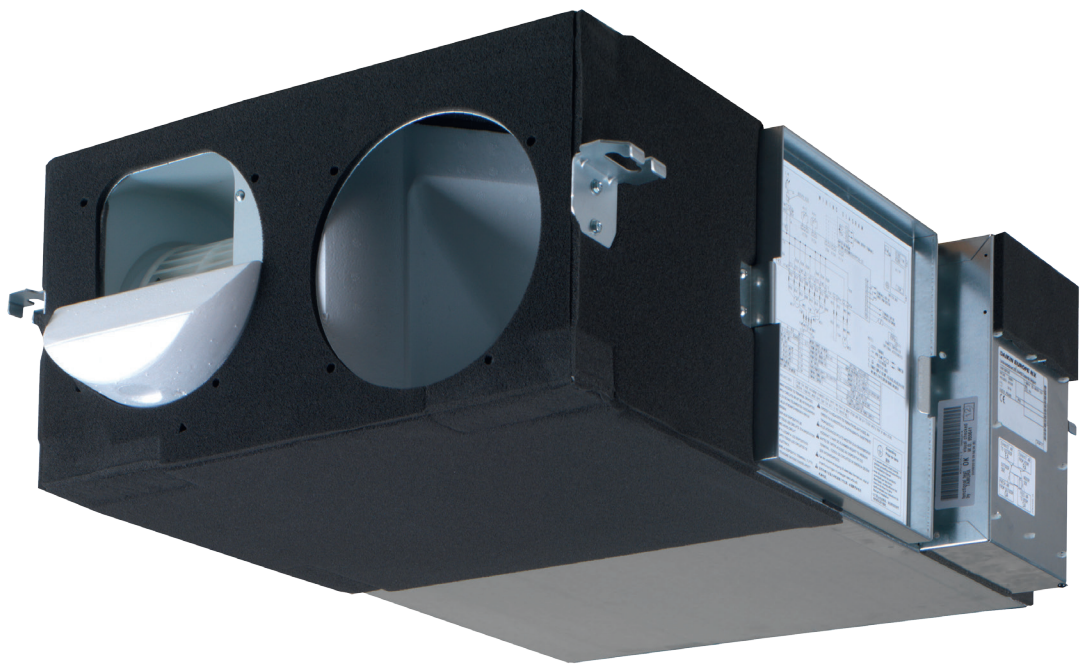


Heat reclaim ventilation Air Conditioning Technical Data VAM-FC



VAM150FCVE
VAM250FCVE
VAM350FCVE
VAM500FCVE
VAM650FCVE
VAM800FCVE
VAM1000FCVE
VAM1500FCVE
VAM2000FCVE

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VAM-FC

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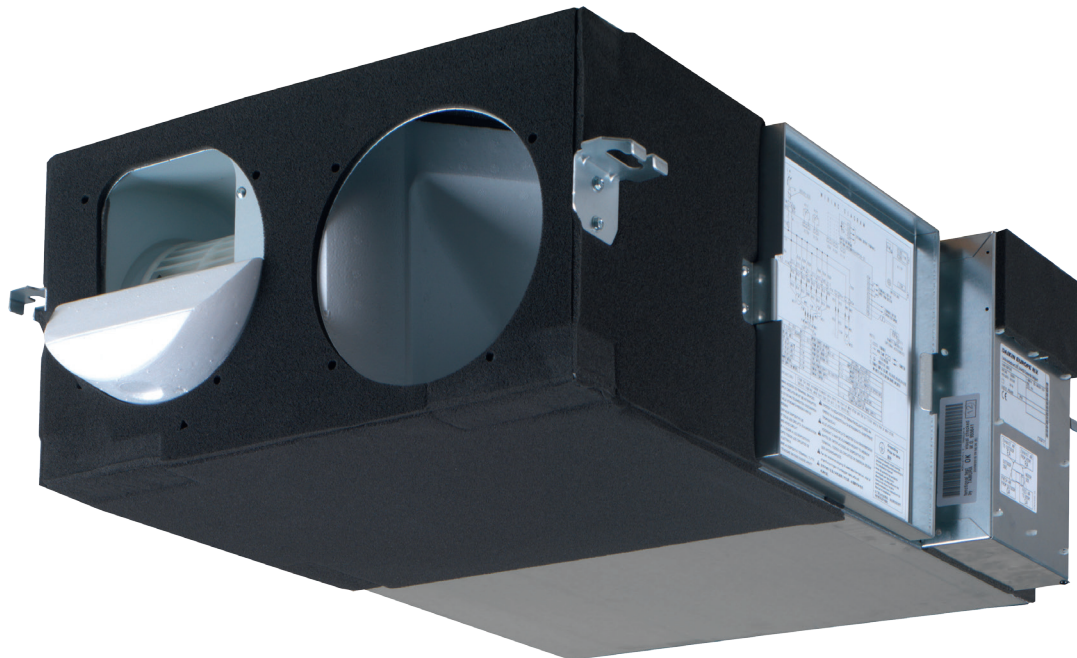
1 Features

1 - 1 VAM-FC

Ventilation with heat recovery as standard

1

- › 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
- › Wide range of units: air flow rate from 150 up to 2,000 m³/h
- › Optional medium and fine dust filters ePM10 70% (M6), ePM1 55% (F7), ePM1 70% (F8) to meet customer request or legislation
- › Shorter installation time thanks to easy adjustment of nominal air flow rate, so less need for dampers compared with traditional installation.
- › 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 Specifications

Technical specifications					VAM150FC		VAM250FC		VAM350FC		VAM500FC		VAM650FC		
Power input - 50Hz	Heat exchange mode	Nom.	Ultra high	kW	0.132		0.161		0.071 (1)		0.147 (1)		0.188 (1)		
			High	kW	0.111		0.079		0.057 (1)		0.101 (1)		0.114 (1)		
			Low	kW	0.058		0.064		0.020 (1)		0.049 (1)		0.063 (1)		
	Bypass mode	Nom.	Ultra high	kW	0.132		0.161		0.071 (1)		0.147 (1)		0.188 (1)		
			High	kW	0.111		0.079		0.057 (1)		0.101 (1)		0.114 (1)		
			Low	kW	0.058		0.064		0.020 (1)		0.049 (1)		0.063 (1)		
Casing		Material			Galvanised steel plate										
Insulation material					Self-extinguishable urethane foam										
Dimensions	Unit	Height	mm		285				301				364		
			mm		776				828				1,000		
			mm		525				816				868		
Weight				kg	24.0				33.0				51.0		
Fan	Type			Sirocco fan											
	Air flow rate - 50Hz	Heat exchange mode	Ultra high	m³/h	150		250		350 (1)		500 (1)		650 (1)		
			High	m³/h	140		230		320 (1)		410 (1)		545 (1)		
			Low	m³/h	105		155		210 (1)		310 (1)		450 (1)		
		Bypass mode	Ultra high	m³/h	150		250		350 (1)		500 (1)		650 (1)		
			High	m³/h	140		230		320 (1)		410 (1)		545 (1)		
			Low	m³/h	105		155		210 (1)		310 (1)		450 (1)		
	External static pressure - 50Hz	Ultra high		Pa	90.0		70.0		103 (1)		83.0 (1)		100 (1)		
			High	Pa	87.0		63.0		93.0 (1)		57.0 (1)		73.0 (1)		
			Low	Pa	40.0		25.0		51.0 (1)		35.0 (1)		49.0 (1)		
Fan motor	Quantity			2											
	Output	50 Hz	W	30				80				106			
Temperature ex- change efficiency - 50Hz	Ultra high			%	77.0 (2) / 72.0 (3)		74.9 (2) / 69.5 (3)		-						
	High			%	78.3 (2) / 72.3 (3)		76.0 (2) / 70.0 (3)		-						
	Low			%	82.8 (2) / 73.2 (3)		80.1 (2) / 72.0 (3)		-						
Enthalpy exchange efficiency - 50Hz	Cooling	Ultra high		%	60.3 (2)				63.4 (2)		60.3 (2)				
		High		%	61.9 (2)		61.2 (2)		65.0 (2)		63.4 (2)		64.0 (2)		
		Low		%	67.3 (2)		64.5 (2)		70.7 (2)		66.9 (2)		67.3 (2)		
	Heating	Ultra high		%	66.6 (2)				67.6 (2)		64.5 (2)		65.5 (2)		
		High		%	67.9 (2)		67.4 (2)		68.9 (2)		67.6 (2)		67.7 (2)		
		Low		%	72.4 (2)		70.7 (2)		73.7 (2)		71.1 (2)		69.7 (2)		
Operation range	Min.			°CDB	-15										
	Max.			°CDB	50										
	Relative humidity			%	80 or less										
Sound pressure level - 50Hz	Heat exchange mode	Ultra high		dBA	27.0		28.0		32.0		33.0		34.5		
		High		dBA	26.0				31.5				33.0		
		Low		dBA	20.5		21.0		23.5		24.5		27.0		
	Bypass mode	Ultra high		dBA	27.0		28.0		32.0		33.5		34.5		
		High		dBA	26.5		27.0		31.0		32.5		34.0		
		Low		dBA	20.5		21.0		24.5		25.5		27.0		
Heat exchange system					Air to air cross flow total heat (sensible + latent heat) exchange										
Heat exchange element					Specially processed non-flammable paper										
Air filter		Type			Multidirectional fibrous fleeces										
Connection duct diameter				mm	100		150				200				
Operation mode					Heat exchange mode, bypass mode, fresh-up mode										
General	Supplier/		Name or trademark			Daikin Europe N.V.									
	Manu- facturer details														
	Product descrip- tion	Model identifier			VAM150FCVE		VAM250FCVE		VAM350FCVE		VAM500FCVE		VAM650FCVE		
Specific energy consumption (SEC)	Cold climate			kWh/ (m².a)	-65.4 (4)		-65.1 (4)		-						
	Average climate			kWh/ (m².a)	-27.1 (4)		-29.2 (4)		-						
	Warm climate			kWh/ (m².a)	-2.51 (4)		-6.10 (4)		-						
SEC class					B / See note 4				-						
Type of product					Bidirectional RVU / See note 5				Heat reclaim ventilation unit						
Type of drive					Multi-speed drive										
Heat recovery system					recuperative										
Thermal efficiency				%	89.1 (3)		80.4 (3)		-						
Maximum flow rate				m³/h	130		207		-						
at 100 Pa ESP				Electric power input	W	129		160		-					
Sound power level (Lwa)				dB	40		43		48		50		51		
Reference flow rate				m³/s	0.025		0.035		-						
Reference pressure difference				Pa	50.0				-						
Specific power input				W/ (m³/h)	0.616 (5)		0.454 (5)		-						

2 Specifications

2 - 1 Specifications

2

Technical specifications					VAM150FC	VAM250FC	VAM350FC	VAM500FC	VAM650FC	
Ventilation control	Type				Clock control		-			
	Factor				0.950 (4)		-			
Maximum external leakage		%				7.42	4.66	4.13	2.89	3.81
Maximum internal leakage		%				4.50		8.10	8.20	7.70
Filter service warning					Displayed on controller / See note 7					
Instructions for pre-/disassembly					https://www.daikin.eu/en_us/about/daikin-innovations/seasonal-efficiency.html		-			
Annual electricity consumption					kWh/a	771 (4)	580 (4)	-		
Annual heating saved	Cold climate		kWh/a		8,941 (4)	8,426 (4)	-			
	Average climate		kWh/a		4,571 (4)	4,307 (4)	-			
	Warm climate		kWh/a		2,067 (4)	1,948 (4)	-			
Technical specifications					VAM800FC		VAM1000FC	VAM1500FC	VAM2000FC	
Power input - 50Hz	Heat exchange mode	Nom.	Ultra high	kW	0.320 (1)	0.360 (1)	0.617 (1)	0.685 (1)		
			High	kW	0.241 (1)	0.309 (1)	0.463 (1)	0.575 (1)		
			Low	kW	0.185 (1)	0.198 (1)	0.353 (1)	0.295 (1)		
	Bypass mode	Nom.	Ultra high	kW	0.320 (1)	0.360 (1)	0.617 (1)	0.685 (1)		
			High	kW	0.241 (1)	0.309 (1)	0.463 (1)	0.575 (1)		
			Low	kW	0.185 (1)	0.198 (1)	0.353 (1)	0.295 (1)		
	Casing					Galvanised steel plate				
	Insulation material					Self-extinguishable urethane foam				
Dimensions	Unit	Height	mm	364			726			
		Width	mm	1,000			1,510			
		Depth	mm	868	1,160	868	1,160			
Weight	Unit		kg	54.0	63.0	128	145			
Fan	Type				Sirocco fan					
	Air flow rate - 50Hz	Heat exchange mode	Ultra high	m³/h	800 (1)	1,000 (1)	1,500 (1)	2,000 (1)		
			High	m³/h	725 (1)	950 (1)	1,350 (1)	1,880 (1)		
			Low	m³/h	665 (1)	820 (1)	1,230 (1)	1,500 (1)		
		Bypass mode	Ultra high	m³/h	800 (1)	1,000 (1)	1,500 (1)	2,000 (1)		
			High	m³/h	725 (1)	950 (1)	1,350 (1)	1,880 (1)		
			Low	m³/h	665 (1)	820 (1)	1,230 (1)	1,500 (1)		
	External static pressure - 50Hz	Ultra high	Pa	109 (1)	147 (1)	116 (1)	132 (1)			
		High	Pa	94.0 (1)	135 (1)	97.0 (1)	118 (1)			
	Fan motor	Low	Pa	78.0 (1)	100 (1)	80.0 (1)	77.0 (1)			
Quantity					2		4			
Enthalpy exchange efficiency - 50Hz	Output	50 Hz	W	210						
		Cooling	Ultra high	%	62.4 (2)		63.4 (2)			
	Heating	High	%	63.6 (2)	64.2 (2)	65.0 (2)	64.5 (2)			
		Low	%	64.6 (2)	66.3 (2)	66.2 (2)	67.8 (2)			
		Ultra high	%	67.6 (2)		68.6 (2)				
		High	%	68.8 (2)	69.4 (2)	69.7 (2)	69.5 (2)			
		Low	%	69.8 (2)	71.5 (2)	70.5 (2)	72.1 (2)			
		Operation range	Min.	°CDB			-15			
Max.	°CDB			50						
Relative humidity	%			80 or less						
Sound pressure level - 50Hz	Heat exchange mode	Ultra high	dBA	36.0			39.5	40.0		
		High	dBA	34.5	35.0	38.0				
		Low	dBA	31.0			34.0	35.0		
Sound pressure level - 50Hz	Bypass mode	Ultra high	dBA	36.0			40.5	40.0		
		High	dBA	34.5	35.5	38.0				
		Low	dBA	31.0			33.5	35.0		
Heat exchange system					Air to air cross flow total heat (sensible + latent heat) exchange					
Heat exchange element					Specially processed non-flammable paper					
Air filter					Multidirectional fibrous fleeces					
Connection duct diameter					mm	250	350			
Operation mode					Heat exchange mode, bypass mode, fresh-up mode					
General	Supplier/ Manu- facturer details	Name or trademark			Daikin Europe N.V.					
	Product descrip- tion	Model identifier			VAM800FCVE	VAM1000FCVE	VAM1500FCVE	VAM2000FCVE		
Type of product					Heat reclaim ventilation unit					
Type of drive					Multi-speed drive					
Heat recovery system					recuperative					
Sound power level (Lwa)					dB	53	55			57
Maximum external leakage					%	3.09	6.59	3.09	6.59	
Maximum internal leakage					%	7.70	6.50	7.70	6.50	
Filter service warning					Displayed on controller / See note 7					

2 Specifications

2 - 1 Specifications

Electrical specifications			VAM150FC	VAM250FC	VAM350FC	VAM500FC	VAM650FC	
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	0.900			1.30	1.60	
	Maximum fuse amps (MFA)	A	15.0		16.0			
	Fan motor rated output	kW	0.03x2		0.08x2		0.106x2	
	Full load	Fan motor	A	0.400			0.600	0.700
	amps	Fan motor 2	A	0.400			0.600	0.700
	(FLA)							

Electrical specifications			VAM800FC		VAM1000FC		VAM1500FC		VAM2000FC	
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		2.50		3.00		5.00	
	Maximum fuse amps (MFA)		A		16.0					
	Fan motor rated output		kW		0.210x2				0.210x4	
	Full load amps (FLA)	Fan motor	A		1.10		1.30		2.20	
		Fan motor 2	A		1.10		1.30		2.20	
		Fan motor 3	A		-		-		2.20	
		Fan motor 4	A		-		-		2.20	

(1) Measured on fan curve 15. Refer to fan curves. |

(2) Measured according to JIS B 8628 |

(3) Measured at reference flow rate according to EN13141-7 |

(4) In accordance with commission regulation (EU) No 1254/2014 |

(5) At reference flow rate in accordance with commission regulation (EU) No 1254/2014 |

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

(7) 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. |

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

(9) Maximum allowable voltage range variation between phases is 2%. |

(10) MCA/MFA: $MCA = 1.25 \times FLA(FM1) + FLA(FM2)$; $MFA \leq 4 \times FLA$; (VAM2000 is regarded as 2x VAM1000) |

(11) Select wire size based on the value of MCA

Options

3 - 1 Options

VAM150-250FC

Type Ceiling-mounted
Installation with duct

Item		Model	
		VAM150FCVE	VAM250FCVE
Control systems	Remote control	BRC301B61	
	Remote control Wired type	BRC1D52	
		BRC1E53A7 *	
		BRC1E53B7 *	
		BRC1E53C7 *	
	Centralised control systems	DCS302C51	
		Unified ON/OFF controller	
		General DCS301B61 or DCS301B51 For EU market	
		Schedule timer	
		DST301B51	
		iTouch Manager	
		DCM601A51	
		iTouch Controller	
		DCS601C51	
		iTab Controller	
		DCC601A51	
		Modbus DIII adaptor	
		EKMBDXA7V1	
	Adaptor PCB	** Wiring adaptor for electrical appendices	General KRP2A61 or KRP2A51 For EU market
		** For humidifiers	KRP50-2
		*** Installation box for adaptor PCB	KRP50-2A90
		For heater control kit	BRP4A50
Miscellaneous	Replacement air filter	YAFF323F15	YAFF323F25
	High-efficiency filter	YAFM323F15	YAFM323F25

Notes

- * BRC1E53A7 Included languages are: English, German, French, Italian, Spanish, Portuguese, and Dutch.
- * 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 adaptor PCBs KRP2A61, KRP2A51, KRP50-2, installation box KRP50-2A90 is required.
- ** Up to 2 adaptor PCBs can be fixed per installation.
- *** Only one installation box can be installed per indoor unit.

3D099234C

VAM350-2000FC

Type Ceiling-mounted
Installation with duct

Item			Model						
			VAM350FCVE	VAM500FCVE	VAM650FCVE	VAM800FCVE	VAM1000FCVE	VAM1500FCVE	VAM2000FCVE
Control systems	Remote control		BRC301B61						
	Remote control Wired type		BRC1D52						
			BRC1E53A7 # / BRC1E53B7 # / BRC1E53C7 # / BRC1H519 * 7 / BRC1H81 * 7						
	Centralised control systems	Central remote control	DCS302C51						
		Unified ON/OFF controller	DCS301B51						
		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 or humidifiers		BRP4A50A						
	Mounting plate		---					EKMPVAM ##	
Miscellaneous	Silencer	Model	---	KDDM24B50	KDDM24B100	KDDM24B100	KDDM24B100	KDDM24B100 x 2	KDDM24B100 x 2
		Outside diameter [mm]	---	Ø200	Ø200	Ø250	Ø250	Ø250	Ø250
	High-efficiency filter	ePM10 70% (M6)	EKAFFV50F6		EKAFFV80F6		EKAFFV100F6	EKAFFV80F6 x 2	EKAFFV100F6 x 2
		ePM10 70% (F7)	EKAFFV50F7		EKAFFV80F7		EKAFFV100F7	EKAFFV80F7 x 2	EKAFFV100F7 x 2
		ePM10 70% (F8)	EKAFFV50F8		EKAFFV80F8		EKAFFV100F8	EKAFFV80F8 x 2	EKAFFV100F8 x 2
CO2		Sensor	BRYMA65	BRYMA65	BRYMA65	BRYMA100	BRYMA100	BRYMA200	BRYMA200

Notes

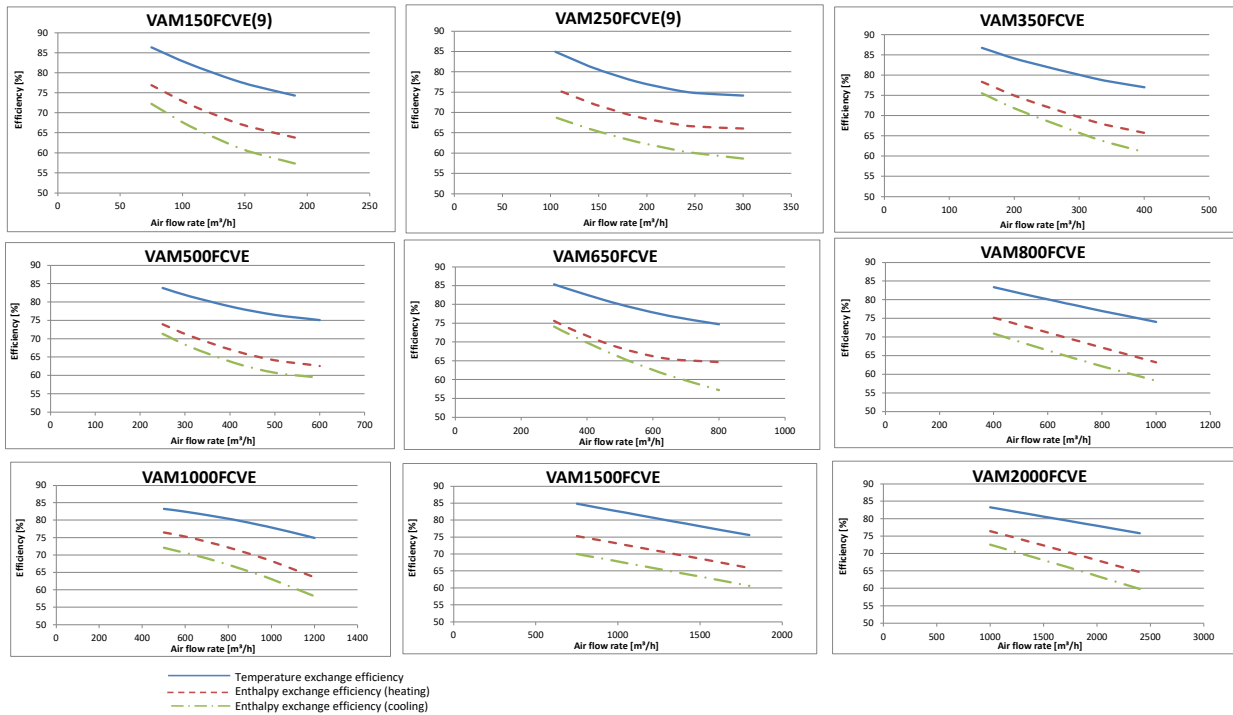
- # BRC1E53A7 Included languages are: English, German, French, Italian, Spanish, Portuguese, and Dutch.
- # BRC1E53B7 Included languages are: English, Czech, Croatian, Hungarian, Slovenian, Romanian, and Bulgarian.
- # BRC1E53C7 Included languages are: English, Russian, Greek, Turkish, Polish, Albanian, and Slovak.
- ## To install an adaptor PCB on ·VAM1500FC/VAM2000FC· units, mounting plate ·EKMPVAM· is required.
- Humidifiers and heaters cannot be combined.
- 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.

