



# Impression II + Super Inverter Multiple Split System

---



---

**SSP-PRC012-EN**



# Contents

---

<b>Features and Benefits</b>	<b>4</b>
<b>Model Nomenclature</b>	<b>5</b>
<b>System Configurations</b>	<b>8</b>
<b>Technical Data</b>	<b>9</b>
<b>Unit Dimensions</b>	<b>12</b>
<b>Unit Installation Instructions</b>	<b>16</b>
<b>Operating Instruction of Controller</b>	<b>18</b>
<b>Operating Instruction for Wireless Controller</b>	<b>19</b>
<b>Selection Example</b>	<b>20</b>



# Features and Benefits

Impression II+ series is a 3rd generation of super inverter multiple split system. It adds innovative new technology to the proven performance of Impression I and Impression II. Impression II+ features a hermetic variable frequency compressor with low noise, high efficiency and minimum vibration and incorporates more advanced frequency converter technologies - sub-cooling and superheat adjustment and pressure control to provide peak performance of all key components under all operating conditions. The system is dependable, efficient, and energy saving.

## Control Method

The system adopts superheat and sub-cooling control and pressure control. The electric expansion valve automatically adjusts and efficiently distributes refrigerant according to temperature in overall system. This ensures that the system works at optimal performance, indoor and outdoor units work efficiently together, and the system adjusts faster, with more precision and stability. Indoor temperature control accuracy is within 0.5°C.

## Free Configuration

Indoor units are available in concealed, cassette, tall-floor and high-wall configuration. Users can select according to the space condition, which brings ease of installation to the installers and higher living quality to users. Meanwhile, indoor and outdoor unit could be configured flexibly in proportion of 20-135% capacity. The design allows up to 8 indoor units to be matched to a single outdoor unit.

## Intelligent Fan Control

Impression II+ uses intelligent control of both the indoor and outdoor fan to save energy and improve noise management. The outdoor fan self-adjusts and switches to a low noise running mode during night sleeping periods if system operating conditions allow.

## Refnet Joint Connection

The use of refnet joint connections simplifies field installation and saves space.

## "Priority" Benefit

When some of indoor units have bigger load demands, while other indoor unit demand is less, the system will adjust refrigerant flow to balance cooling among indoor units. 10-20% energy can be transferred.

## Quick Heating and Cooling

When quick heat/quick cool button is pressed, the unit will shift frequency to maximum capacity level to raise or lower room temperature to set point in a short time. Selected indoor unit capacity will be 20-40% higher than normal.

## Broader Operating range

System can operate normally between -10°C~50°C.

## Broader Voltage Range

Impression II+ requires a 220V~240V/50~60Hz/1ph power supply. The system will run normally under voltage range from 165V to 275V and has the ability to start up at low voltage (the system could start up with voltage 20% lower than standard).

## Less Space Requirement for Installation

The system is designed to use one outdoor unit, which can be installed on balcony, corridor or rooftop etc.

## Logical Refrigerant Distribution

The electric expansion valve ensures each indoor unit receives appropriate refrigerant so that all indoor units run efficiently.

## Shorter Defrosting Time

Defrosting function runs frequently to ensure on-time defrosting, which greatly improves heating comfort.

## Protections for Unexpected Power Fluctuation

Protects power supply and other electric appliances from being interfered.

## 99% Power Factor

There is less VAR. The unit has more power output.

## Liquid Crystal Display

The liquid crystal display controller has state-of-the-art appearance with desirable functions such as timer on/off, failure self-diagnosis, display of fan mode, compressor mode, cool/heat mode, and failure code etc. Users may select wired controller with or without wireless control card, or wireless controller to meet their individual requirements.



# Model Nomenclature

# Outdoor Unit

**T** **W** **F** **5** **4** **8** **B** **M** **0** **E** **E** **B**  
1 2 3 4 5 6 7 8 9 10 11 12

- Digit 1 T=Trane
- Digit 2 W=Heat Pump
- Digit 3 F=Free Configuration Outdoor System
- Digit 4 5=Flare
- Digit 5, 6 Capacity Code
  - 18
  - 24
  - 42
  - 48
- Digit 7 Design Sequence
  - B
- Digit 8 Power supply
  - M=220-240V/50-60Hz/1Ph
- Digit 9 0=Standard Ambient Temperature
- Digit 10 E=With Expansion Device
- Digit 11 Design Change
  - E=Fifth design (TWF518/524/542/548)
- Digit 12 Service Change
  - B=Export



# Model Nomenclature

# Indoor Unit

## Concealed

<u>M</u>	<u>W</u>	<u>D</u>	<u>5</u>	<u>1</u>	<u>2</u>	<u>G</u>	<u>M</u>	<u>N</u>	<u>B</u>	<u>N</u>	<u>B</u>	<u>R</u>	
1	2	3	4	5	6	7	8	9	10	11	12	13	
Digit 1	M=Trane Mini-split system								standard)				
Digit 2	W=Heat Pump								B=Wired controller + wireless control card				
Digit 3	D=Concealed								standard)				
Digit 4	5=Flare							Digit 11	Accessory Option				
Digit 5, 6	Capacity Code 09, 12, 18, 24								N=none				
Digit 7	Design Sequence G=Free configuration variable frequency indoor system, with EXV								M=With rear air return plenum				
Digit 8	Power Supply M=220-240V/50-60Hz/1 Ph								A=With rear air return plenum + filter				
Digit 9	Electric Heater N=None (Standard) C=1.0kW electric heater (for MWD 509 only) D=1.4kW electric heater (for MWD 512 only) F=1.8kW electric heater (for MWD 518 only) H=2.8kW electric heater (for MWD 524 only)								K=With bottom air return plenum				
Digit 10	Controller Option A=Wired controller (as								L=With bottom air return plenum + filter (Filter type: nylon media as standard)				
							Digit 12	Design Change B=Export					
							Digit 13	Connection L= Left hand (standard) R= Right hand (Left or right connection is expressed when facing the airflow thru the coil.)					

