

OUTDOOR UNITS

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1. SPECIFICATIONS

1-1. PUHY-P72~360T(S)LMU-A Specifications

Model			PUHY-P72TLMU-A(-BS)		PUHY-P96TLMU-A(-BS)	
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz		3-phase 3-wire 208 / 230V ±10% 60Hz	
Cooling capacity (Nominal) *1 (208-230V)			Btu/h	72,000	96,000	
			kW	21.1	28.1	
	Power input	kW	4.55 *4		6.39 *4	
	Current input	A	14.0 / 12.6 *4		19.7 / 17.8 *4	
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		59~75° F(15~24° C)	
	Outdoor	D.B.	23~126° F (-5~52° C) *5		23~126° F (-5~52° C) *5	
Heating capacity (Nominal) *2 (208-230V)			Btu/h	80,000	108,000	
			kW	23.4	31.7	
	Power input	kW	5.48 *4		7.65 *4	
	Current input	A	17.3 / 15.6 *4		23.5 / 21.3 *4	
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		59~81° F(15~27° C)	
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		-13~60° F(-25~15.5° C)	
Indoor unit	Total capacity		50~130% of outdoor unit capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P06~P72 / 1~15		P06~P96 / 1~20	
Sound pressure level (measured in anechoic room)			dB <A>	58.0	58.0	
Refrigerant piping diameter	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		3/8 (9.52) Brazed (1/2 [12.7] Brazed, if length from outdoor unit to farthest indoor unit is >= 295' [90m])	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Airflow rate	CFM	6,200		6,700	
		m³ / min	175		190	
		L/s	2,920		3,170	
	Control, Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92	
	External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Operating Range		13% to 100%		13% to 100%	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.6		6.9	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D			In.	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 48-1/16 x 29-5/32	
			mm	1,650 x 920 x 740	1,650 x 1,220 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)			A	24 / 22	32 / 29	
Maximum Overcurrent Protection (MOP)			A	35 / 35	50 / 45	
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)		R410A x 22 lbs + 12 oz (10.3 kg)	
	Control		LEV and HIC circuit		LEV and HIC circuit	
Net weight			lbs (kg)	435 (197)	499 (226)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure	
Defrost method			Auto-defrost mode (Reversed refrigerant cycle)		Auto-defrost mode (Reversed refrigerant cycle)	
Drawing	External		KJ94R620		KJ94R621	
	Wiring		KE94G067		KE94G067	
Standard attachment	Document		Installation Manual		Installation Manual	
	Accessory		Details refer to External Drw		Details refer to External Drw	
Optional parts			Joint: CMY-Y102SS-G2		Joint: CMY-Y102SS/LS-G2	
			Header: CMY-Y104/108/1010C-G		Header: CMY-Y104/108/1010C-G	
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m ³ /min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P120TLMU-A(-BS)		PUHY-P144TLMU-A(-BS)	
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz		3-phase 3-wire 208 / 230V ±10% 60Hz	
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	120,000		144,000	
		kW	35.2		42.2	
	Power input	kW	8.07 *4		10.38 *4	
	Current input	A	24.8 / 22.5 *4		32.0 / 28.9 *4	
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		59~75° F(15~24° C)	
	Outdoor	D.B.	23~126° F (-5~52° C) *5		23~126° F (-5~52° C) *5	
Heating capacity (Nominal) *2 (208-230V)		Btu/h	135,000		160,000	
		kW	39.6		46.9	
	Power input	kW	9.84 *4		12.30 *4	
	Current input	A	30.3 / 27.4 *4		37.9 / 34.3 *4	
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		59~81° F(15~27° C)	
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		-13~60° F(-25~15.5° C)	
Indoor unit	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity	P06~P96 / 1~26		P06~P96 / 1~31		
Sound pressure level (measured in anechoic room)		dB <A>	60.0		61.0	
Refrigerant piping diameter	Liquid pipe	In. (mm)	3/8 (9.52) Brazed (1/2" [12.7] Brazed, if length from outdoor unit to farthest indoor unit is >= 295' [90m])		1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	
Fan	Type x Quantity		Propeller fan x 2		Propeller fan x 2	
	Airflow rate	CFM	11,300		11,300	
		m³ / min	320		320	
		L/s	5,330		5,330	
	Control, Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92±0.92		0.92±0.92	
External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6		
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Operating Range		15% to 100%		15% to 100%	
	Starting method		Inverter		Inverter	
	Motor output	kW	8.2		10.8	
	Lubricant		MEL32		MEL32	
External finish		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		
External dimension H x W x D		In.	64-31/32 x 68-29/32 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32	
		mm	1,650 x 1,750 x 740		1,650 x 1,750 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection	
Minimum Circuit Ampacity		A	42 / 39		46 / 43	
Maximum Overcurrent Protection (MOP)		A	60 / 60		70 / 70	
Refrigerant	Type x original charge		R410A x 26 lbs + 1oz (11.8kg)		R410A x 26 lbs + 1oz (11.8kg)	
	Control		LEV and HIC circuit		LEV and HIC circuit	
Net weight		lbs (kg)	671 (304)		671 (304)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure	
Defrost method			Auto-defrost mode (Reversed refrigerant cycle)		Auto-defrost mode (Reversed refrigerant cycle)	
Drawing	External	KJ94R622		KJ94R622		
	Wiring	KE94G068		KE94G068		
Standard attachment	Document	Installation Manual		Installation Manual		
	Accessory	Details refer to External Drw		Details refer to External Drw		
Optional parts			Joint: CMY-Y102SS/LS-G2		Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2	
			Header: CMY-Y104/108/1010C-G		Header: CMY-Y104/108/1010C-G	
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m³/min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P168TLMU-A(-BS)		
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz		
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	168,000		
		kW	49.2		
		Power input	kW	13.52 *4	
		Current input	A	41.6-37.7 *4	
Temp. range of cooling *3		Indoor	W.B.	59~75° F (15~24° C)	
		Outdoor	D.B.	23~126° F (-5~52° C) *5	
Heating capacity (Nominal) *2 (208-230V)		Btu/h	188,000		
		kW	55.1		
		Power input	kW	14.91 *4	
		Current input	A	45.9 / 41.5 *4	
Temp. range of heating *3		Indoor	D.B.	59~81° F (15~27° C)	
		Outdoor	W.B.	-13~60° F (-25~15.5° C)	
Indoor unit		Total capacity		50~130% of outdoor unit capacity	
		Model / Quantity		P06~P96 / 1~36	
Sound pressure level (measured in anechoic room)		dB <A>	62.0		
Refrigerant piping diameter		Liquid pipe	In. (mm)	5/8 (15.88) Brazed	
		Gas pipe	In. (mm)	1-1/8 (28.58) Brazed	
Fan		Type x Quantity		Propeller fan x 2	
		Airflow rate	CFM	12,700	
			m³ / min	360	
			L/s	6,000	
		Control, Driving mechanism		Inverter-control, Brushless DC motor	
		Motor output	kW	0.92+0.92	
		External static pressure *6		0 in.WG (0 Pa) *6	
Compressor		Type x Quantity		Inverter scroll hermetic compressor x 1	
		Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.	
		Operating Range		12% to 100%	
		Starting method		Inverter	
		Motor output	kW	12.4	
		Lubricant		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		
External dimension H x W x D		In.	64-31/32 x 68-29/32 x 29-5/32		
		mm	1,650 x 1,750 x 740		
Protection devices		High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
		Inverter circuit (COMP. / FAN)		Over-current protection	
Minimum Circuit Ampacity		A	58 / 54		
Maximum Overcurrent Protection (MOP)		A	90 / 80		
Refrigerant		Type x original charge		R410A x 26 lbs + 1oz (11.8kg)	
		Control		LEV and HIC circuit	
Net weight		lbs (kg)	673 (305)		
Heat exchanger			Salt-resistant cross fin & aluminium tube		
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		
Defrost method			Auto-defrost mode (Reversed refrigerant cycle)		
Drawing		External		KJ94R622	
		Wiring		KE94G069	
Standard attachment		Document		Installation Manual	
		Accessory		Details refer to External Drw	
Optional parts			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2		
			Header: CMY-Y104/108/1010C-G		
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.		

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	BTU/h =kW x 3,412
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	cfm =m ³ /min x 35.31
Level difference:	0ft.(0m)	0ft.(0m)	lb =kg / 0.4536
* Due to continuing improvement, above specifications may be subject to change without notice.			* Above specification data is subject to rounding variation.

1. SPECIFICATIONS

Model			PUHY-P144TSLMU-A(-BS)		
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz		
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	144,000		
		kW	42.2		
	Power input	kW	10.09 *4		
	Current input	A	31.1 / 28.1 *4		
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		
	Outdoor	D.B.	23~126° F (-5~52° C) *5		
Heating capacity (Nominal) *2 (208-230V)		Btu/h	160,000		
		kW	46.9		
	Power input	kW	11.88 *4		
	Current input	A	36.6 / 33.1 *4		
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		
System Compressor Operating Range			6% to 100%		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P06~P96 / 1~31		
Sound pressure level (measured in anechoic room)			dB <A> 61.0		
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	1/2 (12.7) Brazed		
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed		
Set Model					
Model			PUHY-P72TLMU-A (-BS)		PUHY-P72TLMU-A (-BS)
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 1
	Airflow rate	CFM	6,200		6,200
		m³ / min	175		175
		L/s	2,920		2,920
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor
	Motor output	kW	0.92		0.92
	External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.
	Starting method		Inverter		Inverter
	Motor output	kW	5.6		5.6
	Lubricant		MEL32		MEL32
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32		64-31/32 x 36-1/4 x 29-5/32
		mm	1,650 x 920 x 740		1,650 x 920 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection
Minimum Circuit Ampacity (MCA)	A		24 / 22		24 / 22
Maximum Overcurrent Protection (MOP)	A		35 / 35		35 / 35
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)		R410A x 16 lbs + 9 oz (7.5 kg)
	Control		LEV and HIC circuit		
Net weight	lbs (kg)		435 (197)		435 (197)
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		3/8 (9.52) Brazed
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)		
Drawing	External		KJ94R626		
	Wiring		KE94G067		KE94G067
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3		
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2		
			Header: CMY-Y104/108/1010C-G		
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.		

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal = kW x 860 BTU/h = kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm = m³/min x 35.31 lb = kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P168TSLMU-A(-BS)			
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz			
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	168,000			
		kW	49.2			
	Power input	kW	12.56 *4			
	Current input	A	38.7 / 35.0 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (208-230V)		Btu/h	188,000			
		kW	55.1			
	Power input	kW	14.60 *4			
	Current input	A	45.0 / 40.7 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)			
	Outdoor	W.B.	-13~60° F(-25~15.5° C)			
System Compressor Operating Range			6% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96 / 1~36			
Sound pressure level (measured in anechoic room)			dB <A> 61.0			
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	5/8 (15.88) Brazed			
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed			
Set Model						
Model			PUHY-P72TLMU-A(-BS)		PUHY-P96TLMU-A(-BS)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Airflow rate	CFM	6,200		6,700	
		m³ / min	175		190	
		L/s	2,920		3,170	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92	
External static pressure *6			0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.6		5.6	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32		64-31/32 x 48-1/16 x 29-5/32	
		mm	1,650 x 920 x 740		1,650 x 1,220 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	24 / 22		32 / 29	
Maximum Overcurrent Protection (MOP)		A	35 / 35		50 / 45	
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)		R410A x 22 lbs + 12 oz (10.3 kg)	
	Control		LEV and HIC circuit			
Net weight		lbs (kg)	435 (197)		499 (226)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		3/8 (9.52) Brazed	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R627			
	Wiring		KE94G067		KE94G067	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3			
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal = kW x 860 BTU/h = kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm = m³/min x 35.31 lb = kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P192TSLMU-A(-BS)			
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz			
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	192,000			
		kW	56.3			
	Power input	kW	14.23 *4			
	Current input	A	43.8 / 39.6 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F (15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (208-230V)		Btu/h	215,000			
		kW	63.0			
	Power input	kW	16.97 *4			
	Current input	A	52.3 / 47.3 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F (15~27° C)			
	Outdoor	W.B.	-13~60° F (-25~15.5° C)			
System Compressor Operating Range			5% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96 / 1~41			
Sound pressure level (measured in anechoic room)		dB <A>	62.5			
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	5/8 (15.88) Brazed			
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed			
Set Model						
Model			PUHY-P72TLMU-A(-BS)		PUHY-P120TLMU-A(-BS)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 2	
	Airflow rate	CFM	6,200		11,300	
		m³ / min	175		320	
		L/s	2,920		5,330	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92+0.92	
External static pressure *6			0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORPORATION		AC&R Works, MITSUBISHI ELECTRIC CORPORATION	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.6		8.2	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32	
		mm	1,650 x 920 x 740		1,650 x 1,750 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	24 / 22		42 / 39	
Maximum Overcurrent Protection (MOP)		A	35 / 35		60 / 60	
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)		R410A x 26 lbs + 1 oz (11.8 kg)	
	Control		LEV and HIC circuit			
Net weight		lbs (kg)	435 (197)		671 (304)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		1-1/8 (28.58) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R628			
	Wiring		KE94G067		KE94G068	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3			
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal = kW x 860 BTU/h = kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm = m³/min x 35.31 lb = kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P216TSLMU-A(-BS)			
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz			
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	216,000			
		kW	63.3			
	Power input	kW	16.43 *4			
	Current input	A	50.6 / 45.8 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (208-230V)		Btu/h	243,000			
		kW	71.2			
	Power input	kW	19.46 *4			
	Current input	A	60.0 / 54.2 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)			
	Outdoor	W.B.	-13~60° F(-25~15.5° C)			
System Compressor Operating Range			5% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96/2~46			
Sound pressure level (measured in anechoic room)		dB <A>	62.5			
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	5/8 (15.88) Brazed			
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed			
Set Model						
Model			PUHY-P96TLMU-A(-BS)		PUHY-P120TLMU-A(-BS)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 2	
	Airflow rate	CFM	6,700		11,300	
		m³ / min	190		320	
		L/s	3,170		5,330	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92+0.92	
	External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter		Inverter	
	Motor output	kW	6.9		8.2	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 48-1/16 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32	
		mm	1,650 x 1,220 x 740		1,650 x 1,750 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	32 / 29		42 / 39	
Maximum Overcurrent Protection (MOP)		A	50 / 45		60 / 60	
Refrigerant	Type x original charge		R410A x 22 lbs + 12 oz (10.3 kg)		R410A x 26 lbs + 1 oz (11.8 kg)	
	Control		LEV and HIC circuit			
Net weight		lbs (kg)	499 (226)		671 (304)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		1-1/8 (28.58) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R629			
	Wiring		KE94G067		KE94G068	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3			
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m³/min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P240TSLMU-A(-BS)	
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz	
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	240,000	
		kW	70.3	
	Power input	kW	18.36 *4	
	Current input	A	56.6 / 51.2 *4	
Temp. range of cooling *3	Indoor	W.B.	59~75°F(15~24°C)	
	Outdoor	D.B.	23~126° F (-5~52° C) *5	
Heating capacity (Nominal) *2 (208-230V)		Btu/h	270,000	
		kW	79.1	
	Power input	kW	21.69 *4	
	Current input	A	66.8 / 60.4 *4	
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)	
	Outdoor	W.B.	-13~60° F(-25~15.5° C)	
System Compressor Operating Range			7% to 100%	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P06~P96 / 2~50	
Sound pressure level (measured in anechoic room)			dB <A> 63.0	
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	5/8 (15.88) Brazed	
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed	
Set Model				
Model			PUHY-P120TLMU-A(-BS)	
Fan	Type x Quantity		Propeller fan x 2	
	Airflow rate	CFM	11,300	
		m³ / min	320	
		L/s	5,330	
	Control , Driving mechanism		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92+0.92	
Compressor	External static pressure *6		0 in.WG (0 Pa) *6	
	Type x Quantity		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter	
	Motor output	kW	8.2	
	Lubricant		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D			64-31/32 x 68-29/32 x 29-5/32	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	42 / 39	
Maximum Overcurrent Protection (MOP)		A	60 / 60	
Refrigerant	Type x original charge		R410A x 26 lbs + 1oz (11.8kg)	
	Control		LEV and HIC circuit	
Net weight		lbs (kg)	671 (304)	
Heat exchanger			Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)	
Drawing	External		KJ94R630	
	Wiring		KE94G068	
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3	
			joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2	
			Header: CMY-Y104/108/1010C-G	
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.	

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal = kW x 860 BTU/h = kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm = m³/min x 35.31 lb = kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P264TSLMU-A(-BS)		
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz		
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	264,000		
		kW	77.4		
	Power input	kW	19.61 *4		
	Current input	A	60.4 / 54.6 *4		
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		
	Outdoor	D.B.	23~126° F (-5~52° C) *5		
Heating capacity (Nominal) *2 (208-230V)		Btu/h	295,000		
		kW	86.5		
	Power input	kW	23.07 *4		
	Current input	A	71.1 / 64.3 *4		
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		
System Compressor Operating Range			4% to 100%		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P06~P96 / 2~50		
Sound pressure level (measured in anechoic room)		dB <A>	63.5		
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	3/4 (19.05) Brazed		
	Gas pipe	In. (mm)	1-3/8 (34.93) Brazed		
Set Model					
Model			PUHY-P72TLMU-A(-BS)	PUHY-P72TLMU-A(-BS)	PUHY-P120TLMU-A(-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Airflow rate	CFM	6,200	6,200	11,300
		m³ / min	175	175	320
		L/s	2,920	2,920	5,330
	Control , Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor
	Motor output	kW	0.92	0.92	0.92+0.92
External static pressure *6		0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORPORATION	AC&R Works, MITSUBISHI ELECTRIC CORPORATION	AC&R Works, MITSUBISHI ELECTRIC CORP.
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	5.6	5.6	8.2
	Lubricant		MEL32	MEL32	MEL32
External finish		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32
		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,750 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP. / FAN)		Over-current protection	Over-current protection	Over-current protection
Minimum Circuit Ampacity (MCA)		A	24 / 22	24 / 22	42 / 39
Maximum Overcurrent Protection (MOP)		A	35 / 35	35 / 35	60 / 60
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)	R410A x 16 lbs + 9 oz (7.5 kg)	R410A x 26 lbs + 1 oz (11.8 kg)
Net weight		lbs (kg)	435 (197)	435 (197)	671 (304)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52)Brazed	3/8 (9.52)Brazed	1/2 (12.7)Brazed
	Gas pipe	In. (mm)	7/8 (22.2)Brazed	7/8 (22.2)Brazed	1-1/8 (28.58)Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)		
Drawing	External		KJ94R631		
	Wiring		KE94G067	KE94G067	KE94G068
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2		
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S/302S-G2		
			Header: CMY-Y104/108/1010C-G		
Remark	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				
	*3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.				
	*4 For details on the electrical data needed for installing these units, see the Y-Series System Design section.				
	*5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information.				
	*6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa).				
*7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.					
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions		Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)		kcal =kW x 860
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)		BTU/h =kW x 3,412
Pipe length:	25ft.(7.6m)		25ft.(7.6m)		cfm =m³/min x 35.31
Level difference:	0ft.(0m)		0ft.(0m)		lb =kg / 0.4536
* Above specification data is subject to rounding variation.					
* Due to continuing improvement, above specifications may be subject to change without notice.					

1. SPECIFICATIONS

Model			PUHY-P288TSLMU-A(-BS)		
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz		
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	288,000		
		kW	84.4		
	Power input	kW	21.83 *4		
	Current input	A	67.3 / 60.8 *4		
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		
	Outdoor	D.B.	23~126° F (-5~52° C) *5		
Heating capacity (Nominal) *2 (208-230V)		Btu/h	323,000		
		kW	94.7		
	Power input	kW	25.82 *4		
	Current input	A	79.6 / 72.0 *4		
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		
System Compressor Operating Range			4% to 100%		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P06~P96 / 2~50		
Sound pressure level (measured in anechoic room)		dB <A>	64.0		
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	3/4 (19.05) Brazed		
	Gas pipe	In. (mm)	1-3/8 (34.93) Brazed		
Set Model					
Model			PUHY-P72TLMU-A(-BS)	PUHY-P96TLMU-A(-BS)	PUHY-P120TLMU-A(-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Airflow rate	CFM	6,200	6,700	11,300
		m³ / min	175	190	320
		L/s	2,920	3,170	5,330
	Control , Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor
	Motor output	kW	0.92	0.92	0.92+0.92
Compressor	External static pressure *6		0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6
	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORPORATION	AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	5.6	6.9	8.2
Lubricant		MEL32	MEL32	MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 48-1/16 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32
		mm	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP. / FAN)		Over-current protection	Over-current protection	Over-current protection
Minimum Circuit Ampacity (MCA)		A	24 / 22	32 / 29	42 / 39
Maximum Overcurrent Protection (MOP)		A	35 / 35	50 / 45	60 / 60
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)	R410A x 22 lbs + 12 oz (10.3 kg)	R410A x 26 lbs + 1 oz (11.8 kg)
	Control		LEV and HIC circuit		
Net weight		lbs (kg)	435 (197)	499 (226)	671 (304)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure	Copper pipe,tube-in-tube structure	Copper pipe,tube-in-tube structure
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52)Brazed	3/8 (9.52)Brazed	1/2 (12.7)Brazed
	Gas pipe	In. (mm)	7/8 (22.2)Brazed	7/8 (22.2)Brazed	1-1/8 (28.58)Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)		
Drawing	External		KJ94R632		
	Wiring		KE94G067	KE94G067	KE94G068
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2		
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S/302S-G2		
			Header: CMY-Y104/108/1010C-G		
Remark	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				
	*3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.				
	*4 For details on the electrical data needed for installing these units, see the Y-Series System Design section.				
	*5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information.				
	*6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa).				
*7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.					
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions		Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)		kcal =kW x 860
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)		BTU/h =kW x 3,412
Pipe length:	25ft.(7.6m)		25ft.(7.6m)		cfm =m³/min x 35.31
Level difference:	0ft.(0m)		0ft.(0m)		lb =kg / 0.4536
* Above specification data is subject to rounding variation.					
* Due to continuing improvement, above specifications may be subject to change without notice.					

1. SPECIFICATIONS

Model			PUHY-P312TSLMU-A(-BS)		
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz		
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	312,000		
		kW	91.4		
		Power input	kW	23.73 *4	
	Current input	A	73.1 / 66.1 *4		
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		
	Outdoor	D.B.	23~126° F (-5~52° C) *5		
Heating capacity (Nominal) *2 (208-230V)		Btu/h	350,000		
		kW	102.6		
		Power input	kW	28.41 *4	
	Current input	A	87.6 / 79.2 *4		
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		
System Compressor Operating Range			3% to 100%		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P06~P96 / 2~50		
Sound pressure level (measured in anechoic room)		dB <A>	64.5		
Refrigerant piping Dia. from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	3/4 (19.05) Brazed		
	Gas pipe	In. (mm)	1-3/8 (34.93) Brazed		
Set Model					
Model			PUHY-P72TLMU-A(-BS)	PUHY-P120TLMU-A(-BS)	PUHY-P120TLMU-A(-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 2	Propeller fan x 2
	Airflow rate	CFM	6,200	11,300	11,300
		m³ / min	175	320	320
		L/s	2,920	5,330	5,330
	Control , Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor
	Motor output	kW	0.92	0.92+0.92	0.92+0.92
	External static pressure *6		0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORPORATION	AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	5.6	8.2	8.2
	Lubricant		MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32
		mm	1,650 x 920 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP. / FAN)		Over-current protection	Over-current protection	Over-current protection
Minimum Circuit Ampacity (MCA)		A	24 / 22	42 / 39	42 / 39
Maximum Overcurrent Protection (MOP)		A	35 / 35	60 / 60	60 / 60
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)	R410A x 26 lbs + 1 oz (11.8 kg)	R410A x 26 lbs + 1 oz (11.8 kg)
	Control		LEV and HIC circuit		
Net weight		lbs (kg)	435 (197)	671 (304)	671 (304)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52)Brazed	1/2 (12.7)Brazed	1/2 (12.7)Brazed
	Gas pipe	In. (mm)	7/8 (22.2)Brazed	1-1/8 (28.58)Brazed	1-1/8 (28.58)Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)		
Drawing	External		KJ94R632		
	Wiring		KE94G067	KE94G068	KE94G068
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2		
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S/302S-G2		
			Header: CMY-Y104/108/1010C-G		
Remark	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				
	*3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.				
	*4 For details on the electrical data needed for installing these units, see the Y-Series System Design section.				
	*5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information.				
	*6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa).				
*7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.					
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions		Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)		kcal =kW x 860
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)		BTU/h=kW x 3,412
Pipe length:	25ft.(7.6m)		25ft.(7.6m)		cfm =m³/min x 35.31
Level difference:	0ft.(0m)		0ft.(0m)		lb =kg / 0.4536
* Above specification data is subject to rounding variation.					
* Due to continuing improvement, above specifications may be subject to change without notice.					

1. SPECIFICATIONS

Model			PUHY-P336TSLMU-A(-BS)				
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz				
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	336,000				
		kW	98.5				
		Power input	kW	26.07 *4			
Current input		A	83.9 / 75.8 *4				
Temp. range of cooling *3		Indoor	W.B.	59~75° F(15~24° C)			
		Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (208-230V)		Btu/h	378,000				
		kW	110.8				
		Power input	kW	31.42 *4			
Current input		A	96.9 / 87.6 *4				
Temp. range of heating *3		Indoor	D.B.	59~81° F(15~27° C)			
		Outdoor	W.B.	-13~60° F(-25~15.5° C)			
System Compressor Operating Range			3% to 100%				
Indoor unit connectable		Total capacity		50~130% of outdoor unit capacity			
		Model / Quantity		P06~P96 / 2~50			
Sound pressure level (measured in anechoic room)			dB <A>	64.5			
Refrigerant piping Dia. from Twinning Kit to Indoor Units		Liquid pipe	In. (mm)	3/4 (19.05) Brazed			
		Gas pipe	In. (mm)	1-5/8 (41.28) Brazed			
Set Model							
Model			PUHY-P96TLMU-A(-BS)		PUHY-P120TLMU-A(-BS)		
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 2		
	Airflow rate	CFM	6,700		11,300		
		m³ / min	190		320		
		L/s	3,170		5,330		
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor		
	Motor output	kW	0.92		0.92+0.92		
	External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6		
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.		
	Starting method		Inverter		Inverter		
	Motor output	kW	6.9		8.2		
	Lubricant		MEL32		MEL32		
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		
External dimension H x W x D			In.	64-31/32 x 48-1/16 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32	
			mm	1,650 x 1,220 x 740		1,650 x 1,750 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection		
Minimum Circuit Ampacity (MCA)		A	32 / 29		42 / 39		
Maximum Overcurrent Protection (MOP)		A	50 / 45		60 / 60		
Refrigerant	Type x original charge		R410A x 22 lbs + 12 oz (10.3 kg)		R410A x 26 lbs + 1 oz (11.8 kg)		
	Control		LEV and HIC circuit				
Net weight		lbs (kg)	499 (226)		671 (304)		
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure		
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52)Brazed		1/2 (12.7)Brazed		
	Gas pipe	In. (mm)	7/8 (22.2)Brazed		1-1/8 (28.58)Brazed		
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)				
Drawing	External		KJ94R634				
	Wiring		KE94G067		KE94G068		
Standard attachment	Document		Installation Manual				
	Accessory		Details refer to External Drw				
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2				
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S/302S-G2				
			Header: CMY-Y104/108/1010C-G				
Remark	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.						
	*3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.						
	*4 For details on the electrical data needed for installing these units, see the Y-Series System Design section.						
	*5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information.						
	*6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa).						
	*7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.						
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions		Unit converter		
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)		kcal =kW x 860		
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)		BTU/h =kW x 3,412		
Pipe length:	25ft.(7.6m)		25ft.(7.6m)		cfm =m³/min x 35.31		
Level difference:	0ft.(0m)		0ft.(0m)		lb =kg / 0.4536		
* Due to continuing improvement, above specifications may be subject to change without notice.							
* Above specification data is subject to rounding variation.							

1. SPECIFICATIONS

Model			PUHY-P360TSLMU-A(-BS)		
Power source			3-phase 3-wire 208 / 230V ±10% 60Hz		
Cooling capacity (Nominal) *1 (208-230V)		Btu/h	360,000		
		kW	105.5		
	Power input	kW	27.94 *4		
	Current input	A	86.1 / 77.9 *4		
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		
	Outdoor	D.B.	23~126° F (-5~52° C) *5		
Heating capacity (Nominal) *2 (208-230V)		Btu/h	405,000		
		kW	118.7		
	Power input	kW	33.83 *4		
	Current input	A	104.3 / 94.3 *4		
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		
System Compressor Operating Range			5% to 100%		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P06~P96 / 2~50		
Sound pressure level (measured in anechoic room)			dB <A> 65.0		
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	3/4 (19.05) Brazed		
	Gas pipe	In. (mm)	1-5/8 (41.28) Brazed		
Set Model					
Model			PUHY-P120TLMU-A(-BS)	PUHY-P120TLMU-A(-BS)	PUHY-P120TLMU-A(-BS)
Fan	Type x Quantity		Propeller fan x 2	Propeller fan x 2	Propeller fan x 2
	Airflow rate	CFM	11,300	11,300	11,300
		m³ / min	320	320	320
		L/s	5,330	5,330	5,330
	Control , Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor
	Motor output	kW	0.92+0.92	0.92+0.92	0.92+0.92
	External static pressure *6		0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	8.2	8.2	8.2
	Lubricant		MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>
External dimension H x W x D		In.	64-31/32 x 68-29/32 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32
		mm	1,650 x 1,750 x 740	1,650 x 1,750 x 740	1,650 x 1,750 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Inverter circuit (COMP. / FAN)		Over-current protection	Over-current protection	Over-current protection
Minimum Circuit Ampacity (MCA)		A	42 / 39	42 / 39	42 / 39
Maximum Overcurrent Protection (MOP)		A	60 / 60	60 / 60	60 / 60
Refrigerant	Type x original charge		R410A x 26 lbs + 1 oz (11.8 kg)	R410A x 26 lbs + 1 oz (11.8 kg)	R410A x 26 lbs + 1 oz (11.8 kg)
	Control		LEV and HIC circuit		
Net weight			lbs (kg)	671 (304)	671 (304)
Heat exchanger			Salt-resistant cross fin & aluminium tube		
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure		
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	1/2 (12.7)Brazed	1/2 (12.7)Brazed	1/2 (12.7)Brazed
	Gas pipe	In. (mm)	1-1/8 (28.58)Brazed	1-1/8 (28.58)Brazed	1-1/8 (28.58)Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)		
Drawing	External		KJ94R635		
	Wiring		KE94G068	KE94G068	KE94G068
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2		
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S/302S-G2		
			Header: CMY-Y104/108/1010C-G		
Remark	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				
	*3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.				
	*4 For details on the electrical data needed for installing these units, see the Y-Series System Design section.				
	*5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information.				
	*6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa).				
	*7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.				
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions		Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)		kcal =kW x 860
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)		BTU/h =kW x 3,412
Pipe length:	25ft.(7.6m)		25ft.(7.6m)		cfm =m³/min x 35.31
Level difference:	0ft.(0m)		0ft.(0m)		lb =kg / 0.4536
* Above specification data is subject to rounding variation.					
* Due to continuing improvement, above specifications may be subject to change without notice.					

1. SPECIFICATIONS

1-2. PUHY-P72~360Y(S)YMU-A Specifications

Model			PUHY-P72YLMU-A (-BS)		PUHY-P96YLMU-A (-BS)	
Power source			3-phase 3-wire 460V ±10% 60Hz		3-phase 3-wire 460V ±10% 60Hz	
Cooling capacity (Nominal) *1 (460V)		Btu/h	72,000		96,000	
		kW	21.1		28.1	
	Power input	kW	4.55 *4		6.39 *4	
	Current input	A	6.3 *4		8.9 *4	
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		59~75° F(15~24° C)	
	Outdoor	D.B.	23~126° F (-5~52° C) *5		23~126° F (-5~52° C) *5	
Heating capacity (Nominal) *2 (460V)		Btu/h	80,000		108,000	
		kW	23.4		31.7	
	Power input	kW	5.48 *4		7.65 *4	
	Current input	A	7.6 *4		10.6 *4	
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		59~81° F(15~27° C)	
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		-13~60° F(-25~15.5° C)	
Indoor unit	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity	P06~P72 / 1~15		P06~P96 / 1~20		
Sound pressure level (measured in anechoic room)		dB <A>	58.0		58.0	
Refrigerant piping diameter	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		3/8 (9.52) Brazed	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		1/2 [12.7] Brazed, if length from outdoor unit to farthest indoor unit is >= 295' (90m)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Airflow rate	CFM	6,200		6,700	
		m³ / min	175		190	
		L/s	2,920		3,170	
	Control, Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92	
External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6		
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Operating Range		13% to 100%		13% to 100%	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.6		6.9	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32		64-31/32 x 48-1/16 x 29-5/32	
		mm	1,650 x 920 x 740		1,650 x 1,220 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	11		14	
Maximum Overcurrent Protection (MOP)		A	15		20	
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)		R410A x 22 lbs + 12 oz (10.3 kg)	
	Control		LEV and HIC circuit		LEV and HIC circuit	
Net weight		lbs (kg)	468 (212)		532 (241)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure	
Defrost method			Auto-defrost mode (Reversed refrigerant cycle)		Auto-defrost mode (Reversed refrigerant cycle)	
Drawing	External		KJ94R623		KJ94R624	
	Wiring		KE94G073		KE94G073	
Standard attachment	Document		Installation Manual		Installation Manual	
	Accessory		Details refer to External Drw		Details refer to External Drw	
Optional parts			Joint: CMY-Y102SS-G2		Joint: CMY-Y102SS/LS-G2	
			Header: CMY-Y104/108/1010C-G		Header: CMY-Y104/108/1010C-G	
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m³/min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P120YLMU-A (-BS)		PUHY-P144YLMU-A (-BS)	
Power source			3-phase 3-wire 460V ±10% 60Hz		3-phase 3-wire 460V ±10% 60Hz	
Cooling capacity (Nominal) *1 (460V)		Btu/h	120,000		144,000	
		kW	35.2		42.2	
	Power input	kW	8.07 *4		10.38 *4	
	Current input	A	11.2 *4		14.4 *4	
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)		59~75° F(15~24° C)	
	Outdoor	D.B.	23~126° F (-5~52° C) *5		23~126° F (-5~52° C) *5	
Heating capacity (Nominal) *2 (460V)		Btu/h	135,000		160,000	
		kW	39.6		46.9	
	Power input	kW	9.84 *4		12.30 *4	
	Current input	A	13.7 *4		17.1 *4	
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)		59~81° F(15~27° C)	
	Outdoor	W.B.	-13~60° F(-25~15.5° C)		-13~60° F(-25~15.5° C)	
Indoor unit	Total capacity	50~130% of outdoor unit capacity		50~130% of outdoor unit capacity		
	Model / Quantity	P06~P96 / 1~26		P06~P96 / 1~31		
Sound pressure level (measured in anechoic room)		dB <A>	60.0		61.0	
Refrigerant piping diameter	Liquid pipe	In. (mm)	(1/2 [12.7] Brazed, if length from outdoor unit to farthest indoor unit is >= 295' [90m])		1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	
Fan	Type x Quantity		Propeller fan x 2		Propeller fan x 2	
	Airflow rate	CFM	11,300		11,300	
		m³ / min	320		320	
		L/s	5,330		5,330	
	Control, Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92+0.92		0.92+0.92	
External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6		
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Operating Range		15% to 100%		15% to 100%	
	Starting method		Inverter		Inverter	
	Motor output	kW	8.2		10.8	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 68-29/32 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32	
		mm	1,650 x 1,750 x 740		1,650 x 1,750 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	19		21	
Maximum Overcurrent Protection (MOP)		A	30		35	
Refrigerant	Type x original charge		R410A x 26 lbs + 1 oz (11.8 kg)		R410A x 26 lbs + 1 oz (11.8 kg)	
	Control		LEV and HIC circuit		LEV and HIC circuit	
Net weight		lbs (kg)	706 (320)		706 (320)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure	
Defrost method			Auto-defrost mode (Reversed refrigerant cycle)		Auto-defrost mode (Reversed refrigerant cycle)	
Drawing	External	KJ94R625		KJ94R625		
	Wiring	KE94G074		KE94G074		
Standard attachment	Document	Installation Manual		Installation Manual		
	Accessory	Details refer to External Drw		Details refer to External Drw		
Optional parts		Joint: CMY-Y102SS/LS-G2		Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2		
		Header: CMY-Y104/108/1010C-G		Header: CMY-Y104/108/1010C-G		
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m³/min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P168YLMU-A (-BS)	
Power source			3-phase 3-wire 460V ±10% 60Hz	
Cooling capacity (Nominal) *1 (460V)		Btu/h	168,000	
		kW	49.2	
	Power input	kW	13.52 *4	
	Current input	A	18.8 *4	
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)	
	Outdoor	D.B.	23~126° F (-5~52° C) *5	
Heating capacity (Nominal) *2 (460V)		Btu/h	188,000	
		kW	55.1	
	Power input	kW	14.91 *4	
	Current input	A	20.7 *4	
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)	
	Outdoor	W.B.	-13~60° F(-25~15.5° C)	
Indoor unit	Total capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P06~P96/1~36	
Sound pressure level (measured in anechoic room)		dB <A>	62.0	
Refrigerant piping diameter	Liquid pipe	In. (mm)	5/8 (15.88) Brazed	
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed	
Fan	Type x Quantity		Propeller fan x 2	
	Airflow rate	CFM	12,700	
		m³ / min	360	
		L/s	6,000	
	Control, Driving mechanism		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92+0.92	
	External static pressure *6		0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Operating Range		12% to 100%	
	Starting method		Inverter	
	Motor output	kW	12.4	
	Lubricant		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D	In.	64-31/32 x 68-29/32 x 29-5/32		
	mm	1,650 x 1,750 x 740		
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Inverter circuit (COMP. / FAN)		Over-current protection	
Minimum Circuit Ampacity (MCA)	A	26		
Maximum Overcurrent Protection (MOP)	A	40		
Refrigerant	Type x original charge		R410A x 26 lbs + 1 oz (11.8 kg)	
	Control		LEV and HIC circuit	
Net weight	lbs (kg)	702 (318)		
Heat exchanger			Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure	
Defrost method			Auto-defrost mode (Reversed refrigerant cycle)	
Drawing	External		KJ94R625	
	Wiring		KE94G074	
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2	
			Header: CMY-Y104/108/1010C-G	
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.	