3D099233E

4 Exchange efficiency

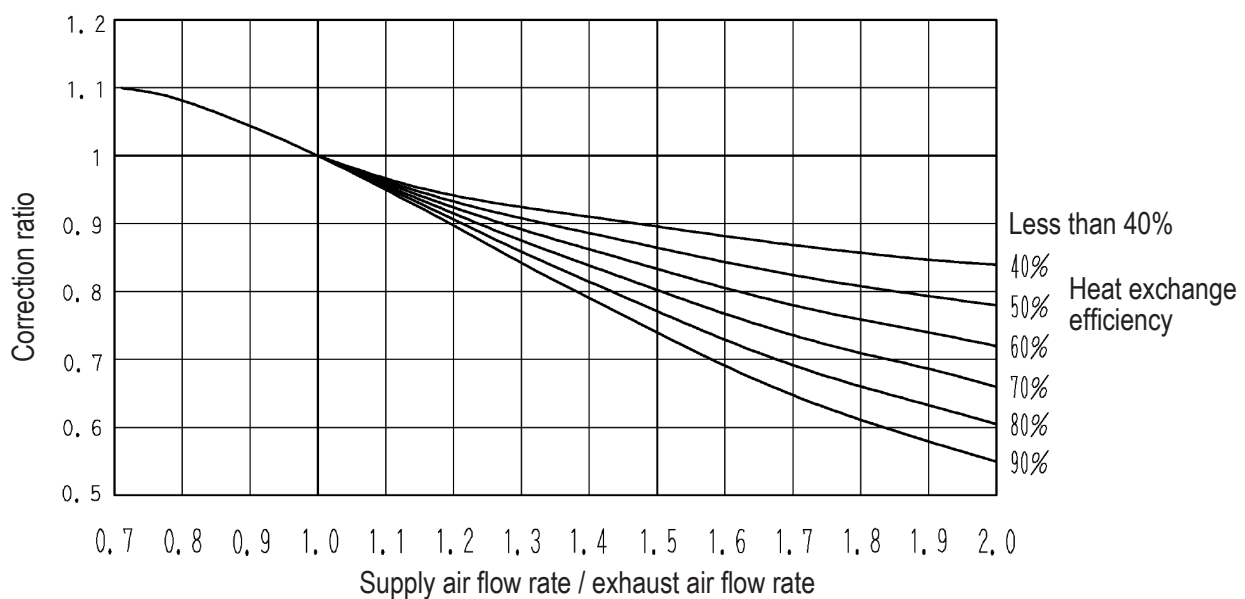
4 - 1 Exchange efficiency

VAM-FC



3D100465A

VAM-FC



4D023764A

5 - 1 Dimensional Drawings

5



- 3TW27874-1

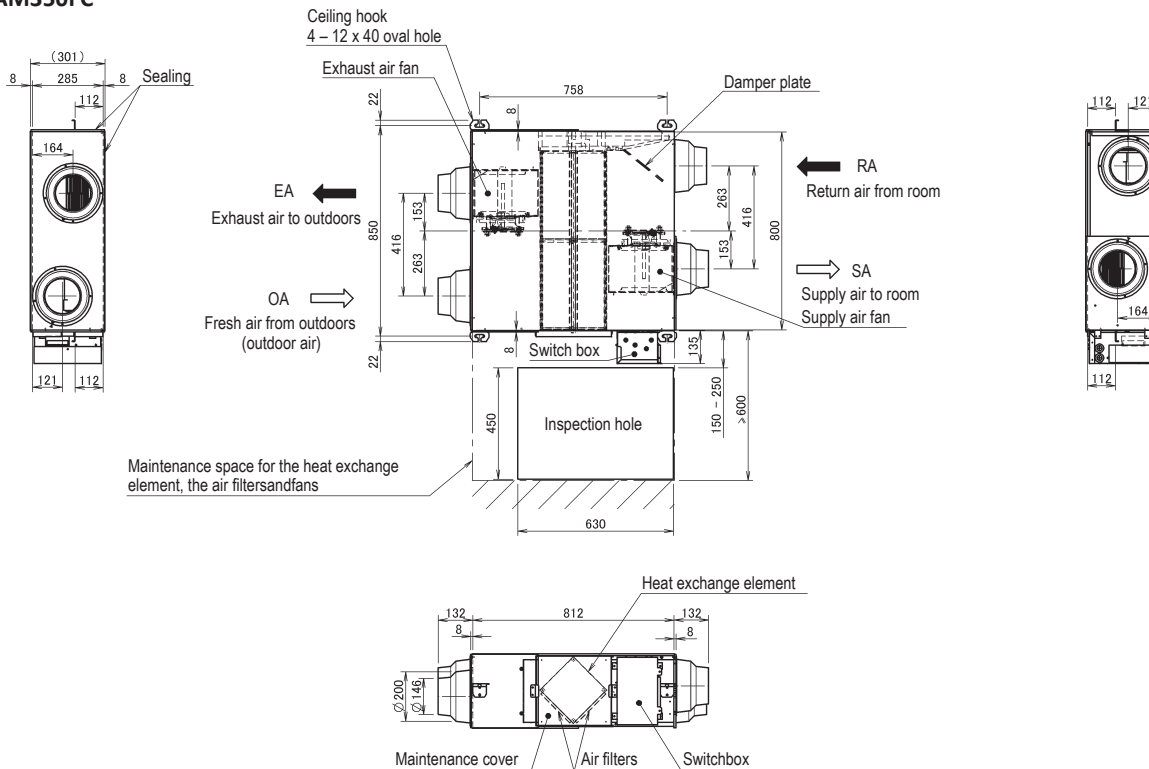
REMARK

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5 Dimensional drawings

5 - 1 Dimensional Drawings

VAM350FC

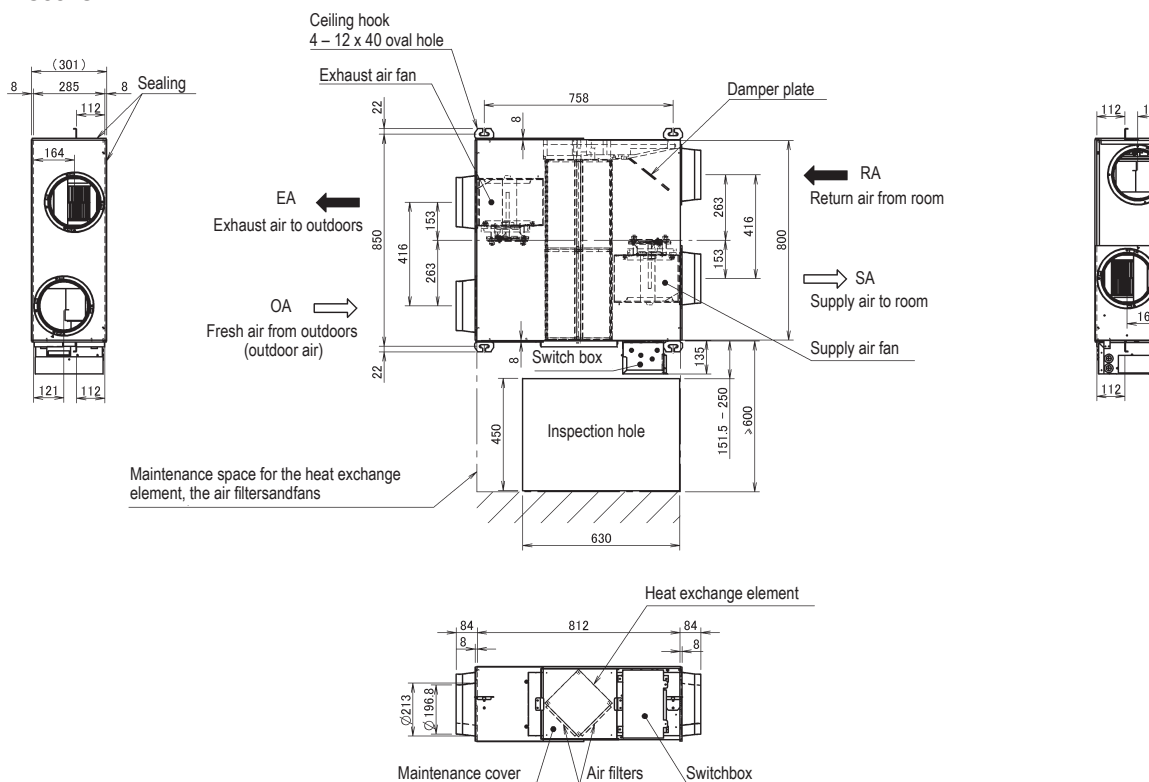


NOTES

1. Be sure to provide the inspection hole to inspect the air filters, the exchange elements and fans.

3D081162

VAM500FC



NOTES

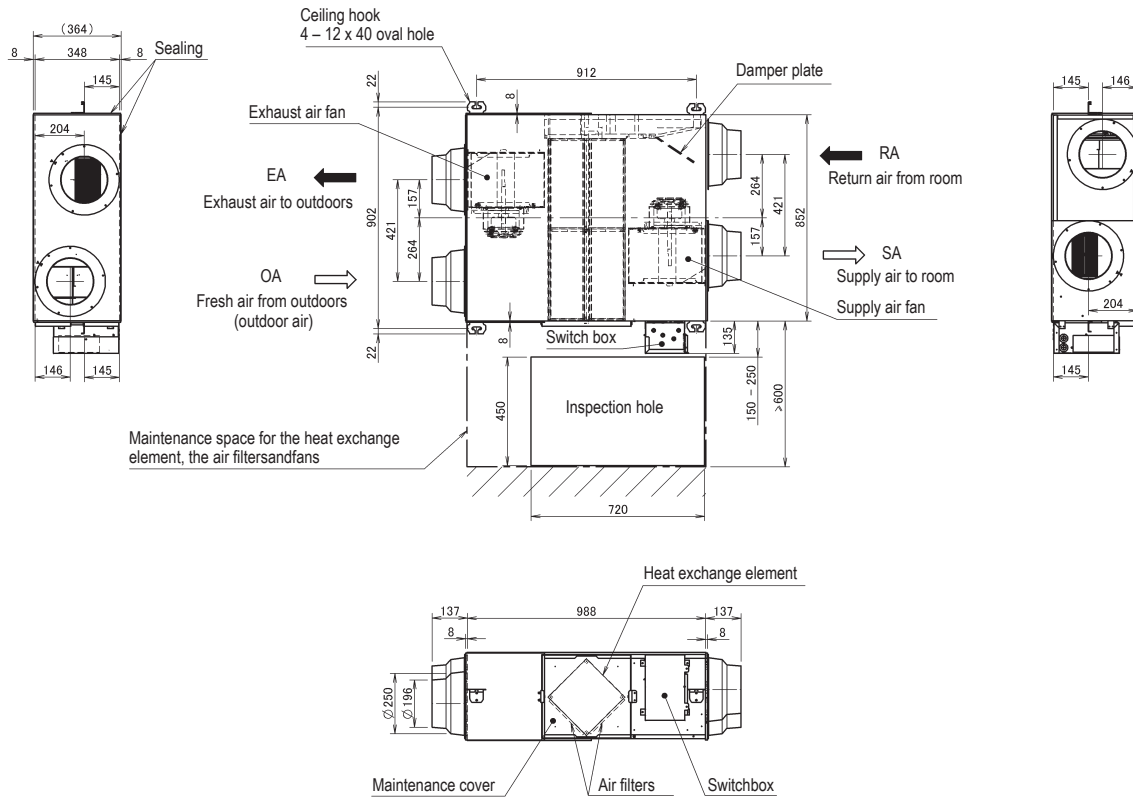
1. Be sure to provide the inspection hole to inspect the air filters, the exchange elements and fans.

3D081163

5 Dimensional drawings

5 - 1 Dimensional Drawings

VAM650FC

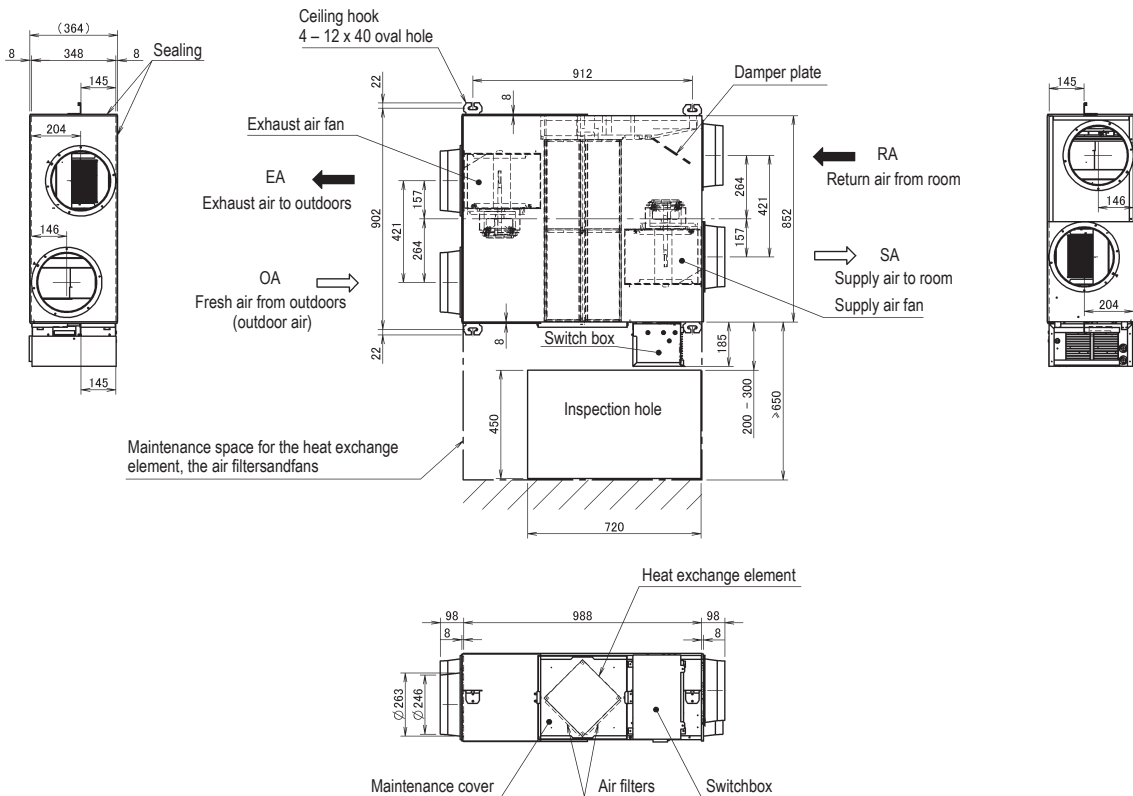


NOTES

1. Be sure to provide the inspection hole to inspect the air filters, the exchange elements and fans.

3D081164

VAM800FC



NOTES

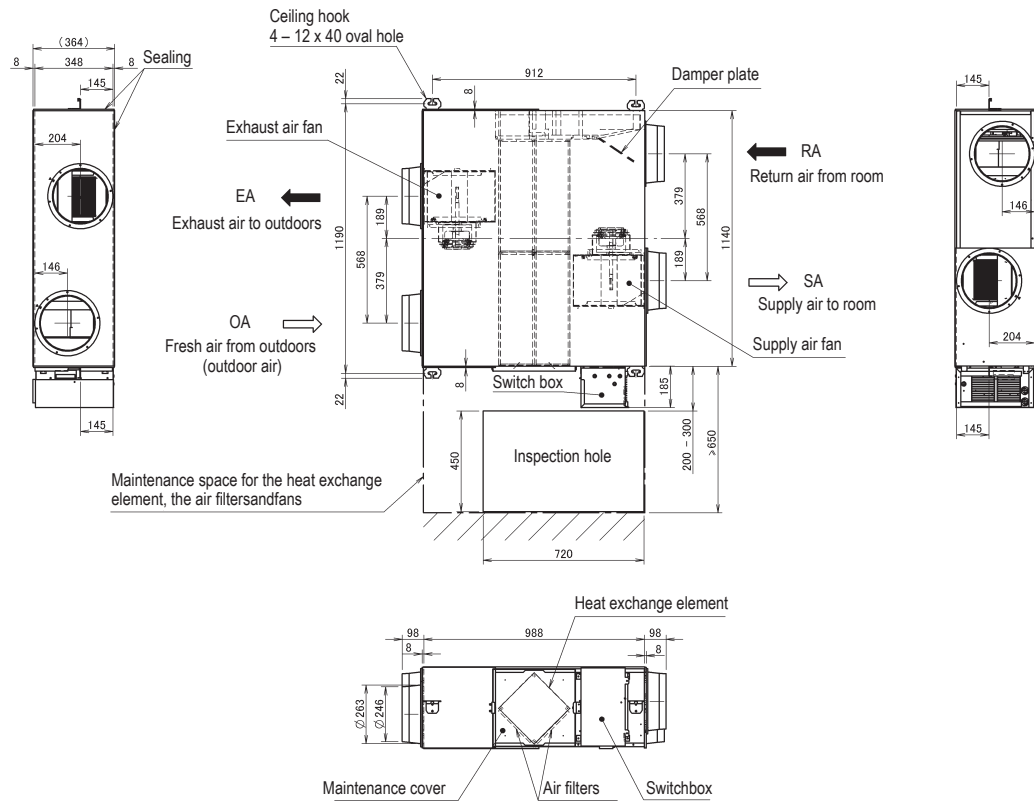
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3D081165

5 Dimensional drawings

5 - 1 Dimensional Drawings

VAM1000FC



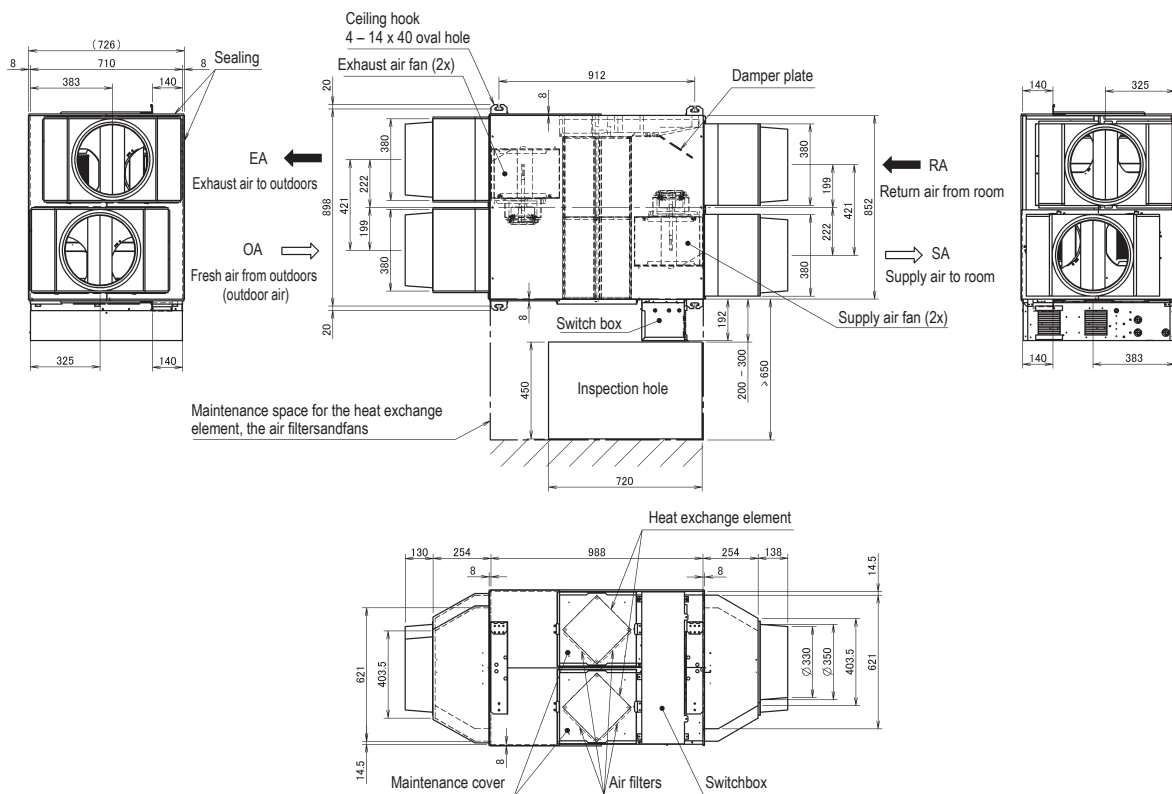
5

NOTES

1. Be sure to provide the inspection hole to inspect the air filters, the exchange elements and fans.

3D081166

VAM1500FC



NOTES

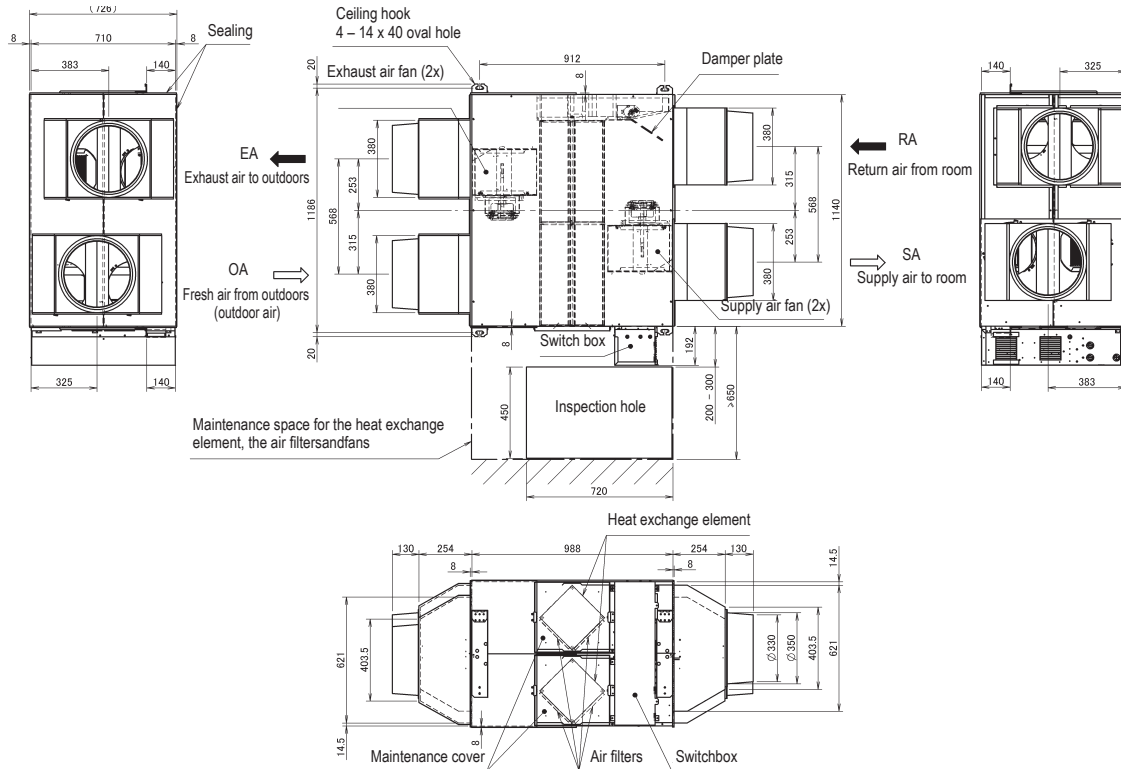
1. Be sure to provide the inspection hole to inspect the air filters, the exchange elements and fans.