## Tall-floor

<u>M</u>	<u>W</u>	<u>V</u>	<u>5</u>	<u>1</u>	<u>8</u>	<u>G</u>	<u>M</u>	<u>N</u>	<u>A</u>	<u>N</u>	<u>B</u>	
1	2	3	4	5	6	7	8	9	10	11	12	
Digit 1	M=Trane Mini-split System								N=None (Standard)			
Digit 2	W=Heat Pump								B=1.2kW electric heater (for MWD 518 only)			
Digit 3	V=Floor Mounted								F=1.8kW electric heater (for MWD 524only)			
Digit 4	5=Flare											
Digit 5, 6	Capacity Code 18, 24							Digit 10	Controller N=None			
Digit 7	Design Sequence G=Free configuration variable frequency indoor system, with EXV								A=Wireless controller			
Digit 8	Power Supply M=220-240V/50-60Hz/1 Ph							Digit 11	Accessory Option N=none			
Digit 9	Electric Heater							Digit 12	Design Change B=Export			



# Model Nomenclature

# Indoor Unit

## High-wall

**M** **W** **W** **5** **1** **8** **G** **M** **N** **A** **N** **B**  
 1 2 3 4 5 6 7 8 9 10 11 12

Digit 1	M=Trane Mini-split System		(For MWW524 only)
Digit 2	W=Heat Pump		1= 220-240 V / 60Hz / 1 Ph
Digit 3	W=Wall Mounted		(For MWW524 only)
Digit 4	5=Flare	Digit 9	Electric Heater
Digit 5, 6	Capacity Code		N=None (Standard)
	09		A=0.5kW electric heater (for
	12		MWW 509 & 512 only)
	18	Digit 10	Controller
	24		A=Wireless controller (as
Digit 7	Design Sequence		standard)
	G=Free configuration		B=Wired controller+Wireless
	variable frequency indoor		control card
	system, with EXV		C=Wired controller
Digit 8	Power Supply	Digit 11	Accessory Option
	M=220-240V/50-60Hz/1Ph		N=None
	(For MWW509, MWW512	Digit 12	Design Change
	and MWW518)		B=Export
	B= 220-240 V / 50Hz / 1 Ph		

Note: All controller options are individual option

## Cassette

**M** **W** **C** **5** **1** **8** **G** **M** **N** **A** **N** **B**  
 1 2 3 4 5 6 7 8 9 10 11 12

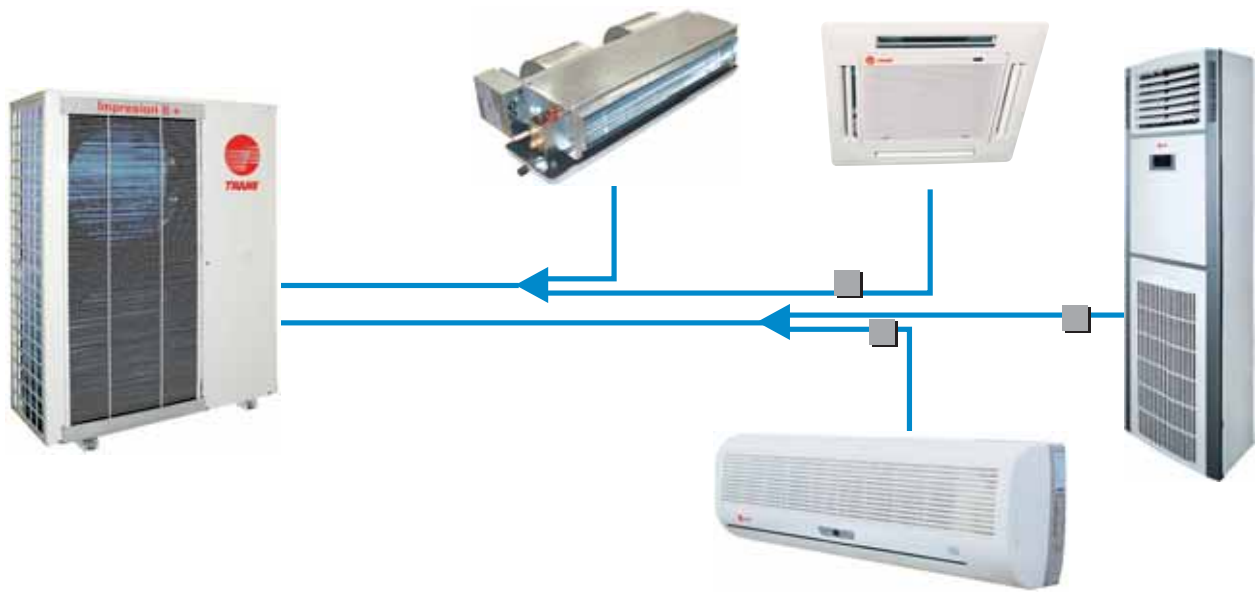
Digit 1	M=Trane Mini-split System	Digit 9	Electric Heater
Digit 2	W=Heat Pump		N=none (Standard)
Digit 3	C=Cassette		F=1.8kW
Digit 4	5=Flare	Digit 10	Controller
Digit 5, 6	Capacity Code		A=Wireless controller (as
	18		standard)
	24		B=Wired controller+Wireless
Digit 7	Design Sequence		control card
	G=Free configuration		C=Wired controller
	variable frequency indoor	Digit 11	Accessory Option
	system, with EXV		N=None
Digit 8	Power Supply	Digit 12	Design Change
	M=220-240 V/50-60Hz/1 Ph		B=Export

