



Service Manual

High Wall R Series Trane TVR™ II DC Inverter VRF System

Model Numbers 4MVW0007BB 4MVW0009BB 4MVW0012BB 4MVW0015BB
4MVW0018BB

SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.



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Warnings, Cautions, and Notices

Warnings, cautions, and notices are provided in appropriate places throughout this document:

- ⚠ WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

- ⚠ CAUTION:** Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

- NOTICE:** Indicates a situation that could result in equipment or property-damage-only accidents.

⚠ WARNING

Personal Protective Equipment (PPE) Required!

Installing/servicing this unit could result in exposure to electrical, mechanical, and chemical hazards. Failure to follow recommendations could result in death or serious injury.

- **Before installing/servicing this unit, technicians MUST put on all Personal Protective Equipment (PPE) recommended for the work being undertaken. ALWAYS refer to appropriate MSDS sheets and OSHA guidelines for proper PPE.**
- **When working with or around hazardous chemicals, ALWAYS refer to the appropriate MSDS sheets and OSHA guidelines for information on allowable personal exposure levels, proper respiratory protection and handling recommendations.**
- **If there is a risk of arc or flash, technicians MUST put on all necessary Personal Protective Equipment (PPE) in accordance with NFPA70E for arc/flash protection PRIOR to servicing the unit.**

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Feature

Panel with LED display.

Different colors are available for the front and display panels: white and brown for big panels, blue and brown for small panels, and other colors can be customized according to the customers' demands.

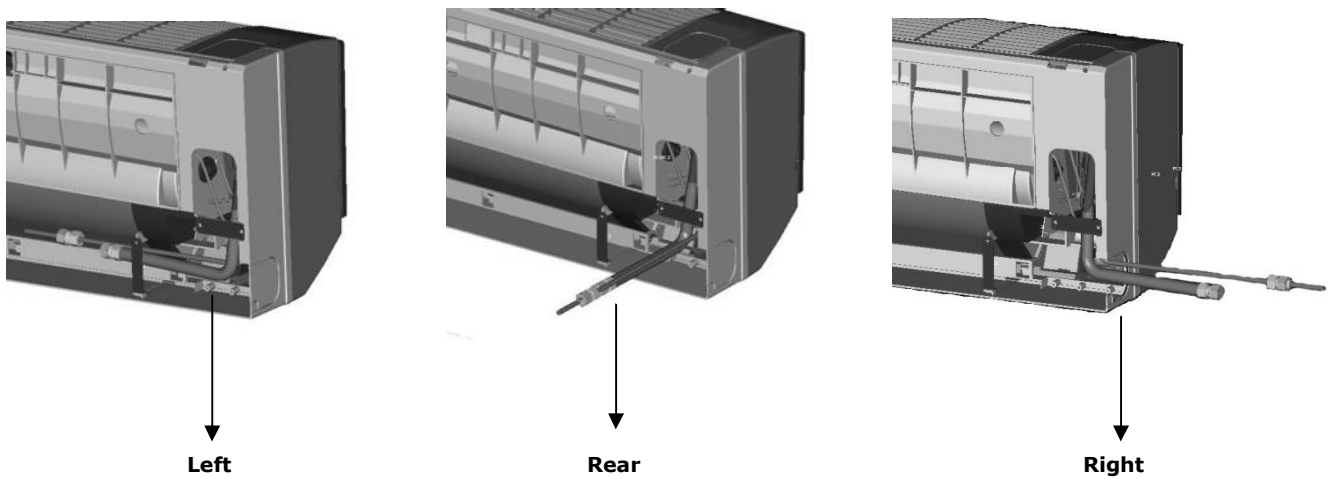
Figure 1



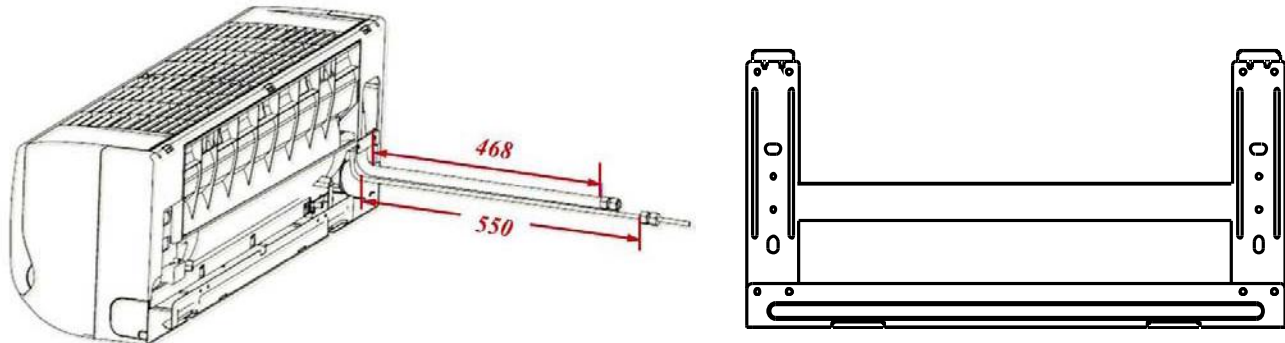
Convenient for installation

- Multi-refrigerant outlet pipe method: left/right/rear

Figure 2



- Longer connection pipe, Gas pipe: 468mm/Liquid pipe: 550mm.
- Newly designed fixing plate.

