

Job Name:

Schedule Reference:

Date:



OUTDOOR VRF HEAT PUMP SYSTEM

ACCESSORIES

- Twinning Kit ... (Required - sold separately) CMY-Y100CBK3
- T-Branch Joint (≤ 72,000 Btu/h) CMY-Y102SS-G2
- T-Branch Joint (73,000 - 144,000 Btu/h) CMY-Y102LS-G2
- T-Branch Joint (145,000 - 234,000 Btu/h) CMY-Y202S-G2
- Header - 4 Branch (Capacity: ≤ 72,000 Btu/h) CMY-Y104C-G
- Header - 8 Branch (Capacity: ≤ 144,000 Btu/h) CMY-Y108C-G
- Header - 10 Branch (Capacity: ≤ 234,000 Btu/h) CMY-Y1010C-G

UNIT OPTION

- Standard Model.....PQHY-P144TSLMU-A1

Specifications		System	Module 1	Module 2
Unit Type		PQHY-P144TSLMU-A1	PQHY-P72TLMU-A1	PQHY-P72TLMU-A1
Nominal Cooling Capacity	Btu/h	144,000	72,700	72,700
Nominal Heating Capacity	Btu/h	160,000	80,000	80,000
External Dimensions (H x W x D)	In. / mm	Refer to Module Data	43-5/16 x 34-11/16 x 21-11/16 / 1,100 x 880 x 550	43-5/16 x 34-11/16 x 21-11/16 / 1,100 x 880 x 550
Net Weight	Lbs. / kg	768/ 348	384/174	384/174
Electrical Power Requirements	Voltage, Phase, Hertz	Refer to Module Data**	208/230V, 3-phase, 60Hz	
Cooling Power Input	kW	7.11	Refer to System Data	
Heating Power Input	kW	7.45		
Cooling Current (208/230V)	A	25.1 / 22.7	Refer to System Data	
Heating Current (208/230V)	A	24.3 / 22.0		
Minimum Circuit Amp. (MCA)** (*)	A	Refer to Module Data**	13 / 12**	13 / 12**
Maximum Fuse Size**	A	Refer to Module Data**	20 / 20**	20 / 20**
Circulating Water (quality must meet regulations)				
Flow Rate	GPM / L/s	50.8 / 3.2	25.4 / 1.6	25.4 / 1.6
Pressure Drop	psi	6.9	3.48	3.48
Operation Volume Range	GPM / L/s	26.4 - 63.4 / 1.6 - 4	13.2 - 31.7 / 0.8 - 2	13.2-31.7 / 0.8 - 2
Maximum Water Pressure	MPa / psi	4 / 580	2 / 290	2 / 290
Water-source Connections (Each for Inlet and Outlet)	In.	Refer to Module Data**	NPT1-1/2 Screw (Install strainer (more than 50 meshes) at water inlet piping of the unit)	
Piping Diameter				
From Twinning Kit to Indoor Units (Brazed) (In. / mm)	Liquid (High Pressure)	1/2 / 12.7	Refer to System Data	
	Gas (Low Pressure)	1-1/8 / 28.58		
From Modules to Twinning Kit (Brazed) (In. / mm)	Liquid (High Pressure)	Refer to Module Data	3/8 / 9.52	3/8 / 9.52
	Gas (Low Pressure)	Refer to Module Data	3/4 / 19.05	3/4 / 19.05
Indoor Unit	Total Capacity	50 to 130% of WSUs	Refer to System Data	
	Model / Quantity	P06 ~ P96 / 1 to 31		
Sound Pressure Levels	dB(A)	49	46	46
Compressor Operating Range		12 - 100%	Refer to System Data	
Compressor Type x Quantity			Inverter-driven Scroll Hermetic x 1	Inverter-driven Scroll Hermetic x 1
Compressor Motor Output	kW	Refer to Module Data	4.5	4.5
Compressor Crankcase Heater	kW		-	-
Refrigerant		Refer to Module Data	R410A	
Lubricant			MEL32	
High-pressure Protection Device			601 psi / 4.15 MPa	601 psi / 4.15 MPa
Compressor / Fan Protection Device		Refer to Module Data	Overheat Protection	Overheat Protection
Inverter Protection Device			Overheat / Overcurrent Protection	Overheat / Overcurrent Protection

** Each individual modulerequires a separate electrical connection. Reference electrical data for each individual module.