Note: All controller options are individual option



# System Configurations

---







# Technical Data

# Outdoor Unit

Outdoor unit		TWF518	TWF524	TWF542	TWF548
Cooling capacity	Kcal/Hr	4820	6790	10750	13080
	Btu/h	19125	26980	42700	51900
	kW	5.6	7.9	12.5	15.2
Heating capacity	Kcal/Hr	6190	8000	13080	16600
	Btu/h	24600	31760	51900	65900
	kW	7.2	9.3	15.2	19.3
Power supply		220~240V/50~60Hz/1Ph			
Compressor	Type	Hermetic frequency inverter			
	Number	1	1	2	2
Outdoor unit power	Cooling (kW)	2.50	2.95	4.57	5.48
	Heating (kW)	2.40	3.02	4.86	5.73
Current	Running (A)	11.5	16.5	25.0	33.0
	Starting (A)	3.0	4.0	7.0	8.0
Fan motor (axis style)	Number	1	1	2	2
	Air flow (m <sup>3</sup> /h)	3,100	3,100	5,500	5,500
Refrigerant	Type	R22			
	Charge (Kg)	3.5	4	3.5+4	4+4
Pipe connection	Gas tube (inch)	5/8"			
	Liquid tube (inch)	3/8"			
Dimensions	Height (mm)	876	876	1,284	1,284
	Width (mm)	422	422	422	422
	Depth (mm)	1,028	1,028	1,028	1,028
Noise	dB(A)	60	60	62.5	62.5
Net weight	kg	84	84	170	180
Capacity coefficient		20~135%			

Note: 1. Cooling operating condition: outdoor dry bulb is 35°C.

2. Heating operating condition: outdoor dry bulb is 7°C, wet bulb is 6°C.

3. Noise test complies with Standard GB/T 18837-2002. Noise data shown in this catalog is lab data, so actual noise level may be different depending on the installation conditions.

4. Test above is based on heatpump parameters; electric heat is not included in the heating capacity.



# Technical Data

# Indoor Unit

## Concealed unit

Indoor unit		MWD509GM	MWD512GM	MWD518GM	MWD524GM
Cooling capacity	Kcal/Hr	2150	3010	4300	5590
	Btu/h	8540	11950	17080	22200
	kW	2.5 (1.5~3.5)	3.5 (2.5~5.0)	5 (3.5~6.5)	6.5 (5.0~7.5)
Heating capacity	Kcal/Hr	2400	3260	4560	5850
	Btu/h	9560	13000	18100	23230
	kW	2.8 (1.5~3.5)	3.8 (2.5~5.0)	5.5 (3.5~7.0)	7.0 (5.0~7.5)
Power supply		220~240V/50~60Hz/1Ph			
Fan motor (four-speed direct drive)	Nominal air flow-high speed (CMH)	730	810	1,350	1,700
	Max static pressure (Pa)	30		50	
	Power (W)	45	45	131	204
	Current (A)	0.2	0.2	0.6	0.9
Noise	dB(A)	40	42.5	49.0	49.5
Shell		Galvanized steel plate			
Dimensions	WxDxH (mm)	806x505x244	920x505x244	1210x505x244	1510x505x244
Duct connection dimensions	WxH (mm)	616x122	730x122	1020x122	1320x122
Weight	kg	18	19	25	28.5
Pipe connection	Gas (inch)	3/8"	1/2"	5/8"	5/8"
	Liquid (inch)	1/4"	1/4"	3/8"	3/8"
	Drain (inch)	3/4" MPT			

## Tall-floor unit

Indoor unit		MWV518GM	MWV524GM
Cooling capacity	Kcal/Hr	4300	5590
	Btu/h	17080	22200
	kW	5 (3.5~6.5)	6.5 (5.0~7.5)
Heating capacity	Kcal/Hr	4560	5850
	Btu/h	18100	23230
	kW	5.5 (3.5~7.0)	7.0 (5.0~7.5)
Power supply		220~240V/50~60Hz/1Ph	
Fan motor	Norminal air flow (CMH)	720	1,150
	Power (W)	30	50
	Current (A)	0.14	0.23
Noise	dB(A)	47	49
Dimensions	WxDxH (mm)	480x280x1723	520x305x1780
Weight	kg	40	47
Pipe connection	Gas (inch)	5/8"	5/8"
	Liquid (inch)	3/8"	3/8"
	Drain (ømm)	18	

- Note: 1. Cooling operating condition: indoor: dry bulb is 27°C, wet bulb is 19°C; Outdoor: dry bulb is 35°C.  
 2. Heating operating condition: indoor: dry bulb is 20°C; Outdoor dry bulb is 7°C, wet bulb is 6°C.  
 3. Noise test complies with Standard GB/T 18837-2002. Noise data shown in this catalog is lab data, so actual noise level may be different depending on the installation conditions.  
 4. Test above is based on parameters of heatpump; electric heat is not included in the heating capacity.  
 5. Nominal air flow is measured when fan runs at high speed and outdoor unit remaining pressure is 0Pa.  
 6. Outside of bracket is indoor unit data when volume coefficient is 100%; inside of bracket is indoor unit capacity range in various volume coefficients.



# Technical Data

# Indoor Unit

## High-wall unit

Indoor unit		MWW509GM	MWW512GM	MWW518GM	MWW524GM
Cooling capacity	Kcal/Hr	2150	3010	4300	5590
	Btu/h	8500	11950	17080	22180
	kW	2.5 (1.5~3.5)	3.5 (2.5~5.0)	5 (3.5~6.5)	6.5 (5.0~7.5)
Heating capacity	Kcal/Hr	2400	3260	4560	6020
	Btu/h	9560	13000	18100	23890
	kW	2.8 (1.5~3.5)	3.8 (2.5~5.0)	5.5 (3.5~7.0)	7.0 (5.0~7.5)
Power supply		220~240V/50~60Hz/1Ph			
Fan motor	Norminal air flow (CMH)	400	530	800	1100
	Power (W)	8	12	30	120
	Current (A)	0.04	0.06	0.14	0.6
Noise	dB(A)	41	44	48	49.5
Shell		White	White	White	White
Dimensions	WxDxH (mm)	788x180x268	886x180x290	1080x197x330	1150x210x350
Weight	kg	8	10	20	23
Pipe connection	Gas (inch)	3/8"	1/2"	5/8"	5/8"
	Liquid (inch)	1/4"	1/4"	3/8"	3/8"
	Drain (ømm)	16	16	18	18

