

Job Name:

Schedule Reference:

Date:

**UNIT OPTION**

Standard Model PUHY-P312TSNU-A1

Seacoast (BS) Model PUHY-P312TSNU-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-P312TSNU-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	
	Power input	kW	25.98
	(208-230) Current input	A	80.1-72.4
	(Rated)	BTU/h	298,000
(208-230)	kW	87.3	
	Power input	kW	30.88
	Current input	A	95.2-86.1
	(Rated)	BTU/h	298,000
	kW	87.3	
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	
	Power input	kW	28.28
	(208-230) Current input	A	87.2-78.8
	(Rated)	BTU/h	334,000
(208-230)	kW	97.9	
	Power input	kW	26.42
	Current input	A	81.4-73.6
	(Rated)	BTU/h	334,000
	kW	97.9	
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 connectable	Total capacity	50~130% of outdoor unit capacity	
	Model/Quantity	P04~P96/2~50	
Sound power level (measured in anechoic room) *4		84.0/85.0	
Refrigerant	Liquid pipe	in. (mm)	3/4 (19.05) Braze
	Gas pipe	in. (mm)	1-3/8 (34.93) Braze

Set Model

Model		PUHY-P120TNU-A1 (-BS)	PUHY-P120TNU-A1 (-BS)	PUHY-P72TNU-A1 (-BS)
Minimum Circuit Ampacity (*)		A	50-46	29-26
Maximum Overcurrent Protection (*)		A	80-70	45-40
FAN	Type x Quantity	Propeller fan x 2		Propeller fan x 1
	Airflow rate	cfm	7,750	6,000
		m3/min	220	170
	Control, Driving mechanism	Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor
	Motor output	kW	0.46+0.46	0.92
Compressor	*5 External static press.	0 in.WG (0 Pa)		0 in.WG (0 Pa)
	Type x Quantity	Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1
	Starting method	Inverter		Inverter
	Motor output	kW	7.7 x 1	3.8 x 1
	Case heater	kW	0.045	0.035
External finish	Lubricant	MEL32		MEL32
	Pre-coated galvanized steel sheet (+powder coating for -BS type)	<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>
		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>
		<MUNSELL 3Y 7.8/1.1 or similar>		<MUNSELL 3Y 7.8/1.1 or similar>
		<MUNSELL 3Y 7.8/1.1 or similar>		<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 36-1/4 x 29-3/16
	mm	1,818 x 1,240 x 740	1,818 x 1,240 x 740	1,818 x 920 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)
	Inverter circuit (COMP./FAN)	Over-current protection		Over-current protection
	Fan motor	-		-
Refrigerant	Type x original charge	R410A x 21 lbs + 9 oz (9.8 kg)		R410A x 14 lbs + 5 oz (6.5 kg)
	Control	LEV and HIC circuit		LEV and HIC circuit
Net weight		lbs (kg)	605 (274)	470 (213)
Heat exchanger		Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube
HIC circuit (HIC: Heat Inter-Change)		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	3/8 (9.52) Braze
	Gas pipe	in. (mm)	1-1/8 (28.58) Braze	7/8 (22.2) Braze
Defrosting method		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		

Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
- Nominal heating conditions (Test conditions are based on AHRI 1230)
Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)
- 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.

