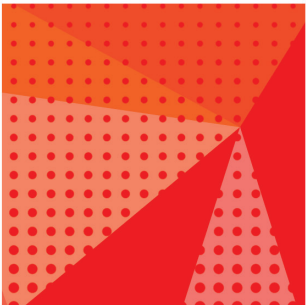


AIR CONDITIONING SYSTEMS

CITY MULTI

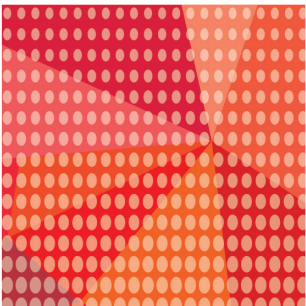


DATA BOOK

MODEL

PURY-EM72-384T(S)XU-A

PURY-EM72-384Y(S)XU-A



R32 refrigerant is mildly flammable, and certain restrictions apply to the installation of units.

When installing new units, moving the existing units, or changing the layout of the room, ensure that installation restrictions are observed.

For details, refer to R32 City Multi Technical Manual (System Design and General Safety Considerations) and Installation Manual.

Heat Recovery R2-Series (High efficiency) - 208-230 V



Type(BTU/h)	72K	96K	120K
Model Name	PURY-EM72TXU-A	PURY-EM96TXU-A	PURY-EM120TXU-A



Type(BTU/h)	144K	168K	192K
Model Name	PURY-EM144TXU-A	PURY-EM168TXU-A	PURY-EM192TXU-A



Type(BTU/h)	264K
Model Name	PURY-EM264TSXU-A



Type(BTU/h)	288K	312K	336K
Model Name	PURY-EM288TSXU-A	PURY-EM312TSXU-A	PURY-EM336TSXU-A
Type(BTU/h)	360K	384K	
Model Name	PURY-EM360TSXU-A	PURY-EM384TSXU-A	

Heat Recovery R2-Series (High efficiency) - 460 V



Type(BTU/h)	72K	96K	120K
Model Name	PURY-EM72YXU-A	PURY-EM96YXU-A	PURY-EM120YXU-A



Type(BTU/h)	144K	168K	192K
Model Name	PURY-EM144YXU-A	PURY-EM168YXU-A	PURY-EM192YXU-A



Type(BTU/h)	264K
Model Name	PURY-EM264YSXU-A



Type(BTU/h)	288K	312K	336K
Model Name	PURY-EM288YSXU-A	PURY-EM312YSXU-A	PURY-EM336YSXU-A
Type(BTU/h)	360K	384K	
Model Name	PURY-EM360YSXU-A	PURY-EM384YSXU-A	

PURY-EM-T(S)XU-A, PURY-EM-Y(S)XU-A

1. SPECIFICATIONS	2
2. EXTERNAL DIMENSIONS	26
3. CENTER OF GRAVITY	32
4. ELECTRICAL WIRING DIAGRAMS	33
5. SOUND LEVELS	37
5-1. Sound levels in cooling mode	37
5-2. Sound levels in heating mode	39
6. VIBRATION LEVEL	41
7. OPERATION TEMPERATURE RANGE	42
8. CAPACITY TABLES	43
8-1. Selection of Cooling/Heating Units	44
8-2. Correction by temperature	54
8-3. Correction by total indoor	99
8-4. Correction by refrigerant piping length	105
8-5. Correction at frost and defrost	109
8-6. Correction at evaporation-temperature (ET) control	110
9. OPTIONAL PARTS	111
9-1. JOINT and REDUCER	111
9-2. OUTDOOR TWINNING KIT	114
9-3. JOINT KIT "CMY-R170M-E" FOR BC CONTROLLER	115
10. ELECTRICAL WORK	116
10-1. General cautions	116
10-2. Power supply for Outdoor unit	117
10-3. Power cable specifications	118
10-4. Power supply examples	119
11. M-NET CONTROL	121
11-1. Transmission cable specifications	121
11-2. System configuration restrictions	122
11-3. Address setting	125
12. PIPING DESIGN	130
12-1. R32 Piping material	130
12-2. Piping Design	132
12-3. Refrigerant charging calculation	139
13. OUTDOOR INSTALLATION	144
13-1. General requirements for installation	144
13-2. Spacing	145
13-3. Piping direction	147
13-4. Weather countermeasure	152
13-5. Countermeasure to wind	152

1. SPECIFICATIONS

R2-Series (High efficiency)

PUR-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM72TXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 208-230V±10% 60Hz		
Cooling capacity (Nominal)		*1	BTU/h	72,000	
			kW	21.1	
(208-230)	Power input		kW	4.49	
		Current input	A	13.8-12.5	
	(Rated)		BTU/h	69,000	
			kW	20.2	
(208-230)	Power input		kW	4.33	4.51
	Current input	A	13.3-12.0		13.9-12.5
Temp. range of cooling		*4	Indoor	W.B. 59.0~75.0° FWB (15.0~24.0°CWB)	
			Outdoor	D.B. 23.0~126.0° FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)		*2	BTU/h	80,000	
			kW	23.4	
(208-230)	Power input		kW	5.18	
		Current input	A	15.9-14.4	
	(Rated)		BTU/h	76,000	
			kW	22.3	
(208-230)	Power input		kW	4.57	5.21
	Current input	A	14.0-12.7		16.0-14.5
Temp. range of heating			Indoor	D.B. 59.0~81.0° FDB (15.0~27.0°CDB)	
			Outdoor	W.B. -22.0~60.0° FWB (-30.0~15.5°CWB)	
Indoor unit connectable		Total capacity			50%~150% of outdoor unit capacity
		Model/Maximum quantity			M04~M96/14
Sound power level (measured in anechoic room)		*3	dB <A> 76.5/78.5		
Refrigerant piping diameter		High pressure	in. (mm)	5/8 Brazed (15.88 Brazed)	
		Low pressure	in. (mm)	3/4 Brazed (19.05 Brazed)	
Minimum Circuit Ampacity (208/230)			A	40/40	
Maximum Overcurrent Protection (208/230)			A	60/60	
FAN		*5	Type x Quantity		Propeller fan x 1
		Airflow rate	cfm	6,356	
				180	
				3,000	
				L/s	
		Control, Driving mechanism		Inverter-control , Brushless DC motor	
		Motor output	kW	0.92	
External static press.		0 in WG (0Pa)			
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1	
		Starting method		Inverter	
		Motor output	kW	3.5	
		Case heater	kW	0.045	
		Lubricant		MEL46EH	
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>		
External dimension H x W x D			in.	70-13/16 x 36-1/4 x 29-7/16	
			mm	1,798 x 920 x 747	
Protection devices		High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	
		Inverter circuit (COMP./FAN)		Over-current protection	
		Compressor		-	
		Fan motor		-	
Refrigerant		Type x original charge		R32 x 11lbs 11oz (5.3kg)	
		Control		Indoor LEV and BC controller	
Net weight			lbs (kg)	604 (274)	
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		
HIC circuit (HIC: Heat Inter-Changer)			-		
Defrosting method			Reverse defrost , Liquid backless defrost		
Drawing		External		KB94CA7N	
		Wiring		KE94L586	
Standard attachment		Document		Installation Manual	
		Accessory		Details refer to External Drw	
Optional parts		Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2	
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV	
		Sub BC controller		CMB-M104/108NU-MB-SV	
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.		

Notes:

- 1.Nominal cooling conditions (Test conditions are based on AHRI 1230)
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)
- 2.Nominal heating conditions (Test conditions are based on AHRI 1230)
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)
- 3.Cooling mode / Heating mode
- 4.-10°CDB. (14°FDB.)/-11°CWB. (12.2°FWB.) to 21°CDB. (69.8°FDB.)/15.5°CWB. (59°FWB.) with cooling/heating mixed operation.
- 5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)

Due to continuing improvement, above specifications may be subject to change without notice.

Unit converter	
BTU/h	=kW x 3,412
cfm	=m³/min x 35.31
lbs	=kg/0.4536

*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM96TXU-A			
Indoor Model			Non-Ducted	Ducted		
Power source			3-phase 3-wire 208-230V±10% 60Hz			
Cooling capacity (Nominal)		*1	BTU/h		96,000	
			kW		28.1	
		Power input	kW		6.33	
(208-230)		Current input	A		19.5-17.6	
(Rated)			BTU/h		92,000	
			kW		27.0	
		Power input	kW		6.10	6.40
(208-230)		Current input	A		18.8-17.0	19.7-17.8
Temp. range of cooling		*4	Indoor	W.B.	59.0~75.0' FWB (15.0~24.0°CWB)	
			Outdoor	D.B.	23.0~126.0' FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)		*2	BTU/h		108,000	
			kW		31.7	
		Power input	kW		7.12	
(208-230)		Current input	A		21.9-19.8	
(Rated)			BTU/h		103,000	
			kW		30.2	
		Power input	kW		6.57	7.14
(208-230)		Current input	A		20.2-18.3	22.0-19.9
Temp. range of heating			Indoor	D.B.	59.0~81.0' FDB (15.0~27.0°CDB)	
			Outdoor	W.B.	-22.0~60.0' FWB (-30.0~15.5°CWB)	
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity		
		Model/Maximum quantity		M04~M96/19		
Sound power level (measured in anechoic room)		*3	dB <A>		77.5/80.0	
Refrigerant piping diameter		High pressure	in. (mm)		3/4 Braze (19.05 Braze)	
		Low pressure	in. (mm)		7/8 Braze (22.2 Braze)	
Minimum Circuit Ampacity (208/230)		A		40/40		
Maximum Overcurrent Protection (208/230)		A		60/60		
FAN		*5	Type x Quantity		Propeller fan x 1	
		Airflow rate	cfm	6,532		
			m³/min	185		
			L/s	3,083		
		Control, Driving mechanism		Inverter-control , Brushless DC motor		
		Motor output	kW		0.92	
		External static press.		0 in WG (0Pa)		
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1		
		Starting method		Inverter		
		Motor output	kW		5.1	
		Case heater	kW		0.045	
		Lubricant		MEL46EH		
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>			
External dimension H x W x D		in.	70-13/16 x 36-1/4 x 29-7/16			
		mm	1,798 x 920 x 747			
Protection devices		High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
		Inverter circuit (COMP./FAN)		Over-current protection		
		Compressor		-		
		Fan motor		-		
Refrigerant		Type x original charge		R32 x 11lbs 11oz (5.3kg)		
		Control		Indoor LEV and BC controller		
Net weight		lbs (kg)		604 (274)		
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes			
HIC circuit (HIC: Heat Inter-Changer)			-			
Defrosting method			Reverse defrost , Liquid backless defrost			
Drawing		External		KB94CA7N		
		Wiring		KE94L586		
Standard attachment		Document		Installation Manual		
		Accessory		Details refer to External Drw		
Optional parts		Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2		
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV		
		Sub BC controller		CMB-M104/108NU-MB-SV		
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230)		BTU/h =kW x 3,412
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		cfm =m ³ /min x 35.31
2.Nominal heating conditions (Test conditions are based on AHRI 1230)		lbs =kg/0.4536
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		
3.Cooling mode / Heating mode		
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM120TXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 208-230V±10% 60Hz		
Cooling capacity (Nominal)		*1	BTU/h		
			120,000		
			kW		
			35.2		
			kW		
			8.54		
(208-230)			Current input		
			A		
			26.3-23.8		
(Rated)			BTU/h		
			115,000		
			kW		
			33.7		
			kW		
			8.40		
			8.54		
(208-230)			Current input		
			A		
			25.9-23.4		
			26.3-23.8		
Temp. range of cooling		*4	Indoor		
			W.B.		
			59.0~75.0˚ FWB (15.0~24.0˚CWB)		
			Outdoor		
			D.B.		
			23.0~126.0˚ FDB (-5.0~52.0˚CDB)		
Heating capacity (Nominal)		*2	BTU/h		
			135,000		
			kW		
			39.6		
			kW		
			9.93		
(208-230)			Current input		
			A		
			30.6-27.6		
(Rated)			BTU/h		
			129,000		
			kW		
			37.8		
			kW		
			8.95		
			9.55		
(208-230)			Current input		
			A		
			27.6-24.9		
			29.4-26.6		
Temp. range of heating			Indoor		
			D.B.		
			59.0~81.0˚ FDB (15.0~27.0˚CDB)		
			Outdoor		
			W.B.		
			-22.0~60.0˚ FWB (-30.0~15.5˚CWB)		
Indoor unit connectable			Total capacity		
			50%~150% of outdoor unit capacity		
			Model/Maximum quantity		
			M04~M96/24		
Sound power level (measured in anechoic room)		*3	dB <A>		
			80.0/83.5		
Refrigerant piping diameter			High pressure		
			in. (mm)		
			3/4 Brazed (19.05 Brazed)		
			Low pressure		
			in. (mm)		
			1-1/8 Brazed (28.58 Brazed)		
Minimum Circuit Ampacity (208/230)			A		
			51/51		
Maximum Overcurrent Protection (208/230)			A		
			80/80		
FAN		*5	Type x Quantity		
			Propeller fan x 1		
			Airflow rate		
			cfm		
			7,062		
			m³/min		
			200		
			L/s		
			3,333		
			Control, Driving mechanism		
			Inverter-control , Brushless DC motor		
			Motor output		
			kW		
			0.92		
			External static press.		
			0 in WG (0Pa)		
Compressor			Type x Quantity		
			Inverter scroll hermetic compressor ×1		
			Starting method		
			Inverter		
			Motor output		
			kW		
			7.5		
			Case heater		
			kW		
			0.045		
			Lubricant		
			MEL46EH		
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>		
External dimension H x W x D			in.		
			70-13/16 x 36-1/4 x 29-7/16		
			mm		
			1,798 x 920 x 747		
Protection devices			High pressure protection		
			High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
			Inverter circuit (COMP./FAN)		
			Over-current protection		
			Compressor		
			-		
			Fan motor		
			-		
Refrigerant			Type x original charge		
			R32 x 11lbs 11oz (5.3kg)		
			Control		
			Indoor LEV and BC controller		
Net weight			lbs (kg)		
			611 (277)		
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		
HIC circuit (HIC: Heat Inter-Changer)			-		
Defrosting method			Reverse defrost , Liquid backless defrost		
Drawing			External		
			KB94CA7N		
			Wiring		
			KE94L586		
Standard attachment			Document		
			Installation Manual		
			Accessory		
			Details refer to External Drw		
Optional parts			Joint		
			CMY-Y102SS-G2 , CMY-Y102LS-G2		
			Main BC controller		
			CMB-M104/106/108/1012NU-MA-SV		
			Sub BC controller		
			CMB-M104/108NU-MB-SV		
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.		

Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
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)
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)
- Cooling mode / Heating mode
- 10 °CD.B. (14 °FD.B.)/-11 °CW.B. (12.2 °FW.B.) to 21 °CD.B. (69.8 °FD.B.)/15.5 °CW.B. (59 °FW.B.) with cooling/heating mixed operation.
- External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)

Due to continuing improvement, above specifications may be subject to change without notice.

Unit converter	
BTU/h	=kW x 3,412
cfm	=m³/min x 35.31
lbs	=kg/0.4536

*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM144TXU-A				
Indoor Model			Non-Ducted	Ducted			
Power source			3-phase 3-wire 208-230V±10% 60Hz				
Cooling capacity (Nominal)		*1	BTU/h		144,000		
			kW		42.2		
(208-230)		Power input	kW	10.43			
		Current input	A	32.1-29.0			
(Rated)			BTU/h	138,000			
			kW	40.4			
(208-230)		Power input	kW	10.51	10.60		
		Current input	A	32.4-29.3	32.6-29.5		
Temp. range of cooling		*4	Indoor	W.B.	59.0~75.0' FWB (15.0~24.0°CWB)		
			Outdoor	D.B.	23.0~126.0' FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)		*2	BTU/h		160,000		
			kW		46.9		
(208-230)		Power input	kW	11.68			
		Current input	A	36.0-32.5			
(Rated)			BTU/h	152,000			
			kW	44.5			
(208-230)		Power input	kW	10.75	11.37		
		Current input	A	33.1-29.9	35.0-31.7		
Temp. range of heating			Indoor	D.B.	59.0~81.0' FDB (15.0~27.0°CDB)		
			Outdoor	W.B.	-22.0~60.0' FWB (-30.0~15.5°CWB)		
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity			
		Model/Maximum quantity		M04-M96/29			
Sound power level (measured in anechoic room)		*3	dB <A>	80.5/82.5			
Refrigerant piping diameter		High pressure	in. (mm)	7/8 Brazed (22.2 Brazed)			
		Low pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)			
Minimum Circuit Ampacity (208/230)		A		60/60			
Maximum Overcurrent Protection (208/230)		A		100/100			
FAN		*5	Type x Quantity		Propeller fan x 2		
		Airflow rate		cfm	8,474		
				m³/min	240		
				L/s	4,000		
		Control, Driving mechanism		Inverter-control , Brushless DC motor			
		Motor output		kW	0.46		
		External static press.		0 in WG (0Pa)			
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1			
		Starting method		Inverter			
		Motor output		kW	9.0		
		Case heater		kW	0.048		
		Lubricant		MEL46EH			
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>				
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16				
		mm	1,798 x 1,217 x 747				
Protection devices		High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)			
		Inverter circuit (COMP./FAN)		Over-current protection			
		Compressor		-			
		Fan motor		-			
Refrigerant		Type x original charge		R32 x 13lbs 15oz (6.3kg)			
		Control		Indoor LEV and BC controller			
Net weight		lbs (kg)	712 (323)				
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes				
HIC circuit (HIC: Heat Inter-Changer)			-				
Defrosting method			Reverse defrost , Liquid backless defrost				
Drawing		External		KB94CA7P			
		Wiring		KE94L591			
Standard attachment		Document		Installation Manual			
		Accessory		Details refer to External Drw			
Optional parts		Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2			
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV			
		Sub BC controller		CMB-M104/108NU-MB-SV			
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230)		BTU/h =kW x 3,412
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		cfm =m ³ /min x 35.31
2.Nominal heating conditions (Test conditions are based on AHRI 1230)		lbs =kg/0.4536
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		
3.Cooling mode / Heating mode		
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model				PURY-EM168TXU-A			
Indoor Model				Non-Ducted		Ducted	
Power source				3-phase 3-wire 208-230V±10% 60Hz			
Cooling capacity (Nominal)			*1	BTU/h	168,000		
				kW	49.2		
(208-230)				Power input	13.22		
				Current input	40.7-36.8		
(Rated)				BTU/h	160,000		
				kW	46.9		
(208-230)				Power input	13.24	13.20	
				Current input	40.8-36.9	40.7-36.8	
Temp. range of cooling		*4	Indoor	W.B.	59.0~75.0˚ FWB (15.0~24.0˚CWB)		
			Outdoor	D.B.	23.0~126.0˚ FDB (-5.0~52.0˚CDB)		
Heating capacity (Nominal)			*2	BTU/h	188,000		
				kW	55.1		
(208-230)				Power input	14.64		
				Current input	45.1-40.8		
(Rated)				BTU/h	178,000		
				kW	52.2		
(208-230)				Power input	13.38	14.17	
				Current input	41.2-37.3	43.7-39.5	
Temp. range of heating			Indoor	D.B.	59.0~81.0˚ FDB (15.0~27.0˚CDB)		
			Outdoor	W.B.	-22.0~60.0˚ FWB (-30.0~15.5˚CWB)		
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity			
		Model/Maximum quantity		M04~M96/34			
Sound power level (measured in anechoic room)			*3	dB <A>		80.5/88.5	
Refrigerant piping diameter			High pressure	in. (mm)	7/8 Brazed (22.2 Brazed)		
			Low pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)		
Minimum Circuit Ampacity (208/230)				A	60/60		
Maximum Overcurrent Protection (208/230)				A	100/100		
FAN		*5	Type x Quantity		Propeller fan x 2		
			Airflow rate	cfm	10,593		
				m³/min	300		
				L/s	5,000		
				Control, Driving mechanism			Inverter-control , Brushless DC motor
			Motor output	kW	0.46		
			External static press.		0 in WG (0Pa)		
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1			
		Starting method		Inverter			
			Motor output	kW	11.5		
			Case heater	kW	0.048		
			Lubricant		MEL46EH		
External finish				Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>			
External dimension H x W x D				in.	70-13/16 x 47-15/16 x 29-7/16		
				mm	1,798 x 1,217 x 747		
Protection devices		High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)			
		Inverter circuit (COMP./FAN)		Over-current protection			
		Compressor		-			
		Fan motor		-			
Refrigerant		Type x original charge		R32 x 13lbs 15oz (6.3kg)			
		Control		Indoor LEV and BC controller			
Net weight				lbs (kg)	712 (323)		
Heat exchanger				Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes			
HIC circuit (HIC: Heat Inter-Changer)				-			
Defrosting method				Reverse defrost , Liquid backless defrost			
Drawing		External		KB94CA7P			
		Wiring		KE94L591			
Standard attachment		Document		Installation Manual			
		Accessory		Details refer to External Drw			
Optional parts		Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2			
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV			
		Sub BC controller		CMB-M104/108NU-MB-SV			
Remarks				Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			

Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
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)
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)
- Cooling mode / Heating mode
4.-10°CDB. (14°FDB.)/-11°CWB. (12.2°FWB.) to 21°CDB. (69.8°FDB.)/15.5°CWB. (59°FWB.) with cooling/heating mixed operation.
- External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
- Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)

Due to continuing improvement, above specifications may be subject to change without notice.

Unit converter	
BTU/h	=kW x 3,412
cfm	=m³/min x 35.31
lbs	=kg/0.4536

*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM192TXU-A			
Indoor Model			Non-Ducted	Ducted		
Power source			3-phase 3-wire 208-230V±10% 60Hz			
Cooling capacity (Nominal)		*1	BTU/h	192,000		
			kW	56.3		
(208-230)	Power input		kW	16.19		
	Current input		A	49.9-45.1		
(Rated)			BTU/h	184,000		
			kW	53.9		
(208-230)	Power input		kW	16.08	16.22	
	Current input		A	49.5-44.8	50.0-45.2	
Temp. range of cooling		*4	Indoor	W.B. 59.0~75.0˚ FWB (15.0~24.0˚CWB)		
			Outdoor	D.B. 23.0~126.0˚ FDB (-5.0~52.0˚CDB)		
Heating capacity (Nominal)		*2	BTU/h	192,000		
			kW	56.3		
(208-230)	Power input		kW	15.89		
	Current input		A	49.0-44.3		
(Rated)			BTU/h	184,000		
			kW	53.9		
(208-230)	Power input		kW	13.75	14.60	
	Current input		A	42.4-38.3	45.0-40.7	
Temp. range of heating			Indoor	D.B. 59.0~81.0˚ FDB (15.0~27.0˚CDB)		
			Outdoor	W.B. -22.0~60.0˚ FWB (-30.0~15.5˚CWB)		
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity		
		Model/Maximum quantity		M04~M96/39		
Sound power level (measured in anechoic room)		*3	dB <A>	87.5/89.5		
Refrigerant piping diameter		High pressure	in. (mm)	7/8 Brazed (22.2 Brazed)		
		Low pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)		
Minimum Circuit Ampacity (208/230)			A	60/60		
Maximum Overcurrent Protection (208/230)			A	100/100		
FAN		*5	Type x Quantity		Propeller fan x 2	
		Airflow rate	cfm	11,123		
			m³/min	315		
			L/s	5,250		
		Control, Driving mechanism		Inverter-control , Brushless DC motor		
		Motor output		kW	0.46	
		External static press.			0 in WG (0Pa)	
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1		
		Starting method		Inverter		
		Motor output	kW	12.7		
		Case heater	kW	0.048		
		Lubricant		MEL46EH		
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>			
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16			
		mm	1,798 x 1,217 x 747			
Protection devices		High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
		Inverter circuit (COMP./FAN)		Over-current protection		
		Compressor		-		
		Fan motor		-		
Refrigerant		Type x original charge		R32 x 13lbs 15oz (6.3kg)		
		Control		Indoor LEV and BC controller		
Net weight		lbs (kg)	712 (323)			
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes			
HIC circuit (HIC: Heat Inter-Changer)			-			
Defrosting method			Reverse defrost , Liquid backless defrost			
Drawing		External		KB94CA7P		
		Wiring		KE94L591		
Standard attachment		Document		Installation Manual		
		Accessory		Details refer to External Drw		
Optional parts		Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2		
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV		
		Sub BC controller		CMB-M104/108NU-MB-SV		
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230)		BTU/h =kW x 3,412
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		cfm =m ³ /min x 35.31
2.Nominal heating conditions (Test conditions are based on AHRI 1230)		lbs =kg/0.4536
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		
3.Cooling mode / Heating mode		
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM264TSXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 208-230V±10% 60Hz		
Cooling capacity (Nominal)	*1	BTU/h	264,000		
		kW	77.4		
	(208-230)	Power input	19.53		
		Current input	60.2-54.4		
	(Rated)	BTU/h	252,000		
		kW	73.9		
	(208-230)	Power input	19.97		20.05
		Current input	61.5-55.6		61.8-55.9
Temp. range of cooling	*4	Indoor	59.0~75.0° FWB (15.0~24.0°CWB)		
		Outdoor	23.0~126.0° FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)	*2	BTU/h	295,000		
		kW	86.5		
	(208-230)	Power input	21.63		
		Current input	66.7-60.3		
	(Rated)	BTU/h	280,000		
		kW	82.1		
	(208-230)	Power input	21.78		21.40
		Current input	67.1-60.7		66.0-59.6
Temp. range of heating		Indoor	59.0~81.0° FDB (15.0~27.0°CDB)		
		Outdoor	-22.0~60.0° FWB (-30.0~15.5°CWB)		
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity		
	Model/Maximum quantity		M04~M96/50		
Sound power level (measured in anechoic room)		*3	dB <A>		
			83.5/86.5		
Refrigerant piping diameter	High pressure		in. (mm)		
	Low pressure		in. (mm)		

Set Model				PURY-EM144TXU-A		PURY-EM120TXU-A	
Model							
Minimum Circuit Ampacity (208/230)				A	60/60	51/51	
Maximum Overcurrent Protection (208/230)				A	100/100	80/80	
FAN	*5	Type x Quantity		Propeller fan x 2		Propeller fan x 1	
		Airflow rate	cfm	8,474		7,062	
			m³/min	240		200	
			L/s	4,000		3,333	
		Control, Driving mechanism		Inverter-control , Brushless DC motor		Inverter-control , Brushless DC motor	
		Motor output	kW	0.46		0.92	
		External static press.		0 in WG (0Pa)		0 in WG (0Pa)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1		Inverter scroll hermetic compressor ×1		
	Starting method		Inverter		Inverter		
	Motor output	kW	9.0		7.5		
	Case heater	kW	0.048		0.045		
	Lubricant		MEL46EH		MEL46EH		
External finish				Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	
External dimension H x W x D			in.	70-13/16 x 47-15/16 x 29-7/16		70-13/16 x 36-1/4 x 29-7/16	
			mm	1,798 x 1,217 x 747		1,798 x 920 x 747	
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection		
	Compressor		-		-		
	Fan motor		-		-		
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)		R32 x 11lbs 11oz (5.3kg)		
	Control		Indoor LEV and BC controller				
Net weight			lbs (kg)	712 (323)		611 (277)	
Heat exchanger				Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	
HIC circuit (HIC: Heat Inter-Changer)				-		-	
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed		3/4 (19.05) Brazed		
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Defrosting method				Reverse defrost , Liquid backless defrost			
Drawing	External		KB94CA7W				
	Wiring		KE94L591		KE94L586		
Standard attachment	Document		Installation Manual				
	Accessory		Details refer to External Drw				
Optional parts	Twinning kit		CMY-R300NCBK				
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2				
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV				
	Sub BC controller		CMB-M104/108MB-SV				
Remarks				Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230) Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		BTU/h =kW x 3.412
2.Nominal heating conditions (Test conditions are based on AHRI 1230) Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		cfm =m ³ /min x 35.31
3.Cooling mode / Heating mode		lbs =kg/0.4536
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM288TSXU-A	
Indoor Model			Non-Ducted	Ducted
Power source			3-phase 3-wire 208-230V±10% 60Hz	
Cooling capacity (Nominal)	*1	BTU/h	288,000	
		kW	84.4	
		Power input	21.94	
		(208-230) Current input	67.6-61.1	
	(Rated)	BTU/h	276,000	
		kW	80.9	
		Power input	22.61	22.57
		(208-230) Current input	69.7-63.0	69.6-62.9
Temp. range of cooling	*4	Indoor	59.0~75.0° FWB (15.0~24.0°CWB)	
		Outdoor	23.0~126.0° FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)	*2	BTU/h	323,000	
		kW	94.7	
		Power input	23.65	
		(208-230) Current input	72.9-65.9	
	(Rated)	BTU/h	304,000	
		kW	89.1	
		Power input	24.37	23.39
		(208-230) Current input	75.1-67.9	72.1-65.2
Temp. range of heating		Indoor	59.0~81.0° FDB (15.0~27.0°CDB)	
		Outdoor	-22.0~60.0° FWB (-30.0~15.5°CWB)	
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity	
	Model/Maximum quantity		M04~M96/50	
Sound power level (measured in anechoic room)	*3	dB <A>	84.0/86.0	
Refrigerant piping diameter	High pressure		1-1/8 Brazed (28.58 Brazed)	
	Low pressure		1-3/8 Brazed (34.93 Brazed)	

Set Model

Model			PURY-EM144TXU-A		PURY-EM144TXU-A		
Minimum Circuit Ampacity (208/230)		A	60/60		60/60		
Maximum Overcurrent Protection (208/230)		A	100/100		100/100		
FAN	*5	Type x Quantity		Propeller fan x 2		Propeller fan x 2	
		Airflow rate	cfm	8,474		8,474	
			m³/min	240		240	
			L/s	4,000		4,000	
	Control, Driving mechanism		Inverter-control , Brushless DC motor		Inverter-control , Brushless DC motor		
	Motor output	kW	0.46		0.46		
	External static press.		0 in WG (0Pa)		0 in WG (0Pa)		
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1		Inverter scroll hermetic compressor ×1		
	Starting method		Inverter		Inverter		
	Motor output	kW	9.0		9.0		
	Case heater	kW	0.048		0.048		
	Lubricant		MEL46EH		MEL46EH		
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>		
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16		70-13/16 x 47-15/16 x 29-7/16		
		mm	1,798 x 1,217 x 747		1,798 x 1,217 x 747		
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection		
	Compressor		-		-		
	Fan motor		-		-		
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)		R32 x 13lbs 15oz (6.3kg)		
	Control		Indoor LEV and BC controller				
Net weight		lbs (kg)	712 (323)		712 (323)		
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		
HIC circuit (HIC: Heat Inter-Changer)			-		-		
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed		
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Defrosting method			Reverse defrost , Liquid backless defrost				
Drawing	External		KB94CA7X				
	Wiring		KE94L591		KE94L591		
Standard attachment	Document		Installation Manual				
	Accessory		Details refer to External Drw				
Optional parts	Twinning kit		CMY-R300NCBK				
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2				
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV				
	Sub BC controller		CMB-M104/108MB-SV				
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				

Notes:			Unit converter	
1.Nominal cooling conditions (Test conditions are based on AHRI 1230) Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)			BTU/h	=kW x 3.412
2.Nominal heating conditions (Test conditions are based on AHRI 1230) Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)			cfm	=m³/min x 35.31
3.Cooling mode / Heating mode			lbs	=kg/0.4536
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.				
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).				
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)				
Due to continuing improvement, above specifications may be subject to change without notice.			*Above specification data is subject to rounding variation.	

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM312TSXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 208-230V±10% 60Hz		
Cooling capacity (Nominal)	*1	BTU/h	312,000		
		kW	91.4		
	(208-230)	Power input	25.19		
		Current input	77.6-70.2		
	(Rated)	BTU/h	298,000		
		kW	87.3		
	(208-230)	Power input	25.91		25.28
		Current input	79.9-72.2		77.9-70.5
Temp. range of cooling	*4	Indoor	W.B. 59.0~75.0° FWB (15.0~24.0°CWB)		
		Outdoor	D.B. 23.0~126.0° FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)	*2	BTU/h	350,000		
		kW	102.6		
	(208-230)	Power input	26.52		
		Current input	81.7-73.9		
	(Rated)	BTU/h	334,000		
		kW	97.9		
	(208-230)	Power input	27.12		26.56
		Current input	83.6-75.6		81.9-74.0
Temp. range of heating		Indoor	D.B. 59.0~81.0° FDB (15.0~27.0°CDB)		
		Outdoor	W.B. -22.0~60.0° FWB (-30.0~15.5°CWB)		
Indoor unit connectable		Total capacity	50%~150% of outdoor unit capacity		
		Model/Maximum quantity	M04~M96/50		
Sound power level (measured in anechoic room)		*3	dB <A> 84.0/89.5		
Refrigerant piping diameter	High pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)		
	Low pressure	in. (mm)	1-5/8 Brazed (41.28 Brazed)		

Set Model						
Model			PURY-EM168TXU-A		PURY-EM144TXU-A	
Minimum Circuit Ampacity (208/230)			A	60/60		60/60
Maximum Overcurrent Protection (208/230)			A	100/100		100/100
FAN	*5	Type x Quantity		Propeller fan x 2		Propeller fan x 2
		Airflow rate	cfm	10,593		8,474
			m³/min	300		240
			L/s	5,000		4,000
		Control, Driving mechanism		Inverter-control , Brushless DC motor		Inverter-control , Brushless DC motor
	Motor output	kW	0.46		0.46	
	External static press.		0 in WG (0Pa)		0 in WG (0Pa)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1		Inverter scroll hermetic compressor ×1	
	Starting method		Inverter		Inverter	
	Motor output	kW	11.5		9.0	
	Case heater	kW	0.048		0.048	
	Lubricant	MEL46EH		MEL46EH		
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16		70-13/16 x 47-15/16 x 29-7/16	
		mm	1,798 x 1,217 x 747		1,798 x 1,217 x 747	
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection	
	Compressor		-		-	
	Fan motor		-		-	
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)		R32 x 13lbs 15oz (6.3kg)	
	Control		Indoor LEV and BC controller			
Net weight		lbs (kg)	712 (323)		712 (323)	
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	
HIC circuit (HIC: Heat Inter-Changer)			-		-	
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed	
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	
Defrosting method			Reverse defrost , Liquid backless defrost			
Drawing	External		KB94CA7X			
	Wiring		KE94L591		KE94L591	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts	Twinning kit		CMY-R300NCBK			
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2			
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV			
	Sub BC controller		CMB-M104/108MB-SV			
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230) Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		BTU/h =kW x 3.412
2.Nominal heating conditions (Test conditions are based on AHRI 1230) Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		cfm =m ³ /min x 35.31
3.Cooling mode / Heating mode		lbs =kg/0.4536
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM336TSXU-A	
Indoor Model			Non-Ducted	Ducted
Power source			3-phase 3-wire 208-230V±10% 60Hz	
Cooling capacity (Nominal)	*1	BTU/h	336,000	
		kW	98.5	
	(208-230)	Power input	28.82	
		Current input	88.8-80.3	
	(Rated)	BTU/h	320,000	
		kW	93.8	
Temp. range of cooling	(208-230)	Power input	29.38	
		Current input	90.6-81.9	
	(Rated)	BTU/h	320,000	
		kW	93.8	
Heating capacity (Nominal)	*2	BTU/h	378,000	
		kW	110.8	
Temp. range of heating	(208-230)	Power input	29.58	
		Current input	91.2-82.5	
	(Rated)	BTU/h	360,000	
		kW	105.5	
Indoor unit connectable	Model/Maximum quantity	BTU/h	378,000	
		kW	110.8	
Sound power level (measured in anechoic room)	*3	dB <A>	84.0/92.0	
Refrigerant piping diameter	High pressure	in. (mm)	1-1/8 Braze (28.58 Braze)	
		Low pressure	1-5/8 Braze (41.28 Braze)	

Set Model				
Model			PURY-EM168TXU-A	PURY-EM168TXU-A
Minimum Circuit Ampacity (208/230)		A	60/60	60/60
Maximum Overcurrent Protection (208/230)		A	100/100	100/100
FAN	*5 Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Airflow rate	cfm	10,593	10,593
		m³/min	300	300
		L/s	5,000	5,000
	Control, Driving mechanism		Inverter-control , Brushless DC motor	Inverter-control , Brushless DC motor
	Motor output	kW	0.46	0.46
External static press.		0 in WG (0Pa)	0 in WG (0Pa)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x1	Inverter scroll hermetic compressor x1
	Starting method		Inverter	Inverter
	Motor output	kW	11.5	11.5
	Case heater	kW	0.048	0.048
	Lubricant		MEL46EH	MEL46EH
External finish		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16	70-13/16 x 47-15/16 x 29-7/16
		mm	1,798 x 1,217 x 747	1,798 x 1,217 x 747
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	High pressure switch , Pressure sensor at 4.15MPa (601Psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Compressor		-	-
	Fan motor		-	-
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)	R32 x 13lbs 15oz (6.3kg)
	Control		Indoor LEV and BC controller	
Net weight		lbs (kg)	712 (323)	712 (323)
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes
HIC circuit (HIC: Heat Inter-Changer)			-	-
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Reverse defrost , Liquid backless defrost	
Drawing	External		KB94CA7X	
	Wiring		KE94L591	KE94L591
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts	Twinning kit		CMY-R300NCBK	
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2	
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV	
	Sub BC controller		CMB-M104/108MB-SV	
Remarks		Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.		

Notes:			Unit converter	
1.Nominal cooling conditions (Test conditions are based on AHRI 1230)			BTU/h	=kW x 3.412
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)			cfm	=m ³ /min x 35.31
2.Nominal heating conditions (Test conditions are based on AHRI 1230)			lbs	=kg/0.4536
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)				
3.Cooling mode / Heating mode				
4.-10 °CD.B. (14 °FD.B.)/-11 °CW.B. (12.2 °FW.B.) to 21 °CD.B. (69.8 °FD.B.)/15.5 °CW.B. (59 °FW.B.) with cooling/heating mixed operation.				
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).				
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)				
Due to continuing improvement, above specifications may be subject to change without notice.			*Above specification data is subject to rounding variation.	

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM360TSXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 208-230V±10% 60Hz		
Cooling capacity (Nominal)	*1	BTU/h	360,000		
		kW	105.5		
		Power input	32.21		
		(208-230) Current input	99.3-89.8		
	(Rated)	BTU/h	344,000		
		kW	100.8		
		Power input	32.81		32.19
		(208-230) Current input	101.1-91.5		99.2-89.7
Temp. range of cooling	*4	Indoor	59.0~75.0° FWB (15.0~24.0°CWB)		
		Outdoor	23.0~126.0° FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)	*2	BTU/h	380,000		
		kW	111.4		
		Power input	30.75		
		(208-230) Current input	94.8-85.7		
	(Rated)	BTU/h	362,000		
		kW	106.1		
		Power input	31.00		28.85
		(208-230) Current input	95.6-86.4		88.9-80.4
Temp. range of heating		Indoor	59.0~81.0° FDB (15.0~27.0°CDB)		
		Outdoor	-22.0~60.0° FWB (-30.0~15.5°CWB)		
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity		
	Model/Maximum quantity		M04~M96/50		
Sound power level (measured in anechoic room)		*3	dB <A>		
			88.5/92.5		
Refrigerant piping diameter	High pressure		in. (mm)		
	Low pressure		in. (mm)		

Set Model				
Model			PURY-EM192TXU-A	PURY-EM168TXU-A
Minimum Circuit Ampacity (208/230)			A	60/60
Maximum Overcurrent Protection (208/230)			A	100/100
FAN	*5	Type x Quantity	Propeller fan x 2	
		Airflow rate	cfm	11,123
			m³/min	315
			L/s	5,250
	Control, Driving mechanism	Inverter-control , Brushless DC motor		
	Motor output	kW	0.46	
	External static press.	0 in WG (0Pa)		
Compressor	Type x Quantity	Inverter scroll hermetic compressor ×1		
	Starting method	Inverter		
	Motor output	kW	12.7	
	Case heater	kW	0.048	
	Lubricant	MEL46EH		
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16	70-13/16 x 47-15/16 x 29-7/16
		mm	1,798 x 1,217 x 747	1,798 x 1,217 x 747
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	High pressure switch , Pressure sensor at 4.15MPa (601Psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Compressor		-	-
	Fan motor		-	-
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)	R32 x 13lbs 15oz (6.3kg)
	Control		Indoor LEV and BC controller	
Net weight		lbs (kg)	712 (323)	712 (323)
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes
HIC circuit (HIC: Heat Inter-Changer)			-	-
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Reverse defrost , Liquid backless defrost	
Drawing	External		KB94CA7X	
	Wiring		KE94L591	KE94L591
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts	Twinning kit		CMY-R300NCBK	
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2	
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV	
	Sub BC controller		CMB-M104/108MB-SV	
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.	

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230) Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		BTU/h =kW x 3.412
2.Nominal heating conditions (Test conditions are based on AHRI 1230) Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		cfm =m ³ /min x 35.31
3.Cooling mode / Heating mode		lbs =kg/0.4536
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM384TSXU-A	
Indoor Model			Non-Ducted	Ducted
Power source			3-phase 3-wire 208-230V±10% 60Hz	
Cooling capacity (Nominal)	*1	BTU/h	384,000	
		kW	112.5	
	(208-230)	Power input	35.66	
		Current input	109.9-99.4	
	(Rated)	BTU/h	368,000	
		kW	107.9	
	(208-230)	Power input	36.21	36.23
		Current input	111.6-100.9	111.7-101.0
Temp. range of cooling	*4	Indoor	59.0~75.0° FWB (15.0~24.0°CWB)	
		Outdoor	23.0~126.0° FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)	*2	BTU/h	384,000	
		kW	112.5	
	(208-230)	Power input	32.70	
		Current input	100.8-91.2	
	(Rated)	BTU/h	368,000	
		kW	107.9	
	(208-230)	Power input	31.67	29.79
		Current input	97.6-88.3	91.8-83.0
Temp. range of heating		Indoor	59.0~81.0° FDB (15.0~27.0°CDB)	
		Outdoor	-22.0~60.0° FWB (-30.0~15.5°CWB)	
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity	
	Model/Maximum quantity		M04~M96/50	
Sound power level (measured in anechoic room)	*3	dB <A>	91.0/93.0	
Refrigerant piping diameter	High pressure		1-1/8 Brazed (28.58 Brazed)	
	Low pressure		1-5/8 Brazed (41.28 Brazed)	

Set Model				
Model			PURY-EM192TXU-A	PURY-EM192TXU-A
Minimum Circuit Ampacity (208/230)		A	60/60	60/60
Maximum Overcurrent Protection (208/230)		A	100/100	100/100
FAN	*5 Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Airflow rate	cfm	11,123	11,123
		m³/min	315	315
		L/s	5,250	5,250
	Control, Driving mechanism		Inverter-control , Brushless DC motor	Inverter-control , Brushless DC motor
	Motor output	kW	0.46	0.46
	External static press.		0 in WG (0Pa)	0 in WG (0Pa)
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1	Inverter scroll hermetic compressor ×1
	Starting method		Inverter	Inverter
	Motor output	kW	12.7	12.7
	Case heater	kW	0.048	0.048
	Lubricant		MEL46EH	MEL46EH
External finish		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16	70-13/16 x 47-15/16 x 29-7/16
		mm	1,798 x 1,217 x 747	1,798 x 1,217 x 747
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	High pressure switch , Pressure sensor at 4.15MPa (601Psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Compressor		-	-
	Fan motor		-	-
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)	R32 x 13lbs 15oz (6.3kg)
	Control		Indoor LEV and BC controller	
Net weight		lbs (kg)	712 (323)	712 (323)
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes
HIC circuit (HIC: Heat Inter-Changer)			-	-
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Reverse defrost , Liquid backless defrost	
Drawing	External		KB94CA7X	
	Wiring		KE94L591	KE94L591
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts	Twinning kit		CMY-R300NCBK	
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2	
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV	
	Sub BC controller		CMB-M104/108MB-SV	
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.	

Notes:			Unit converter	
1.Nominal cooling conditions (Test conditions are based on AHRI 1230) Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)			BTU/h	=kW x 3.412
2.Nominal heating conditions (Test conditions are based on AHRI 1230) Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)			cfm	=m³/min x 35.31
3.Cooling mode / Heating mode			lbs	=kg/0.4536
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.				
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).				
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)				
Due to continuing improvement, above specifications may be subject to change without notice.			*Above specification data is subject to rounding variation.	

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM72YXU-A		
Indoor Model			Non-Ducted	Ducted	
Power source			3-phase 3-wire 460V±10% 60Hz		
Cooling capacity (Nominal)		*1	BTU/h	72,000	
			kW	21.1	
(460)	Power input	kW	4.49		
	Current input	A	6.2		
(Rated)		BTU/h	69,000		
		kW	20.2		
(460)	Power input	kW	4.33	4.51	
	Current input	A	6.0	6.2	
Temp. range of cooling		*4 Indoor	W.B. 59.0~75.0° FWB (15.0~24.0°CWB)		
		Outdoor	D.B. 23.0~126.0° FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)		*2	BTU/h	80,000	
			kW	23.4	
(460)	Power input	kW	5.18		
	Current input	A	7.2		
(Rated)		BTU/h	76,000		
		kW	22.3		
(460)	Power input	kW	4.57	5.21	
	Current input	A	6.3	7.2	
Temp. range of heating		Indoor	D.B. 59.0~81.0° FDB (15.0~27.0°CDB)		
		Outdoor	W.B. -22.0~60.0° FWB (-30.0~15.5°CWB)		
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity	
		Model/Maximum quantity		M04~M96/14	
Sound power level (measured in anechoic room)		*3	dB <A>	76.5/78.5	
Refrigerant piping diameter	High pressure	in. (mm)	5/8 Brazed (15.88 Brazed)		
	Low pressure	in. (mm)	3/4 Brazed (19.05 Brazed)		
Minimum Circuit Ampacity		A	22		
Maximum Overcurrent Protection		A	35		
FAN		*5	Type x Quantity	Propeller fan x 1	
		Airflow rate	cfm	6,356	
			m³/min	180	
			L/s	3,000	
		Control, Driving mechanism		Inverter-control , Brushless DC motor	
		Motor output	kW	0.92	
		External static press.		0 in WG (0Pa)	
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1	
		Starting method		Inverter	
		Motor output	kW	3.5	
		Case heater	kW	0.045	
		Lubricant		MEL46EH	
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>		
External dimension H x W x D		in.	70-13/16 x 36-1/4 x 29-7/16		
		mm	1,798 x 920 x 747		
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
	Inverter circuit (COMP./FAN)		Over-current protection		
	Compressor		-		
	Fan motor		-		
Refrigerant	Type x original charge		R32 x 11lbs 11oz (5.3kg)		
	Control		Indoor LEV and BC controller		
Net weight		lbs (kg)	633 (287)		
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		
HIC circuit (HIC: Heat Inter-Changer)			-		
Defrosting method			Reverse defrost , Liquid backless defrost		
Drawing	External		KB94CA7N		
	Wiring		KE94L592		
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2		
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV		
	Sub BC controller		CMB-M104/108NU-MB-SV		
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.		

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230)		BTU/h =kW x 3,412
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		cfm =m³/min x 35.31
2.Nominal heating conditions (Test conditions are based on AHRI 1230)		lbs =kg/0.4536
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		
3.Cooling mode / Heating mode		
4.-10°CDB. (14°FDB.)/-11°CWB. (12.2°FWB.) to 21°CDB. (69.8°FDB.)/15.5°CWB. (59°FWB.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM96YXU-A				
Indoor Model			Non-Ducted	Ducted			
Power source			3-phase 3-wire 460V±10% 60Hz				
Cooling capacity (Nominal)		*1	BTU/h		96,000		
			kW		28.1		
(460)		Power input		kW	6.33		
		Current input		A	8.8		
(Rated)				BTU/h		92,000	
				kW		27.0	
(460)		Power input		kW	6.10	6.40	
		Current input		A	8.5	8.9	
Temp. range of cooling		*4	Indoor	W.B.	59.0~75.0' FWB (15.0~24.0°CWB)		
			Outdoor	D.B.	23.0~126.0' FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)		*2	BTU/h		108,000		
			kW		31.7		
(460)		Power input		kW	7.12		
		Current input		A	9.9		
(Rated)				BTU/h		103,000	
				kW		30.2	
(460)		Power input		kW	6.57	7.14	
		Current input		A	9.1	9.9	
Temp. range of heating			Indoor	D.B.	59.0~81.0' FDB (15.0~27.0°CDB)		
			Outdoor	W.B.	-22.0~60.0' FWB (-30.0~15.5°CWB)		
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity			
		Model/Maximum quantity		M04-M96/19			
Sound power level (measured in anechoic room)		*3	dB <A>		77.5/80.0		
Refrigerant piping diameter		High pressure	in. (mm)		3/4 Brazed (19.05 Brazed)		
		Low pressure	in. (mm)		7/8 Brazed (22.2 Brazed)		
Minimum Circuit Ampacity		A		22			
Maximum Overcurrent Protection		A		35			
FAN		*5	Type x Quantity		Propeller fan x 1		
		Airflow rate		cfm	6,532		
				m³/min	185		
				L/s	3,083		
		Control, Driving mechanism		Inverter-control , Brushless DC motor			
		Motor output		kW		0.92	
		External static press.				0 in WG (0Pa)	
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1			
		Starting method		Inverter			
		Motor output		kW		5.1	
		Case heater		kW		0.045	
		Lubricant				MEL46EH	
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>				
External dimension H x W x D		in.	70-13/16 x 36-1/4 x 29-7/16				
		mm	1,798 x 920 x 747				
Protection devices		High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)			
		Inverter circuit (COMP./FAN)		Over-current protection			
		Compressor		-			
		Fan motor		-			
Refrigerant		Type x original charge		R32 x 11lbs 11oz (5.3kg)			
		Control		Indoor LEV and BC controller			
Net weight		lbs (kg)		633 (287)			
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes				
HIC circuit (HIC: Heat Inter-Changer)			-				
Defrosting method			Reverse defrost , Liquid backless defrost				
Drawing		External		KB94CA7N			
		Wiring		KE94L592			
Standard attachment		Document		Installation Manual			
		Accessory		Details refer to External Drw			
Optional parts		Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2			
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV			
		Sub BC controller		CMB-M104/108NU-MB-SV			
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230) Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		BTU/h =kW x 3,412
2.Nominal heating conditions (Test conditions are based on AHRI 1230) Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		cfm =m ³ /min x 35.31
3.Cooling mode / Heating mode		lbs =kg/0.4536
4.-10°CDB. (14°FDB.)/-11°CWB. (12.2°FWB.) to 21°CDB. (69.8°FDB.)/15.5°CWB. (59°FWB.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa). Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM120YXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 460V±10% 60Hz		
Cooling capacity (Nominal)		*1	BTU/h	120,000	
			kW	35.2	
(Rated)	(460)	Power input	kW	8.54	
		Current input	A	11.9	
	(Rated)		BTU/h	115,000	
			kW	33.7	
	(460)	Power input	kW	8.40	8.54
		Current input	A	11.7	11.9
Temp. range of cooling	*4	Indoor	W.B.	59.0~75.0° FWB (15.0~24.0°CWB)	
		Outdoor	D.B.	23.0~126.0° FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)		*2	BTU/h	135,000	
			kW	39.6	
(Rated)	(460)	Power input	kW	9.93	
		Current input	A	13.8	
	(Rated)		BTU/h	129,000	
			kW	37.8	
	(460)	Power input	kW	8.95	9.55
		Current input	A	12.4	13.3
Temp. range of heating		Indoor	D.B.	59.0~81.0° FDB (15.0~27.0°CDB)	
		Outdoor	W.B.	-22.0~60.0° FWB (-30.0~15.5°CWB)	
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity		
	Model/Maximum quantity		M04~M96/24		
Sound power level (measured in anechoic room)		*3	dB <A>	80.0/83.5	
Refrigerant piping diameter	High pressure	in. (mm)	3/4 Brazed (19.05 Brazed)		
	Low pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)		
Minimum Circuit Ampacity		A	27		
Maximum Overcurrent Protection		A	45		
FAN	*5	Type x Quantity		Propeller fan x 1	
		Airflow rate	cfm	7,062	
			m³/min	200	
			L/s	3,333	
			Control, Driving mechanism		Inverter-control , Brushless DC motor
		Motor output	kW	0.92	
		External static press.		0 in WG (0Pa)	
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1	
		Starting method		Inverter	
		Motor output	kW	7.5	
		Case heater	kW	0.045	
		Lubricant		MEL46EH	
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>		
External dimension H x W x D		in.	70-13/16 x 36-1/4 x 29-7/16		
		mm	1,798 x 920 x 747		
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
	Inverter circuit (COMP./FAN)		Over-current protection		
	Compressor		-		
	Fan motor		-		
Refrigerant	Type x original charge		R32 x 11lbs 11oz (5.3kg)		
	Control		Indoor LEV and BC controller		
Net weight		lbs (kg)	637 (289)		
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		
HIC circuit (HIC: Heat Inter-Changer)			-		
Defrosting method			Reverse defrost , Liquid backless defrost		
Drawing	External		KB94CA7N		
	Wiring		KE94L592		
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2		
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV		
	Sub BC controller		CMB-M104/108NU-MB-SV		
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.		

Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
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)
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)
- Cooling mode / Heating mode
4.-10°CDB. (14°FDB.)/-11°CWB. (12.2°FWB.) to 21°CDB. (69.8°FDB.)/15.5°CWB. (59°FWB.) with cooling/heating mixed operation.
- External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
- Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)

Due to continuing improvement, above specifications may be subject to change without notice.

Unit converter	
BTU/h	=kW x 3,412
cfm	=m³/min x 35.31
lbs	=kg/0.4536

*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM144YXU-A			
Indoor Model			Non-Ducted	Ducted		
Power source			3-phase 3-wire 460V±10% 60Hz			
Cooling capacity (Nominal)		*1	BTU/h	144,000		
			kW	42.2		
(460)	Power input		kW	10.43		
	Current input		A	14.5		
(Rated)			BTU/h	138,000		
			kW	40.4		
(460)	Power input		kW	10.51	10.60	
	Current input		A	14.6	14.7	
Temp. range of cooling		*4	Indoor	W.B. 59.0~75.0° FWB (15.0~24.0°CWB)		
			Outdoor	D.B. 23.0~126.0° FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)		*2	BTU/h	160,000		
			kW	46.9		
(460)	Power input		kW	11.68		
	Current input		A	16.2		
(Rated)			BTU/h	152,000		
			kW	44.5		
(460)	Power input		kW	10.75	11.37	
	Current input		A	14.9	15.8	
Temp. range of heating			Indoor	D.B. 59.0~81.0° FDB (15.0~27.0°CDB)		
			Outdoor	W.B. -22.0~60.0° FWB (-30.0~15.5°CWB)		
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity		
		Model/Maximum quantity		M04~M96/29		
Sound power level (measured in anechoic room)		*3	dB <A>	80.5/82.5		
Refrigerant piping diameter		High pressure	in. (mm)	7/8 Brazed (22.2 Brazed)		
		Low pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)		
Minimum Circuit Ampacity			A	31		
Maximum Overcurrent Protection			A	50		
FAN		*5	Type x Quantity		Propeller fan x 2	
		Airflow rate	cfm	8,474		
			m³/min	240		
			L/s	4,000		
		Control, Driving mechanism		Inverter-control , Brushless DC motor		
		Motor output	kW	0.46		
		External static press.		0 in WG (0Pa)		
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1		
		Starting method		Inverter		
		Motor output	kW	9.0		
		Case heater	kW	0.048		
		Lubricant		MEL46EH		
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>			
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16			
		mm	1,798 x 1,217 x 747			
Protection devices		High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
		Inverter circuit (COMP./FAN)		Over-current protection		
		Compressor		-		
		Fan motor		-		
Refrigerant		Type x original charge		R32 x 13lbs 15oz (6.3kg)		
		Control		Indoor LEV and BC controller		
Net weight		lbs (kg)	745 (338)			
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes			
HIC circuit (HIC: Heat Inter-Changer)			-			
Defrosting method			Reverse defrost , Liquid backless defrost			
Drawing		External		KB94CA7P		
		Wiring		KE94L593		
Standard attachment		Document		Installation Manual		
		Accessory		Details refer to External Drw		
Optional parts		Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2		
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV		
		Sub BC controller		CMB-M104/108NU-MB-SV		
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230)		BTU/h =kW x 3,412
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		cfm =m ³ /min x 35.31
2.Nominal heating conditions (Test conditions are based on AHRI 1230)		lbs =kg/0.4536
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		
3.Cooling mode / Heating mode		
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM168YXU-A				
Indoor Model			Non-Ducted	Ducted			
Power source			3-phase 3-wire 460V±10% 60Hz				
Cooling capacity (Nominal)		*1	BTU/h		168,000		
			kW		49.2		
(460)		Power input	kW		13.22		
		Current input	A		18.4		
(Rated)			BTU/h		160,000		
			kW		46.9		
(460)		Power input	kW		13.24	13.20	
		Current input	A		18.4	18.4	
Temp. range of cooling		*4 Indoor	W.B.		59.0~75.0' FWB (15.0~24.0°CWB)		
		Outdoor	D.B.		23.0~126.0' FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)		*2	BTU/h		188,000		
			kW		55.1		
(460)		Power input	kW		14.64		
		Current input	A		20.4		
(Rated)			BTU/h		178,000		
			kW		52.2		
(460)		Power input	kW		13.38	14.17	
		Current input	A		18.6	19.7	
Temp. range of heating		Indoor	D.B.		59.0~81.0' FDB (15.0~27.0°CDB)		
		Outdoor	W.B.		-22.0~60.0' FWB (-30.0~15.5°CWB)		
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity			
		Model/Maximum quantity		M04~M96/34			
Sound power level (measured in anechoic room)		*3	dB <A>		80.5/88.5		
Refrigerant piping diameter		High pressure	in. (mm)		7/8 Brazed (22.2 Brazed)		
		Low pressure	in. (mm)		1-1/8 Brazed (28.58 Brazed)		
Minimum Circuit Ampacity		A		31			
Maximum Overcurrent Protection		A		50			
FAN		*5	Type x Quantity		Propeller fan x 2		
		Airflow rate	cfm		10,593		
			m³/min		300		
			L/s		5,000		
		Control, Driving mechanism		Inverter-control , Brushless DC motor			
		Motor output		kW		0.46	
		External static press.				0 in WG (0Pa)	
Compressor		Type x Quantity		Inverter scroll hermetic compressor ×1			
		Starting method		Inverter			
		Motor output		kW		11.5	
		Case heater		kW		0.048	
		Lubricant				MEL46EH	
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>				
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16				
		mm	1,798 x 1,217 x 747				
Protection devices		High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)			
		Inverter circuit (COMP./FAN)		Over-current protection			
		Compressor		-			
		Fan motor		-			
Refrigerant		Type x original charge		R32 x 13lbs 15oz (6.3kg)			
		Control		Indoor LEV and BC controller			
Net weight		lbs (kg)		745 (338)			
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes				
HIC circuit (HIC: Heat Inter-Changer)			-				
Defrosting method			Reverse defrost , Liquid backless defrost				
Drawing		External		KB94CA7P			
		Wiring		KE94L593			
Standard attachment		Document		Installation Manual			
		Accessory		Details refer to External Drw			
Optional parts		Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2			
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV			
		Sub BC controller		CMB-M104/108NU-MB-SV			
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230)		BTU/h =kW x 3,412
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		cfm =m³/min x 35.31
2.Nominal heating conditions (Test conditions are based on AHRI 1230)		lbs =kg/0.4536
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		
3.Cooling mode / Heating mode		
4.-10°CDB. (14°FDB.)/-11°CWB. (12.2°FWB.) to 21°CDB. (69.8°FDB.)/15.5°CWB. (59°FWB.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM192YXU-A			
Indoor Model			Non-Ducted		Ducted	
Power source			3-phase 3-wire 460V±10% 60Hz			
Cooling capacity (Nominal)		*1	BTU/h	192,000		
			kW	56.3		
(460)	Power input		kW	16.19		
	Current input		A	22.5		
(Rated)			BTU/h	184,000		
			kW	53.9		
(460)	Power input		kW	16.08	16.22	
	Current input		A	22.4	22.6	
Temp. range of cooling		*4	Indoor	W.B. 59.0~75.0° FWB (15.0~24.0°CWB)		
			Outdoor	D.B. 23.0~126.0° FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)		*2	BTU/h	192,000		
			kW	56.3		
(460)	Power input		kW	15.89		
	Current input		A	22.1		
(Rated)			BTU/h	184,000		
			kW	53.9		
(460)	Power input		kW	13.75	14.60	
	Current input		A	19.1	20.3	
Temp. range of heating			Indoor	D.B. 59.0~81.0° FDB (15.0~27.0°CDB)		
			Outdoor	W.B. -22.0~60.0° FWB (-30.0~15.5°CWB)		
Indoor unit connectable			Total capacity	50%~150% of outdoor unit capacity		
			Model/Maximum quantity	M04~M96/39		
Sound power level (measured in anechoic room)		*3	dB <A>	87.5/89.5		
Refrigerant piping diameter			High pressure	in. (mm) 7/8 Brazed (22.2 Brazed)		
			Low pressure	in. (mm) 1-1/8 Brazed (28.58 Brazed)		
Minimum Circuit Ampacity			A	31		
Maximum Overcurrent Protection			A	50		
FAN		*5	Type x Quantity	Propeller fan x 2		
		Airflow rate	cfm	11,123		
			m³/min	315		
			L/s	5,250		
		Control, Driving mechanism		Inverter-control , Brushless DC motor		
		Motor output		kW	0.46	
		External static press.			0 in WG (0Pa)	
Compressor			Type x Quantity	Inverter scroll hermetic compressor ×1		
		Starting method		Inverter		
		Motor output		kW	12.7	
		Case heater		kW	0.048	
		Lubricant			MEL46EH	
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resinColor:MUNSELL 5Y 8/1>			
External dimension H x W x D			in.	70-13/16 x 47-15/16 x 29-7/16		
			mm	1,798 x 1,217 x 747		
Protection devices			High pressure protection	High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
		Inverter circuit (COMP./FAN)		Over-current protection		
		Compressor		-		
		Fan motor		-		
Refrigerant			Type x original charge	R32 x 13lbs 15oz (6.3kg)		
		Control		Indoor LEV and BC controller		
Net weight			lbs (kg)	745 (338)		
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes			
HIC circuit (HIC: Heat Inter-Changer)			-			
Defrosting method			Reverse defrost , Liquid backless defrost			
Drawing			External	KB94CA7P		
			Wiring	KE94L593		
Standard attachment			Document	Installation Manual		
		Accessory		Details refer to External Drw		
Optional parts			Joint	CMY-Y102SS-G2 , CMY-Y102LS-G2		
		Main BC controller		CMB-M104/106/108/1012NU-MA-SV		
		Sub BC controller		CMB-M104/108NU-MB-SV		
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.			

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230)		BTU/h =kW x 3,412
Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		cfm =m ³ /min x 35.31
2.Nominal heating conditions (Test conditions are based on AHRI 1230)		lbs =kg/0.4536
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		
3.Cooling mode / Heating mode		
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM264YSXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 460V±10% 60Hz		
Cooling capacity (Nominal)	*1	BTU/h	264,000		
		kW	77.4		
		Power input	19.53		
		(460) Current input	27.2		
	(Rated)	BTU/h	252,000		
		kW	73.9		
		Power input	19.97		20.05
		(460) Current input	27.8		27.9
Temp. range of cooling	*4	Indoor	59.0~75.0° FWB (15.0~24.0°CWB)		
		Outdoor	23.0~126.0° FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)	*2	BTU/h	295,000		
		kW	86.5		
		Power input	21.63		
		(460) Current input	30.1		
	(Rated)	BTU/h	280,000		
		kW	82.1		
		Power input	21.78		21.40
		(460) Current input	30.3		29.8
Temp. range of heating		Indoor	59.0~81.0° FDB (15.0~27.0°CDB)		
		Outdoor	-22.0~60.0° FWB (-30.0~15.5°CWB)		
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity		
	Model/Maximum quantity		M04~M96/50		
Sound power level (measured in anechoic room)		*3 dB <A>	83.5/86.5		
Refrigerant piping diameter	High pressure		1-1/8 Braze (28.58 Braze)		
	Low pressure		1-3/8 Braze (34.93 Braze)		

Set Model

Model			PURY-EM144YXU-A	PURY-EM120YXU-A
Minimum Circuit Ampacity			31	27
Maximum Overcurrent Protection			50	45
FAN	*5 Type x Quantity		Propeller fan x 2	Propeller fan x 1
	Airflow rate	cfm	8,474	7,062
		m³/min	240	200
		L/s	4,000	3,333
	Control, Driving mechanism		Inverter-control , Brushless DC motor	Inverter-control , Brushless DC motor
	Motor output	kW	0.46	0.92
	External static press.		0 in WG (0Pa)	0 in WG (0Pa)
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1	Inverter scroll hermetic compressor ×1
	Starting method		Inverter	Inverter
	Motor output	kW	9.0	7.5
	Case heater	kW	0.048	0.045
	Lubricant		MEL46EH	MEL46EH
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16	70-13/16 x 36-1/4 x 29-7/16
		mm	1,798 x 1,217 x 747	1,798 x 920 x 747
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	High pressure switch , Pressure sensor at 4.15MPa (601Psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Compressor		-	-
	Fan motor		-	-
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)	R32 x 11lbs 11oz (5.3kg)
	Control		Indoor LEV and BC controller	
Net weight		lbs (kg)	745 (338)	637 (289)
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes
HIC circuit (HIC: Heat Inter-Changer)			-	-
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	3/4 (19.05) Brazed
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Reverse defrost , Liquid backless defrost	
Drawing	External		KB94CA7W	
	Wiring		KE94L593	KE94L592
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts	Twinning kit		CMY-R300NCBK	
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2	
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV	
	Sub BC controller		CMB-M104/108MB-SV	
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.	

Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
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)
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)
- Cooling mode / Heating mode
- 10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.
- External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
- Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)

Due to continuing improvement, above specifications may be subject to change without notice.

Unit converter	
BTU/h	=kW x 3.412
cfm	=m ³ /min x 35.31
lbs	=kg/0.4536
*Above specification data is subject to rounding variation.	

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM288YSXU-A	
Indoor Model			Non-Ducted	Ducted
Power source			3-phase 3-wire 460V±10% 60Hz	
Cooling capacity (Nominal)	*1	BTU/h	288,000	
		kW	84.4	
		Power input	21.94	
		(460) Current input	30.5	
	(Rated)	BTU/h	276,000	
		kW	80.9	
		Power input	22.61	22.57
		(460) Current input	31.5	31.4
Temp. range of cooling	*4 Indoor	W.B.	59.0~75.0° FWB (15.0~24.0°CWB)	
	Outdoor	D.B.	23.0~126.0° FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)	*2	BTU/h	323,000	
		kW	94.7	
		Power input	23.65	
		(460) Current input	32.9	
	(Rated)	BTU/h	304,000	
		kW	89.1	
		Power input	24.37	23.39
		(460) Current input	33.9	32.6
Temp. range of heating	Indoor	D.B.	59.0~81.0° FDB (15.0~27.0°CDB)	
	Outdoor	W.B.	-22.0~60.0° FWB (-30.0~15.5°CWB)	
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity	
	Model/Maximum quantity		M04~M96/50	
Sound power level (measured in anechoic room)	*3	dB <A>	84.0/86.0	
Refrigerant piping diameter	High pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)	
	Low pressure	in. (mm)	1-3/8 Brazed (34.93 Brazed)	

Set Model

Model			PURY-EM144YXU-A	PURY-EM144YXU-A
Minimum Circuit Ampacity		A	31	31
Maximum Overcurrent Protection		A	50	50
FAN	*5	Type x Quantity	Propeller fan x 2	Propeller fan x 2
	Airflow rate	cfm	8,474	8,474
		m³/min	240	240
		L/s	4,000	4,000
	Control, Driving mechanism		Inverter-control , Brushless DC motor	Inverter-control , Brushless DC motor
	Motor output	kW	0.46	0.46
	External static press.		0 in WG (0Pa)	0 in WG (0Pa)
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1	Inverter scroll hermetic compressor ×1
	Starting method		Inverter	Inverter
	Motor output	kW	9.0	9.0
	Case heater	kW	0.048	0.048
	Lubricant		MEL46EH	MEL46EH
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16	70-13/16 x 47-15/16 x 29-7/16
		mm	1,798 x 1,217 x 747	1,798 x 1,217 x 747
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	High pressure switch , Pressure sensor at 4.15MPa (601Psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Compressor		-	-
	Fan motor		-	-
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)	R32 x 13lbs 15oz (6.3kg)
	Control		Indoor LEV and BC controller	
Net weight		lbs (kg)	745 (338)	745 (338)
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes
HIC circuit (HIC: Heat Inter-Changer)			-	-
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Reverse defrost , Liquid backless defrost	
Drawing	External		KB94CA7X	
	Wiring		KE94L593	KE94L593
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts	Twinning kit		CMY-R300NCBK	
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2	
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV	
	Sub BC controller		CMB-M104/108MB-SV	
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.	

Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
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)
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)
- Cooling mode / Heating mode
- 10 °CD.B. (14 °FD.B.)/-11 °CW.B. (12.2 °FW.B.) to 21 °CD.B. (69.8 °FD.B.)/15.5 °CW.B. (59 °FW.B.) with cooling/heating mixed operation.
- External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
- Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)

Due to continuing improvement, above specifications may be subject to change without notice.

Unit converter

BTU/h	=kW x 3.412
cfm	=m³/min x 35.31
lbs	=kg/0.4536

*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM312YSXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 460V±10% 60Hz		
Cooling capacity (Nominal)		*1	BTU/h	312,000	
			kW	91.4	
	(460)	Power input	kW	25.19	
		Current input	A	35.1	
(Rated)			BTU/h	298,000	
			kW	87.3	
	(460)	Power input	kW	25.91	25.28
		Current input	A	36.1	35.2
Temp. range of cooling		*4	Indoor	59.0~75.0° FWB (15.0~24.0°CWB)	
			Outdoor	23.0~126.0° FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)		*2	BTU/h	350,000	
			kW	102.6	
	(460)	Power input	kW	26.52	
		Current input	A	36.9	
(Rated)			BTU/h	334,000	
			kW	97.9	
	(460)	Power input	kW	27.12	26.56
		Current input	A	37.8	37.0
Temp. range of heating			Indoor	59.0~81.0° FDB (15.0~27.0°CDB)	
			Outdoor	-22.0~60.0° FWB (-30.0~15.5°CWB)	
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity	
		Model/Maximum quantity		M04~M96/50	
Sound power level (measured in anechoic room)		*3	dB <A>	84.0/89.5	
Refrigerant piping diameter		High pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)	
		Low pressure	in. (mm)	1-5/8 Brazed (41.28 Brazed)	

Set Model

Model			PURY-EM168YXU-A		PURY-EM144YXU-A
Minimum Circuit Ampacity			A	31	31
Maximum Overcurrent Protection			A	50	50
FAN	*5	Type x Quantity		Propeller fan x 2	Propeller fan x 2
		Airflow rate	cfm	10,593	8,474
			m³/min	300	240
			L/s	5,000	4,000
	Control, Driving mechanism		Inverter-control , Brushless DC motor	Inverter-control , Brushless DC motor	
	Motor output	kW	0.46	0.46	
	External static press.		0 in WG (0Pa)	0 in WG (0Pa)	
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1	Inverter scroll hermetic compressor ×1	
	Starting method		Inverter	Inverter	
	Motor output	kW	11.5	9.0	
	Case heater	kW	0.048	0.048	
	Lubricant		MEL46EH	MEL46EH	
			External finish		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16	70-13/16 x 47-15/16 x 29-7/16	
		mm	1,798 x 1,217 x 747	1,798 x 1,217 x 747	
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	High pressure switch , Pressure sensor at 4.15MPa (601Psi)	
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection	
	Compressor		-	-	
	Fan motor		-	-	
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)	R32 x 13lbs 15oz (6.3kg)	
	Control		Indoor LEV and BC controller		
Net weight		lbs (kg)	745 (338)	745 (338)	
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	
HIC circuit (HIC: Heat Inter-Changer)			-	-	
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed	
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed	
Defrosting method			Reverse defrost , Liquid backless defrost		
Drawing	External		KB94CA7X		
	Wiring		KE94L593	KE94L593	
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts	Twinning kit		CMY-R300NCBK		
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2		
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV		
	Sub BC controller		CMB-M104/108MB-SV		
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.		

Notes:		Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230) Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)		BTU/h =kW x 3.412
2.Nominal heating conditions (Test conditions are based on AHRI 1230) Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)		cfm =m ³ /min x 35.31
3.Cooling mode / Heating mode		lbs =kg/0.4536
4.-10°CD.B. (14°FD.B.)/-11°CW.B. (12.2°FW.B.) to 21°CD.B. (69.8°FD.B.)/15.5°CW.B. (59°FW.B.) with cooling/heating mixed operation.		
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).		
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)		
Due to continuing improvement, above specifications may be subject to change without notice.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM336YSXU-A	
Indoor Model			Non-Ducted	Ducted
Power source			3-phase 3-wire 460V±10% 60Hz	
Cooling capacity (Nominal)	*1	BTU/h	336,000	
		kW	98.5	
	(460)	Power input	28.82	
		Current input	40.1	
(Rated)		BTU/h	320,000	
		kW	93.8	
	(460)	Power input	29.38	28.20
		Current input	40.9	39.3
Temp. range of cooling	*4	Indoor	59.0~75.0° FWB (15.0~24.0°CWB)	
		Outdoor	23.0~126.0° FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)	*2	BTU/h	378,000	
		kW	110.8	
	(460)	Power input	29.58	
		Current input	41.2	
(Rated)		BTU/h	360,000	
		kW	105.5	
	(460)	Power input	30.91	28.79
		Current input	43.1	40.1
Temp. range of heating		Indoor	59.0~81.0° FDB (15.0~27.0°CDB)	
		Outdoor	-22.0~60.0° FWB (-30.0~15.5°CWB)	
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity	
	Model/Maximum quantity		M04~M96/50	
Sound power level (measured in anechoic room)	*3	dB <A>	84.0/92.0	
Refrigerant piping diameter	High pressure		1-1/8 Brazed (28.58 Brazed)	
	Low pressure		1-5/8 Brazed (41.28 Brazed)	

Set Model

Model			PURY-EM168YXU-A		PURY-EM168YXU-A		
Minimum Circuit Ampacity		A	31		31		
Maximum Overcurrent Protection		A	50		50		
FAN	*5	Type x Quantity		Propeller fan x 2		Propeller fan x 2	
		Airflow rate	cfm	10,593		10,593	
			m³/min	300		300	
			L/s	5,000		5,000	
	Control, Driving mechanism		Inverter-control , Brushless DC motor		Inverter-control , Brushless DC motor		
	Motor output		kW	0.46		0.46	
	External static press.		0 in WG (0Pa)		0 in WG (0Pa)		
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1		Inverter scroll hermetic compressor ×1		
	Starting method		Inverter		Inverter		
	Motor output		kW	11.5		11.5	
	Case heater		kW	0.048		0.048	
	Lubricant		MEL46EH		MEL46EH		
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>		
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16		70-13/16 x 47-15/16 x 29-7/16		
		mm	1,798 x 1,217 x 747		1,798 x 1,217 x 747		
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		High pressure switch , Pressure sensor at 4.15MPa (601Psi)		
	Inverter circuit (COMP./FAN)		Over-current protection		Over-current protection		
	Compressor		-		-		
	Fan motor		-		-		
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)		R32 x 13lbs 15oz (6.3kg)		
	Control		Indoor LEV and BC controller				
Net weight		lbs (kg)	745 (338)		745 (338)		
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes		
HIC circuit (HIC: Heat Inter-Changer)			-		-		
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed		
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
Defrosting method			Reverse defrost , Liquid backless defrost				
Drawing	External		KB94CA7X				
	Wiring		KE94L593		KE94L593		
Standard attachment	Document		Installation Manual				
	Accessory		Details refer to External Drw				
Optional parts	Twinning kit		CMY-R300NCBK				
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2				
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV				
	Sub BC controller		CMB-M104/108MB-SV				
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				

Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
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)
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)
- Cooling mode / Heating mode
- 10 °CD.B. (14 °FD.B.)/-11 °CW.B. (12.2 °FW.B.) to 21 °CD.B. (69.8 °FD.B.)/15.5 °CW.B. (59 °FW.B.) with cooling/heating mixed operation.
- External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
- Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)

Due to continuing improvement, above specifications may be subject to change without notice.

Unit converter

BTU/h	=kW x 3.412
cfm	=m³/min x 35.31
lbs	=kg/0.4536

*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM360YSXU-A	
Indoor Model			Non-Ducted	Ducted
Power source			3-phase 3-wire 460V±10% 60Hz	
Cooling capacity (Nominal)	*1	BTU/h	360,000	
		kW	105.5	
	(460)	Power input	32.21	
		Current input	44.9	
	(Rated)	BTU/h	344,000	
		kW	100.8	
	(460)	Power input	32.81	32.19
		Current input	45.7	44.8
	Temp. range of cooling	Indoor	59.0~75.0' FWB (15.0~24.0°CWB)	
		Outdoor	23.0~126.0' FDB (-5.0~52.0°CDB)	
Heating capacity (Nominal)	*2	BTU/h	380,000	
		kW	111.4	
	(460)	Power input	30.75	
		Current input	42.8	
	(Rated)	BTU/h	362,000	
		kW	106.1	
	(460)	Power input	31.00	28.85
		Current input	43.2	40.2
	Temp. range of heating	Indoor	59.0~81.0' FDB (15.0~27.0°CDB)	
		Outdoor	-22.0~60.0' FWB (-30.0~15.5°CWB)	
Indoor unit connectable	Total capacity		50%~150% of outdoor unit capacity	
	Model/Maximum quantity		M04~M96/50	
Sound power level (measured in anechoic room)		*3 dB <A>	88.5/92.5	
Refrigerant piping diameter	High pressure	in. (mm)	1-1/8 Brazed (28.58 Brazed)	
	Low pressure	in. (mm)	1-5/8 Brazed (41.28 Brazed)	

Set Model

Model			PURY-EM192YXU-A	PURY-EM168YXU-A
Minimum Circuit Ampacity		A	31	31
Maximum Overcurrent Protection		A	50	50
FAN	*5 Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Airflow rate	cfm	11,123	10,593
		m³/min	315	300
		L/s	5,250	5,000
	Control, Driving mechanism		Inverter-control , Brushless DC motor	Inverter-control , Brushless DC motor
	Motor output	kW	0.46	0.46
	External static press.		0 in WG (0Pa)	0 in WG (0Pa)
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1	Inverter scroll hermetic compressor ×1
	Starting method		Inverter	Inverter
	Motor output	kW	12.7	11.5
	Case heater	kW	0.048	0.048
	Lubricant		MEL46EH	MEL46EH
External finish			Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>
External dimension H x W x D		in.	70-13/16 x 47-15/16 x 29-7/16	70-13/16 x 47-15/16 x 29-7/16
		mm	1,798 x 1,217 x 747	1,798 x 1,217 x 747
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	High pressure switch , Pressure sensor at 4.15MPa (601Psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Compressor		-	-
	Fan motor		-	-
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)	R32 x 13lbs 15oz (6.3kg)
	Control		Indoor LEV and BC controller	
Net weight		lbs (kg)	745 (338)	745 (338)
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes
HIC circuit (HIC: Heat Inter-Changer)			-	-
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Reverse defrost , Liquid backless defrost	
Drawing	External		KB94CA7X	
	Wiring		KE94L593	KE94L593
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts	Twinning kit		CMY-R300NCBK	
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2	
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV	
	Sub BC controller		CMB-M104/108MB-SV	
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.	

