

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-A		
Indoor Model		Non-Ducted	Ducted	
Power source		3-phase 3-wire 208-230 V ±10% 60 Hz		
Cooling capacity *1 (Nominal)	BTU/h	144,000		
	kW	42.2		
	Power input	kW		
	(208-230) Current input	A		
	(Rated)	BTU/h	138,000	
	kW	40.4		
(208-230)	Power input	kW	10.98	
	Current input	A	33.8-30.6	
			35.8-32.3	
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	160,000		
	kW	46.9		
	Power input	kW		
	(208-230) Current input	A		
	(Rated)	BTU/h	152,000	
	kW	44.5		
(208-230)	Power input	kW	10.5	
	Current input	A	32.3-29.2	
			34.3-31.0	
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	P05-P96/1-31		
Sound pressure level (measured in anechoic room) *3	dB <A>	58.5/60.5		
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-A	PUHY-HP72TNU-A	
Model				
Minimum Circuit Ampacity (*)	A	38-35	38-35	
Maximum Overcurrent Protection (*)	A	60-50	60-50	
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		
	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	
	Manufacture	MITSUBISHI ELECTRIC		
	Starting method	Inverter		
	Motor output	kW	3.8 x 1	3.8 x 1
	Case heater	kW	-	-
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 49-1/4 x 29-3/8	71-5/8 x 49-1/4 x 29-3/8	
	mm	1,818 x 1,250 x 745	1,818 x 1,250 x 745	
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		
	Fan motor			
Refrigerant	Type x original charge	R410A x 21 lbs + 10 oz (9.8 kg)	R410A x 21 lbs + 10 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-Changer)		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	
	Gas pipe	in. (mm)	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		

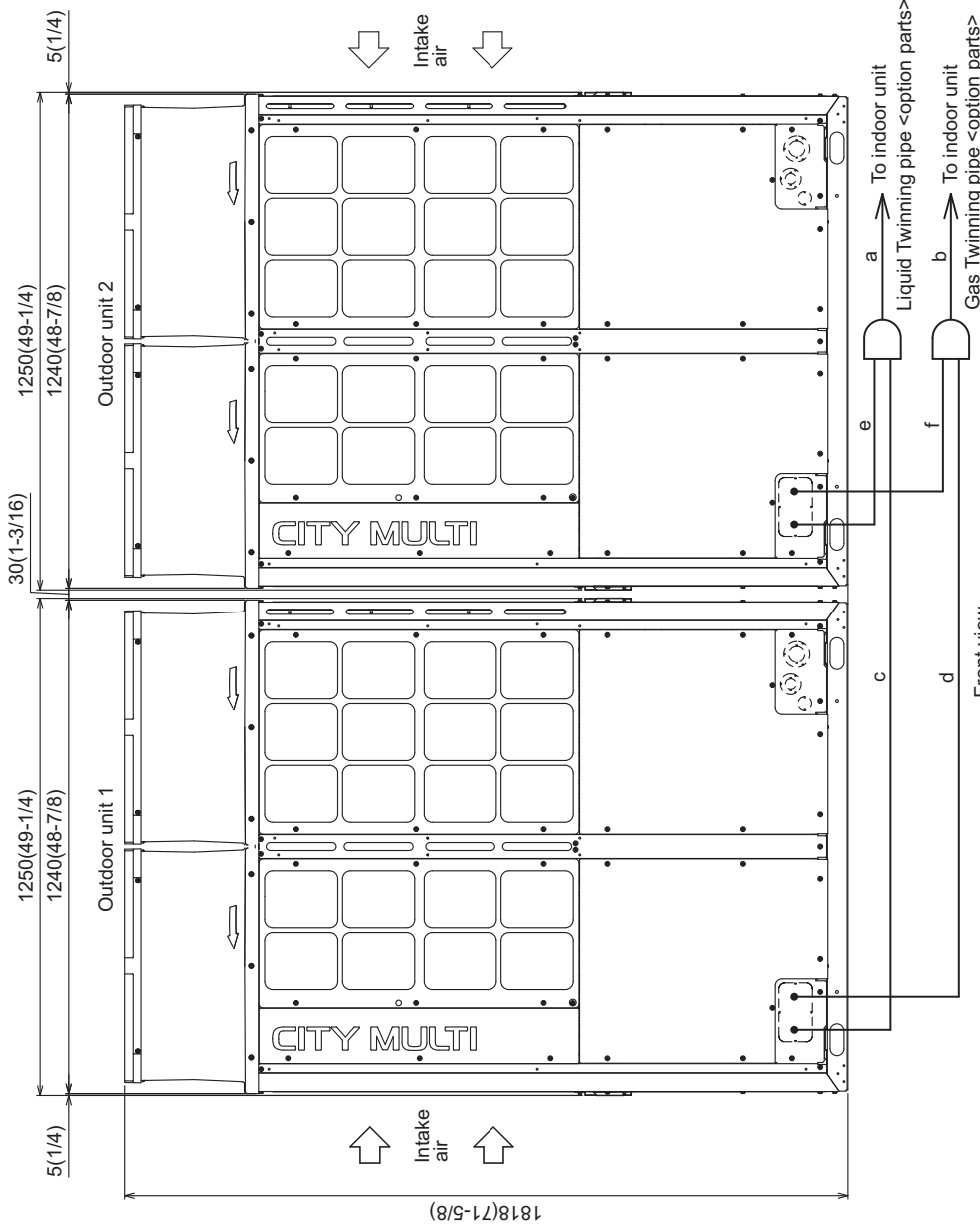
### Notes:

- 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).

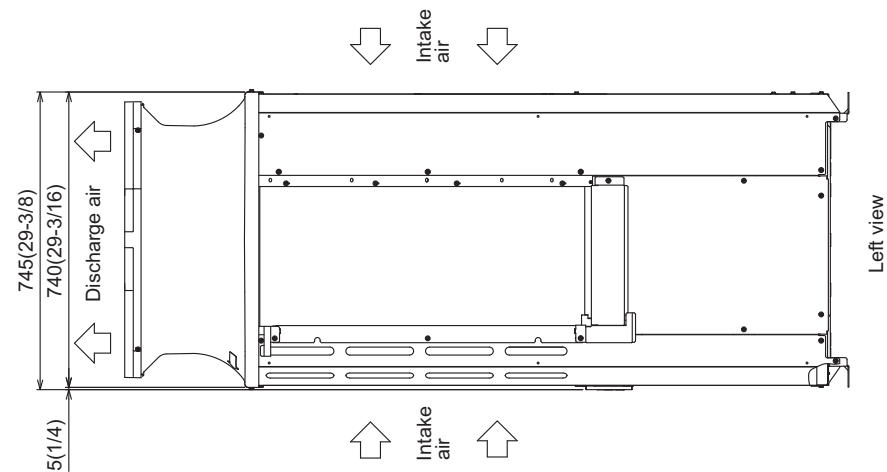
Specifications are subject to change without notice.

\* All electrical work shall comply with National (NEC) and local codes and regulations. Should this document be altered or changed without MESCA's permission, it becomes null and void. MESCA assumes no responsibility for any consequences in such cases.

# Module: PUHY-HP144TSNU-A-TH - DIMENSIONS



Front view



Left view

Twinning pipe connection size

Package unit name	PUHY-HP144TSNU-A	PUHY-HP192TSNU-A	PUHY-HP240TSNU-A
Component unit name	Outdoor unit 1	PUHY-HP96TNU-A	PUHY-HP120TNU-A
Outdoor Twinning Kit (optional parts)	Outdoor unit 2	PUHY-HP96TNU-A	PUHY-HP120TNU-A
BC controller	CMY-Y100CBK3		
~Twinning pipe	Liquid	a	ø12.7(1/2)
	Gas	b	ø15.88(5/8)
			ø28.58(1-1/8)

Unit model	Liquid c or e	Gas d or f
HP72	ø9.52(3/8)	ø22.2(7/8)
HP96		
HP120	ø12.7(1/2)	ø28.58(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 should not be tilted more than 15 degrees from the horizontal plane. Be sure to see the Installation Manual for details of Twinning pipe installation.  
 3. 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).  
 4. Only use the Twinning pipe by Mitsubishi (optional parts).

Unit: mm (in.)

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# Module: PUHY-HP72TNU-A-TH - DIMENSIONS

Unit: mm (in.)

Note 1 Please refer to the next page 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).

Connecting pipe specifications

Model	Refrigerant pipe		Diameter	
	Liquid	Gas	Gas	Service valve
HP72	ø9.52(3/8) Braze <sup>*1</sup>	ø22.2(7/8) Braze <sup>*1</sup>	ø12.7(1/2)	ø28.58(1-1/8)
HP96	ø9.52(3/8) Braze <sup>*1</sup>	ø22.2(7/8) Braze <sup>*1</sup>	ø12.7(1/2)	ø28.58(1-1/8)
HP120	ø9.52(3/8) Braze <sup>*1</sup>	ø22.2(7/8) Braze <sup>*1</sup>	ø12.7(1/2)	ø28.58(1-1/8)

