CITYMULTI®

36-TON PURY-EP432YSNU-A1

MITSUBISHI ELECTRIC
HEATING & AIR CONDITIONING

Job Name:

System Reference: Date:

460V OUTDOOR VRF HEAT RECOVERY SYSTEM



UNIT OPTION

☑ Standard Model PURY-EP432YSNU-A1

ACCESSORIES

☑ Big Foot Stand ..... for details see Big Foot Stands submittals
☑ Twinning Kit (Required) CMY-R300NCBK
☑ 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-EP432YSNU-A1
Cooling Capacity (Nominal)		BTU/H	432,000
Heating Capacity (Nominal)		BTU/H	480,000
Net Weight		Lbs. [kg]	1,836 [832]
Refrigerant Piping Diameter	Liquid (High Pressure)	In. [mm]	1-1/8 [28.58] Brazed
	Gas (Low Pressure)	In. [mm]	1-5/8 [41.28] Brazed
Max. Total Refrigerant Line Length		Ft.	4,920
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~P96/2.0~50.0
Sound Pressure Levels		dB(A)	69.5/70.0
Sound Power Levels		dB(A)	88.5/89.0
Compressor Operating Range			7.5% to 100.0%
AHRI Ratings (Ducted/Non-ducted)	EER		8.9/8.9
	IEER		17.1/17.6
	COP		3.2/3.2
	SCHE		19.6/22.4

Specifications			Module 1	Module 2
Unit Type			PURY-EP216YNU-A1	PURY-EP216YNU-A1
Cooling Capacity (Nominal)		BTU/H	216,000	216,000
Heating Capacity (Nominal)		BTU/H	243,000	243,000
Guaranteed Operating Range[1]	Cooling[2]	°F [°C]	23~126 [-5.0~52.0]	23~126 [-5.0~52.0]
Guaranteed Operating Range	Heating	°F [°C]	-13~60 [-25.0~15.5]	-13~60 [-25.0~15.5]
Extended Operating Range	Heating	°F [°C]	-27.4~60 [-33.0~15.5]	-27.4~60 [-33.0~15.5]
External Dimensions (H x W x D)		In. [mm]	71-5/8 x 68-15/16 x 29-3/16 [1,818 x 1,750 x 740]	71-5/8 x 68-15/16 x 29-3/16 [1,818 x 1,750 x 740]
Net Weight		Lbs. [kg]	918 [416]	918 [416]
External Finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) [MUNSELL 5Y 8/1]	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%	460V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity		A	41.0	41.0
Maximum Overcurrent Protection		A	70	70
Recommended Fuse Size		A	50	50
Recommended Minimum Wire Size		AWG [mm]	6 [13.3]	6 [13.3]
SCCR		kA	5	5
FAN[4]	Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Airflow Rate	CFM	14,100	14,100
	External Static Pressure	In. WG	Selectable; 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG	Selectable; 0.00, 0.12, 0.24, 0.32, In. WG; factory set to 0 In. WG
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
Refrigerant	Type x Original Charge		R410A x 26.0 lbs + 1.0 oz [11.8 kg]	R410A x 26.0 lbs + 1.0 oz [11.8 kg]
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

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

Each individual module requires a separate electrical connection. Refer to electrical data for each individual module.

