

Job Name:

Schedule Reference:

Date:

**UNIT OPTION**

Standard Model PUHY-EP312TSNU-A1

Seacoast (BS) Model PUHY-EP312TSNU-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-PH01EHYU-E) (x1)

Panel Heater - (PAC-PH02EHYU-E) (x2)

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-EP312TSNU-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	312,000			
				kW			91.4
(208-230)	Power input	kW	24.33				
			Current input	A	75.0-67.8		
	(Rated)	BTU/h			298,000		
			kW	87.3			
Power input	kW	29.62		27.65			
		(208-230)	Current input	A	91.3-82.6	85.2-77.1	
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	350,000			
				kW			102.6
(208-230)	Power input	kW	27.37				
			Current input	A	84.4-76.3		
	(Rated)	BTU/h			334,000		
			kW	97.9			
Power input	kW	25.35		25.02			
		(208-230)	Current input	A	78.1-70.7	77.1-69.7	
Temp. range of heating					Indoor	D.B.	59~81°F (15~27°C)
		Outdoor	W.B.	-13~60°F (-25~15.5°C)			
Indoor unit connectable			Total capacity		50~130% of outdoor unit capacity		
			Model/Quantity		P04~P96/2~50		
Sound power level (measured in anechoic room) *3			dB <A>		83.5/85.0		
Refrigerant piping diameter		Liquid pipe	in. (mm)	3/4 (19.05) Brazed			
		Gas pipe	in. (mm)	1-3/8 (34.93) Brazed			

Set Model

Model		PUHY-EP120TNU-A1 (-BS)	PUHY-EP120TNU-A1 (-BS)	PUHY-EP72TNU-A1 (-BS)
Minimum Circuit Ampacity (*)		A	55-49	55-49
Maximum Overcurrent Protection (*)		A	90-80	90-80
FAN	Type x Quantity	Propeller fan x 2	Propeller fan x 2	Propeller fan x 1
	Airflow rate	cfm	7,750	7,750
		m3/min	220	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
	*4 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	7.4 x 1	7.4 x 1
	Case heater	kW	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
		mm	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 21 lbs + 9 oz (9.8 kg)	R410A x 21 lbs + 9 oz (9.8 kg)
		Control	LEV and HIC circuit	LEV and HIC circuit
Net weight		lbs (kg)	633 (287)	633 (287)
Heat exchanger		Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium 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) Braze	1/2 (12.7) Braze
	Gas pipe	in. (mm)	1-1/8 (28.58) Braze	1-1/8 (28.58) Braze
Defrosting method		Auto-defrost mode (Reversed refrigerant cycle)	Auto-defrost mode (Reversed refrigerant cycle)	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	Outdoor Twinning kit: CMY-Y300CBK2 Joint: CMY-Y102SS/102LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010C-G	Outdoor Twinning kit: CMY-Y300CBK2 Joint: CMY-Y102SS/102LS-G2, CMY-Y202S/302S-G2 Header: CMY-Y104/108/1010C-G

Notes:

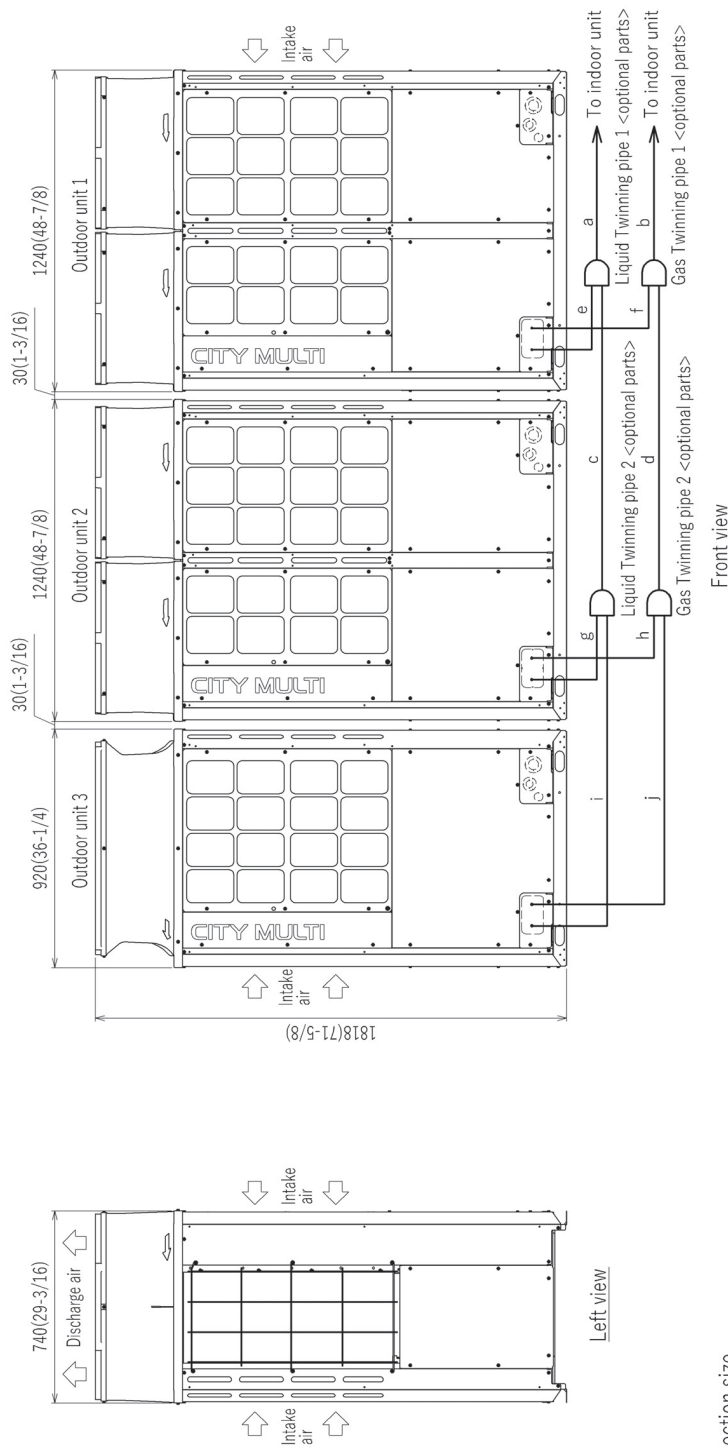
- Cooling conditions (Test conditions are based on AHRI 1230)
Indoor: 80°F DB/67°F WB, (26.7°C DB/19.4°C WB), Outdoor: 95°F DB, (35°C DB)
- Heating conditions (Test conditions are based on AHRI 1230)
Indoor: 70°F DB, (21.1°C DB), Outdoor: 47°F DB/43°F WB, (8.3°C DB/6.1°C WB)
- Cooling mode/Heating mode
- External static pressure option is available (0.12 in.WG, 0.24 in.WG/30 Pa, 60 Pa, 80 Pa).

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-EP312TSNU-A1(-BS) - DIMENSIONS



Twinning pipe connection size

Package unit name	(E)P264T/YSNU	(E)P288T/YSNU	(E)P312T/YSNU
Outdoor unit 1	(E)P96T/YSNU	(E)P120T/YSNU	(E)P120T/YSNU
Component unit name	(E)P96T/YSNU	(E)P96T/YSNU	(E)P120T/YSNU
Outdoor unit 2	(E)P96T/YSNU	(E)P96T/YSNU	(E)P120T/YSNU
Outdoor unit 3	(E)P96T/YSNU	(E)P96T/YSNU	(E)P120T/YSNU
Outdoor Twinning Kit(optional parts)	CMY-Y300CBK2	CMY-Y300CBK2	CMY-Y300CBK2
Indoor unit			
~Twinning pipe 1	a	φ 19.05(3/4)	φ 19.05(3/4)
Gas	b	φ 34.93(1-3/8)	φ 34.93(1-3/8)
~Twinning pipe 2	c	φ 19.05(3/4)	φ 19.05(3/4)
Liquid	d	φ 34.93(1-3/8)	φ 34.93(1-3/8)
~Twinning pipe 1	e	φ 12.7(1/2)	φ 12.7(1/2)
Liquid	f	φ 28.58(1-1/8)	φ 28.58(1-1/8)
~Outdoor unit 1	g	φ 9.52(3/8)	φ 12.7(1/2)
Gas	h	φ 22.2(7/8)	φ 22.2(7/8)
~Outdoor unit 2	i	φ 9.52(3/8)	φ 9.52(3/8)
Liquid	j	φ 22.2(7/8)	φ 22.2(7/8)
~Outdoor unit 3			

- 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.)