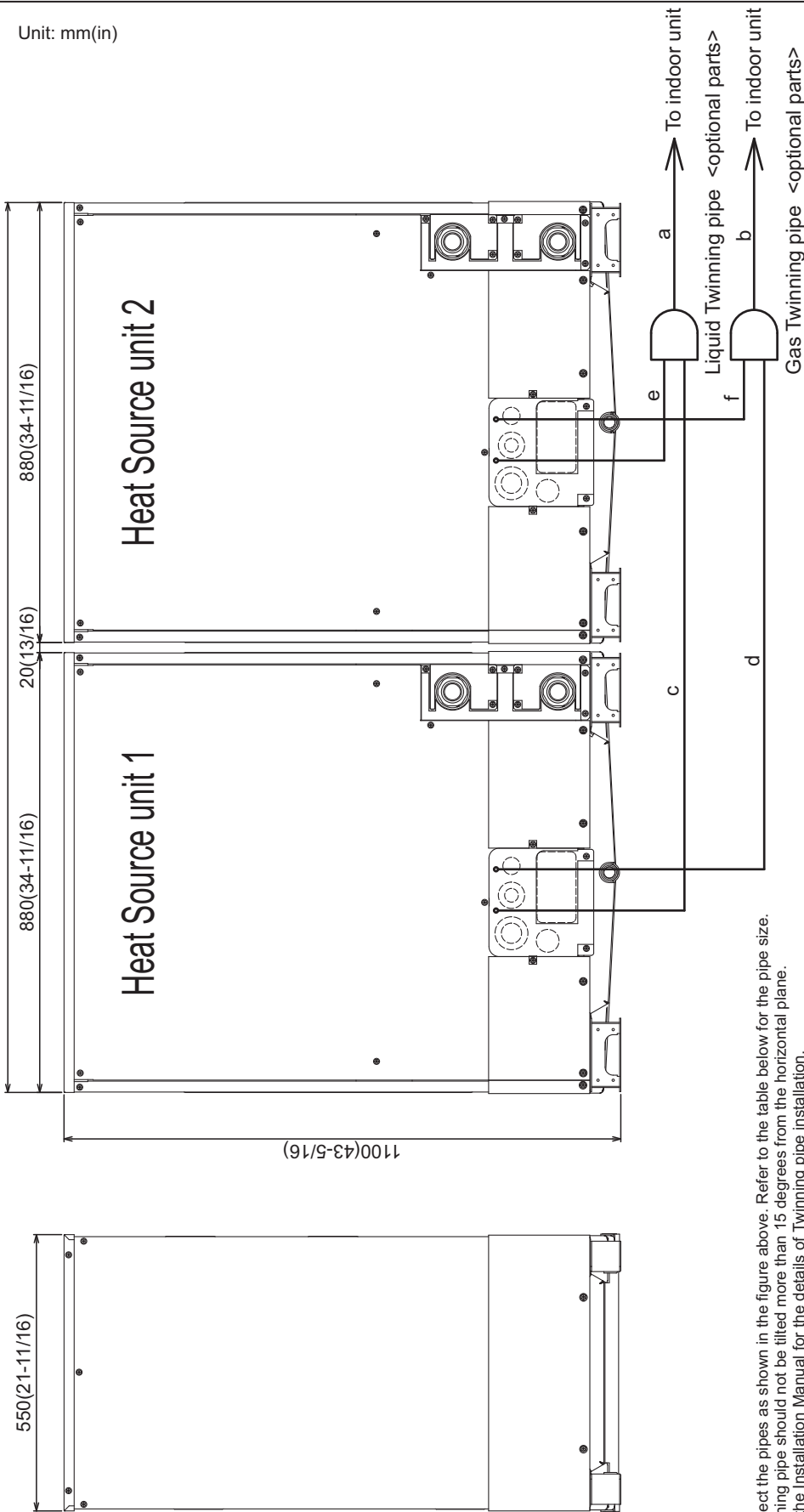
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Note: Mitsubishi Electric (MESCA) supports the use of only MESCA supplied and approved accessories for proper functioning of the unit(s). Use of non-MESCA supported accessories will affect warranty coverage.



