TRANE

Product Catalogue

High Wall Inverter

FEB 2023

Content

Model Reference

Refer to the following table to determine the specific indoor and outdoor unit model number of your purchased equipment

Indoor Unit Model	Outdoor Unit Model	Capacity (Btu/h)	Power Supply
4MXWFA12TB000AA	4TXKFA12TB000AA	12K	220~240V~, 50Hz
4MXWFA18TB000AA	4TXKFA18TB000AA	18K	
4MXWFA24TB000AA	4TXKFA24TB000AA	24K	

General Specification

Indoor			4MXWFA12TB000AA	4MXWFA18TB000AA	4MXWFA24TB000AA
Outdoor			4TXKFA12TB000AA	4TXKFA18TB000AA	4TXKFA24TB000AA
Power supply		V,Hz, Ph	220-240V,1Ph,50Hz	220-240V,1Ph,50Hz	220-240V,1Ph,60Hz
Cooling (T1)	Capacity	Btu/h	12000	18000	21200
	Rated current	A	4.5	6.5	7.5
	EER	W/W	12.5	12.4	12.4
Cooling (T3)	Capacity	Btu/h	10700	15700	19100
	Rated current	A	5.2	8	10
	EER	W/W	8.7	8.65	8.5
Heating	Capacity	W	3750	4900	6950
	Rated current	A	4.9	6.6	9.7
	COP	W/W	3.4	3.25	3.15
Max. input consumption		W	1800	2200	3500
Max. current		A	8.5	14	16
Compressor	Type		ROTARY	ROTARY	ROTARY
	Capacity	W	3045	4720	6195
	Input	W	758	1070	1695
	Rated Current (RLA)	A	4.65	3.63	7.75
	Refrigerant oil/oil charge	ml	400	350	450
Indoor fan motor	Type		DC	DC	DC
	Input	W	40	58	70
	Speed (Hi/Mi/Lo)	r/min	1150/1000/900/800	1330/1180/1050/900	1510/1320/1120/1000

General Specification

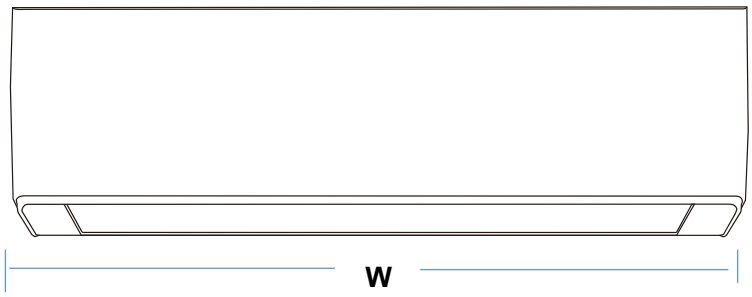
Indoor coil	Number of rows		2	2	3
	Tube pitch(a) x row pitch(b)	mm	19.05x23.2	19.05x23.2	20.5x25.4
	Fin spacing	mm	1.3	1.3	1.4
	Fin type (code)		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outdoor dia and type	mm	Φ5, innergroove tube	Φ7,innergroove tube	Φ7,innergroove tube
	Coil Length x height x width	mm	622x304.8x23.2	722x304.8x23.2	850x369x25.4
	Number of circuits		3	3	3
Indoor air flow (Hi/Mi/Lo)		m3/h	650/570/510/450	1000/850/750/600	1300/1200/1010/870
Indoor noise level (Hi/Mi/Lo)		dB(A)	43	48	50
Indoor unit	Dimension (W*D*H)	mm	816×295×198	965×325×230	1089×328×227
	Packing (W*D*H)	mm	885×367×277	1020×375×305	1155×397×312
	Net weight	Kg	8.5	11	13.5
Outdoor fan	Type		DC	DC	DC
	Input	W	62	90	90
motor	Speed	r/min	720/680/450	780/750/500	800/750/500

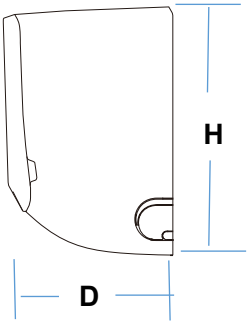
General Specification

Outdoor coil	Number of rows		2	2	2
	Tube pitch(a) x row pitch(b)	mm	19.05x23.2	19.05x23.2	22x19.05
	Fin spacing	mm	1.4	1.2	1.3
	Fin type (code)		Hydrophilic aluminium	Hydrophilic aluminium	Hydrophilic aluminium
	Tube outside dia .and type	mm	Φ5, innergroove tube	Φ5 .innergroove tube	Φ7,innergroove tube
	Coil length x height x width	mm	787x495.3x23.2	886x647.7x23.2	886x660x23.2
	Number of circuits		2	2	2
Outdoor noise level		dB(A)	54	55	58
Outdoor unit	Dimension(W*D*H)	mm	785×555×300	900×700×350	900×700×350
	Packing (W*D*H)	mm	905×372×615	1020×770×430	1020×770×430
	Net weight	Kg	27	39	41.5
Refrigerant type		g	R410A/780	R410A/900	R410A/1460
Design pressure		MPa	4 .3/1 .15	4 .3/1 .15	4 .3/1 .15
Qty'per 40'HQ			230	165	145

Dimensional Drawings

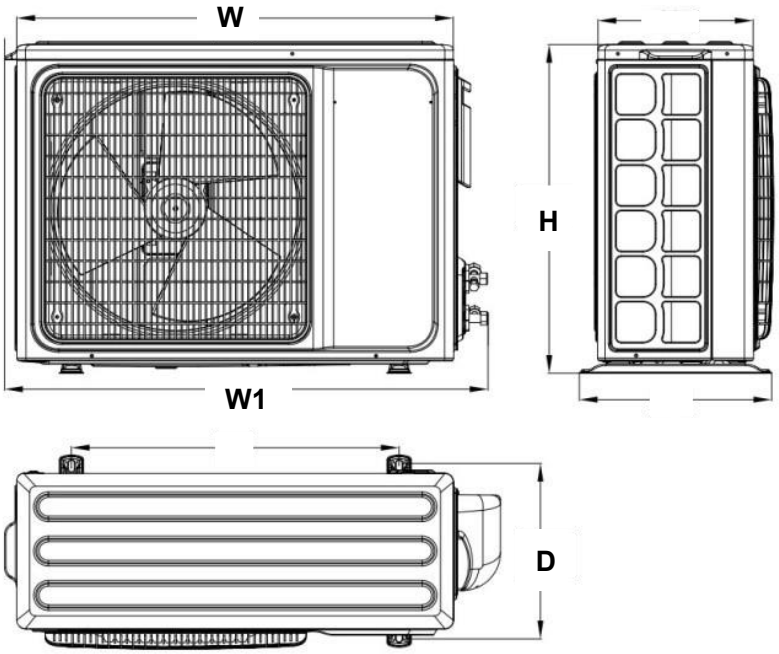
3.1 Indoor Unit





Capacity (Btu/h)	Net Dimension WidthxDepthxHeight (mm)	Packing Dimension WidthxDepthxHeight (mm)
12K	816×295×198	885×367×277
18K	965×325×230	1020×375×305
24K	1089×328×227	1155×397×312

