

Air to Air Heat exchanger with DX-coil Type



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1-1. Specifications

(50Hz)

Model name				MMD-VN502HEXE	MMD-VN802HEXE	MMD-VN1002HEXE
Fresh air conditioning load	Cooling	(*1)	kW	4.10 (1.30)	6.56 (2.06)	8.25 (2.32)
	Heating	(*1)	kW	5.53 (2.33)	8.61 (3.61)	10.92 (4.32)
Power supply				1phase 50Hz 230V (220V-240V) (Separate power supply for indoor units is required.)		
Temperature exchange efficiency		Extra High	%	70.5	70.0	65.5
		High	%	70.5	70.0	65.5
		Low	%	71.5	72.5	67.5
Enthalpy exchange efficiency	Cooling	Extra High	%	56.5	56.0	52.0
		High	%	56.5	56.0	52.0
		Low	%	57.5	59.0	54.0
	Heating	Extra High	%	68.5	70.0	66.0
		High	%	68.5	70.0	66.0
		Low	%	69.0	73.0	68.5
Power input (Heat exchange mode)		Extra High	kW	0.300	0.505	0.550
		High	kW	0.280	0.465	0.545
		Low	kW	0.235	0.335	0.485
Running current		Extra High	A	1.30	2.25	2.46
		High	A	1.21	2.07	2.43
		Low	A	1.01	1.46	2.16
Fan unit	Standard air flow	Extra High	m³/h	500	800	950
		High	m³/h	500	800	950
		Low	m³/h	440	640	820
	External static pressure	Extra High	Pa	120	120	135
		High	Pa	105	100	120
		Low	Pa	115	100	105
	Air flow limit	Lower limit	m³/h	330	480	640
		Upper limit	m³/h	600	960	1140
Sound pressure		Extra High	dB	37.5	41.0	43.0
		High	dB	36.5	40.0	42.0
		Low	dB	34.5	38.0	40.0
Appearance				Zinc hot dipping steel plate		
Outer dimension	Height		mm	430	430	430
	Width		mm	1140	1189	1189
	Depth		mm	1690	1739	1739
Total weight			kg	84	100	101
Heat exchanger				Finned tube		
Heat-insulating material				Flexible urethane foam		
Air filter				Standard filter (Gravitational method 82%) & High efficiency filter (Colorimetric method 65%)		
Controller				Remote controller (Separately sold parts)		
Connecting piping	Gas side		mm	Ø9.5	Ø12.7	Ø12.7
	Liquid side		mm	Ø6.4	Ø6.4	Ø6.4
Drain port (Nominal dia. mm)				25 (Polyvinyl chloride tube)		

(*1) Cooling and heating capacities are based on the following conditions:

Cooling capacities are based on: indoor temperature: 27 °CDB/19°CWB, Outdoor temperature: 35°CDB

Heating capacities are based on: indoor temperature: 20°CDB, Outdoor temperature: 7 °CDB/6°CWB

Fan is based on Extra High and High

(): The figures in () indicate the heat reclaimed from the heat recovery ventilator.

When calculating the capacity code as indoor units, please use as below.

MMD-VN502HEXE: 1HP, MMD-VN802HEXE: 1.7HP,

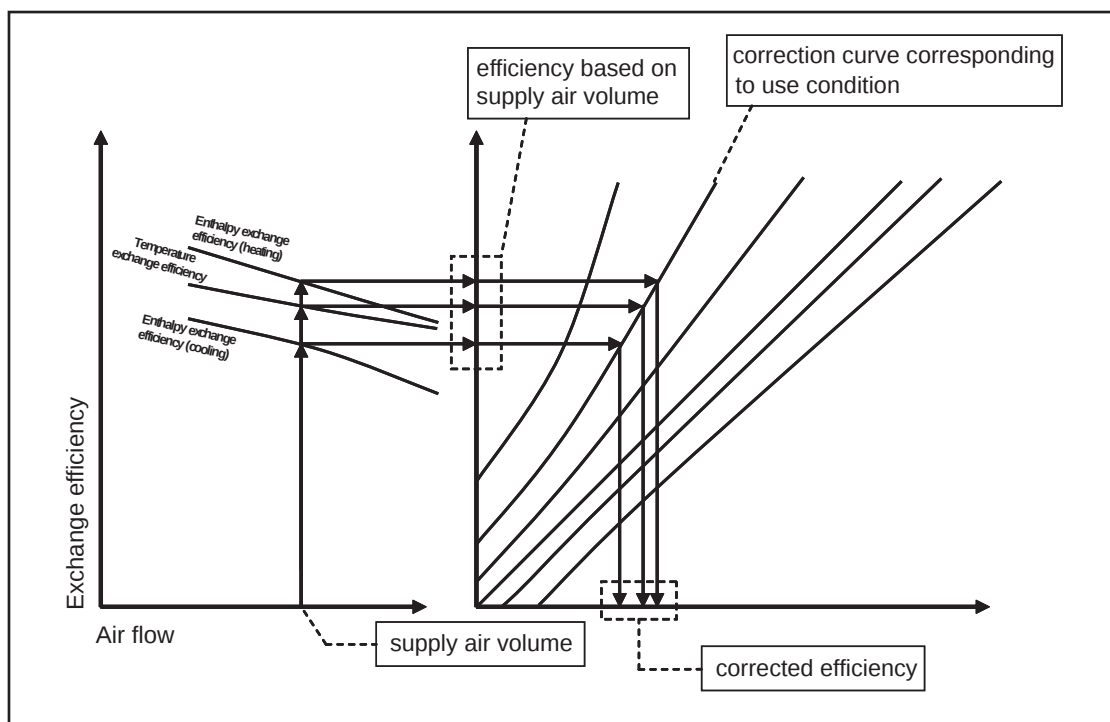
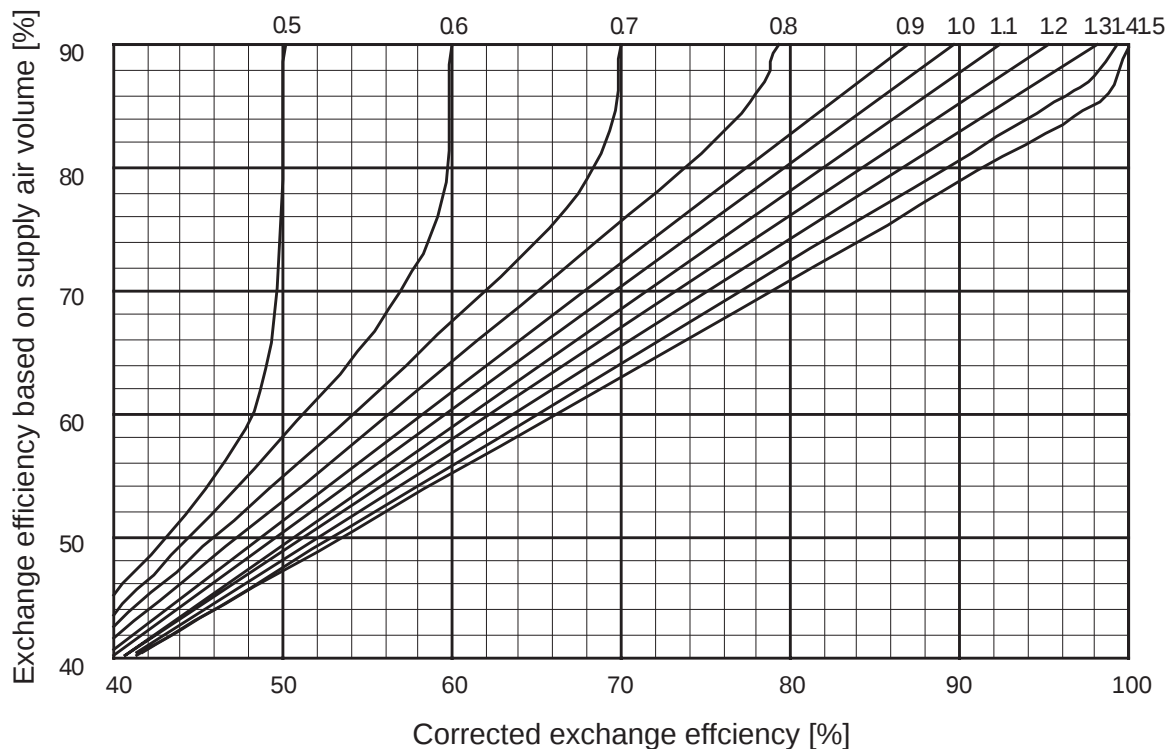
MMD-VN1002HEXE: 2.0HP

1-2. Exchange Efficiency Correction

Exchange efficiency correction when supply air volume and exhaust air volume are different

Exchange efficiency correction curve

Exhaust to supply ratio = Exhaust air volume / Supply air volume



1-3. Sensible Capacity Table

Cooling capacity tables

TC: Total Capacity [kW] SHC: Sensible Heat Capacity [kW]

MMD-VN ***HEXE

Class	DX-coil capacity [kW]	Outdoor temp. [°CDB]	DX-coil inlet temp. [°CWB]											
			16.0		18.0		19.0		20.0		22.0		24.0	
			TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
502	2.8	10.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		12.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		14.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		16.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		18.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		20.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		21.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		23.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		25.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		27.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		29.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		31.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		33.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		35.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		37.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.7
		39.0	2.4	1.7	2.6	1.8	2.7	1.8	2.8	1.8	2.9	1.8	3.1	1.7
802	4.5	10.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		12.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		14.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		16.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		18.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		20.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		21.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		23.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		25.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		27.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		29.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		31.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		33.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		35.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		37.0	4.0	2.7	4.3	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		39.0	3.9	2.7	4.2	2.8	4.4	2.8	4.5	2.9	4.7	2.8	5.0	2.7
1002	5.93	10.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		12.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		14.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		16.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		18.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		20.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		21.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		23.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		25.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		27.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		29.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		31.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		33.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		35.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		37.0	5.3	3.7	5.7	3.9	5.9	3.9	6.1	3.9	6.4	3.9	6.7	3.8
		39.0	5.2	3.6	5.6	3.8	5.7	3.8	5.9	3.8	6.2	3.8	6.5	3.7

