

Job Name:

Schedule Reference:

Date:



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)

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-HP144TSNU-A1	
Indoor Model			Non-Ducted	Ducted
Power source			3-phase 3-wire 208-230 V ±10% 60 Hz	
Cooling capacity *1 (Nominal)	(208-230)	BTU/h	144,000	
		kW	42.2	
		Power input	12.2	
		Current input	37.6-34.0	
	(Rated)	BTU/h	138,000	
		kW	40.4	
		Power input	11.73	12.34
		Current input	36.1-32.7	38.0-34.4
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)	(208-230)	BTU/h	160,000	
		kW	46.9	
		Power input	11.7	
		Current input	36.0-32.6	
	(Rated)	BTU/h	152,000	
		kW	44.5	
		Power input	10.50	10.99
		Current input	32.3-29.2	33.8-30.6
Temp. range of heating	Indoor	D.B.	59~81°F (15~27°C)	
	Outdoor	W.B.	-22~60°F (-30~15.5°C)	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	
	Model/Quantity		P04~P96/1~36	
Sound power level (measured in anechoic room) *3			dB <A> 77.5/79.5	
Refrigerant piping diameter	Liquid pipe	in. (mm)	1/2 (12.7) Brazed	
	Gas pipe	in. (mm)	1-1/8 (28.58) Brazed	

Set Model			PUHY-HP72TNU-A1	PUHY-HP72TNU-A1
Model				
Minimum Circuit Ampacity (*)			55-49	55-49
Maximum Overcurrent Protection (*)			90-80	90-80
FAN	Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Airflow rate	cfm	6,700	6,700
		m3/min	190	190
	Control, Driving mechanism		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)
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Starting method		Inverter	Inverter
	Motor output	kW	3.8 x 1	3.8 x 1
	Case heater	kW	0.045	0.045
	Lubricant		MEL46	MEL46
	External finish		Pre-coated galvanized steel sheet <MUNSELL 3Y 7.8/1.1 or similar>	Pre-coated galvanized steel sheet <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)
	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 21 lbs + 9 oz (9.8 kg)
	Control		LEV and HIC circuit	
Net weight		lbs (kg)	609 (276)	609 (276)
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)	3/8 (9.52) Brazed	3/8 (9.52) Brazed
	Gas pipe	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)	
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3 Joint: CMY-Y102SS/102LS-G2, CMY-Y202S-G2 Header: CMY-Y104/108/1010C-G	

Notes:

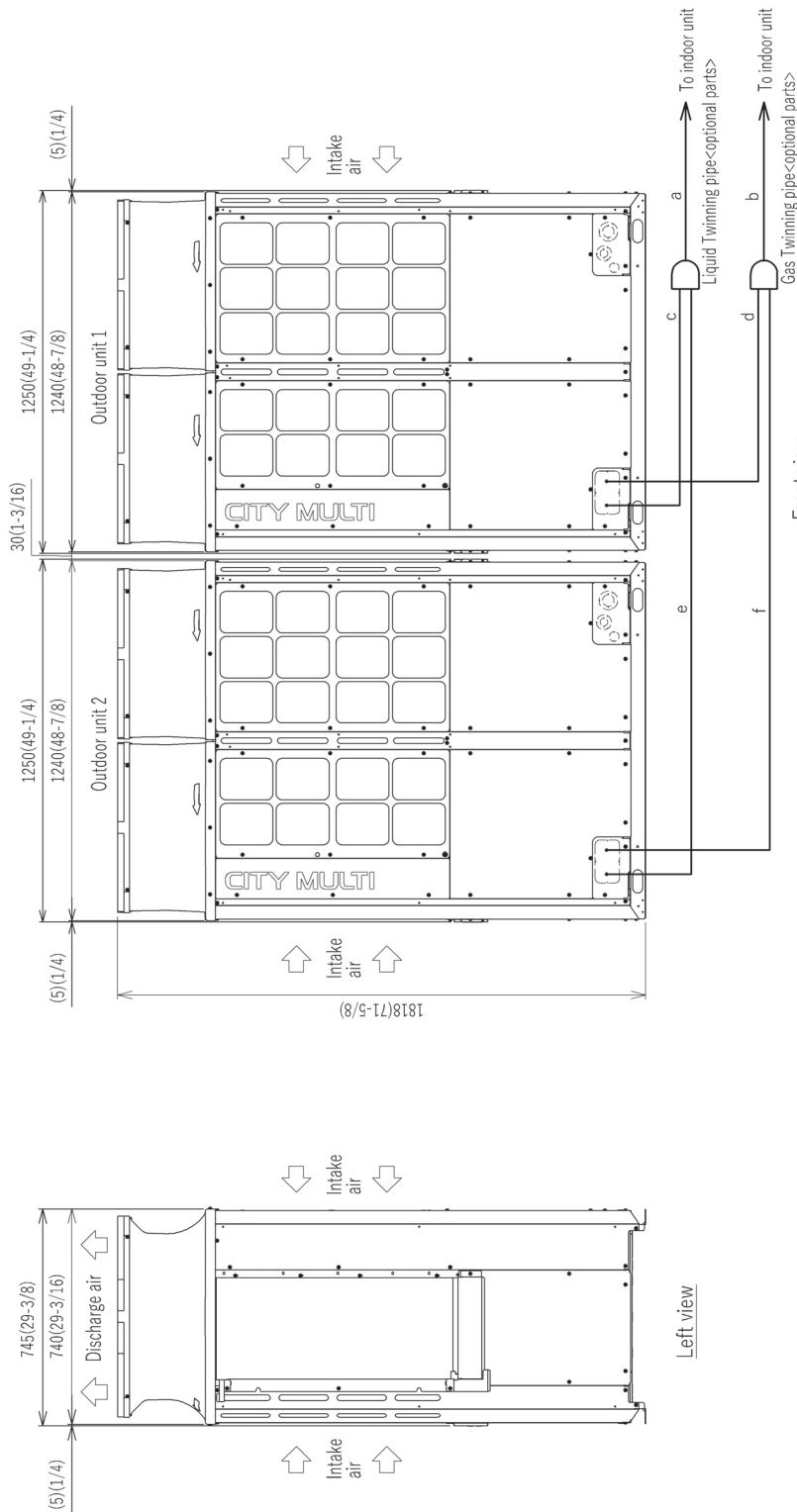
- Cooling conditions (Test conditions are based on AHRI 1230)
Indoor: 80°F D.B./67°F W.B. (26.7°C D.B./19.4°C W.B.), Outdoor: 95°F D.B. (35°C D.B.)
- Heating conditions (Test conditions are based on AHRI 1230)
Indoor: 70°F D.B. (21.1°C D.B.), Outdoor: 47°F D.B./43°F W.B. (8.3°C D.B./6.1°C W.B.)
- Cooling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

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-HP144TSNU-A1 - DIMENSIONS



Twinning pipe connection size

Package unit name	HP144T/YSNU	HP192T/YSNU	HP240T/YSNU
Component unit name	HP72T/YNU	HP96T/YNU	HP120T/YNU
Outdoor unit 1	HP72T/YNU	HP96T/YNU	HP120T/YNU
Outdoor unit 2	HP72T/YNU	HP96T/YNU	HP120T/YNU
Outdoor Twinning Kit(optional parts)	CMY-Y100CBK3	CMY-Y100CBK3	CMY-Y100CBK3
Indoor unit			
~Twinning pipe	Liquid	a	φ 15.88(5/8)
	Gas	b	φ 28.58(1-1/8)
~Twinning pipe	Liquid	c	φ 28.58(1-1/8)
	Gas	d	φ 12.7(1/2)
~Outdoor unit 1	Liquid	e	φ 28.58(1-1/8)
	Gas	f	φ 12.7(1/2)
~Outdoor unit 2	Liquid		φ 28.58(1-1/8)
	Gas		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.
- Note 2. Twinning pipes must be installed horizontally using a level vessel.
- Note 3. Be sure to see the Installation Manual for details of Twinning pipe installation.
- Note 4. The pipe section before the Twinning pipe (section "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).
- Note 5. Only use the Twinning pipe by Mitsubishi (optional parts).

Unit: mm (in.)

Module: PUHY-HP72TNU-A1 - DIMENSIONS

Unit: mm (in.)