Module: PUHY-EP72TNU-A1(-BS) - DIMENSIONS

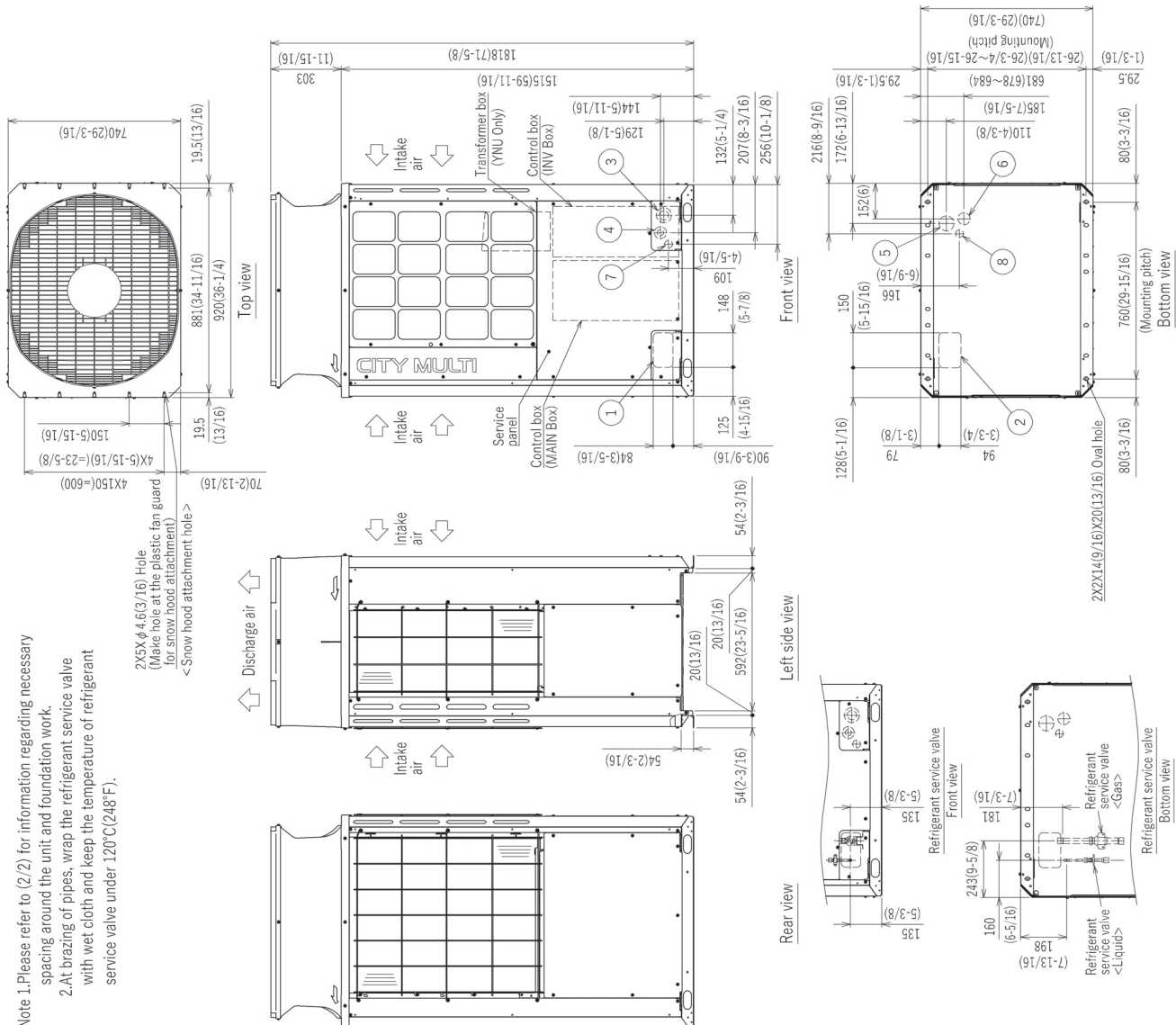
Unit: mm (in.)

Connecting pipe specifications

Model	Refrigerant pipe *1		Diameter	
	Liquid	Gas	Gas	Liquid
(E)P72	φ9.52(3/8)	Brazed	φ22.2(7/8)	φ9.52(3/8)
				φ22.2(7/8)

*1 Connect the refrigerant pipe to the service valve according to the Installation Manual.

NO.	Usage	Specifications
①	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	φ62.7(2-1/2) or φ34.5(1-3/8) Knockout hole
④	Front through hole	φ43.7(1-3/4) or φ22.2(7/8) Knockout hole
⑤	Bottom through hole	φ65(2-9/16) Knockout hole
⑥	Bottom through hole	φ52(2-1/16) Knockout hole
⑦	Front through hole	φ34(1-3/8) Knockout hole
⑧	Bottom through hole	φ34(1-3/8) 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).