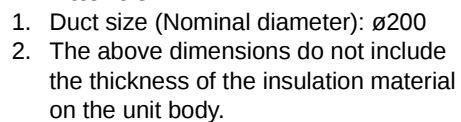
Heating capacity tables

TC: Total Capacity [kW] SHC: Sensible Heat Capacity [kW]

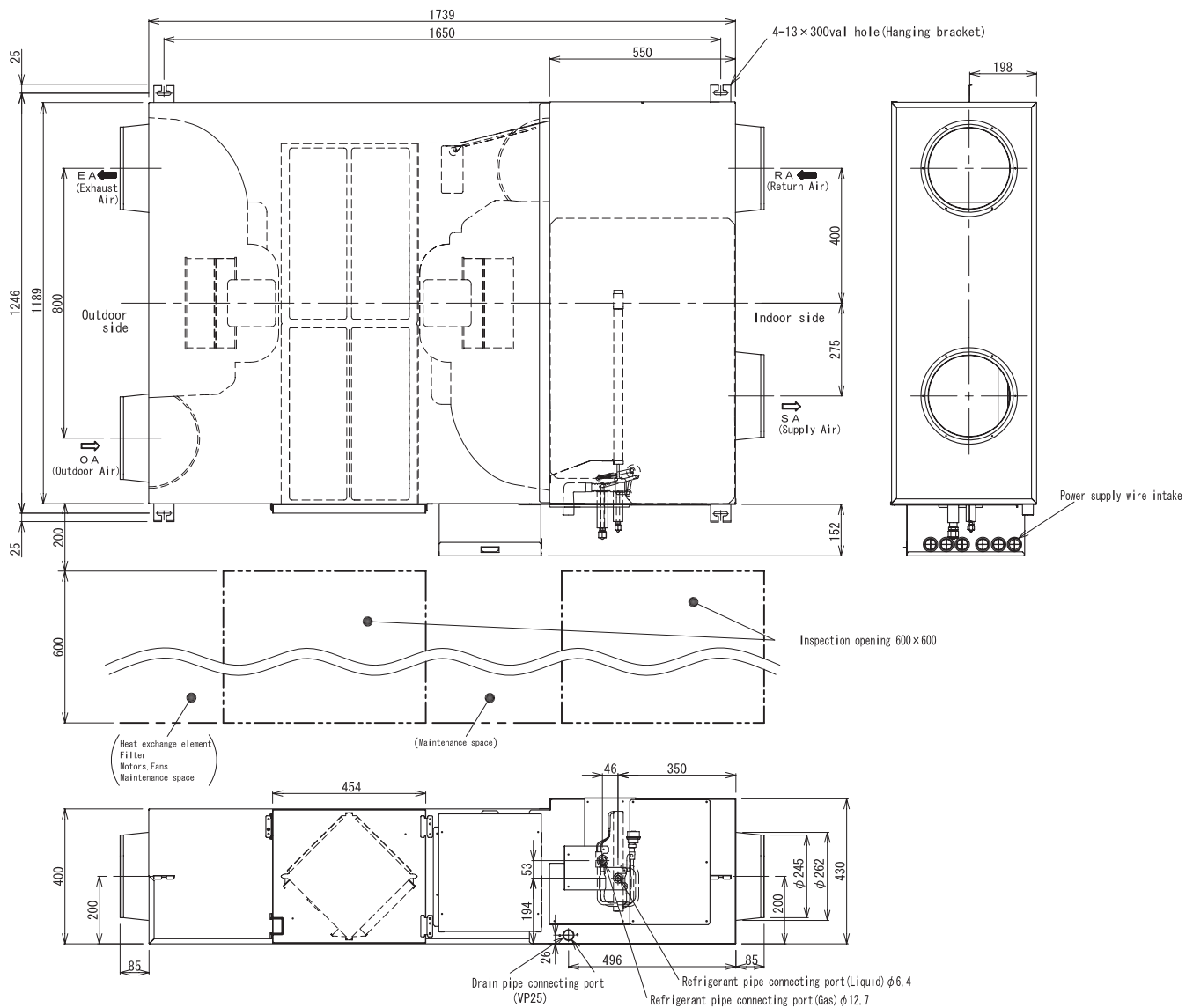
MMD-VN ***HEXE

Class	DX-coil capacity [kW]	Outdoor temp. [°CWB]	DX-coil inlet temp. [°CDB]				
			16.0	18.0	20.0	22.0	24.0
			SHC	SHC	SHC	SHC	SHC
502	3.2	-15.0	1.9	1.8	1.8	1.8	1.7
		-13.0	2.0	2.0	2.0	1.9	1.9
		-11.0	2.2	2.1	2.1	2.0	2.0
		-10.0	2.2	2.2	2.2	2.1	2.1
		-8.0	2.4	2.3	2.3	2.2	2.2
		-6.0	2.5	2.4	2.4	2.3	2.3
		-4.0	2.5	2.4	2.3	2.3	2.2
		-2.0	2.5	2.5	2.4	2.4	2.3
		0.0	2.6	2.7	2.6	2.5	2.5
		2.0	2.8	2.8	2.7	2.6	2.6
		4.0	3.2	3.1	3.0	3.0	2.9
		6.0	3.3	3.3	3.2	3.1	3.0
		8.0	3.3	3.3	3.2	3.1	3.0
		10.0	3.3	3.3	3.2	3.1	3.0
		12.0	3.3	3.3	3.2	3.1	3.0
		14.0	3.3	3.3	3.2	3.1	3.0
802	4.8	-15.0	2.8	2.8	2.7	2.6	2.6
		-13.0	3.0	3.0	2.9	2.9	2.8
		-11.0	3.3	3.2	3.1	3.1	3.0
		-10.0	3.4	3.3	3.2	3.2	3.1
		-8.0	3.6	3.5	3.4	3.3	3.3
		-6.0	3.7	3.6	3.6	3.5	3.4
		-4.0	3.7	3.5	3.5	3.4	3.3
		-2.0	3.8	3.7	3.6	3.5	3.4
		0.0	3.9	4.0	3.9	3.8	3.7
		2.0	4.2	4.1	4.1	4.0	3.9
		4.0	4.7	4.7	4.6	4.5	4.3
		6.0	5.0	4.9	4.8	4.7	4.6
		8.0	5.0	4.9	4.8	4.7	4.6
		10.0	5.0	4.9	4.8	4.7	4.6
		12.0	5.0	4.9	4.8	4.7	4.6
		14.0	5.0	4.9	4.8	4.7	4.6
1002	6.6	-15.0	3.9	3.8	3.7	3.6	3.5
		-13.0	4.2	4.1	4.0	3.9	3.8
		-11.0	4.5	4.4	4.3	4.2	4.1
		-10.0	4.6	4.5	4.4	4.3	4.2
		-8.0	4.9	4.8	4.7	4.6	4.5
		-6.0	5.1	5.0	4.9	4.8	4.6
		-4.0	5.1	4.9	4.8	4.7	4.5
		-2.0	5.2	5.1	5.0	4.9	4.7
		0.0	5.4	5.5	5.4	5.2	5.1
		2.0	5.8	5.7	5.6	5.4	5.3
		4.0	6.5	6.4	6.3	6.1	6.0
		6.0	6.9	6.7	6.6	6.4	6.3
		8.0	6.9	6.7	6.6	6.4	6.3
		10.0	6.9	6.7	6.6	6.4	6.3
		12.0	6.9	6.7	6.6	6.4	6.3
		14.0	6.9	6.7	6.6	6.4	6.3

MMD-VN502HEXE



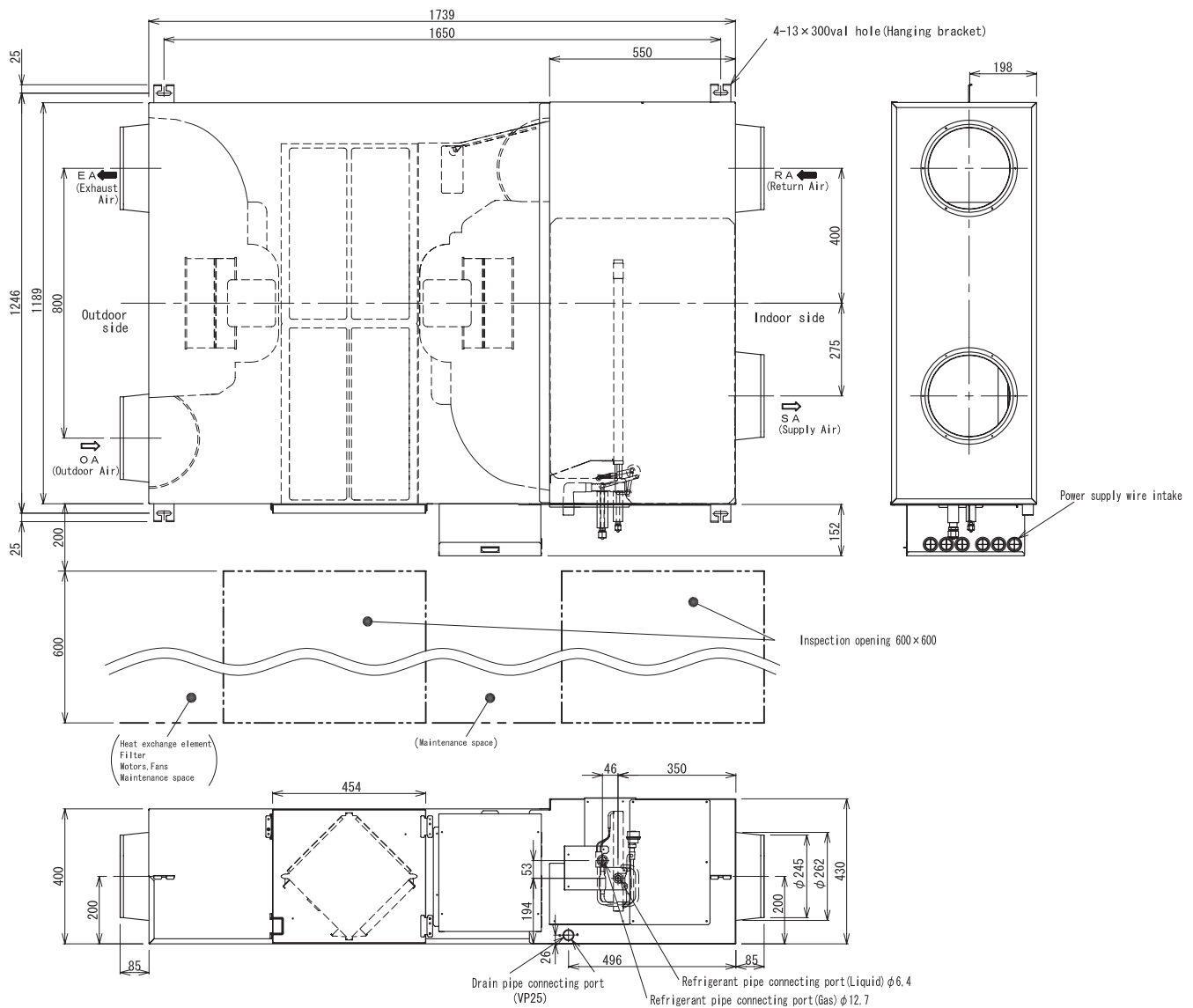
MMD-VN802HEXE



■ **Attention**

1. Duct size (Nominal diameter): $\phi 250$
2. The above dimensions do not include the thickness of the insulation material on the unit body.