Connecting pipe specifications

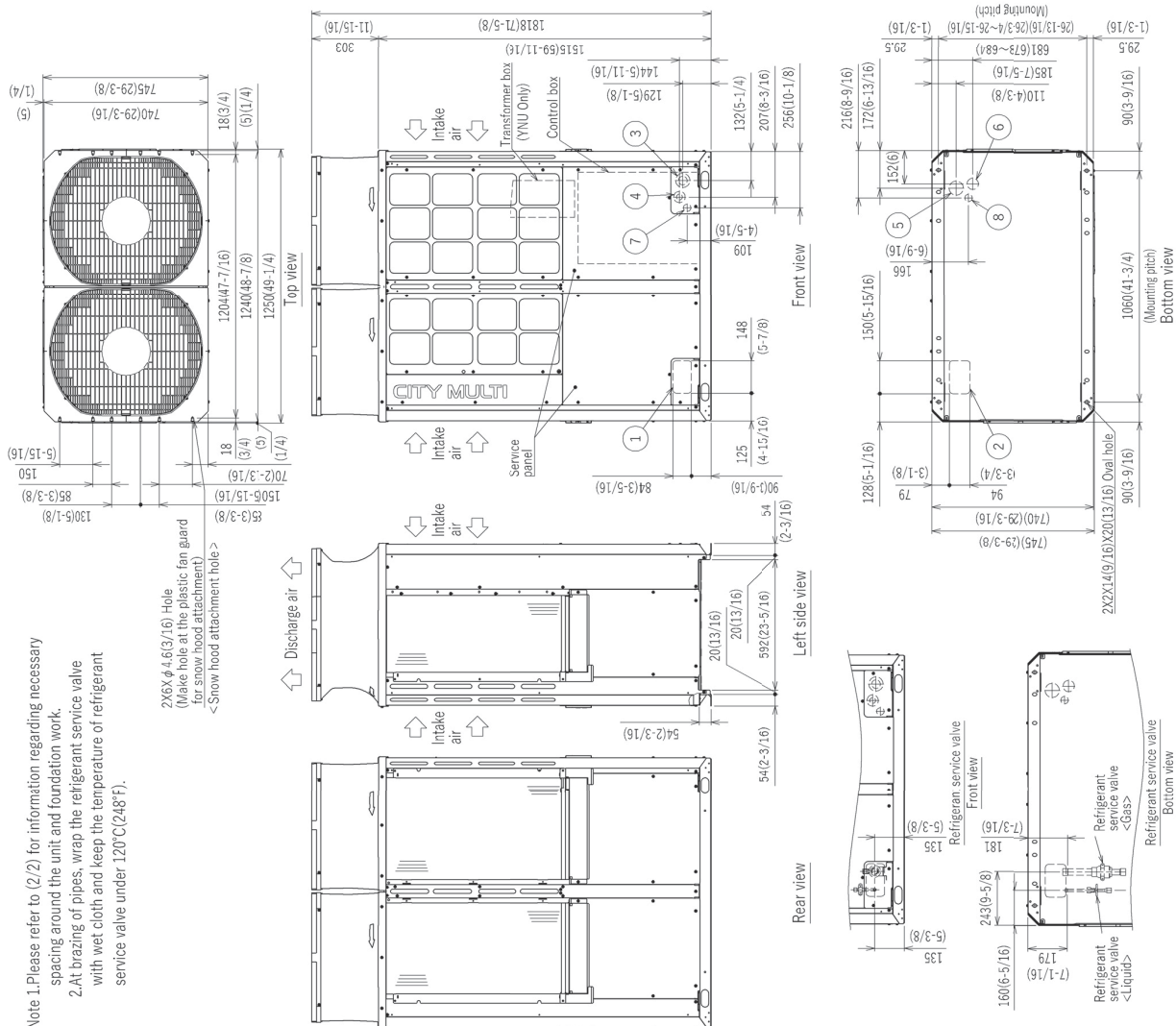
Model	Diameter			
	Refrigerant pipe *1		Service valve	
	Liquid	Gas	Liquid	Gas
HP72	φ9.52(3/8)	φ22.2(7/8)	φ12.7(1/2)	φ28.58(1-1/8)
HP96	φ9.52(3/8)	φ22.2(7/8)	φ12.7(1/2)	φ28.58(1-1/8)
HP96	φ12.7(1/2)	φ22.2(7/8)	φ12.7(1/2)	φ28.58(1-1/8)
HP120	φ9.52(3/8)	φ28.58(1-1/8)	φ12.7(1/2)	φ28.58(1-1/8)
HP120	φ12.7(1/2)	φ28.58(1-1/8)	φ12.7(1/2)	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)



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).

2X6X 4.6(3/16) Hole
(Make hole at the plastic fan guard
for snow hood attachment)
<Snow hood attachment hole>

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

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