Figure 3


- Compact size with built-in EXV.
- The panel assembly of Q series can be exchanged with that of R series.
- Reserved the socket on main control board for water pump and PCB can be customized if you need water pump function.

Auxiliary electrical heating type is available.

Three air flow speed: high/medium/low, double air guides.

Low noise creates quiet and comfortable environment.

- Adoption of Fujikoki brand mechanical expansion valve with 2,000 stages element positioning ensures precise flow control as well as lower modulation noise during the operation of EXV.
- Owing to the multiple blade fan and the air guide design, the airflow is getting smoother and more comfortable with less turbulence.

Remote controller TMUCR001A is the standard controller, which can set the indoor unit address; and the wired controller is optional.



Specifications

Table 1

Trane Model			4MVW0007BB0E0AA	4MVW0009BB0E0AA	4MVW0012BB0E0AA
Power supply		V-Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	2.2	2.8	3.6
	Input	W	28	28	28
	Rated Current	A	0.14	0.14	0.14
Heating	Capacity	kW	2.6	3.2	4.0
	Input	W	28	28	28
	Rated Current	A	0.14	0.14	0.14
Electric Heater Capacity		kW	-	-	-
Fan Motor	Model		YDK15-6	YDK15-6	YDK15-6
	Type		AC Motor	AC Motor	AC Motor
	Brand		Welling	Welling	Welling
	Input	W	30/24/22	30/24/22	30/24/22
	Capacitor	uF/V	1.2/xxx	1.2/xxx	1.2/xxx
	Speed (H/M/L)	rpm	810/760/700	810/760/700	810/760/700
Coil	Number of Rows		2	2	2
	Tube Pitch (a)*Row Pitch (b)	mm	21*13.37	21*13.37	21*13.37
	Fin Spacing	mm	1.5	1.5	1.5
	Fin Type		Hydrophillic Aluminum		
	Tube Outside Diameter	mm	Φ7		
	Tube Type		Inner Groove		
	Coil Length*Height*Width	mm	635*283.5*26.74	635*283.5*26.74	635*283.5*26.74
	Number of Circuits		3	3	3
Air Flow (H/M/L)		m ³ /h	520/480/430	520/480/430	520/480/430
Sound Pressure Level (H/M/L)		dB (A)	35/32/29	35/32/29	35/32/29
Unit Dimension	Uncrated (HxWxD)	mm	290*915*210	290*915*210	290*915*210
	Crated (HxWxD)	mm	390*1,020*300	390*1,020*300	385*1,020*300
	Net/Gross Weight	kg	12/16	12/16	12/16
Refrigerant	Type		R410A		
Expansion Device	Type		EXV (Mechanical gear modulation, integrated with the evaporator)		
	Model		EFM-25YGMISZ-6M-A		
Design pressure		MPa	4.4/2.6		
Refrigerant Pipe Size	Liquid	in (mm)	Φ1/4 (6.35)	Φ1/4 (6.35)	Φ1/4 (6.35)
	Gas	in (mm)	Φ1/2 (12.7)	Φ1/2 (12.7)	Φ1/2 (12.7)
Drain Pipe Diameter	Inner/Outer	mm	Φ-/16.5	Φ-/16.5	Φ-/16.5
Wire Size	Power wiring	mm ²	3x2.5 (L≤20m): 3x3.5 (L≤50m)		
	Signal wiring	mm ²	3x0.75		
Controller			Wireless Remote Controller (TMUCR001A)		
Operation Temperature		°C	Cooling: 17~32; Heating: 10~28		

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, outdoor temp.: 35°CDB, and equivalent ref. piping: 8m (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. piping: 8m (horizontal).

Table 2

Trane Model			4MVW0015BB0E0AA	4MVW0018BB0E0AA
Power supply		V-Ph-Hz	220-240V, 1Ph, 50Hz	
Cooling	Capacity	kW	4.5	5.6
	Input	W	45	45
	Rated Current	A	0.20	0.20
Heating	Capacity	kW	5.0	6.3
	Input	W	45	45
	Rated Current	A	0.20	0.20
Electric Heater Capacity		kW	-	-
Fan Motor	Model		YDK18-4	YDK18-4
	Type		AC Motor	AC Motor
	Brand		Welling	Welling
	Input	W	44/42/39	44/42/39
	Capacitor	uF/V	1.2/xxx	1.2/xxx
	Speed (H/M/L)	rpm	980/880/760	980/880/760
Coil	Number of Rows		2	2
	Tube Pitch (a)*Row Pitch (b)	mm	21*13.37	21*13.37
	Fin Spacing	mm	1.5	1.5
	Fin Type		Hydrophillic Aluminum	
	Tube Outside Diameter	mm	Φ7	
	Tube Type		Inner Groove	
	Coil Length*Height*Width	mm	785*357*26.74	785*357*26.74
	Number of Circuits		6	6
Air Flow (H/M/L)		m ³ /h	860/755/630	925/860/755
Sound Pressure Level (H/M/L)		dB (A)	40/38/34	40/38/34
Unit Dimension	Uncrated (HxWxD)	mm	315*1,070*210	315 *1,070*210
	Crated (HxWxD)	mm	395*1,165*285	395*1,165*285
	Net/Gross Weight	kg	16/19	16/19
Refrigerant	Type		R410A	
Expansion Device	Type		EXV (Mechanical gear modulation, integrated with the evaporator)	
	Model		EFM-25YGMISZ-6M-A	
Design pressure		MPa	4.4/2.6	
Refrigerant Pipe Size	Liquid	in (mm)	Φ1/4 (6.35)	Φ3/8 (9.53)
	Gas	in (mm)	Φ1/2 (12.7)	Φ5/8 (15.9)
Drain Pipe Diameter	Inner/Outer	mm	Φ-/16.5	Φ-/16.5
Wire Size	Power wiring	mm ²	3x2.5 (L≤20m): 3x3.5 (L≤50m)	
	Signal wiring	mm ²	3x0.75	
Controller			Wireless Remote Controller (TMUCR001A)	
Operation Temperature		°C	Cooling: 17~32; Heating: 10~28	

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, outdoor temp.: 35°CDB, and equivalent ref. piping: 8m (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. piping: 8m (horizontal).