MMD-VN1002HEXE

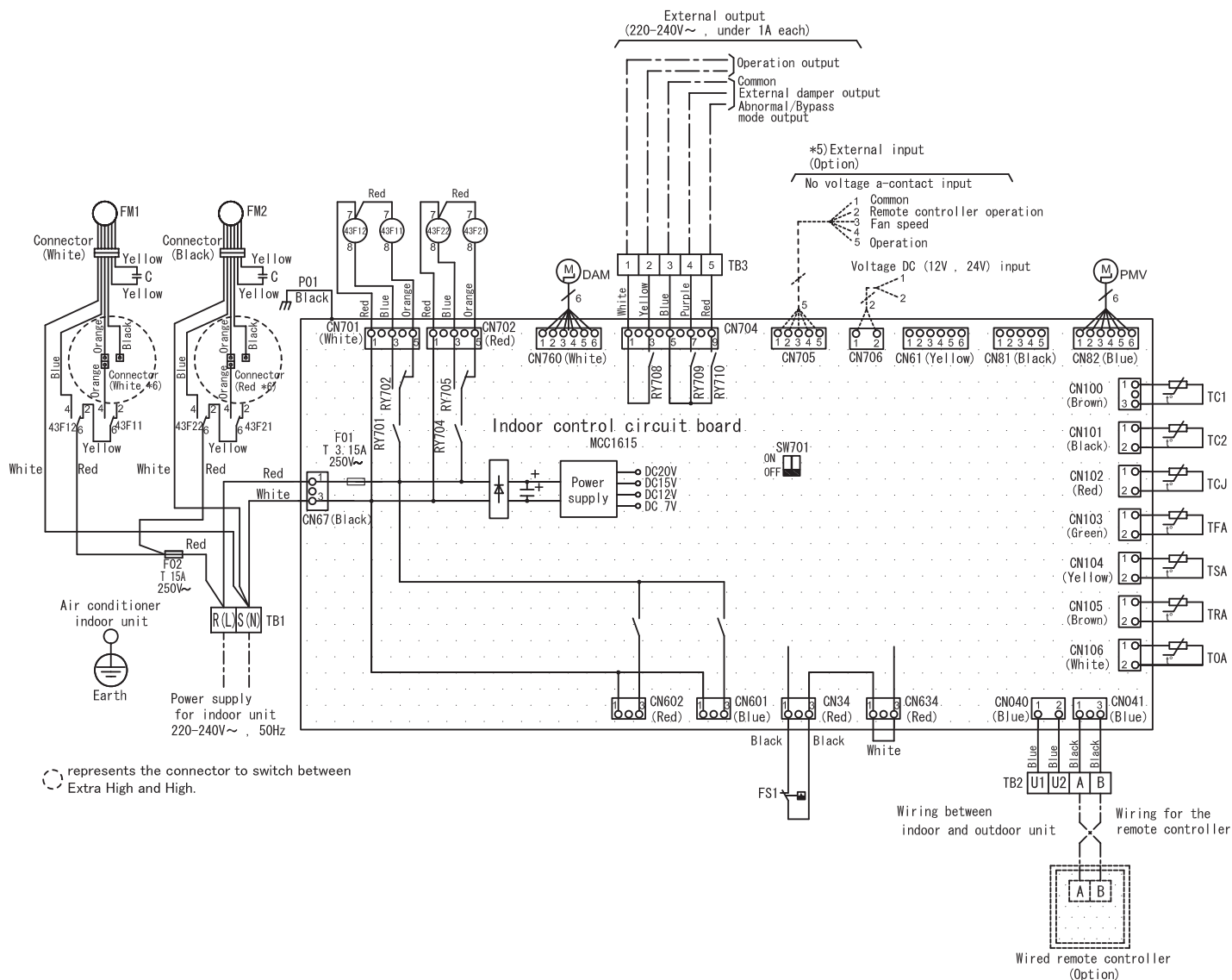


■ Attention

1. Duct size (Nominal diameter): $\varnothing 250$
2. The above dimensions do not include the thickness of the insulation material on the unit body.

1-5. Wiring Diagram

MMD-VN502HEXE, MMD-VN802HEXE, MMD-VN1002HEXE



Code	Parts name
CN***	Connector
F01	Fuse (Printed circuit board)
F02	Fuse (Motor)
FM1	Air supplying motor
FM2	Air exhausting motor
DAM	Damper motor
TRA	TRA sensor
TOA	TOA sensor
TSA	TSA sensor
TFA	TFA sensor
TCJ, TC1, TC2	Indoor coil sensor

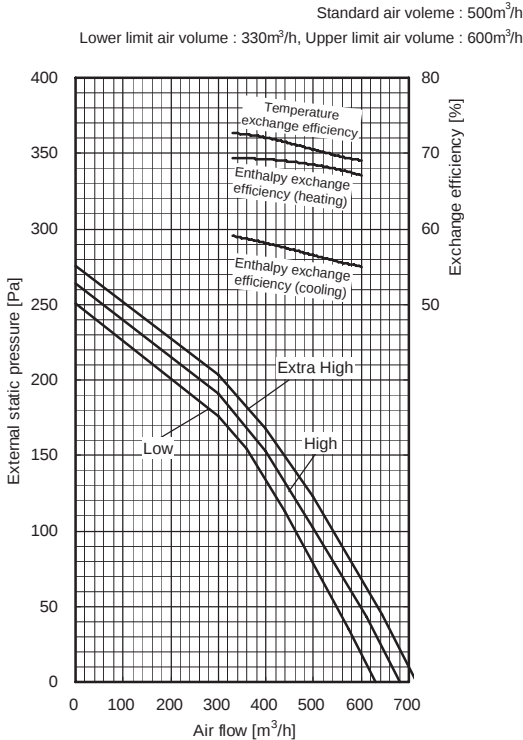
Code	Parts name
TB1	Terminal block (Power source)
TB2	Terminal block (Communication)
TB3	Terminal block (External output)
TS1	Float switch
PMV	Pulse modulating value
SW701	Dip switch
43F11, 43F12	Relay for air supplying motor
43F21, 43F22	Relay for air exhausting motor
RY701, RY702	Relay for air supplying motor
RY704, RY705	Relay for air exhausting motor

- The dotted line represents a wire procured locally, and the dashed line represents an option sold separately.
- represents a terminal block, —○— represents a connection terminal, □ represents a connector on the printed circuit board and □ represents a short circuit connector.
- ⊕ represents a protective earth.
- represents a printed circuit board.
- Using a no voltage a-contact input of the external input (option), the following operations are available.
 - Between 1 and 2: Selecting the remote controller operation (Invalid/Valid)
 - Between 1 and 3: Adjusting the fan speed (Low/High)
 - Between 1 and 5: Operation (ON/OFF)
 Use a microcurrent contact (DC12V, 1mA). In addition, ON/OFF operation is possible when using a voltage of DC12V or 24V.
- Orange wire (High) is connected as factory default. To switch to "Extra High", connect black wire's connector instead of orange.

