CITYMULTI®

22-TON TURYE2643BN41AN





Job Name:

System Reference: Date:

208/230V OUTDOOR VRF HEAT RECOVERY SYSTEM



UNIT OPTION

TURYE2643BN41AN Standard Model

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		TURYE2643BN41AN
Cooling Capacity (Nominal)		BTU/H	264,000
Heating Capacity (Nominal)		BTU/H	295,000
Net Weight		Lbs. [kg]	1,302 [590]
Defricement Dining Diameter	Liquid (High Pressure)	In. [mm]	1-1/8 [28.58] Brazed
Refrigerant Piping Diameter	Gas (Low Pressure)	In. [mm]	1-3/8 [34.93] Brazed
Max. Total Refrigerant Line Length		Ft.	3,116
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
indoor Onit Connectable	Model/Quantity		P04~P96/2.0~50.0
Sound Pressure Levels		dB(A)	66.5/67.5
Sound Power Levels		dB(A)	87.0/87.0
Compressor Operating Range			7.5% to 100.0%
	EER		9.5/9.7
ALIDI Detinge (Dueted/New dueted)	IEER		19.4/21.1
AHRI Ratings (Ducted/Non-ducted)	COP		3.36/3.53
	SCHE		22.3/25.7

	Specifications		Module 1	Module 2
	Unit Type		TURYE1443AN41AN	TURYE1203AN41AN
Cooling Capacity (Nomina	al)	BTU/H	144,000	120,000
Heating Capacity (Nomina	al)	BTU/H	160,000	135,000
Guaranteed Operating Ra	ange ¹ Cooling ²	°F [°C]	23~126 [-5.0~52.0]	23~126 [-5.0~52.0]
Guaranteed Operating Ra	ange Heating	°F [°C]	-13~60 [-25.0~15.5]	-13~60 [-25.0~15.5]
Extended Operating Rang	ge 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 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]	71-5/8 x 48-7/8 x 29-3/16 [1,818 x 1,240 x 740]
Net Weight		Lbs. [kg]	680 [308]	622 [282]
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 Requirer	ments Voltage, Phase, Hertz, Po	ower	208/230V, 3-phase, 60 Hz, ±10%	208/230V, 3-phase, 60 Hz, ±10%
Minimum Circuit Ampacity	у	Α	60.0/60.0	56.0/55.0
Maximum Overcurrent Pro	otection	Α	100/100	90/90
Recommended Fuse Size	9	Α	60/60	60/60
Recommended Minimum	Wire Size	AWG [mm]	4/4 [21.2/21.2]	4/4 [21.2/21.2]
SCCR		kA	5	5
	Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Airflow Rate	CFM	9,550	8,300
FAN⁴	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 23.0 lbs + 12.0 oz [10.8 kg]	R410A x 17.0 lbs + 10.0 oz [8.0 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./F	an)	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.)

¹Harsh weather environments may demand performance enhancing equipment. Ask your Mitsubishi

Electric representative for more details about your region

For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal ³When applying product below -4°F, consult your design engineer for cold climate application best

practices, including the use of a backup source for heating

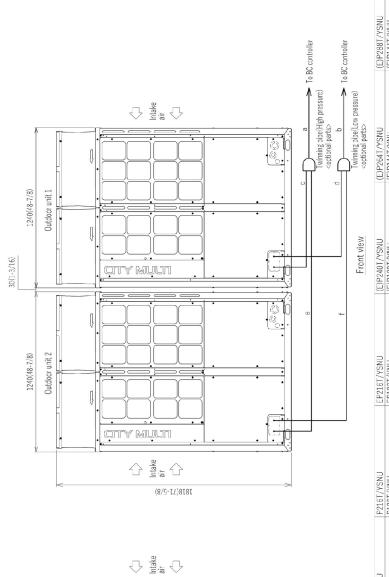
4Unit will continue to operate in extended operating range, but capacity is not guaranteed

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

OUTDOOR UNIT: TURYE2643BN41AN - DIMENSIONS

PURY-EP192, 216, 240, 264, 288T/YSNU-A1

Unit: mm(in)