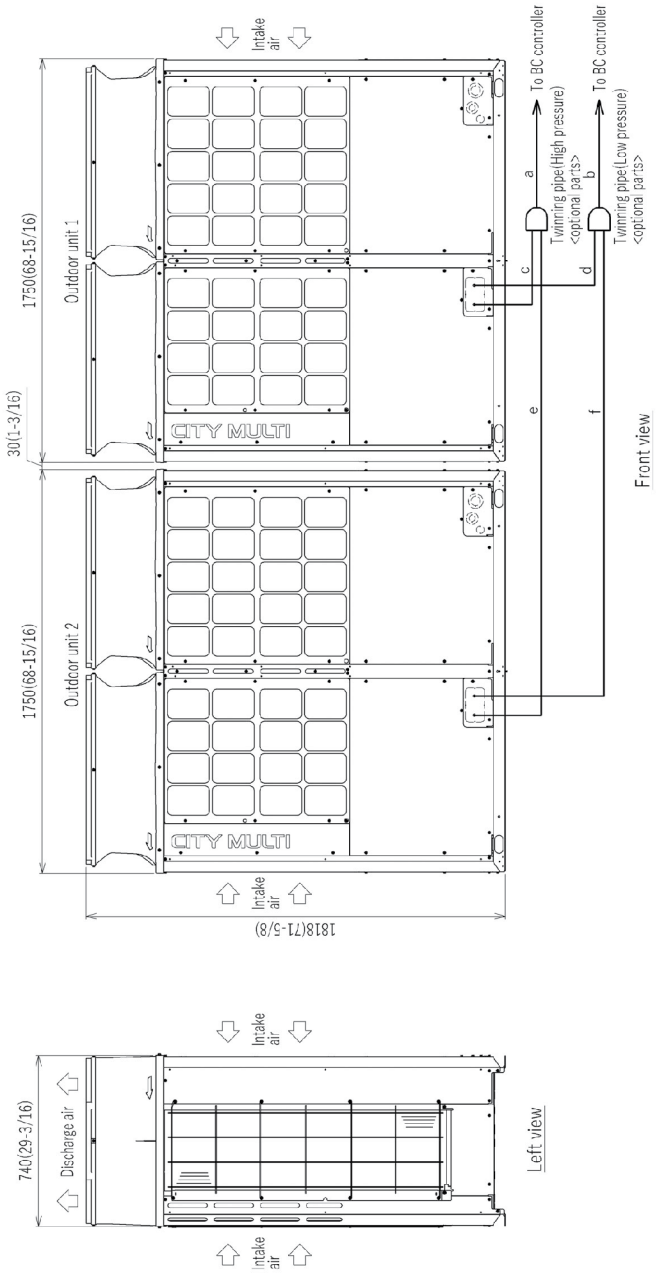
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OUTDOOR UNIT: PURY-EP432YSNU-A1 – DIMENSIONS

PURY-EP384, 432T/YSNU-A1

Unit: mm(in)



Twinning pipe connection size

Package unit name		EP384T/YSNU	EP432T/YSNU
Component unit name	Outdoor unit 1	EP192T/YNU	EP216T/YNU
	Outdoor unit 2	EP192T/YNU	EP216T/YNU
Outdoor Twinning Kit(optional parts)		CMY-R300NCBK	CMY-R300NCBK
BC controller --Twinning pipe	High pressure a	ϕ28.58(1-1/8)	ϕ28.58(1-1/8)
	Low pressure b	ϕ41.28(1-5/8)	ϕ41.28(1-5/8)
Twinning pipe --Outdoor unit 1	High pressure c	ϕ22.2(7/8)	ϕ22.2(7/8)
	Low pressure d	ϕ28.58(1-1/8)	ϕ28.58(1-1/8)
Twinning pipe --Outdoor unit 2	High pressure e	ϕ22.2(7/8)	ϕ22.2(7/8)
	Low pressure f	ϕ28.58(1-1/8)	ϕ28.58(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 must be installed horizontally using a level vessel.
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).