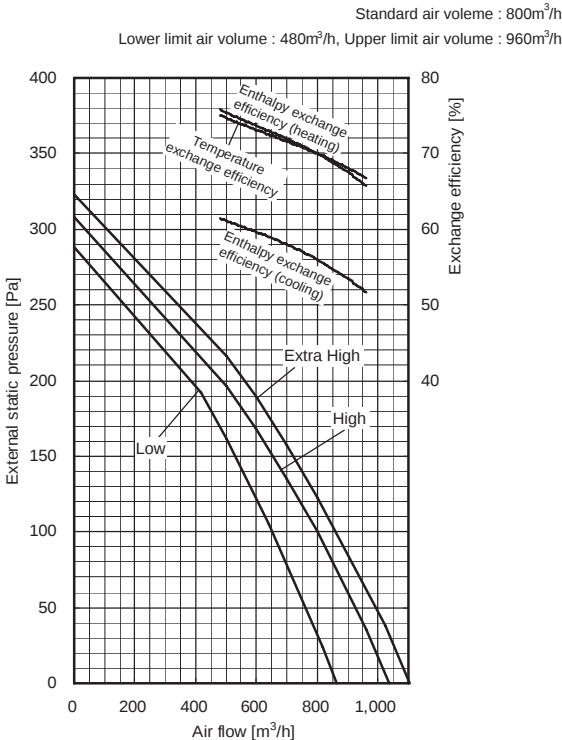
1-6. Fan Characteristics

----- 230V, 50Hz

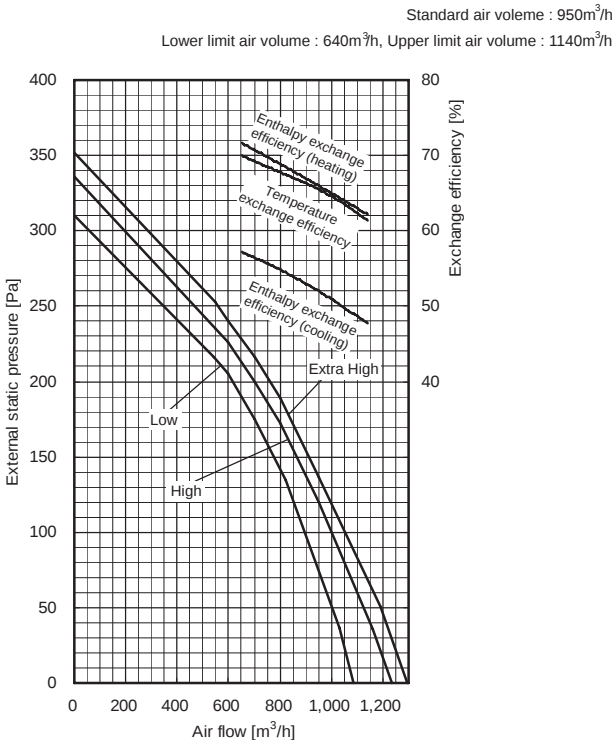
MMD-VN502HEXE



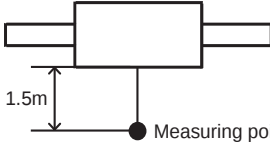
MMD-VN802HEXE

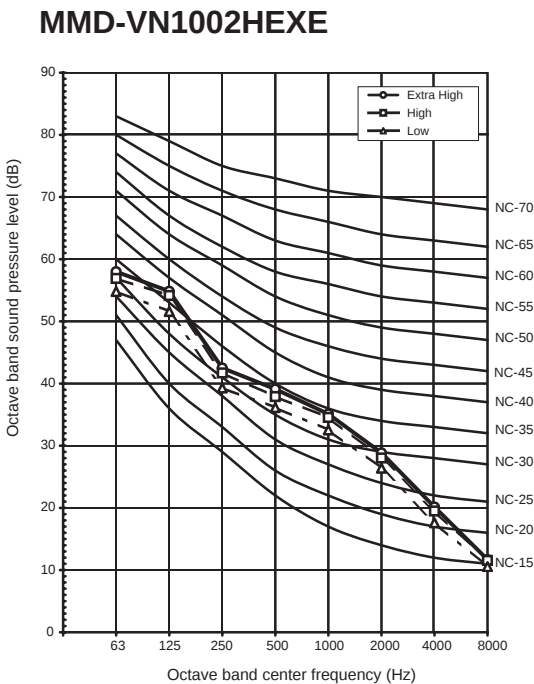
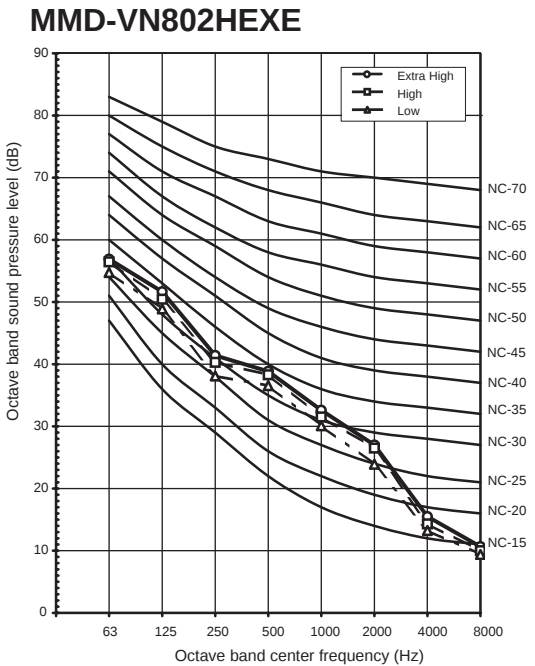
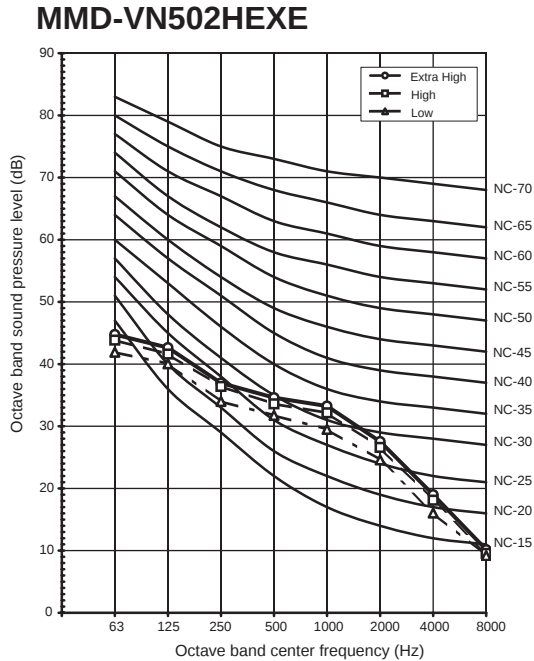


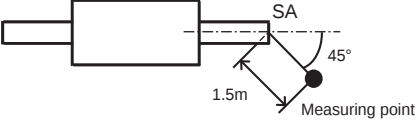
MMD-VN1002HEXE

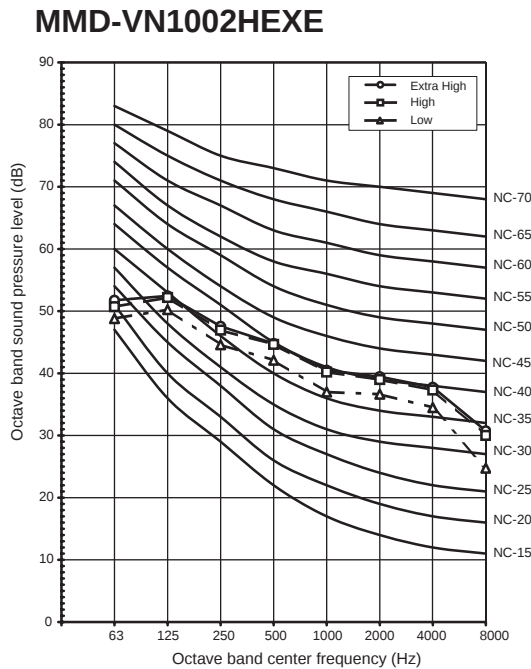
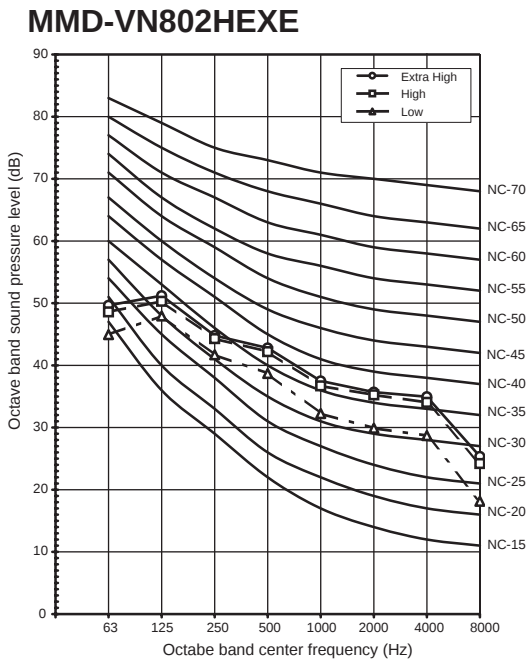
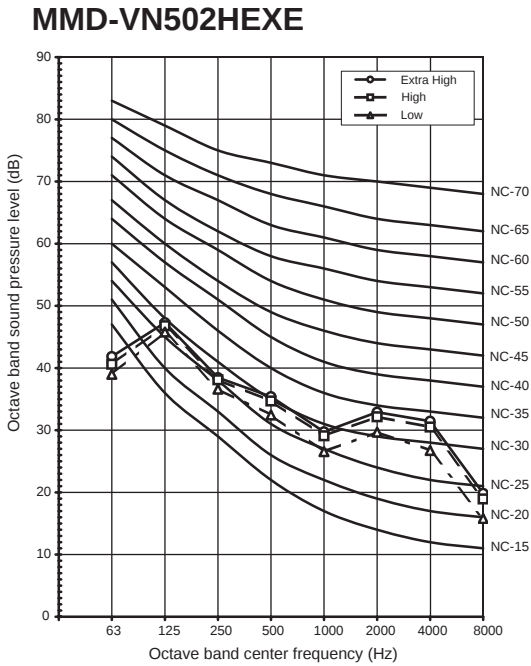


1-7. Sound Characteristics (NC Curve)

Model name	Power supply (phase/Hz/V)		Sound pressure level (dB)		
			Extra High	High	Low
MMD-VN502HEXE	1 phase / 50Hz / 220V-240V	Under from body 1.5m 	37.5	36.5	34.5
MMD-VN802HEXE			41.0	40.0	38.0
MMD-VN1002HEXE			43.0	42.0	40.0



Model name	Power supply (phase/Hz/V)		Sound pressure level (dB)		
			Extra High	High	Low
MMD-VN502HEXE	1 phase / 50Hz / 220V-240V		39.5	39.0	37.0
MMD-VN802HEXE			44.5	44.5	40.5
MMD-VN1002HEXE			47.0	47.0	45.0



2-1. Specifications

(60Hz)

Model name				MMD-VN502HEXE	MMD-VN802HEXE	MMD-VN1002HEXE2
Fresh air conditioning load	Cooling	(*1)	kW	4.10 (1.30)	6.56 (2.06)	8.25 (2.32)
	Heating	(*1)	kW	5.53 (2.33)	8.61 (3.61)	10.92 (4.32)
Power supply				1phase 60Hz 220V (Separate power supply for indoor units is required.)		
Temperature exchange efficiency		Extra High	%	70.5	70.0	65.5
		High	%	70.5	70.0	65.5
		Low	%	72.0	73.0	68.0
Enthalpy exchange efficiency	Cooling	Extra High	%	56.5	56.0	52.0
		High	%	56.5	56.0	52.0
		Low	%	58.0	59.5	55.0
	Heating	Extra High	%	68.5	70.0	66.0
		High	%	68.5	70.0	66.0
		Low	%	69.0	73.5	69.0
Power input (Heat exchange mode)		Extra High	kW	0.365	0.595	0.720
		High	kW	0.350	0.555	0.665
		Low	kW	0.250	0.390	0.530
Running current		Extra High	A	1.65	2.77	3.38
		High	A	1.62	2.59	3.11
		Low	A	1.14	1.79	2.45
Fan unit	Standard air flow	Extra High	m³/h	500	800	950
		High	m³/h	500	800	950
		Low	m³/h	410	600	800
	External static pressure	Extra High	Pa	200	190	195
		High	Pa	170	155	160
		Low	Pa	150	130	130
	Air flow limit	Lower limit	m³/h	330	480	640
		Upper limit	m³/h	600	960	1140
Sound pressure		Extra High	dB	40.0	43.0	43.5
		High	dB	38.0	42.0	42.0
		Low	dB	36.5	37.0	40.0
Appearance				Zinc hot dipping steel plate		
Outer dimension	Height		mm	430	430	430
	Width		mm	1140	1189	1189
	Depth		mm	1690	1739	1739
Total weight			kg	84	100	103
Heat exchanger				Finned tube		
Heat-insulating material				Flexible urethane foam		
Air filter				Standard filter (Gravitational method 82%) & High efficiency filter (Colorimetric method 65%)		
Controller				Remote controller (Separately sold parts)		
Connecting piping	Gas side		mm	Ø9.5	Ø12.7	Ø12.7
	Liquid side		mm	Ø6.4	Ø6.4	Ø6.4
Drain port (Nominal dia. mm)				25 (Polyvinyl chloride tube)		

(*1) Cooling and heating capacities are based on the following conditions:

Cooling capacities are based on: indoor temperature: 27 °CDB/19°CWB, Outdoor temperature: 35°CDB

Heating capacities are based on: indoor temperature: 20°CDB, Outdoor temperature: 7 °CDB/6°CWB

Fan is based on Extra High and High

(): The figures in () indicate the heat reclaimed from the heat recovery ventilator.

