

Job Name:

Schedule Reference:

Date:

**UNIT OPTION**

Standard Model PUHY-P408TSNU-A1

Seacoast (BS) Model PUHY-P408TSNU-A1-BS

Minimum Operating Temperature

Heating (Outdoor): -25°F (-32°C) WB

Below -22°F (-30°C) WB, an auxiliary heating source is highly recommended.

ACCESSORIES

Snow/Wind Guards - (See separate submittal)

Panel Heater - (PAC-PH02EHYU-E) (x3)

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

Outdoor Model				PUHY-P408TSNU-A1 (-BS)			
Indoor Model				Non-Ducted		Ducted	
Power source				3-phase 3-wire 208-230 V ±10% 60 Hz			
Cooling capacity *1 (Nominal)			BTU/h	408,000			
			kW	119.6			
(208-230)			Power input	35.79			
			Current input	110.3-99.8			
(Rated)			BTU/h	390,000			
			kW	114.3			
(208-230)			Power input	41.87		38.69	
			Current input	129.1-116.7		119.3-107.9	
Temp. range of cooling		Indoor	W.B.	59~75°F (15~24°C)			
		Outdoor	D.B.	23~126°F (-5~52°C)			
Heating capacity *2 (Nominal)			BTU/h	455,000			
			kW	133.4			
(208-230)			Power input	38.94			
			Current input	120.0-108.6			
(Rated)			BTU/h	433,000			
			kW	126.0			
(208-230)			Power input	36.50		34.97	
			Current input	112.5-101.8		107.8-97.5	
Temp. range of heating *3		Indoor	D.B.	59~81°F (15~27°C)			
		Outdoor	W.B.	-13~60°F (-25~15.5°C)			
Indoor unit		Total capacity		50~130% of outdoor unit capacity			
connectable		Model/Quantity		P04~P96/3~50			
Sound power level (measured in anechoic room) *4			dB <A>	87.0/88.0			
Refrigerant		Liquid pipe	in. (mm)	3/4 (19.05) Brazed			
piping diameter		Gas pipe	in. (mm)	1-5/8 (41.28) Brazed			

Set Model

Model			PUHY-P144TNU-A1 (-BS)	PUHY-P144TNU-A1 (-BS)	PUHY-P120TNU-A1 (-BS)
Minimum Circuit Ampacity (*)		A	60-55	60-55	50-46
Maximum Overcurrent Protection (*)		A	100-90	100-90	80-70
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Airflow rate	cfm	9,200	9,200	7,750
		m3/min	260	260	220
	Control, Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor
	Motor output	kW	0.46+0.46	0.46+0.46	0.46+0.46
	*5 External static press.		0 in.WG (0 Pa)	0 in.WG (0 Pa)	0 in.WG (0 Pa)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	9.6 x 1	9.6 x 1	7.7 x 1
	Case heater	kW	0.045	0.045	0.045
	Lubricant		MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) <MUNSELL 3Y 7.8/1.1 or similar>
External dimension H x W x D		in.	71-5/8 x 48-7/8 x 29-3/16	71-5/8 x 48-7/8 x 29-3/16	71-5/8 x 48-7/8 x 29-3/16
		mm	1,818 x 1,240 x 740	1,818 x 1,240 x 740	1,818 x 1,240 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	Over-current protection
	Fan motor		-	-	-
Refrigerant	Type x original charge		R410A x 23 lbs + 12 oz (10.8 kg)	R410A x 23 lbs + 12 oz (10.8 kg)	R410A x 21 lbs + 9 oz (9.8 kg)
	Control		LEV and HIC circuit		
Net weight		lbs (kg)	649 (294)	649 (294)	605 (274)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure
Pipe between unit and distributor	Liquid pipe	in. (mm)	1/2 (12.7) Brazed	1/2 (12.7) Brazed	1/2 (12.7) Brazed
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)		
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2		
			Joint: CMY-Y102SS/102LS-G2, CMY-Y202S/302S-G2		
			Header: CMY-Y104/108/1010C-G		

Notes:

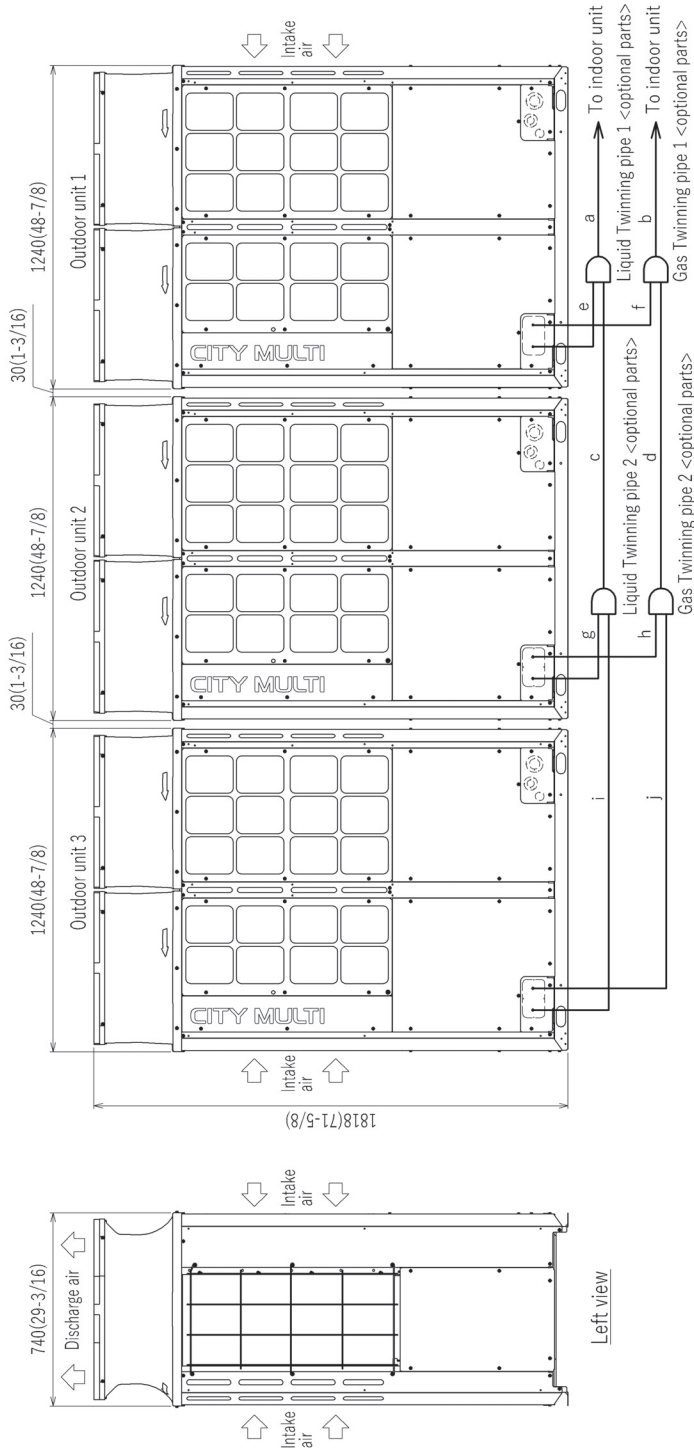
- Nominal cooling conditions (Test conditions are based on AHRI 1230)
Indoor: 80°F DB, 67°F WB, (26.7°C DB, 19.4°C WB), Outdoor: 95°F DB, (35°C DB)
 - Nominal heating conditions (Test conditions are based on AHRI 1230)
Indoor: 70°F DB, (21.1°C DB), Outdoor: 47°F DB, 43°F WB, (8.3°C DB, 6.1°C WB)
 - When applying product below -4°F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.
 - Cooling mode/Heating mode
 - External static pressure option is available (0.12 in. WG, 0.24 in. WG, 0.32 in. WG/30 Pa, 60 Pa, 80 Pa).
- * Due to continuing improvement, above specifications may be subject to change without notice.

Specifications are subject to change without notice.