Package unit name			P216T/YSNU	EP216T/YSNU		(E)P264T/YSNU
Component in the	Outdoor unit 1		P120T/YNU	EP120T/YNU		(E)P144T/YNU
Component dintinging	Outdoor unit 2		P96T/YNU	EP96T/YNU	(E)P120T/YNU	(E)P120T/YNU
Outdoor Twinning Kit((optional parts)		CMY-R200NCBK	CMY-R200NCBK	CMY-R200NCBK	CMY-R300NCBK
BC controller High pressure a ϕ 22.2(7/8)	High pressure 6		* \$\phi 22.2(7/8)(\phi 28.58(1-1/8)) \ *	* \$22.2(7/8)(\$28.58(1-1/8))	* \$22.2(7/8)(\$28.58(1-1/8	3)) \$\phi 28.58(1-1/8)\$
~Twinning pipe	Low pressure		φ 28.58(1-1/8)	φ34.93(1-3/8)	φ34.93(1-3/8)	\$34.93(1-3/8)
Twinning pipe	High pressure (φ 19.05(3/4)	φ19.05(3/4)	φ 19.05(3/4)	φ 22.2(7/8)
~0utdoor unit 1	Low pressure (φ 28.58(1-1/8)	φ 28.58(1-1/8)	φ28.58(1-1/8)	φ 28.58(1-1/8)
Twinning pipe	High pressure €		φ 19.05(3/4)	Ø19.05(3/4)	\$ 19.05(3/4)	\$ 19.05(3/4)
~0utdoor unit 2	Low pressure		φ 22.2(7/8)	φ 22.2(7/8)	φ28.58(1-1/8)	φ 28.58(1-1/8)
		(10000)	. (300			

Left view

Twinning pipe connection size

φ 28.58(1-1/8) φ 34.93(1-3/8) φ 22.2(7/8) φ 28.58(1-1/8) φ 22.2(7/8) φ 28.58(1-1/8)

* When the piping length is 65m(213ft) or longer, use the ϕ 28.58(1-1/8) pipe for the part that exceeds 65m(213ft).

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.

Discharge air 740(29-3/16)

Be sure to see the Installation Manual for defails 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).

MODULE 1: TURYE1443AN41AN - DIMENSIONS

Unit: mm(in)

Connect	Connecting pipe specifications	ecifications			
			Diameter		
Model		Refriger	Refrigerant pipe *1	Service	Service valve
	High pr	High pressure	Low pressure	High pressure	High pressure Low pressure
(E) P96	\$ 19.05(3/4) Brazed	Brazed	\$ 22.2(7/8) Brazed	\$28.58(1-1/8)	\$28.58(1-1/8) \$\phi\$28.58(1-1/8)
(E)P120	E)P120 \$419.05(3/4)	Brazed			\$\phi 28.58(1-1/8) \$\phi 28.58(1-1/8)\$
(E)P144	(E)P144 \$22.2(7/8)	Brazed		\$28.58(1-1/8)	\$28.58(1-1/8) \$\phi\$28.58(1-1/8)

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

 NO.
 Usage
 Specifications

 ①
 Fort though hole 136(5-7/8) x94(3-5/4) knobcut hole

 ②
 Port though hole 156(5-7/8) x94(3-5/4) knobcut hole

 ⑤
 Fort though hole 4627(2-1/2) or 48.45(1-3/3) knobcut hole

 ⑤
 Fort though hole 463(7-2/1/2) or 48.45(1-3/3) knobcut hole

 ⑥
 Fort though hole 463(2-9/1/2) knobcut hole

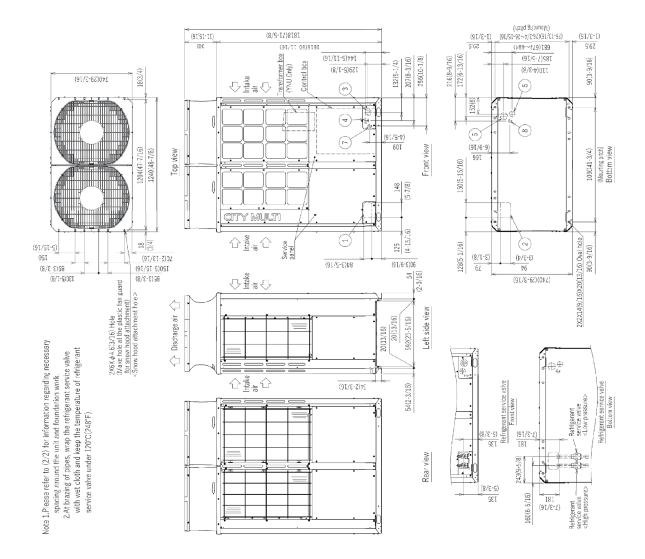
 ⑥
 Fort though hole 463(2-9/1/2) knobcut hole