When calculating the capacity code as indoor units, please use as below.

MMD-VN502HEXE: 1HP, MMD-VN802HEXE: 1.7HP,

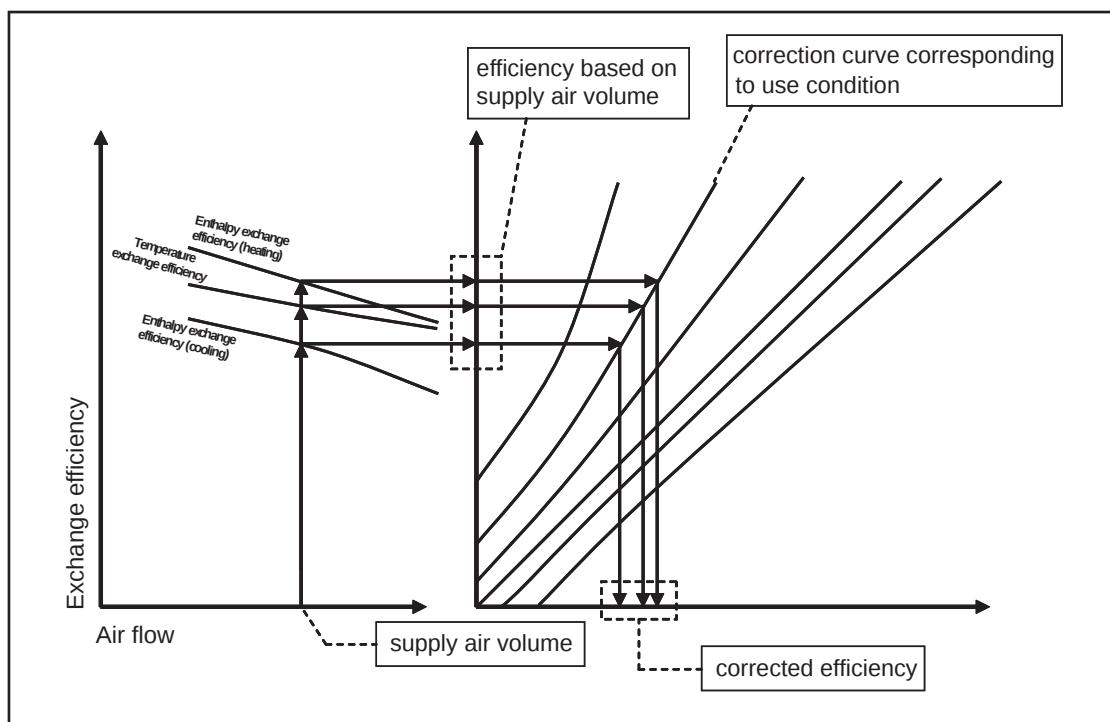
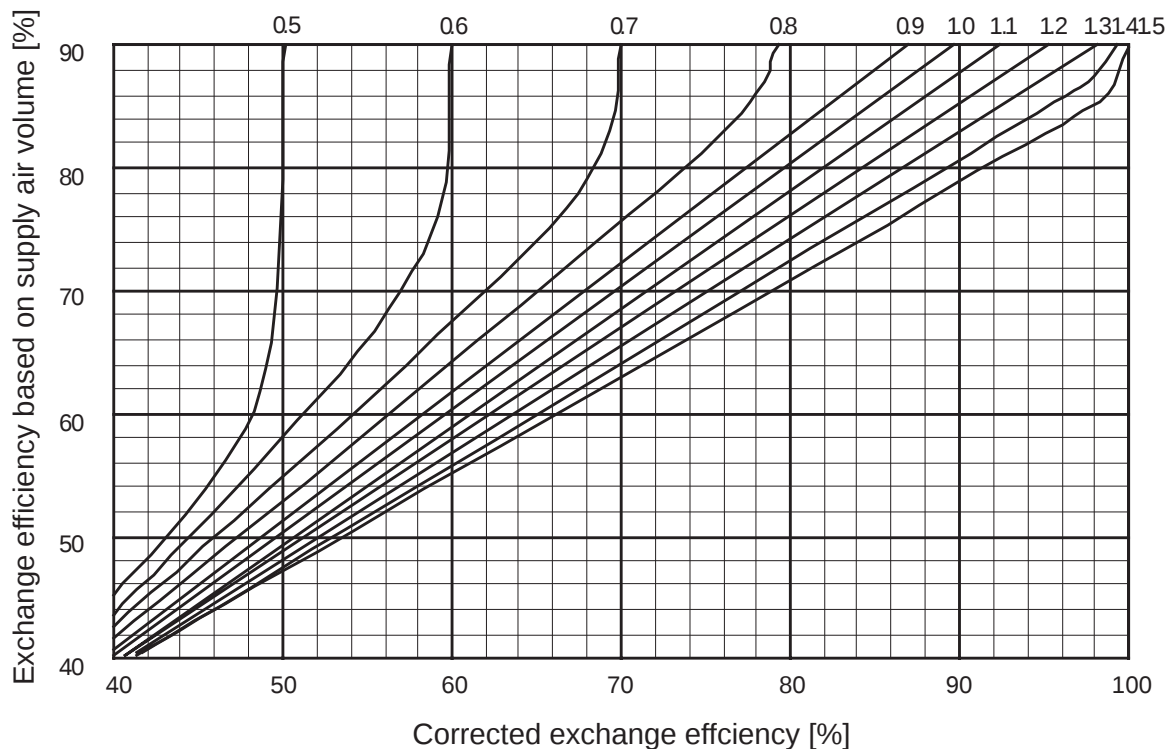
MMD-VN1002HEXE2: 2.0HP

2-2. Exchange Efficiency Correction

Exchange efficiency correction when supply air volume and exhaust air volume are different

Exchange efficiency correction curve

Exhaust to supply ratio = Exhaust air volume / Supply air volume



2-3. Sensible Capacity Table

Cooling capacity tables

TC: Total Capacity [kW] SHC: Sensible Heat Capacity [kW]

MMD-VN ***HEXE, MMD-VN****HEXE2

Class	DX-coil capacity [kW]	Outdoor temp. [°CDB]	DX-coil inlet temp. [°CWB]											
			16.0		18.0		19.0		20.0		22.0		24.0	
			TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
502	2.8	10.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		12.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		14.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		16.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		18.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		20.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		21.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		23.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		25.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		27.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		29.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		31.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		33.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		35.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.8
		37.0	2.5	1.7	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.8	3.2	1.7
		39.0	2.4	1.7	2.6	1.8	2.7	1.8	2.8	1.8	2.9	1.8	3.1	1.7
802	4.5	10.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		12.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		14.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		16.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		18.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		20.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		21.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		23.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		25.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		27.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		29.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		31.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		33.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		35.0	4.1	2.8	4.4	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		37.0	4.0	2.7	4.3	2.9	4.5	2.9	4.6	2.9	4.9	2.9	5.1	2.8
		39.0	3.9	2.7	4.2	2.8	4.4	2.8	4.5	2.9	4.7	2.8	5.0	2.7
1002	5.93	10.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		12.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		14.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		16.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		18.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		20.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		21.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		23.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		25.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		27.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		29.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		31.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		33.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		35.0	5.3	3.7	5.7	4.0	5.9	4.0	6.1	4.0	6.4	3.9	6.8	3.8
		37.0	5.3	3.7	5.7	3.9	5.9	3.9	6.1	3.9	6.4	3.9	6.7	3.8
		39.0	5.2	3.6	5.6	3.8	5.7	3.8	5.9	3.8	6.2	3.8	6.5	3.7