3D081167

5 Dimensional drawings

5 - 1 Dimensional Drawings

VAM2000FC



NOTES

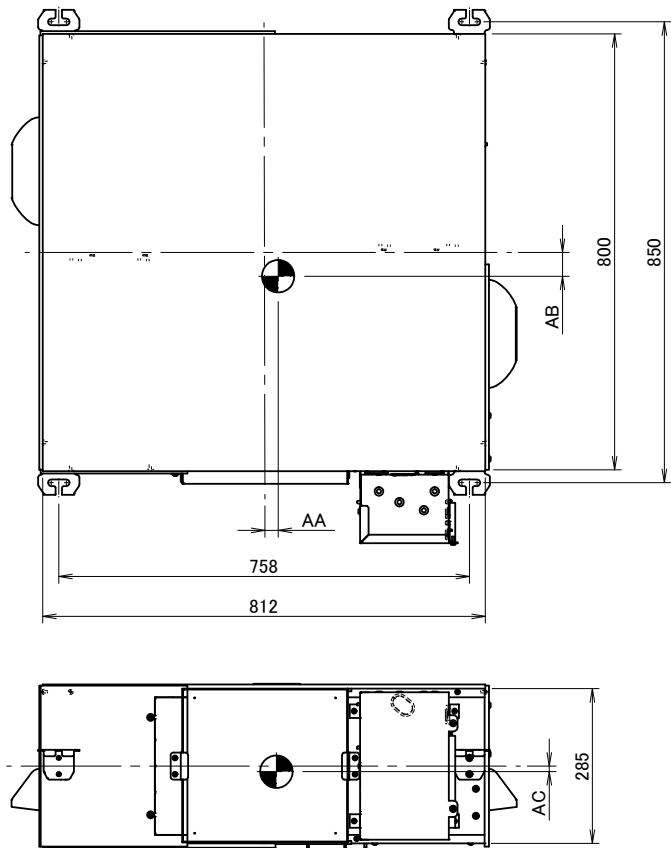
1. Be sure to provide the inspection hole to inspect the air filters, the exchange elements and fans.

3D081168

6 Centre of gravity

6 - 1 Centre of Gravity

VAM350-500FC

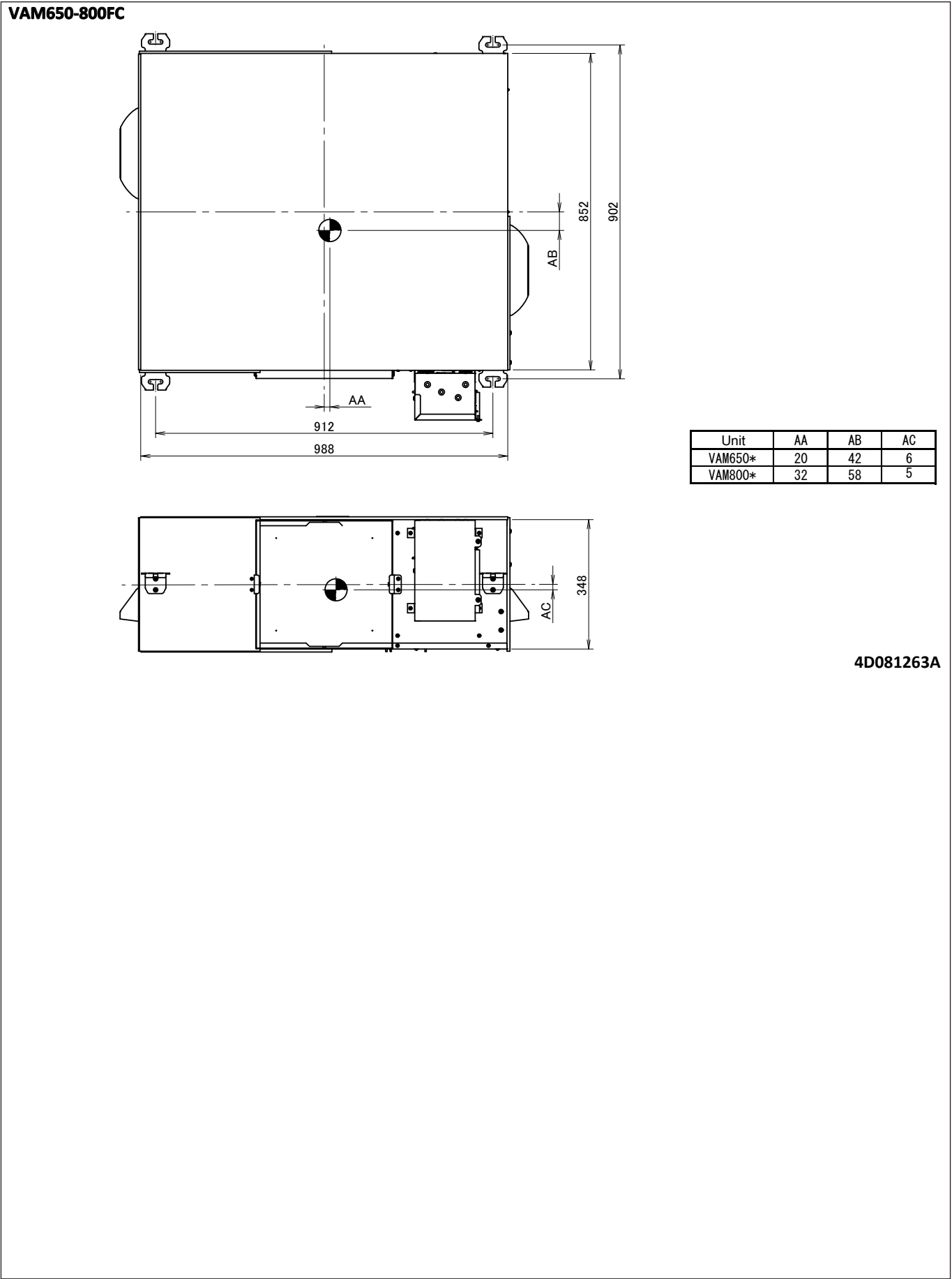


Unit	AA	AB	AC
VAM350*	24	51	10
VAM500*	23	36	9

4D081262A

6 Centre of gravity

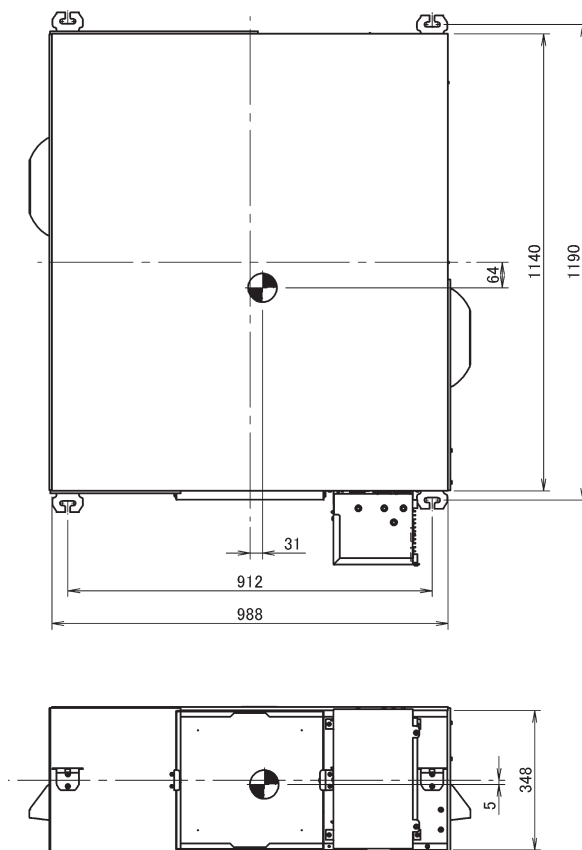
6 - 1 Centre of Gravity



6 Centre of gravity

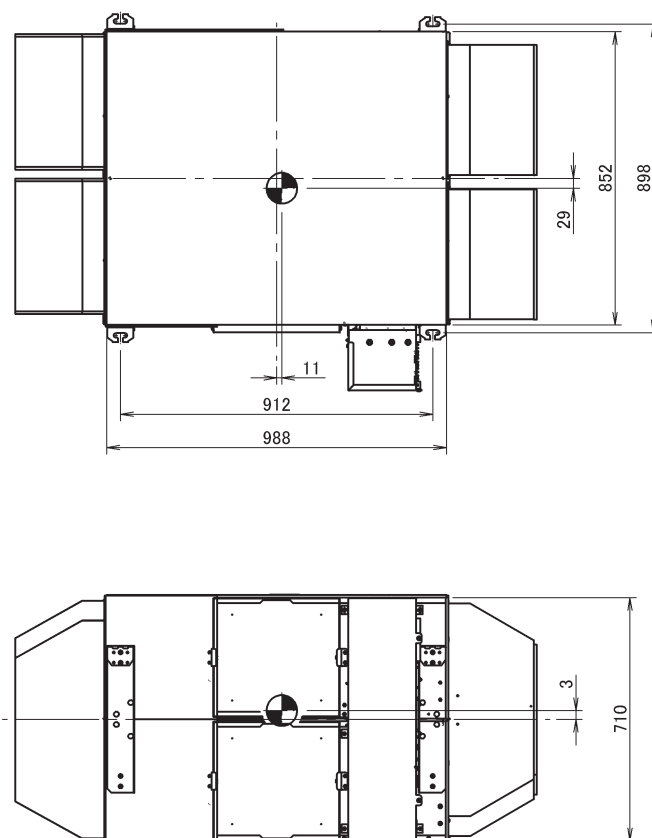
6 - 1 Centre of Gravity

VAM1000FC



4D081264

VAM1500FC

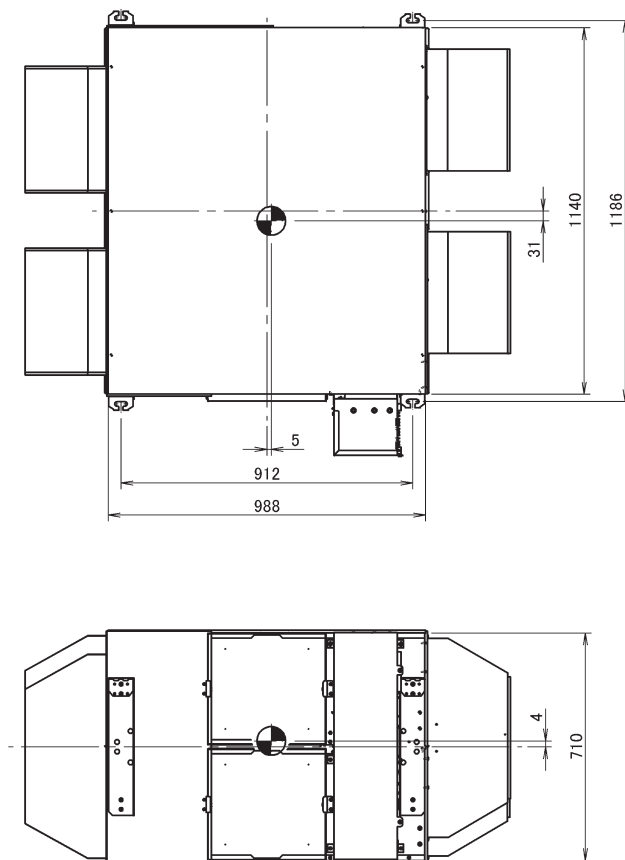


4D081265

6 Centre of gravity

6 - 1 Centre of Gravity

VAM2000FC

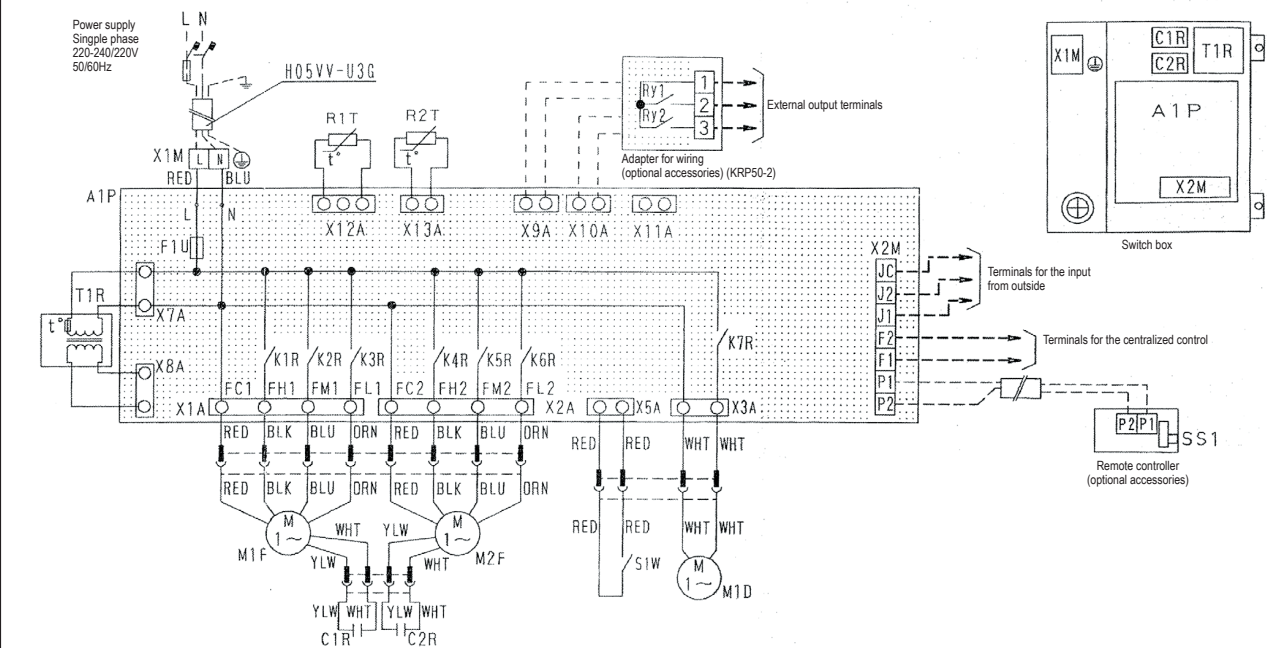


4D081266

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

VAM150-250FC



L-RED		N-BLU	M2F	Motor (exhaust fan motor)	Optional Accessories	
A1P	Printed circuit board		Q1L-Q2L	Thermo switch (MF1-2 built-in)		Adapter for wiring (KRP50-2)
C1R-C2R	Capacitor (M1F · M2F)		R1T	Thermistor (indoor air)	Ry1	Magnetic relay (ON/OFF)
F1U	Fuse (250V, 10A)		R2T	Thermistor (outdoor air)	Ry2	Magnetic relay (humidifier operation)
K1R-K3R	Magnetic relay (M1F)		S1W	Limit switch	X9A-10A	Connector (KRP50-2)
K4R-K6R	Magnetic relay (M2F)		T1R	Transformer (supply 220-240V/22V)		Remote Controller
K7R	Magnetic relay (M1D)		X1M	Terminal (power supply)	SS1	Selector switch (main/sub)
M1D	Motor (damper motor)		X2M	Terminal (control)		Optional connector
M1F	Motor (air supply fan motor)				X11A	Connector (adapter power supply)

NOTES

- : terminals
- : wire clamp, □ : connector
- : field wiring
- ⊕ : protective earth
- Symbols show as follows: BLK: Black, RED: Red, BLU: Blue, WHT: White, YLW: Yellow, ORN: Orange, GRN: Green

⚠ CLEANING PRECAUTIONS:

Clean the heat exchange elements once every two years or more often and the air filter once a year or more often. (Before cleaning, make sure that the unit is not operating).

⚠

Before obtaining access to terminal devices, all power supply circuits must be interrupted.

⚡

Grounding

- To prevent electric shock hazards, provide grounding work according to the installation manual.

2D098350

7 Wiring diagrams

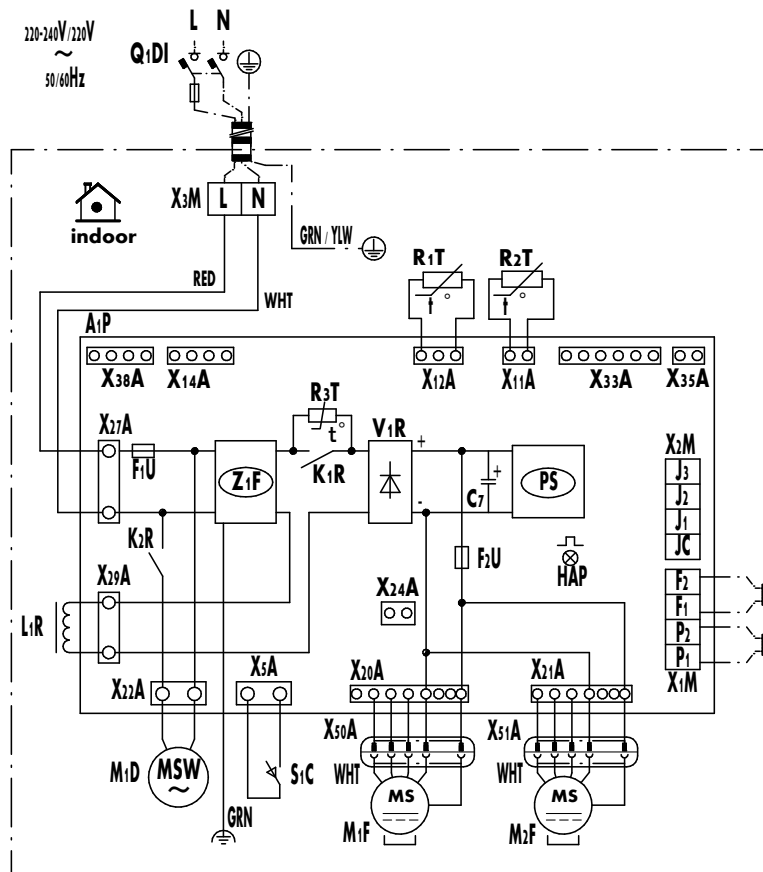
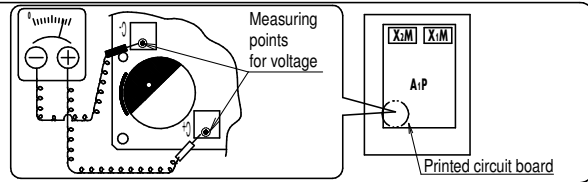
7 - 1 Wiring Diagrams - Single Phase

VAM350-650FC

Caution when performing service inside the EL. Compo. box

WARNING Caution for ELECTRIC SHOCK

- Do not open the EL. Compo. box cover for 10 minutes after the power supply is turned off.
- After opening the EL. Compo. box, measure the points shown at the right with a tester and confirm that the voltage of the capacitor in the main circuit is less than DC50V.