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m³/min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P144YSLMU-A (-BS)			
Power source			3-phase 3-wire 460V ±10% 60Hz			
Cooling capacity (Nominal) *1 (460V)		Btu/h	144,000			
		kW	42.2			
	Power input	kW	10.09 *4			
	Current input	A	14.0 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F (15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (460V)		Btu/h	160,000			
		kW	46.9			
	Power input	kW	11.68 *4			
	Current input	A	16.5 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F (15~27° C)			
	Outdoor	W.B.	-13~60° F (-25~15.5° C)			
System Compressor Operating Range			6% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96/1~31			
Sound pressure level (measured in anechoic room)			dB <A> 61.0			
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	1/2 (12.7) Brazed			
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed			
Set Model						
Model			PUHY-P72YLMU-A (-BS)		PUHY-P72YLMU-A (-BS)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Airflow rate	CFM	6,200		6,200	
		m³ / min	175		175	
		L/s	2,920		2,920	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92	
External static pressure *6			0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.6		5.6	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32		64-31/32 x 36-1/4 x 29-5/32	
		mm	1,650 x 920 x 740		1,650 x 920 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Compressor / Fan		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	11		11	
Maximum Overcurrent Protection (MOP)		A	15		15	
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)		R410A x 16 lbs + 9 oz (7.5 kg)	
	Control		LEV and HIC circuit			
Net weight		lbs (kg)	468 (212)		468 (212)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure		Copper pipe, tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		3/8 (9.52) Brazed	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R636			
	Wiring		KE94G073		KE94G073	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3			
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m³/min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P168YSLMU-A(-BS)			
Power source			3-phase 3-wire 460V ±10% 60Hz			
Cooling capacity (Nominal) *1 (460V)		Btu/h	168,000			
		kW	49.2			
	Power input	kW	12.56 *4			
	Current input	A	17.5 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F (15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (460V)		Btu/h	188,000			
		kW	55.1			
	Power input	kW	14.60 *4			
	Current input	A	20.3 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F (15~27° C)			
	Outdoor	W.B.	-13~60° F (-25~15.5° C)			
System Compressor Operating Range			6% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96 / 1~36			
Sound pressure level (measured in anechoic room)			dB <A> 61.0			
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	5/8 (15.88) Brazed			
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed			
Set Model						
Model			PUHY-P72YLMU-A (-BS)		PUHY-P96YLMU-A (-BS)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Airflow rate	CFM	6,200		6,700	
		m³ / min	175		190	
		L/s	2,920		3,170	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92	
External static pressure *6			0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.6		6.9	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32		64-31/32 x 48-1/16 x 29-5/32	
		mm	1,650 x 920 x 740		1,650 x 1,220 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Compressor / Fan		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	11		14	
Maximum Overcurrent Protection (MOP)		A	15		20	
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)		R410A x 22 lbs + 12 oz (10.3 kg)	
	Control		LEV and HIC circuit			
Net weight		lbs (kg)	468 (212)		532 (241)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure		Copper pipe, tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		3/8 (9.52) Brazed	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		7/8 (22.2) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R637			
	Wiring		KE94G073		KE94G073	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3			
			Joint: CMY-Y102SS/LS-G2, CMY-Y202S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal = kW x 860 BTU/h = kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm = m³/min x 35.31 lb = kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P192YSLMU-A(-BS)	
Power source			3-phase 3-wire 460V ±10% 60Hz	
Cooling capacity (Nominal) *1 (460V)		Btu/h	192,000	
		kW	56.3	
	Power input	kW	14.23 *4	
	Current input	A	19.8 *4	
Temp. range of cooling *3	Indoor	W.B.	59~75°F (15~24°C)	
	Outdoor	D.B.	23~126° F (-5~52° C) *5	
Heating capacity (Nominal) *2 (460V)		Btu/h	215,000	
		kW	63.0	
	Power input	kW	16.97 *4	
	Current input	A	23.6 *4	
Temp. range of heating *3	Indoor	D.B.	59~81° F (15~27° C)	
	Outdoor	W.B.	-13~60° F (-25~15.5° C)	
System Compressor Operating Range			5% to100%	
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity	
	Model / Quantity		P06~P96 / 1~41	
Sound pressure level (measured in anechoic room)		dB <A>	62.5	
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	5/8 (15.88) Brazed	
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed	
Set Model				
Model			PUHY-P72YLMU-A (-BS)	PUHY-P120YLMU-A (-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 2
	Airflow rate	CFM	6,200	11,300
		m³ / min	175	320
		L/s	2,920	5,330
	Control , Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor
	Motor output	kW	0.92	0.92+0.92
External static pressure *6		0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.
	Starting method		Inverter	Inverter
	Motor output	kW	5.6	8.2
Lubricant		MEL32	MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32
		mm	1,650 x 920 x 740	1,650 x 1,750 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Compressor / Fan		Over-current protection	Over-current protection
Minimum Circuit Ampacity (MCA)		A	11	19
Maximum Overcurrent Protection (MOP)		A	15	30
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)	R410A x 26 lbs + 1 oz (11.8 kg)
	Control		LEV and HIC circuit	
Net weight		lbs (kg)	468 (212)	706 (320)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure	Copper pipe,tube-in-tube structure
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed	1/2 (12.7) Brazed
	Gas pipe	In. (mm)	7/8 (22.2) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)	
Drawing	External		KJ94R638	
	Wiring		KE94G073	KE94G074
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw	
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3	
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2	
			Header: CMY-Y104/108/1010C-G	
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.	

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal = kW x 860 BTU/h = kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm = m³/min x 35.31 lb = kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P216YSLMU-A(-BS)			
Power source			3-phase 3-wire 460V ±10% 60Hz			
Cooling capacity (Nominal) *1 (460V)		Btu/h	216,000			
		kW	63.3			
	Power input	kW	16.43 *4			
	Current input	A	22.9 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (460V)		Btu/h	243,000			
		kW	71.2			
	Power input	kW	19.46 *4			
	Current input	A	27.1 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)			
	Outdoor	W.B.	-13~60° F(-25~15.5° C)			
System Compressor Operating Range			5% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96 / 2~46			
Sound pressure level (measured in anechoic room)			dB <A> 62.5			
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	5/8 (15.88) Brazed			
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed			
Set Model						
Model			PUHY-P96YLMU-A (-BS)		PUHY-P120YLMU-A (-BS)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 2	
	Airflow rate	CFM	6,700		11,300	
		m³ / min	190		320	
		L/s	3,170		5,330	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92+0.92	
External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6		
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter		Inverter	
	Motor output	kW	6.9		8.2	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 48-1/16 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32	
		mm	1,650 x 1,220 x 740		1,650 x 1,750 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Compressor / Fan		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	14		19	
Maximum Overcurrent Protection (MOP)		A	20		30	
Refrigerant	Type x original charge		R410A x 22 lbs + 12 oz (10.3 kg)		R410A x 26 lbs + 1 oz (11.8 kg)	
	Control		LEV and HIC circuit			
Net weight		lbs (kg)	532 (241)		706 (320)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure		Copper pipe, tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		1-1/8 (28.58) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R639			
	Wiring		KE94G073		KE94G074	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3			
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal = kW x 860 BTU/h = kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm = m³/min x 35.31 lb = kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P240YSLMU-A(-BS)			
Power source			3-phase 3-wire 460V ±10% 60Hz			
Cooling capacity (Nominal) *1 (460V)		Btu/h	240,000			
		kW	70.3			
	Power input	kW	18.36 *4			
	Current input	A	25.6 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F (15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (460V)		Btu/h	270,000			
		kW	79.1			
	Power input	kW	21.69 *4			
	Current input	A	30.2 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F (15~27° C)			
	Outdoor	W.B.	-13~60° F (-25~15.5° C)			
System Compressor Operating Range			7% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96 / 2~50			
Sound pressure level (measured in anechoic room)		dB <A>	63.0			
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	5/8 (15.88) Brazed			
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed			
Set Model						
Model			PUHY-P120YLMU-A (-BS)		PUHY-P120YLMU-A (-BS)	
Fan	Type x Quantity		Propeller fan x 2		Propeller fan x 2	
	Airflow rate	CFM	11,300		11,300	
		m³ / min	320		320	
		L/s	5,330		5,330	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92+0.92		0.92+0.92	
External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6		
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter		Inverter	
	Motor output	kW	8.2		8.2	
	Lubricant		MEL32		MEL32	
External finish		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		
External dimension H x W x D		In.	64-31/32 x 68-29/32 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32	
		mm	1,650 x 1,750 x 740		1,650 x 1,750 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Compressor / Fan		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	19		19	
Maximum Overcurrent Protection (MOP)		A	30		30	
Refrigerant	Type x original charge		R410A x 26 lbs + 1 oz (11.8 kg)		R410A x 26 lbs + 1 oz (11.8 kg)	
	Control		LEV and HIC circuit			
Net weight		lbs (kg)	706 (320)		706 (320)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,tube-in-tube structure		Copper pipe,tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	1/2 (12.7) Brazed		1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R640			
	Wiring		KE94G074		KE94G074	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y100CBK3			
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark			Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.			

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m³/min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P264YSLMU-A (-BS)		
Power source			3-phase 3-wire 460V ±10% 60Hz		
Cooling capacity (Nominal) *1 (460V)		Btu/h	264,000		
		kW	77.4		
		Power input	kW	19.61 *4	
	Current input	A	27.3 *4		
Temp. range of cooling *3	Indoor	W.B.	59~75° F (15~24° C)		
	Outdoor	D.B.	23~126° F (-5~52° C) *5		
Heating capacity (Nominal) *2 (460V)		Btu/h	295,000		
		kW	86.5		
		Power input	kW	23.07 *4	
	Current input	A	32.1 *4		
Temp. range of heating *3	Indoor	D.B.	59~81° F (15~27° C)		
	Outdoor	W.B.	-13~60° F (-25~15.5° C)		
System Compressor Operating Range			4% to100%		
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity		
	Model / Quantity		P06~P96 / 2~50		
Sound pressure level (measured in anechoic room)			dB <A>		
			63.5		
Refrigerant piping diameter from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	3/4 (19.05) Brazed		
	Gas pipe	In. (mm)	1-3/8 (34.93) Brazed		
Set Model					
Model			PUHY-P72YLMU-A (-BS)	PUHY-P72YLMU-A (-BS)	PUHY-P120YLMU-A (-BS)
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2
	Airflow rate	CFM	6,200	6,200	11,300
		m³ / min	175	175	320
		L/s	2,920	2,920	5,330
	Control , Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor
	Motor output	kW	0.92	0.92	0.92+0.92
External static pressure *6		0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.
	Starting method		Inverter	Inverter	Inverter
	Motor output	kW	5.6	5.6	8.2
	Lubricant		MEL32	MEL32	MEL32
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32
		mm	1,650 x 920 x 740	1,650 x 920 x 740	1,650 x 1,750 x 740
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)
	Compressor / Fan		Over-current protection	Over-current protection	Over-current protection
Minimum Circuit Ampacity (MCA)		A	11	11	19
Maximum Overcurrent Protection (MOP)		A	15	15	30
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)	R410A x 16 lbs + 9 oz (7.5 kg)	R410A x 26 lbs + 1 oz (11.8 kg)
	Control		LEV and HIC circuit		
Net weight		lbs (kg)	468 (212)	468 (212)	706 (320)
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed	3/8 (9.52) Brazed	1/2 (12.7) Brazed
	Gas pipe	In. (mm)	7/8 (22.2) Brazed	7/8 (22.2) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)		
Drawing	External		KJ94R641		
	Wiring		KE94G073	KE94G073	KE94G074
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw		
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2		
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S/302S-G2		
			Header: CMY-Y104/108/1010C-G		
Remark	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.				
	*3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.				
	*4 For details on the electrical data needed for installing these units, see the Y-Series System Design section.				
	*5 For details on extended ambient cooling operation range down to -10° FDB (-23° CDB), see Low Ambient Cooling Kit information.				
	*6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa).				
	*7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.				
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions		Unit converter
Indoor:	80° F D.B./ 67° F W.B. (26.7° C D.B./ 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)		kcal =kW x 860
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B./ 43° F W.B. (8.3° C D.B./ 6.1° C W.B.)		BTU/h =kW x 3,412
Pipe length:	25ft.(7.6m)		25ft.(7.6m)		cfm =m³/min x 35.31
Level difference:	0ft.(0m)		0ft.(0m)		lb =kg / 0.4536
					* Above specification data is subject to rounding variation.
* Due to continuing improvement, above specifications may be subject to change without notice.					

1. SPECIFICATIONS

Model			PUHY-P288YSLMU-A(-BS)			
Power source			3-phase 3-wire 460V ±10% 60Hz			
Cooling capacity (Nominal) *1 (460V)		Btu/h	288,000			
		kW	84.4			
		Power input	kW	21.83 *4		
Current input		A	30.4 *4			
Temp. range of cooling *3		Indoor	W.B.	59~75° F (15~24° C)		
		Outdoor	D.B.	23~126° F (-5~52° C) *5		
Heating capacity (Nominal) *2 (460V)		Btu/h	323,000			
		kW	94.7			
		Power input	kW	25.82 *4		
Current input		A	36.0 *4			
Temp. range of heating *3		Indoor	D.B.	59~81° F (15~27° C)		
		Outdoor	W.B.	-13~60° F (-25~15.5° C)		
System Compressor Operating Range			4% to 100%			
Indoor unit connectable		Total capacity		50~130% of outdoor unit capacity		
		Model / Quantity		P06~P96 / 2~50		
Sound pressure level (measured in anechoic room)			dB <A>	64.0		
Refrigerant piping diameter from Twinning Kit to Indoor Units		Liquid pipe	In. (mm)	3/4 (19.05) Brazed		
		Gas pipe	In. (mm)	1-3/8 (34.93) Brazed		
Set Model						
Model			PUHY-P72YLMU-A (-BS)	PUHY-P96YLMU-A (-BS)	PUHY-P120YLMU-A (-BS)	
Fan	Type x Quantity		Propeller fan x 1	Propeller fan x 1	Propeller fan x 2	
	Airflow rate	CFM	6,200	6,700	11,300	
		m³ / min	175	190	320	
		L/s	2,920	3,170	5,330	
	Control , Driving mechanism		Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor	Inverter-control, Brushless DC motor	
	Motor output	kW	0.92	0.92	0.92+0.92	
External static pressure *6		0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6	0 in.WG (0 Pa) *6		
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.	AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter	Inverter	Inverter	
	Motor output	kW	5.6	6.9	8.2	
	Lubricant		MEL32	MEL32	MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32	64-31/32 x 48-1/16 x 29-5/32	64-31/32 x 68-29/32 x 29-5/32	
		mm	1,650 x 920 x 740	1,650 x 1,220 x 740	1,650 x 1,750 x 740	
Protection devices		High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
		Compressor / Fan		Over-current protection	Over-current protection	Over-current protection
Minimum Circuit Ampacity (MCA)		A	11	14	19	
Maximum Overcurrent Protection (MOP)		A	15	20	30	
Refrigerant		Type x original charge	R410A x 16 lbs + 9 oz (7.5 kg)	R410A x 22 lbs + 12 oz (10.3 kg)	R410A x 26 lbs + 1 oz (11.8 kg)	
Net weight		lbs (kg)	468 (212)	532 (241)	706 (320)	
Heat exchanger			Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit		Liquid pipe	In. (mm)	3/8 (9.52) Brazed	3/8" (9.52) Brazed	
		Gas pipe	In. (mm)	7/8 (22.2) Brazed	7/8" (22.2) Brazed	1-1/8 (28.58) Brazed
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing		External		KJ94R642		
		Wiring		KE94G073	KE94G073	KE94G074
Standard attachment		Document		Installation Manual		
		Accessory		Details refer to External Drw		
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2			
			Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark		Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10°FDB (-23°CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.				
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions		Unit converter	
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)		kcal =kW x 860	
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)		BTU/h =kW x 3,412	
Pipe length:	25ft.(7.6m)		25ft.(7.6m)		cfm =m³/min x 35.31	
Level difference:	0ft.(0m)		0ft.(0m)		lb =kg / 0.4536	
					* Above specification data is subject to rounding variation.	
* Due to continuing improvement, above specifications may be subject to change without notice.						

1. SPECIFICATIONS

Model			PUHY-P312YSLMU-A(-BS)			
Power source			3-phase 3-wire 460V ±10% 60Hz			
Cooling capacity (Nominal) *1 (460V)		Btu/h	312,000			
		kW	91.4			
	Power input	kW	23.73 *4			
	Current input	A	33.0 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (460V)		Btu/h	350,000			
		kW	102.6			
	Power input	kW	28.41 *4			
	Current input	A	39.6 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)			
	Outdoor	W.B.	-13~60° F(-25~15.5° C)			
System Compressor Operating Range			3% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96 / 2~50			
Sound pressure level (measured in anechoic room)		dB <A>	64.5			
Refrigerant piping Dia. from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	3/4 (19.05) Brazed			
	Gas pipe	In. (mm)	1-3/8 (34.93) Brazed			
Set Model						
Model			PUHY-P72YLMU-A (-BS)		PUHY-P120YLMU-A (-BS)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 2	
	Airflow rate	CFM	6,200		11,300	
		m³ / min	175		320	
		L/s	2,920		5,330	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92+0.92	
	External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6	
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter		Inverter	
	Motor output	kW	5.6		8.2	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		In.	64-31/32 x 36-1/4 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32	
		mm	1,650 x 920 x 740		1,650 x 1,750 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Compressor / Fan		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	11		19	
Maximum Overcurrent Protection (MOP)		A	15		30	
Refrigerant	Type x original charge		R410A x 16 lbs + 9 oz (7.5 kg)		R410A x 26 lbs + 1 oz (11.8 kg)	
	Control		LEV and HIC circuit			
Net weight		lbs (kg)	468 (212)		706 (320)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure		Copper pipe, tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8 (9.52) Brazed		1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	7/8 (22.2) Brazed		1-1/8 (28.58) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R643			
	Wiring		KE94G073		KE94G074	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2			
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S/302S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.					
	*3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.					
	*4 For details on the electrical data needed for installing these units, see the Y-Series System Design section.					
	*5 For details on extended ambient cooling operation range down to -10°FDB (-23°CDB), see Low Ambient Cooling Kit information.					
	*6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa).					
*7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.						
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions		Unit converter	
Indoor:	80° F D.B./ 67° F W.B. (26.7° C D.B./ 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)		kcal =kW x 860	
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B./ 43° F W.B. (8.3° C D.B./ 6.1° C W.B.)		BTU/h =kW x 3,412	
Pipe length:	25ft.(7.6m)		25ft.(7.6m)		cfm =m³/min x 35.31	
Level difference:	0ft.(0m)		0ft.(0m)		lb =kg / 0.4536	
* Due to continuing improvement, above specifications may be subject to change without notice.						

1. SPECIFICATIONS

Model			PUHY-P336YSLMU-A(-BS)			
Power source			3-phase 3-wire 460V ±10% 60Hz			
Cooling capacity (Nominal) *1 (460V)		Btu/h	336,000			
		kW	98.5			
	Power input	kW	26.07 *4			
	Current input	A	36.3 *4			
Temp. range of cooling *3	Indoor	W.B.	59~75° F(15~24° C)			
	Outdoor	D.B.	23~126° F (-5~52° C) *5			
Heating capacity (Nominal) *2 (460V)		Btu/h	378,000			
		kW	110.8			
	Power input	kW	31.42 *4			
	Current input	A	43.8 *4			
Temp. range of heating *3	Indoor	D.B.	59~81° F(15~27° C)			
	Outdoor	W.B.	-13~60° F(-25~15.5° C)			
System Compressor Operating Range			3% to 100%			
Indoor unit connectable	Total capacity		50~130% of outdoor unit capacity			
	Model / Quantity		P06~P96 / 2~50			
Sound pressure level (measured in anechoic room)		dB <A>	64.5			
Refrigerant piping Dia. from Twinning Kit to Indoor Units	Liquid pipe	In. (mm)	3/4 (19.05) Brazed			
	Gas pipe	In. (mm)	1-3/8 (34.93) Brazed			
Set Model						
Model			PUHY-P96YLMU-A (-BS)		PUHY-P120YLMU-A (-BS)	
Fan	Type x Quantity		Propeller fan x 1		Propeller fan x 2	
	Airflow rate	CFM	6,700		11,300	
		m³ / min	190		320	
		L/s	3,170		5,330	
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor	
	Motor output	kW	0.92		0.92+0.92	
Compressor	External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6	
	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1	
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.	
	Starting method		Inverter		Inverter	
	Motor output	kW	6.9		8.2	
	Lubricant		MEL32		MEL32	
External finish			Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D			In.		64-31/32 x 48-1/16 x 29-5/32	
			mm		1,650 x 1,220 x 740	
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
	Compressor / Fan		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	14		19	
Maximum Overcurrent Protection (MOP)		A	20		30	
Refrigerant	Type x original charge		R410A x 22 lbs + 12 oz (10.3 kg)		R410A x 26 lbs + 1 oz (11.8 kg)	
			LEV and HIC circuit			
Net weight		lbs (kg)	532 (241)		706 (320)	
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure		Copper pipe, tube-in-tube structure	
Refrigerant piping diameter from Module to Twinning Kit	Liquid pipe	In. (mm)	3/8"(9.52) Brazed		1/2 (12.7) Brazed	
	Gas pipe	In. (mm)	7/8"(22.2) Brazed		1-1/8 (28.58) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)			
Drawing	External		KJ94R644			
	Wiring		KE94G073		KE94G074	
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw			
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2			
			Joint: CMY-Y102SS/LS-G2,CMY-Y202S/302S-G2			
			Header: CMY-Y104/108/1010C-G			
Remark	Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. *3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating. *4 For details on the electrical data needed for installing these units, see the Y-Series System Design section. *5 For details on extended ambient cooling operation range down to -10°FDB (-23°CDB), see Low Ambient Cooling Kit information. *6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa). *7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.					

Note:	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
Indoor:	80° F D.B. / 67° F W.B. (26.7° C D.B. / 19.4° C W.B.)	70° F D.B. (21.1° C D.B.)	kcal =kW x 860 BTU/h =kW x 3,412
Outdoor:	95° F D.B. (35° C D.B.)	47° F D.B. / 43° F W.B. (8.3° C D.B. / 6.1° C W.B.)	cfm =m³/min x 35.31 lb =kg / 0.4536
Pipe length:	25ft.(7.6m)	25ft.(7.6m)	* Above specification data is subject to rounding variation.
Level difference:	0ft.(0m)	0ft.(0m)	

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

1. SPECIFICATIONS

Model			PUHY-P360YSLMU-A(-BS)						
Power source			3-phase 3-wire 460V ±10% 60Hz						
Cooling capacity (Nominal) *1 (460V)		Btu/h	360,000						
		kW	105.5						
		Power input	kW	27.94 *4					
		Current input	A	38.9 *4					
Temp. range of cooling *3		Indoor	W.B.	59~75° F(15~24° C)					
		Outdoor	D.B.	23~126° F (-5~52° C) *5					
Heating capacity (Nominal) *2 (460V)		Btu/h	403,000						
		kW	118.1						
		Power input	kW	33.83 *4					
		Current input	A	47.1 *4					
Temp. range of heating *3		Indoor	D.B.	59~81° F(15~27° C)					
		Outdoor	W.B.	-13~60° F(-25~15.5° C)					
System Compressor Operating Range			5% to 100%						
Indoor unit connectable		Total capacity		50~130% of outdoor unit capacity					
		Model / Quantity		P06~P96 / 2~50					
Sound pressure level (measured in anechoic room)		dB <A>	65.0						
Refrigerant piping Dia. from Twinning Kit to Indoor Units		Liquid pipe	In. (mm)	3/4 (19.05) Brazed					
		Gas pipe	In. (mm)	1-5/8 (41.28) Brazed					
Set Model									
Model			PUHY-P120YLMU-A (-BS)		PUHY-P120YLMU-A (-BS)		PUHY-P120YLMU-A (-BS)		
Fan	Type x Quantity		Propeller fan x 2		Propeller fan x 2		Propeller fan x 2		
	Airflow rate	CFM	11,300		11,300		11,300		
		m³ / min	320		320		320		
		L/s	5,330		5,330		5,330		
	Control , Driving mechanism		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor		Inverter-control, Brushless DC motor		
	Motor output	kW	0.92+0.92		0.92+0.92		0.92+0.92		
	External static pressure *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6		0 in.WG (0 Pa) *6		
Compressor	Type x Quantity		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		Inverter scroll hermetic compressor x 1		
	Manufacturer		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.		AC&R Works, MITSUBISHI ELECTRIC CORP.		
	Starting method		Inverter		Inverter		Inverter		
	Motor output	kW	8.2		8.2		8.2		
	Lubricant		MEL32		MEL32		MEL32		
External finish		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>		Pre-coated galvanized steel sheet (+powder coating for -BS type) *7 <MUNSELL 5Y 8/1 or similar>			
External dimension H x W x D		In.	64-31/32 x 68-29/32 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32		64-31/32 x 68-29/32 x 29-5/32		
		mm	1,650 x 1,750 x 740		1,650 x 1,750 x 740		1,650 x 1,750 x 740		
Protection devices		High pressure protection		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)		High pressure sensor, High pressure switch at 4.15MPa (601 psi)	
		Compressor / Fan		Over-current protection		Over-current protection		Over-current protection	
Minimum Circuit Ampacity (MCA)		A	19		19		19		
Maximum Overcurrent Protection (MOP)		A	30		30		30		
Refrigerant		Type x original charge		R410A x 26 lbs + 1 oz (11.8 kg)		R410A x 26 lbs + 1 oz (11.8 kg)		R410A x 26 lbs + 1 oz (11.8 kg)	
		Control		LEV and HIC circuit					
Net weight		lbs (kg)	706 (320)		706 (320)		706 (320)		
Heat exchanger			Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		Salt-resistant cross fin & aluminium tube		
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure		Copper pipe, tube-in-tube structure		Copper pipe, tube-in-tube structure		
Refrigerant piping diameter from Module to Twinning Kit		Liquid pipe	In. (mm)	1/2 (12.7) Brazed		1/2 (12.7) Brazed		1/2 (12.7) Brazed	
		Gas pipe	In. (mm)	1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed	
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)						
Drawing		External		KJ94R645					
		Wiring		KE94G074		KE94G074		KE94G074	
Standard attachment		Document		Installation Manual					
		Accessory		Details refer to External Drw					
Optional parts			Outdoor Twinning kit: CMY-Y300CBK2						
			Joint: CMY-Y102SS/LS-G2, CMY-Y202S/302S-G2						
			Header: CMY-Y104/108/1010C-G						
Remark		Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.							
		*3 When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.							
		*4 For details on the electrical data needed for installing these units, see the Y-Series System Design section.							
		*5 For details on extended ambient cooling operation range down to -10°FDB (-23°CDB), see Low Ambient Cooling Kit information.							
		*6 External static pressure is adjustable via dipswitch setting (0.12 in.WG, 0.24 in.WG / 30Pa, 60Pa).							
		*7 For information on standard anti-corrosion protection and -BS treatment, see the Y-Series System Design section.							
Note:	*1 Nominal cooling conditions		*2 Nominal heating conditions			Unit converter			
Indoor:	80° F D.B./ 67° F W.B. (26.7° C D.B./ 19.4° C W.B.)		70° F D.B. (21.1° C D.B.)			kcal =kW x 860			
Outdoor:	95° F D.B. (35° C D.B.)		47° F D.B./ 43° F W.B. (8.3° C D.B./ 6.1° C W.B.)			BTU/h =kW x 3,412			
Pipe length:	25ft.(7.6m)		25ft.(7.6m)			cfm =m³/min x 35.31			
Level difference:	0ft.(0m)		0ft.(0m)			lb =kg / 0.4536			
* Above specification data is subject to rounding variation.									
* Due to continuing improvement, above specifications may be subject to change without notice.									

1. SPECIFICATIONS

Efficiency Ratings

Model	IDU Type	EER (95° F) *1	IEER *1	HI COP (47° F) *1	LOW COP (17° F) *1
PUHY-P72TLMU-A (-BS)	Ducted / Non-Ducted	13.7 / 16.4	23.1 / 28.1	3.84 / 4.44	2.46 / 2.39
PUHY-P96TLMU-A (-BS)	Ducted / Non-Ducted	13.1 / 15.5	23.1 / 28.2	3.79 / 4.27	2.57 / 2.68
PUHY-P120TLMU-A (-BS)	Ducted / Non-Ducted	13.2 / 14.9	21.9 / 25.3	3.71 / 4.17	2.38 / 2.38
PUHY-P144TLMU-A (-BS)	Ducted / Non-Ducted	12.5 / 14.0	21.2 / 24.7	3.55 / 3.88	2.20 / 2.22
PUHY-P144TSLMU-A (-BS)	Ducted / Non-Ducted	12.6 / 14.6	21.3 / 26.0	3.60 / 4.10	2.43 / 2.13
PUHY-P168TLMU-A (-BS)	Ducted / Non-Ducted	11.6 / 12.5	18.7 / 22.2	3.47 / 3.77	2.38 / 2.28
PUHY-P168TSLMU-A (-BS)	Ducted / Non-Ducted	12.0 / 14.0	21.0 / 25.0	3.50 / 3.90	2.47 / 2.19
PUHY-P192TSLMU-A (-BS)	Ducted / Non-Ducted	12.4 / 13.5	21.1 / 24.5	3.61 / 3.70	2.33 / 2.17
PUHY-P216TSLMU-A (-BS)	Ducted / Non-Ducted	12.1 / 13.3	21.0 / 24.5	3.56 / 3.64	2.36 / 2.09
PUHY-P240TSLMU-A (-BS)	Ducted / Non-Ducted	12.1 / 13.1	20.8 / 23.5	3.52 / 3.67	2.30 / 2.05
PUHY-P264TSLMU-A (-BS)	Ducted / Non-Ducted	12.4 / 13.6	21.1 / 24.0	3.60 / 3.75	2.39 / 2.16
PUHY-P288TSLMU-A (-BS)	Ducted / Non-Ducted	12.0 / 13.5	20.4 / 24.0	3.47 / 3.70	2.40 / 2.21
PUHY-P312TSLMU-A (-BS)	Ducted / Non-Ducted	12.0 / 13.4	20.3 / 23.4	3.45 / 3.66	2.31 / 2.22
PUHY-P336TSLMU-A (-BS)	Ducted / Non-Ducted	11.8 / 13.2	20.3 / 23.4	3.43 / 3.52	2.26 / 2.13
PUHY-P360TSLMU-A (-BS)	Ducted / Non-Ducted	11.8 / 13.1	20.1 / 22.7	3.41 / 3.51	2.20 / 2.05
PUHY-P72YLMU-A (-BS)	Ducted / Non-Ducted	13.7 / 16.4	23.1 / 28.1	3.84 / 4.44	2.46 / 2.39
PUHY-P96YLMU-A (-BS)	Ducted / Non-Ducted	13.1 / 15.5	23.1 / 28.2	3.79 / 4.27	2.57 / 2.68
PUHY-P120YLMU-A (-BS)	Ducted / Non-Ducted	13.2 / 14.9	21.9 / 25.3	3.71 / 4.17	2.38 / 2.38
PUHY-P144YLMU-A (-BS)	Ducted / Non-Ducted	12.5 / 14.0	21.2 / 24.7	3.55 / 3.88	2.2 / 2.22
PUHY-P144YSLMU-A (-BS)	Ducted / Non-Ducted	12.6 / 14.6	21.3 / 26.0	3.60 / 4.10	2.43 / 2.13
PUHY-P168YLMU-A (-BS)	Ducted / Non-Ducted	11.6 / 12.5	18.7 / 22.2	3.47 / 3.77	2.38 / 2.28
PUHY-P168YSLMU-A (-BS)	Ducted / Non-Ducted	12.0 / 14.0	21.0 / 25.0	3.50 / 3.90	2.47 / 2.19
PUHY-P192YSLMU-A (-BS)	Ducted / Non-Ducted	12.4 / 13.5	21.1 / 24.5	3.61 / 3.70	2.33 / 2.17
PUHY-P216YSLMU-A (-BS)	Ducted / Non-Ducted	12.1 / 13.3	21.0 / 24.5	3.56 / 3.64	2.36 / 2.09
PUHY-P240YSLMU-A (-BS)	Ducted / Non-Ducted	12.1 / 13.1	20.8 / 23.5	3.52 / 3.67	2.30 / 2.05
PUHY-P264YSLMU-A (-BS)	Ducted / Non-Ducted	12.4 / 13.6	21.1 / 24.0	3.60 / 3.75	2.39 / 2.16
PUHY-P288YSLMU-A (-BS)	Ducted / Non-Ducted	12.0 / 13.5	20.4 / 24.0	3.47 / 3.70	2.40 / 2.21
PUHY-P312YSLMU-A (-BS)	Ducted / Non-Ducted	12.0 / 13.4	20.3 / 23.4	3.45 / 3.66	2.31 / 2.22
PUHY-P336YSLMU-A (-BS)	Ducted / Non-Ducted	11.8 / 13.2	20.3 / 23.4	3.43 / 3.52	2.26 / 2.13
PUHY-P360YSLMU-A (-BS)	Ducted / Non-Ducted	11.8 / 13.1	20.1 / 22.7	3.41 / 3.51	2.20 / 2.05
Note:	*1. Efficiency values based on AHRI 1230 test method.				

