



MITSUBISHI ELECTRIC MULTI AIR CONDITIONERS OPTIONAL PARTS

CMY-Y100VBK2, Y200VBK2, Y300VBK2 Outdoor Twinning Kit Installation Manual

- For your safety, thoroughly read the following instructions prior to installation.

Safety Precautions

- Thoroughly read the following "Safety Precautions" to ensure proper installation.
- Observe the following important safety precautions at all times.
- Hazards that can occur from incorrect handling are classified by the symbols below:

WARNING	Incorrect handling can result in death or serious injury.
CAUTION	Incorrect handling can result in bodily injury and/or structure damage.

WARNING

Only a dealer or qualified technician should perform installation.

- Improper installation may result in refrigerant gas leakage and equipment damage.

Do not make any modifications or alterations. Consult your dealer for repair.

- Improper installation may result in water leakage, electric shock, or fire.

In the event of a refrigerant leak, thoroughly ventilate the room.

- If refrigerant leaks and comes in contact with an open flame, toxic gases will be generated.

Properly install all parts according to the instructions in the Installation Manual.

- If the wrong twinning pipe or wrong size connecting pipe is used, air conditioning performance will suffer.

When installing or relocating the unit, check that no substance other than the specified refrigerant (R410A) enters the refrigerant circuit.

- Any presence of foreign substance or air can cause abnormal pressure rise or explosion.

After installation, check for a refrigerant leak.

- If leaked refrigerant comes in contact with a heat source, such as a fan heater, stove, or electric grill, toxic gases will be generated.

CAUTION

Properly dispose of packing materials.

- Plastic bags can pose suffocation and choking hazards: keep them out of the reach of children. Tear the plastics bags before disposing of them.

Do not touch the refrigerant pipes and refrigerant circuit components with bare hands during and immediately after operation.

- During or immediately after operation, certain parts of the unit such as pipes and compressor may be either very cold or hot, depending on the state of the refrigerant in the unit at the time. To reduce the risk of frostbites and burns, do not touch these parts with bare hands.

* See the Installation Manual that came with the outdoor unit for installation instructions.

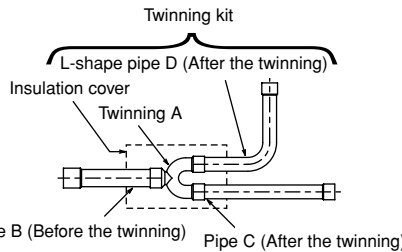
1. Confirming the Package Contents

The following twinning and accessory piping parts are included with the Twinning Kit (CMY-Y100VBK2, CMY-Y200VBK2, and CMY-Y300VBK2). Verify that all items are present before starting installation.

After checking, prepare the twinning kit by connecting the twinning pipes B, C, and D to the twinning pipe A.

*Always use the twinning pipes included in the kit when preparing the twinning kit.

If the field-supplied pipes do not fit the parts in the kit, use the accessory piping parts listed below.



(1) Twinning pipes

Model	Section	Label	Twinning A	Pipe B (Before the twinning)	Pipe C (After the twinning)	L-shape pipe D (After the twinning)	Insulation cover	Instruction
CMY-Y100VBK2	Liquid	A	ID15.88[5/8]×ID12.7[1/2]×ID12.7[1/2]	OD15.88[5/8]-ID15.88[5/8] L83[3-9/32]	OD12.7[1/2]-ID12.7[1/2] L128[5-1/16]	OD12.7[1/2]-ID12.7[1/2]	Small	
	Gas	D	ID28.58[1-1/8]×ID25.4[1]×ID25.4[1]	OD28.58[1-1/8]-ID28.58[1-1/8] L342[13-15/32]	OD25.4[1]-ID22.2[7/8] L190[7-1/2]	OD25.4[1]-ID22.2[7/8]	Large	
CMY-Y200VBK2	Liquid	C	ID19.05[3/4]×ID15.88[5/8]×ID15.88[5/8]	OD19.05[3/4]-ID19.05[3/4] L85[3-3/8]	OD15.88[5/8]-ID15.88[5/8] L123[4-27/32]	OD15.88[5/8]-ID15.88[5/8]	Small	1 (This sheet)
	Gas	B	ID31.75[1-1/4]×ID28.58[1-1/8]×ID28.58[1-1/8]	OD31.75[1-1/4]-ID34.93[1-3/8] L37[13-9/32]	OD28.58[1-1/8]-ID28.58[1-1/8] L192[7-9/16]	OD28.58[1-1/8]-ID28.58[1-1/8]	Large	
CMY-Y300VBK2	Liquid Second row	A (Red)	ID15.88[5/8]×ID12.7[1/2]×ID12.7[1/2]	OD15.88[5/8]-ID19.05[3/4] L85[3-3/8]	OD12.7[1/2]-ID12.7[1/2] L128[5-1/16]	OD12.7[1/2]-ID12.7[1/2]	Small	
	Liquid First row	C (Red)	ID19.05[3/4]×ID15.88[5/8]×ID15.88[5/8]	OD19.05[3/4]-ID19.05[3/4] L85[3-3/8]	OD15.88[5/8]-ID15.88[5/8] L125[4-15/16]	OD15.88[5/8]-ID15.88[5/8]	Small	
	Gas Second row	D (Red)	ID28.58[1-1/8]×ID25.4[1]×ID25.4[1]	OD28.58[1-1/8]-ID34.93[1-3/8] L37[13-9/32]	OD25.4[1]-ID28.58[1-1/8] L192[7-9/16]	OD25.4[1]-ID28.58[1-1/8]	Large	
	Gas First row	B (Red)	ID31.75[1-1/4]×ID28.58[1-1/8]×ID28.58[1-1/8]	OD31.75[1-1/4]-ID38.1[1-1/2] L339[13-3/8]	OD28.58[1-1/8]-ID34.93[1-3/8] L187[7-3/8]	OD28.58[1-1/8]-ID28.58[1-1/8]	Large	

