

Floor standing

Service manual



Floor Standing

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The 2nd Generation DC Series VRF Indoor Units

1 Specifications

Table 1.1: MVD-22(28,36,45)F4DN1, MVD-22(28,36,45)F5DN1 specifications

Model			MVD-22F4DN1	MVD-28F4DN1	MVD-36F4DN1	MVD-45F4DN1
			MVD-22F5DN1	MVD-28F5DN1	MVD-36F5DN1	MVD-45F5DN1
Power supply			1 phase, 220-240V, 50Hz			
Cooling ¹	Capacity	kW	2.2	2.8	3.6	4.5
		kBtu/h	7.5	9.6	12.3	15.4
Power input		W	40	45	55	60
Heating ²	Capacity	kW	2.4	3.2	4.0	5.0
		kBtu/h	8.2	10.9	13.6	17.1
Power input		W	40	45	55	60
Fan motor	Model		WZDK100-38GS-2			
	Type		DC			
	Brand		Panasonic /Match-well			
	Speed ³	r/min	890/840/790/770/ 740/710/670	970/910/860/830/ 790/760/740	760/720/690/650/ 600/540/500	850/830/790/770/ 730/680/630
Indoor coil	Number of rows		2	2	3	3
	Tube pitch × row pitch	mm	25.4×22			
	Fin spacing	mm	1.8			
	Fin type		Hydrophilic aluminum			
	Tube OD and type	mm	Φ9.52 Inner-groove			
	Dimensions (L×H×W)	mm	568×254×44	568×254×44	768×254×66	768×254×66
	Number of circuits		3			
Air flow rate ³	m ³ /h	530/504/478/456/ 439/418/400	569/540/515/485/ 462/443/421	624/591/557/522/ 473/420/375	660/625/583/542/ 501/475/440	
Sound pressure level ⁴	dB(A)	36/35/34/33/31/30/29			37/36/35/34/32/31/30	
Sound power level	dB(A)	54/53/52/51/49/48/47			55/54/53/52/51/49/48	
Unit	Net dimensions ⁵ (W×H×D)	mm (F4)	1000×596×225			1200×596×225
		mm (F5)	1000×677×220			1200×677×220
	Packed dimensions (W×H×D)	mm (F4)	1089×683×312			1289×683×312
		mm (F5)	1182×683×312			1382×683×312
	Net/Gross weight	kg (F4)	28/33			33/38.6
		kg (F5)	28/35			33/40.7
Refrigerant type			R410A			
Throttle	Type	Electronic expansion valve				
	Model	D20MISZ-1R(L)				
Design pressure (H/L)		MPa	4.4/2.6			
Refrigerant piping	Liquid/Gas side	mm	Φ6.35/Φ12.7			
Drain piping		mm	OD Φ16			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Fan motor speed and air flow rate are from the highest to the lowest, total 7 rates for each model.
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured at 1m in front of the unit and at a height of 1.5m in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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Table 1.2: MVD-56(71,80)F4DN1, MVD-22(28,36,45)F5DN1 specifications

Model			MVD-56F4DN1	MVD-71F4DN1	MVD-80F4DN1
			MVD-56F5DN1	MVD-71F5DN1	MVD-80F5DN1
Power supply			1 phase, 220-240V, 50Hz		
Cooling ¹	Capacity	kW	5.6	7.1	8.0
		kBtu/h	19.1	24.2	27.3
	Power input	W	88	110	130
Heating ²	Capacity	kW	6.3	8.0	9.0
		kBtu/h	21.5	27.3	30.7
	Power input	W	88	110	130
Fan motor	Model		WZDK100-38GS-3		
	Type		DC		
	Brand		Panasonic /Match-well		
	Speed ³	r/min	900/840/800/760/730 /690/630	1100/1060/1030/990/930 /890/860	1130/1110/1080/1040 /1010/940/910
Indoor coil	Number of rows		2	2	3
	Tube pitch × row pitch	mm	25.4×22		
	Fin spacing	mm	1.8		
	Fin type		Hydrophilic aluminum		
	Tube OD and type	mm	Φ9.52 Inner-groove		
	Dimensions (L×H×W)	mm	1068×254×44	1068×254×44	1068×254×66
	Number of circuits		4	4	3
Air flow rate ³		m ³ /h	1150/1094/1028/970/925 /886/830	1380/1290/1205/1100/1033/955/870	
Sound pressure level ⁴		dB(A)	41/39/37/35/33/32/31	44/42/40/39/37/35/33	
Sound power level		dB(A)	59/57/55/53/51/50/49	62/60/58/57/55/53/51	
Unit	Net dimensions ⁵ (W×H×D)	mm (F4)	1500×596×225		
		mm (F5)	1500×677×220		
	Packed dimensions (W×H×D)	mm (F4)	1589×683×312		
		mm (F5)	1682×683×312		
	Net/Gross weight	kg (F4)	40/46	40/46	41.5/47.5
		kg (F5)	40.4/48.6	40.4/48.6	41.5/49.5
Refrigerant type			R410A		
Throttle	Type	Electronic expansion valve			
	Model	D20MISZ-1R(L)			
Design pressure (H/L)		MPa	4.4/2.6		
Refrigerant piping	Liquid/Gas side	mm	Φ9.53/Φ15.9		
Drain piping		mm	OD Φ16		

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Fan motor speed and air flow rate are from the highest to the lowest, total 7 rates for each model.
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured at 1m in front of the unit and at a height of 1.5m in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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Table 1.3: MVD-22(28,36,45)F3DN1 specifications

Model			MVD-22F3DN1	MVD-28F3DN1	MVD-36F3DN1	MVD-45F3DN1
Power supply			1 phase, 220-240V, 50Hz			
Cooling ¹	Capacity	kW	2.2	2.8	3.6	4.5
		kBtu/h	7.5	9.6	12.3	15.4
	Power input	W	40	45	55	60
Heating ²	Capacity	kW	2.4	3.2	4.0	5.0
		kBtu/h	8.2	10.9	13.6	17.1
	Power input	W	40	45	55	60
Fan motor	Model		WZDK100-38GS-2			
	Type		DC			
	Brand		Panasonic /Match-well			
	Speed ³	r/min	890/840/790/770 /740/710/670	970/910/860/830 /790/760/740	760/720/690/650 /600/540/500	850/830/790/770 /730/680/630
Indoor coil	Number of rows		2	2	3	3
	Tube pitch × row pitch	mm	25.4×22			
	Fin spacing	mm	1.8			
	Fin type		Hydrophilic aluminum			
	Tube OD and type	mm	Φ9.52 Inner-groove			
	Dimensions (L×H×W)	mm	568×254×44		768×254×66	
	Number of circuits		3			
Air flow rate ³	m ³ /h	530/504/478/456 /439/418/400	569/540/515/485 /462/443/421	624/591/557/522 /473/420/375	660/625/583/542 /501/475/440	
Sound pressure level ⁴	dB(A)	36/35/34/33/31/30/29			37/36/35/34/32/31/30	
Sound power level	dB(A)	54/53/52/51/49/48/47			55/54/53/52/51/49/48	
Unit	Net dimensions ⁵ (W×H×D)	mm	840×545×212		1040×545×220	
	Packed dimensions (W×H×D)	mm	925×639×305		1139×639×305	
	Net/Gross weight	kg	21/25.5		25.5/30.5	
Refrigerant type			R410A			
Throttle	Type	Electronic expansion valve				
	Model	D20MISZ-1R(L)				
Design pressure (H/L)		MPa	4.4/2.6			
Refrigerant piping	Liquid/Gas side	mm	Φ6.35/Φ12.7			
Drain piping		mm	OD Φ16			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Fan motor speed and air flow rate are from the highest to the lowest, total 7 rates for each model.
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
- Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