* All electrical work shall comply with National (CEC) and local codes and regulations.

Unit: mm(in)



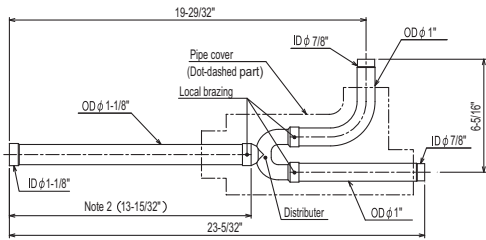
- Note 1. Connect the pipes as shown in the figure above. Refer to the table below for the pipe size.
2. Twinning pipe should not be tilted more than 15 degrees from the horizontal plane.
3. See the Installation Manual for the details of Twinning pipe installation.
4. The pipe section before the Twinning pipe (sections "a" and "b" in the figure) must have at least 500mm(19-11/16) of straight section (*including the straight pipe that is supplied with the Twinning pipe).
5. Only use the Twinning pipe by Mitsubishi (optional parts).

Twinning pipe connection size

Package unit name	PQHY-P144TSLMU-A1	PQHY-P168TSLMU-A1	PQHY-P192TSLMU-A1	PQHY-P216TSLMU-A1	PQHY-P240TSLMU-A1
Heat Source unit 1	PQHY-P72TLMU-A1	PQHY-P96TLMU-A1	PQHY-P120TLMU-A1	PQHY-P120TLMU-A1	PQHY-P120TLMU-A1
Heat Source unit 2	PQHY-P72TLMU-A1	PQHY-P96TLMU-A1	PQHY-P120TLMU-A1	PQHY-P96TLMU-A1	PQHY-P120TLMU-A1
Twinning pipe Kit(optional parts)	CMY-Y100CBK3				
Indoor unit-Twinning pipe	Liquid a	ø12.7(1/2)		ø15.88(5/8)	
	Gas b		ø28.58(1-1/8)		
Twinning pipe-Heat Source unit 1	Liquid c	ø9.52(3/8)		ø12.7(1/2)	
	Gas d	ø19.05(3/4)		ø22.2(7/8)	
Twinning pipe-Heat Source unit 2	Liquid e	ø9.52(3/8)		ø12.7(1/2)	
	Gas f	ø19.05(3/4)		ø22.2(7/8)	

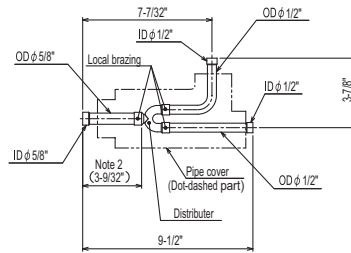
CMY-Y100CBK3

For Gas pipe:

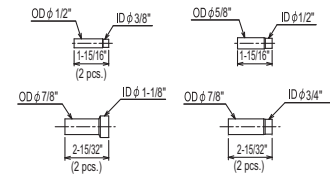


ID: Inner Diameter OD: Outer Diameter

For Liquid pipe:

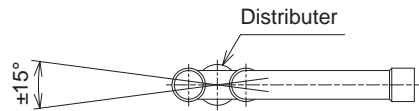


<Reducer(Accessory)>



in.

Note 1. Reference the attitude angle of the branch pipe below the fig.

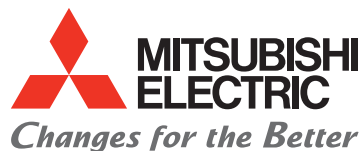


The angle of the branch pipe for high pressure is within $\pm 15^\circ$ against the horizontal plane.

2. Use the attached pipe to braze the port-opening of the distributor
3. Pipe diameter is indicated by inside diameter
4. Only use the Twinning pipe by Mitsubishi (optional parts)

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Notes:



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