PUHY-P72TLMU-A(-BS)

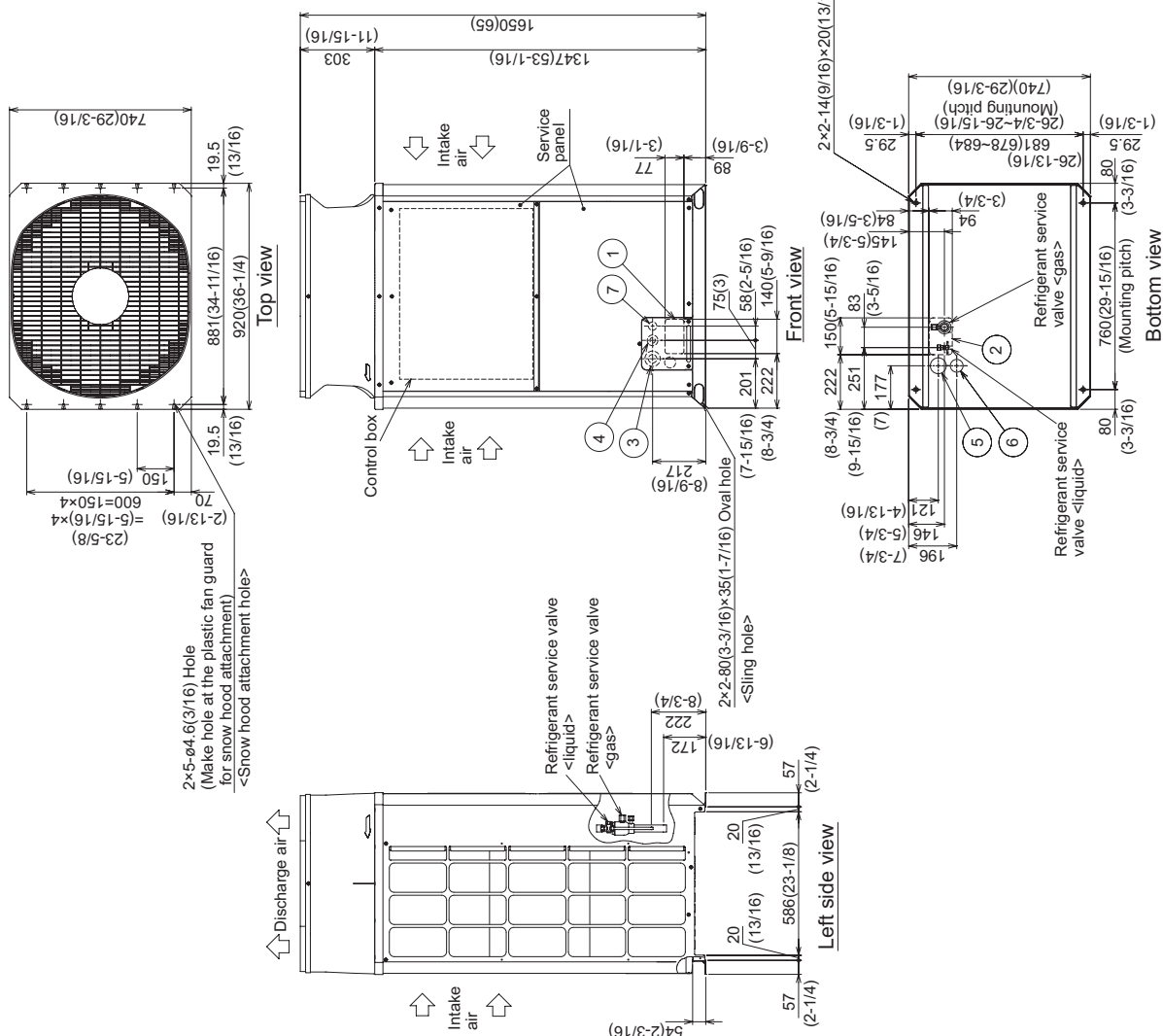
Unit : mm (in.)

Note 1. Please refer to the engineering manual for information regarding necessary spacing around the unit and foundation work. Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.

Connecting pipe specifications			Service valve	
Model	Refrigerant pipe		Diameter	Gas
	Liquid	Gas	Liquid	
PUHY-P7ZTLMU	ø9.52 Brazed (3/8)*1	ø22.2 Brazed (7/8) *2	ø9.52 (3/8)	ø28.58 (1-1/8)

- 1 Expand the on-site piping and connect to the refrigerant service valve piping.
- 2 Use the pipe joint(field supply) and connect to the refrigerant service valve piping.

NO.	Usage	Specifications
①	For pipes	Front through hole (5-9/16) (3-1/16)
②		Bottom through hole (5-15/16) (3-3/4)
③		Front through hole ø62.7 or ø34.5 Knockout hole (2-1/2) (1-3/8)
④	For wires	Front through hole ø43.7 or ø22.2 Knockout hole (1-3/4) (7/8)
⑤		Bottom through hole ø65 Knockout hole (2-9/16)
⑥		Bottom through hole ø52 Knockout hole (2-1/16)
⑦	For transmission cables	Front through hole ø34 Knockout hole (1-3/8)



2. EXTERNAL DIMENSIONS

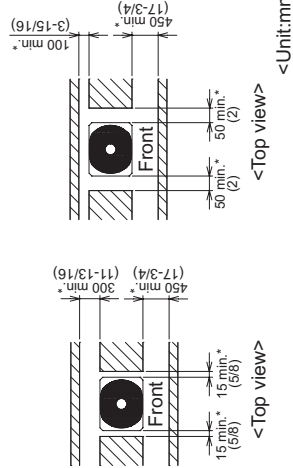
PUHY-P72TLMU-A(-BS)

Unit : mm (in.)

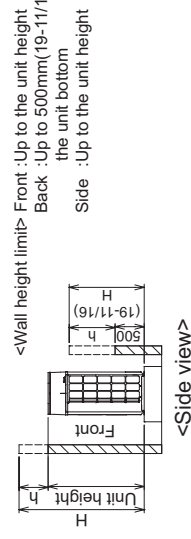
1. Required space around the unit

● 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 the height that exceeds the height limit <h> to the figures that are marked with an asterisk.



2. Foundation work

- ① Take into consideration the surface strength, water drainage route, piping route and wiring route when preparing the installation site.
- 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 post-installed anchor bolts.(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.

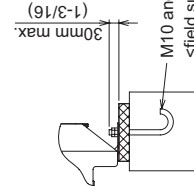


Fig.A

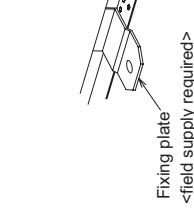


Fig.B

● 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 the height that exceeds the height limit <h> 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.

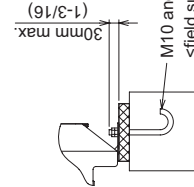
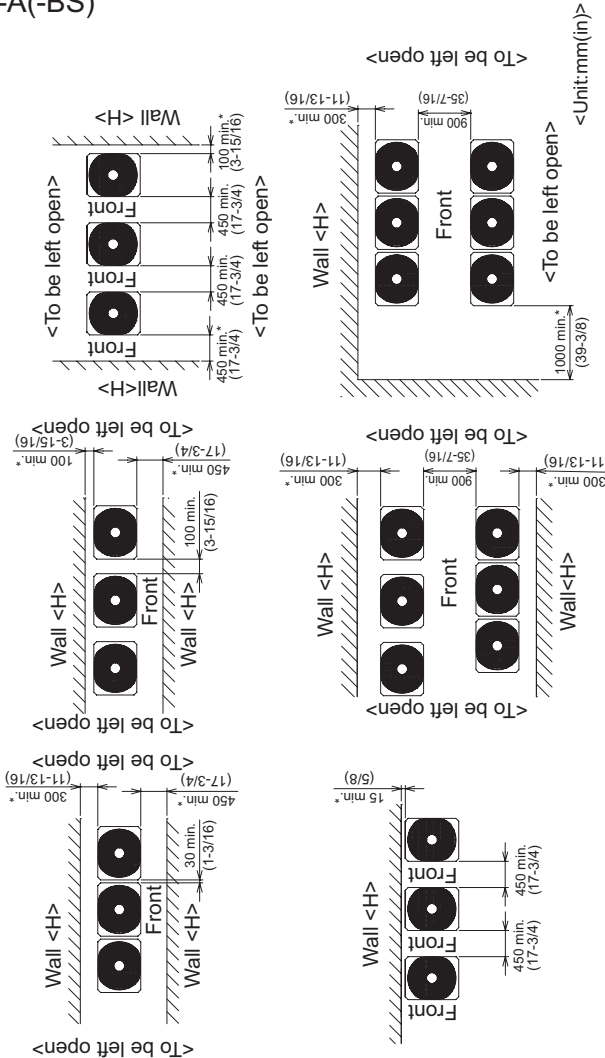


Fig.A

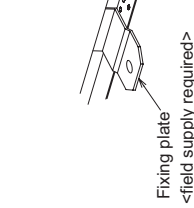


Fig.B

2. EXTERNAL DIMENSIONS

PUHY-P96TLMU-A(-BS)

Unit : mm (in.)

Note 1. Please refer to the engineering manual for information regarding necessary spacing around the unit and foundation work. Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.
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).

Connecting pipe specifications

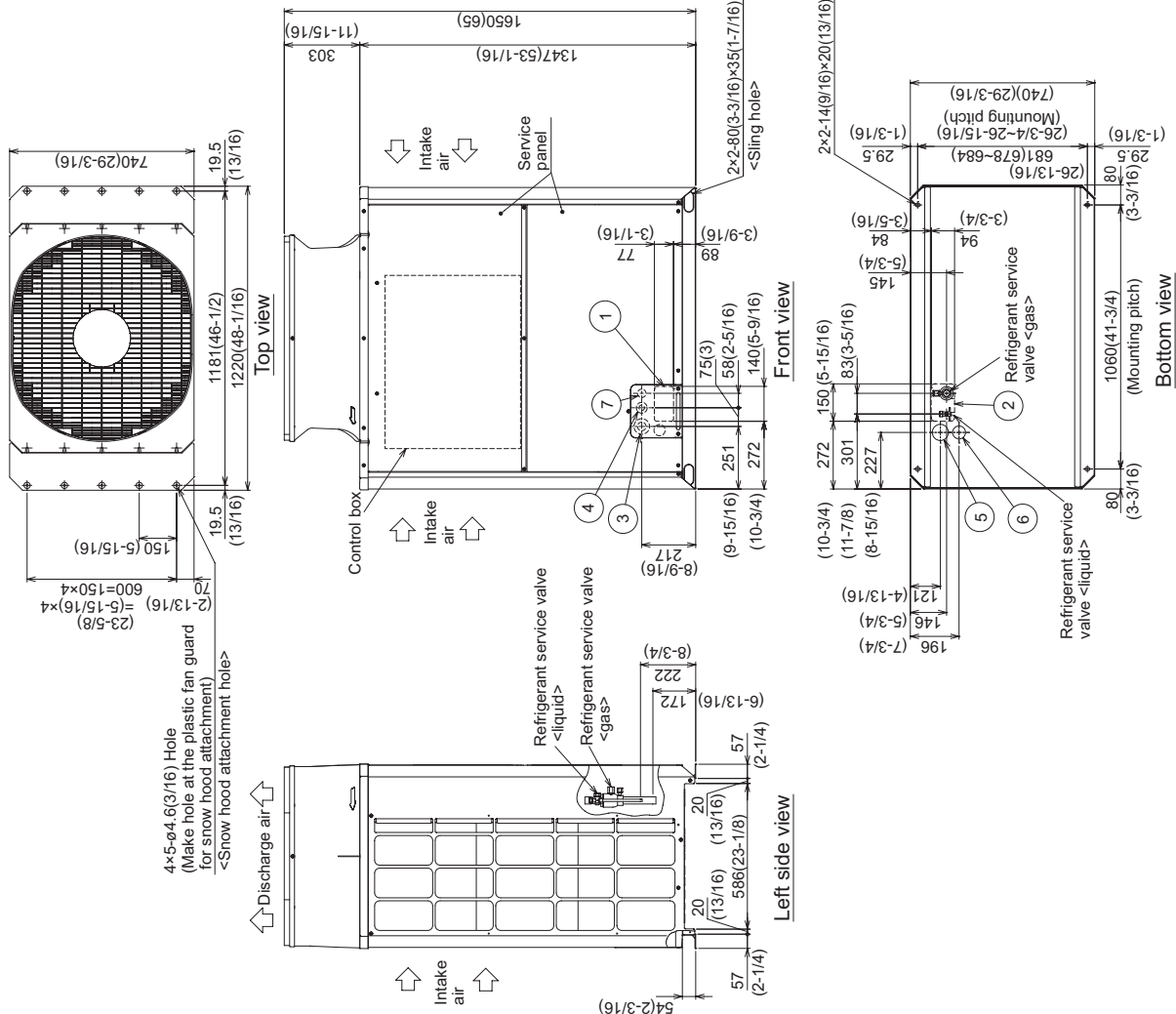
Model	Diameter			
	Refrigerant pipe		Service valve	
PUHY-P96TLMU	Liquid	Gas	Liquid	Gas
	ø9.52 Braze (3/8)" (ø12.7 Braze) (1 1/2)" 2 3	ø22.2 Braze (7/8)" 2	ø9.52 (3/8)"	ø28.58 (1 1/8)"

*1 Expand the on-site piping and connect to the refrigerant service valve piping.

*2 Use the pipe joint (field supply) and connect to the refrigerant service valve piping.

*3 To be used when piping length OU to First Joint (OU from IU) ≥ 90m (295ft)

NO.	Usage	Specifications
①	For pipes	Front through hole (5-9/16) (3-1/16)
②		Bottom through hole (5-15/16) (3-3/4)
③	For wires	Front through hole (2-1/2) (1-3/8)
④		Front through hole (1-3/4) (7/8)
⑤		Bottom through hole (2-9/16)
⑥		Bottom through hole (2-1/16)
⑦	For transmission cables	Front through hole (1-3/8)



2. EXTERNAL DIMENSIONS

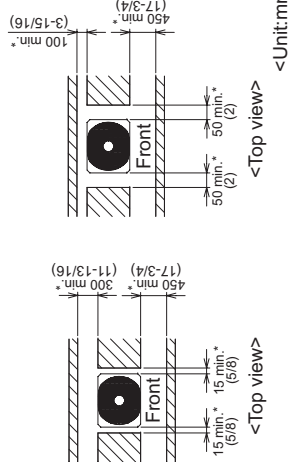
PUHY-P96TLMU-A(-BS)

Unit : mm (in.)

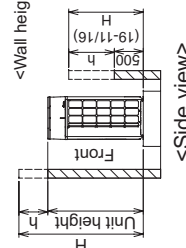
1. Required space around the unit

● 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 the height that exceeds the height limit <h> to the figures that are marked with an asterisk.



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 post-installed anchor bolts. (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.

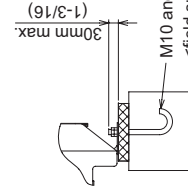


Fig. A

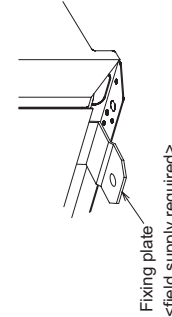


Fig. B

● 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 the height that exceeds the height limit <h> 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.

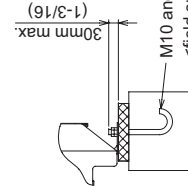
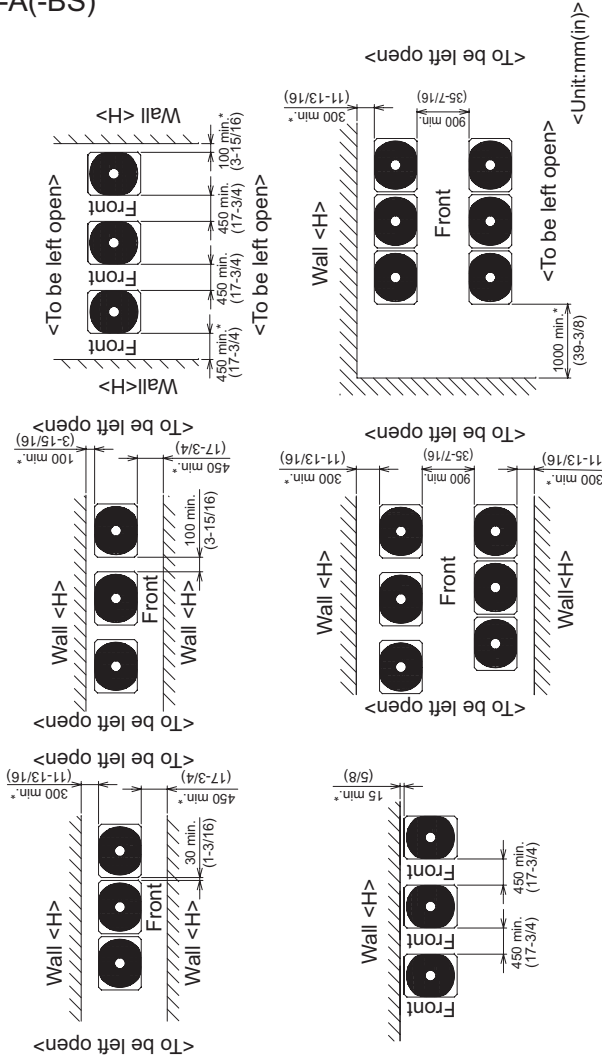


Fig. A

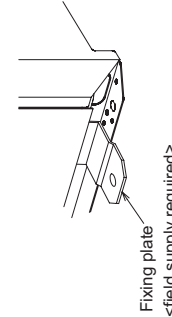


Fig. B

2. EXTERNAL DIMENSIONS

PUHY-P120, 144, 168TLMU-A(-BS)

Unit : mm (in.)

Note 1: Please refer to the engineering manual for information regarding necessary spacing around the unit and foundation work. Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.
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).

Connecting pipe specifications

Model	Diameter		
	Refrigerant pipe	Service valve	
	Liquid	Gas	Gas
PUHY-P120TLMU	ø9.52 Braze (3/8)"2 (ø12.7 Braze) (1/2)"1 *3 *4		
PUHY-P144TLMU	ø12.7 Braze (1/2)"1	ø28.58 Braze (1-1/8)"1	ø28.58 (1-1/8)
PUHY-P168TLMU	ø15.88 Braze (5/8)"2		

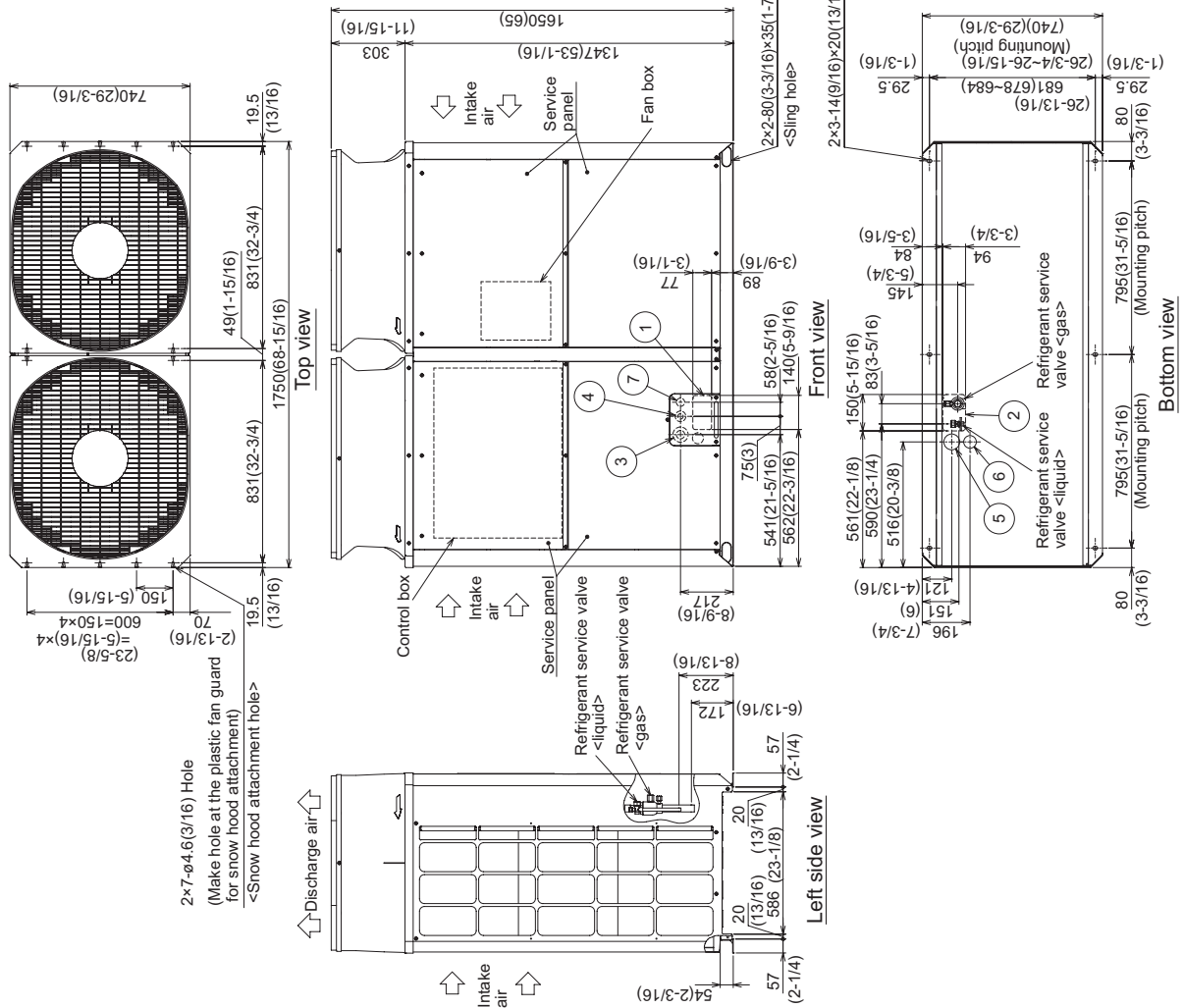
*1 Expand the on-site piping and connect to the refrigerant service valve piping.

*2 Use the pipe joint (field supply) and connect to the refrigerant service valve piping.

*3 Indicates dimensions and connection specifications in the case the unit is used in combination with other outdoor units.

*4 To be used when piping length OU to First Joint (OU from LU) ≥ 40m (131ft)

NO.	Usage	Specifications
①	For pipes	Front through hole 140 × 77 Knockout hole (5-9/16) (3-1/16)
②		Bottom through hole 150 × 94 Knockout hole (5-15/16) (3-3/4)
③	For wires	Front through hole ø62.7 or ø34.5 Knockout hole (2-1/2) (1-3/8)
④		Front through hole ø43.7 or ø22.2 Knockout hole (1-3/4) (7/8)
⑤		Bottom through hole ø65 Knockout hole (2-9/16)
⑥	For transmission cables	Bottom through hole ø52 Knockout hole (2-1/16)
⑦		Front through hole ø34 Knockout hole (1-3/8)



2. EXTERNAL DIMENSIONS

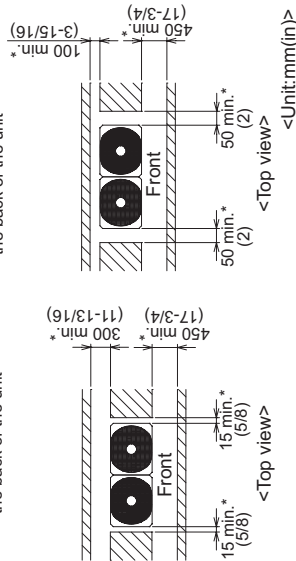
PUHY-P120, 144, 168TLMU-A(-BS)

Unit : mm (in.)

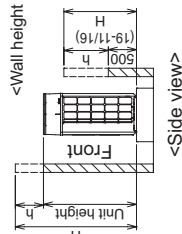
1. Required space around the unit

● 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 the height that exceeds the height limit <h> to the figures that are marked with an asterisk.



Front : Up to the unit height
Back : Up to 500mm(19-11/16) from the unit bottom
Side : Up to the unit height

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 post-installed anchor bolts. (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.

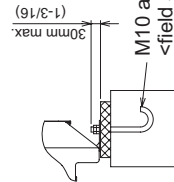


Fig. A

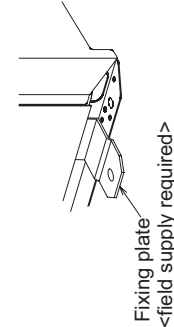
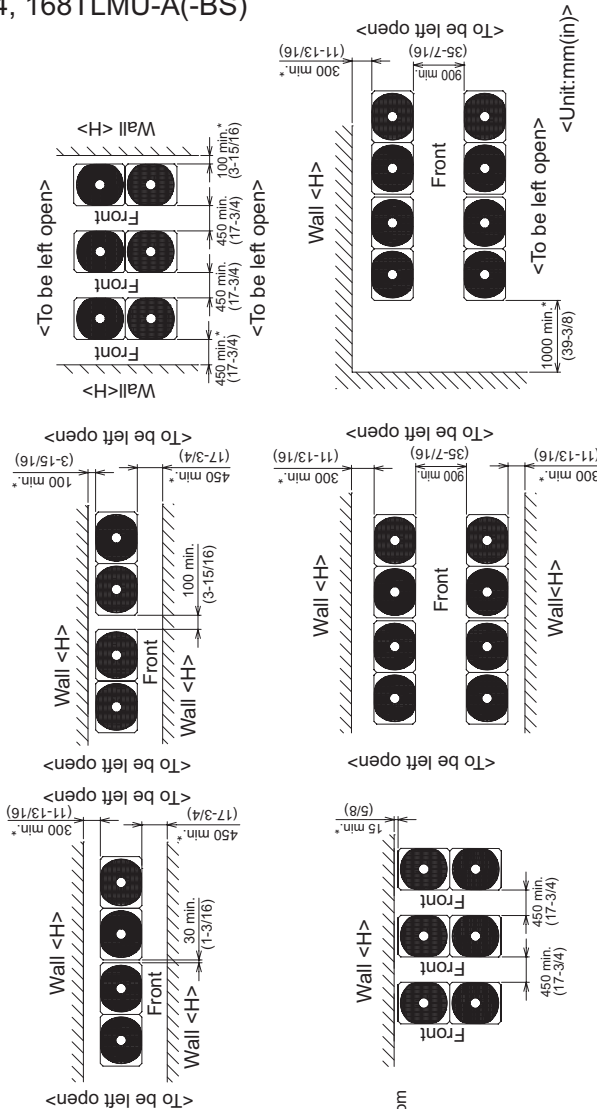


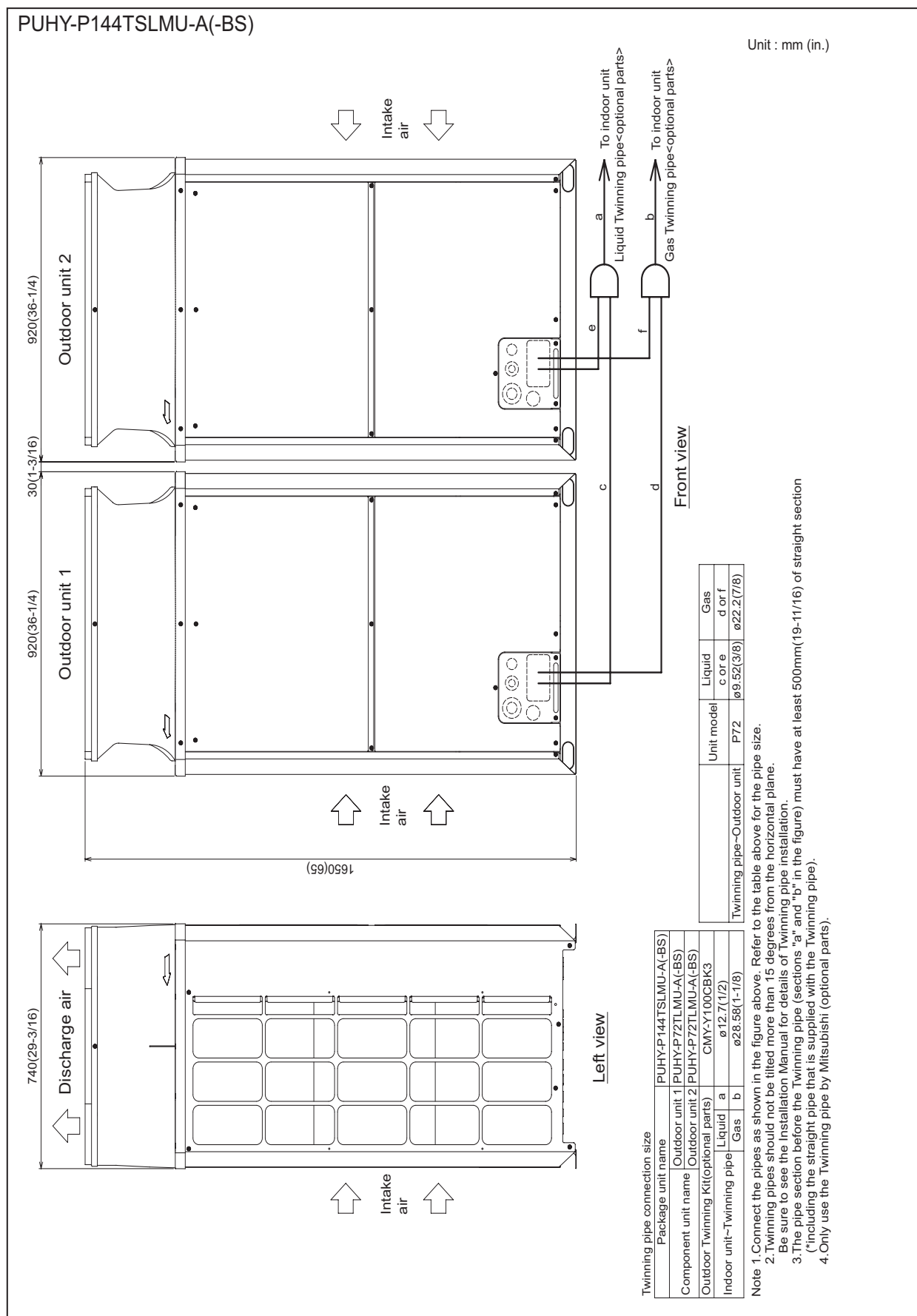
Fig. B

● 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 the height that exceeds the height limit <h> 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 three units consecutively in the side direction and provide a space of 1000mm(39-3/8) or more as inlet space/ passage space for each three units.



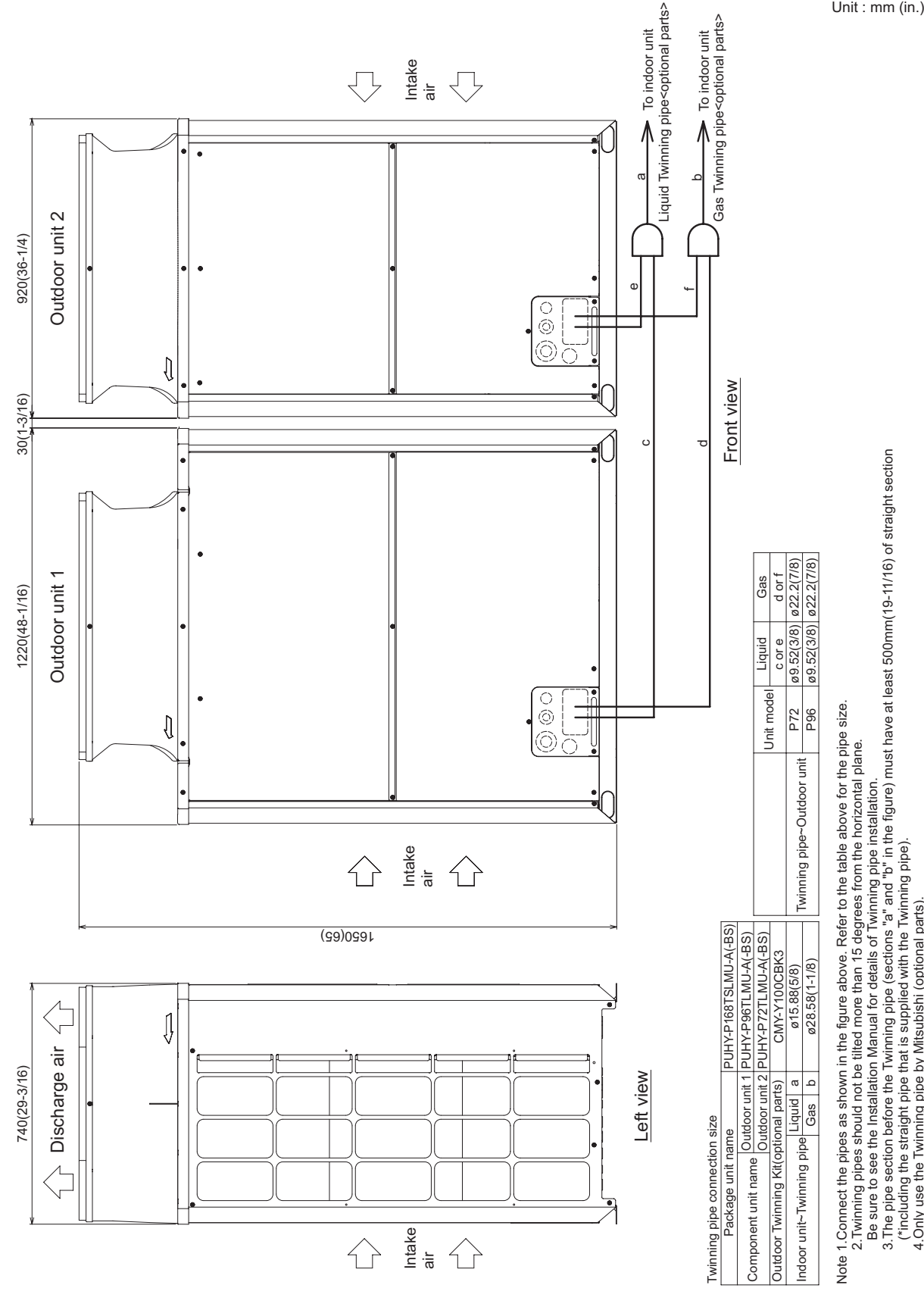
2. EXTERNAL DIMENSIONS



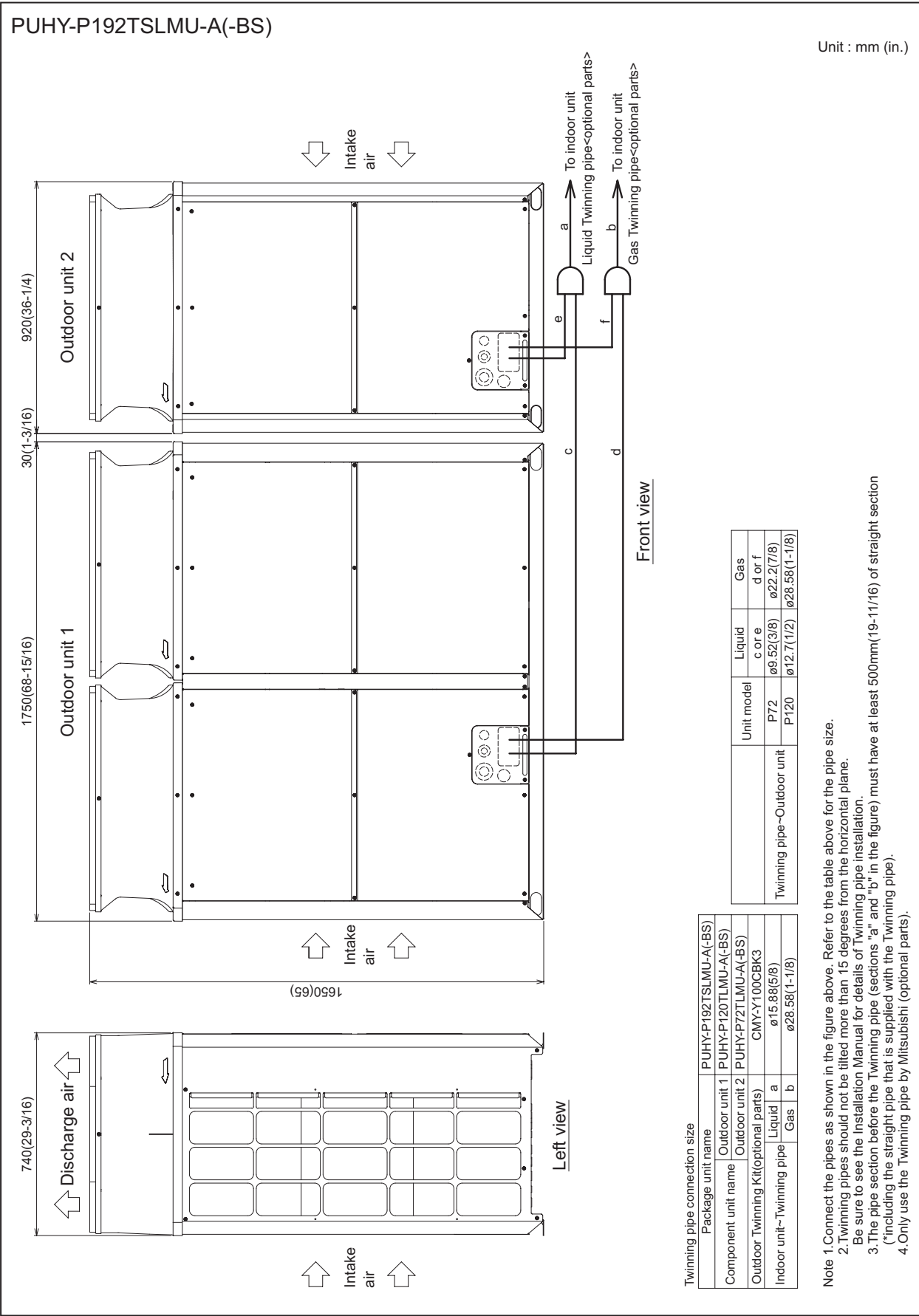
2. EXTERNAL DIMENSIONS

PUHY-P168TSLMU-A(-BS)

Unit : mm (in.)

