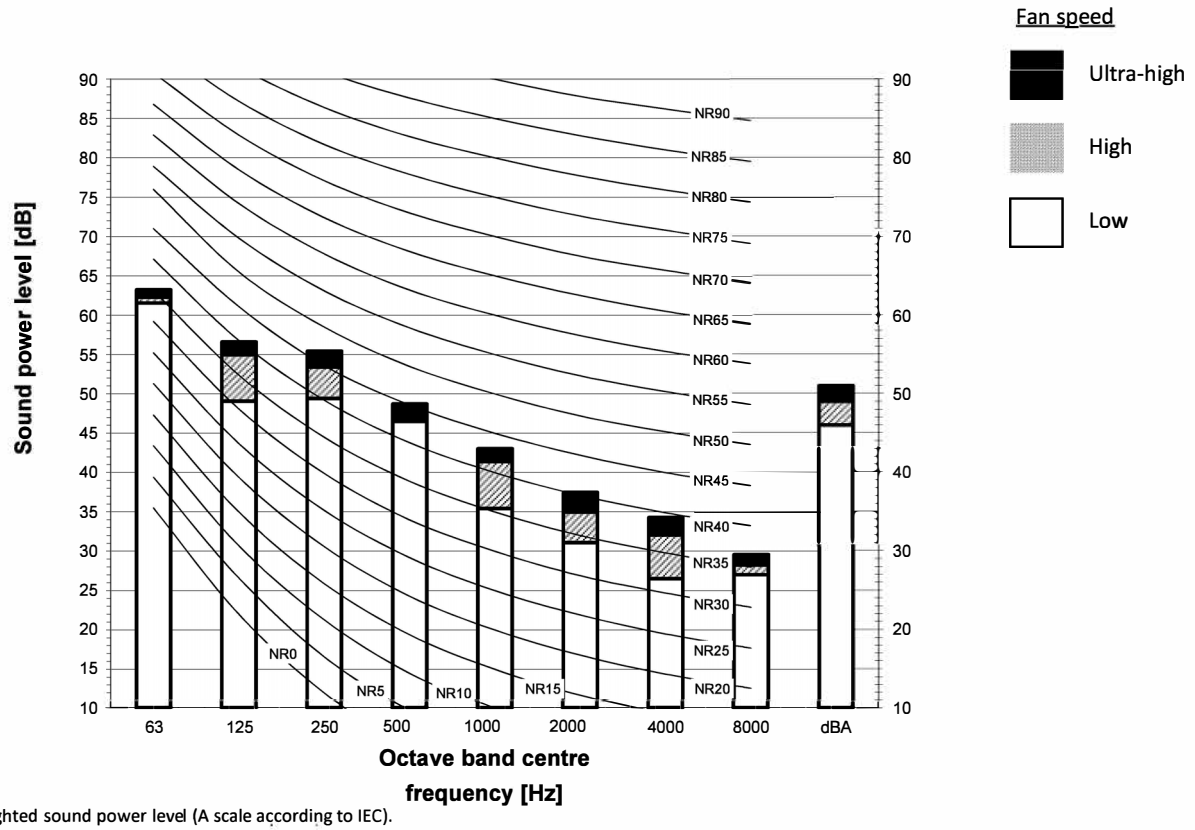
COLORS:
BLK: BLACK, BLU: BLUE,
ORG: ORANGE, RED: RED,
WHT: WHITE, YLW: YELLOW,
GRN: GREEN

2D112506C

8 Sound data

8 - 1 Sound Power Spectrum

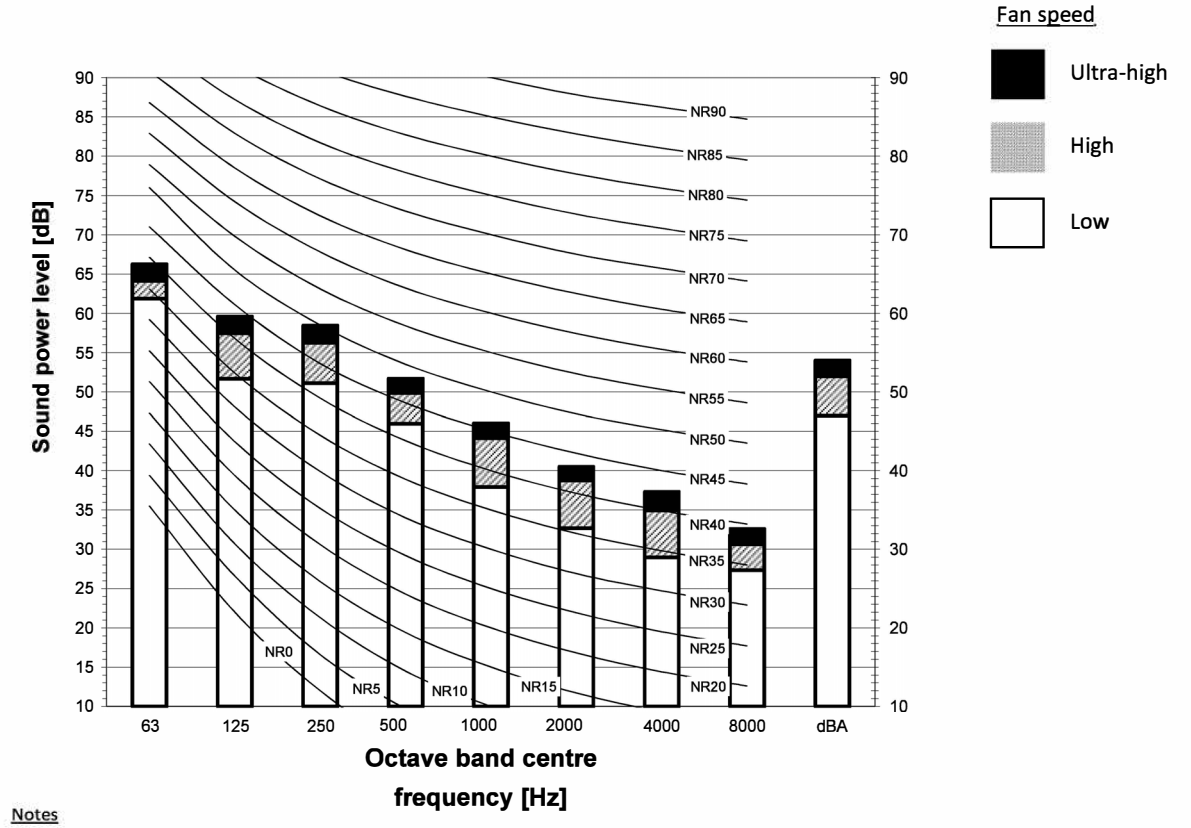
VAM350J



Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = ·10E-6µW/m²
- Measured according to ISO 3744

3D113496

VAM500J



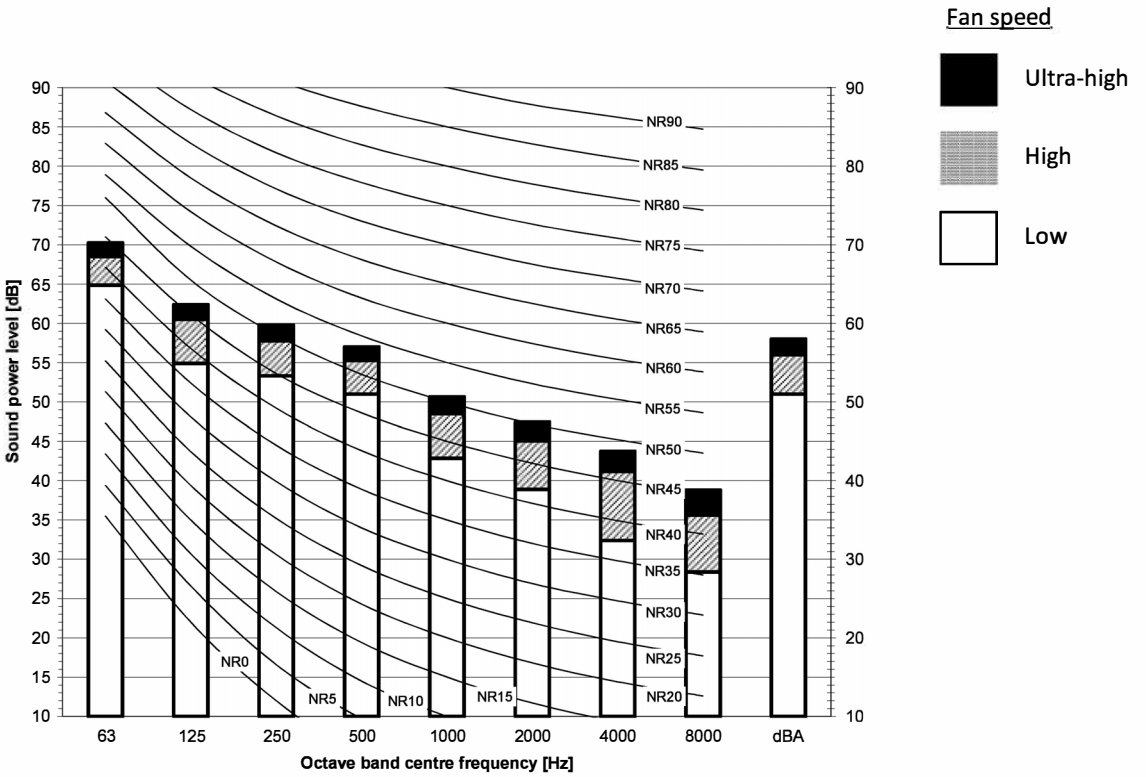
Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = ·10E-6µW/m²·
- Measured according to ISO 3744