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Table 1.2: MVD-56(71,80)F3DN1 specifications

Model			MVD-56F3DN1	MVD-71F3DN1	MVD-80F3DN1
Power supply			1 phase, 220-240V, 50Hz		
Cooling ¹	Capacity	kW	5.6	7.1	8.0
		kBtu/h	19.1	24.2	27.3
	Power input	W	88	110	130
Heating ²	Capacity	kW	6.3	8.0	9.0
		kBtu/h	21.5	27.3	30.7
	Power input	W	88	110	130
Fan motor	Model		WZDK100-38GS-3		
	Type		DC		
	Brand		Panasonic /Match-well		
	Speed ³	r/min	900/840/800/760/730 /690/630	1100/1060/1030/990 /930/890/860	1130/1110/1080/1040 /1010/940/910
Indoor coil	Number of rows		2	2	3
	Tube pitch × row pitch	mm	25.4×22		
	Fin spacing	mm	1.8		
	Fin type		Hydrophilic aluminum		
	Tube OD and type	mm	Φ9.52 Inner-groove		
	Dimensions (L×H×W)	mm	1068×254×44	1068×254×44	1068×254×66
	Number of circuits		4	4	3
Air flow rate ³		m ³ /h	1150/1094/1028/970 /925/886/830	1380/1290/1205/1100/1033/955/870	
Sound pressure level ⁴		dB(A)	41/39/37/35/33/32/31	44/42/40/39/37/35/33	
Sound power level		dB(A)	59/57/55/53/51/50/49	62/60/58/57/55/53/51	
Unit	Net dimensions ⁵ (W×H×D)	mm	1340×545×220		
	Packed dimensions (W×H×D)	mm	1425×639×345		
	Net/Gross weight	kg	30.5/35.5	30.5/35.5	32/37
Refrigerant type			R410A		
Throttle	Type	Electronic expansion valve			
	Model	D20MISZ-1R(L)			
Design pressure (H/L)		MPa	4.4/2.6		
Refrigerant piping	Liquid/Gas side	mm	Φ9.53/Φ15.9		
Drain piping		mm	OD Φ16		

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Fan motor speed and air flow rate are from the highest to the lowest, total 7 rates for each model.
4. Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

The 2nd Generation DC Series VRF Indoor Units

2 Dimensions

2.1 Unit Dimensions

Figure 2.1: F4 series (air inlet from front) Exposed Floor Standing dimensions (unit: mm)

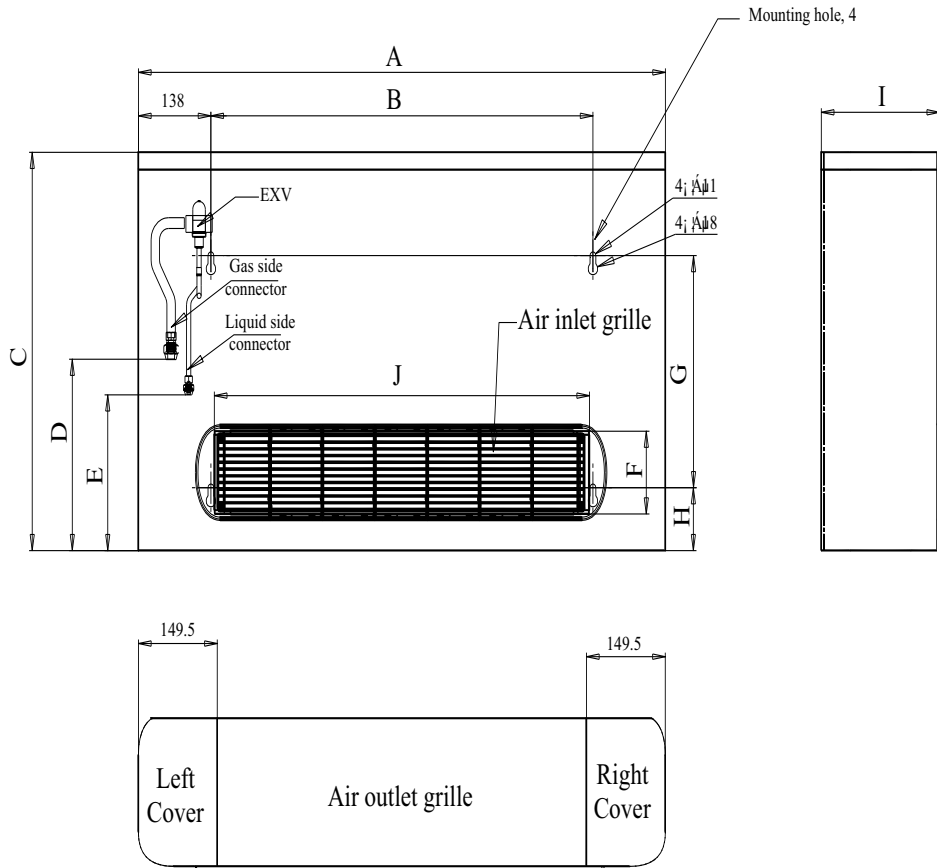


Table 2.1: F4 series Exposed Floor Standing dimensions

Model names	Dimensions (mm)								
	A	B	C	D	E	F	G	H	I
MVD-22F4DN1 MVD-28F4DN1	1000	725	596	284	232	112	345	94	225
MVD-36F4DN1 MVD-45F4DN1	1200	925	596	310	258	112	345	100	225
MVD-56F4DN1 MVD-71F4DN1 MVD-80F4DN1	1500	1225	596	310	258	112	345	100	225

The 2nd Generation DC Series VRF Indoor Units

Figure 2.2: F5 series (air inlet from bottom) Exposed Floor Standing dimensions (unit: mm)