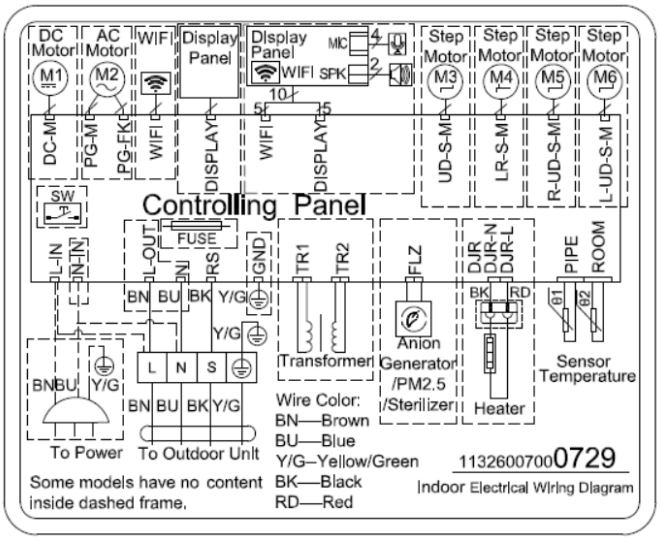
3.2 Outdoor Unit



Capacity (Btu/h)	Net Dimension WidthxDepthxHeight (mm)	Packing Dimension WidthxDepthxHeight (mm)
12K	785×555×300	905×372×615
18K	900×700×350	1020×770×430
24K	900×700×350	1015×762×425

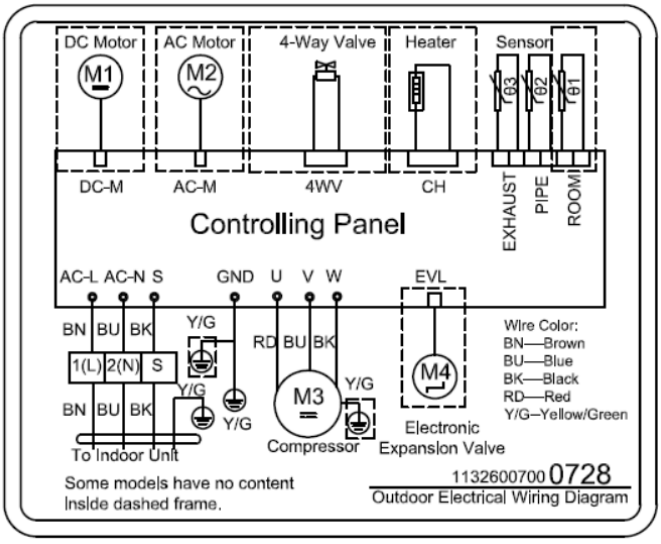
4.1 Indoor Units

4MXWFA12TB000AA
4MXWFA18TB000AA
4MXWFA24TB000AA



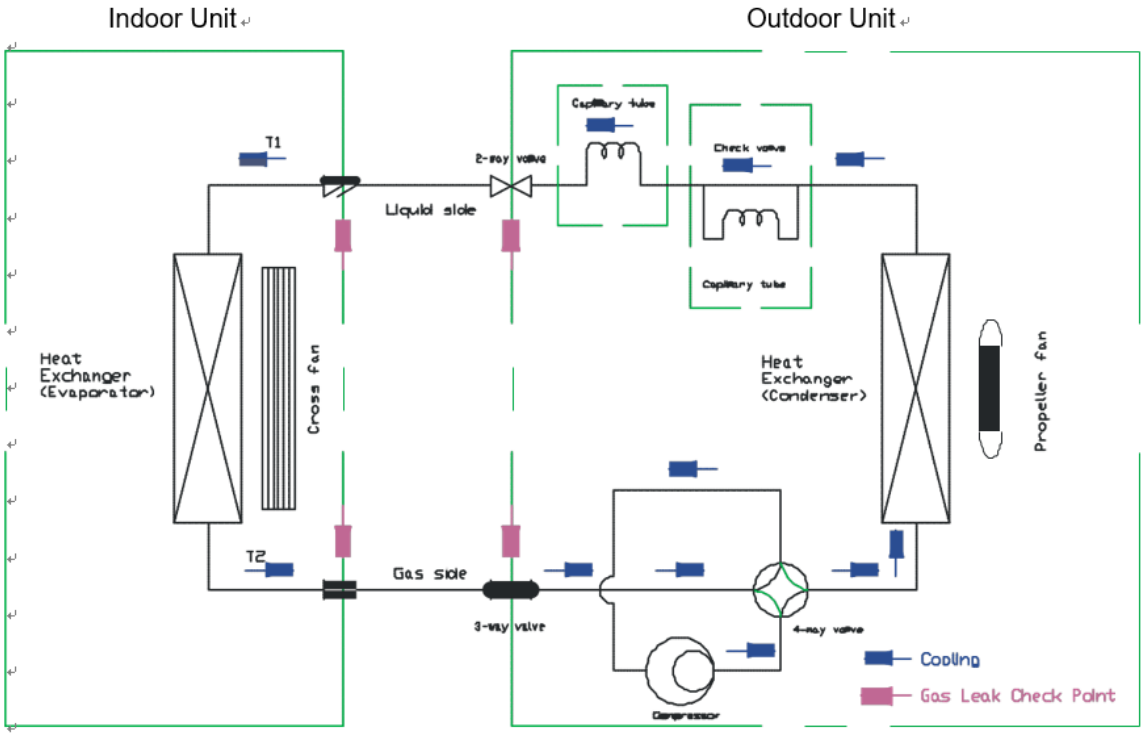
4.2 Outdoor Units

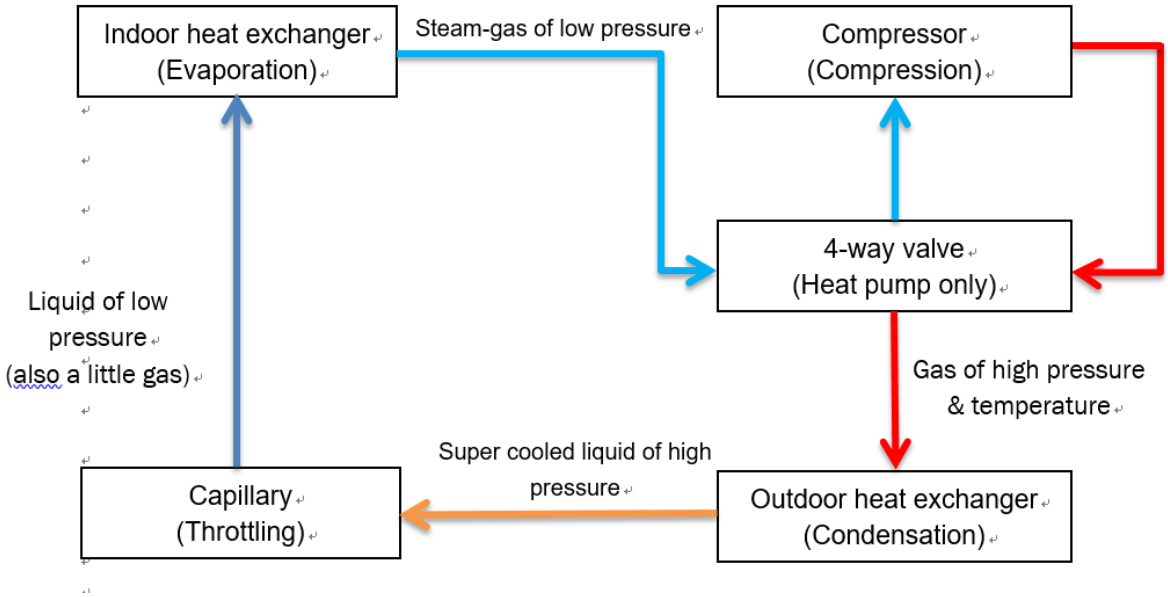
4TXKFA12TB000AA
4TXKFA18TB000AA
4TXKFA24TB000AA