3D113497

8 Sound data

8 - 1 Sound Power Spectrum

VAM650J

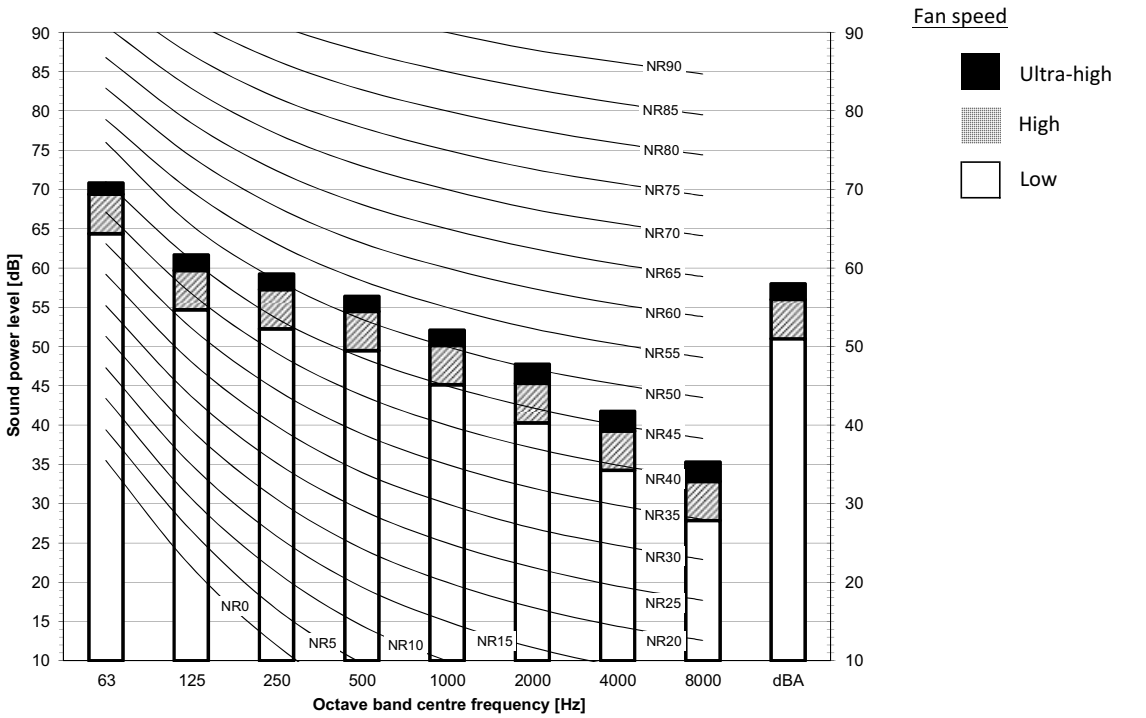


Notes

- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = ·10E-6µW/m²
- Measured according to ISO 3744

3D113498

VAM800J



Notes

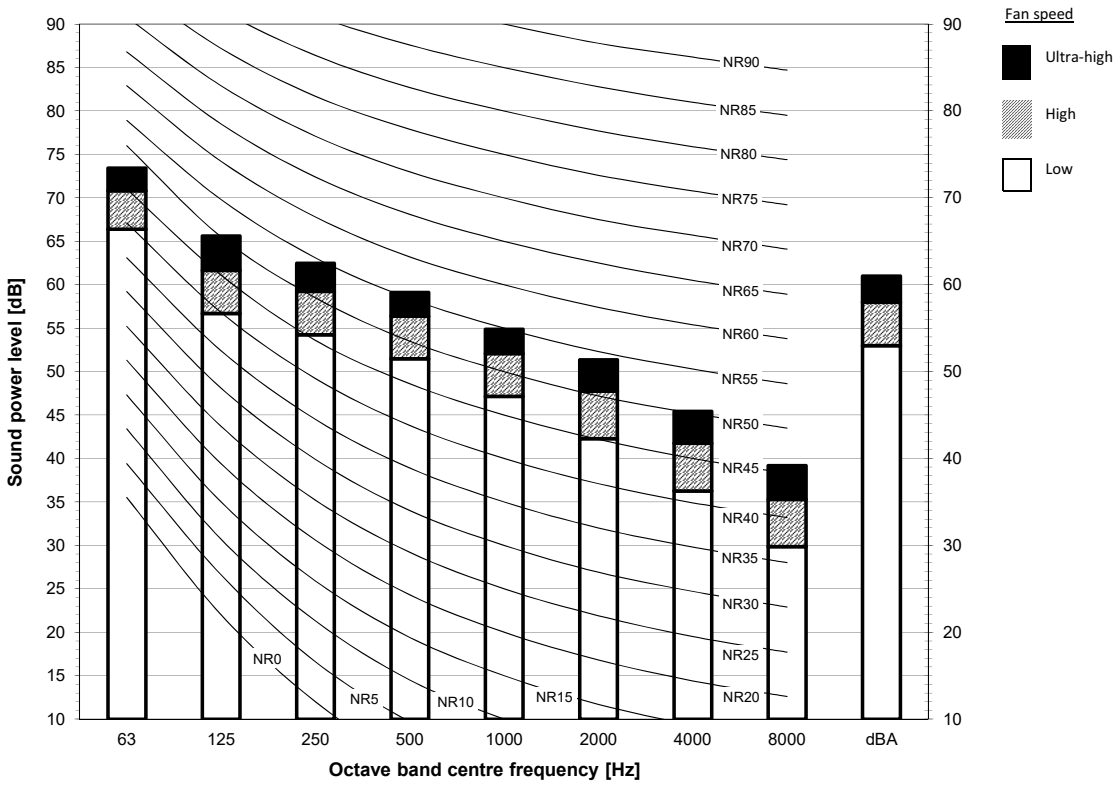
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = ·10E-6µW/m²·
- Measured according to ISO 3744

3D112841

8 Sound data

8 - 1 Sound Power Spectrum

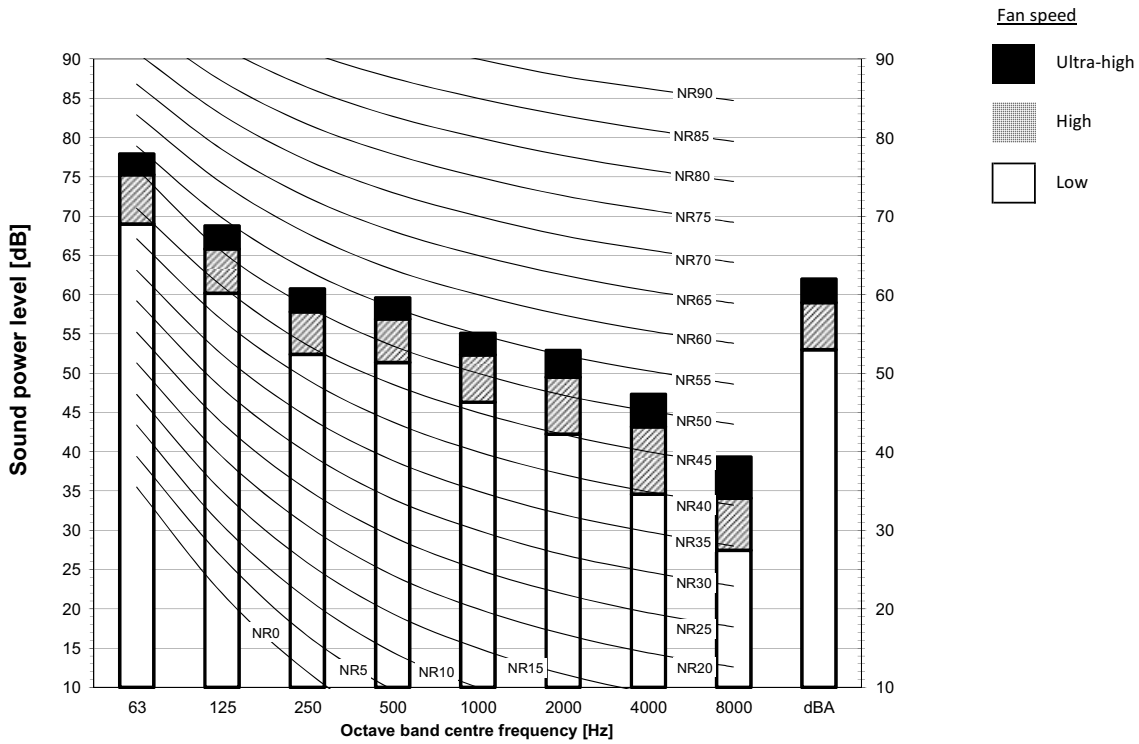
VAM1000J



Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6µW/m²
- Measured according to ISO 3744