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MODULE 1: PURY-EP216YNU-A1 – DIMENSIONS

PURY-EP192, 216, 240T/YNU-A1

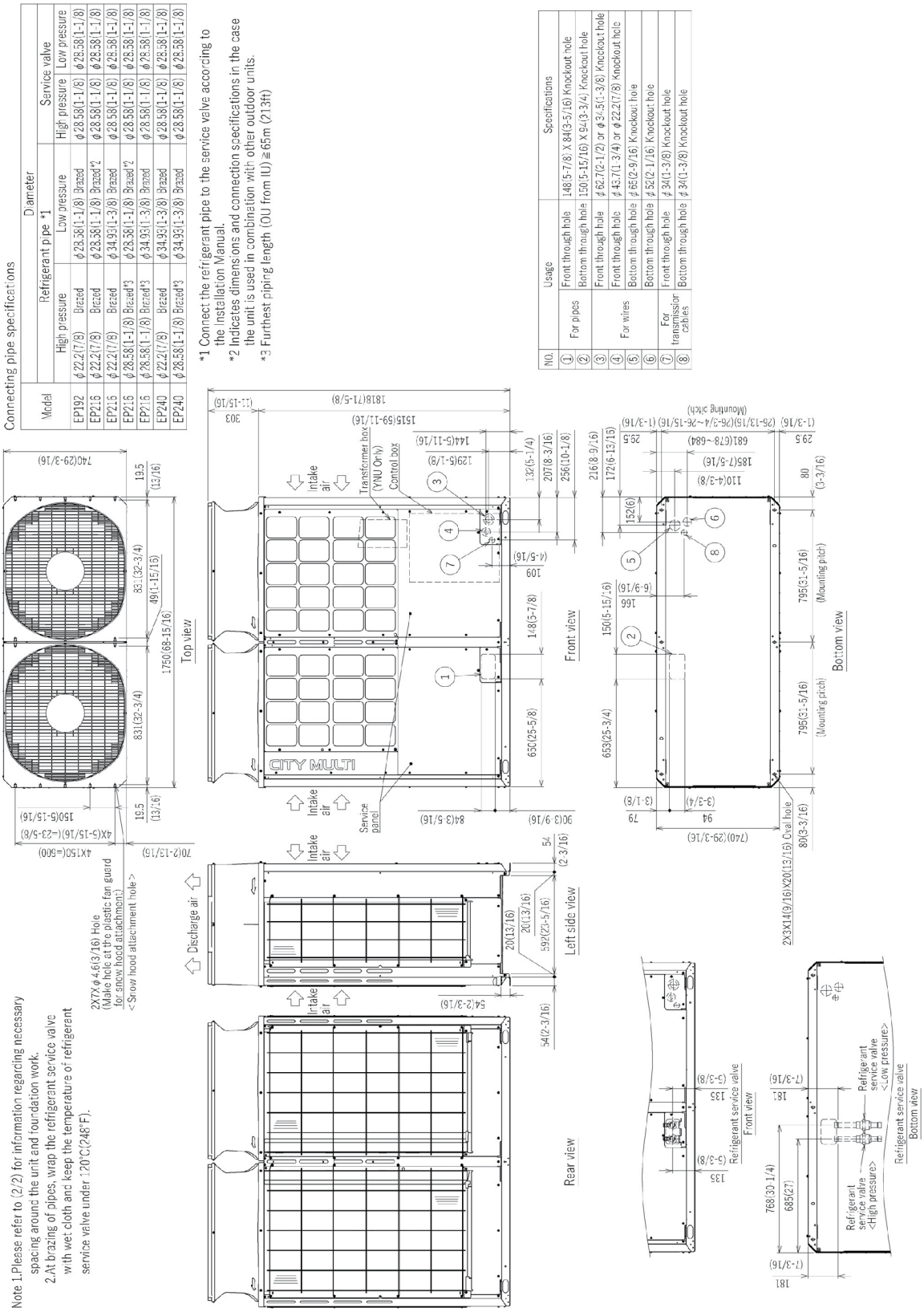
Unit: mm(in)