Heating capacity tables

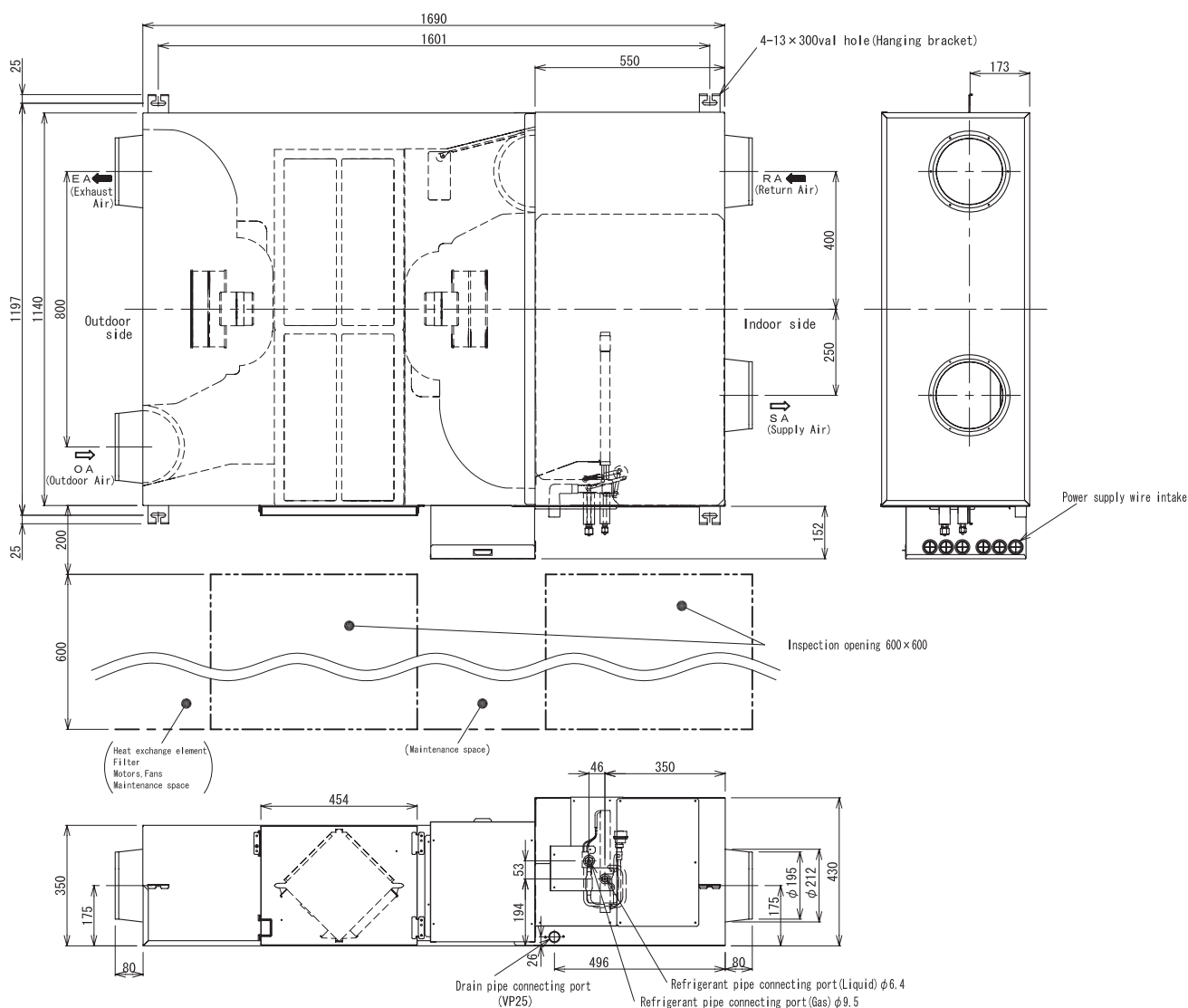
TC: Total Capacity [kW] SHC: Sensible Heat Capacity [kW]

MMD-VN ***HEXE, MMD-VN****HEXE2

Class	DX-coil capacity [kW]	Outdoor temp. [°CWB]	DX-coil inlet temp. [°CDB]				
			16.0	18.0	20.0	22.0	24.0
			SHC	SHC	SHC	SHC	SHC
502	3.2	-15.0	1.9	1.8	1.8	1.8	1.7
		-13.0	2.0	2.0	2.0	1.9	1.9
		-11.0	2.2	2.1	2.1	2.0	2.0
		-10.0	2.2	2.2	2.2	2.1	2.1
		-8.0	2.4	2.3	2.3	2.2	2.2
		-6.0	2.5	2.4	2.4	2.3	2.3
		-4.0	2.5	2.4	2.3	2.3	2.2
		-2.0	2.5	2.5	2.4	2.4	2.3
		0.0	2.6	2.7	2.6	2.5	2.5
		2.0	2.8	2.8	2.7	2.6	2.6
		4.0	3.2	3.1	3.0	3.0	2.9
		6.0	3.3	3.3	3.2	3.1	3.0
		8.0	3.3	3.3	3.2	3.1	3.0
		10.0	3.3	3.3	3.2	3.1	3.0
		12.0	3.3	3.3	3.2	3.1	3.0
		14.0	3.3	3.3	3.2	3.1	3.0
802	4.8	-15.0	2.8	2.8	2.7	2.6	2.6
		-13.0	3.0	3.0	2.9	2.9	2.8
		-11.0	3.3	3.2	3.1	3.1	3.0
		-10.0	3.4	3.3	3.2	3.2	3.1
		-8.0	3.6	3.5	3.4	3.3	3.3
		-6.0	3.7	3.6	3.6	3.5	3.4
		-4.0	3.7	3.5	3.5	3.4	3.3
		-2.0	3.8	3.7	3.6	3.5	3.4
		0.0	3.9	4.0	3.9	3.8	3.7
		2.0	4.2	4.1	4.1	4.0	3.9
		4.0	4.7	4.7	4.6	4.5	4.3
		6.0	5.0	4.9	4.8	4.7	4.6
		8.0	5.0	4.9	4.8	4.7	4.6
		10.0	5.0	4.9	4.8	4.7	4.6
		12.0	5.0	4.9	4.8	4.7	4.6
		14.0	5.0	4.9	4.8	4.7	4.6
1002	6.6	-15.0	3.9	3.8	3.7	3.6	3.5
		-13.0	4.2	4.1	4.0	3.9	3.8
		-11.0	4.5	4.4	4.3	4.2	4.1
		-10.0	4.6	4.5	4.4	4.3	4.2
		-8.0	4.9	4.8	4.7	4.6	4.5
		-6.0	5.1	5.0	4.9	4.8	4.6
		-4.0	5.1	4.9	4.8	4.7	4.5
		-2.0	5.2	5.1	5.0	4.9	4.7
		0.0	5.4	5.5	5.4	5.2	5.1
		2.0	5.8	5.7	5.6	5.4	5.3
		4.0	6.5	6.4	6.3	6.1	6.0
		6.0	6.9	6.7	6.6	6.4	6.3
		8.0	6.9	6.7	6.6	6.4	6.3
		10.0	6.9	6.7	6.6	6.4	6.3
		12.0	6.9	6.7	6.6	6.4	6.3
		14.0	6.9	6.7	6.6	6.4	6.3

2-4. Dimension

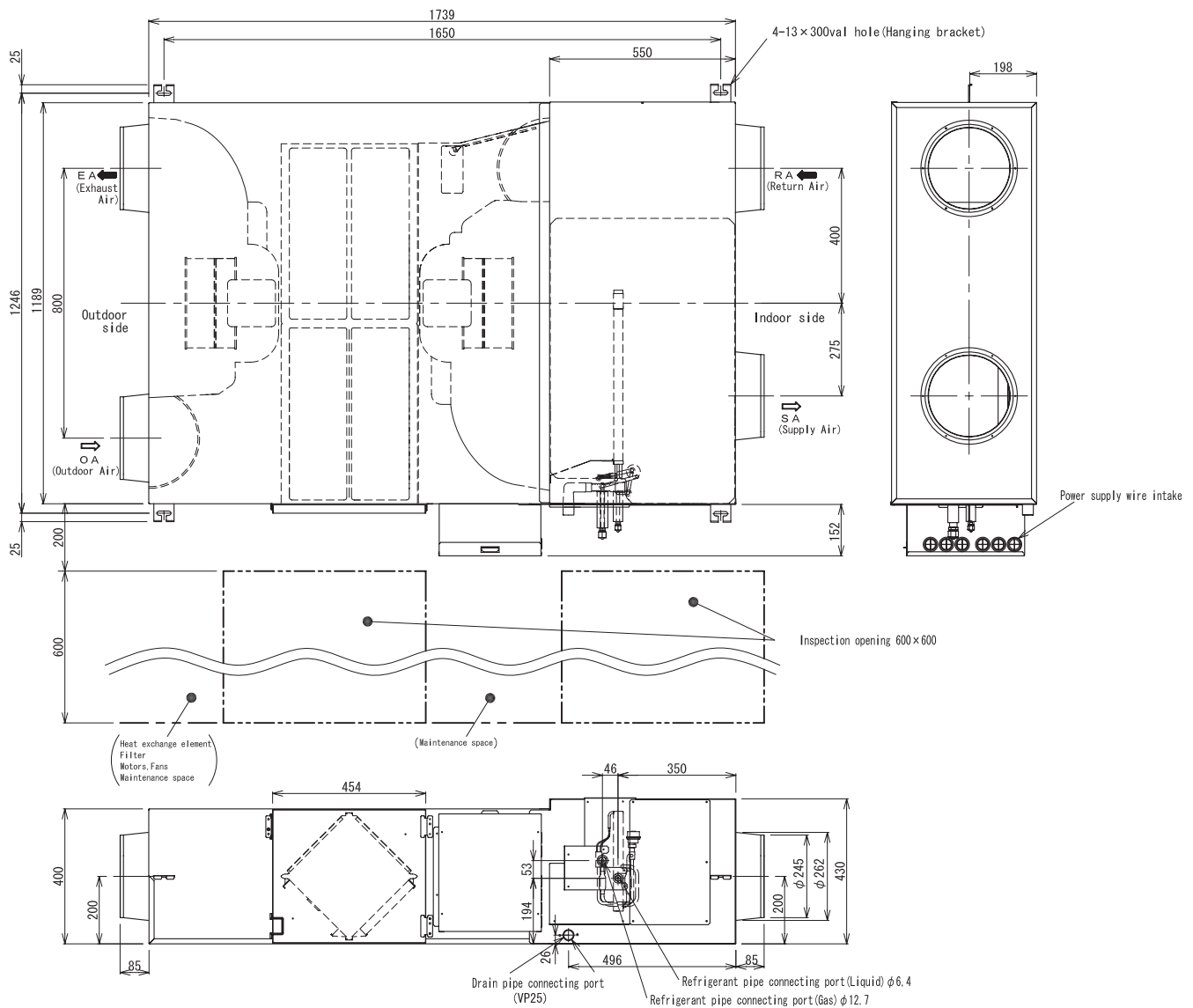
MMD-VN502HEXE



■ Attention

1. Duct size (Nominal diameter): $\phi 200$
2. The above dimensions do not include the thickness of the insulation material on the unit body.