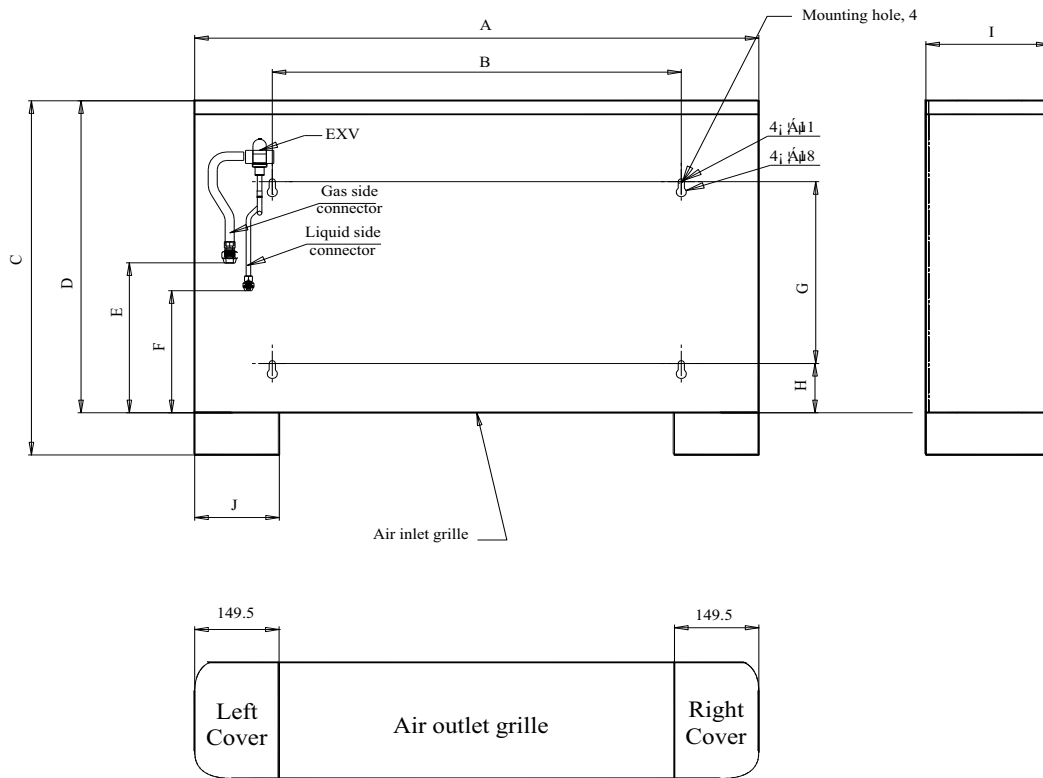


Table 2.2: F5 series Exposed Floor Standing dimensions

Model names	Dimensions (mm)									
	A	B	C	D	E	F	G	H	I	J
MVD-22F5DN1 MVD-28F5DN1	1000	725	677	592	284	232	345	94	220	150
MVD-36F5DN1 MVD-45F5DN1	1200	925	677	592	310	258	345	100	220	150
MVD-56F5DN1 MVD-71F5DN1 MVD-80F5DN1	1500	1225	677	592	310	258	345	100	220	150

The 2nd Generation DC Series VRF Indoor Units

Figure 2.3: F3 series Concealed Floor Standing dimensions (unit: mm)

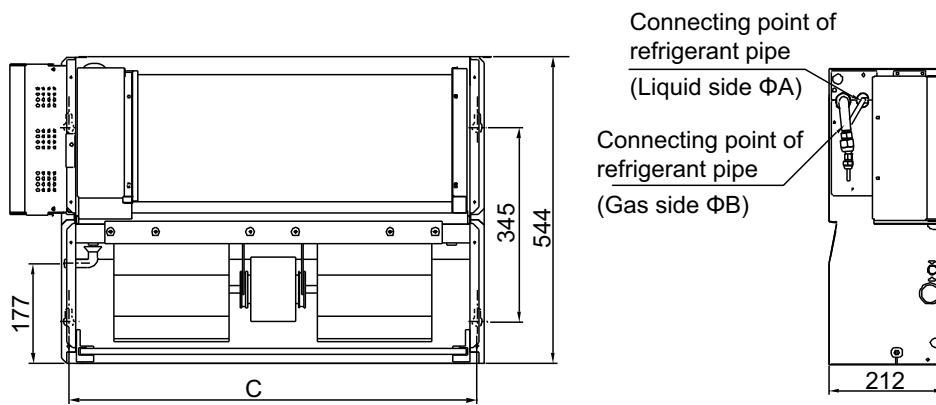


Table 2.3: F3 series Concealed Floor Standing dimensions

Model names	Dimensions (mm)		
	A	B	C
MVD-22F3DN1 MVD-28F3DN1	Φ6.35	Φ12.7	725
MVD-36F3DN1 MVD-45F3DN1	Φ6.35	Φ12.7	925
MVD-56F3DN1 MVD-71F3DN1 MVD-80F3DN1	Φ9.53	Φ15.9	1225

3 Unit Placement

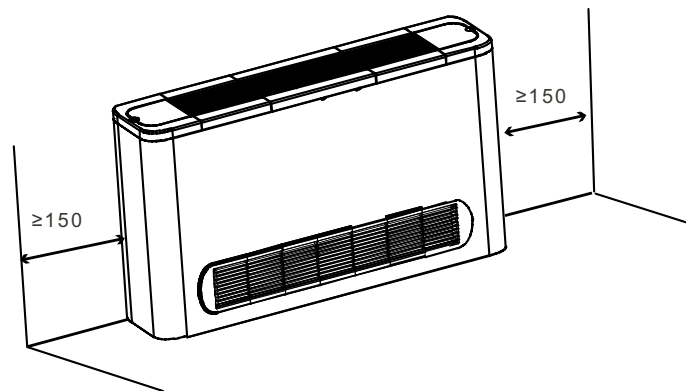
3.1 Placement Considerations

Unit placement should take account of the following considerations:

- Units should not be installed in the following locations:
 - Where exposure to direct radiation from a high-temperature heat source or to interference from a source of electromagnetic radiation may occur.
 - Where dust or dirt may affect heat exchangers.
 - Where exposure to oil or to corrosive or harmful gases, such as acidic or alkaline gases, may occur.
 - Where exposure to salinity may occur, such as seaside locations.
 - Where highly flammable materials are present.
 - Where exposure to oily air may occur, such as a kitchen.
 - Where exposure to very high humidity may occur, such as a laundry.
- Units should be installed in positions where:
 - The ceiling is horizontal and is able to bear the unit's weight.
 - There are no obstructions that could impede the airflow into and out of the unit.
 - The airflow out of the unit can reach throughout the room.
 - There is sufficient space for access during installation, servicing and maintenance.
 - The refrigerant piping and drain piping can be easily connected to the refrigerant piping and drain piping systems.
 - Short-circuit ventilation (where outlet air returns quickly to a unit's air inlet) will not occur.

3.2 Space Requirements

Figure 3.1: F4 series (air inlet from front) Exposed Floor Standing space requirements (unit: mm)

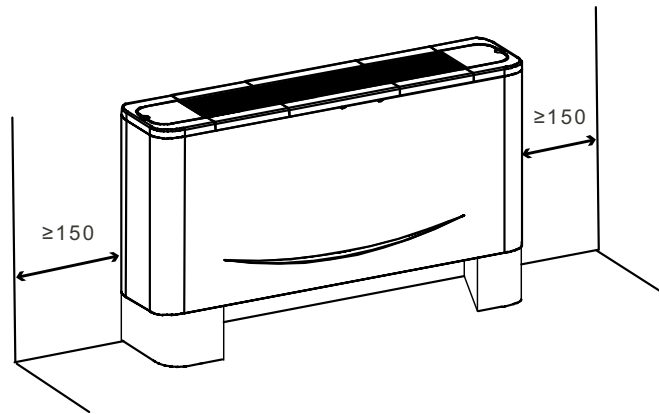


Notes:

1. Vertical unit with casing, with air intake from front and air outlet on top, for installation on a wall or on feet on the floor.
2. Additionally, it is required to keep 20mm between the rear and wall; 600mm between the front face and the obstacle. 1700mm vertical distance between the top of unit (outlet) and the upper obstacle.

