CITYMULTI®

10-TON PUHY-HP120YNU-A1

MITSUBISHI ELECTRIC
HEATING & AIR CONDITIONING

Job Name:

System Reference: Date:

460V OUTDOOR VRF HEAT PUMP SYSTEM



ACCESSORIES

☑ Big Foot Stand.....for details see Big Foot Stands submittals
☑ Header Kit.....for details see Pipe Accessories Submittal
☑ Joint Kit.....for details see Pipe Accessories Submittal
☑ Low Ambient Kit.....for details see Low Ambient Kit Submittal
☑ Snow/Hail Guards Kit.....for details see Snow/Hail Guards Kit Submittal

Specifications			System
Unit Type			PUHY-HP120YNU-A1
Cooling Capacity (Nominal)		BTU/H	120,000
Heating Capacity (Nominal)		BTU/H	135,000
Guaranteed Operating Range	Cooling	°F [°C]	23~126 [-5.0~52.0]
	Heating	°F [°C]	-22~60 [-30.0~15.5]
Extended Operating Range	Heating	°F [°C]	-27.4~60 [-33.0~15.5]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 49-1/4 x 29-3/8 [1,818 x 1,250 x 745]
Net Weight		Lbs. [kg]	691 [313]
External Finish			Pre-coated galvanized steel sheet [MUNSELL 3Y 7.8/1.1 or similar]
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		460V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	35.0
Maximum Overcurrent Protection		A	50
Recommended Fuse Size		A	35
Recommended Minimum Wire Size		AWG [mm]	8 [8.4]
SCCR		kA	5
Refrigerant Piping Diameter	Liquid (High Pressure)	In. [mm]	3/8 [9.52] Brazed (Pipe Size Dependent on Piping Length)
	Gas (Low Pressure)	In. [mm]	1-1/8 [28.58] Brazed
Max. Total Refrigerant Line Length		Ft.	3,280
Max. Refrigerant Line Length (Between ODU & IDU)		Ft.	541
Max. Control Wiring Length		Ft.	1,640
Indoor Unit Connectable	Total Capacity		50.0~130.0% of outdoor unit capacity
	Model/Quantity		P04~P96/1.0~30.0
Sound Pressure Levels		dB(A)	59.5/61.5
Sound Power Levels		dB(A)	79.5/80.5
FAN[4]	Type x Quantity		Propeller fan x 2
	Fan Motor Output	kW	0.46+0.46
	Airflow Rate	CFM	7,750
	External Static Pressure	In. WG	Selectable; 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG
Compressor Operating Range			15.0% to 100.0%
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge		R410A x 23.0 lbs + 12.0 oz [10.8 kg]
Protection Devices	High Pressure Protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp./Fan)		Over-heat protection, Over-current protection
AHRI Ratings (Ducted/Non-ducted)	EER		11.4/11.2
	IEER		20.3/22.4
	COP		3.76/4.26

NOTES:
Nominal cooling conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 80°FD.B./67°FW.B. (26.7°CD.B./19.4°CW.B.), Outdoor: 95°FD.B. (35°CD.B.)
Nominal heating conditions (Test conditions are based on AHRI 1230-2023)
Indoor: 70°FD.B. (21.1°CD.B.), Outdoor: 47°FD.B./43°FW.B. (8.3°CD.B./6.1°CW.B.)

[1]Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi Electric representative for more details about your region
[2]For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal
[3]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
[4]Unit will continue to operate in extended operating range, but capacity is not guaranteed

Specifications are subject to change without notice.