3D112842

VAM1500J



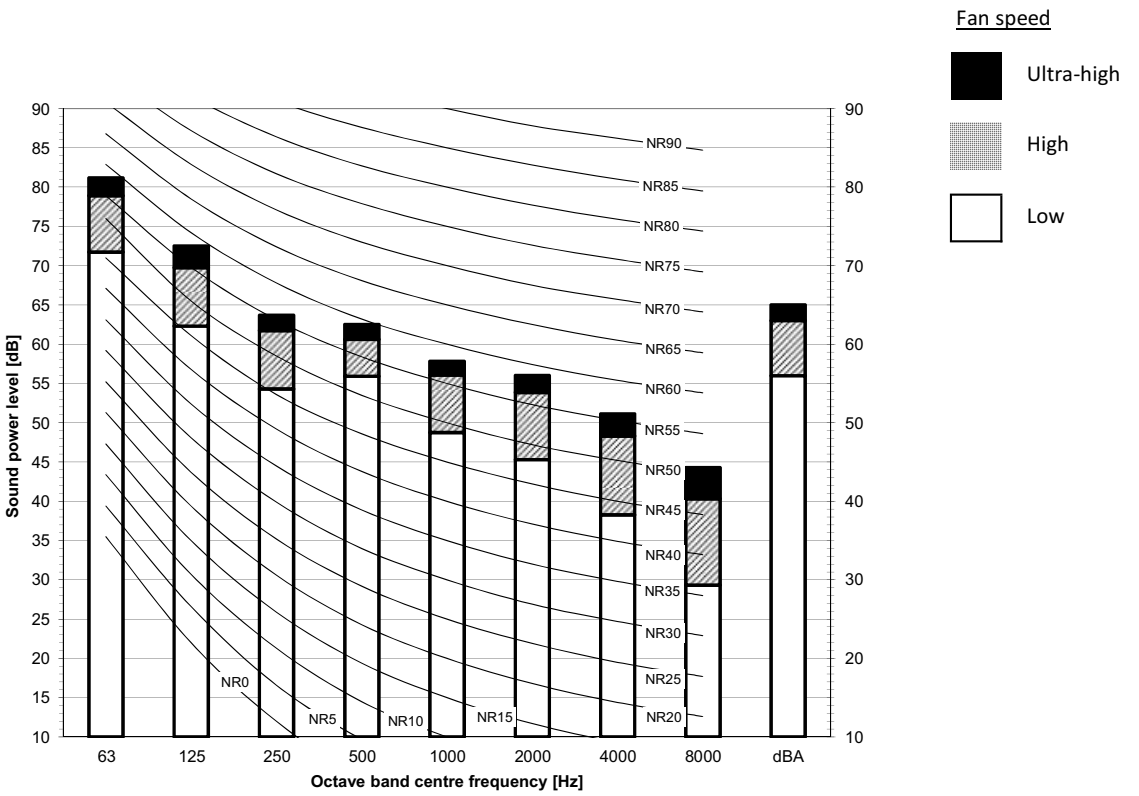
Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = ·10E-6µW/m²·
- Measured according to ISO 3744

3D112843

8 Sound data

8 - 1 Sound Power Spectrum

VAM2000J



Notes

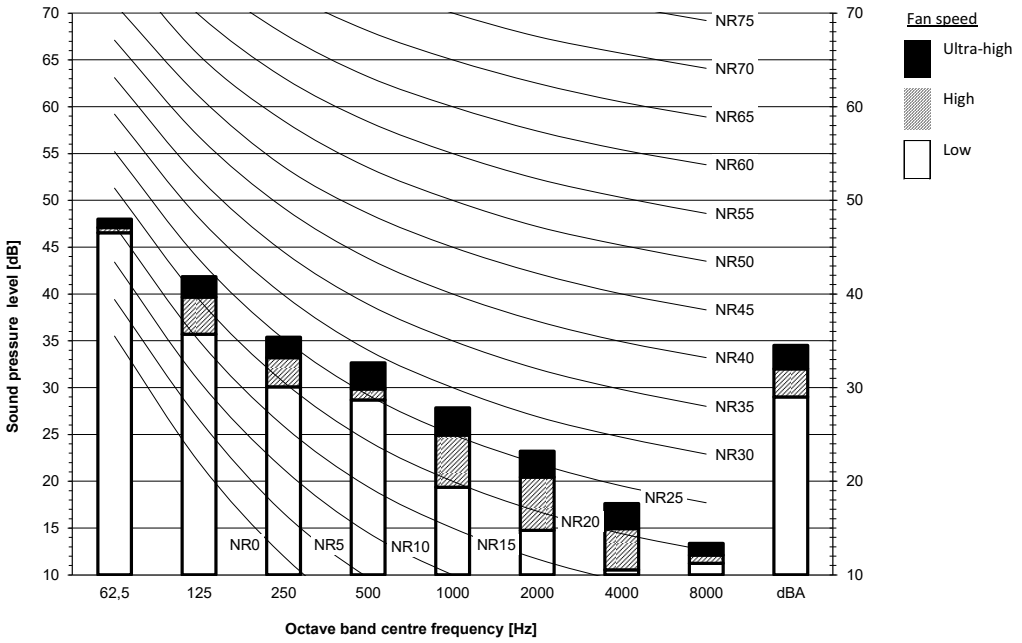
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = ·10E-6µW/m²·
- Measured according to ISO 3744