The 2nd Generation DC Series VRF Indoor Units

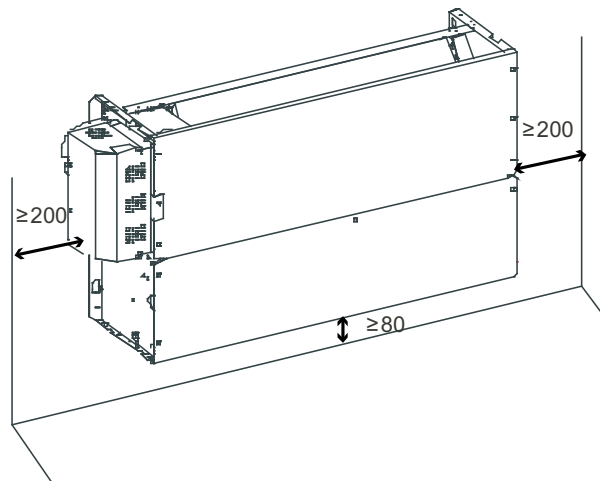
Figure 3.2: F5 series (air inlet from bottom) Exposed Floor Standing space requirements (unit: mm)



Notes:

1. Vertical unit with casing, with air intake from below and air outlet on top, for installation on a wall or on feet on the floor.
2. Additionally, it is required to keep 20mm between the rear and wall; 600mm between the front face and the obstacle. 1700mm vertical distance between the top of unit (outlet) and the upper obstacle.

Figure 3.3: F3 series Concealed Floor Standing space requirements (unit: mm)

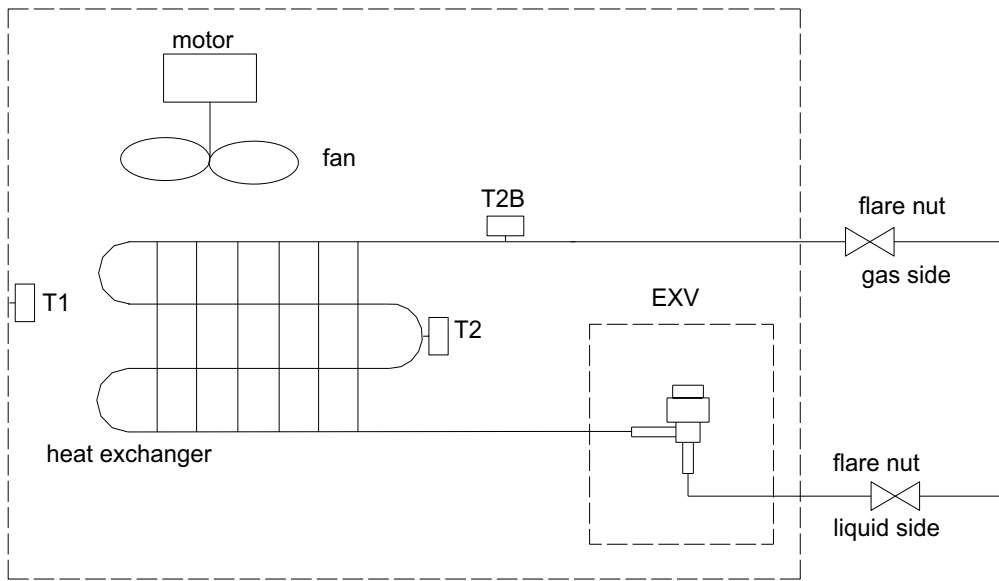


Notes:

1. Vertical unit for building-in, with air intake from below and air outlet on top, for installation on a wall.
2. Additionally, it is required to keep 20mm between the rear and wall; 600mm between the front face and the obstacle. 1700mm vertical distance between the top of unit (outlet) and the upper obstacle.

4 Piping Diagram

Figure 4.1: Floor Standing piping diagram

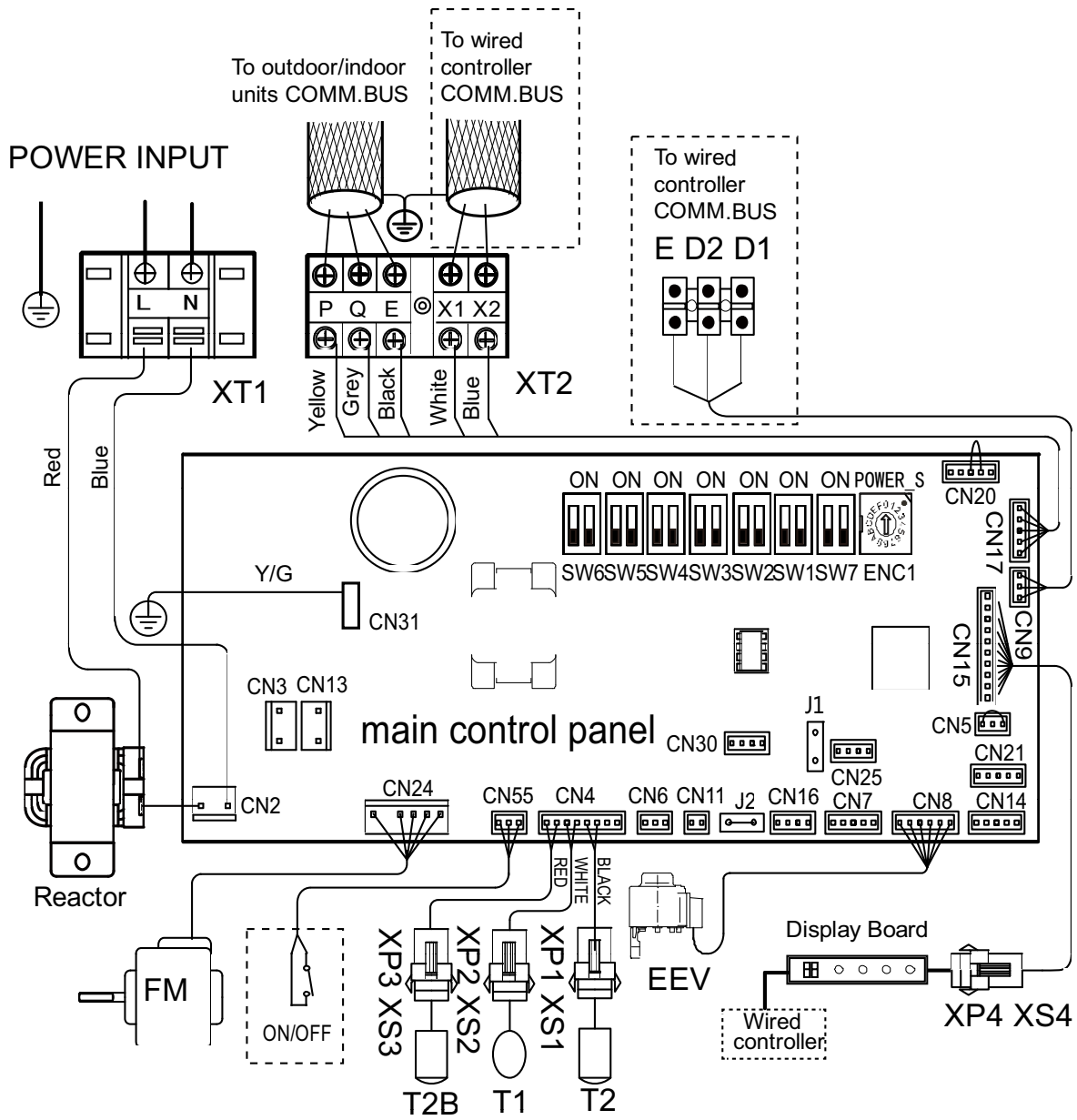


Legend	
T1	Indoor ambient temperature sensor
T2	Indoor heat exchanger mid-point temperature sensor
T2B	Indoor heat exchanger outlet temperature sensor