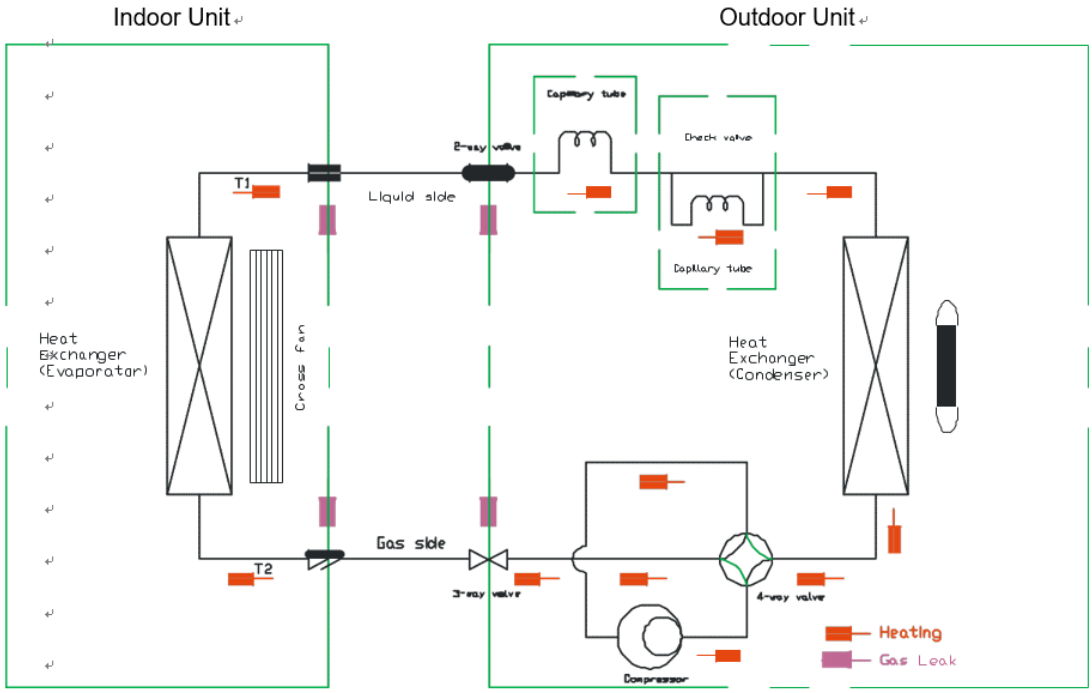
Note:Three Board Connect have no earth terminal,"Y/G" direct connect to panel.

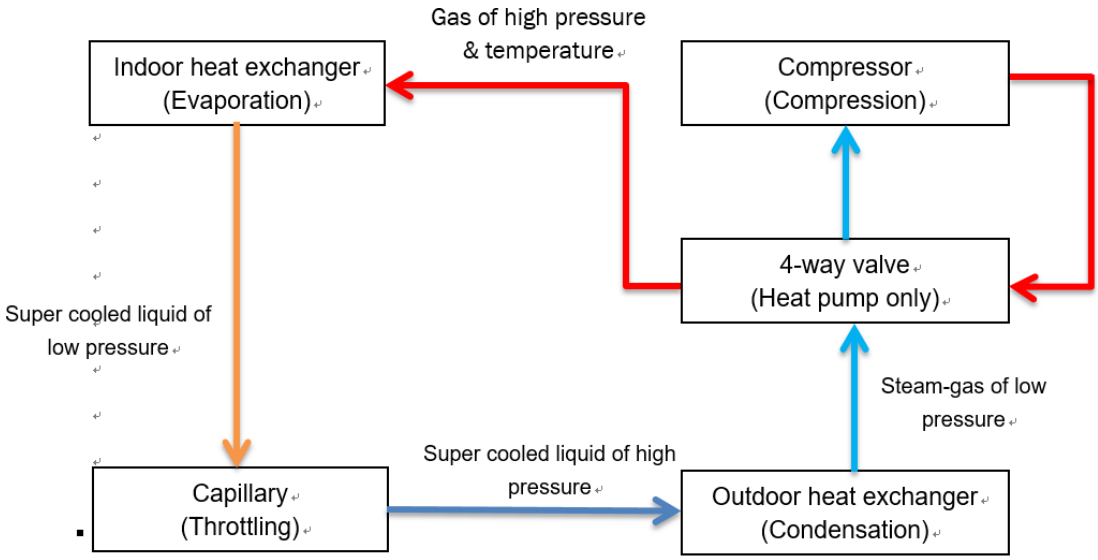
5.1 Cooling Mode





5.2 Heating Mode





Capacity Table

6.1 Cooling

4MXWFA12TB000AA/4TXKFA12TB000AA								
Indoor air entering Temp		Outdoor air entering Temp(DB)						
		70 0F/21ºC	82 0F/28ºC	95 0F/35ºC	109 0F/43ºC	115 0F/46ºC	126 0F/52ºC	1290F/54ºC
70 0F/21ºC DB	Tcc(kW)	1.90	2.74	2.95	2.46	1.86	1.47	0.77
59 0F/15ºC WB	Scc(kW)	0.75	0.83	0.85	0.78	0.72	0.57	0.33
	PW(kW)	0.26	0.61	0.91	0.95	0.76	0.70	0.52
75 0F/24ºC DB	Tcc(kW)	3.58	2.95	3.19	2.77	2.04	1.33	0.95
63 0F/17ºC WB	Scc(kW)	0.93	0.84	0.86	0.81	0.71	0.48	0.34
	PW(kW)	0.76	0.62	0.92	0.97	0.77	0.61	0.52
80 0F/27ºC DB	Tcc(kW)	4.00	3.19	3.51	2.98	0.59	1.40	0.98
66 0F/19ºC WB	Scc(kW)	1.02	0.89	0.94	0.86	0.76	0.51	0.35
	PW(kW)	0.77	0.64	0.96	0.99	0.78	0.57	0.48
84 0F/29ºC DB	Tcc(kW)	4.07	3.65	3.72	3.26	2.46	1.51	1.05
66 0F/19ºC WB	Scc(kW)	1.18	1.13	1.00	1.06	0.96	0.26	0.38
	PW(kW)	0.79	0.68	1.02	1.01	0.80	0.54	0.48
90 0F/32ºC DB	Tcc(kW)	5.47	5.14	4.14	3.55	2.74	1.68	1.09
73 0F/23ºC WB	Scc(kW)	1.13	1.09	1.00	0.92	0.82	0.60	0.39
	PW(kW)	0.88	0.99	1.02	1.04	0.82	0.56	0.43

TCC: Total Cooling Capacity (kW)
SCC: Sensible Cooling Capacity (kW)
PI: Power Input (kW)