Specifications

Table 3

Trane Model			4MVW0007BBAE0AA	4MVW0009BBAE0AA	4MVW0012BBAE0AA
Power supply		V-Ph-Hz	220-240V, 1Ph, 50Hz		
Cooling	Capacity	kW	2.2	2.8	3.6
	Input	W	28	28	28
	Rated Current	A	0.14	0.14	0.14
Heating	Capacity	kW	2.6	3.2	4.0
	Input	W	28	28	28
	Rated Current	A	0.14	0.14	0.14
Electric Heater Capacity		kW	0.75	0.75	0.75
Fan Motor	Model		YDK15-6	YDK15-6	YDK15-6
	Type		AC Motor	AC Motor	AC Motor
	Brand		Welling	Welling	Welling
	Input	W	30/24/22	30/24/22	30/24/22
	Capacitor	uF/V	1.2/xxx	1.2/xxx	1.2/xxx
	Speed (H/M/L)	rpm	810/760/700	810/760/700	810/760/700
Coil	Number of Rows		2	2	2
	Tube Pitch (a)*Row Pitch (b)	mm	21*13.37	21*13.37	21*13.37
	Fin Spacing	mm	1.5	1.5	1.5
	Fin Type		Hydrophillic Aluminum		
	Tube Outside Diameter	mm	Φ7		
	Tube Type		Inner Groove		
	Coil Length*Height*Width	mm	635*283.5*26.74	635*283.5*26.74	635*283.5*26.74
	Number of Circuits		3	3	3
Air Flow (H/M/L)		m ³ /h	520/480/430	520/480/430	520/480/430
Sound Pressure Level (H/M/L)		dB (A)	35/32/29	35/32/29	35/32/29
Unit Dimension	Uncrated (HxWxD)	mm	290*915*210	290*915*210	290*915*210
	Crated (HxWxD)	mm	390*1,020*300	390*1,020*300	385*1,020*300
	Net/Gross Weight	kg	12/16	12/16	12/16
Refrigerant	Type		R410A		
Expansion Device	Type		EXV (Mechanical gear modulation, integrated with the evaporator)		
	Model		EFM-25YGMISZ-6M-A		
Design pressure		MPa	4.4/2.6		
Refrigerant Pipe Size	Liquid	in (mm)	Φ1/4 (6.35)	Φ1/4 (6.35)	Φ1/4 (6.35)
	Gas	in (mm)	Φ1/2 (12.7)	Φ1/2 (12.7)	Φ1/2 (12.7)
Drain Pipe Diameter	Inner/Outer	mm	Φ-/16.5	Φ-/16.5	Φ-/16.5
Wire Size	Power wiring	mm ²	3x2.5 (L≤20m); 3x3.5 (L≤50m)		
	Signal wiring	mm ²	3x0.75		
Controller			Wireless Remote Controller (TMUCR001A)		
Operation Temperature		°C	Cooling: 17~32; Heating: 10~28		

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, outdoor temp.: 35°CDB, and equivalent ref. piping: 8m (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. piping: 8m (horizontal).

Table 4

Trane Model			4MVW0015BBAE0AA	4MVW0018BBAE0AA
Power supply		V-Ph-Hz	220-240V, 1Ph, 50Hz	
Cooling	Capacity	kW	4.5	5.6
	Input	W	45	45
	Rated Current	A	0.20	0.20
Heating	Capacity	kW	5.0	6.3
	Input	W	45	45
	Rated Current	A	0.20	0.20
Electric Heater Capacity		kW	0.9	0.9
Fan Motor	Model		YDK18-4	YDK18-4
	Type		AC Motor	AC Motor
	Brand		Welling	Welling
	Input	W	44/42/39	44/42/39
	Capacitor	uF/V	1.2/xxx	1.2/xxx
	Speed (H/M/L)	rpm	980/880/760	980/880/760
Coil	Number of Rows		2	2
	Tube Pitch (a)*Row Pitch (b)	mm	21*13.37	21*13.37
	Fin Spacing	mm	1.5	1.5
	Fin Type		Hydrophillic Aluminum	
	Tube Outside Diameter	mm	Φ7	
	Tube Type		Inner Groove	
	Coil Length*Height*Width	mm	785*357*26.74	785*357*26.74
	Number of Circuits		6	6
Air Flow (H/M/L)		m ³ /h	860/755/630	925/860/755
Sound Pressure Level (H/M/L)		dB (A)	40/38/34	40/38/34
Unit Dimension	Uncrated (HxWxD)	mm	315*1,070*210	315*1,070*210
	Crated (HxWxD)	mm	395*1,165*285	395*1,165*285
	Net/Gross Weight	kg	16/19	16/19
Refrigerant	Type		R410A	
Expansion Device	Type		EXV (Mechanical gear modulation, integrated with the evaporator)	
	Model		EFM-25YGMISZ-6M-A	
Design pressure		MPa	4.4/2.6	
Refrigerant Pipe Size	Liquid	in (mm)	Φ1/4 (6.35)	Φ3/8 (9.53)
	Gas	in (mm)	Φ1/2 (12.7)	Φ5/8 (15.9)
Drain Pipe Diameter	Inner/Outer	mm	Φ-/16.5	Φ-/16.5
Wire Size	Power wiring	mm ²	3x2.5 (L≤20m): 3x3.5 (L≤50m)	
	Signal wiring	mm ²	3x0.75	
Controller			Wireless Remote Controller (TMUCR001A)	
Operation Temperature		°C	Cooling: 17~32; Heating: 10~28	