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5 Wiring Diagram

Figure 5.1: Floor Standing wiring diagram



Code	Name
FM	FAN MOTOR
EEV	ELECTRIC EXPANSION VALVE
T1	ROOM TEMP. SENSOR
T2	MIDDLE PIPE TEMP.
T2B	OUTER PIPE TEMP.
XP1-4	CONNECTORS
XS1-4	CONNECTORS
XT1-2	CONNECTORS

HP set switch ENC1 definition list	
Code	Indoor Unit Capacity Value
0	2200W(0.8HP)
1	2800W(1.0HP)
2	3600W(1.2HP)
3	4500W(1.7HP)
4	5600W(2.0HP)
5	7100W(2.5HP)
6	8000W(3.0HP)

Notes for installers and service engineers

Caution

- All installation, servicing and maintenance must be carried out by competent and suitably qualified, certified and accredited professionals and in accordance with all applicable legislation.
- Units should be grounded in accordance with all applicable legislation. Metal and other conductive components should be insulated in accordance with all applicable legislation.
- Power supply wiring should be securely fastened at the power supply terminals – loose power supply wiring would represent a fire risk.
- After installation, servicing or maintenance, the electric control box cover should be closed. Failing to close the electric control box cover risks fire or electric shock.
- Switch ENC1 (indoor unit capacity setting) is factory-set and its setting should normally not be changed. The only circumstances in which a switch ENC1 might need to be set in the field is when replacing a main PCB. When replacing a main PCB, ensure that the capacity setting on switch ENC1 on the new PCB is consistent with the unit capacity given on the unit's nameplate.

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6 Capacity Tables

6.1 Cooling Capacity Table

Table 6.1: Floor Standing cooling capacity

Capacity (kW)	Outdoor air temperature (°C DB)	Indoor air temperature (°C WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
2.2	10.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.9	1.5
	12.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.8	1.5
	14.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.8	1.5
	16.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.8	1.5
	18.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.8	1.4
	20.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.7	1.4
	21.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.6	1.6	2.7	1.4
	23.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.5	1.5	2.7	1.4
	25.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.5	1.5	2.6	1.4
	27.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.5	1.5	2.6	1.4
	29.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.4	1.4	2.5	1.4
	31.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.4	1.4	2.5	1.4
	33.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.4	1.4	2.4	1.4
	35.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.3	1.3	2.4	1.4
	37.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.3	1.6	2.3	1.3	2.3	1.4
	39.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.3	2.3	1.4
42.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.3	2.3	1.4	
44.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.3	2.3	1.4	
46.0	1.5	1.3	1.8	1.4	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.3	2.3	1.4	
2.8	10.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.7	2.0
	12.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.6	2.0
	14.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.6	2.0
	16.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.5	1.9
	18.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.5	1.9
	20.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.4	1.9
	21.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.4	1.9
	23.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.3	2.0	3.4	1.9
	25.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.2	1.9	3.3	1.9
	27.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.2	1.9	3.3	1.9
	29.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.1	1.8	3.2	1.8
	31.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.1	1.8	3.2	1.7
	33.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	3.0	1.9	3.1	1.8	3.1	1.7
	35.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.8	3.1	1.7
	37.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.8	3.0	1.7
	39.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.9	3.0	1.7
42.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.9	3.0	1.7	
44.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.9	3.0	1.7	
46.0	1.9	1.6	2.3	1.8	2.6	1.9	2.8	1.9	2.9	1.9	3.0	1.9	3.0	1.7	

Abbreviations:
 TC: Total capacity
 SC: Sensible capacity

Notes:
 1. Shaded cells indicate rating condition.

Table continued on next page ...

The 2nd Generation DC Series VRF Indoor Units

Table 6.1: Floor Standing cooling capacity (continued)

Capacity (kW)	Outdoor air temperature (°C DB)	Indoor air temperature (°C WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
3.6	10.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.7	2.5
	12.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.7	2.5
	14.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.6	2.4
	16.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.5	2.4
	18.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.5	2.4
	20.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.4	2.3
	21.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.4	2.3
	23.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.1	2.3	4.3	2.2
	25.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.1	2.3	4.2	2.2
	27.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.0	2.2	4.2	2.2
	29.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.0	2.2	4.1	2.2
	31.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	4.1	2.2
	33.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	3.9	2.1
	35.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	3.9	2.1
	37.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.9	2.1
	39.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1
42.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1	
44.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1	
46.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1	
4.5	10.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.9	3.0
	12.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.9	3.0
	14.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.8	3.0
	16.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.6	2.9
	18.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.7	3.0
	20.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.7	3.0
	21.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.6	3.0
	23.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.5	3.0
	25.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.2	3.0	5.4	2.9
	27.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.1	3.0	5.2	2.8
	29.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.1	2.9	5.2	2.8
	31.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.0	2.9	5.1	2.7
	33.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	4.9	2.8	5.1	2.7
	35.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	4.8	2.8	5.0	2.7
	37.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	4.8	2.9	4.9	2.6
	39.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.6	2.8	4.7	2.8	4.8	2.6
42.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.6	2.8	4.7	2.8	4.8	2.6	
44.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.6	2.8	4.7	2.8	4.8	2.6	
46.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.6	2.8	4.7	3.1	4.8	2.6	

Abbreviations:
 TC: Total capacity
 SC: Sensible capacity

Notes:
 1. Shaded cells indicate rating condition.

Table continued on next page ...

The 2nd Generation DC Series VRF Indoor Units

Table 6.1: Floor Standing cooling capacity (continued)

Capacity (kW)	Outdoor air temperature (°C DB)	Indoor air temperature (°C WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
5.6	10.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	7.3	3.5
	12.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	7.2	3.5
	14.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	7.1	3.5
	16.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	7.0	3.4
	18.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.8	3.4
	20.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.7	3.3
	21.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.6	3.3
	23.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.6	3.3
	25.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.5	3.2
	27.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.4	3.5	6.4	3.2
	29.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.3	3.5	6.4	3.3
	31.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.2	3.4	6.2	3.2
	33.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.2	3.4	6.2	3.2
	35.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.0	3.3	6.0	3.1
	37.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	5.9	3.2	6.0	3.1
	39.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.7	3.4	5.8	3.2	6.0	3.1
42.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.7	3.4	5.8	3.2	6.0	3.1	
44.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.7	3.4	5.8	3.2	6.0	3.1	
46.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.7	3.7	5.8	3.2	6.0	3.1	
7.1	10.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	9.2	4.6
	12.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	9.1	4.5
	14.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	9.0	4.5
	16.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.9	4.4
	18.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.7	4.3
	20.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.5	4.2
	21.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.4	4.2
	23.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.3	4.1
	25.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.2	4.1
	27.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.1	4.3	8.2	4.1
	29.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.5	8.0	4.3	8.1	4.1
	31.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.5	7.9	4.3	7.8	4.0
	33.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.5	7.8	4.2	7.8	4.0
	35.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.5	7.6	4.1	7.7	3.9
	37.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.4	4.4	7.5	4.1	7.6	4.0
	39.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.2	4.3	7.4	4.1	7.6	4.0
42.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.2	4.3	7.4	4.1	7.6	4.0	
44.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.2	4.3	7.4	4.1	7.6	4.0	
46.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.2	4.3	7.4	4.1	7.6	4.0	

Abbreviations:
 TC: Total capacity
 SC: Sensible capacity

Notes:
 1. Shaded cells indicate rating condition.

Table continued on next page ...