4MXWFA18TB000AA/4TXKFA18TB000AA								
Indoor air entering Temp		Outdoor air entering Temp(DB)						
		70 0F/21ºC	82 0F/28ºC	95 0F/35ºC	109 0F/43ºC	115 0F/46ºC	126 0F/52ºC	1290F/54ºC
70 0F/21ºC DB	Tcc(kW)	2.86	4.13	4.45	3.71	2.81	2.23	1.17
59 0F/15ºC WB	Scc(kW)	0.73	0.86	0.87	0.80	0.70	0.58	0.30
	PW(kW)	0.39	0.93	1.38	1.44	1.15	1.06	0.78
75 0F/24ºC DB	Tcc(kW)	5.41	4.45	4.82	4.19	3.07	2.01	1.43
63 0F/17ºC WB	Scc(kW)	1.03	0.93	0.96	0.89	0.79	0.53	0.37
	PW(kW)	1.15	0.94	1.39	1.46	1.16	0.93	0.78
80 0F/27ºC DB	Tcc(kW)	6.04	4.82	5.30	4.51	0.89	2.12	1.48
66 0F/19ºC WB	Scc(kW)	1.13	0.99	1.04	0.96	0.84	0.56	0.38
	PW(kW)	1.16	0.97	1.45	1.49	1.17	0.86	0.73
84 0F/29ºC DB	Tcc(kW)	6.15	5.51	5.62	4.93	3.71	2.28	1.59
66 0F/19ºC WB	Scc(kW)	1.30	1.25	1.10	1.18	1.06	0.29	0.42
	PW(kW)	1.19	1.03	1.54	1.52	1.20	0.81	0.73
90 0F/32ºC DB	Tcc(kW)	8.26	7.75	6.25	5.35	4.13	2.54	1.64
73 0F/23ºC WB	Scc(kW)	1.25	1.20	1.10	1.02	0.90	0.67	0.43
	PW(kW)	1.32	1.49	1.54	1.57	1.23	0.84	0.65

TCC: Total Cooling Capacity (kW)
SCC: Sensible Cooling Capacity (kW)
PI: Power Input (kW)

Capacity Table

4MXWFA24TB000AA/4TXKFA24TB000AA								
Indoor air entering Temp		Outdoor air entering Temp(DB)						
		70 0F/21ºC	82 0F/28ºC	95 0F/35ºC	109 0F/43ºC	115 0F/46ºC	126 0F/52ºC	1290F/54ºC
70 0F/21ºC DB	Tcc(kW)	3.36	4.85	5.22	4.35	3.30	2.61	1.37
59 0F/15ºC WB	Scc(kW)	0.73	0.82	0.86	0.77	0.72	0.57	0.33
	PW(kW)	0.46	1.09	1.62	1.69	1.35	1.25	0.92
75 0F/24ºC DB	Tcc(kW)	6.34	5.22	5.66	4.91	3.61	2.36	1.68
63 0F/17ºC WB	Scc(kW)	0.92	0.83	0.86	0.80	0.71	0.47	0.33
	PW(kW)	1.35	1.11	1.64	1.73	1.37	1.09	0.92
80 0F/27ºC DB	Tcc(kW)	7.09	5.66	6.22	5.29	1.05	2.49	1.74
66 0F/19ºC WB	Scc(kW)	1.01	0.88	0.93	0.86	0.75	0.50	0.34
	PW(kW)	1.37	1.15	1.71	1.76	1.39	1.01	0.86
84 0F/29ºC DB	Tcc(kW)	7.22	6.46	6.59	5.78	4.35	2.67	1.87
66 0F/19ºC WB	Scc(kW)	1.16	1.11	0.99	1.05	0.95	0.26	0.37
	PW(kW)	1.40	1.21	1.81	1.80	1.42	0.96	0.86
90 0F/32ºC DB	Tcc(kW)	9.69	9.10	7.34	6.28	4.85	2.99	1.93
73 0F/23ºC WB	Scc(kW)	1.11	1.07	0.99	0.91	0.81	0.60	0.38
	PW(kW)	1.56	1.76	1.81	1.85	1.45	0.99	0.77

TCC: Total Cooling Capacity (kW)
SCC: Sensible Cooling Capacity (kW)
PI: Power Input (kW)

6.2 Heating

4MXWFA12TB000AA/4TXKFA12TB000AA							
81°F/27°C DB	Tcc(kW)	3.41	3.31	3.23	2.24	1.87	1.76
66°F/19°C WB	PW(kW)	1.57	1.45	1.24	1.10	0.85	0.79
75°F/24°C DB	Tcc(kW)	3.80	3.67	3.58	2.50	2.09	1.98
63°F/17°C WB	PW(kW)	1.51	1.40	1.20	1.07	0.83	0.78
70°F/21°C DB	Tcc(kW)	3.95	3.84	3.75	2.60	2.18	2.06
59°F/15°C WB	PW(kW)	1.36	1.24	1.10	0.97	0.76	0.69
68°F/20°C DB	Tcc(kW)	4.04	3.91	3.79	2.66	2.23	2.10
59°F/15°C WB	PW(kW)	1.30	1.20	1.03	0.91	0.70	0.66

4MXWFA18TB000AA/4TXKFA18TB000AA							
81°F/27°C DB	Tcc(kW)	4.45	4.33	4.22	2.93	2.45	2.30
66°F/19°C WB	PW(kW)	2.14	1.97	1.69	1.50	1.16	1.08
75°F/24°C DB	Tcc(kW)	4.96	4.80	4.67	3.27	2.73	2.58
63°F/17°C WB	PW(kW)	2.06	1.90	1.64	1.46	1.13	1.06
70°F/21°C DB	Tcc(kW)	5.16	5.02	4.90	3.40	2.85	2.69
59°F/15°C WB	PW(kW)	1.85	1.69	1.50	1.32	1.04	0.95
68°F/20°C DB	Tcc(kW)	5.28	5.11	4.95	3.47	2.91	2.74
59°F/15°C WB	PW(kW)	1.77	1.63	1.41	1.24	0.96	0.90

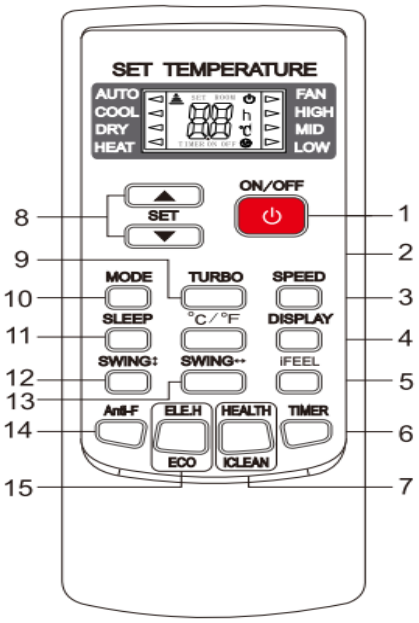
4MXWFA24TB000AA/4TXKFA24TB000AA							
81°F/27°C DB	Tcc(kW)	6.32	6.14	5.98	4.16	3.47	3.26
66°F/19°C WB	PW(kW)	3.14	2.89	2.48	2.20	1.70	1.58
75°F/24°C DB	Tcc(kW)	7.03	6.81	6.63	4.63	3.88	3.66
63°F/17°C WB	PW(kW)	3.03	2.79	2.41	2.14	1.65	1.55
70°F/21°C DB	Tcc(kW)	7.32	7.12	6.95	4.82	4.04	3.82
59°F/15°C WB	PW(kW)	2.72	2.48	2.20	1.93	1.52	1.39
68°F/20°C DB	Tcc(kW)	7.48	7.24	7.02	4.93	4.13	3.89
59°F/15°C WB	PW(kW)	2.60	2.39	2.07	1.82	1.40	1.31

7.1 Function and Control

H-Style

1) Remote Controller Introduction

➢ **Introduction for Buttons on Remote Controller**



Note:

All the figures above are the displays after being initially electrified or re-electrified after power off. In actual operations, the remote controller screen displays related items only. Some functions are optional and don't work according to the model.

1. ON/OFF

* Press this button to turn on/off the unit.
* This will clear the existing timer and SLEEP settings.