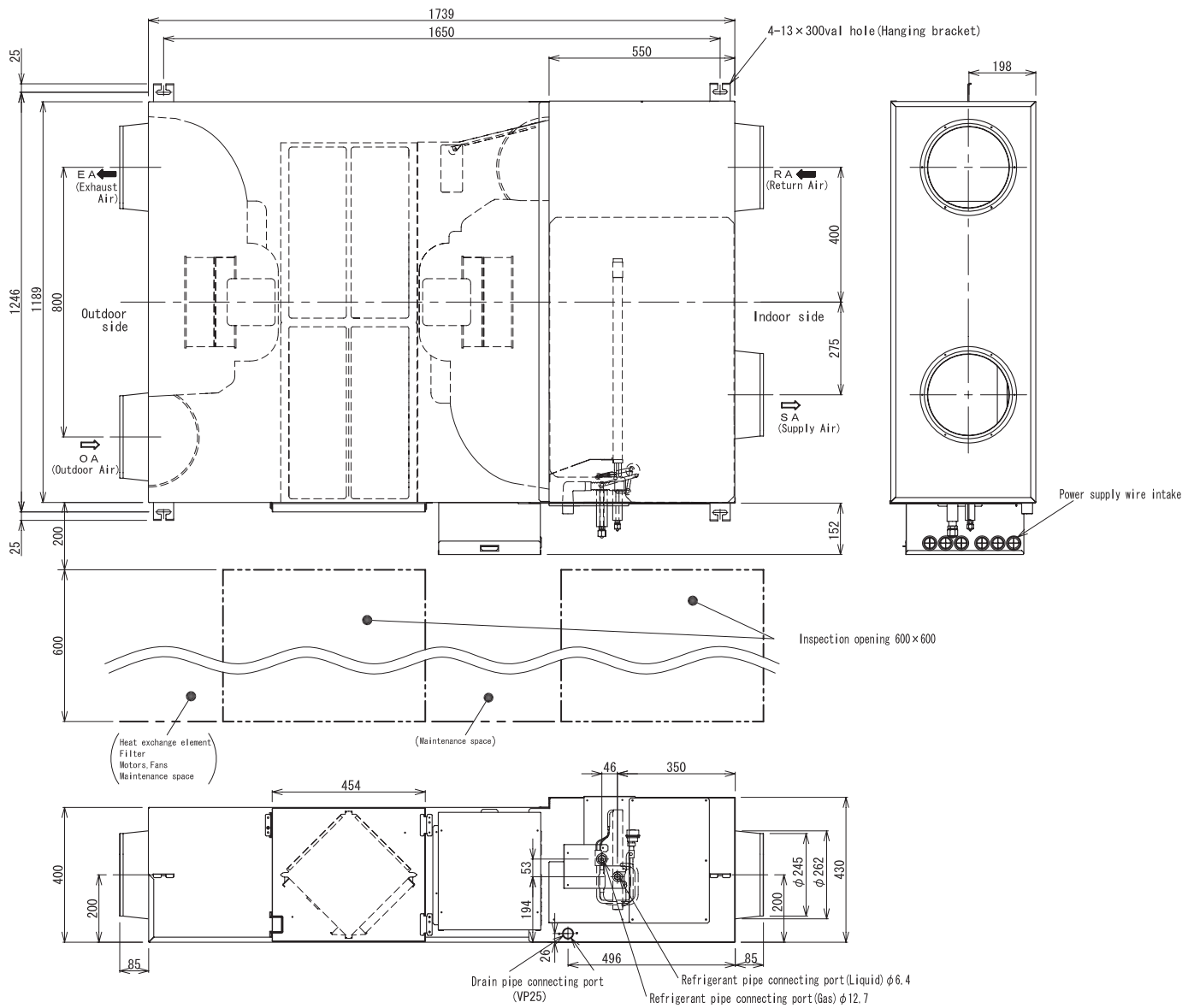
MMD-VN802HEXE



■ **Attention**

1. Duct size (Nominal diameter): $\phi 250$
2. The above dimensions do not include the thickness of the insulation material on the unit body.

MMD-VN1002HEXE2

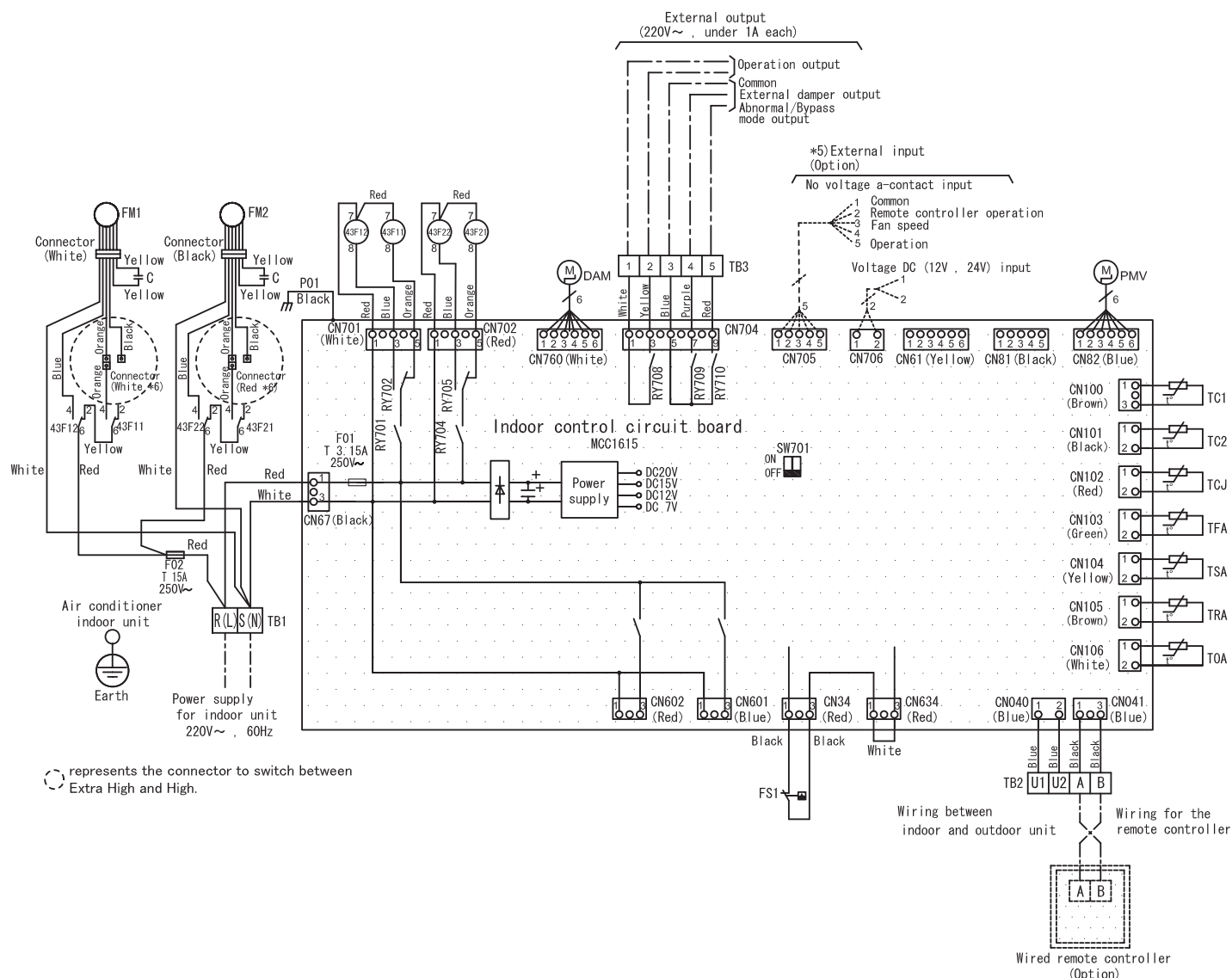


■ **Attention**

1. Duct size (Nominal diameter): $\phi 250$
2. The above dimensions do not include the thickness of the insulation material on the unit body.

2-5. Wiring Diagram

MMD-VN502HEXE, MMD-VN802HEXE, MMD-VN1002HEXE2

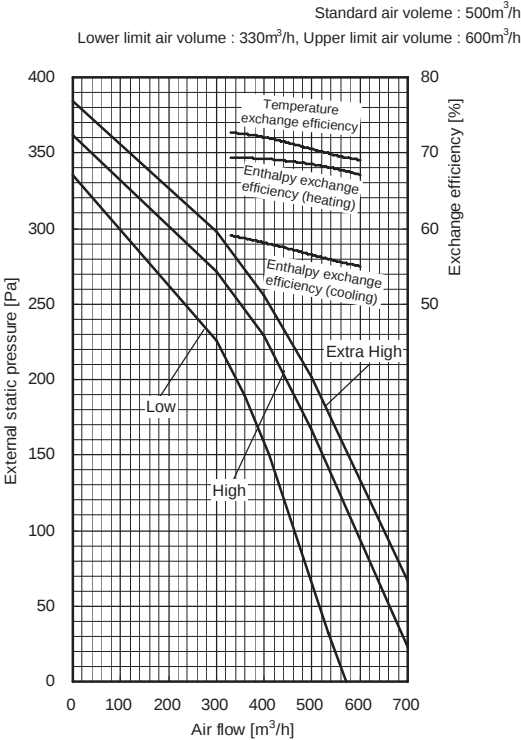


- The dotted line represents a wire procured locally, and the dashed line represents an option sold separately.
- represents a terminal block, —○— represents a connection terminal, ○ represents a connector on the printed circuit board and □ represents a short circuit connector.
- ⊕ represents a protective earth.
- represents a printed circuit board.
- Using a no voltage a-contact input of the external input (option), the following operations are available.
 - Between 1 and 2: Selecting the remote controller operation (Invalid/Valid)
 - Between 1 and 3: Adjusting the fan speed (Low/High)
 - Between 1 and 5: Operation (ON/OFF)
 Use a microcurrent contact (DC12V, 1mA). In addition, ON/OFF operation is possible when using a voltage of DC12V or 24V.
- Orange wire (High) is connected as factory default. To switch to "Extra High", connect black wire's connector instead of orange.