The 2nd Generation DC Series VRF Indoor Units

Table 6.1: Floor Standing cooling capacity (continued)

Capacity (kW)	Outdoor air temperature (°C DB)	Indoor air temperature (°C WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
8.0	10.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.4	5.6
	12.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	14.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	16.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.0	5.4
	18.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.8	5.3
	20.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.6	5.2
	21.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	23.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	25.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.3	5.0
	27.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.1	5.3	9.2	5.1
	29.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	9.0	5.3	9.1	5.0
	31.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.9	5.2	8.8	4.8
	33.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.8	5.2	8.8	4.8
	35.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.6	5.1	8.6	4.8
	37.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.3	5.4	8.4	5.0	8.6	4.9
	39.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
42.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9	
44.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9	
46.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9	

Abbreviations:

TC: Total capacity

SC: Sensible capacity

Notes:

1. Shaded cells indicate rating condition.

The 2nd Generation DC Series VRF Indoor Units

6.2 Heating Capacity Table

Table 6.2: Floor Standing heating capacity

Capacity (kW)	Outdoor air temperature (°C)		Indoor air temperature (°C DB)					
			16	18	20	21	22	24
	WB	DB	TC	TC	TC	TC	TC	TC
2.2	-20	-19.8	1.34	1.34	1.34	1.34	1.34	1.34
	-19	-18.8	1.44	1.44	1.44	1.44	1.44	1.44
	-17	-16.7	1.51	1.51	1.51	1.51	1.51	1.51
	-15	-14.7	1.56	1.56	1.56	1.56	1.56	1.56
	-13.00	-12.60	1.66	1.66	1.66	1.66	1.66	1.66
	-11.00	-10.50	1.68	1.70	1.70	1.70	1.70	1.70
	-10.00	-9.50	1.75	1.75	1.75	1.75	1.75	1.75
	-9.10	-8.50	1.80	1.80	1.80	1.80	1.80	1.80
	-7.60	-7.00	1.82	1.82	1.82	1.82	1.82	1.82
	-5.60	-5.00	1.90	1.90	1.90	1.90	1.90	1.90
	-3.70	-3.00	1.99	1.99	1.99	1.99	1.99	1.99
	-0.70	0.00	2.14	2.14	2.14	2.14	2.14	2.02
	2.20	3.00	2.26	2.26	2.26	2.26	2.21	2.02
	4.10	5.00	2.33	2.33	2.33	2.33	2.21	2.02
	6.00	7.00	2.40	2.40	2.40	2.33	2.21	2.02
	7.90	9.00	2.47	2.47	2.40	2.33	2.21	2.02
	9.80	11.00	2.54	2.54	2.40	2.33	2.21	2.02
11.80	13.00	2.64	2.59	2.40	2.33	2.21	2.02	
13.70	15.00	2.71	2.59	2.40	2.33	2.21	2.02	
2.8	-20	-19.8	1.79	1.79	1.79	1.79	1.79	1.79
	-19	-18.8	1.92	1.92	1.92	1.92	1.92	1.92
	-17	-16.7	2.02	2.02	2.02	2.02	2.02	2.02
	-15	-14.7	2.02	2.02	2.02	2.02	2.02	2.02
	-13.00	-12.60	2.14	2.14	2.14	2.14	2.14	2.14
	-11.00	-10.50	2.24	2.24	2.24	2.24	2.24	2.24
	-10.00	-9.50	2.34	2.34	2.34	2.34	2.34	2.34
	-9.10	-8.50	2.40	2.40	2.40	2.40	2.40	2.40
	-7.60	-7.00	2.43	2.43	2.43	2.43	2.43	2.43
	-5.60	-5.00	2.53	2.53	2.53	2.53	2.53	2.53
	-3.70	-3.00	2.66	2.66	2.66	2.66	2.66	2.66
	-0.70	0.00	2.85	2.85	2.85	2.85	2.85	2.69
	2.20	3.00	3.01	3.01	3.01	3.01	2.94	2.69
	4.10	5.00	3.10	3.10	3.10	3.10	2.94	2.69
	6.00	7.00	3.20	3.20	3.20	3.10	2.94	2.69
	7.90	9.00	3.30	3.30	3.20	3.10	2.94	2.69
	9.80	11.00	3.39	3.39	3.20	3.10	2.94	2.69
11.80	13.00	3.52	3.46	3.20	3.10	2.94	2.69	
13.70	15.00	3.62	3.46	3.20	3.10	2.94	2.69	

Abbreviations:
TC: Total capacity

Notes:
1. Shaded cells indicate rating condition.

Table continued on next page ...

The 2nd Generation DC Series VRF Indoor Units

Table 6.2: Floor Standing heating capacity (continued)

Capacity (kW)	Outdoor air temperature (°C)		Indoor air temperature (°C DB)					
			16	18	20	21	22	24
	WB	DB	TC kW	TC kW	TC kW	TC kW	TC kW	TC kW
3.6	-20	-19.8	2.24	2.24	2.24	2.24	2.24	2.24
	-19	-18.8	2.40	2.40	2.40	2.40	2.40	2.40
	-17	-16.7	2.52	2.52	2.52	2.52	2.52	2.52
	-15	-14.7	2.60	2.60	2.60	2.60	2.60	2.60
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36
	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	4.00	3.88	3.68	3.36
9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36	
11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36	
13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36	
4.5	-20	-19.8	2.80	2.80	2.80	2.80	2.80	2.80
	-19	-18.8	3.00	3.00	3.00	3.00	3.00	3.00
	-17	-16.7	3.15	3.15	3.15	3.15	3.15	3.15
	-15	-14.7	3.25	3.25	3.25	3.25	3.25	3.25
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20
9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20	
11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20	
13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20	

Abbreviations:
TC: Total capacity

Notes:
1. Shaded cells indicate rating condition.

Table continued on next page ...

The 2nd Generation DC Series VRF Indoor Units

Table 6.2: Floor Standing heating capacity (continued)

Capacity (kW)	Outdoor air temperature (°C)		Indoor air temperature (°C DB)					
			16	18	20	21	22	24
	WB	DB	TC	TC	TC	TC	TC	TC
5.6	-20	-19.8	3.53	3.53	3.53	3.53	3.53	3.53
	-19	-18.8	3.78	3.78	3.78	3.78	3.78	3.78
	-17	-16.7	3.97	3.97	3.97	3.97	3.97	3.97
	-15	-14.7	4.10	4.10	4.10	4.10	4.10	4.10
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29	
11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29	
13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29	
7.1	-20	-19.8	4.48	4.48	4.48	4.48	4.48	4.48
	-19	-18.8	4.80	4.80	4.80	4.80	4.80	4.80
	-17	-16.7	5.04	5.04	5.04	5.04	5.04	5.04
	-15	-14.7	5.20	5.20	5.20	5.20	5.20	5.20
	-13.00	-12.60	5.36	5.36	5.36	5.36	5.36	5.36
	-11.00	-10.50	5.60	5.60	5.60	5.60	5.60	5.60
	-10.00	-9.50	5.84	5.84	5.84	5.84	5.84	5.84
	-9.10	-8.50	6.00	6.00	6.00	6.00	6.00	6.00
	-7.60	-7.00	6.08	6.08	6.08	6.08	6.08	6.08
	-5.60	-5.00	6.32	6.32	6.32	6.32	6.32	6.32
	-3.70	-3.00	6.64	6.64	6.64	6.64	6.64	6.64
	-0.70	0.00	7.12	7.12	7.12	7.12	7.12	6.72
	2.20	3.00	7.52	7.52	7.52	7.52	7.36	6.72
	4.10	5.00	7.76	7.76	7.76	7.76	7.36	6.72
	6.00	7.00	8.00	8.00	8.00	7.76	7.36	6.72
	7.90	9.00	8.24	8.24	8.00	7.76	7.36	6.72
9.80	11.00	8.48	8.48	8.00	7.76	7.36	6.72	
11.80	13.00	8.80	8.64	8.00	7.76	7.36	6.72	
13.70	15.00	9.04	8.64	8.00	7.76	7.36	6.72	

Abbreviations:
TC: Total capacity

Notes:
1. Shaded cells indicate rating condition.