Notes:	Unit converter
1.Nominal cooling conditions (Test conditions are based on AHRI 1230) Indoor: 80 °FD.B./67 °FW.B. (26.7 °CD.B./19.4 °CW.B.), Outdoor: 95 °FD.B. (35 °CD.B.)	BTU/h =kW x 3,412
2.Nominal heating conditions (Test conditions are based on AHRI 1230) Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)	cfm =m ³ /min x 35.31
3.Cooling mode / Heating mode	lbs =kg/0.4536
4.-10°C.D.B. (14°F.D.B.)/-11°C.W.B. (12.2°F.W.B.) to 21°C.D.B. (69.8°F.D.B.)/15.5°C.W.B. (59°F.W.B.) with cooling/heating mixed operation.	
5.External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).	
Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)	
Due to continuing improvement, above specifications may be subject to change without notice.	*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

R2-Series (High efficiency)

PURY-EM-T(S)XU-A, Y(S)XU-A

Outdoor Model			PURY-EM384YSXU-A		
Indoor Model			Non-Ducted		Ducted
Power source			3-phase 3-wire 460V±10% 60Hz		
Cooling capacity (Nominal)		*1	BTU/h	384,000	
			kW	112.5	
(460)	Power input	kW	35.66		
	Current input	A	49.7		
(Rated)		BTU/h	368,000		
		kW	107.9		
(460)	Power input	kW	36.21		36.23
	Current input	A	50.4		50.5
Temp. range of cooling		*4 Indoor	59.0~75.0' FWB (15.0~24.0°CWB)		
		Outdoor	23.0~126.0' FDB (-5.0~52.0°CDB)		
Heating capacity (Nominal)		*2	BTU/h	384,000	
			kW	112.5	
(460)	Power input	kW	32.70		
	Current input	A	45.6		
(Rated)		BTU/h	368,000		
		kW	107.9		
(460)	Power input	kW	31.67		29.79
	Current input	A	44.1		41.5
Temp. range of heating		Indoor	59.0~81.0' FDB (15.0~27.0°CDB)		
		Outdoor	-22.0~60.0' FWB (-30.0~15.5°CWB)		
Indoor unit connectable		Total capacity		50%~150% of outdoor unit capacity	
		Model/Maximum quantity		M04~M96/50	
Sound power level (measured in anechoic room)		*3	dB <A>		
			91.0/93.0		
Refrigerant piping diameter		High pressure	1-1/8 Brazed (28.58 Brazed)		
		Low pressure	1-5/8 Brazed (41.28 Brazed)		

Set Model

Model			PURY-EM192YXU-A	PURY-EM192YXU-A
Minimum Circuit Ampacity		A	31	31
Maximum Overcurrent Protection		A	50	50
FAN	*5 Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Airflow rate	cfm	11,123	11,123
		m³/min	315	315
		L/s	5,250	5,250
	Control, Driving mechanism		Inverter-control , Brushless DC motor	Inverter-control , Brushless DC motor
	Motor output	kW	0.46	0.46
	External static press.		0 in WG (0Pa)	0 in WG (0Pa)
Compressor	Type x Quantity		Inverter scroll hermetic compressor ×1	Inverter scroll hermetic compressor ×1
	Starting method		Inverter	Inverter
	Motor output	kW	12.7	12.7
	Case heater	kW	0.048	0.048
	Lubricant		MEL46EH	MEL46EH
	External finish		Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>	Pre-coated galvanized steel sheet <Surface treatment : polyester resin Color:MUNSELL 5Y 8/1>
External dimension H x W x D		in. mm	70-13/16 x 47-15/16 x 29-7/16 1,798 x 1,217 x 747	70-13/16 x 47-15/16 x 29-7/16 1,798 x 1,217 x 747
Protection devices	High pressure protection		High pressure switch , Pressure sensor at 4.15MPa (601Psi)	High pressure switch , Pressure sensor at 4.15MPa (601Psi)
	Inverter circuit (COMP./FAN)		Over-current protection	Over-current protection
	Compressor		-	-
	Fan motor		-	-
Refrigerant	Type x original charge		R32 x 13lbs 15oz (6.3kg)	R32 x 13lbs 15oz (6.3kg)
	Control		Indoor LEV and BC controller	
Net weight		lbs (kg)	745 (338)	745 (338)
Heat exchanger			Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes	Corrugated fin & Zinc-Sprayed Aluminum Multi-Port Extruded tubes
HIC circuit (HIC: Heat Inter-Changer)			-	-
Pipe between unit and distributor	High pressure	in. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed
	Low pressure	in. (mm)	1-1/8 (28.58) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Reverse defrost , Liquid backless defrost	
Drawing	External		KB94CA7X	
	Wiring		KE94L593	KE94L593
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts	Twinning kit		CMY-R300NCBK	
	Joint		CMY-Y102SS-G2 , CMY-Y102LS-G2	
	Main BC controller		CMB-M104/106/108/1012NU-MA-SV	
	Sub BC controller		CMB-M104/108MB-SV	
Remarks			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.	

Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
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)
Indoor: 70 °FD.B. (21.1 °CD.B.), Outdoor: 47 °FD.B./43 °FW.B. (8.3 °CD.B./6.1 °CW.B.)
- Cooling mode / Heating mode
- 10°CDB. (14°FDB.)/-11°CWB. (12.2°FWB.) to 21°CDB. (69.8°FDB.)/15.5°CWB. (59°FWB.) with cooling/heating mixed operation.
- External static pressure option is available (0.12 in.WG, 0.24 in.WG, 0.32 in.WG/30 Pa, 60 Pa, 80 Pa).
- Consult your dealer about the specification when setting External static pressure option. (the setting is only available for cooling and heating in models EM72 to EM144 and EM264 to EM288, and for cooling in models EM168 and EM312 to EM336.)

Due to continuing improvement, above specifications may be subject to change without notice.

Unit converter	
BTU/h	=kW x 3.412
cfm	=m³/min x 35.31
lbs	=kg/0.4536

*Above specification data is subject to rounding variation.

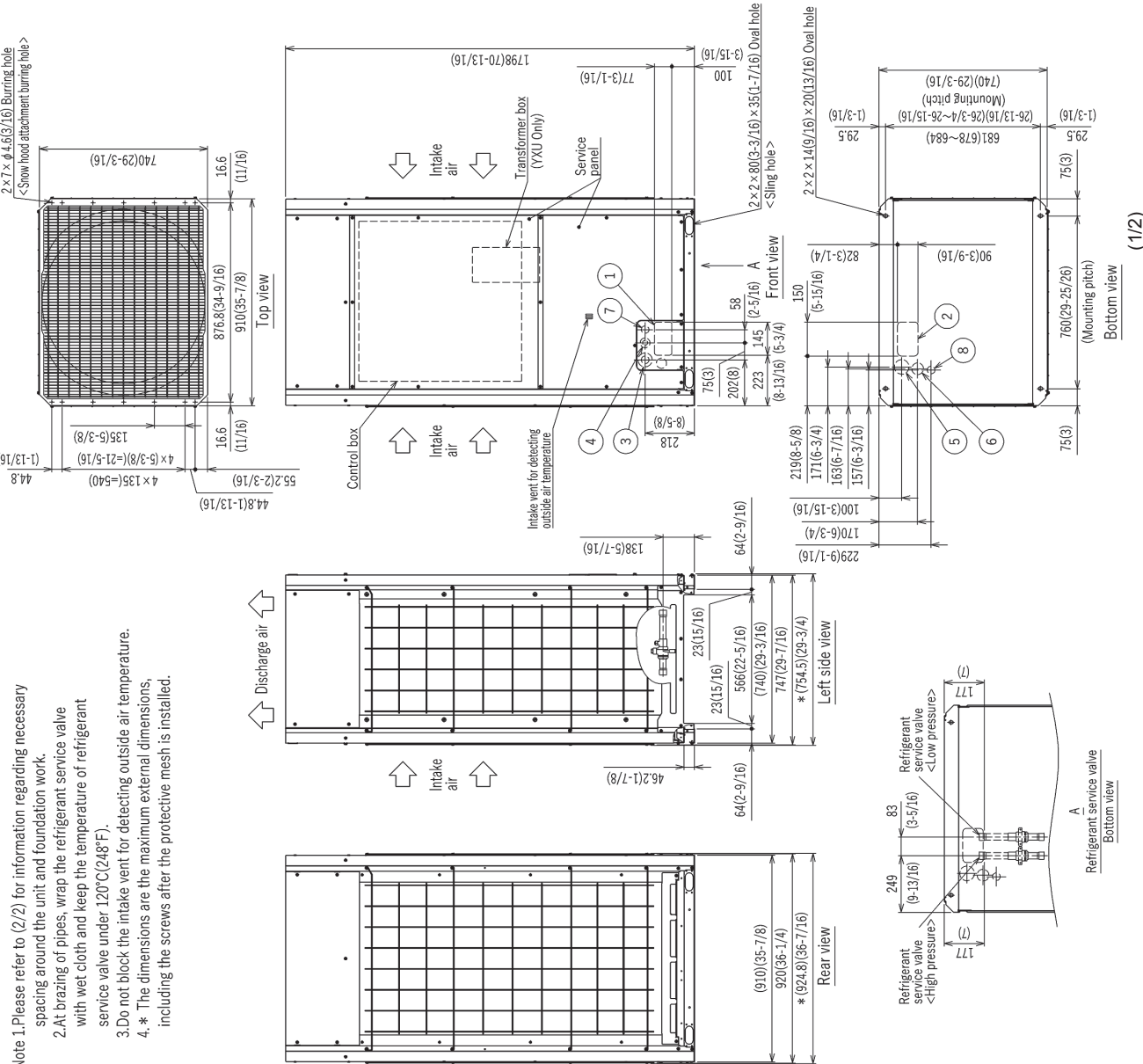
PURY-EM72, 96, 120T/YXU-A

Unit: mm (in.)

Model	Connecting pipe specifications		
	Refrigerant pipe *1	Diameter	
	High pressure	Low pressure	Service valve
EM72	φ15.88(5/8) Braze	φ19.05(3/4) Braze	High pressure φ28.58(1-1/8) φ28.58(1-1/8)
EM96	φ19.05(3/4) Braze	φ22.2(7/8) Braze	High pressure φ28.58(1-1/8) φ28.58(1-1/8)
EM120	φ19.05(3/4) Braze	φ28.58(1-1/8) Braze	High pressure 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	Front through hole	145(5-3/4) × 77(3-1/16) Knockout hole
②	Bottom through hole	150(5-15/16) × 90(3-9/16) Knockout hole
③	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	φ52(2-1/16) Knockout hole
⑦	Front through hole	φ34(1-3/8) Knockout hole
⑧	Bottom through hole	φ34(1-3/8) Knockout hole



PURY-EM72, 96, 120T/YXU-A

Unit: mm (in.)

● In case of collective installation

- ① When multiple units are installed adjacent to each other, secure enough space to allow for air circulation and walkway between groups of units as shown in the figures below.
- ② At least two sides must be left open.
- ③ As with the single installation, add half of the height that exceeds the height limit $<h/2>$ to the figures that are marked with an asterisk (*).
- ④ If there is a wall at both the front and the rear of the unit, install up to six units consecutively in the side direction and provide a space of 1000mm(39-3/8) or more as inlet space / passage space for each six units.

When adjacent to a building wall, ensure that at least two directions are open, with a rear space of at least 300mm(11-13/16) and a side space of at least 200mm(7-7/8) from the wall.

When installing units side by side, ensure a space of at least 400mm(15-3/4) between the units.

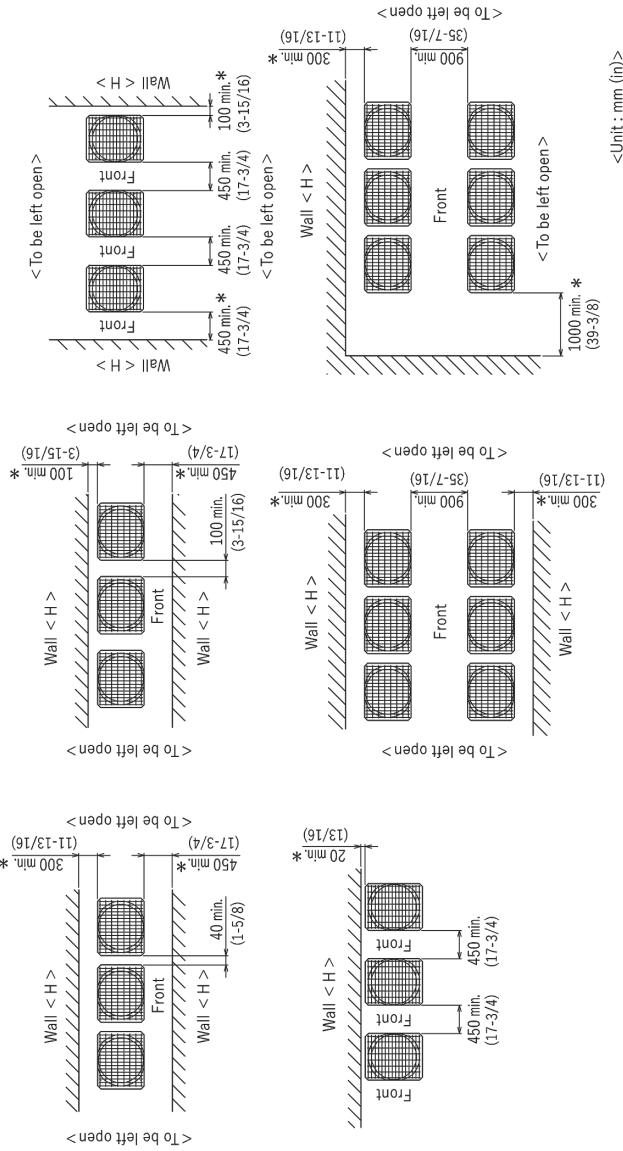


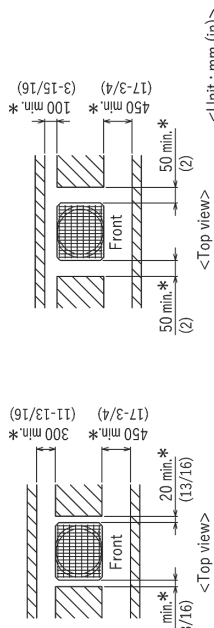
Fig. B

Fig. A

1. Required space around the unit

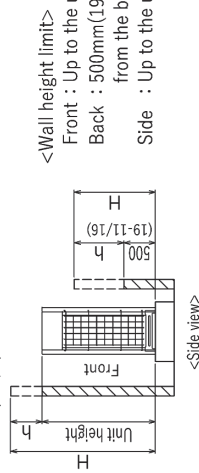
● In case of single installation

- ① Secure enough space around the unit as shown in the figure below.
 - With a space of at least 300mm(11-13/16) to the wall on the back of the unit



- ② When the height of the walls on the front, back or on the sides $<h>$ exceeds the wall height limit as defined below add half of the height that exceeds the height limit $<h/2>$ to the figures that are marked with an asterisk (*).

When adjacent to a building wall, ensure that at least two directions are open, with a rear space of at least 300mm(11-13/16) and a side space of at least 200mm(7-7/8) from the wall.



2. Foundation work

- ① Take into consideration the surface strength, water drainage route, piping route, and wiring route when preparing the installation site.
 - <Note that the drain water comes out of the unit during operation.>
- ② Build the foundation in such way that the corner of the installation leg is securely supported as shown in the right figure.(Fig.A)
 - When using a rubber isolating cushion, please ensure it is large enough to cover the entire width of each of the unit's legs.
- ③ The protrusion length of the anchor bolt must not exceed 30mm(1-3/16).(Fig.A)
- ④ Use four fixing plates as shown in the right figure <field supply required> when using M12 hole-in anchor bolts <field supply required>.(Fig.B)
- ⑤ To prevent small animals and water and snow from entering the unit and damaging its parts, close the gap around the edges of through holes for pipes and wires with filler plates <field supply required>.
- ⑥ When the pipes or cables are routed at the bottom of the unit, make sure that the through hole at the base of the unit does not get blocked with the installation base.
- ⑦ Refer to the Installation Manual when installing units on an installation base.

PURY-EM-T(S)XU-A, Y(S)XU-A

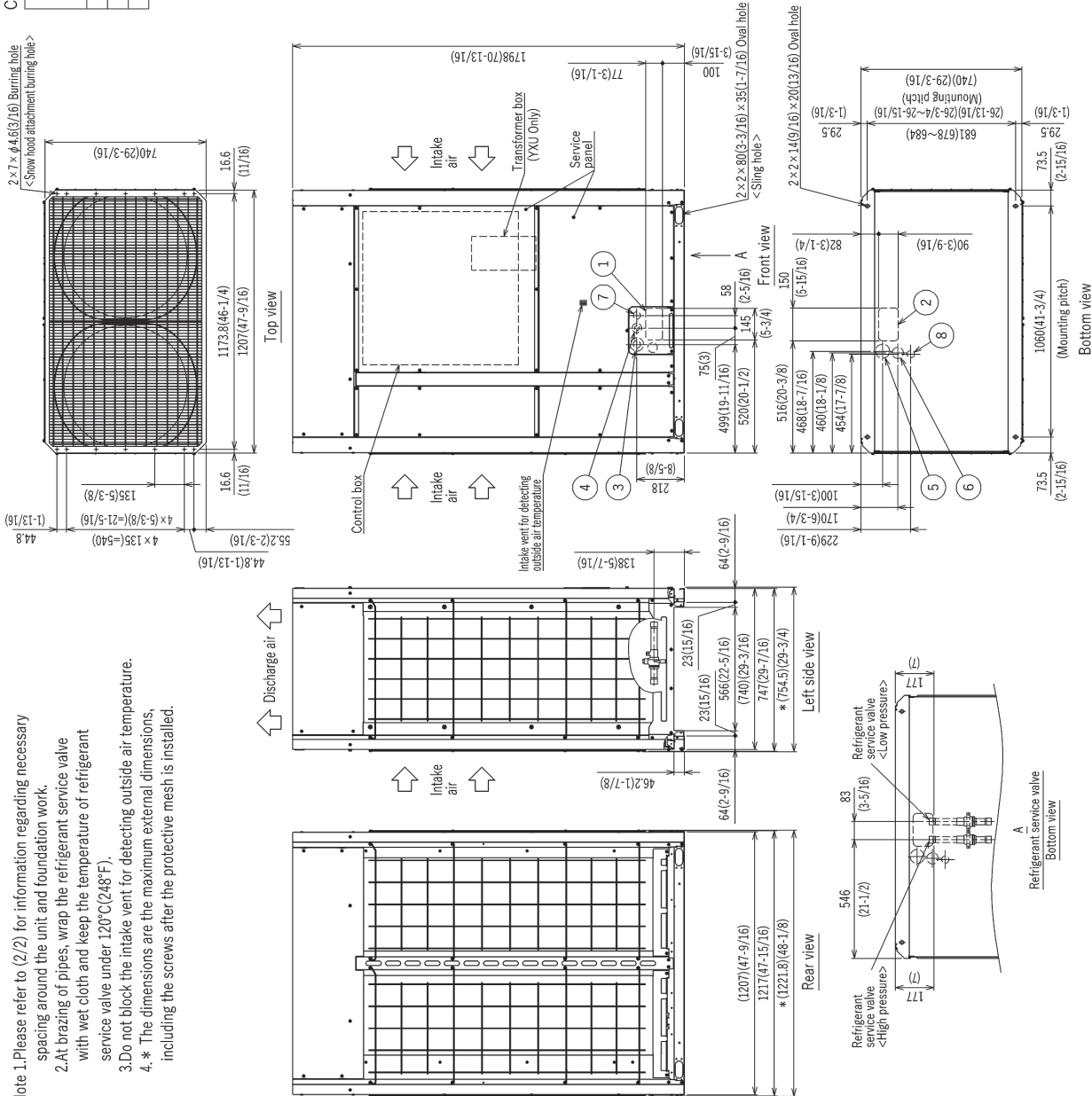
PURY-EM144, 168, 192T/YXU-A

Unit: mm (in.)

Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe *1		Service valve	
	High pressure	Low pressure	High pressure	Low pressure
EM144	φ22.2(7/8)	Brazed φ28.58(1-1/8)	φ28.58(1-1/8)	φ28.58(1-1/8)
EM168	φ22.2(7/8)	Brazed φ28.58(1-1/8)	φ28.58(1-1/8)	φ28.58(1-1/8)
EM192	φ22.2(7/8)	Brazed φ28.58(1-1/8)	φ28.58(1-1/8)	φ28.58(1-1/8)

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



- 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).
3. Do not block the intake vent for detecting outside air temperature.
4. * The dimensions are the maximum external dimensions, including the screws after the protective mesh is installed.

No.	Usage	Specifications
①	Front through hole	145(5-3/4) × 77(3-1/16) Knockout hole
②	Bottom through hole	150(5-15/16) × 90(3-9/16) Knockout hole
③	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	φ52(2-1/16) Knockout hole
⑦	Front through hole	φ34(1-3/8) Knockout hole
⑧	Bottom through hole	φ34(1-3/8) Knockout hole

PURY-EM144, 168, 192T/YXU-A

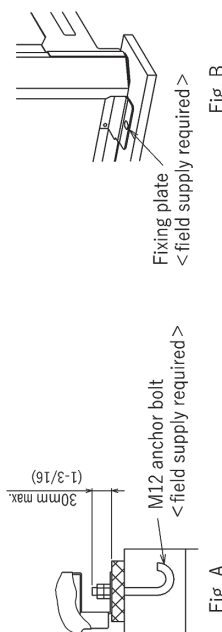
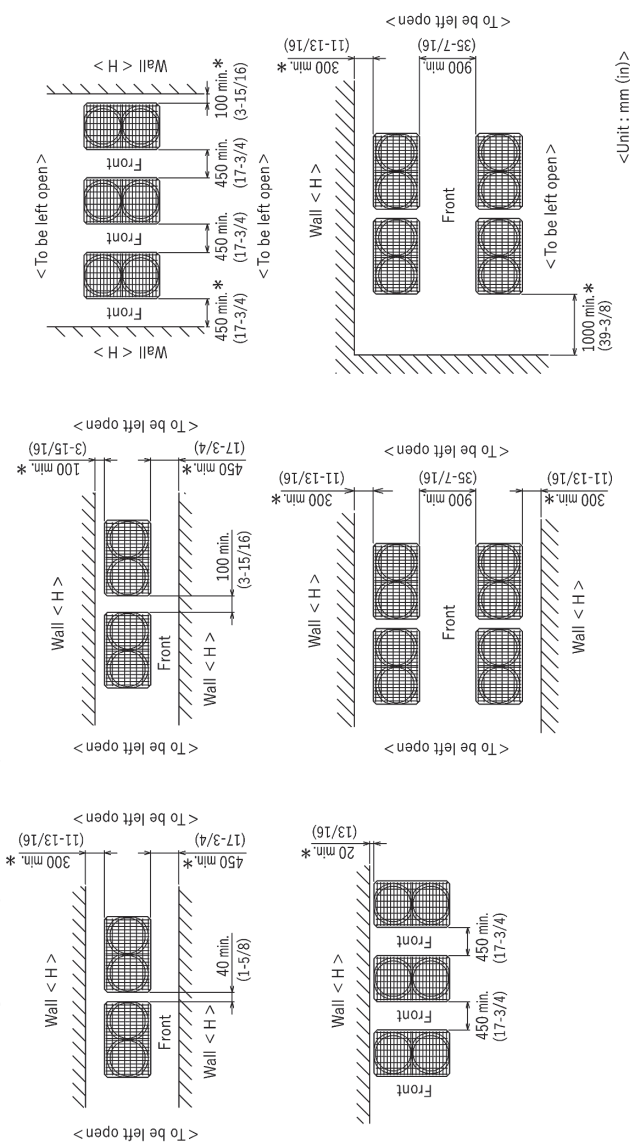
Unit: mm (in.)

● In case of collective installation

- ① When multiple units are installed adjacent to each other, secure enough space to allow for air circulation and walkway between groups of units as shown in the figures below.
- ② At least two sides must be left open.
- ③ As with the single installation, add half of the height that exceeds the height limit $<h/2>$ to the figures that are marked with an asterisk(*).
- ④ If there is a wall at both the front and the rear of the unit, install up to six units consecutively in the side direction and provide a space of 1000mm(39-3/8) or more as inlet space / passage space for each six units.

When adjacent to a building wall, ensure that at least two directions are open, with a rear space of at least 300mm(11-13/16) and a side space of at least 200mm(7-7/8) from the wall.

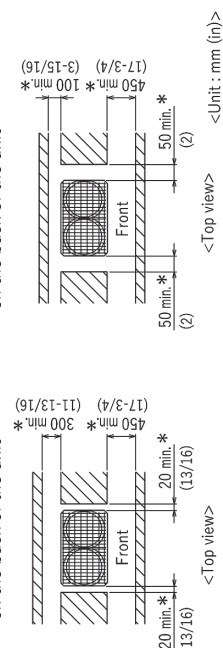
When installing units side by side, ensure a space of at least 400mm(15-3/4) between the units.



1. Required space around the unit

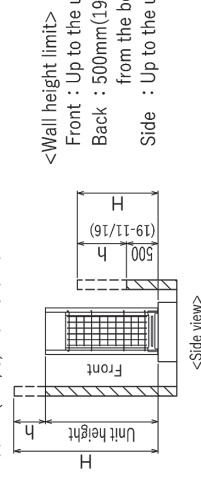
● In case of single installation

- ① Secure enough space around the unit as shown in the figure below.
 - With a space of at least 300mm(11-13/16) to the wall on the back of the unit



- ② When the height of the walls on the front, back or on the sides $<H>$ exceeds the wall height limit as defined below add half of the height that exceeds the height limit $<h/2>$ to the figures that are marked with an asterisk(*).

When adjacent to a building wall, ensure that at least two directions are open, with a rear space of at least 300mm(11-13/16) and a side space of at least 200mm(7-7/8) from the wall.



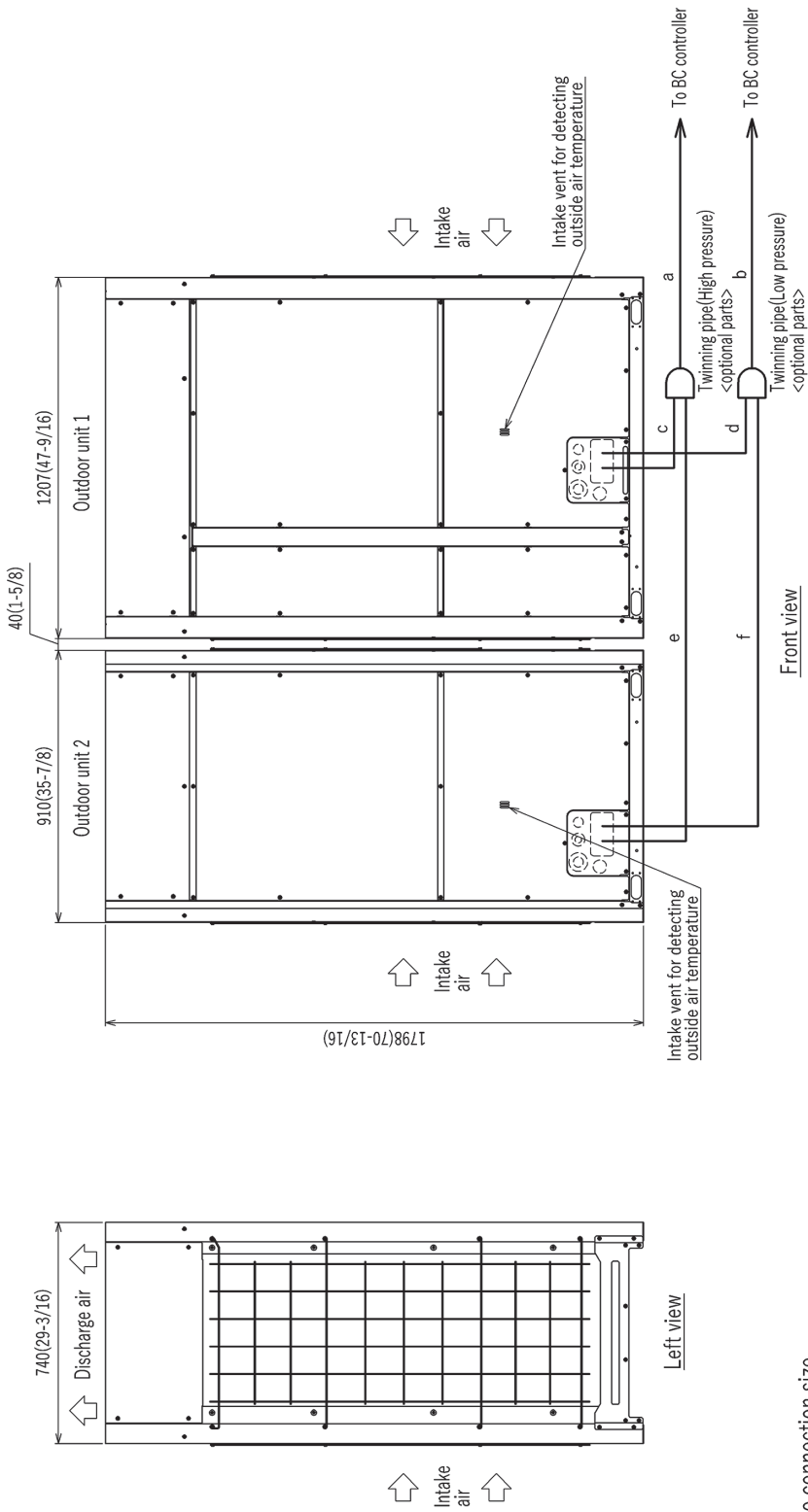
2. Foundation work

- ① Take into consideration the surface strength, water drainage route, piping route, and wiring route when preparing the installation site.
 - <Note that the drain water comes out of the unit during operation.>
- ② Build the foundation in such way that the corner of the installation leg is securely supported as shown in the right figure.(Fig.A)
 - When using a rubber isolating cushion, please ensure it is large enough to cover the entire width of each of the unit's legs.
- ③ The protrusion length of the anchor bolt must not exceed 30mm(1-3/16). (Fig.A)
- ④ Use four fixing plates as shown in the right figure <field supply required> when using M12 hole-in anchor bolts <field supply required>. (Fig.B)
- ⑤ To prevent small animals and water and snow from entering the unit and damaging its parts, close the gap around the edges of through holes for pipes and wires with filler plates <field supply required>.
- ⑥ When the pipes or cables are routed at the bottom of the unit, make sure that the through hole at the base of the unit does not get blocked with the installation base.
- ⑦ Refer to the Installation Manual when installing units on an installation base.

PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM264T/YSXU-A

Unit: mm (in.)



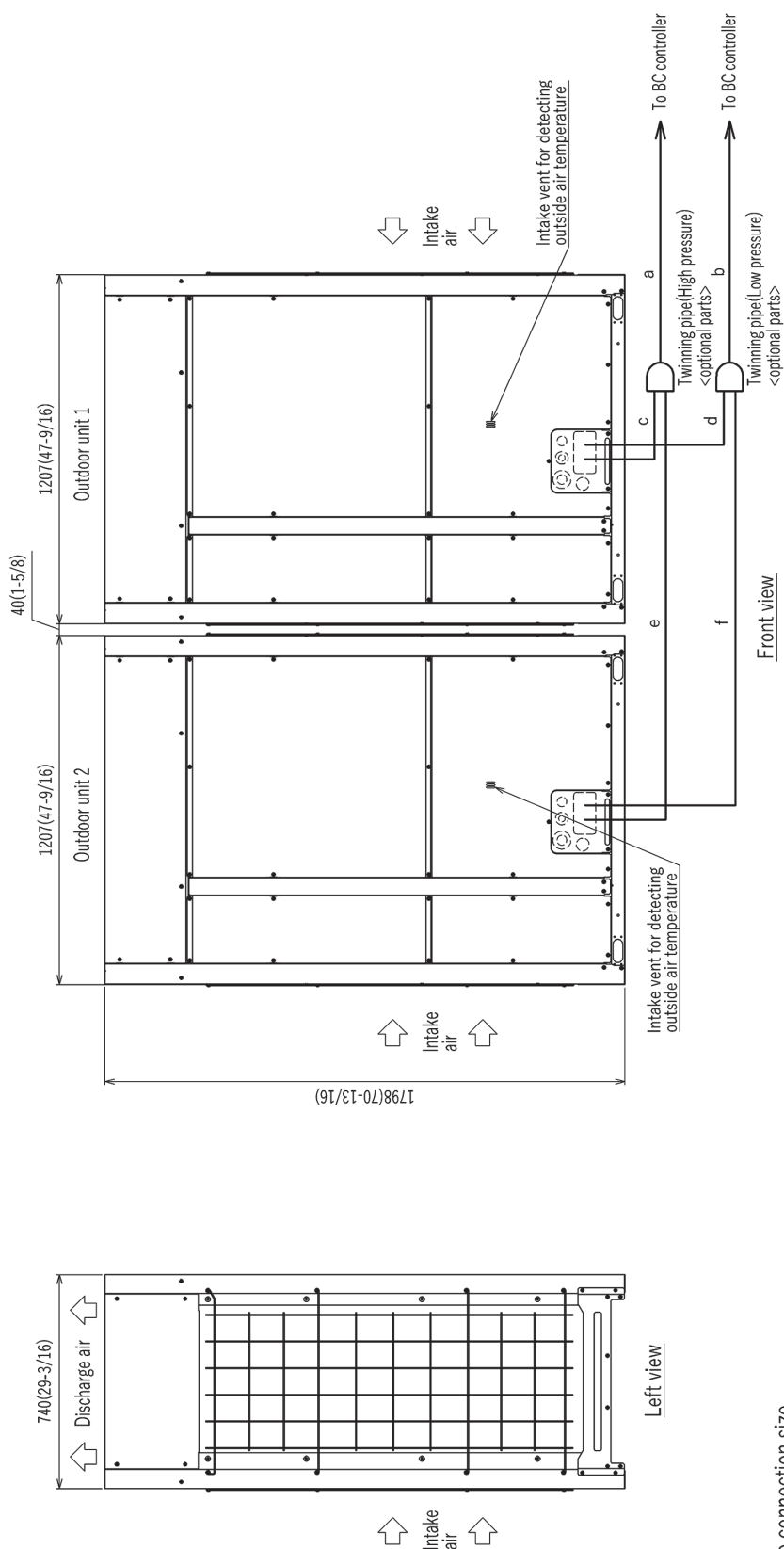
Twining pipe connection size

Package unit name		EM264T/YSXU-A
Component unit name		EM144T/YXU-A
Outdoor unit 1		EM120T/YXU-A
Outdoor unit 2		CMY-R300NCBK
Outdoor Twining Kit(optional parts)		
BC controller		
~ Twining pipe		
High pressure		ø 28.58(1-1/8)
Low pressure		ø 34.93(1-3/8)
Twining pipe		
High pressure		ø 22.2(7/8)
Low pressure		ø 28.58(1-1/8)
Twining pipe		
~Outdoor unit 1		ø 19.05(3/4)
~Outdoor unit 2		ø 28.58(1-1/8)

- Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
2. Twining pipes must be installed horizontally using a level vessel.
Be sure to see the Installation Manual for details of Twining pipe installation.
3. The pipe section before the Twining 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 Twining pipe).
4. Only use the Twining pipe by Mitsubishi (optional parts).
5. Do not block the intake vent for detecting outside air temperature.

PURY-EM288, 312, 336, 360, 384T/YSXU-A

Unit: mm (in.)



Twinning pipe connection size

Package unit name	EM288T/YSXU-A	EM312T/YSXU-A	EM336T/YSXU-A	EM360T/YSXU-A	EM384T/YSXU-A
Component unit name	EM144T/YSXU-A	EM168T/YSXU-A	EM168T/YSXU-A	EM192T/YSXU-A	EM192T/YSXU-A
Outdoor unit 1	EM144T/YSXU-A	EM144T/YSXU-A	EM168T/YSXU-A	CMY-R300NCBK	CMY-R300NCBK
Outdoor unit 2	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK
Outdoor Twinning Kit(optional parts)	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK
BC controller	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK	CMY-R300NCBK
~Twinning pipe	~Twinning pipe	~Twinning pipe	~Twinning pipe	~Twinning pipe	~Twinning pipe
High pressure	High pressure	High pressure	High pressure	High pressure	High pressure
Low pressure	Low pressure	Low pressure	Low pressure	Low pressure	Low pressure
~Outdoor unit 1	~Outdoor unit 1	~Outdoor unit 1	~Outdoor unit 1	~Outdoor unit 1	~Outdoor unit 1
High pressure	High pressure	High pressure	High pressure	High pressure	High pressure
Low pressure	Low pressure	Low pressure	Low pressure	Low pressure	Low pressure
~Outdoor unit 2	~Outdoor unit 2	~Outdoor unit 2	~Outdoor unit 2	~Outdoor unit 2	~Outdoor unit 2
High pressure	High pressure	High pressure	High pressure	High pressure	High pressure
Low pressure	Low pressure	Low pressure	Low pressure	Low pressure	Low pressure

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.

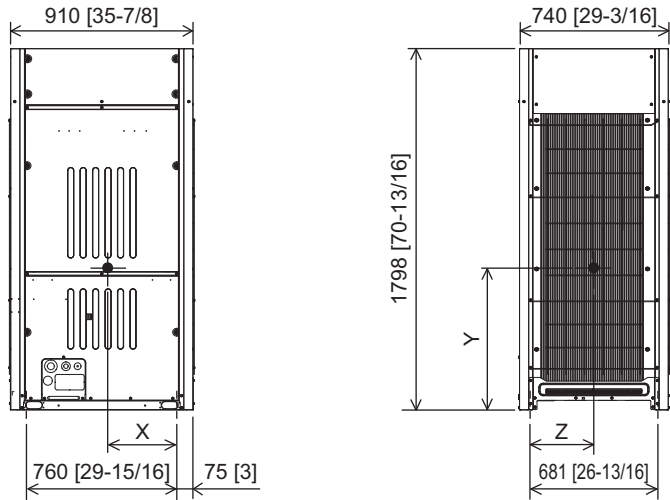
3. The pipe section before the Twinning pipe (section "a" and "b" in the figure) must have at least 500mm(19-11/16) of straight section (* including the straight pipe that is supplied with the Twinning pipe).

4. Only use the Twinning pipe by Mitsubishi (optional parts).

5. Do not block the intake vent for detecting outside air temperature.

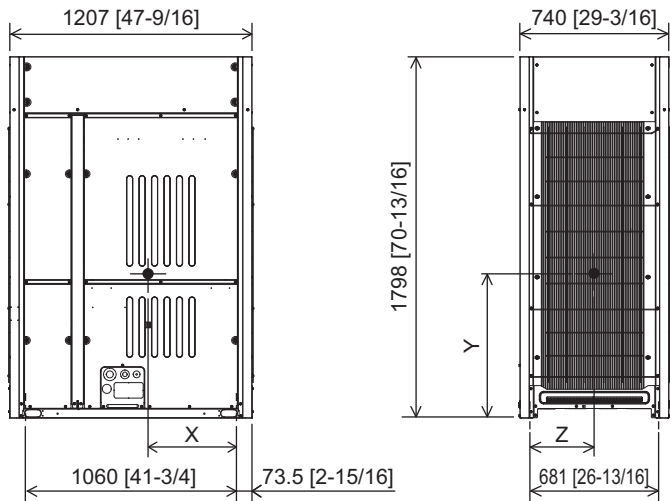
PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM72, 96, 120TXU-A
PURY-EM72, 96, 120YXU-A



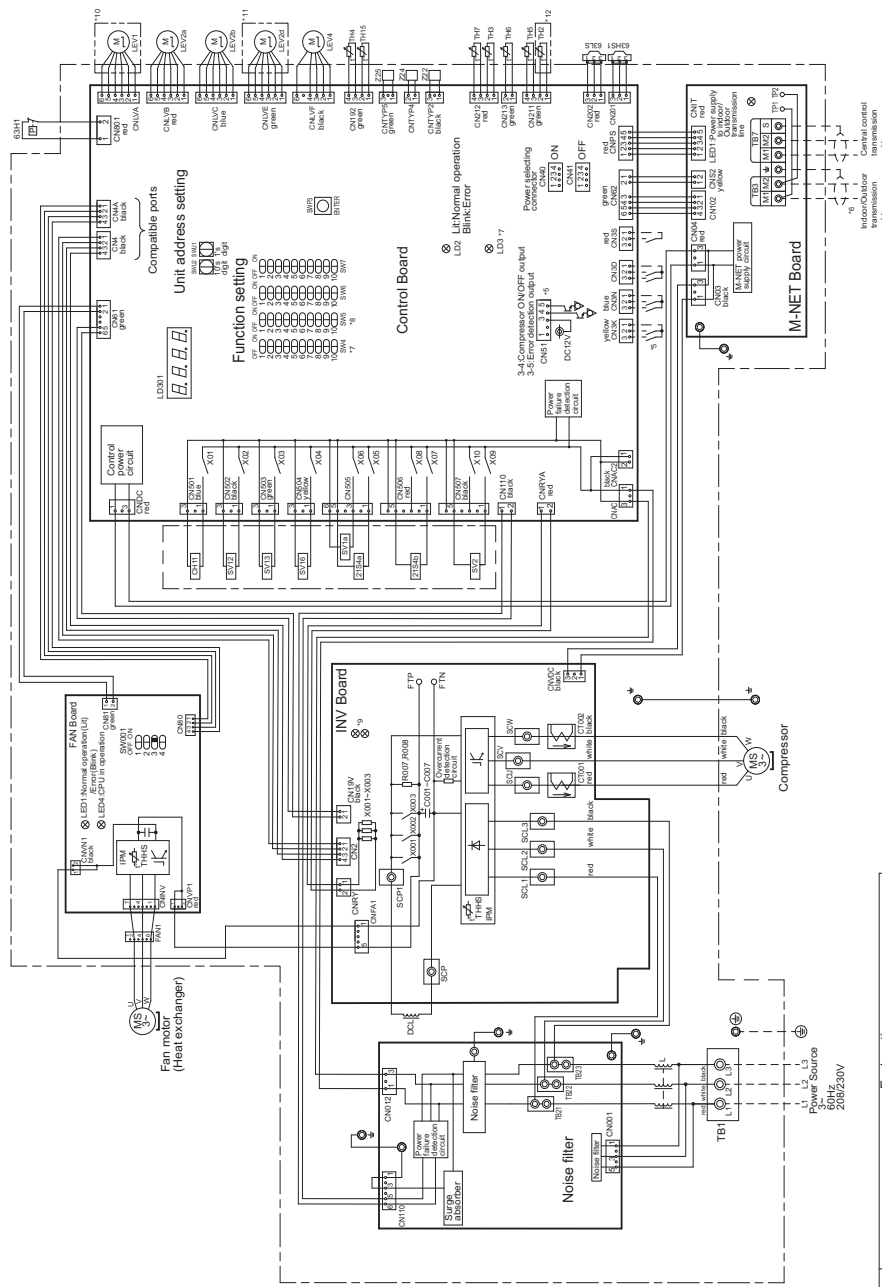
Unit: mm [in.]			
Model	X	Y	Z
PURY-EM72TXU-A	344 [13-9/16]	744 [29-5/16]	303 [11-15/16]
PURY-EM96TXU-A	344 [13-9/16]	744 [29-5/16]	303 [11-15/16]
PURY-EM120TXU-A	345 [13-5/8]	750 [29-9/16]	300 [11-13/16]
PURY-EM72YXU-A	339 [13-3/8]	749 [29-1/2]	297 [11-3/4]
PURY-EM96YXU-A	339 [13-3/8]	749 [29-1/2]	296 [11-11/16]
PURY-EM120YXU-A	339 [13-3/8]	751 [29-5/8]	296 [11-11/16]

PURY-EM144, 168, 192TXU-A
PURY-EM144, 168, 192YXU-A



Unit: mm [in.]			
Model	X	Y	Z
PURY-EM144TXU-A	428 [16-7/8]	775 [30-9/16]	306 [12-1/16]
PURY-EM168TXU-A	428 [16-7/8]	775 [30-9/16]	306 [12-1/16]
PURY-EM192TXU-A	428 [16-7/8]	775 [30-9/16]	306 [12-1/16]
PURY-EM144YXU-A	421 [16-5/8]	781 [30-3/4]	301 [11-7/8]
PURY-EM168YXU-A	421 [16-5/8]	781 [30-3/4]	301 [11-7/8]
PURY-EM192YXU-A	421 [16-5/8]	781 [30-3/4]	301 [11-7/8]

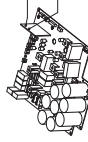
PURY-EM72, 96, 120TXU-A



- *1 Dot-dash lines indicate wiring not supplied with unit.
- *2 Single-dotted lines indicate the control box boundaries.
- *3 Control box houses high-voltage parts. Before inspecting the inside of the control box, turn off the power, keep the unit off for at least 10 minutes, and confirm that the voltage between the FTP and FTN terminals on the INV board has dropped to DC20V or less.
- *4 There are many high-temperature parts inside and on the back of the control box, so exercise caution even after turning off the power.
- *5 Refer to the Data book for connecting input/output signal connectors.
- *6 Refer to the Data book for outdoor units in the same refrigerant system.
- *7 SW4 in the case of All OFF
- *8 Setting the Central control switch(SW5-1).
- *9 Refer to the following for the LED on the INV board.

Unit: Turn on
Unit: Turn off
Refer to the Data book and Service Handbook for other switch setting and monitoring items.

System configuration	SW5-1
No connection system with the system controller	OFF
Connection system with the system controller	ON

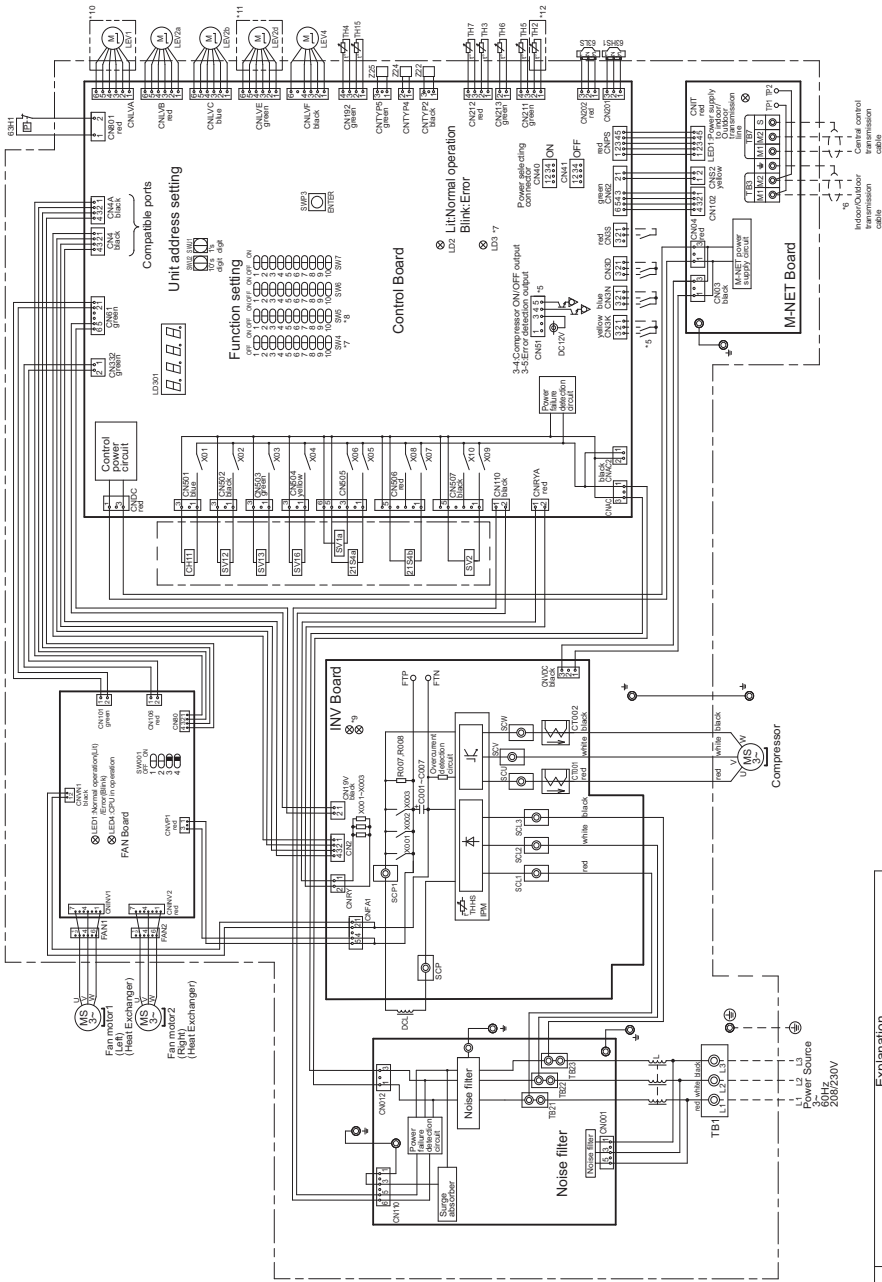


- *10 Difference of appliance
Model name | Appliance
PURYURY | *10 exist
PURYURY | *10 do not exist
- *11 Difference of appliance
Model name | Appliance
PURYURY | *11 exist
PURYURY | *11 do not exist
- *12 Difference of appliance
Model name | Appliance
PURYURY | *12 exist
PURYURY | *12 do not exist

Symbol	Explanation	Symbol	Explanation
SV1a	4-way valve	SV1a	For opening/closing the bypass circuit under the O/S
SV2	Pressure switch (for high pressure protection)	SV2	For opening/closing the high and low pressure the bypass circuit
SV12	Pressure sensor	SV12	For on defrost switching
SV13	Magnetic relay (inverter main circuit) 2C	SV13	For on defrost switching
SV16	Capacitor (inverter main circuit)	SV16	For opening/closing the variable pass circuit
SV16	Crankcase heater (for heating the compressor)	SV16	Power supply
SV16	DC reactor (For power factor enhancement)	SV16	Indoor/Outdoor transmission cable
SV16	Choke coil (For high-frequency noise reduction)	SV16	Central control transmission cable
SV16	Linear expansion valve	SV16	Refrigerant outlet temperature
SV16	Refrigerant control	SV16	Pipe temperature
SV16	Refrigerant flow late control	SV16	Discharge pipe temperature
SV16	Pressure control Refrigerant	SV16	ACC inlet pipe temperature
SV16	Pressure control	SV16	Subcooled liquid refrigerant temperature
SV16	Flow late control	SV16	O/A temperature
SV16	Pressure control Refrigerant	SV16	Detection of compressor lower shell temperature
SV16	Flow late control	SV16	IPM temperature
SV16	For opening/closing the injection circuit	SV16	Function setting connector
SV16	Inrush current prevention	SV16	

PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM144, 168, 192TXU-A



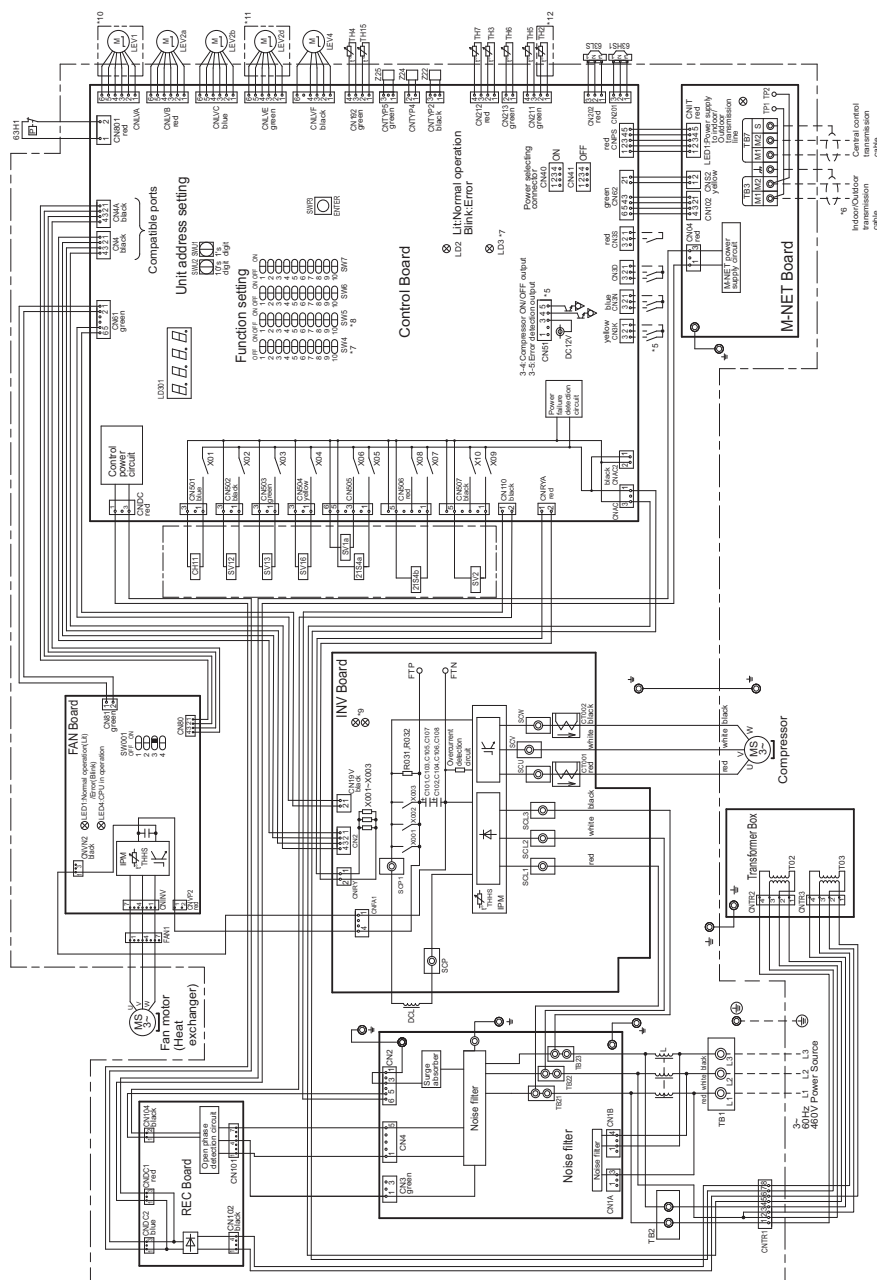
<Symbol explanation>			
Symbol	Symbol	Explanation	
21S4a	SV1a	For opening/closing the bypass circuit under the OIS	Solenoid valve
21S4b		For opening/closing the high and low pressure	
63H1	SV2	For on defrost switching	
63H1S1		For opening/closing the variable pass circuit	
SV3-X003	SV12	Power supply	
C001-C007	SV13	Indoor/Outdoor transmission cable	
CH11	SV16	Central control transmission cable	
CT001,002	TB1	Subcool bypass outlet temperature	Terminal block
DCL	TB3	Pipe temperature	
LEV1	TB7	ACC temperature	
LEV2a	TH2	Subcooled liquid refrigerant temperature	
LEV2b	TH3	O/A temperature	
LEV2d	TH4	Detection of compressor lower shell temperature	
LEV4	TH5	TPM temperature	
R007,008	TH15	Function setting connector	

- *1. Dot-dash lines indicate wiring not supplied with unit.
- *2. Single-dotted lines indicate the control box boundaries.
- *3. Control box houses high-voltage parts. Before inspecting the inside of the control box, turn off the power, keep the unit off for at least 10 minutes, and the voltage between the FTP and FTN terminals on the INV board has dropped to DC20V or less.
- *4. There are many high-temperature parts inside and on the back of the control box, so exercise caution even after turning off the power.
- *5. Refer to the Data book for connecting input/output signal connectors.
- *6. Refer to the Data book for outdoor units in the same refrigerant system.
- *7. SW4: in the case of All OFF
- *LD3 Lit-Operation
- *Blink: Turning on
- *Unit: Turn off
- *Refer to the Data book and Service Handbook for other switch setting and monitoring items.
- *8. Setting the Central control switch(SW5-1).
- *9. Refer to the following for the LED on the INV board.



- *10. Difference of appliance
- Model name /Appliance
- PURY/TURY *10 exist
- PURY/TURY *10 do not exist
- *11. Difference of appliance
- Model name /Appliance
- PURY/TURY *11 do not exist
- PURY/TURY *11 exist
- *12. Difference of appliance
- Model name /Appliance
- PURY/TURY *12 exist
- PURY/TURY *12 do not exist

PURY-EM-T(s)XU-A, Y(s)XU-A



1. Dot-dash lines indicate wiring not supplied with unit.
2. Single-dotted lines indicate the control box boundaries.
3. Control box houses high-voltage parts. Before inspecting the inside of the control box, turn off the power, keep the unit off for at least 10 minutes, and turn off the voltage between the FTP and FTM terminals on the INV[®] board has dropped to DC20V or less.
4. There are many high-temperature parts inside and on the back of the control box, so exercise caution even after turning off the power.
5. Refer to the Data book for connecting input/output signal connectors.
6. Refer to the Data book for outdoor units in the same refrigerant system.

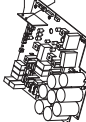
- LD3 Lit:Operation
Blink:Turning on
Unlit:Turn off

Refer to the Data book and Service Handbook for other switch setting and monitoring items.

8.Setting the Central control switch(SW5-1).

System configuration	SW5-1
No connection system with the system controller	OFF
Connection system with the system controller	ON

9. Refer to the following for the LED on the INV board.



—LED4:Microcomputer operation

operation(Lit)

```
Error(Blink)
```

- ## 10. Difference of appliance

Model name	Appliance
PUHY/TUHY	*10 exist

- ### 11. Difference of appliance

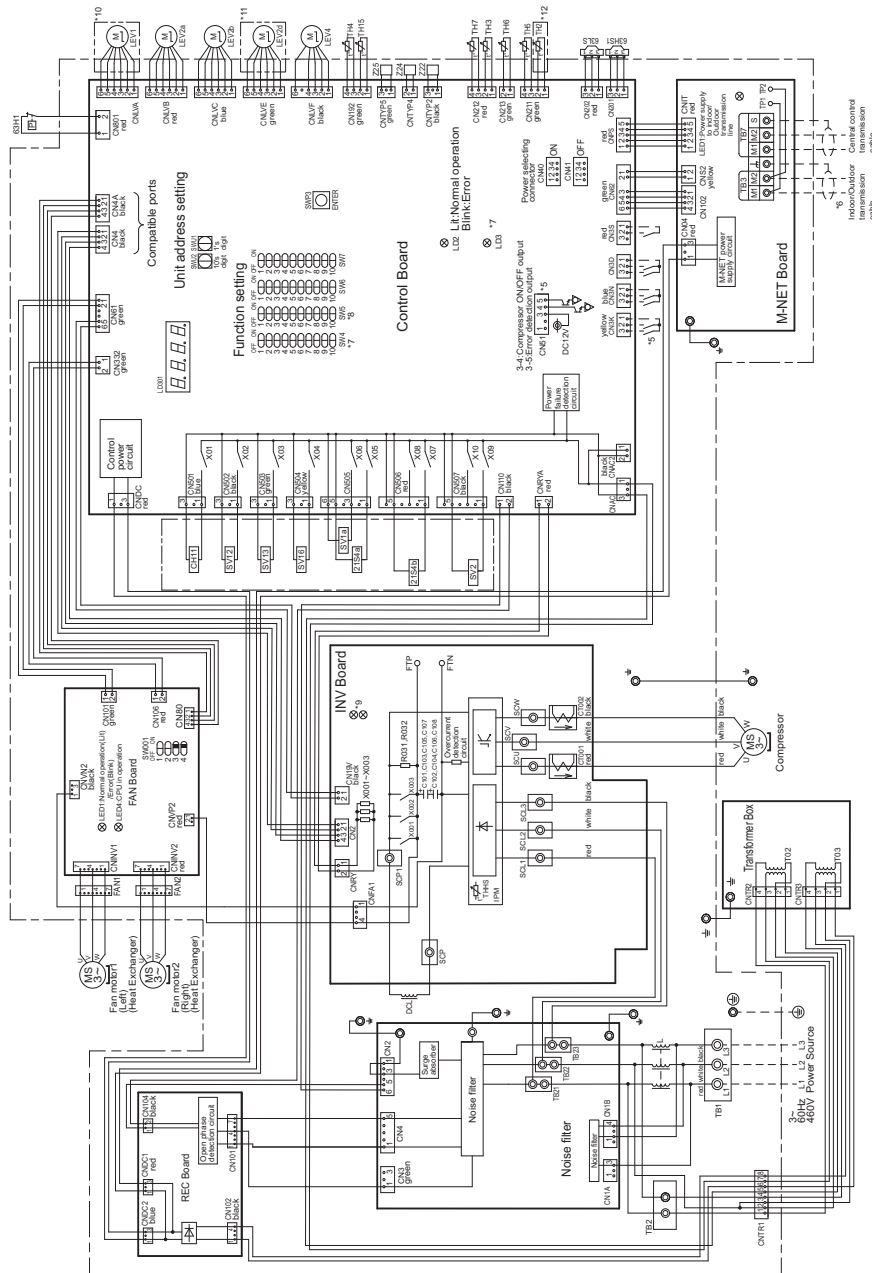
Model name	Appliance
PUHY/TUHY	*11 do not exist

- ### 12. Difference of appliance

Model name	Appliance
PUHY/TUHY	*12 exist
PURY/TURY	*12 do not exist

Symbol explanation>		Explanation	Symbol	Solenoid valve	Explanation
4 way valve	Cooling/Heating switching	SV1a			For opening/closing the bypass circuit under the OS
2154a	HE capacity switching				
2154b	Pressure switch (high pressure protection)	SV2			For opening/closing the high and low pressure
63HS1	Pressure				the bypass circuit
63LS	Low pressure sensor	SV12			For on defrost switching
X001~X003	Magnetic relay (inverter main circuit)	SV13			For on defrost switching
C001~C007	Capacitor (inverter main circuit)	SV16			For opening/closing the variable phase circuit
CT001_002	Current sensor				
DCL	DC reactor (P or power factor enhancement)	TB1		Terminal block	Power supply
LEV1	Choke coil (P or power factor enhancement)	TB2			Indoor/outdoor transmission cable
LEV2a	Linear expansion valve	TH1		Thermistor	Subcool bypass outlet temperature
LEV2b		TH2			Pipe temperature
LEV2d		TH3			Discharge pipe temperature
		TH4			A/C inlet pipe temperature
		TH5			Subcooled liquid refrigerant temperature
		TH6			OA temperature
		TH7			Detection of compressor lower shell temperature
		TH8S			IPM temperature
LEV4	For opening/closing the refrigerant suction	ZZZ Z24 Z25			Function setting connector
R007 008	Resistor				

PURY-EM-T(S)XU-A, Y(S)XU-A



1. Dot-dash lines indicate wiring not supplied with unit.
2. Single-dotted lines indicate the control box boundaries.
3. Control box houses high-voltage parts. Before inspecting the inside of the control box, turn off the power, keep the unit off for at least 10 minutes, and confirm that the voltage between the FTP and FTT terminals on the INV board has dropped to DC20V or less.
4. There are many high-temperature parts inside and on the back of the control box, so exercise caution even after turning off the power.
5. Refer to the Data book for connecting input/output signal connectors.
6. Refer to the Data book for outdoor units in the same refrigerant system.

•LD3 Lit:Operation
Blink:Turning on
Unlit:Turn off

Refer to the Data book and Service Handbook for other switch setting and monitoring items.

*8.Setting the Central control switch(SW5-1).

System configuration	SW5-1
No connection system with the system controller	OFF
Connection system with the system controller	ON

*9. Refer to the following for the LED on the INV board.

*10.Difference of appliance

Model name	Appliance
PUHY/TUHY	*10 exist
PURY/TURY	*10 do not exist

*11. Difference of appliance

Model name	Appliance
PURHY/TUHY	*11 do not exist
PURY/TURY	*11 exist

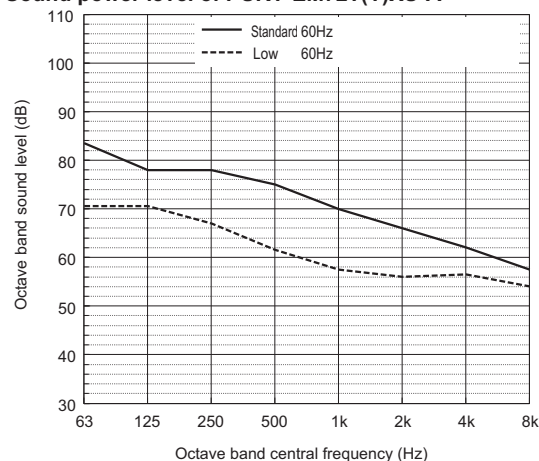
***12.Difference of appliance**

Model name	Appliance
PUHY/TUHY	*12 exist
PURY/TURY	*12 do not exist

>Symbol explanation<			
Symbol	Explanation	Symbol	Explanation
4-way valve	Cooling/Heating switching	SV1a	For opening/closing the bypass circuit under the pressure of the high and low pressure
2T54a	AC capacity switching	SV2	For on/off switching the bypass circuit
63H4b	Pressure switch (for protection)	SV13	For on/off switching the variable pass circuit
63HS1	Pressure	SV16	Power supply
63LS	Discharge pressure	TB1	Door/Outdoor transmission cable block
63LS	Low pressure	TB7	Door/Outdoor transmission cable block
X001~X003	Magnetic relay (inverter main circuit)	TH2	Thermistor
X001~C007	Magnetic relay (inverter main circuit)	TH3	Pipe temperature
C001~C007	Capacitor (inverter main circuit)	TH4	Discharge pipe temperature
CH1	Crankcase heater (for heating the compressor)	TH5	ACC inlet pipe temperature
C001~C002	Current sensor	TH6	Subcooled liquid refrigerant temperature
DC reactor	DC reactor (or power factor enhancement)	TH7	OA temperature
Choke coil	Choke coil (for frequency noise reduction)	TH8	Detection of compressor lower shell temperature
Linear expansion valve	Pressure control, Refrigerant flow rate control, Refrigerant flow rate control, Refrigerant flow rate control	TH9	Pipe temperature
LEV1a	Pressure control, Refrigerant flow rate control, Refrigerant flow rate control, Refrigerant flow rate control	Z21, Z24, Z25	Function setting connector
LEV2a	Pressure control, Refrigerant flow rate control, Refrigerant flow rate control, Refrigerant flow rate control		
LEV2b	Pressure control, Refrigerant flow rate control, Refrigerant flow rate control, Refrigerant flow rate control		
LEV2d	Pressure control, Refrigerant flow rate control, Refrigerant flow rate control, Refrigerant flow rate control		
LEV4	Pressure control, Refrigerant flow rate control, Refrigerant flow rate control, Refrigerant flow rate control		
R007, 008	Inrush current prevention		
Resistor			

5-1. Sound levels in cooling mode

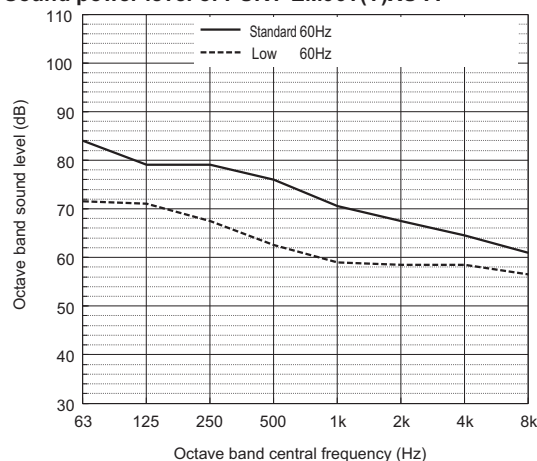
Sound power level of PURY-EM72T(Y)XU-A



	63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling 60Hz	83.5	78.0	78.0	75.0	70.0	66.0	62.0	57.5	76.5
Low noise mode 60Hz	70.5	70.5	67.0	61.5	57.5	56.0	56.5	54.0	65.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

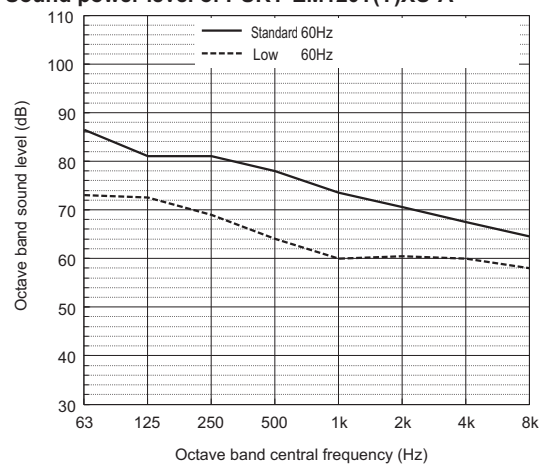
Sound power level of PURY-EM96T(Y)XU-A



	63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling 60Hz	84.0	79.0	79.0	76.0	70.5	67.5	64.5	61.0	77.5
Low noise mode 60Hz	71.5	71.0	67.5	62.5	59.0	58.5	58.5	56.5	67.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

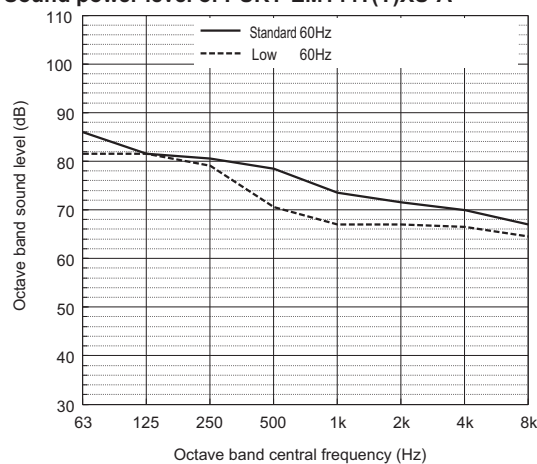
Sound power level of PURY-EM120T(Y)XU-A



	63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling 60Hz	86.5	81.0	81.0	78.0	73.5	70.5	67.5	64.5	80.0
Low noise mode 60Hz	73.0	72.5	69.0	64.0	60.0	60.5	60.0	58.0	68.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

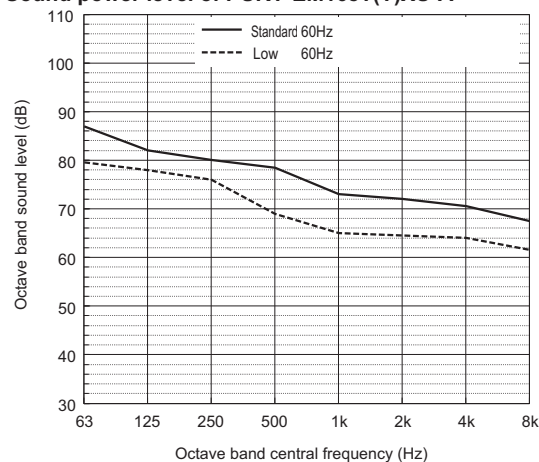
Sound power level of PURY-EM144T(Y)XU-A



	63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling 60Hz	86.0	81.5	80.5	78.5	73.5	71.5	70.0	67.0	80.5
Low noise mode 60Hz	81.5	81.5	79.0	70.5	67.0	67.0	66.5	64.5	76.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

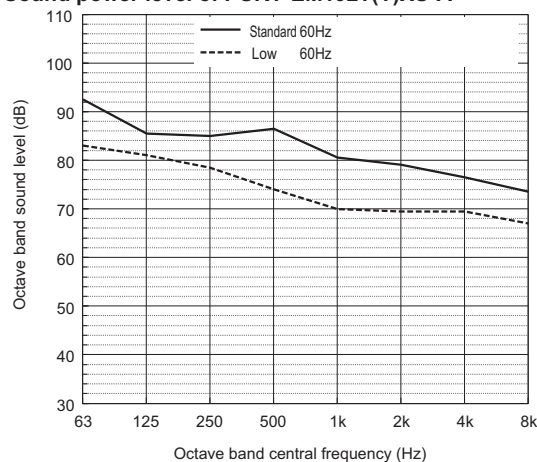
Sound power level of PURY-EM168T(Y)XU-A



	63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling 60Hz	87.0	82.0	80.0	78.5	73.0	72.0	70.5	67.5	80.5
Low noise mode 60Hz	79.5	78.0	76.0	69.0	65.0	64.5	64.0	61.5	73.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

Sound power level of PURY-EM192T(Y)XU-A



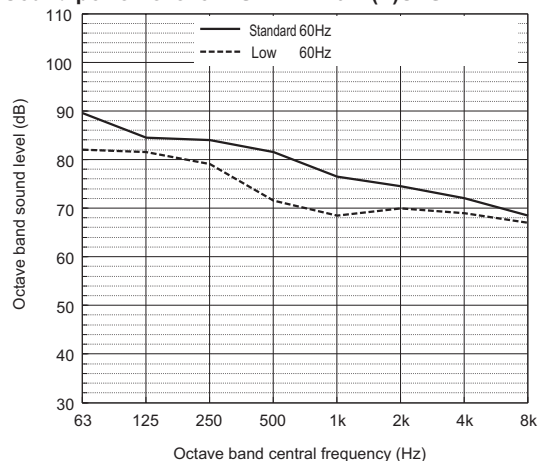
	63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling 60Hz	92.5	85.5	85.0	86.5	80.5	79.0	76.5	73.5	87.5
Low noise mode 60Hz	83.0	81.0	78.5	74.0	70.0	69.5	69.5	67.0	78.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

- Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes when operating normally. Please consider to avoid location where quietness is required.
- For BC controller, it is recommended to be installed in places such as ceilings of corridor, rest rooms and plant rooms.

- The sound values are sound power level (PWL) based on ISO 3744:2010 ($r = 3.5$ m).

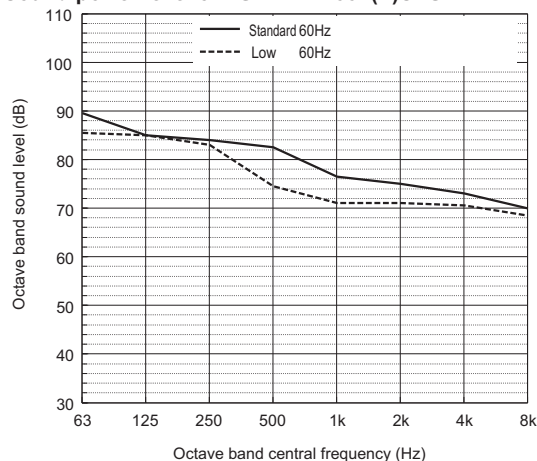
Sound power level of PURY-EM264T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	89.5	84.5	84.0	81.5	76.5	74.5	72.0	68.5	83.5
Low noise mode	60Hz	82.0	81.5	79.0	71.5	68.5	70.0	69.0	67.0	77.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

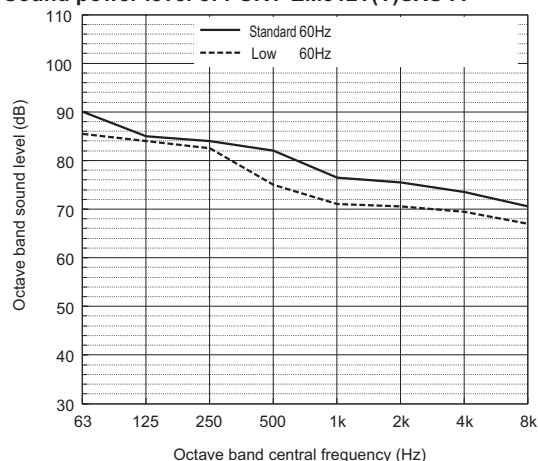
Sound power level of PURY-EM288T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	89.5	85.0	84.0	82.5	76.5	75.0	73.0	70.0	84.0
Low noise mode	60Hz	85.5	85.0	83.0	74.5	71.0	71.0	70.5	68.5	80.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

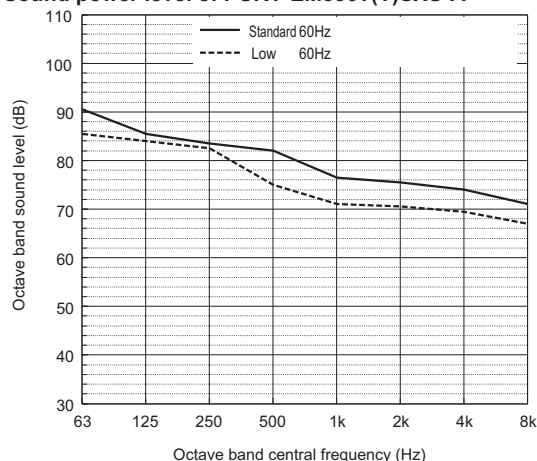
Sound power level of PURY-EM312T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	90.0	85.0	84.0	82.0	76.5	75.5	73.5	70.5	84.0
Low noise mode	60Hz	85.5	84.0	82.5	75.0	71.0	70.5	69.5	67.0	79.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

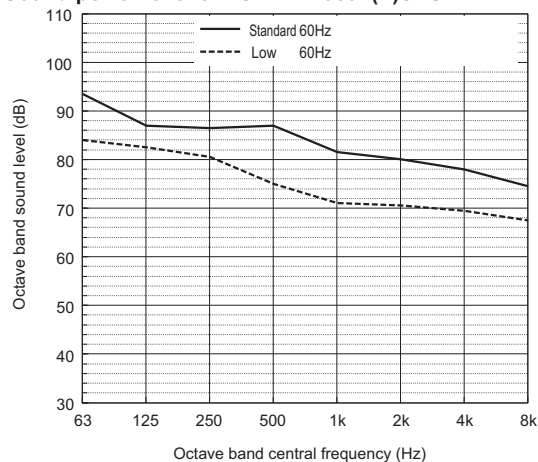
Sound power level of PURY-EM336T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	90.5	85.5	83.5	82.0	76.5	75.5	74.0	71.0	84.0
Low noise mode	60Hz	85.5	84.0	82.5	75.0	71.0	70.5	69.5	67.0	79.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

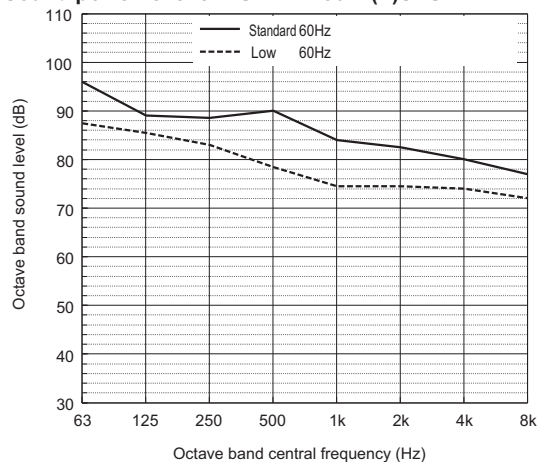
Sound power level of PURY-EM360T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	93.5	87.0	86.5	87.0	81.5	80.0	78.0	74.5	88.5
Low noise mode	60Hz	84.0	82.5	80.5	75.0	71.0	70.5	69.5	67.5	79.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

Sound power level of PURY-EM384T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	96.0	89.0	88.5	90.0	84.0	82.5	80.0	77.0	91.0
Low noise mode	60Hz	87.5	85.5	83.0	78.5	74.5	74.5	74.0	72.0	82.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

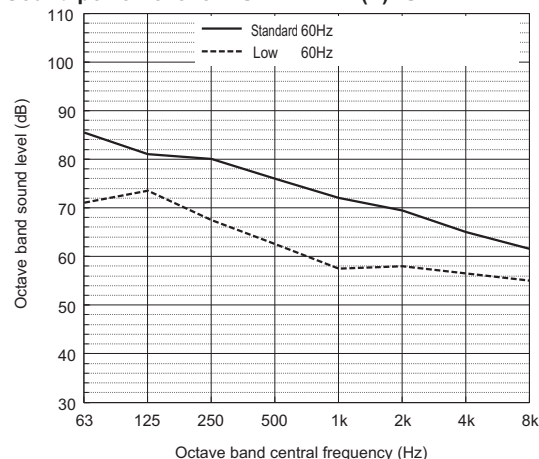
• Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes when operating normally. Please consider to avoid location where quietness is required.

For BC controller, it is recommended to be installed in places such as ceilings of corridor, rest rooms and plant rooms.

• The sound values are sound power level (PWL) based on ISO 3744:2010 ($r = 3.5 \text{ m}$).