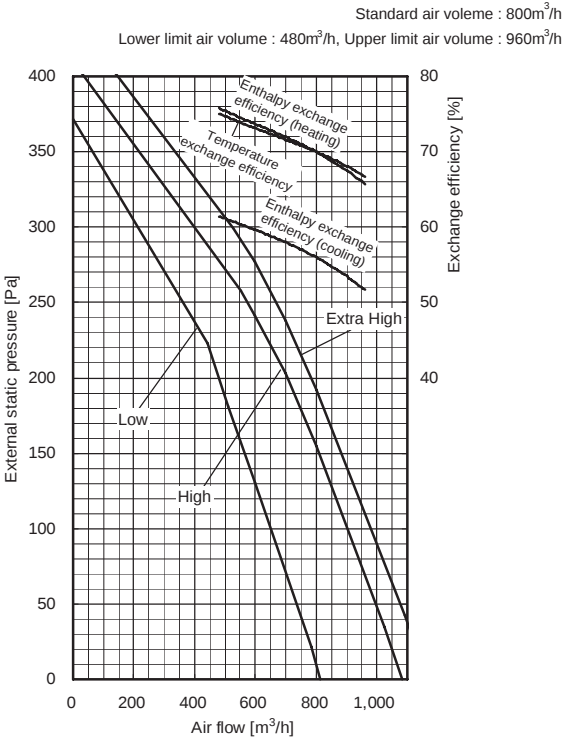
2-6. Fan Characteristics

220V, 60Hz

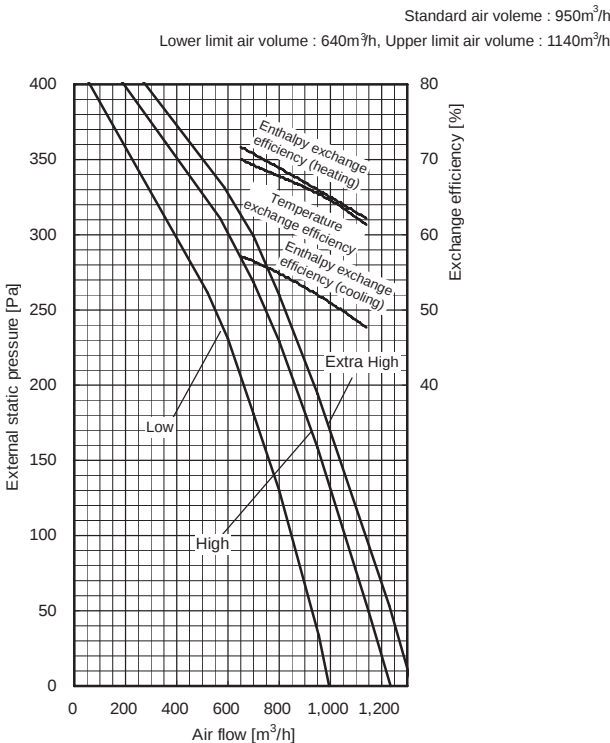
MMD-VN502HEXE



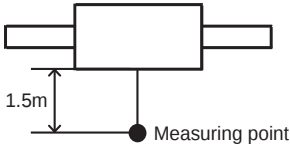
MMD-VN802HEXE



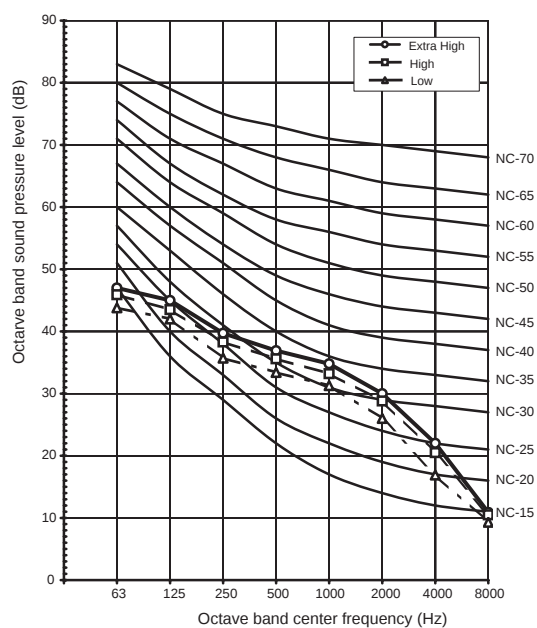
MMD-VN1002HEXE2



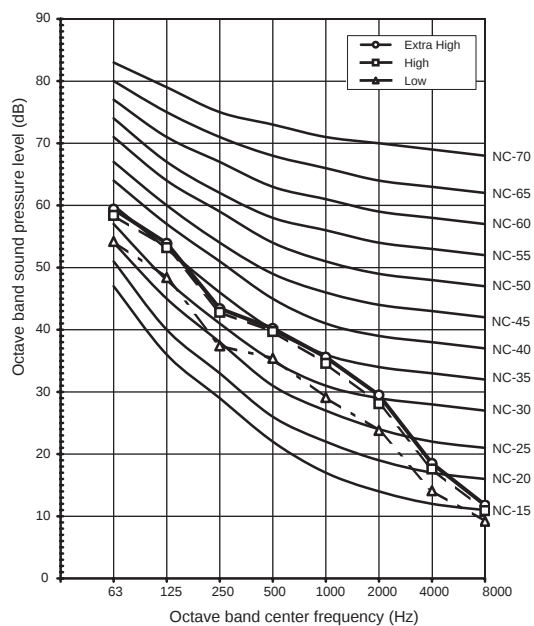
2-7. Sound Characteristics (NC Curve)

Model name	Power supply (phase/Hz/V)		Sound pressure level (dB)		
			Extra High	High	Low
MMD-VN502HEXE	1 phase / 60Hz / 220V	Under from body 1.5m 	40.0	38.0	36.5
MMD-VN802HEXE			43.0	42.0	37.0
MMD-VN1002HEXE2			43.5	42.0	40.0

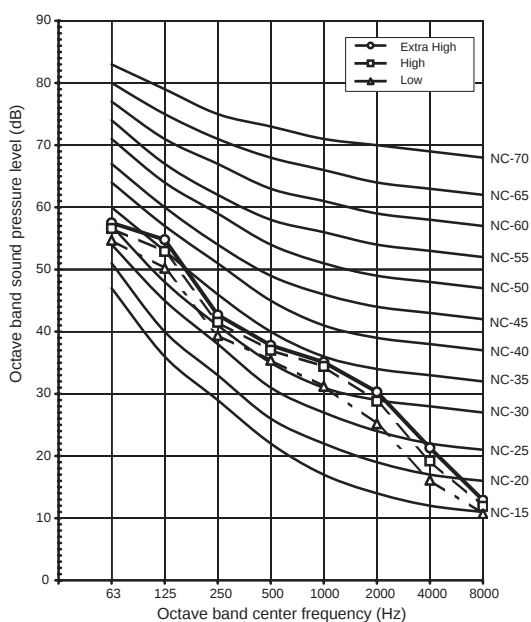
MMD-VN502HEXE

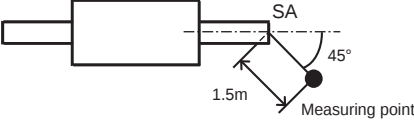


MMD-VN802HEXE

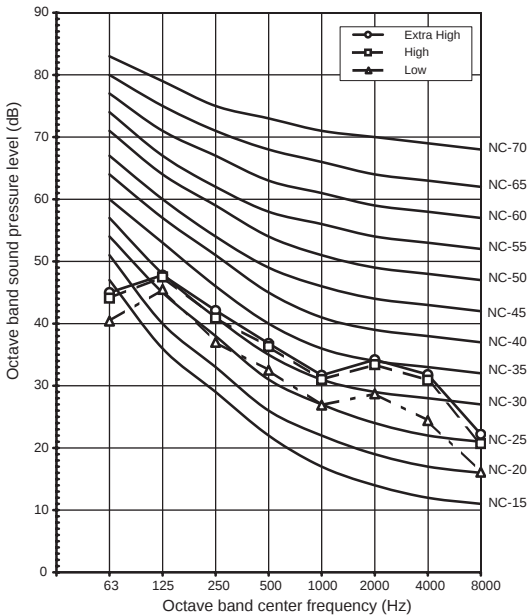


MMD-VN1002HEXE2

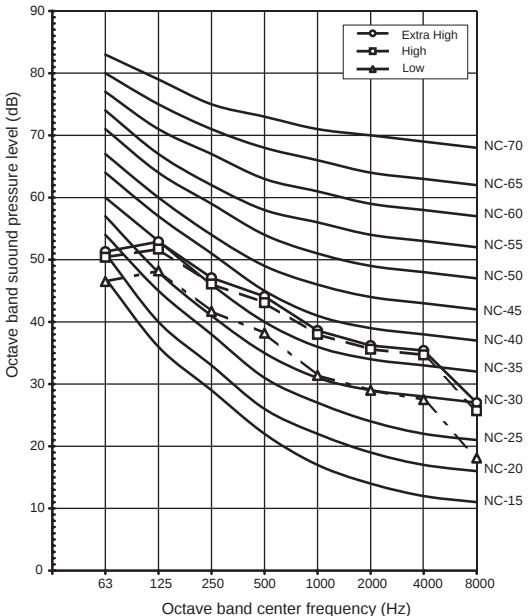


Model name	Power supply (phase/Hz/V)		Sound pressure level (dB)		
			Extra High	High	Low
MMD-VN502HEXE	1 phase / 60Hz / 220V		41.5	40.5	36.5
MMD-VN802HEXE			46.0	45.0	40.0
MMD-VN1002HEXE2			48.0	47.0	43.5

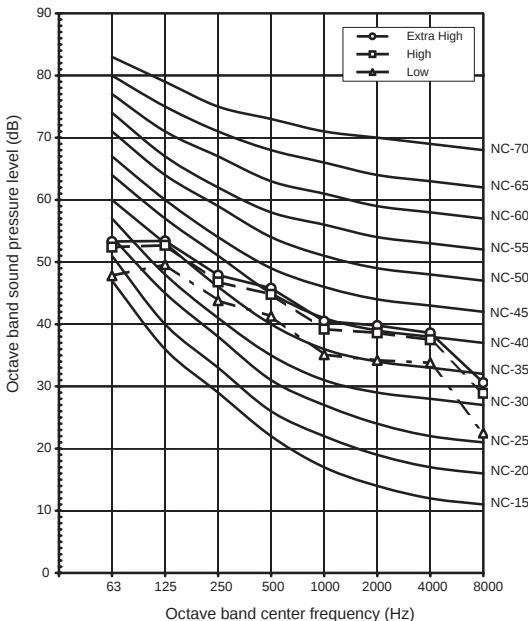
MMD-VN502HEXE



MMD-VN802HEXE



MMD-VN1002HEXE2



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