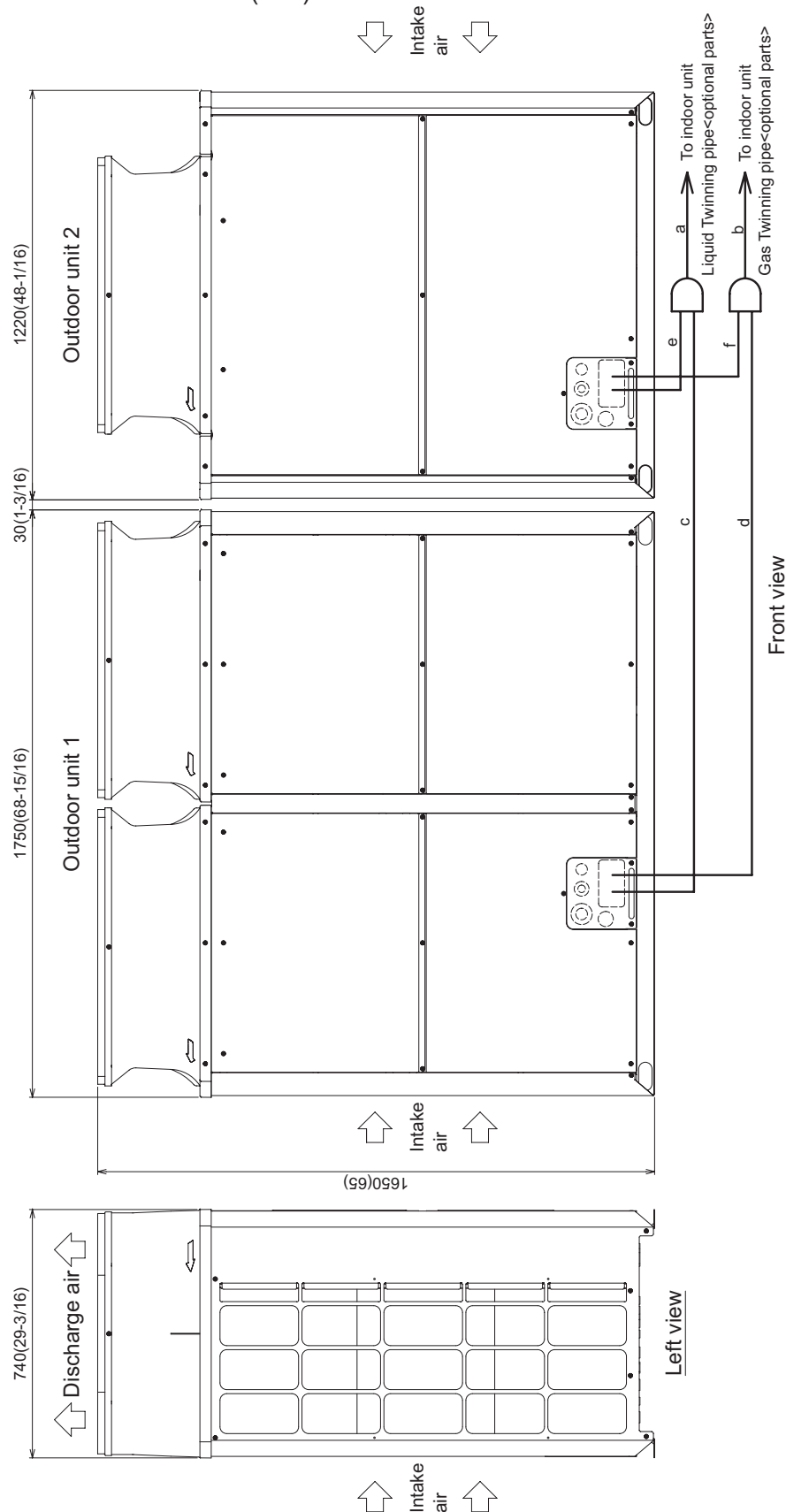


2. EXTERNAL DIMENSIONS



2. EXTERNAL DIMENSIONS

PUHY-P216TSLMU-A(-BS)



Unit : mm (in.)

Twinning pipe connection size

Package unit name	PUHY-P216TSLMU-A(-BS)
Component unit name	Outdoor unit 1 Outdoor unit 2 Outdoor Twinning Kit(optional parts)
Indoor unit-Twinning pipe	Liquid a Gas b

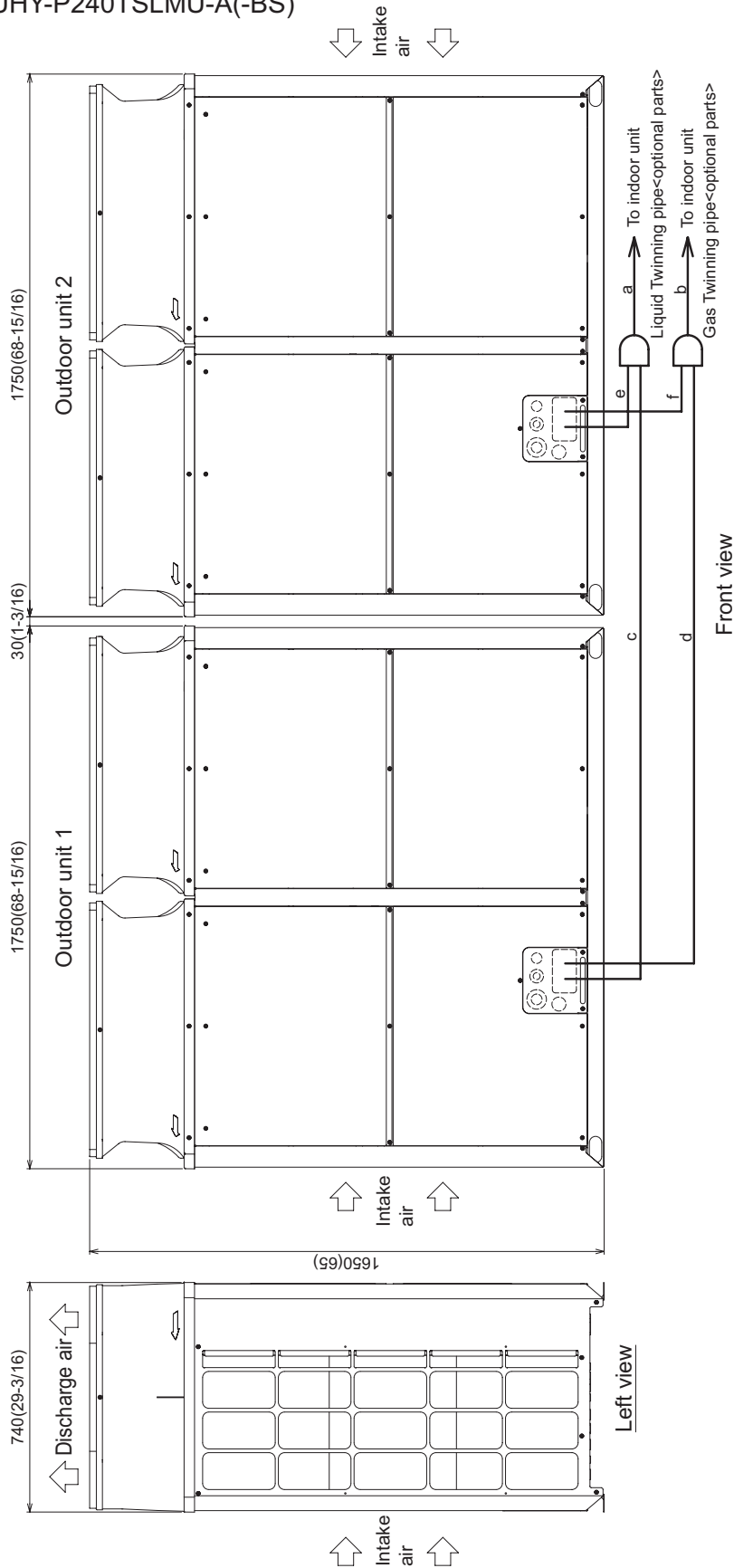
Unit model	Liquid c or e	Gas d or f
Twinning pipe-Outdoor unit	P96 P120	ø9.52(3/8) ø12.7(1/2) ø22.2(7/8) ø28.58(1-1/8)

- Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.
3. The pipe section before the Twinning pipe (sections "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).

2. EXTERNAL DIMENSIONS

PUHY-P240TSLMU-A(-BS)

Unit : mm (in.)



Front view

Twinning pipe connection size

Package unit name	PUHY-P240TSLMU-A(-BS)
Outdoor unit 1	PUHY-P120TSLMU-A(-BS)
Outdoor unit 2	PUHY-P120TSLMU-A(-BS)
Outdoor Twinning Kit(optional parts)	GM-Y100CBK3
Indoor unit-Twinning pipe	
Liquid	a
Gas	b
	ø15.88(5/8)
	ø28.58(1-1/8)

Unit model	Liquid	Gas
P120	c or e	d or f
	ø12.7(1/2)	ø28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

Be sure to see the Installation Manual for details of Twinning pipe installation.

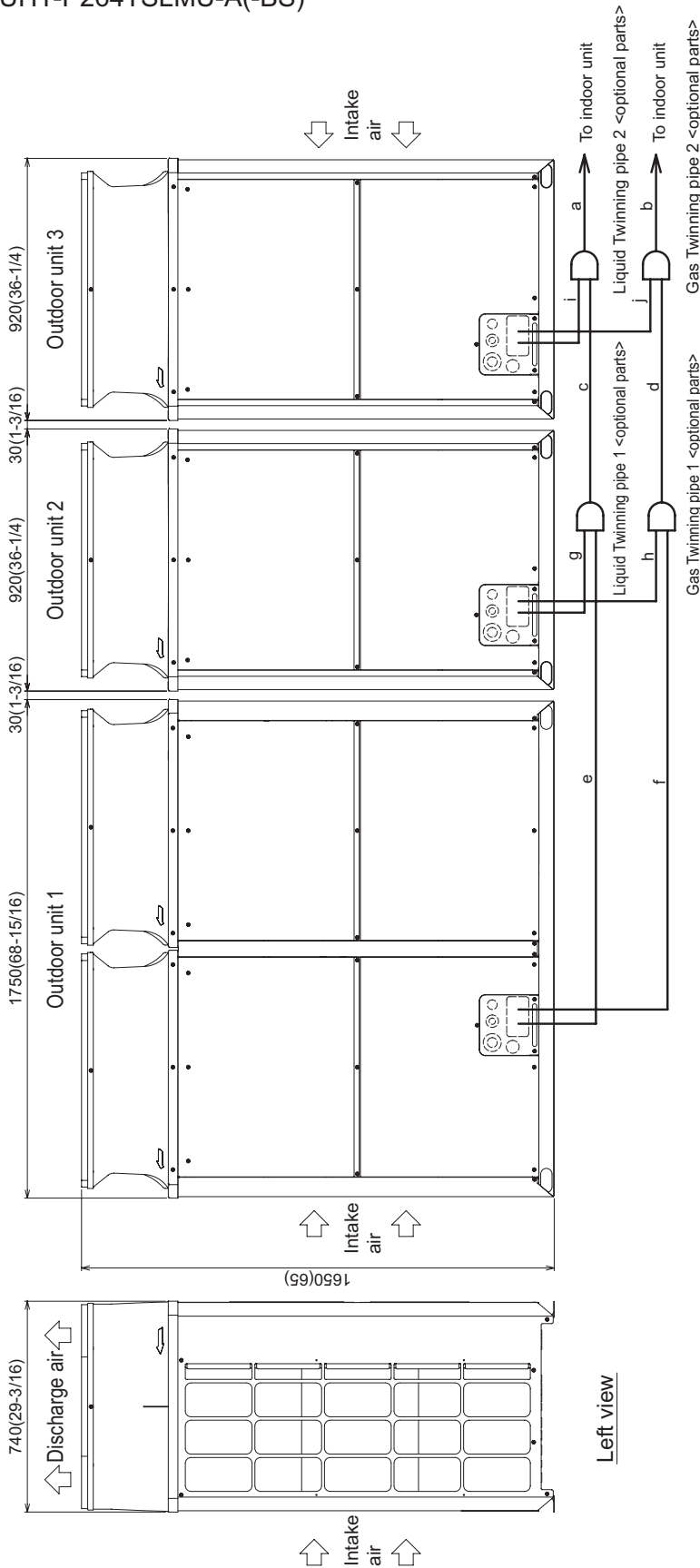
3. The pipe section before the Twinning pipe (sections 'a' and 'b' in the figure) must have at least 500mm(19-11/16) of straight section (*including the straight pipe that is supplied with the Twinning pipe).

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

2. EXTERNAL DIMENSIONS

PUHY-P264TSLMU-A(-BS)

Unit : mm (in.)



Front view

Twinning pipe connection size

Package unit name	PUHY-P264TSLMU-A(-BS)
Outdoor unit 1	PUHY-P120TLMU-A(-BS)
Outdoor unit 2	PUHY-P72TLMU-A(-BS)
Outdoor unit 3	PUHY-P72TLMU-A(-BS)
Outdoor Twinning Kit(optional parts)	CMY-Y300CBK2
Indoor unit-Twinning pipe 2	Liquid a ø19.05(3/4)
	Gas b ø34.93(1-3/8)
Twinning pipe 1-Twinning pipe 2	Liquid c ø19.05(3/4)
	Gas d ø34.93(1-3/8)

Twinning pipe-Outdoor unit	Unit model	Liquid e or g or i	Gas f or h or j
P72	P72	ø9.52(3/8)	ø22.2(7/8)
P120	P120	ø12.7(1/2)	ø28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

Be sure to see the Installation Manual for details of Twinning pipe installation.

3. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" in the figure) must have at least 500mm(19-11/16) of straight section

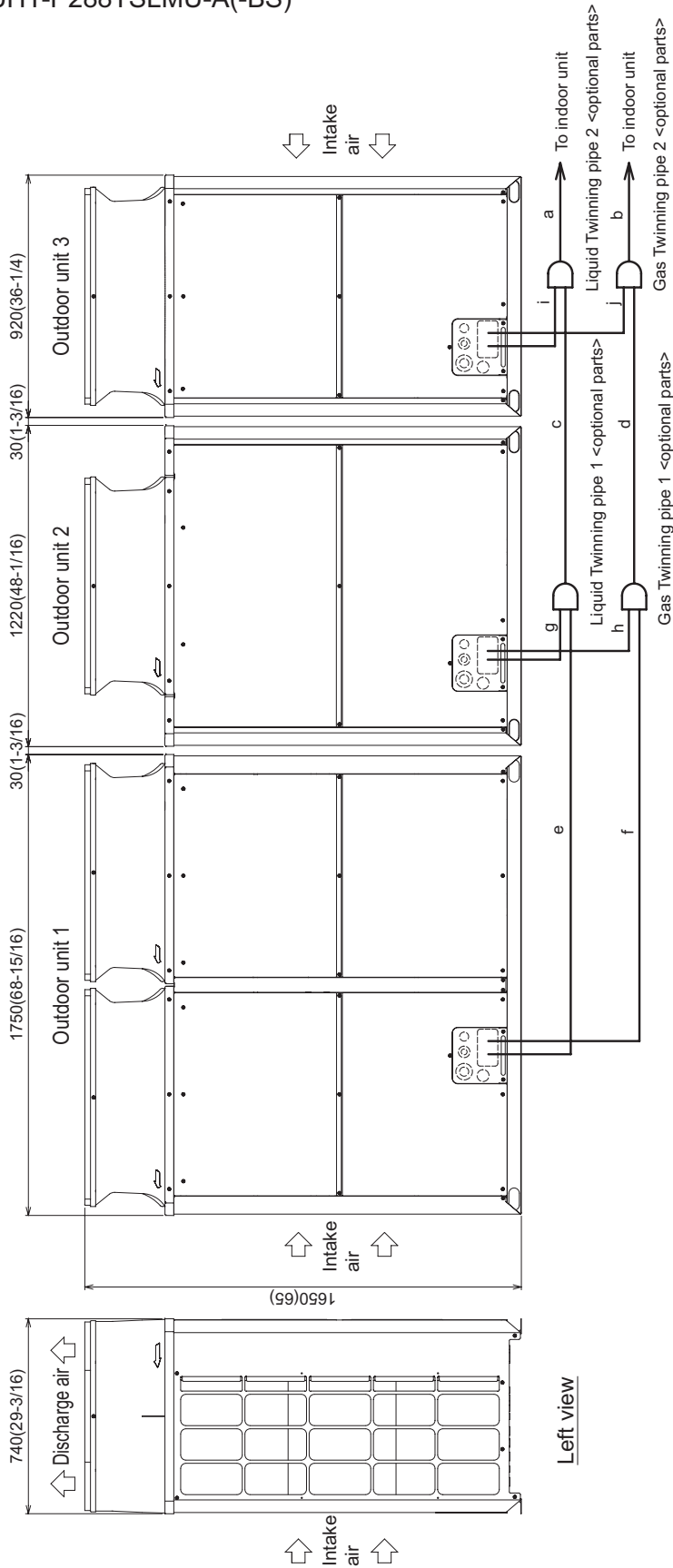
(*including the straight pipe that is supplied with the Twinning pipe).

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

2. EXTERNAL DIMENSIONS

PUHY-P288TSLMU-A(-BS)

Unit : mm (in.)



Front view

Twinning pipe connection size		PUHY-P288TSLMU-A(-BS)
Package unit name		PUHY-P120TLMU-A(-BS)
Component unit name	Outdoor unit 1	PUHY-P96TLMU-A(-BS)
	Outdoor unit 2	PUHY-P72TLMU-A(-BS)
Outdoor Twinning Kit(optional parts)		CMY-Y300CBK2
Indoor unit~Twinning pipe 2	Liquid a	ø19.05(3/4)
	Gas b	ø34.93(1-3/8)
Twinning pipe 1~Twinning pipe 2	Liquid c	ø19.05(3/4)
	Gas d	ø34.93(1-3/8)

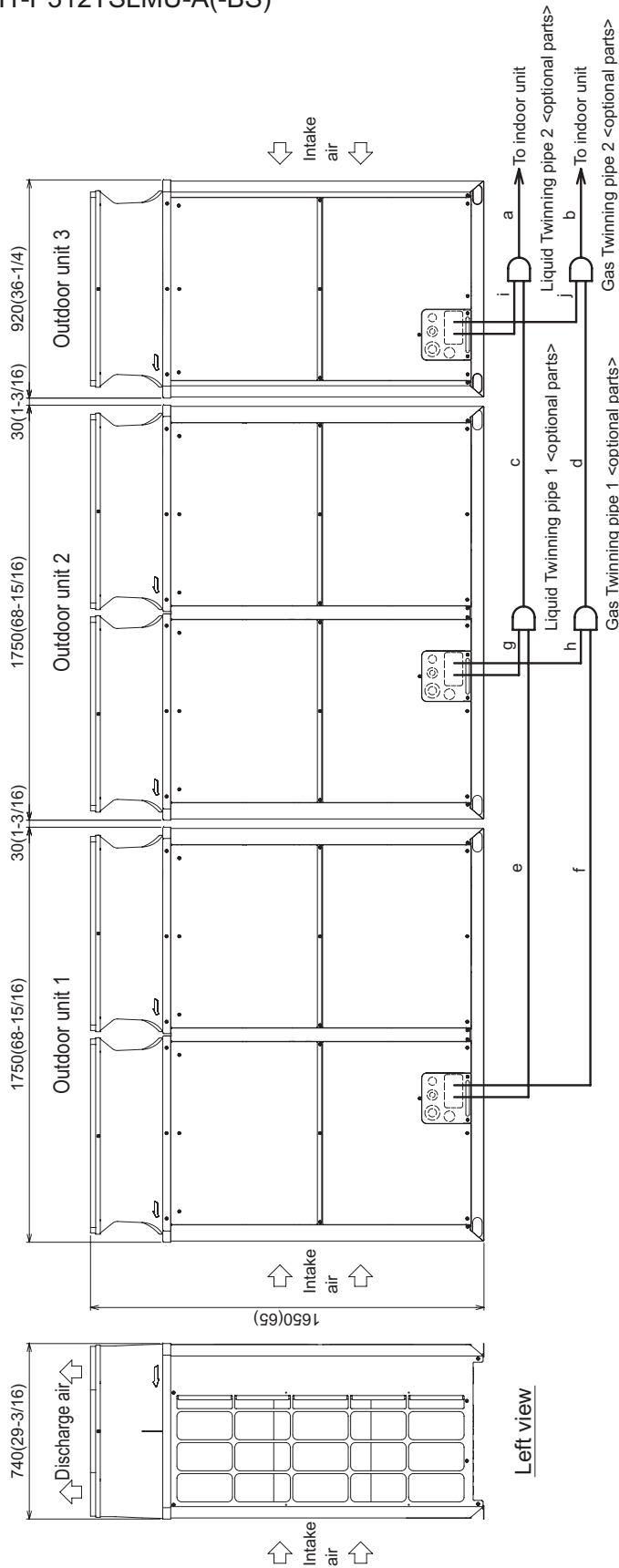
Twinning pipe~Outdoor unit	Unit model		Liquid e or g or i		Gas f or h or j	
	P72	P96	P120	ø9.52(3/8)	ø22.2(7/8)	ø28.58(1-1/8)

- Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
 2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.
 3. Be sure to see the Installation Manual for details of Twinning pipe installation.
 4. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" 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).
 5. Only use the Twinning pipe by Mitsubishi (optional parts).

2. EXTERNAL DIMENSIONS

PUHY-P312TSLMU-A(-BS)

Unit : mm (in.)



Front view

Left view

Twinning pipe connection size

Package unit name		PUHY-P312TSLMU-A(-BS)	
Component unit name		PUHY-P120TLMU-A(-BS)	
Outdoor unit 1		PUHY-P120TLMU-A(-BS)	
Outdoor unit 2		PUHY-P120TLMU-A(-BS)	
Outdoor unit 3		PUHY-P72TLMU-A(-BS)	
Outdoor Twinning Kit(optional parts)		CMY-Y300CBK2	
Indoor unit~ Twinning pipe 2		ø19.05(3/4)	
Twinning pipe 1~Twinning pipe 2		ø34.93(1-3/8)	
		ø19.05(3/4)	
		ø34.93(1-3/8)	

Unit model		Liquid		Gas	
P72		e or g or i		f or h or j	
P120		ø9.52(3/8)		ø22.2(7/8)	
Twinning pipe~Outdoor unit		ø12.7(1/2)		ø28.58(1-1/8)	

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

3. Be sure to see the Installation Manual for details of Twinning pipe installation.

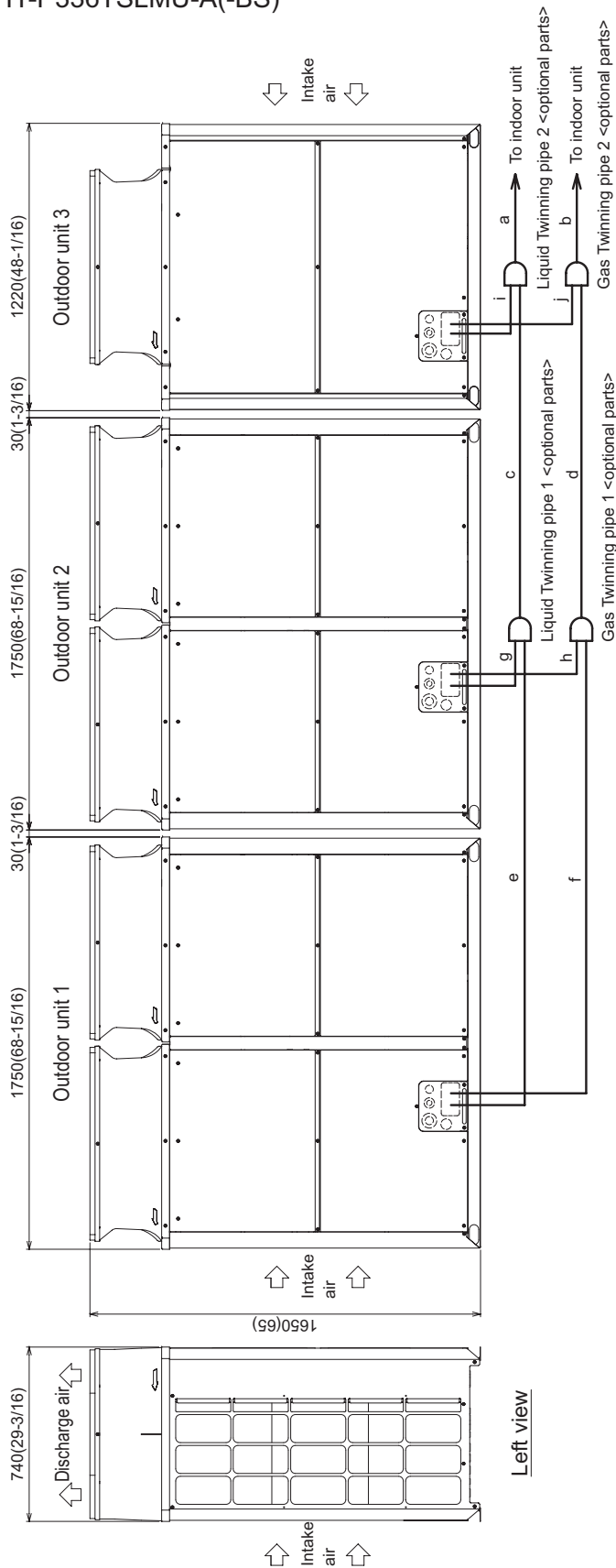
4. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" in the figure) must have at least 500mm(19-11/16) of straight section (*including the straight pipe that is supplied with the Twinning pipe).

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

2. EXTERNAL DIMENSIONS

PUHY-P336TSLMU-A(-BS)

Unit : mm (in.)



Front view

Twinning pipe connection size

Package unit name		PUHY-P336TSLMU-A(-BS)
Component unit name	Outdoor unit 1	PUHY-P120TLMU-A(-BS)
	Outdoor unit 2	PUHY-P120TLMU-A(-BS)
	Outdoor unit 3	PUHY-P96TLMU-A(-BS)
Outdoor Twinning Kit(optional parts)		CMY-Y300CBK2
Indoor unit~Twinning pipe 2	Liquid a	ø19.05(3/4)
	Gas b	ø41.28(1-5/8)
Twinning pipe 1~Twinning pipe 2	Liquid c	ø19.05(3/4)
	Gas d	ø34.93(1-3/8)

Unit model		Liquid	Gas
P96	e or g or i	ø9.52(3/8)	f or h or j
	P120	ø12.7(1/2)	ø22.2(7/8)
Twinning pipe~Outdoor unit		ø12.7(1/2)	ø28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

Be sure to see the Installation Manual for details of Twinning pipe installation.

3. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" in the figure) must have at least 500mm(19-11/16) of straight section

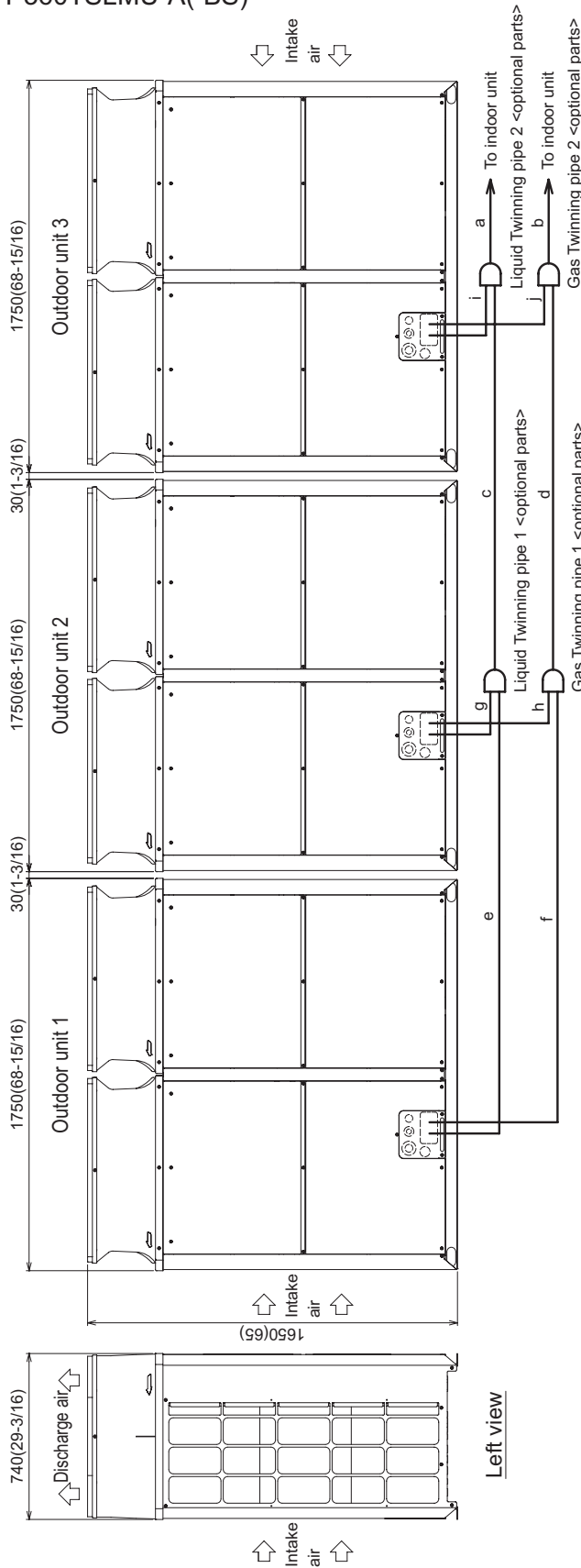
(*including the straight pipe that is supplied with the Twinning pipe).

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

2. EXTERNAL DIMENSIONS

PUHY-P360TSLMU-A(-BS)

Unit : mm (in.)



Front view

Left view

Twinning pipe connection size

Package unit name	PUHY-P360TSLMU-A(-BS)
Outdoor unit 1	PUHY-P120TLMU-A(-BS)
Outdoor unit 2	PUHY-P120TLMU-A(-BS)
Outdoor unit 3	PUHY-P120TLMU-A(-BS)
Outdoor Twinning Kit(optional parts)	CMY-Y300CBK2
Indoor unit~ Twinning pipe 2	Liquid a Gas b
Twinning pipe 1~Twinning pipe 2	Liquid c Gas d

Unit model	Liquid e or g or i for h or j	Gas for h or j
P120	ø12.7(1/2)	ø28.58(1-1/8)

- Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
 2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.
 Be sure to see the Installation Manual for details of Twinning pipe installation.
 3. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" 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).

2. EXTERNAL DIMENSIONS

PUHY-P72YLMU-A(-BS)

Unit : mm (in.)

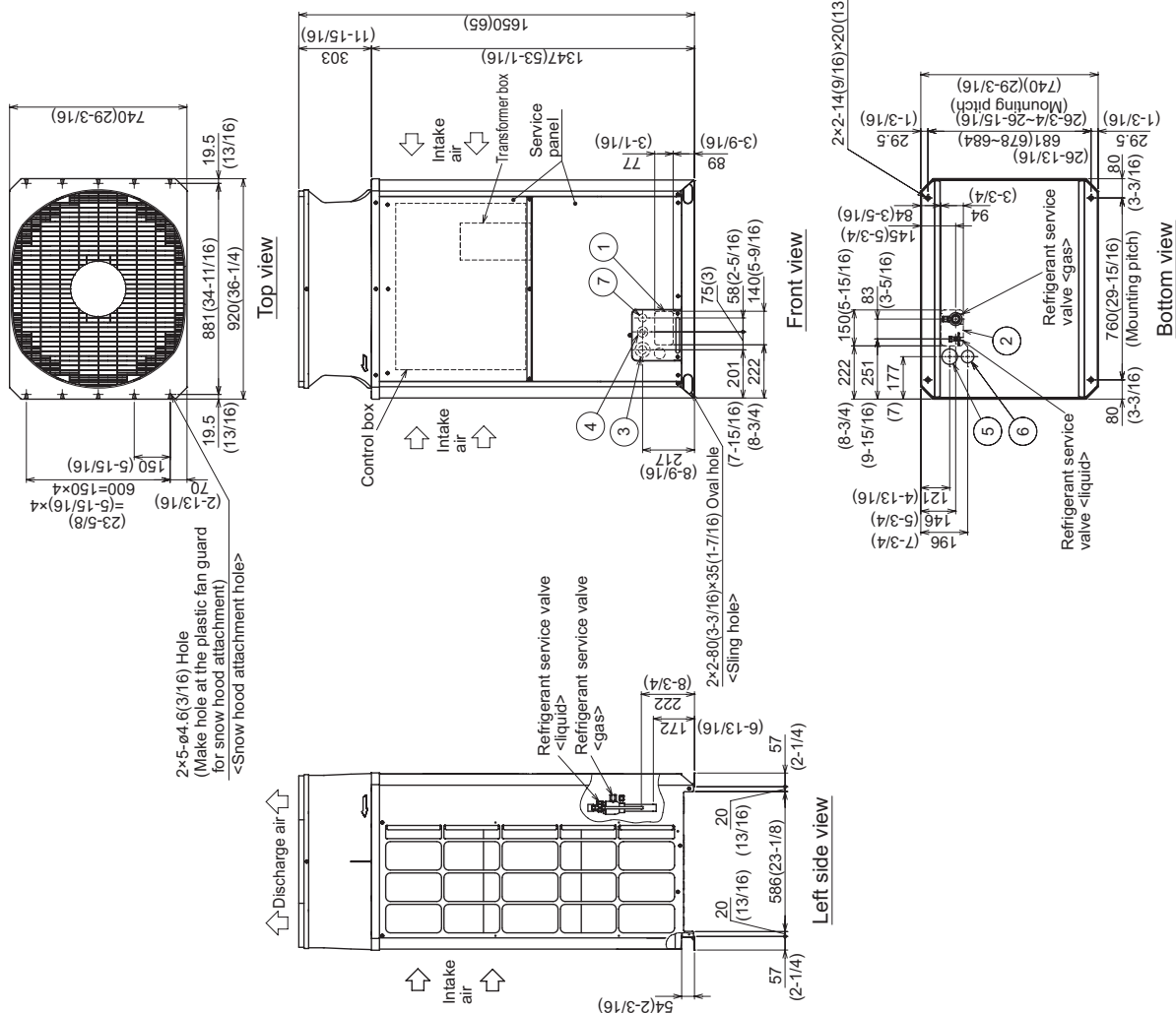
Note 1. Please refer to the engineering manual for information regarding necessary spacing around the unit and foundation work. Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.
2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C(248 °F).