5-2. Sound levels in heating mode

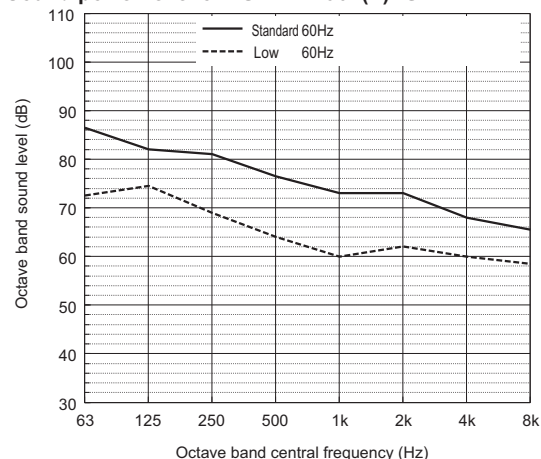
Sound power level of PURY-EM72T(Y)XU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	85.5	81.0	80.0	76.0	72.0	69.5	65.0	61.5	78.5
Low noise mode	60Hz	71.0	73.5	67.5	62.5	57.5	58.0	56.5	55.0	66.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

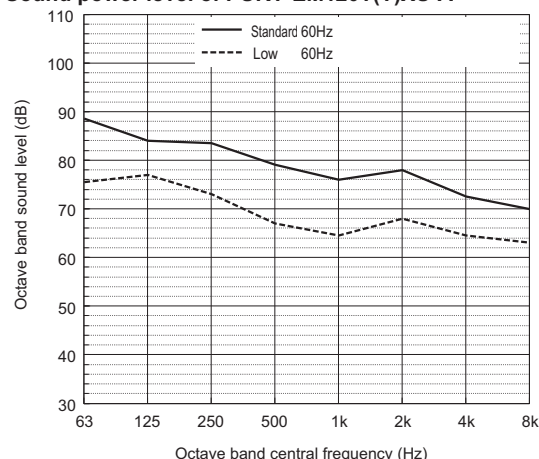
Sound power level of PURY-EM96T(Y)XU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	86.5	82.0	81.0	76.5	73.0	73.0	68.0	65.5	80.0
Low noise mode	60Hz	72.5	74.5	69.0	64.0	60.0	62.0	60.0	58.5	69.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

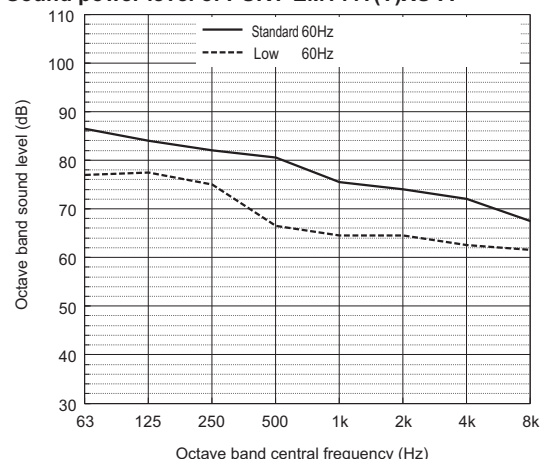
Sound power level of PURY-EM120T(Y)XU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	88.5	84.0	83.5	79.0	76.0	78.0	72.5	70.0	83.5
Low noise mode	60Hz	75.5	77.0	73.0	67.0	64.5	68.0	64.5	63.0	73.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

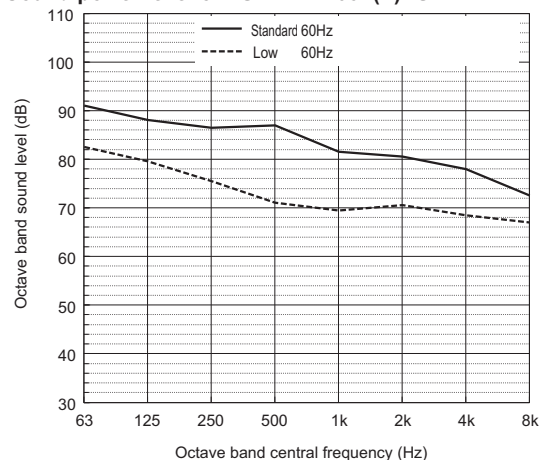
Sound power level of PURY-EM144T(Y)XU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	86.5	84.0	82.0	80.5	75.5	74.0	72.0	67.5	82.5
Low noise mode	60Hz	77.0	77.5	75.0	66.5	64.5	64.5	62.5	61.5	72.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

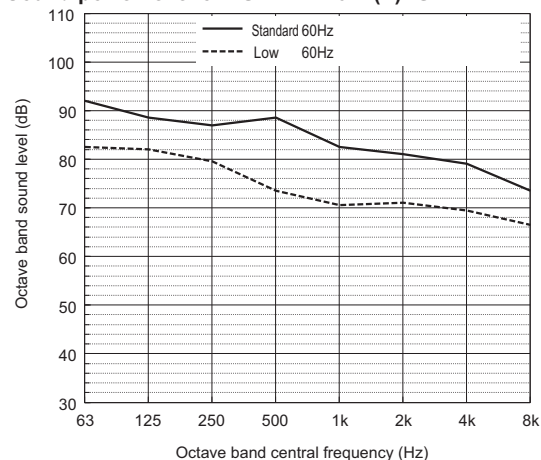
Sound power level of PURY-EM168T(Y)XU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	91.0	88.0	86.5	87.0	81.5	80.5	78.0	72.5	88.5
Low noise mode	60Hz	82.5	79.5	75.5	71.0	69.5	70.5	68.5	67.0	77.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

Sound power level of PURY-EM192T(Y)XU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	92.0	88.5	87.0	88.5	82.5	81.0	79.0	73.5	89.5
Low noise mode	60Hz	82.5	82.0	79.5	73.5	70.5	71.0	69.5	66.5	78.5

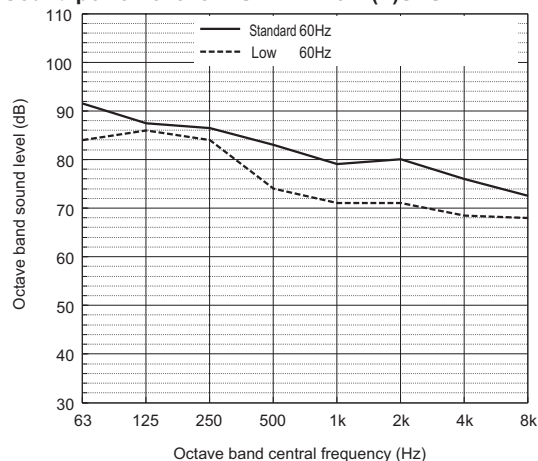
When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

- Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes when operating normally. Please consider to avoid location where quietness is required.

For BC controller, it is recommended to be installed in places such as ceilings of corridor, rest rooms and plant rooms.

- The sound values are sound power level (PWL) based on ISO 3744:2010 ($r = 3.5$ m).

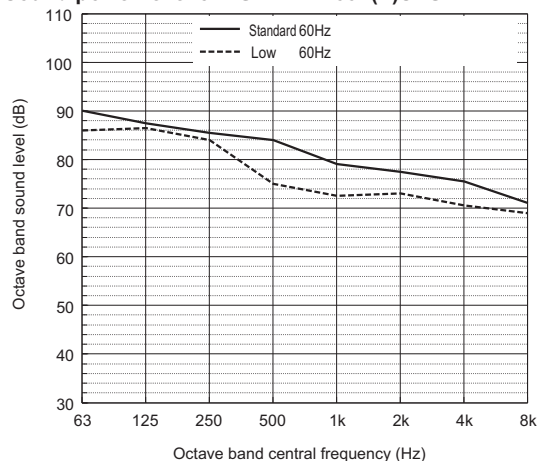
Sound power level of PURY-EM264T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	91.5	87.5	86.5	83.0	79.0	80.0	76.0	72.5	86.5
Low noise mode	60Hz	84.0	86.0	84.0	74.0	71.0	71.0	68.5	68.0	80.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

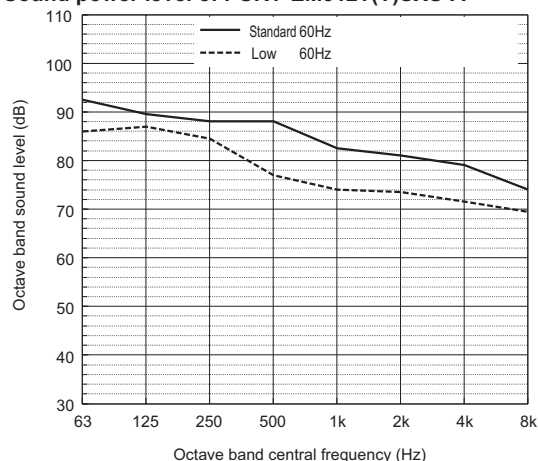
Sound power level of PURY-EM288T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	90.0	87.5	85.5	84.0	79.0	77.5	75.5	71.0	86.0
Low noise mode	60Hz	86.0	86.5	84.0	75.0	72.5	73.0	70.5	69.0	81.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

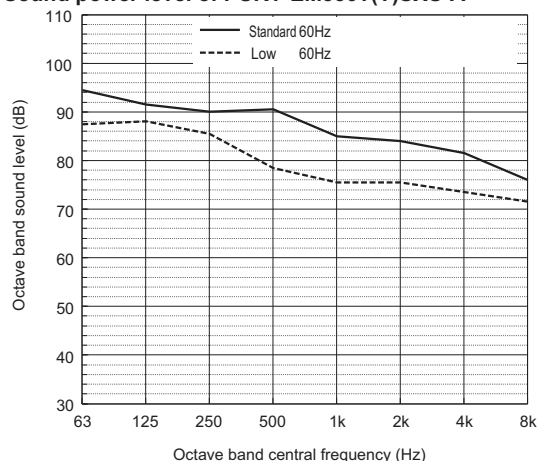
Sound power level of PURY-EM312T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	92.5	89.5	88.0	88.0	82.5	81.0	79.0	74.0	89.5
Low noise mode	60Hz	86.0	87.0	84.5	77.0	74.0	73.5	71.5	69.5	82.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

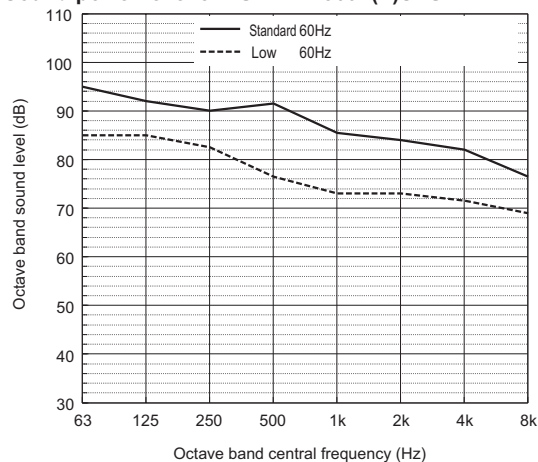
Sound power level of PURY-EM336T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	94.5	91.5	90.0	90.5	85.0	84.0	81.5	76.0	92.0
Low noise mode	60Hz	87.5	88.0	85.5	78.5	75.5	75.5	73.5	71.5	83.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

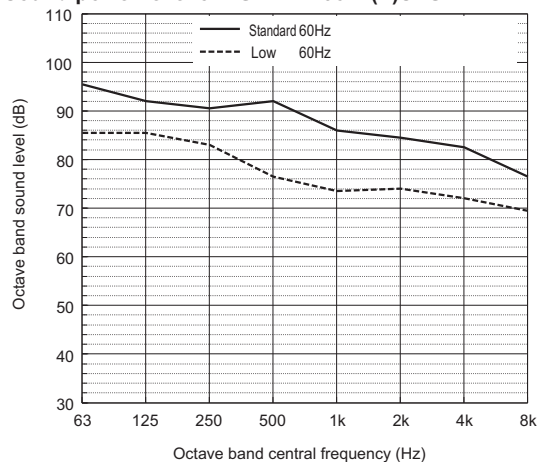
Sound power level of PURY-EM360T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	95.0	92.0	90.0	91.5	85.5	84.0	82.0	76.5	92.5
Low noise mode	60Hz	85.0	85.0	82.5	76.5	73.0	73.0	71.5	69.0	81.0

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

Sound power level of PURY-EM384T(Y)SXU-A



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	95.5	92.0	90.5	92.0	86.0	84.5	82.5	76.5	93.0
Low noise mode	60Hz	85.5	85.5	83.0	76.5	73.5	74.0	72.0	69.5	81.5

When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

• Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes when operating normally. Please consider to avoid location where quietness is required.

For BC controller, it is recommended to be installed in places such as ceilings of corridor, rest rooms and plant rooms.

• The sound values are sound power level (PWL) based on ISO 3744:2010 ($r = 3.5$ m).

[PURY-EM72-192T/YXU, PURY-EM264-384T/YSXU]

Measurement condition

Measurement frequency: 1 Hz-80 Hz

Measurement point: Ground surface 20 cm away from the unit leg

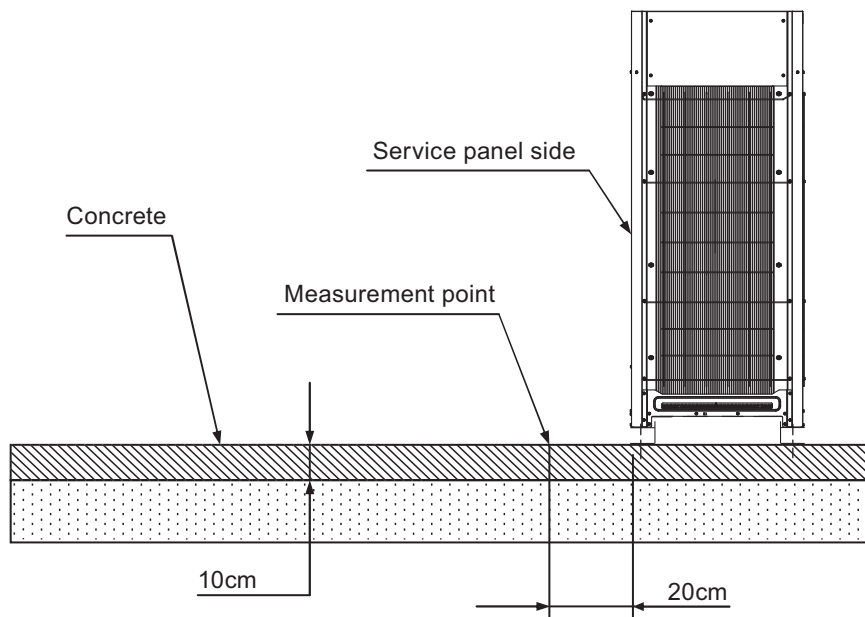
Installation condition: Direct installation on the concrete floor

Power source: 3-phase 3-wire 208 V-230 V 60 Hz: For TXU-Series

3-phase 3-wire 460 V 60 Hz: For YXU-Series

Operation condition: AHRI condition (cooling, heating)

Measurement device: Vibration level meter for vibration pollution VM-1220C (JIS-compliant product)

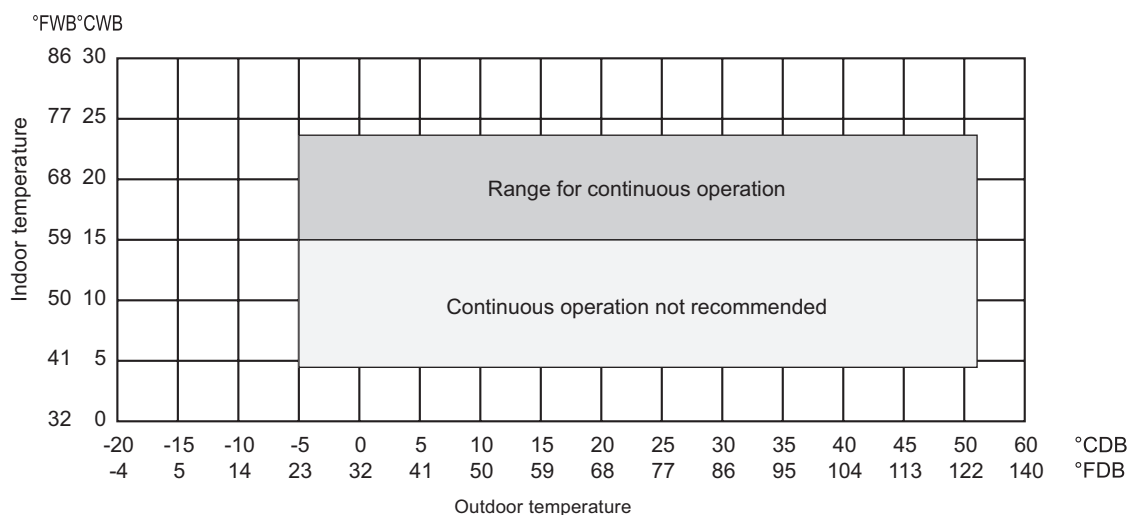


Vibration level

Model	Vibration level (dB)
PURY-EM72T(Y)XU-A	36.5
PURY-EM96T(Y)XU-A	43.0
PURY-EM120T(Y)XU-A	44.0
PURY-EM144T(Y)XU-A	50.5
PURY-EM168T(Y)XU-A	48.0
PURY-EM192T(Y)XU-A	45.5
PURY-EM264T(Y)SXU-A	51.5
PURY-EM288T(Y)SXU-A	54.0
PURY-EM312T(Y)SXU-A	52.5
PURY-EM336T(Y)SXU-A	50.0
PURY-EM384T(Y)SXU-A	49.0

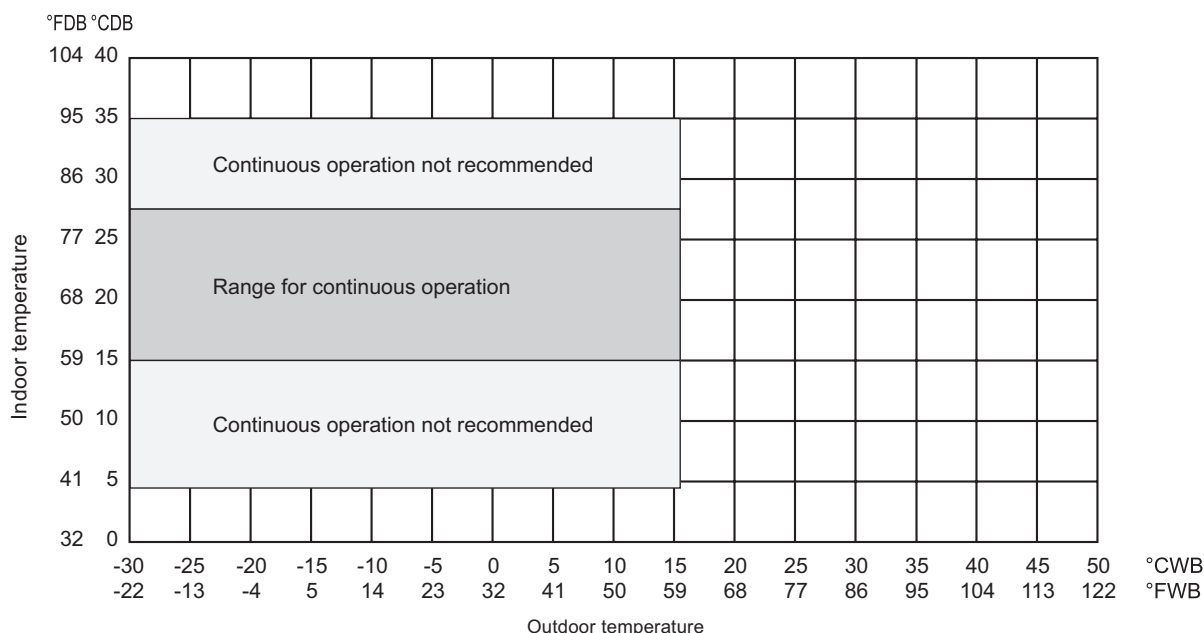
* Vibration level varies depending on the conditions of actual installation site.

• Cooling



* The operation temperature of outdoor unit is limited into 32~109°FDB (0~43°CDB) when the outdoor unit is installed in a location that is positioned lower than the indoor units.

• Heating



• Combination of cooling/heating operation (Cooling main or Heating main)

	Cooling	Heating
Indoor temperature	59 to 75 °FWB (15 to 24 °CWB)	59 to 81 °FDB (15 to 27 °CDB)
Outdoor temperature	14 to 70 °FDB (-10 to 21 °CDB)	12 to 60 °FWB (-11 to 15.5 °CWB)

Installation of the low ambient kit is recommended to operate in cooling and cooling main mode in conditions under 50°F [10°C].

Section 8-1.
Shows an example of how to select the indoor and outdoor units according to the required heating/cooling load.

Section 8-2. through 8-6.
Show the actual correction data of indoor and outdoor units.

8-1. Selection of Cooling/Heating Units

How to determine the capacity when less than or equal to 100% indoor model size units are connected in total:

The purpose of this flow chart is to select the indoor and outdoor units. For other purposes, this flow chart is intended only for reference.

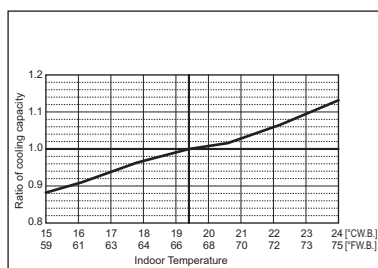
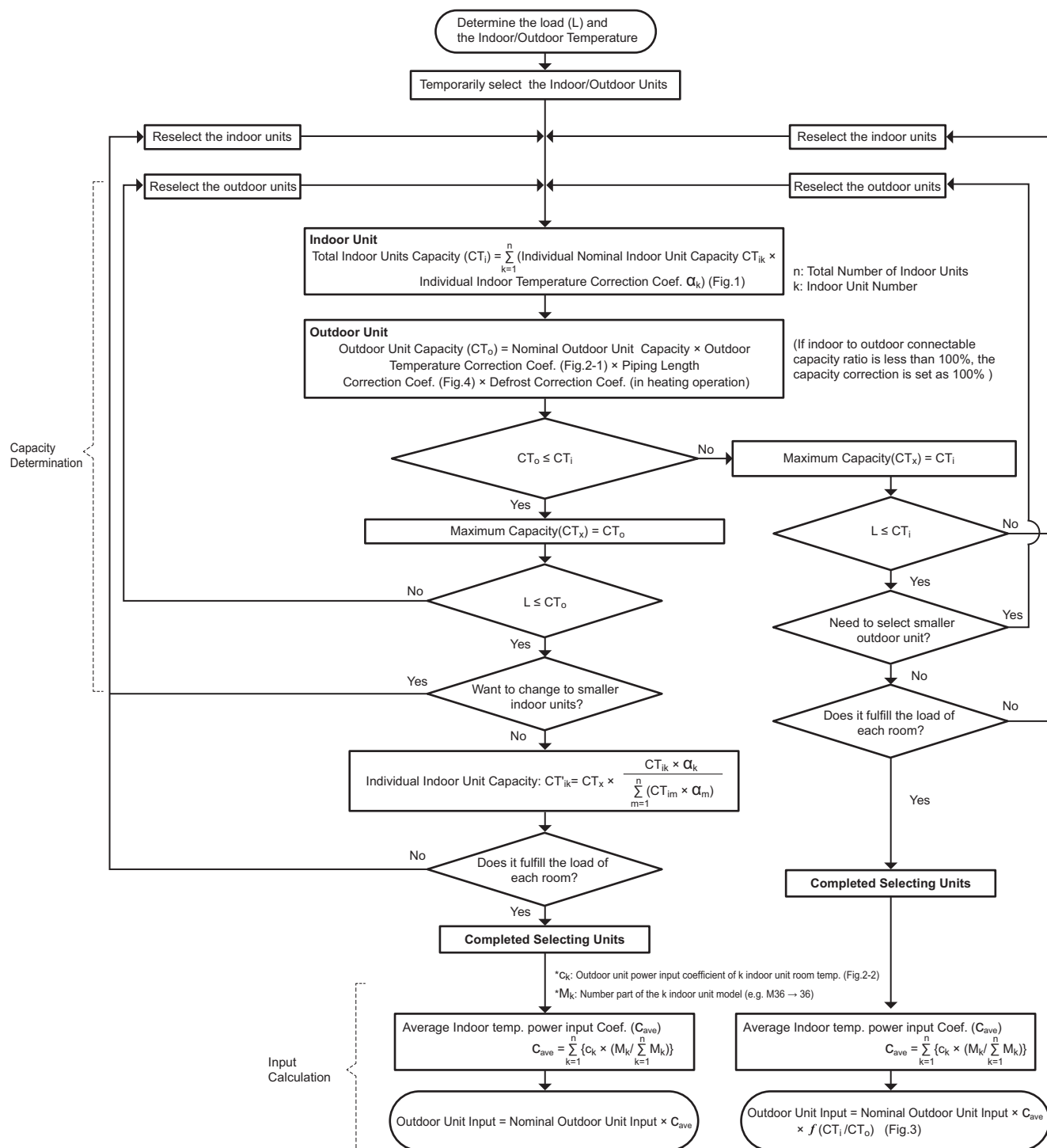


Fig.1 Indoor unit temperature correction

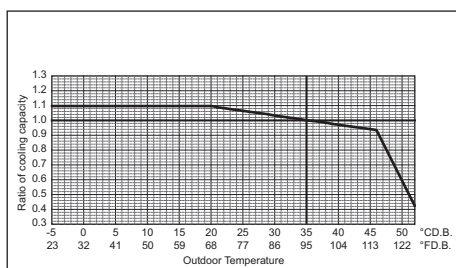


Fig.2-1 Outdoor unit temperature correction (capacity)

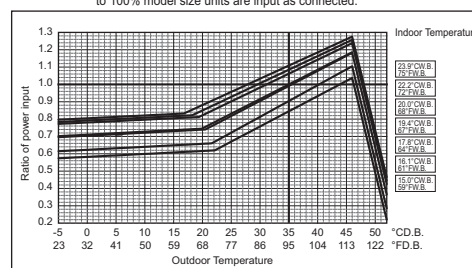
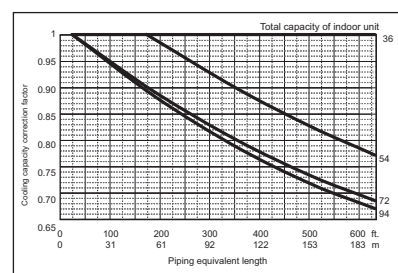
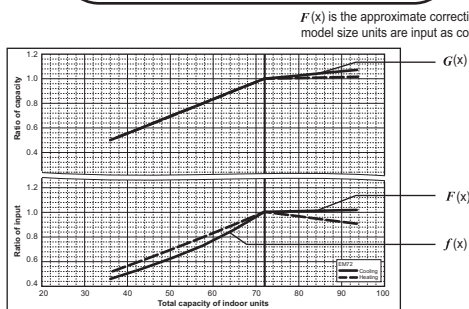
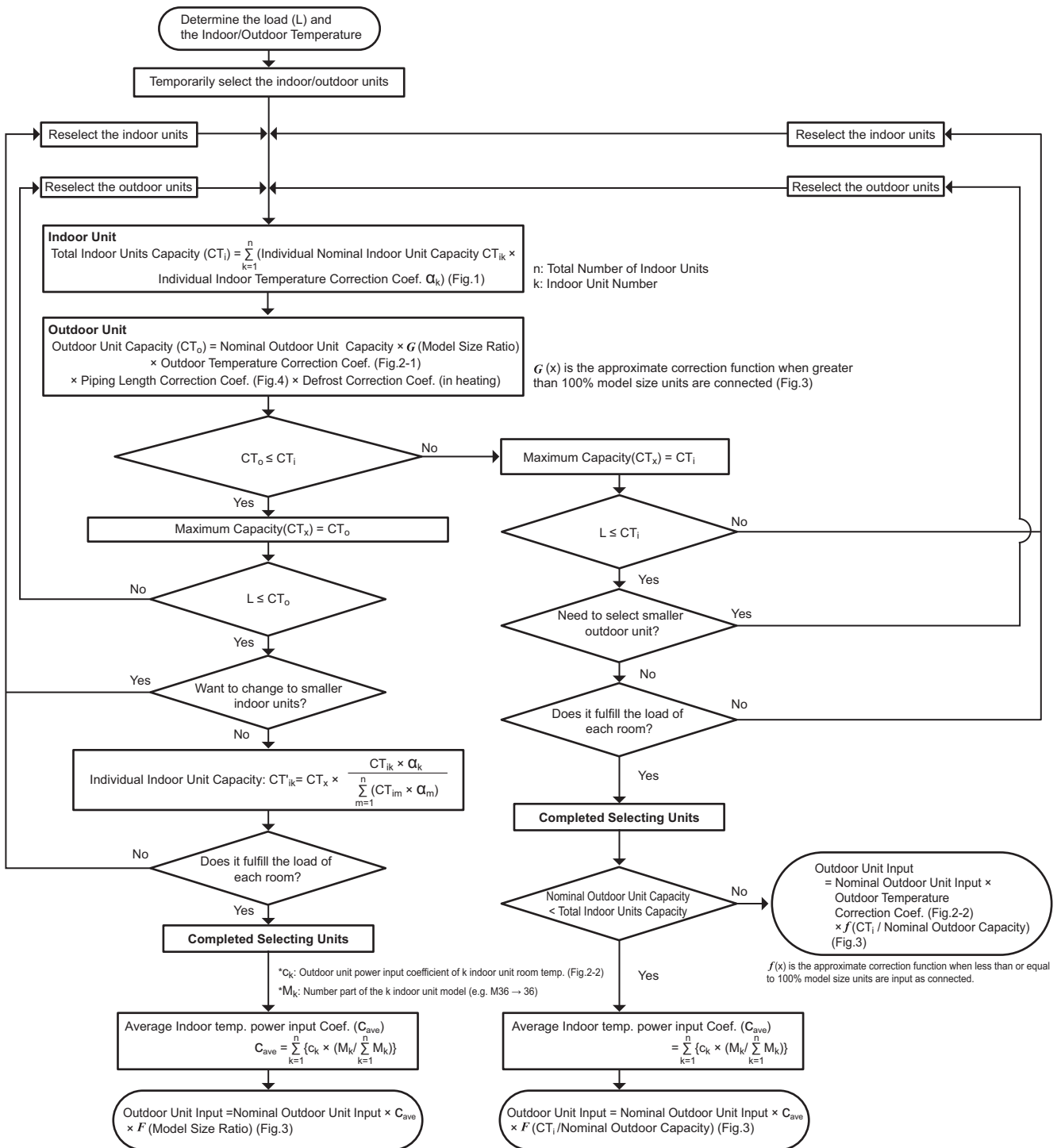


Fig.2-2 Outdoor unit temperature correction (power input)

How to determine the capacity when greater than 100% indoor model size units are connected in total:

The purpose of this flow chart is to select the indoor and outdoor units. For other purposes, this flow chart is intended only for reference.



<Cooling>

Design Condition	
Outdoor Design Dry Bulb Temperature	37 °C
Total Cooling Load	18.5 kW
Room1	
Indoor Design Dry Bulb Temperature	27 °C
Indoor Design Wet Bulb Temperature	20 °C
Cooling Load	9.0 kW
Room2	
Indoor Design Dry Bulb Temperature	24 °C
Indoor Design Wet Bulb Temperature	17.8 °C
Cooling Load	9.5 kW
<Other>	
Indoor/Outdoor Equivalent Piping Length	30 m

1. Cooling Calculation

(1) Temporary Selection of Indoor Units

Room1	
PEFY-M36	10.6 kW (Nominal)
Room2	
PEFY-M36	10.6 kW (Nominal)

(2) Total Indoor Units Capacity

$$M36 + M36 = M72$$

(3) Selection of Outdoor Unit

The EM72 outdoor unit is selected as total indoor units capacity is M72

PURY-EM72	21.1 kW
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(4) Total Indoor Units Capacity Correction Calculation

Room1	
Indoor Design Wet Bulb Temperature Correction (20°C)	1.02 (Refer to Fig.1)
Room2	
Indoor Design Wet Bulb Temperature Correction (18°C)	0.96 (Refer to Fig.1)

Total Indoor Units Capacity (CTi)

$$\begin{aligned} CTi &= \Sigma (\text{Indoor Unit Rating} \times \text{Indoor Design Temperature Correction}) \\ &= 10.6 \times 1.02 + 10.6 \times 0.96 \\ &= 20.9 \text{ kW} \end{aligned}$$

(5) Outdoor Unit Correction Calculation

Outdoor Design Dry Bulb Temperature Correction (37°C)	0.99 (Refer to Fig.2)
Piping Length Correction (30 m)	0.95 (Refer to Fig.3)

Total Outdoor Unit Capacity (CTo)

$$\begin{aligned} CTo &= \text{Outdoor Rating} \times \text{Outdoor Design Temperature Correction} \times \text{Piping Length Correction} \\ &= 21.1 \times 0.99 \times 0.95 \\ &= 19.8 \text{ kW} \end{aligned}$$

(6) Determination of Maximum System Capacity (CTx)

Comparison of Capacity between Total Indoor Units Capacity (CTi) and Total Outdoor Unit Capacity (CTo)

$$CTi = 20.9 > CTo = 19.8, \text{ thus, select } CTo.$$

$$CTx = CTo = 19.8 \text{ kW}$$

(7) Comparison with Essential Load

Against the essential load 18.5kW, the maximum system capacity is 19.8kW: Proper outdoor units have been selected.

(8) Calculation of Maximum Indoor Unit Capacity of Each Room

CTx = CTo, thus, calculate by the calculation below

Room1

$$\begin{aligned} &\text{Maximum Capacity} \times \text{Room1 Capacity after the Temperature Correction} / (\text{Room1,2 Total Capacity after the Temperature Correction}) \\ &= 19.8 \times (10.6 \times 1.02) / (10.6 \times 1.02 + 10.6 \times 0.96) \\ &= 10.2 \text{ kW} \quad \text{OK: fulfills the load 9.0kW} \end{aligned}$$

Room2

$$\begin{aligned} &\text{Maximum Capacity} \times \text{Room2 Capacity after the Temperature Correction} / (\text{Room1,2 Total Capacity after the Temperature Correction}) \\ &= 19.8 \times (10.6 \times 0.96) / (10.6 \times 1.02 + 10.6 \times 0.96) \\ &= 9.6 \text{ kW} \quad \text{OK: fulfills the load 9.5kW} \end{aligned}$$

Go on to the heating trial calculation since the selected units fulfill the cooling loads of Room 1, 2.

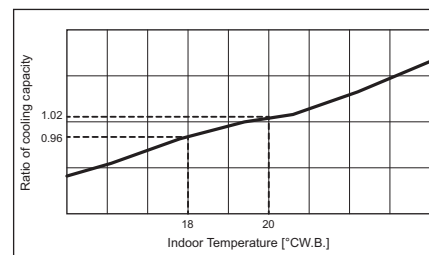


Fig.1 Indoor unit temperature correction
To be used to correct indoor unit only

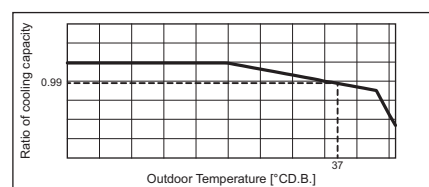


Fig.2 Outdoor unit temperature correction
To be used to correct outdoor unit only

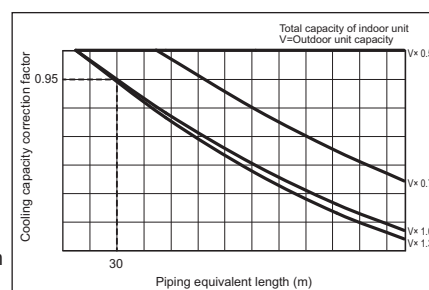


Fig.3 Correction of refrigerant piping length

<Heating>

Design Condition	
Outdoor Design Wet Bulb Temperature	2 °C
Total Heating Load	18.2 kW
Room1	
Indoor Design Dry Bulb Temperature	25 °C
Heating Load	9.2 kW
Room2	
Indoor Design Dry Bulb Temperature	25 °C
Heating Load	9.0 kW
<Other>	
Indoor/Outdoor Equivalent Piping Length	30 m

2. Heating Calculation

(1) Temporary Selection of Indoor Units

Room1	
PEFY-M36	11.7 kW (Nominal)
Room2	
PEFY-M36	11.7 kW (Nominal)

(2) Total Indoor Units Capacity

$$M36 + M36 = M72$$

(3) Selection of Outdoor Unit

The EM72 outdoor unit is selected as total indoor units capacity is M72

PURY-EM72	23.4 kW
-----------	---------

(4) Total Indoor Units Capacity Correction Calculation

Room1	
Indoor Design Dry Bulb Temperature Correction (25°C)	0.80 (Refer to Fig.4)
Room2	
Indoor Design Dry Bulb Temperature Correction (25°C)	0.80 (Refer to Fig.4)

Total Indoor Units Capacity (CTi)

$$\begin{aligned} CTi &= \Sigma (\text{Indoor Unit Rating} \times \text{Indoor Design Temperature Correction}) \\ &= 11.7 \times 0.80 + 11.7 \times 0.80 \\ &= 18.7 \text{ kW} \end{aligned}$$

(5) Outdoor Unit Correction Calculation

Outdoor Design Wet Bulb Temperature Correction (2°C)	0.98 (Refer to Fig.5)
Piping Length Correction (30 m)	0.98 (Refer to Fig.6)
Defrost Correction	0.84 (Refer to Tbl.1)

Total Outdoor Unit Capacity (CTo)

$$\begin{aligned} CTo &= \text{Outdoor Unit Rating} \times \text{Outdoor Design Temperature Correction} \times \text{Piping Length} \\ &\quad \times \text{Correction} \times \text{Defrost Correction} \\ &= 23.4 \times 0.98 \times 0.98 \times 0.84 \\ &= 18.8 \text{ kW} \end{aligned}$$

(6) Determination of Maximum System Capacity (CTx)

Comparison of Capacity between Total Indoor Units Capacity (CTi) and Total Outdoor Unit Capacity (CTo)

$$CTi = 18.7 < CTo = 18.8, \text{ thus, select } CTi.$$

$$CTx = CTi = 18.7 \text{ kW}$$

(7) Comparison with Essential Load

Against the essential load 18.2kW, the maximum system capacity is 18.7kW: Proper outdoor units have been selected.

(8) Calculation of Maximum Indoor Unit Capacity of Each Room

CTx = CTi, thus, calculate by the calculation below

Room1	
Indoor Unit Rating × Indoor Design Temperature Correction	
= 11.7 × 0.80	
= 9.4 kW	OK: fulfills the load 9.2kW

Room2	
Indoor Unit Rating × Indoor Design Temperature Correction	
= 11.7 × 0.80	
= 9.4 kW	OK: fulfills the load 9.0kW

Completed selecting units since the selected units fulfill the heating loads of Room 1, 2.

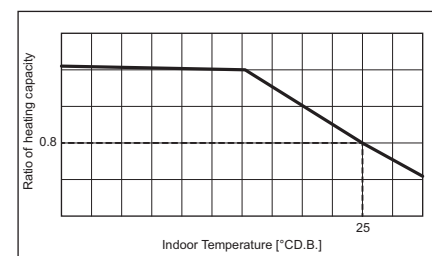


Fig.4 Indoor unit temperature correction
To be used to correct indoor unit only

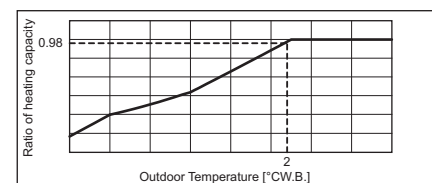


Fig.5 Outdoor unit temperature correction
To be used to correct outdoor unit only

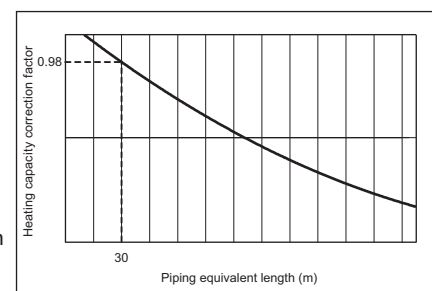


Fig.6 Correction of refrigerant piping length

Tbl.1 Table of correction factor at frost and defrost

Outdoor inlet air temp. °CWB	6	4	2	1	0	-2	-4	-6	-8	-10	-20	-30
Outdoor inlet air temp. °FWB	43	39	36	34	32	28	25	21	18	14	-4	-22
PURY-EM72	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM96	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM120	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM144	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM168	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM192	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90

PURV-EM-T(S)XU-A, Y(S)XU-A

3. Power input of outdoor unit
<Cooling>

(1) Nominal power input of outdoor unit	4.55 kW (Nominal)
(2) Calculation of the average indoor temperature power input coefficient	
Coefficient of the outdoor unit for indoor unit 1 (Outdoor temp. 37 °CD.B., Indoor temp. 20 °CW.B.)	1.09
Coefficient of the outdoor unit for indoor unit 2 (Outdoor temp. 37 °CD.B., Indoor temp. 17.8 °CW.B.)	1.03
Average indoor temp. power input coefficient $(C_{ave}) = \sum_{k=1}^n \{c_k \times (M_k / \sum_{k=1}^n M_k)\}$	
n: Total number of the indoor units	
k: Number of the indoor unit	
c _k : Outdoor unit power input coefficient of k indoor unit room temp.	
M _k : Number part of the k indoor unit model (e.g. M36 → 36)	
$= 1.09 \times 36 / (36 + 36) + 1.03 \times 36 / (36 + 36)$	
$= 1.06$	
(3) No need to consider Coefficient of the partial load f'(CTi/CTo)	-
(4) Outdoor power input (Plo)	
Maximum System Capacity (CTx) = Total Outdoor unit Capacity (CTo), so use the following formula	
Plo = Outdoor unit Cooling Nominal Power Input × Correction Coefficient of Indoor temperature	
$= 4.55 \times 1.06$	
$= 4.82 \text{ kW}$	

<Heating>

(1) Nominal power input of outdoor unit 5.48 kW (Nominal)

(2) Calculation of the average indoor temperature power input coefficient

Coefficient of the outdoor unit for indoor unit 1 (Outdoor temp. 2 °CW.B., Indoor temp. 25 °CD.B.)
0.80

Coefficient of the outdoor unit for indoor unit 2 (Outdoor temp. 2 °CW.B., Indoor temp. 25 °CD.B.)
0.80

Average indoor temp. power input coefficient $(C_{ave}) = \sum_{k=1}^n \{c_k \times (M_k / \sum_{k=1}^n M_k)\}$

n: Total number of the indoor units
k: Number of the indoor unit
c_k: Outdoor unit power input coefficient of k indoor unit room temp.
M_k: Number part of the k indoor unit model (e.g. M36 → 36)

= 0.8 × 36/(36 + 36) + 0.8 × 36/(36 + 36)
= 0.80

(3) Coefficient of the partial load *f* (CTi/CTo) 0.94

(4) Outdoor power input (Plo)

Maximum System Capacity (CTx) = Total Indoor unit Capacity (CTi), so use the following formula
Plo = Outdoor unit Heating Nominal Power Input × Correction Coefficient of Indoor temperature × *f* (CTi/CTo)
= 5.48 × 0.8 × 0.94
= 4.12 kW

<Cooling>

Design Condition	
Outdoor Design Dry Bulb Temperature	99 °F
Total Cooling Load	63,000 BTU/h
Room1	
Indoor Design Dry Bulb Temperature	81 °F
Indoor Design Wet Bulb Temperature	68 °F
Cooling Load	31,000 BTU/h
Room2	
Indoor Design Dry Bulb Temperature	75 °F
Indoor Design Wet Bulb Temperature	64 °F
Cooling Load	32,000 BTU/h
<Other>	
Indoor/Outdoor Equivalent Piping Length	100 ft.

1. Cooling Calculation

(1) Temporary Selection of Indoor Units

Room1	
PEFY-M36	36,000 BTU/h (Nominal)
Room2	
PEFY-M36	36,000 BTU/h (Nominal)

(2) Total Indoor Units Capacity

$$M36 + M36 = M72$$

(3) Selection of Outdoor Unit

The EM72 outdoor unit is selected as total indoor units capacity is M72

PURY-EM72	72,000 BTU/h
-----------	--------------

(4) Total Indoor Units Capacity Correction Calculation

Room1	
Indoor Design Wet Bulb Temperature Correction (68°F)	1.02 (Refer to Fig.1)
Room2	
Indoor Design Wet Bulb Temperature Correction (64°F)	0.96 (Refer to Fig.1)

Total Indoor Units Capacity (CTi)

$$\begin{aligned}
 CTi &= \Sigma (\text{Indoor Unit Rating} \times \text{Indoor Design Temperature Correction}) \\
 &= 36,000 \times 1.02 + 36,000 \times 0.96 \\
 &= 71,200 \text{ BTU/h}
 \end{aligned}$$

(5) Outdoor Unit Correction Calculation

Outdoor Design Dry Bulb Temperature Correction (99°F)	0.99 (Refer to Fig.2)
Piping Length Correction (100 ft.)	0.95 (Refer to Fig.3)

Total Outdoor Unit Capacity (CTo)

$$\begin{aligned}
 CTo &= \text{Outdoor Rating} \times \text{Outdoor Design Temperature Correction} \times \text{Piping Length Correction} \\
 &= 72,000 \times 0.99 \times 0.95 \\
 &= 67,700 \text{ BTU/h}
 \end{aligned}$$

(6) Determination of Maximum System Capacity (CTx)

Comparison of Capacity between Total Indoor Units Capacity (CTi) and Total Outdoor Unit Capacity (CTo)

$$CTi = 71,200 > CTo = 67,700, \text{ thus, select } CTo.$$

$$CTx = CTo = 67,700 \text{ BTU/h}$$

(7) Comparison with Essential Load

Against the essential load 63,000BTU/h, the maximum system capacity is 67,700BTU/h: Proper outdoor units have been selected.

(8) Calculation of Maximum Indoor Unit Capacity of Each Room

CTx = CTo, thus, calculate by the calculation below

Room1

$$\begin{aligned}
 &\text{Maximum Capacity} \times \text{Room1 Capacity after the Temperature Correction} / (\text{Room1,2 Total Capacity after the Temperature Correction}) \\
 &= 67,700 \times (36,000 \times 1.02) / (36,000 \times 1.02 + 36,000 \times 0.96) \\
 &= 34,800 \text{ BTU/h} \quad \text{OK: fulfills the load 31,000BTU/h}
 \end{aligned}$$

Room2

$$\begin{aligned}
 &\text{Maximum Capacity} \times \text{Room2 Capacity after the Temperature Correction} / (\text{Room1,2 Total Capacity after the Temperature Correction}) \\
 &= 67,700 \times (36,000 \times 0.96) / (36,000 \times 1.02 + 36,000 \times 0.96) \\
 &= 32,800 \text{ BTU/h} \quad \text{OK: fulfills the load 32,000BTU/h}
 \end{aligned}$$

Go on to the heating trial calculation since the selected units fulfill the cooling loads of Room 1, 2.

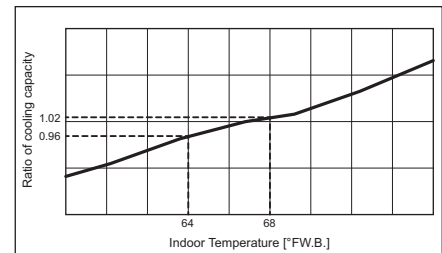


Fig.1 Indoor unit temperature correction
To be used to correct indoor unit only

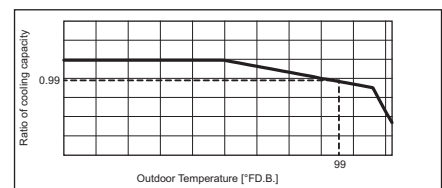


Fig.2 Outdoor unit temperature correction
To be used to correct outdoor unit only

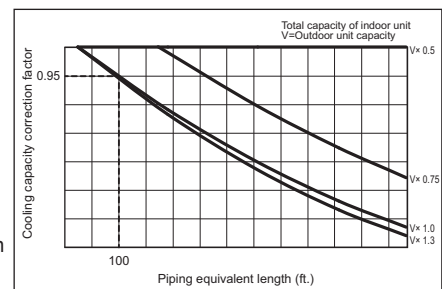


Fig.3 Correction of refrigerant piping length

<Heating>

Design Condition	
Outdoor Design Wet Bulb Temperature	37 °F
Total Heating Load	62,000 BTU/h
Room1	
Indoor Design Dry Bulb Temperature	77 °F
Heating Load	31,000 BTU/h
Room2	
Indoor Design Dry Bulb Temperature	77 °F
Heating Load	31,000 BTU/h
<Other>	
Indoor/Outdoor Equivalent Piping Length	100 ft.

2. Heating Calculation

(1) Temporary Selection of Indoor Units

Room1	
PEFY-M36	40,000 BTU/h (Nominal)
Room2	
PEFY-M36	40,000 BTU/h (Nominal)

(2) Total Indoor Units Capacity

$$M36 + M36 = M72$$

(3) Selection of Outdoor Unit

The EM72 outdoor unit is selected as total indoor units capacity is M72

PURY-EM72	80,000 BTU/h
-----------	--------------

(4) Total Indoor Units Capacity Correction Calculation

Room1	
Indoor Design Dry Bulb Temperature Correction (77°F)	0.80 (Refer to Fig.4)
Room2	
Indoor Design Dry Bulb Temperature Correction (77°F)	0.80 (Refer to Fig.4)

Total Indoor Units Capacity (CTi)

$$\begin{aligned} CTi &= \Sigma (\text{Indoor Unit Rating} \times \text{Indoor Design Temperature Correction}) \\ &= 40,000 \times 0.80 + 40,000 \times 0.80 \\ &= 64,000 \text{ BTU/h} \end{aligned}$$

(5) Outdoor Unit Correction Calculation

Outdoor Design Wet Bulb Temperature Correction (37°F)	0.99 (Refer to Fig.5)
Piping Length Correction (100 ft.)	0.98 (Refer to Fig.6)
Defrost Correction	0.87 (Refer to Tbl.1)

Total Outdoor Unit Capacity (CTo)

$$\begin{aligned} CTo &= \text{Outdoor Unit Rating} \times \text{Outdoor Design Temperature Correction} \times \text{Piping Length} \\ &\quad \times \text{Correction} \times \text{Defrost Correction} \\ &= 80,000 \times 0.99 \times 0.98 \times 0.87 \\ &= 67,000 \text{ BTU/h} \end{aligned}$$

(6) Determination of Maximum System Capacity (CTx)

Comparison of Capacity between Total Indoor Units Capacity (CTi) and Total Outdoor Unit Capacity (CTo)

$$CTi = 64,000 < CTo = 67,000, \text{ thus, select } CTi.$$

$$CTx = CTi = 64,000 \text{ BTU/h}$$

(7) Comparison with Essential Load

Against the essential load 62,000BTU/h, the maximum system capacity is 64,000BTU/h: Proper outdoor units have been selected.

(8) Calculation of Maximum Indoor Unit Capacity of Each Room

CTx = CTi, thus, calculate by the calculation below

Room1	
Indoor Unit Rating × Indoor Design Temperature Correction	
= 40,000 × 0.80	
= 32,000 BTU/h	OK: fulfills the load 31,000BTU/h
Room2	
Indoor Unit Rating × Indoor Design Temperature Correction	
= 40,000 × 0.80	
= 32,000 BTU/h	OK: fulfills the load 31,000BTU/h

Completed selecting units since the selected units fulfill the heating loads of Room 1, 2.

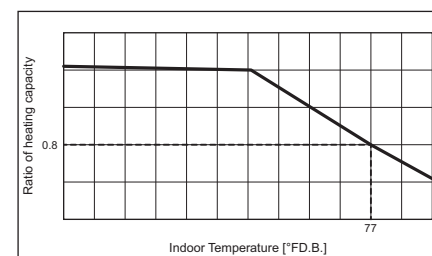


Fig.4 Indoor unit temperature correction
To be used to correct indoor unit only

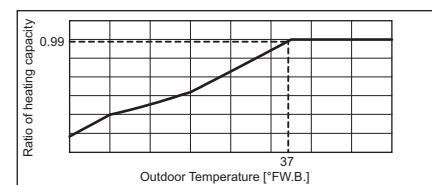


Fig.5 Outdoor unit temperature correction
To be used to correct outdoor unit only

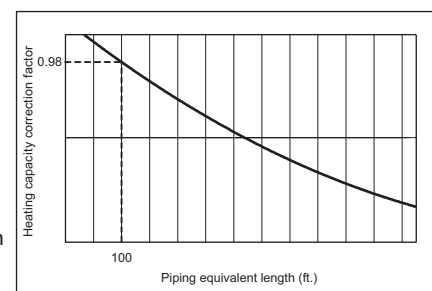


Fig.6 Correction of refrigerant piping length

Tbl.1 Table of correction factor at frost and defrost

Outdoor inlet air temp. °CWB	6	4	2	1	0	-2	-4	-6	-8	-10	-20	-30
Outdoor inlet air temp. °FWB	43	39	36	34	32	28	25	21	18	14	-4	-22
PURY-EM72	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM96	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM120	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM144	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM168	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM192	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90

PURV-EM-T(S)XU-A, Y(S)XU-A

3. Power input of outdoor unit
<Cooling>

(1) Nominal power input of outdoor unit 4.55 kW (Nominal)

(2) Calculation of the average indoor temperature power input coefficient

Coefficient of the outdoor unit for indoor unit 1 (Outdoor temp. 99 °FD.B., Indoor temp. 68 °FW.B.)
1.09
Coefficient of the outdoor unit for indoor unit 2 (Outdoor temp. 99 °FD.B., Indoor temp. 64 °FW.B.)
1.03

Average indoor temp. power input coefficient $(C_{ave}) = \sum_{k=1}^n \{c_k \times (M_k / \sum_{k=1}^n M_k)\}$
n: Total number of the indoor units
k: Number of the indoor unit
c_k: Outdoor unit power input coefficient of k indoor unit room temp.
M_k: Number part of the k indoor unit model (e.g. M36 → 36)

= 1.09 × 36/(36 + 36) + 1.03 × 36/(36 + 36)
= 1.06

(3) No need to consider Coefficient of the partial load f'(CTi/CTo) -

(4) Outdoor power input (Plo)

Maximum System Capacity (CTx) = Total Outdoor unit Capacity (CTo), so use the following formula
Plo = Outdoor unit Cooling Nominal Power Input × Correction Coefficient of Indoor temperature
= 4.55 × 1.06
= 4.82 kW

<Heating>

(1) Nominal power input of outdoor unit 5.48 kW (Nominal)

(2) Calculation of the average indoor temperature power input coefficient

Coefficient of the outdoor unit for indoor unit 1 (Outdoor temp. 35.6 °FW.B., Indoor temp. 77 °FD.B.)
0.80

Coefficient of the outdoor unit for indoor unit 2 (Outdoor temp. 35.6 °FW.B., Indoor temp. 77 °FD.B.)
0.80

Average indoor temp. power input coefficient $(C_{ave}) = \sum_{k=1}^n \{c_k \times (M_k / \sum_{k=1}^n M_k)\}$

n: Total number of the indoor units
k: Number of the indoor unit
c_k: Outdoor unit power input coefficient of k indoor unit room temp.
M_k: Number part of the k indoor unit model (e.g. M36 → 36)

= 0.8 × 36/(36 + 36) + 0.8 × 36/(36 + 36)
= 0.80

(3) Coefficient of the partial load *f* (CTi/CTo) 0.92

(4) Outdoor power input (Plo)

Maximum System Capacity (CTx) = Total Indoor unit Capacity (CTi), so use the following formula
Plo = Outdoor unit Heating Nominal Power Input × Correction Coefficient of Indoor temperature × *f* (CTi/CTo)
= 5.48 × 0.8 × 0.92
= 4.03 kW

PURY-EM-T(S)XU-A, Y(S)XU-A

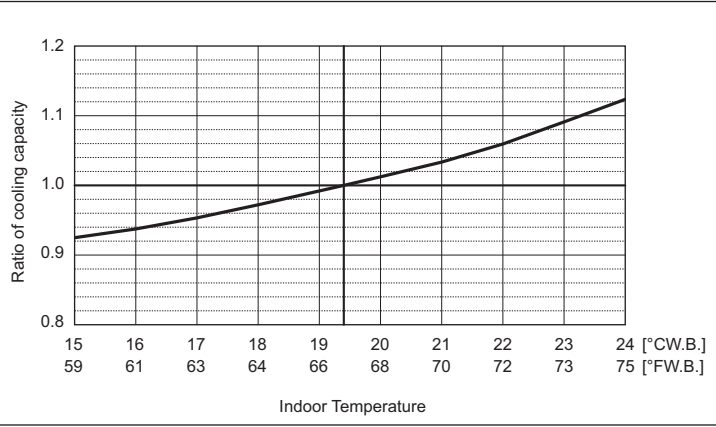
8-2. Correction by temperature

CITY MULTI could have various capacities at different designing temperatures. Using the nominal cooling/heating capacity values and the ratios below, the capacity can be observed at various temperatures.

PURY-		EM72TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	72,000	
	kW	21.1	
	Input kW	4.49	

Indoor unit temperature correction

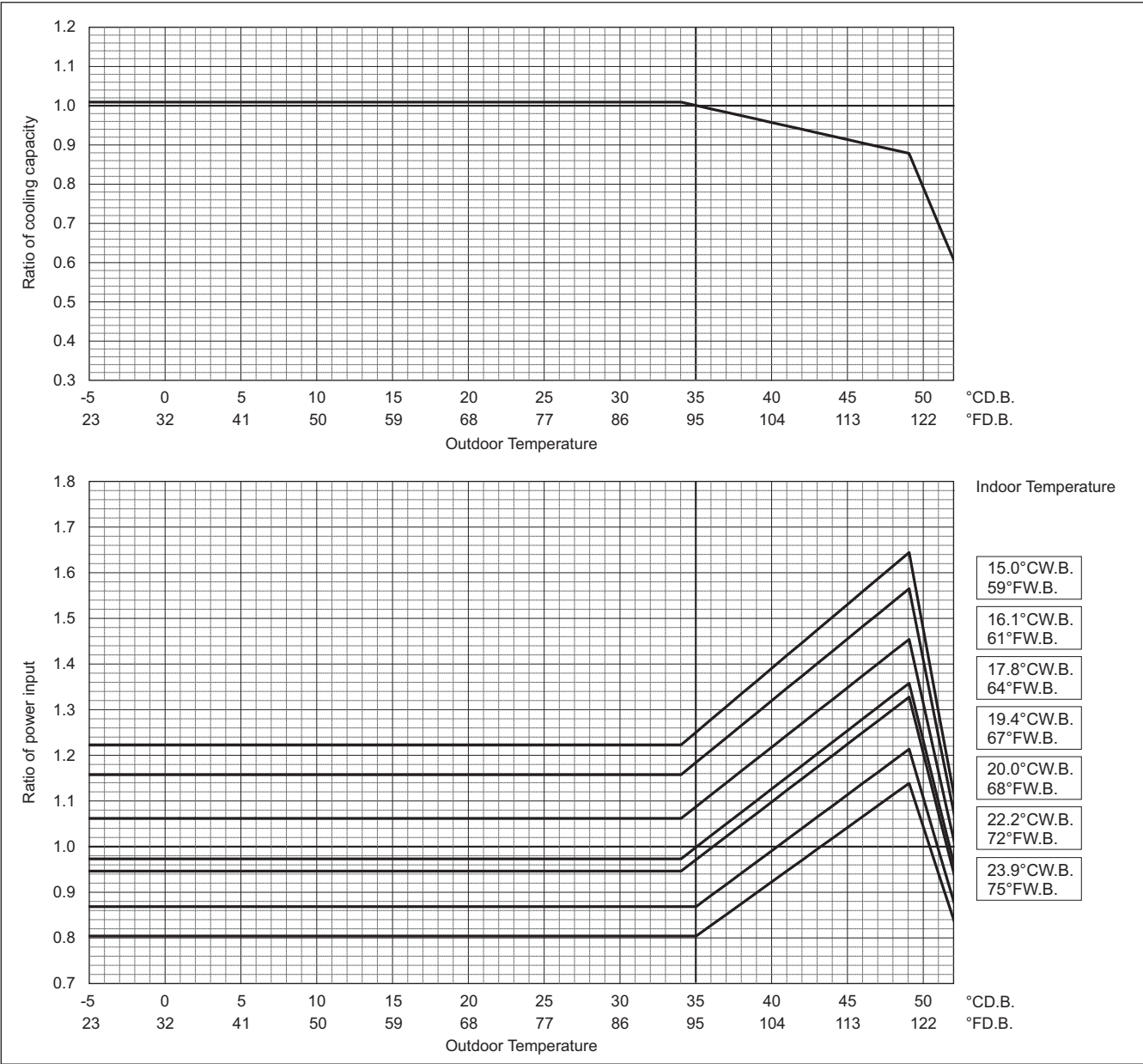
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

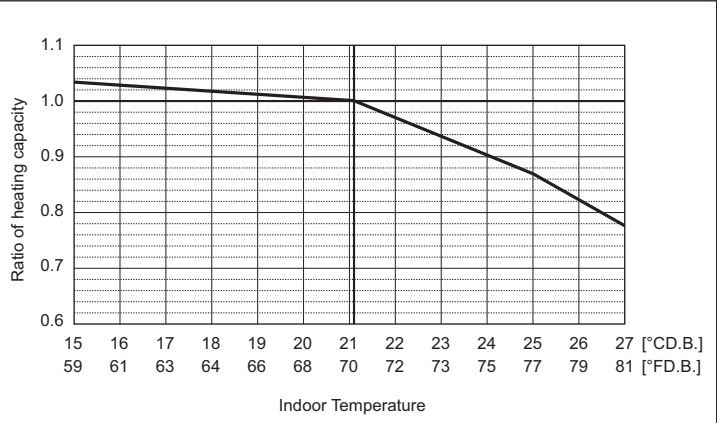
To be used to correct outdoor unit only

Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

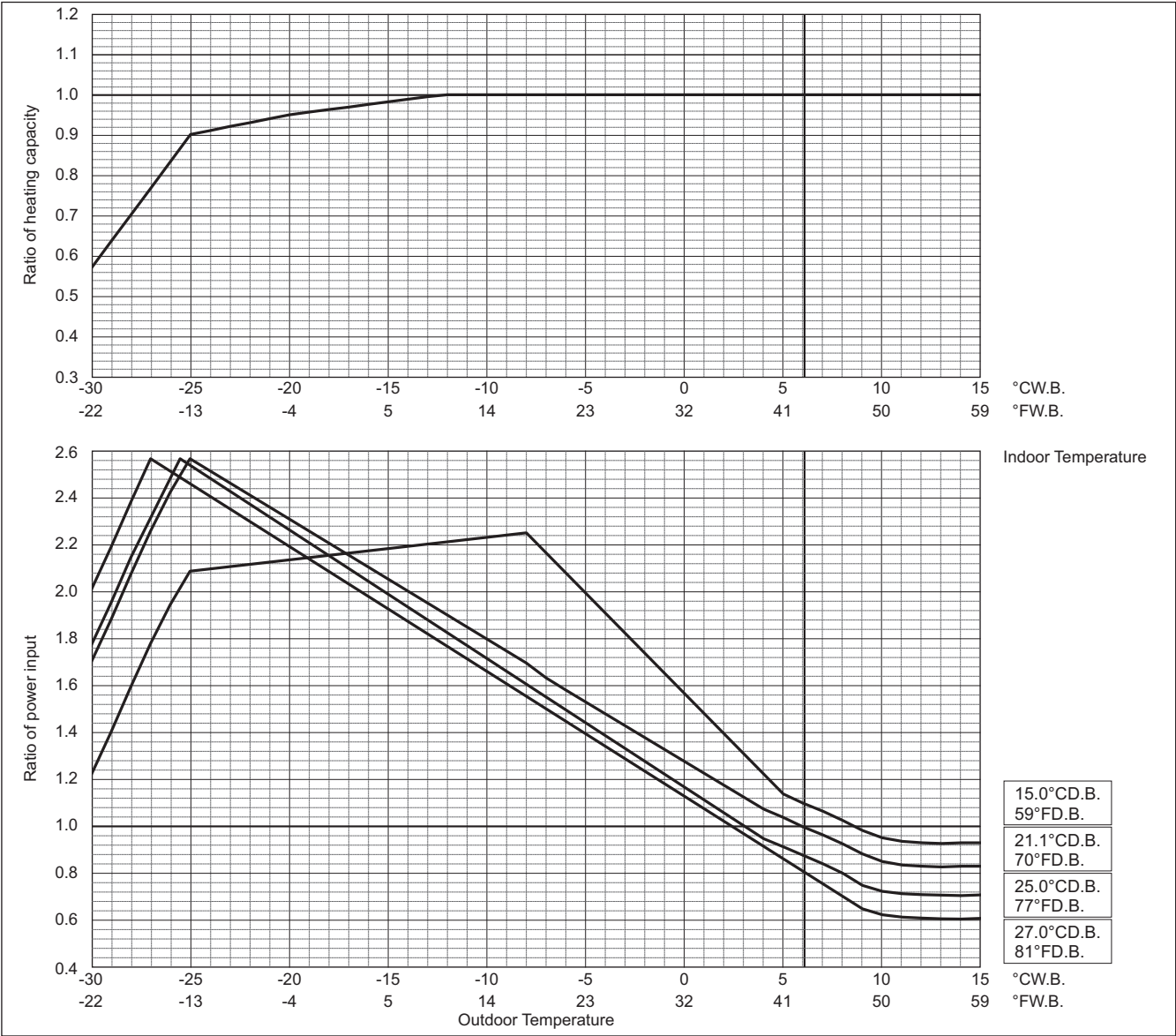


PURY-		EM72TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	80,000	
	kW	23.4	
	Input kW	5.18	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

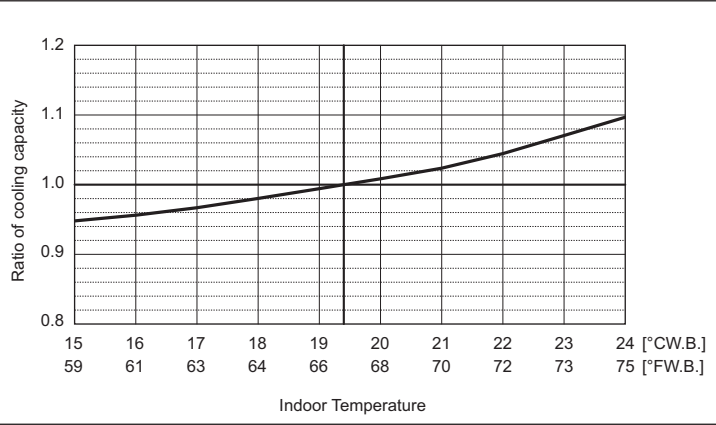


PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM-T(S)XU-A, Y(S)XU-A

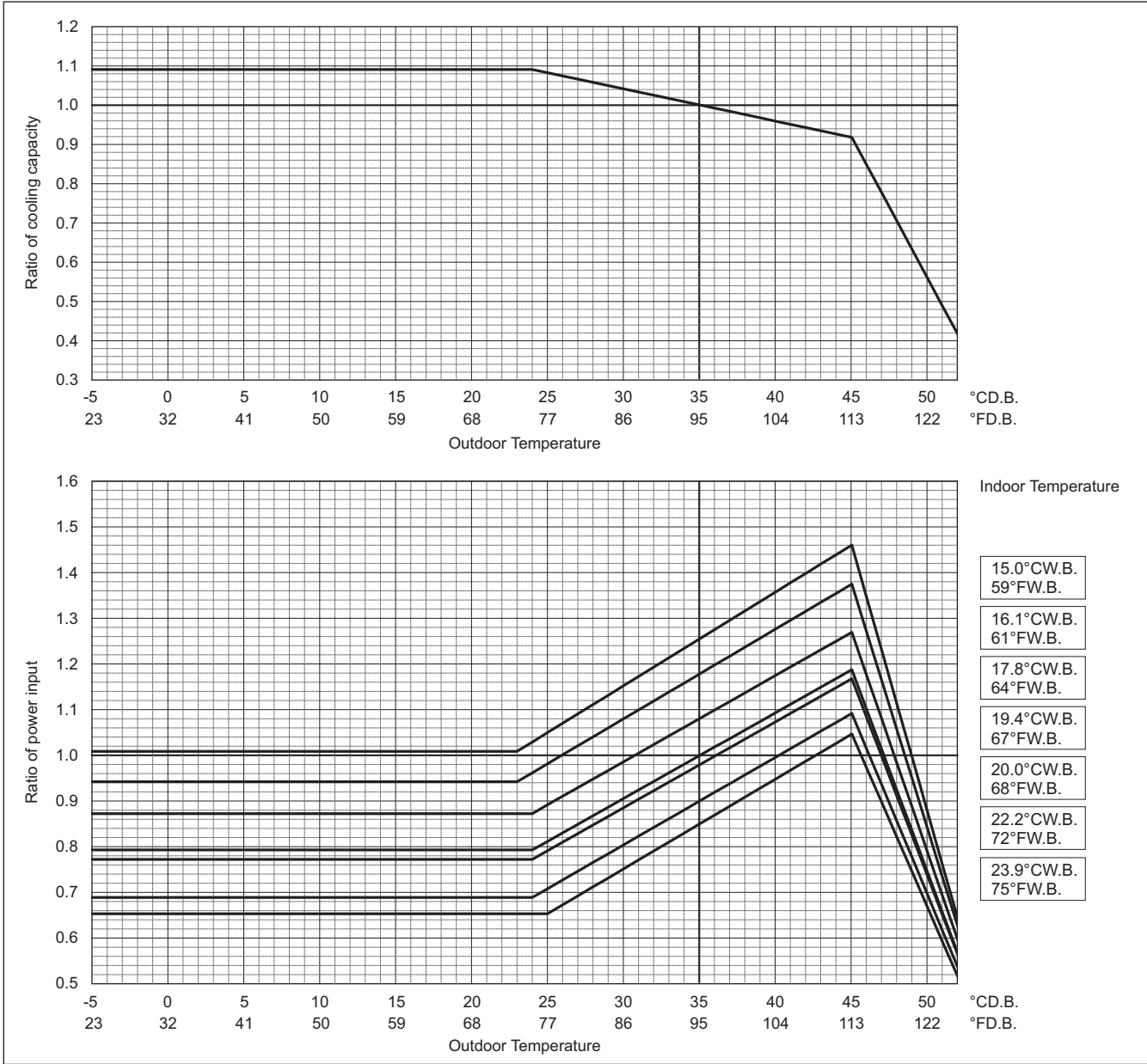
PURY-		EM96TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	96,000	
	kW	28.1	
	Input kW	6.33	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



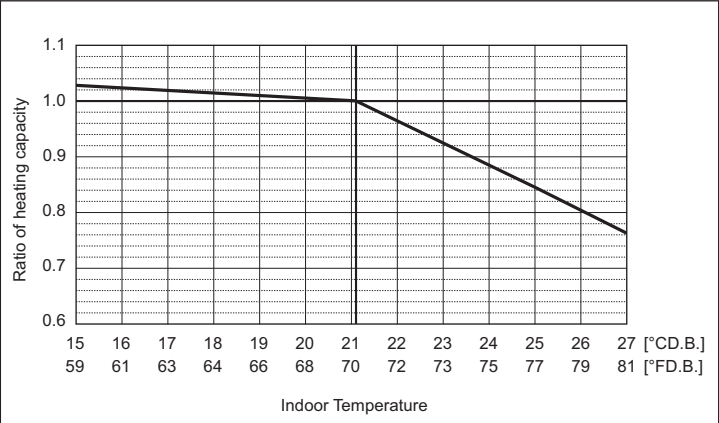
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



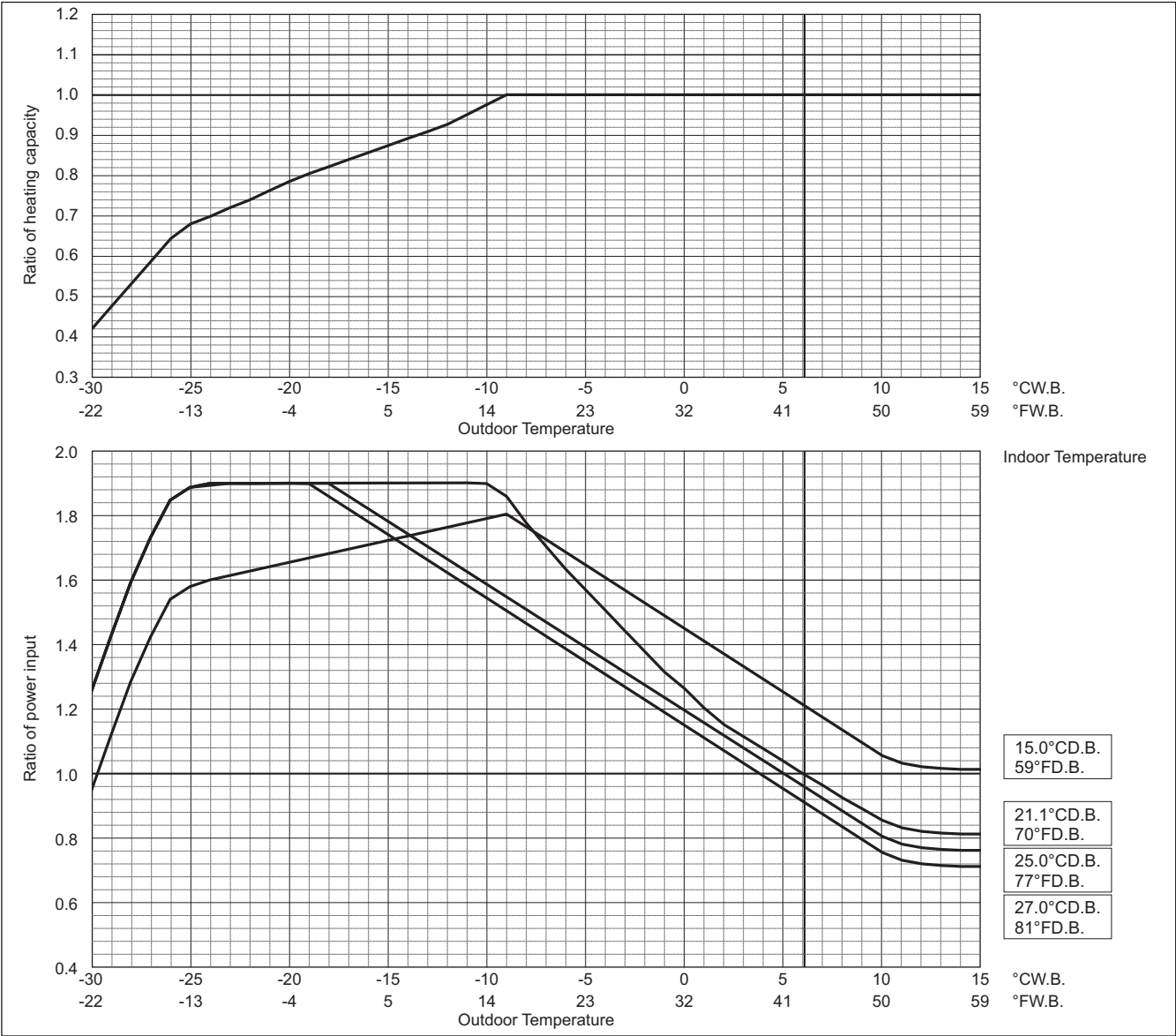
PURY-		EM96TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	108,000	
	kW	31.7	
	Input kW	7.12	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

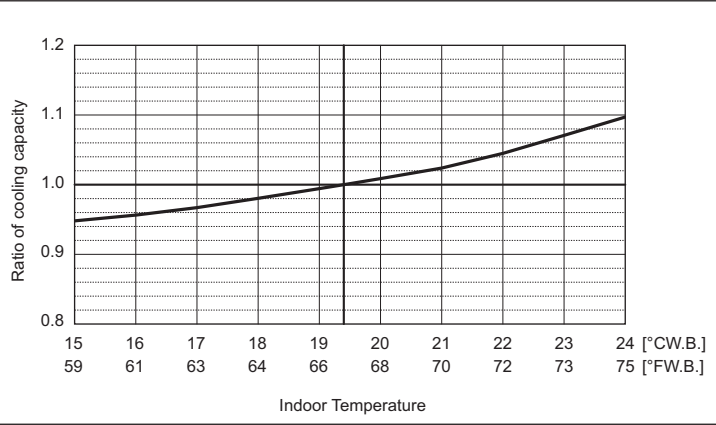
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



PURY-EM-T(S)XU-A, Y(S)XU-A

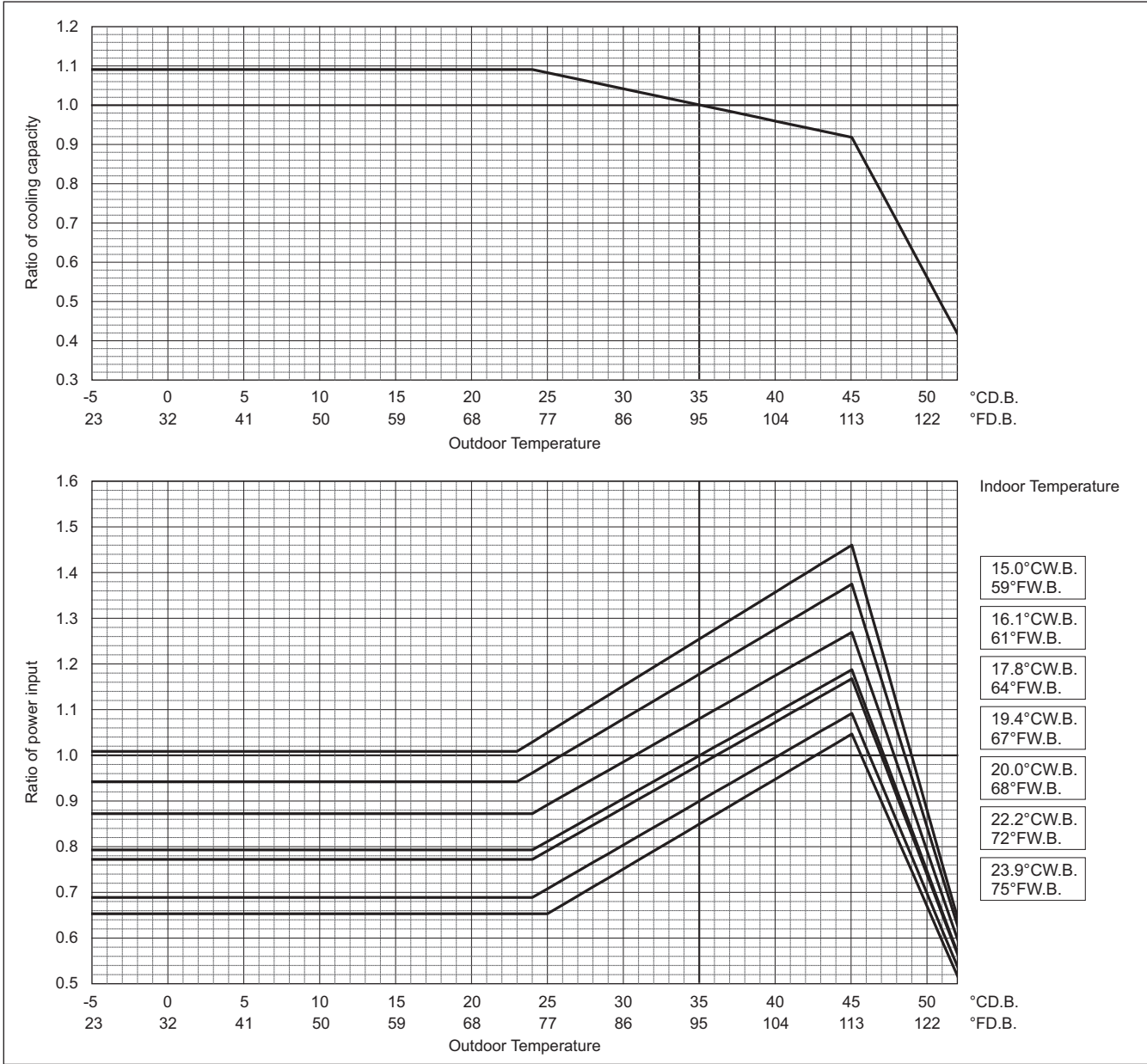
PURY-		EM120TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	120,000	
	kW	35.2	
	Input kW	8.54	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