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

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Module: PUHY-P408TSNU-A1(-BS) - DIMENSIONS



Twinning pipe connection size

Package unit name	(E)P336T/YSNU	(E)P360T/YSNU	(E)P384T/YSNU	(E)P408T/YSNU	(E)P432T/YSNU
Outdoor unit 1	(E)P120T/YNU	(E)P120T/YNU	(E)P144T/YNU	(E)P144T/YNU	(E)P144T/YNU
Outdoor unit 2	(E)P120T/YNU	(E)P120T/YNU	(E)P120T/YNU	(E)P144T/YNU	(E)P144T/YNU
Outdoor unit 3	(E)P96T/YNU	(E)P120T/YNU	(E)P120T/YNU	(E)P120T/YNU	(E)P144T/YNU
Outdoor Twinning Kit(optional parts)	CMY-Y300CBK2	CMY-Y300CBK2	CMY-Y300CBK2	CMY-Y300CBK2	CMY-Y300CBK2
Indoor unit					
~Twinning pipe 1	Liquid a	φ 19.05(3/4)	φ 19.05(3/4)	φ 19.05(3/4)	φ 19.05(3/4)
~Twinning pipe 1	Gas b	φ 41.28(1-5/8)	φ 41.28(1-5/8)	φ 41.28(1-5/8)	φ 41.28(1-5/8)
~Twinning pipe 2	Liquid c	φ 19.05(3/4)	φ 19.05(3/4)	φ 19.05(3/4)	φ 19.05(3/4)
~Twinning pipe 2	Gas d	φ 34.93(1-3/8)	φ 34.93(1-3/8)	φ 34.93(1-3/8)	φ 34.93(1-3/8)
~Twinning pipe 1	Liquid e	φ 12.7(1/2)	φ 12.7(1/2)	φ 12.7(1/2)	φ 12.7(1/2)
~Outdoor unit 1	Gas f	φ 28.58(1-1/8)	φ 28.58(1-1/8)	φ 28.58(1-1/8)	φ 28.58(1-1/8)
~Twinning pipe 2	Liquid g	φ 12.7(1/2)	φ 12.7(1/2)	φ 12.7(1/2)	φ 12.7(1/2)
~Outdoor unit 2	Gas h	φ 28.58(1-1/8)	φ 28.58(1-1/8)	φ 28.58(1-1/8)	φ 28.58(1-1/8)
~Twinning pipe 2	Liquid i	φ 9.52(3/8)	φ 12.7(1/2)	φ 12.7(1/2)	φ 12.7(1/2)
~Outdoor unit 3	Gas j	φ 22.2(7/8)	φ 28.58(1-1/8)	φ 28.58(1-1/8)	φ 28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes must be installed horizontally using a level vessel.

Be sure to see the Installation Manual for details of Twinning pipe installation.

3. The pipe section before the "twinning pipe (section "a", "b", "c" and "d" 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).

4. Only use the Twinning pipe by Mitsubishi (optional parts).

Unit: mm (in.)

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Module: PUHY-P120_144TNU-A1(-BS) - DIMENSIONS