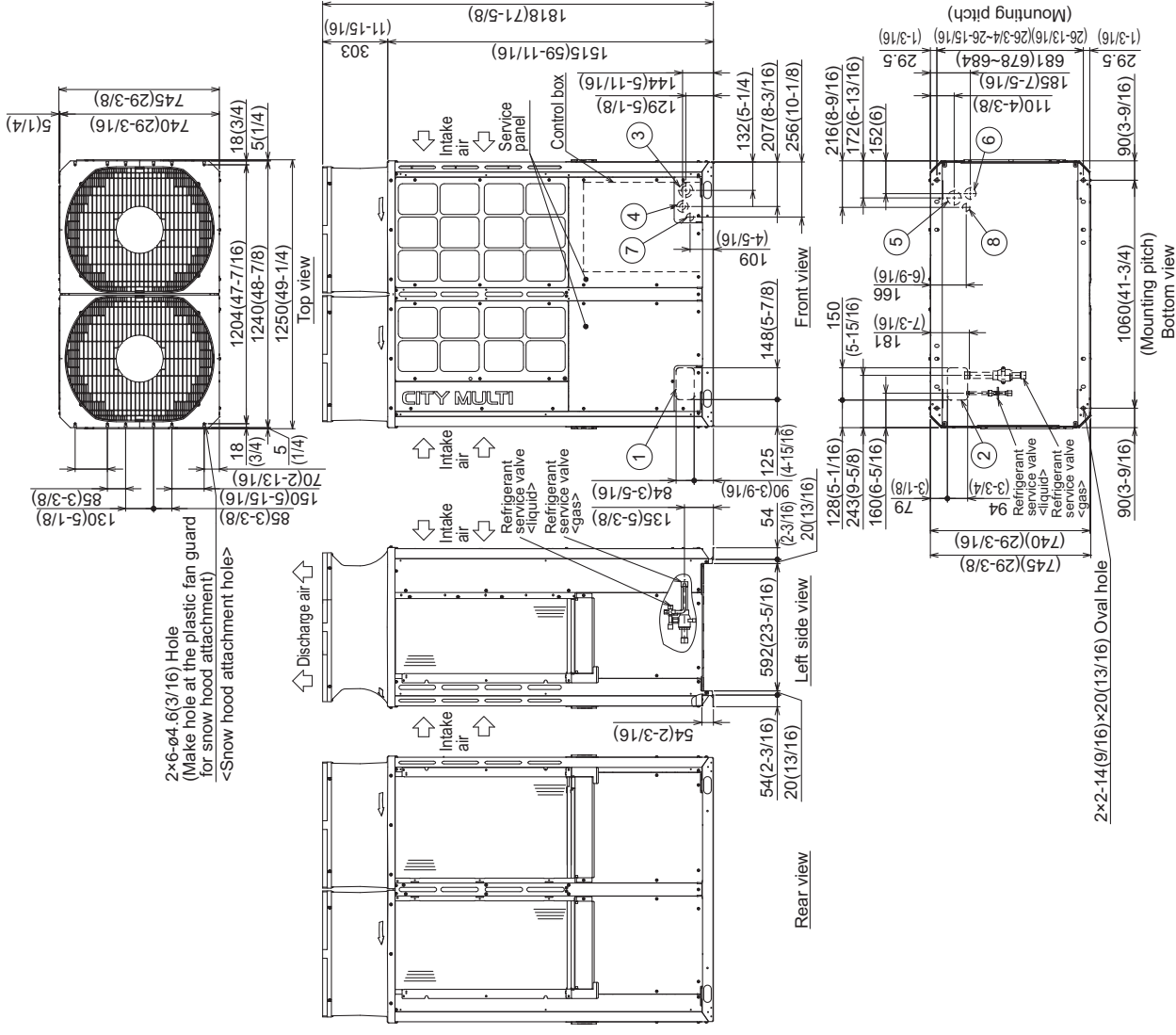
\*1 Connect the refrigerant pipe to the service valve according to the Installation Manual.

\*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

\*4 Furthest piping length (OU from IU) ≥ 40m

NO.	Usage	Specifications
①	Front through hole	148(5-7/8) × 84(3-5/16) Knockout hole
②	Bottom through hole	150(5-15/16) × 94(3-3/4) Knockout hole
③	Front through hole	ø62.7(2-1/2) or ø34.5(1-3/8) Knockout hole
④	Front through hole	ø43.7(1-3/4) or ø22.7(7/8) Knockout hole
⑤	Bottom through hole	ø65(2-9/16) Knockout hole
⑥	Bottom through hole	ø62(2-1/16) Knockout hole
⑦	Front through hole	ø34(1-3/8) Knockout hole
⑧	Bottom through hole	ø34(1-3/8) Knockout hole



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