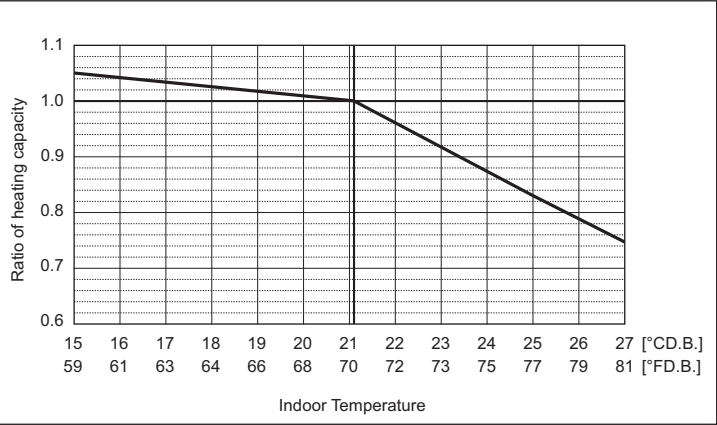
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

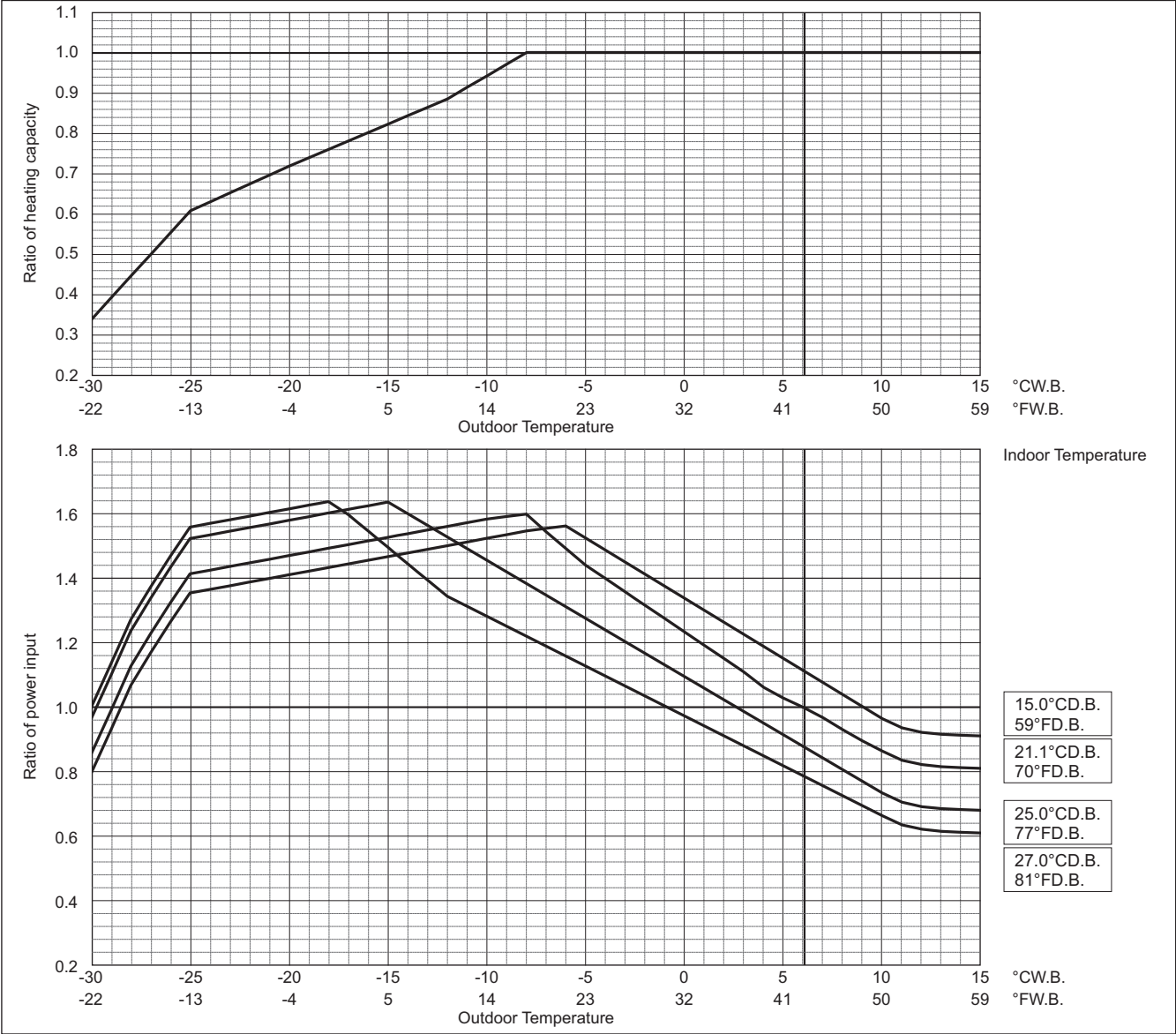


PURY-		EM120TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	135,000	
	kW	39.6	
	Input kW	9.93	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



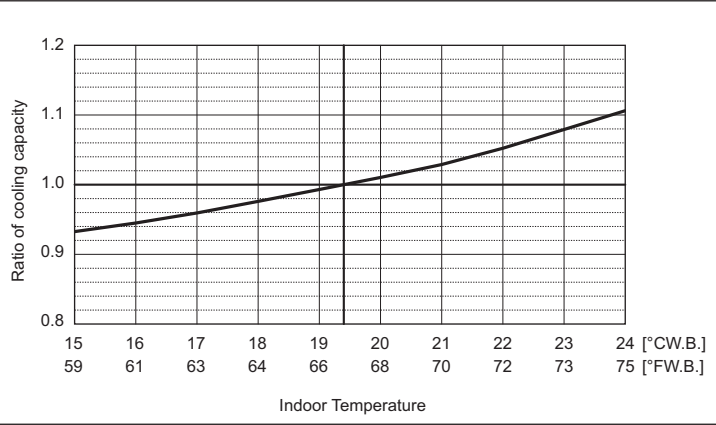
Outdoor unit temperature correction
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



PURY-EM-T(S)XU-A, Y(S)XU-A

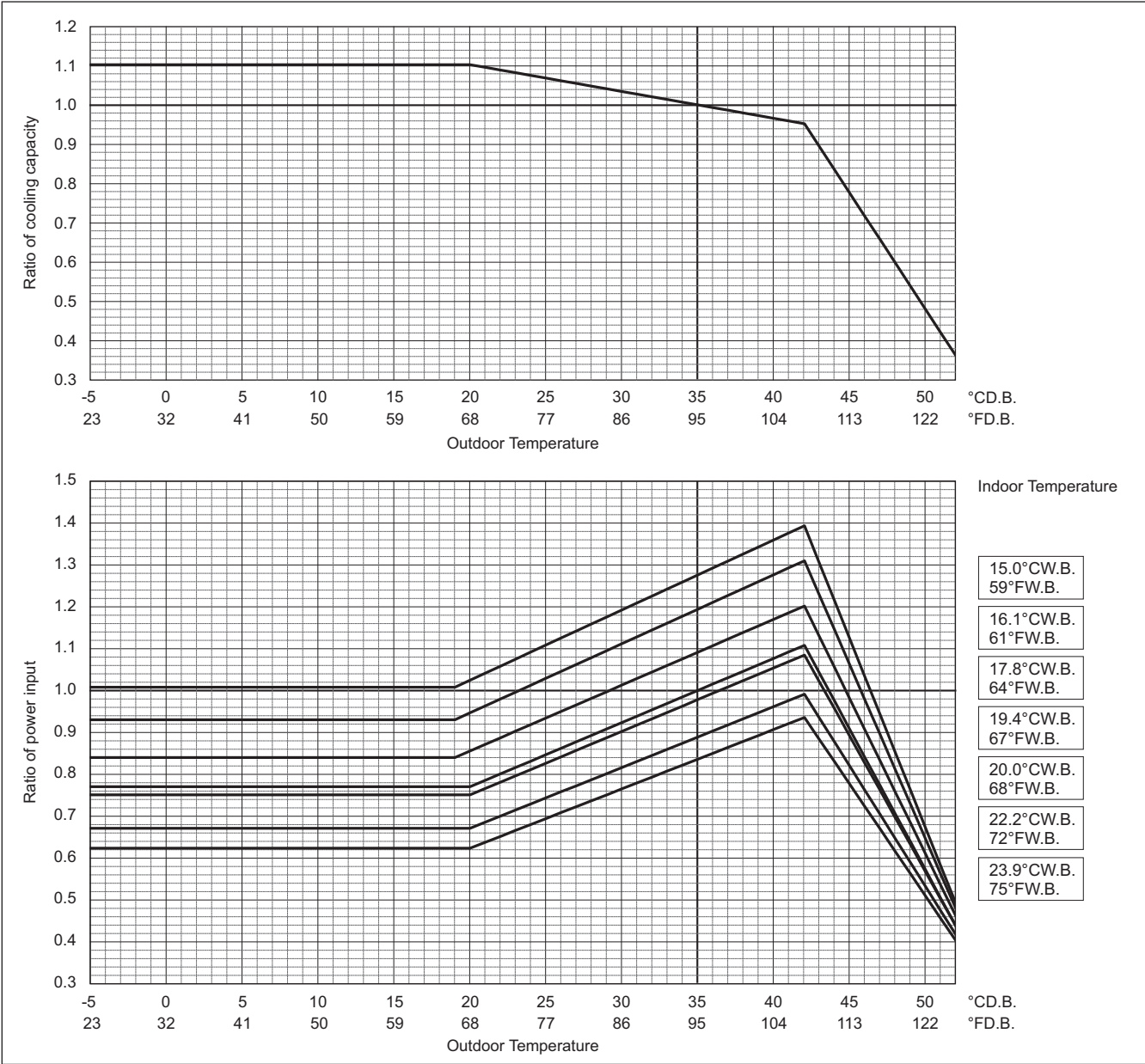
PURY-		EM144TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	144,000	
	kW	42.2	
	Input kW	10.43	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



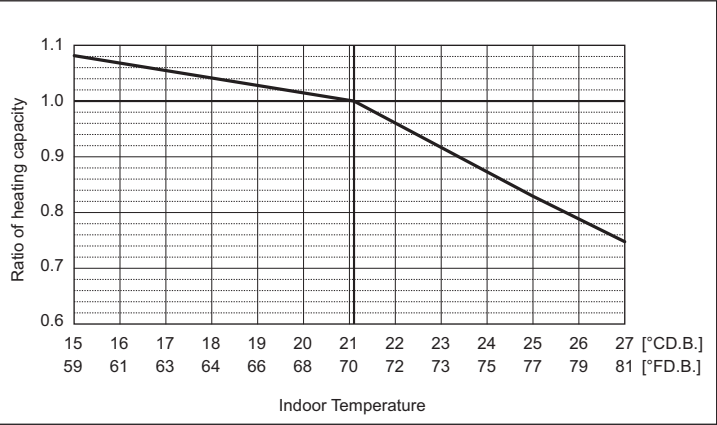
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



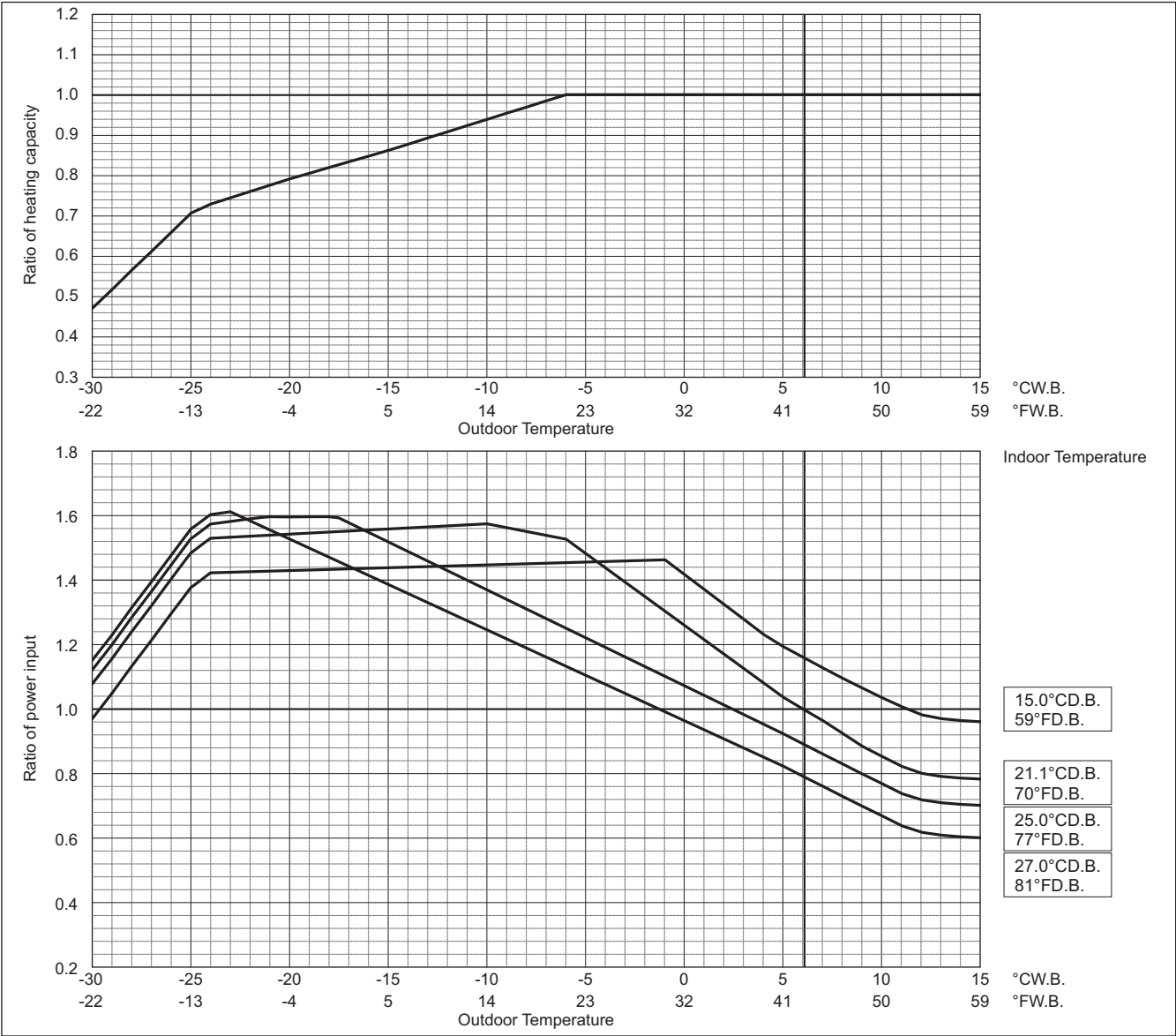
PURY-		EM144TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	160,000	
	kW	46.9	
	Input kW	11.68	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

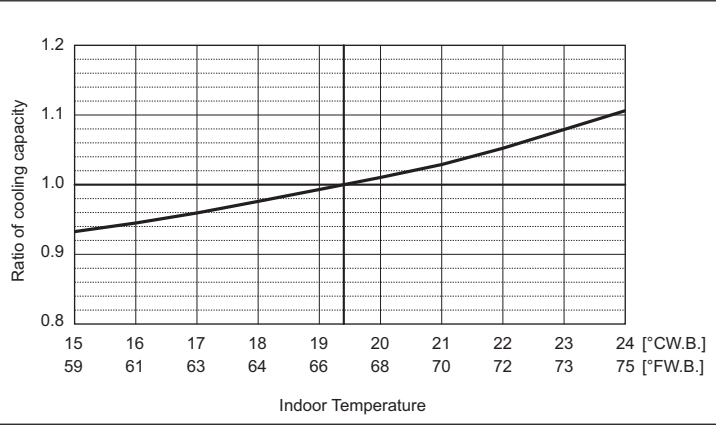


PURY-EM-T(s)XU-A, Y(s)XU-A

PUR-EM-T(S)XU-A, Y(S)XU-A

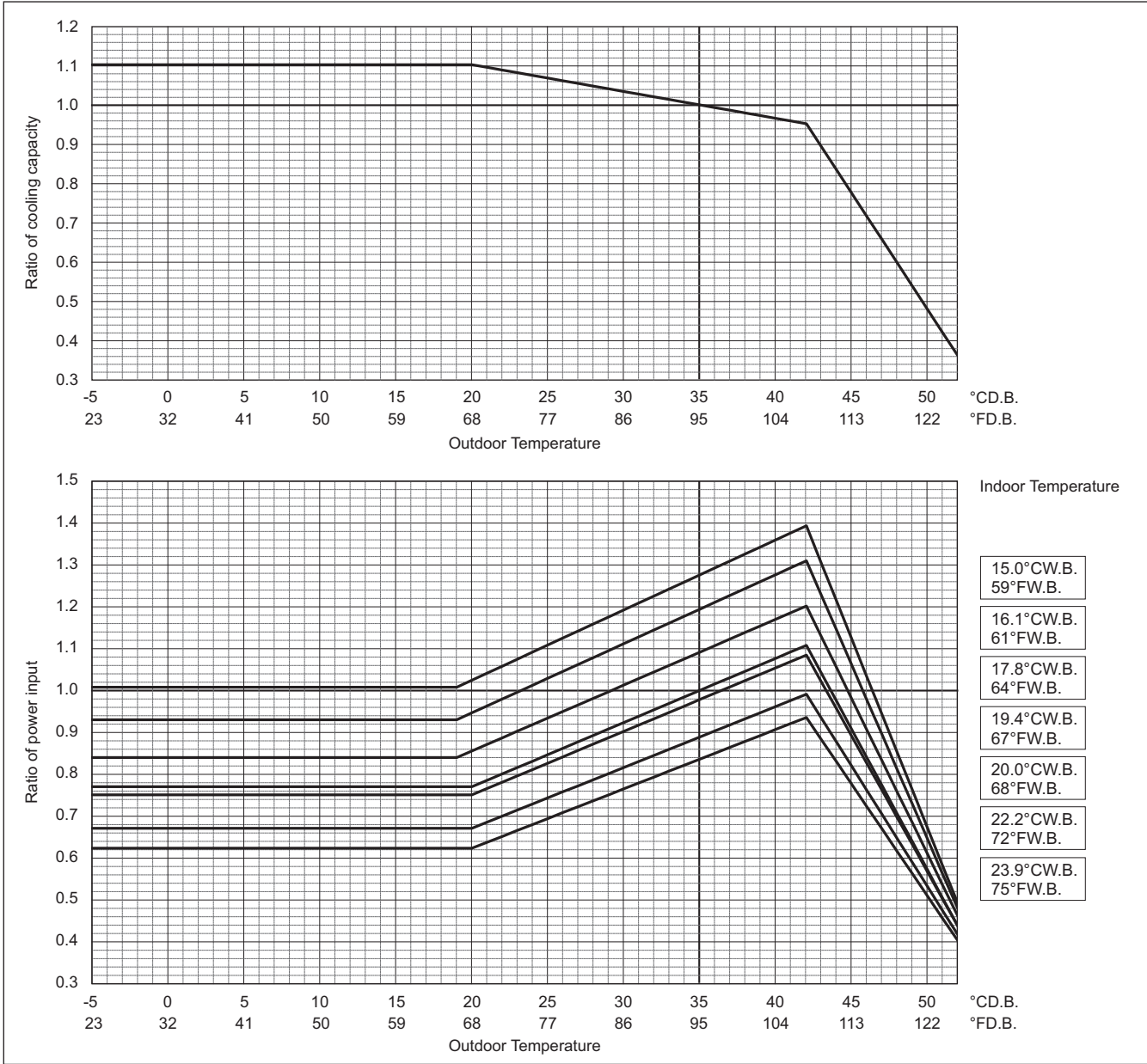
PUR-		EM168TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	168,000	
	kW	49.2	
	Input	kW	
		13.22	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



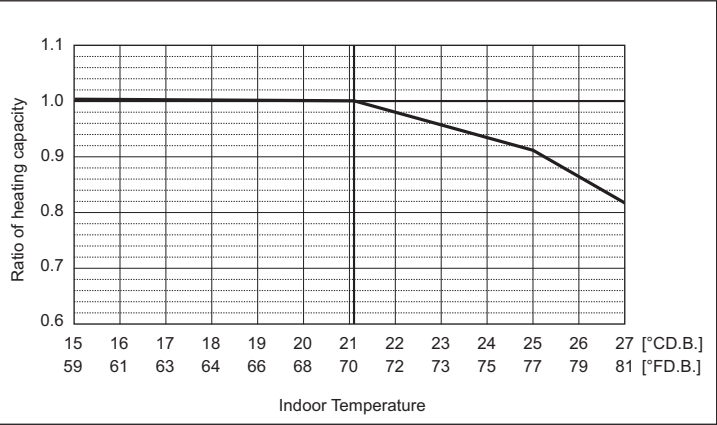
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



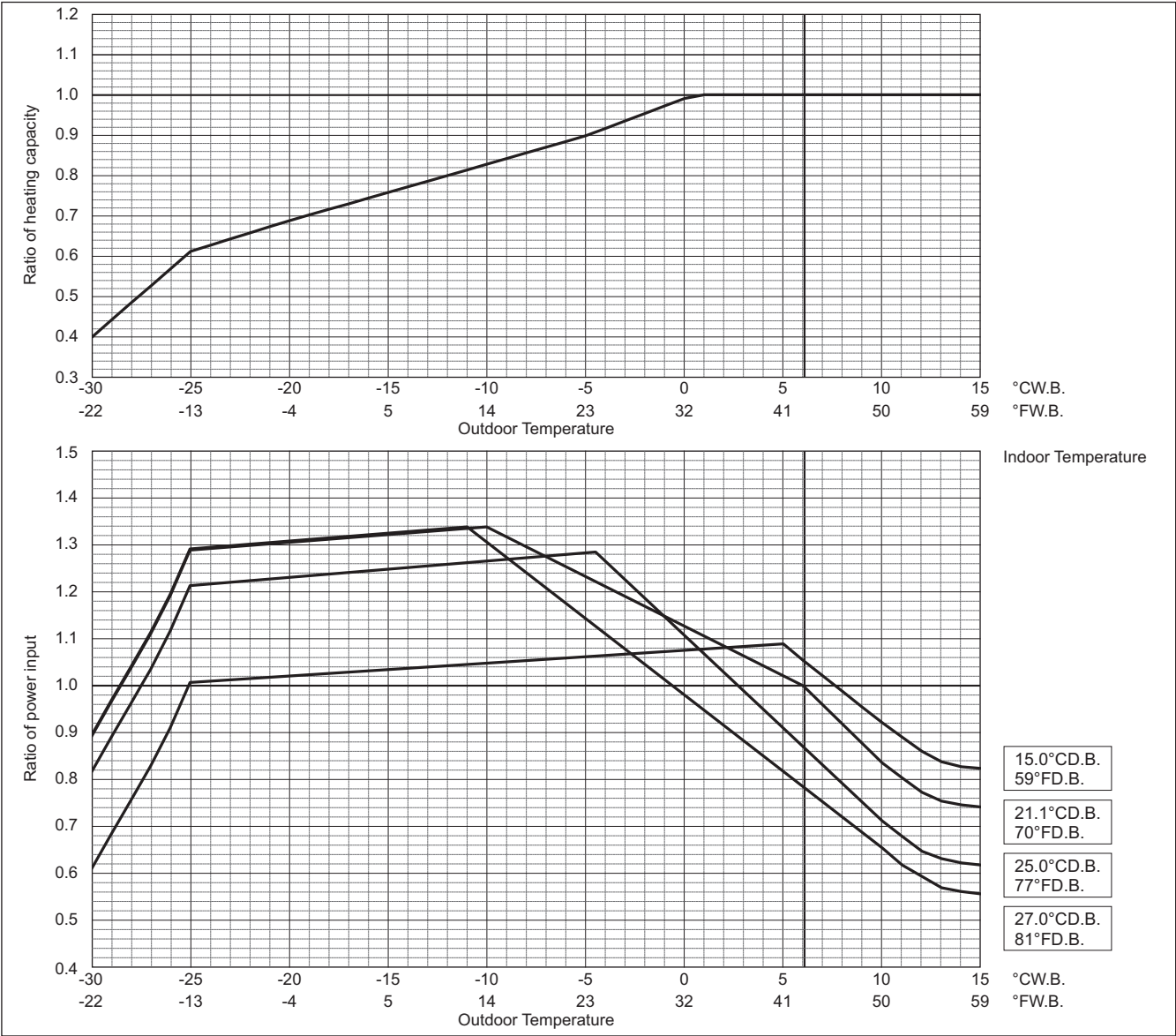
PURY-		EM168TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	188,000	
	kW	55.1	
	Input kW	14.64	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

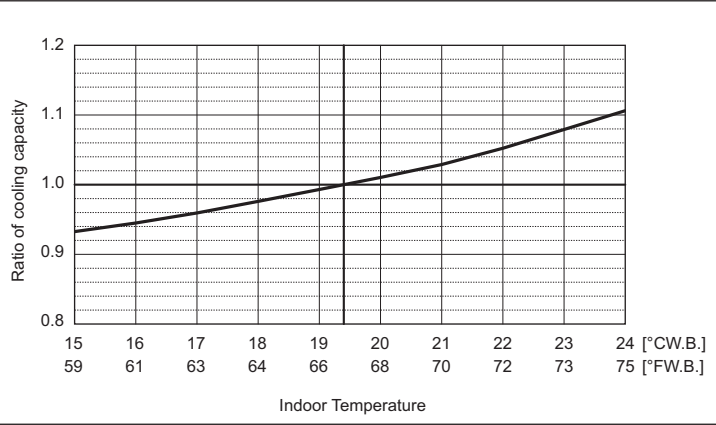
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



PUR-EM-T(S)XU-A, Y(S)XU-A

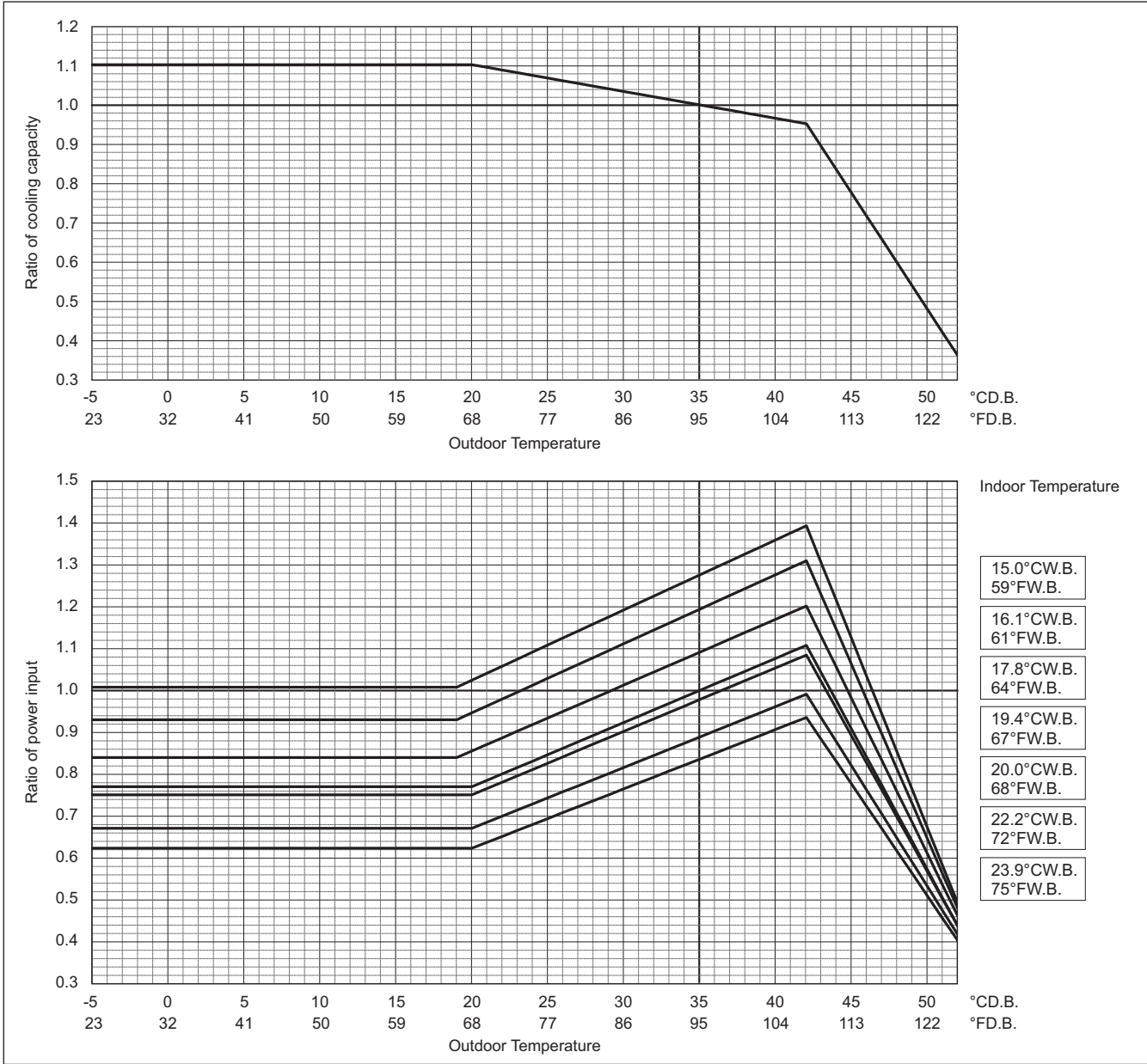
PUR-		EM192TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	192,000	
	kW	56.3	
	Input	kW	
		16.19	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



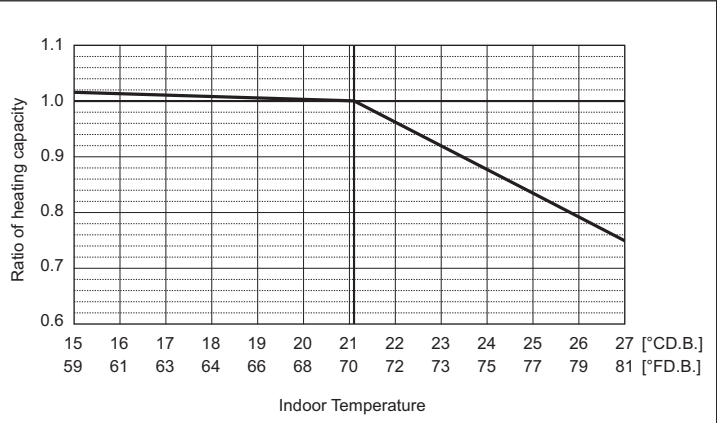
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



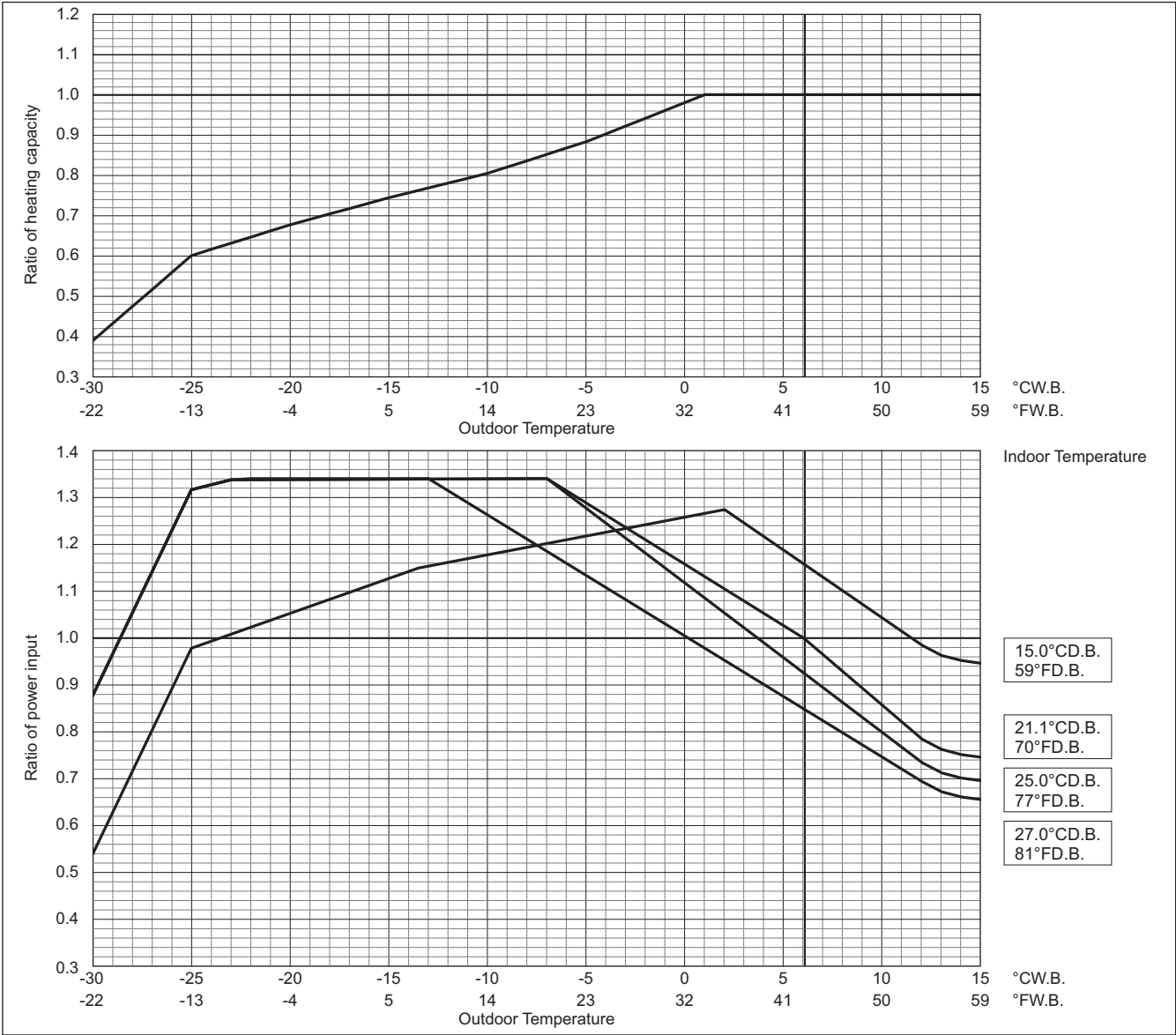
PURY-		EM192TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	192,000	
	kW	56.3	
	Input kW	15.89	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

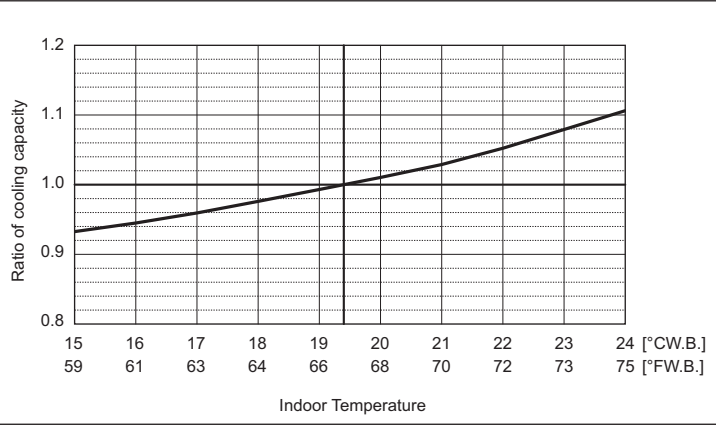


PURY-EM-T(S)XU-A, Y(S)XU-A

PUR-EM-T(S)XU-A, Y(S)XU-A

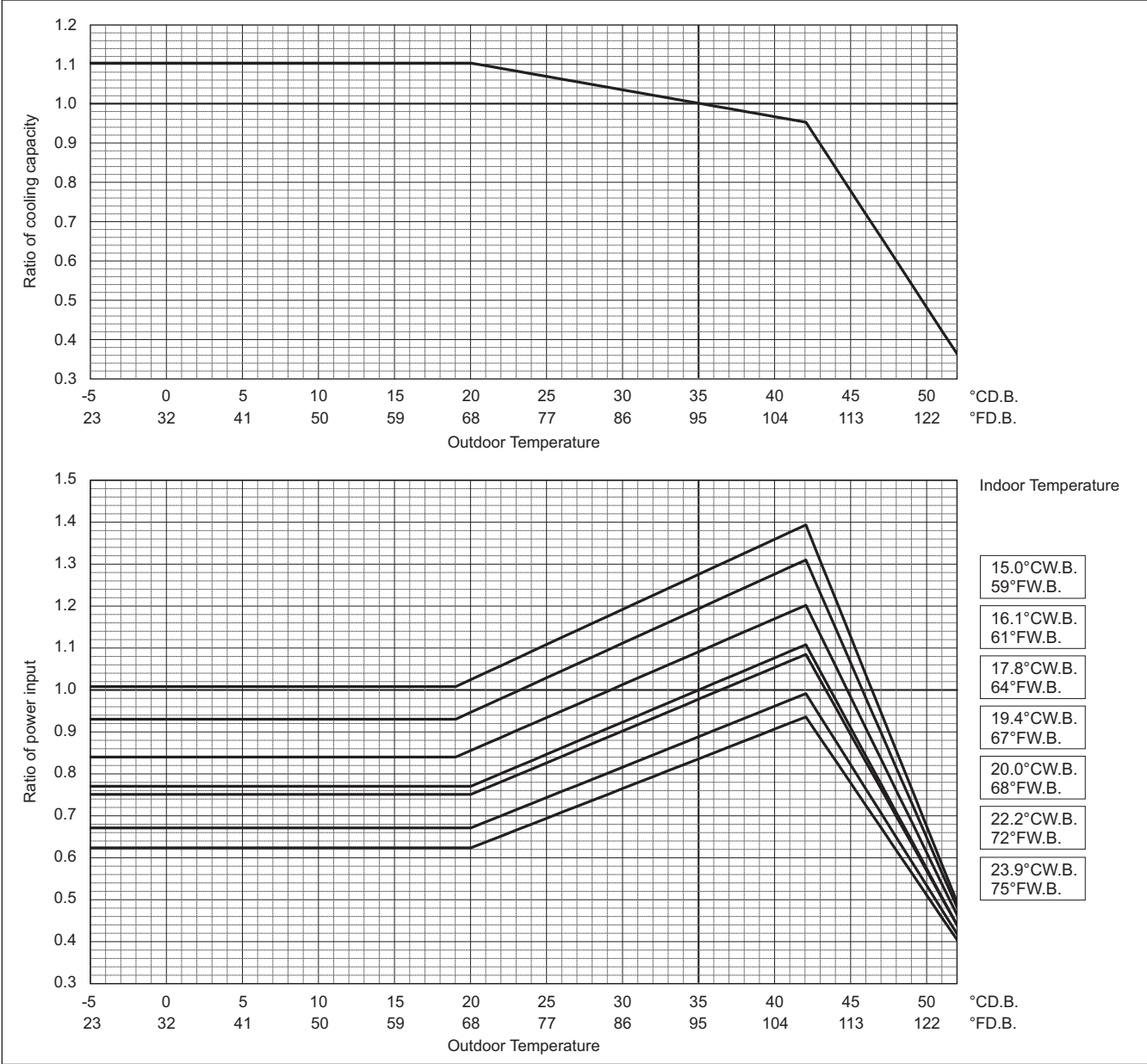
PUR-		EM264TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	264,000	
	kW	77.4	
	Input kW	19.53	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



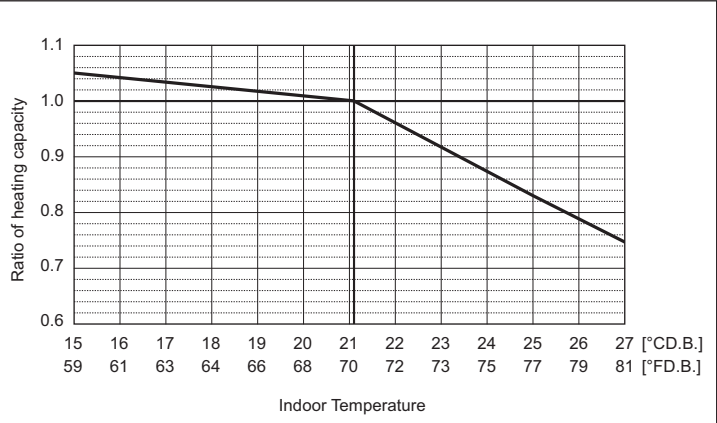
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



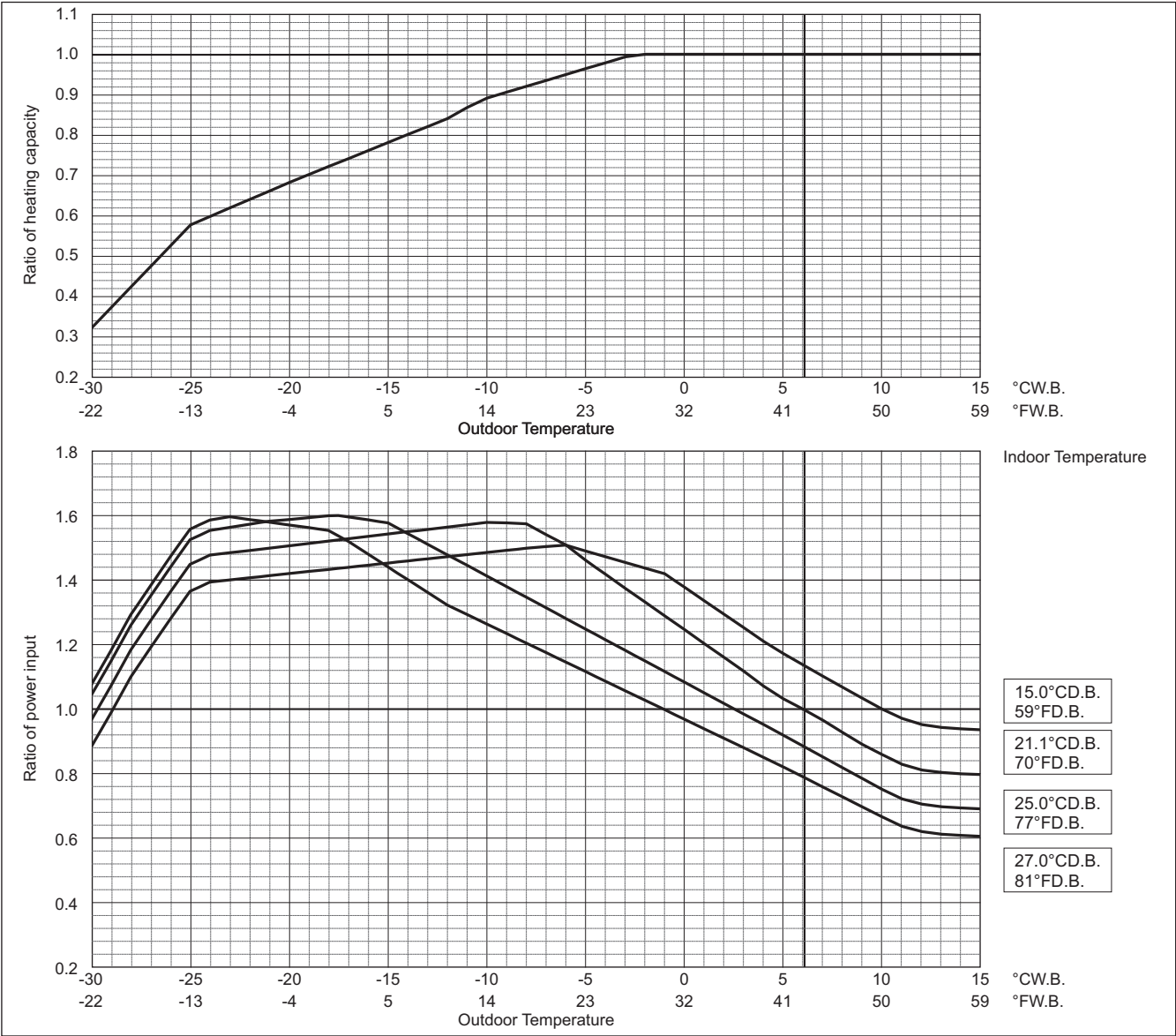
PURY-		EM264TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	295,000	
	kW	86.5	
	Input kW	21.63	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

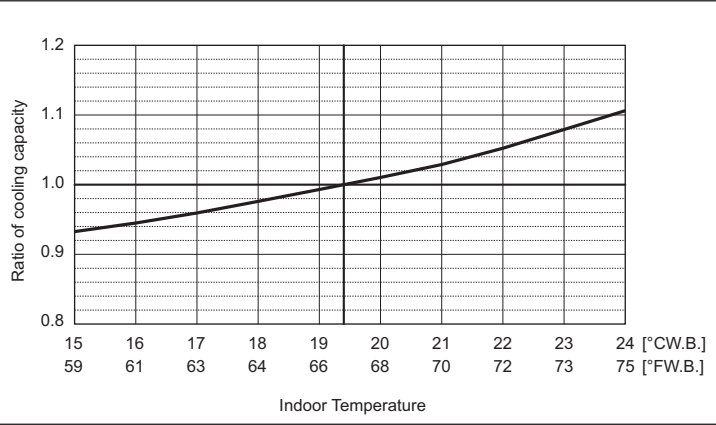


PURY-EM-T(S)XU-A, Y(S)XU-A

PUR-EM-T(S)XU-A, Y(S)XU-A

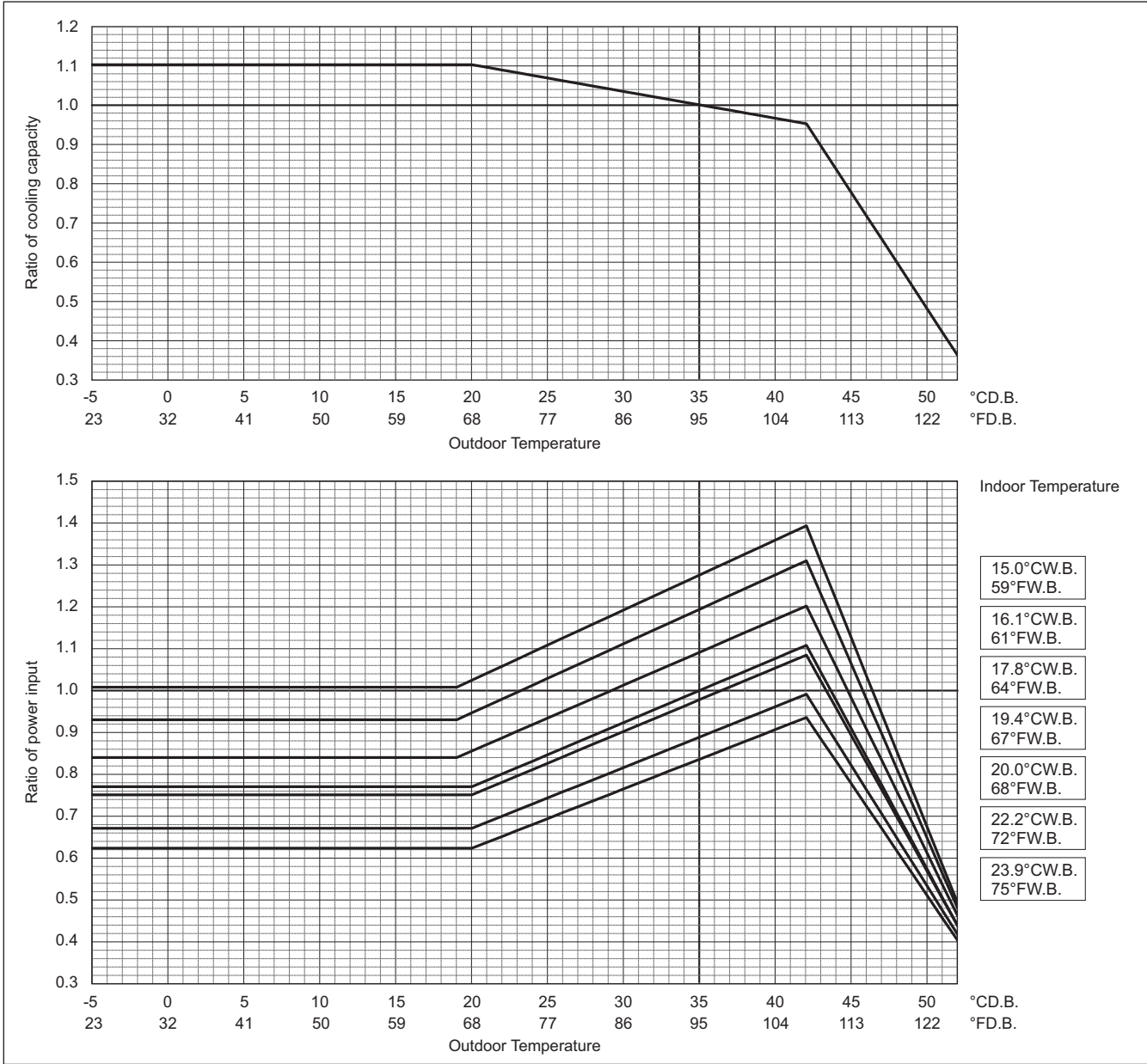
PUR-		EM288TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	288,000	
	kW	84.4	
	Input kW	21.94	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



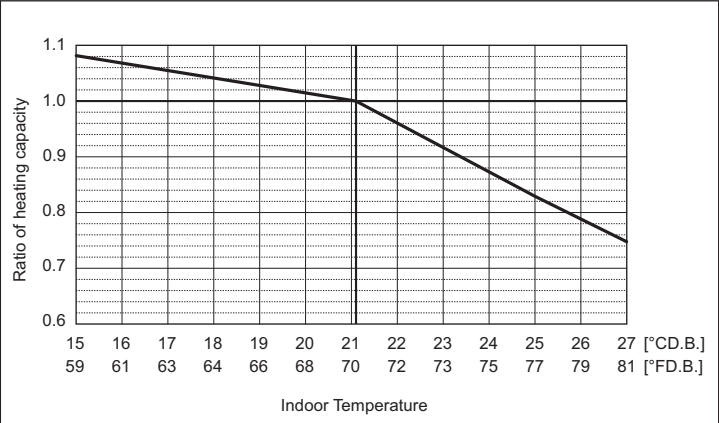
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



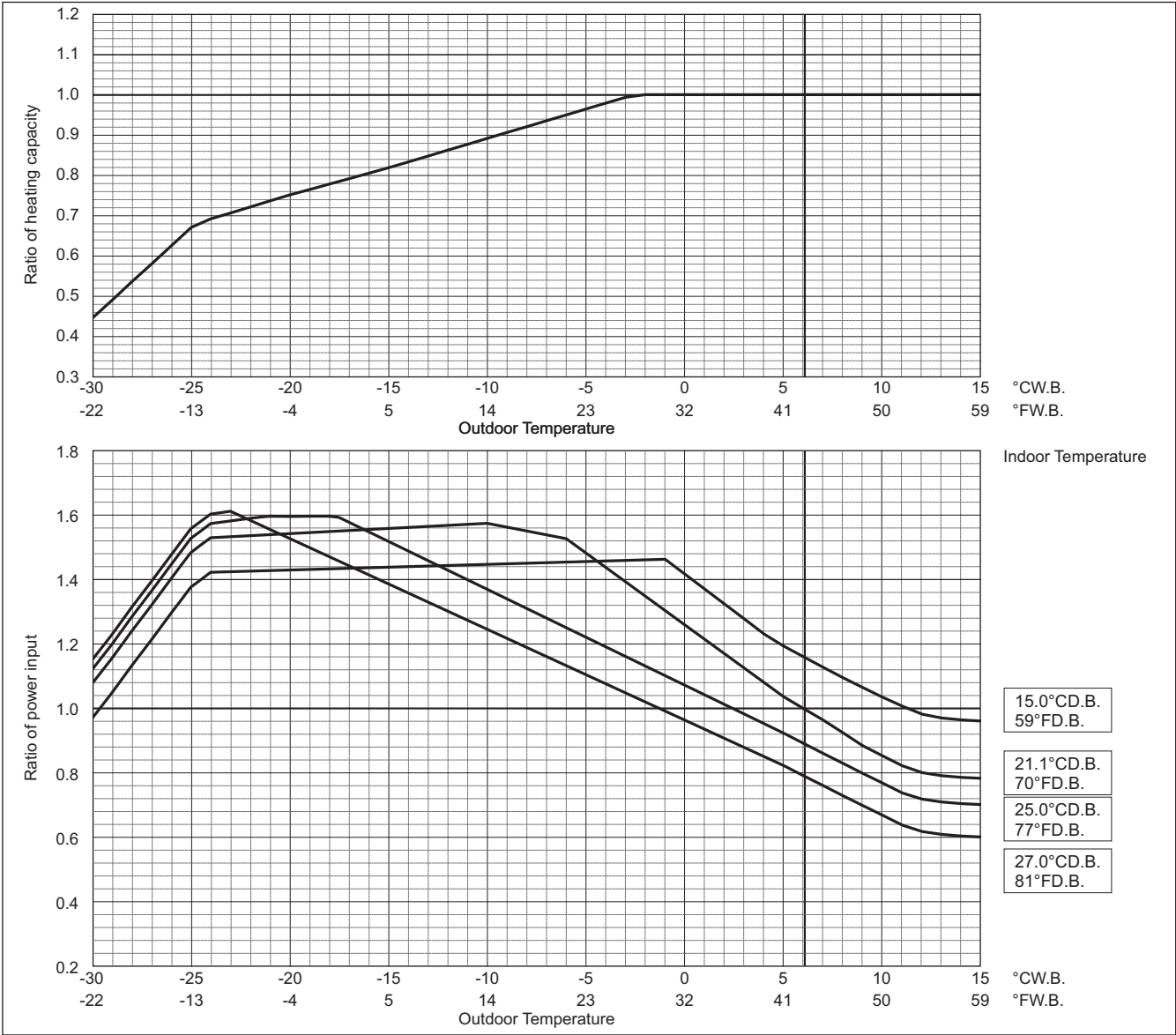
PURY-		EM288TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	323,000	
	kW	94.7	
	Input kW	23.65	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

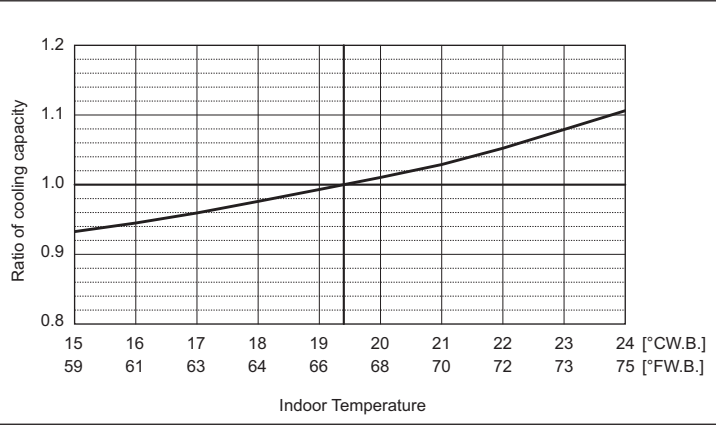


PURY-EM-T(S)XU-A, Y(S)XU-A

PUR-EM-T(S)XU-A, Y(S)XU-A

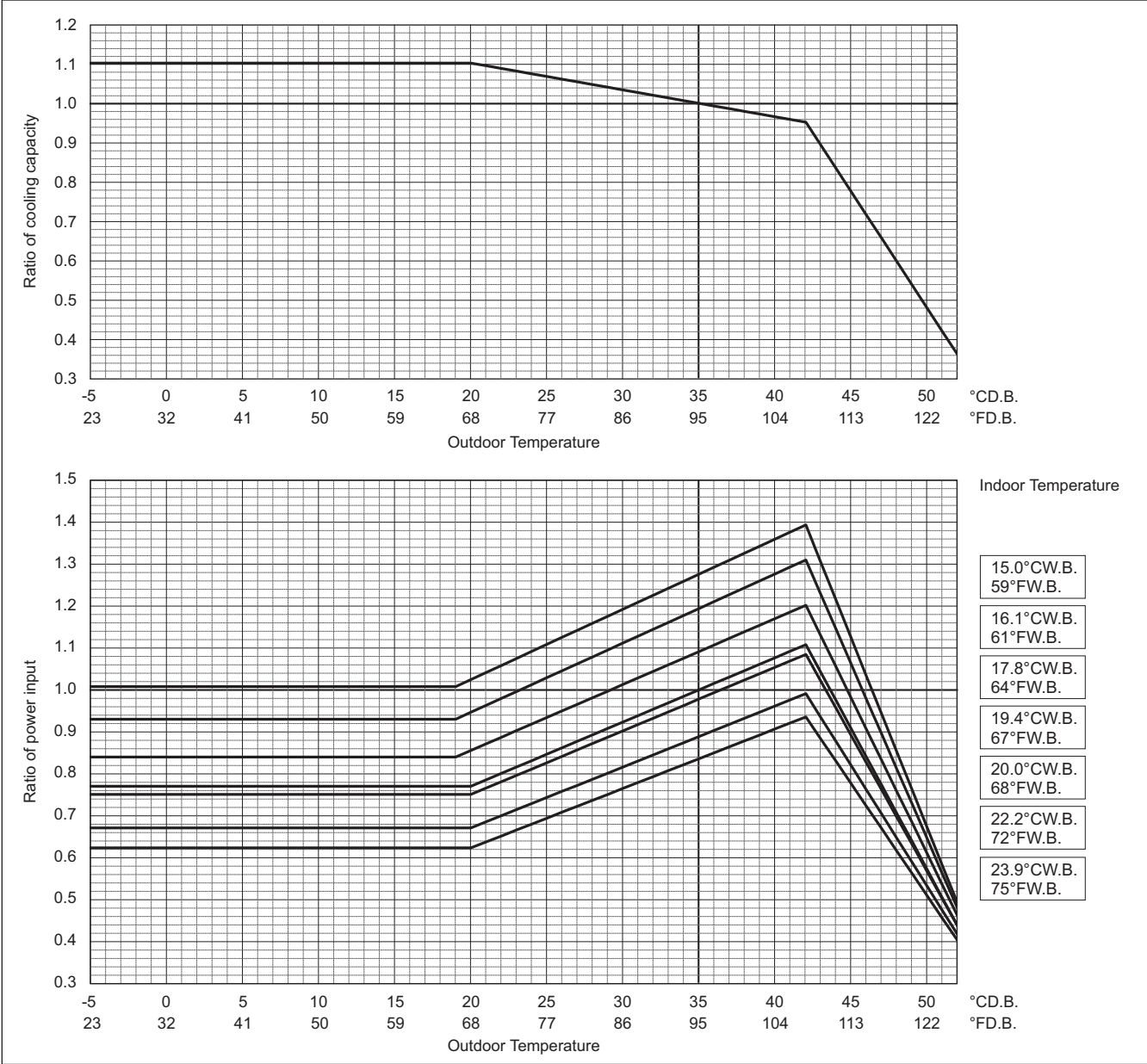
PUR-		EM312TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	312,000	
	kW	91.4	
	Input	kW	
		25.19	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



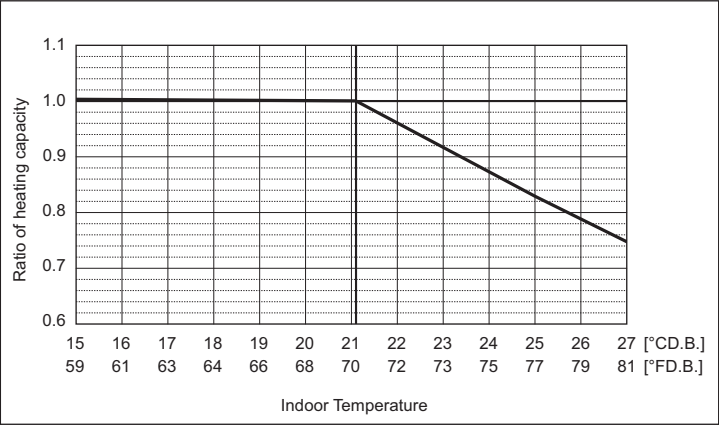
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



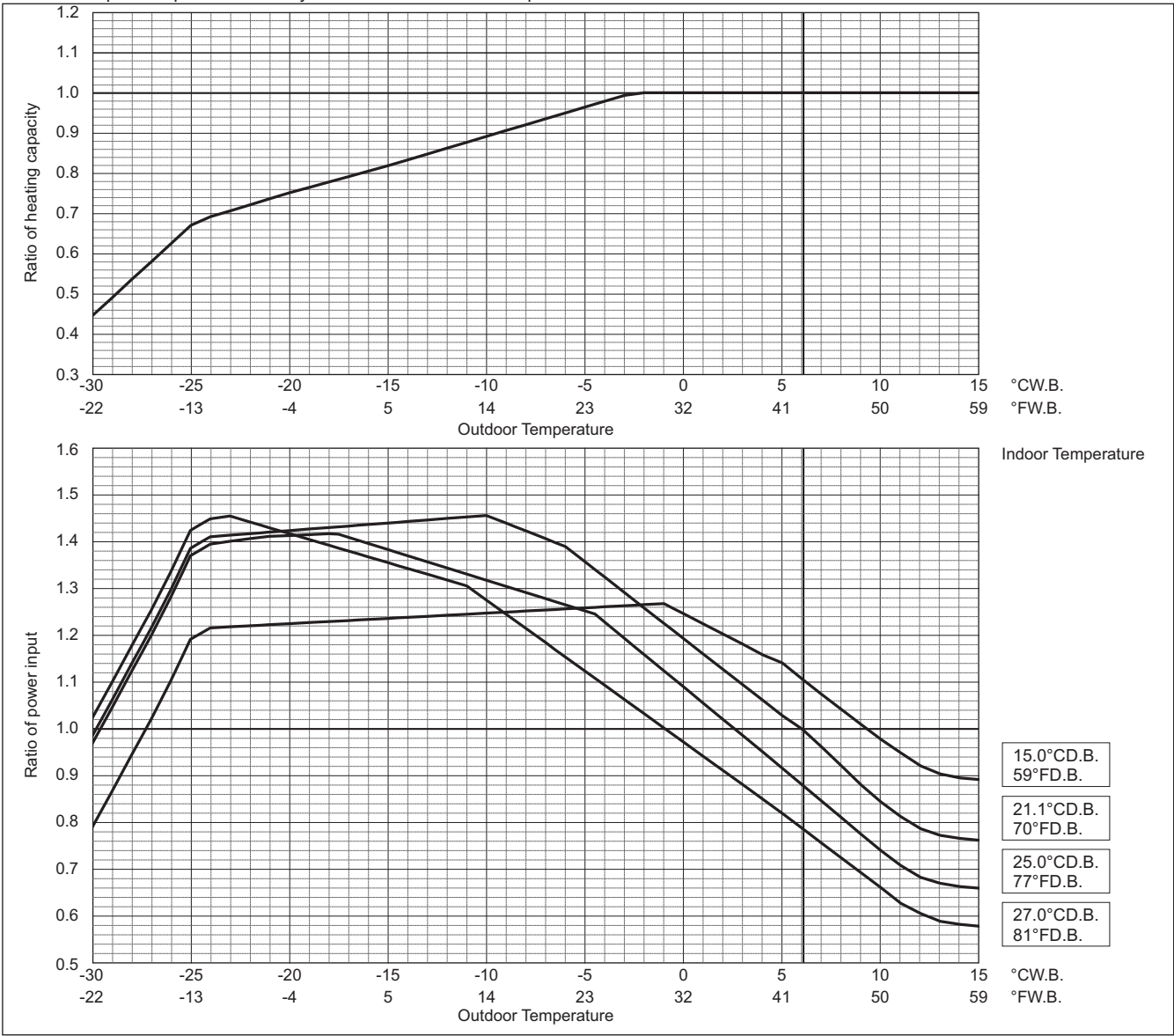
PURY-		EM312TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	350,000	
	kW	102.6	
	Input kW	26.52	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

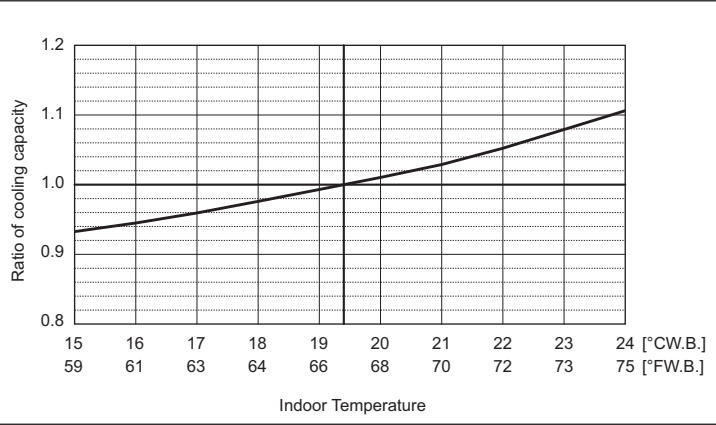


PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM-T(S)XU-A, Y(S)XU-A

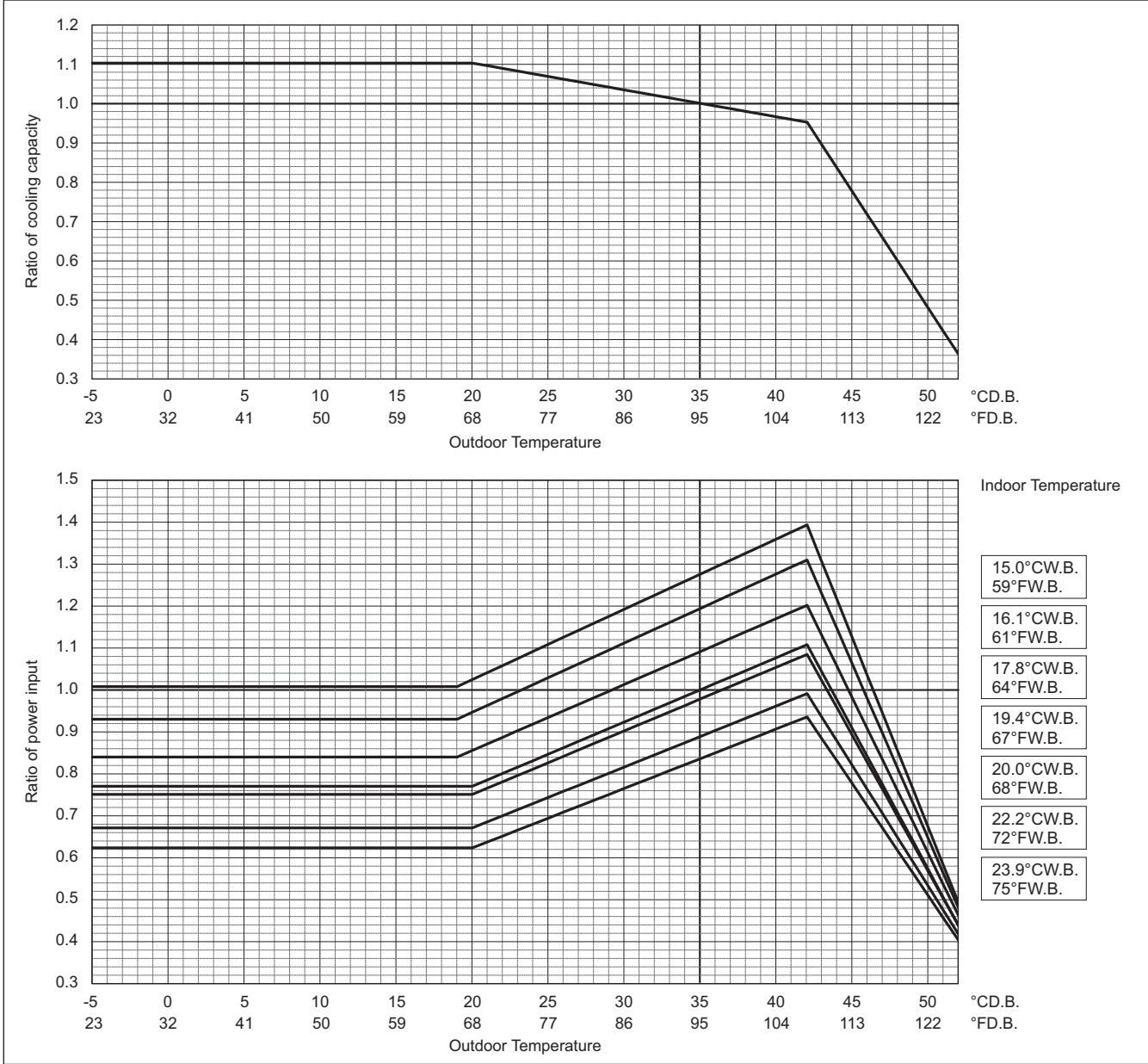
PURY-		EM336TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	336,000	
	kW	98.5	
	Input	kW	
		28.82	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



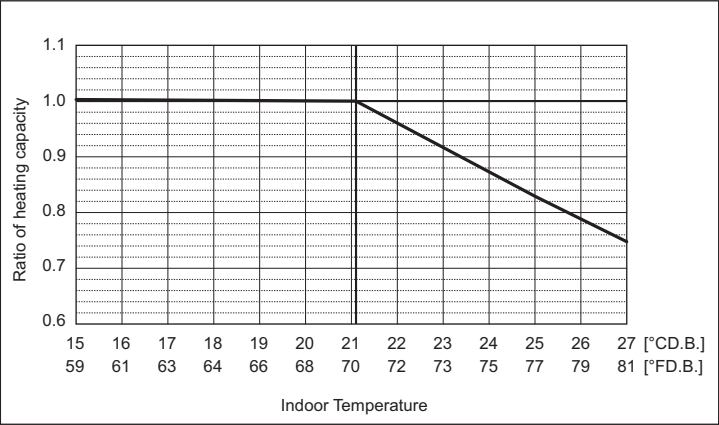
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



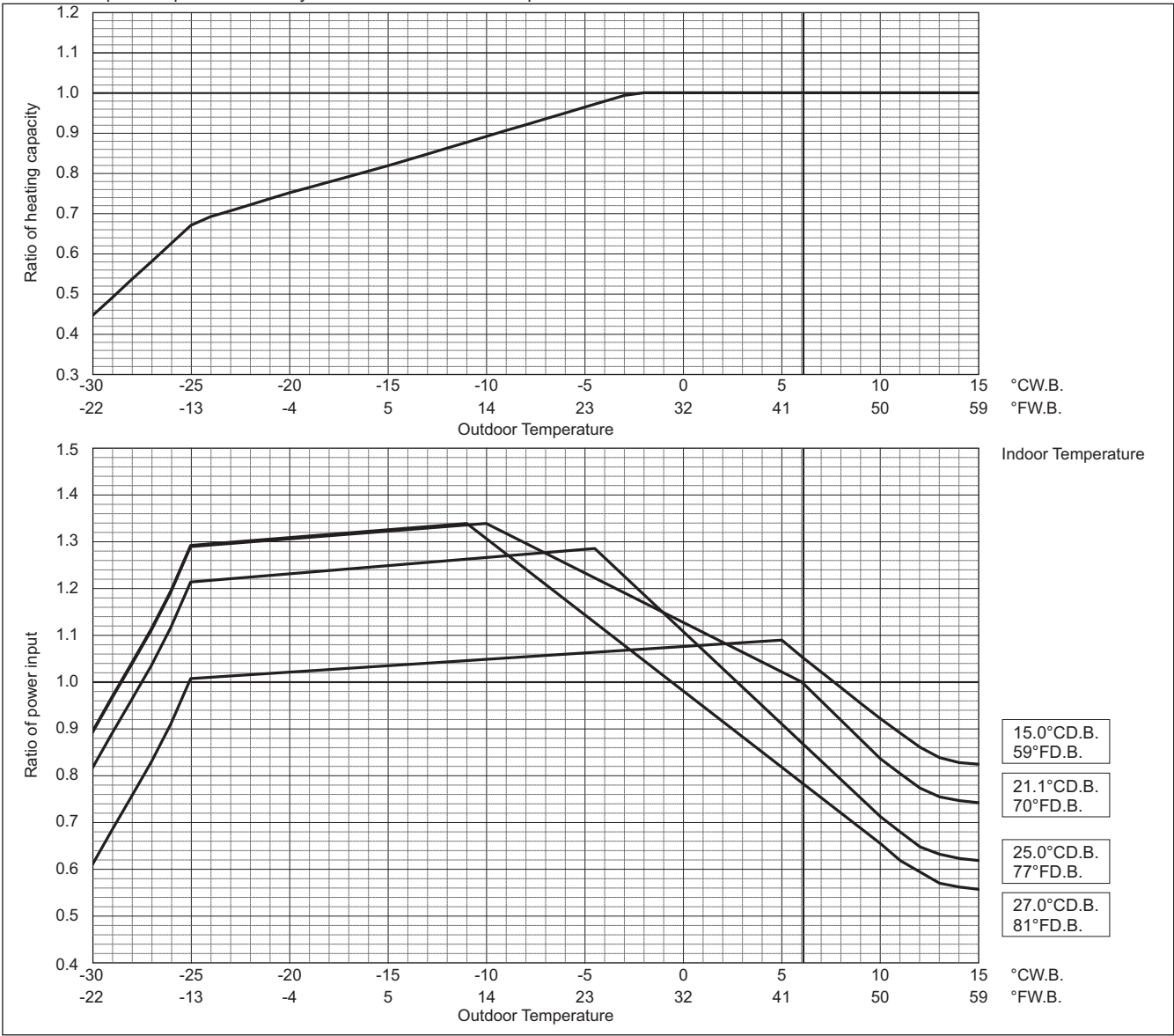
PURY-		EM336TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	378,000	
	kW	110.8	
	Input kW	29.58	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

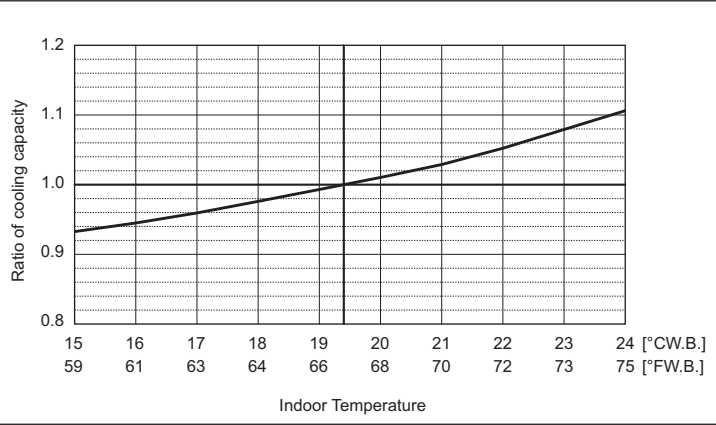
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



PURY-EM-T(S)XU-A, Y(S)XU-A

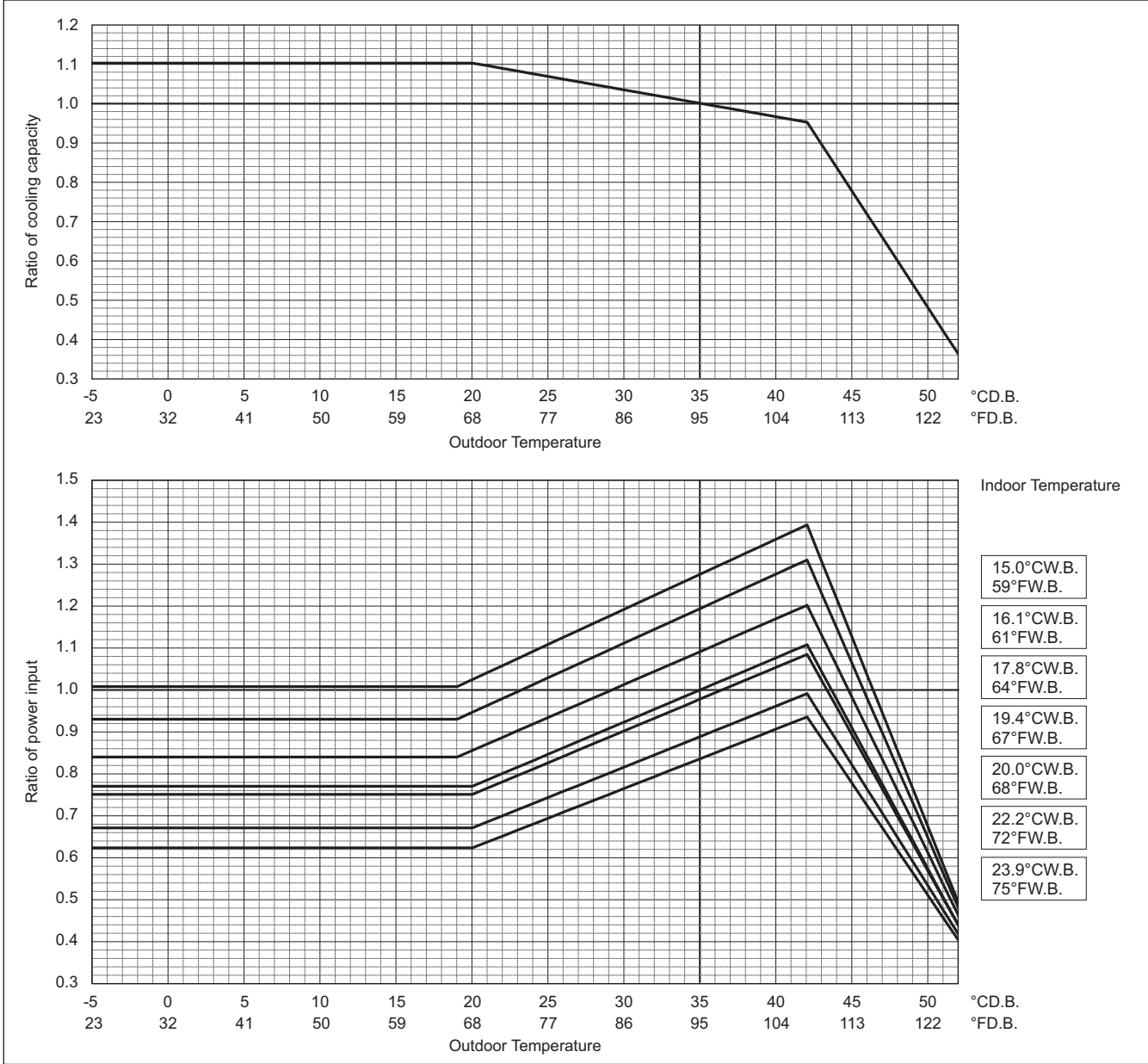
PURY-		EM360TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	360,000	
	kW	105.5	
	Input kW	32.21	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



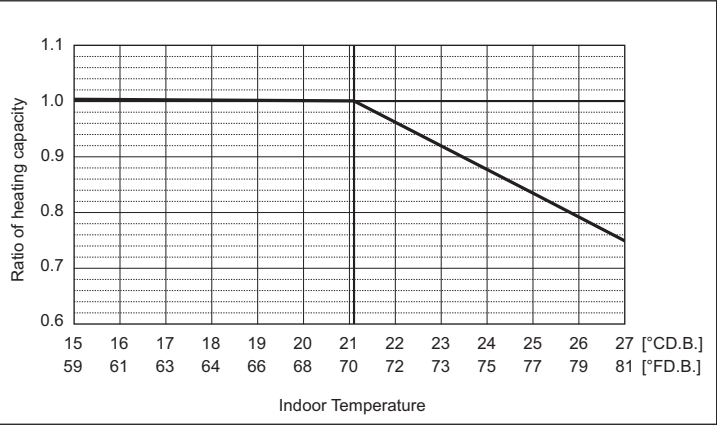
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