1

③ Three outdoor units

Package unit name	A0	B0	C0	D0	E0	F0	G0	H0	I0
Component unit name	Outdoor unit1	B0	Outdoor unit2	C0	Outdoor unit3	D0	Outdoor unit4	E0	F0
Outdoor Twinning Kit	Liquid	A	F0						
Indoor unit-Twinning pipe2	Gas	B	G0						
Twinning pipe1-Twinning pipe2	Liquid	C	H0						
	Gas	D	I0						
PUHY-++Y(S)HM	P550	P400	P300	P250	CMY-Y300VBK2	ø19.05 [3/4]	ø41.28 [1-5/8] (")	ø19.05 [3/4]	ø34.93 [1-3/8]
P1000	P400	P300	P300						
P1050	P400	P350	P300						
P1100	P400	P350	P350						
P1150	P450	P350	P350						
P1200	P450	P400	P350						
P1250	P450	P450	P350						
EP700	EP300	EP200	EP200						
EP750	EP300	P250	EP200						
EP800	EP300	EP300	EP200						
PUHY-++T(S)HM	P550	P400	P300	P250	CMY-Y300VBK2	ø19.05 [3/4]	ø41.28 [1-5/8] (")	ø19.05 [3/4]	ø34.93 [1-3/8]
P1000	P400	P300	P300						
P1050	P400	P350	P300						
P1100	P400	P350	P350						
P1150	P450	P350	P350						
P1200	P450	P400	P350						
P1250	P450	P450	P350						
P264	P120	P72	P72						
P288	P120	P96	P72						
P312	P120	P120	P72						
PUHY-++Y(S)HMMU	P550	P400	P300	P250	CMY-Y300VBK2	ø19.05 [3/4]	ø41.28 [1-5/8] (")	ø19.05 [3/4]	ø34.93 [1-3/8]
P1000	P400	P300	P300						
P1050	P400	P350	P300						
P1100	P400	P350	P350						
P1150	P450	P350	P350						
P1200	P450	P400	P350						
P1250	P450	P450	P350						
P264	P120	P72	P72						
P288	P120	P96	P72						
P312	P120	P120	P72						
PUHY-++T(S)HMMU	P550	P400	P300	P250	CMY-Y300VBK2	ø19.05 [3/4]	ø41.28 [1-5/8] (")	ø19.05 [3/4]	ø34.93 [1-3/8]
P1000	P400	P300	P300						
P1050	P400	P350	P300						
P1100	P400	P350	P350						
P1150	P450	P350	P350						
P1200	P450	P400	P350						
P1250	P450	P450	P350						
P264	P120	P72	P72						
P288	P120	P96	P72						
P312	P120	P120	P72						
PUHY-++Y(S)HC	P550(AH)	P350	P300	P200	CMY-Y300VBK2	ø19.05 [3/4]	ø41.28 [1-5/8] (")	ø19.05 [3/4]	ø34.93 [1-3/8]
P600(AH)	P350	P300	P250						
P650	P400	P300	P250						
P1000	P400	P300	P300						
P1050	P400	P350	P300						
P1100	P400	P350	P350						
P1150	P400	P400	P350						
P1200	P400	P400	P400						
P1250	P450	P450	P350						

(3) Slope of twinning pipes

Make sure the slope of the twinning pipes are at an angle within $\pm 15^\circ$ to the horizontal plane.