3D112848

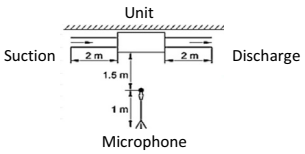
8 Sound data

8 - 2 Sound Pressure Spectrum

VAM350J

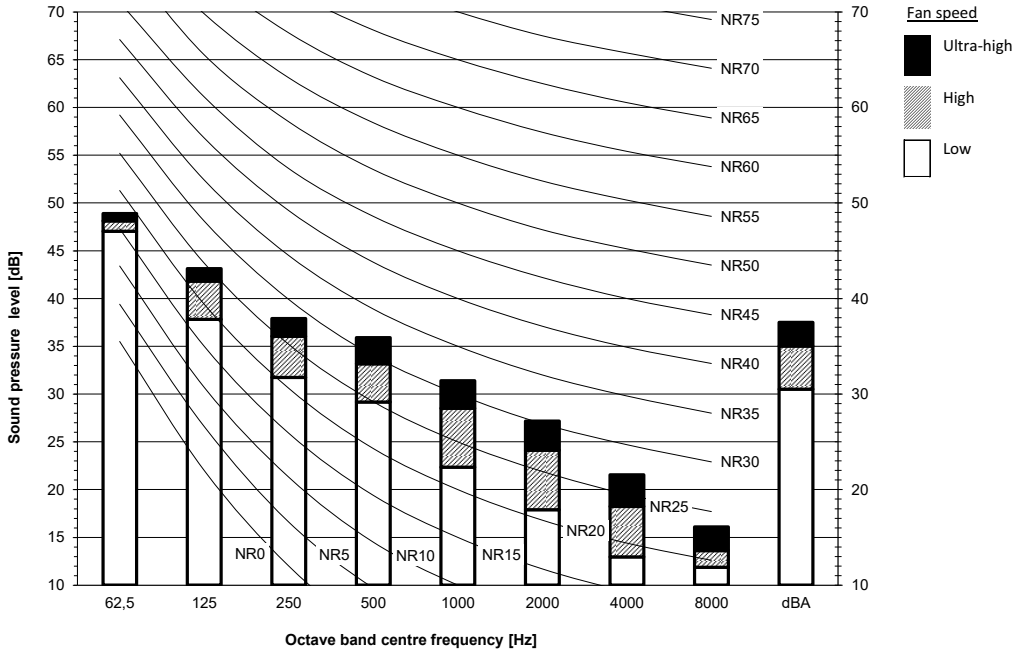


Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

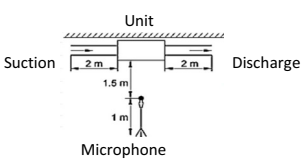


3D113499

VAM500J



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

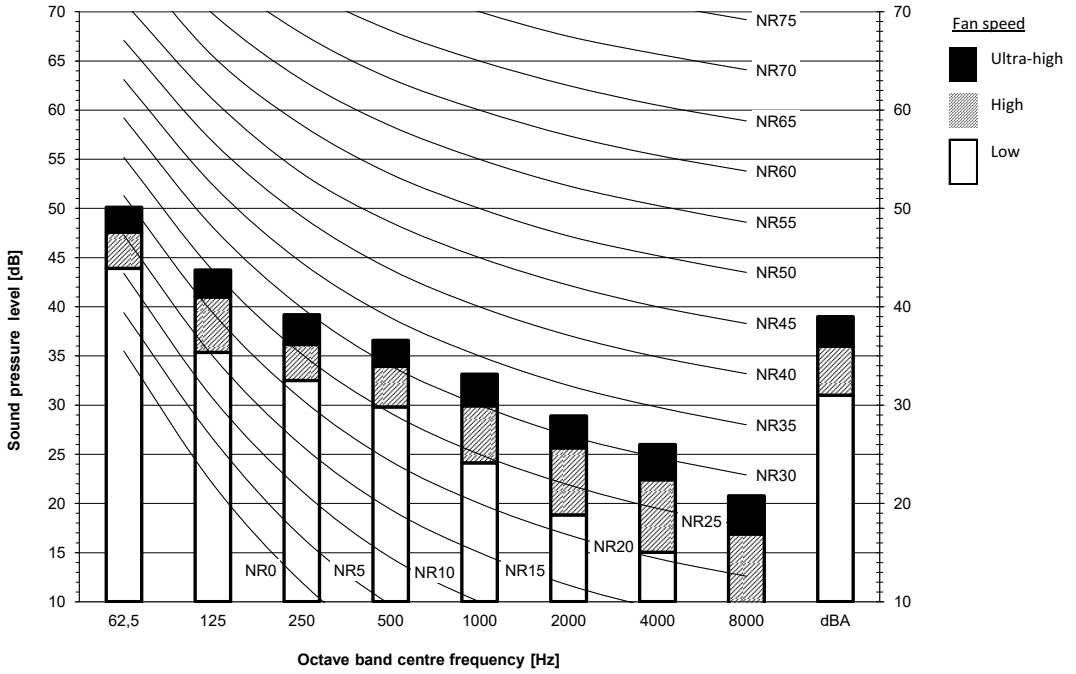


3D113500

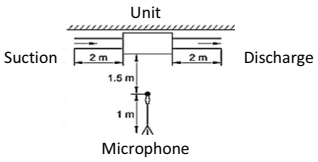
8 Sound data

8 - 2 Sound Pressure Spectrum

VAM650J

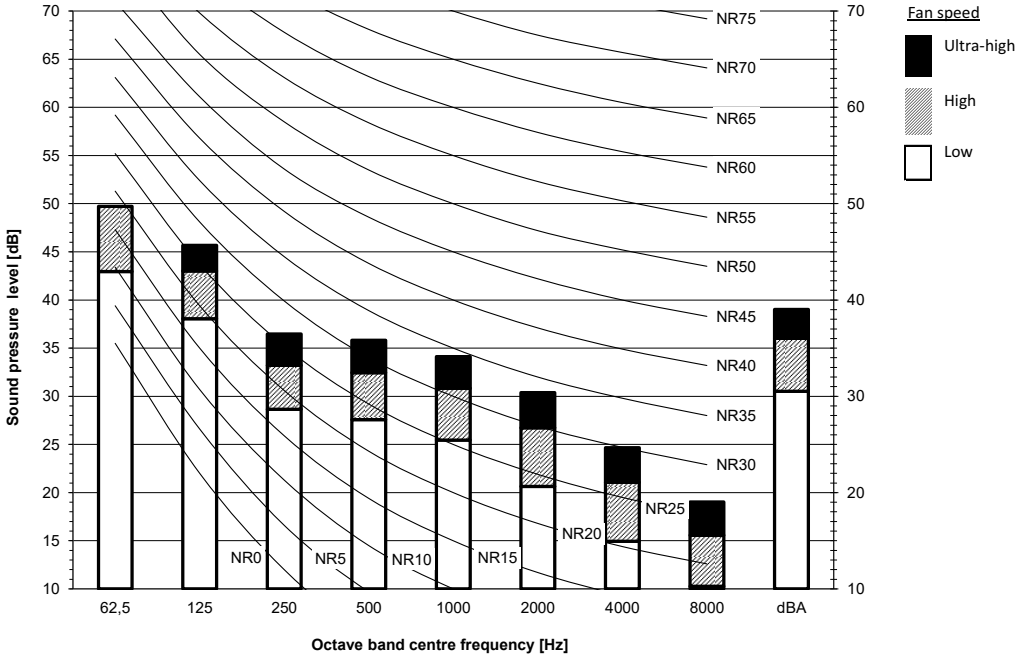


Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

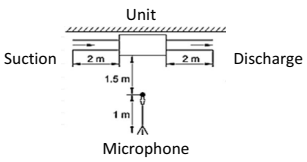


3D113501

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 µPa

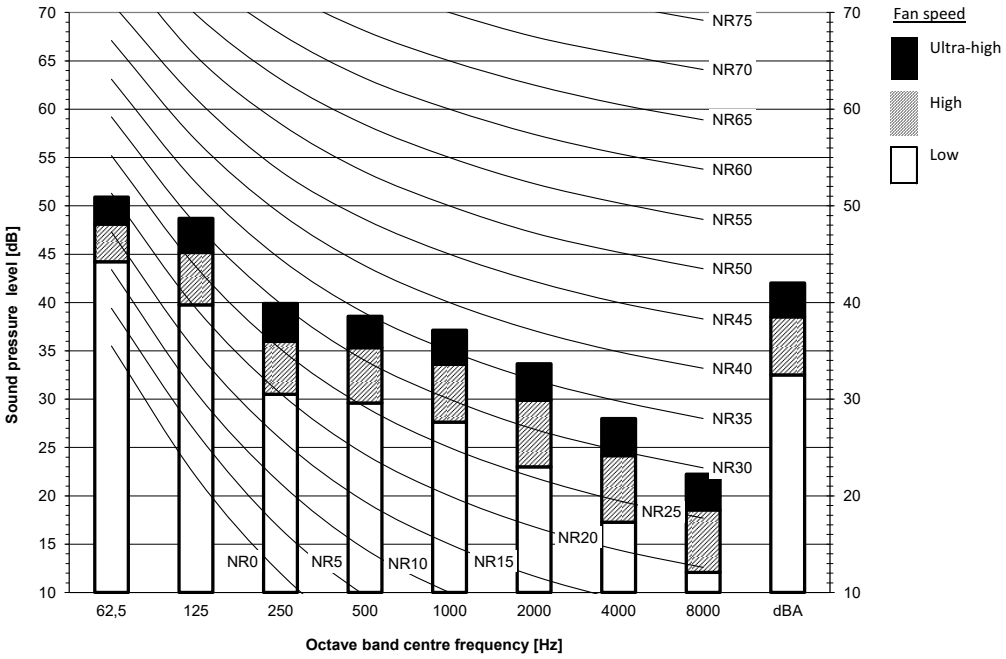


3D112844

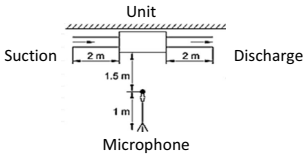
8 Sound data

8 - 2 Sound Pressure Spectrum

VAM1000J

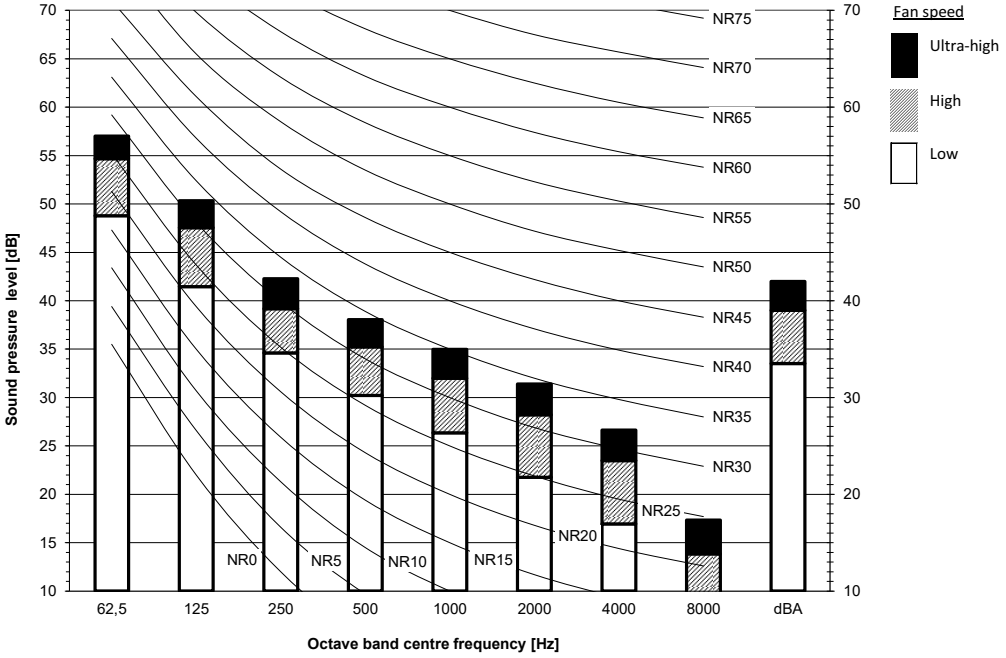


Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

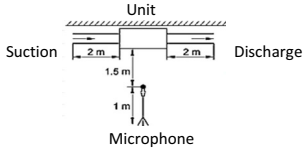


3D112845

VAM1500J



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

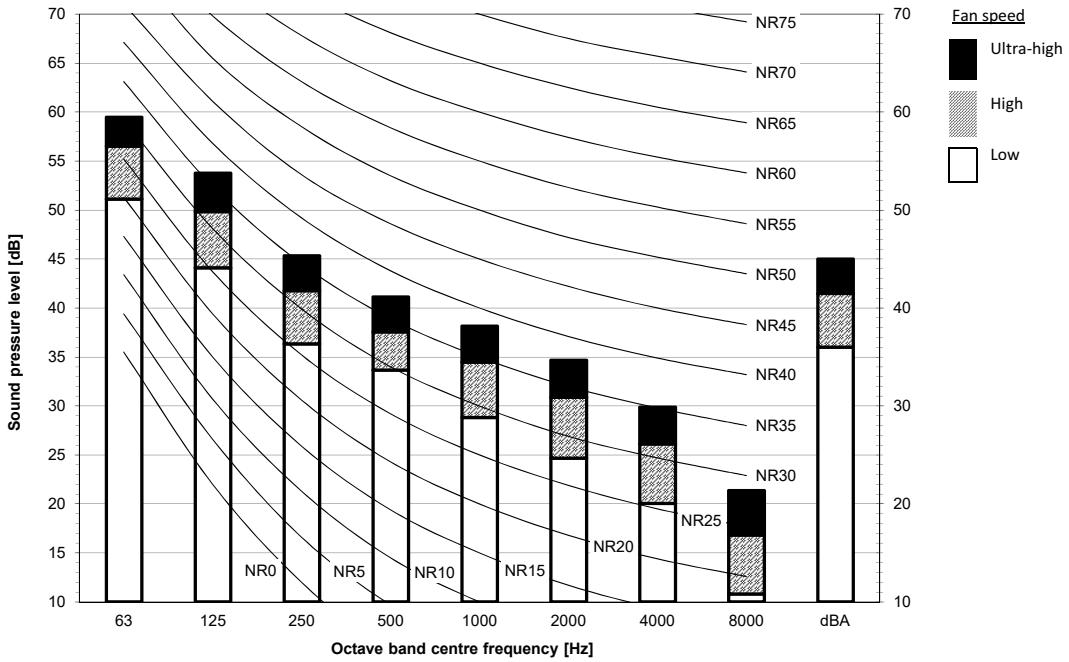


3D112846

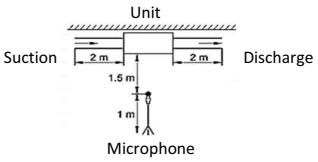
8 Sound data

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

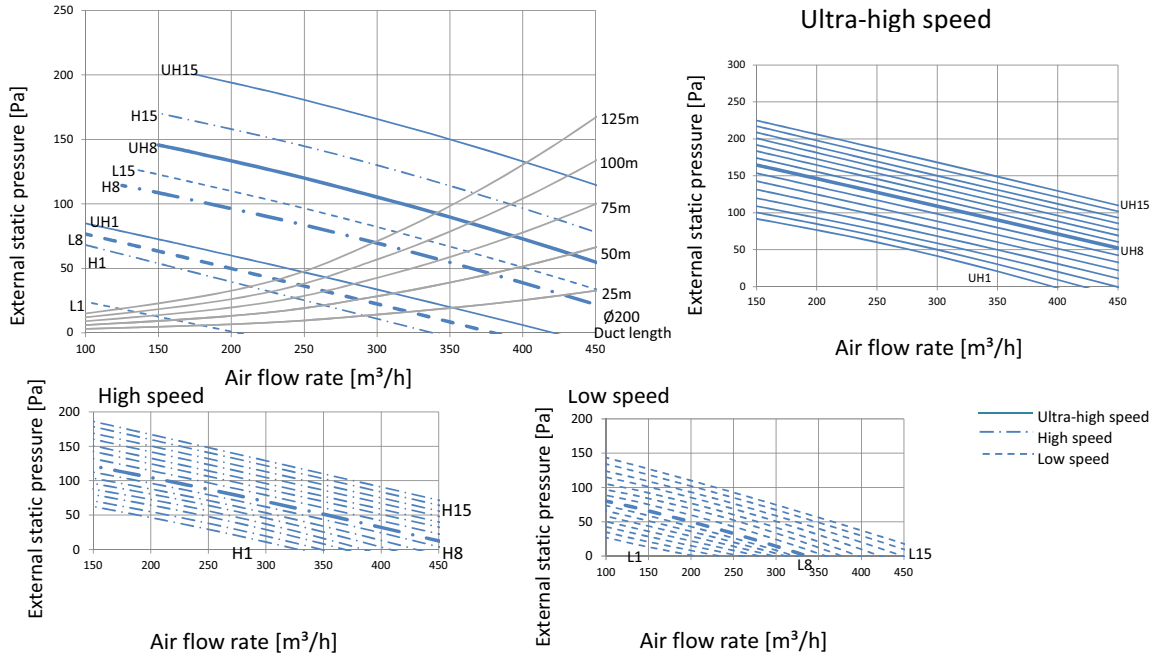


3D112847

9 Fan characteristics

9 - 1 Fan Characteristics

VAM350J



Notes

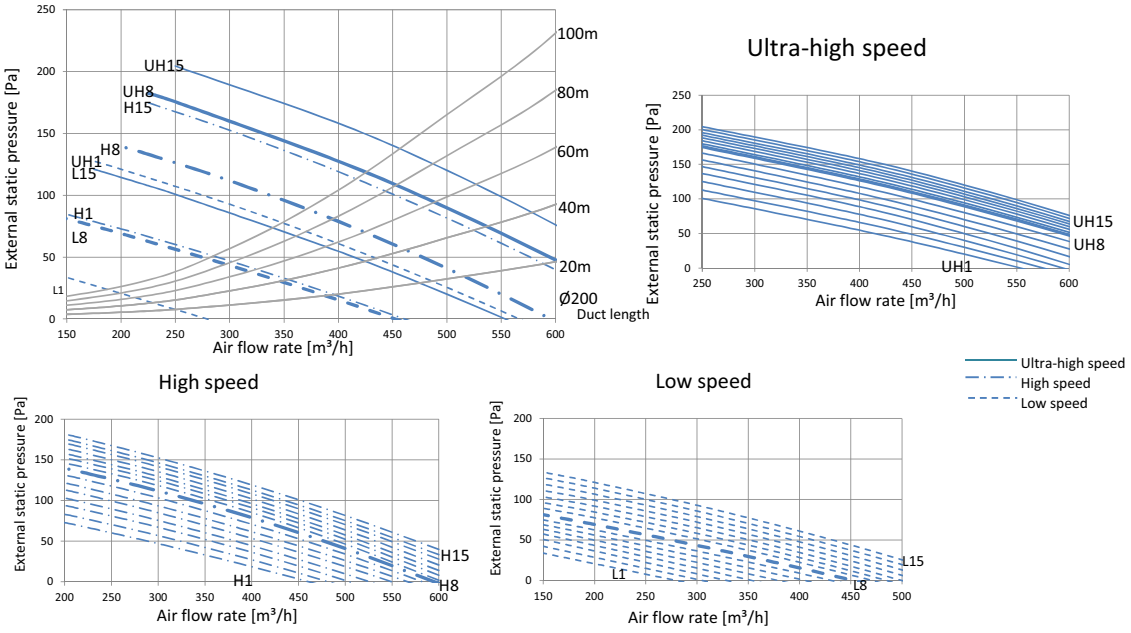
