CITYMULTI®

12-TON PURY-EP144YNU-A1

MITSUBISHI ELECTRIC
HEATING & AIR CONDITIONING

Job Name:
System Reference: Date:

460V OUTDOOR VRF HEAT RECOVERY SYSTEM

UNIT OPTION

☑ Standard Model PURY-EP144YNU-A1

ACCESSORIES

☑ Big Foot Stand ..... for details see Big Foot Stands submittals
☑ BC Controller (Required) ..... for details see BC Controller Submittals
☑ Joint Kit ..... for details see Pipe Accessories Submittal
☑ Low Ambient Kit ..... for details see Low Ambient Kit Submittal
☑ Panel Heater Kit ..... for details see Panel Heater Kit Submittal
☑ Snow/Hail Guards Kit ..... for details see Snow/Hail Guards Kit Submittal

Specifications			System
Unit Type			PURY-EP144YNU-A1
Cooling Capacity (Nominal)		BTU/H	144,000
Heating Capacity (Nominal)		BTU/H	160,000
Guaranteed Operating Range	Cooling	ºF [ºC]	23~126 [-5.0~52.0]
	Heating	ºF [ºC]	-13~60 [-25.0~15.5]
Extended Operating Range	Heating	ºF [ºC]	-27.4~60 [-33.0~15.5]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]
Net Weight		Lbs. [kg]	715 [324]
External Finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) [MUNSELL 5Y 8/1]
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		460V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	34.0
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]	7/8 [22.2] Brazed
	Gas (Low Pressure)	In. [mm]	1-1/8 [28.58] Brazed
Max. Total Refrigerant Line Length		Ft.	1,968
Max. Refrigerant Line Length (Between ODU & IDU)		Ft.	541
Max. Control Wiring Length		Ft.	1,640
Indoor Unit Connectable	Total Capacity		50.0~150.0% of outdoor unit capacity
	Model/Quantity		P04~P96/1.0~36.0
Sound Pressure Levels		dB(A)	65.0/65.5
Sound Power Levels		dB(A)	85.5/85.5
FAN[4]	Type x Quantity		Propeller fan x 2
	Fan Motor Output	kW	0.46+0.46
	Airflow Rate	CFM	9,550
	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-current protection
AHRI Ratings (Ducted/Non-ducted)	EER		10.0/10.1
	IEER		21.2/22.7
	COP		3.49/3.86
	SCHE		24.8/27.7

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

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OUTDOOR UNIT: PURY-EP144YNU-A1 – DIMENSIONS

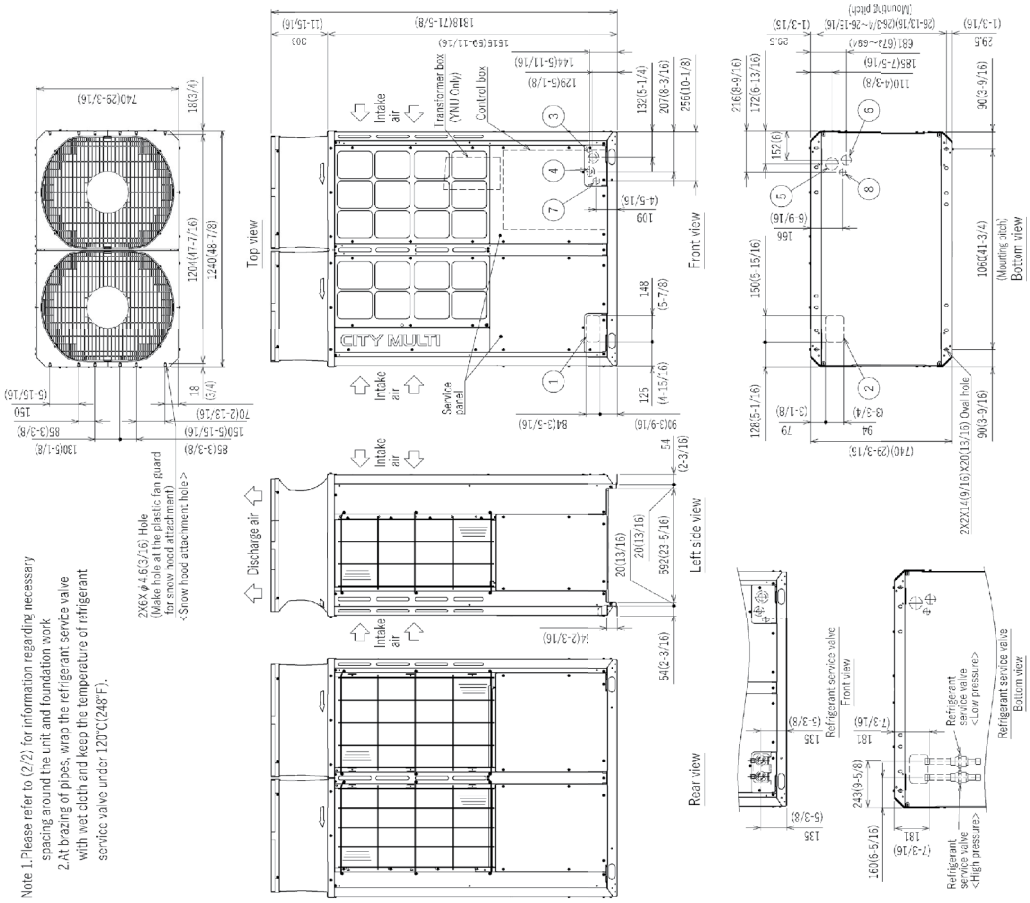
Unit: mm(in)

Connecting pipe specifications

Model	Refrigerant pipe *1 Diameter				Service valve	
	High pressure		Low pressure		High pressure	Low pressure
(E)P96	φ19.05(3/4)	Brazed	φ22.2(7/8)	Brazed	φ28.58(1-1/8)	φ28.58(1-1/8)
(E)P120	φ19.05(3/4)	Brazed	φ28.58(1-1/8)	Brazed	φ28.58(1-1/8)	φ28.58(1-1/8)
(E)P144	φ22.2(7/8)	Brazed	φ28.58(1-1/8)	Brazed	φ28.58(1-1/8)	φ28.58(1-1/8)

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

NO.	Usage	Specifications
①	For pipes	Front through hole 148(5-7/8) X 84(3-5/16) Knockout hole
②		Bottom through hole 130(5-15/16) X 94(3-3/4) Knockout hole
③	For wires	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 φ50(2-1/16) Knockout hole
⑦	For transmission cables	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).

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Specifications are subject to change without notice.

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