 Ø
 Fort though hole 463(1-3/2) knobcut hole

 Ø
 Fort though hole 463(1-3/2) knobcut hole

 I ransmission
 Botton though hole 423(1-3/2) knobcut hole

 Ø
 Fort frough hole 423(1-3/2) knobcut hole



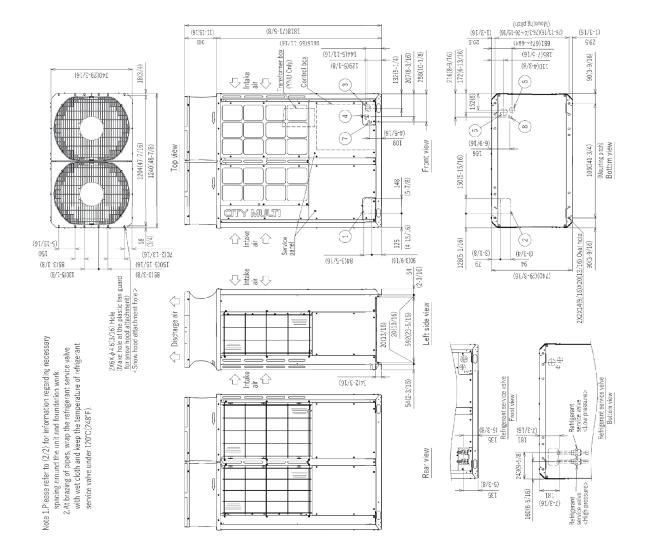
MODULE 2: TURYE1203AN41AN - DIMENSIONS

Unit: mm(in)

			e	∞	8	66
		Service valve	Low pressur	♦ 28.58(1-1)	\$ 28.58(1-1/	♦ 28.58(1-1/
		Service	High pressure Low pressure	\$28.58(1-1/8) \$28.58(1-1/8)	\$28.58(1-1/8) \$\phi\$28.58(1-1/8)	\$\phi 28.58(1-1/8) \$\phi 28.58(1-1/8)\$
	Diameter	Refrigerant pipe *1	Low pressure	\$ 22.2(7/8) Brazed		
Connecting pipe specifications		Refriger	High pressure	(E) P96 \ \phi 19.05(3/4) Brazed	(E)P120 \$\phi\$19.05(3/4) Brazed	(E)P144 \$\phi 22.2(7/8) Brazed
Connecti		Model		(E) P96	(E)P120	(E)P144

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

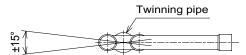
9		Usage	Specifications
0		Front hrough hole	Front hrough hole 148(5-7/8) X 84(3-5/16) Knockaut hole
(3)	sadid in i	Botton through hole	Botton through hole 150(5-15/16) X 94(3-3/4) Knockout hole
ල		Front hrough hole	Front hrough hole \$\phi 62.7(2-1/2) or \$\phi 34.5(1-3/8) Knockout hale
(4)	- Cosinia	Front hrough hole	Front hrough hole ϕ 43.7(1-3/4) or ϕ 22.2(7/8) Knockout hole
(3)		Botton through hole	Botton through hole \$65(2-9/16) Knockout hole
9		Botton through hole	Botton through hole \$52(2-1/16) Knockout hole
0	(2) For	Front hrough hole	Front hrough hole \$34(1-3/8) Knockout hole
00	cables	Botton through hole	Botton through hole \$34(1-3/8) Knockout hole



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. Low-pressure twinning pipe Slope of the twinning pipes are at an angle within ±15° 503(19-13/16) ø28.58(ø1-3/16) (Outside diameter) ø28.58(ø1-3/16) <Deformed pipe(Accessory)> Pipe cover 2. Use the attached pipe to braze (Dot-dashed ø34.93(ø1-7/16) ø41.28(ø1-11/16) the port-opening of the twinning pipe. Pipe diameter is indicated by inside diameter. Local brazing (Outside diameter ø31.75(ø1-1/4) ø28.58(ø1-3/16) 69 (2-3/4)ø34.93(ø1-7/16) Twinning pipe ø28.58(ø1-3/16) Note 2 (337)(13-5/16) 585(23-1/16) High-pressure twinning pipe <Deformed pipe(Accessory)> ø19.05(ø3/4) ø28.58(ø1-3/16) ø19.05(ø3/4) ø22.2(ø7/8) ø19.05(ø3/4)

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) .