1. The fan curves are determined with ·1/3· of the ESP on the outdoor side (·EA & OA·), and ·2/3· of the ESP on the indoor side (·RA & SA·).
   EA = Exhaust air
   OA = Outdoor air
   RA = Room air
   SA = Supply air
2. Measured according to ·JIS B 8628 - 2003·

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

3D113493A

VAM500J



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

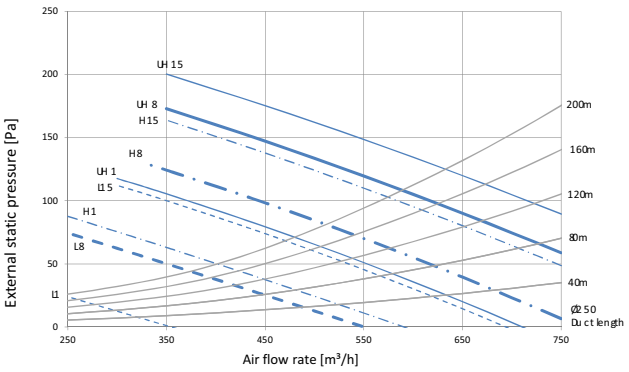
L1	=	Low speed lower limit
L8	=	Low speed factory setting
L15	=	Low speed upper limit
H1	=	High speed lower limit
H8	=	High speed factory setting
H15	=	High speed upper limit
UH1	=	Ultra-high speed lower limit
UH8	=	Ultra-high speed factory setting
UH15	=	Ultra-high speed upper limit

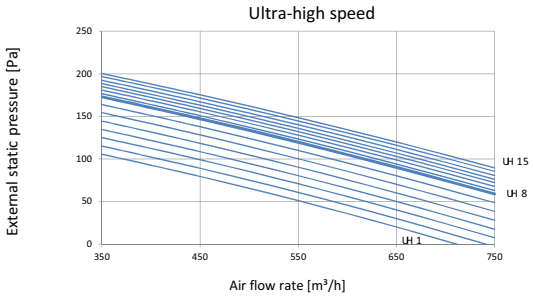
3D113494A

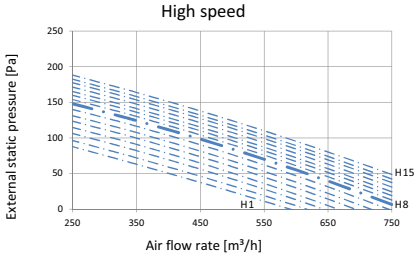
9 Fan characteristics

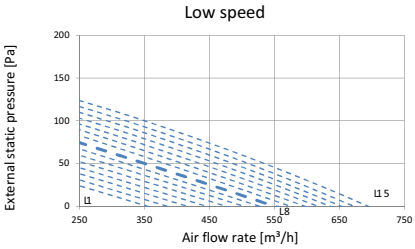
9 - 1 Fan Characteristics

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

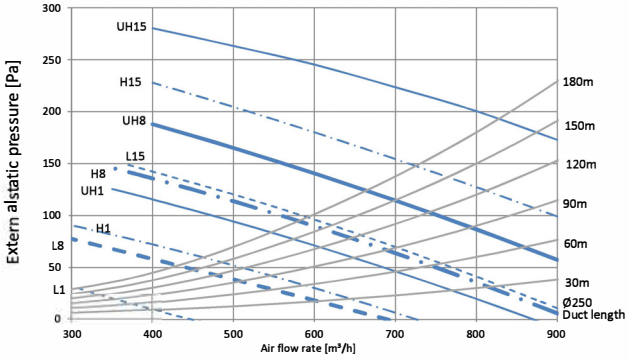
Ultra-high speed
High speed
Low speed

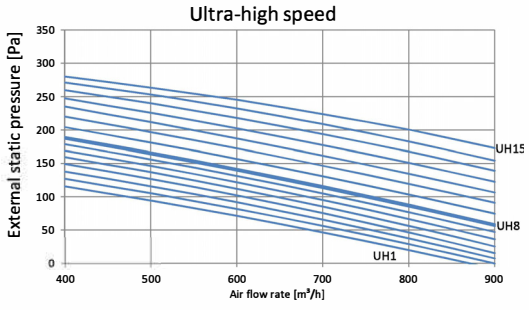
Legend

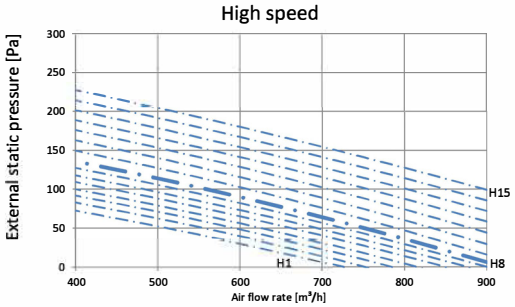
L1	=	Low speed lower limit
L8	=	Low speed factory setting
L15	=	Low speed upper limit
H1	=	High speed lower limit
H8	=	High speed factory setting
H15	=	High speed upper limit
UH1	=	Ultra-high speed lower limit
UH8	=	Ultra-high speed factory setting
UH15	=	Ultra-high speed upper limit