2.℃/℉

* Press this button to set the temperature display to Fahrenheit, which is displayed by default in Celsius. The "℃" will not be displayed on the LCD.
* Press this button again to restore the temperature display to Celsius.

Note: Temperature display in Fahrenheit is not available for some models. When temperature is displayed in Fahrenheit on the remote controller, it might be in Celsius on the unit, the function and operation of which will not be affected.

3. SPEED

* Press this button, you can select the motor speed as follows:

Low → Mid → High → Auto

Note: AUTO air speed is not available in Fan mode.

4. DISPLAY

* Press this button to turn on/off the display. This is for the convenience of users who are unconformable sleeping with the backlight on.

5. iFEEL

* Press this button to set the temperature display on the remote controller to ambient temperature and press this button again to set it to preset temperature.

6. TIMER

* With the unit ON, press this button to set OFF timer or with it OFF to set ON timer.
* Press this button once, a "ON(OFF)" will flash. Press “▲”or “ ▼” to set the number of hours in which the unit will be turned ON/OFF, with an interval of 0.5 hour if less than 10 hours, or 1 hour if longer than 10 hours and a range of 0.5-24 hours.
* Press it again to confirm the setting the "ON (OFF)" will stop flashing.
* If the timer button is not pressed longer than 10 seconds after the "ON (OFF)" start flashing, the timer setting will be exited.
* If a timer setting is confirmed, pressing this button again will cancel it.

Note: When a ON timer is set, all function buttons (except SLEEP DISPLAY and iFEEL can't be set) are valid and when the ON time set is up, the unit will operate as preset.

7. 

This button has two functions.

a. HEALTH

* Press this button with the unit ON to activate health related functions, such as negative ion, electrostatic precipitation, PM2.5 removal, etc, depending on the actual configuration of each model.
* Press this button again to deactivate the HEALTH function.

b. iCLEAN

* Press this button with the unit OFF, the remote controller will display "CL" and the unit will automatically clean dust off the evaporator and dry it, to increase the cooling and heating efficiency.
* The iCLEAN function runs for approximately 30 minutes, during which if the unit is turned on with the remote controller or this button is pressed again, the iCLEAN will be deactivated.

8. ▲ or ▼

* Each time the "▲" is pressed, the temperature setting will increase by 1℃ and each time the "▼" is pressed, it will decrease by 1℃.
* a. If the type of controller remote is YKR-H/101E or YKR-H/102E setting temperature range is 16℃ ~32℃(60℉~90℉).

b. If the type of controller remote is YKR-H/132E setting temperature range is 20℃ ~28℃ (68℉~82℉).

c. Some area don't have the YKR-H/132E.Local regulation and actual object shall prevail.

Note: The temperature cannot be set in AUTO or Fan mode, thus these two buttons are not functional.

9. TURBO

* Press this button only in COOL or HEAT mode to set TURBO on or off to speedy the cooling or heating.
* When TURBO is on the air speed is HIGH.
* When TURBO is off the air speed will restore to previous status.

10. MODE

* Press this button you can select the running mode as follows:

AUTO → COOL → DRY → HEAT →FAN

Note: HEAT mode is not available for cool only units.

11. SLEEP
* Press this button to enter SLEEP mode, which the unit will exit after 10 hours of continuous operation and restore to the previous status.
Note: The SLEEP function cannot be activated in Fan mode.

12. SWING ↕
* Press this button to activate up/down swing and press it again to fix the swing position.

13. SWING ↔
* Press this button to activate left/right swing and press it again to fix the swing position.

14. Anti-F
* The Anti-F functions when the unit is turned off with the remote controller in COOL, DRY or AUTO mode. It will operate in HEAT mode (Fan mode for cool only units), with the Indoor Unit motor running with weak flow for 3 minute before stop, to remove the moisture within the evaporator so as to prevent it from giving bad smell from mold.
* This function is not set in the factory. You may set it or cancel it any time you want as follows: With both the unit and the remote controller OFF, point the remote controller at the unit and press
"Anti-F" button once, the buzzer will sound 5 times after 5 times, indicating this function is set. Once set, this function will remain valid except when the unit is power off or until it is canceled.
* To cancel Anti-F:
1. Power off the unit.
2. With both the unit and the remote controller OFF, point the remote controller at the unit and press this button once, the buzzer will sound 3 times after 5 times, indicating this function is canceled.
Note:
* With Anti-F activated, it is advised not to turn ON the unit again before it is fully OFF.
*Anti-F function will be invalid when OFF timer is set.

15.This button has two functions.
a. ELE.H (Optional)
* If this button is pressed in HEAT mode, the electric heating will be turned on/off.
b. ECO (Optional)
* If this button is pressed in COOL mode, the unit will enter the ECO mode which has the lowest electricity consumption, and exit it automatically 8 hours after.
* Changing modes or turning off the remote controller will automatically cancel the ECO function.
* Press ECO button in ECO mode to exit this mode. Note: The ECO mode only works for inverter units.

2) Introduction for mode settings

★Automatic operation mode
1. Press the "MODE" button, select the automatic operation mode.
2. By pressing the "SPEED" button, you can select the motor speed from LOW, MID, HIGH, AUTO.
3. Press the "ON/OFF" button, the air-conditioner starts to operate.
4. Press the "ON/OFF" button again, the air-conditioner stops.
Note: In the fan operation mode the temperature settings is non-effective.

★Cooling/Heating operation mode
1. Press the "MODE" button, select the Cooling or Heating operation mode.

2. By pressing the "▲"or "▼"button, you can set the temperature the display changes as you touch the button.
3. By pressing the "SPEED" button, you can select the motor speed from LOW, MID, HIGH, AUTO.
4. Press the "ON/OFF" button, the air-conditioner starts to operate.
5. Press the "ON/OFF" button again, the air-conditioner stops.
Note: The cold wind type has no heating function.

★Fan operation mode

1. Press the "MODE" button, select the fan operation mode.
2. By pressing the "SPEED" button, you can select the motor speed from LOW, MID, HIGH.
3. Press the "ON/OFF" button, the air-conditioner starts to operate.
4. Press the "ON/OFF" button again, the air-conditioner stops.
Note: In the fan operation mode the temperature settings is non-effective.

★Drying operation mode

1. Press the "MODE" button, select the drying operation mode.
2. By pressing the "▲"or "▼"button, you can set the temperature the display changes as you touch the button.
3. By pressing the "SPEED" button, you can select the motor speed from LOW, MID, HIGH, AUTO.
4. Press the "ON/OFF" button, the air-conditioner starts to operate.
5. Press the "ON/OFF" button again, the air-conditioner stops.

★Backlight function (for remote controllers with such function only)

The remote controller has a backlight which can be turned on by pressing any button for the convenience of operation in darkness. The backlight will be automatically turned off if there is no operation within 10 seconds.