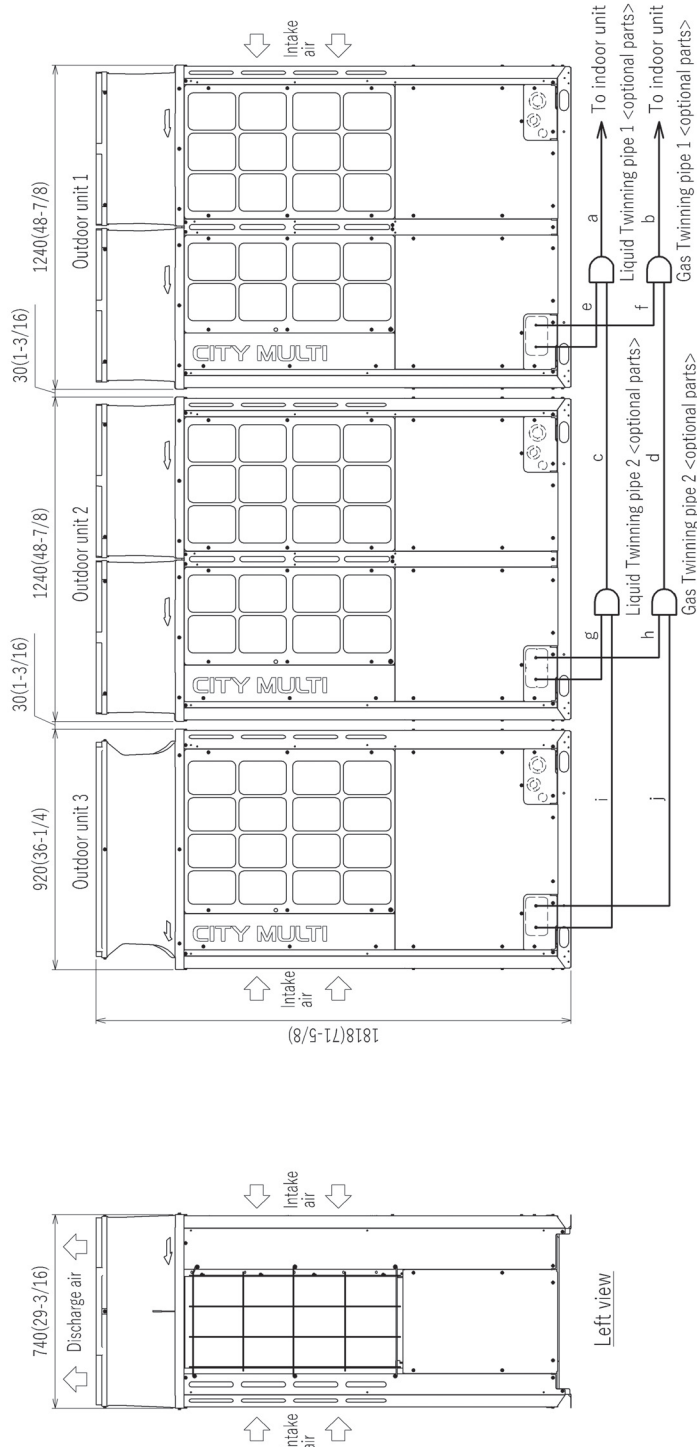
Specifications are subject to change without notice.

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

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Module: PUHY-P312TSNU-A1(-BS) - DIMENSIONS

Unit: mm (in.)



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
Outdoor unit 2	(E)P96T/YSNU	(E)P120T/YSNU	(E)P120T/YSNU
Outdoor unit 3	(E)P72T/YSNU	(E)P72T/YSNU	(E)P72T/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)
~Twinning pipe 2	b	φ 34.93 (1-3/8)	φ 34.93 (1-3/8)
~Twinning pipe 1	c	φ 19.05 (3/4)	φ 19.05 (3/4)
~Twinning pipe 2	d	φ 34.93 (1-3/8)	φ 34.93 (1-3/8)
~Twinning pipe 1	e	φ 9.52 (3/8)	φ 12.7 (1/2)
~Outdoor unit 1	f	φ 22.2 (7/8)	φ 28.58 (1-1/8)
~Twinning pipe 2	g	φ 9.52 (3/8)	φ 12.7 (1/2)
~Outdoor unit 2	h	φ 22.2 (7/8)	φ 28.58 (1-1/8)
~Twinning pipe 2	i	φ 9.52 (3/8)	φ 9.52 (3/8)
~Outdoor unit 3	j	φ 22.2 (7/8)	φ 22.2 (7/8)

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

Note 2. Twinning pipes must be installed horizontally using a level vessel.
Be sure to see the Installation Manual for details of Twinning pipe installation.

Note 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).