If the slope exceeds the specified angle, the unit may be damaged.

(4) The length of the straight pipe between indoor units and the twinning pipe

Use the pipes supplied in the twinning kit, and make sure the section of the field-supplied pipe that connects to the twinning pipe has at least 500 mm [19-11/16 in] of straight section. (The section of the field-supplied pipe that connects to the twinning pipe must have at least 500 mm [19-11/16 in] of straight section.) If the straight section is less than 500 mm [19-11/16 in], it may result in equipment damage.

(5) Pipe connection

When connecting the twinning kit to the outdoor unit, note the following:

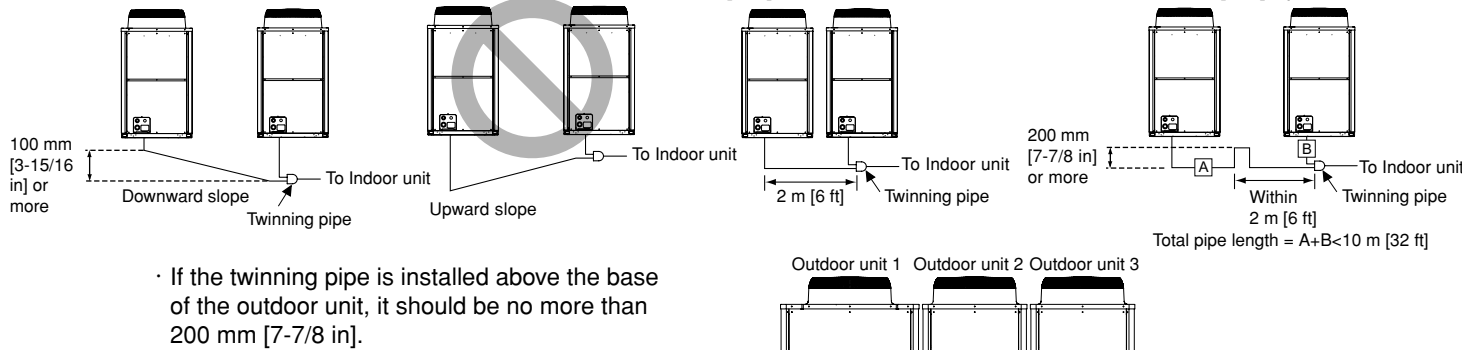
- Make sure the pipes from the twinning pipe to the outdoor unit are sloped downwards (towards the twinning pipes).
- If the piping on the outdoor unit side (from the twinning pipe) exceeds 2 m [6 ft], ensure a trap (gas pipe only) within 2 m [6 ft].

Make sure the height of the trap is 200 mm [7-7/8 in] or more.

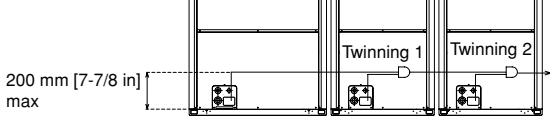
If there is no trap, oil can accumulate inside the pipe, causing a shortage of oil and may damage the compressor.

<2 m [6 ft] or less>

<More than 2 m [6 ft] apart>



- If the twinning pipe is installed above the base of the outdoor unit, it should be no more than 200 mm [7-7/8 in].



3

(2) Accessory piping parts

Model	Section	Supplied pipe			
CMY-Y100VBK2	Liquid	OD12.7[1/2]-ID9.52[3/8] (2)	OD15.88[5/8]-ID12.7[1/2]		
	Gas	OD22.2[7/8]-ID28.58[1-1/8]	OD22.2[7/8]-ID19.05[3/4] (2)		
CMY-Y200VBK2	Liquid	OD15.88[5/8]-ID12.7[1/2] (2)			
	Gas	OD34.93[1-3/8]-ID41.28[1-5/8]			
CMY-Y300VBK2	Liquid	OD12.7[1/2]-ID9.52[3/8]	OD12.7[1/2]-ID15.88[5/8] (2)	OD15.88[5/8]-ID9.52[3/8]	OD15.88[5/8]-ID12.7[1/2]
	Gas	OD28.58[1-1/8]-ID22.2[7/8] (3)	OD38.1[1-1/2]-ID41.28[1-5/8]	OD28.58[1-1/8]-ID19.05[3/4] (2)	OD38.1[1-1/2]-ID34.93[1-3/8]