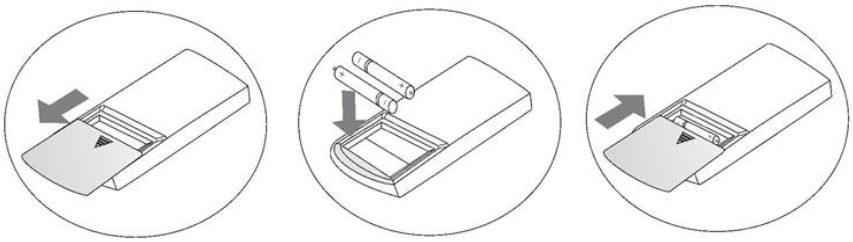
3) Precautions

• Before first time use of the remote controller install the batteries and ensure the "+"and "_" poles are correctly positioned.
• Ensure the remote controller is pointed to the signal receiving Window and that there is no obstruction in between and the distance is 8m at the maximum.
• Do not let the remote controller drop or fling it at will.
Do not let any liquid in the remote controller.
Do not expose the remote controller directly to the sunlight or excessive heat.
• If the remote controller does not function normally remove the batteries for 30 second before reinstall them. If that doesn't work replace the batteries.
• When replacing the batteries do not mix the new batteries with old ones or mix batteries of different types which could cause failure of the remote controller.
• If the remote controller is not to be used for a long period of time remove the batteries first lest the leakage from them may damage the remote controller.
• Properly dispose the discarded batteries.

Note:

1. This is a universal remote controller which provide all the function buttons. Please understand that some of the buttons may not function, depending on the specific air conditioner you have purchased. (If a specific function is not available on the air conditioner, pressing the corresponding button will simply have no respond.)
2. HEAT and ELE.H functions are not available for cool only models, thus these two buttons do not work correspondingly.

- **Battery use and replacement**



1. Slide to open the cover according to the direction indicated by the arrowhead.
2. Insert two brand new batteries (7#) and position the batteries to the right electric poles (+ & -).
3. Put back the cover.

8.1 Main Tools for Installation and Maintenance

Screwdriver , Wire stripper	Tapeline , Spirit level	Allen wrench , Wrench
		
Hammer , Electric hammer	**Water drill punch , Drill**	**Forming Drill**
		
Cutting Knife	**Belling Expander**	**Thermometer , Electro Probe**
		
Pressure Gage	**Pliers , Clip-on Ammeter**	**Vacuum Pump**
		
Soldering Set	**Refrigerant**	**Safety Belt , Safety Rope**
		

9.1 Notes for Installation

Important Notices

- Before installation, please contact with local authorized maintenance center, if unit is not installed by the authorized maintenance center, the malfunction may not solved, due to discommodious contact.
- The air conditioner must be installed by professionals according to the national wiring rules and this manual.
- To move and install air conditioner to another place, please contact our local special service center.

Requirements For Installation Position

- Avoid places of inflammable or explosive gas leakage or where there are strongly aggressive gases.
- Avoid places subject to strong artificial electric/magnetic fields.
- Avoid places subject to noise and resonance.
- Avoid severe natural conditions (e.g. heavy lampblack, strong sandy wind, direct sunshine or high temperature heat sources).
- Avoid places within the reach of children.
- Shorten the connection between the indoor and outdoor units.
- Select where it is easy to perform service and repair and where the ventilation good.
- The outdoor unit shall not be installed in any way that could occupy an aisle, stairway, exit, fire escape, catwalk or any other public area.
- The outdoor unit shall be installed as far as possible from the doors and windows of the neighbors as well as the green plants.

Requirements for operations at raised height

- When carrying out installation at 2m or higher above the base level, safety belts must be worn and ropes of sufficient strength be securely fasten to the outdoor unit, to prevent falling that could cause personal injury or death as well as property loss.

Requirements of the mounting structure

- The mounting rack must meet the relevant national or industrial standards in terms of strength with welding and connection areas rustproofed.
- The mounting rack and its load carry surface shall be able to withstand 4 times or above the weight of the unit, or 200kg, whichever is heavier.
- The mounting rack of the outdoor unit shall be fastened with expansion bolt.
- Ensure the secure installation regardless of what type of wall on which it is installed, to prevent potential dropping that could hurt people.

Electrical Safety Requirements

- Be sure to use the rated voltage and air conditioners dedicated circuit for the power supply, and the power cord diameter mu
- Be sure to use the rated voltage and air
- When the maximum current of air condit leakage protection switch equipped with
- The normal operating range is 90%-110
- The minimum clearance between the air
- The power cable enables communicatio must first choose the right cable size bef

Grounding Requirements

- The air conditioner is the type I electrical appliance and must ensure a reliable

grounding.

- Do not connect the grounding wire to a gas pipe, water pipe, lightning rod, telephone line, or a circuit poorly grounded to the earth.
- The grounding wire is specially designed and shall not be used for other purpose,
- nor shall it be fastened with a common tapping screw.

Others

- The connection method of the air conditioner and the power cord and the interconnection method of each independent element shall be subject to the wiring diagram affixed to the machine.

The model and rating value of the fuse shall be subject to the silkscreen on corresponding controller or fuse sleeve.

9.2 Installation of Indoor Unit

9.2.1 Installation Parts-checking

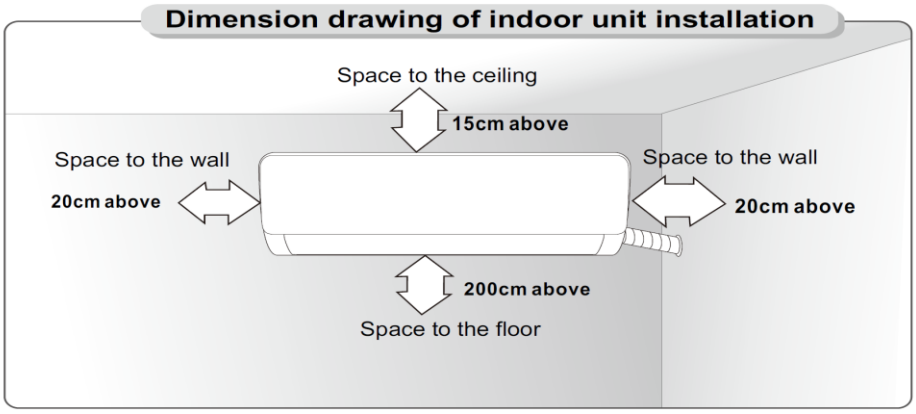
Packing list of the indoor unit

NO.	Name	Quantity	Unit
1	Indoor Unit	1	Set
2	Remote Controller	1	PC
3	Batteries(7#)	2	PC
4	Instructions	1	Set
5	Drain pipe	1	PC

NOTE:

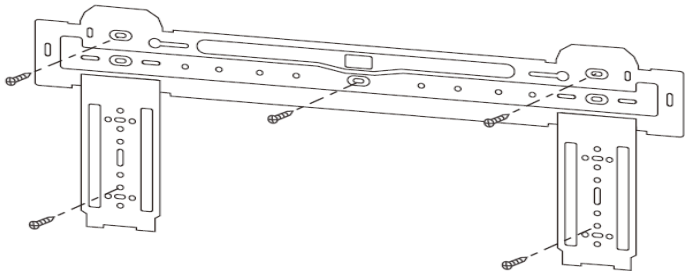
※ All accessories shall be subject to actual packaging material, and if there is any difference, please understand.

9.2.2 Selection of Installation location



9.2.3 Mounting plate

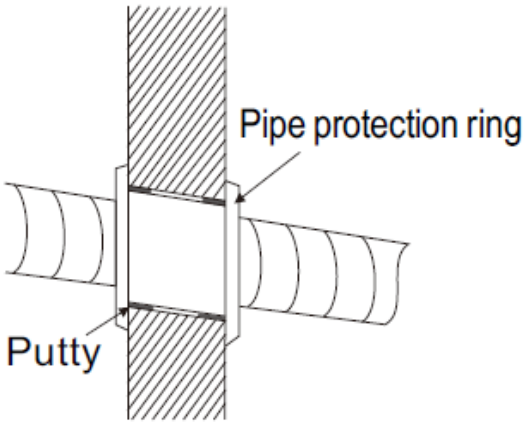
1. The wall for installation of the indoor unit shall be hard and firm, so as to prevent vibration.
2. Use the "+" type screw to fasten the peg board, horizontally mount the peg board on the wall, and ensure the lateral horizontal and longitudinal vertical.
3. Pull the peg board by hand after the installation, to confirm whether it is solid.