Table continued on next page ...

The 2nd Generation DC Series VRF Indoor Units

Table 6.2: Floor Standing heating capacity (continued)

Capacity (kW)	Outdoor air temperature (°C)		Indoor air temperature (°C DB)					
			16	18	20	21	22	24
	WB	DB	TC	TC	TC	TC	TC	TC
8.0	-20	-19.8	5.04	5.04	5.04	5.04	5.04	5.04
	-19	-18.8	5.40	5.40	5.40	5.40	5.40	5.40
	-17	-16.7	5.67	5.67	5.67	5.67	5.67	5.67
	-15	-14.7	5.85	5.85	5.85	5.85	5.85	5.85
	-13.00	-12.60	6.03	6.03	6.03	6.03	6.03	6.03
	-11.00	-10.50	6.30	6.30	6.30	6.30	6.30	6.30
	-10.00	-9.50	6.57	6.57	6.57	6.57	6.57	6.57
	-9.10	-8.50	6.75	6.75	6.75	6.75	6.75	6.75
	-7.60	-7.00	6.84	6.84	6.84	6.84	6.84	6.84
	-5.60	-5.00	7.11	7.11	7.11	7.11	7.11	7.11
	-3.70	-3.00	7.47	7.47	7.47	7.47	7.47	7.47
	-0.70	0.00	8.01	8.01	8.01	8.01	8.01	7.56
	2.20	3.00	8.46	8.46	8.46	8.46	8.28	7.56
	4.10	5.00	8.73	8.73	8.73	8.73	8.28	7.56
	6.00	7.00	9.00	9.00	9.00	8.73	8.28	7.56
	7.90	9.00	9.27	9.27	9.00	8.73	8.28	7.56
	9.80	11.00	9.54	9.54	9.00	8.73	8.28	7.56
11.80	13.00	9.90	9.72	9.00	8.73	8.28	7.56	
13.70	15.00	10.17	9.72	9.00	8.73	8.28	7.56	

Abbreviations:

TC: Total capacity

Notes:

1. Shaded cells indicate rating condition.

The 2nd Generation DC Series VRF Indoor Units

7 Electrical Characteristics

Table 7.1: Floor Standing electrical characteristics

Model	Power supply						Indoor fan motors	
	Hz	Volts	Min. volts	Max. volts	MCA	MFA	Rated motor output (kW)	FLA
MVD-22F3DN1 MVD-22F4DN1 MVD-22F5DN1	50	220-240	198	264	0.49	15	0.1	0.39
MVD-28F3DN1 MVD-28F4DN1 MVD-28F5DN1	50	220-240	198	264	0.55	15	0.1	0.44
MVD-36F3DN1 MVD-36F4DN1 MVD-36F5DN1	50	220-240	198	264	0.55	15	0.1	0.44
MVD-45F3DN1 MVD-45F4DN1 MVD-45F5DN1	50	220-240	198	264	0.55	15	0.1	0.44
MVD-56F3DN1 MVD-56F4DN1 MVD-56F5DN1	50	220-240	198	264	0.85	15	0.1	0.68
MVD-71F3DN1 MVD-71F4DN1 MVD-71F5DN1	50	220-240	198	264	1.4	15	0.1	1.1
MVD-80F3DN1 MVD-80F4DN1 MVD-80F5DN1	50	220-240	198	264	1.4	15	0.1	1.1

Abbreviations:

MCA: Minimum Circuit Amps

MFA: Maximum Fuse Amps

FLA: Full Load Amps

8 Sound Levels

8.1 Overall

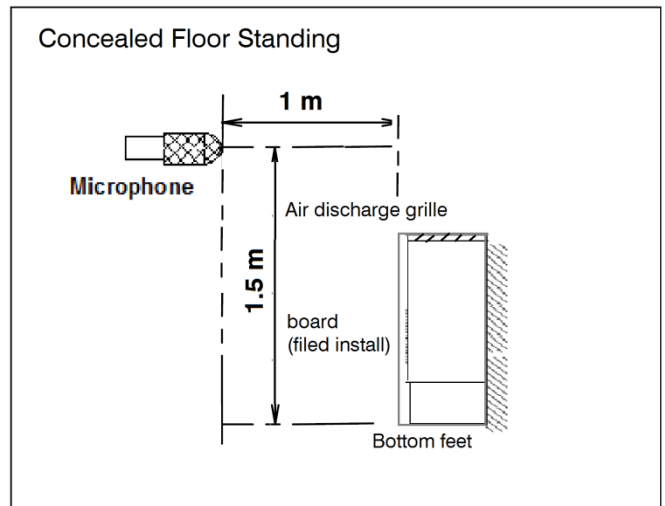
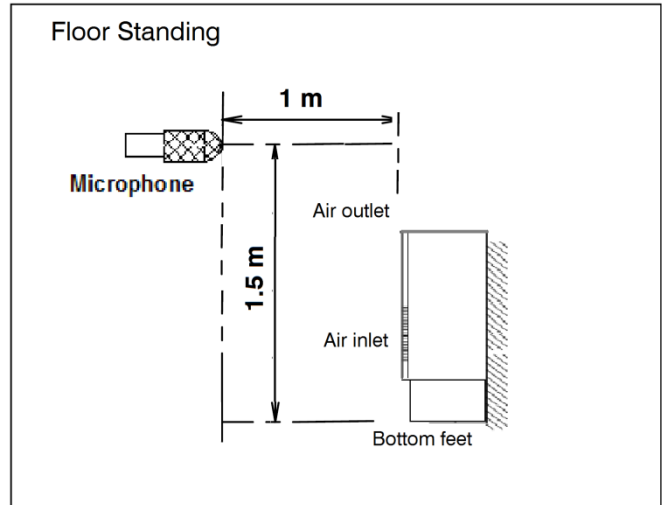
Table 8.1: Floor Standing sound pressure levels¹

Model name	Sound pressure levels dB(A)						
	SSH	SH	H	M	L	SL	SSL
MVD-22F3DN1	36	35	34	33	31	30	29
MVD-22F4DN1							
MVD-22F5DN1							
MVD-28F3DN1	36	35	34	33	31	30	29
MVD-28F4DN1							
MVD-28F5DN1							
MVD-36F3DN1	37	36	35	34	32	31	30
MVD-36F4DN1							
MVD-36F5DN1							
MVD-45F3DN1	37	36	35	34	32	31	30
MVD-45F4DN1							
MVD-45F5DN1							
MVD-56F3DN1	41	39	37	35	33	32	31
MVD-56F4DN1							
MVD-56F5DN1							
MVD-71F3DN1	44	42	40	39	37	35	33
MVD-71F4DN1							
MVD-71F5DN1							
MVD-80F3DN1	44	42	40	39	37	35	33
MVD-80F4DN1							
MVD-80F5DN1							

Notes:

1. Sound pressure levels are measured at 1m in front of the unit at a height of 1.5m in a semi-anechoic chamber. During in-situ operation, sound pressure levels may be higher as a result of ambient noise.