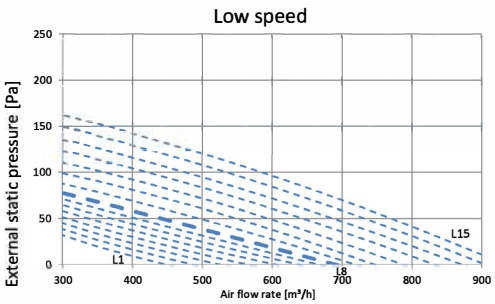
3D113495A

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·

Ultra-high speed
High speed
Low speed

Legend

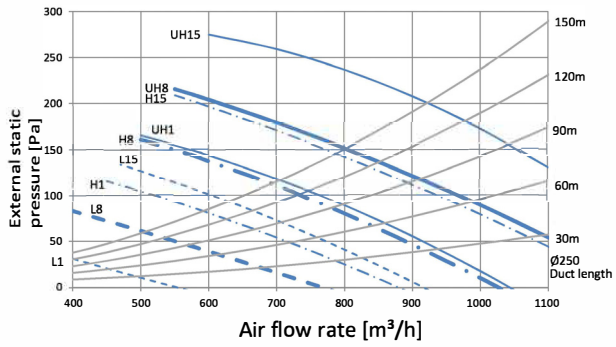
L1	=	Low speed lower limit
L8	=	Low speed factory setting
L15	=	Low speed upper limit
H1	=	High speed lower limit
H8	=	High speed factory setting
H15	=	High speed upper limit
UH1	=	Ultra-high speed lower limit
UH8	=	Ultra-high speed factory setting
UH15	=	Ultra-high speed upper limit

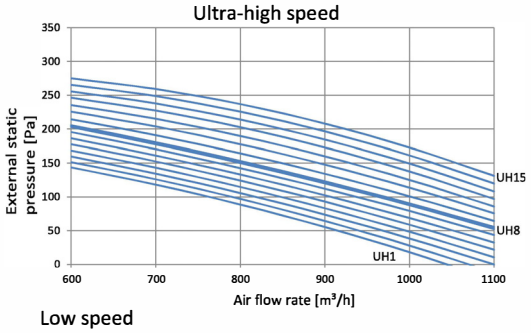
3D112837

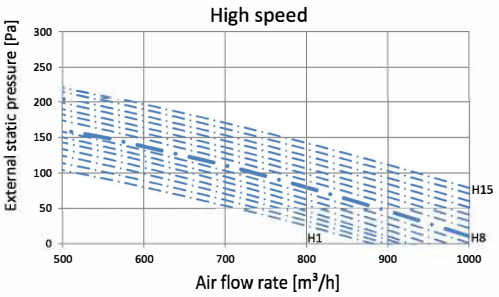
9 Fan characteristics

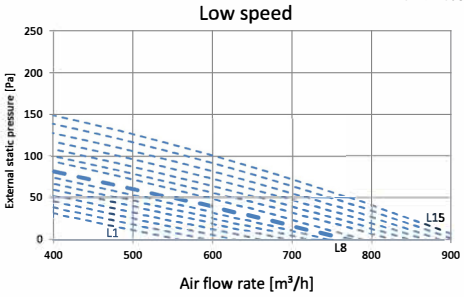
9 - 1 Fan Characteristics

VAM1000J









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·

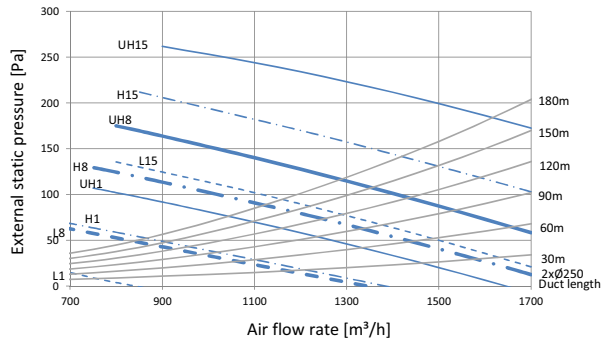
Ultra-high speed
High speed
Low speed

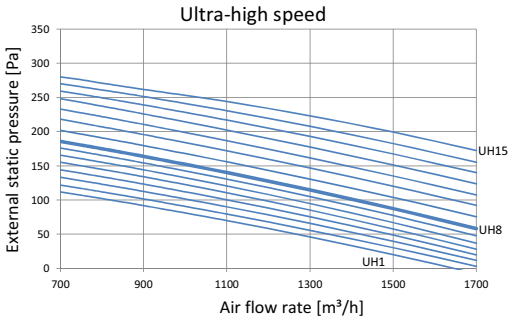
Legend

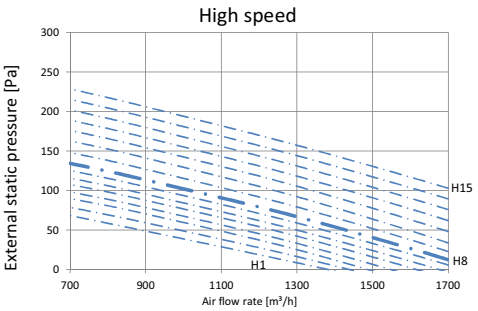
L1	=	Low speed lower limit
L8	=	Low speed factory setting
L15	=	Low speed upper limit
H1	=	High speed lower limit
H8	=	High speed factory setting
H15	=	High speed upper limit
UH1	=	Ultra-high speed lower limit
UH8	=	Ultra-high speed factory setting
UH15	=	Ultra-high speed upper limit

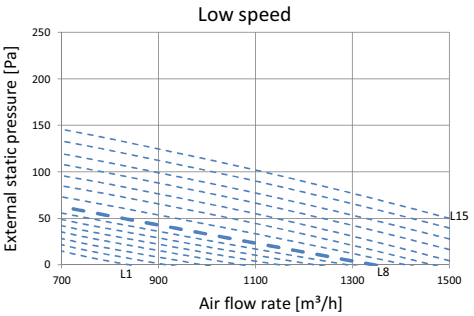
3D112832

VAM1500J









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·

Ultra-high speed
High speed
Low speed

Legend

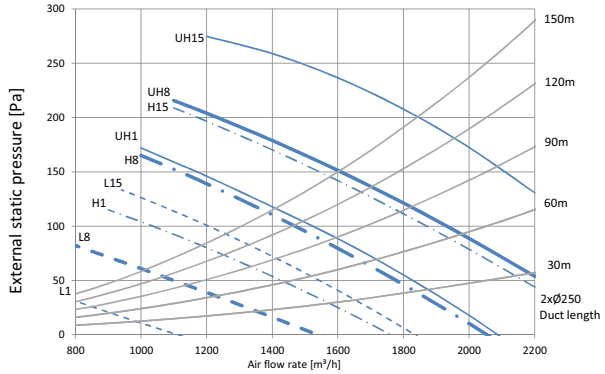
L1	=	Low speed lower limit
L8	=	Low speed factory setting
L15	=	Low speed upper limit
H1	=	High speed lower limit
H8	=	High speed factory setting
H15	=	High speed upper limit
UH1	=	Ultra-high speed lower limit
UH8	=	Ultra-high speed factory setting
UH15	=	Ultra-high speed upper limit