9.2.4 Wall-through Hole

1. Make a hole with an electric hammer or a water drill at the predetermined position on the wall for piping, which shall slant outwardly by 5°-10°.
2. To protect the piping and the cables from being damaged running through the wall, and from the rodents that may inhabit in the hollow wall, a pipe protecting ring shall be installed and sealed with putty.

Note: Usually, the wall hole is Φ60mm~ Φ80mm. Avoid pre-buried power wire and hard wall when making the hole



9.2.5 Route of Pipeline

1. Depending on the position of the unit, the piping may be routed sideway from the left or the right (Fig 1), or vertically from the back(Fig 2)(depending on the pipe length of the indoor unit). In the case of sideway routing, cut off the outlet cutting stock of the opposite side.
2. The power cord may be routed separately from the piping. Cut off the outlet cutting stock and then run the power cord through the hole, keeping the remaining part as a protection from rodents.

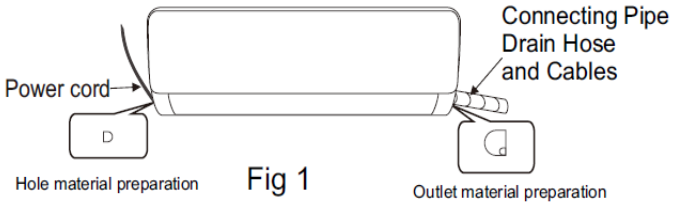


Fig 1

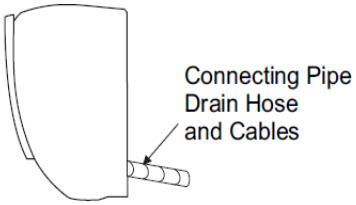


Fig 2

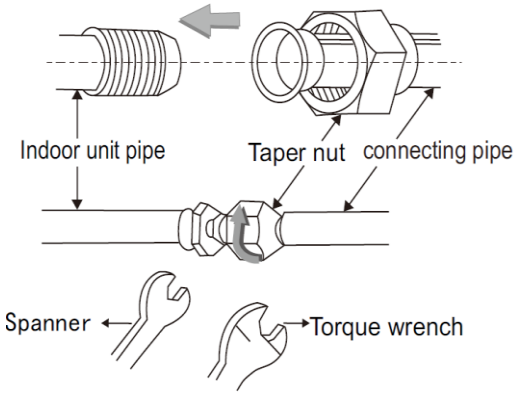
9.2.6 Drain pipe connection

1. Remove the mountings and pull the indoor unit pipe out of the housing.
2. Connect the connecting pipe to the indoor unit:

Aim at the pipe center, tighten the Taper nut with fingers, and then tighten the T nut with a torque wrench, and the direction is shown in diagram on the right. The torque used is shown in the following table.

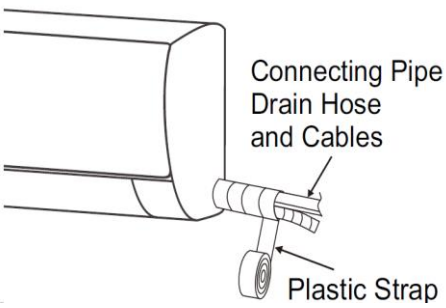
Tightening torque table

The size of pipe(mm)	Torque(N·m)
Φ6/Φ6.35	15 ~ 25
Φ9 /Φ9.5 2	35 ~ 40
Φ12/Φ12.7	45 ~ 60
Φ15.88	73 ~ 78
Φ19.05	75 ~ 80



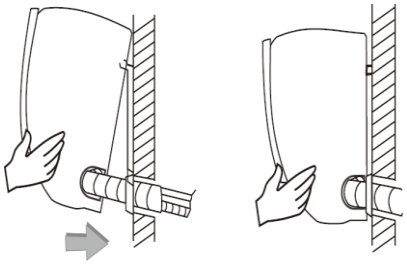
9.2.7 Wrap the Piping

1. Use the insulation sleeve to wrap the joint part the indoor unit and the connection pipe, and then use insulating material to pack and seal insulation pipe, to prevent generation of condensate water on the joint part.
2. Connect the water outlet with drain pipes, and make the connection pipe, cables, and the drain hose straight.
3. Use plastic cable ties to wrap the connecting pipes, cables and drain hose. Run the pipe sloping downward.



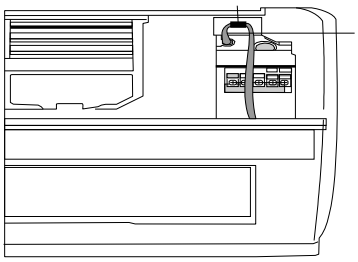
9.2.8 Fixing the indoor unit

1. Hang the indoor unit on the peg board, and move the unit from left to right to ensure that the hook is properly positioned in the peg board.
2. Push toward the lower left side and the upper right side of the unit toward the peg board, until the hook is embedded in the slot and makes a "click" sound.



9.2.9 Electric Connection Requirement

● Loosen the screws and remove from the unit.
● Connect the cables respectively to the corresponding terminals of the terminal board of the indoor unit (see the wiring diagram), and if there are signals connected to the plug, just conduct butt joint.
●Ground wire: Remove the grounding screw out of the electric bracket, cover the grounding wire end onto the grounding screw and screw it into the grounding hole.
● Fix the cable reliably with fasteners (Pressing board).
● Put the E-parts cover back in its original place and fasten it with screws.

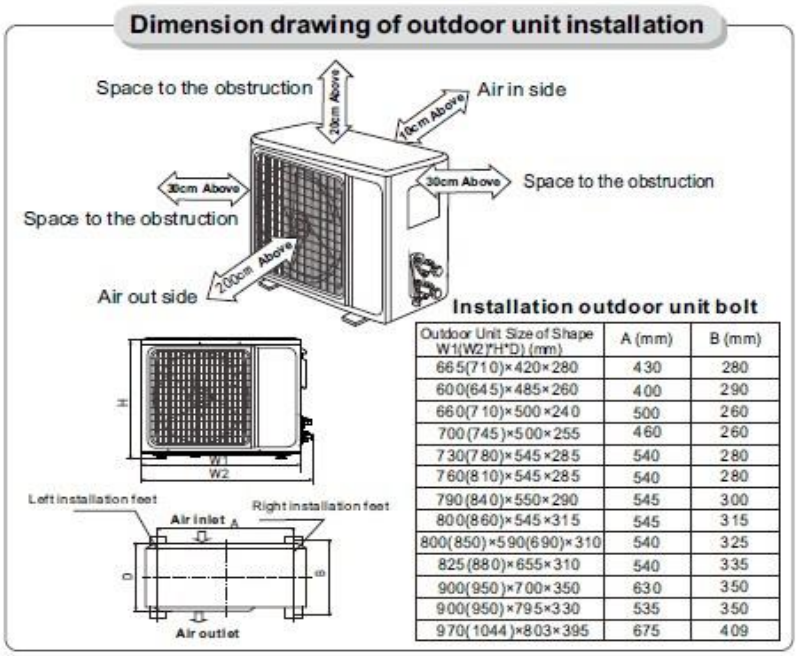


9.3 Installation of Outdoor Unit

9.3.1 Packing list of the outdoor unit

NO.	Name	Quantity	Unit
1	Outdoor Unit	1	Set
2	Connecting pipe	2	PC
3	Plastic Strap	1	ROLL
4	Pipe Protection Ring	1	Set
5	Luting (putty)	1	PACKET