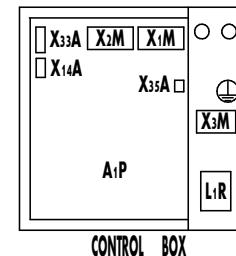


NOTES:

- 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

SEE NOTE 1

Wired remote controller (OPT. ACCESSORY)



CONTROL BOX

A1P	PRINTED CIRCUIT BOARD	Q1DI	FIELD EARTH LEAK DETECTOR	REMOTE CONTROLLER	
C1	CAPACITOR (M1F)		(MAX. 300mA)	SS1	SELECTOR SWITCH
F1U	FUSE T, 6.3A, 250V (A1P)	R1T	THERMISTOR (INDOOR AIR)	CONNECTOR FOR OPTION (SEE NOTE 3)	
F1U	FUSE T, 5A, 250V (A1P)	R2T	THERMISTOR (OUTDOOR AIR)	X14A	CONNECTOR (CO2 SENSOR)
HAP	PILOT LAMP (SERVICE MONITOR-GREEN)	R3T	THERMISTOR (PTC)	X24A	CONNECTOR (OUTSIDE DAMPER)
K1R	MAGNETIC RELAY	S1C	LIMIT SWITCH DAMPER MOTOR	X33A	CONNECTOR (CONTACT PCB)
K2R	MAGNETIC RELAY	X1M	TERMINAL (A1P)	X35A	CONNECTOR (APPENDICES PCB)
L1R	REACTOR	X2M	TERMINAL (OUTSIDE INPUT) (A1P)		
M1F	MOTOR (SUPPLY AIR FAN)	X3M	TERMINAL (POWER SUPPLY)		
M2F	MOTOR (EXHAUST AIR FAN)	V1R	DIODE BRIDGE		
M1D	MOTOR (DAMPER)	Z1F	NOISE FILTER		
PS	SWITCHING POWER SUPPLY (A1P)				

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

3D080682D

7 Wiring diagrams

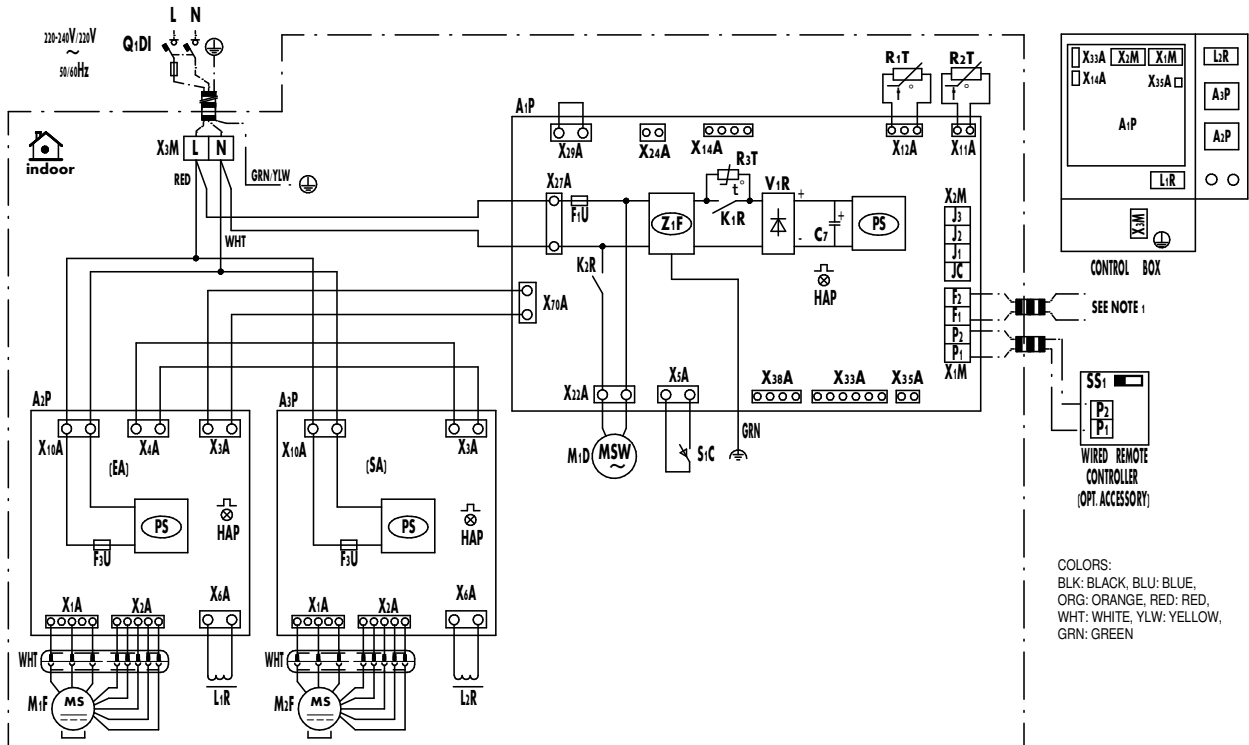
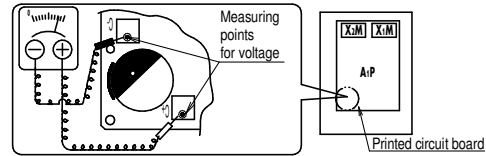
7 - 1 Wiring Diagrams - Single Phase

VAM800-1000FC

Caution when performing service inside the EL. Compo. box

WARNING Caution for ELECTRIC SHOCK

- Do not open the EL.Compo. box cover for 10 minutes after the power supply is turned off.
- After opening the EL. Compo. box, measure (on A1P~A3P) the points shown at the right with a tester and confirm that the voltage of the capacitor in the main circuit is less than DC50V.



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

A1P	PRINTED CIRCUIT BOARD	M1D	MOTOR (DAMPER)	REMOTE CONTROLLER	
A2P	PRINTED CIRCUIT BOARD ASSY (FAN)	PS	SWITCHING POWER SUPPLY	SS1	SELECTOR SWITCH
A3P	PRINTED CIRCUIT BOARD ASSY (FAN)	Q1DI	FIELD EARTH LEAK DETECTOR (MAX. 300mA)	CONNECTOR FOR OPTION (SEE NOTE 3)	
C1	CAPACITOR (M1F)			X14A	CONNECTOR (CO2 SENSOR)
F1U	FUSE T. 6.3A, 250V (A1P)	R1T	THERMISTOR (INDOOR AIR)	X24A	CONNECTOR (OUTSIDE DAMPER)
F3U	FUSE T. 6.3A, 250V (A2P, A3P)	R2T	THERMISTOR (OUTDOOR AIR)	X33A	CONNECTOR (CONTACT PCB)
HAP	PILOT LAMP (SERVICE MONITOR-GREEN)	R3T	THERMISTOR (PTC)	X35A	CONNECTOR (APPENDICES PCB)
K1R	MAGNETIC RELAY	S1C	LIMIT SWITCH DAMPER MOTOR		
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:

- 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

3D080683C

7 Wiring diagrams

7 - 1 Wiring Diagrams - Single Phase

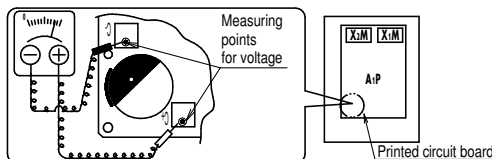
VAM1500-2000FC

7

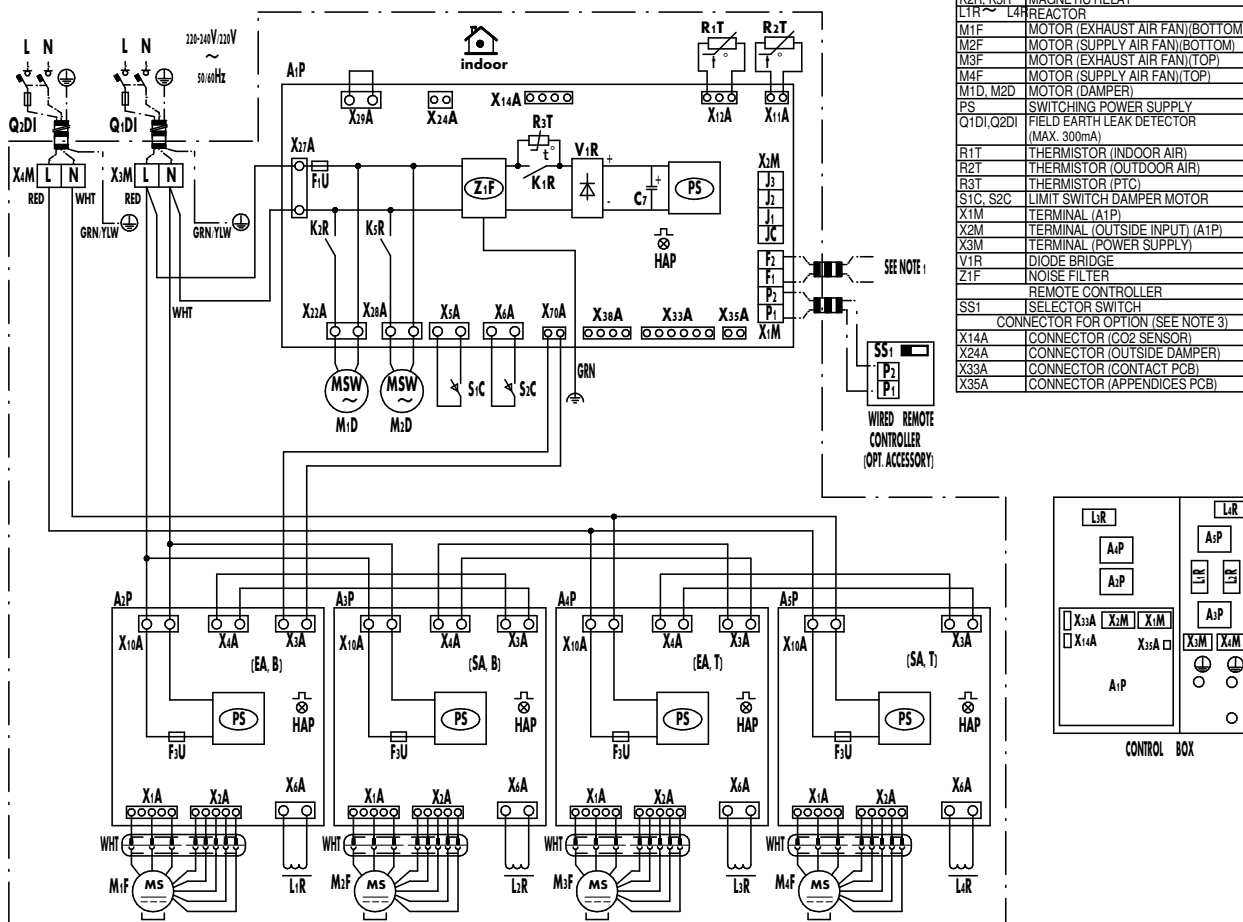
Caution when performing service inside the EL. Compo. box

WARNING Caution for ELECTRIC SHOCK

- Do not open the EL.Compo. box cover for 10 minutes after the power supply is turned off.
- After opening the EL. Compo. box, measure (on A1P~A5P) the points shown at the right with a tester and confirm that the voltage of the capacitor in the main circuit is less than DC50V.



A1P	PRINTED CIRCUIT BOARD
A2P~A4P	PRINTED CIRCUIT BOARD ASSY (FAN)
A5P	PRINTED CIRCUIT BOARD ASSY (FAN)
C1	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
LTR~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
Q1D1, Q2D1	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
	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)



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

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

3D080684C

8 Sound data

8 - 1 Sound Power Spectrum

VAM150FC

Sound power

Model	Fan speed	Hz								
		63	125	250	500	1000	2000	4000	[dB]	[dBA]
VAM150FCVE(9)	U-H	57	55	48	44	41	33	27	22	46
	H	56	54	47	43	40	32	26	22	45
	L	55	49	43	37	33	25	22	23	40

Notes

1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = 10^{-6} W/m².
3. Measured according to ISO 3744
4. Depending on the operating conditions, reflected sound, and peripheral noise, the operating sound may become higher than this value.

4D099265B

VAM250FC

Sound power

Model	Fan speed	Hz								
		63	125	250	500	1000	2000	4000	[dB]	[dBA]
VAM250FCVE(9)	U-H	61	59	52	47	44	37	31	26	50
	H	60	58	51	46	43	36	29	26	49
	L	57	51	45	40	35	27	25	26	42

Notes

1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic intensity 0dB = 10^{-6} W/m².
3. Measured according to ISO 3744
4. Depending on the operating conditions, reflected sound, and peripheral noise, the operating sound may become higher than this value.

4D099266B

8 Sound data

8 - 1 Sound Power Spectrum

VAM350FC

Power level data (in case of Total Heat Exchange mode)

(dB) (dBA)										
Unit model name	<div>Hz</div> <div>Fan speed</div>	63	125	250	500	1000	2000	4000	8000	Total
VAM350FB	U-H	57.5	53.0	49.5	45.0	42.5	39.5	31.5	25.5	48
	H	58.5	51.0	46.5	43.5	40.5	35.0	26.0	26.5	46
	L	58.5	45.5	41.5	38.0	33.5	24.0	25.0	27.0	41

NOTES

1. dBA = A-weighted sound power level (A-scale according to IEC).
2. Reference acoustic intensity 0dB = 10E-6μW/m²
3. Measured according to ISO 3744.
4. The operating sound level may become higher than this value depending on the operating conditions, reflected sound and peripheral noise.
5. The power levels have been calculated in the assumption that the measuring point is immediately under the source of operating sound.

4D082464

VAM500FC

Power level data (in case of Total Heat Exchange mode)

										(dB) (dBA)	
Unit model name		Hz	63	125	250	500	1000	2000	4000	8000	Total
	Fan speed										
VAM500FB	U-H		57.0	54.0	51.0	48.0	45.0	37.5	27.5	25.5	50
	H		54.0	51.5	49.0	46.0	42.5	36.0	26.5	26.0	48
	L		50.5	47.5	44.0	39.0	33.5	25.0	23.0	24.5	41

NOTES

1. dBA = A-weighted sound power level (A-scale according to IEC).
2. Reference acoustic intensity 0dB = 10E-6μW/m²
3. Measured according to ISO 3744.
4. The operating sound level may become higher than this value depending on the operating conditions, reflected sound and peripheral noise.
5. The power levels have been calculated in the assumption that the measuring point is immediately under the source of operating sound.

4D082465

8 Sound data

8 - 1 Sound Power Spectrum

VAM650FC

Power level data (in case of Total Heat Exchange mode)

(dB) (dBA)										
Unit model name	<div>Hz</div> <div>Fan speed</div>	63	125	250	500	1000	2000	4000	8000	Total
VAM650FB	U-H	62.0	58.0	52.5	48.5	45.5	41.5	34.0	26.0	51
	H	61.0	56.5	51.0	47.0	44.5	39.0	30.0	26.0	50
	L	53.5	50.5	46.0	42.0	37.5	32.0	24.0	25.5	44

NOTES

1. dBA = A-weighted sound power level (A-scale according to IEC).
2. Reference acoustic intensity 0dB = 10E-6μW/m²
3. Measured according to ISO 3744.
4. The operating sound level may become higher than this value depending on the operating conditions, reflected sound and peripheral noise.
5. The power levels have been calculated in the assumption that the measuring point is immediately under the source of operating sound.

4D082466

VAM800FC

Power level data (in case of Total Heat Exchange mode)

(dB) (dBA)										
Unit model name	<div>Hz</div> <div>Fan speed</div>	63	125	250	500	1000	2000	4000	8000	Total
VAM800FB	U-H	58.0	58.0	52.5	49.5	48.5	41.5	33.5	26.0	53
	H	58.5	57.0	51.5	49.5	47.0	40.5	31.0	27.5	52
	L	54.5	54.5	47.5	44.5	43.0	35.5	24.5	23.5	47

NOTES

1. dBA = A-weighted sound power level (A-scale according to IEC).
2. Reference acoustic intensity 0dB = 10E-6μW/m²
3. Measured according to ISO 3744.
4. The operating sound level may become higher than this value depending on the operating conditions, reflected sound and peripheral noise.
5. The power levels have been calculated in the assumption that the measuring point is immediately under the source of operating sound.

4D082467

8 Sound data

8 - 1 Sound Power Spectrum

VAM1000FC

Power level data (in case of Total Heat Exchange mode)

(dB) (dBA)										
Unit model name	<div>Hz</div> <div>Fan speed</div>	63	125	250	500	1000	2000	4000	8000	Total
VAM1000FB	U-H	62.0	58.5	54.0	50.5	49.0	42.0	36.5	28.0	53
	H	61.0	57.0	52.0	50.0	48.0	38.5	31.0	25.5	52
	L	58.0	55.0	49.0	45.5	43.5	36.5	27.5	24.0	48

NOTES

1. dBA = A-weighted sound power level (A-scale according to IEC).
2. Reference acoustic intensity 0dB = 10E-6μW/m²
3. Measured according to ISO 3744.
4. The operating sound level may become higher than this value depending on the operating conditions, reflected sound and peripheral noise.
5. The power levels have been calculated in the assumption that the measuring point is immediately under the source of operating sound.

4D082468

VAM1500FC

Power level data (in case of Total Heat Exchange mode)

(dB) (dBA)										
Unit model name	<div>Hz</div> <div>Fan speed</div>	63	125	250	500	1000	2000	4000	8000	Total
VAM1500FB	U-H	60.5	61.0	55.5	52.5	50.5	46.0	39.5	29.5	55
	H	60.5	60.0	53.5	51.5	49.5	44.5	37.0	31.0	54
	L	58.5	58.0	51.0	49.0	47.0	39.5	30.5	31.0	51

NOTES

1. dBA = A-weighted sound power level (A-scale according to IEC).
2. Reference acoustic intensity 0dB = 10E-6μW/m²
3. Measured according to ISO 3744.
4. The operating sound level may become higher than this value depending on the operating conditions, reflected sound and peripheral noise.
5. The power levels have been calculated in the assumption that the measuring point is immediately under the source of operating sound.

4D082469

8 Sound data

8 - 1 Sound Power Spectrum

VAM2000FC

Power level data (in case of Total Heat Exchange mode)

Unit model name	Fan speed	(dB) (dBA)								
		63	125	250	500	1000	2000	4000	8000	Total
VAM2000FB	U-H	65.0	61.5	57.0	54.0	53.0	45.0	39.5	32.5	57
	H	64.0	60.0	55.0	53.0	51.0	41.5	34.5	30.5	55
	L	62.0	58.0	51.5	50.0	48.5	40.5	32.5	30.5	53

NOTES

1. dBA = A-weighted sound power level (A-scale according to IEC).
2. Reference acoustic intensity 0dB = 10E-6μW/m²
3. Measured according to ISO 3744.
4. The operating sound level may become higher than this value depending on the operating conditions, reflected sound and peripheral noise.
5. The power levels have been calculated in the assumption that the measuring point is immediately under the source of operating sound.

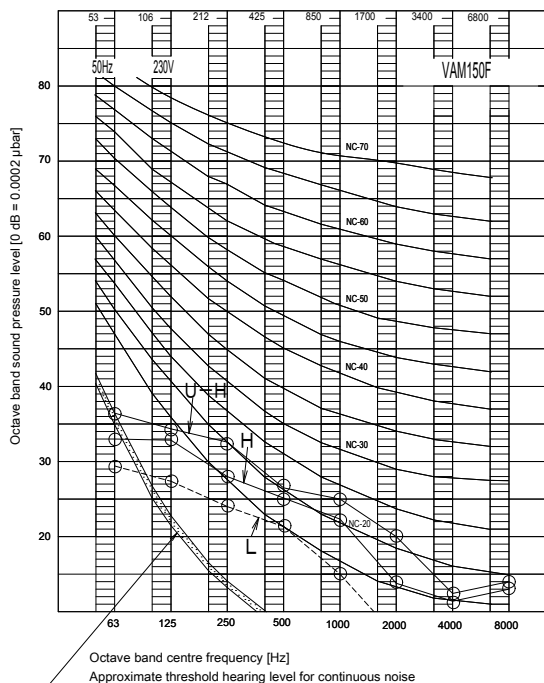
4D082470

8 Sound data

8 - 2 Sound Pressure Spectrum

8

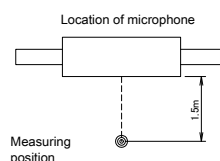
VAM150FC



Notes

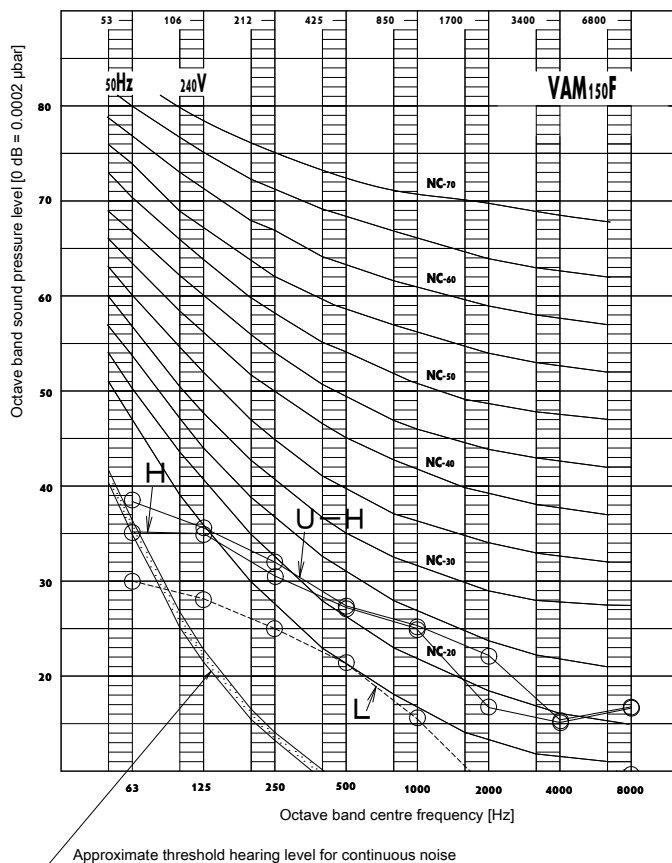
- Data is valid at nominal operation condition. –
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Operating noise varies depending on operation, installation, and ambient conditions. –
- Measuring location: anechoic chamber

Scale	Air flow rate		
	U-H	H	L
A	28	27	21



3D099269

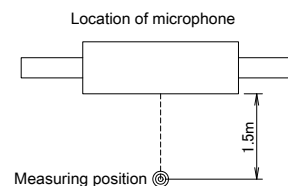
VAM150FC (240V)



Notes

- Data is valid at nominal operation condition. –
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Operating noise varies depending on operation, installation, and ambient conditions. –
- Measuring location: anechoic chamber