Connecting pipe specifications

Model	Diameter		
	Refrigerant pipe	Service valve	
	Liquid	Gas	Gas
PUHY-P72YLMU	ø9.52 Braze (3/8)" ¹	ø22.2 Braze (7/8)" ²	ø28.58 (1-1/8)

*1 Expand the on-site piping and connect to the refrigerant service valve piping.
*2 Use the pipe joint(field supply) and connect to the refrigerant service valve piping.

NO.	Usage	Specifications
①	Front through hole	140 x 77 Knockout hole (5-9/16) (3-1/16)
②	Bottom through hole	150 x 94 Knockout hole (5-15/16) (3-3/4)
③	Front through hole	ø62.7 or ø34.5 Knockout hole (2-1/2) (1-3/8)
④	Front through hole	ø43.7 or ø22.2 Knockout hole (1-3/4) (7/8)
⑤	Bottom through hole	ø65 Knockout hole (2-9/16)
⑥	Bottom through hole	ø52 Knockout hole (2-1/16)
⑦	For transmission cables	ø34 Knockout hole (1-3/8)



2. EXTERNAL DIMENSIONS

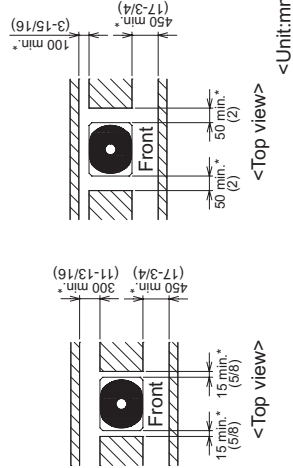
PUHY-P72YLMU-A(-BS)

Unit : mm (in.)

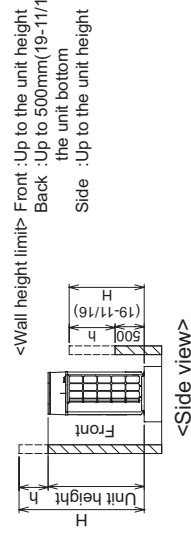
1. Required space around the unit

● 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 the height that exceeds the height limit <h> to the figures that are marked with an asterisk.



2. Foundation work

- ① Take into consideration the surface strength, water drainage route, piping route and wiring route when preparing the installation site.
- 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 post-installed anchor bolts.(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.

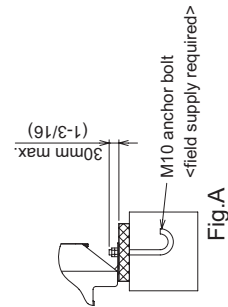


Fig.A

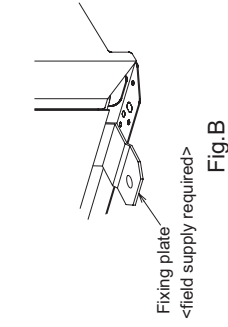


Fig.B

● 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 the height that exceeds the height limit <h> 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.

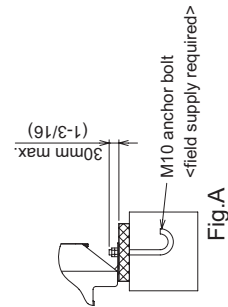
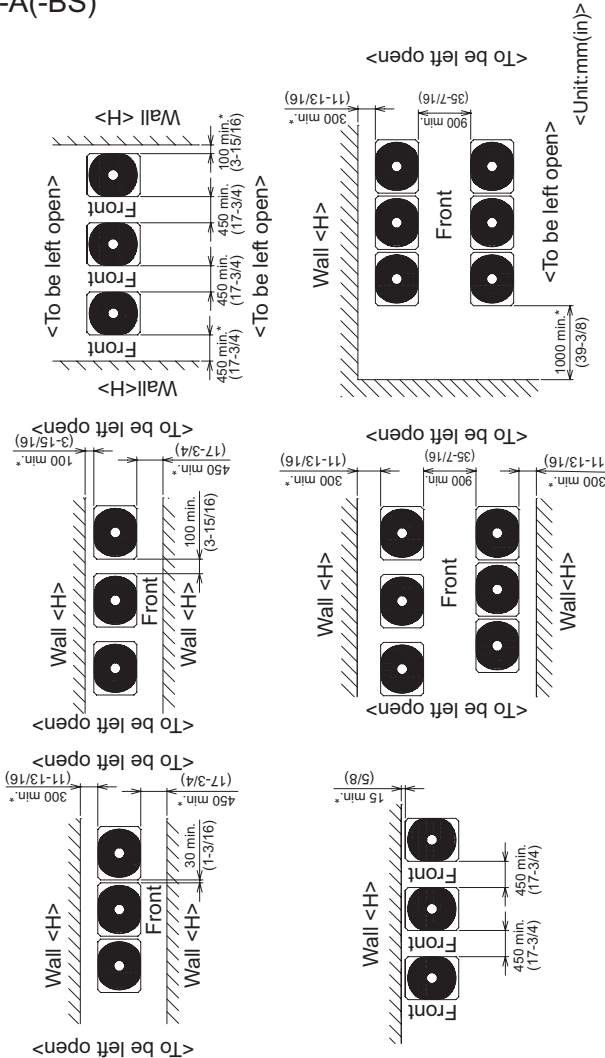


Fig.A

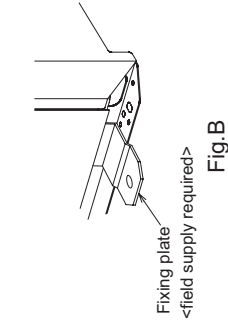


Fig.B

PUHY-P72YLMU-A(-BS)

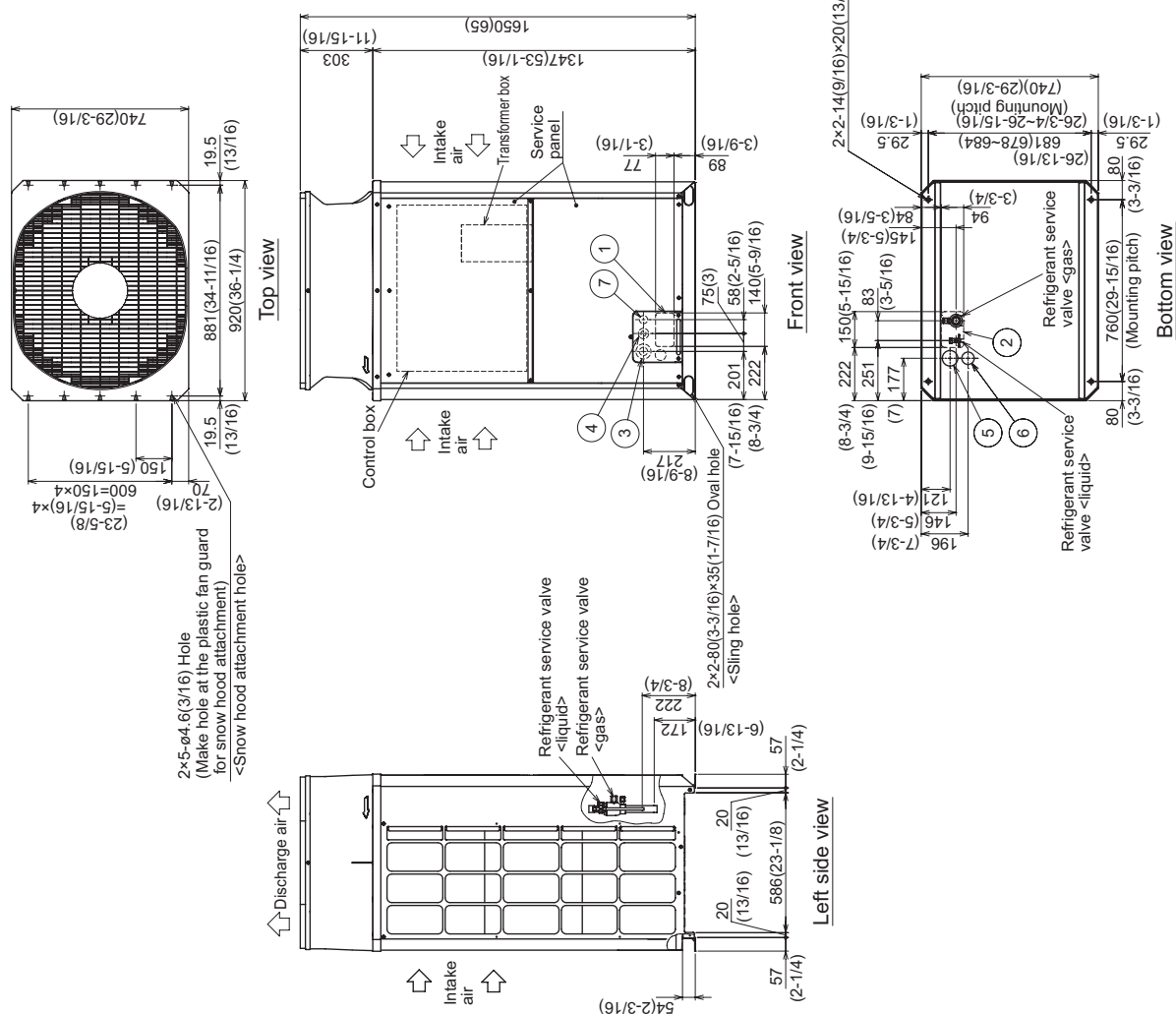
Note1. Please refer to the engineering manual for information regarding necessary spacing around the unit and foundation work. Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.

Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe		Service valve	
	Liquid	Gas	Liquid	Gas
PUHY-P72YLMU	ø9.52 Braze (3/8)" ¹	ø22.2 Braze (7/8)" ²	ø9.52 (3/8)"	ø28.58 (1-1/8)"

- 1 Expand the on-site piping and connect to the refrigerant service valve piping.
- 2 Use the pipe join(field supply) and connect to the refrigerant service valve piping.

NO.	Usage	Specifications
①	For pipes	Front through hole 140 × 77 Knockout hole (5-9/16) (3-1/16)
②		Bottom through hole 150 × 94 Knockout hole (5-15/16) (3-3/4)
③		Front through hole ø62.7 or ø34.5 Knockout hole (2-1/2) (1-3/8)
④	For wires	Front through hole ø43.7 or ø22.2 Knockout hole (1-3/4) (7/8)
⑤		Bottom through hole ø65 Knockout hole (2-9/16)
⑥		Bottom through hole ø52 Knockout hole (2-1/16)
⑦	For transmission cables	Front through hole ø34 Knockout hole (1-3/8)



2. EXTERNAL DIMENSIONS

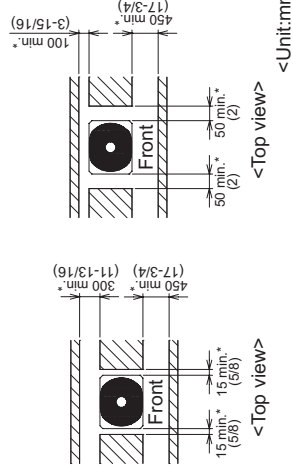
PUHY-P72YLMU-A-(BS)

Unit : mm (in.)

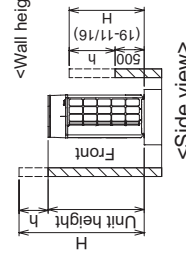
1. Required space around the unit

● 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

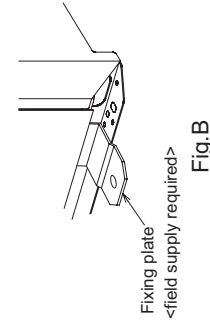
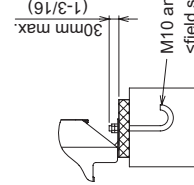


- ② When the height of the walls on the front, back or on the sides <H> exceeds the wall height limit as defined below add the height that exceeds the height limit <h> to the figures that are marked with an asterisk.



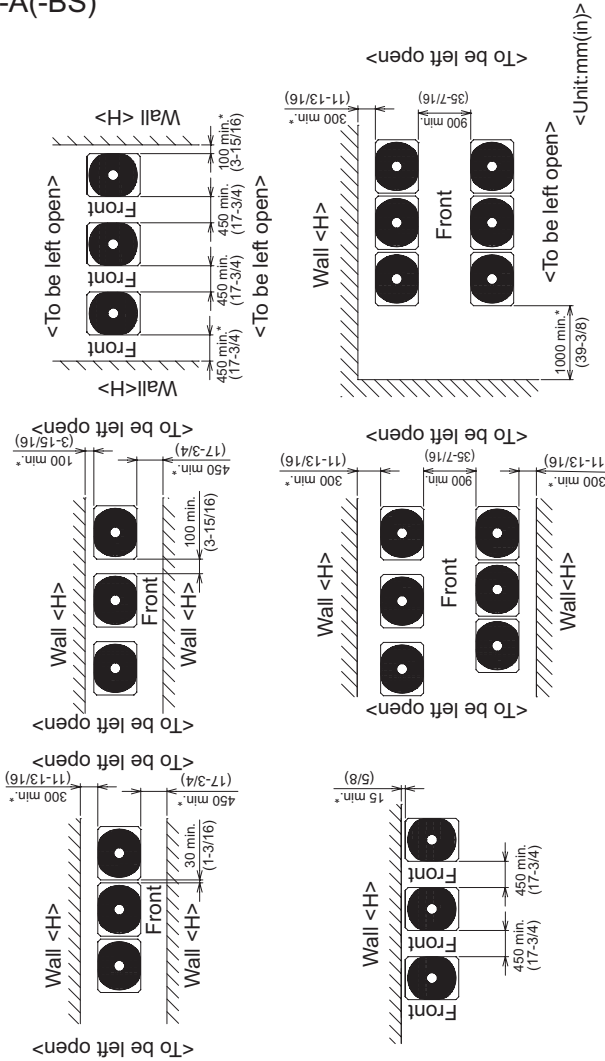
2. Foundation work

- ① Take into consideration the surface strength, water drainage route, piping route and wiring route when preparing the installation site.
- 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 post-installed anchor bolts. (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.



● 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 the height that exceeds the height limit <h> 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.



2. EXTERNAL DIMENSIONS

PUHY-P96YLMU-A(-BS)

Unit : mm (in.)

Note1. Please refer to the engineering manual for information regarding necessary spacing around the unit and foundation work. Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.
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).

Connecting pipe specifications

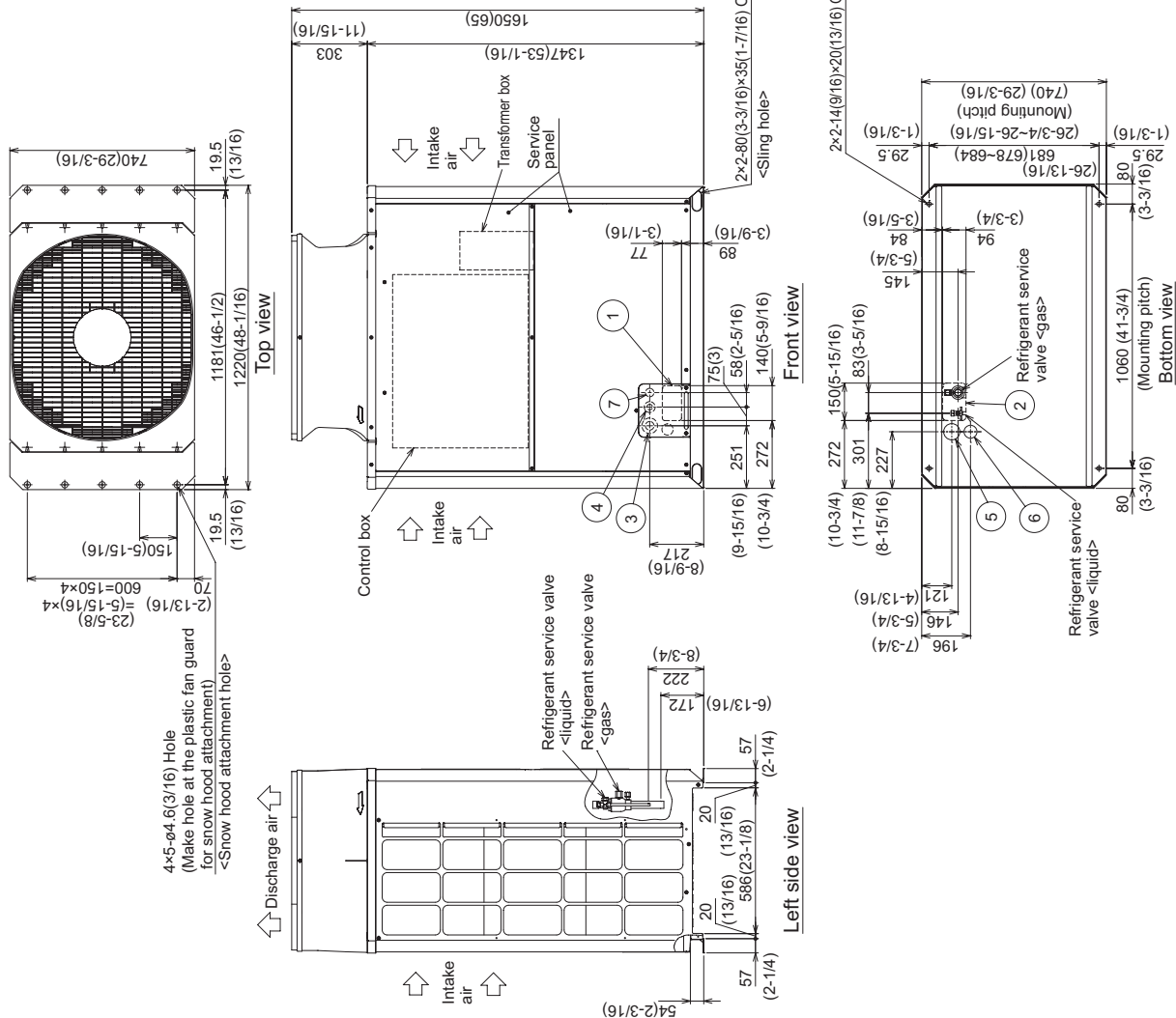
Model	Diameter			
	Refrigerant pipe		Service valve	
	Liquid	Gas	Liquid	Gas
PUHY-P96YLMU	ø9.52 Braze (3/8)"*1 (ø12.7 Braze) (1/2)"*2 *3	ø22.2 Braze (7/8)"*2	ø9.52 (3/8)	ø28.58 (1-1/8)

*1 Expand the on-site piping and connect to the refrigerant service valve piping.

*2 Use the pipe joint (field supply) and connect to the refrigerant service valve piping.

*3 Furthest piping length (OU from IU) ≥ 90m(295ft)

NO.	Usage	Specifications
①	Front through hole	140 × 77 Knockout hole (5-9/16) (3-1/16)
②	Bottom through hole	150 × 94 Knockout hole (5-15/16) (3-3/4)
③	Front through hole	ø62.7 or ø34.5 Knockout hole (2-1/2) (1-3/8)
④	Front through hole	ø43.7 or ø22.2 Knockout hole (1-3/4) (7/8)
⑤	Bottom through hole	ø65 Knockout hole (2-9/16)
⑥	Bottom through hole	ø52 Knockout hole (2-1/16)
⑦	For transmission cables	ø34 Knockout hole (1-3/8)



2. EXTERNAL DIMENSIONS

PUHY-P120, 144, 168YLMU-A(-BS)

Unit : mm (in.)

Note1 Please refer to the engineering manual for information regarding necessary spacing around the unit and foundation work. Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.
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).

Connecting pipe specifications

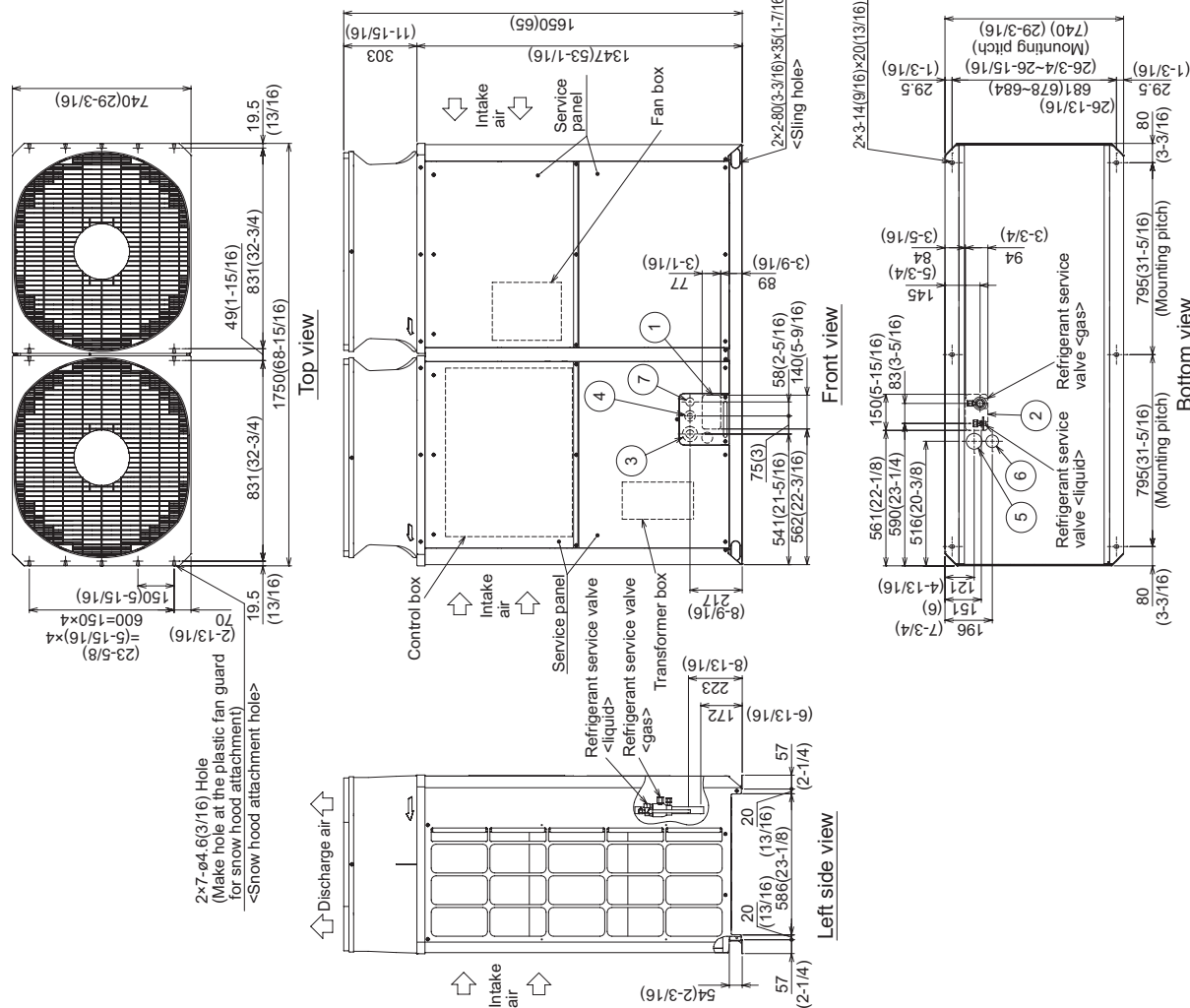
Model	Diameter			Service valve
	Refrigerant pipe		Gas	
PUHY-P120YLMU	Liquid	ø9.52 Braze (3/8)" ²	ø28.58 Braze (1-1/8)" ¹	Liquid
	Gas	ø12.7 Braze (1/2)" ¹ *3 *4		Gas
PUHY-P144YLMU	Liquid	ø12.7 Braze (1/2)" ¹	ø28.58 Braze (1-1/8)" ¹	Liquid
PUHY-P168YLMU	Liquid	ø15.88 Braze (5/8)" ²		Gas

*1 Expand the on-site piping and connect to the refrigerant service valve piping.
*2 Use the pipe joint(field supply) and connect to the refrigerant service valve piping.

*3 Indicates dimensions and connection specifications in the case the unit is used in combination with other outdoor units.

*4 Furthest piping length (OU from IU) ≥ 40m(131ft)

NO.	Usage	Specifications
①	For pipes	Front through hole 140 x 77 Knockout hole (5-9/16) (3-1/16)
②		Bottom through hole 150 x 94 Knockout hole (5-15/16) (3-3/4)
③	For wires	Front through hole ø62.7 or ø34.5 Knockout hole (2-1/2) (1-3/8)
④		Front through hole ø43.7 or ø22.2 Knockout hole (1-3/4) (7/8)
⑤		Bottom through hole ø65 Knockout hole (2-9/16)
⑥		Bottom through hole ø52 Knockout hole (2-1/16)
⑦	For transmission cables	Front through hole ø34 Knockout hole (1-3/8)



2. EXTERNAL DIMENSIONS

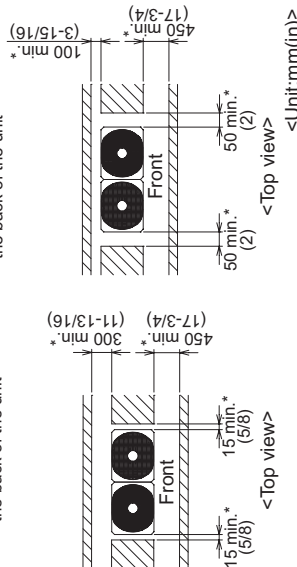
PUHY-P120, 144, 168YLMU-A-(BS)

Unit : mm (in.)

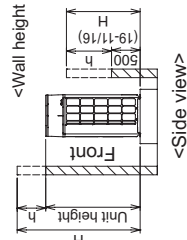
1. Required space around the unit

● 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 the height that exceeds the height limit <h> to the figures that are marked with an asterisk.



2. Foundation work

- ① Take into consideration the surface strength, water drainage route, piping route, and wiring route when preparing the installation site.
- ② Build the foundation in such a 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 post-installed anchor bolts. (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.

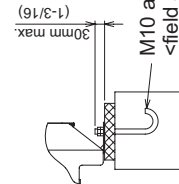


Fig.A

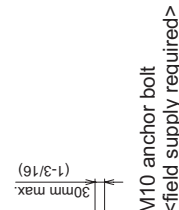


Fig.B

● 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 the height that exceeds the height limit <h> 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 three units consecutively in the side direction and provide a space of 1000mm(39-3/8) or more as inlet space/ passage space for each three units.

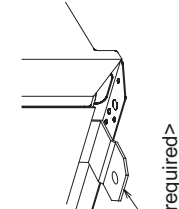
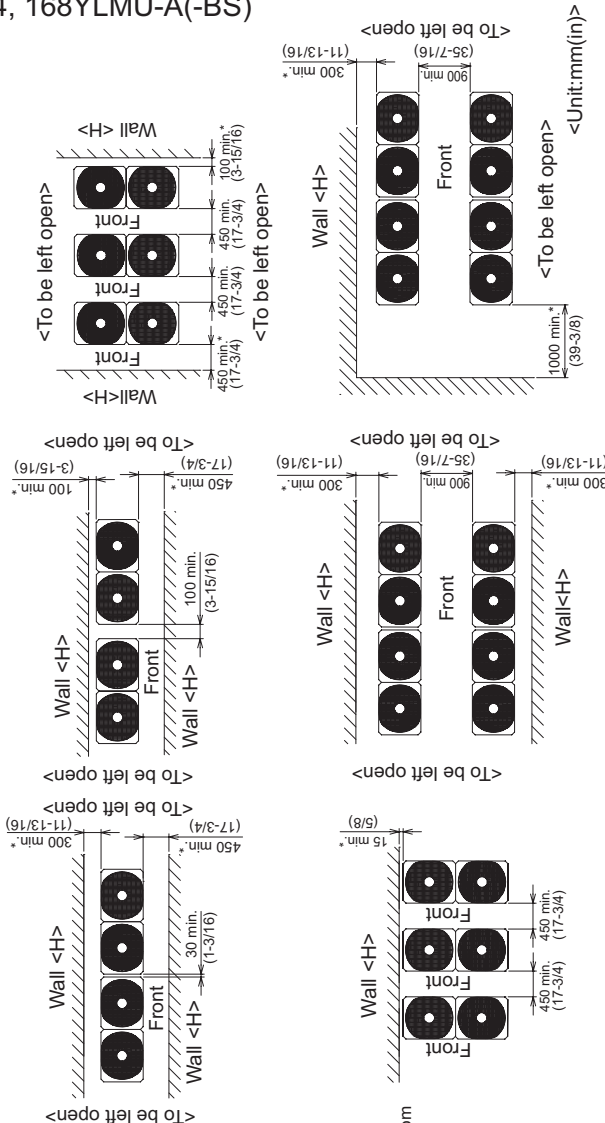
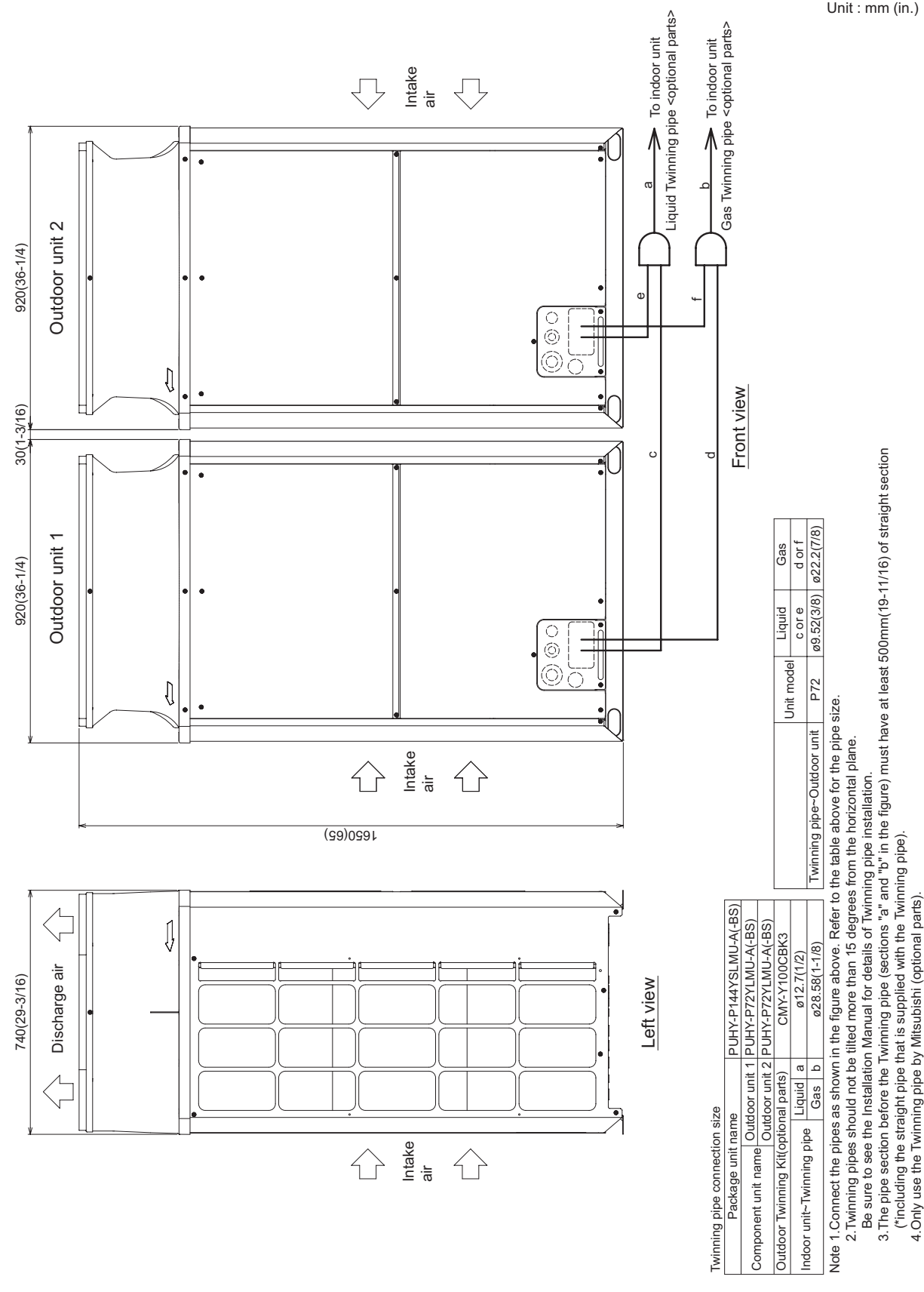


Fig.B

2. EXTERNAL DIMENSIONS

PUHY-P144YSLMU-A(-BS)

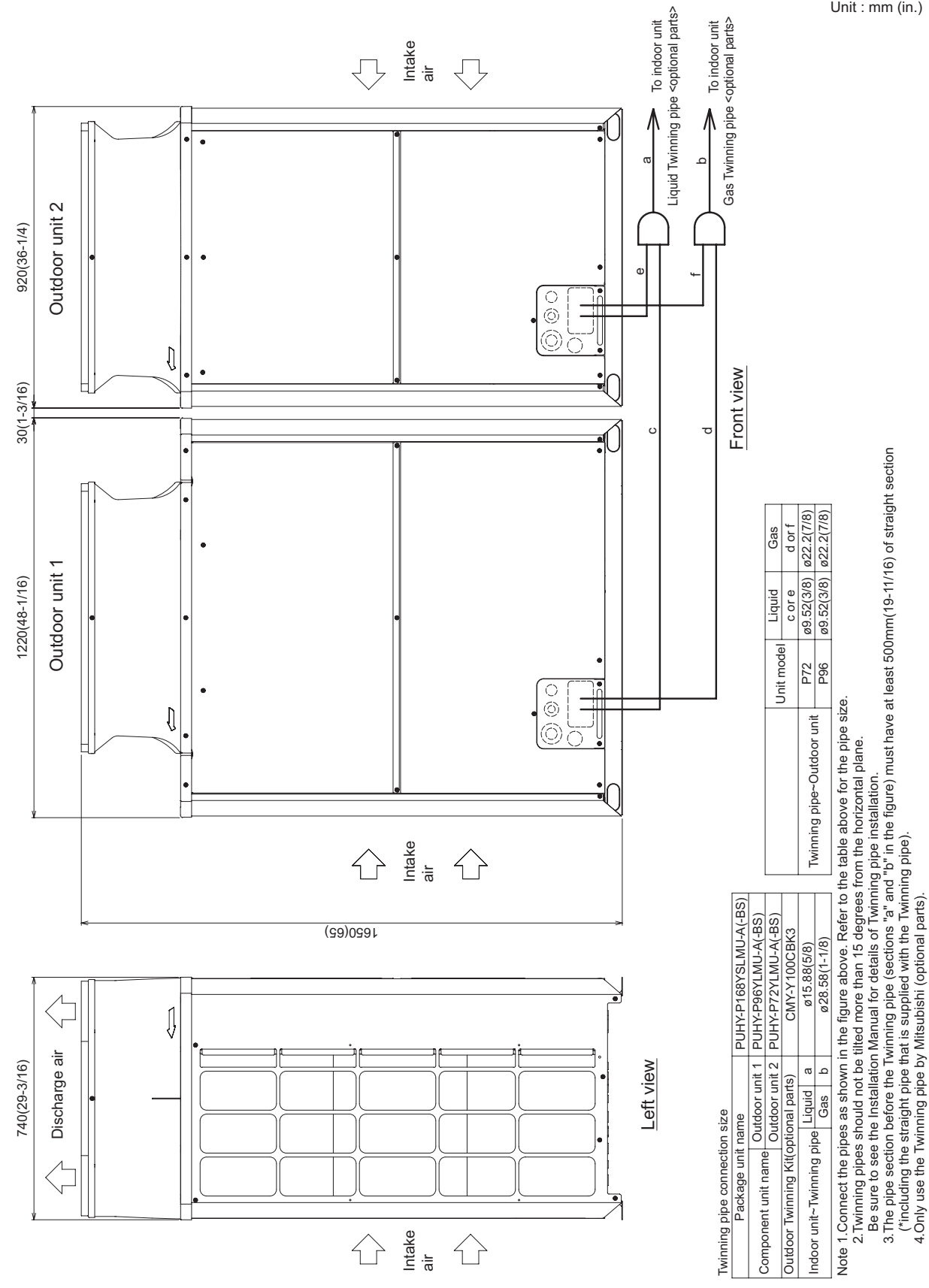
Unit : mm (in.)