9.3.2 Selection of Installation location

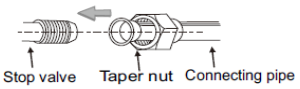


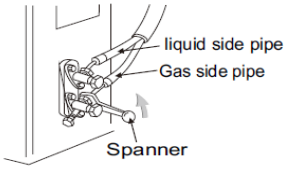
Installation outdoor unit bolt

Outdoor Unit Size of Shape W1(W2)*H*D) (mm)	A (mm)	B (mm)
665(710)×420×280	430	280
600(645)×485×260	400	290
660(710)×500×240	500	260
700(745)×500×255	460	260
730(780)×545×285	540	280
760(810)×545×285	540	280
790(840)×550×290	545	300
800(860)×545×315	545	315
800(850)×590(690)×310	540	325
825(880)×655×310	540	335
900(950)×700×350	630	350
900(950)×795×330	535	350
970(1044)×803×395	675	409

9.3.3 Install the connection pipe

Connect the Outdoor Unit with Connecting Pipe: Aim the counter-bore of the connecting pipe at the stop valve, and tighten the Taper nut with fingers. Then tighten the Taper nut with a torque wrench.





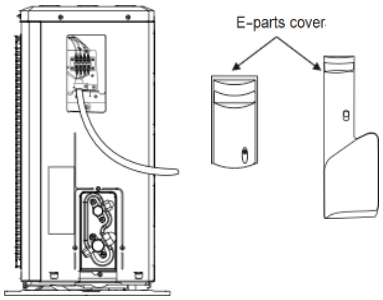
★When prolonging the piping, extra amount of refrigerant must be added so that the operation and performance of the air conditioner will not be compromised.

Piping length	Amount of refrigerant to be added	
≤5M	Not needed	
5- 15M	CC≤12000Btu	20g/m
	CC≥18000Btu	30g/m

Note: This table is for reference only.

9.3.4 Wiring Connection

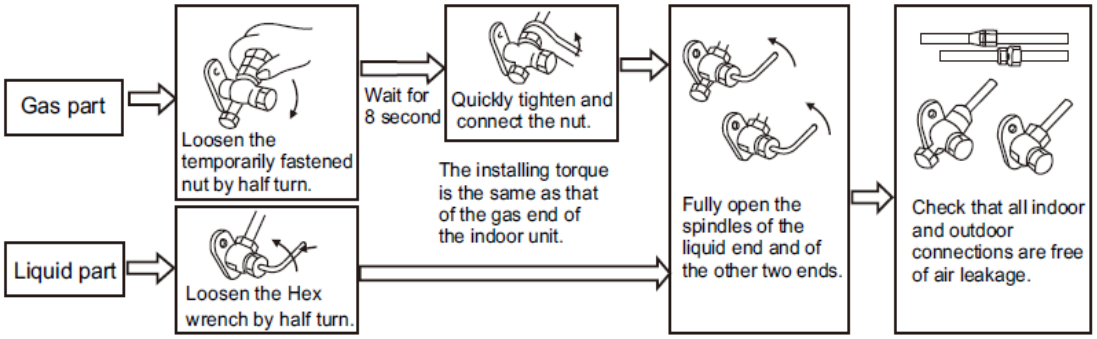
1. Loosen the screws and remove E-parts cover from the unit.
2. Connect the cables respectively to the corresponding terminals of the terminal board of the outdoor unit (see the wiring diagram),and if there are signals connected to the plug, just conduct butt joint.
3. Ground wire: Remove the grounding screw out of the electric bracket, cover the grounding wire end onto the grounding screw and screw it into the grounding hole.
4. Fix the cable reliably with fasteners (Pressing board).
5. Put the E-parts cover back in its original place and fasten it with screws.



9.4 Expelling the air

★Outdoor unit refrigerant discharging method

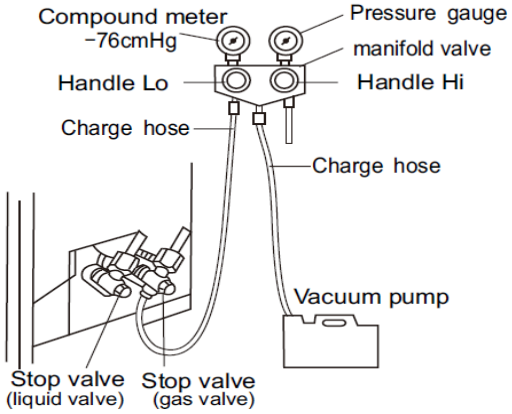
After the pipe side connection is complete, proceed as follows.



★Vacuum Pumping Method (R410A refrigerant evacuation must use the vacuum pumping method)

Before working on the air conditioner, remove the cover of the stop valve(gas and liquid valves)and be sure to retighten it afterward.(to prevent the potential air leakage)

1. To prevent air leakage and spilling tighten all connecting nut of all flare tubes.
2. Connect the stop valve, charge hose, manifold valve, and vacuum pump.
3. Fully open the handle Lo of the manifold valve and apply vacuum for at least 15 minutes and check that the compound vacuum gauge reads -0.1MPa (-76cmHg).
4. After applying vacuum, fully open the stop valve with a hex wrench.
5. Check that both indoor and outdoor connections are free of air leakage.

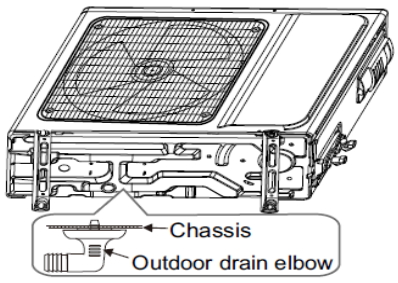


9.5 Outdoor condensation drainage(Heat pump type only)

When the unit is heating, the condensing water and defrosting water can be out reliably through the drain house.

Installation：

Install the outdoor drain elbow in Φ25 hole on the base plate, and joint the drain hose to the elbow, so that the waste water formed in the outdoor unit can be drained out to a proper plate.



9.6 Check after installation and test operation

9.6.1 Check after installation

★ Electrical Safety Check

① If the supply voltage is as required.

② If there is any faulty or miss connection in each of the power, signal and grounding wires.

③ If the grounding wire of the air conditioner is securely grounded.

★ Installation Safety Check

① If the installation is secure.

② If the water drain is smooth.

③ If the wiring and piping are correctly installed.

④ Check that no foreign matter or tools are left inside the unit.

★ Leak test of the refrigerant

Depending on the installation method, the following methods may be used to check for suspect leak, on areas such as the four connections of the outdoor unit and the cores of the cut-off valves and t-valves:

① Bubble method: Apply of spray a uniform layer of soap water over the suspected leak spot and observe carefully for bubble.

② Instrument method: Checking for leak by pointing the probe of the leak detector according to the instruction to the suspect points of leak.

9.6.2 Test operation

★ Test preparation

※Verify that all piping and connection cables are well connected.

※Confirm that the values at the gas side the liquid-side are fully open.

※Connect the power cord to an independent power socket.

※Install batteries in remote control.

★ Test Operation method

① Turn on the power and push the ON/OFF switch button of the remote controller to start the air conditioner.

② Select COOL, HEAT (not available on cool-only models), SWING and other operation modes with the remote controller and see if the operation is ok.