Notes:

- Nominal cooling capacities are based on the following conditions: return air temp.: 27°CDB, 19°CWB, outdoor temp.: 35°CDB, and equivalent ref. piping: 8m (horizontal).
- Nominal heating capacities are based on the following conditions: return air temp.: 20°CDB, outdoor temp.: 7°CDB, 6°CWB, and equivalent ref. piping: 8m (horizontal).

Dimension

Outline dimension and air outlet opening size

Figure 4

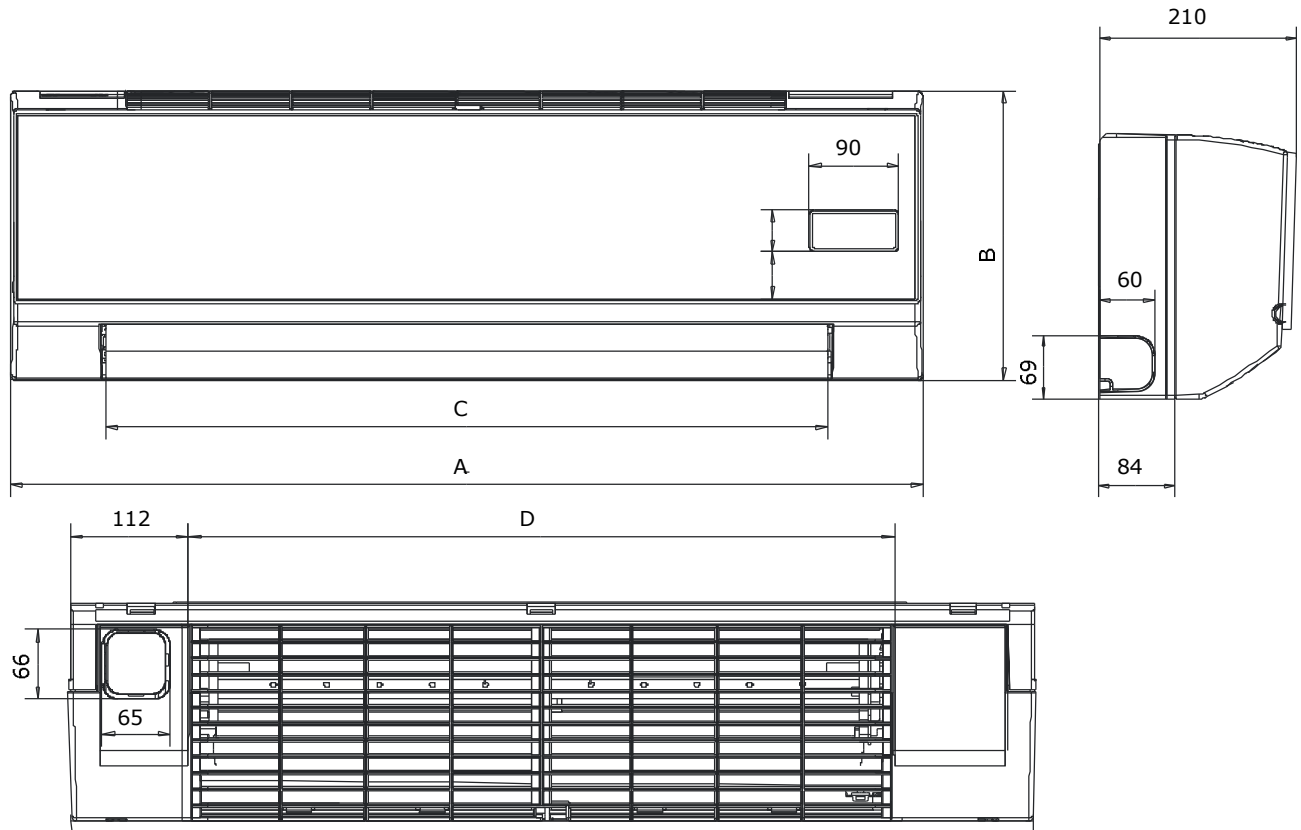


Table 5

Model	7.5MBH	9MBH	12MBH	15MBH	18MBH
A	915	915	915	1,070	1,070
B	290	290	290	315	315
C	725	725	725	885	885
D	670	670	670	815	815