2. EXTERNAL DIMENSIONS

PUHY-P168YSLMU-A(-BS)

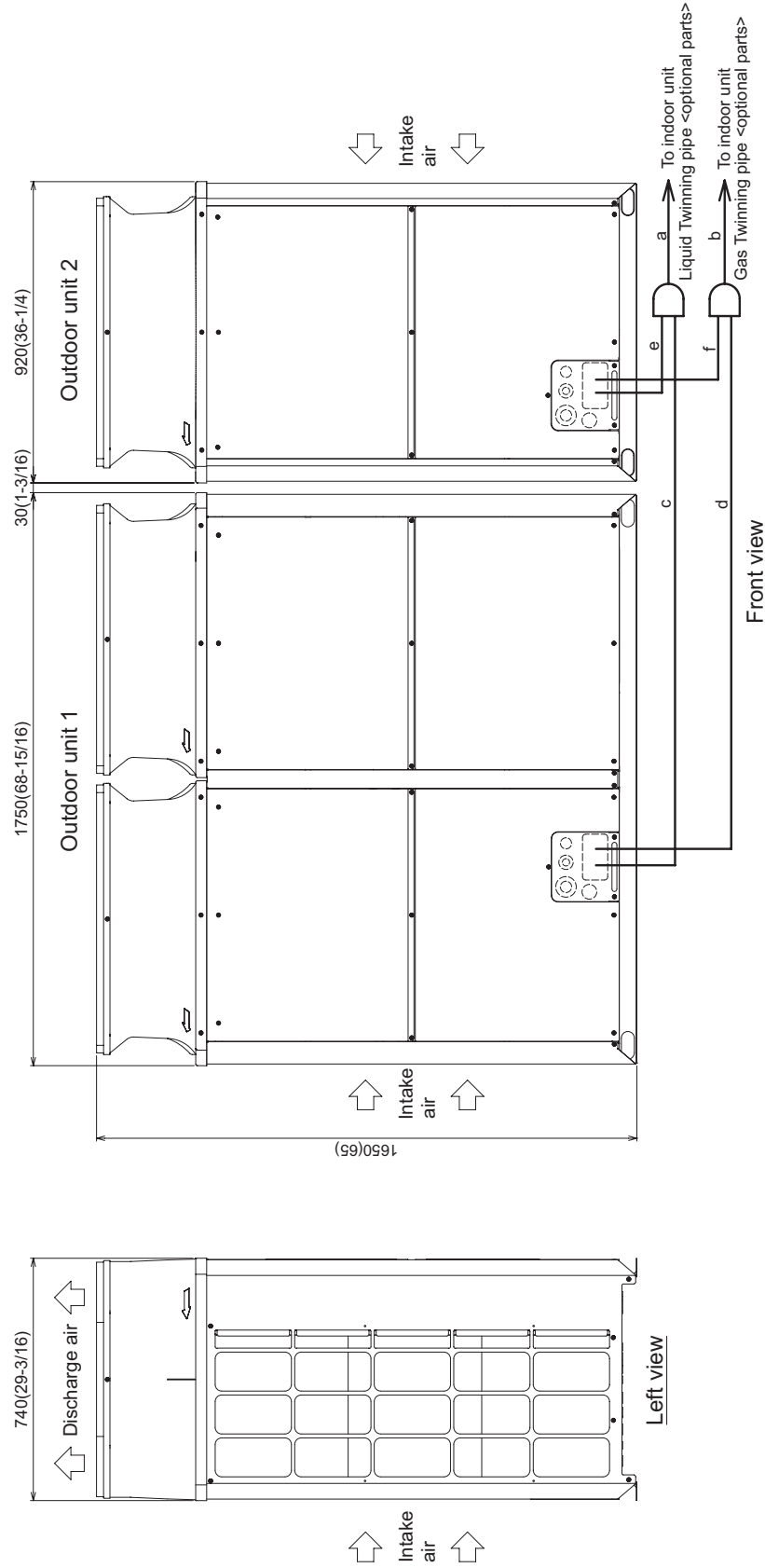
Unit : mm (in.)



2. EXTERNAL DIMENSIONS

PUHY-P192YSLMU-A(-BS)

Unit : mm (in.)



Twinning pipe connection size

Package unit name	PUHY-P192YSLMU-A(-BS)
Component unit name	Outdoor unit 1 PUHY-P120YLMU-A(-BS)
Outdoor Twinning Kit (optional parts)	CMY-Y100CBK3
Indoor unit - Twinning pipe	Liquid a Gas b
	ø15.88(5/8) ø28.58(1-1/8)

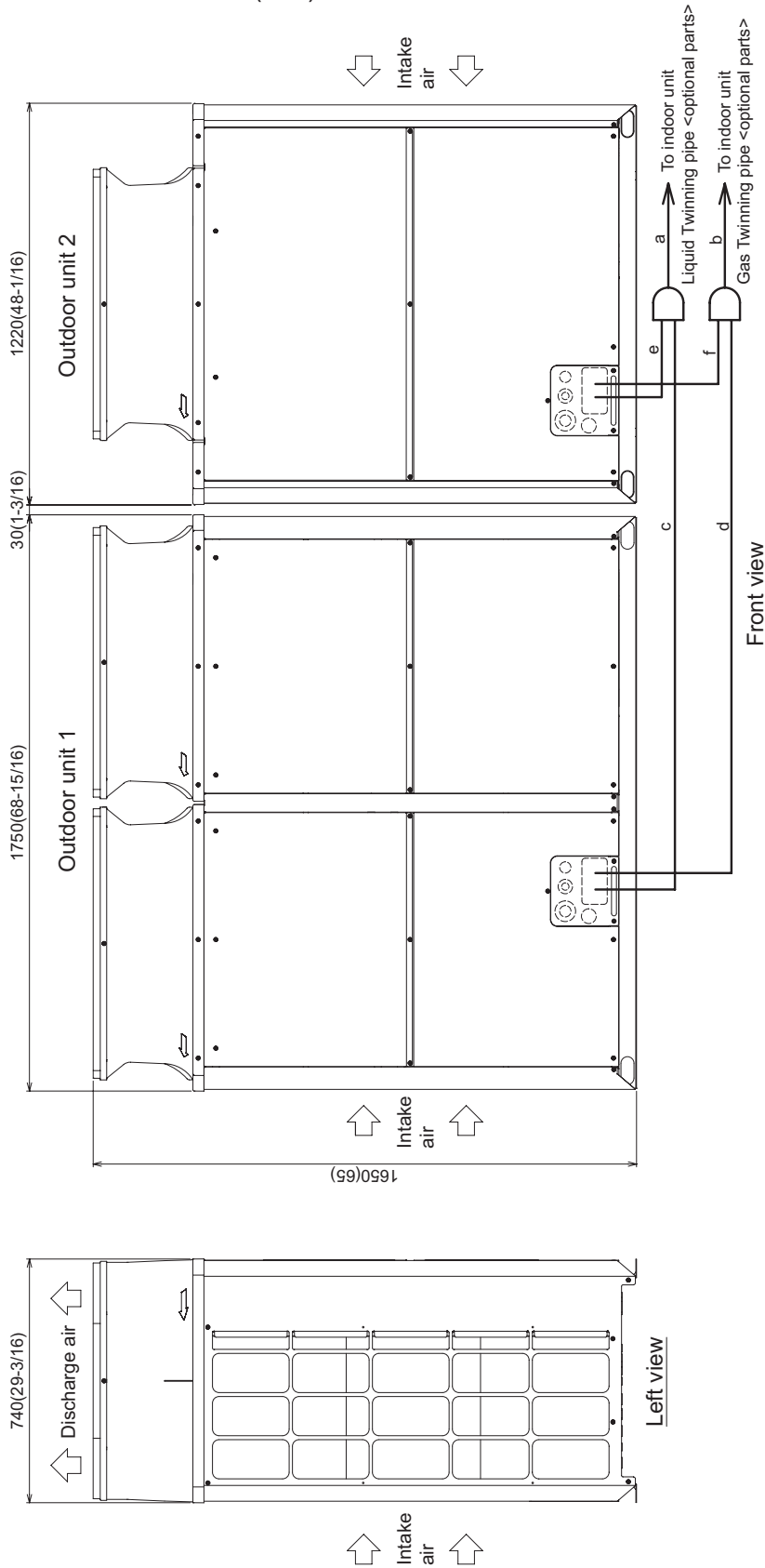
Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
Note 2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.
Note 3. The pipe section before the Twinning pipe (sections "a" and "b" in the figure) must have at least 500mm(19-11/16) of straight section (*including the straight pipe that is supplied with the Twinning pipe).
Note 4. Only use the Twinning pipe by Mitsubishi (optional parts).

Twinning pipe-Outdoor unit	Unit model	Liquid c or e	Gas d or f
P72	P120	ø9.52(3/8)	ø22.2(7/8)
P120	P120	ø12.7(1/2)	ø28.58(1-1/8)

2. EXTERNAL DIMENSIONS

PUHY-P216YSLMU-A(-BS)

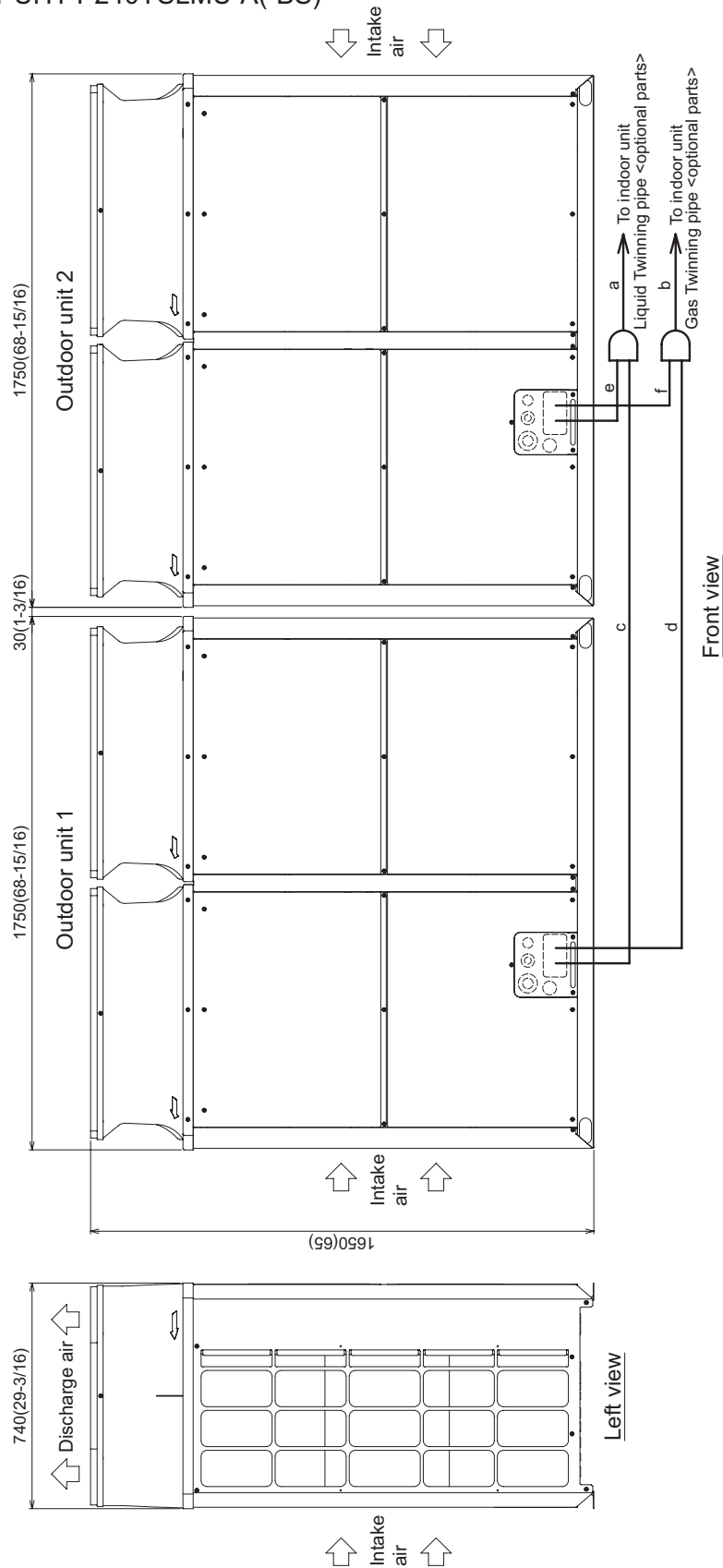
Unit : mm (in.)



2. EXTERNAL DIMENSIONS

PUHY-P240YSLMU-A(-BS)

Unit : mm (in.)



Twinning pipe connection size

Package unit name		PUHY-P240YSLMU-A(-BS)	
Component unit name		PUHY-P120YLMU-A(-BS)	
Outdoor unit name		PUHY-P120YLMU-A(-BS)	
Outdoor Twinning Kit(optional parts)		CMY-Y100CBK3	
Indoor unit- Twinning pipe		ø15.88(5/8)	
Liquid		ø28.58(1-1/8)	
Gas		ø28.58(1-1/8)	

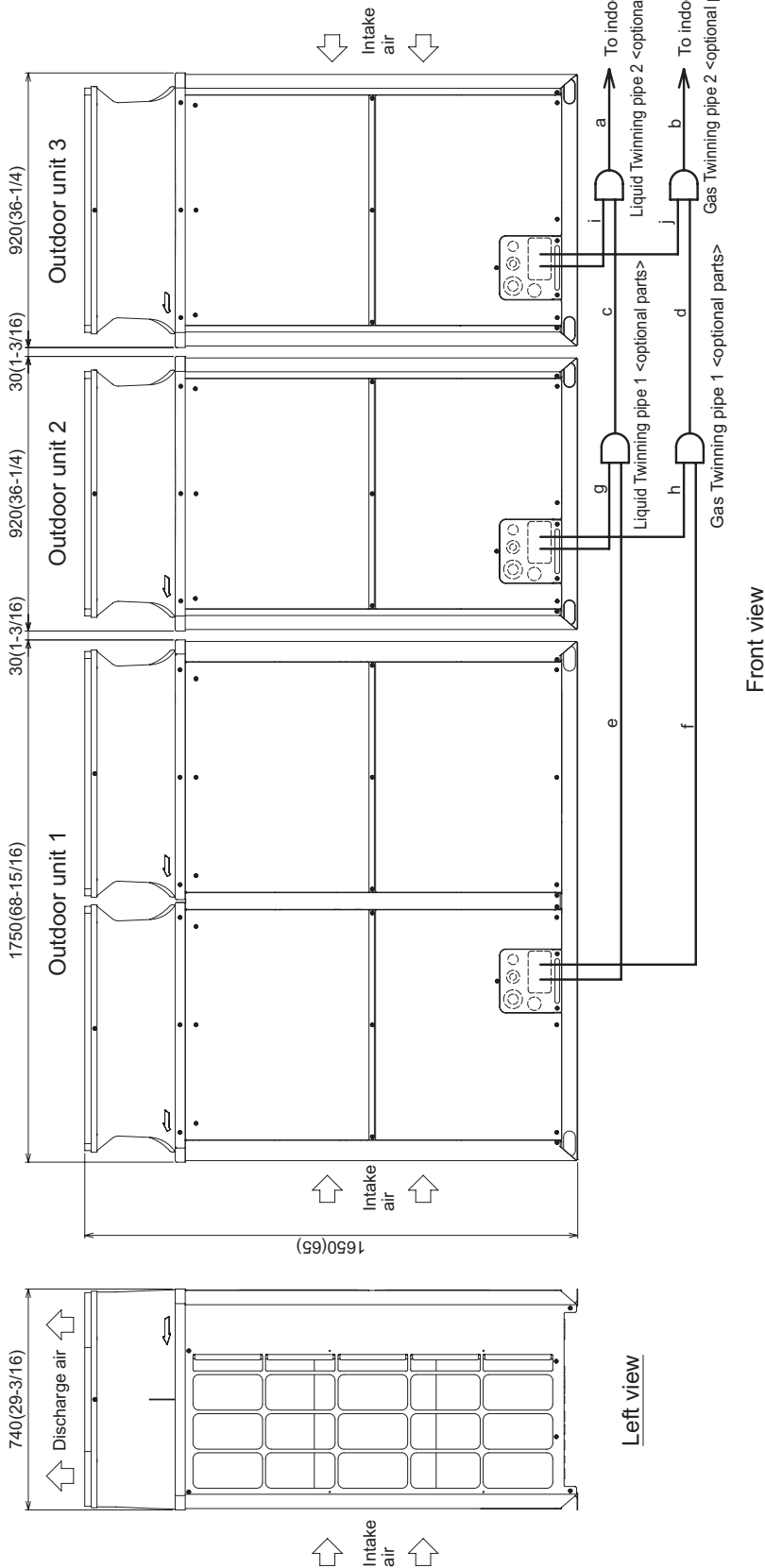
Twinning pipe-Outdoor unit		Unit model		Liquid		Gas	
		P120		c or e		d or f	
				ø12.7(1/2)		ø28.58(1-1/8)	

- Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.
3. The pipe section before the Twinning pipe (sections "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).

2. EXTERNAL DIMENSIONS

PUHY-P264YSLMU-A(-BS)

Unit : mm (in.)



Twinning pipe connection size

Package unit name		PUHY-P264YSLMU-A(-BS)
Component unit name	Outdoor unit 1	PUHY-P120YLMU-A(-BS)
	Outdoor unit 2	PUHY-P72YLMU-A(-BS)
	Outdoor unit 3	PUHY-P72YLMU-A(-BS)
Outdoor Twinning Kit(optional parts)		CMY-Y300CBK2
Indoor unit~Twinning pipe 2	Liquid a	ø19.05(3/4)
	Gas b	ø34.93(1-3/8)
Twinning pipe 1~Twinning pipe 2	Liquid c	ø19.05(3/4)
	Gas d	ø34.93(1-3/8)

Unit model	Liquid e or g or i	Gas f or h or j
P72	ø9.52(3/8)	ø22.2(7/8)
P120	ø12.7(1/2)	ø28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

Be sure to see the Installation Manual for details of Twinning pipe installation.

3. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" in the figure) must have at least 500mm(19-11/16) of straight section

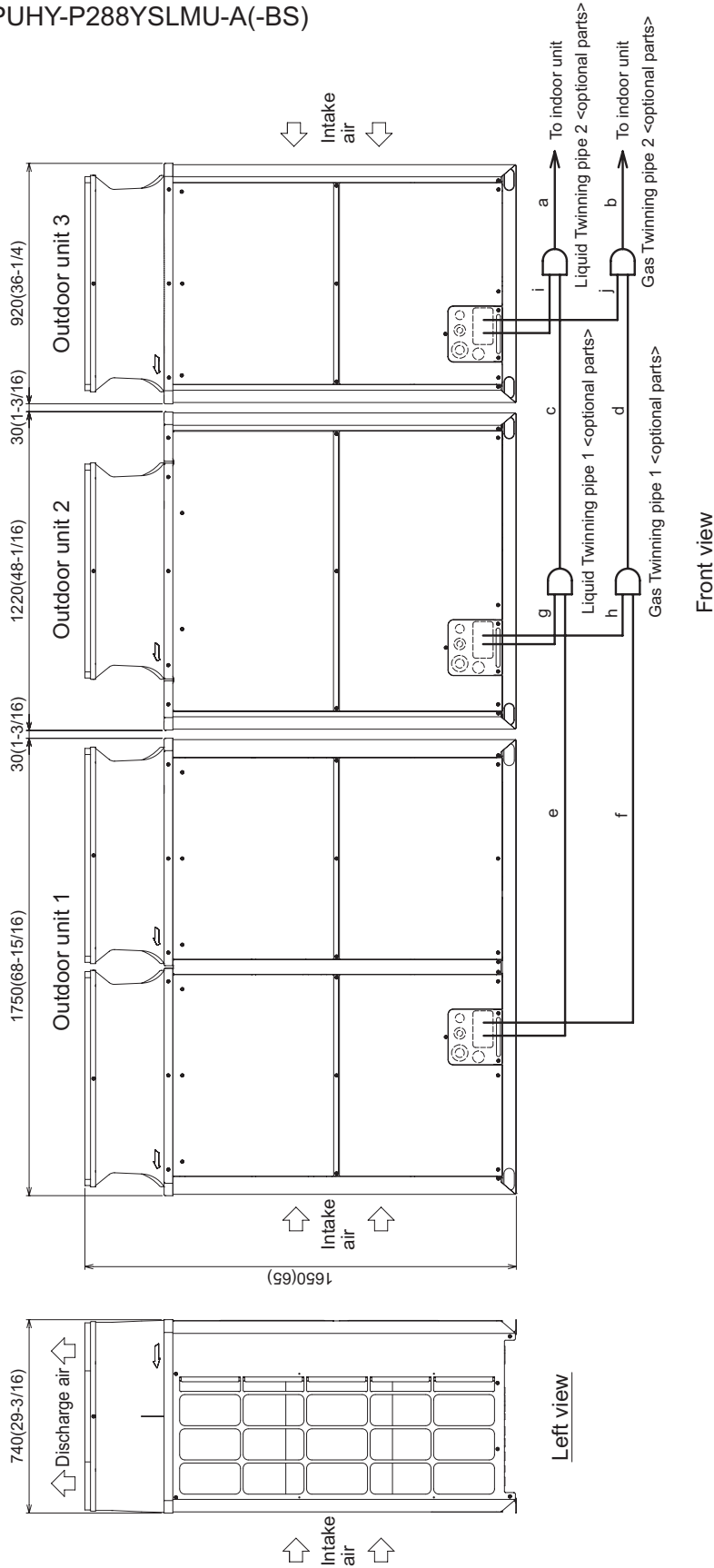
(*including the straight pipe that is supplied with the Twinning pipe).

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

2. EXTERNAL DIMENSIONS

PUHY-P288YSLMU-A(-BS)

Unit : mm (in.)



Twinning pipe connection size

Package unit name		PUHY-P288YSLMU-A(-BS)
Component unit name	Outdoor unit 1	PUHY-P120YLMU-A(-BS)
	Outdoor unit 2	PUHY-P96YLMU-A(-BS)
	Outdoor unit 3	PUHY-P72YLMU-A(-BS)
Outdoor Twinning Kit(optional parts)		CMY-Y300CBK2
Indoor unit-Twinning pipe 2	Liquid a	ø19.05(3/4)
	Gas b	ø34.93(1-3/8)
Twinning pipe 1~Twinning pipe 2	Liquid c	ø19.05(3/4)
	Gas d	ø34.93(1-3/8)

Twinning pipe~Outdoor unit	Unit model	Liquid e or g or i	Gas for h or j
	P72	ø9.52(3/8)	ø22.2(7/8)
	P96	ø9.52(3/8)	ø22.2(7/8)
	P120	ø12.7(1/2)	ø28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

Be sure to see the Installation Manual for details of Twinning pipe installation.

3. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" 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).

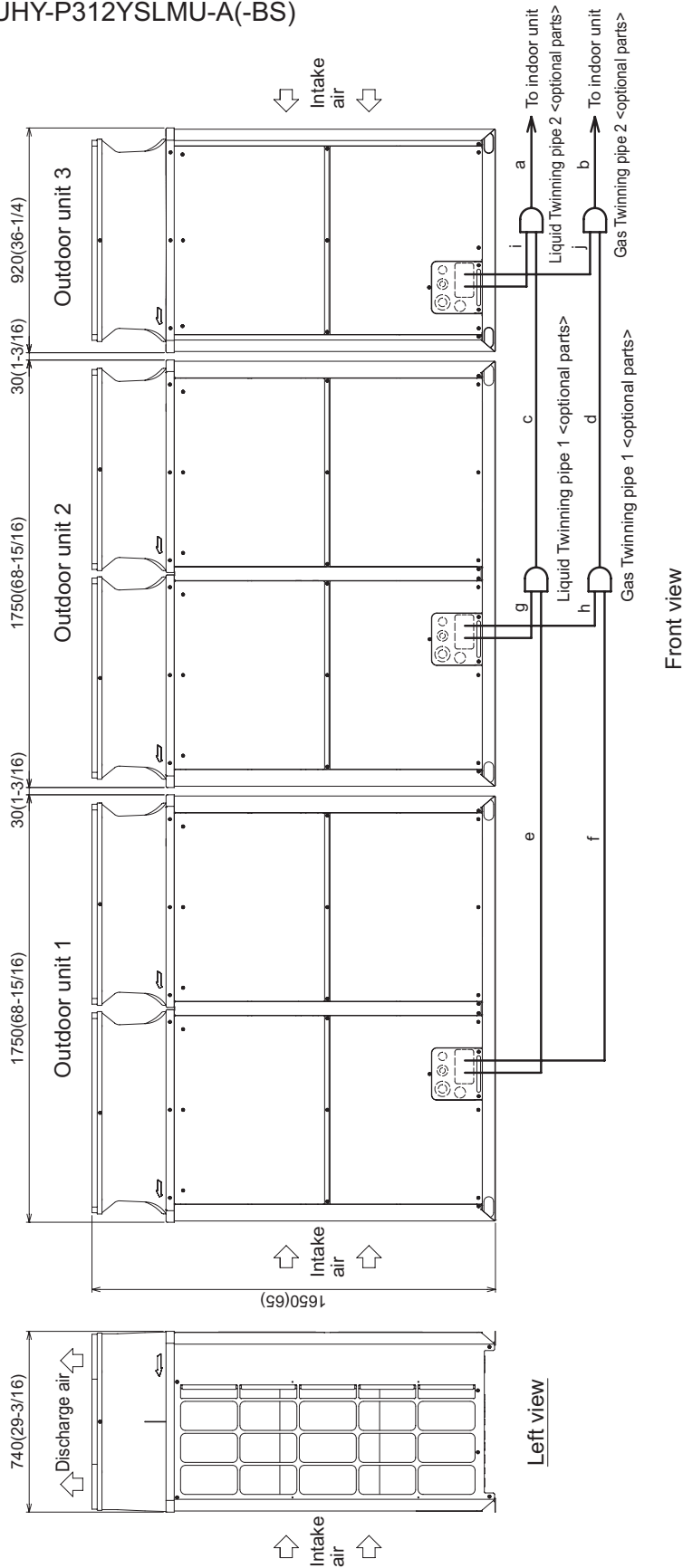
Front view

Left view

2. EXTERNAL DIMENSIONS

PUHY-P312YSLMU-A(-BS)

Unit : mm (in.)



Twinning pipe connection size

Package unit name		PUHY-P312YSLMU-A(-BS)
Component unit name	Outdoor unit 1	PUHY-P120YLMU-A(-BS)
	Outdoor unit 2	PUHY-P120YLMU-A(-BS)
	Outdoor unit 3	PUHY-P72YLMU-A(-BS)
Outdoor Twinning Kit(optional parts)		CMY-Y300CBK2
Indoor unit-Twinning pipe 2	Liquid	a
	Gas	b
	Liquid	c
Twinning pipe 1-Twinning pipe 2	Gas	d
	Gas	d

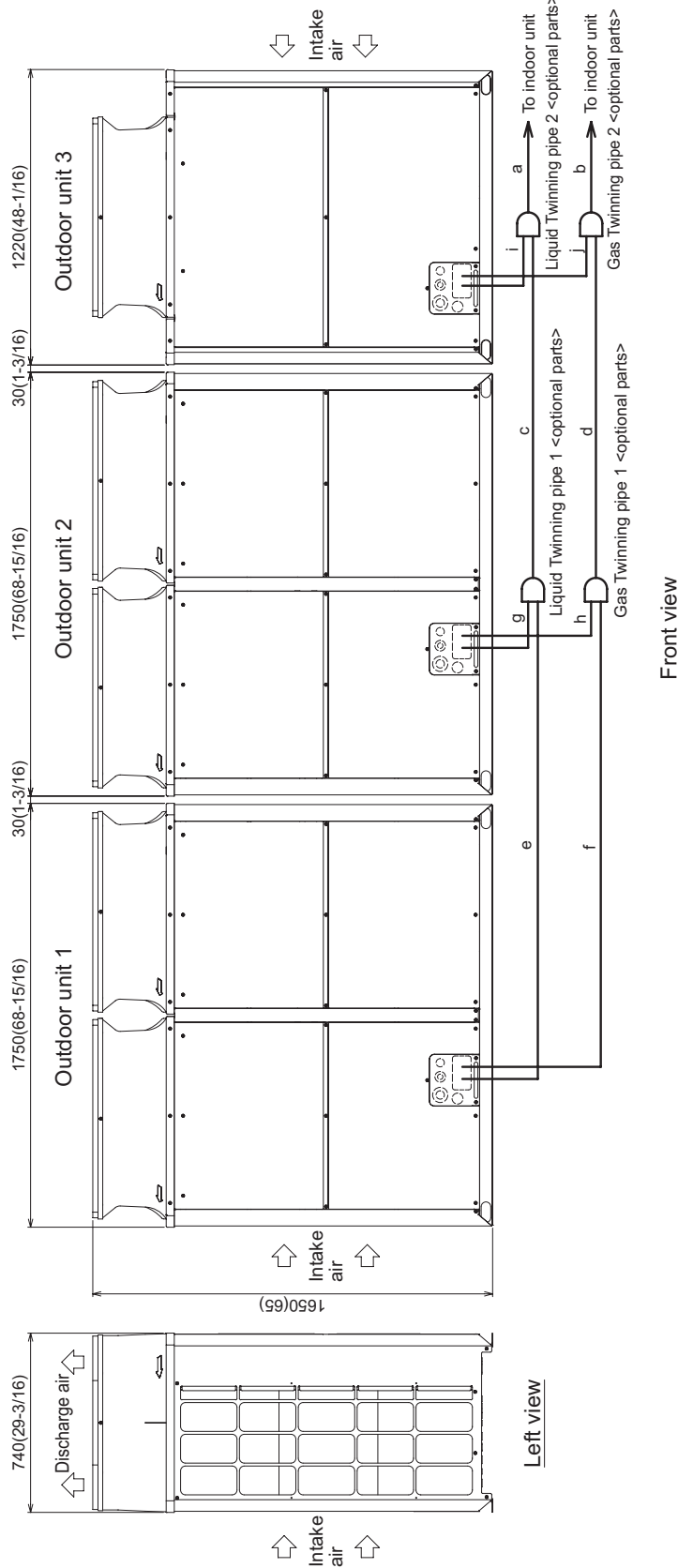
Unit model	Liquid e or g or i	Gas for h or j
P72	ø9.52(3/8)	ø22.2(7/8)
P120	ø12.7(1/2)	ø28.58(1-1/8)

- Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
 2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.
 Be sure to see the Installation Manual for details of Twinning pipe installation.
 3. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" 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).

2. EXTERNAL DIMENSIONS

PUHY-P336YSLMU-A(-BS)

Unit : mm (in.)



Twinning pipe connection size

Package unit name		PUHY-P336YSLMU-A(-BS)
Component unit name	Outdoor unit 1	PUHY-P120YLMU-A(-BS)
	Outdoor unit 2	PUHY-P120YLMU-A(-BS)
	Outdoor unit 3	PUHY-P96YLMU-A(-BS)
Outdoor Twinning Kit(optional parts)		CMY-Y300CBK2
Indoor unit-Twinning pipe 2	Liquid a	ø19.05(3/4)
	Gas b	ø41.28(1-5/8)
Twinning pipe 1 ~ Twinning pipe 2	Liquid c	ø19.05(3/4)
	Gas d	ø34.93(1-3/8)

Unit model		Liquid e or g or i	Gas f or h or j
Twinning pipe~Outdoor unit		P96 ø9.52(3/8)	ø22.2(7/8)
		P120 ø12.7(1/2)	ø28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

Be sure to see the Installation Manual for details of Twinning pipe installation.

3. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" in the figure) must have at least 500mm(19-11/16) of straight section

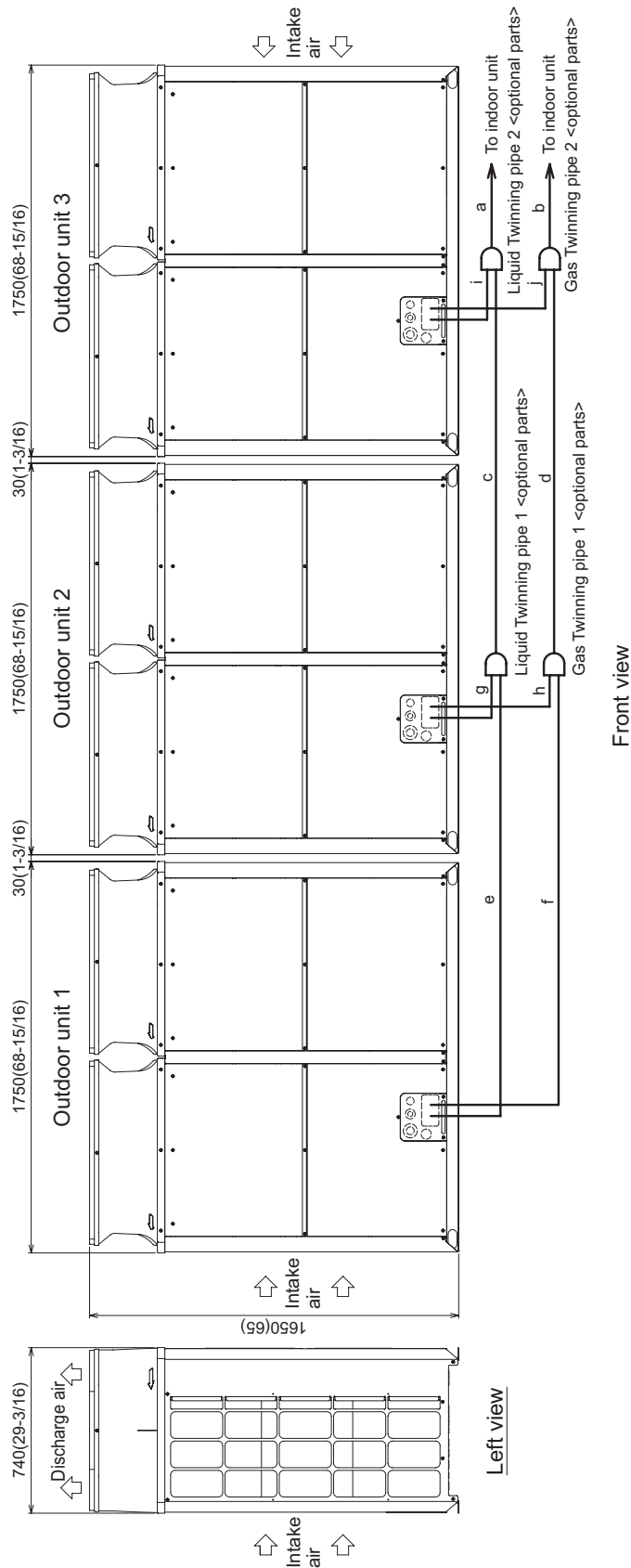
(*including the straight pipe that is supplied with the Twinning pipe).