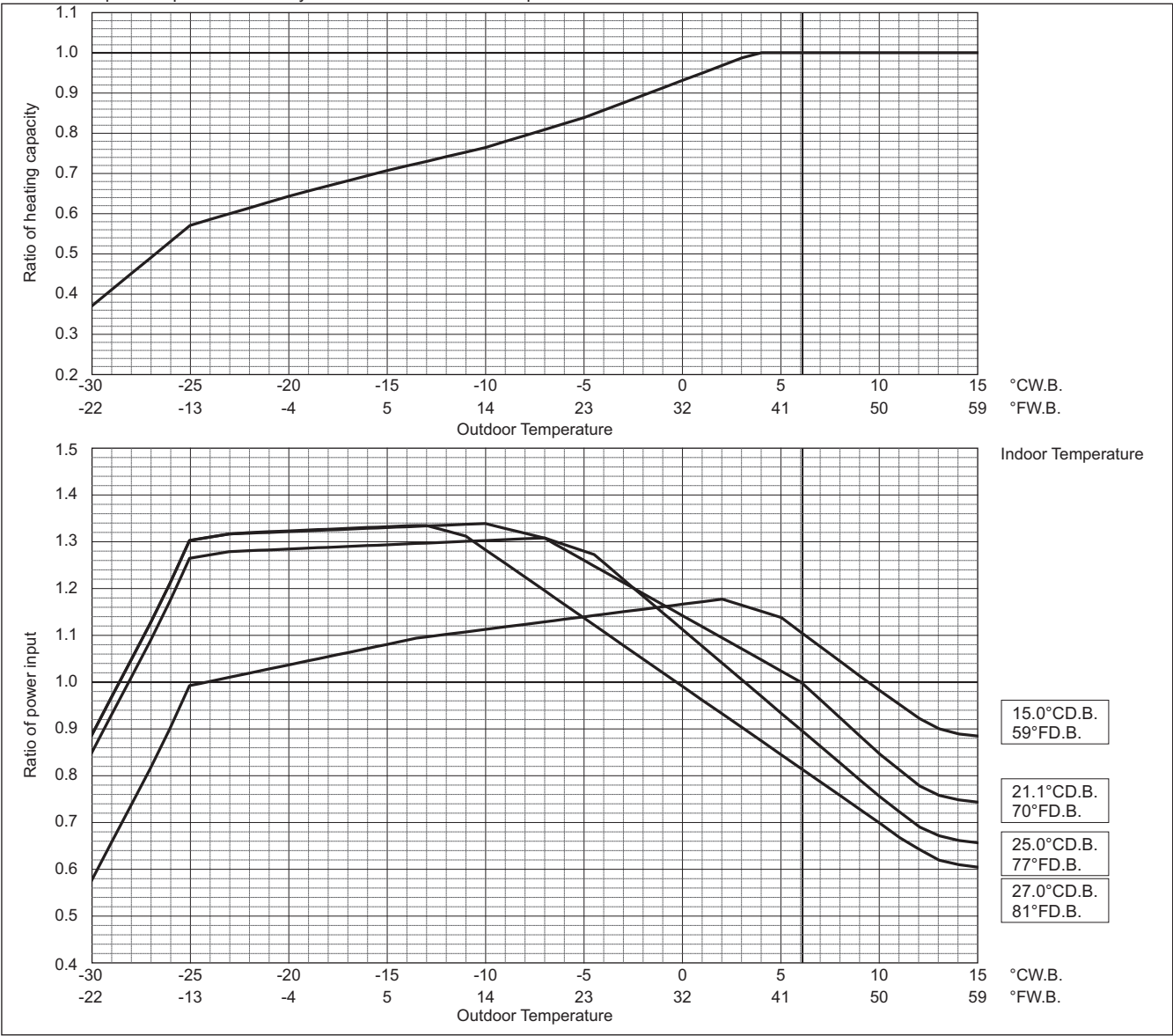
PURY-		EM360TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	380,000	
	kW	111.4	
	Input kW	30.75	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

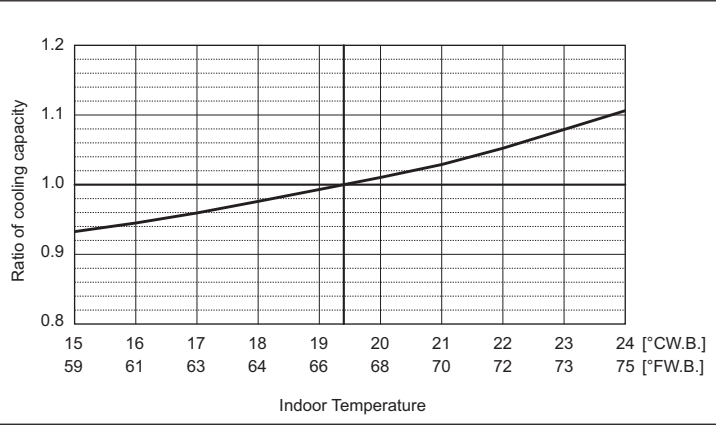


PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM-T(S)XU-A, Y(S)XU-A

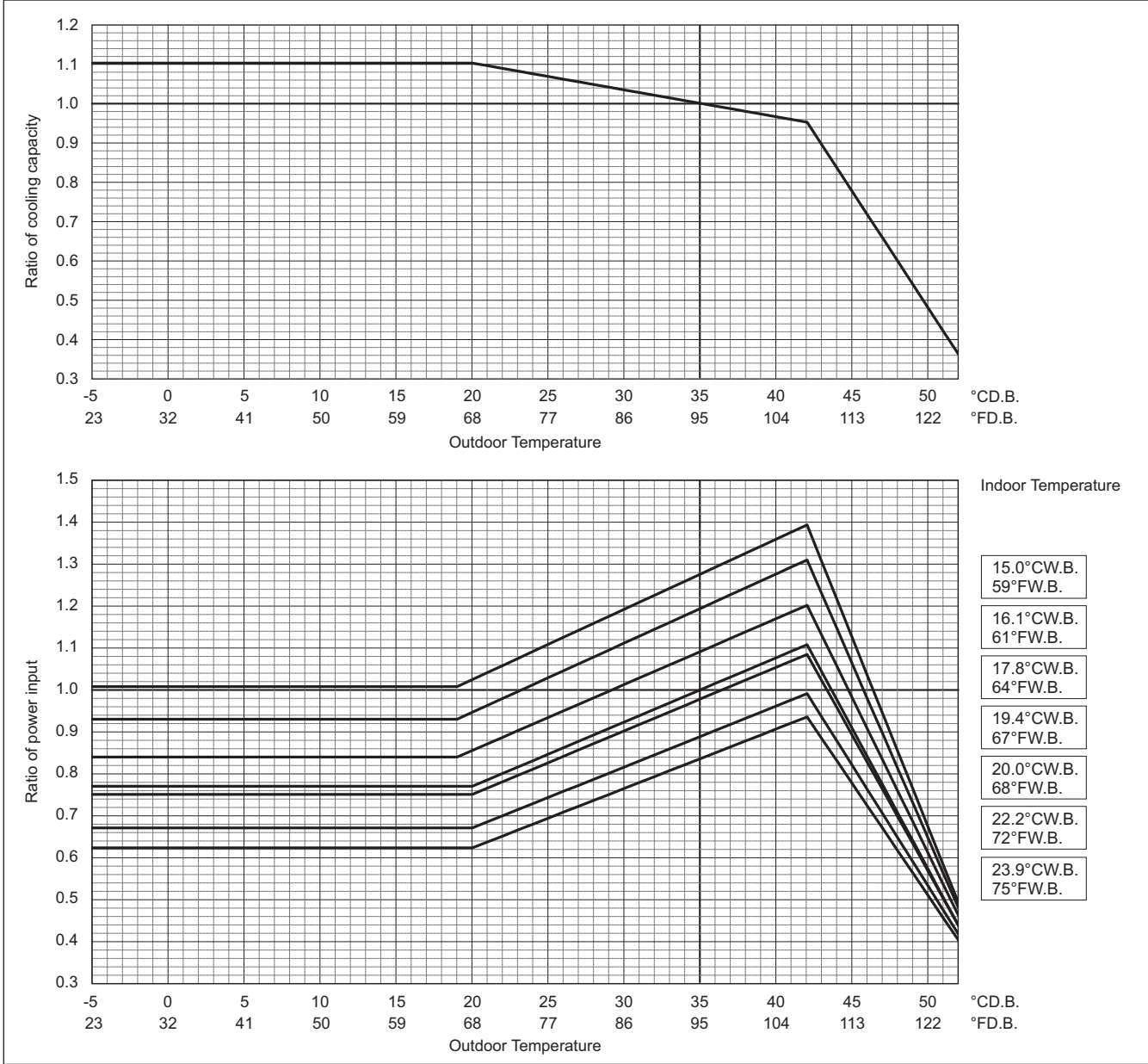
PURY-		EM384TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	384,000	
	kW	112.5	
	Input kW	35.66	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



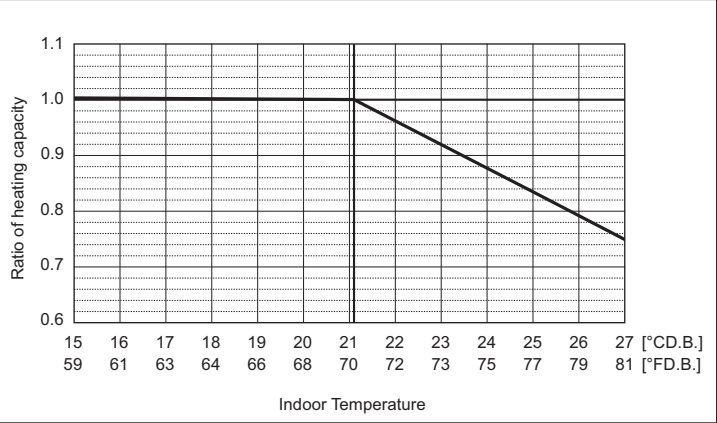
Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



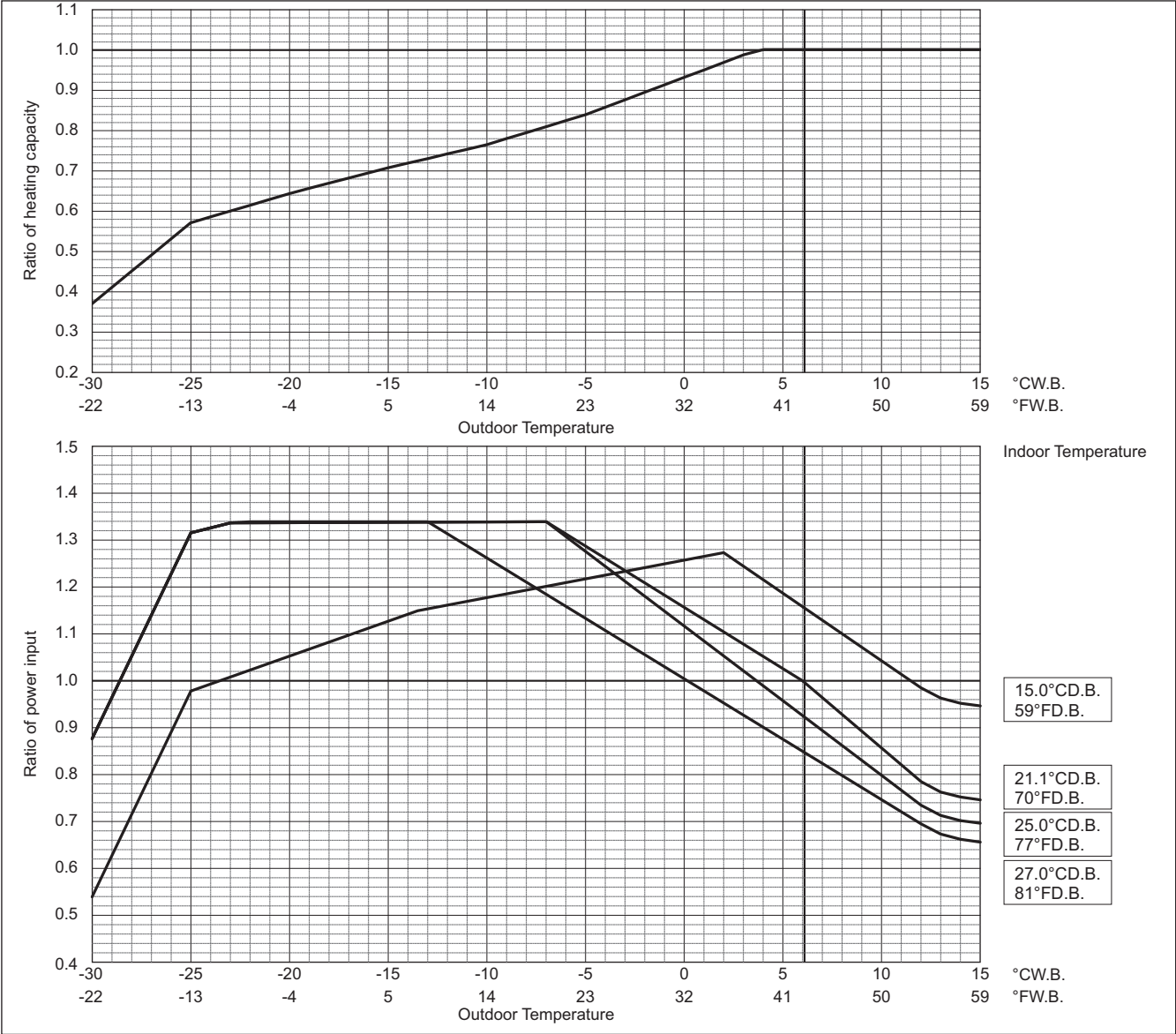
PURY-		EM384TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	384,000	
	kW	112.5	
	Input kW	32.70	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



PURY-EM-T(S)XU-A, Y(S)XU-A

PUR-EM-T(S)XU-A, Y(S)XU-A

Correction by temperature (Cool toughness mode)

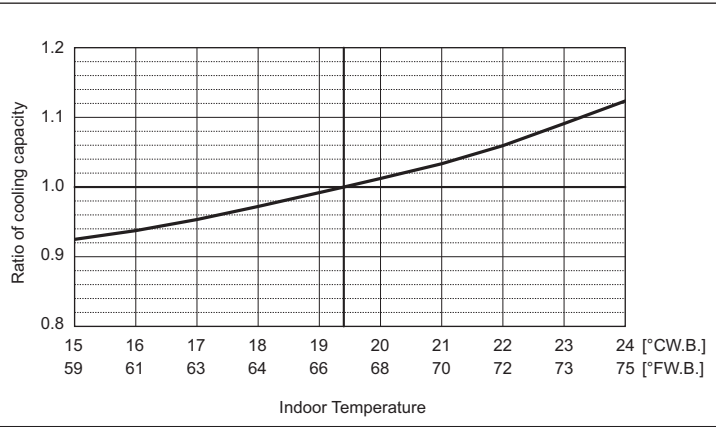
CITY MULTI could have various capacities at different designing temperatures. Using the nominal cooling/heating capacity values and the ratios below, the capacity can be found for various temperatures. To select cool toughness mode, SW4 (959) must be set to ON.

Cool toughness mode

PUR-		EM72TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	72,000	
	kW	21.1	
	Input kW	4.49	

Indoor unit temperature correction

To be used to correct indoor unit capacity only

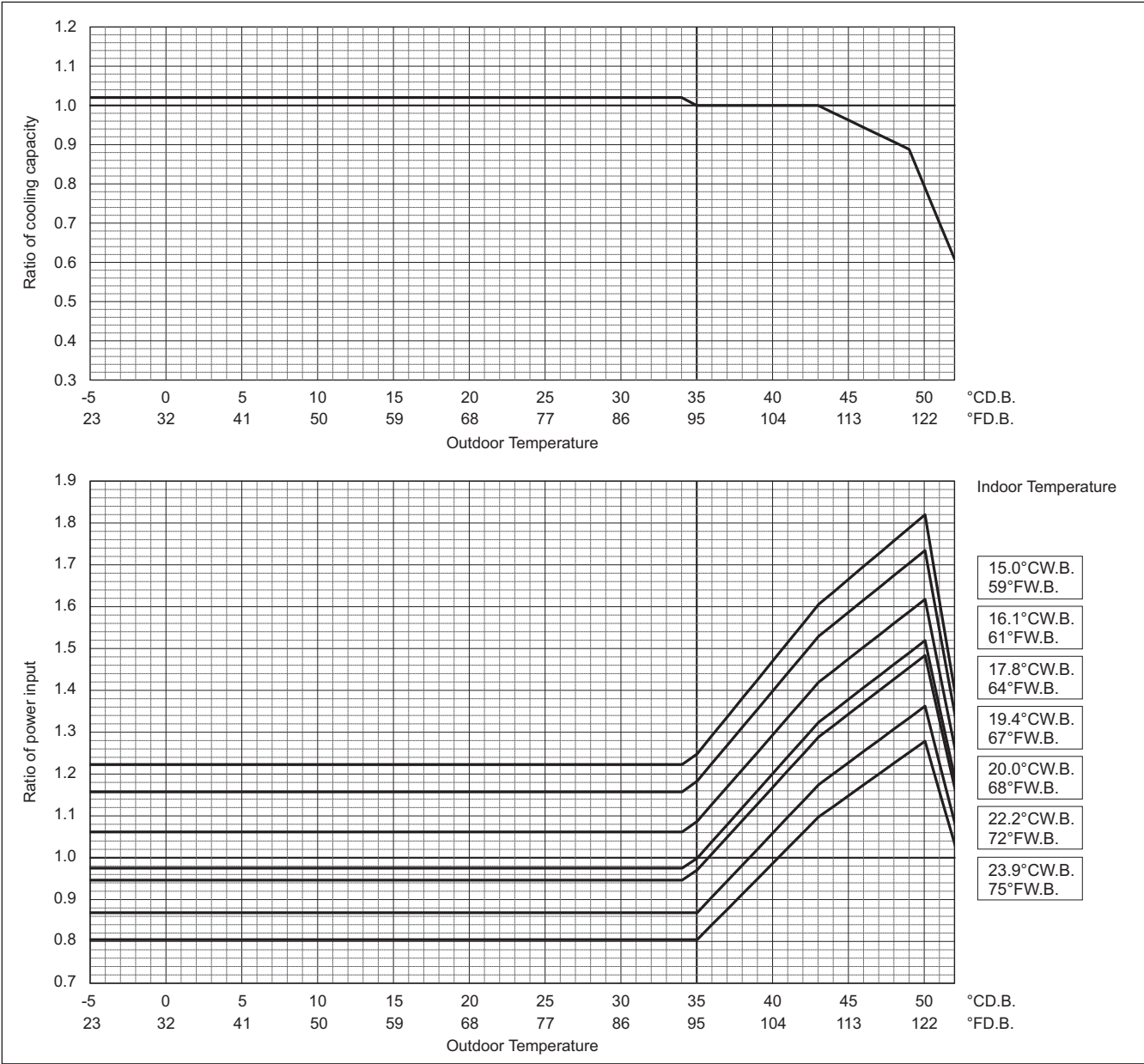


Outdoor unit temperature correction

To be used to correct outdoor unit only

Outdoor unit capacity is NOT affected by the indoor temperature.

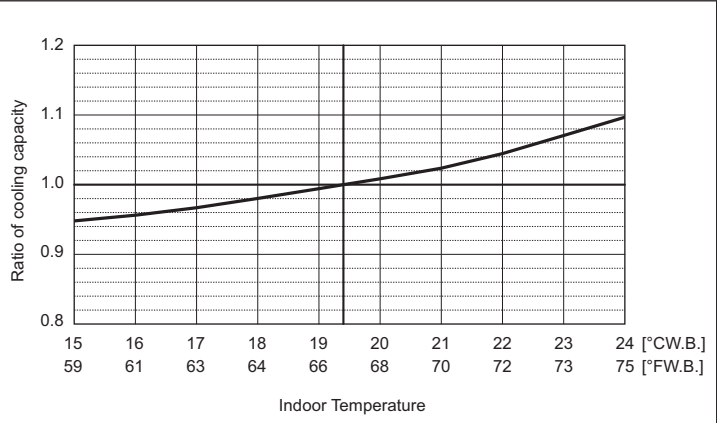
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Cool toughness mode

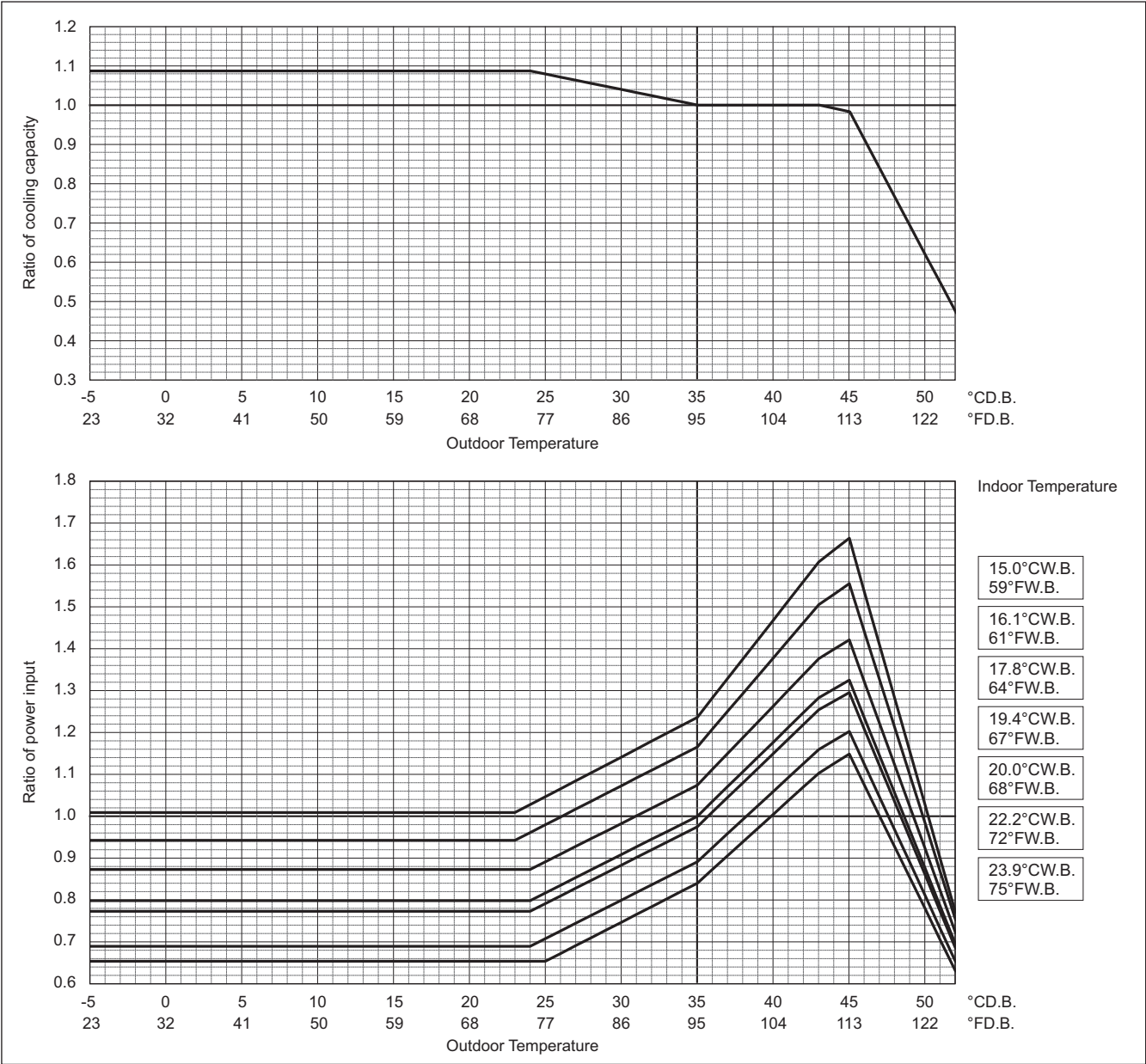
PURY-		EM96TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	96,000	
	kW	28.1	
	Input kW	6.33	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

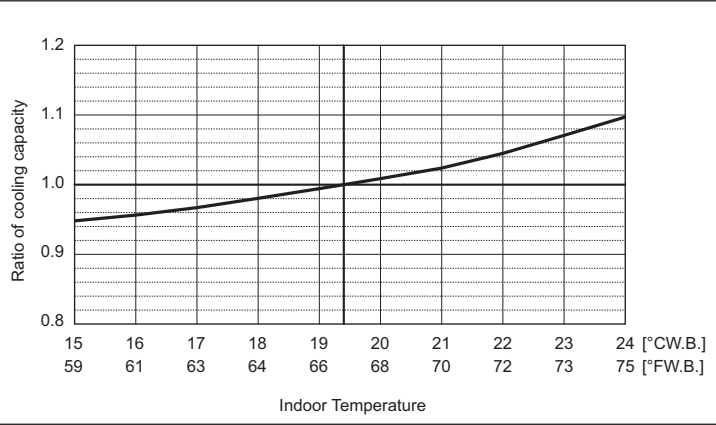


PUR-EM-T(S)XU-A, Y(S)XU-A

Cool toughness mode

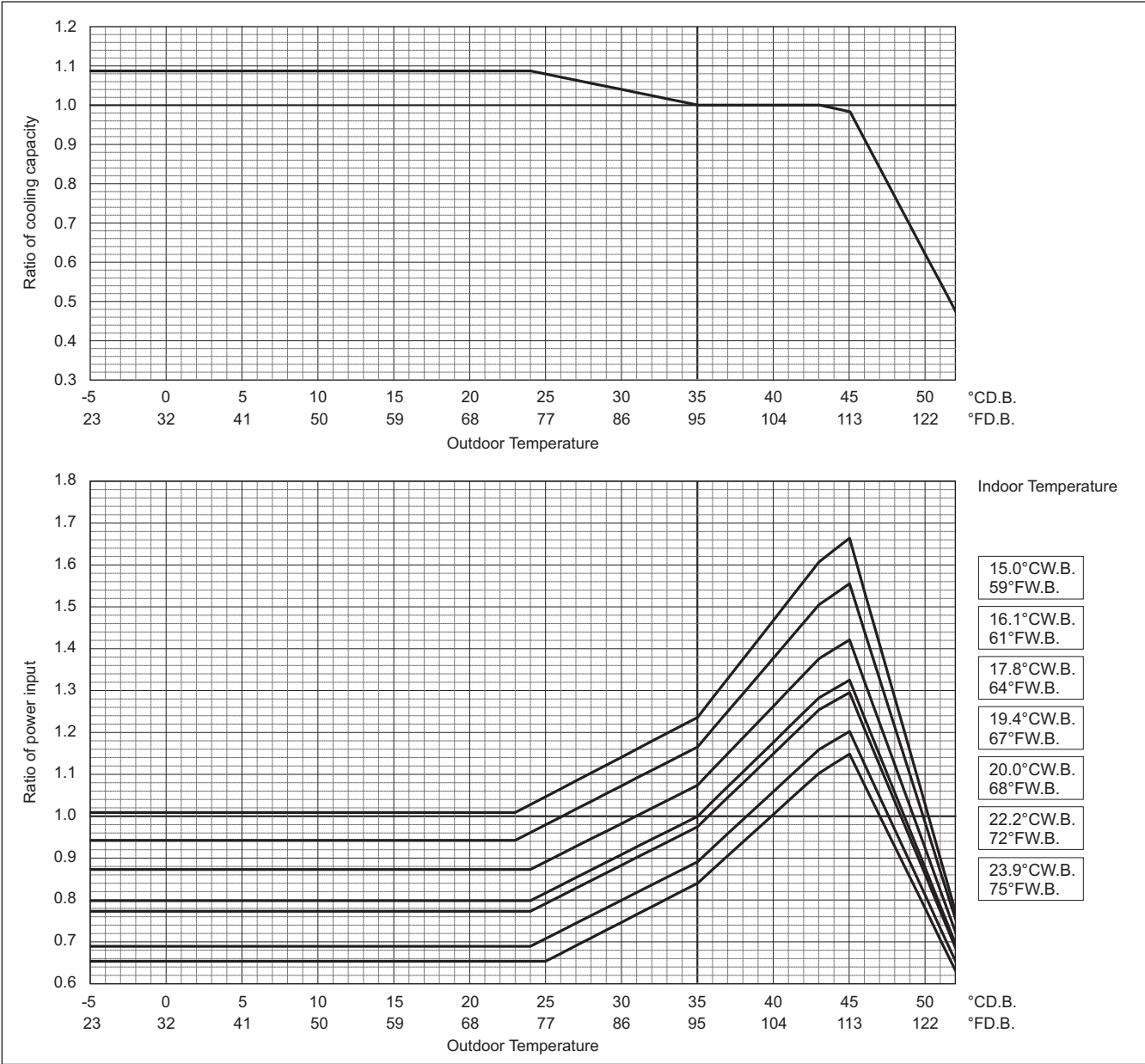
PUR-		EM120TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	120,000	
	kW	35.2	
	Input kW	8.54	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

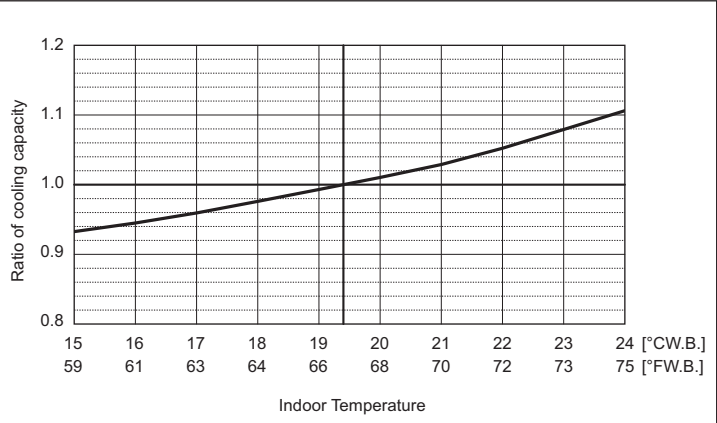
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Cool toughness mode

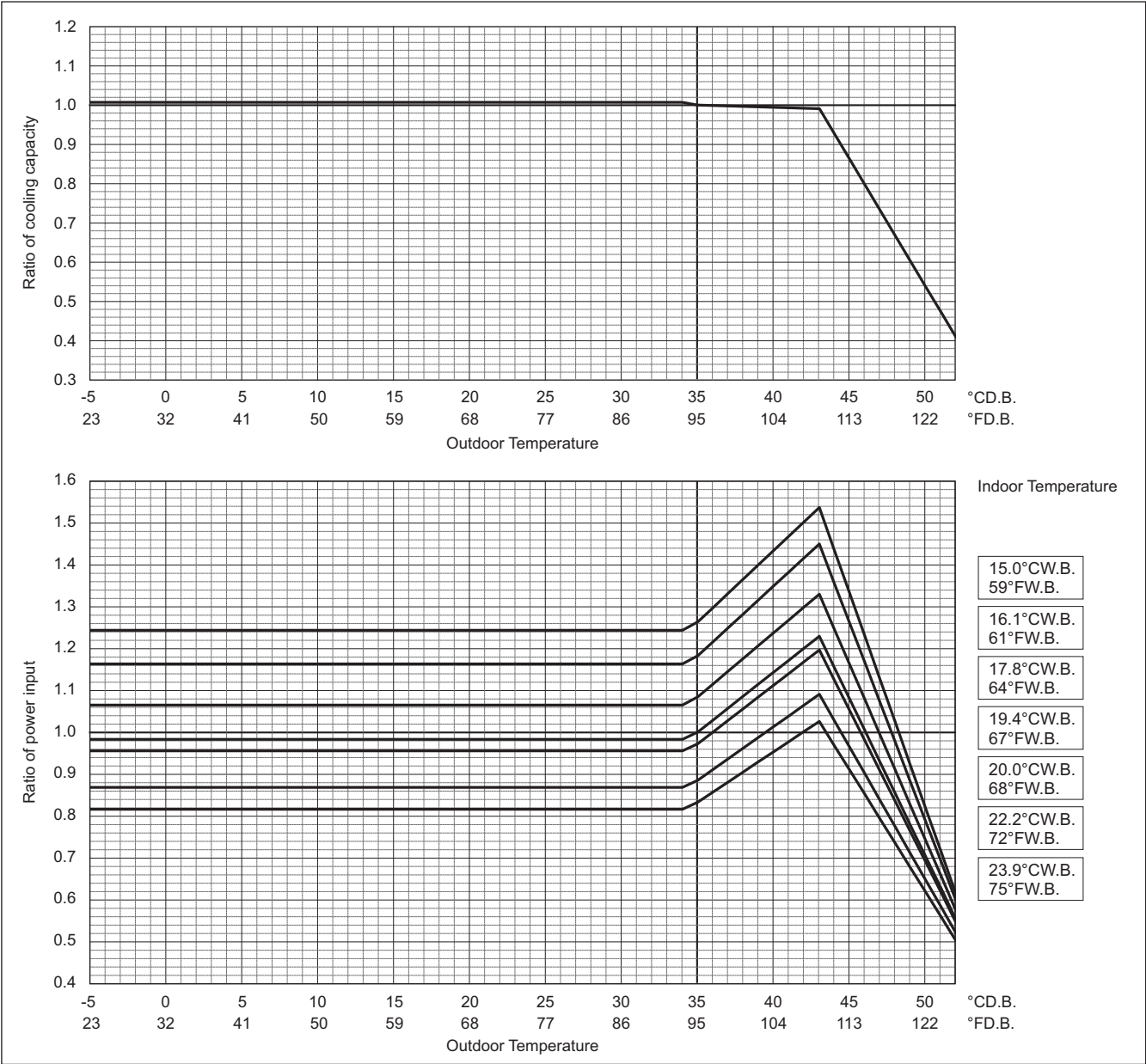
PURY-		EM144TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	144,000	
	kW	42.2	
	Input kW	10.43	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

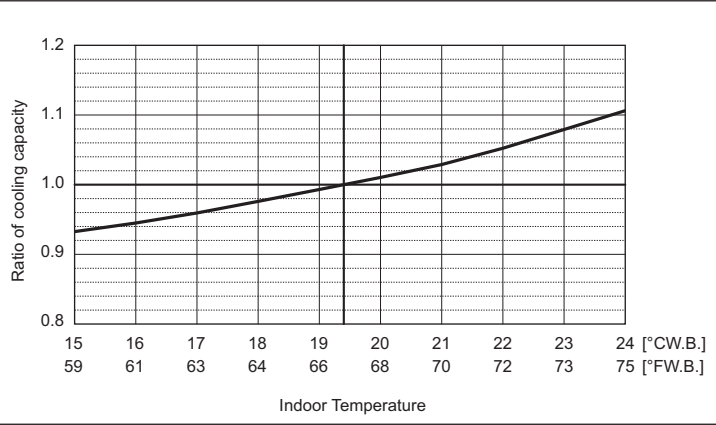


PUR-EM-T(S)XU-A, Y(S)XU-A

Cool toughness mode

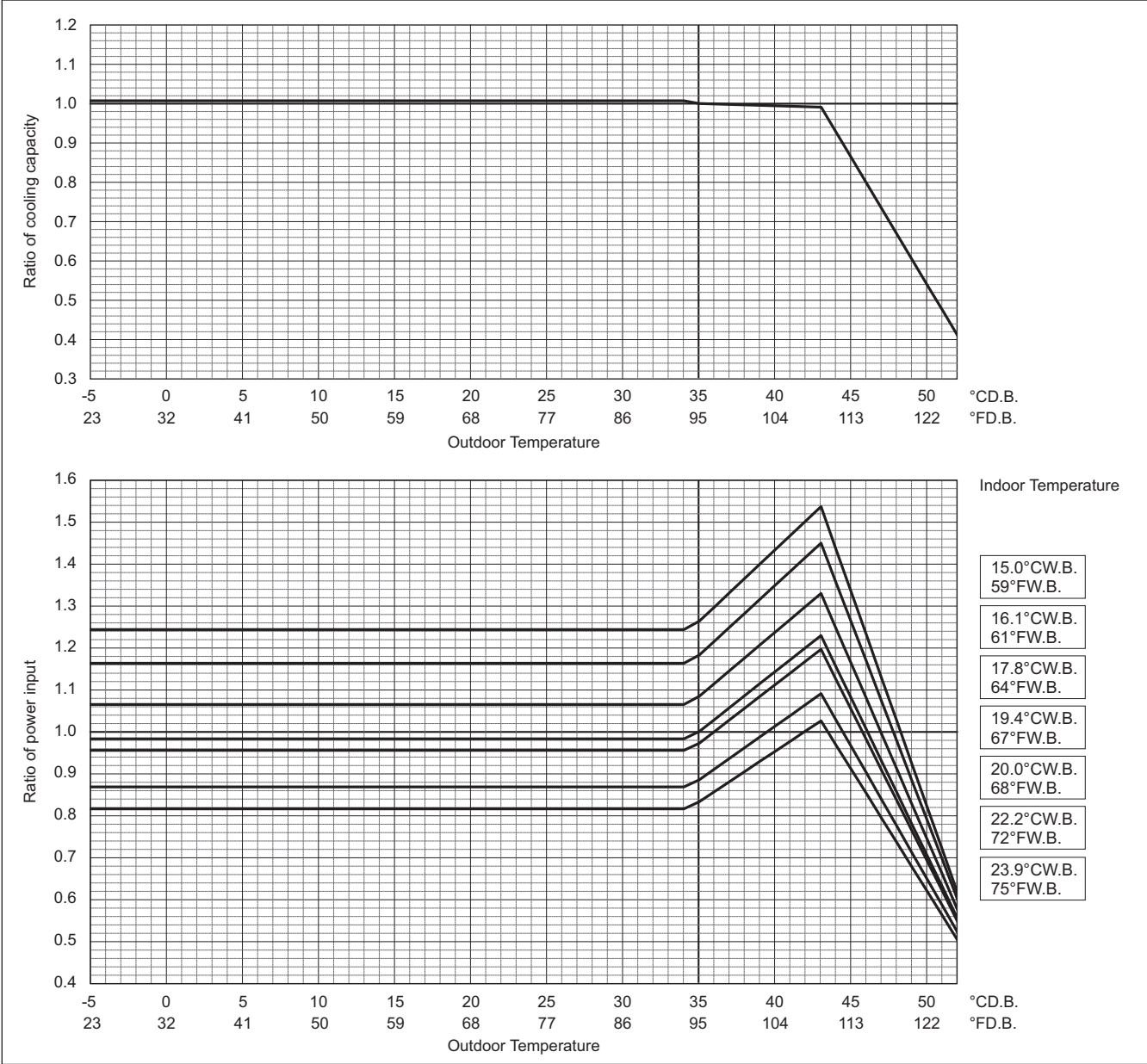
PUR-		EM168TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	168,000	
	kW	49.2	
	Input kW	13.22	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

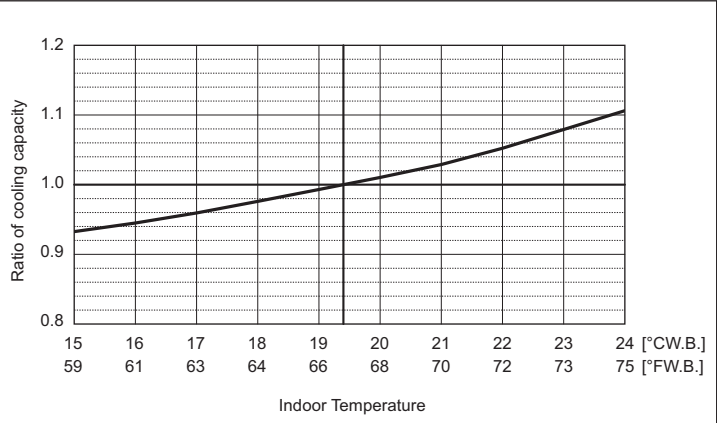
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Cool toughness mode

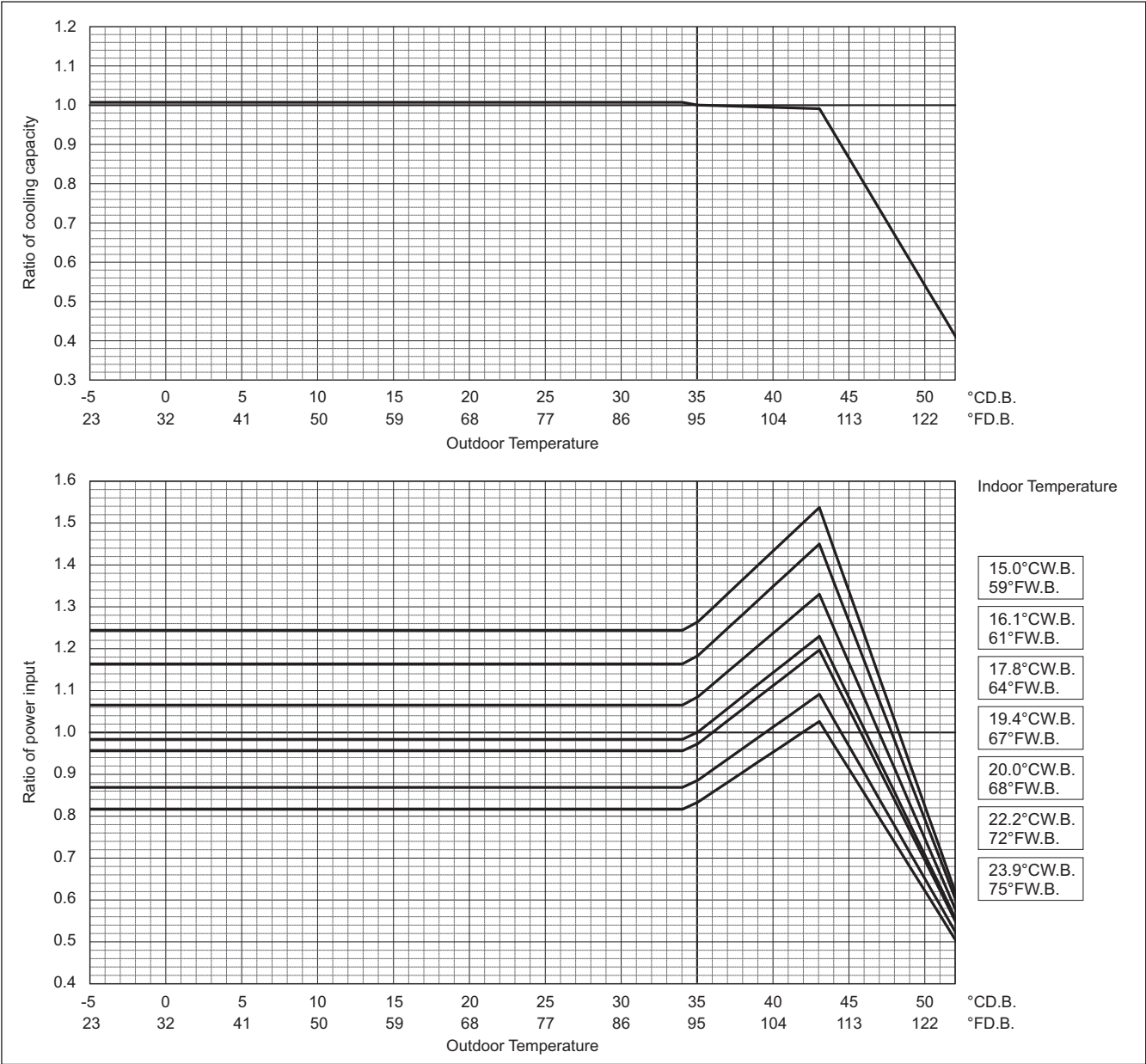
PURY-		EM264TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	264,000	
	kW	77.4	
	Input kW	19.53	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

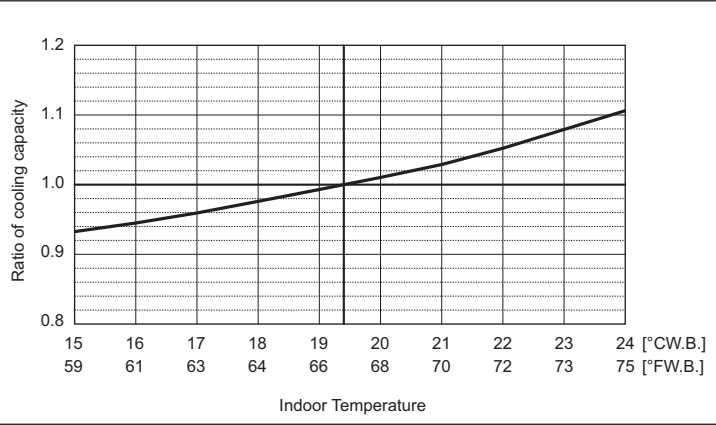


PUR-EM-T(S)XU-A, Y(S)XU-A

Cool toughness mode

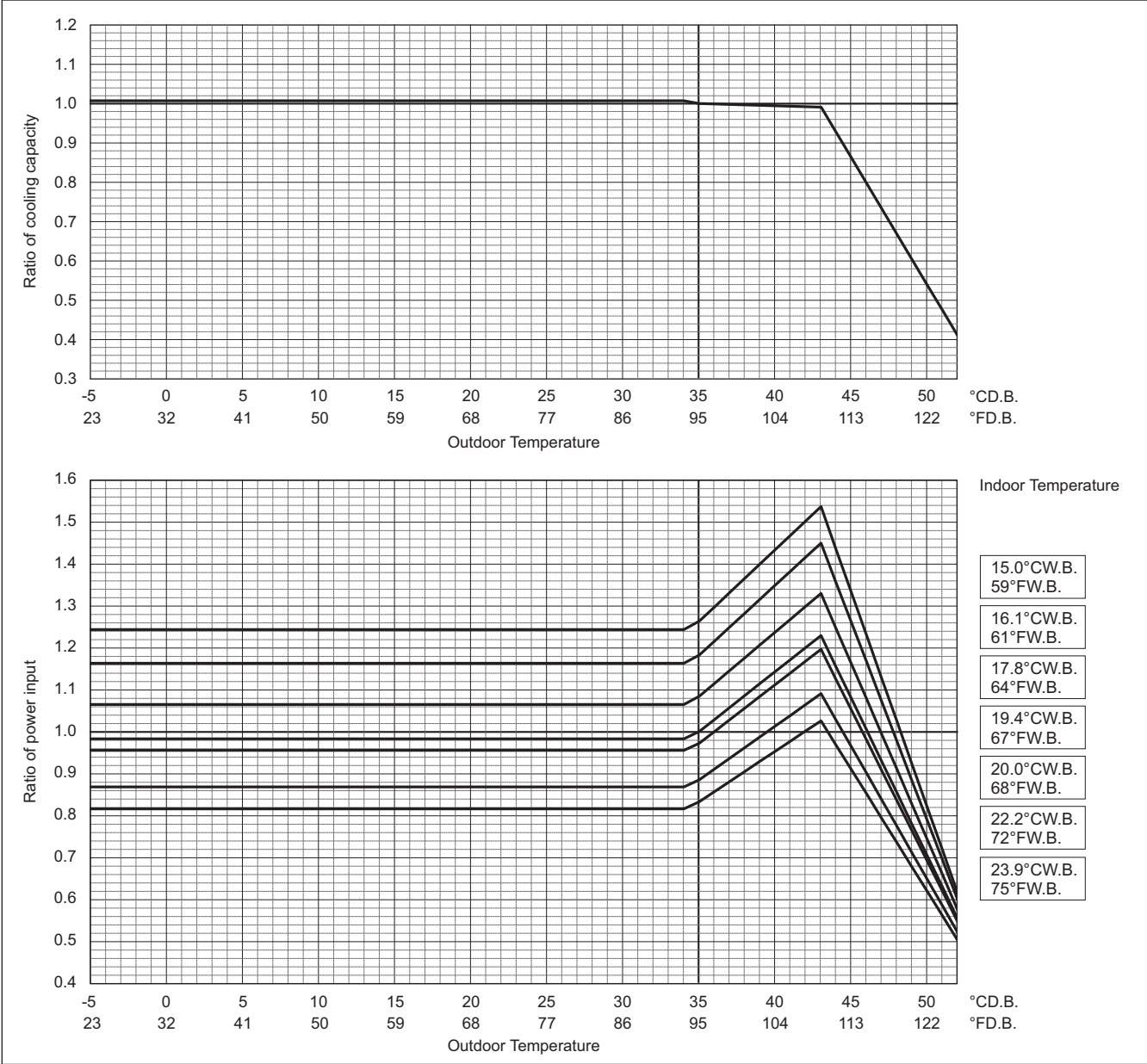
PUR-		EM288TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	288,000	
	kW	84.4	
	Input kW	21.94	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

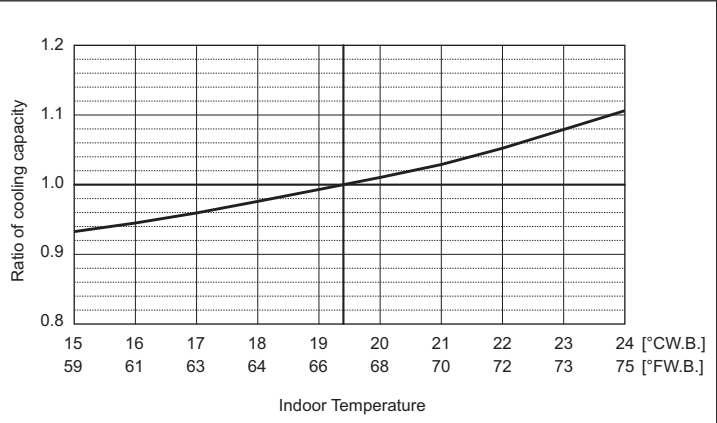
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Cool toughness mode

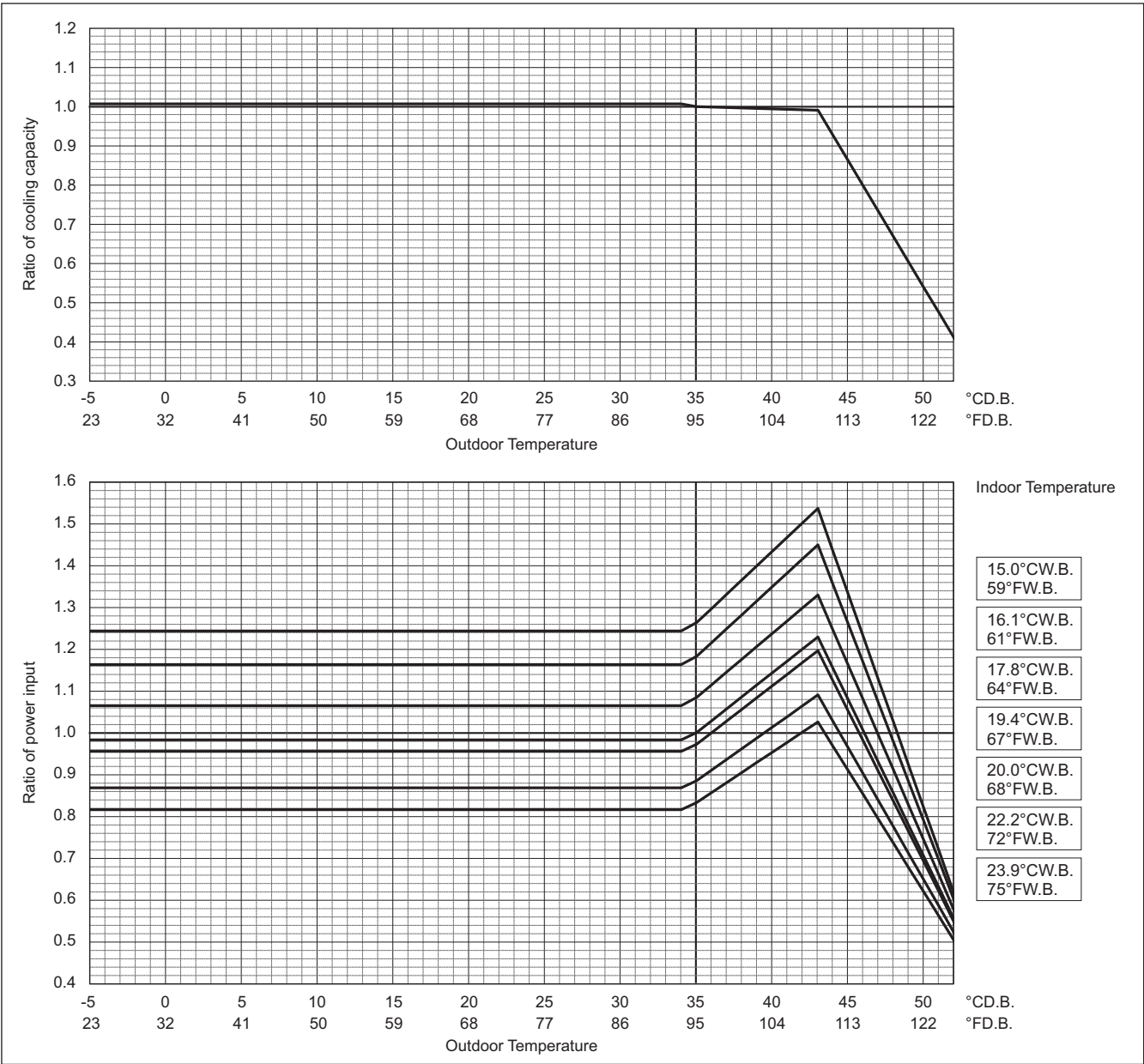
PURY-		EM312TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	312,000	
	kW	91.4	
	Input kW	25.19	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

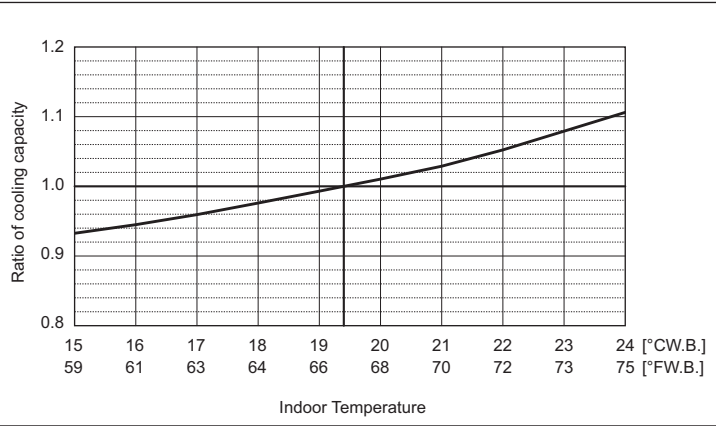


PURY-EM-T(S)XU-A, Y(S)XU-A

Cool toughness mode

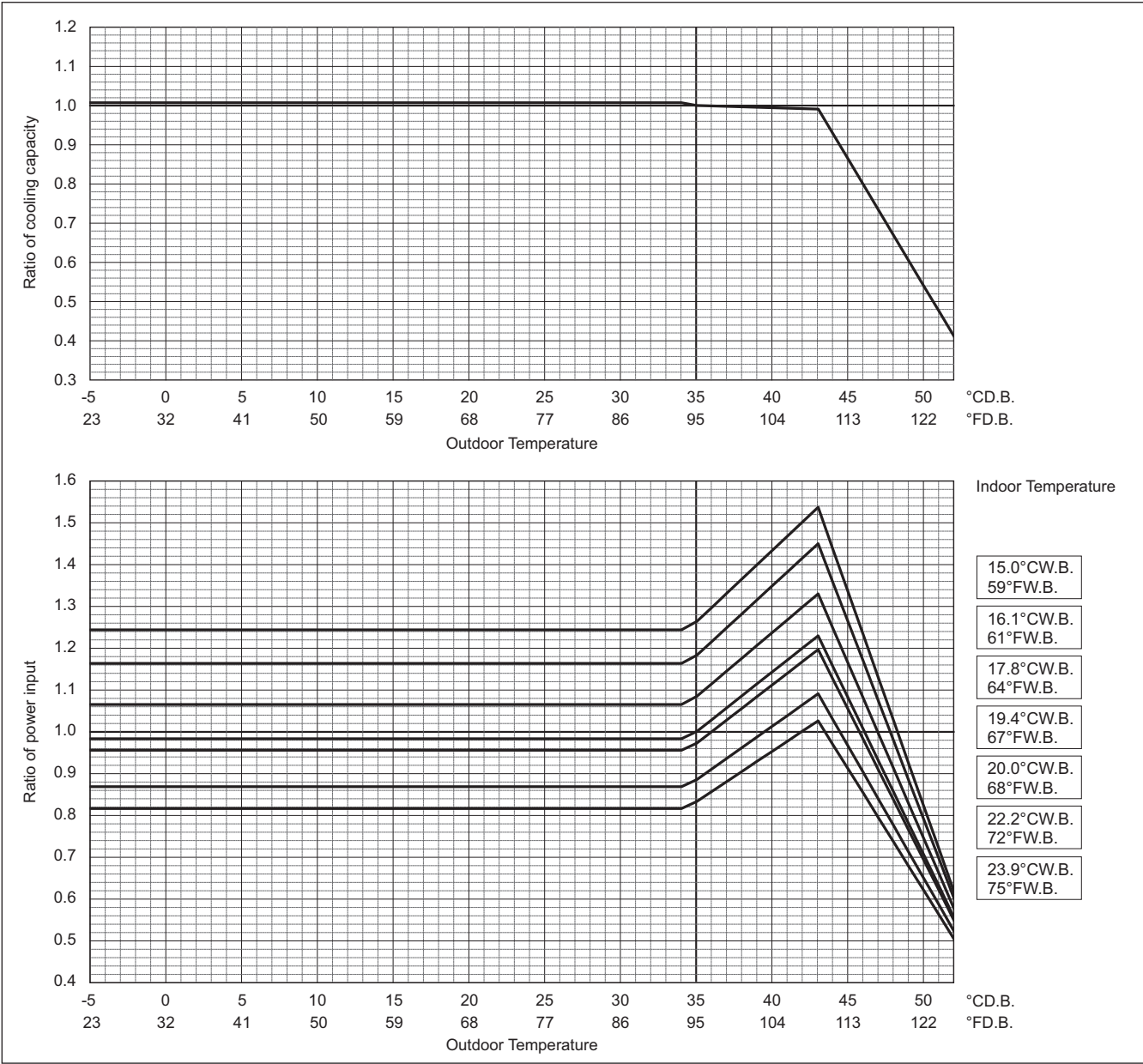
PURY-		EM336TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	336,000	
	kW	98.5	
	Input kW	28.82	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Correction by temperature (Heating COP priority mode)

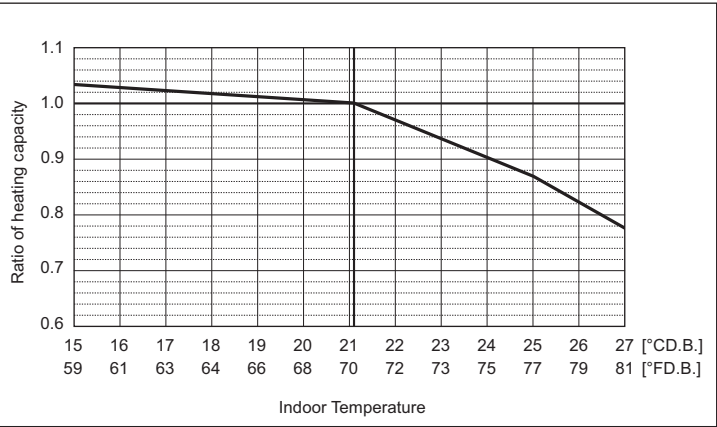
CITY MULTI could have various capacities at different designing temperatures. Using the nominal cooling/heating capacity values and the ratios below, the capacity can be found for various temperatures. To select heating COP priority mode, SW4 (935) must be set to OFF.

Heating COP priority mode

PURY-		EM72TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	80,000	
	kW	23.4	
	Input kW	5.18	

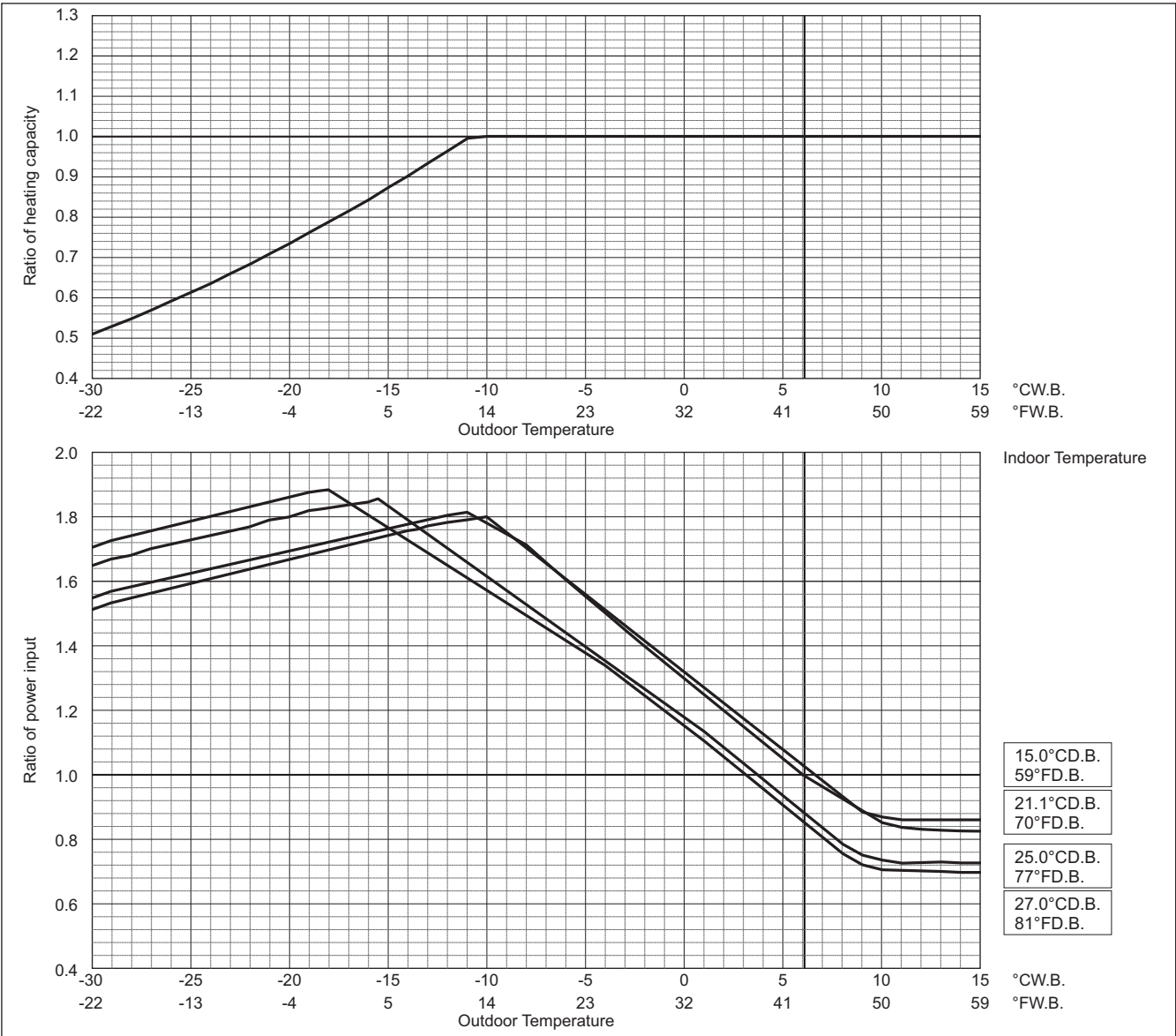
Indoor unit temperature correction

To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

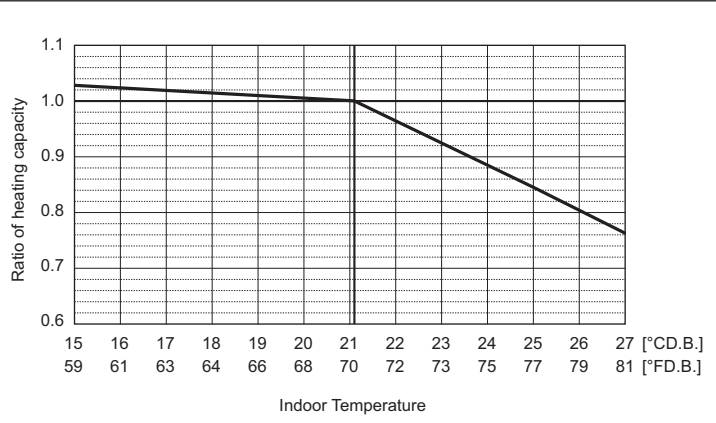


PURY-EM-T(S)XU-A, Y(S)XU-A

Heating COP priority mode

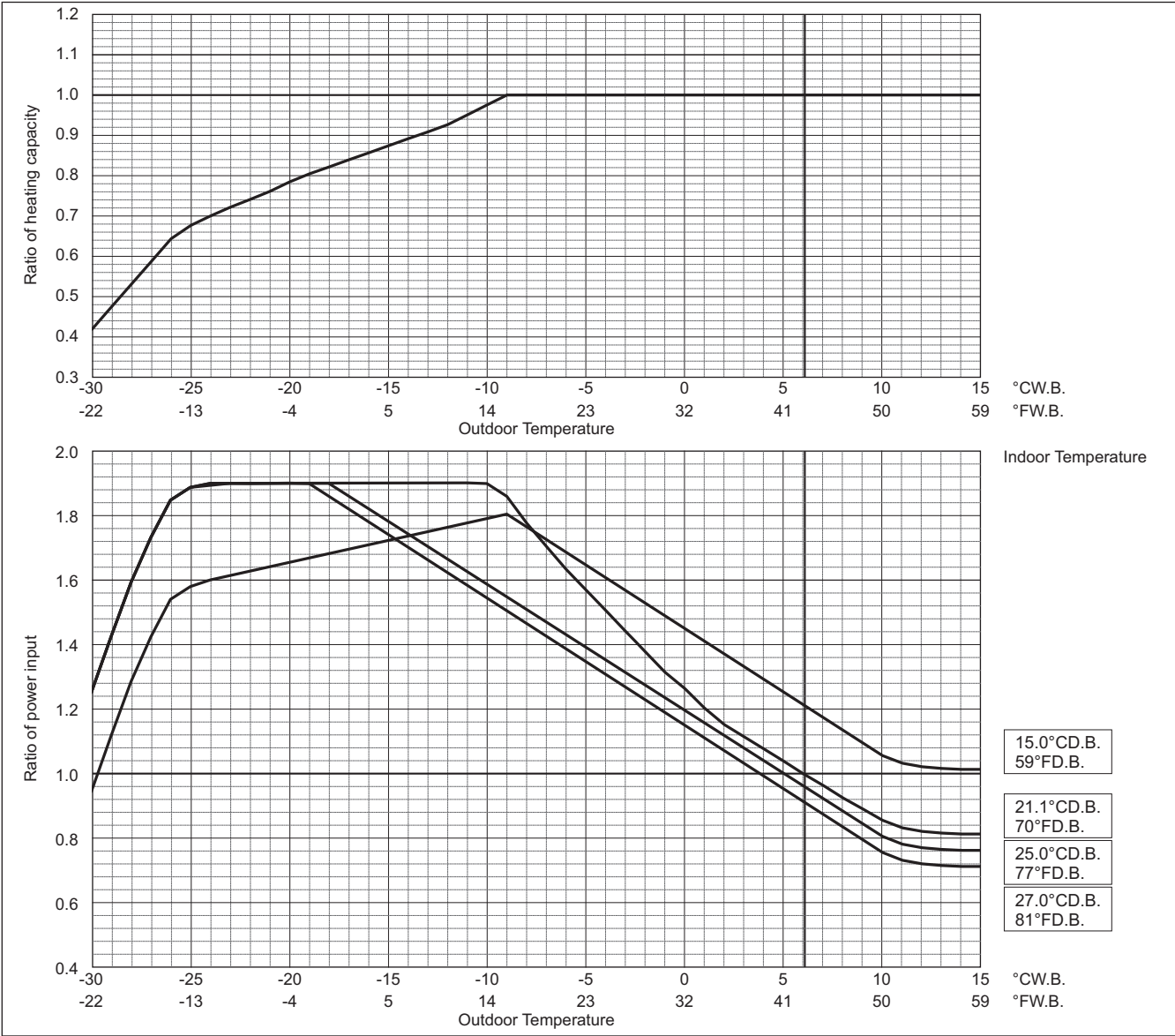
PURY-		EM96TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	108,000	
	kW	31.7	
	Input kW	7.12	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

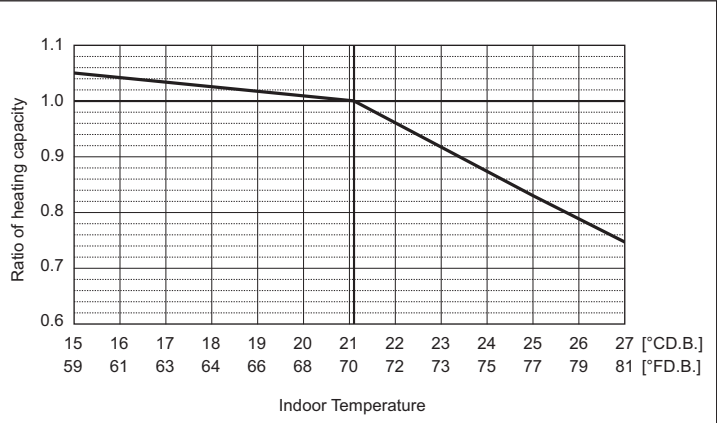
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Heating COP priority mode

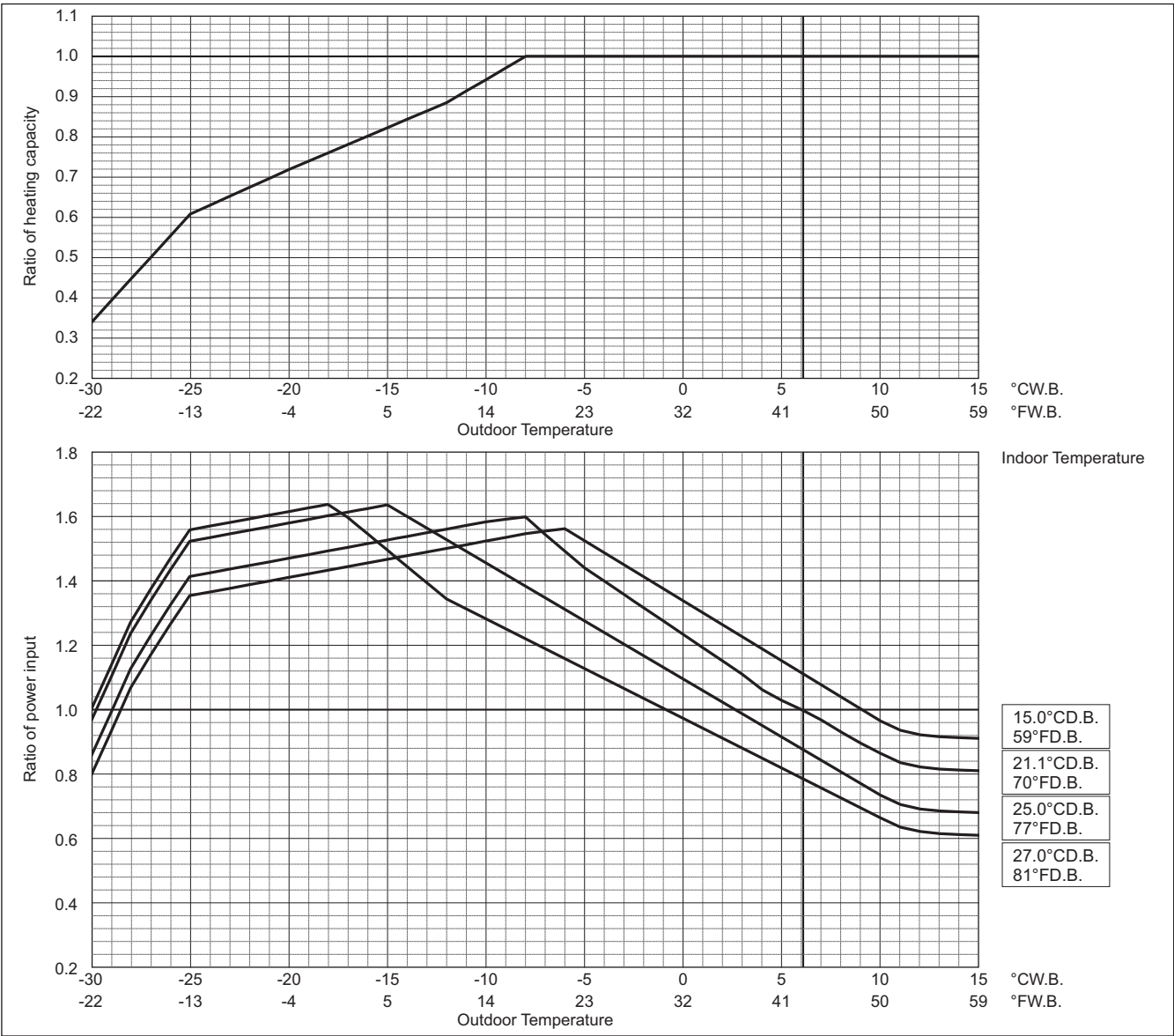
PURY-		EM120TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	135,000	
	kW	39.6	
	Input kW	9.93	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



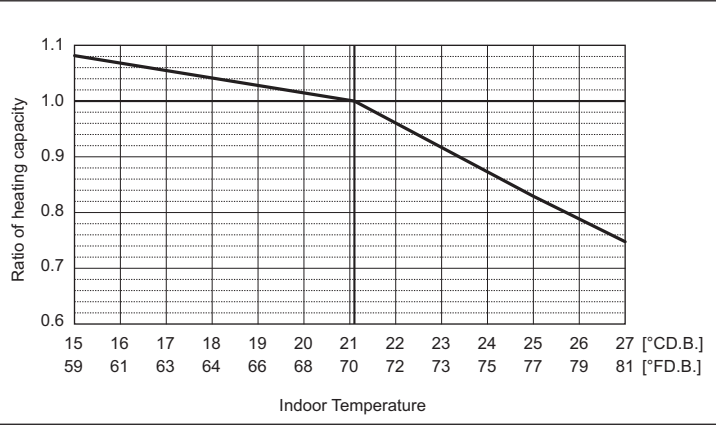
PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM-T(S)XU-A, Y(S)XU-A

Heating COP priority mode

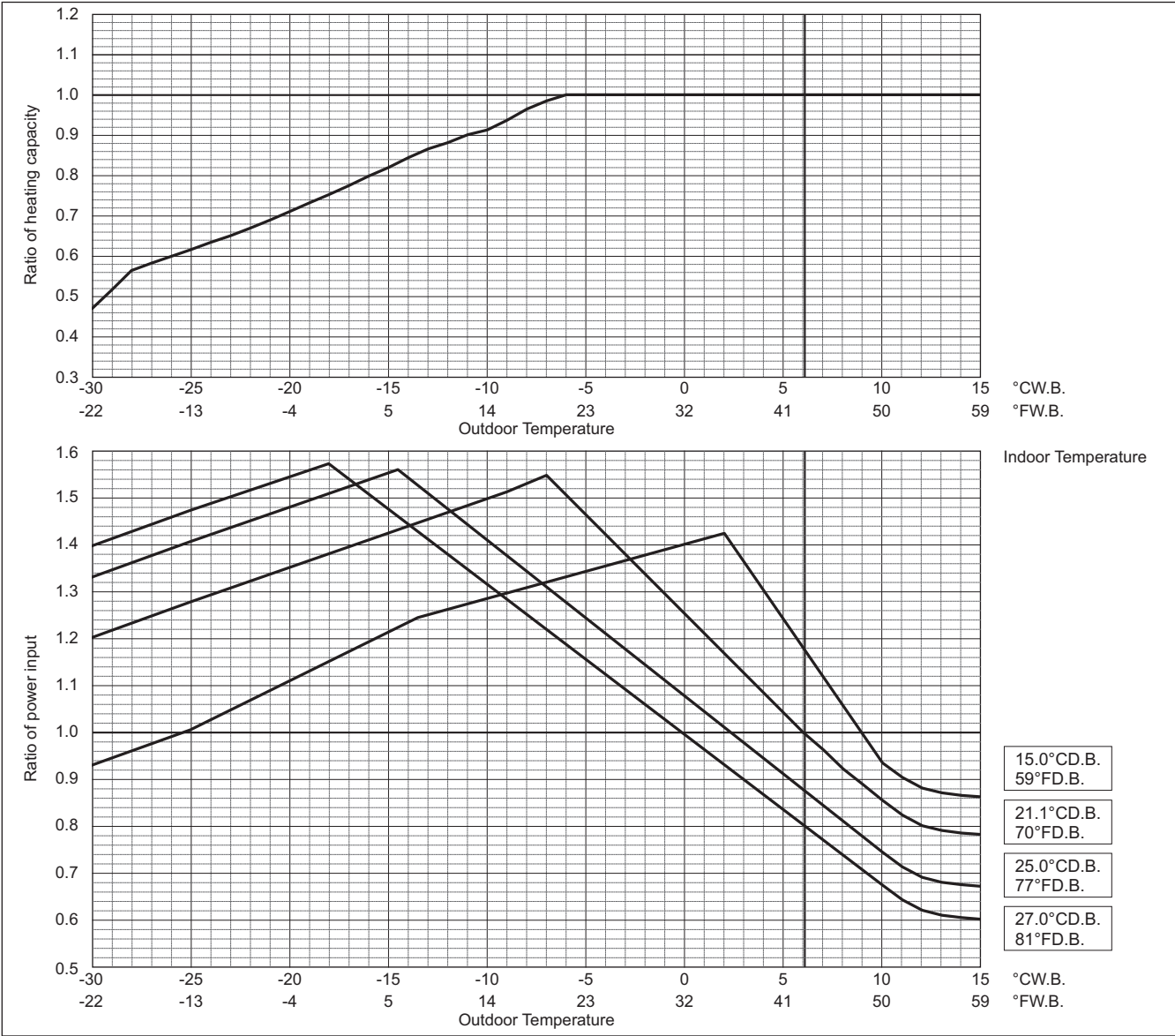
PURY-		EM144TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	160,000	
	kW	46.9	
	Input kW	11.68	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

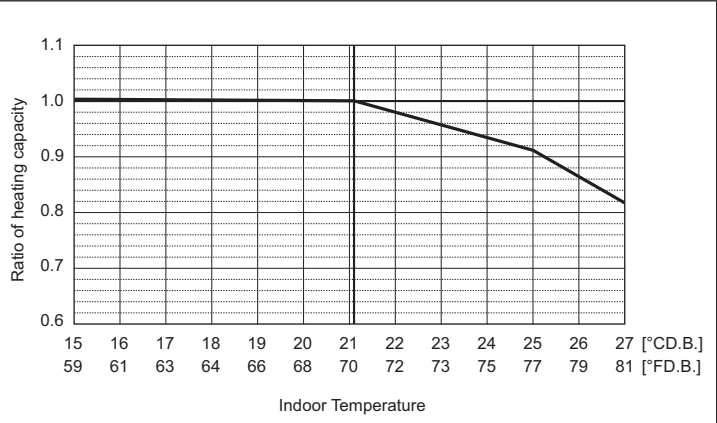
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Heating COP priority mode