Scale	Air flow rate		
	U-H	H	L
A	28.5	27.5	21.5

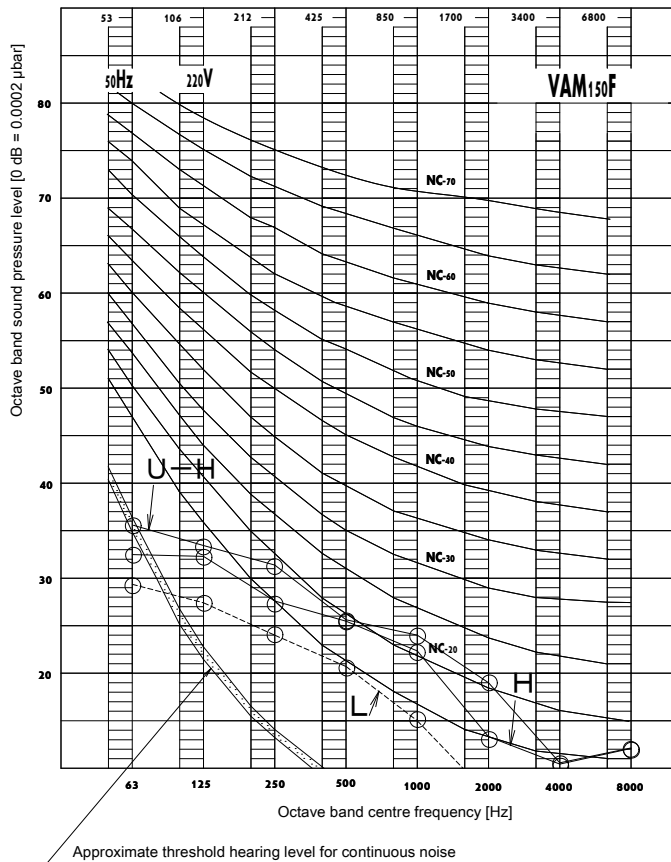


3D099271

8 Sound data

8 - 2 Sound Pressure Spectrum

VAM150FC (220V)



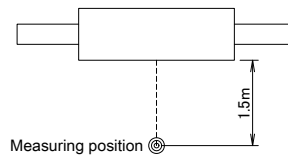
Notes

- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Operating noise varies depending on operation, installation, and ambient conditions.
- Measuring location: anechoic chamber

Total dBA

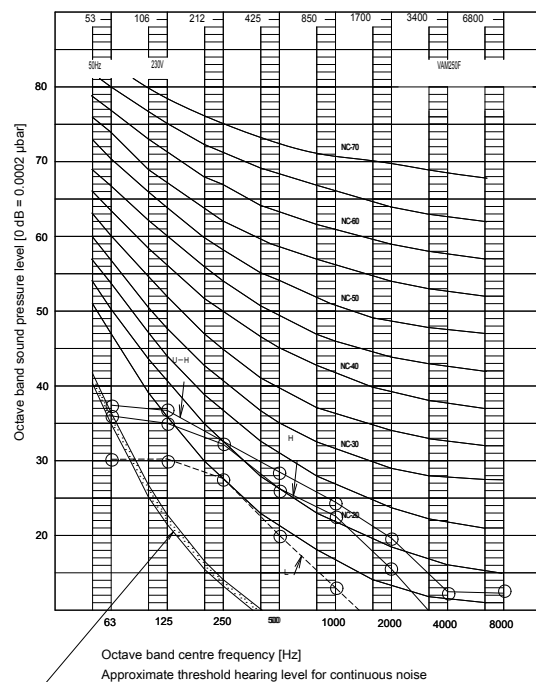
Scale	Air flow rate		
	U-H	H	L
A	27	26	20, 5

Location of microphone



3D099267

VAM250FC (230V)



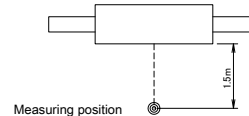
Notes

- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Operating noise varies depending on operation, installation, and ambient conditions.
- Measuring location: anechoic chamber

Total dBA

Scale	Air flow rate		
	U-H	H	L
A	28.5	26.5	21.5

Location of microphone

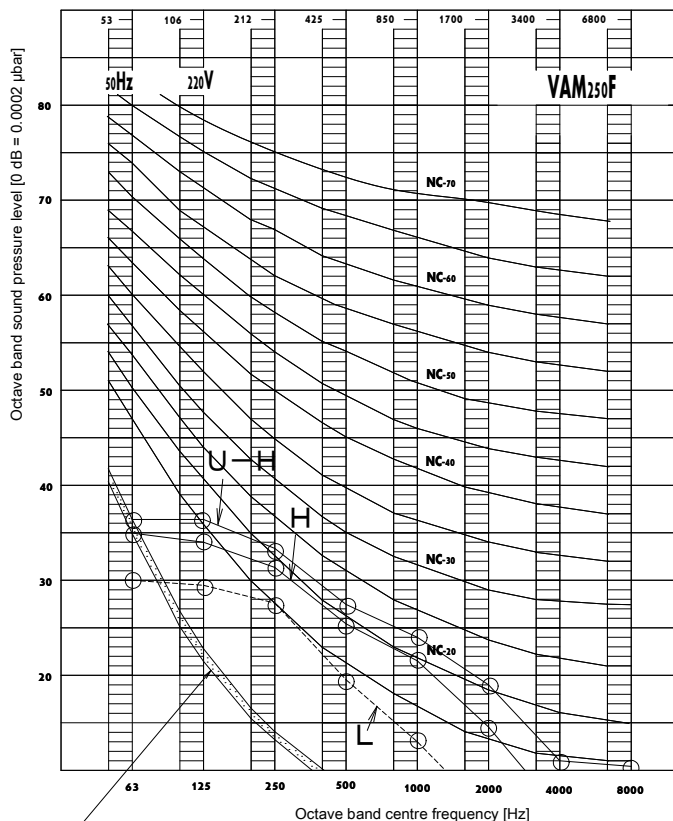


3D099270

8 Sound data

8 - 2 Sound Pressure Spectrum

VAM250FC (220V)



Approximate threshold hearing level for continuous noise

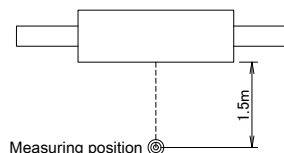
Notes

- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Operating noise varies depending on operation, installation, and ambient conditions.
- Measuring location: anechoic chamber

Total dB

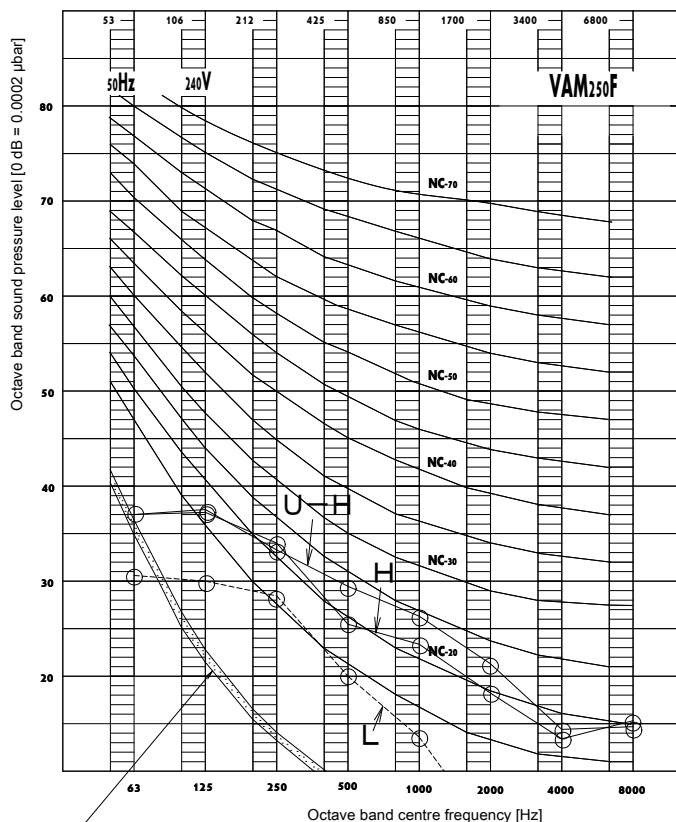
Scale	Air flow rate		
	U-H	H	L
A	28	26	21

Location of microphone



3D099268

VAM250FC (240V)



Approximate threshold hearing level for continuous noise

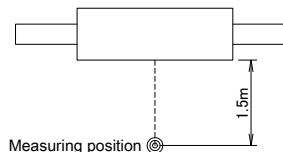
Notes

- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Operating noise varies depending on operation, installation, and ambient conditions.
- Measuring location: anechoic chamber

Total dB

Scale	Air flow rate		
	U-H	H	L
A	29	27	22

Location of microphone

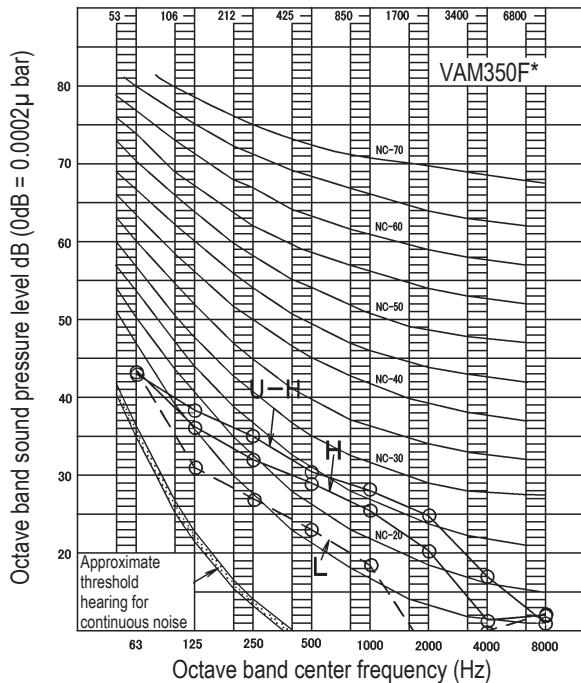


3D099272

8 Sound data

8 - 2 Sound Pressure Spectrum

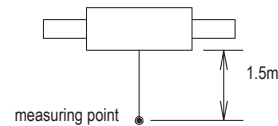
VAM350FC



Air flow rate (dB)		
U-H	H	L
32	31.5	23.5

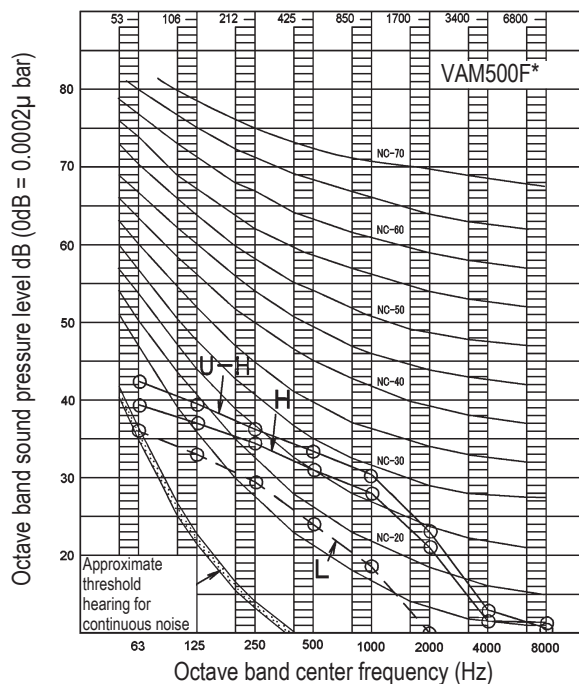
NOTES

1. Ventilation mode: total heat exchange.
2. Operation noise is measured in an anechoic chamber.
3. The operation noise level may become higher than this value depending on the operation conditions, reflected sound and peripheral noise.
4. Operation noise differs with operation and ambient conditions.
5. U-H: ultra-high, H: high, L: low
6. Location of microphone.



4D082471

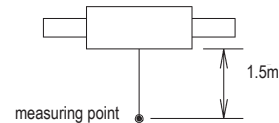
VAM500FC



Air flow rate (dB)		
U-H	H	L
33	31.5	24.5

NOTES

1. Ventilation mode: total heat exchange.
2. Operation noise is measured in an anechoic chamber.
3. The operation noise level may become higher than this value depending on the operation conditions, reflected sound and peripheral noise.
4. Operation noise differs with operation and ambient conditions.
5. U-H: ultra-high, H: high, L: low
6. Location of microphone.



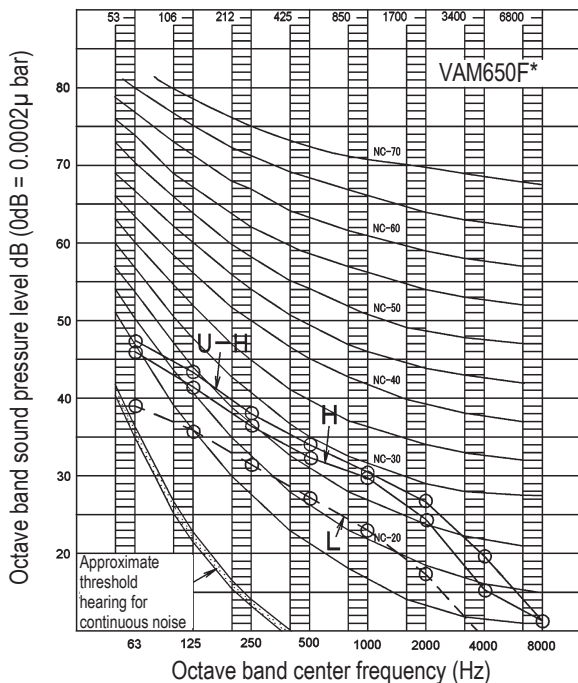
4D082472

8 Sound data

8 - 2 Sound Pressure Spectrum

8

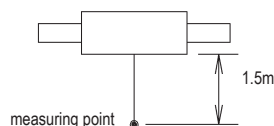
VAM650FC



Air flow rate (dB)		
U-H	H	L
34.5	33	27

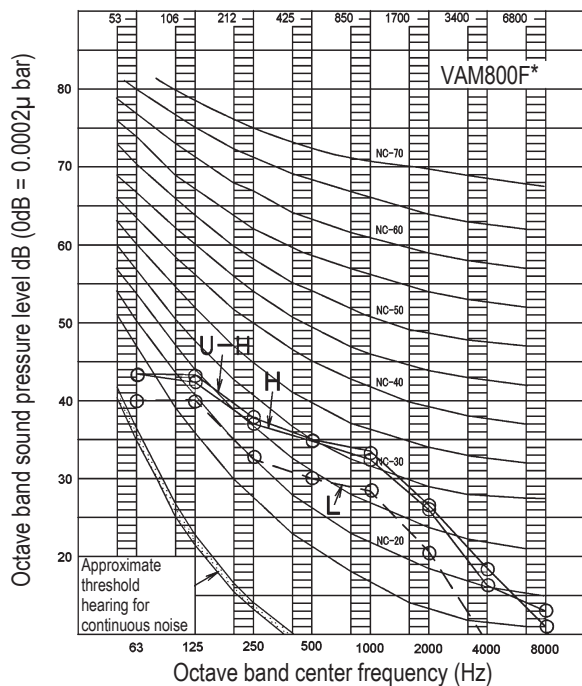
NOTES

1. Ventilation mode: total heat exchange.
2. Operation noise is measured in an anechoic chamber.
3. The operation noise level may become higher than this value depending on the operation conditions, reflected sound and peripheral noise.
4. Operation noise differs with operation and ambient conditions.
5. U-H: ultra-high, H: high, L: low
6. Location of microphone.



4D082473

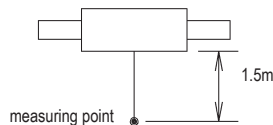
VAM800FC



Air flow rate (dB)		
U-H	H	L
35.5	34.5	31

NOTES

1. Ventilation mode: total heat exchange.
2. Operation noise is measured in an anechoic chamber.
3. The operation noise level may become higher than this value depending on the operation conditions, reflected sound and peripheral noise.
4. Operation noise differs with operation and ambient conditions.
5. U-H: ultra-high, H: high, L: low
6. Location of microphone.

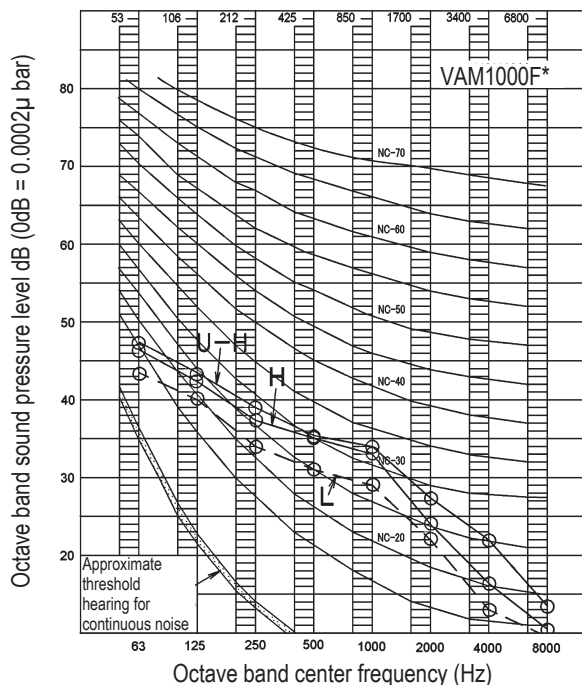


4D082474

8 Sound data

8 - 2 Sound Pressure Spectrum

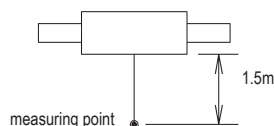
VAM1000FC



Air flow rate (dB)		
U-H	H	L
36	35	31.5

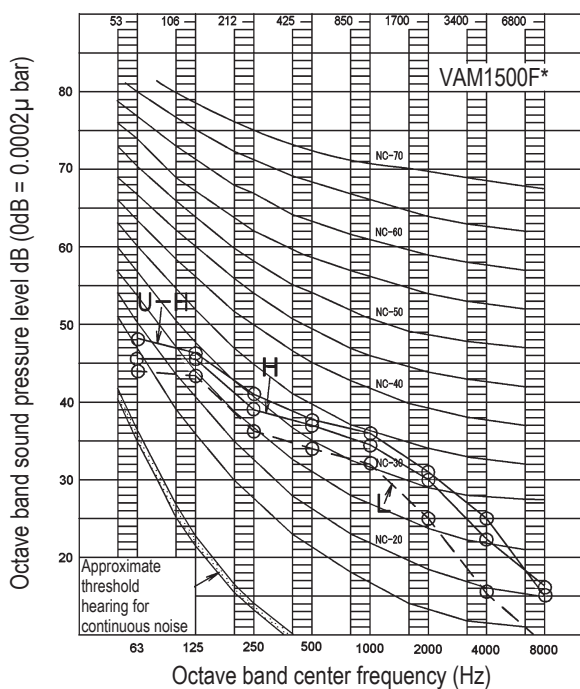
NOTES

1. Ventilation mode: total heat exchange.
2. Operation noise is measured in an anechoic chamber.
3. The operation noise level may become higher than this value depending on the operation conditions, reflected sound and peripheral noise.
4. Operation noise differs with operation and ambient conditions.
5. U-H: ultra-high, H: high, L: low
6. Location of microphone.



4D082475

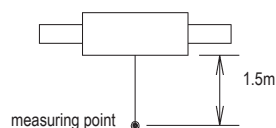
VAM1500FC



Air flow rate (dB)		
U-H	H	L
39.5	38	34

NOTES

1. Ventilation mode: total heat exchange.
2. Operation noise is measured in an anechoic chamber.
3. The operation noise level may become higher than this value depending on the operation conditions, reflected sound and peripheral noise.
4. Operation noise differs with operation and ambient conditions.
5. U-H: ultra-high, H: high, L: low
6. Location of microphone.

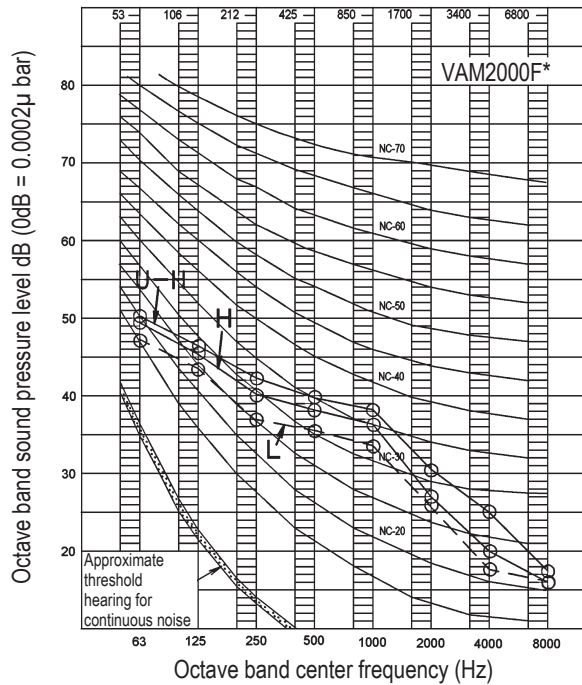


4D082476

8 Sound data

8 - 2 Sound Pressure Spectrum

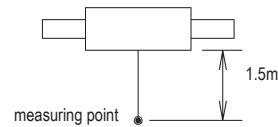
VAM2000FC



Air flow rate (dB)		
U-H	H	L
40	38	35

NOTES

1. Ventilation mode: total heat exchange.
2. Operation noise is measured in an anechoic chamber.
3. The operation noise level may become higher than this value depending on the operation conditions, reflected sound and peripheral noise.
4. Operation noise differs with operation and ambient conditions.
5. U-H: ultra-high, H: high, L: low
6. Location of microphone.