Main dimension:**4MVW0007-0012BB**

Outer Length: 915mm, Height: 290mm, Depth: 210mm

Filter length: 670mm

Gas tube: Φ 12.7mm, Length: Approx. 468mm

Liquid tube: Φ 6.35mm, Length: Approx. 550mm

4MVW0015-0018BB

Outer Length: 1,072mm, Height: 315mm, Depth: 230mm

Filter length: 815mm

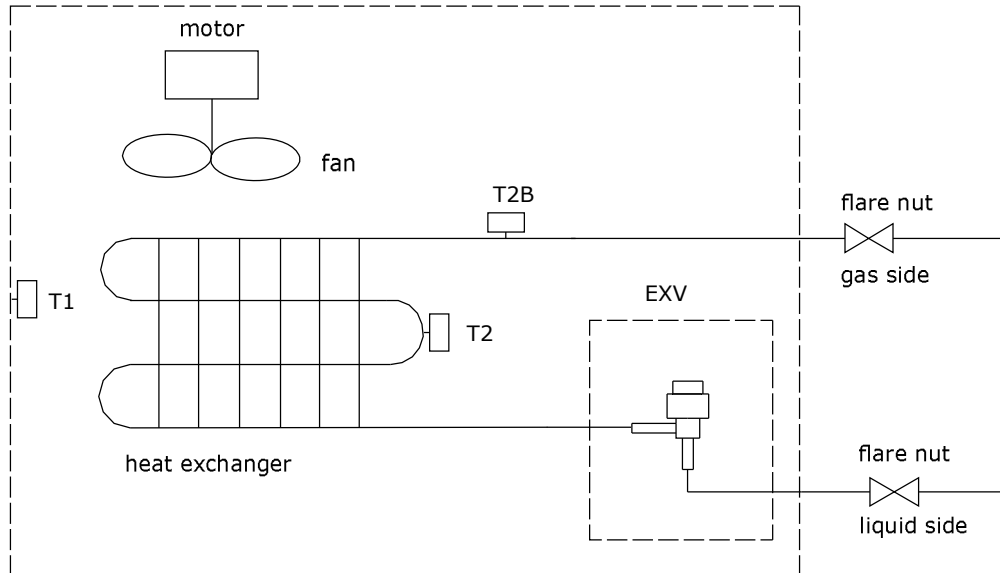
Gas tube: Φ 12.7mm, Length: Approx. 468mm