Module: PUHY-EP120TNU-A1(-BS) - DIMENSIONS

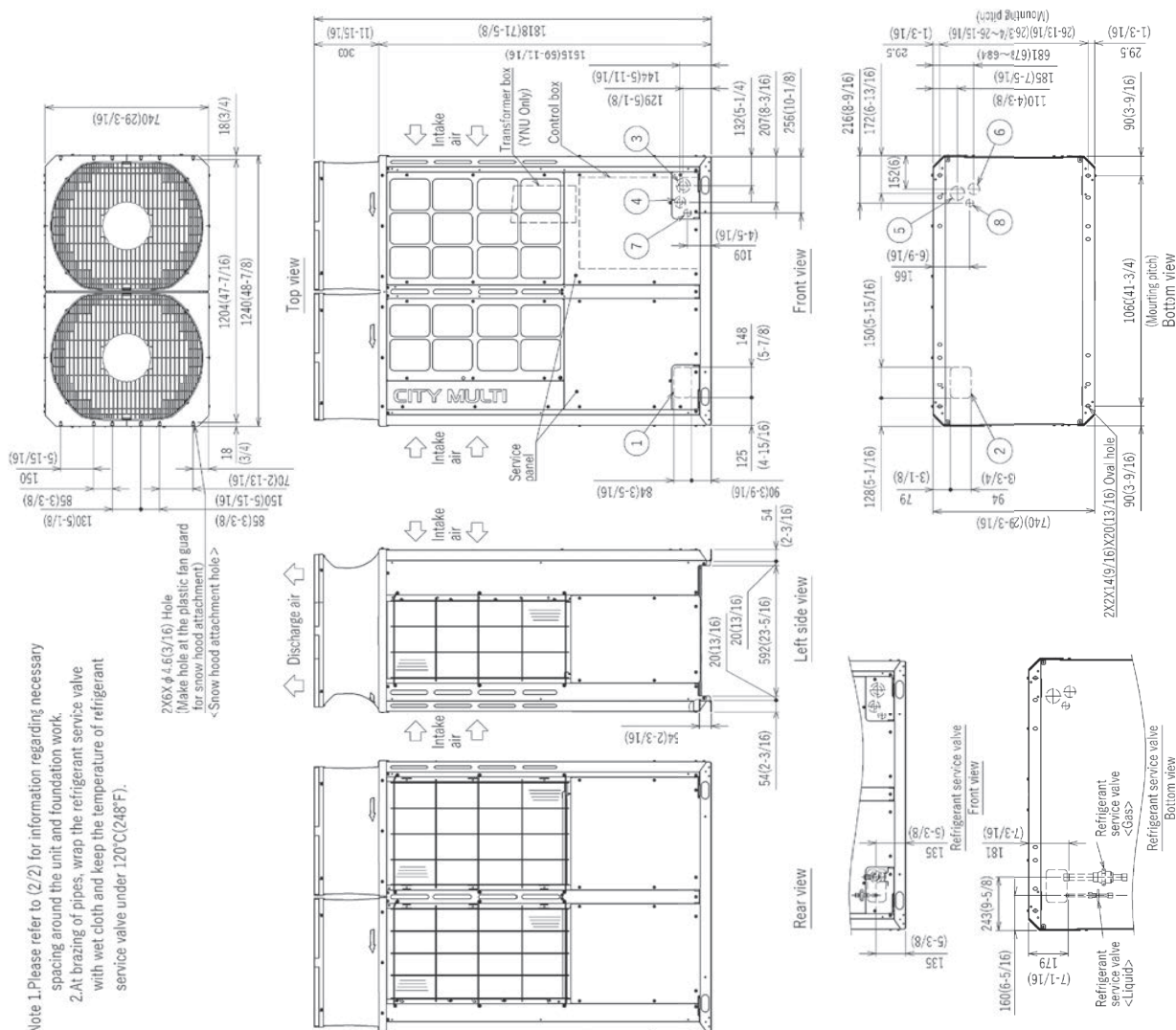
Unit: mm (in.)

Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe *1		Service valve	
	Liquid	Gas	Liquid	Gas
(E)P96	φ52(3/8)	φ22(7/8)	Brazed	φ12.7(1/2)
(E)P96	φ12.7(1/2)	φ22(7/8)	Brazed	φ28.58(1-1/8)
(E)P120	φ52(3/8)	φ22(7/8)	Brazed	φ12.7(1/2)
(E)P120	φ12.7(1/2)	φ28.58(1-1/8)	Brazed	φ28.58(1-1/8)
(E)P144	φ12.7(1/2)	φ28.58(1-1/8)	Brazed	φ12.7(1/2)
(E)P144	φ12.7(1/2)	φ28.58(1-1/8)	Brazed	φ28.58(1-1/8)

- *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(3-1/5)
②	For pipes	Bottom through hole 150(5-15/16) X 94(3-3/4)
③	For pipes	Front through hole 150(5-15/16) X 94(3-3/4)
④	For pipes	Bottom through hole 150(5-15/16) X 94(3-3/4)
⑤	For wires	Front through hole 148(5-7/8) X 84(3-1/5)
⑥	For wires	Bottom through hole 150(5-15/16) X 94(3-3/4)
⑦	For transmission cables	Front through hole 148(5-7/8) X 84(3-1/5)
⑧	For transmission cables	Bottom through hole 150(5-15/16) X 94(3-3/4)



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