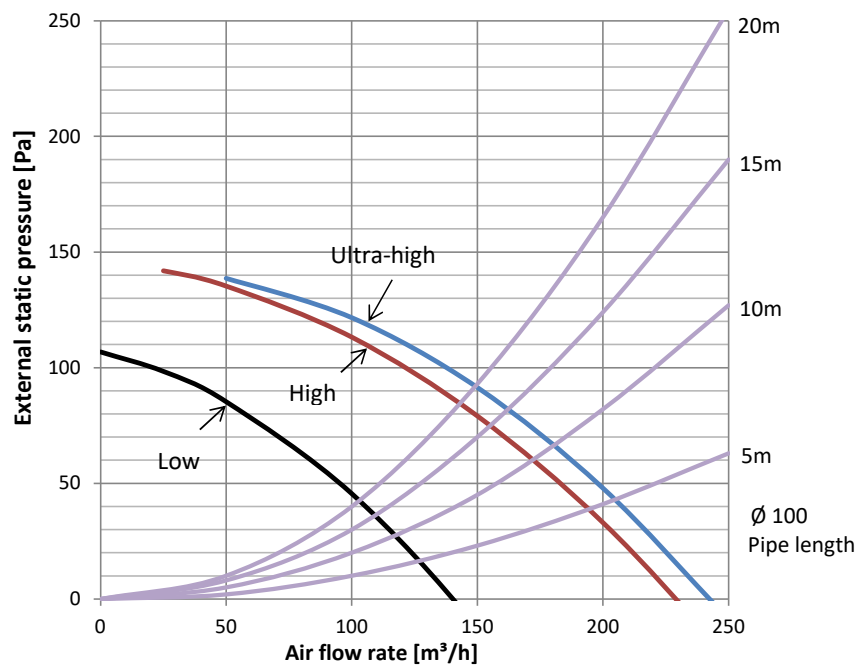
4D082477

9 Fan characteristics

9 - 1 Fan Characteristics

VAM150FC

VAM150FCVE(9)



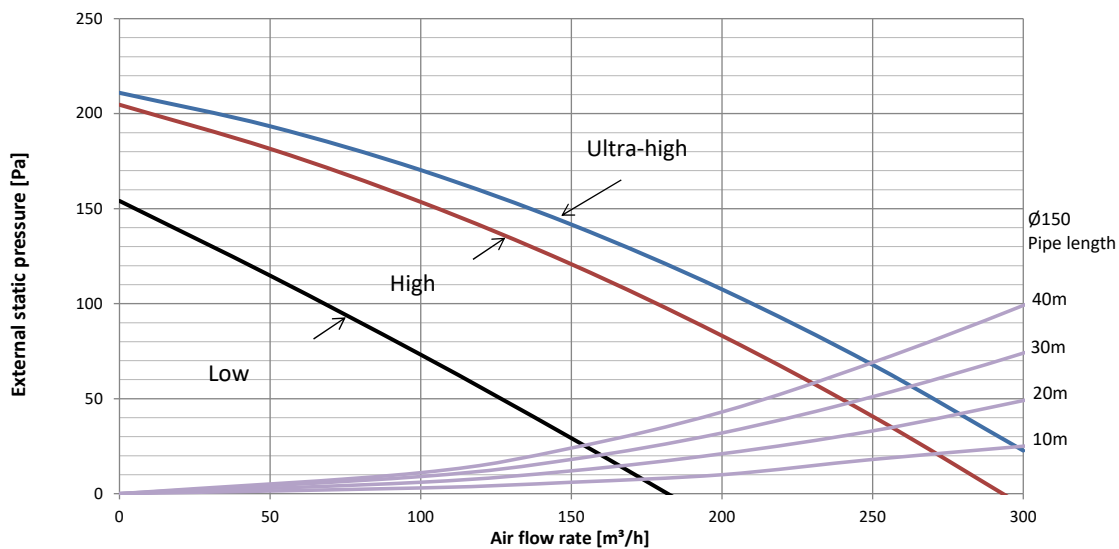
Notes

1. The fan speeds are valid for ~230-V, ~50-Hz power supply.

4D100379A

VAM250FC

VAM250FCVE(9)



Notes

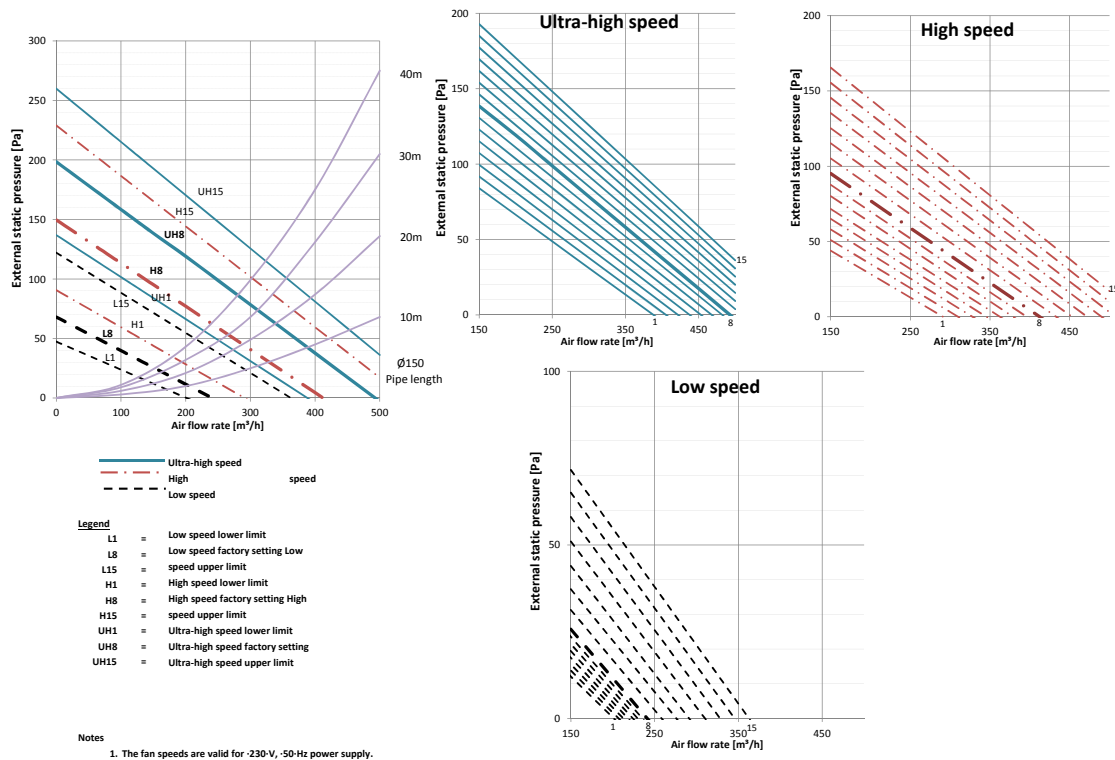
1. The fan speeds are valid for ~230-V, ~50-Hz power supply.

4D100380A

9 Fan characteristics

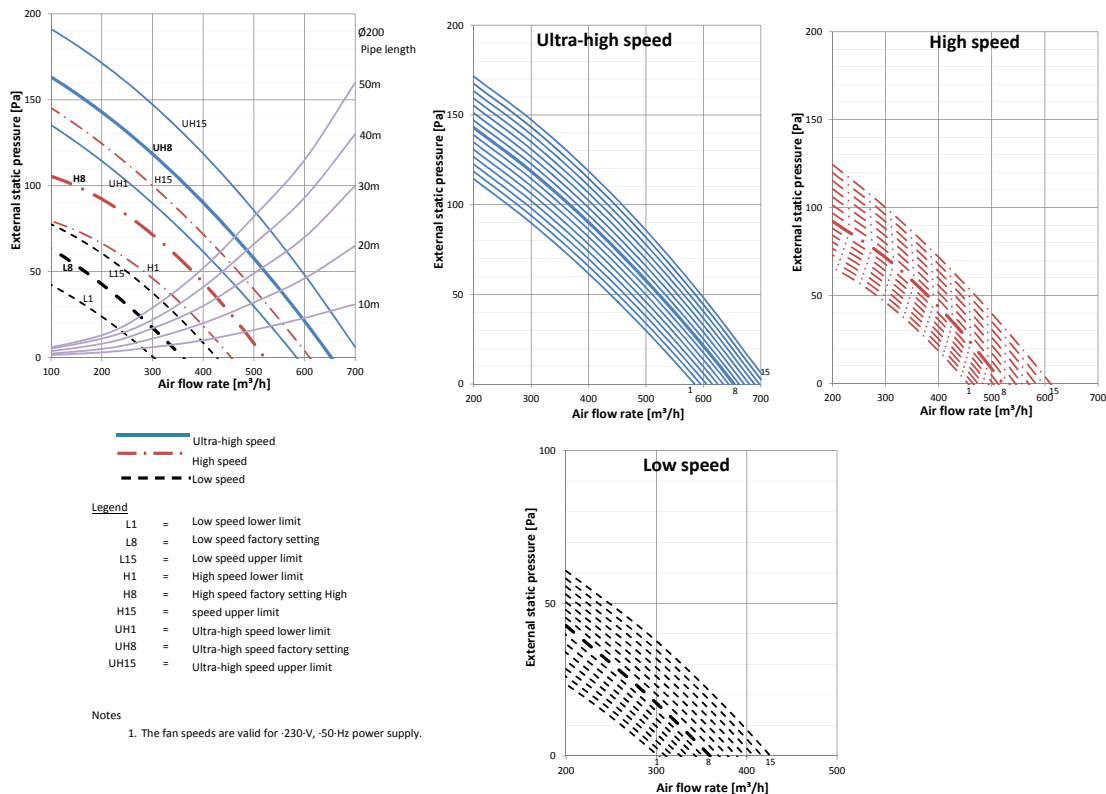
9 - 1 Fan Characteristics

VAM350FC



3D100381

VAM500FC

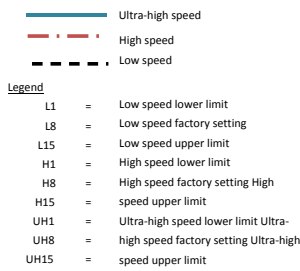
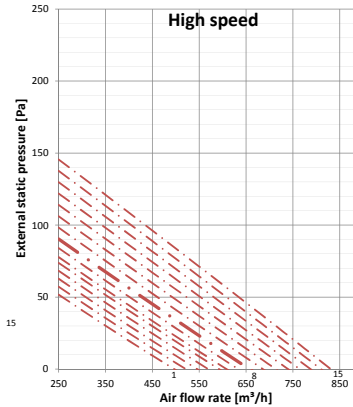
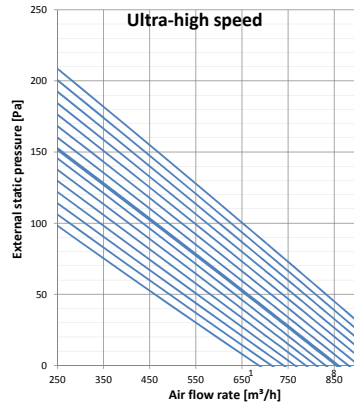
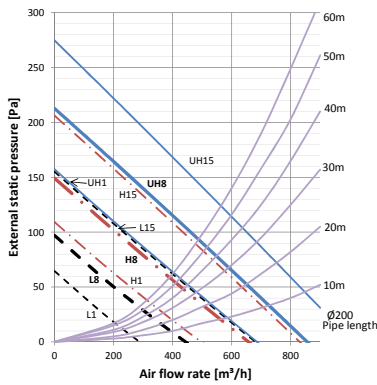


3D100382

9 Fan characteristics

9 - 1 Fan Characteristics

VAM650FC

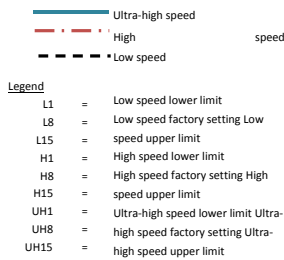
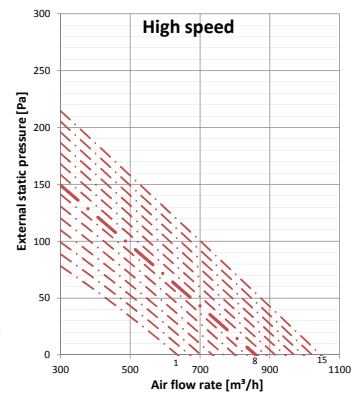
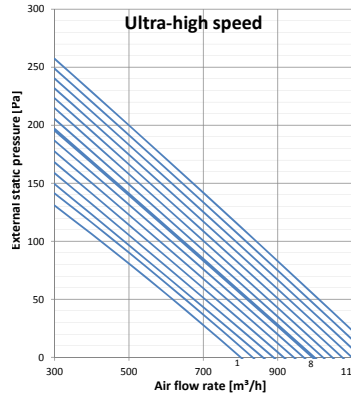
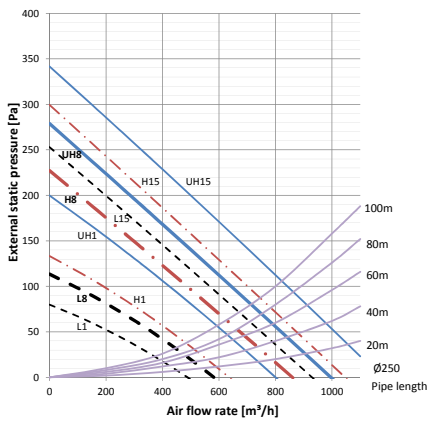


Notes

1. The fan speeds are valid for -230-V, -50-Hz power supply.

3D100383

VAM800FC



Notes

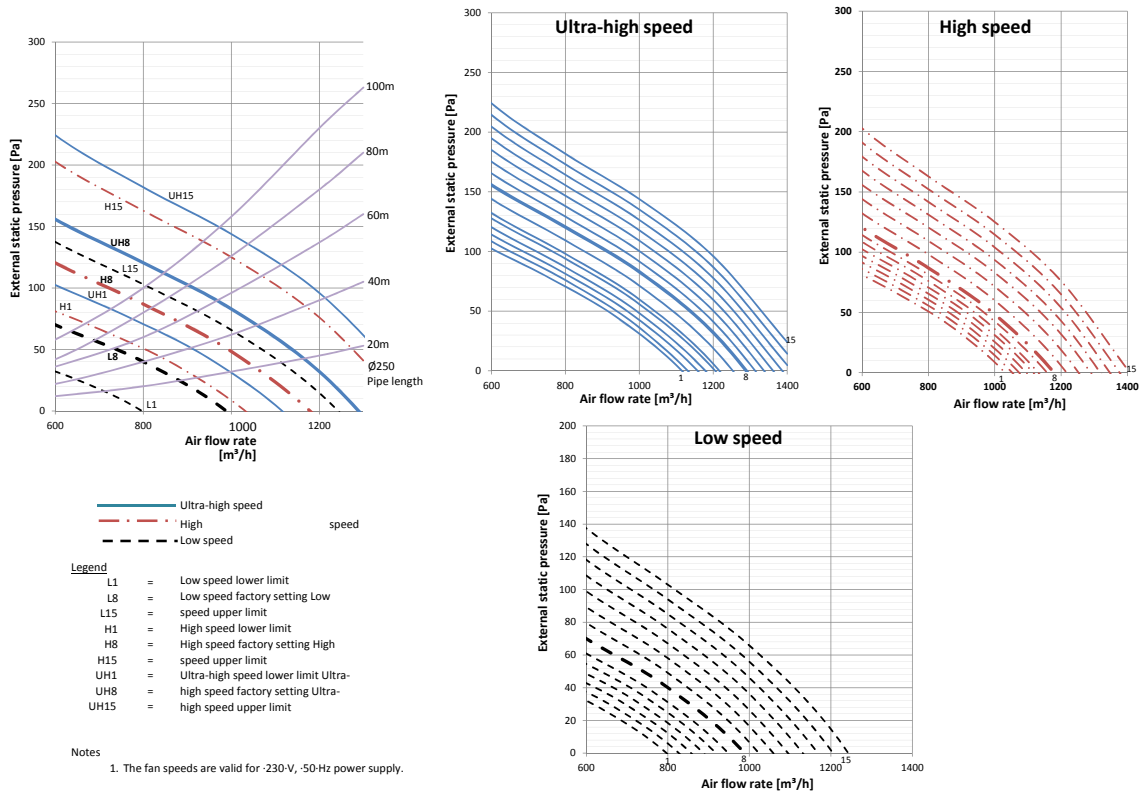
1. The fan speeds are valid for -230-V, -50-Hz power supply.

3D100384

9 Fan characteristics

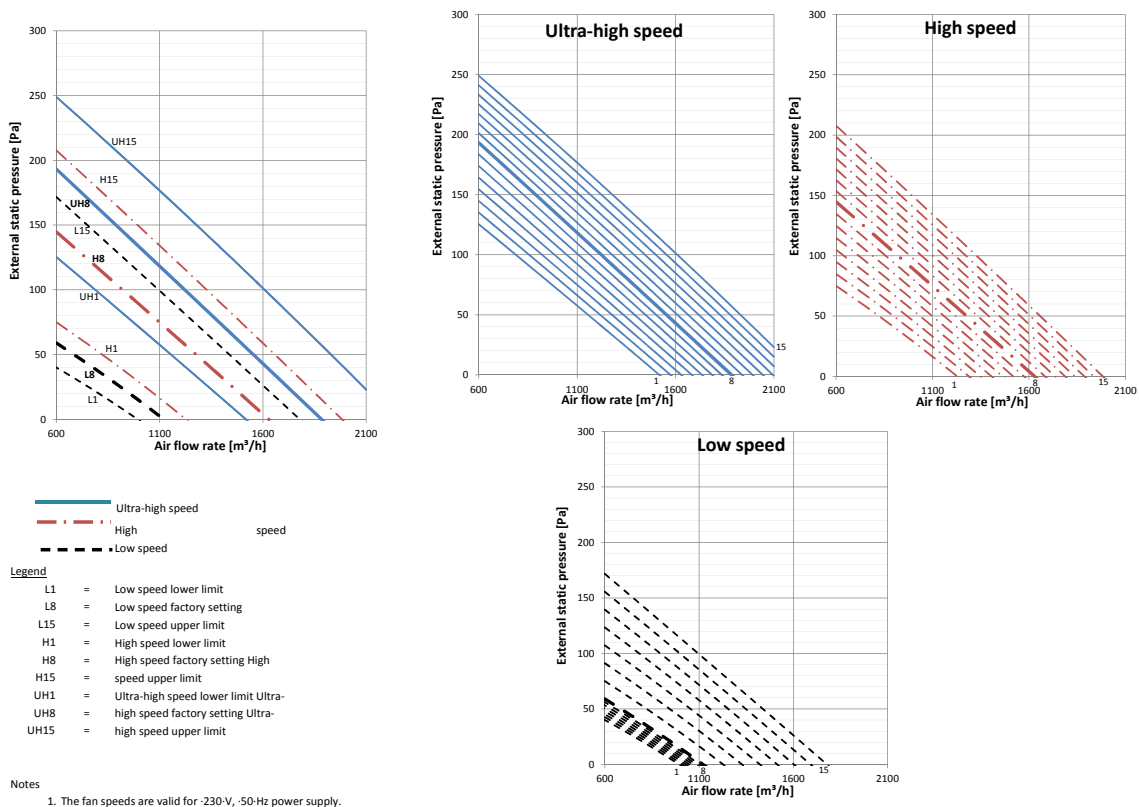
9 - 1 Fan Characteristics

VAM1000FC



3D100385

VAM1500FC

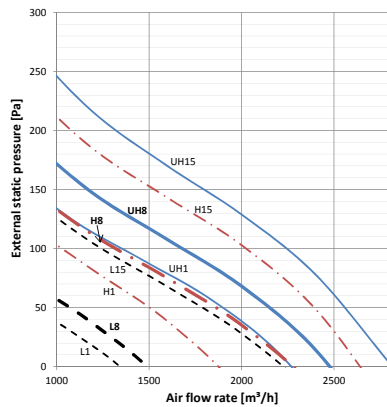


3D100386

9 Fan characteristics

9 - 1 Fan Characteristics

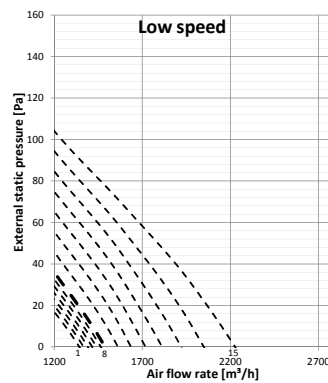
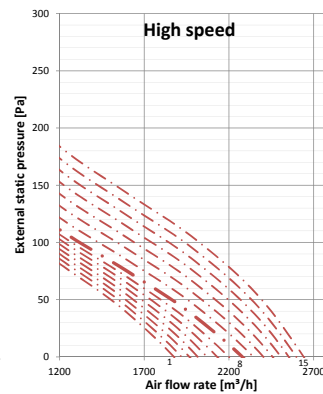
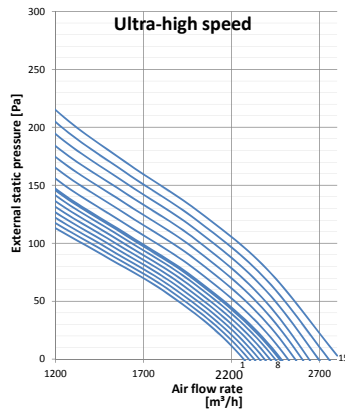
VAM2000FC



- 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 High
 - H15 = speed upper limit
 - UH1 = Ultra-high speed lower limit
 - UH8 = Ultra-high speed factory setting
 - UH15 = Ultra-high speed upper limit