Connecting pipe specifications

Model	Diameter					
	Refrigerant pipe *1				Service valve	
	High pressure		Low pressure		High pressure	Low pressure
EP192	φ 22.2(7/8)	Brazed	φ 28.58(1-1/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP216	φ 22.2(7/8)	Brazed	φ 28.58(1-1/8)	Brazed*2	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP216	φ 22.2(7/8)	Brazed	φ 34.93(1-3/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP216	φ 28.58(1-1/8)	Brazed*3	φ 28.58(1-1/8)	Brazed*2	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP216	φ 28.58(1-1/8)	Brazed*3	φ 34.93(1-3/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP240	φ 22.2(7/8)	Brazed	φ 34.93(1-3/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP240	φ 28.58(1-1/8)	Brazed*3	φ 34.93(1-3/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(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) ≦65m (213ft)

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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MODULE 2: PURY-EP216YNU-A1 – DIMENSIONS

PURY-EP192, 216, 240T/YNU-A1

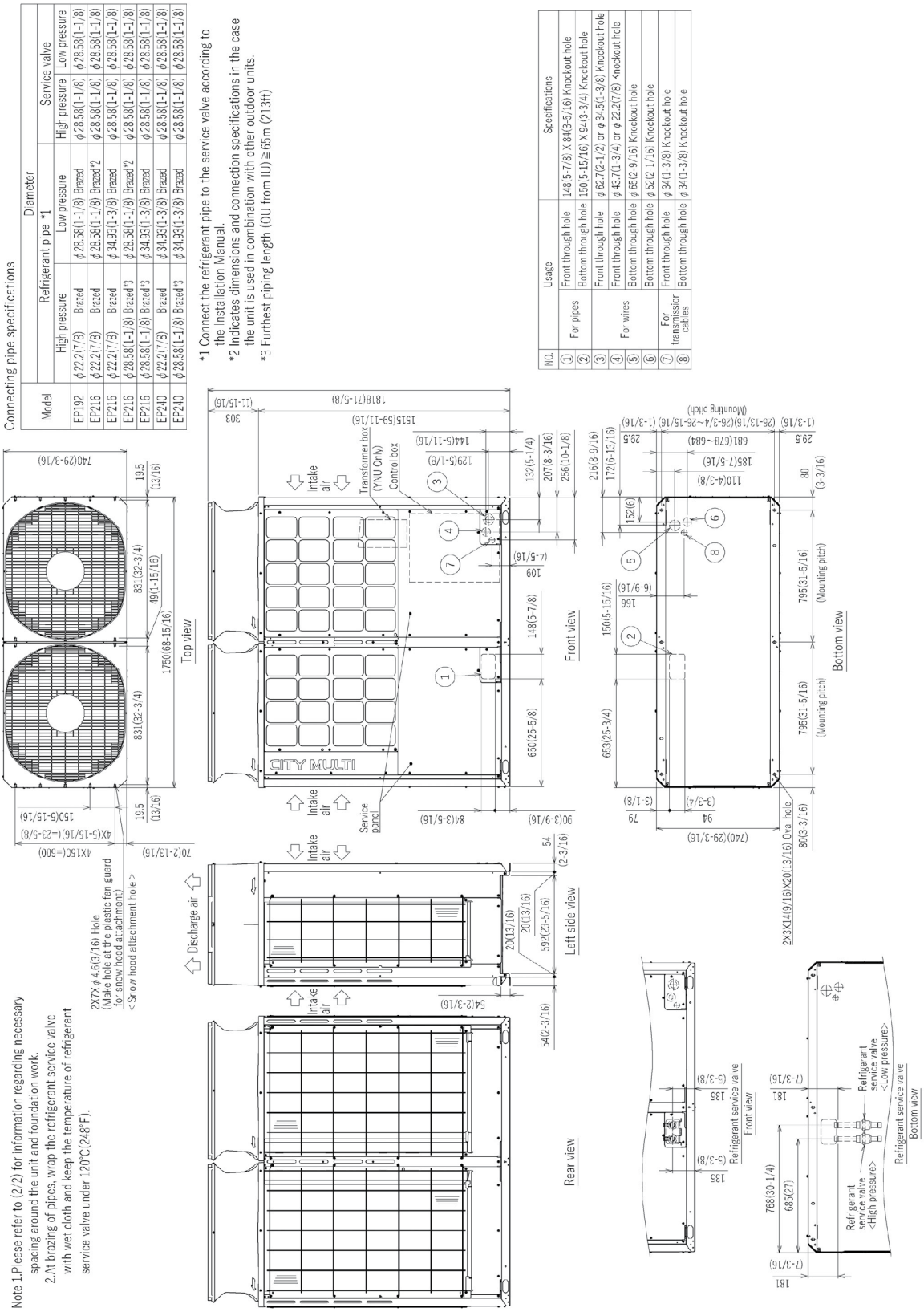
Unit: mm(in)