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

Module: PUHY-P72TNU-A1(-BS) - DIMENSIONS

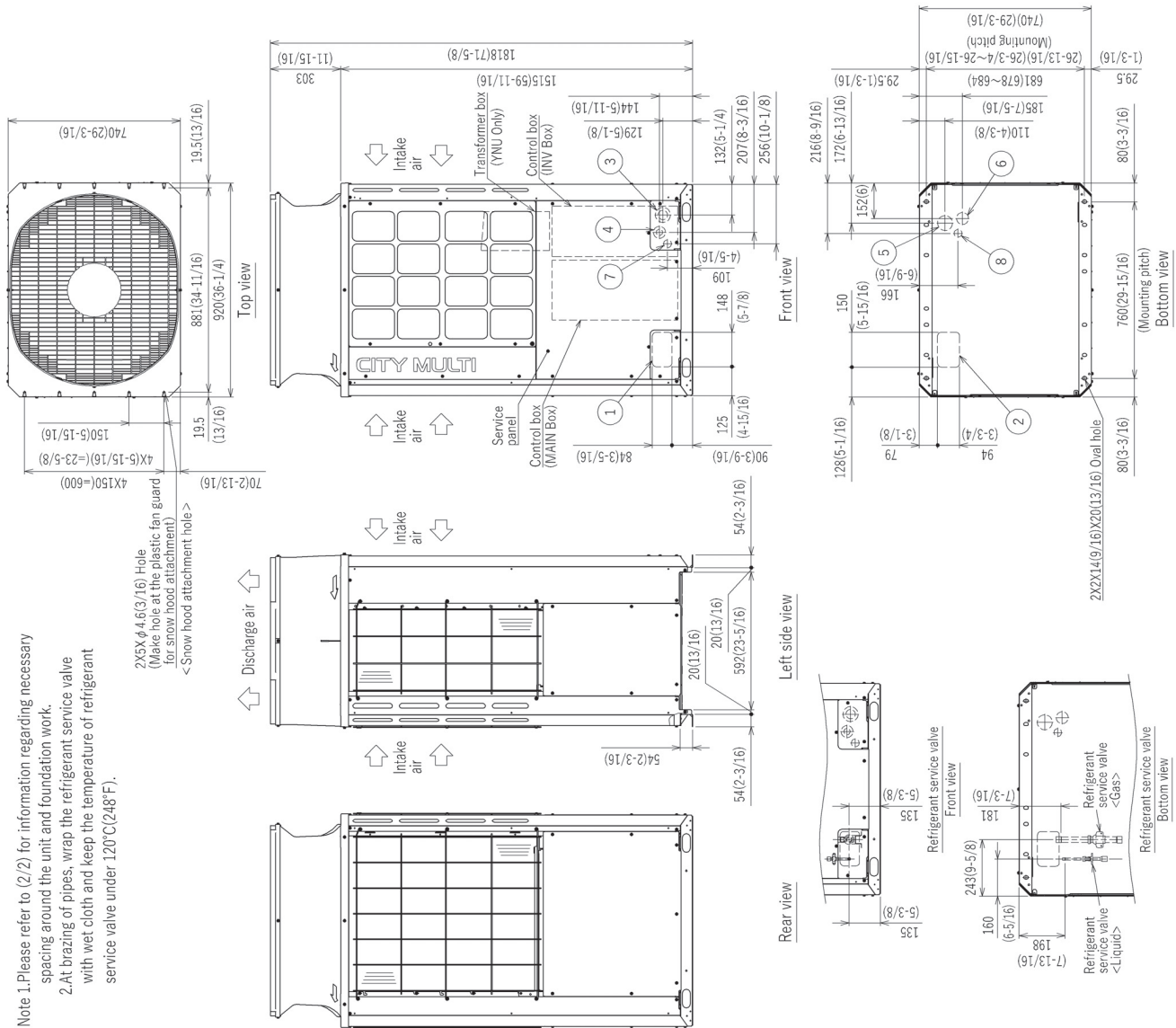
Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe *1		Service valve	
	Liquid	Gas	Liquid	Gas
(E)P72	φ9.52(3/8)	Brazed	φ22.2(7/8)	Brazed
			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	140(5-7/8) X 84(3-5/16) Knockout hole
②	For pipes	Bottom through hole 150(5-15/16) X 94(3-3/4) Knockout hole
③	Front through hole	$\phi 27.1(1-1/4)$ or $\phi 34.5(1-3/8)$ Knockout hole
④	For wires	Front through hole $\phi 42.7(1-3/2)$ or $\phi 22.7(1-7/8)$ Knockout hole
⑤	Bottom through hole	$\phi 55.2(9-1/16)$ Knockout hole
⑥	Bottom through hole	$\phi 52.2(2-1/16)$ Knockout hole
⑦	Front through hole	$\phi 34(1-3/8)$ Knockout hole
⑧	For transmission cables	Bottom through hole $\phi 34(1-3/8)$ Knockout hole

Unit: mm (in.)