Notes

1. The fan speeds are valid for 230-V, 50-Hz power supply.



3D100387

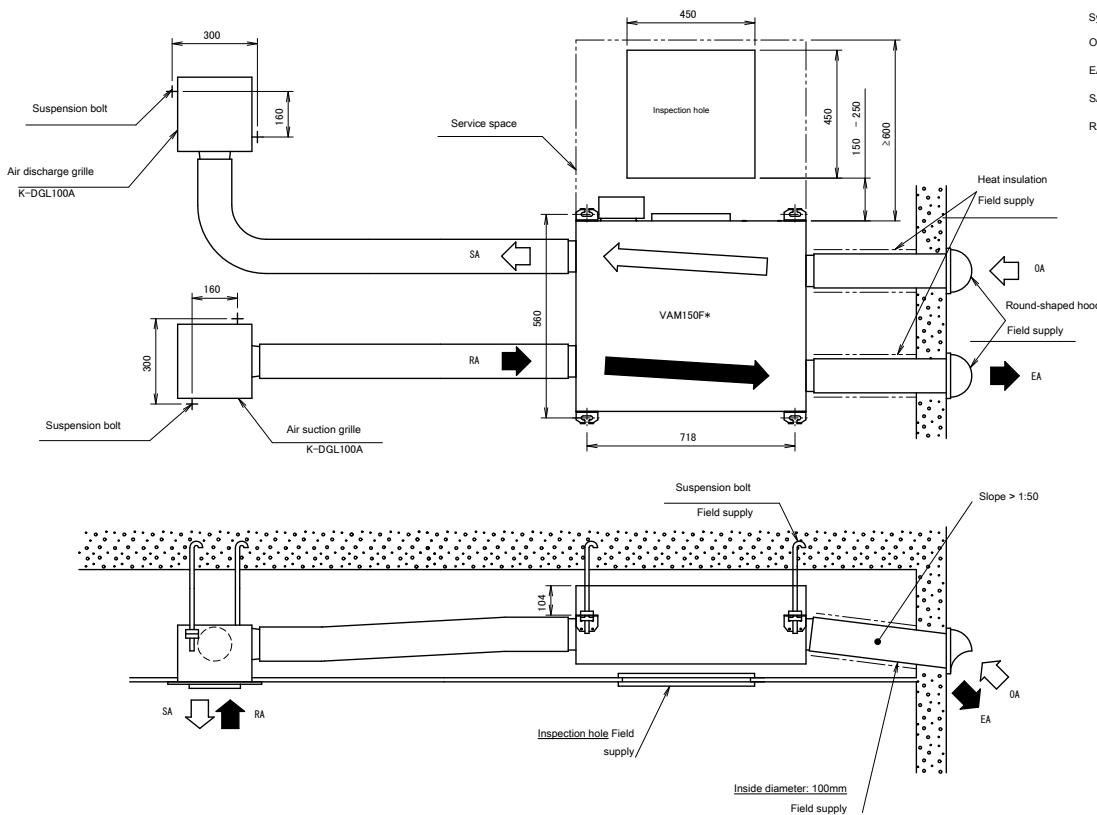
10 Installation

10 - 1 Installation Method

10

VAM150FC

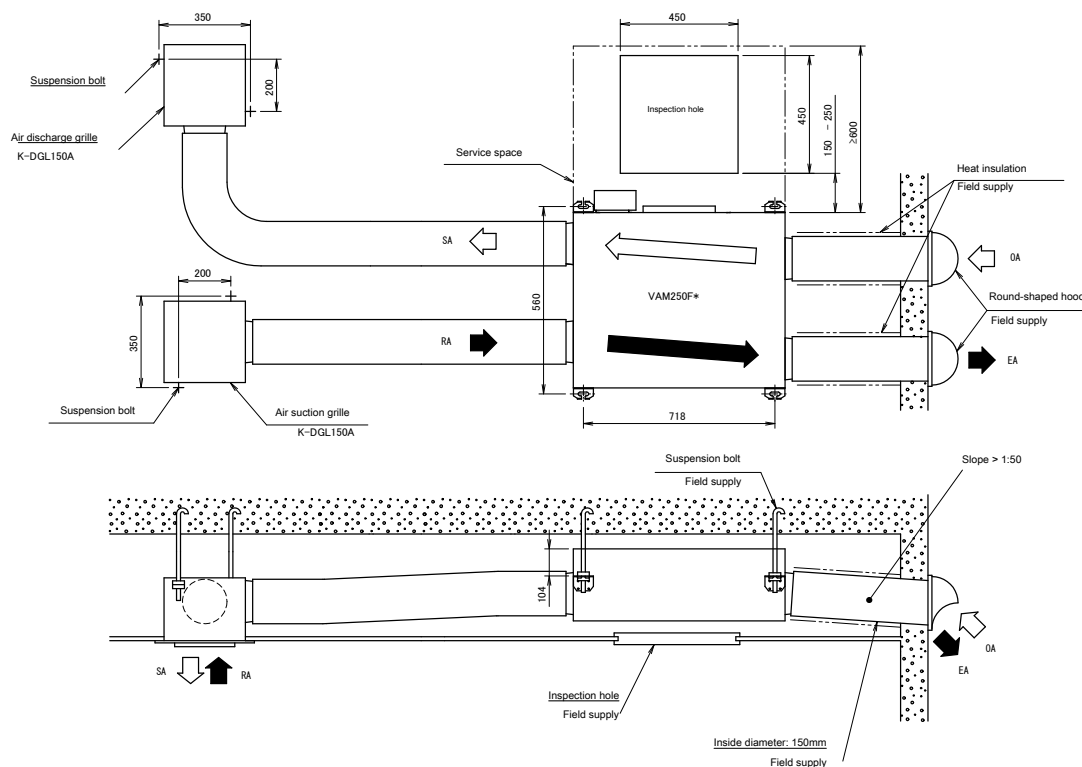
Symbols
 OA = Fresh outdoor air
 EA = Exhaust air
 SA = Supply air to room
 RA = Return air from room



3D099263

VAM250FC

Symbols
 OA = Fresh outdoor air
 EA = Exhaust air
 SA = Supply air to room
 RA = Return air from room