## Cassette unit

Indoor unit		MWC518GM	MWC524GM
Cooling capacity	Kcal/Hr	4300	5590
	Btu/h	17080	22200
	kW	5 (3.5~6.5)	6.5 (5.0~7.5)
Heating capacity	Kcal/Hr	4560	5850
	Btu/h	18100	23230
	kW	5.3 (3.5~7.0)	7.0 (5.0~7.5)
Power supply		220~240V/50~60Hz/1Ph	
Fan motor	Norminal air flow (CMH)	900	1,200
	Power (W)	35	35
	Current (A)	0.16	0.16
Noise	dB(A)	37	46
Panel	Model	TJG-06102	
	Color	Ivory white	
	WxDxH (mm)	950x950x70	
Dimensions	WxDxH (mm)	850x850x313	
Weight	kg	26+6	26+6
Pipe connection	Gas (inch)	5/8"	5/8"
	Liquid (inch)	3/8"	3/8"
	Drain (ømm)	32	32

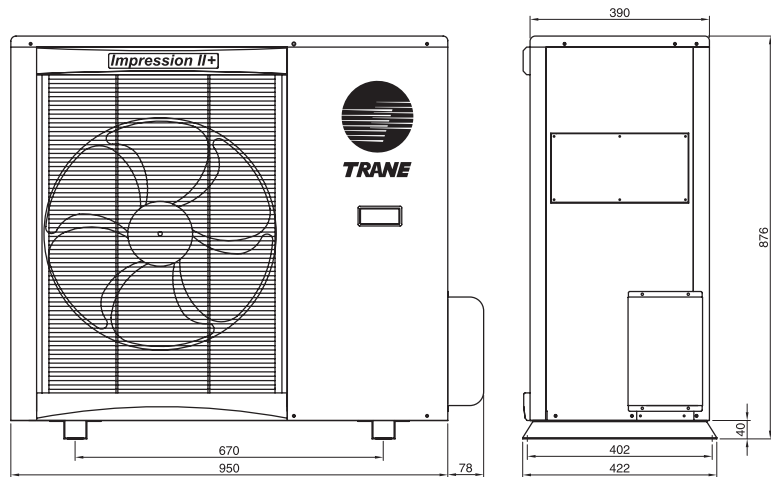
- Note: 1. Cooling operating condition: indoor: dry bulb is 27°C, wet bulb is 19°C, outdoor: dry bulb is 35°C.  
 2. Heating operating condition: indoor: dry bulb is 20°C; outdoor: dry bulb is 7°C, wet bulb is 6°C.  
 3. Noise test complies with Standard GB/T 18837-2002. Noise data shown in this catalog is lab data, so actual noise level may be different depending on the installation conditions.  
 4. Test above is based on heatpump unit parameter; electric heat is not included in the heating capacity.  
 5. Outside of bracket is indoor unit data when volume coefficient is 100%; inside of bracket is indoor unit capacity range in various volume coefficients.