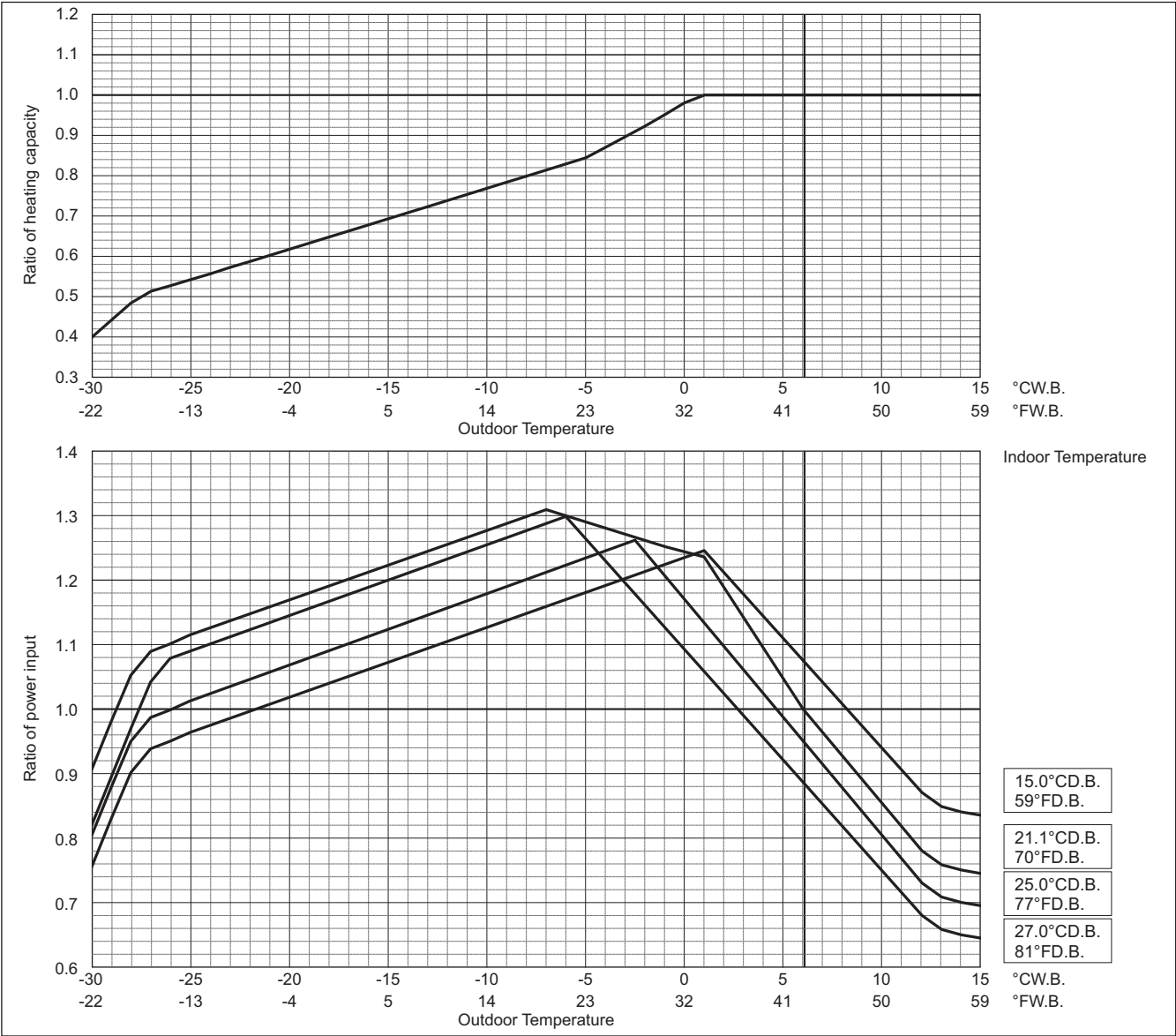
PURY-		EM168TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	188,000	
	kW	55.1	
	Input kW	14.64	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

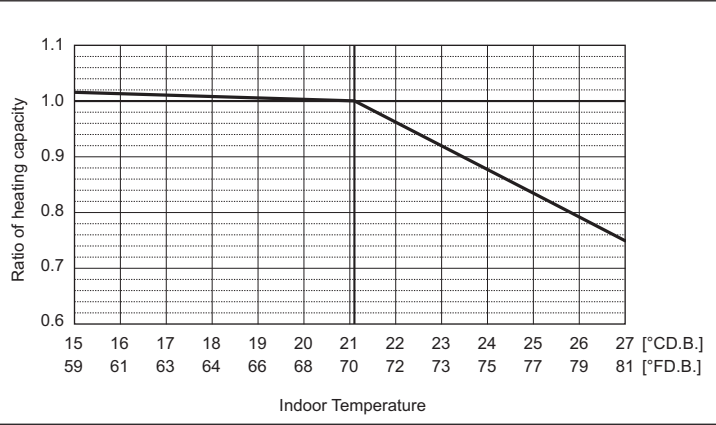


PURY-EM-T(S)XU-A, Y(S)XU-A

Heating COP priority mode

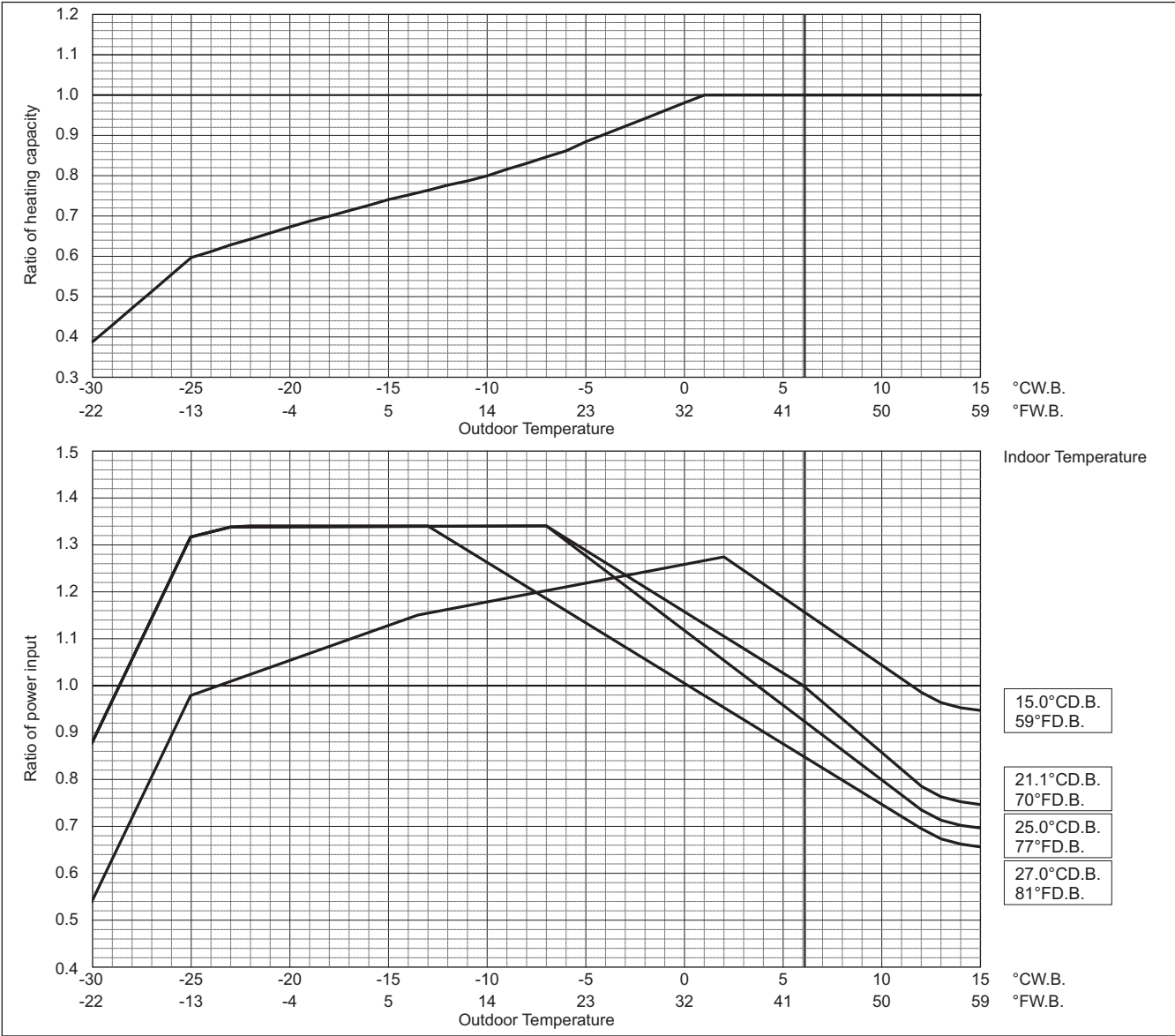
PURY-		EM192TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	192,000	
	kW	56.3	
	Input kW	15.89	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

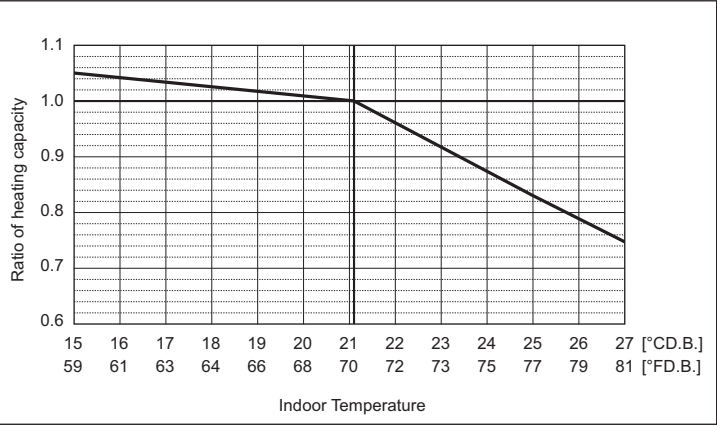
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Heating COP priority mode

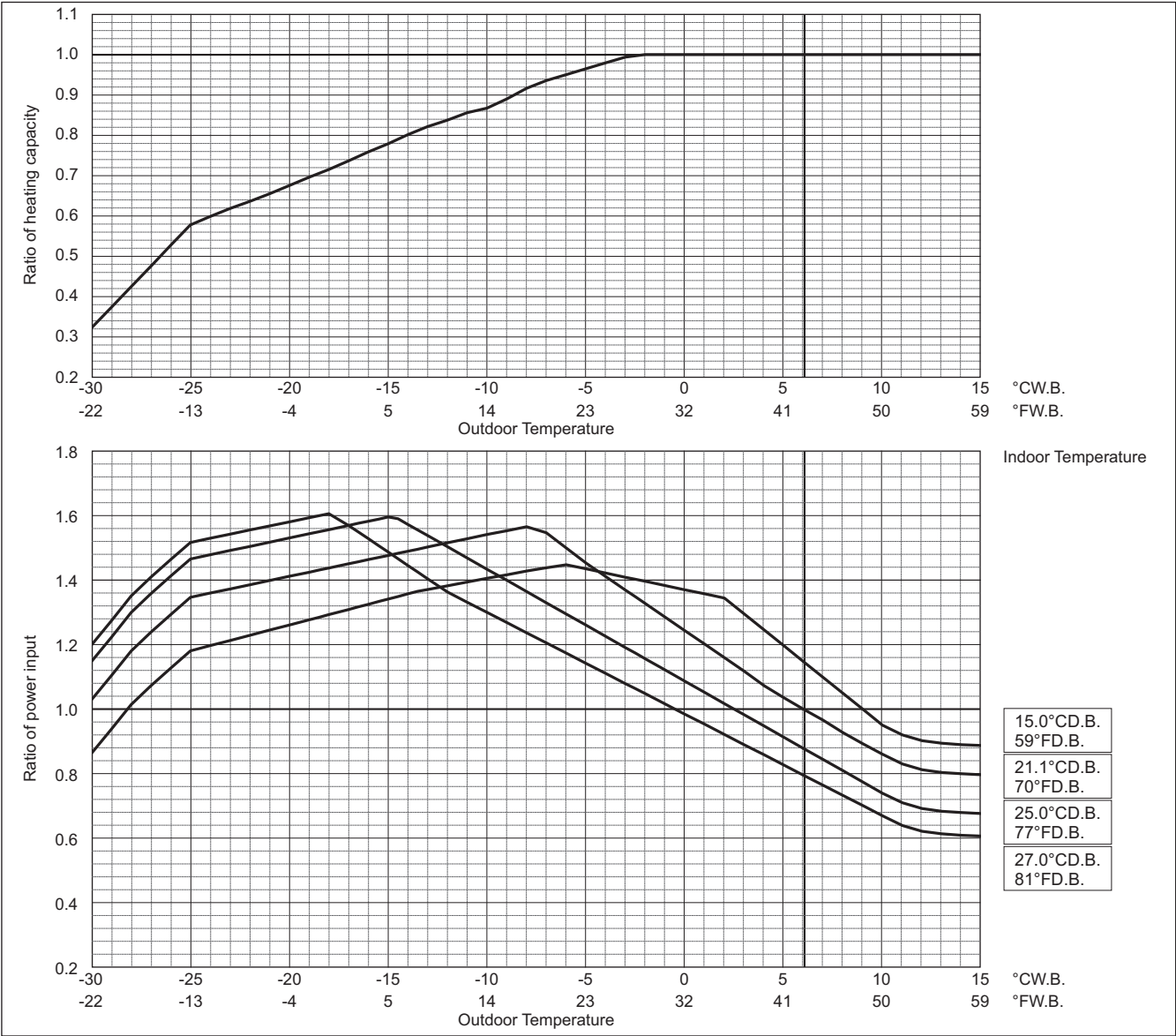
PURY-		EM264TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	295,000	
	kW	86.5	
	Input kW	21.63	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



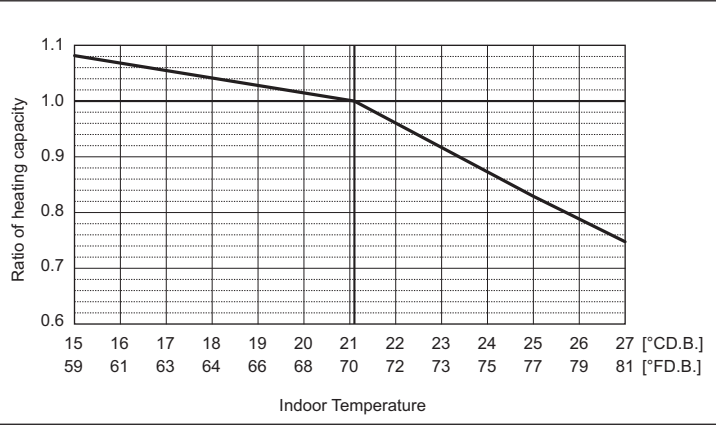
PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM-T(S)XU-A, Y(S)XU-A

Heating COP priority mode

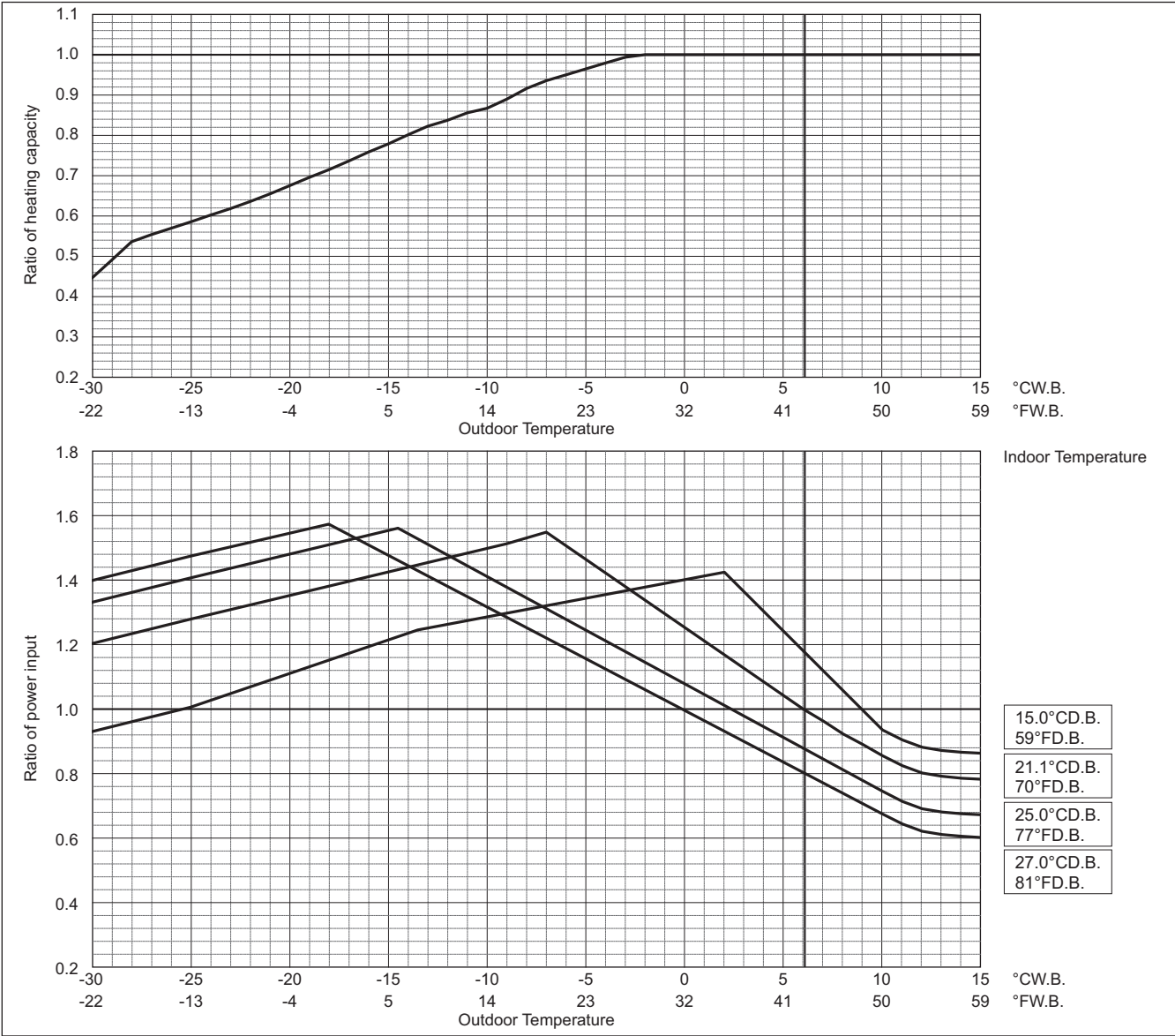
PURY-		EM288TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	323,000	
	kW	94.7	
	Input kW	23.65	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

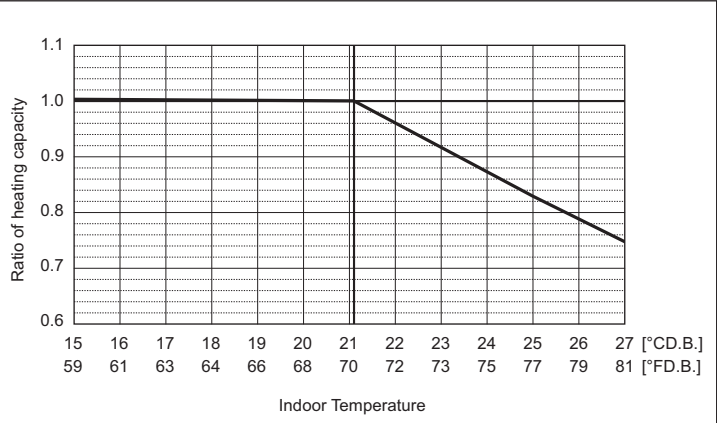
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Heating COP priority mode

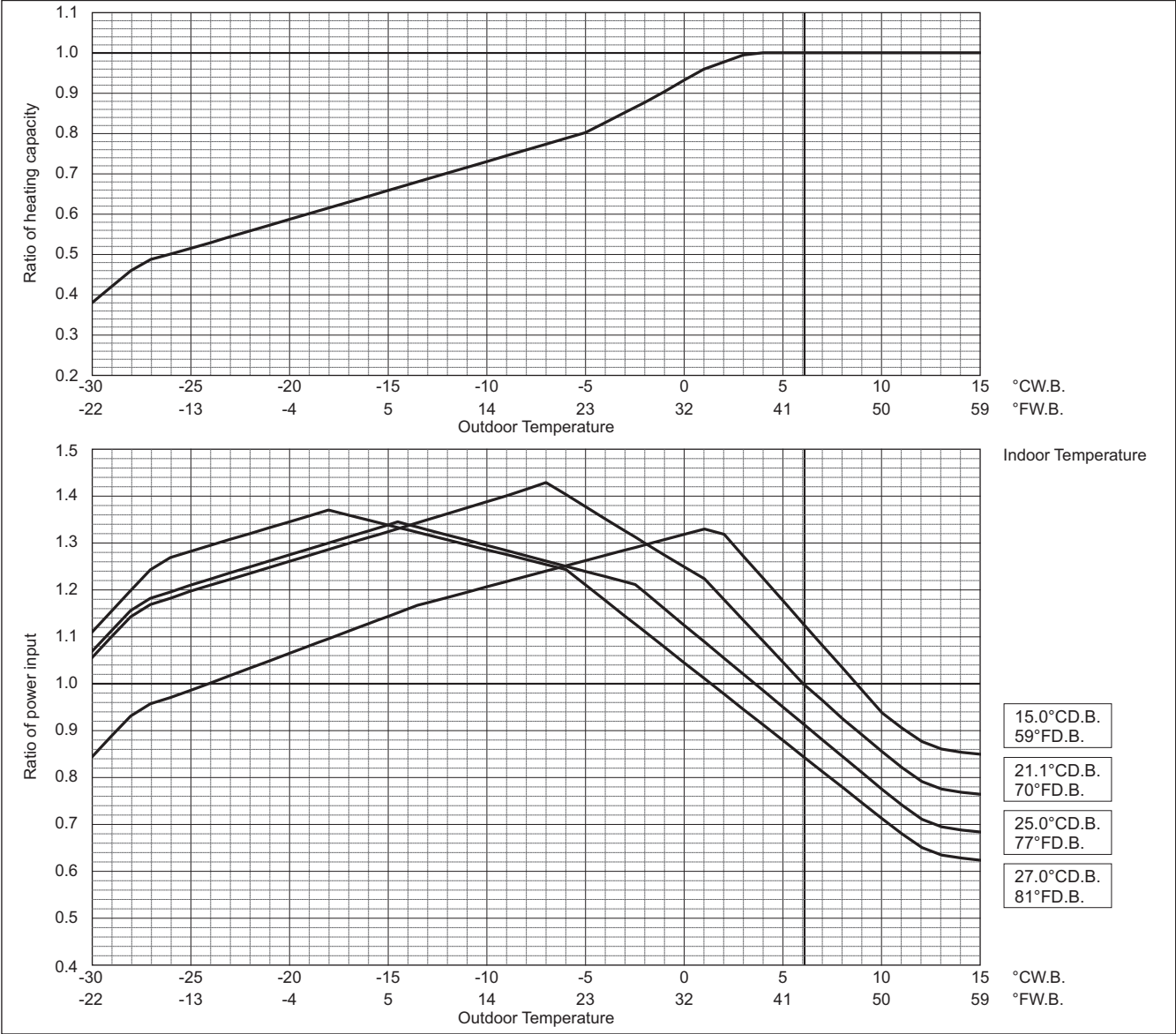
PURY-		EM312TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	350,000	
	kW	102.6	
	Input kW	26.52	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.

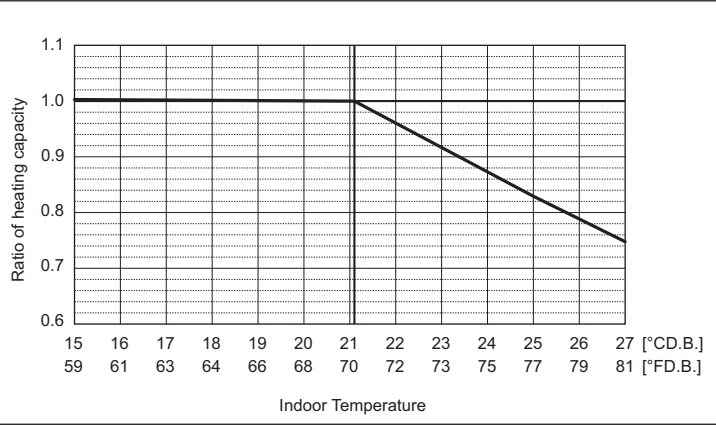


PURY-EM-T(S)XU-A, Y(S)XU-A

Heating COP priority mode

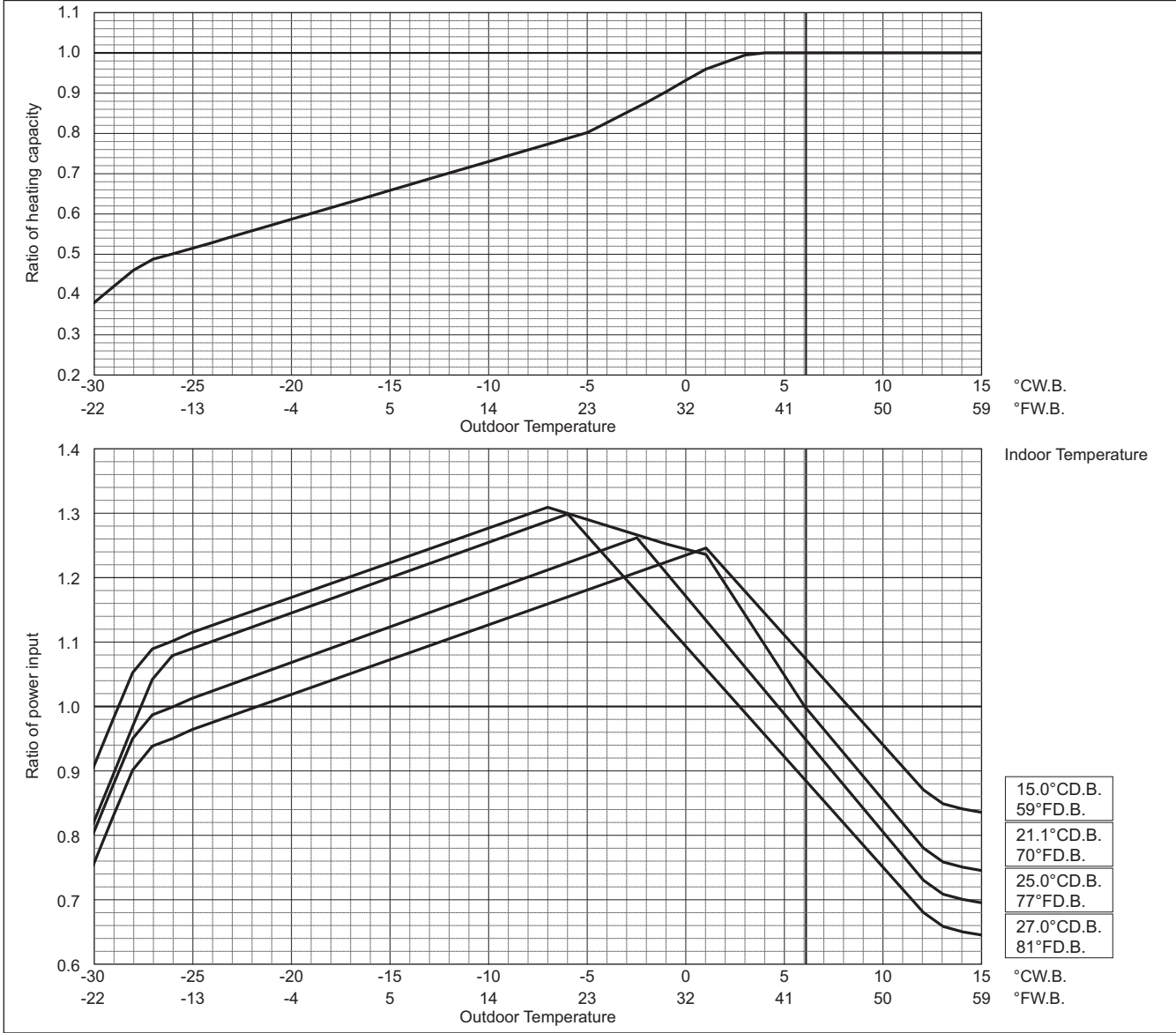
PURY-		EM336TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	378,000	
	kW	110.8	
	Input kW	29.58	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

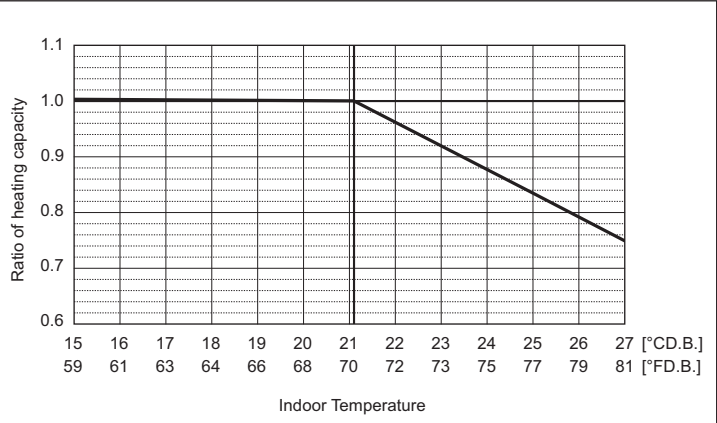
To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



Heating COP priority mode

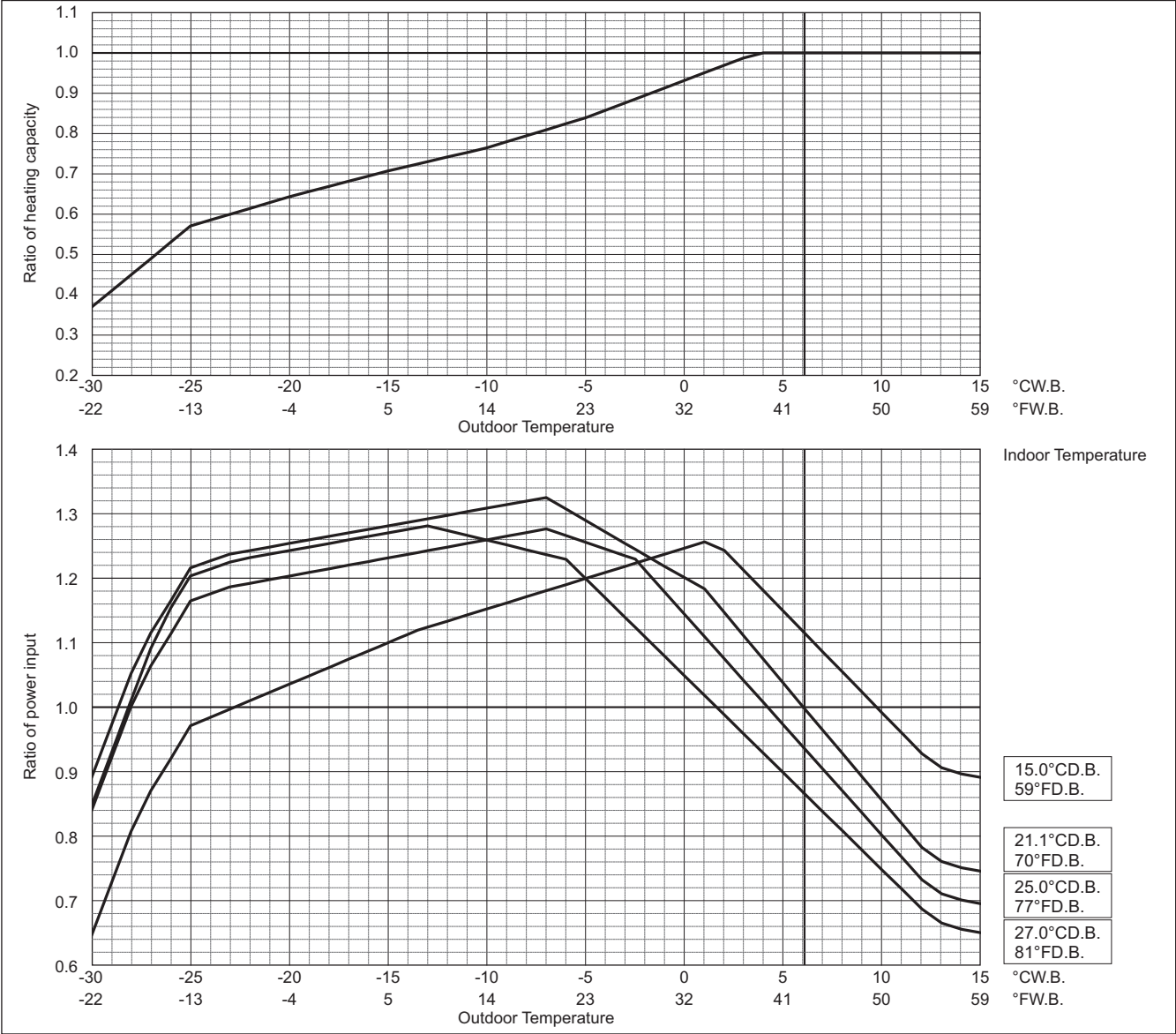
PURY-		EM360TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	380,000	
	kW	111.4	
	Input kW	30.75	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



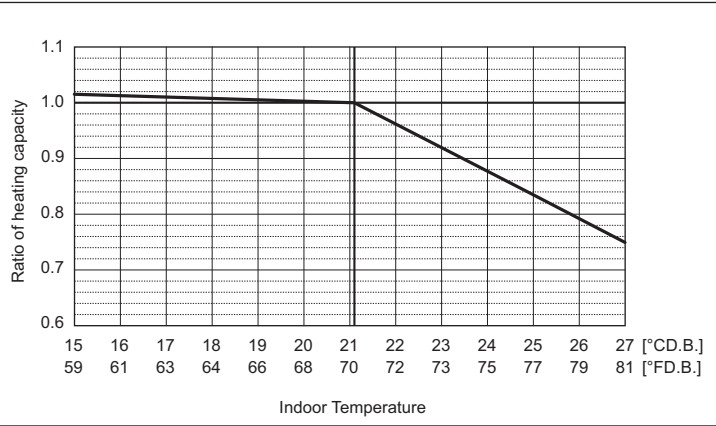
PURY-EM-T(S)XU-A, Y(S)XU-A

PURY-EM-T(S)XU-A, Y(S)XU-A

Heating COP priority mode

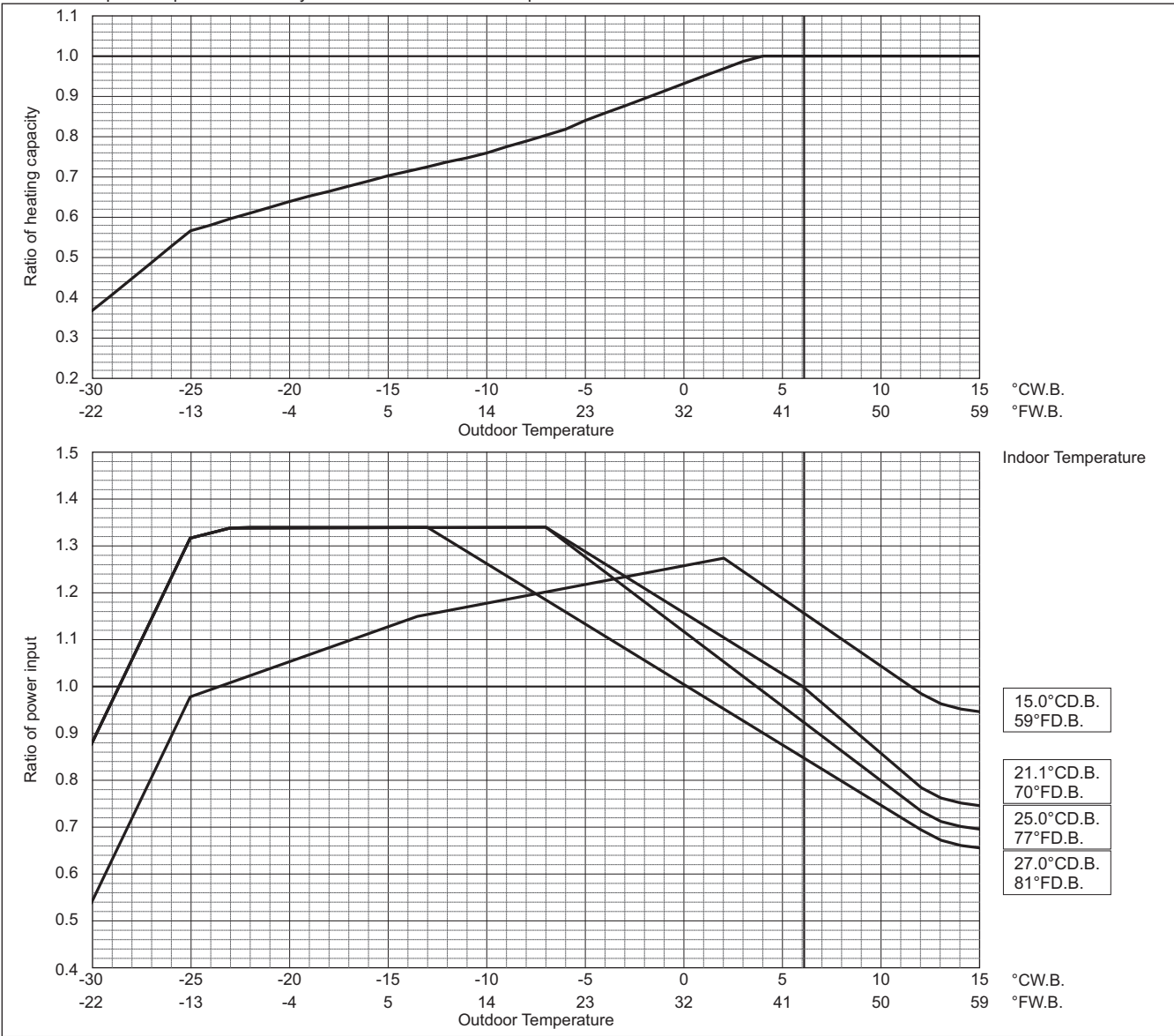
PURY-		EM384TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	384,000	
	kW	112.5	
	Input kW	32.70	

Indoor unit temperature correction
To be used to correct indoor unit capacity only



Outdoor unit temperature correction

To be used to correct outdoor unit only
Outdoor unit capacity is NOT affected by the indoor temperature.
Outdoor unit power input is affected by the indoor and outdoor temperatures. Please consult the sales office for details.



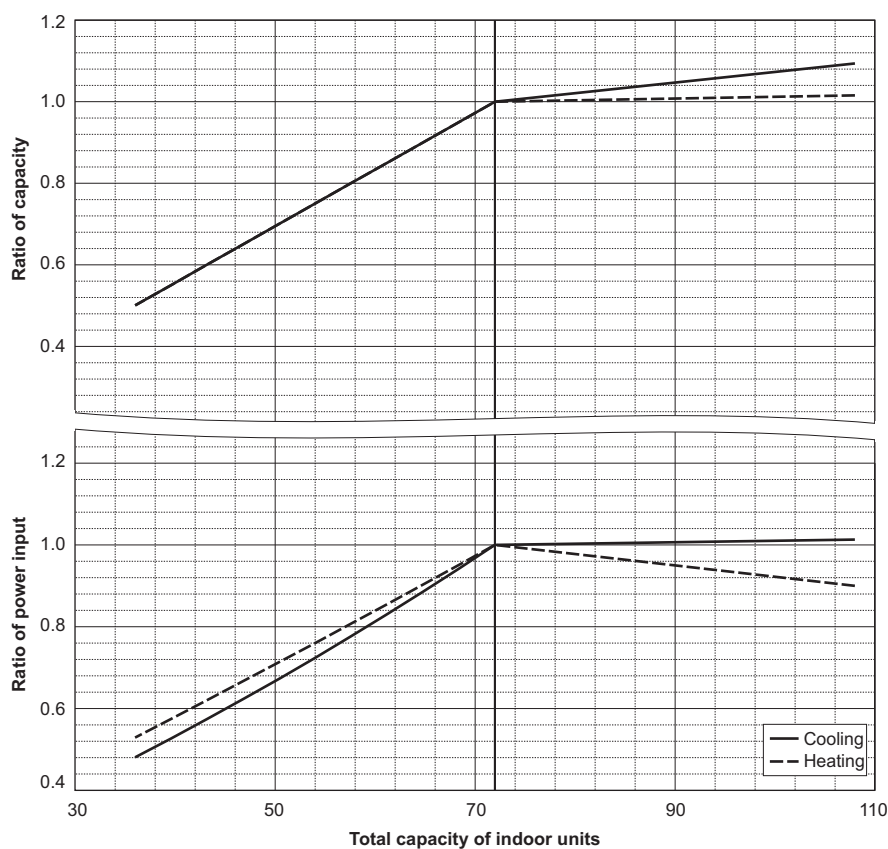
8-3. Correction by total indoor

CITY MULTI system has different capacities and inputs when many combinations of indoor units with different total capacities are connected. Using following tables, the maximum capacity can be found to ensure the system is installed with enough capacity for a particular application. In conditions of extremely low ambient temperature, operating the system with a low total indoor unit capacity may result in unstable performance. To ensure reliable operation, the installation of a snow hood is recommended.

PURY-		EM72TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	72,000	
	kW	21.1	
	Input kW	4.49	

PURY-		EM72TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	80,000	
	kW	23.4	
	Input kW	5.18	

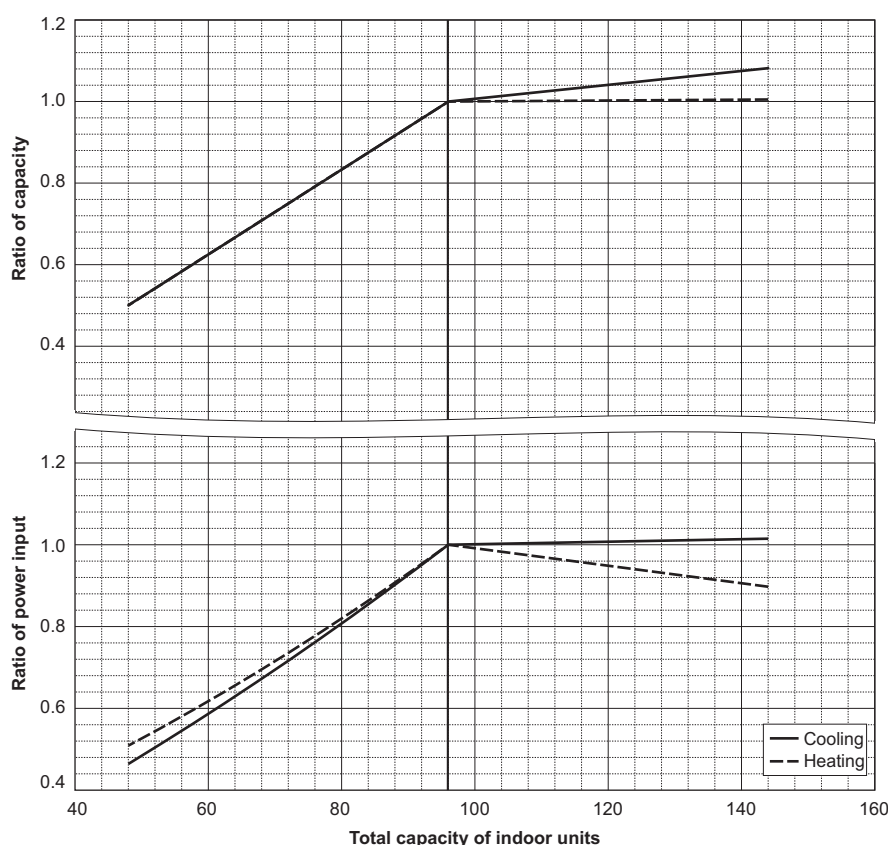
PURY-EM72TXU/YXU-A



PURY-		EM96TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	96,000	
	kW	28.1	
	Input kW	6.33	

PURY-		EM96TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	108,000	
	kW	31.7	
	Input kW	7.12	

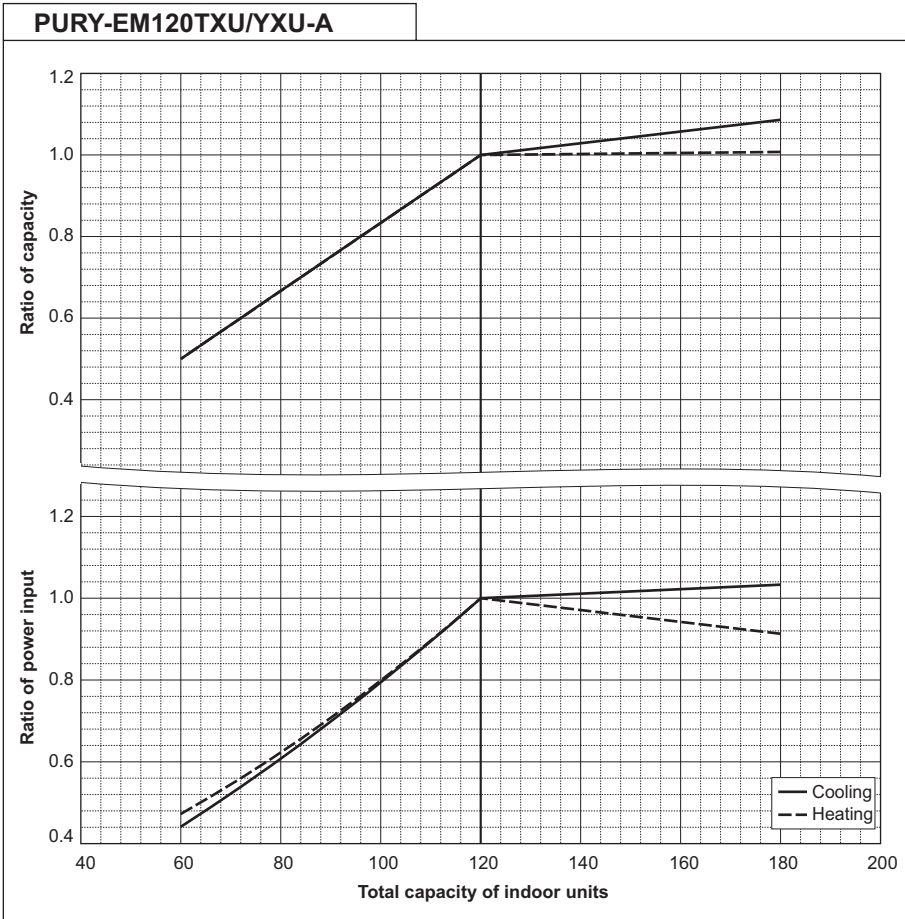
PURY-EM96TXU/YXU-A



PURY-EM-T(S)XU-A, Y(S)XU-A

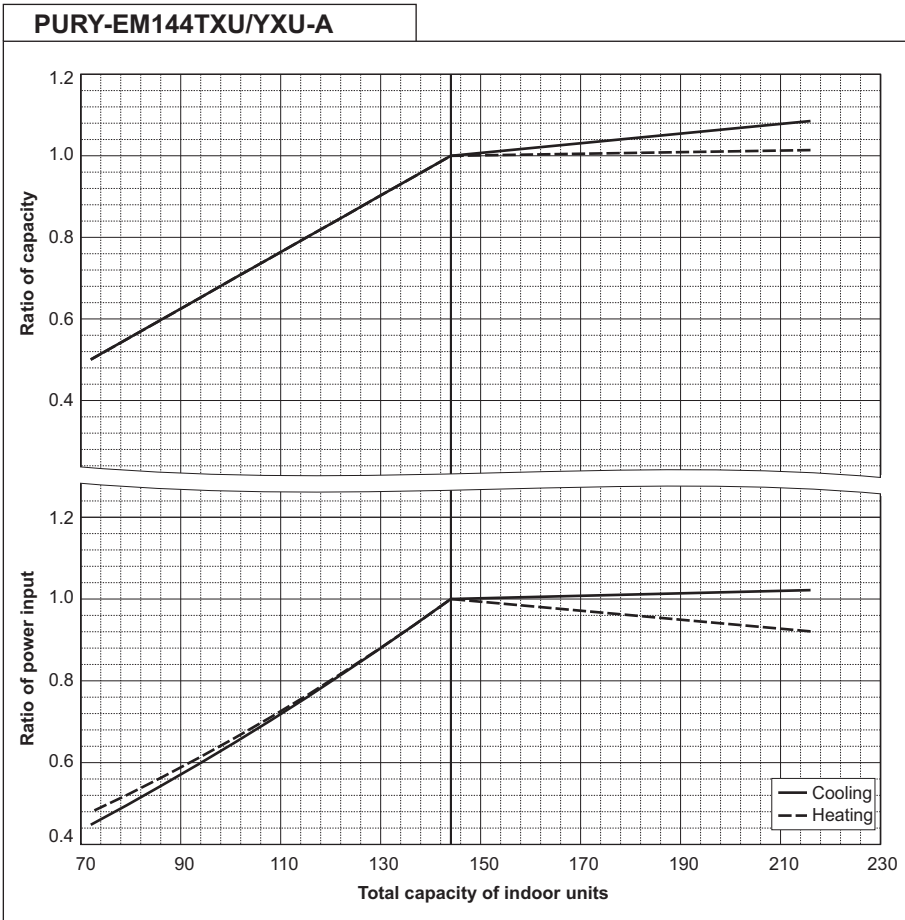
PURY-		EM120TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	120,000	
	kW	35.2	
	Input kW	8.54	

PURY-		EM120TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	135,000	
	kW	39.6	
	Input kW	9.93	



PURY-		EM144TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	144,000	
	kW	42.2	
	Input kW	10.43	

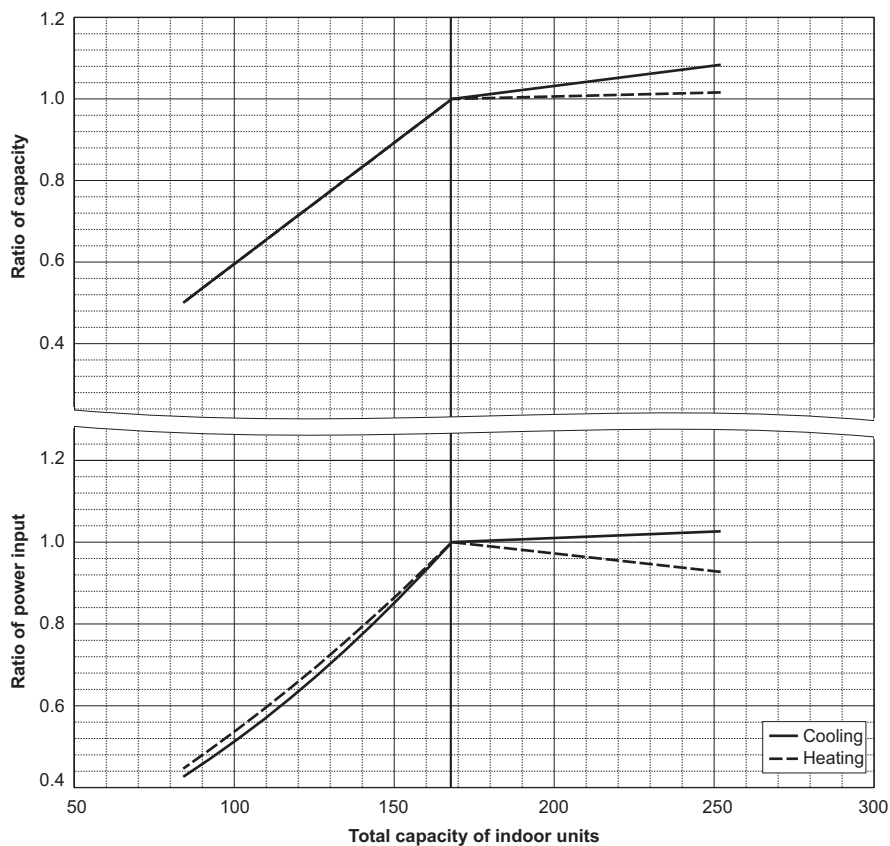
PURY-		EM144TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	160,000	
	kW	46.9	
	Input kW	11.68	



PURY-		EM168TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	168,000	
	kW	49.2	
	Input kW	13.22	

PURY-		EM168TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	188,000	
	kW	55.1	
	Input kW	14.64	

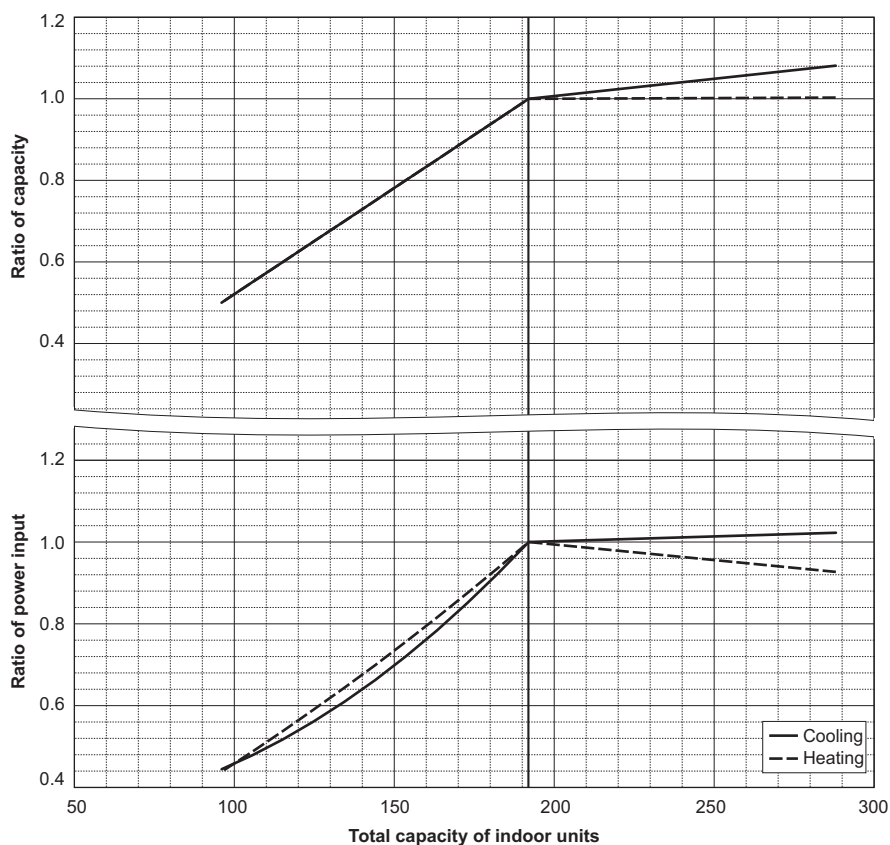
PURY-EM168TXU/YXU-A



PURY-		EM192TXU/YXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	192,000	
	kW	56.3	
	Input kW	16.19	

PURY-		EM192TXU/YXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	192,000	
	kW	56.3	
	Input kW	15.89	

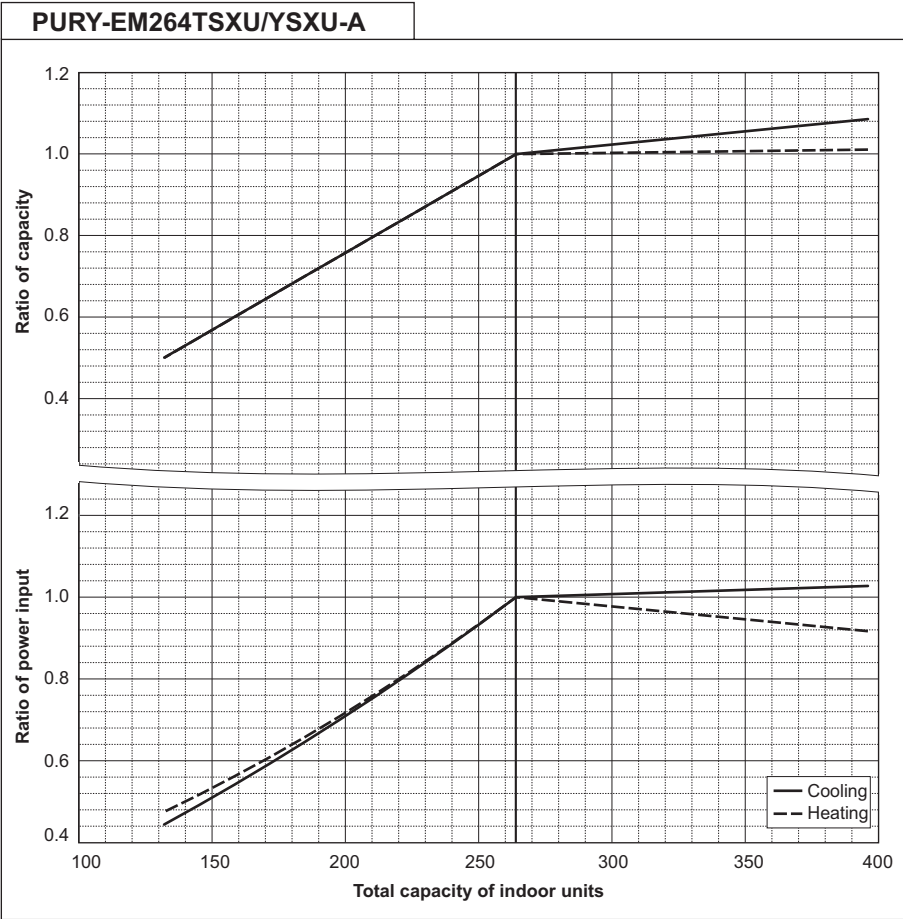
PURY-EM192TXU/YXU-A



PURY-EM-T(S)XU-A, Y(S)XU-A

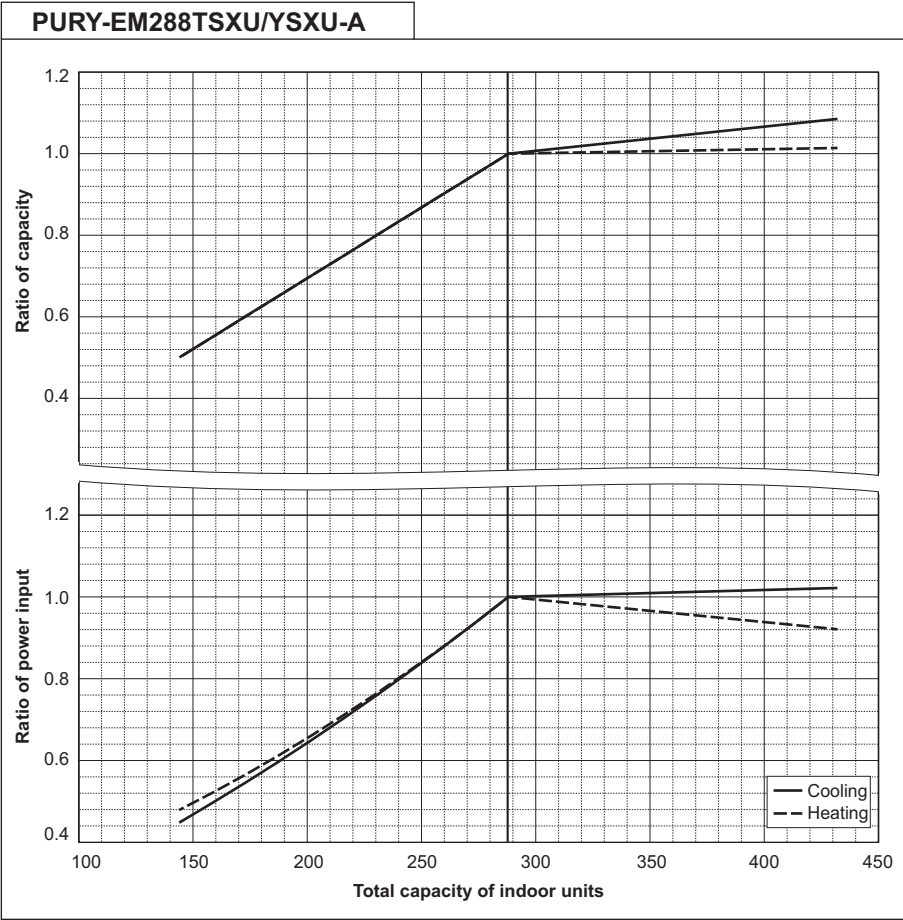
PURY-		EM264TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	264,000	
	kW	77.4	
	Input kW	19.53	

PURY-		EM264TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	295,000	
	kW	86.5	
	Input kW	21.63	



PURY-		EM288TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	288,000	
	kW	84.4	
	Input kW	21.94	

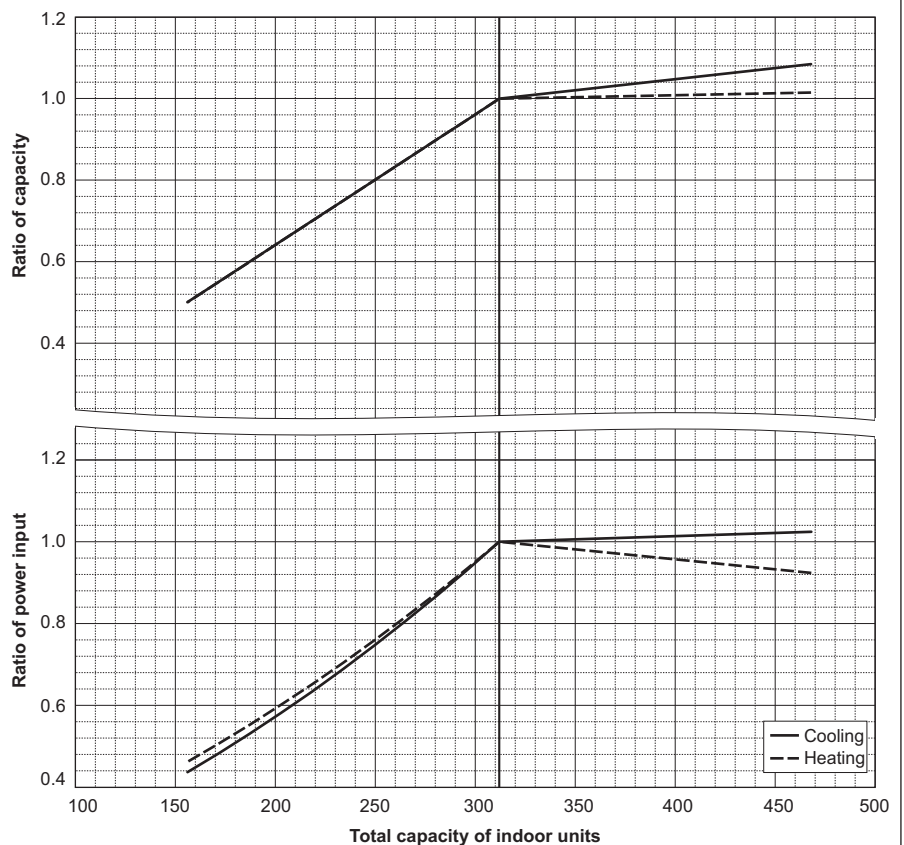
PURY-		EM288TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	323,000	
	kW	94.7	
	Input kW	23.65	



PURY-		EM312TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	312,000	
	kW	91.4	
	Input kW	25.19	

PURY-		EM312TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	350,000	
	kW	102.6	
	Input kW	26.52	

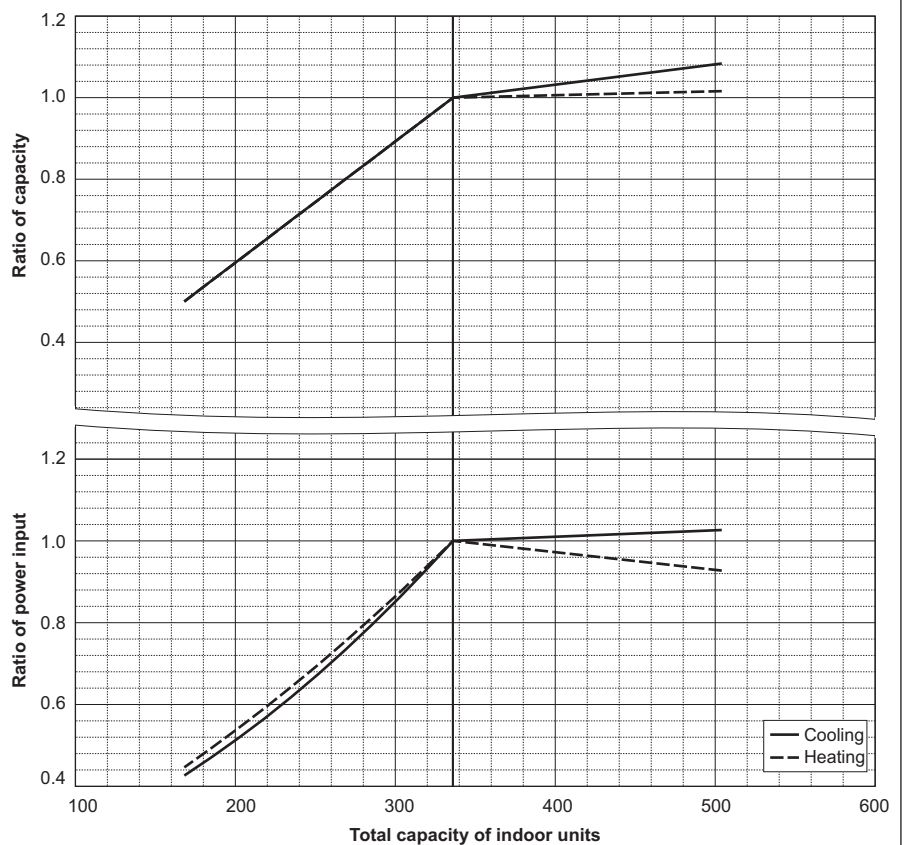
PURY-EM312TSXU/YSXU-A



PURY-		EM336TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	336,000	
	kW	98.5	
	Input kW	28.82	

PURY-		EM336TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	378,000	
	kW	110.8	
	Input kW	29.58	

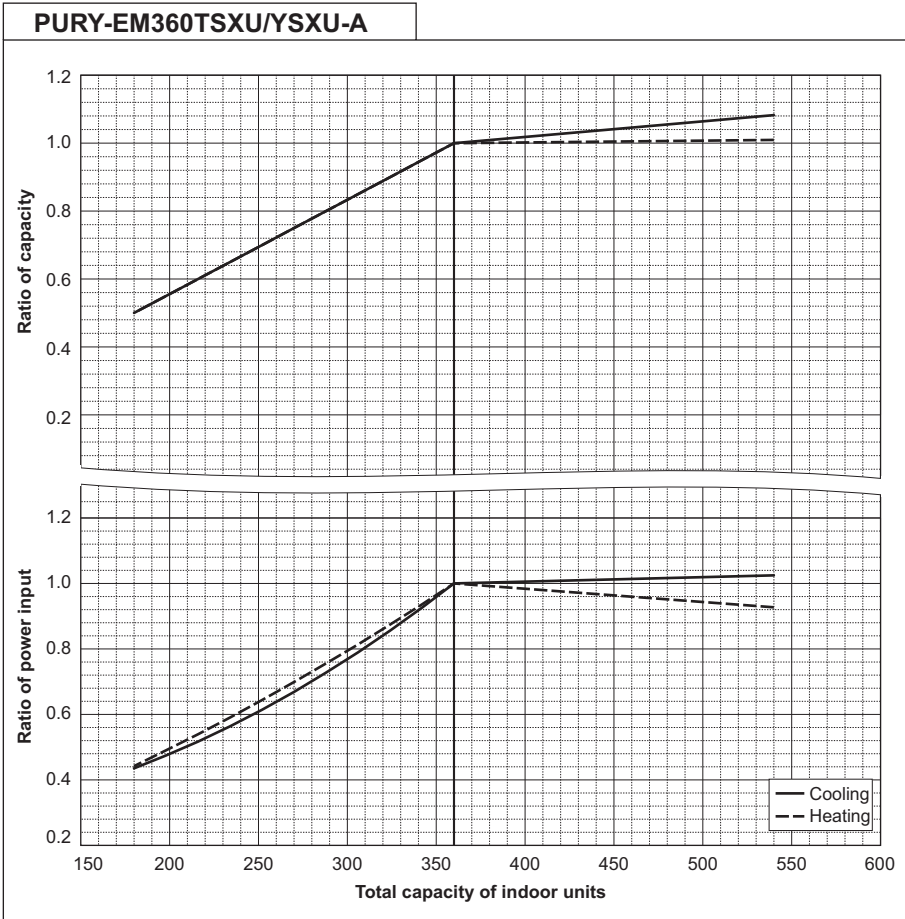
PURY-EM336TSXU/YSXU-A



PURY-EM-T(S)XU-A, Y(S)XU-A

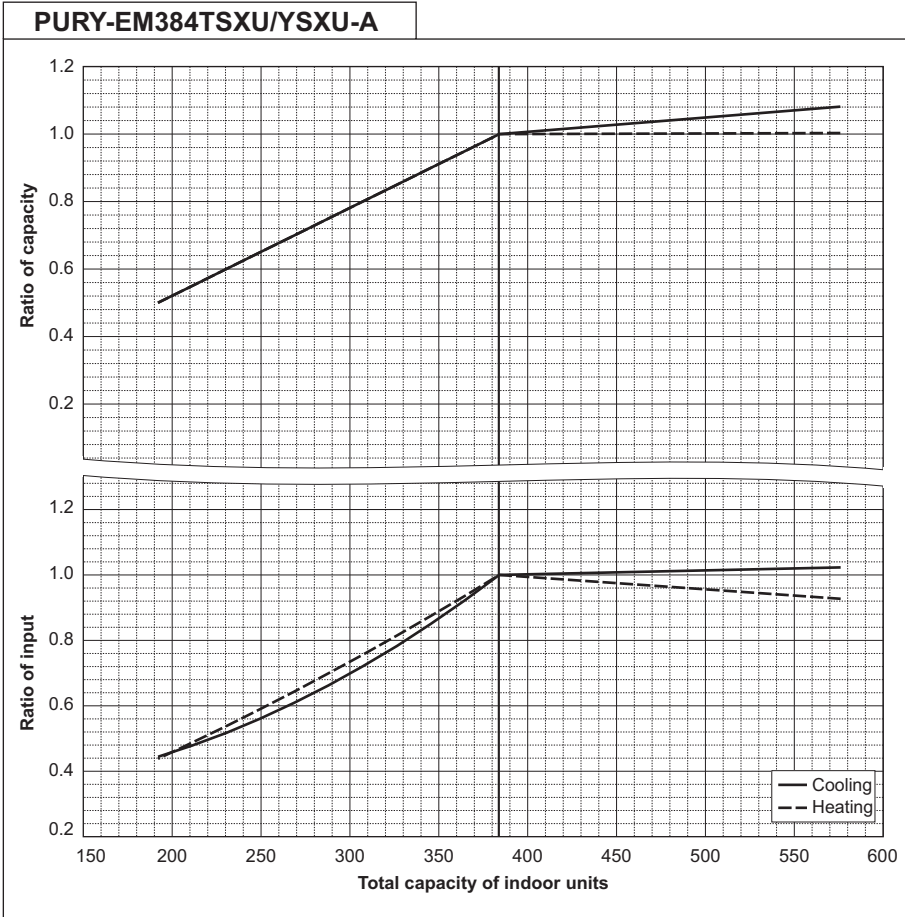
PURY-		EM360TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	360,000	
	kW	105.5	
	Input kW	32.21	

PURY-		EM360TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	380,000	
	kW	111.4	
	Input kW	30.75	



PURY-		EM384TSXU/YSXU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	384,000	
	kW	112.5	
	Input kW	35.66	

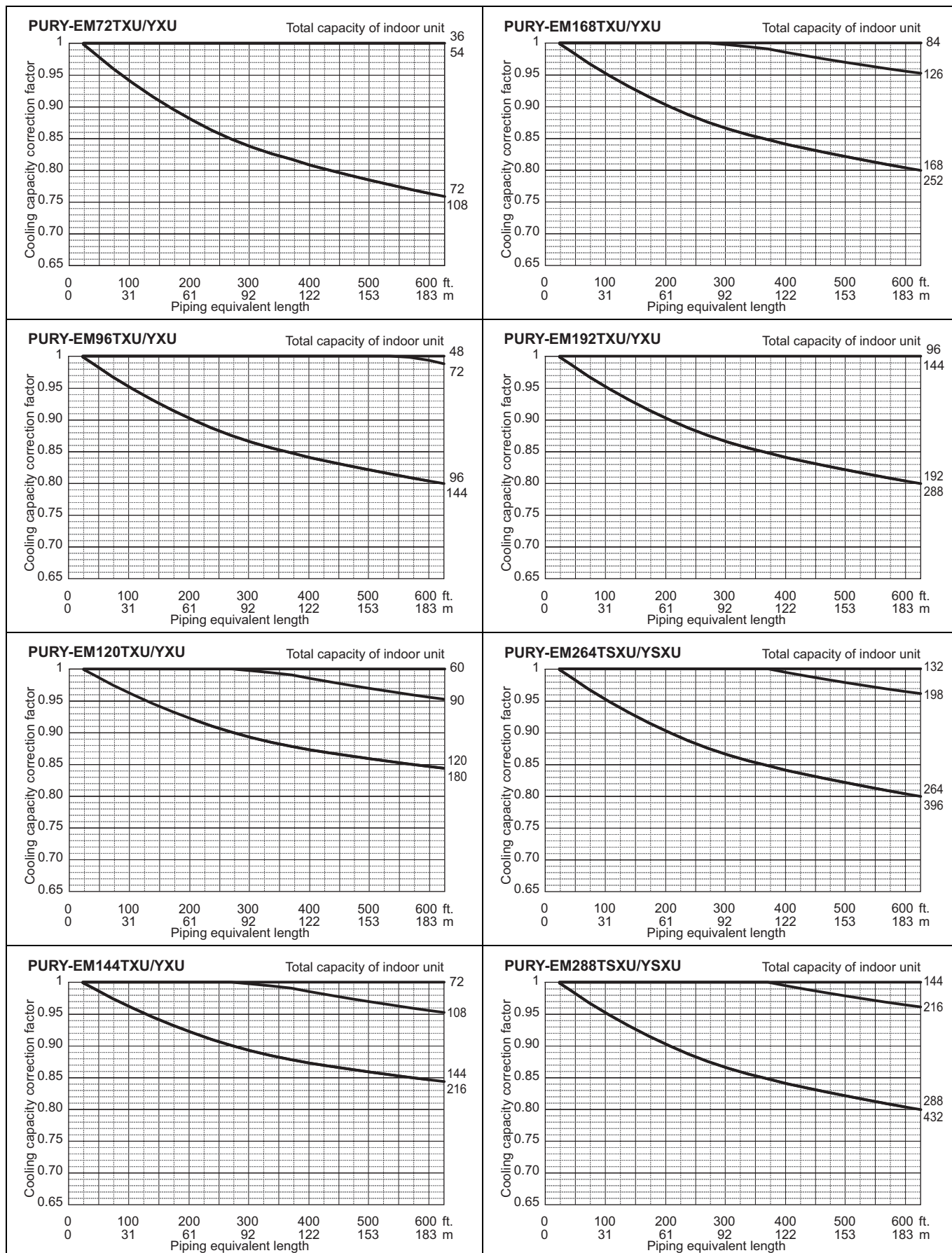
PURY-		EM384TSXU/YSXU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	384,000	
	kW	112.5	
	Input kW	32.70	



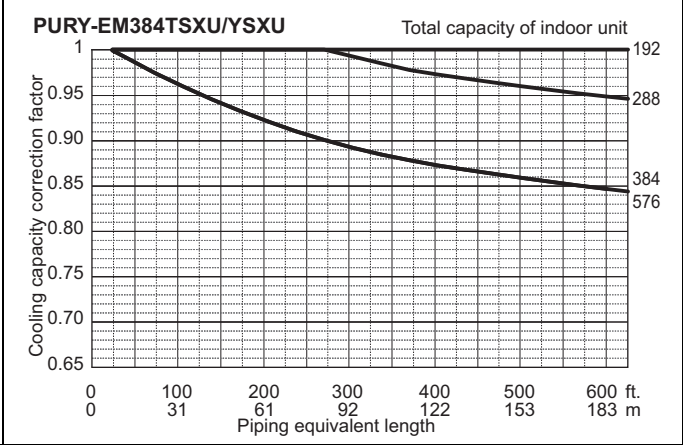
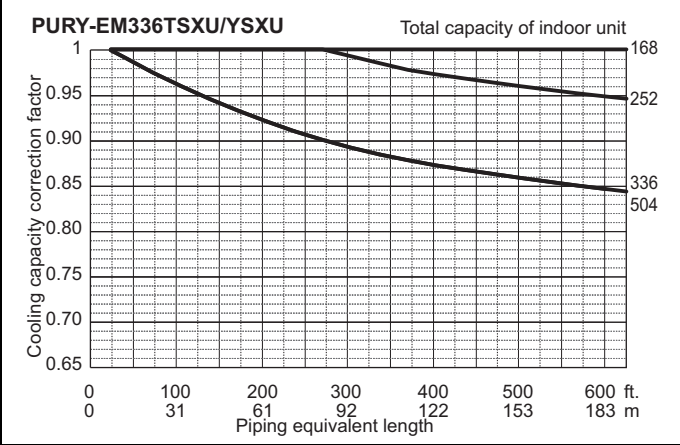
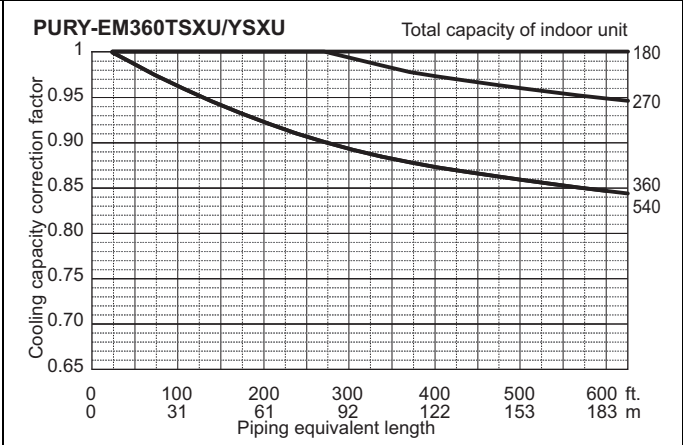
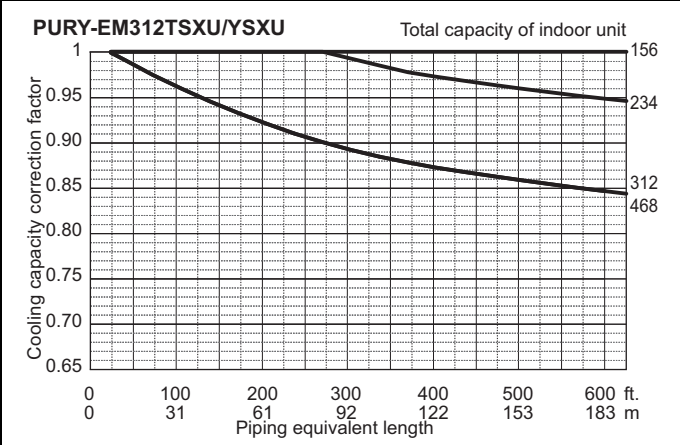
8-4. Correction by refrigerant piping length

CITY MULTI system can extend the piping flexibly within its limitation for the actual situation. However, a decrease of cooling/heating capacity could happen correspondently. Using following correction factor according to the equivalent length of the piping shown at 8-4-1 and 8-4-2, the capacity can be observed. 8-4-3 shows how to obtain the equivalent length of piping.