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

2. EXTERNAL DIMENSIONS

PUHY-P360YSLMU-A(-BS)

Unit : mm (in.)



Twinning pipe connection size

Package unit name		PUHY-P360YSLMU-A(-BS)
Component unit name	Outdoor unit 1	PUHY-P120YLMU-A(-BS)
	Outdoor unit 2	PUHY-P120YLMU-A(-BS)
Outdoor unit name	Outdoor unit 3	PUHY-P120YLMU-A(-BS)
	Outdoor unit name	CMY-Y300CBK2
Indoor unit-Twinning pipe 2	Liquid	a
	Gas	b
Twinning pipe 1-Twinning pipe 2	Liquid	c
	Gas	d

Unit model	Liquid e or g or i	Gas f or h or j
P120	ø12.7(1/2)	ø28.58(1-1/8)

Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.

2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.

Be sure to see the Installation Manual for details of Twinning pipe installation.

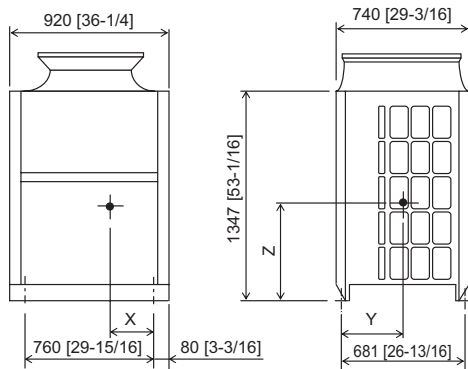
3. The pipe section before the Twinning pipe (sections "a", "b", "c" and "d" in the figure) must have at least 500mm(19-11/16) of straight section

(*including the straight pipe that is supplied with the Twinning pipe).

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

3. CENTER OF GRAVITY

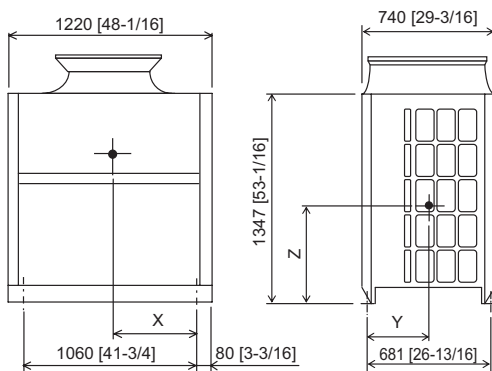
PUHY-P72TLMU-A (-BS) PUHY-P72YLMU-A (-BS)



Unit : mm[in.]

Model	X	Y	Z
PUHY-P72TLMU-A(-BS)	342[13-15/32]	308[12-5/32]	656[25-27/32]
PUHY-P72YLMU-A(-BS)	333[13-1/8]	297[11-23/32]	670[26-13/32]

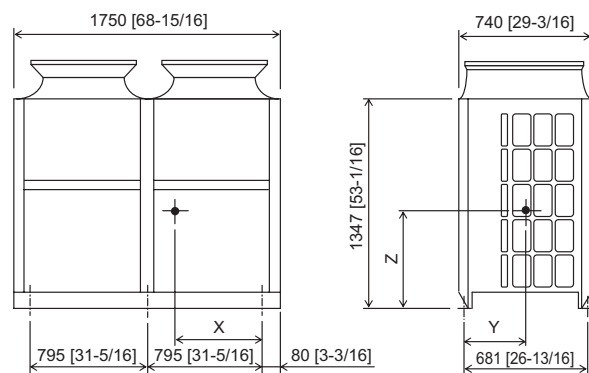
PUHY-P96TLMU-A (-BS) PUHY-P96YLMU-A (-BS)



Unit : mm[in.]

Model	X	Y	Z
PUHY-P96TLMU-A(-BS)	463[18-1/4]	323[12-23/32]	642[25-9/32]
PUHY-P96YLMU-A(-BS)	449[17-11/16]	313[12-11/32]	653[25-23/32]

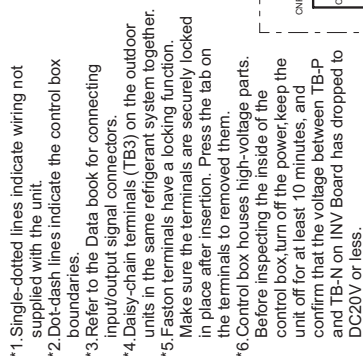
PUHY-P120, 144, 168TLMU-A (-BS) PUHY-P120, 144, 168YLMU-A (-BS)



Unit : mm[in.]

Model	X	Y	Z
PUHY-P120TLMU-A(-BS)	697[27-15/32]	328[12-15/16]	658[25-29/32]
PUHY-P144TLMU-A(-BS)	697[27-15/32]	328[12-15/16]	663[26-1/8]
PUHY-P168TLMU-A(-BS)	704[27-23/32]	327[12-7/8]	644[25-3/8]
PUHY-P120YLMU-A(-BS)	732[28-27/32]	320[12-5/8]	644[25-3/8]
PUHY-P144YLMU-A(-BS)	732[28-27/32]	320[12-5/8]	646[25-7/16]
PUHY-P168YLMU-A(-BS)	734[28-29/32]	321[12-21/32]	646[25-7/16]

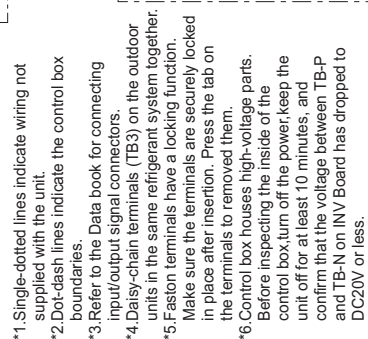
PUHY-P72, 96TLMU-A(-BS)



<Symbol explanation>

Symbol	Explanation	Symbol	Explanation
4-way valve	Exp/Discharge	SV2	For opening/closing the discharge suction bypass
21SAB	Control	SV9	For opening/closing the bypass circuit
63H1	Pressure switch	TB1	Power supply
63HS1	Pressure sensor	TB3	Indoor/Outdoor transmission cable
63LS	Pressure sensor	TB7	Central control transmission cable
X001	Magnetic relay (inverter main circuit)	Thermistor	Subcool bypass outlet temperature
C011~C016	Capacitor (inverter main circuit)	TH2	Pressure
CT11~12	Current sensor(AC)	TH3	Discharge pipe temperature
DCL	D.C. reactor	TH4	A/C inlet pipe temperature
LEV1	Pressure expansion valve	TH5	Subcooled liquid refrigerant temperature
LEV2ab	Pressure control	TH6	OA temperature
	Flow control/Refrigerant flow rate control	TH7	IPM temperature
	For inrush current prevention	THHS	Function setting connector
	For current detection	Z25	
R1	Resistor		
RSH01~RSH03			
RSH01~RSH03 (INV Board)			
SV4a	For opening/closing the bypass	Solenoid	

PUHY-P120, 144TLMU-A(-BS)

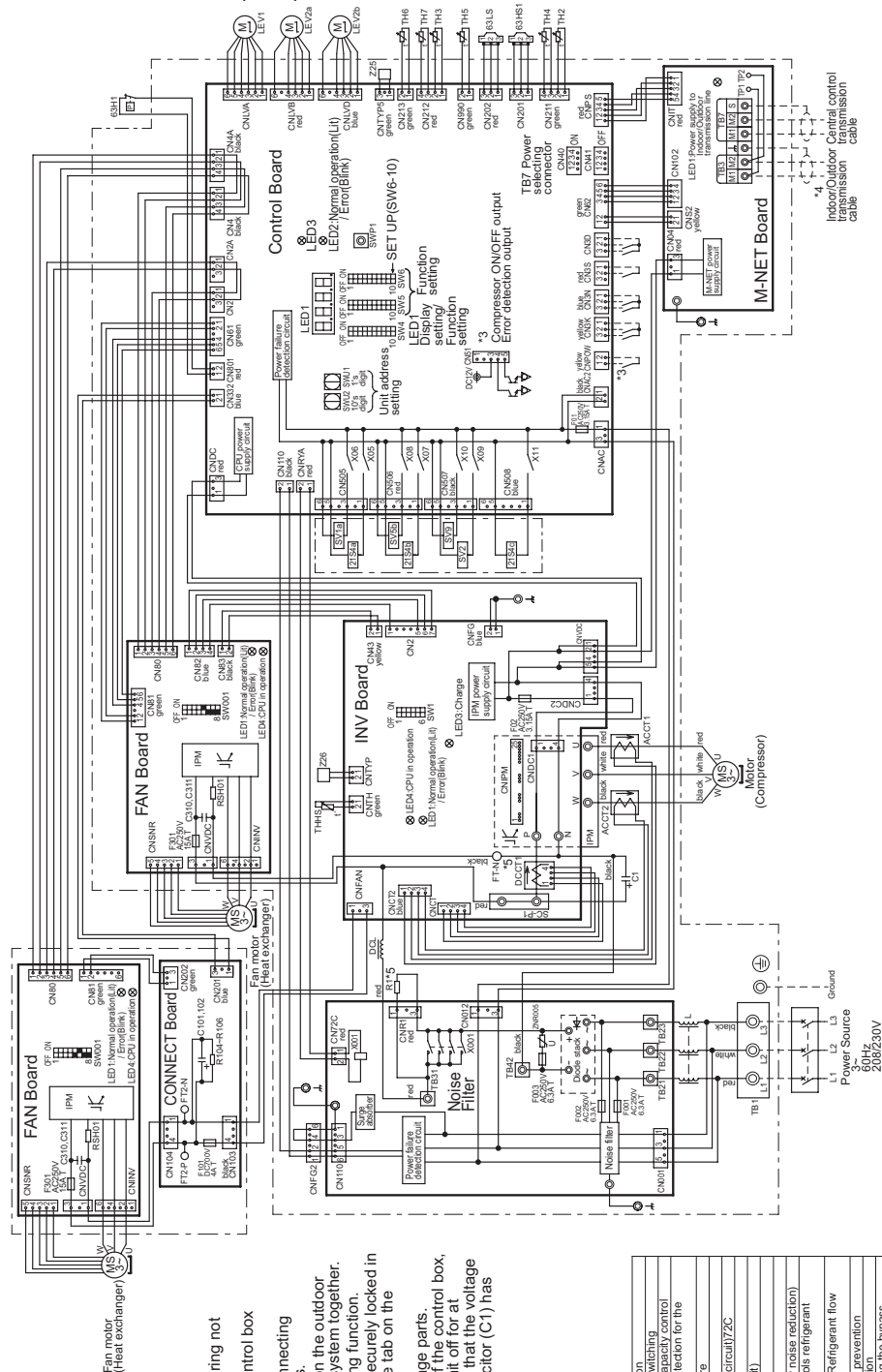


<Symbol explanation>

Symbol	Extraction	Symbol	Extraction
2154a	4-way valve	S/V	Coil/capacity switching
2154b,c	Heat exchanger	S/Vb5	Heat exchanger capacity control
63H1	Pressure switch	S/V9	High pressure protection for the outdoor unit
63HS1	Pressure switch	TB1	Discharge pressure
63HS2	Pressure switch	TB3	Low pressure
XX01	Magnetic relay	Terminal block	Inverter main circuit/2FC
C011~C016	Capacitor (inverter main circuit)	Thermistor	Capacitor (inverter main circuit)
CT11, 12	Current sensor	Th7	DC reactor
DCL	DC reactor	Th2	For high frequency noise reduction
LEV1	Linear expansion valve	Th3	H/C bypass Controls refrigerant flow in H/C circuit
LEV2ab	Linear expansion valve	Th4	Pressure control/Refrigerant flow rate control
FL	Resistor	Th5	Pressure control/Current prevention
RS40/4AN Board	Resistor	Th6	For current prevention
RS40/4~RS403	Resistor	Th7	For current detection
RS40/4~RS403 (INV Board)	Resistor	ThH5	For opening/closing the bypass
SVa	Solenoid	ThH7	For opening/closing the bypass
SVb	Solenoid	ThH8	For opening/closing the bypass

4. ELECTRICAL WIRING DIAGRAMS

PUHY-P168TLMU-A(-BS)



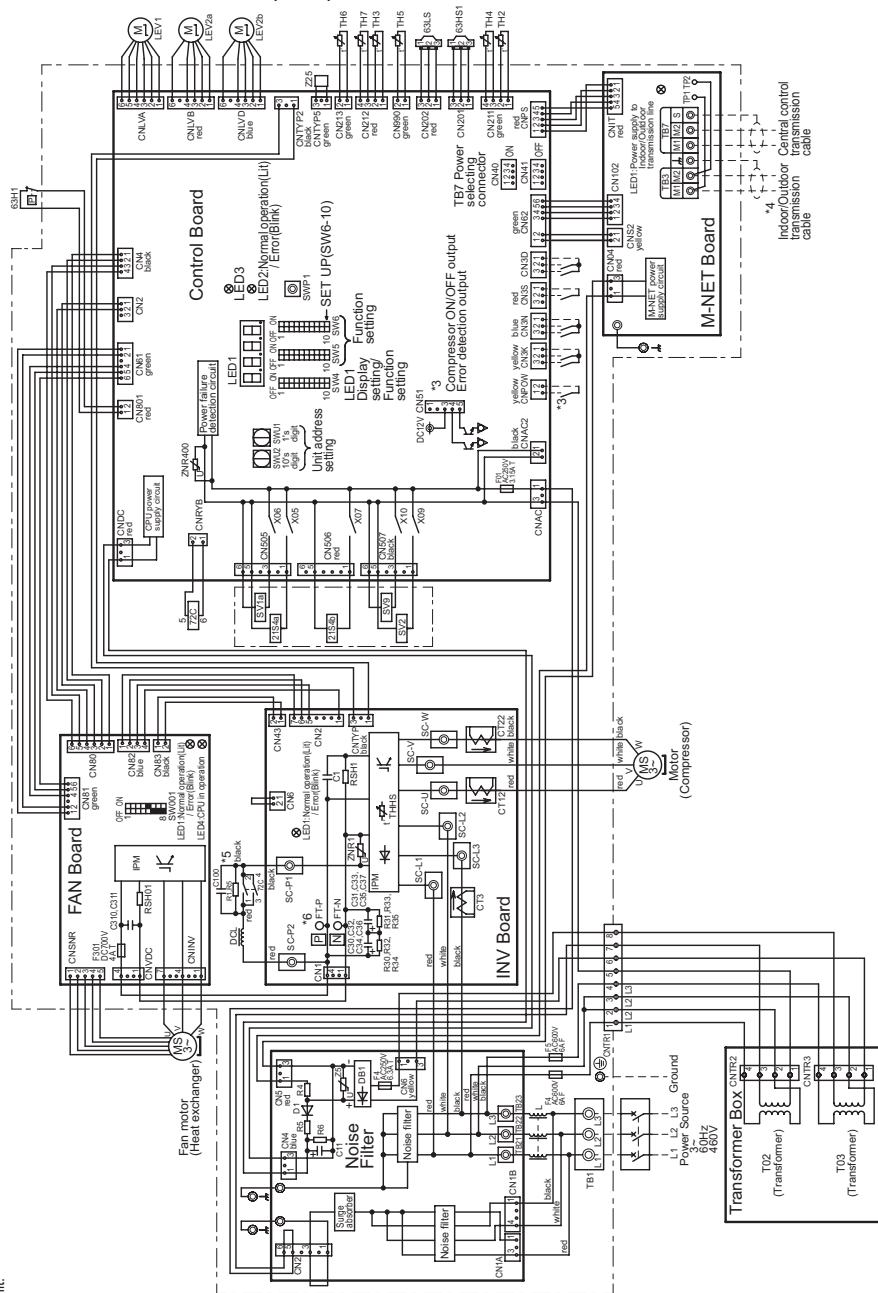
- *1. Single-dotted lines indicate wiring not supplied with the unit.
- *2. Dot-dash lines indicate the control box boundaries.
- *3. Refer to the Data book for connecting input/output signal connectors.
- *4. Daisy-chain terminals (TB3) on the outdoor units in the same refrigerant system together.
- *5. Fusion terminals have a locking function. Make sure the terminals are securely locked in place after insertion. Press the tab on the terminals to removed them.
- *6. 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 at both ends of the main capacitor (C1) has dropped to DC20V or less.

<Symbol explanation>

Symbol	Explanation
2/5S4a	4-way valve Cooling/Heating switching
2/5S4b.c	Heat exchanger capacity control
63H1	Pressure switch
63H1	High pressure protection for the outdoor unit
63H1	Discharge pressure
63H1	Low pressure protection
X001	Magnetic relay (Inverter main circuit)72C
ACC.T1.2	Current sensor (AC)
C1	Capacitor (Inverter main circuit)
DC111	Current sensor(DC)
L	Choke coil (for high frequency noise reduction)
LEV1	Linear expansion valve
LEV2a.b	Pressure control, Refrigerant flow
R1	Resistor
SV1a	Solenoid valve
SV2	For opening/closing the bypass circuit under the O/S
SV5b	For opening/closing the discharge capacity control
SV9	For opening/closing the bypass circuit
TB1	Terminal block
TB7	Central control transmission cable
TH2	Subcool bypass outlet temperature
TH3	Pipe temperature
TH4	Discharge pipe temperature
TH5	Discharge pipe temperature
TH6	Subcool bypass inlet temperature
TH7	OA temperature
THHS	IPM temperature
Z25.26	Function setting connector

4. ELECTRICAL WIRING DIAGRAMS

PUHY-P72, 96YLMU-A(-BS)



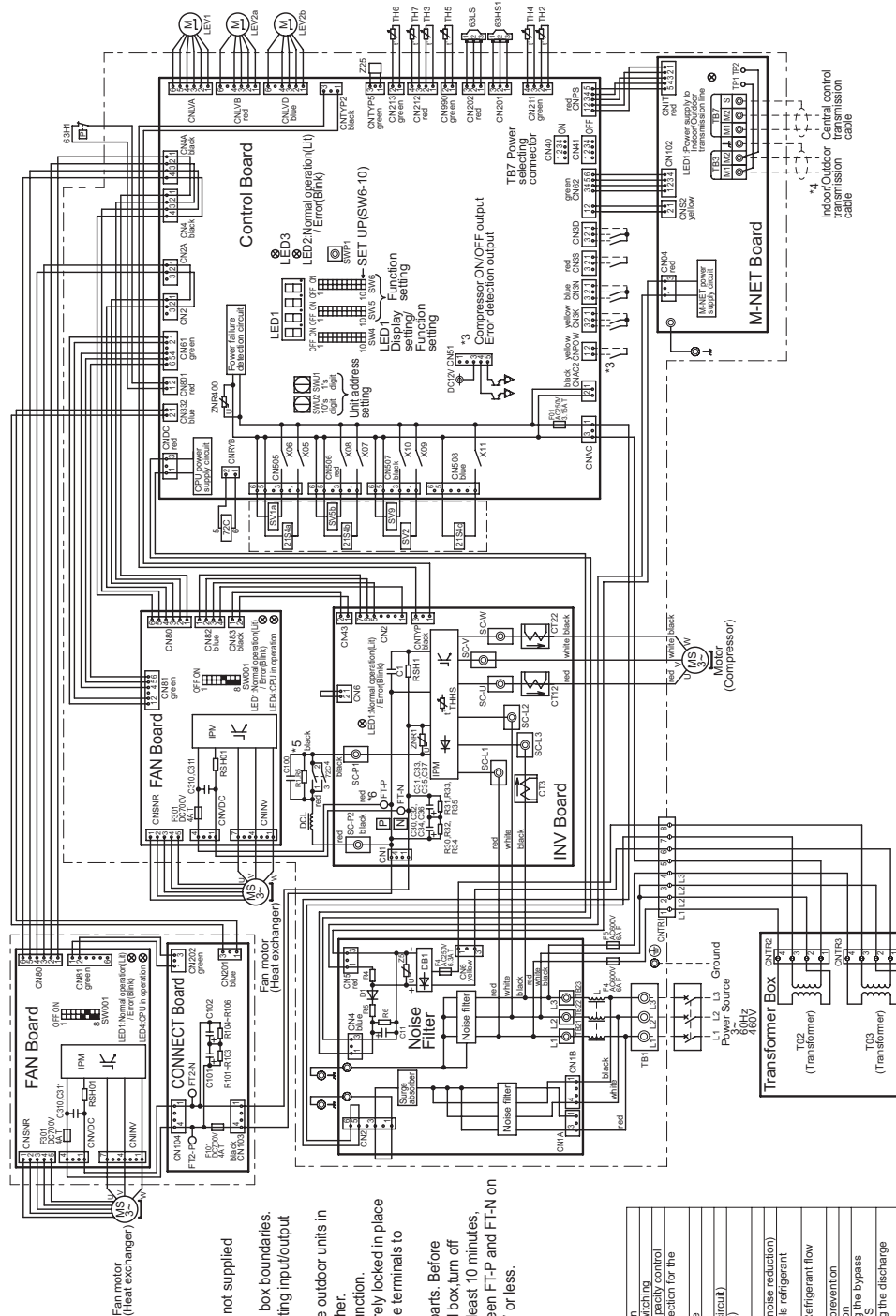
- *1 Single-dotted lines indicate wiring not supplied with the unit.
- *2 Dot-dash lines indicate the control box boundaries.
- *3 Refer to the Data book for connecting input/output signal connectors.
- *4 Daisy-chain terminals (TB3) on the outdoor units in the same refrigerant system together.
- *5 Fasten terminals have a locking function. Make sure the terminals are securely locked in place after insertion. Press the tab on the terminals to removed them.
- *6 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 FT-P and FT-N on INV Board has dropped to DC20V or less.

<Symbol explanation>

Symbol	Explanation
2154a	4-way valve
2154b	Cooling/Heating switching
63H1	Heat exchanger capacity control
63H2	High pressure protection for the
63LS	Pressure
63LS1	Discharge pressure
63LS2	Low pressure
72C	Magnetic relay (Inverter main circuit)
C30-C37	Capacitor (Inverter main circuit)
C112,22,3	Current sensor (AC)
DCL	Choke coil (for high frequency noise reduction)
LEV1	Linear
LEV2a,b	HIC bypass, Controls refrigerant
LEV2a	expansion
LEV2b	valve
R1.5	Pressure control, Refrigerant flow
RS001,RS1	Anti control
SV1a	For current prevention
SV2	For opening/closing the bypass
SV9	For opening/closing the discharge
TB1	Terminal
TB3	block
TB7	Indoor/Outdoor transmission cable
TH2	Indoor control transmission cable
TH3	Thermistor
TH4	Thermistor
TH5	Thermistor
TH6	Thermistor
TH7	Thermistor
TH8	Thermistor
TH9	Thermistor
TH10	Thermistor
TH11	Thermistor
TH12	Thermistor
TH13	Thermistor
TH14	Thermistor
TH15	Thermistor
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TH439	Thermistor
TH440	

4. ELECTRICAL WIRING DIAGRAMS

PUHY-P120, 144, 168YLMU-A(-BS)



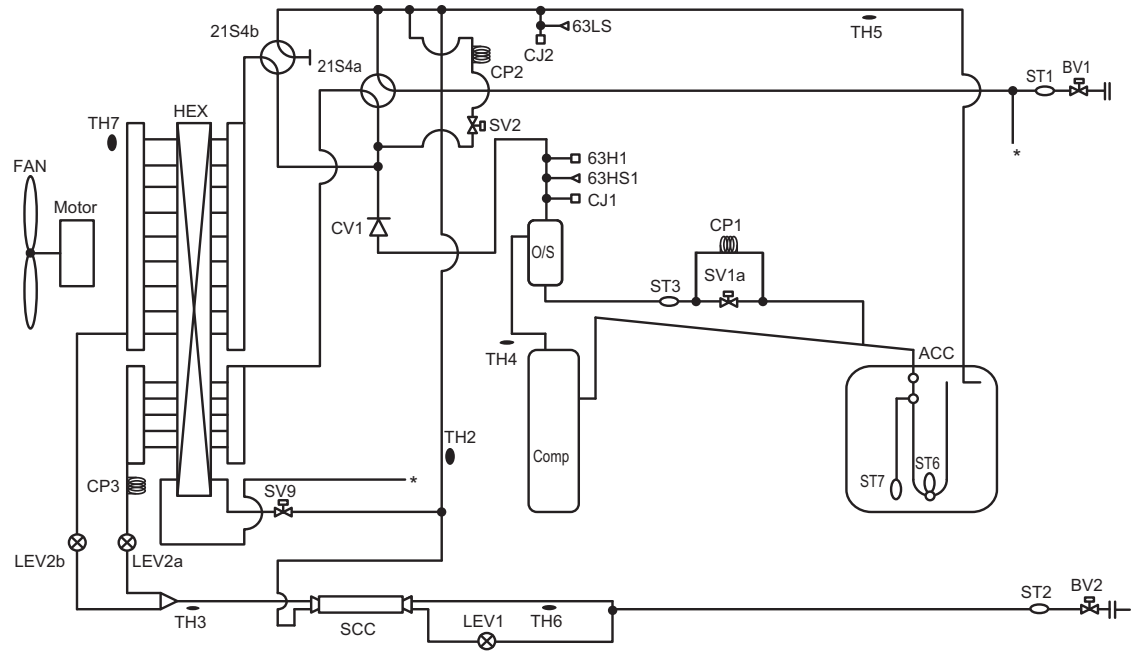
- *1 Single-dotted lines indicate wiring not supplied with the unit.
- *2 Dot-dash lines indicate the control box boundaries.
- *3 Refer to the Data book for connecting input/output signal connectors.
- *4 Daisy-chain terminals (TB3) on the outdoor units in the same refrigerant system together.
- *5 Faston terminals have a locking function.
Make sure the terminals are securely locked in place after insertion. Press the tab on the terminals to removed them.
- *6 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 FT-P and FT-N on INV Board has dropped to DC20V or less.

<Symbol explanation>

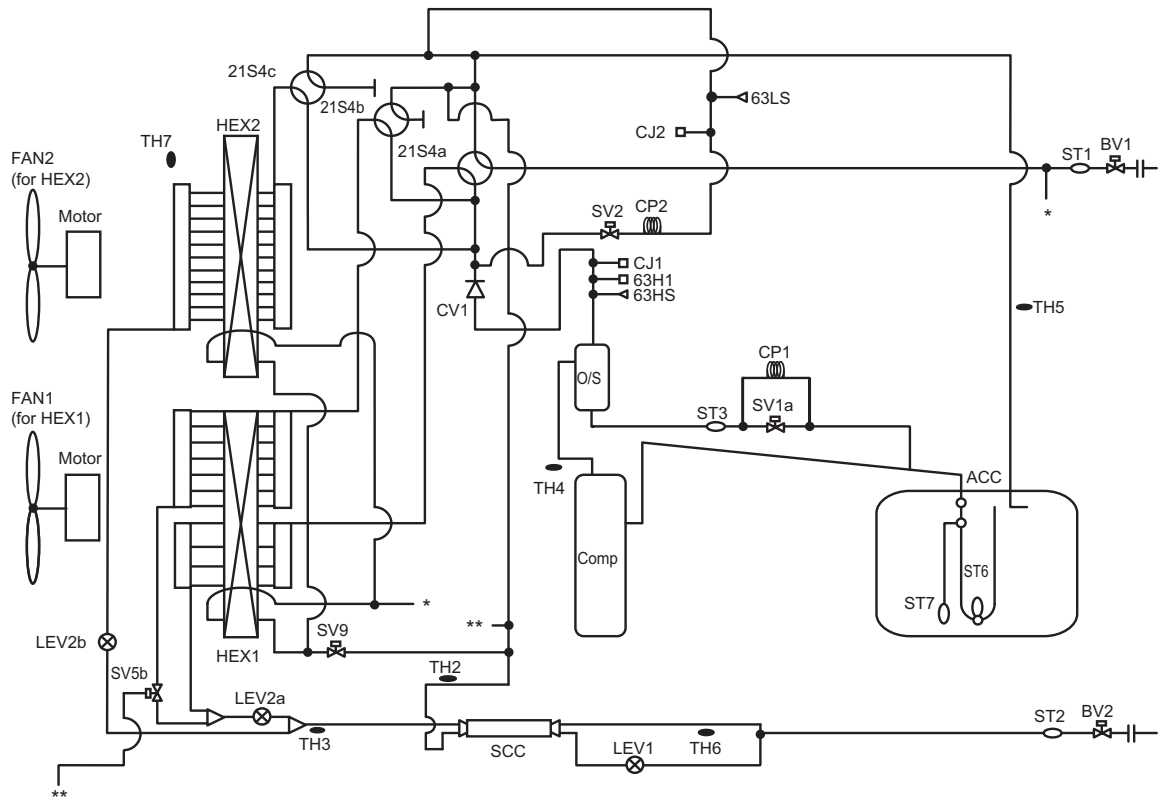
Symbol	Explanation
2TS4a	4-way valve Cooling/Heating switching
2TS4b.c	Heat exchanger capacity control
63H1	Pressure
63HST	High pressure protection for the
63LS	Pressure
63LS	Discharge pressure
72C	Low pressure
C30-C37	Magnetic relay (Inverter main circuit)
C12.22.3	Capacitor (Inverter main circuit)
L	Inductor
LCL	Choke coil (for high frequency noise reduction)
LEV1	Linear
LEV2a	HIC bypass Controls refrigerant
LEV2a.b	expansion
LEV2a	valve
R1.5	Pressure control, Refrigerant flow
RS101.RSH1	Rate control, Refrigerant prevention
SV1a	For current detection
SV2	For opening/closing the bypass
SV2	circuit under the O/S
SV5b	For opening/closing the discharge
SV5b	valve
SV9	Outdoor heat exchanger
SV9	capacity control
TB1	For opening/closing the bypass circuit
TB1	Terminal
TB3	block
TB7	Indoor/Outdoor transmission cable
TH3	Central control transmission cable
TH3	Thermistor
TH3	Discharge pipe temperature
TH4	Pipe temperature
TH5	Discharge pipe temperature
TH6	ACC inlet pipe temperature
TH6	Subcooled liquid refrigerant
TH7	Subcooled liquid refrigerant
TH7S	Temperature
TH7S	IPM temperature
ZZ5	Function setting connector

5. REFRIGERANT CIRCUIT DIAGRAMS

(1) PUHY-P72, P96 models

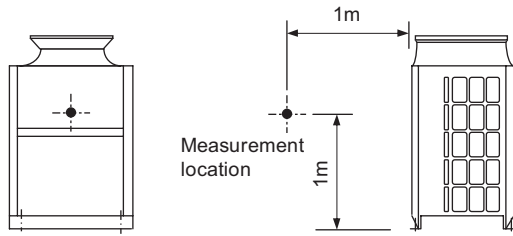


(2) PUHY-P120, P144, P168 models

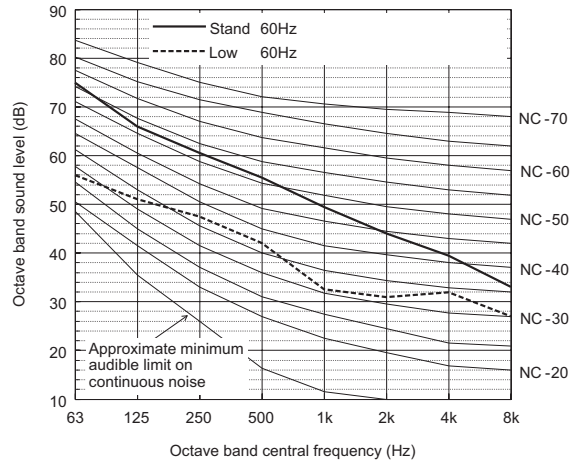


6. SOUND PRESSURE LEVELS

Measurement condition PUHY-P72TLMU/YLMU



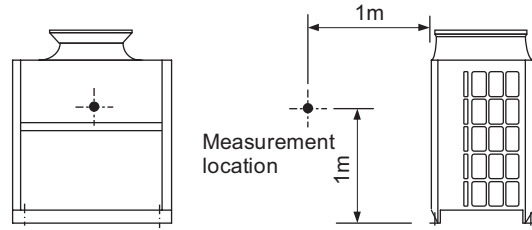
Sound level of PUHY-P72T(Y)LMU-A(-BS)



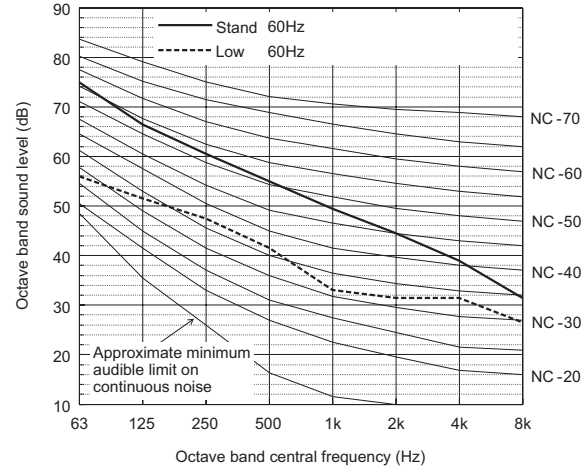
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	75.0	66.0	60.5	55.5	49.5	44.0	39.5	33.0	58.0
Low noise mode	60Hz	56.0	51.0	47.5	42.0	32.5	31.0	32.0	27.0	44.0

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.
Tested in accordance with JIS B 8616.

Measurement condition PUHY-P96TLMU/YLMU



Sound level of PUHY-P96T(Y)LMU-A(-BS)

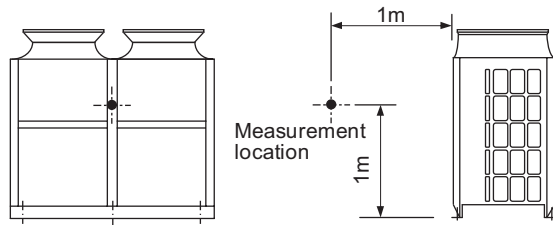


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	75.0	66.5	60.5	55.0	49.5	44.5	39.0	31.5	58.0
Low noise mode	60Hz	56.0	51.5	47.5	41.5	33.0	31.5	31.5	26.5	44.0

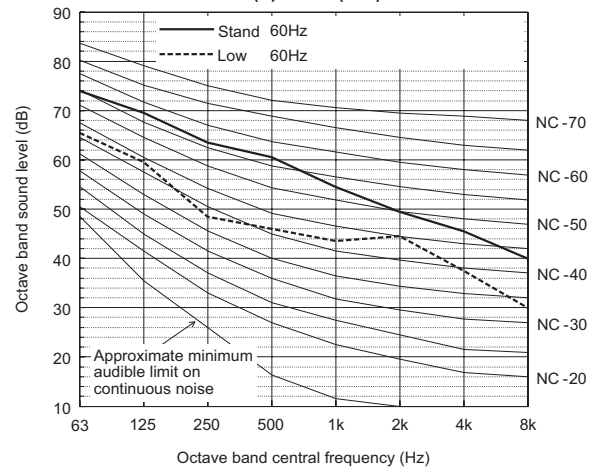
When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.

6. SOUND PRESSURE LEVELS

Measurement condition PUHY-P120,144,168TLMU/YLMU



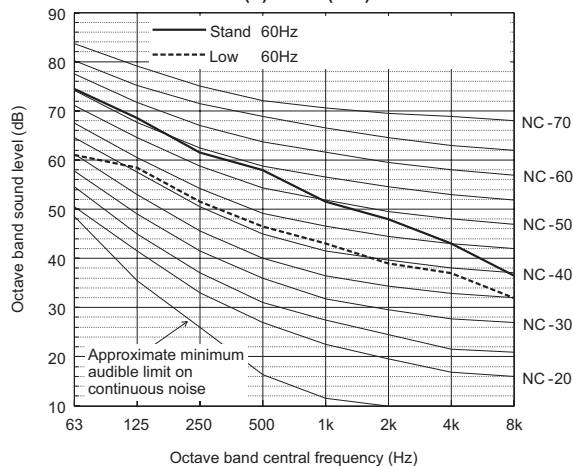
Sound level of PUHY-P168T(Y)LMU-A(-BS)



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	74.0	69.5	63.5	60.5	54.5	49.5	45.5	40.0	62.0
Low noise mode	60Hz	65.5	59.5	48.5	46.0	43.5	44.5	37.5	30.0	51.0

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.
Tested in accordance with JIS B 8616.