# Unit Dimensions

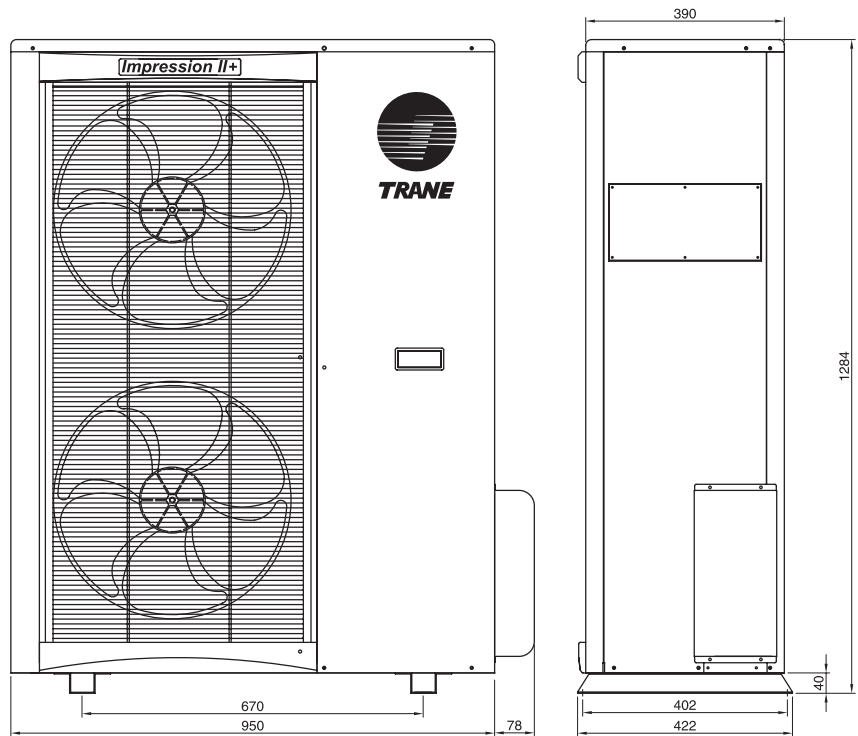
# Outdoor unit

unit: mm

**TWF 518/524**



**TWF 542/548**



# Unit Dimensions

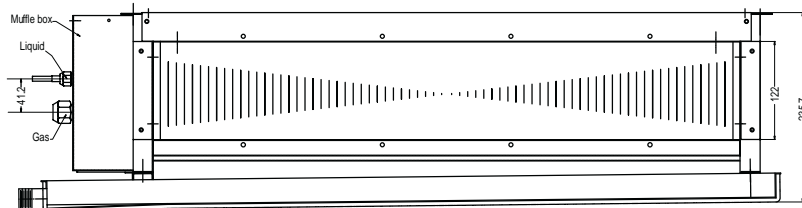
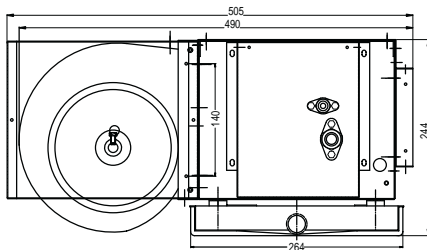
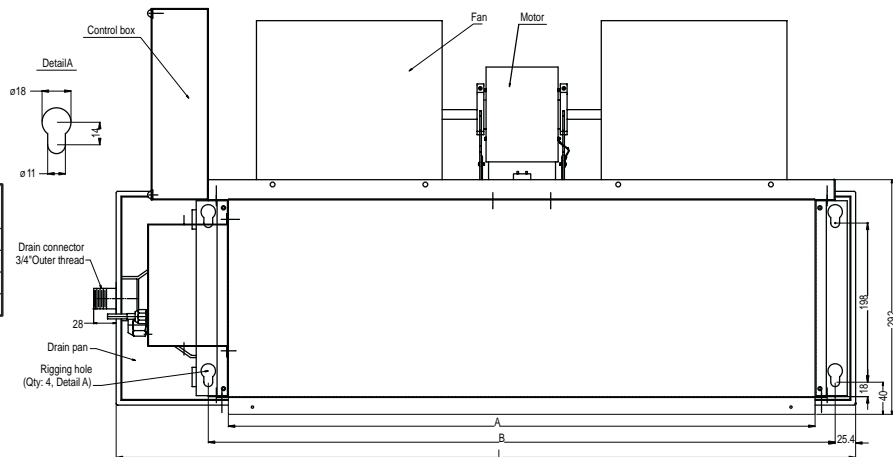
# Indoor unit

Unit: mm

## Concealed Unit

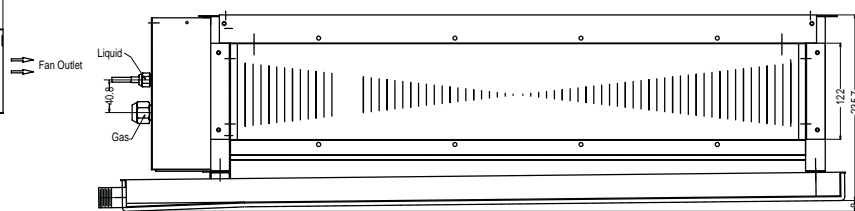
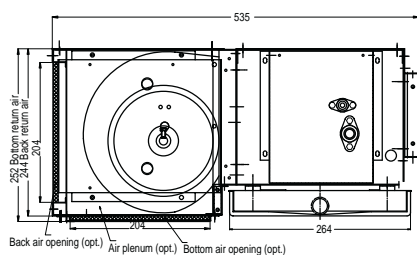
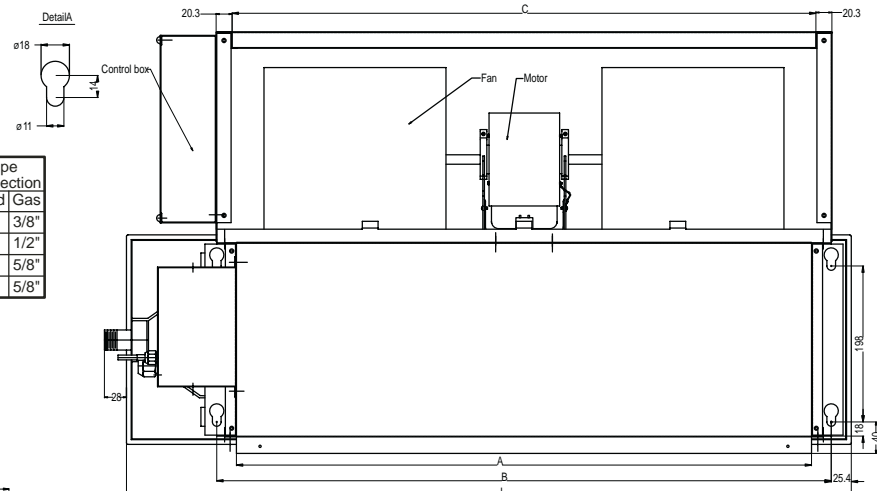
### Main Unit (without plenum) MWD509/512/518/524GM

Model	Dim.			Fan Outlet	Pipe Connection		Weight kg
	L	A	B		Liquid	Gas	
MWD509GM	806	616	666	122x616	1/4"	3/8"	18
MWD512GM	920	730	780	122x730	1/4"	1/2"	19
MWD518GM	1210	1020	1070	122x1020	3/8"	5/8"	25
MWD524GM	1510	1320	1370	122x1320	3/8"	5/8"	28.5



### Main Unit (with plenum) MWD509/512/518/524GM

Model	Dim.			Fan Outlet	Return Air Opening	Pipe Connection	
	L	A	B			Liquid	Gas
MWD509GM	806	616	666	122x616	204x627	1/4"	3/8"
MWD512GM	920	730	780	122x730	204x741	1/4"	1/2"
MWD518GM	1210	1020	1070	122x1020	204x1031	3/8"	5/8"
MWD524GM	1510	1320	1370	122x1320	204x1331	3/8"	5/8"