Liquid tube: Φ 9.53mm, Length: Approx. 550mm

Piping Diagram

4MVW0007-0018BB

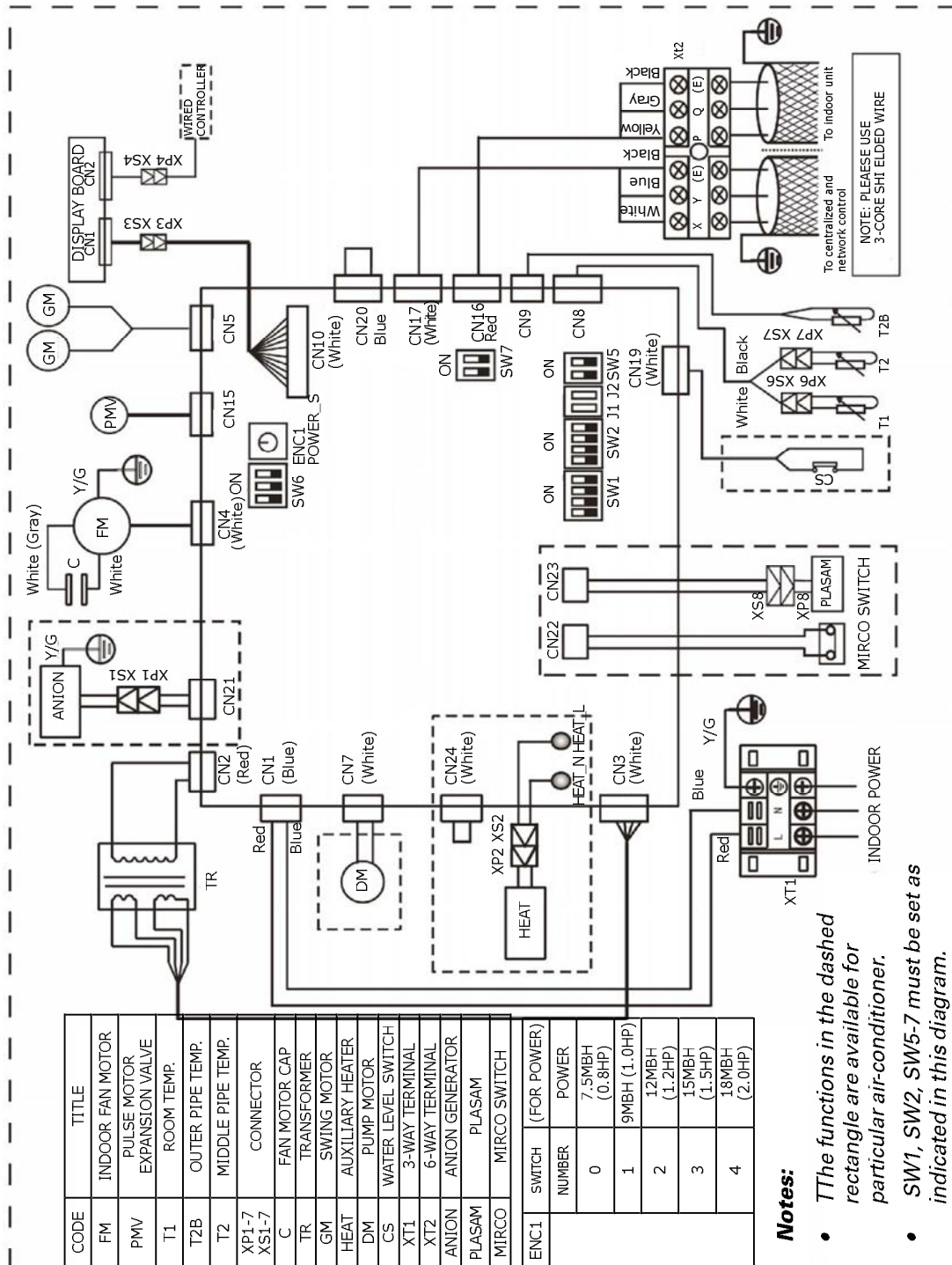
Figure 5



Wiring Diagram

4MVW0007-0018BB

Figure 6





Capacity Tables

Cooling Capacity

Table 6

TC: Total Capacity (kW) SC: Sensible Capacity (kW) WB: Wet-bulb Temperature DB: Dry-bulb Temperature

Model (MBH)	Outdoor Temp. (°CDB)	Indoor Temperature (°CDB / °CWB)													
		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
7.5	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	
9	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	
12	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	

Capacity Tables

15	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	
18	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	



Capacity Tables

Heating Capacity

Table 7

TC: Total Capacity (kW) WB: Wet-bulb Temperature DB: Dry-bulb Temperature

Model (MBH)	Outdoor Temp. (°C)		Indoor Temperature (°CDB)					
	WB	DB	16	18	20	21	22	24
			TC	TC	TC	TC	TC	TC
7.5	-20.0	-19.8	1.46	1.46	1.46	1.46	1.46	1.46
	-19.0	-18.8	1.56	1.56	1.56	1.56	1.56	1.56
	-17.0	-16.7	1.64	1.64	1.64	1.64	1.64	1.64
	-15.0	-14.7	1.69	1.69	1.69	1.69	1.69	1.69
	-13.0	-12.6	1.79	1.79	1.79	1.79	1.79	1.79
	-11.0	-10.5	1.82	1.85	1.85	1.85	1.85	1.85
	-10.0	-9.5	1.90	1.90	1.90	1.90	1.90	1.90
	-9.1	-8.5	1.95	1.95	1.95	1.95	1.95	1.95
	-7.6	-7.0	1.98	1.98	1.98	1.98	1.98	1.98
	-5.6	-5.0	2.05	2.05	2.05	2.05	2.05	2.05
	-3.7	-3.0	2.16	2.16	2.16	2.16	2.16	2.16
	-0.7	0.0	2.31	2.31	2.31	2.31	2.31	2.18
	2.2	3.0	2.44	2.44	2.44	2.44	2.39	2.18
	4.1	5.0	2.52	2.52	2.52	2.52	2.39	2.18
	6.0	7.0	2.60	2.60	2.60	2.52	2.39	2.18
	7.9	9.0	2.68	2.68	2.60	2.52	2.39	2.18
9.8	11.0	2.76	2.76	2.60	2.52	2.39	2.18	
11.8	13.0	2.86	2.81	2.60	2.52	2.39	2.18	
13.7	15.0	2.94	2.81	2.60	2.52	2.39	2.18	
9	-20.0	-19.8	1.79	1.79	1.79	1.79	1.79	1.79
	-19.0	-18.8	1.92	1.92	1.92	1.92	1.92	1.92
	-17.0	-16.7	2.02	2.02	2.02	2.02	2.02	2.02
	-15.0	-14.7	2.02	2.02	2.02	2.02	2.02	2.02
	-13.0	-12.6	2.14	2.14	2.14	2.14	2.14	2.14
	-11.0	-10.5	2.24	2.24	2.24	2.24	2.24	2.24
	-10.0	-9.5	2.34	2.34	2.34	2.34	2.34	2.34
	-9.1	-8.5	2.40	2.40	2.40	2.40	2.40	2.40
	-7.6	-7.0	2.43	2.43	2.43	2.43	2.43	2.43
	-5.6	-5.0	2.53	2.53	2.53	2.53	2.53	2.53
	-3.7	-3.0	2.66	2.66	2.66	2.66	2.66	2.66
	-0.7	0.0	2.85	2.85	2.85	2.85	2.85	2.69
	2.2	3.0	3.01	3.01	3.01	3.01	2.94	2.69
	4.1	5.0	3.10	3.10	3.10	3.10	2.94	2.69
	6.0	7.0	3.20	3.20	3.20	3.10	2.94	2.69
	7.9	9.0	3.30	3.30	3.20	3.10	2.94	2.69
9.8	11.0	3.39	3.39	3.20	3.10	2.94	2.69	
11.8	13.0	3.52	3.46	3.20	3.10	2.94	2.69	
13.7	15.0	3.62	3.46	3.20	3.10	2.94	2.69	
12	-20.0	-19.8	2.24	2.24	2.24	2.24	2.24	2.24
	-19.0	-18.8	2.40	2.40	2.40	2.40	2.40	2.40
	-17.0	-16.7	2.52	2.52	2.52	2.52	2.52	2.52
	-15.0	-14.7	2.60	2.60	2.60	2.60	2.60	2.60
	-13.0	-12.6	2.68	2.68	2.68	2.68	2.68	2.68
	-11.0	-10.5	2.80	2.80	2.80	2.80	2.80	2.80
	-10.0	-9.5	2.92	2.92	2.92	2.92	2.92	2.92
	-9.1	-8.5	3.00	3.00	3.00	3.00	3.00	3.00
	-7.6	-7.0	3.04	3.04	3.04	3.04	3.04	3.04
	-5.6	-5.0	3.16	3.16	3.16	3.16	3.16	3.16
	-3.7	-3.0	3.32	3.32	3.32	3.32	3.32	3.32
	-0.7	0.0	3.56	3.56	3.56	3.56	3.56	3.36
	2.2	3.0	3.76	3.76	3.76	3.76	3.68	3.36
	4.1	5.0	3.88	3.88	3.88	3.88	3.68	3.36
	6.0	7.0	4.00	4.00	4.00	3.88	3.68	3.36
	7.9	9.0	4.12	4.12	4.00	3.88	3.68	3.36
9.8	11.0	4.24	4.24	4.00	3.88	3.68	3.36	
11.8	13.0	4.40	4.32	4.00	3.88	3.68	3.36	
13.7	15.0	4.52	4.32	4.00	3.88	3.68	3.36	