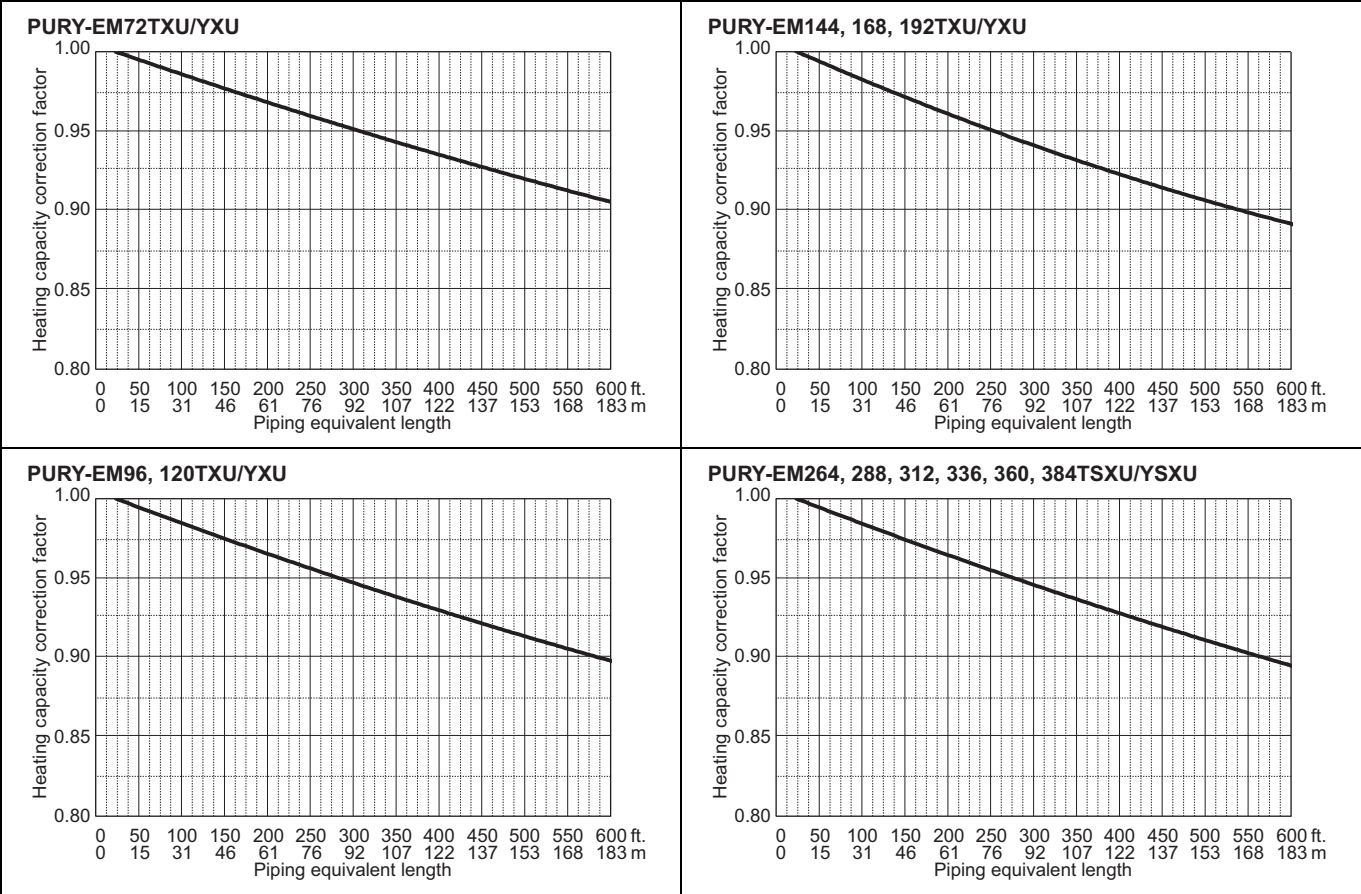
8-4-1. Cooling capacity correction



PURY-EM-T(S)XU-A, Y(S)XU-A



8-4-2. Heating capacity correction



PURY-EM-T(S)XU-A, Y(S)XU-A

8-4-3. How to obtain the equivalent piping length**1. PURY-EM72TXU/YXU**

Equivalent length = (Actual piping length to the farthest indoor unit) + (1.15 x number of bent on the piping) [ft.]

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.35 x number of bent on the piping) [m]

2. PURY-EM96TXU/YXU

Equivalent length = (Actual piping length to the farthest indoor unit) + (1.38 x number of bent on the piping) [ft.]

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.42 x number of bent on the piping) [m]

3. PURY-EM120, 144, 168, 192TXU/YXU

Equivalent length = (Actual piping length to the farthest indoor unit) + (1.65 x number of bent on the piping) [ft.]

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.50 x number of bent on the piping) [m]

4. PURY-EM264, 288TSXU/YSXU

Equivalent length = (Actual piping length to the farthest indoor unit) + (2.30 x number of bent on the piping) [ft.]

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.70 x number of bent on the piping) [m]

5. PURY-EM312, 336, 360, 384TSXU/YSXU

Equivalent length = (Actual piping length to the farthest indoor unit) + (2.63 x number of bent on the piping) [ft.]

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.80 x number of bent on the piping) [m]

8-5. Correction at frost and defrost

Due to frost at the outdoor heat exchanger and the automatic defrost operation, the heating capacity of the outdoor unit can be calculated by multiplying the correction factor shown in the table below.

Table of correction factor at frost and defrost

Outdoor inlet air temp. °CWB	6	4	2	1	0	-2	-4	-6	-8	-10	-20	-30
Outdoor inlet air temp. °FWB	43	39	36	34	32	28	25	21	18	14	-4	-22
PURY-EM72T(Y)XU-A	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM96T(Y)XU-A	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM120T(Y)XU-A	1.00	0.90	0.86	0.83	0.84	0.79	0.83	0.88	0.88	0.90	0.90	0.90
PURY-EM144T(Y)XU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM168T(Y)XU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM192T(Y)XU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM264T(Y)SXU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM288T(Y)SXU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM312T(Y)SXU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM336T(Y)SXU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM360T(Y)SXU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90
PURY-EM384T(Y)SXU-A	1.00	0.90	0.81	0.76	0.78	0.75	0.82	0.88	0.88	0.90	0.90	0.90

Note

- ♦ The high humidity condition (e.g., a foggy atmosphere) which causes frost forming on the heat exchanger will worsen the heating performance of the unit.
- ♦ The snow blowing to the heat exchanger will worsen the heating performance of the unit. Install a snow hood as a preventive measure.
- ♦ The correction factors in the table above are used for a full-load and above.
Use the formula below to calculate the correction factor to use for a partial load.

Correction factor for partial load: K

Correction factor for a full load and above: K_0

Partial load factor: A

$$K = 1 - (1 - K_0) \times A$$

8-6. Correction at evaporation-temperature (ET) control

When the target evaporation temperature is changed, the capacity or the power input can be calculated by multiplying the correction factor shown in the table below.

ET *1		°C	6	9	14
		°F	43	48	57
Correction factor	Capacity		0.92	0.75	0.43
	Power Input		0.87	0.63	0.32

*1 The evaporation temperature in operation may be different from the preset target evaporation temperature because it depends on such factors as the unit protection control.
The capacity and power input could also fluctuate.

*2 Use the table above which indicates the unit properties as a reference.

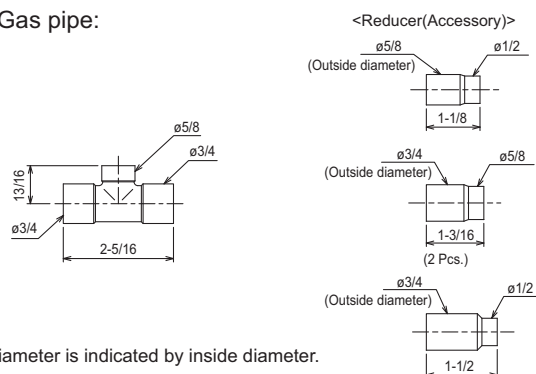
PURY-EM-T(S)XU-A, Y(S)XU-A

9-1. JOINT and REDUCER

CITY MULTI units can be easily connected by using Joint sets and Reducer sets provided by Mitsubishi Electric. Refer to section "Piping Design" or the Installation Manual that comes with the Joint set or Reducer set for how to install the Joint set or Reducer set.

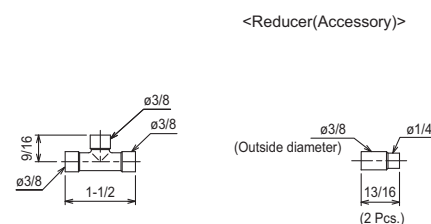
CMY-Y102SS-G2

For Gas pipe:



*Pipe diameter is indicated by inside diameter.

For Liquid pipe:

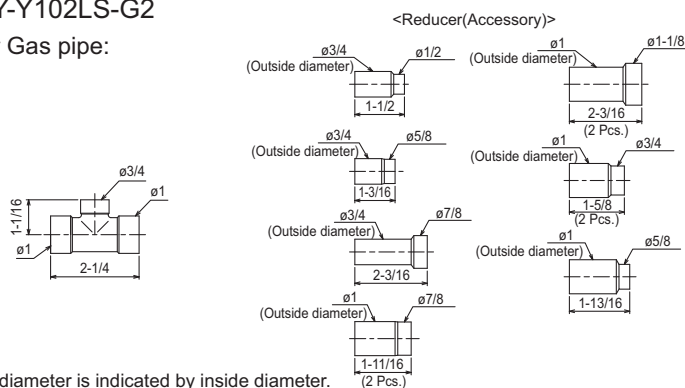


in.

PUR-Y-EM-T(S)XU-A, Y(S)XU-A

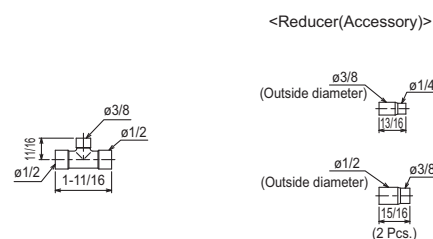
CMY-Y102LS-G2

For Gas pipe:



*Pipe diameter is indicated by inside diameter.

For Liquid pipe:

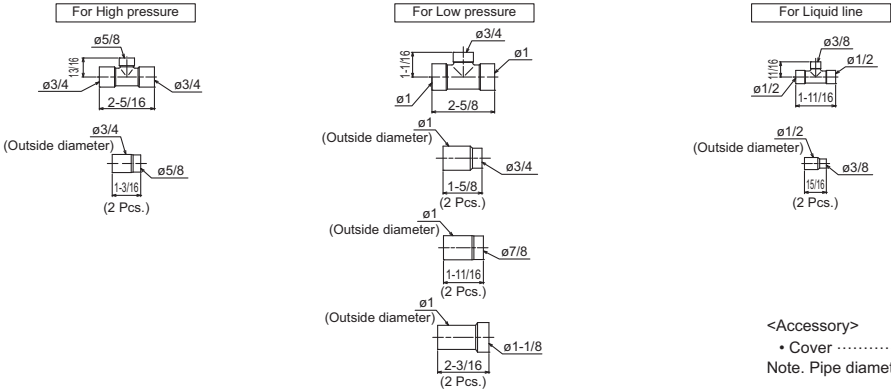


in.

PUR-EM-T(S)XU-A, Y(S)XU-A

CMY-R201S-G

in.



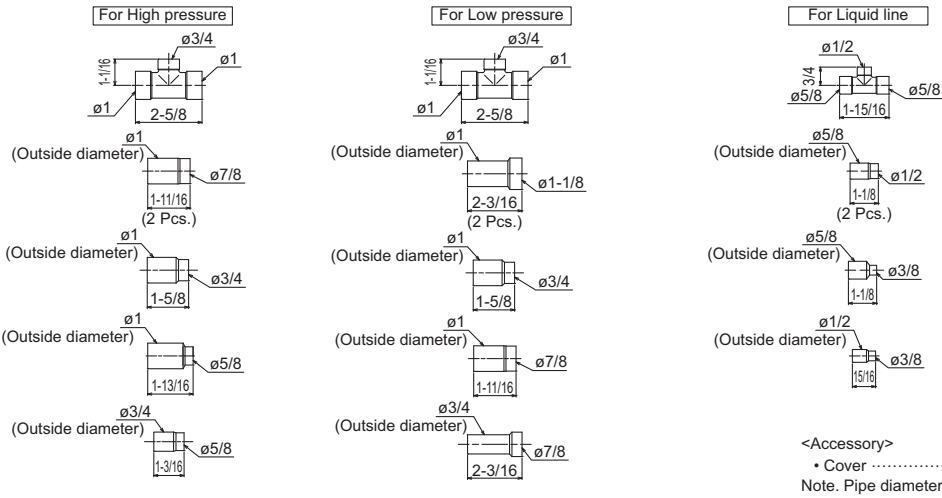
<Accessory>

• Cover3 Pcs.

Note. Pipe diameter is indicated by inside diameter.

CMY-R202S-G

in.



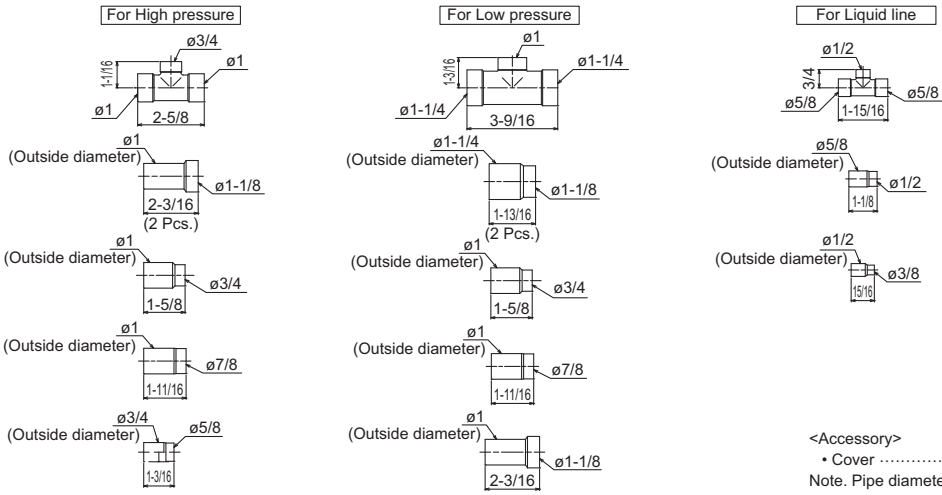
<Accessory>

• Cover3 Pcs.

Note. Pipe diameter is indicated by inside diameter.

CMY-R203S-G

in.

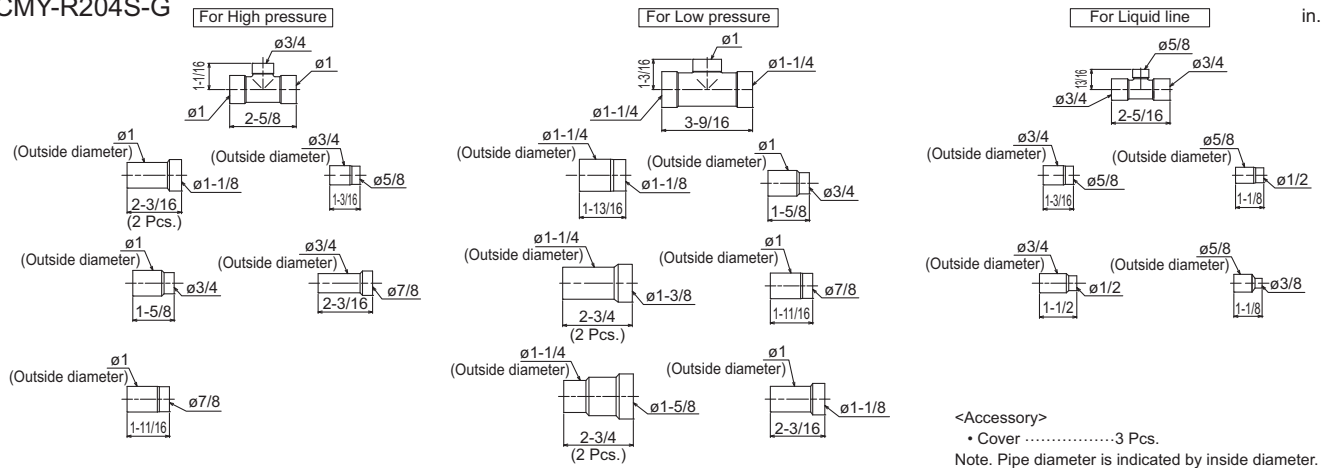


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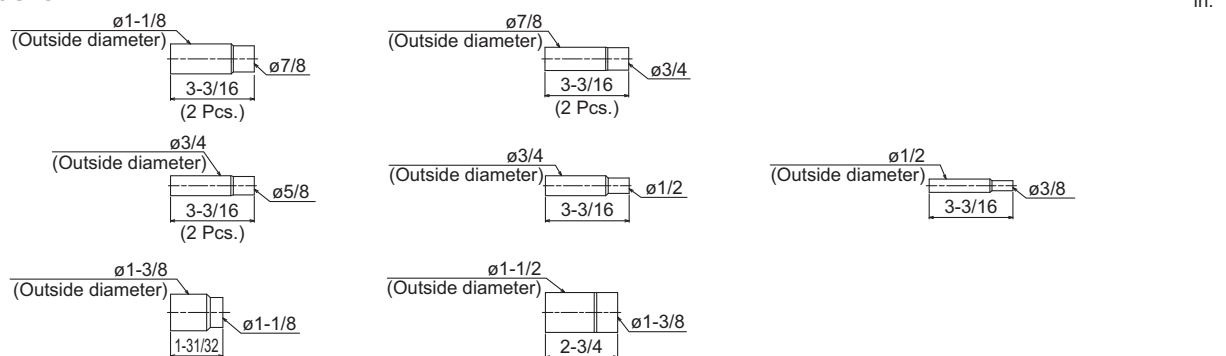
• Cover3 Pcs.

Note. Pipe diameter is indicated by inside diameter.

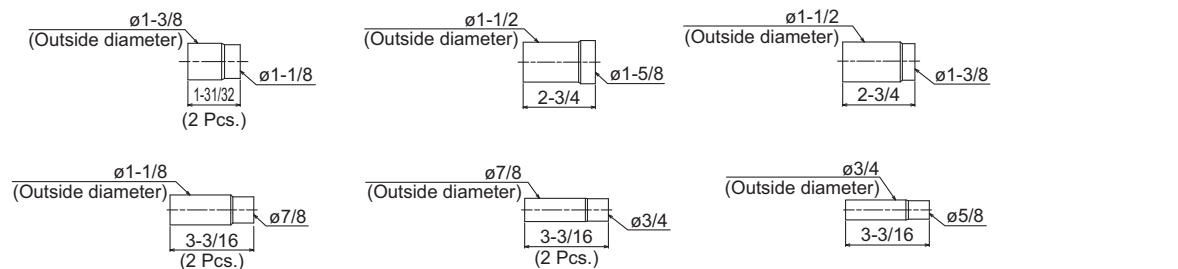
CMY-R204S-G



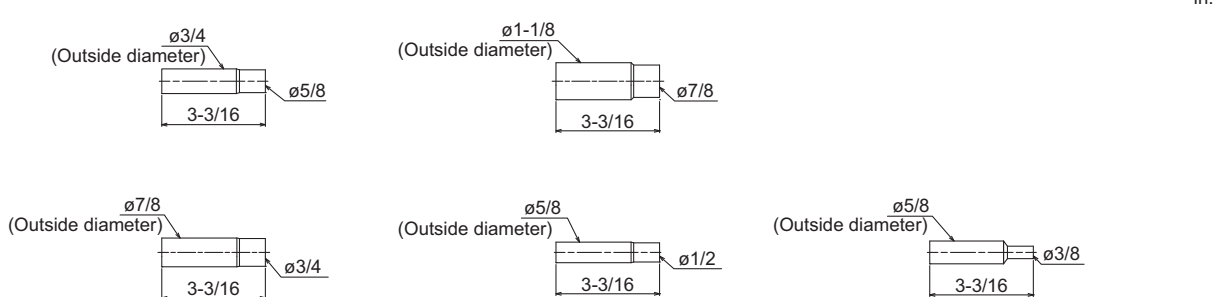
CMY-R303S-G1



CMY-R304S-G1



CMY-R306S-G



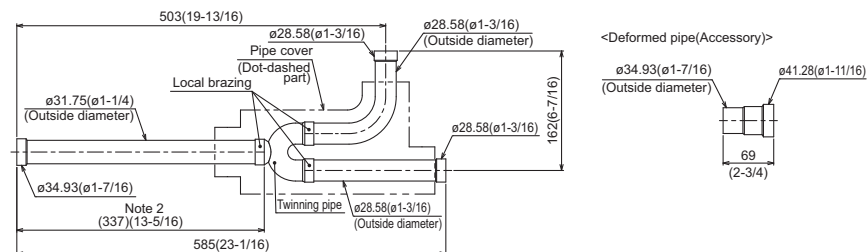
9-2. OUTDOOR TWINNING KIT

The following optional Outdoor Twinning Kit is needed to use to combine multiple refrigerant pipes. Refer to section "Piping Design" for the details of selecting a proper twinning kit.

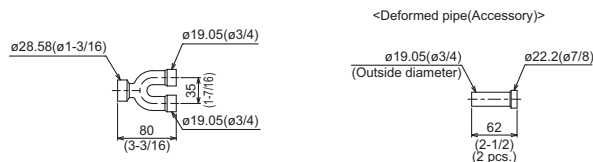
CMY-R300NCBK

Unit: mm (in.)

Low-pressure twinning pipe

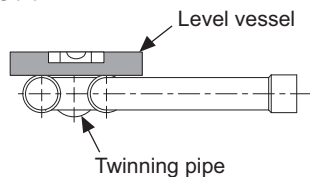


High-pressure twinning pipe



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

The Twinning pipe must be installed horizontally using a level vessel to avoid unit damage.

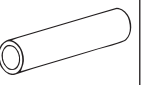
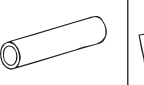
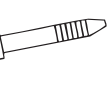
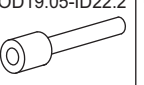
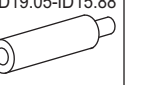


2. Use the attached pipe to braze the port-opening of the twinning pipe.
3. Pipe diameter is indicated by inside diameter.
4. Only use the twinning pipe by Mitsubishi (optional parts).

9-3. JOINT KIT "CMY-R170M-E" FOR BC CONTROLLER

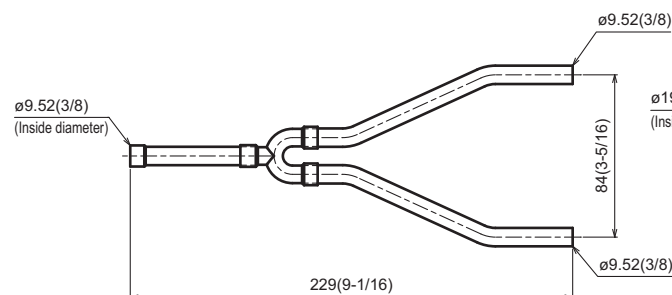
Joint kit "CMY-R170M-E" for BC controller is used to combine 2 ports of the BC controller at a PURY/PQRY system so as to enable down-stream Indoor capacity above 54 as shown in Fig. 1.

The Joint kit include following items:

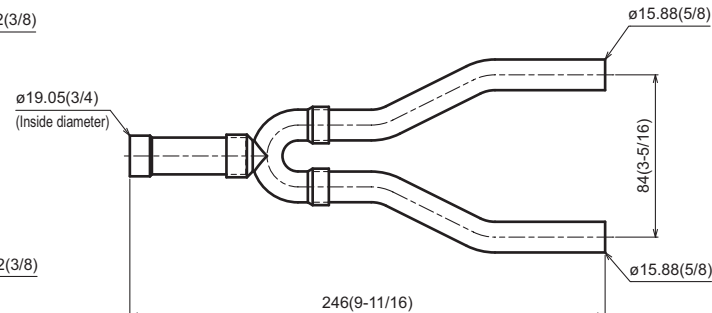
① Instruction	② Joint pipe (Small)	③ Joint pipe (Large)	④ Cover 1	⑤ Cover 2	⑥ Cover 3	⑦ Band	⑧ Reducer 1	⑨ Reducer 2
 This sheet 1pc	 1pc	 1pc	 2pcs	 1pc for gas side	 1pc for liquid side	 8pcs	 OD19.05-ID22.2 1pc	 OD19.05-ID15.88 1pc

Please prepare the following items in the field. ① Tape for insulation material sealing ② Extension pipe for refrigerant circuit

② Joint pipe (for liquid side)



③ Joint pipe (for gas side)



1. Designing CMY-R170M-E to a PURY/PQRY system

1-1. When connecting one indoor unit to the BC controller port

- The maximum capacity index of an indoor unit that can be connected to one port is 54.
- When connecting an indoor unit having the capacity index larger than 54, use the joint pipe kit to merge two ports.

1-2. When connecting multiple indoor units to the BC controller port

- Up to three indoor units can be connected to one port.
- Use the branch pipes (CMY-Y102SS-G2 or CMY-Y102LS-G2) to connect the indoor units to the BC controller.
- If the total downstream capacity index is 54 or less, all the units can be connected to one port.
- If the total downstream capacity index is between 55 and 96, use the joint pipe kit to merge two ports.

However, the maximum capacity index per unit is 54.
*All the indoor units connected to the same port must be operated in the same mode.

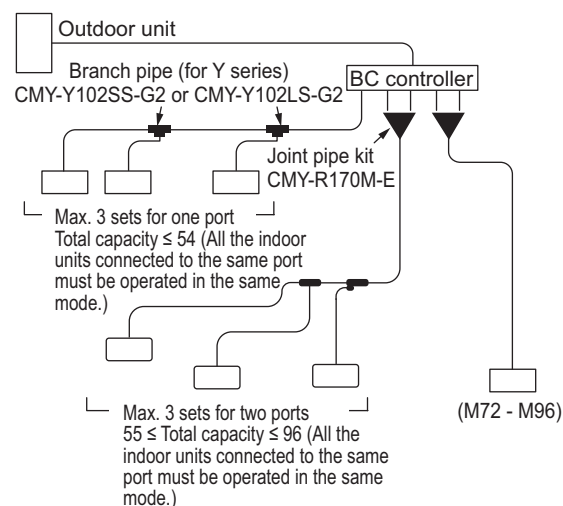


Fig.1. CMY-R170M-E applying scheme

2. Piping at the installation site

The connection of CMY-R170M-E to BC controller and pipe leading to Indoor units is referable to Fig. 2. Non-oxidized brazing is necessary. All piping must be careful to avoid foreign material getting inside.

After piping and air-tight testing, insulation work to the Joint and pipe should be done. Details is available at the Installation Manual.

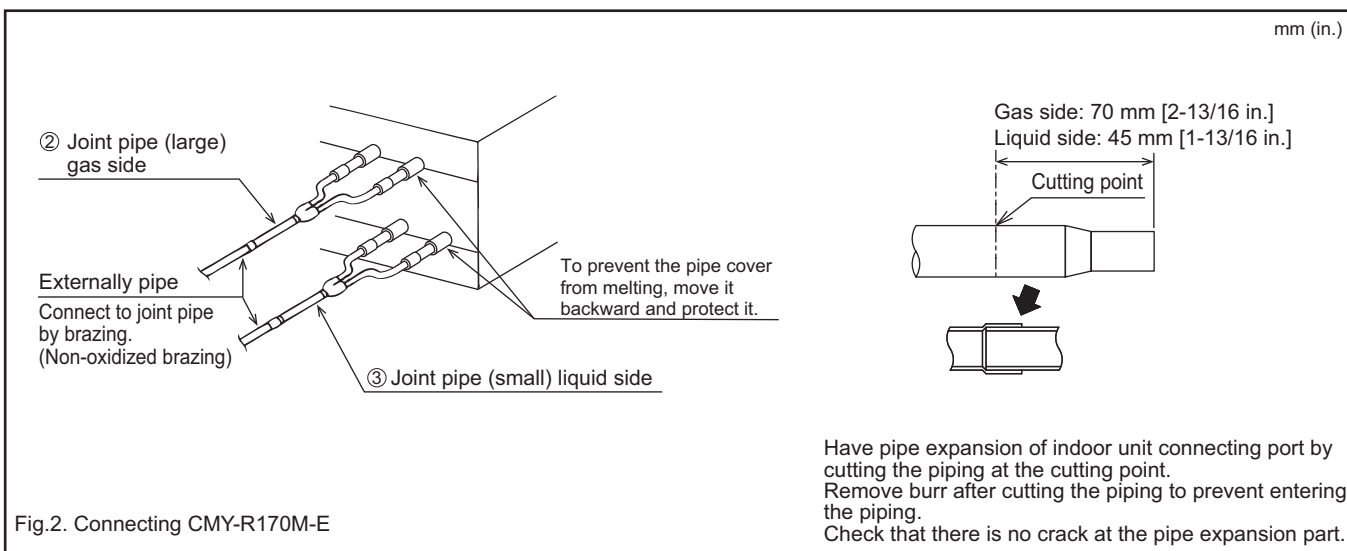
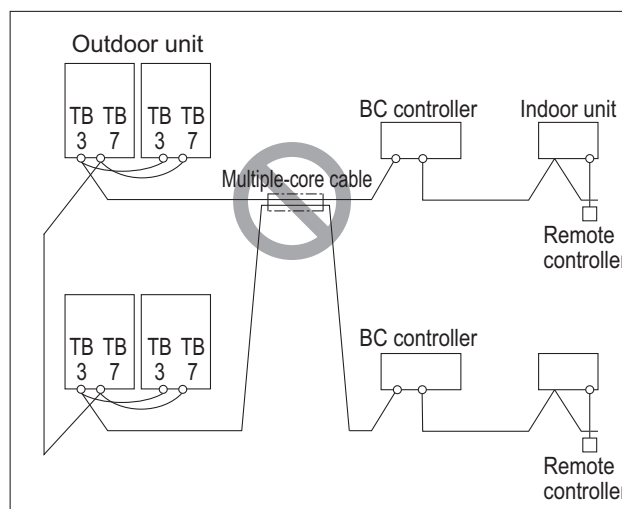
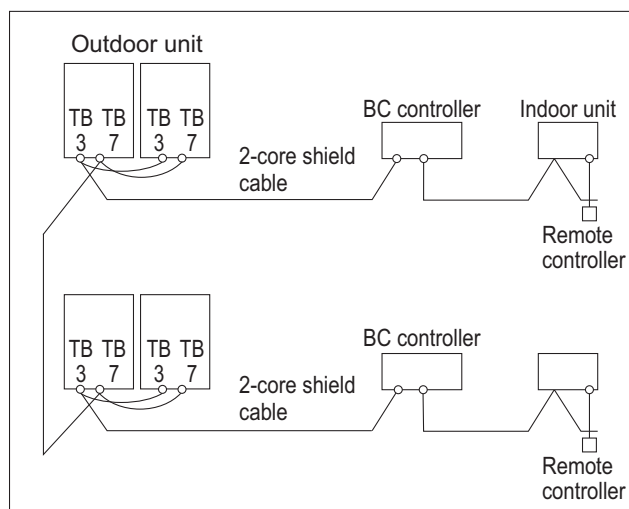


Fig.2. Connecting CMY-R170M-E

10-1. General cautions

- ① Follow ordinance of your governmental organization for technical standard related to electrical equipment, wiring regulations, and guidance of each electric power company.
- ② Wiring for control (hereinafter referred to as transmission cable) shall be (50mm[1-5/8in] or more) apart from power source wiring so that it is not influenced by electric noise from power source wiring. (Do not insert transmission cable and power source wire in the same conduit.)
- ③ Be sure to provide designated grounding work to outdoor unit.
- ④ Give some allowance to wiring for electrical part box of indoor and outdoor units, because the box is sometimes removed at the time of service work.
- ⑤ Never connect 100V, 208~230, 460V power source to terminal block of transmission cable. If connected, electrical parts will be damaged.
- ⑥ Use 2-core shield cable for transmission cable. If transmission cables of different systems are wired with the same multiple-core cable, the resultant poor transmitting and receiving will cause erroneous operations.
- ⑦ When extending the transmission line, make sure to extend the shield cable as well.



TB3: Terminal block for Indoor/Outdoor transmission cable
 TB7: Terminal block for central control transmission cable

10-2. Power supply for Outdoor unit

10-2-1. Electrical characteristics for Outdoor unit in cooling mode

PURY-EM-T(S)XU

Symbols: MCA: Minimum Circuit Ampacity

MOP: Maximum Overcurrent Protection

Model	Unit combination	Outdoor units					Compressor	Fan
		Hz	Volts	Voltage range	MCA (A)	MOP (A)	Output (kW)	Output (kW)
PURY-EM72TXU-A	-	60Hz	208/230V	188 to 253V	40/40	60/60	3.5	0.92
PURY-EM96TXU-A	-				40/40	60/60	5.1	0.92
PURY-EM120TXU-A	-				51/51	80/80	7.5	0.92
PURY-EM144TXU-A	-				60/60	100/100	9.0	0.46+0.46
PURY-EM168TXU-A	-				60/60	100/100	11.5	0.46+0.46
PURY-EM192TXU-A	-				60/60	100/100	12.7	0.46+0.46
PURY-EM264TSXU-A	PURY-EM120TXU-A				51/51	80/80	7.5	0.92
	PURY-EM144TXU-A				60/60	100/100	9.0	0.46+0.46
PURY-EM288TSXU-A	PURY-EM144TXU-A				60/60	100/100	9.0	0.46+0.46
	PURY-EM144TXU-A				60/60	100/100	9.0	0.46+0.46
PURY-EM312TSXU-A	PURY-EM144TXU-A				60/60	100/100	9.0	0.46+0.46
	PURY-EM168TXU-A				60/60	100/100	11.5	0.46+0.46
PURY-EM336TSXU-A	PURY-EM168TXU-A				60/60	100/100	11.5	0.46+0.46
	PURY-EM168TXU-A				60/60	100/100	11.5	0.46+0.46
PURY-EM360TSXU-A	PURY-EM168TXU-A				60/60	100/100	11.5	0.46+0.46
	PURY-EM192TXU-A				60/60	100/100	12.7	0.46+0.46
PURY-EM384TSXU-A	PURY-EM192TXU-A				60/60	100/100	12.7	0.46+0.46
	PURY-EM192TXU-A				60/60	100/100	12.7	0.46+0.46

PURY-EM-Y(S)XU

Symbols: MCA: Minimum Circuit Ampacity

MOP: Maximum Overcurrent Protection

Model	Unit combination	Outdoor units					Compressor	Fan
		Hz	Volts	Voltage range	MCA (A)	MOP (A)	Output (kW)	Output (kW)
PURY-EM72YXU-A	-	60Hz	460V	414 to 506V	22	35	3.5	0.92
PURY-EM96YXU-A	-				22	35	5.1	0.92
PURY-EM120YXU-A	-				27	45	7.5	0.92
PURY-EM144YXU-A	-				31	50	9.0	0.46+0.46
PURY-EM168YXU-A	-				31	50	11.5	0.46+0.46
PURY-EM192YXU-A	-				31	50	12.7	0.46+0.46
PURY-EM264YSXU-A	PURY-EM120YXU-A				27	45	7.5	0.92
	PURY-EM144YXU-A				31	50	9.0	0.46+0.46
PURY-EM288YSXU-A	PURY-EM144YXU-A				31	50	9.0	0.46+0.46
	PURY-EM144YXU-A				31	50	9.0	0.46+0.46
PURY-EM312YSXU-A	PURY-EM144YXU-A				31	50	9.0	0.46+0.46
	PURY-EM168YXU-A				31	50	11.5	0.46+0.46
PURY-EM336YSXU-A	PURY-EM168YXU-A				31	50	11.5	0.46+0.46
	PURY-EM168YXU-A				31	50	11.5	0.46+0.46
PURY-EM360YSXU-A	PURY-EM168YXU-A				31	50	11.5	0.46+0.46
	PURY-EM192YXU-A				31	50	12.7	0.46+0.46
PURY-EM384YSXU-A	PURY-EM192YXU-A				31	50	12.7	0.46+0.46
	PURY-EM192YXU-A				31	50	12.7	0.46+0.46

PURY-EM-T(S)XU-A, Y(S)XU-A

10-3. Power cable specifications

Thickness of wire for main power supply, capacities of the switch and system impedance.

3-phase 3-wire, 208/230V, 60Hz		Minimum cable size [mm ² (AWG)]				Breaker for current leakage	
		Main cable		Ground			
		208V	230V	208V	230V	208V	230V
PURY-EM-TXU-A	EM72	8.4 (8)	8.4 (8)	8.4 (8)	8.4 (8)	40A 100mA 0.1sec. or less	40A 100mA 0.1sec. or less
	EM96	8.4 (8)	8.4 (8)	8.4 (8)	8.4 (8)	40A 100mA 0.1sec. or less	40A 100mA 0.1sec. or less
	EM120	21.2 (4)	21.2 (4)	21.2 (4)	21.2 (4)	60A 100mA 0.1sec. or less	60A 100mA 0.1sec. or less
	EM144	21.2 (4)	21.2 (4)	21.2 (4)	21.2 (4)	70A 100mA 0.1sec. or less	70A 100mA 0.1sec. or less
	EM168	21.2 (4)	21.2 (4)	21.2 (4)	21.2 (4)	70A 100mA 0.1sec. or less	70A 100mA 0.1sec. or less
	EM192	21.2 (4)	21.2 (4)	21.2 (4)	21.2 (4)	70A 100mA 0.1sec. or less	70A 100mA 0.1sec. or less

3-phase 3-wire, 460V, 60Hz		Minimum cable size [mm ² (AWG)]		Breaker for current leakage
		Main cable	Ground	
PURY-EM-YXU-A	EM72	5.3(10)	5.3(10)	25A 30mA or 100mA 0.1sec. or less
	EM96	5.3(10)	5.3(10)	25A 30mA or 100mA 0.1sec. or less
	EM120	5.3(10)	5.3(10)	30A 30mA or 100mA 0.1sec. or less
	EM144	8.4(8)	8.4(8)	35A 30mA or 100mA 0.1sec. or less
	EM168	8.4(8)	8.4(8)	35A 30mA or 100mA 0.1sec. or less
	EM192	8.4(8)	8.4(8)	35A 30mA or 100mA 0.1sec. or less

1. Use dedicated power supplies for the outdoor unit. Ensure OC and OS are wired individually.
2. Bear in mind ambient conditions (ambient temperature, direct sunlight, rain water, etc.) when proceeding with the wiring and connections.
3. The wire size is the minimum value for metal conduit wiring. If the voltage drops, use a wire that is one rank thicker in diameter. Make sure the power-supply voltage does not drop more than 10%. Make sure that the voltage imbalance between the phases is 2% or less.
4. Specific wiring requirements should adhere to the wiring regulations of the region.
5. Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord (design 60245 IEC57). For example, use wiring such as YZW.
6. A switch with at least 3 mm [1/8 in.] contact separation in each pole shall be provided by the Air Conditioner installer.
7. For details on indoor unit wiring and breaker for current leakage, refer to the indoor unit Instruction Book and Installation Manual.

 **WARNING**

◆ Be sure to use specified wires for connections and ensure no external force is imparted to terminal connections. If connections are not fixed firmly, heating or fire may result.

◆ Be sure to use the appropriate type of overcurrent protection switch. Note that generated overcurrent may include some amount of direct current.

 **CAUTION**

◆ The breakers for current leakage should support Inverter circuit. (e.g. Mitsubishi Electric's NV-C-Series or equivalent). If no earth leakage breaker is installed, it may cause an electric shock.

◆ Breakers for current leakage should combine using of switch.

◆ Do not use anything other than a breaker with the correct capacity. Using a breaker of too large capacity may cause malfunction or fire.

◆ If a large electric current flows due to malfunction or faulty wiring, earth-leakage breakers on the unit side and on the upstream side of the power supply system may both operate.
Depending on the importance of the system, separate the power supply system or take protective coordination of breakers.

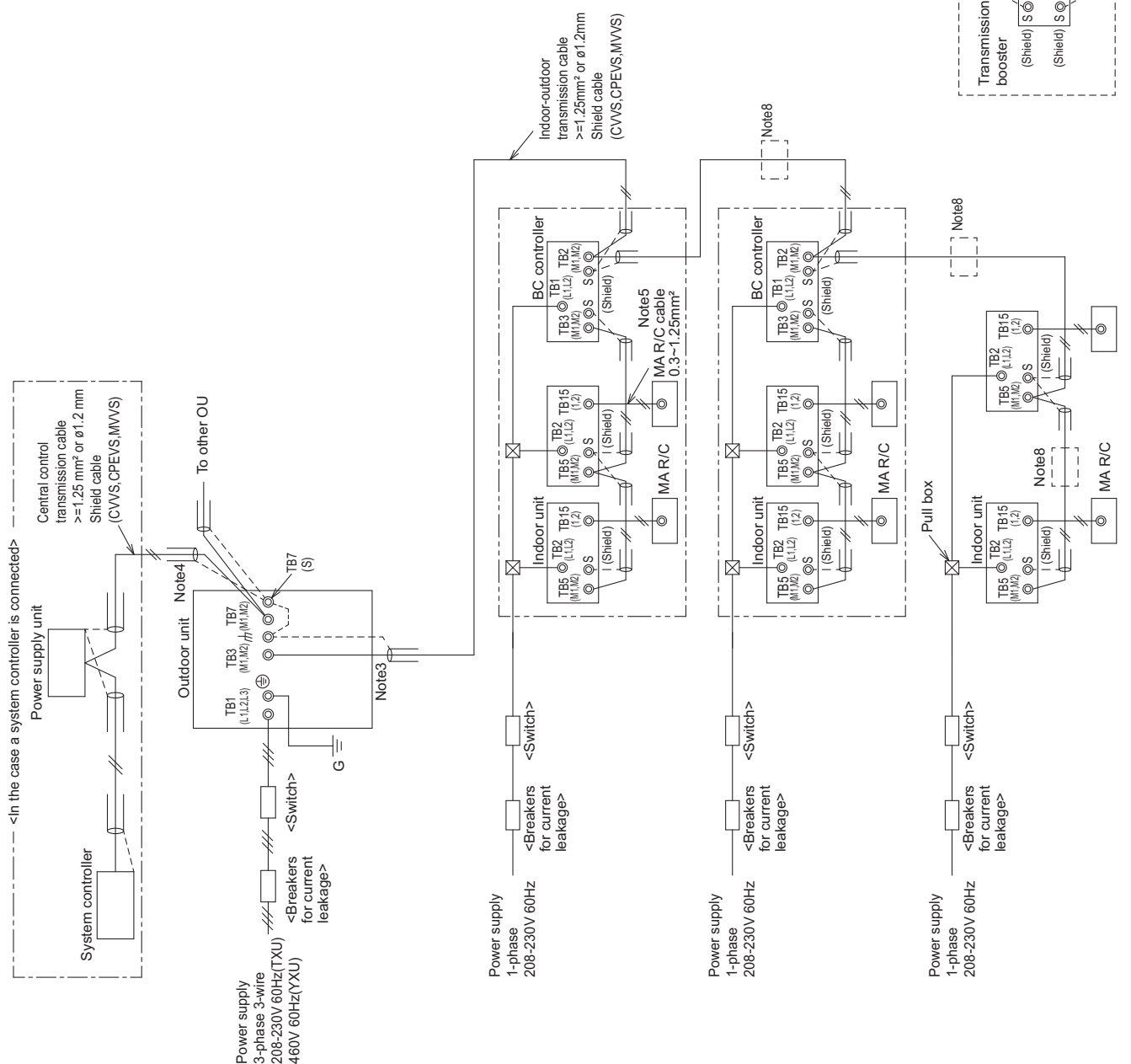
10-4. Power supply examples

10-4-1. PURY-EM72, 96, 120, 144, 168, 192TXU/YXU

The local standards and/or regulations is applicable at a higher priority.

Note:

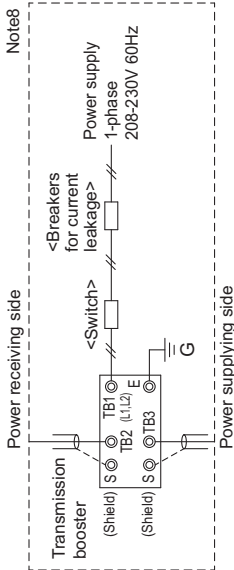
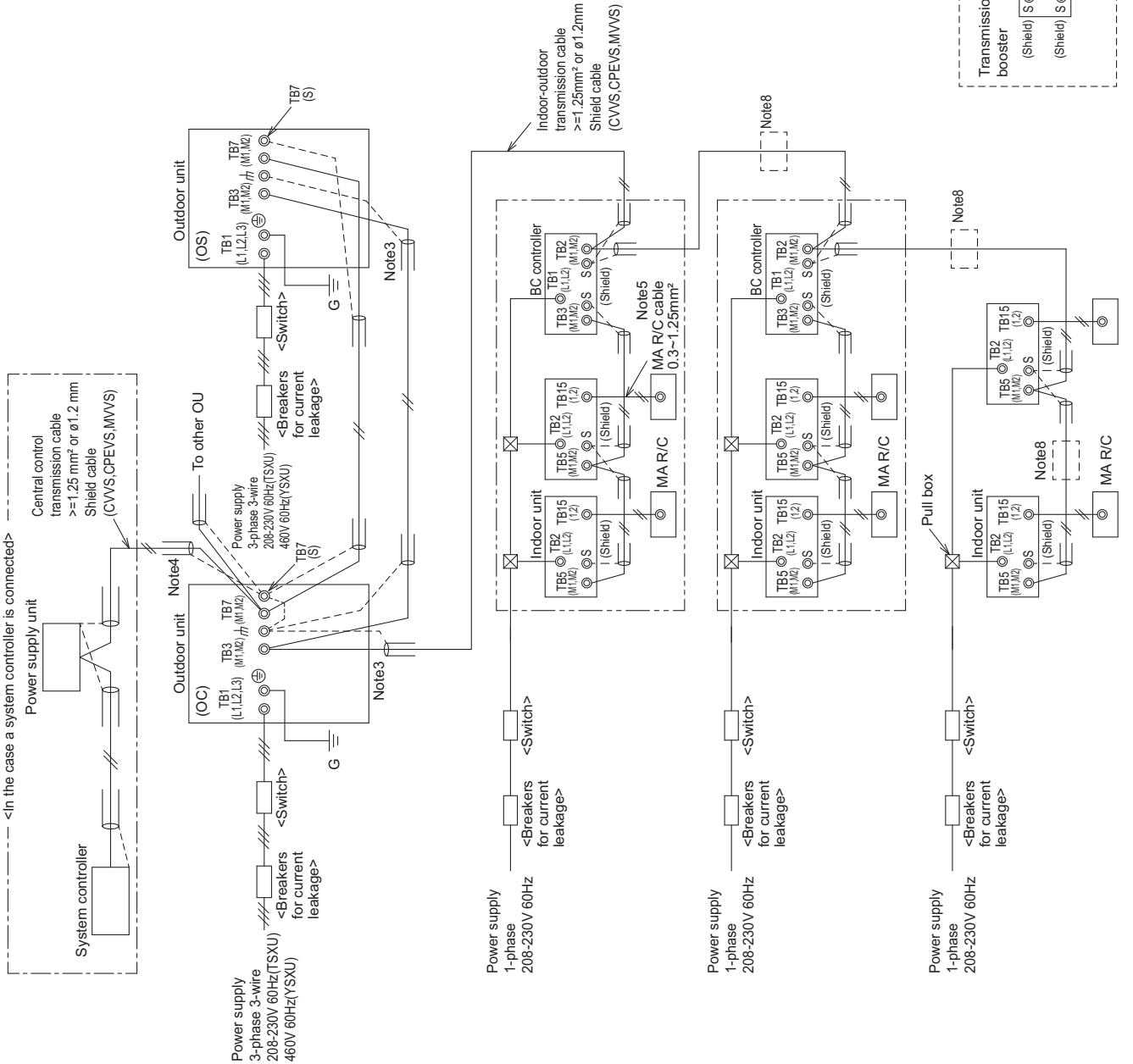
- 1 The transmission cable is not-polarity double-wire.
- 2 Symbol © means a screw terminal for wiring.
- 3 The shield wire of transmission cable should be connected to the grounding terminal at Outdoor unit. All shield wire of M-Net transmission cable among Indoor units should be connected to the S terminal at Indoor unit or all shield wire should be connected together.
The broken line at the scheme means shield wire.
- 4 When connecting a system controller to a central control transmission cable, connect a power supply unit or supply power from a system controller with a power supply function.
- 5 MA remote controller transmission cable must be less than 200 m in length (100 m when connecting two MA remote controllers in a group).
- 6 If using 1 or 2 (main/sub) MA remote controller to control more than 1 Indoor unit, use MA transmission cable to connect all the TB15 terminals of the Indoor units. It is called "Grouping".
- 7 Indoor board consumes power from TB3. The power balance should be considered according to "System configuration restrictions" section.
- 8 If a transmission booster is needed, be sure to connect it to the location specified in this diagram.
Also, when connecting, be sure to connect the shielded transmission cable to the S terminals (shield) of the booster.
- 9 The critical current for choosing power source equipment is approximate 1.4 times of total rated current of the Outdoor unit(s) or Indoor unit(s).
- 10 When System controller (SC) is connected to the system, turn the SW5-1 on.



10-4-2. PURY-EM264, 288, 312, 336, 360, 384TSXU/YSXU

The local standards and/or regulations is applicable at a higher priority.

- Note:
1 The transmission cable is not-polarity double-wire.
2 Symbol ⊙ means a screw terminal for wiring.
3 The shield wire of transmission cable should be connected to the grounding terminal at Outdoor unit. All shield wire of M-Net transmission cable among Indoor units should be connected to the S terminal at Indoor unit or all shield wire should be connected together.
4 When connecting a system controller to a central control transmission cable, connect a power supply unit or supply power from a system controller with a power supply function.
5 MA remote controller transmission cable must be less than 200 m in length (100 m when connecting two MA remote controllers in a group).
6 If using 1 or 2 (main/sub) MA remote controller to control more than 1 Indoor unit, use MA transmission cable to connect all the TB15 terminals of the Indoor units. It is called "Grouping".
7 Indoor board consumes power from TB3. The power balance should be considered according to "System configuration restrictions" section.
8 If a transmission booster is needed, be sure to connect it to the location specified in this diagram.
Also, when connecting, be sure to connect the shielded transmission cable to the S terminals (shield) of the booster.
9 The critical current for choosing power source equipment is approximate 1.4 times of total rated current of the Outdoor unit(s) or Indoor unit(s).
10 When System controller (SC) is connected to the system, turn the SW5-1 on.



11-1. Transmission cable specifications

	Transmission cables (Li)	MA Remote controller cables
Type of cable	Shielded cables (2-core) CVVS, CPEVS, and MVVS	VCTF, VCTFK, CVV, VVR, VVF, VCT
Cable size	Larger than 1.25 mm ² [AWG16], or ø1.2 mm or above	0.3 to 1.25 mm ² [AWG22 to 16] *1
Maximum overall line length	Refer to 11-3-3.	200 m [656 ft]

*1 The use of cables that are smaller than 0.75 mm² (AWG18) is recommended for easy handling.

CVVS, MVVS: PVC insulated PVC sheathed shielded control cable
CPEVS: PE insulated PVC sheathed shielded communication cable
CVV: PVC insulated PVC sheathed control cable

11-2. System configuration restrictions

11-2-1. Common restrictions for the CITY MULTI system

For each Outdoor/Heat source unit, the maximum connectable quantity of Indoor unit is specified at its Specifications table.

- A) 1 Group of Indoor units can have 1-16 Indoor units;
- B) Maximum 2 remote controllers for 1 group;
- C) 1 LOSSNAY unit can interlock maximum 16 Indoor units; 1 Indoor unit can interlock only 1 LOSSNAY unit.
- D) Maximum 3 System controllers are connectable when connecting to TB3 of the Outdoor/Heat source unit.
- E) A maximum of 6 system controller are connectable to TB3 and TB7 of Outdoor/Heat source unit.
- F) 4 System controllers or more are connectable when connecting to TB7 of the Outdoor/Heat source unit, if the transmission power is supplied by the power supply unit PAC-SC51KUA.

*System controller connected as described in D) would have a risk that the failure of connected Outdoor/Heat source unit would stop power supply to the System controller.

11-2-2. Ensuring proper communication power and the number of connected units for M-NET

In order to ensure proper communication among Outdoor/Heat source unit, Indoor unit, LOSSNAY, and Controllers, the transmission power situation for the M-NET should be observed. In some cases, Transmission booster should be used. Taking the power consumption of Indoor unit as 1, the equivalent power consumption or supply of others are listed at Table 1 and Table 2.

Both the transmission line for centralized controller and indoor-outdoor transmission line must meet the conditions listed below. (Both conditions a) and b) must be met.)

a) [Total equivalent power consumption] ≤ [The equivalent power supply]

b) [Total equivalent number of units (Table1)] ≤ [40] *1*2

*1 [40-2] when one or more BC controllers are connected.

*2 [40-1] when one or more shut off valve kits are connected.

Table 1 The equivalent power consumption and the equivalent number of units

Category	Model	The equivalent power consumption	The equivalent number of units
Indoor unit	Sized M04-M96	1	1
BC controller	CMB-M104, 106, 108, 1012NU-MA-SV CMB-M104, 108NU-MB-SV	0.75	1
Shut off valve kit	CMR-M100KT-NA	0.75	1
MA remote controller/LOSSNAY	PAR-CT01MAU PAR-42MAAUB PAR-41MAAU PAR-40MAAU PAC-YT53CRAU PAR-FA32MA LGH-F-RX ₅ -E1 LGH-F-RVX-E LGH-FRVX2-E LGH-FRVXT2-E PZ-60DR-E PZ-61DR-E PZ-62DR-EA PZ-43SMF-E	0	0
System controller	AE-C400A/EW-C50A	0	0
	PAC-YG60MCA PAC-YG66DCA PAC-YG63MCA	0.25	1
ON/OFF controller	PAC-YT40ANRA	1	1
MN converter	CMS-MNG-E	2	1
Outdoor/Heat source unit	TB7 power consumption	0	0
A-M converter	PAC-IF01MNT-E	1	2

Table 2 The equivalent power supply

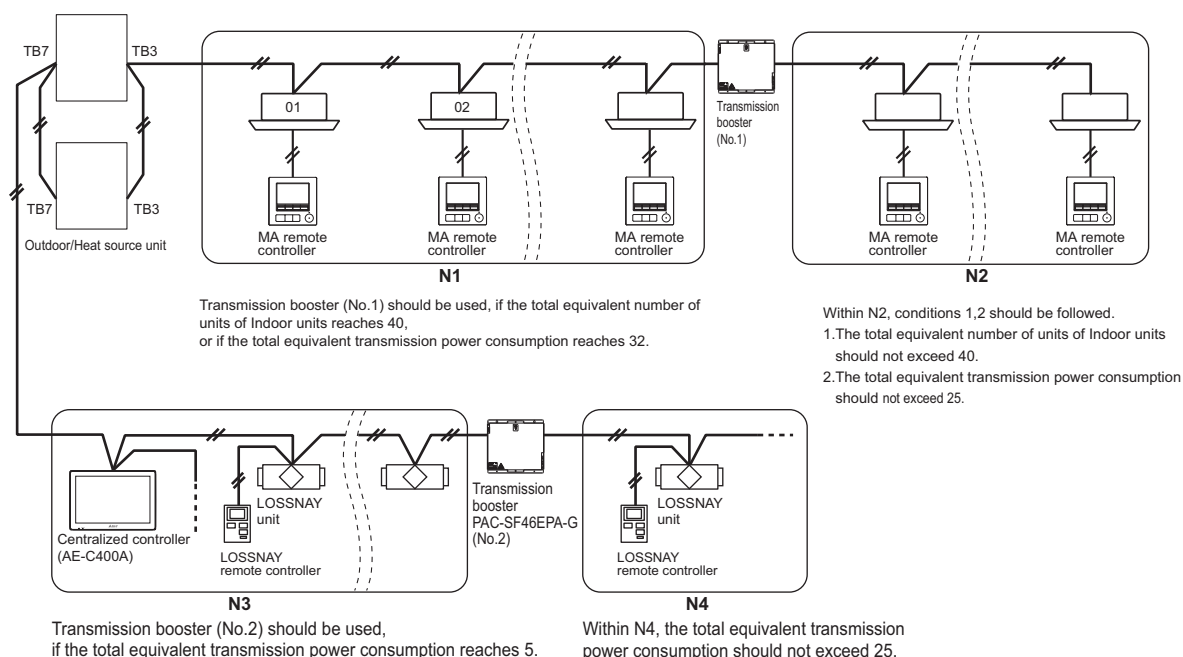
Category	Model	The equivalent power supply		
Transmission Booster	PAC-SF46EPA-G	25		
Power supply unit	PAC-SC51KUA	5		
BM ADAPTER	BACS-AP50E	0.75		
System controller	AE-C400A/EW-C50A	0.75		
Outdoor/Heat source unit		TB3 and TB7 total	TB7 only	TB3 only
	Outdoor unit other than the following units *1	32	6	32 - equivalent power supplied to TB7
	S-Series outdoor unit	12	0	12
	TLMU/TKMU outdoor unit	32	-	32

*1 If PAC-SC51KUA is used to supply power at TB7 side, no power supply need from Outdoor/Heat source unit at TB7, Connector TB3 itself will therefore have 32.

With the equivalent power consumption values and the equivalent number of units in Table 1 and Table 2, PAC-SF46EPA-G can be designed into the air-conditioner system to ensure proper system communication according to (A), (B), (C).

- (A) Firstly, count from TB3 at TB3 side the total equivalent number of units of Indoor units and System controllers. If the total equivalent number of units reaches 40, a PAC-SF46EPA-G should be set.
- (B) Secondly, count from TB7 side to TB3 side the total transmission power consumption. If the total equivalent power supply reaches 32, a PAC-SF46EPA-G should be set. Yet, if a PAC-SC51KUA or another controller with a built-in power supply, such as AE-C400A/EW-C50A, is used to supply power at TB7 side, count from TB3 side only.
- (C) Thirdly, count from TB7 at TB7 side the total transmission power consumption. If the total equivalent power supply for only TB7 reaches 6, a PAC-SF46EPA-G should be set. Also, count from TB7 at TB7 side the total equivalent number of units of System controllers, and so on. If the total equivalent number of units reaches 40, a PAC-SF46EPA-G should be set.

■ System example



11-2-3. Power supply to BM ADAPTER

1-phase 100-240VAC power supply is needed.

The power supply unit PAC-SC51KUA is not necessary when only BM ADAPTER is connected.

Yet, make sure not to remove the connector CN21 from the BM ADAPTER. (BM ADAPTER is shipped with connector CN21 attached.)

11-2-4. Power supply to AE-C400A/EW-C50A

1-phase 100-240VAC power supply is needed.

The power supply unit PAC-SC51KUA is not necessary when connecting only the AE-C400A/EW-C50A.

11-3. Address setting

11-3-1. Switch operation

In order to constitute CITY MULTI in a complete system, switch operation for setting the unit address No. and connection No. is required.

① Address No. of outdoor/heat source unit and indoor unit.

The address No. is set at the address setting board.

In the case of R2 system, it is necessary to set the same No. at the branch No. switch of indoor unit as that of the BC controller connected. (When connecting two or more branches, use the lowest branch No.)

② Caution for switch operations

- Be sure to shut off power source before switch setting. If operated with power source on, switch can not operate properly.
- No units with identical unit address shall exist in one whole air conditioner system. If set erroneously, the system can not operate.

③ MA remote controller

- When connecting only one remote controller to one group, it is always the main remote controller. When connecting two remote controllers to one group, set one remote controller as the main remote controller and the other as the sub remote controller.
- The factory setting is "Main".

PAR-4"x"MAA ("x" represents 0 or later), PAR-CT01MA

The MA remote controller does not have the switches shown above.

Refer to the installation manual for the function setting.

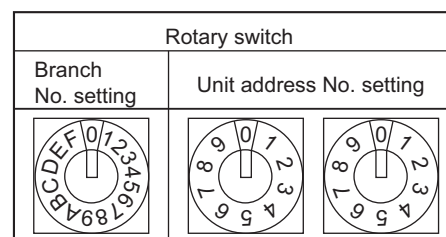
PAC-YT53CRAU

Setting the dip switches

There are switches on the back of the top case. Remote controller Main/Sub and other function settings are performed using these switches. Ordinarily, only change the Main/Sub setting of SW1.

(The factory settings are ON for SW1, 3, and 4 and OFF for SW2.)

SW No	SW contents Main	ON	OFF	Comment
1	Remote controller Main/Sub setting	Main	Sub	Set one of the two remote controllers at one group to "ON".
2	Temperature display units setting	Celsius	Fahrenheit	When the temperature is displayed in [Fahrenheit], set to "OFF".
3	Cooling/heating display in AUTO mode	Yes	No	When you do not want to display "Cooling" and "Heating" in the AUTO mode, set to "OFF".
4	Indoor temperature display	Yes	No	When you do not want to display the indoor temperature, set to "OFF".



11-3-2. Rule of setting address

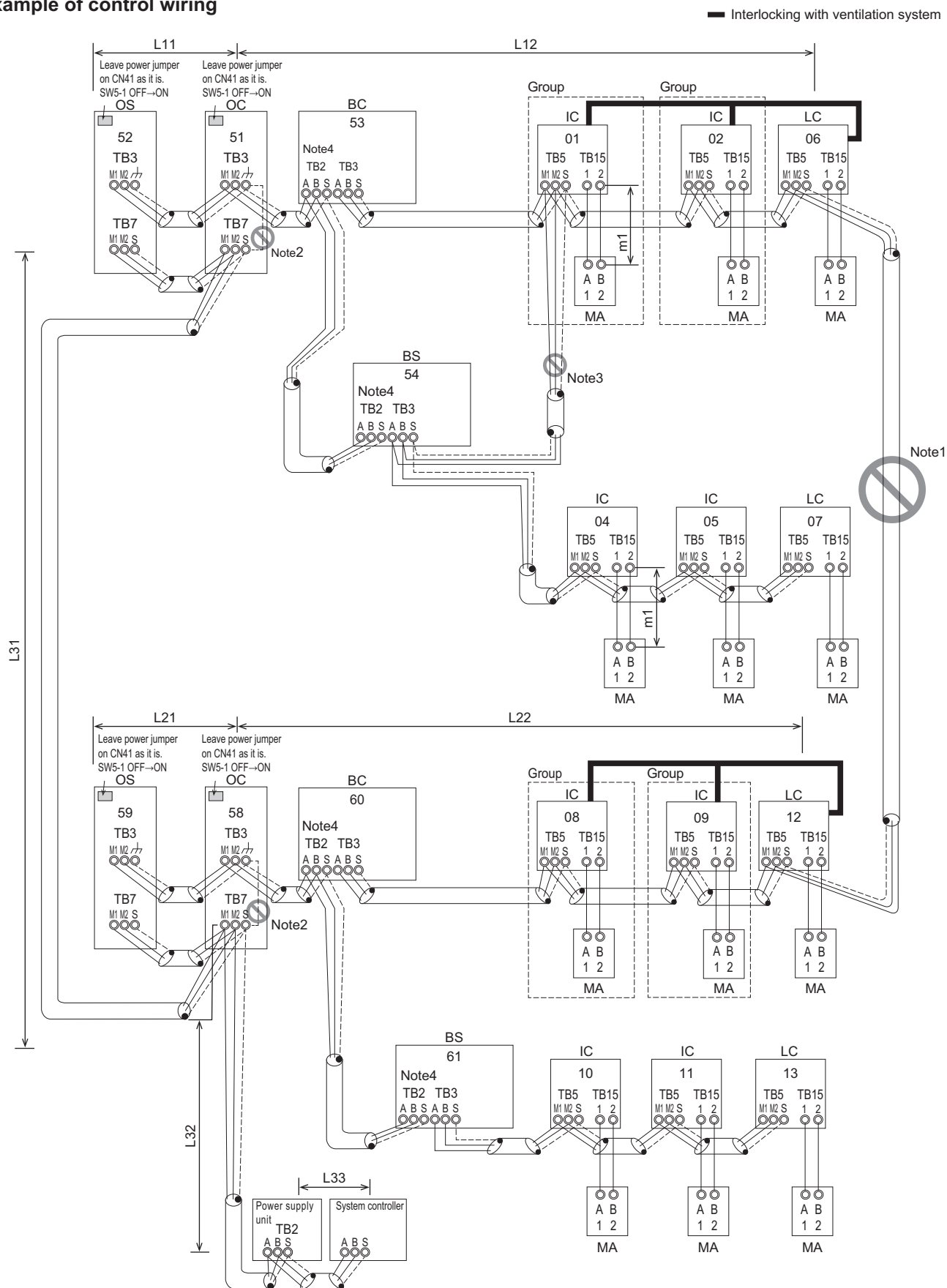
Unit		Address setting	Example		Note
Indoor unit		01 ~ 50			Use the most recent address within the same group of indoor units. Assign the smallest address in the group to the main unit. If indoor units with different functions operate in the same group, set the unit with the most functions as the main unit.
Outdoor/Heat source unit		51 ~ 99, 100 (Note1)			The smallest address of indoor unit in same refrigerant system + 50 Assign sequential address numbers to the outdoor/heat source units in one refrigerant circuit system. OC and OS are automatically detected. (Note 2) * Please reset one of them to an address between 51 and 99 when two addresses overlap. * The address automatically becomes "100" if it is set as "01~ 50"
BC controller (Main)		51 ~ 99, 100			The BC controller address should generally be set to 1 + the address of the outdoor unit and Heat source unit. However, if this would result in it having the same address as another outdoor unit and Heat source unit, set the address between 51 and 100, making sure that it is different from the address of other controllers. * The address automatically becomes "100" if it is set as "01~ 50".
BC controller (Sub)		51 ~ 99, 100			
Shut off valve kit		151 ~ 200			The smallest address of outdoor/heat source unit in same refrigerant system + 100 * The address automatically becomes "200" if it is set as "01~ 50"
Local remote controller	LOSSNAY Remote controller (Main)	101 ~ 150	1 Fixed		The smallest address of indoor unit in the group + 100 * The place of "100" is fixed to "1"
	LOSSNAY Remote controller (Sub)	151 ~ 199, 200	1 Fixed		The address of main remote controller + 50 * The address automatically becomes "200" if it is set as "00"
System controller	ON/OFF remote controller	201 ~ 250			The smallest group No. to be managed + 200 * The smallest group No. to be managed is changeable.
	AE-C400A/EW-C50A	000, 201 ~ 250			
	BACS-AP50E	000, 201 ~ 250			* Settings are made with setting tool of BM ADAPTER.
PI, AI, DIDO	PAC-YG60MCA	01 ~ 50			
	PAC-YG63MCA	01 ~ 50			
	PAC-YG66DCA	01 ~ 50			
LOSSNAY		01 ~ 50			After setting the addresses of all the indoor units, assign an arbitrary address.

Note1: To set the address to "100", set it to "50"

Note2: Outdoor/Heat source units OC and OS in one refrigerant circuit system are automatically detected.
OC and OS are ranked in descending order of capacity. If units are the same capacity, they are ranked in ascending order of their address.

11-3-3. System examples

Example of control wiring



Cautions

- Note1. Do not connect the terminal blocks TB5 on the indoor units that are connected to different outdoor units with each other.
- Note2. If a power supply unit is connected, do not connect the ground terminal (接地) to the shield terminal S on the TB7 terminal block for the centralized control transmission cable.
- Note3. Do not connect the transmission cable terminal block TB3 (indoor unit) of the BC controller to any indoor unit other than the unit connected to the BC controller.
- Note4. Up to two cables can be connected to the transmission cable terminal block TB2 (outdoor unit/indoor unit/BC controller) of the BC controller, and one cable can be connected to the transmission cable terminal block TB3 (indoor unit).
- Note5. When a power supply unit is connected to the centralized control transmission cable, leave the power jumper connector on CN41 as it is (factory setting).
- Note6. For information on the maximum number of indoor units or other devices that can be connected, connection requirements, or the need for a transmission booster, refer to the MELANS Centralized Controller Technical Manual.
- Note7. Grouping is not possible between different refrigerant systems or between main BC controller and sub BC controller.

Allowable cable length

- <a. Indoor-outdoor transmission cable>
 Farthest length (1.25 mm² or more)
 $L11+L12 \leq 200 \text{ m}$
 $L21+L22 \leq 200 \text{ m}$
- <b. Centralized control transmission cable>
 $L31 + L32 (L21) \leq 200 \text{ m}$
 $L33 \leq 200 \text{ m}$
- <c. MA remote controller wiring>
 Total length (0.3 to 1.25 mm²)
 $m1 \leq 200 \text{ m}$
 If the MA remote controller PAR-43MAAUB is connected, use a sheathed cable with a cross-sectional area of 0.3 mm².
- <d. Farthest length via outdoor unit (1.25 mm² or more)>
 $L33 + L32 + L31 + L12 (L11) \leq 1000 \text{ m}$
 $L33 + L32 + L22 (L21) \leq 1000 \text{ m}$
 $L12 (L11) + L31 + L22 (L21) \leq 1000 \text{ m}$

Wiring and address setting

<a. Indoor-outdoor transmission cable>

Use shielded cables.

Daisy-chain the following terminals: the M1 and M2 terminals of the indoor-outdoor transmission cable terminal block TB3 on the outdoor units (OC and OS), the M1 and M2 terminals of the indoor-outdoor transmission cable terminal block TB5 on each indoor unit IC that does not require safety measures, and the A and B terminals of the transmission cable terminal block TB2 (outdoor unit/indoor unit/BC controller) on each BC controller. (Non-polarized double-wire)

*1 The outdoor units (OC and OS) in the same refrigerant circuit system are automatically designated in the order of capacity from large to small. If the OC and OS have the same capacity, the one with the smaller address number is designated as OC, while the one with the larger address number is designated as OS.

[Shielded cable connection]

To ground the shielded cable, daisy-chain the following terminals: the ground terminals of OC and OS, the S terminal of the terminal block on each indoor unit (IC), and the S terminal of the transmission cable terminal block TB2 (outdoor unit/indoor unit/BC controller) on each BC controller.

<b. Indoor unit transmission cable>

Use shielded cables.

Daisy-chain the following terminals: the M1 and M2 terminals of the indoor-outdoor transmission cable terminal block TB5 on each indoor unit (IC), and the A and B terminals of the transmission cable terminal block TB3 (indoor unit) on the BC controller. (Non-polarized double-wire)

[Shielded cable connection]

To ground the shielded cable, daisy-chain the following terminals: the S terminal of the indoor-outdoor transmission cable terminal block TB5 on each indoor unit (IC), and the S terminal of the transmission cable terminal block TB3 (indoor unit) on the BC controller.

<c. Centralized control transmission cable> * Ensure shielded cables are used.

Daisy-chain the following terminals: the A and B terminals of the system controller, the A and B terminals of the terminal block TB2 on the power supply unit, the M1 and M2 terminals of the centralized control transmission cable terminal block TB7 on the outdoor unit OC in a different refrigerant circuit system, the M1 and M2 terminals of the centralized control transmission cable terminal block TB7 on the outdoor units (OC and OS) *1 in the same refrigerant circuit system.

If a power supply unit is not connected to the centralized control transmission cable, replace the power jumper connector from CN41 to CN40 on the control board of only one of the outdoor units.

To connect the system controller, set the central control switch SW5-1 on the control board of all outdoor units to "ON".

*1 The outdoor units OC and OS in the same refrigerant circuit system are automatically designated in the order of capacity from large to small. If the OC and OS have the same capacity, the one with the smaller address number is designated as OC, while the one with the larger address number is designated as OS.

*2 If TB7 of the outdoor units in the same refrigerant circuit system is not daisy-chained, connect the centralized control transmission cable to TB7 of the OC *1.

To maintain centralized control even during an OC failure or a power failure, daisy-chain terminal blocks TB7 of the OC and OS.

*3 When connecting TB7, only commence after checking that the voltage is below 20 VDC.

[Shielded cable connection]

To ground the shielded cable, daisy-chain the following: the system controller, the terminal block TB2 of the power supply unit, and the S terminals of the terminal blocks TB7 on the OC and OS.

Connect the ground terminal (接地) to the S terminal of terminal block TB7 on the outdoor unit whose power jumper connector has been replaced to CN40.

<d. MA remote controller wiring>

Connect the terminals 1 and 2 of the MA remote controller cable terminal block TB15 on the IC to the MA remote controller terminal box (MA).
(Non-polarized double-wire)

[When pairing the remote controllers]

When pairing the remote controllers, connect the terminals 1 and 2 of terminal block TB15 on the IC to the terminal blocks of two MA remote controllers.

For requirements for pairing the remote controllers, refer to "Precautions for installing alarm device (MA remote controller, model name: PAR-43MAAUB or later)" section in the R32 City Multi Technical Manual.

<e. LOSSNAY connection>

Daisy-chain the M1 and M2 terminals of terminal block TB5 on the IC to the indoor-outdoor transmission cable terminal block TB5 on the LOSSNAY unit (LC). (Non-polarized double-wire)

*Indoor units must be interlocked with the LOSSNAY unit using the system controller. (Refer to the operation manual for the system controller for the setting method.)

Interlock setting from the remote controller is required if the ON/OFF remote controller alone is connected.

<f. Switch setting>

For address setting, refer to the "Rule of setting address" section.

12-1. R32 Piping material

Refrigerant pipe for CITY MULTI shall be made of phosphorus deoxidized copper.

The maximum operation pressure of R32 air conditioners is 4.30 MPa [623psi]. The refrigerant piping should ensure the safety under the maximum operation pressure. MITSUBISHI ELECTRIC recommends the pipe size in Table1, however, please follow the local industrial standard. Pipes with a radial thickness of 0.7mm or less shall not be used.

Table 1. Copper pipe size and radial thickness for R32 CITY MULTI.

Size [mm (in)]	Minimum wall thickness [mm (in)]
ø6.35 (ø1/4)	0.67 (0.0265)
ø9.52 (ø3/8)	0.72 (0.0285)
ø12.7 (ø1/2)	0.72 (0.0285)
ø15.88 (ø5/8)	0.8 (0.0315)
ø19.05 (ø3/4)	0.98 (0.0385)
ø22.2 (ø7/8)	1.04 (0.0410)
ø25.4 (ø1)	1.17 (0.0460)
ø28.58 (ø1-1/8)	1.17 (0.0460)
ø31.75 (ø1-1/4)	1.28 (0.0505)
ø34.93 (ø1-3/8)	1.28 (0.0505)
ø41.28 (ø1-5/8)	1.41 (0.0555)

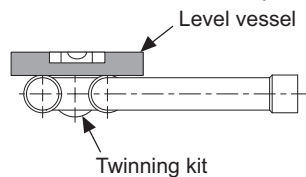
Procedures for installing the branched pipes

Refer to the instructions that came with the branched pipe kit (separately sold) for details.

[1] Branches on the outdoor/heat source-unit side

Note. Refer to the figure below for the installation position of the twinning kit.

The Twinning kit must be installed horizontally using a level vessel to avoid unit damage.



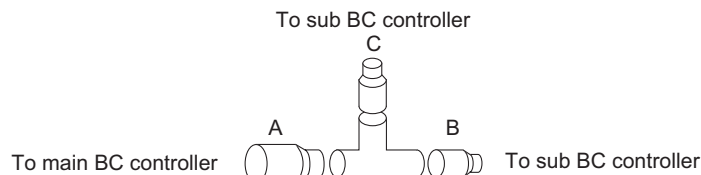
•Minimum length of the straight section of the pipe before the branched pipes

Always use the pipes supplied in the branched kit, and make sure the straight section of the pipe immediately before it connects to the branched pipe is at least 500 mm (19-11/16 in.). Failure to do so may damage the unit.

[2] Branches on the indoor-unit side

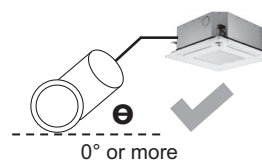
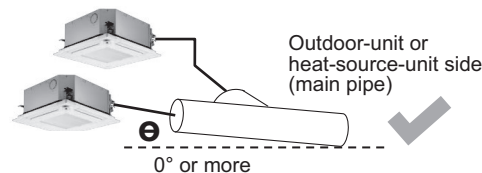
•Restriction on installing the 2-Branch Joint Pipe between main BC and sub BC on the high-pressure piping, low-pressure piping, and liquid piping.

- When using indoor unit of total capacity of 72 or 96, use the joint piping kit (model name: CMY-R170M-E) to connect the units.

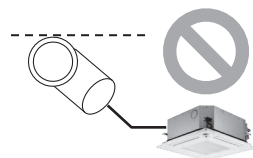


- Regarding the 2-Branch Joint Pipe between main BC and sub BC on the high-pressure/low-pressure/liquid piping, A and B must be installed horizontally, and C must be installed upward higher than the horizontal plane of A and B.

Horizontal installation

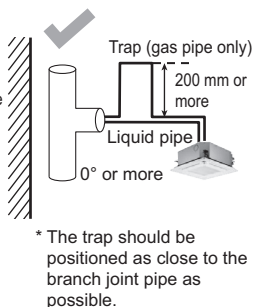
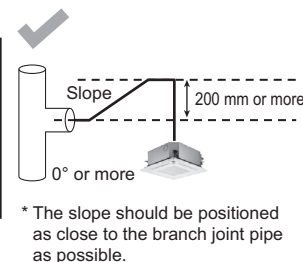
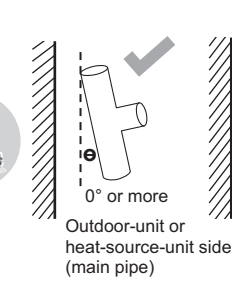
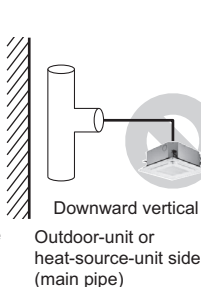
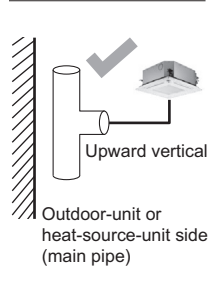


Be careful on return oil.



When installing the branched pipe, do not tilt it with the indoor unit side facing down.

Vertical installation



- When installing outdoor units above indoor units, provide a trap to keep the oil from stagnating in the stopped indoor units. The trap should be positioned as close to the branch joint pipe as possible.

12-2. Piping Design

"BC controller," "BC controller (Main)," and "BC controller (Sub)" that appear in this section refer to the MA type and MB type.

12-2-1. If 12 ports or less are in use, i.e., if only one BC controller is in use with no sub BC controller

- Note1. No Header usable on PURY system.
 Note2. Indoor unit sized M72-M96 should be connected to BC controller via Y shape joint CMY-R170M-E.
 Note3. Indoor unit sized M72-M96 does NOT share BC controller ports with other Indoor units;
 Note4. As bents cause pressure loss on transportation of refrigerant, fewer bents design is better;
 Piping length needs to consider the actual length and equivalent length which bents are counted.
 Equivalent piping length (m) = Actual piping length + "M" × Number of bent.
 Note5. Set DIP-SW 1-1 to ON of BC controller, in case of connected Indoor unit sized M31-M54 with 2 ports.
 Note6. Do not connect multiple indoor units to the same port when operating each of them in different mode (cooling, heating, stop, and thermo-off). In case of connecting multiple indoor units to the same port, connecting all indoor units to one remote controller and switching SW1-1 ON in the all connected indoor units (switch to thermostat built in the remote controller) are recommended.
 Note7. Indoor capacity is described as its model size. For example, PEFY-M24NMAU, its capacity is M24.
 Note8. Total down-stream Indoor capacity is the summary of the model size of Indoors down-stream. For example, PEFY-M24NMAU + PEFY-M06NMAU: Total Indoor capacity = M24 + M06 = M30.
 Note9. To connect the BC controller to the main pipe, use the reducer (CMY-R304S-G1).
 Note10. Install the pipes correctly referring to the section titled "Procedures for installing the branched pipes."

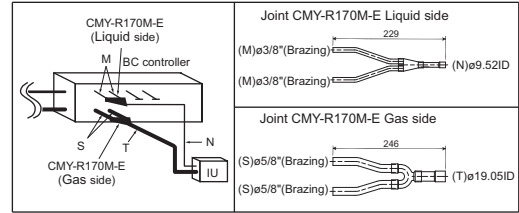


Fig. A

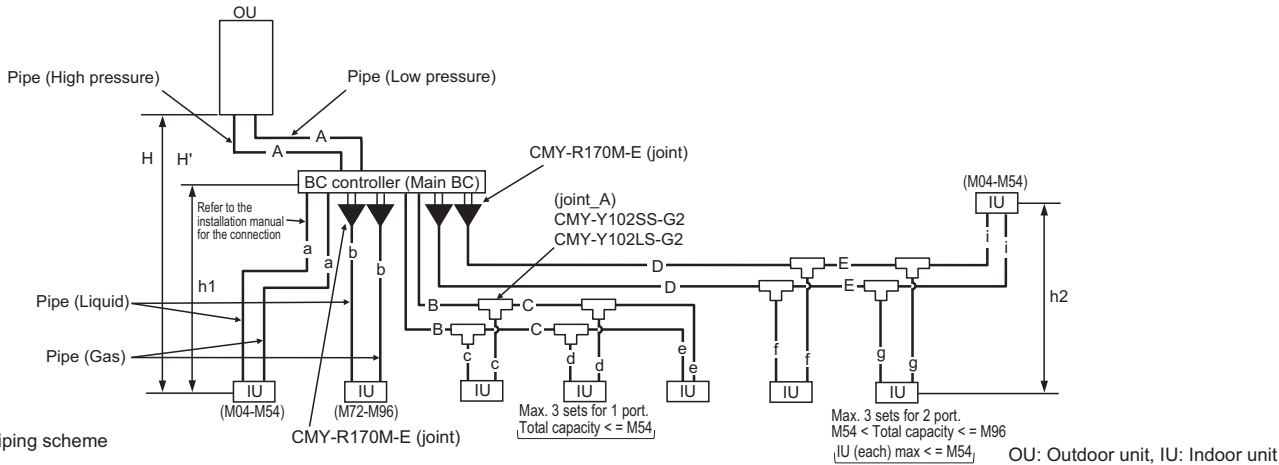


Fig. Piping scheme

Piping length limitation *8

Item	Piping in the figure	Max. length	Max. equivalent length
Total piping length (Total length of high pressure and liquid pipes)	A+B+C+D+E+a+b+c+d+e+f+g+i	*1	-
Farthest IU from OU	A+D+E+i	165 [541]	190 [623]
Distance between OU and BC	A	110 [360] *1	110 [360] *1
Farthest IU from BC controller	D+E+i	60 [197] *2*3	60 [197] *2*3
Height between OU and IU (OU above IU)	H	50 [164] *6	-
Height between OU and IU (OU under IU)	H'	40 [131] *7	-
Height between IU and BC	h1	15 [49] (10 [32]) *4	-
Height between IU and IU	h2	30 [98] (20 [65]) *5	-

OU: Outdoor Unit; IU: Indoor Unit; BC: BC controller

*1. Refer to "Total piping length restrictions (m)" / "Total piping length restrictions (ft.)" section.