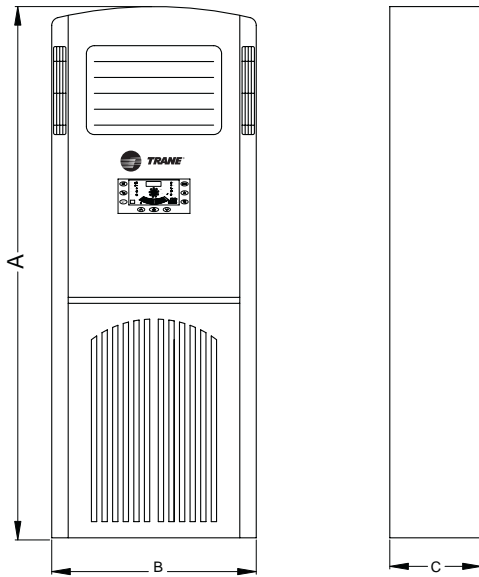


# Unit Dimensions

# Indoor unit

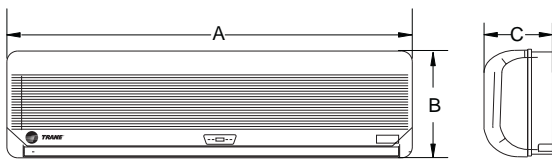
## Tall-floor unit

Unit: mm



Model	MWV518GM	MWV524GM
A	1723	1780
B	480	520
C	280	305

## High-wall unit



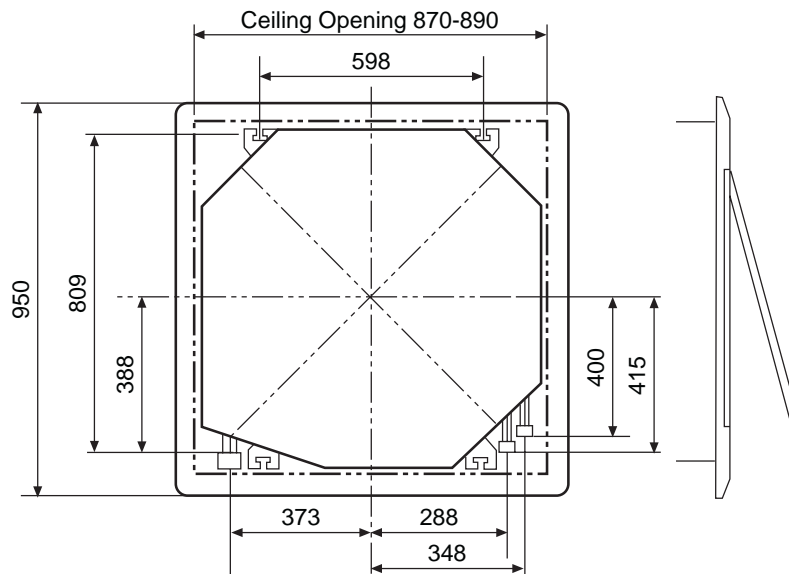
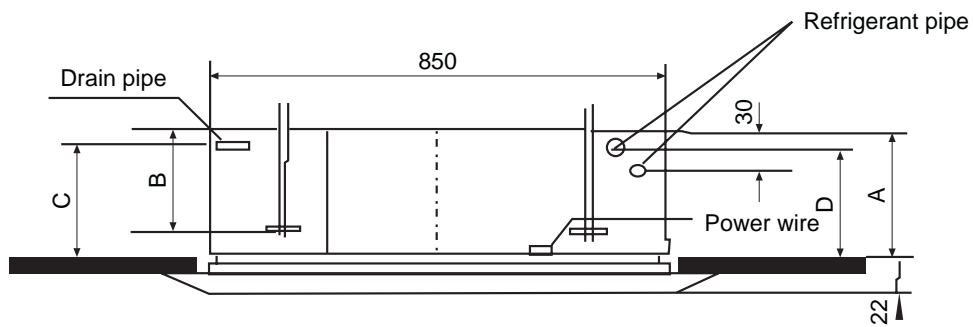
Model	MWW509GM	MWW512GM	MWW518GM	MWW524GM
A	788	886	1080	1150
B	268	290	330	350
C	180	180	197	210

# Unit Dimensions

Indoor unit

## Cassette unit

Unit: mm

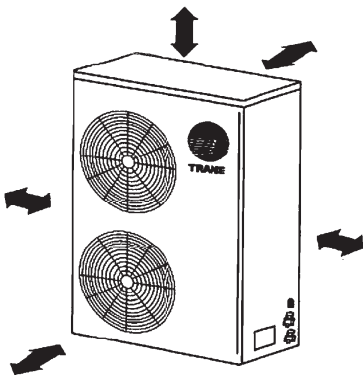


Model	MWC518GM	MWC524GM
In-ceiling unit height mm(A)	313	313
Bracket height mm(B)	161	161
Drain pipe elevation mm(C)	240	240
Refrigerant pipe elevation mm(D)	216	216

# Unit Installation Instruction

## Outdoor unit

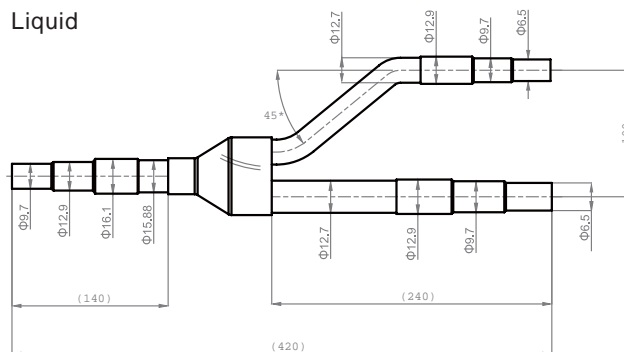
1. Leave enough space (as shown left) to ensure the unit runs normally and has enough service access.
2. For better operation, it is suggested to avoid an installation that exposes the outdoor unit to strong sunlight.
3. Outdoor unit should be installed far away from heat source, steam or flammable gas.
4. Avoid installation in areas which are windy and dusty and areas where the air flow direction face directly to pathways.
5. Ease of maintenance and air flow shall be considered when install the unit. Installation should comply with diagram below (if there is not enough installation space please contact local TRANE office.)