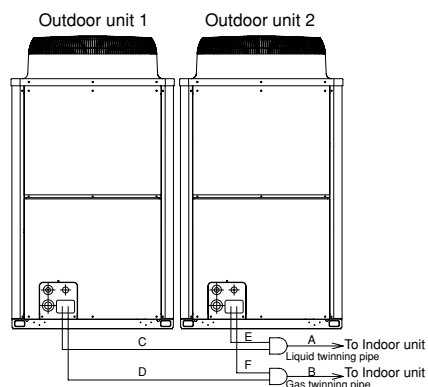
(3) List of field-supplied parts

- Refrigerant pipes other than the ones provided in the kit.
- Heat-resistant insulation material (for field-supplied refrigerant pipes)
- Insulation cover tape

2. Selecting the Correct Size Refrigerant Pipes and Using the Twinning Kit

(1) Two outdoor units

- Field-supply the pipes to be connected to the kit.
- Choose the correct size pipe using the table below. Connect the field-supplied pipe to the twinning kit for the sizes in the table that are marked with an asterisk (*).
- If the pipe was cut with a pipe cutter, remove the burrs and eliminate foreign materials before connecting.



① Two outdoor units

Package unit name		A0					
Component unit name	Outdoor unit 1		B0				
	Outdoor unit 2		C0				
Outdoor Twinning Kit							
Indoor unit-Twinning pipe	Liquid	A	D0				
	Gas	B	E0				
			F0	(Unit: mm(f))			
PUHY-++Y(S)HM	A0	B0	C0	D0	E0	F0	
	P500	P250	P250	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]	
	P550	P300	P250				
	P600	P350	P250				
	P650	P350	P300				
	P700	P350	P350	CMY-Y200VBK2	ø19.05 [3/4]	ø34.93 [1-3/8]	
	P750	P400	P350				
	P800	P450	P350				
	P850	P450	P400				
	P900	P450	P450	CMY-Y100VBK2	ø12.7(1/2)	ø41.28 [1-5/8](*)	
	EP400	EP200	EP200				
	EP450	P250	EP200				
	EP500	EP300	EP200				
	EP550	EP300	P250	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]	
EP600	EP300	EP300					
EP650	P350	EP300					
HP400	HP200	HP200					
HP500	HP250	HP250	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]		
P500	P250	P250					
P550	P300	P250					
P600	P350	P250					
PUHY-++T(S)HM	P650	P350	P300	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]	
	P700	P350	P350				
	P750	P400	P350				
	P800	P450	P400				
	P850	P450	P450	CMY-Y200VBK2	ø19.05 [3/4]	ø34.93 [1-3/8]	
	P900	P450	P450				
	P144	P72	P72				
	P168	P96	P72				
	P192	P120	P72	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]	
	P216	P120	P96				
	P240	P120	P120				
	P144	P72	P72				
	PUHY-++T(S)HMM	P168	P96	P72	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]
		P192	P120	P72			
P216		P120	P96				
P240		P120	P120				
HP144		HP72	HP72	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]	
HP192		HP96	HP96				
HP400		HP200	HP200				
HP500		HP250	HP250				
P450(A4)		P250	P250	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]	
P500		P300	P250				
P550		P350	P250				
P600		P350	P250				
PUHY-++Y(S)HCC		P650	P350	P300	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]
		P700	P350	P350			
	P750	P400	P350				
	P800	P400	P400				
	P850	P450	P400	CMY-Y200VBK2	ø19.05 [3/4]	ø34.93 [1-3/8]	
	P900	P450	P450				
	P144	P72	P72				
	P168	P96	P72				
	P192	P120	P72	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]	
	P216	P120	P96				
	P240	P120	P120				
	HP144	HP72	HP72				
	HP192	HP96	HP96	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]	
	HP400	HP200	HP200				
HP500	HP250	HP250					
P450(A4)	P250	P250					
P500	P300	P250	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]		
P550	P350	P250					
P600	P350	P250					
P650	P350	P300					
P700	P350	P350	CMY-Y200VBK2	ø19.05 [3/4]	ø34.93 [1-3/8]		
P750	P400	P350					
P800	P400	P400					
P850	P450	P400					
P900	P450	P450	CMY-Y200VBK2	ø19.05 [3/4]	ø41.28 [1-5/8](*)		
P144	P72	P72					
P168	P96	P72					
P192	P120	P72					
P216	P120	P96	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]		
P240	P120	P120					
HP144	HP72	HP72					
HP192	HP96	HP96					
HP400	HP200	HP200	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]		
HP500	HP250	HP250					
P450(A4)	P250	P250					
P500	P300	P250					
P550	P350	P250	CMY-Y100VBK2	ø15.88 [5/8]	ø28.58 [1-1/8]		
P600	P350	P250					
P650	P350	P300					
P700	P350	P350					
P750	P400	P350	CMY-Y200VBK2	ø19.05 [3/4]	ø34.93 [1-3/8]		
P800	P400	P400					
P850	P450	P400					
P900	P450	P450					