Capacity Tables

15	-15.0	-14.7	3.25	3.25	3.25	3.25	3.25	3.25
	-13.0	-12.6	3.35	3.35	3.35	3.35	3.35	3.35
	-11.0	-10.5	3.50	3.50	3.50	3.50	3.50	3.50
	-10.0	-9.5	3.65	3.65	3.65	3.65	3.65	3.65
	-9.1	-8.5	3.75	3.75	3.75	3.75	3.75	3.75
	-7.6	-7.0	3.80	3.80	3.80	3.80	3.80	3.80
	-5.6	-5.0	3.95	3.95	3.95	3.95	3.95	3.95
	-3.7	-3.0	4.15	4.15	4.15	4.15	4.15	4.15
	-0.7	0.0	4.45	4.45	4.45	4.45	4.45	4.20
	2.2	3.0	4.70	4.70	4.70	4.70	4.60	4.20
	4.1	5.0	4.85	4.85	4.85	4.85	4.60	4.20
	6.0	7.0	5.00	5.00	5.00	4.85	4.60	4.20
	7.9	9.0	5.15	5.15	5.00	4.85	4.60	4.20
	9.8	11.0	5.30	5.30	5.00	4.85	4.60	4.20
	11.8	13.0	5.50	5.40	5.00	4.85	4.60	4.20
	13.7	15.0	5.65	5.40	5.00	4.85	4.60	4.20
18	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
	-20.0	-19.8	3.53	3.53	3.53	3.53	3.53	3.53
	-19.0	-18.8	3.78	3.78	3.78	3.78	3.78	3.78
	-17.0	-16.7	3.97	3.97	3.97	3.97	3.97	3.97
	-15.0	-14.7	4.10	4.10	4.10	4.10	4.10	4.10
	-13.0	-12.6	4.22	4.22	4.22	4.22	4.22	4.22
	-11.0	-10.5	4.41	4.41	4.41	4.41	4.41	4.41
	-10.0	-9.5	4.60	4.60	4.60	4.60	4.60	4.60
	-9.1	-8.5	4.73	4.73	4.73	4.73	4.73	4.73
	-7.6	-7.0	4.79	4.79	4.79	4.79	4.79	4.79
	-5.6	-5.0	4.98	4.98	4.98	4.98	4.98	4.98
	-3.7	-3.0	5.23	5.23	5.23	5.23	5.23	5.23
	-0.7	0.0	5.61	5.61	5.61	5.61	5.61	5.29
	2.2	3.0	5.92	5.92	5.92	5.92	5.80	5.29
4.1	5.0	6.11	6.11	6.11	6.11	5.80	5.29	
6.0	7.0	6.30	6.30	6.30	6.11	5.80	5.29	
7.9	9.0	6.49	6.49	6.30	6.11	5.80	5.29	
9.8	11.0	6.68	6.68	6.30	6.11	5.80	5.29	
11.8	13.0	6.93	6.80	6.30	6.11	5.80	5.29	
13.7	15.0	7.12	6.80	6.30	6.11	5.80	5.29	

Notes:

The above table is only for the heat pump heating type. But for the type with electrical heater, the total capacity should add the additional electrical heating capacity (a constant value).



Electrical Characteristics

Table 8

Model	Indoor Unit				Power Supply		IFM	
	Hz	Voltage	Min.	Max.	MCA	MFA	KW	FLA
4MVW0007BB0E0AA	50Hz	220-240V	198V	254V	0.30	15A	0.013	0.225
4MVW0009BB0E0AA	50Hz	220-240V	198V	254V	0.30	15A	0.013	0.225
4MVW0012BB0E0AA	50Hz	220-240V	198V	254V	0.30	15A	0.013	0.225
4MVW0015BB0E0AA	50Hz	220-240V	198V	254V	0.30	15A	0.028	0.24
4MVW0018BB0E0AA	50Hz	220-240V	198V	254V	0.30	15A	0.028	0.24
4MVW0007BBA0EAA	50Hz	220-240V	198V	254V	3.60	15A	0.013	0.225
4MVW0009BBA0EAA	50Hz	220-240V	198V	254V	3.60	15A	0.013	0.225
4MVW0012BBA0EAA	50Hz	220-240V	198V	254V	3.60	15A	0.013	0.225
4MVW0015BBA0EAA	50Hz	220-240V	198V	254V	4.30	15A	0.028	0.24
4MVW0018BBA0EAA	50Hz	220-240V	198V	254V	4.30	15A	0.028	0.24

Remark:

MCA: Min. Current Amps. (A)

MFA: Max. Fuse Amps. (A)

KW: Fan Motor Rated Output (kW)

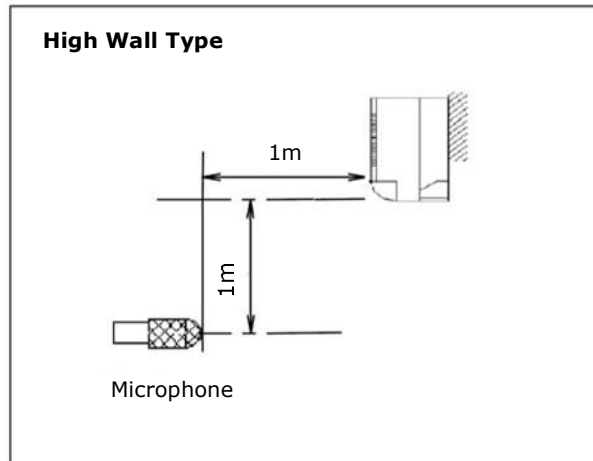
FLA: Full Load Amps. (A)

IFM: Indoor Fan Motor

Noise Level

Test condition

Figure 7



Test value

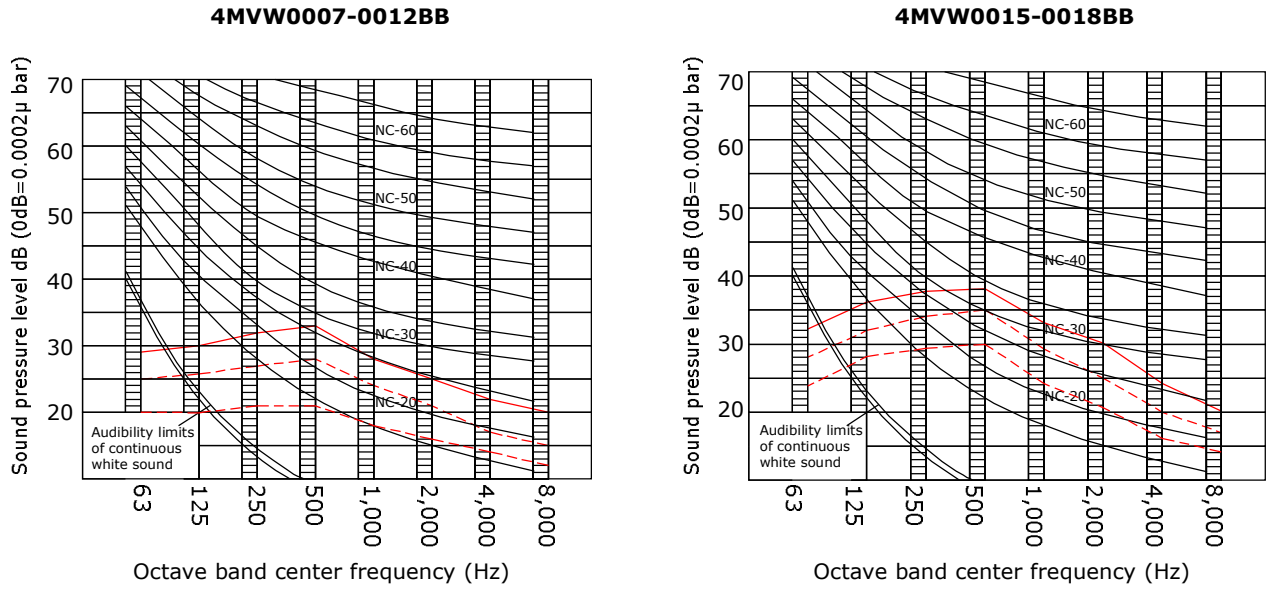
Table 9

Trane Model	Sound Level dB (A)		
	High	Medium	Low
4MVW0007BB0E0AA	35	32	29
4MVW0009BB0E0AA	35	32	29
4MVW0012BB0E0AA	35	32	29
4MVW0015BB0E0AA	40	38	34
4MVW0018BB0E0AA	40	38	34
4MVW0007BBA0EAA	35	32	29
4MVW0009BBA0EAA	35	32	29
4MVW0012BBA0EAA	35	32	29
4MVW0015BBA0EAA	40	38	34
4MVW0018BBA0EAA	40	38	34

Noise Level

Octave Band Level











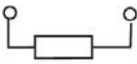
Figure 8



Accessories

Standard accessories

Table 10

Name	Quantity	Shape	Usage
Installation manual	1	/	/
Pipe insulation material	2		Heat insulation
Remote controller	1		/
7# alkaline battery	2		/
Remote controller holder	1		Holder for the remote controller
Remote controller manual	1		---
Mounting screw (ST2.9 10-C-H)	2		Installation holder for remote controller
Controlling discreteness installation plot	1	---	---
Installation spring	2		Fix water outlet
Water outlet joint	1		For drainage
Wrapping tape	1		
Plastic expanded tube	3		
Screw ST3.9x25 for installation board	3		Secure the installation board
Network matching wire	1		The indoor unit which is at the terminal of communication system should connect with an impedance between port P and port Q.

Optional accessories

Table 11

Name	Model	Usage
Wired controller	TMUCW001A	With a standard 5m long cable to connect to display board.
(Follow me) Wired controller	TMUCW002A	The same as TMUCW001A, except an extra built-in room temp. sensor.



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