Figure 8.1: Floor Standing sound pressure level measurement



8.2 Octave Band Levels

Figure 8.2: MVD-22(28)F3(4,5)DN1 octave band levels

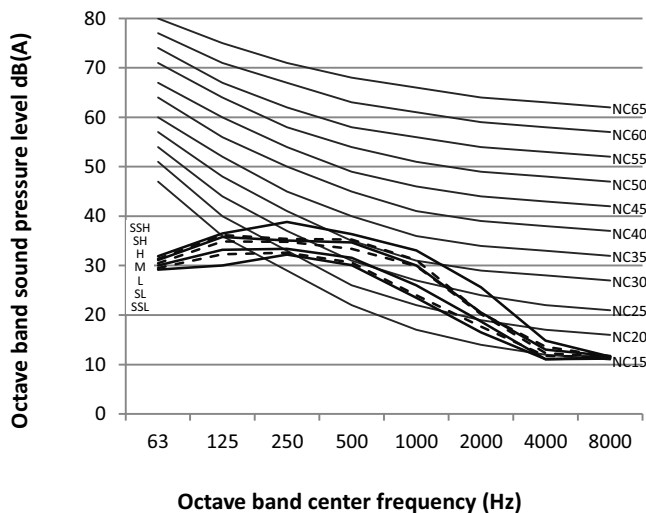
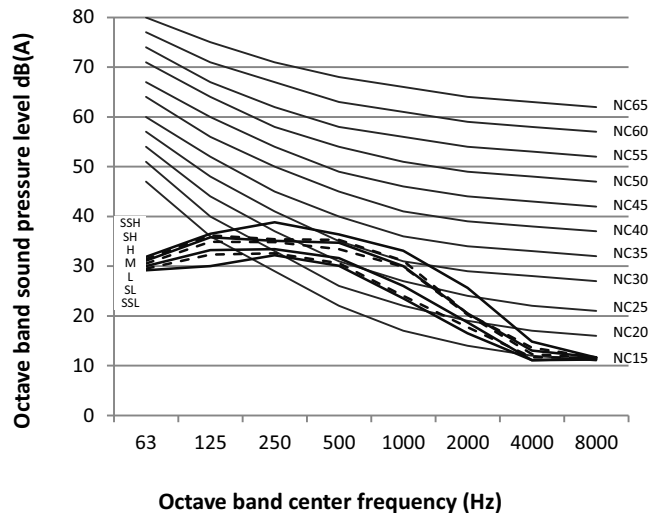


Figure 8.3: MVD-36(45) F3(4,5)DN1 octave band levels



The 2nd Generation DC Series VRF Indoor Units

Figure 8.5: MVD-56F3(4,5)DN1 octave band levels

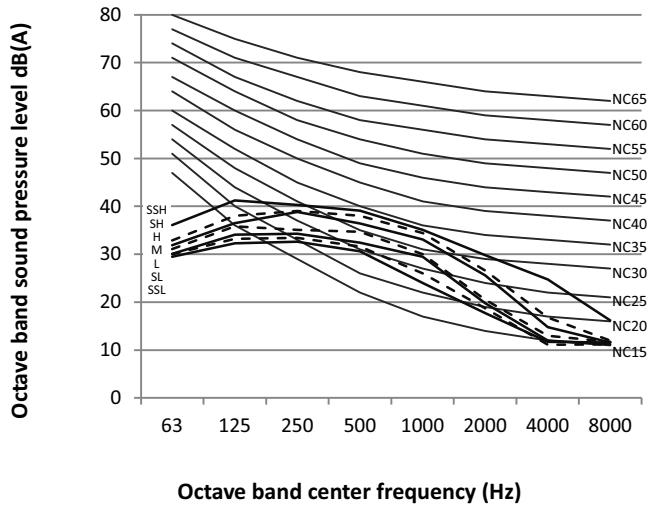
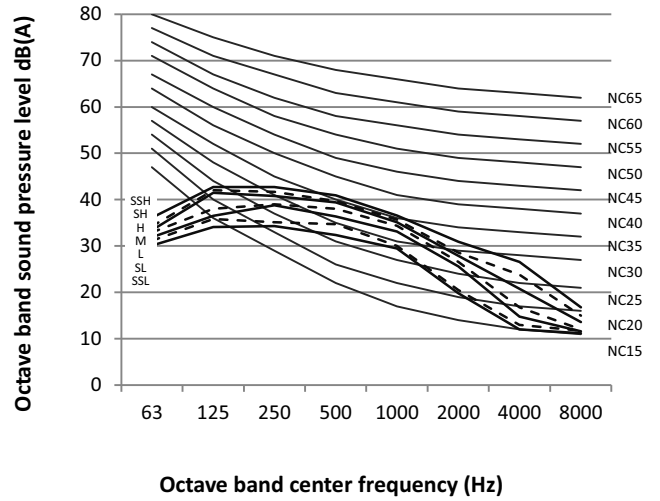


Figure 8.6: MVD-71(80) F3(4,5)DN1 octave band levels



9 Error codes

With the exception of a mode conflict error, contact your supplier or service engineer if any of the error codes listed in the following table are displayed on the unit's display panel. If the mode conflict error is displayed and persists, contact your supplier or service engineer. These errors should only be investigated by a professional technician. The descriptions are provided in this manual for reference only.

Content	Digital display output	Possible causes
Mode conflict	E0	<ul style="list-style-type: none"> ♦ The indoor unit's operating mode conflicts with that of the outdoor units.
Communication error between indoor and outdoor units	E1	<ul style="list-style-type: none"> ♦ Communication wires between indoor and outdoor units not connected properly. ♦ Interference from high voltage wires or other sources of electromagnetic radiation. ♦ Communication wire too long. ♦ Damaged main PCB.
Indoor ambient temperature sensor (T1) error	E2	<ul style="list-style-type: none"> ♦ Temperature sensor not connected properly or has malfunctioned. ♦ Damaged main PCB.
Indoor heat exchanger mid-point temperature sensor (T2) error	E3	
Indoor heat exchanger outlet temperature sensor (T2B) error	E4	
Fan error	E6	<ul style="list-style-type: none"> ♦ Fan stuck or blocked. ♦ Fan motor not connected properly or has malfunctioned. ♦ Power supply abnormal. ♦ Damaged main PCB.
EEPROM mismatch	E7	<ul style="list-style-type: none"> ♦ Damaged main PCB.
EEV error	Eb	<ul style="list-style-type: none"> ♦ Line loosened or broken. ♦ The electronic expansion valve is stuck. ♦ Damaged main PCB.
Outdoor unit error	Ed	<ul style="list-style-type: none"> ♦ Outdoor unit error.
Water level error	EE	<ul style="list-style-type: none"> ♦ Water level float stuck. ♦ Water level switch not connected properly. ♦ Damaged main PCB. ♦ Drain pump has malfunctioned.
The indoor unit has not been assigned an address	FE	<ul style="list-style-type: none"> ♦ Indoor unit has not been assigned an address.

Notes:

Flashing rapidly means flashing twice per second; flashing slowly means flashing once per second.



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