## Refnet joint

1. Incorrect or improper installation of refnet joints may lead to poor performance.
2. Use the following recommended refnet joints with multiple connection sizes. See fig. 1. Size of the refnet joint pipes is dependent on the connection of the indoor units. Cut off those unnecessary parts with proper tool when large connection is required.
3. Refer to fig. 2 for a typical piping layout. It should be noted long piping length can influence the system performance. The below maximum piping lengths should be strictly followed if more than two indoor units will be installed in one circuit.
4. Height difference between indoor units and outdoor units should be less than 10m if outdoor unit is installed under all indoor units.
5. Refnet joint should be horizontally installed and elbows should be avoided within 0.5 meter ahead of or behind the refnet.

### Liquid



### Gas

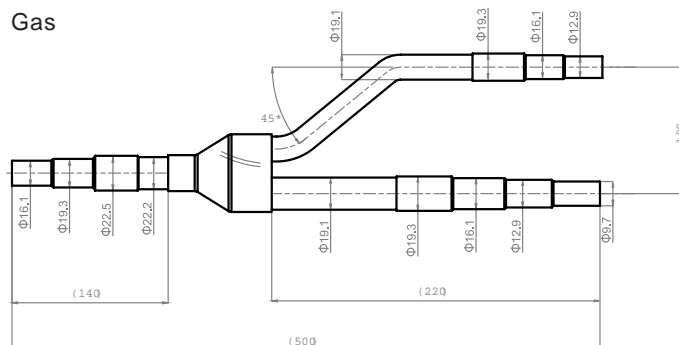


Fig. 1 Refnet joints



# Unit Installation Instruction

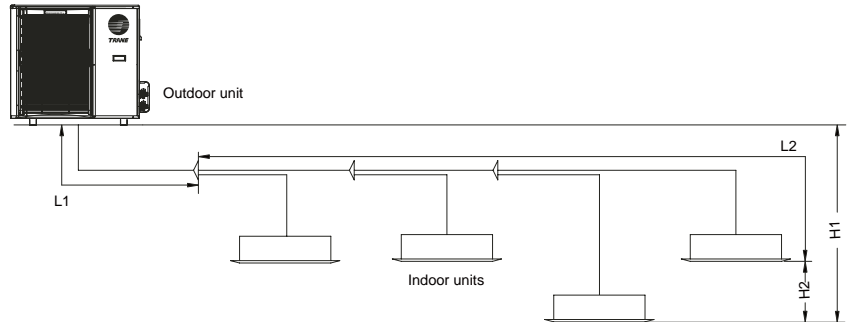


Fig. 2 Piping length and layout

Maximum piping lengths

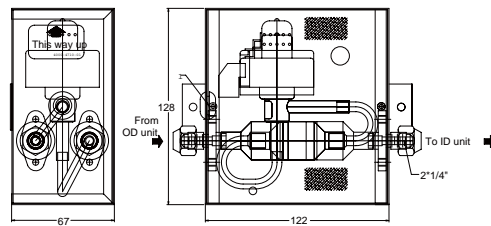
	L	L1	L2	H1	H2
Max. length (m)	60	10	30	15	5

## Electronic expansion valve (EXV) box

1. Each high wall, tall floor or cassette indoor unit will have an separate EXV box. See the dimensional drawings as below:

2. The EXV box should be firmly mounted on the ceiling or wall and connected to the liquid line. Distance between EXV and indoor unit control board should be less than 2m.

3. Installing the unit upside down will result in poor system performance.



# Operating Instruction of Controller

---



Wired controller

## Operating instruction for wired controller:

### Control button:

Switch on/off, operation mode selection, fan speed setting, temperature up/down (time) adjustment (2 pieces), sleep function, auxiliary heating function, quick cooling/heating, priority.

### Liquid crystal displays:

Operation mode, temperature setting, fan speed setting, compressor status, Defrost, sleep, auxiliary heating, quick cooling, quick heating, priority etc.



Wireless control card



## Operating instruction for control panel of the tall-floor unit

### Control button:

Switch on/off, temperature/time conversion, Quick cooling/heating, operation mode selection, timing check and setting, fan speed setting, sleep, lock setting and priority setting.

### Display function:

Priority, sleep, dry mode operation, heating mode or quick heating mode, cooling mode or quick cooling mode, temperature setting, error code, and auxiliary heat etc.

# Operating Instruction for Wireless Controller

---



## Switch on/off:

Press this button to control the starting up and shutting down of the air conditioner.

## Temperature setting:

Press ▲ or ▼ to increase or decrease the current temperature. The temperature can be set within a range of 16°C to 30°C. Temperature cannot be set during fan mode.

## Mode:

Press this button to convert mode as followings: Cool→[Dry]→Fan→[Heat]→[Auto Cool/Heat].

## Fan:

Press this button to convert fan speed as followings: [Auto]→Low→Medium→High. The Auto air mode is not valid in the fan mode and fan speed is low and not adjustable in the dry mode.

## Swing:

Pressing this button for the first time will start this function, press for the second time will stop this function.

## Swing angle:

Press this button to set the angle.

## Sleep:

Pressing this button for the first time will start the sleep function, press for the second time will stop this function.

## Electric heater:

In heat mode, press this button to activate auxiliary heating. Another press of this key can disable this function.

## Priority:

Press this button for the first time: start Priority, press for the second time: stop Priority.

## Quick cooling/heating:

If the system runs in cool mode, press this button to start quick cooling. If the system runs in heat mode, press this button to start quick heating.

## Timer on/off:

Timer on/off is allowed.

## Reset:

Use this button to reset the remote controller.



# Selection Example

## 1. Definition

### Unit capacity code

Outdoor unit model		Capacity code
TWF518		50
TWF524		75
TWF542	SA	50
	SB	75
TWF548	SA	75
	SB	75

### Capacity Coefficient

Capacity Coefficient (CC)=Sum of indoor unit capacity code/outdoor unit capacity code  
 Allowable range of Capacity Coefficient shall be between 20%~135%.