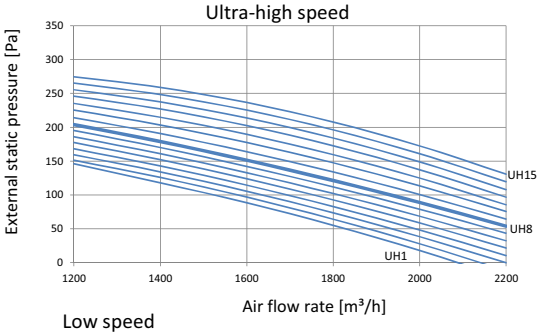
3D112838

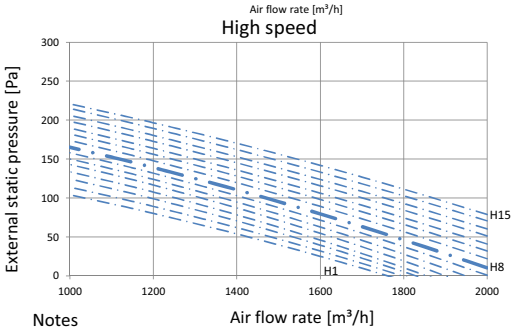
9 Fan characteristics

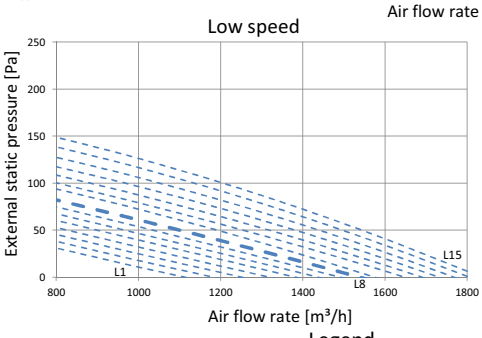
9 - 1 Fan Characteristics

VAM2000J









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·

Ultra-high speed
High speed
Low speed

Legend

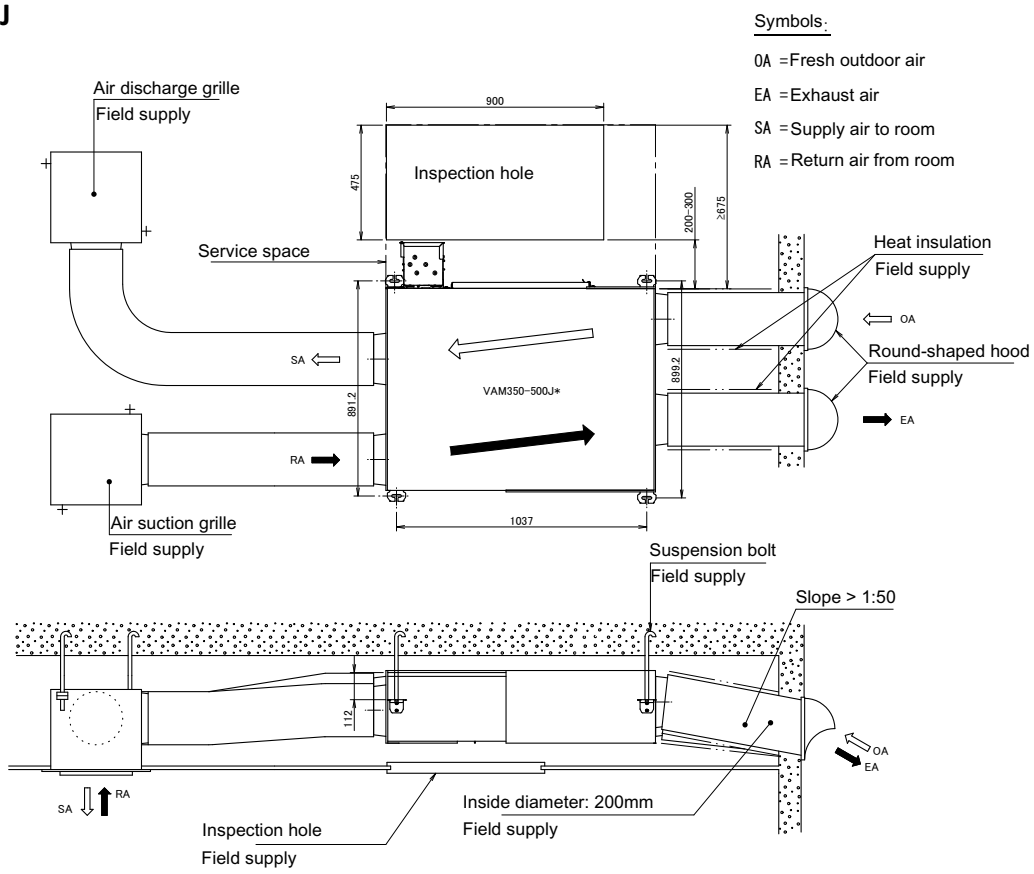
L1	=	Low speed lower limit
L8	=	Low speed factory setting
L15	=	Low speed upper limit
H1	=	High speed lower limit
H8	=	High speed factory setting
H15	=	High speed upper limit
UH1	=	Ultra-high speed lower limit
UH8	=	Ultra-high speed factory setting
UH15	=	Ultra-high speed upper limit