Specifications are subject to change without notice.

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Module: PUHY-P120TNU-A1(-BS) - DIMENSIONS

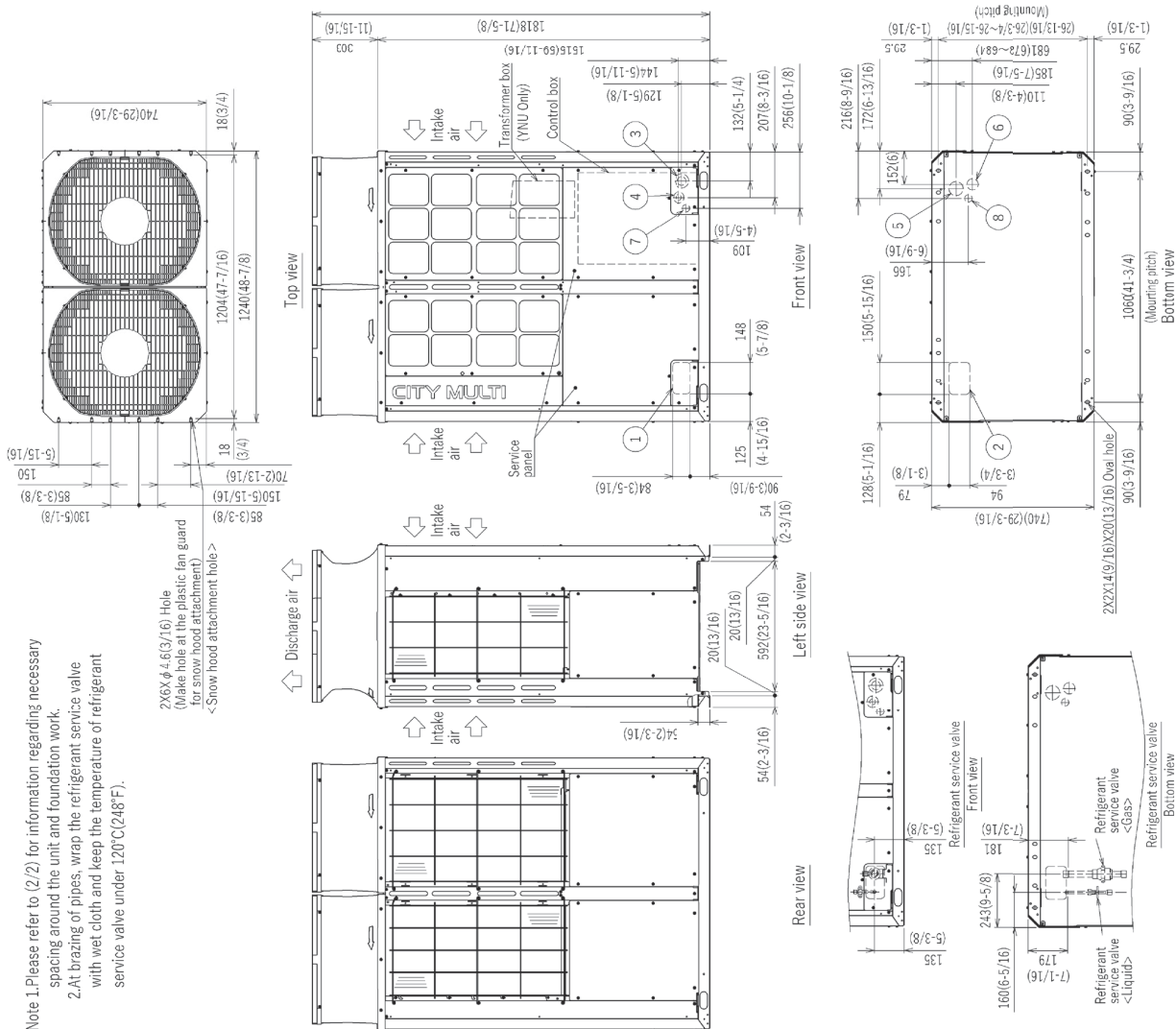
Unit: mm (in.)

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 165(6-9/16) 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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