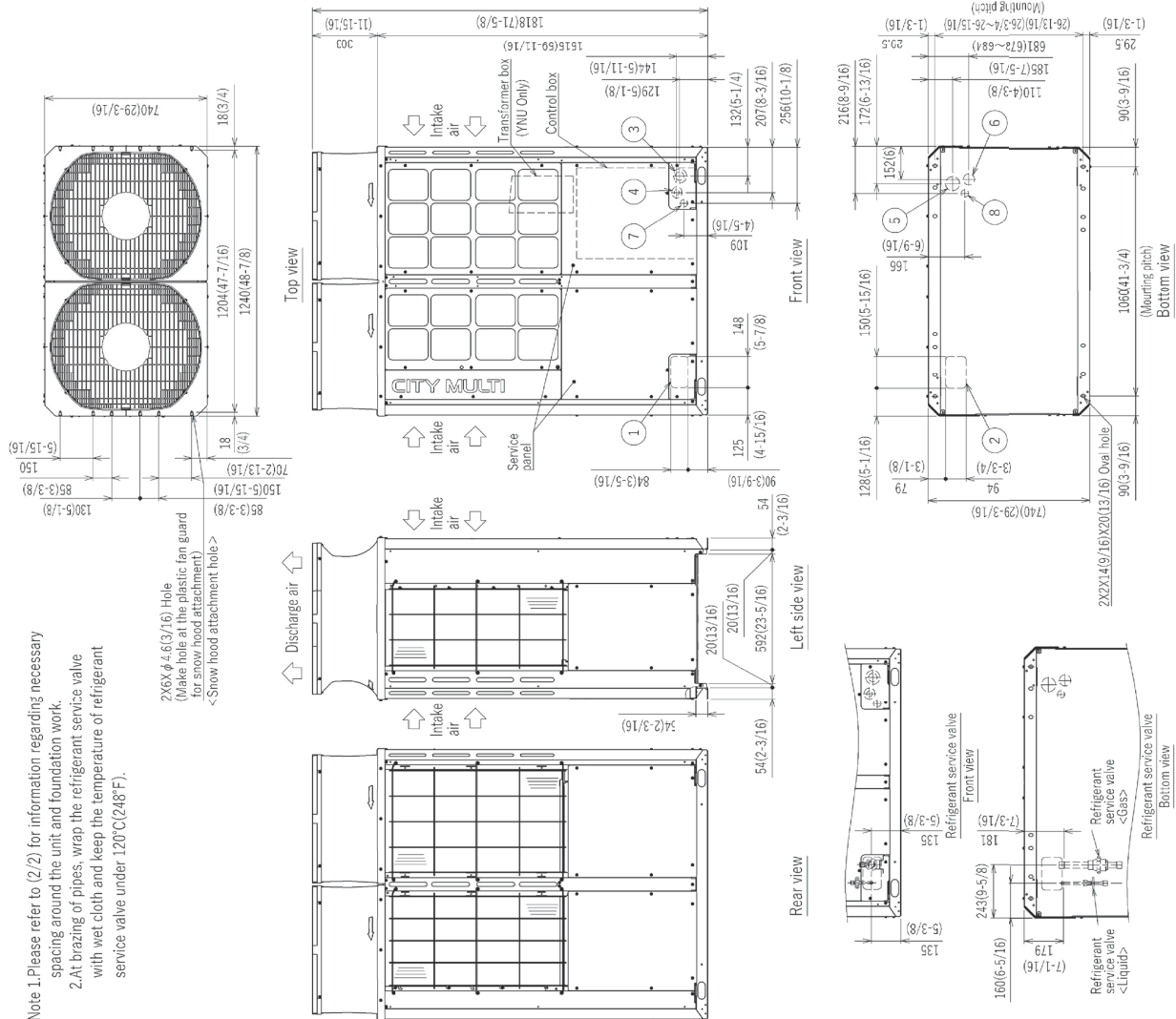
Unit: mm (in.)

Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe *1		Service valve	
	Liquid	Gas	Liquid	Gas
(E)P96	φ 9.52(3/8)	φ 22.2(7/8)	Brazed	φ 12.7(1/2)
(E)P96	φ 12.7(1/2)	φ 22.2(7/8)	Brazed	φ 12.7(1/2)
(E)P120	φ 9.52(3/8)	φ 28.58(1-1/8)	Brazed	φ 12.7(1/2)
(E)P120	φ 12.7(1/2)	φ 28.58(1-1/8)	Brazed	φ 12.7(1/2)
(E)P144	φ 12.7(1/2)	φ 28.58(1-1/8)	Brazed	φ 12.7(1/2)

- *1 Connect the refrigerant pipe to the service valve according to the Installation Manual.
- *2 Indicates dimensions and connection specifications in the case the unit is used in combination with other outdoor units.
- *3 Furthest piping length (OU from IU) ≧ 90m (295ft)
- *4 Furthest piping length (OU from IU) ≧ 40m (131ft)

No.	Usage	Specifications
①	For pipes	Front through hole 148(5-7/8) X 84(3-5/16) Knockout hole
②		Bottom through hole 150(5-15/16) X 94(3-3/4) Knockout hole
③		Front through hole 162(7-1/2) or 164(6-5/8) Knockout hole
④	For wires	Front through hole 148(5-7/8) X 84(3-5/16) Knockout hole
⑤		Bottom through hole 165(6-9/16) Knockout hole
⑥		Front through hole 148(5-7/8) X 84(3-5/16) Knockout hole
⑦	For transmission cables	Front through hole 148(5-7/8) X 84(3-5/16) Knockout hole
⑧		Bottom through hole 150(5-15/16) X 94(3-3/4) Knockout hole



Note 1. Please refer to (2/2) for information regarding necessary spacing around the unit and foundation work.
 2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C(248°F).

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