3D112839

10 Installation

10 - 1 Installation Method

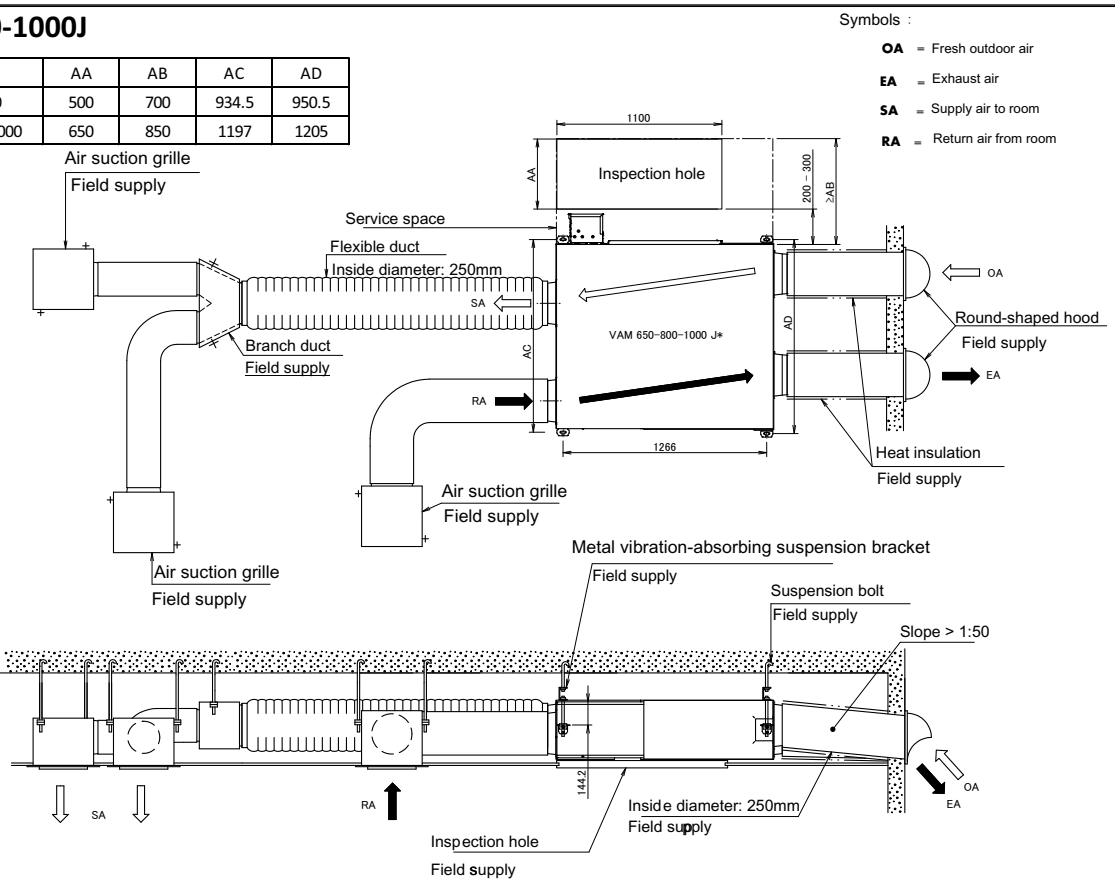
VAM350-500J



3D112823

VAM650-1000J

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

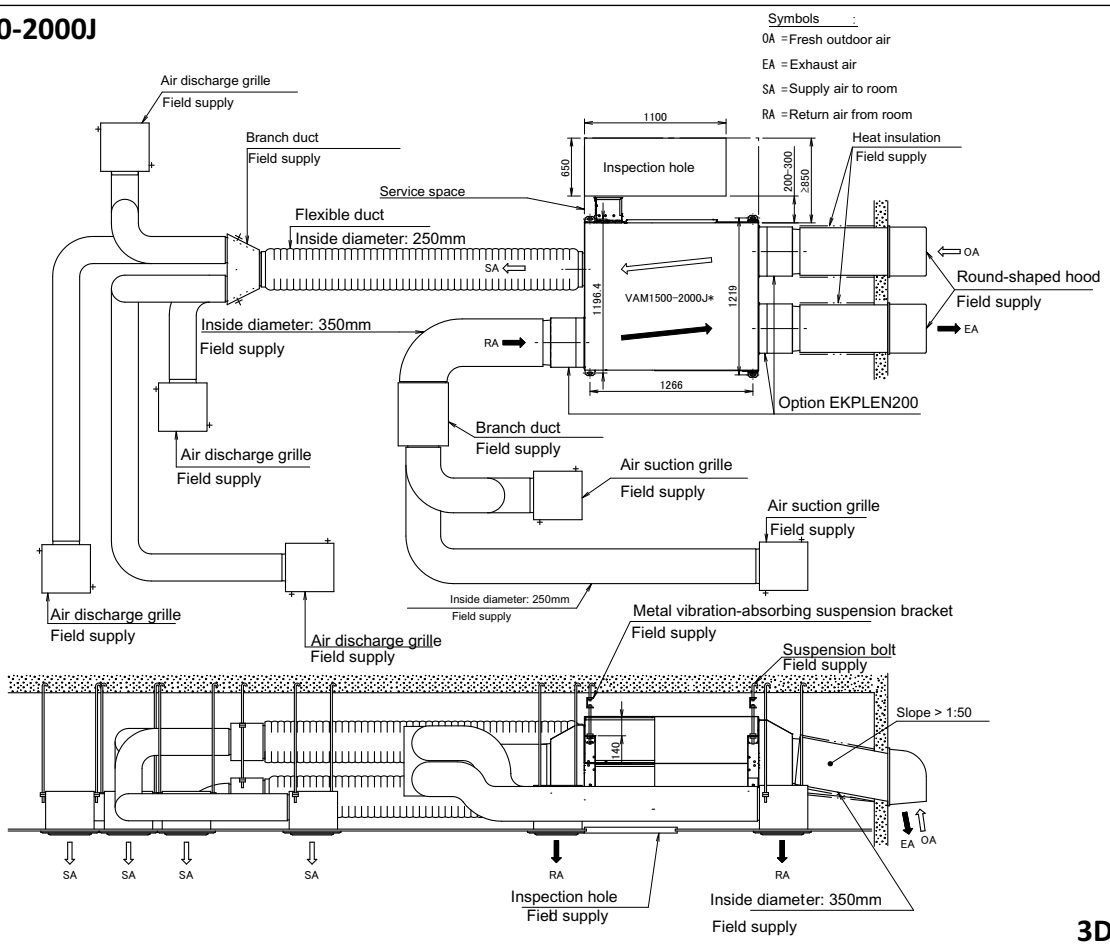


3D112824

10 Installation

10 - 1 Installation Method

VAM1500-2000J



3D112825

10 Installation

10 - 2 Filter Installation Method

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

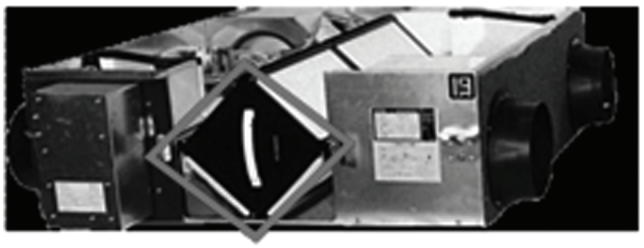
Table: Recommended dust filter classes per filter section (definition of filter classes according to EN 779)

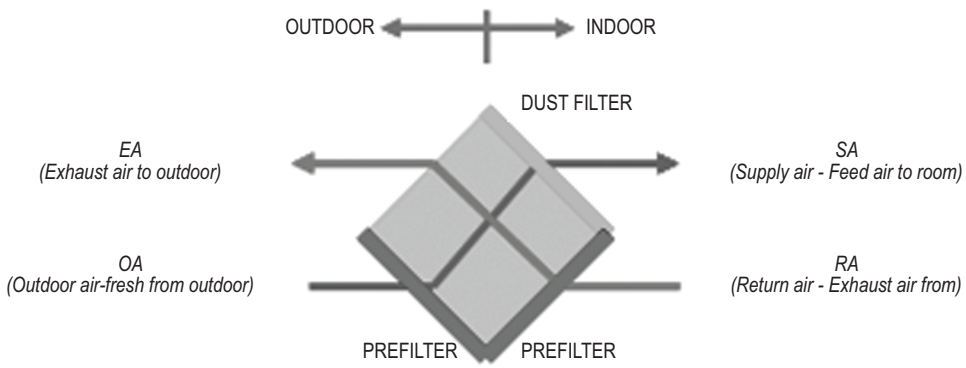
Outdoor Air Quality	**Indoor Air Quality**			
	IDA 1 (High)	IDA 2 (Medium)	IDA 3 (Moderate)	IDA 4 (Low)
ODA 1 (pure air)	N/A	ePM_1 70% (F8)	ePM_1 50% (F7)	ePM_{10} 75% (M5)
ODA 2 (dust)	N/A	ePM_{10} 70% (M6) + ePM_1 70% (F8)	ePM_{10} 75% (M5) + ePM_1 50% (F7)	ePM_{10} 75% (M5) + ePM_{10} 70% (M6)
ODA 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 concetration gas pollution
ODA 4 - High concentration gas pollution and particles
ODA 5 - Very high concentration gas pollution and particles

Indoor air Quality:
IDA 1 - Optium 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, ePM_{10} 70% (M6), ePL_1 55% (F7) and ePM_1 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

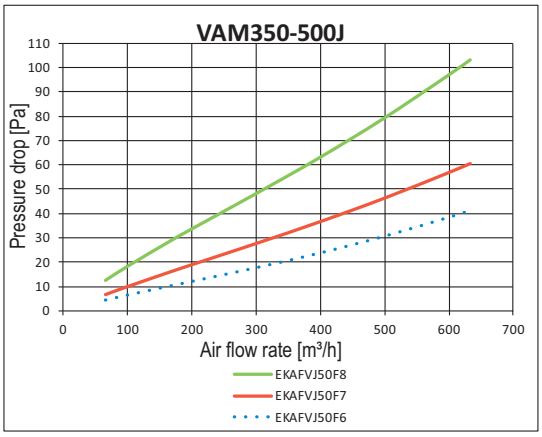
To adjust static pressure after filter placement:

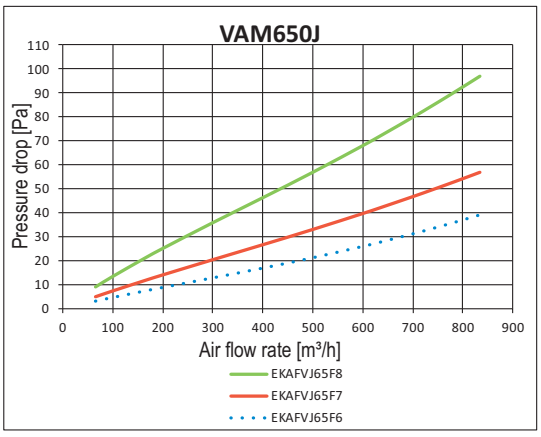
Setting mode	Setting switch No.	Description of setting
19 (29)	2	SA fan speed setting
	3	EA fan speed setting

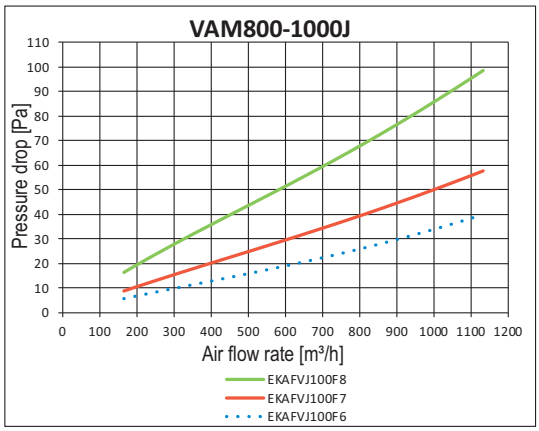
11 Air filter characteristics

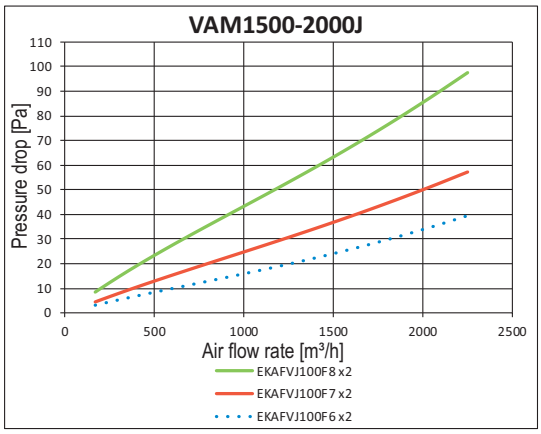
11 - 1 Air filter characteristics

VAM-J



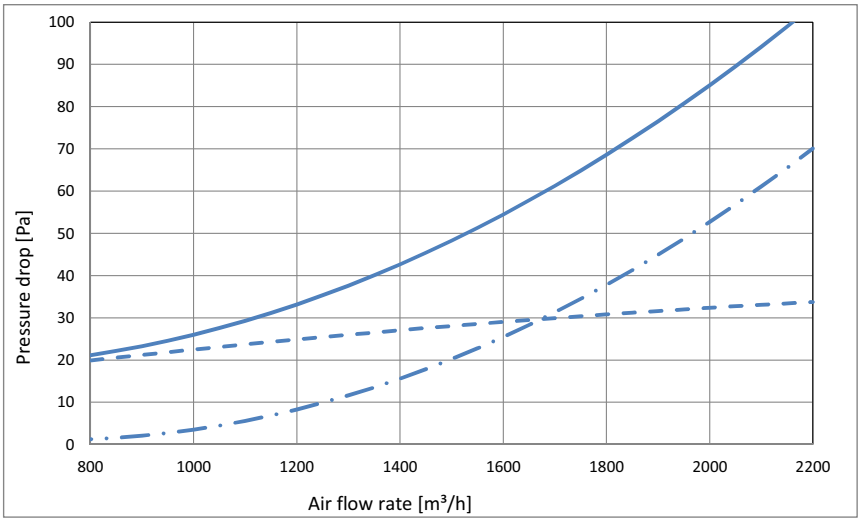






3D112840

VAM-J



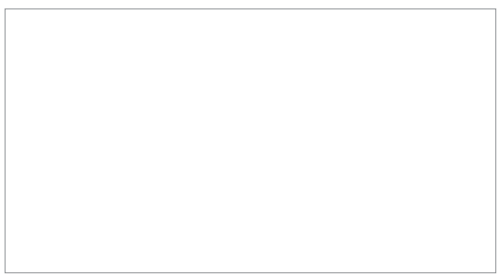
Option kit EKPLEN200 installed on OA and SA, or RA and EA side.
Option kit EKPLEN200 installed on OA or RA side.
Option kit EKPLEN200 installed on SA or EA side.

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

Measured according to JIS B 8628 - 2003

3D113505

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EEDEN19 03/19



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