Indoor unit model	Capacity code
509	25
512	35
518	50
524	75

## 2. Selection

### 1) Calculation condition

Design temperature condition

Cooling: ambient dry bulb temperature: 35°CDB

Indoor wet bulb temperature: 21°CWB

### Room load:

Room	A	B	C	D
Cooling load (kW)	2.0	3.0	3.0	4.5

### 2) Indoor unit selection

Room	A	B	C	D
Load	2.0	3.0	3.0	4.5
Unit Size	509	512	512	518
Capacity Code	25	35	35	50

# Selection Example

### 3) Outdoor unit selection

Sum of indoor unit capacity code =  $25 + (35 \times 2) + 50 = 145$

Total capacity code is 145, recommend to select outdoor unit TWF 542 with capacity code of 125(75+50).

TWF 542 is a double compressor system, the capacity code of each system are 50 and 75 respectively.

$A+B=25+35=60$ ,  $60/50=120\%$ , fit to SA system

$C+D=35+50=85$ ,  $85/75=113\%$ , fit to SB system

Indoor/outdoor capacity coefficient between 20%~135% complies with configuration standard.

### 4) Outdoor unit capacity correction

Outdoor unit capacity = rated capacity X correction factor to design temperature condition.

Assume indoor and outdoor unit are configured as below:

Indoor unit: 25, 35, 35, 50

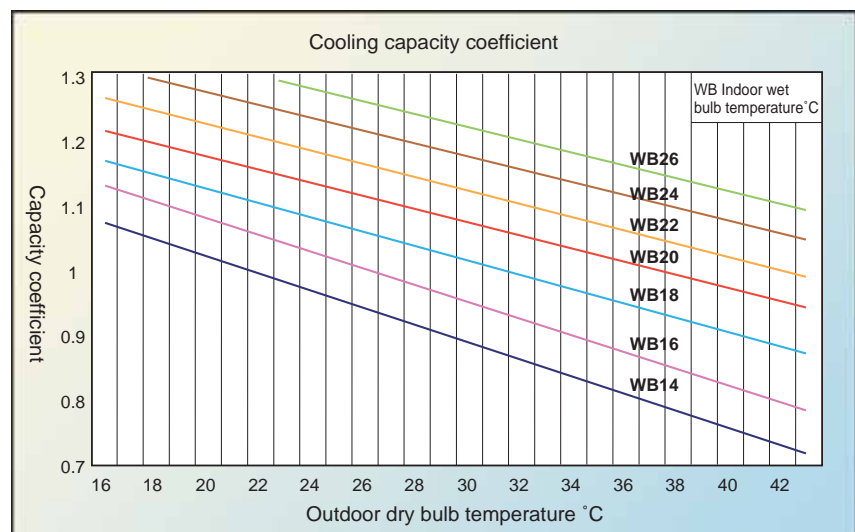
Outdoor unit: TWF542      SA= $50/125 \times 12.5\text{kW} = 5.0\text{kW}$

SB= $75/125 \times 12.5\text{kW} = 7.5\text{kW}$

Cooling capacity correction factor should be checked on design condition. Cooling capacity correction factor is 1.06

TWF542      SA capacity:  $5.0 \times 1.06 = 5.3\text{kW}$

SB capacity:  $7.5 \times 1.06 = 7.95\text{kW}$



Cooling capacity correction factor

# Selection Example

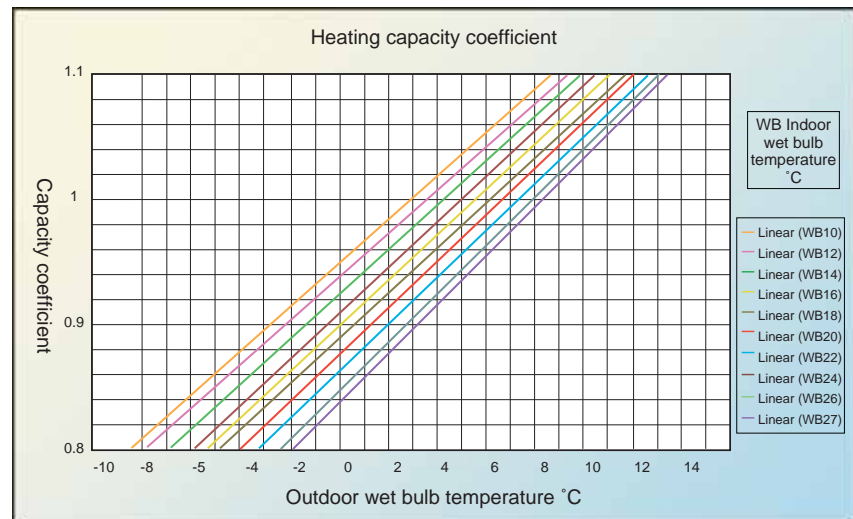
## 5) Indoor unit capacity correction

Each indoor unit operating capacity = outdoor unit operating capacity × indoor unit capacity / sum of indoor unit capacities

Room	A	B	C	D
Load	2.0	3.0	3.0	4.5
Unit Size	509	512	512	518
Capacity Code	25	35	35	50
Operating capacity	2.21	3.09	3.27	4.68

Operating capacity of each indoor unit can fulfill requirements.

## 6) Use the following chart to correct the heating capacity.



Heating capacity correction factor





**Trane**  
**A business of American Standard Companies**  
**[www.trane.com](http://www.trane.com)**

*For more information, contact your local district office*



Literature Order Number SSP-PRC012-EN (July 2007)

---

File Number PL-UN-000-SSP-PRC012-EN-0707

---

Supersedes August 2006

---

Stocking location China

---

Trane has a policy of continuous product and data improvement and reserves the right to change design specifications without notice.