Connecting pipe specifications

Model	Diameter					
	Refrigerant pipe *1				Service valve	
	High pressure		Low pressure		High pressure	Low pressure
EP192	φ 22.2(7/8)	Brazed	φ 28.58(1-1/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP216	φ 22.2(7/8)	Brazed	φ 28.58(1-1/8)	Brazed*2	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP216	φ 22.2(7/8)	Brazed	φ 34.93(1-3/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP216	φ 28.58(1-1/8)	Brazed*3	φ 28.58(1-1/8)	Brazed*2	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP216	φ 28.58(1-1/8)	Brazed*3	φ 34.93(1-3/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP240	φ 22.2(7/8)	Brazed	φ 34.93(1-3/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(1-1/8)
EP240	φ 28.58(1-1/8)	Brazed*3	φ 34.93(1-3/8)	Brazed	φ 28.58(1-1/8)	φ 28.58(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) ≦65m (213ft)

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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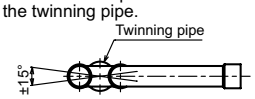
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TWINNING KIT: CMY-R300NCBK – DIMENSIONS

CMY-R300NCBK

Unit: mm (in.)

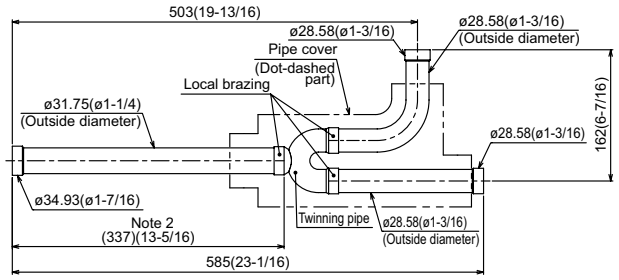
Note:
1. Refer to the figure below for the installation position of the twinning pipe.



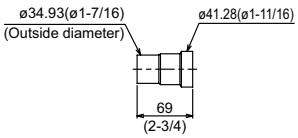
Slope of the twinning pipes are at an angle within ±15° to the horizontal plane.

2. Use the attached pipe to braze the port-opening of the twinning pipe.
3. Pipe diameter is indicated by inside diameter.

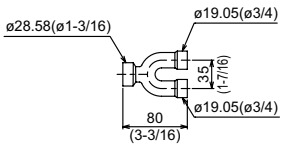
Low-pressure twinning pipe



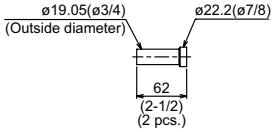
<Deformed pipe(Accessory)>



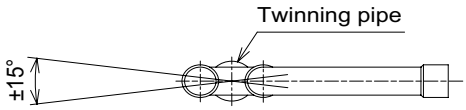
High-pressure twinning pipe



<Deformed pipe(Accessory)>



Note 1. Reference the attitude angle of the twinning pipe below the fig.



The angle of the twinning pipe is within ±15° against the horizontal plane.

2. Use the attached pipe to braze the port-opening of the twinning pipe.
3. Pipe diameter is indicated by inside diameter.
4. Only use the Twinning pipe by Mitsubishi (optional parts) .

1340 Satellite Boulevard Suwanee, GA 30024
Toll Free: 800-433-4822 www.mehvac.com