*2. Details refer to Fig. 1.

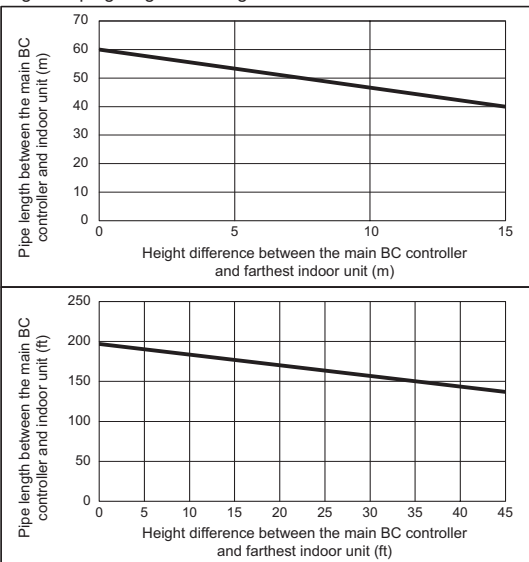
*3. When the M72 or M96 model of indoor units are connected to the system, the maximum distance from the BC controller to the farthest indoor unit (indicated as "D + E + i" in the figure) is 40 m [131 ft].

*4. Distance of Indoor sized M72, M96 from BC must be less than 10 m [32 ft], if any.

*5. Distance of Indoor sized M72, M96 from IU must be less than 20 m [65 ft], if any.

*6. 113 m [370 ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

Fig. 1 Piping length and height between IU and BC controller



Bent equivalent length

Outdoor Model	M (m/bent [ft./bent])
EM72T/YXU	0.35 [1.15]
EM96T/YXU	0.42 [1.38]
EM120T/YXU	0.50 [1.65]
EM144T/YXU	0.50 [1.65]
EM168T/YXU	0.50 [1.65]
EM192T/YXU	0.50 [1.65]

*7. 60 m [197 ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*8. Total length of high-pressure pipes and liquid pipes

*9. The piping length between the BC controller and the indoor unit is subject to restrictions depending on the installation location and the capacity of the indoor unit. For details, refer to the New Design Tool software of Mitsubishi Electric Corporation/the Diamond System Builder software of Mitsubishi Electric Trane HVAC US.

Piping "A" size selection rule

Outdoor Model	Pipe(High pressure)	Pipe(Low pressure)
EM72T/YXU	ø15.88 [5/8]	ø19.05 [3/4]
EM96T/YXU	ø19.05 [3/4]	ø22.20 [7/8]
EM120T/YXU	ø19.05 [3/4]	ø28.58 [1-1/8]
EM144T/YXU	ø22.20 [7/8]	ø28.58 [1-1/8]
EM168T/YXU	ø22.20 [7/8]	ø28.58 [1-1/8]
EM192T/YXU	ø22.20 [7/8]	ø28.58 [1-1/8]

Piping "B", "C", "D", "E" size selection rule

Total down-stream Indoor capacity	Pipe(Liquid)	Pipe(Gas)
M54 or less	ø9.52 [3/8]	ø15.88 [5/8]
M55-M72	ø9.52 [3/8]	ø19.05 [3/4]
M73-M96	ø9.52 [3/8]	ø22.20 [7/8]

Piping "a", "b", "c", "d", "e", "f", "g", "i" size selection rule

Indoor Unit size	Pipe(Liquid)	Pipe(Gas)
M04-M18	ø6.35 [1/4]	ø12.70 [1/2]
M24-M54	ø9.52 [3/8]	ø15.88 [5/8]
M72	ø9.52 [3/8]	ø19.05 [3/4]
M96	ø9.52 [3/8]	ø22.20 [7/8]

Selection criteria for joints_A

Total down-stream Indoor capacity	Joint
-M72	CMY-Y102SS-G2
M73-M96	CMY-Y102LS-G2

12-2-2. If more than 12 ports are in use, or if there is more than one BC controller in use for one outdoor unit

Note1. No Header usable on PURY system.

Note2. Indoor unit sized M72-M96 should be connected to BC controller via Y shape joint CMY-R170M-E.

Note3. Indoor unit sized M72-M96 does NOT share BC controller ports with other Indoor units;

Note4. As bents cause pressure loss on transportation of refrigerant, fewer bents design is better;

Piping length needs to consider the actual length and equivalent length which bents are counted.

Equivalent piping length (m) = Actual piping length + "M" × Number of bent.

Note5. Set DIP-SW 1-1 to ON of BC controller, in case of connected Indoor unit sized M31-M54 with 2 ports.

Note6. Do not connect multiple indoor units to the same port when operating each of them in different mode (cooling, heating, stop, and thermo-off). In case of connecting multiple indoor units to the same port, connecting all indoor units to one remote controller and switching SW1-1 ON in the all connected indoor units (switch to thermostat built in the remote controller) are recommended.

Note7. The maximum total capacity of indoor units that can be connected to each sub BC controller CMB-M•NU-MB-SV is 126.

Note8. Indoor capacity is described as its model size. For example, PEFY-M24NMAU, its capacity is M24.

Note9. Total down-stream Indoor capacity is the summary of the model size of Indoors down-stream. For example, PEFY-M24NMAU + PEFY-M06NMAU: Total Indoor capacity = M24 + M06 = M30.

Note10. To connect the BC controller to the main pipe, use the reducer (CMY-R304S-G1).

Note11. To connect the sub BC controller to the main BC controller, use the reducer (CMY-R303S-G1 or CMY-R306S-G).

Note12. Install the pipes correctly referring to the section titled "Procedures for installing the branched pipes."

Note13. Up to 11 sub BC controllers can be connected.

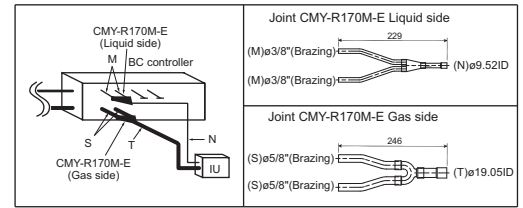


Fig. A

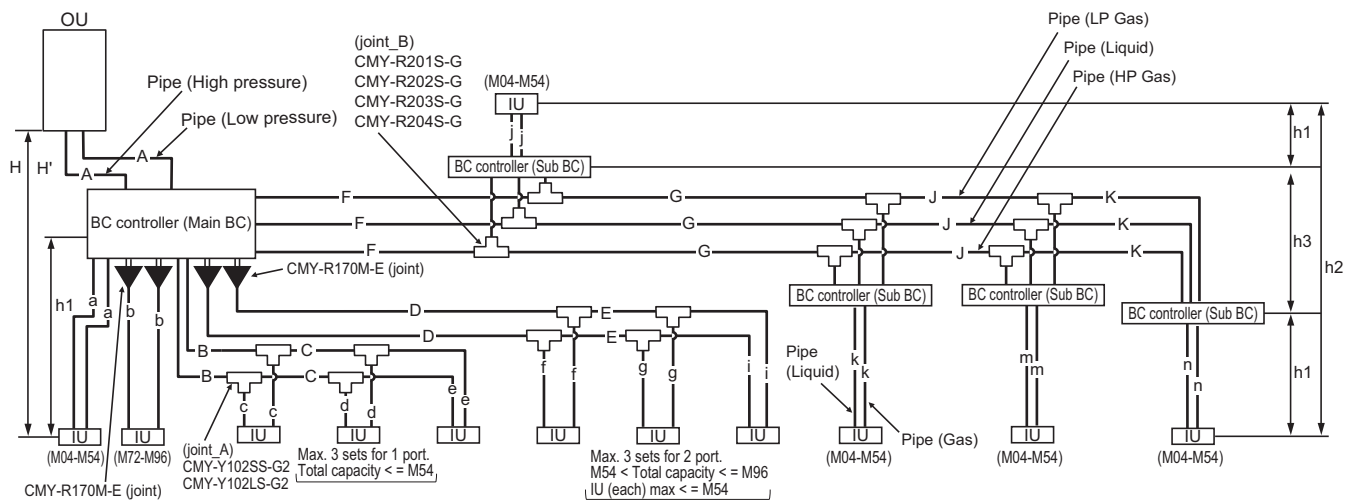


Fig. Piping scheme

OU: Outdoor unit, IU: Indoor unit

Piping length limitation *10

(m [ft.])

Item	Piping in the figure	Max. length	Max. equivalent length
Total piping length (Total length of high pressure and liquid pipes)	A+B+C+D+E+F+G+J+K+a+b+c+d+e+f+g+i+j+k+m+n	*1	-
Farthest IU from OU	A+F+G+J+K+n	165 [541]	190 [623]
Distance between OU and BC	A	110 [360] *1	110 [360] *1
Farthest IU from BC controller	D+E+i	60 [197] *2*3	60 [197] *2*3
Farthest IU from BC controller via Sub BC controller	F+G+J+K+n	90 [295] *9	90 [295] *9
Height between OU and IU (OU above IU)	H	50 [164] *7	-
Height between OU and IU (OU under IU)	H'	40 [131] *8	-
Height between IU and BC	h1	15 [49] (10 [32]) *4	-
Height between IU and IU	h2	30 [98] (20 [65]) *5	-
Height between BC(Main or Sub) and BC(Sub)	h3	15 [49] (10 [32]) *6	-

OU: Outdoor Unit; IU: Indoor Unit; BC: BC controller

*1. Refer to "Total piping length restrictions (m)" / "Total piping length restrictions (ft.)" section.

*2. Details refer to Fig. 2.

*3. When the M72 or M96 model of indoor units are connected to the system, the maximum distance from the BC controller to the farthest indoor unit (indicated as "D + E + i" in the figure) is 40 m [131 ft].

*4. Distance of Indoor sized M72, M96 from BC must be less than 10 m [32 ft], if any.

*5. Distance of Indoor sized M72, M96 from IU must be less than 20 m [65 ft], if any.

*6. When using 2 or more Sub BC controllers, max. height "h3" should be considered.

*7. 113 m [370 ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*8. 60 m [197 ft] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*9. When the piping length or the vertical separation exceeds the limit specified in Fig. 2, connect a sub BC to the system. The restriction for a system with a sub BC connection is shown in Fig. 3. When a given system configuration falls within the shaded area in Fig. 3, increase the size of the high-pressure pipe and the liquid pipe between the main BC and sub BC by one size. When using M12, M15, M18, M36, or M48 model of indoor units, increase the size of the liquid branch pipe between the sub BC and indoor unit by one size. When using indoor models M54 or larger, the restrictions shown in Fig. 2 cannot be exceeded.

*10. Total length of high-pressure pipes and liquid pipes

*11. The piping length between the BC controller and the indoor unit is subject to restrictions depending on the installation location and the capacity of the indoor unit. For details, refer to the New Design Tool software of Mitsubishi Electric Corporation/the Diamond System Builder software of Mitsubishi Electric Trane HVAC US.

Bent equivalent length

Outdoor Model	M(m/bent [ft./bent])
EM72T/YXU	0.35 [1.15]
EM96T/YXU	0.42 [1.38]
EM120T/YXU	0.50 [1.65]
EM144T/YXU	0.50 [1.65]
EM168T/YXU	0.50 [1.65]
EM192T/YXU	0.50 [1.65]

Piping length and height between IU and BC controller

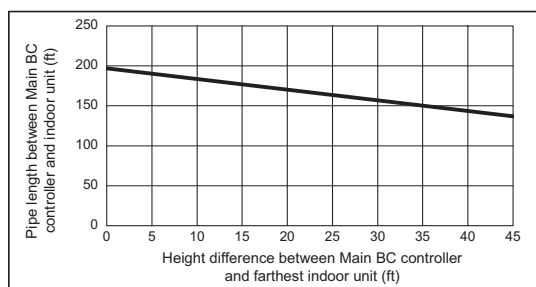


Fig. 2

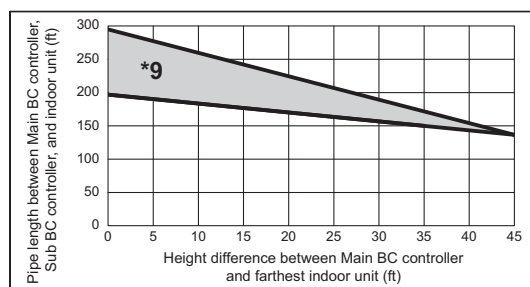
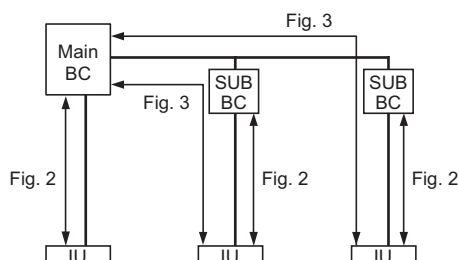


Fig. 3



*9. When the piping length or the vertical separation exceeds the limit specified in Fig. 2, connect a sub BC to the system.

The restriction for a system with a sub BC connection is shown in Fig. 3.

When a given system configuration falls within the shaded area in Fig. 3, increase the size of the high-pressure pipe and the liquid pipe between the main BC and sub BC by one size.

The maximum liquid branch pipe diameter is $\phi 19.05$. If a given system already has a $\phi 19.05$ -pipe between the main BC and sub BC, there is no need to increase the pipe size.

When using M12, M15, M18, M36, or M48 model of indoor units, increase the size of the liquid branch pipe between the sub BC and indoor unit by one size.

When using indoor models M54 or larger, the restrictions shown in Fig. 2 cannot be exceeded.

Piping "A" size selection rule

(mm [in.])

Outdoor Model	Pipe(High pressure)	Pipe(Low pressure)
EM72T/YXU	$\phi 15.88$ [5/8]	$\phi 19.05$ [3/4]
EM96T/YXU	$\phi 19.05$ [3/4]	$\phi 22.20$ [7/8]
EM120T/YXU	$\phi 19.05$ [3/4]	$\phi 28.58$ [1-1/8]
EM144T/YXU	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]
EM168T/YXU	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]
EM192T/YXU	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]

Selection criteria for joints_A

Total down-stream Indoor capacity	Joint
-M72	CMY-Y102SS-G2
M73-M96	CMY-Y102LS-G2

Selection criteria for joints_B

Total down-stream Indoor capacity	Joint
-M126	CMY-R201S-G
M127-M216	CMY-R202S-G
M217-M234	CMY-R203S-G
M235-	CMY-R204S-G

Piping "B", "C", "D", "E" size selection rule

(mm [in.])

Total down-stream Indoor capacity	Pipe(Liquid)	Pipe(Gas)
M54 or less	$\phi 9.52$ [3/8]	$\phi 15.88$ [5/8]
M55-M72	$\phi 9.52$ [3/8]	$\phi 19.05$ [3/4]
M73-M96	$\phi 9.52$ [3/8]	$\phi 22.20$ [7/8]

Piping "a", "b", "c", "d", "e", "f", "g", "i", "j", "k", "m", "n" size selection rule (mm [in.])

Indoor Unit size	Pipe(Liquid)	Pipe(Gas)
M04-M18	$\phi 6.35$ [1/4]	$\phi 12.70$ [1/2]
M24-M54	$\phi 9.52$ [3/8]	$\phi 15.88$ [5/8]
M72	$\phi 9.52$ [3/8]	$\phi 19.05$ [3/4]
M96	$\phi 9.52$ [3/8]	$\phi 22.20$ [7/8]

Piping "F", "G", "J", "K" size selection rule

(mm [in.])

Total down-stream Indoor capacity	Pipe(Liquid)	Pipe(HP Gas)	Pipe(LP Gas)
M72 or less	$\phi 9.52$ [3/8]	$\phi 15.88$ [5/8]	$\phi 19.05$ [3/4]
M73 to M108	$\phi 9.52$ [3/8]	$\phi 19.05$ [3/4]	$\phi 22.20$ [7/8]
M109 to M126	$\phi 12.70$ [1/2]	$\phi 19.05$ [3/4]	$\phi 28.58$ [1-1/8]
M127 to M144	$\phi 12.70$ [1/2]	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]
M145 to M216	$\phi 15.88$ [5/8]	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]
M217 to M234	$\phi 15.88$ [5/8]	$\phi 28.58$ [1-1/8]	$\phi 28.58$ [1-1/8]
M235 to M288	$\phi 19.05$ [3/4]	$\phi 28.58$ [1-1/8]	$\phi 34.93$ [1-3/8]
M289 or above	$\phi 19.05$ [3/4]	$\phi 28.58$ [1-1/8]	$\phi 41.28$ [1-5/8]

HP: High pressure, LP: Low pressure

PURY-EM-T(S)XU-A, Y(S)XU-A

OU: Outdoor unit, IU: Indoor unit

(m [ft.])

For details, refer to the New Design Tool software of Mitsubishi Electric Corporation/the Diamond System Builder software of Mitsubishi Electric Trane HVAC US.



Fig. A

Outdoor Model	M(m/bent [ft./bent])
EM264T/YSXU	0.70 [2.30]
EM288T/YSXU	0.70 [2.30]
EM312T/YSXU	0.80 [2.63]
EM336T/YSXU	0.80 [2.63]
EM360T/YSXU	0.80 [2.63]
EM384T/YSXU	0.80 [2.63]

Piping length and height between IU and BC controller

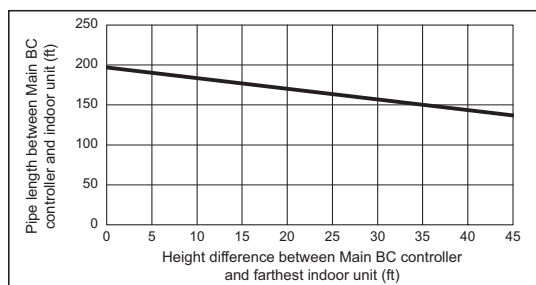


Fig. 2

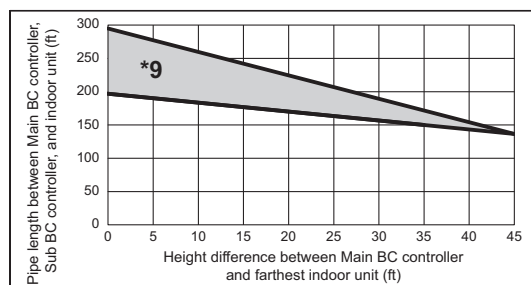
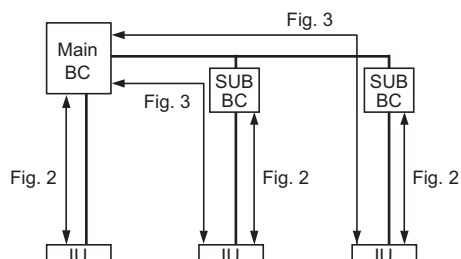


Fig. 3



*9. When the piping length or the vertical separation exceeds the limit specified in Fig. 2, connect a sub BC to the system.

The restriction for a system with a sub BC connection is shown in Fig. 3.

When a given system configuration falls within the shaded area in Fig. 3, increase the size of the high-pressure pipe and the liquid pipe between the main BC and sub BC by one size.

The maximum liquid branch pipe diameter is $\phi 19.05$. If a given system already has a $\phi 19.05$ -pipe between the main BC and sub BC, there is no need to increase the pipe size.

When using M12, M15, M18, M36, or M48 model of indoor units, increase the size of the liquid branch pipe between the sub BC and indoor unit by one size.

When using indoor models M54 or larger, the restrictions shown in Fig. 2 cannot be exceeded.

Piping "A" size selection rule

(mm [in.])

Outdoor Model	Pipe(High pressure)	Pipe(Low pressure)
EM264T/YXU	$\phi 28.58$ [1-1/8]	$\phi 34.93$ [1-3/8]
EM288T/YXU	$\phi 28.58$ [1-1/8]	$\phi 34.93$ [1-3/8]
EM312T/YXU	$\phi 28.58$ [1-1/8]	$\phi 41.28$ [1-5/8]
EM336T/YXU	$\phi 28.58$ [1-1/8]	$\phi 41.28$ [1-5/8]
EM360T/YXU	$\phi 28.58$ [1-1/8]	$\phi 41.28$ [1-5/8]
EM384T/YXU	$\phi 28.58$ [1-1/8]	$\phi 41.28$ [1-5/8]

Piping "L", "M" size selection rule

(mm [in.])

Outdoor Model	Pipe(High pressure)	Pipe(Low pressure)
EM120T/YXU	$\phi 19.05$ [3/4]	$\phi 28.58$ [1-1/8]
EM144T/YXU	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]
EM168T/YXU	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]
EM192T/YXU	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]

Piping "B", "C", "D", "E" size selection rule

(mm [in.])

Total down-stream Indoor capacity	Pipe(Liquid)	Pipe(Gas)
M54 or less	$\phi 9.52$ [3/8]	$\phi 15.88$ [5/8]
M55-M72	$\phi 9.52$ [3/8]	$\phi 19.05$ [3/4]
M73-M96	$\phi 9.52$ [3/8]	$\phi 22.20$ [7/8]

Selection criteria for joints_A

Total down-stream Indoor capacity	Joint
-M72	CMY-Y102SS-G2
M73-M96	CMY-Y102LS-G2

Piping "a", "b", "c", "d", "e", "f", "g", "i", "j", "k", "m", "n" size selection rule (mm [in.])

Indoor Unit size	Pipe(Liquid)	Pipe(Gas)
M04-M18	$\phi 6.35$ [1/4]	$\phi 12.70$ [1/2]
M24-M54	$\phi 9.52$ [3/8]	$\phi 15.88$ [5/8]
M72	$\phi 9.52$ [3/8]	$\phi 19.05$ [3/4]
M96	$\phi 9.52$ [3/8]	$\phi 22.20$ [7/8]

Selection criteria for joints_B

Total down-stream Indoor capacity	Joint
-M126	CMY-R201S-G
M127-M216	CMY-R202S-G
M217-M234	CMY-R203S-G
M235-	CMY-R204S-G

Piping "F", "G", "J", "K" size selection rule

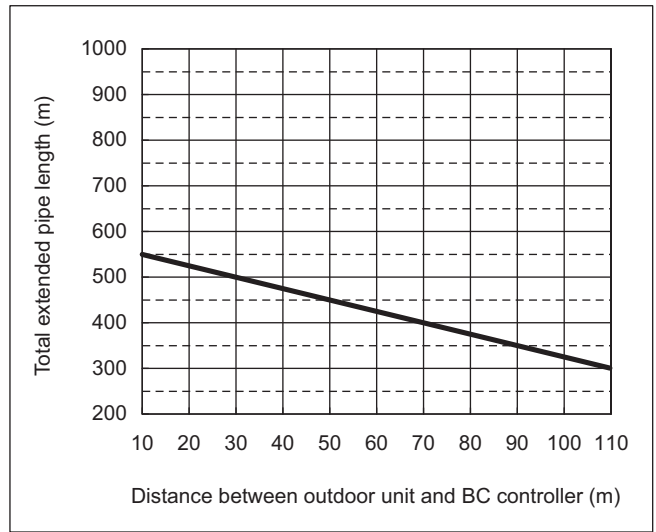
(mm [in.])

Total down-stream Indoor capacity	Pipe(Liquid)	Pipe(HP Gas)	Pipe(LP Gas)
M72 or less	$\phi 9.52$ [3/8]	$\phi 15.88$ [5/8]	$\phi 19.05$ [3/4]
M73 to M108	$\phi 9.52$ [3/8]	$\phi 19.05$ [3/4]	$\phi 22.20$ [7/8]
M109 to M126	$\phi 12.70$ [1/2]	$\phi 19.05$ [3/4]	$\phi 28.58$ [1-1/8]
M127 to M144	$\phi 12.70$ [1/2]	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]
M145 to M216	$\phi 15.88$ [5/8]	$\phi 22.20$ [7/8]	$\phi 28.58$ [1-1/8]
M217 to M234	$\phi 15.88$ [5/8]	$\phi 28.58$ [1-1/8]	$\phi 28.58$ [1-1/8]
M235 to M288	$\phi 19.05$ [3/4]	$\phi 28.58$ [1-1/8]	$\phi 34.93$ [1-3/8]
M289 or above	$\phi 19.05$ [3/4]	$\phi 28.58$ [1-1/8]	$\phi 41.28$ [1-5/8]

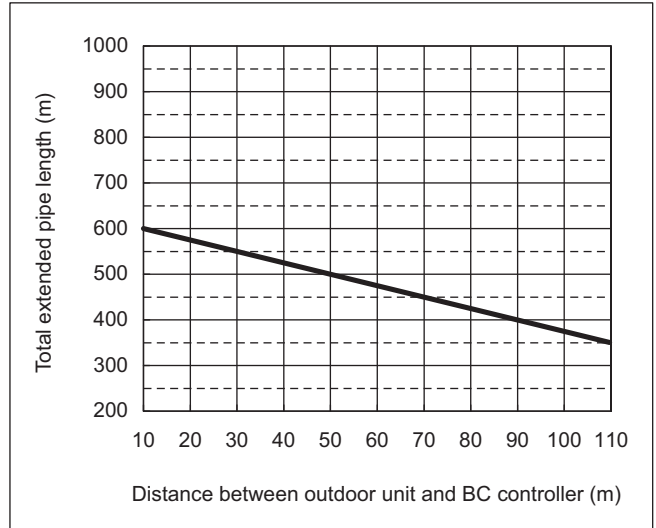
HP: High pressure, LP: Low pressure

12-2-4. Total piping length restrictions (m)

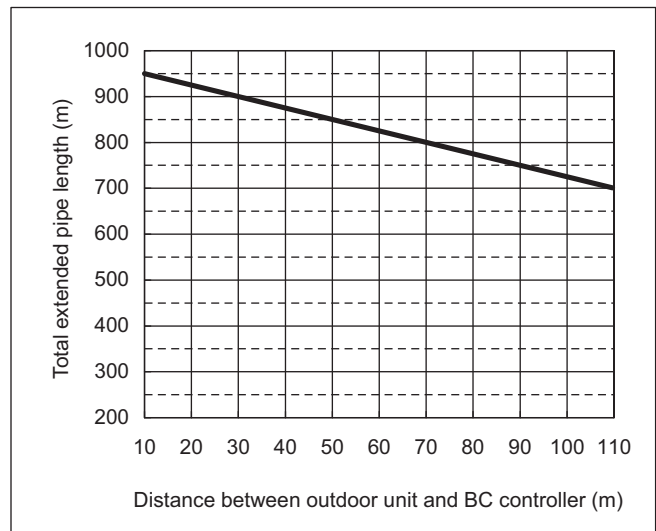
[PURY-EM72, 96, 120TXU/YXU]



[PURY-EM144, 168, 192TXU/YXU]



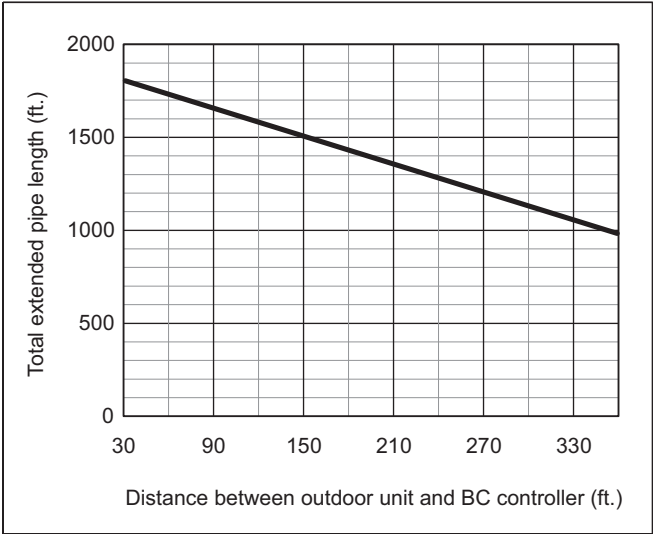
[PURY-EM264, 288, 312, 336, 360, 384TSXU/YSXU]



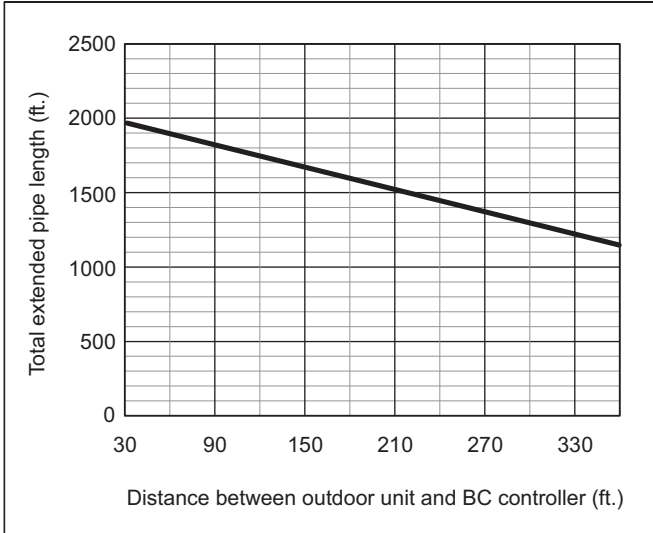
PURY-EM-T(S)XU-A, Y(S)XU-A

Total piping length restrictions (ft.)

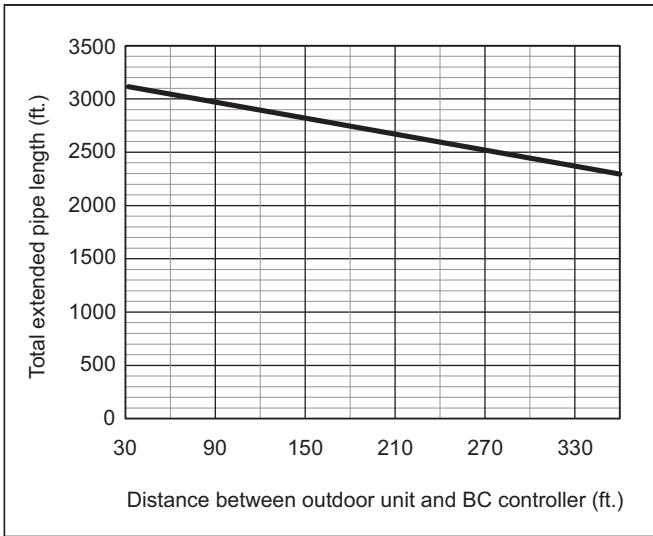
[PURY-EM72, 96, 120TXU/YXU]



[PURY-EM144, 168, 192TXU/YXU]



[PURY-EM264, 288, 312, 336, 360, 384TSXU/YSXU]



12-3. Refrigerant charging calculation

At the time of shipping, the outdoor unit is charged with the refrigerant. As this charge does not include the amount needed for extended piping, additional charging for each refrigerant line will be required on site. In order that future servicing may be properly provided, always keep a record of the size and length of each refrigerant line and the amount of additional charge by writing it in the space provided on the outdoor unit.

■ Calculation of additional refrigerant charge

- The amount of refrigerant to be added depends on the size and the total length of the high-pressure piping and liquid piping.
- Calculate the amount of refrigerant to be charged according to the formula below.
- Round up the calculation result to the nearest 0.1 kg (0.1 oz).
- The refrigerant amount in the high-pressure piping between the main and sub BC is not included in the calculation of the total additional refrigerant amount.

<Additional Charge>

(1) Units "m" and "kg" (In an R2 system)

<Formula>

- When the piping length from the outdoor unit to the farthest indoor unit is 30.5 m (100 ft) or shorter

Amount of additional charge (kg)	=	High-pressure pipe ø28.58 total length × 0.32 (kg/m)	+	High-pressure pipe ø22.2 total length × 0.20 (kg/m)	+	High-pressure pipe ø19.05 total length × 0.14 (kg/m)	+	High-pressure pipe ø15.88 total length × 0.099 (kg/m)	
	+	Liquid pipe ø19.05 total length × 0.26 (kg/m)	+	Liquid pipe ø15.88 total length × 0.17 (kg/m)	+	Liquid pipe ø12.7 total length × 0.11 (kg/m)	+	Liquid pipe ø9.52 total length × 0.054 (kg/m)	Liquid pipe ø6.35 total length × 0.020 (kg/m)
	+	Main or sub BC controller		Amount (kg/unit)					
		MA-type		3.1					
		MB-type		0.8					

	+	Total capacity of connected indoor units	All amount (kg) (to be added for indoor unit)
		48 or below	2.7
		49 to 72	5.6
		73 to 96	6.0
		97 to 120	6.3
		121 to 144	6.6
		145 to 168	7.0
		169 to 192	7.3
		193 to 216	7.7
		217 to 240	8.3
		241 to 264	8.9
		265 to 288	9.5
		289 to 312	10.1
		313 to 336	10.7
		337 to 360	11.4
		361 to 384	11.8
		385 to 408	12.2
		409 to 432	12.6
		433 to 456	13.0
		457 to 480	13.4
		481 or above	13.8

* If all the indoor units are the following models, add 0.2 kg of refrigerant to each unit.

PEFY-M06/18/24/30/36NMAU-A

* If all the indoor units are the following models, add 0.4 kg of refrigerant to each unit.

PLFY-EM06/18/24/30/36NEMU-A

- When the piping length from the outdoor unit to the farthest indoor unit is longer than 30.5 m (100 ft)

Amount of additional charge (kg)	=	High-pressure pipe ø28.58 total length × 0.30 (kg/m)	+	High-pressure pipe ø22.2 total length × 0.19 (kg/m)	+	High-pressure pipe ø19.05 total length × 0.13 (kg/m)	+	High-pressure pipe ø15.88 total length × 0.090 (kg/m)		
	+	Liquid pipe ø19.05 total length × 0.24 (kg/m)	+	Liquid pipe ø15.88 total length × 0.16 (kg/m)	+	Liquid pipe ø12.7 total length × 0.10 (kg/m)	+	Liquid pipe ø9.52 total length × 0.050 (kg/m)	+	Liquid pipe ø6.35 total length × 0.018 (kg/m)
	+	Main or sub BC controller		Amount (kg/unit)		Total capacity of connected indoor units		All amount (kg) (to be added for indoor unit)		
		MA-type		3.1		48 or below		2.7		
		MB-type		0.8		49 to 72		5.6		
						73 to 96		6.0		
						97 to 120		6.3		
						121 to 144		6.6		
						145 to 168		7.0		
						169 to 192		7.3		
						193 to 216		7.7		
						217 to 240		8.3		
						241 to 264		8.9		
						265 to 288		9.5		
						289 to 312		10.1		
						313 to 336		10.7		
						337 to 360		11.4		
						361 to 384		11.8		
						385 to 408		12.2		
						409 to 432		12.6		
						433 to 456		13.0		
						457 to 480		13.4		
						481 or above		13.8		

* If all the indoor units are the following models, add 0.2 kg of refrigerant to each unit.

PEFY-M06/18/24/30/36NMAU-A

* If all the indoor units are the following models, add 0.4 kg of refrigerant to each unit.

PLFY-EM06/18/24/30/36NEMU-A

(2) Units "ft" and "oz" (In an R2 system)

<Formula>

- When the piping length from the outdoor unit to the farthest indoor unit is 30.5 m (100 ft) or shorter

Amount of additional charge (oz)	=	High-pressure pipe ø1-1/8 total length × 3.45 (oz/ft)	+	High-pressure pipe ø7/8 total length × 2.16 (oz/ft)	+	High-pressure pipe ø3/4 total length × 1.51 (oz/ft)	+	High-pressure pipe ø5/8 total length × 1.07 (oz/ft)	
	+	Liquid pipe ø3/4 total length × 2.80 (oz/ft)	+	Liquid pipe ø5/8 total length × 1.83 (oz/ft)	+	Liquid pipe ø1/2 total length × 1.19 (oz/ft)	+	Liquid pipe ø3/8 total length × 0.59 (oz/ft)	Liquid pipe ø1/4 total length × 0.22 (oz/ft)
+	Main or sub BC controller		Amount (oz/unit)		Total capacity of connected indoor units		All amount (oz) (to be added for indoor unit)		
	MA-type	110			48 or below	96			
	MB-type	29			49 to 72	198			
					73 to 96	212			
					97 to 120	223			
					121 to 144	233			
					145 to 168	247			
					169 to 192	258			
					193 to 216	272			
					217 to 240	293			
					241 to 264	314			
					265 to 288	336			
					289 to 312	357			
					313 to 336	378			
					337 to 360	403			
					361 to 384	417			
					385 to 408	431			
					409 to 432	445			
					433 to 456	459			
					457 to 480	473			
					481 or above	487			

* If all the indoor units are the following models, add 8 oz of refrigerant to each unit.

PEFY-M06/18/24/30/36NMAU-A

* If all the indoor units are the following models, add 15 oz of refrigerant to each unit.

PLFY-EM06/18/24/30/36NEMU-A

- When the piping length from the outdoor unit to the farthest indoor unit is longer than 30.5 m (100 ft)

Amount of additional charge (oz)	=	High-pressure pipe ø1-1/8 total length × 3.23 (oz/ft)	+	High-pressure pipe ø7/8 total length × 2.05 (oz/ft)	+	High-pressure pipe ø3/4 total length × 1.40 (oz/ft)	+	High-pressure pipe ø5/8 total length × 0.97 (oz/ft)	
	+	Liquid pipe ø3/4 total length × 2.59 (oz/ft)	+	Liquid pipe ø5/8 total length × 1.73 (oz/ft)	+	Liquid pipe ø1/2 total length × 1.08 (oz/ft)	+	Liquid pipe ø3/8 total length × 0.54 (oz/ft)	Liquid pipe ø1/4 total length × 0.20 (oz/ft)
	+	Main or sub BC controller		Amount (oz/unit)		Total capacity of connected indoor units		All amount (oz) (to be added for indoor unit)	
		MA-type		110		48 or below		96	
		MB-type		29		49 to 72		198	
						73 to 96		212	
						97 to 120		223	
						121 to 144		233	
						145 to 168		247	
						169 to 192		258	
						193 to 216		272	
						217 to 240		293	
						241 to 264		314	
						265 to 288		336	
						289 to 312		357	
						313 to 336		378	
						337 to 360		403	
						361 to 384		417	
						385 to 408		431	
						409 to 432		445	
						433 to 456		459	
						457 to 480		473	
						481 or above		487	

* If all the indoor units are the following models, add 8 oz of refrigerant to each unit.

PEFY-M06/18/24/30/36NMAU-A

* If all the indoor units are the following models, add 15 oz of refrigerant to each unit.

PLFY-EM06/18/24/30/36NEMU-A

■ Sample calculation

Units "m" and "kg"

Indoor	1: 18	A: ø28.58	40 m	a: ø6.35	10 m
	2: 96	B: ø9.52	10 m	b: ø9.52	10 m
	3: 06	C: ø12.7	20 m	c: ø6.35	5 m
	4: 06	D: ø9.52	5 m	d: ø6.35	5 m
	5: 48	E: ø9.52	5 m	e: ø9.52	5 m
	6: 36	F: ø9.52	5 m	f: ø9.52	5 m
	7: 30	G: ø22.2	3 m	g: ø9.52	5 m
	8: 18	H: ø19.05	1 m	h: ø6.35	10 m

Outdoor EM264

Main BC controller CMB-M108NU-MA-SV

Sub BC controller CMB-M104NU-MB-SV × 4

Units "ft" and "oz"

Indoor	1: 18	A: ø1-1/8	131 ft	a: ø1/4	32 ft
	2: 96	B: ø3/8	32 ft	b: ø3/8	32 ft
	3: 06	C: ø1/2	65 ft	c: ø1/4	16 ft
	4: 06	D: ø3/8	16 ft	d: ø1/4	16 ft
	5: 48	E: ø3/8	16 ft	e: ø3/8	16 ft
	6: 36	F: ø3/8	16 ft	f: ø3/8	16 ft
	7: 30	G: ø7/8	9 ft	g: ø3/8	16 ft
	8: 18	H: ø3/4	3 ft	h: ø1/4	32 ft

Outdoor EM264

Main BC controller CMB-M108NU-MA-SV

Sub BC controller CMB-M104NU-MB-SV × 4

The total length of each liquid line as follows:

ø28.58: A = 40 m

ø22.2: G = 3 m

ø12.70: C = 20 m

ø9.52: B + D + E + F + b + e + f + g = 50 m

ø6.35: a + c + d + h = 30 m

<Calculation example>

Additional refrigerant charge

= $40 \times 0.30 + 3 \times 0.19 + 1 \times 0.13$ + $20 \times 0.10 + 50 \times 0.050 + 30 \times 0.018 + 3.1 + 0.8 \times 4 + 8.9$

= 33.0 (32.94) kg

The total length of each liquid line as follows:

ø1-1/8: A = 131 ft

ø7/8: G = 9 ft

ø3/4: H = 3 ft

ø1/2: C = 65 ft

ø3/8: B + D + E + F + b + e + f + g = 160 ft

ø1/4: a + c + d + h = 96 ft

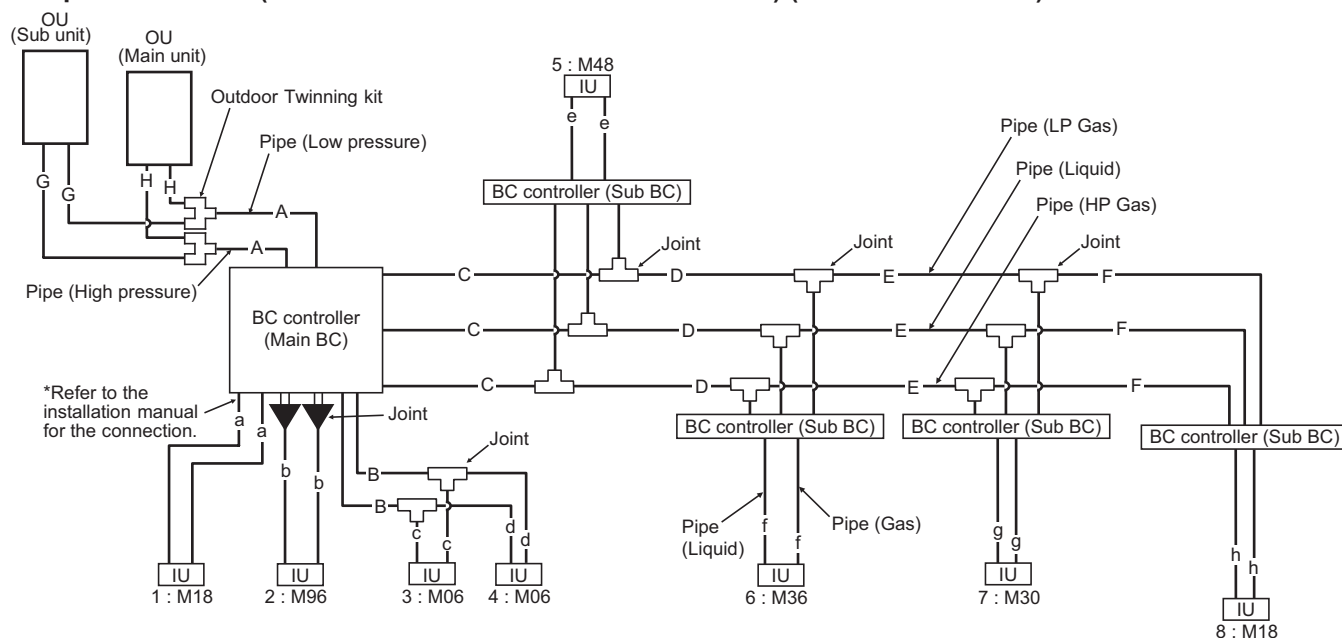
<Calculation example>

Additional refrigerant charge

= $131 \times 3.23 + 9 \times 2.05 + 3 \times 1.40$ + $65 \times 1.08 + 160 \times 0.54 + 96 \times 0.20 + 110 + 29 \times 4 + 314$

= 1161.6 (1161.58) oz

Sample connection (with 5 BC controllers and 8 indoor units) (PURY-EM264YSXU)



■ Limitation of the amount of refrigerant to be charged

The above calculation result of the amount of refrigerant to be charged must become below the value in the table below.

Unit model		EM72 T/YXU	EM96 T/YXU	EM120 T/YXU	EM144 T/YXU	EM168 T/YXU	EM192 T/YXU
Maximum refrigerant charge	Factory charged	5.3 kg	5.3 kg	5.3 kg	6.3 kg	6.3 kg	6.3 kg
	Charged on site	32.3 kg	32.7 kg	33.2 kg	34.7 kg	34.7 kg	35.8 kg
	Total for system	37.6 kg	38.0 kg	38.5 kg	41.0 kg	41.0 kg	42.1 kg
	Factory charged	187 oz	187 oz	187 oz	223 oz	223 oz	223 oz
	Charged on site	1140 oz	1154 oz	1172 oz	1225 oz	1225 oz	1263 oz
	Total for system	1327 oz	1341 oz	1359 oz	1447 oz	1447 oz	1486 oz

Unit model		EM264 T/YSXU	EM288 T/YSXU	EM312 T/YSXU	EM336 T/YSXU	EM360 T/YSXU	EM384 T/YSXU
Maximum refrigerant charge	Factory charged	11.6 kg	12.6 kg	12.6 kg	12.6 kg	12.6 kg	12.6 kg
	Charged on site	62.3 kg	61.3 kg	61.6 kg	62.5 kg	63.0 kg	63.0 kg
	Total for system	73.9 kg	73.9 kg	74.2 kg	75.1 kg	75.6 kg	75.6 kg
	Factory charged	410 oz	445 oz	445 oz	445 oz	445 oz	445 oz
	Charged on site	2198 oz	2163 oz	2173 oz	2205 oz	2223 oz	2223 oz
	Total for system	2607 oz	2607 oz	2618 oz	2650 oz	2667 oz	2667 oz

- Both refrigerant overcharge and undercharge will cause problems. Charge the system with the proper amount of refrigerant. Record the added refrigerant amount on the label attached to the control box panel and the spec label for future servicing.

13-1. General requirements for installation

1. If possible, locate the unit to reduce the direct thermal radiation to the unit.
2. Consider the amount of noise the unit produces when choosing an installation location.

Valves and refrigerant flow on the outdoor/heat source unit may generate noise.

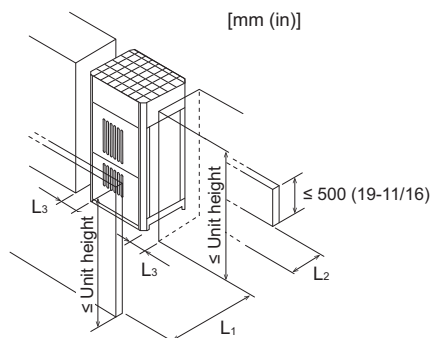
3. Avoid sites that may encounter strong winds.
4. Ensure the installation site can bear the weight of the unit.
5. Condensation should be moved away from the unit, particularly in heating mode.
6. Provide enough space for installation and service as shown in section 13-2. Spacing.
7. Avoid sites where acidic solutions or chemical sprays (such as sulfur sprays) are used frequently.
8. The unit should be provided from combustible gas, oil, steam, chemical gas like acidic solution, sulfur gas and so on.

13-2. Spacing

In case of single installation

(1) When all walls are within their height limits*.

[mm (in)]



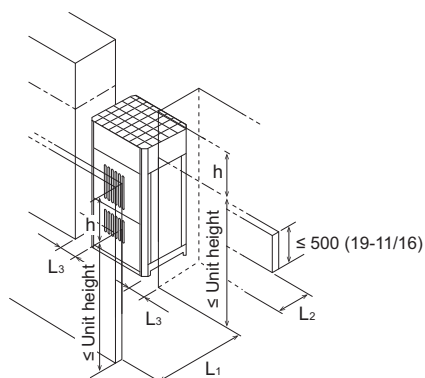
* Height limit

Front/Right/Left/Rear	Same height or lower than the overall height of the unit
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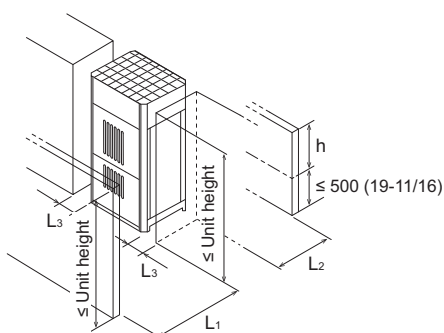
	Required minimum distance [mm (in)]		
	L ₁ (Front)	L ₂ (Rear)	L ₃ (Right/Left)
When the distance behind the unit (L ₂) needs to be small	450 (17-3/4)	100 (3-15/16)	50 (2)
When the distance to the right or left (L ₃) needs to be small	450 (17-3/4)	300 (11-13/16)	20 (13/16)

(2) When one or more walls exceed their height limits*.

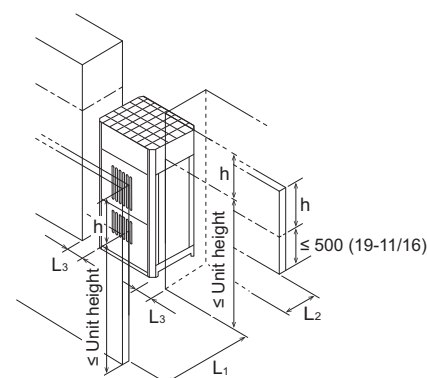
When the wall(s) at the front and/or the right/left exceed(s) their height limits



When the wall at the rear exceeds its height limit



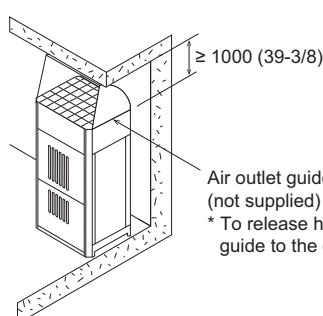
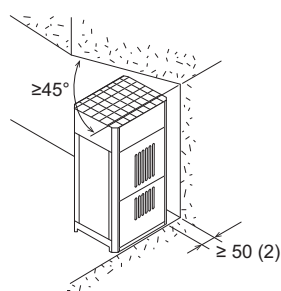
When all walls exceed their height limits



If the height of the walls around the unit exceeds the height limit, add half of the height that exceeds the limit ($h/2$) to L₁, L₂, and L₃ as shown in the table below.

	Required minimum distance [mm (in)]		
	L ₁ (Front)	L ₂ (Rear)	L ₃ (Right/Left)
When the distance behind the unit (L ₂) needs to be small	450 (17-3/4) + $h/2$	100 (3-15/16) + $h/2$	50 (2) + $h/2$
When the distance to the right or left (L ₃) needs to be small	450 (17-3/4) + $h/2$	300 (11-13/16) + $h/2$	20 (13/16) + $h/2$

(3) When there are overhead obstacles



Air outlet guide
(not supplied)

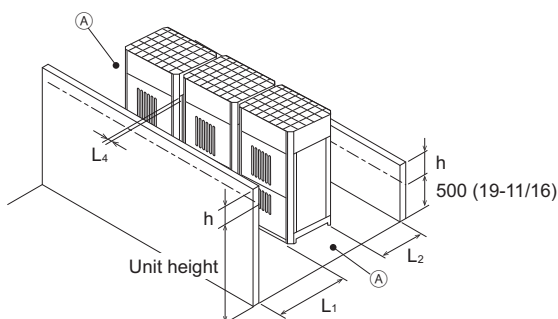
* To release heat through the air outlet guide, install the air outlet guide to the outdoor unit without gaps between them.

In case of collective installation and continuous installation

- When installing multiple units, make sure to take into consideration factors such as providing enough space for people to pass through, ample space between blocks of units, and sufficient space for airflow. (The areas marked with (A) in the figures below must be left open.)
- In the same way as with the single unit installation, if the height of the walls around the unit exceeds the height limit, add half of the height that exceeds the limit ($h/2$) to L_1 , L_2 , and L_3 as shown in the table below.
- If there are walls in the front and rear of the block of units, up to six units can be installed consecutively side by side, and a space of 1000 mm (39-3/8 in) or more must be left between each block of six units.

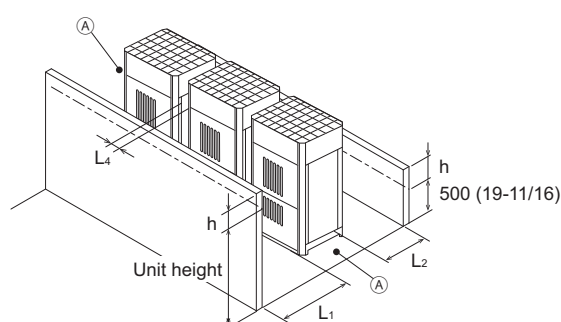
(1) Side-by-side installation

When the distances between the units (L_4) need to be small



Required minimum distance [mm (in)]		
L_1 (Front)	L_2 (Rear)	L_4 (Between)
$450 (17-3/4) + h/2$	$300 (11-13/16) + h/2$	$40 (1-10/16)$

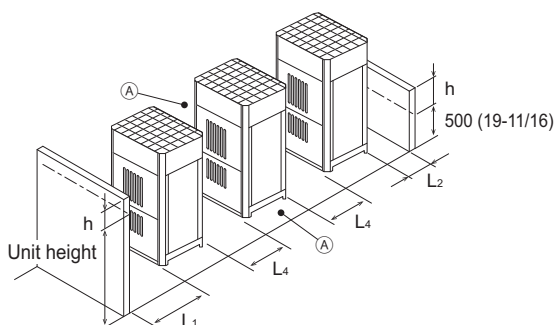
When the distance behind the block of units (L_2) needs to be small



Required minimum distance [mm (in)]		
L_1 (Front)	L_2 (Rear)	L_4 (Between)
$450 (17-3/4) + h/2$	$100 (3-15/16) + h/2$	$100 (3-15/16)$

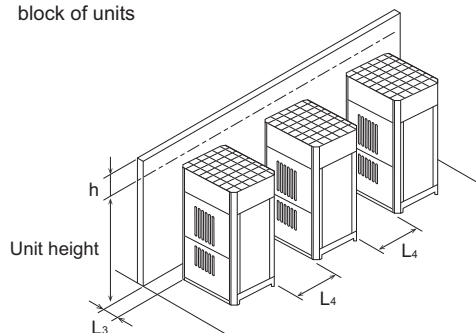
(2) Face-to-face installation

When there are walls in the front and rear of the block of units



Required minimum distance [mm (in)]		
L_1 (Front)	L_2 (Rear)	L_4 (Between)
$450 (17-3/4) + h/2$	$100 (3-15/16) + h/2$	$450 (17-3/4)$

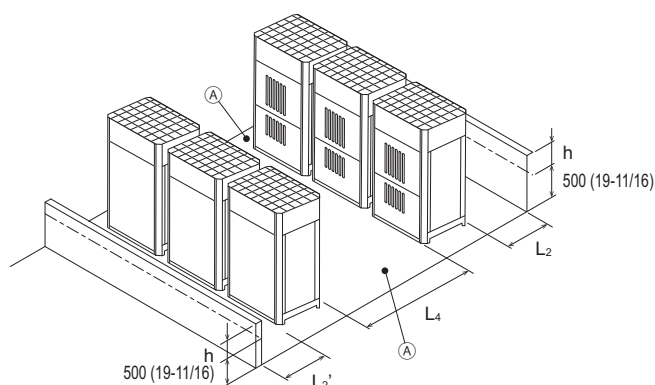
When there is a wall on either the right or left side of the block of units



Required minimum distance [mm (in)]	
L_3 (Right/Left)	L_4 (Between)
$15 (5/8) + h/2$	$450 (17-3/4)$

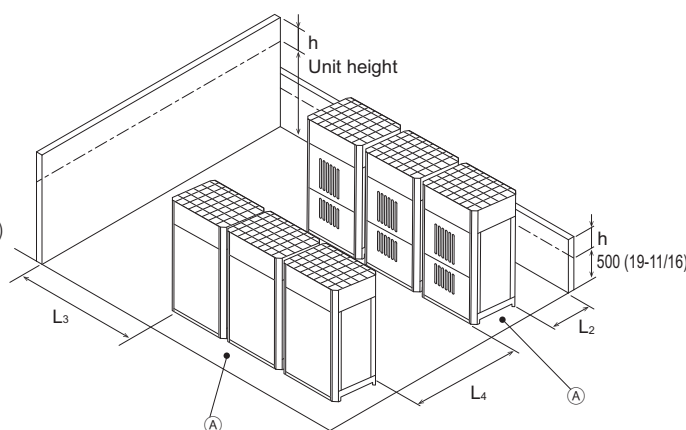
(3) Combination of face-to-face and side-by-side installations

When there are walls in the front and rear of the block of units



Required minimum distance [mm (in)]		
L_2 (Rear)	L_2' (Rear)	L_4 (Between)
$300 (11-13/16) + h/2$	$300 (11-13/16) + h/2$	$900 (35-7/16)$

When there are two walls in an L-shape



Required minimum distance [mm (in)]		
L_2 (Rear)	L_3 (Right/Left)	L_4 (Between)
$300 (11-13/16) + h/2$	$1000 (39-3/8) + h/2$	$900 (35-7/16)$

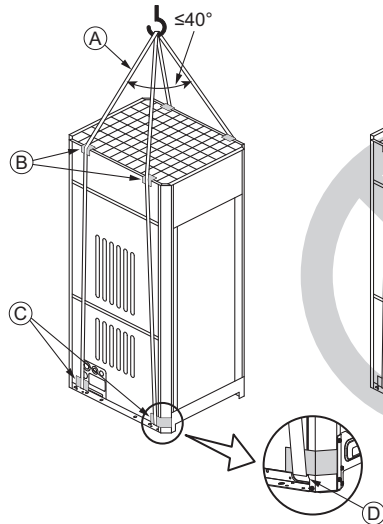
(A): Leave open in two directions.

13-3. Piping direction

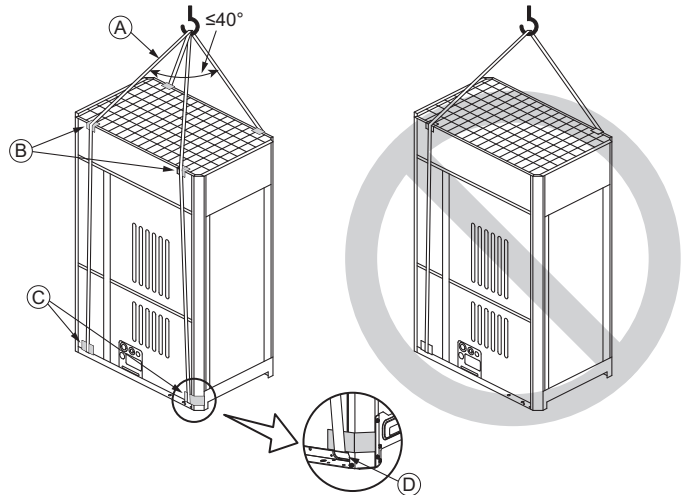
13-3-1. Lifting method

- Always use two slings to lift up the unit. Each sling must be at least 8 m (26 ft) long and must be able to support the weight of the unit.
- Put protective pads between slings and the unit where the slings touch the unit at the base to protect the unit from being scratched.
- Make sure that the angles between slings at the top are less than 40 degrees.

EM72, EM96, EM120



EM144, EM168, EM192



- (A) Slings (Min. 8 m (26 ft) x 2)
- (B) Protective pads
(two each in the front and back)
- (C) Protective pads
(two each in the front and back)
- (D) Sling holes
(two each in the front and back)



CAUTION

Exercise caution when transporting products.

- Products weighing more than 20 kg [45 LBS] should not be carried alone.
- Do not carry the product by the PPbands.
- To avoid the risk of injury, do not touch the heat exchanger fins.
- Plastic bags may pose a risk of choking hazard to children. Tear plastic bags into pieces before disposing of them.
- When lifting and transporting outdoor units with ropes, run the ropes through lifting hole at the unit base. Securely fix the unit so that the ropes will not slide off, and always lift the unit at four points to prevent the unit from falling.

13-3-2. Installation

- Secure the unit with anchor bolts as shown in the figure below so that the unit will not topple over with strong wind or during an earthquake.
 - Install the unit on a durable base made of such materials as concrete or angle steel.
 - Take appropriate anti-vibration measures (e.g., vibration damper pad, vibration isolation base) to keep vibrations and noise from being transmitted from the unit through walls and floors.
- When installing a unit on a base, place an anti-vibration pad between the base and the unit.
- When using an anti-vibration rubber pad, install it so that the pad covers the entire width of the unit leg.
 - All the bottom corners of the unit must still be supported by both the anti-vibration rubber pads and the base.
 - Install the unit in such a way that the corner of the angle bracket at the base of the unit shown in the figure below is securely supported.
 - Install the anchor bolt in such a way that the top end of the anchor bolt do not stick out more than 30 mm [1-3/16 in.].
 - This unit is not designed to be anchored with post-installation-type anchor bolts, although by adding fixing brackets anchoring with such type of anchor bolts becomes possible.

Ⓐ M12 anchor bolt* procured at the site

*Required specification for M12 anchor bolt: Tensile load of 5.6 kN or more to withstand the short-term load caused by earthquakes or strong winds

Ⓑ (Incorrect installation) The corner section is not securely received.

Ⓒ Fixing bracket for M12 hole-in anchor bolt* procured at the site (3 locations to fix with M5 self-tapping screws)

*Required specification for M12 hole-in anchor bolt:
Tensile load of 6.7 kN or more to withstand the short-term load caused by earthquakes or strong winds
Use the fixing bracket with sufficient strength.

Ⓓ Anti-vibration rubber pad
(The pad needs to be large enough to cover the entire width of each unit leg.)

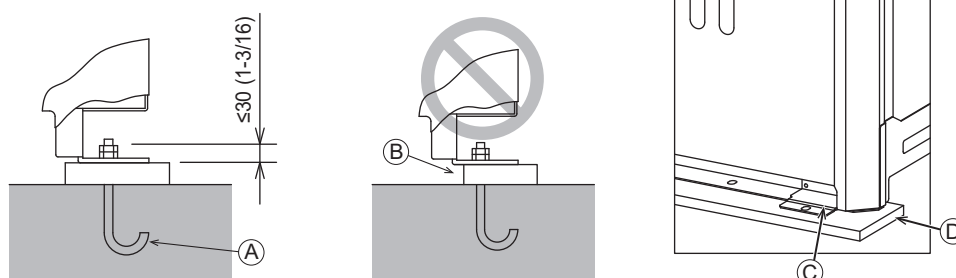
! WARNING

Properly install the unit on a surface that can withstand the weight of the unit. Unit installed on an unstable surface may fall and cause injury.

! WARNING

Take adequate measures against natural disasters including earthquakes and windstorms so that the unit will not fall or tip over. Consult your local specialist for safety measures to be taken.

(Unit: mm [in.])



Take into consideration the durability of the base, water drainage route (Drain water is discharged from outdoor units during operation.), piping route, and wiring route when performing foundation work.

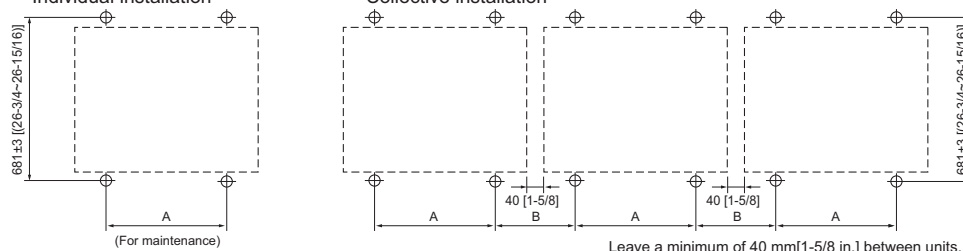
13-3-3. Anchor bolt positions

<EM72-192>

• Individual installation

• Collective installation

(Unit: mm [in.])



PURY	EM72, 96, 120	EM144, 168, 192
A	760±2 [29-15/16(29-7/8~30)]	1060±2 [41-3/4(41-11/16~41-13/16)]
B	190 [7-1/2]	187 [7-3/8]

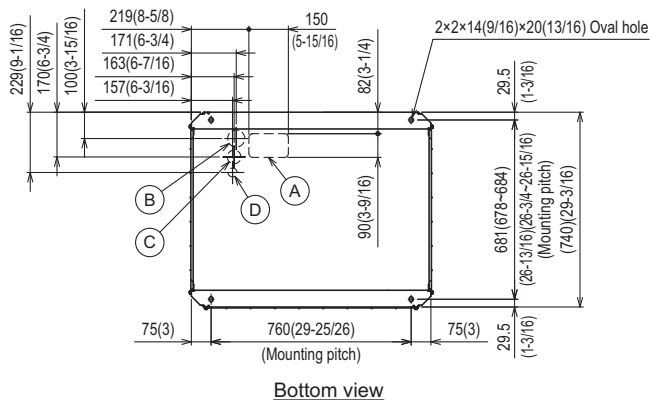
13-3-4. Installation

When the pipes and/or cables are routed at the bottom of the unit, make sure that the through hole at the base of the unit does not get blocked with the installation base.

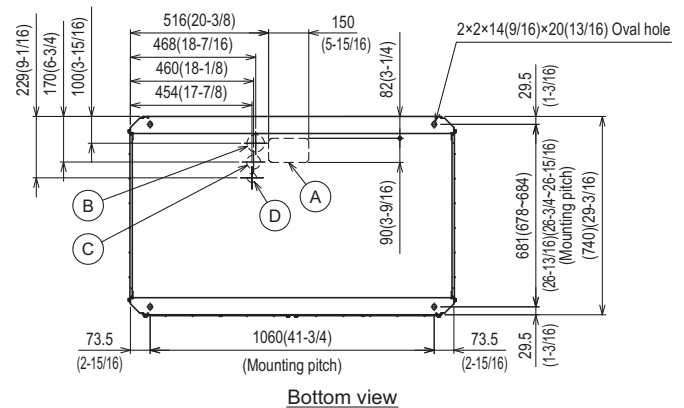
When the pipes are routed at the bottom of the unit, the base should be at least 100 mm [3-15/16 in.] in height.

(Unit: mm[in.])

EM72, 96, 120

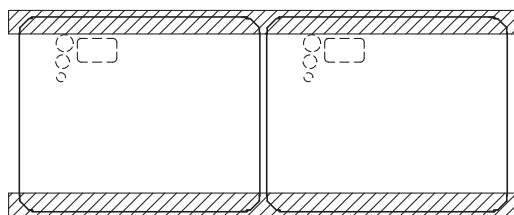


EM144, 168, 192

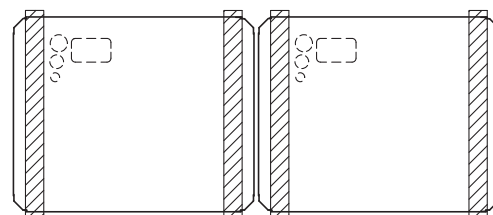


NO.	Usage	Specifications
(A)	For pipes	Bottom through hole 150 (5-15/16) × 90(3-9/16) Knockout hole
(B)	For wires	Bottom through hole ø65 (2-9/16) Knockout hole
(C)		Bottom through hole ø52 (2-1/16) Knockout hole
(D)	For transmission cables	Bottom through hole ø34 (1-3/8) Knockout hole

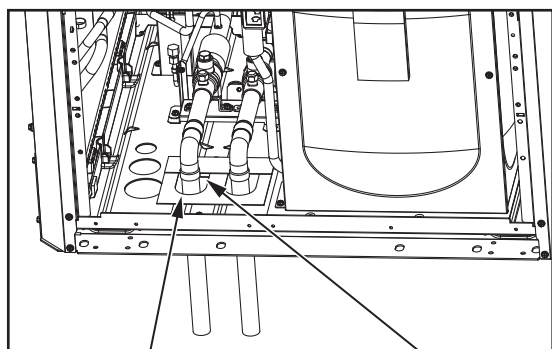
Installation base parallel to the unit's front panel



Installation base perpendicular to the unit's front panel



13-3-5. Refrigerant pipe routing



Example of closure materials (not supplied)

Fill the openings

The gaps around the edges of through holes for pipes and wires on the unit allow water or mice to enter the unit and damage its parts. Close these gaps with filler plates.

This unit allows two types of pipe routing:

- Bottom piping
- Front piping

⚠ CAUTION

To prevent small animals, water and snow from entering the unit and damage its parts, close the gap around the edges of through holes for pipes and wires with filler plates.

13-3-6. Twinning on the outdoor unit side

- The pipe from multiple outdoor units must be installed so that oil will not accumulate in the pipe under certain conditions. Refer to the figures below for details.

* Small dots in the figures indicate branching points.

① To a BC controller

- The pipe from the outdoor units must be inclined downward to the indoor unit side. In the figure on the right, because the pipe is inclined upward, the oil in the pipe accumulates when Unit 1 is in operation and Unit 2 is stopped.



- The distance between the unit bottom and the pipe (H) must be 0.2 m (7-7/8 in) or below. In the figure on the right, because the distance is more than 0.2 m (7-7/8 in), the oil accumulates in Unit 1 when Unit 2 is in operation and Unit 1 is stopped.



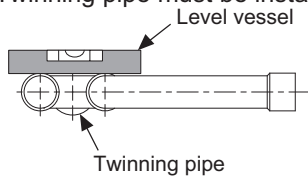
- The vertical separation between units (H) must be 0.1 m (3-15/16 in) or below. In the figure on the right, because the distance is more than 0.1 m (3-15/16 in), the oil accumulates in Unit 1 when Unit 2 is in operation and Unit 1 is stopped.



- The vertical separation between units (H) must be 0.1 m (3-15/16 in) or below. In the figure on the right, because the distance is more than 0.1 m (3-15/16 in), the oil accumulates in Unit 2 when Unit 1 is in operation and Unit 2 is stopped.

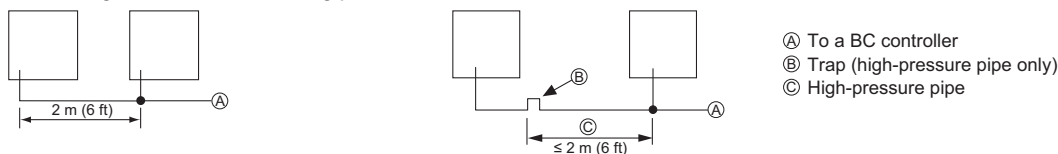


- The Twinning pipe must be installed horizontally using a level vessel to avoid unit damage.



- If the length of the pipe between the branching point and the outdoor unit exceeds 2 m (6 ft), provide a trap within 2 m (6 ft) from the branching point. The trap must be at least 200 mm (7-7/8 in) in height. (high-pressure pipe only) If there is no trap, oil can accumulate inside the pipe, causing a shortage of oil and may damage the compressor.

* Small dots in the figures indicate branching points.



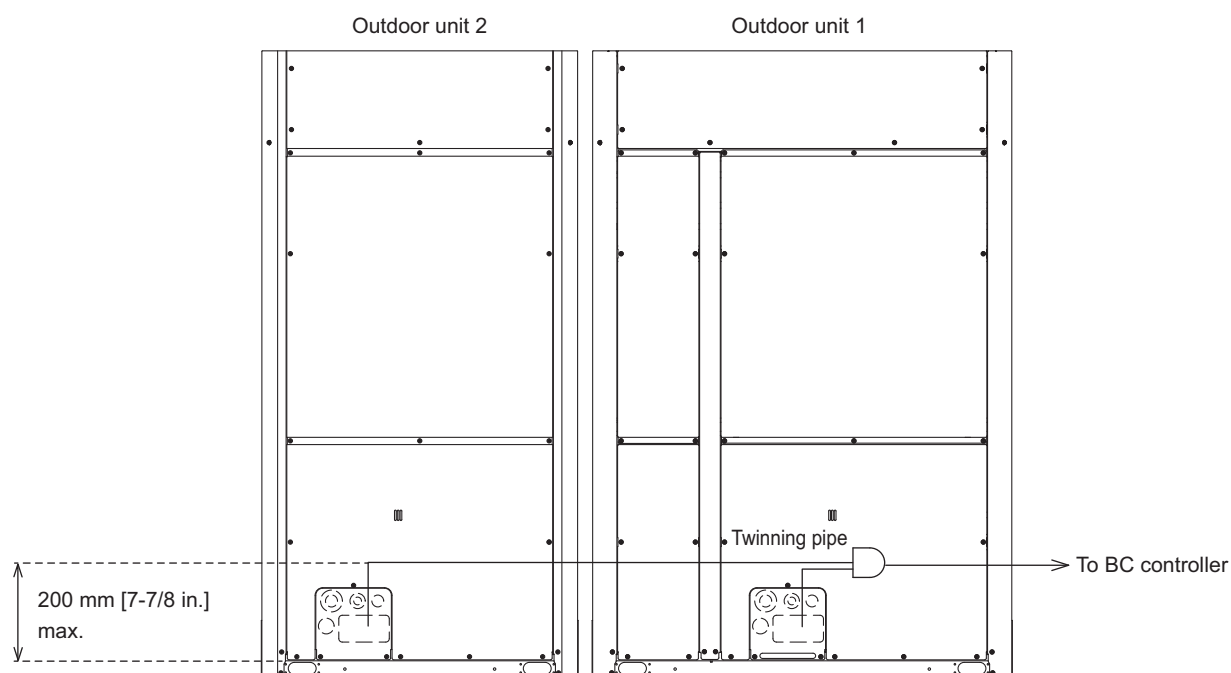
① To a BC controller

② Trap (high-pressure pipe only)

③ High-pressure pipe

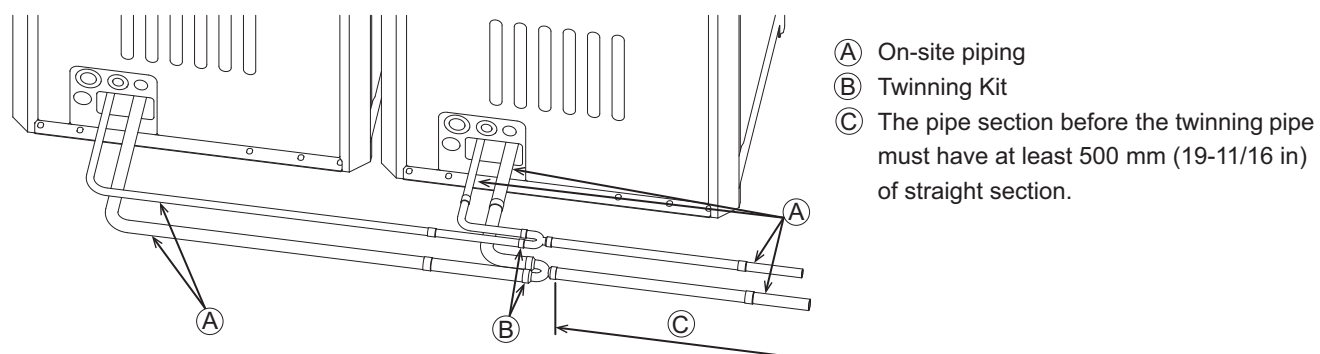
⚠ Caution:

- Do not install expansion loops or offsets other than the ones between outdoor units described on a separate sheet to prevent oil backflow and compressor start-up failure.
- Do not install solenoid valves to prevent oil backflow and compressor start-up failure.
- Do not install a sight glass because it may show improper refrigerant flow.
- If a sight glass is installed, inexperienced technicians that use the glass may overcharge the refrigerant.
- Refrigerant pipes may expand or shrink due to temperature fluctuations of the refrigerant inside the pipes. When installing long straight pipes, provide expansion loops or offsets to absorb the thermal expansions of the pipes.



13-3-7. Twinning on the outdoor unit side

See the following drawing for connecting the pipes between the outdoor units.



13-4. Weather countermeasure

- In abnormally harsh environments such as cold and/or windy areas, sufficient countermeasures to guard against excessive wind and snow should be taken to ensure the unit's correct operation. When the unit is expected to operate in cooling mode in conditions under 10°C (50°F), in snowy areas, in environments subject to strong winds or rain, install snow hoods.

Refer to the snow hood Installation Manual for details.

- *Do not use a snow hood made of stainless steel, which may cause the unit to rust. If the use of a stainless snow hood is the only option, contact the sales office before installing it.
- Install the unit so that the wind will not blow directly against the inlet and outlet.
- If necessary, install the unit on a raised base of the following specifications (not supplied) to prevent damage from snow.

Material: Angle iron (Build a structure that snow and wind can pass through.)

Height: Expected maximum snowfall plus 500 mm (19-11/16 in)

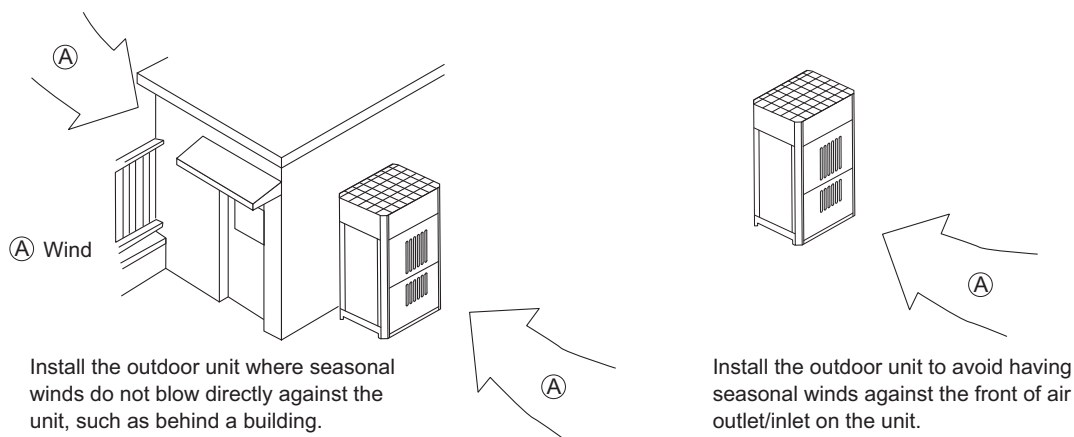
Width: Within the unit width (If the raised base is too wide, snow will accumulate on the raised base.)

- When the unit is used in a cold region and the heating operation is continuously performed for a long time when the outside air temperature is below freezing, install a heater on the raised base or take other appropriate measures to prevent water from freezing on the raised base.
- If a drain pan for centralized drainage is used in cold regions, install the drain pan so that freezing does not damage the equipment.
- When installing a snow hood, take pressure loss into consideration to prevent airflow from decreasing.
- Avoid installing a trestle or other structure under the drainage hole in the bottom plate as much as possible.
- If icicles form on the bottom plate, regularly remove them to prevent them from reaching the trestle or ground and growing under the outdoor unit.

13-5. Countermeasure to wind

Referring to the figure shown below, take appropriate measures which will suit the actual situation of the place for installation. A unit installed alone is vulnerable to strong winds. Select the installation site carefully to minimize the effect of winds.

To install a unit in a place where the wind always blows from the same direction, install the unit so that the outlet faces away from the direction of the wind.



⚠ Warning

- Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
 - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, repair, or at the time of disposal of the unit.
 - It may also be in violation of applicable laws.
 - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
- Our air conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R32.

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