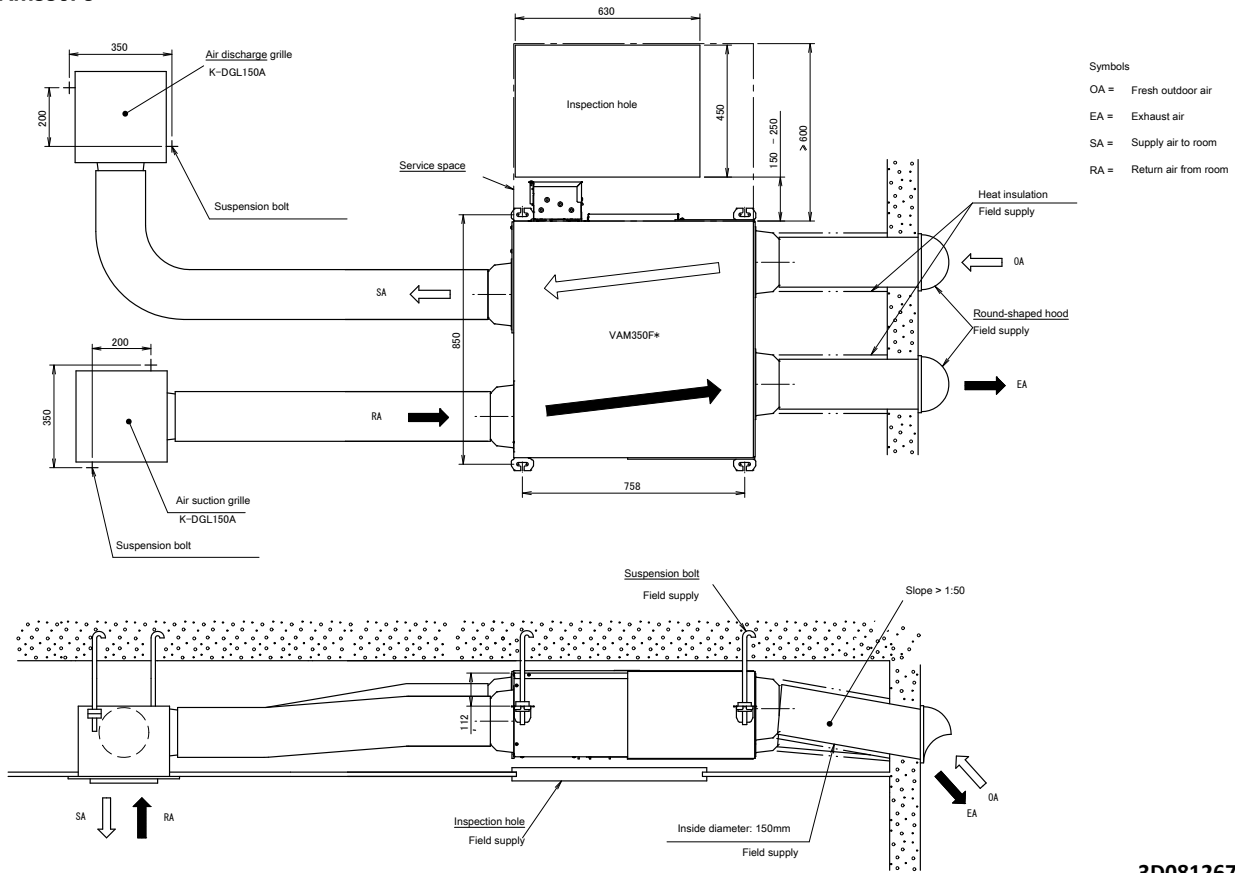


3D099264

10 Installation

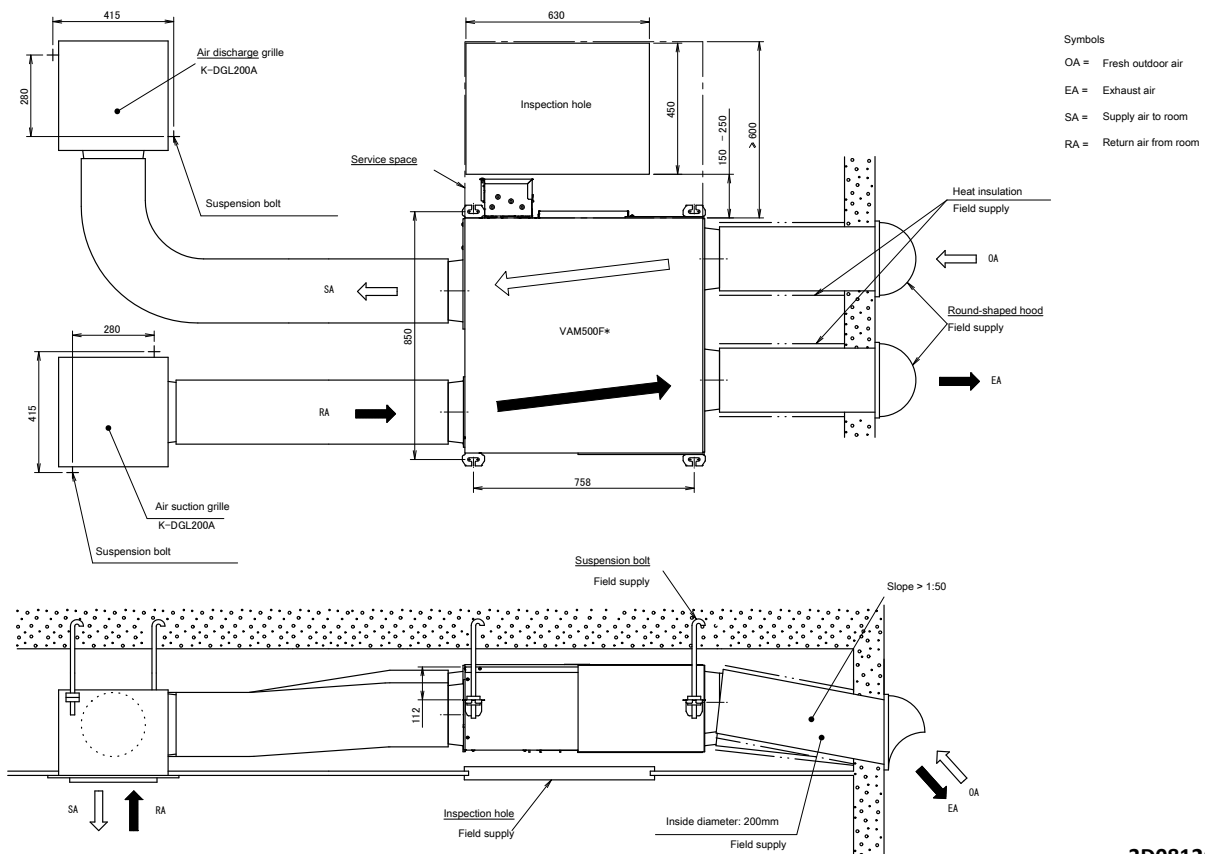
10 - 1 Installation Method

VAM350FC



3D081267A

VAM500FC



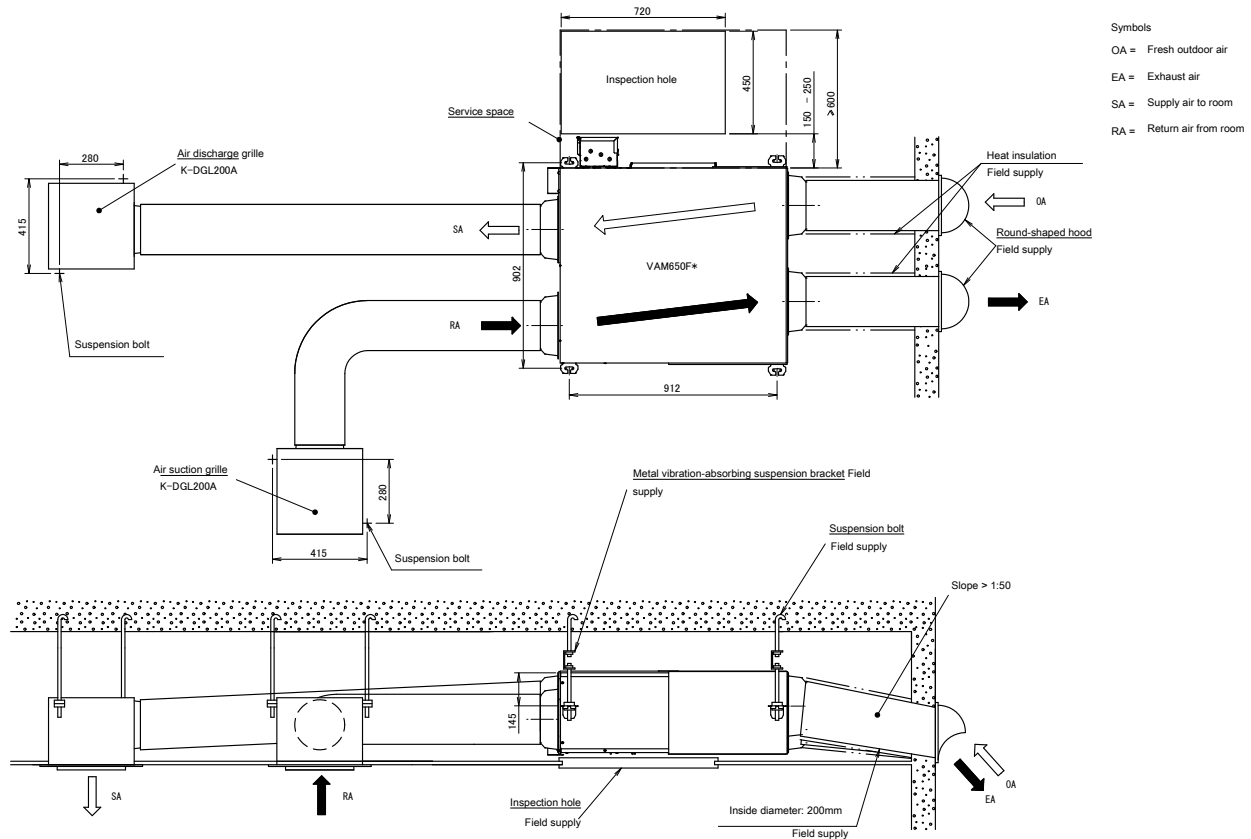
3D081268A

10 Installation

10 - 1 Installation Method

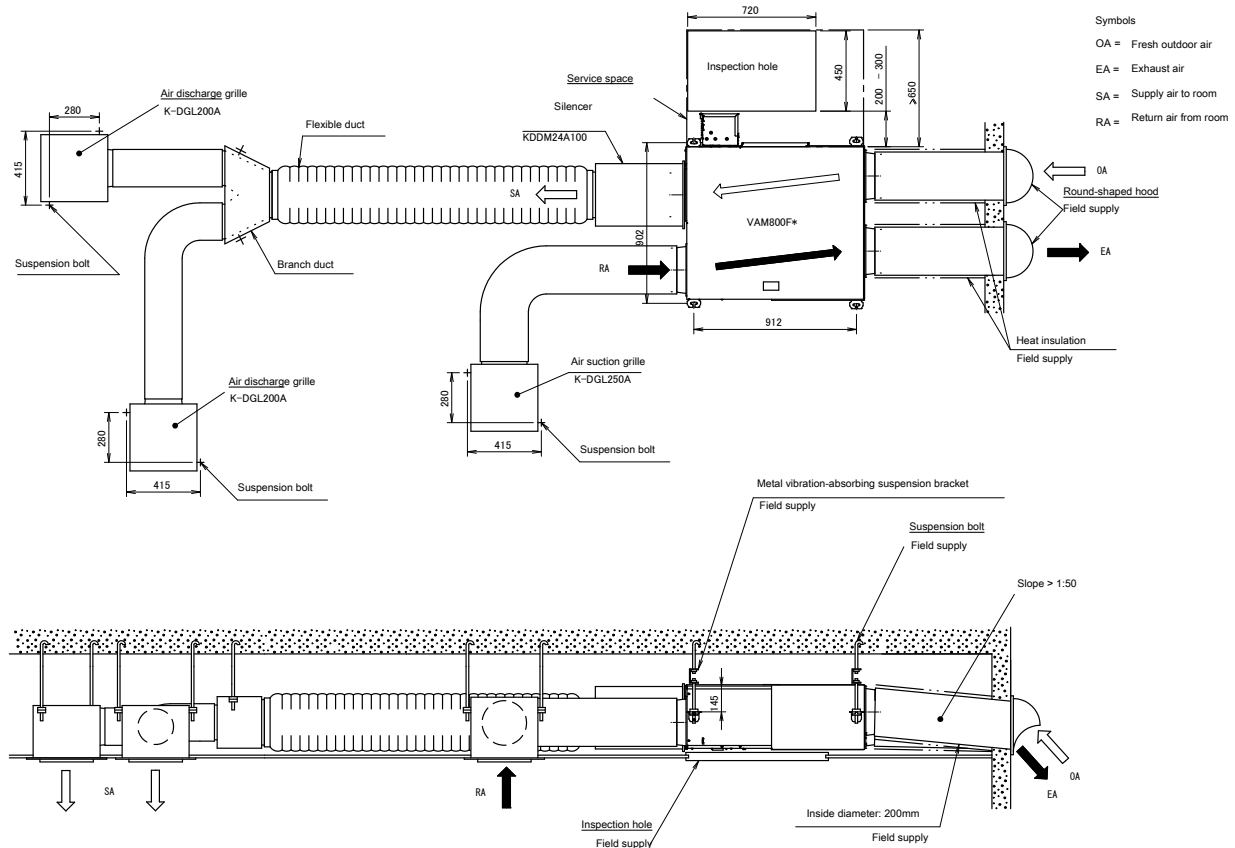
10

VAM650FC



3D081269A

VAM800FC

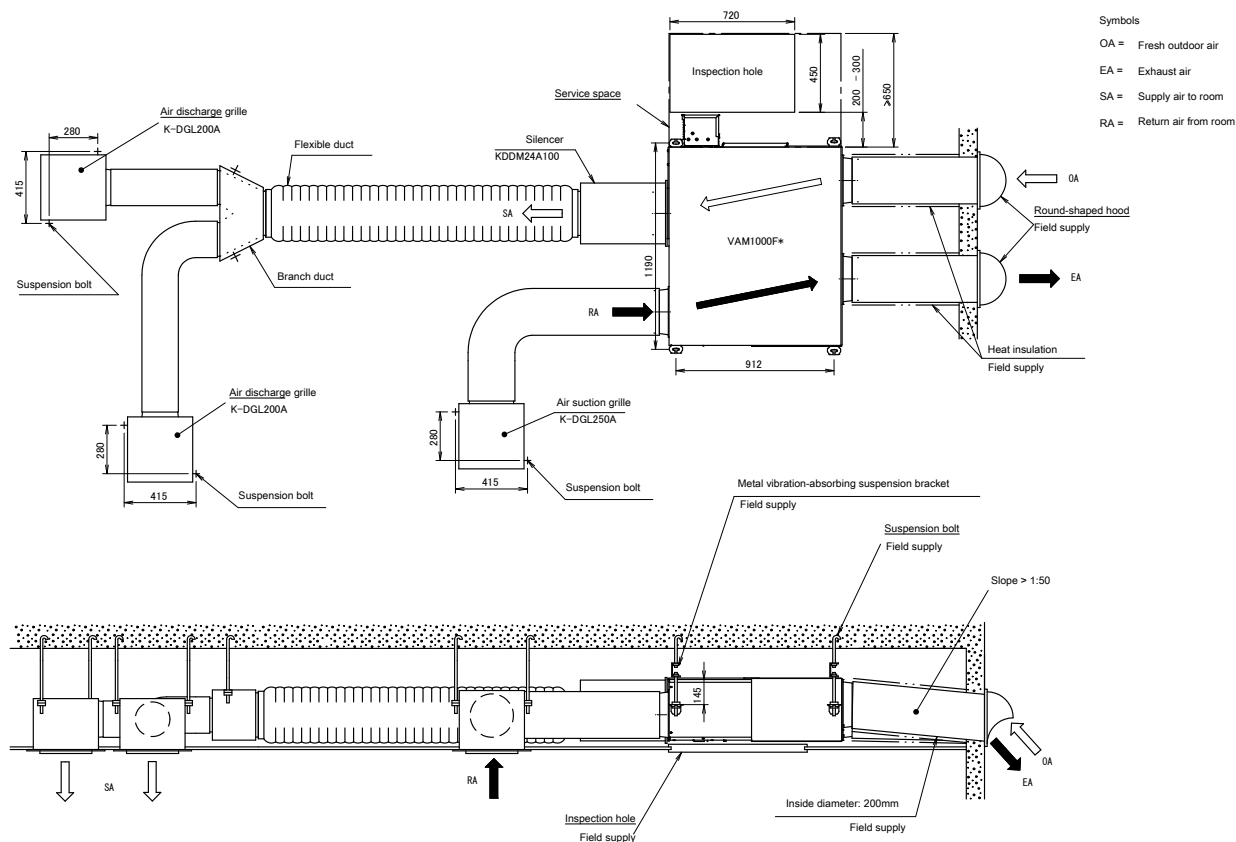


3D081270A

10 Installation

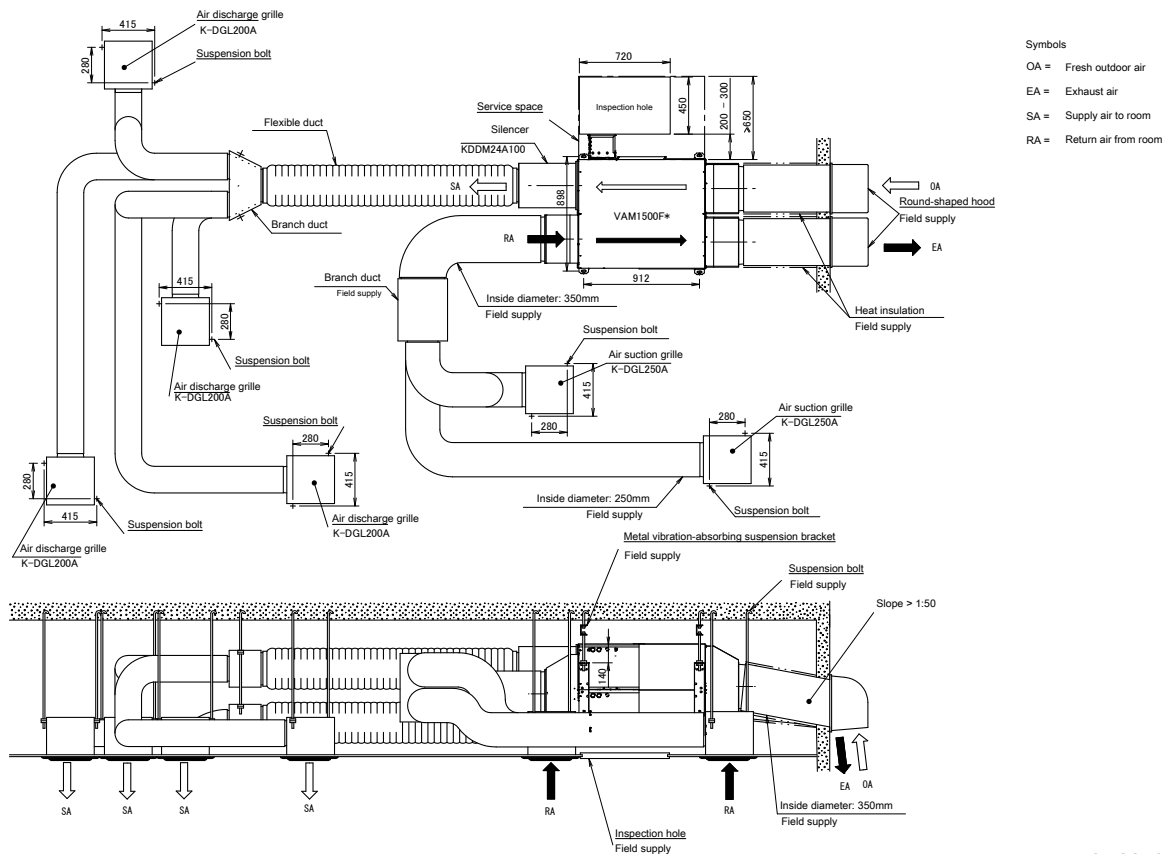
10 - 1 Installation Method

VAM1000FC



3D081271

VAM1500FC



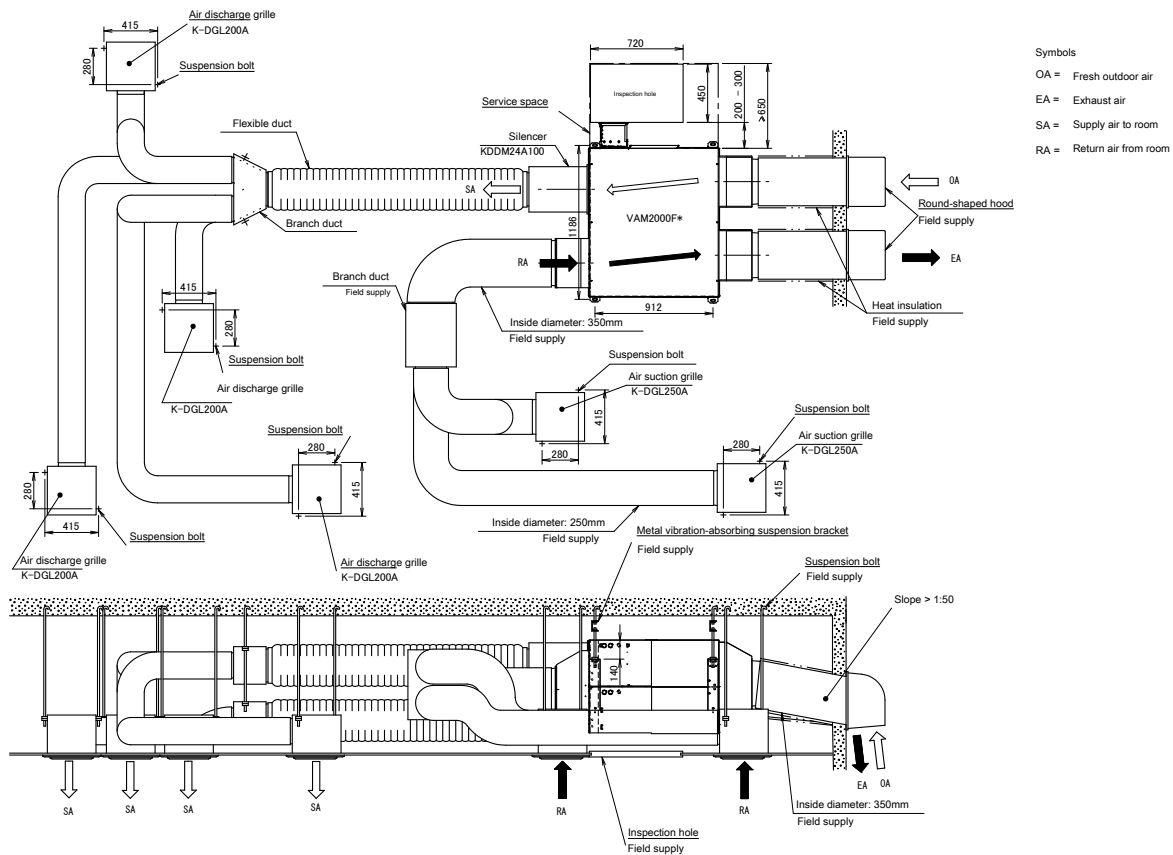
3D081272A

10 Installation

10 - 1 Installation Method

10

VAM2000FC



3D081273A

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 or 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

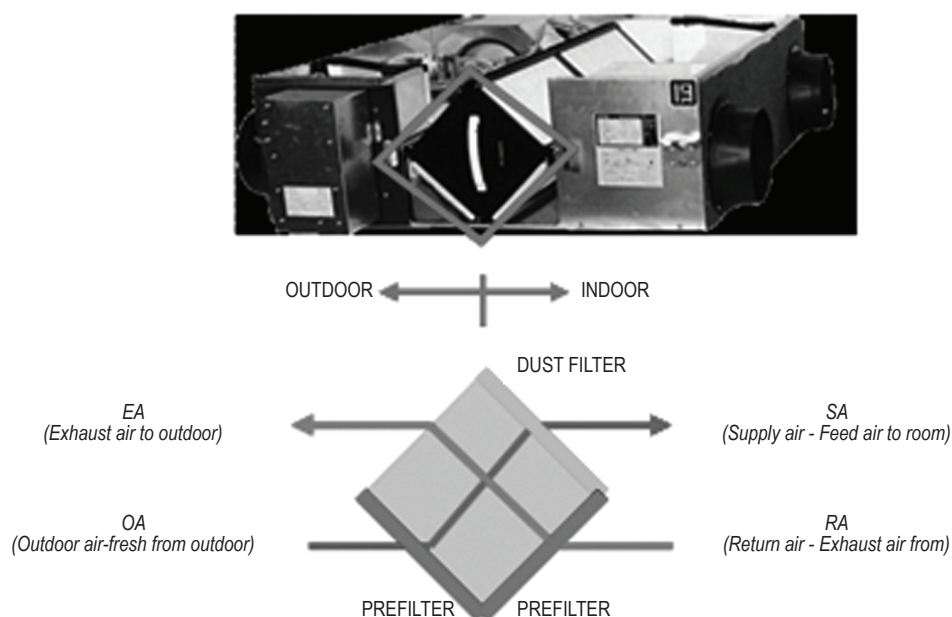
Outdoor air Quality:

- 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

10

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

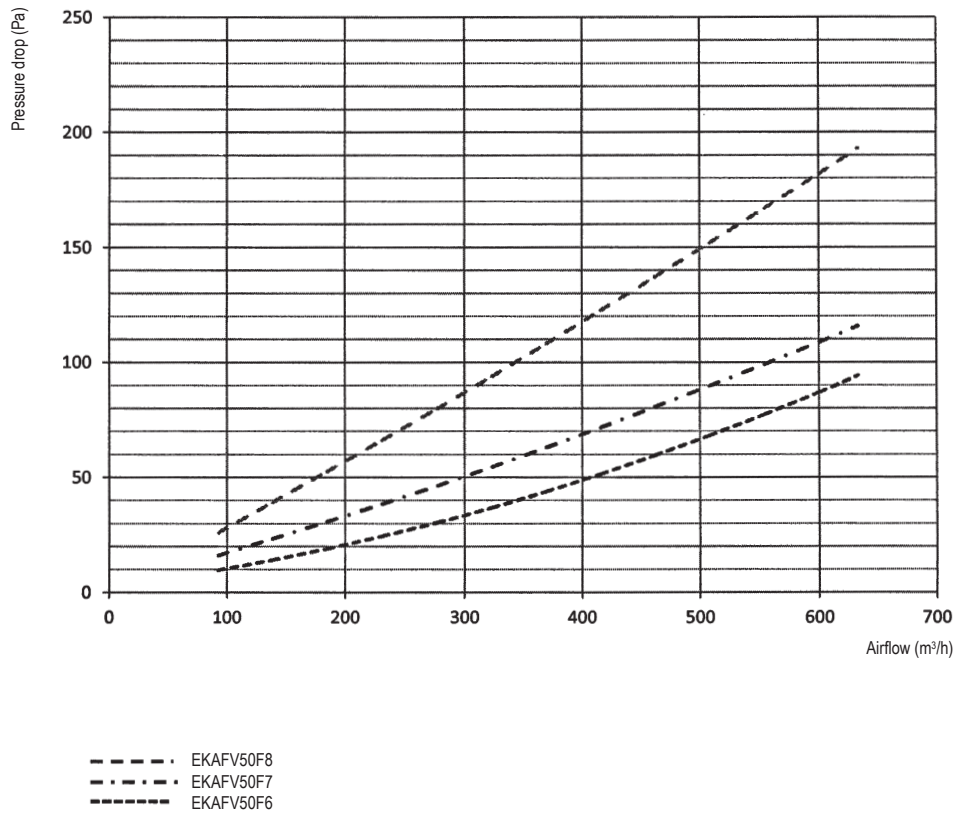
To adjust static pressure after filter placement:

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

10 Installation

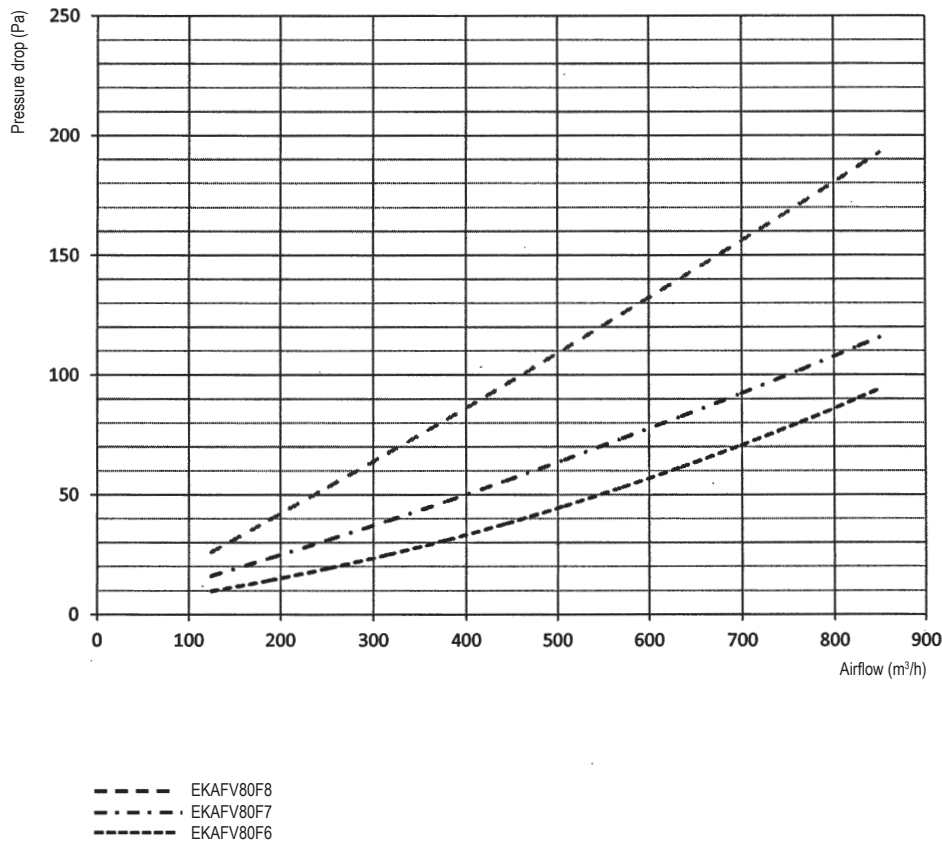
10 - 2 Filter Installation Method

VAM350-500FC



4D082449

VAM650-800FC



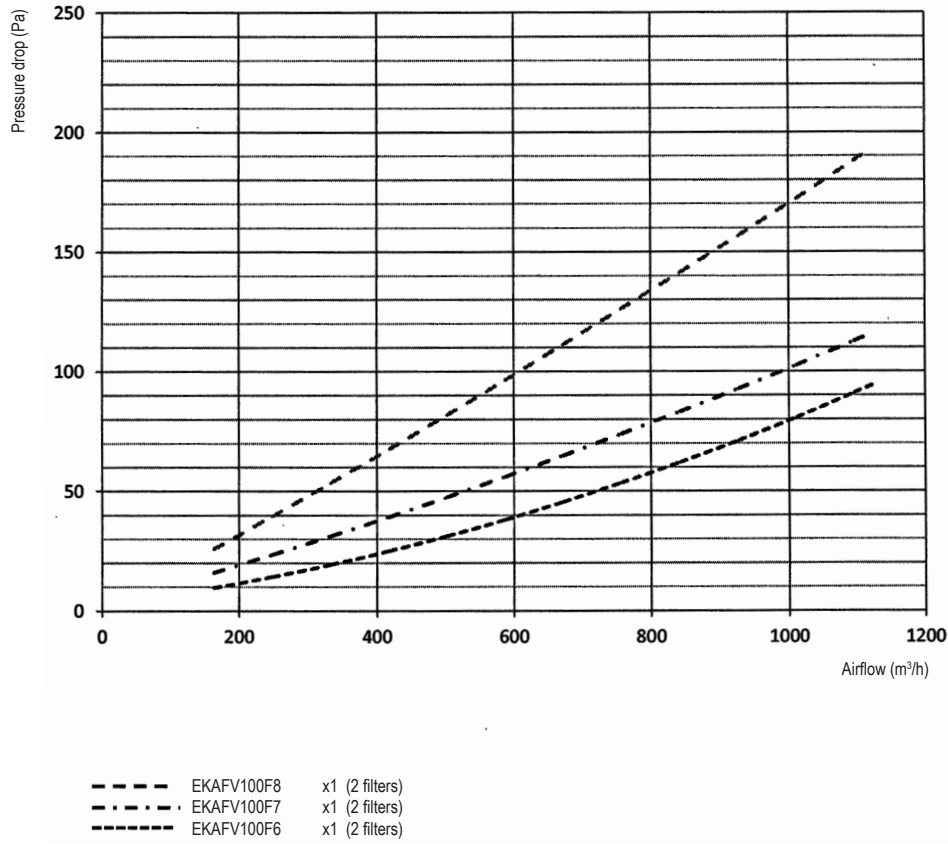
4D082450

10 Installation

10 - 2 Filter Installation Method

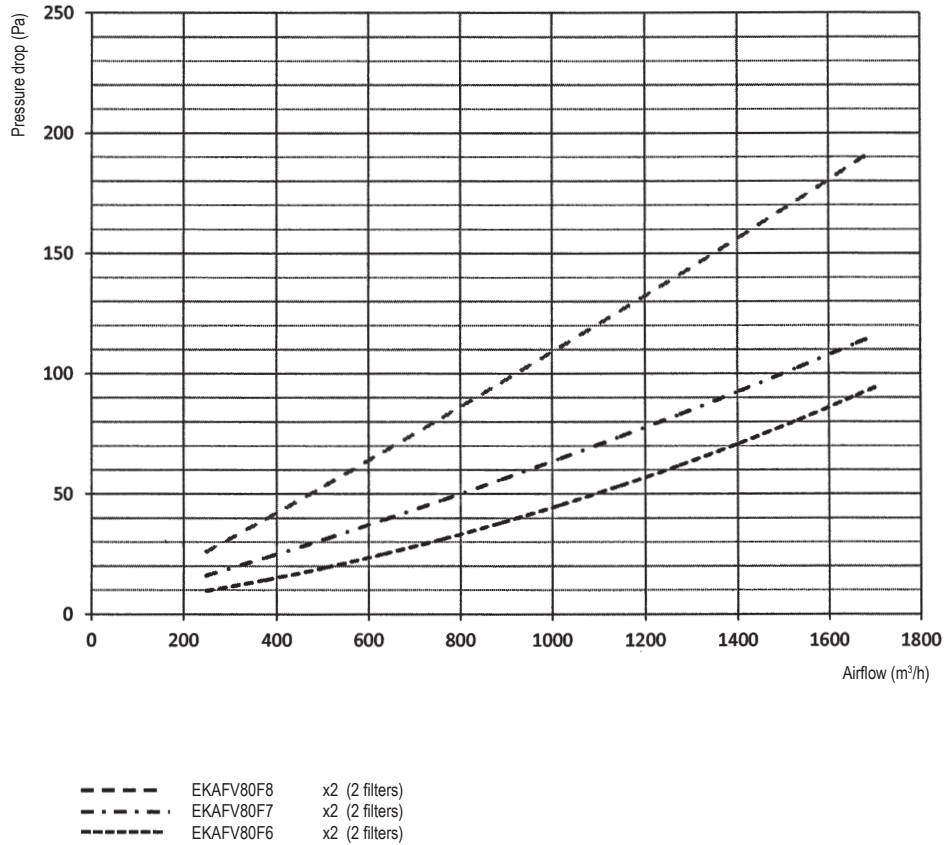
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VAM1000FC



4D082451

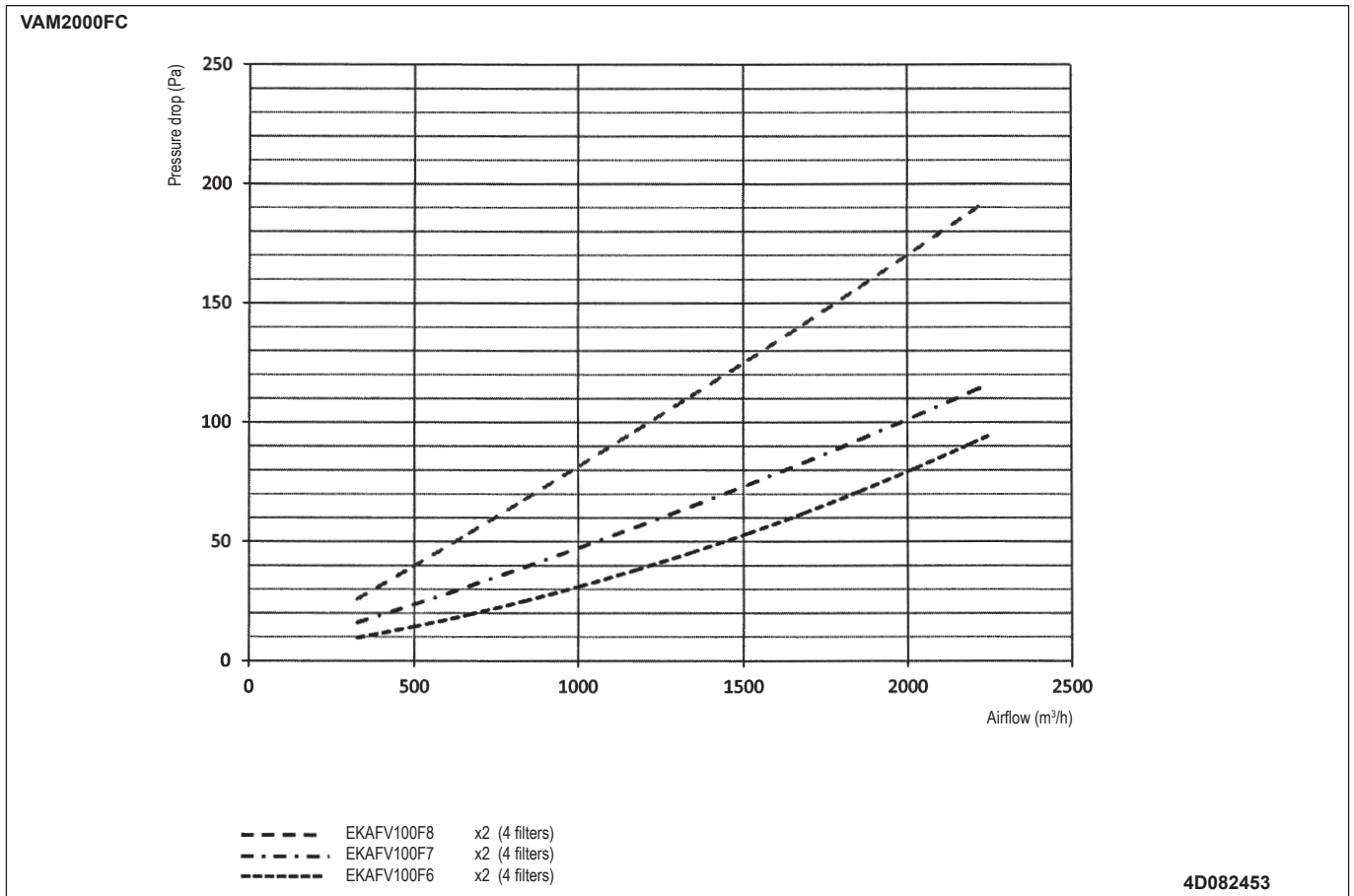
VAM1500FC

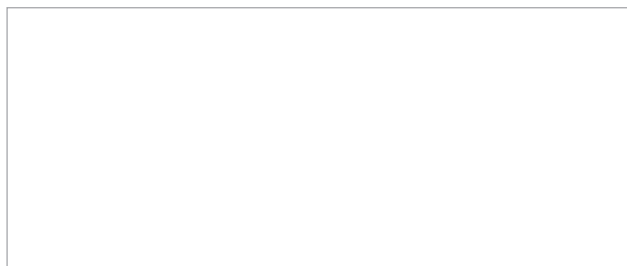


4D082452

10 Installation

10 - 2 Filter Installation Method





EEDEN22

10/2022



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