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OUTDOOR UNIT: PUHY-HP120YNU-A1 – DIMENSIONS

PUHY-HP72, 96, 120T/YNU-A1

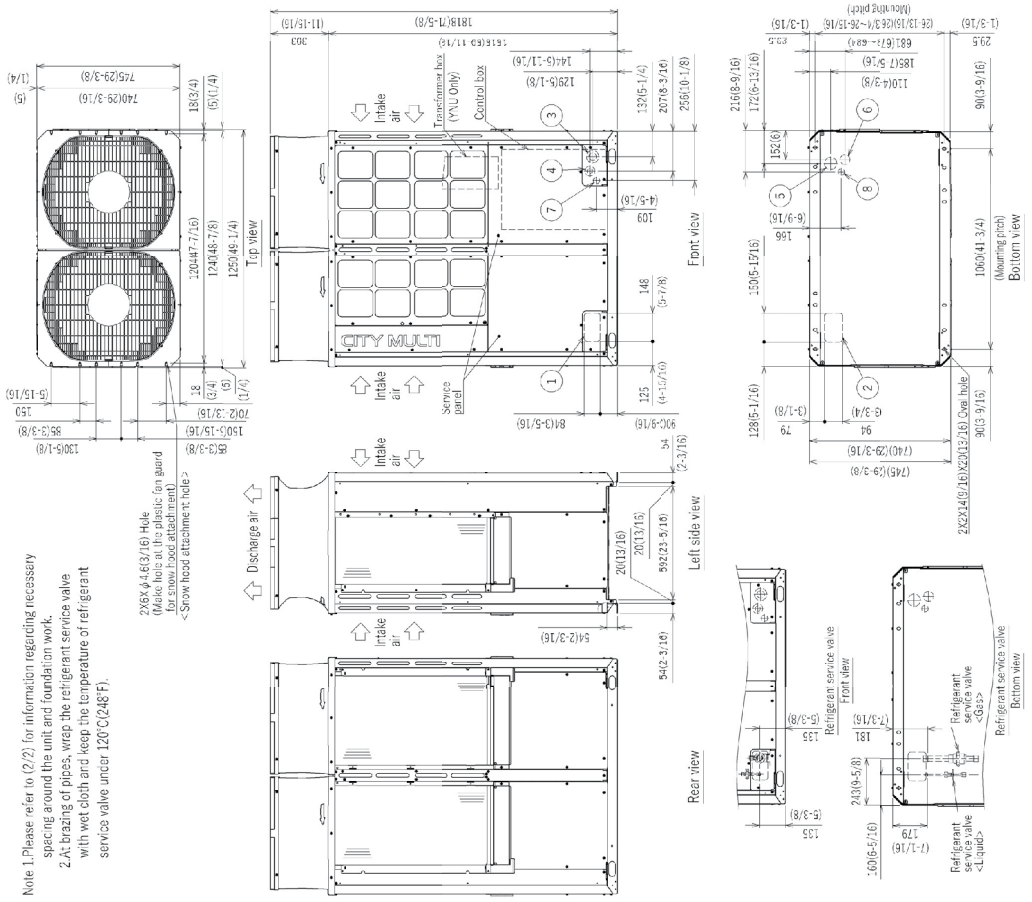
Unit: mm (in.)

Connecting pipe specifications

Model	Diameter					
	Refrigerant pipe *1			Service valve		
	Liquid		Gas	Liquid		Gas
HP72	φ9.52(3/8)	Brazed	φ22.2(7/8)	Brazed	φ12.7(1/2)	φ28.58(1-1/8)
HP96	φ9.52(3/8)	Brazed	φ22.2(7/8)	Brazed	φ12.7(1/2)	φ28.58(1-1/8)
HP96	φ12.7(1/2)	Brazed *3	φ22.2(7/8)	Brazed	φ12.7(1/2)	φ28.58(1-1/8)
HP120	φ9.52(3/8)	Brazed	φ28.58(1-1/8)	Brazed	φ12.7(1/2)	φ28.58(1-1/8)
HP120	φ12.7(1/2)	Brazed *3,*4	φ28.58(1-1/8)	Brazed	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)

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	For wires	Front through hole: φ 62.7(2-1/2) or φ 34.5(1-3/8) Knockout hole
④		Front through hole: φ 43.7(1-3/4) or φ 22.2(7/8) Knockout hole
⑤		Bottom through hole: φ 65(2-9/16) Knockout hole
⑥		Bottom through hole: φ 52(2-1/16) Knockout hole
⑦	For transmission cables	Front through hole: φ 34(1-3/8) Knockout hole
⑧		Bottom through hole: φ 34(1-3/8) Knockout hole



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