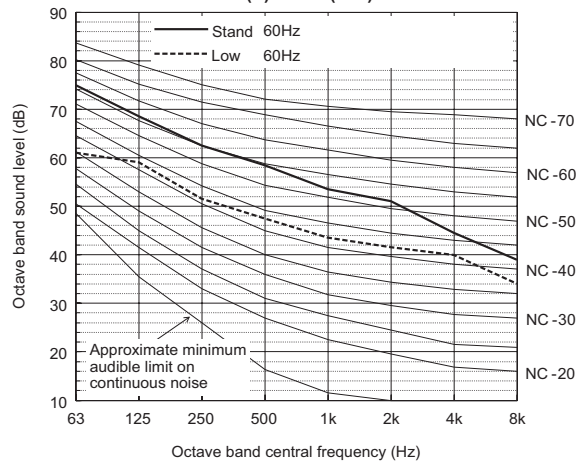
Sound level of PUHY-P120T(Y)LMU-A(-BS)



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	74.5	68.5	61.5	58.0	51.5	48.0	43.0	36.5	60.0
Low noise mode	60Hz	61.0	58.5	51.5	46.5	43.0	39.0	37.0	32.0	50.0

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.
Tested in accordance with JIS B 8616.

Sound level of PUHY-P144T(Y)LMU-A(-BS)

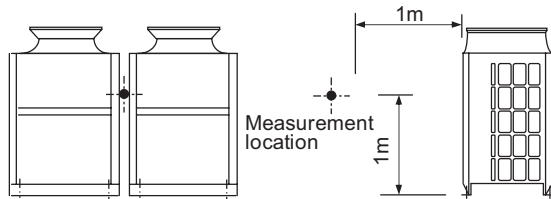


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	75.0	68.5	62.5	58.5	53.5	51.0	44.5	39.0	61.0
Low noise mode	60Hz	61.0	59.0	51.5	47.5	43.5	41.5	40.0	34.0	51.0

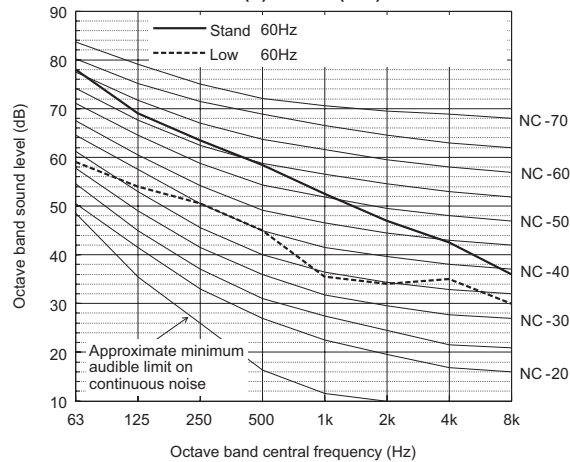
When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.
Tested in accordance with JIS B 8616.

6. SOUND PRESSURE LEVELS

Measurement condition PUHY-P144YSLMU/TSLMU



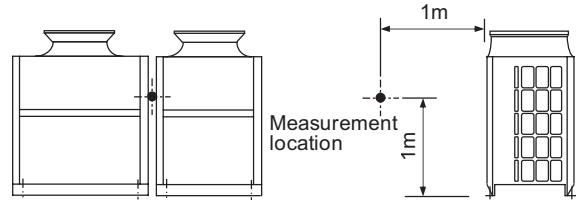
Sound level of PUHY-P144T(Y)SLMU-A(-BS)



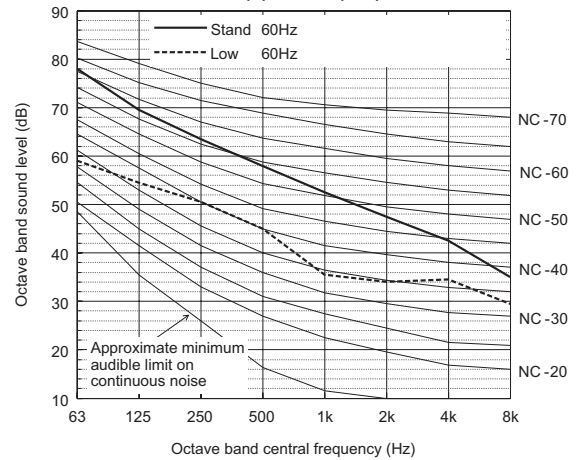
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	78.0	69.0	63.5	58.5	52.5	47.0	42.5	36.0	61.0
Low noise mode	60Hz	59.0	54.0	50.5	45.0	35.5	34.0	35.0	30.0	47.0

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.
Tested in accordance with JIS B 8616.

Measurement condition PUHY-P168YSLMU/TSLMU



Sound level of PUHY-P168T(Y)SLMU-A(-BS)

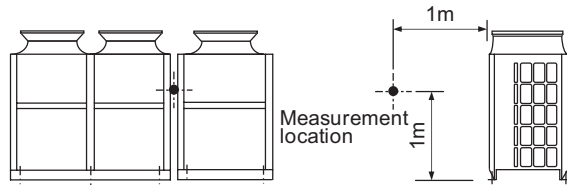


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	78.0	69.5	63.5	58.0	52.5	47.5	42.5	35.0	61.0
Low noise mode	60Hz	59.0	54.5	50.5	45.0	35.5	34.0	34.5	29.5	47.0

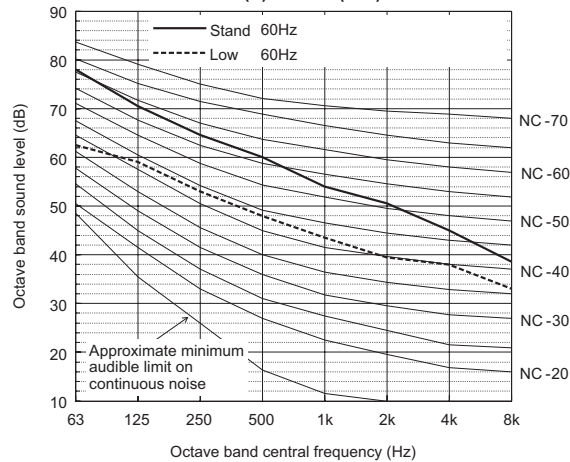
When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.
Tested in accordance with JIS B 8616.

6. SOUND PRESSURE LEVELS

Measurement condition PUHY-P192TSLMU/YSLMU



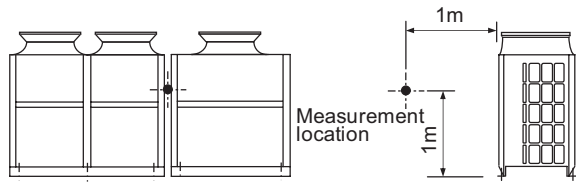
Sound level of PUHY-P192T(Y)SLMU-A(-BS)



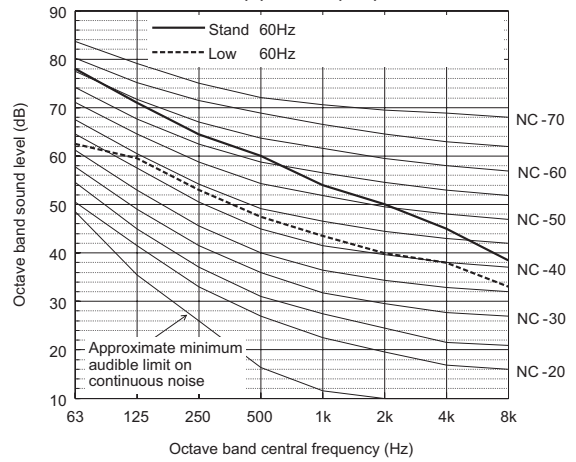
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	78.0	70.5	64.5	60.0	54.0	50.5	45.0	38.5	62.5
Low noise mode	60Hz	62.5	59.0	53.0	48.0	43.5	39.5	38.0	33.0	51.0

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.
Tested in accordance with JIS B 8616.

Measurement condition PUHY-P216TSLMU/YSLMU



Sound level of PUHY-P216T(Y)SLMU-A(-BS)

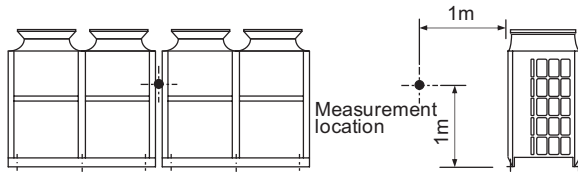


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	78.0	71.0	64.5	60.0	54.0	50.0	45.0	38.5	62.5
Low noise mode	60Hz	62.5	59.5	53.0	47.5	43.5	40.0	38.0	33.0	51.0

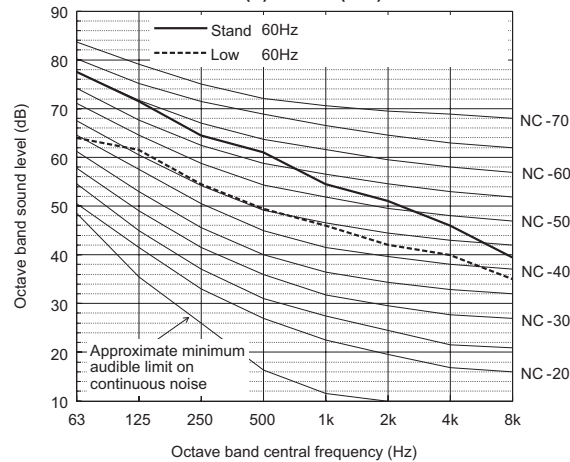
When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.
Tested in accordance with JIS B 8616.

6. SOUND PRESSURE LEVELS

Measurement condition PUHY-P240TSLMU/YSLMU



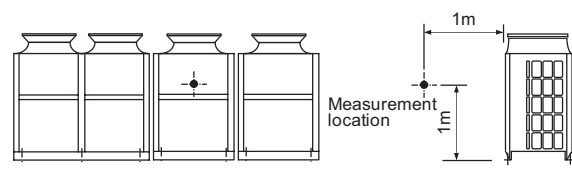
Sound level of PUHY-P240T(Y)SLMU-A(-BS)



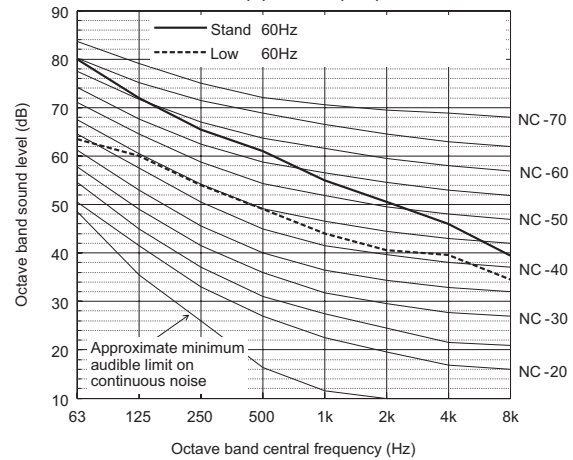
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	77.5	71.5	64.5	61.0	54.5	51.0	46.0	39.5	63.0
Low noise mode	60Hz	64.0	61.5	54.5	49.5	46.0	42.0	40.0	35.0	53.0

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.
Tested in accordance with JIS B 8616.

Measurement condition PUHY-P264TSLMU/YSLMU



Sound level of PUHY-P264T(Y)SLMU-A(-BS)

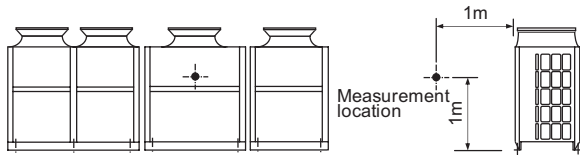


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	80.0	72.0	65.5	61.0	55.0	50.5	46.0	39.5	63.5
Low noise mode	60Hz	63.5	60.0	54.0	49.0	44.0	40.5	39.5	34.5	52.0

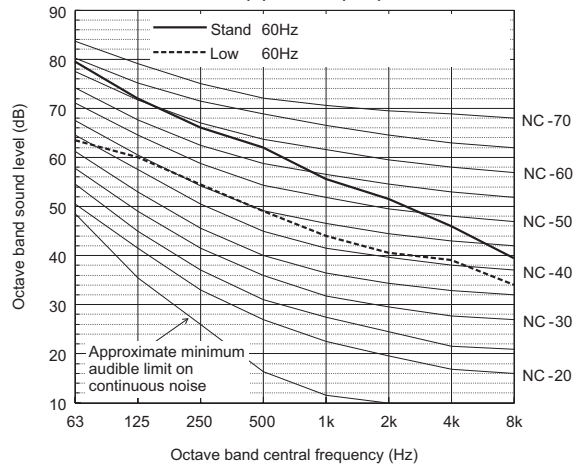
When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.
Tested in accordance with JIS B 8616.

6. SOUND PRESSURE LEVELS

Measurement condition PUHY-P288TSLMU/YSLMU



Sound level of PUHY-P288T(Y)SLMU-A(-BS)



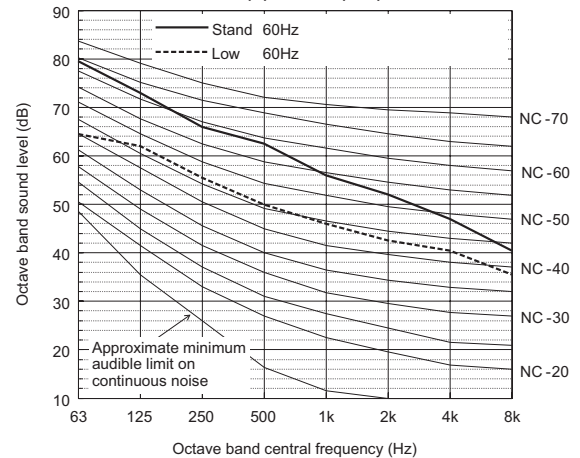
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	79.5	72.0	66.0	62.0	55.5	51.5	46.0	39.5	64.0
Low noise mode	60Hz	63.5	60.0	54.5	49.0	44.0	40.5	39.0	34.0	52.0

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.
Tested in accordance with JIS B 8616.

Measurement condition PUHY-P312TSLMU/YSLMU



Sound level of PUHY-P312T(Y)SLMU-A(-BS)

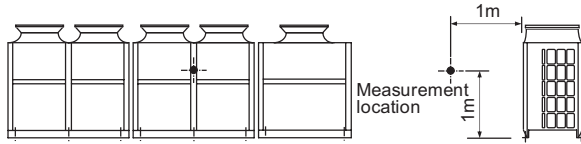


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	79.5	73.0	66.0	62.5	56.0	52.0	47.0	40.5	64.5
Low noise mode	60Hz	64.5	62.0	55.5	50.0	46.0	42.5	40.5	35.5	53.5

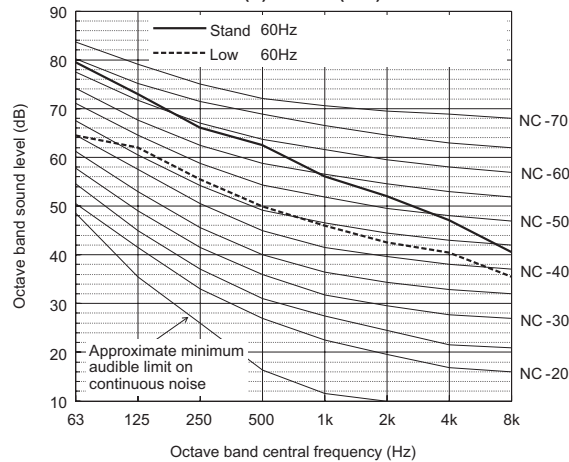
When Low noise mode is set, the A/C system's capacity is limited. The system could return to normal operation from Low noise mode automatically in the case that the operation condition is severe.
Tested in accordance with JIS B 8616.

6. SOUND PRESSURE LEVELS

Measurement condition PUHY-P336TSLMU/YSLMU



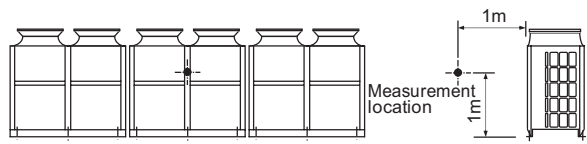
Sound level of PUHY-P336T(Y)SLMU-A(-BS)



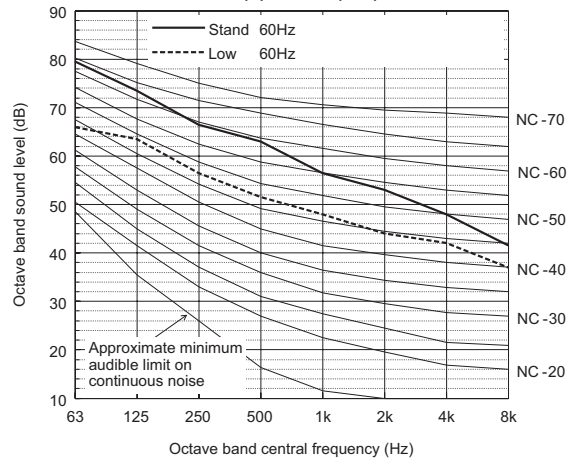
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	79.5	73.0	66.0	62.5	56.0	52.0	47.0	40.5	64.5
Low noise mode	60Hz	64.5	62.0	55.5	50.0	46.0	42.5	40.5	35.5	53.5

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.
Tested in accordance with JIS B 8616.

Measurement condition PUHY-P360TSLMU/YSLMU



Sound level of PUHY-P360T(Y)SLMU-A(-BS)



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	79.5	73.5	66.5	63.0	56.5	53.0	48.0	41.5	65.0
Low noise mode	60Hz	66.0	63.5	56.5	51.5	48.0	44.0	42.0	37.0	55.0

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.
Tested in accordance with JIS B 8616.

7. VIBRATION LEVEL

Measurement condition

Measurement frequency: 1 Hz-80 Hz

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

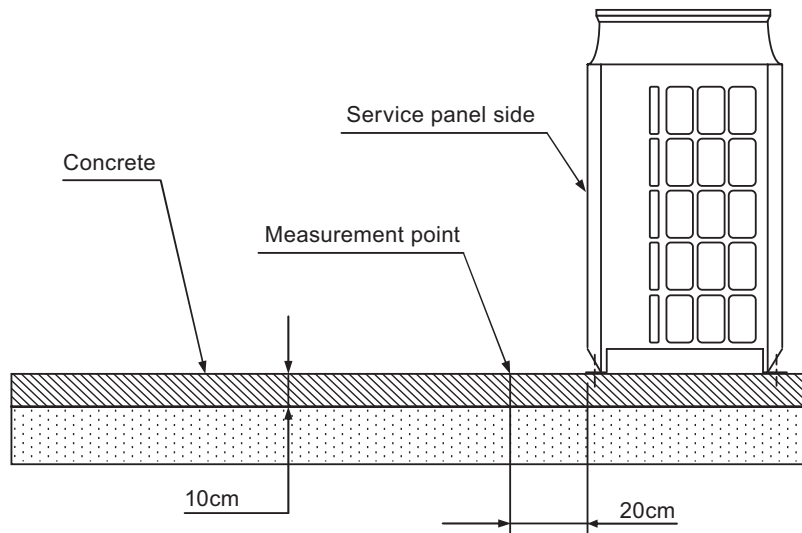
Installation condition: Direct installation on the concrete floor

Power source: 3-phase 3-wire 208 V-230 V 60 Hz: For TLMU series

3-phase 3-wire 460 V 60 Hz: For YLMU series

Operation condition: JIS condition (cooling, heating)

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



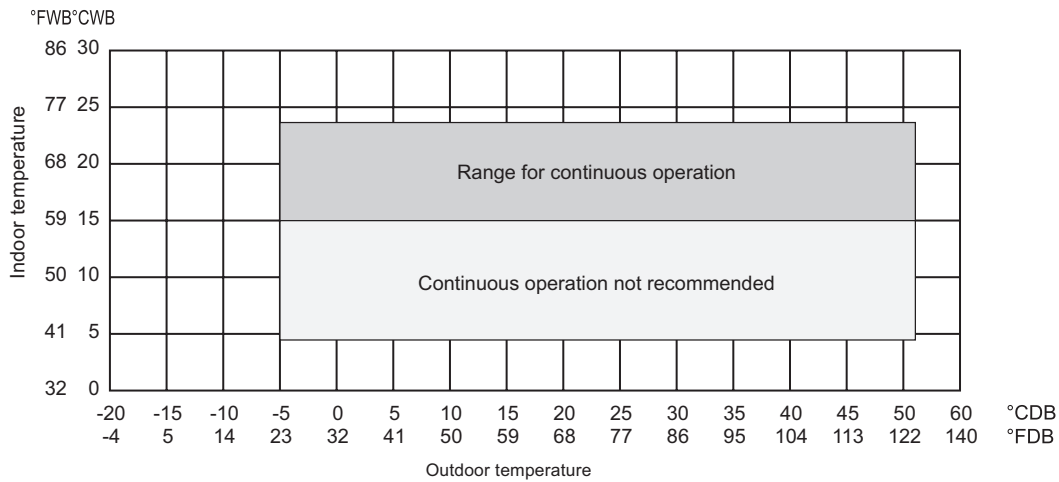
Vibration Level

Model	Vibration level (dB)
PUHY-P72T(Y)LMU-A(-BS)	46
PUHY-P96T(Y)LMU-A(-BS)	47
PUHY-P120T(Y)LMU-A(-BS)	47
PUHY-P144T(Y)LMU-A(-BS)	47
PUHY-P168T(Y)LMU-A(-BS)	47
PUHY-P144T(Y)SLMU-A(-BS)	49
PUHY-P168T(Y)SLMU-A(-BS)	49.5
PUHY-P192T(Y)SLMU-A(-BS)	49.5
PUHY-P216T(Y)SLMU-A(-BS)	50
PUHY-P240T(Y)SLMU-A(-BS)	50
PUHY-P264T(Y)SLMU-A(-BS)	51.5
PUHY-P288T(Y)SLMU-A(-BS)	51.5
PUHY-P312T(Y)SLMU-A(-BS)	51.5
PUHY-P336T(Y)SLMU-A(-BS)	52
PUHY-P360T(Y)SLMU-A(-BS)	52

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

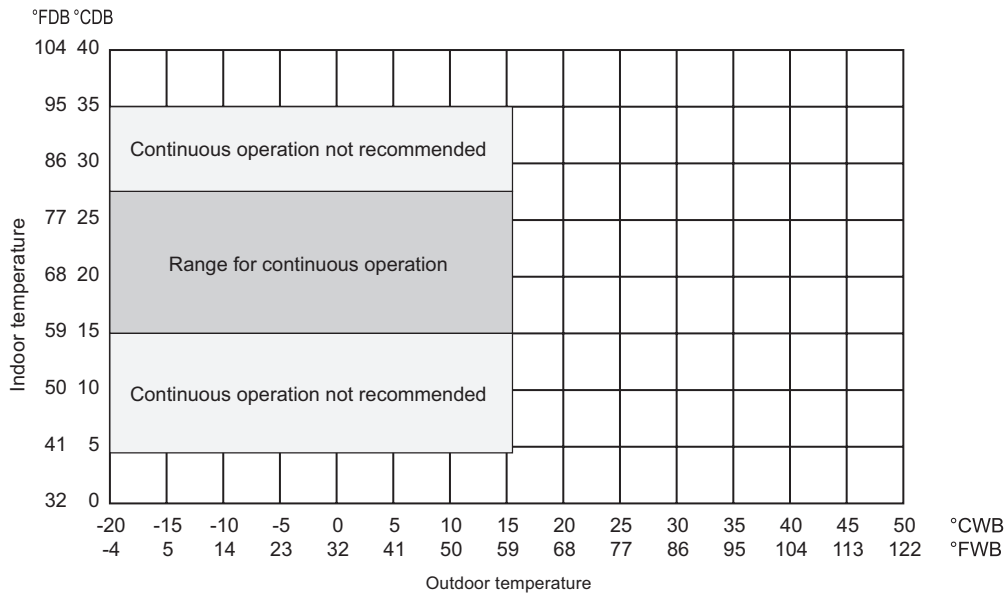
8. OPERATION TEMPERATURE RANGE

• Cooling



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

• Heating



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

9. CAPACITY TABLES

9-1. Selection of Cooling/Heating Units

<Cooling>

Design Condition	
Outdoor Design Dry Bulb Temperature	43 °C
Total Cooling Load	17.5 kW
Room1	
Indoor Design Dry Bulb Temperature	27 °C
Indoor Design Wet Bulb Temperature	20 °C
Cooling Load	8.0 kW
Room2	
Indoor Design Dry Bulb Temperature	24 °C
Indoor Design Wet Bulb Temperature	17 °C
Cooling Load	9.5 kW
<Other>	
Indoor/Outdoor Equivalent Piping Length	50 m

1. Cooling Calculation

(1) Temporary Selection of Indoor Units

Room1	PEFY-P30	8.8 kW (Rated)
Room2	PEFY-P36	10.6 kW (Rated)

(2) Total Indoor Units Capacity

$$P30 + P36 = P66$$

(3) Selection of Outdoor Unit

The HP72 outdoor unit is selected as total indoor units capacity is P66

PUHY-HP72	21.1 kW
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(4) Total Indoor Units Capacity Correction Calculation

Room1	Indoor Design Wet Bulb Temperature Correction (20°C)	1.03 (Refer to Fig.1)
Room2	Indoor Design Wet Bulb Temperature Correction (17°C)	0.95 (Refer to Fig.1)

Total Indoor Units Capacity (CTi)

$$\begin{aligned}
 CT_i &= \Sigma (\text{Indoor Unit Rating} \times \text{Indoor Design Temperature Correction}) \\
 &= 8.8 \times 1.03 + 10.6 \times 0.95 \\
 &= 19.1 \text{ kW}
 \end{aligned}$$

(5) Outdoor Unit Correction Calculation

Outdoor Design Dry Bulb Temperature Correction (43°C)	0.94 (Refer to Fig.2)
Piping Length Correction (50 m)	0.94 (Refer to Fig.3)

Total Outdoor Unit Capacity (CTo)

$$\begin{aligned}
 C_{To} &= \text{Outdoor Rating} \times \text{Outdoor Design Temperature Correction} \times \text{Piping Length Correction} \\
 &= 21.1 \times 0.94 \times 0.94 \\
 &= 18.6 \text{ kW}
 \end{aligned}$$

(6) Determination of Maximum System Capacity

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

$$CT_i = 19.1 > C_{To} = 18.6, \text{ thus, select } C_{To}.$$

$$C_{Tx} = C_{To} = 18.6 \text{ kW}$$

(7) Comparison with Essential Load

Against the essential load 17.5kW, the maximum system capacity is 18.6kW: Proper outdoor units have been selected.

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

$$C_{Tx} = C_{To}, \text{ thus, calculate by the calculation below}$$

Room1

$$\begin{aligned}
 &\text{Maximum Capacity} \times \text{Room1 Capacity after the Temperature Correction} / (\text{Room1,2 Total Capacity after the Temperature Correction}) \\
 &= 18.6 \times (8.8 \times 1.03) / (8.8 \times 1.03 + 10.6 \times 0.95) \\
 &= 8.8 \text{ kW} \quad \text{OK: fulfills the load 8.0kW}
 \end{aligned}$$

Room2

$$\begin{aligned}
 &\text{Maximum Capacity} \times \text{Room2 Capacity after the Temperature Correction} / (\text{Room1,2 Total Capacity after the Temperature Correction}) \\
 &= 18.6 \times (10.6 \times 0.95) / (8.8 \times 1.03 + 10.6 \times 0.95) \\
 &= 9.8 \text{ kW} \quad \text{OK: fulfills the load 9.5kW}
 \end{aligned}$$

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

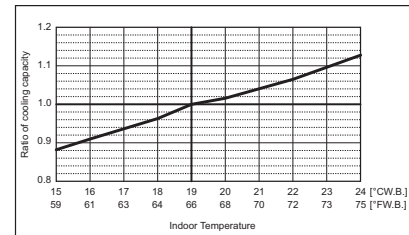


Fig.1 Indoor unit temperature correction
To be used to correct indoor unit only

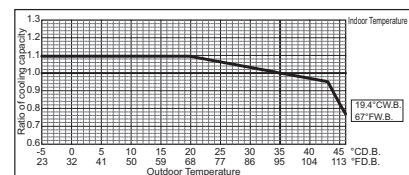


Fig.2 Outdoor unit temperature correction
To be used to correct outdoor unit only

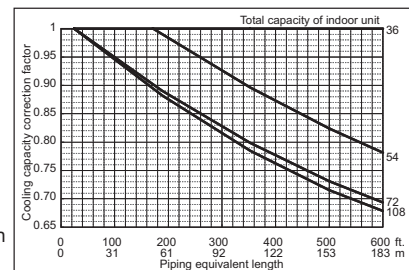


Fig.3 Correction of refrigerant piping length

9. CAPACITY TABLES

<Heating>

Design Condition	
Outdoor Design Wet Bulb Temperature	-3 °C
Total Heating Load	18 kW
Room1	
Indoor Design Dry Bulb Temperature	23 °C
Heating Load	8.5 kW
Room2	
Indoor Design Dry Bulb Temperature	24 °C
Heating Load	9.5 kW
<Other>	
Indoor/Outdoor Equivalent Piping Length	50 m

2. Heating Calculation

(1) Temporary Selection of Indoor Units

Room1	
PEFY-P30	10 kW (Rated)
Room2	
PEFY-P36	11.7 kW (Rated)

(2) Total Indoor Units Capacity

P30 + P36 = P66

(3) Selection of Outdoor Unit

The HP72 outdoor unit is selected as total indoor units capacity is P66

PUHY-HP72 23.4 kW

(4) Total Indoor Units Capacity Correction Calculation

Room1	
Indoor Design Dry Bulb Temperature Correction (23°C)	0.90 (Refer to Fig.4)
Room2	
Indoor Design Dry Bulb Temperature Correction (24°C)	0.86 (Refer to Fig.4)

Total Indoor Units Capacity (CTi)

$$\begin{aligned}
 CTi &= \Sigma (\text{Indoor Unit Rating} \times \text{Indoor Design Temperature Correction}) \\
 &= 10.0 \times 0.90 + 11.7 \times 0.86 \\
 &= 19.1 \text{ kW}
 \end{aligned}$$

(5) Outdoor Unit Correction Calculation

Outdoor Design Wet Bulb Temperature Correction (-3°C)	0.98 (Refer to Fig.5)
Piping Length Correction (50 m)	0.97 (Refer to Fig.6)
Defrost Correction	0.89 (Refer to Tbl.1)

Total Outdoor Unit Capacity (CTo)

$$\begin{aligned}
 CTo &= \text{Outdoor Unit Rating} \times \text{Outdoor Design Temperature Correction} \times \text{Piping Length Correction} \times \text{Defrost Correction} \\
 &= 23.4 \times 0.98 \times 0.97 \times 0.89 \\
 &= 19.7 \text{ kW}
 \end{aligned}$$

(6) Determination of Maximum System Capacity

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

CTi = 19.1 < CTo = 19.7, thus, select CTi.

CTx = CTi = 19.1 kW

(7) Comparison with Essential Load

Against the essential load 18.0kW, the maximum system capacity is 19.1kW: 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	
= 10.0 × 0.90	
= 9.0 kW	OK: fulfills the load 8.5kW

Room2	
Indoor Unit Rating × Indoor Design Temperature Correction	
= 11.7 × 0.86	
= 10.1 kW	OK: fulfills the load 9.5kW

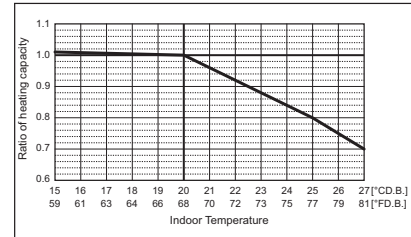


Fig.4 Indoor unit temperature correction
To be used to correct indoor unit only

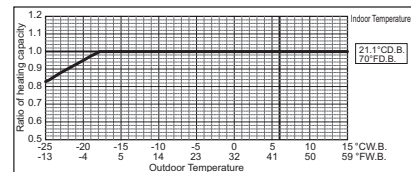


Fig.5 Outdoor unit temperature correction
To be used to correct outdoor unit only

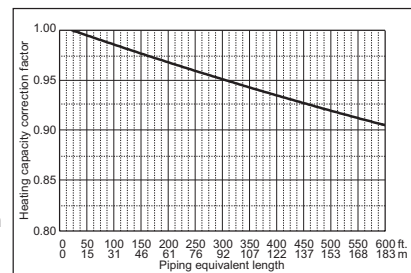


Fig.6 Correction of refrigerant piping length

Tbl.1 Table of correction factor at frost and defrost

Outdoor inlet air temp. °C	6	4	2	1	0	-2	-4	-6	-8	-10	-20
Outdoor inlet air temp. °F	43	39	36	34	32	28	25	21	18	14	-4
PURY-HP72	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.93	0.93	0.95	0.95
PURY-HP96	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.93	0.93	0.95	0.95
PURY-HP144	1.00	0.98	0.89	0.86	0.88	0.90	0.91	0.92	0.92	0.95	0.95
PURY-HP192	1.00	0.98	0.89	0.86	0.88	0.90	0.91	0.92	0.92	0.95	0.95

9. CAPACITY TABLES

<Cooling>

Design Condition	
Outdoor Design Dry Bulb Temperature	109 °F
Total Cooling Load	60,000 BTU/h
Room1	
Indoor Design Dry Bulb Temperature	81 °F
Indoor Design Wet Bulb Temperature	68 °F
Cooling Load	27,000 BTU/h
Room2	
Indoor Design Dry Bulb Temperature	75 °F
Indoor Design Wet Bulb Temperature	63 °F
Cooling Load	32,000 BTU/h
<Other>	
Indoor/Outdoor Equivalent Piping Length	164 ft.

1. Cooling Calculation

(1) Temporary Selection of Indoor Units

Room1	
PEFY-P30	30,000 BTU/h (Rated)
Room2	
PEFY-P36	36,000 BTU/h (Rated)

(2) Total Indoor Units Capacity

$$P30 + P36 = P66$$

(3) Selection of Outdoor Unit

The HP72 outdoor unit is selected as total indoor units capacity is P66

PUHY-HP72	72,000 BTU/h
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(4) Total Indoor Units Capacity Correction Calculation

Room1	
Indoor Design Wet Bulb Temperature Correction (68°F)	1.03 (Refer to Fig.1)
Room2	
Indoor Design Wet Bulb Temperature Correction (63°F)	0.95 (Refer to Fig.1)

Total Indoor Units Capacity (CTi)

$$\begin{aligned}
 CTi &= \Sigma (\text{Indoor Unit Rating} \times \text{Indoor Design Temperature Correction}) \\
 &= 30,000 \times 1.03 + 36,000 \times 0.95 \\
 &= 65,000 \text{ BTU/h}
 \end{aligned}$$

(5) Outdoor Unit Correction Calculation

Outdoor Design Dry Bulb Temperature Correction (109°F)	0.94 (Refer to Fig.2)
Piping Length Correction (164 ft.)	0.94 (Refer to Fig.3)

Total Outdoor Unit Capacity (CTo)

$$\begin{aligned}
 CTo &= \text{Outdoor Rating} \times \text{Outdoor Design Temperature Correction} \times \text{Piping Length Correction} \\
 &= 72,000 \times 0.94 \times 0.94 \\
 &= 63,000 \text{ BTU/h}
 \end{aligned}$$

(6) Determination of Maximum System Capacity

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

$$CTi = 65,000 > CTo = 63,000, \text{ thus, select } CTo.$$

$$CTx = CTo = 63,000 \text{ BTU/h}$$

(7) Comparison with Essential Load

Against the essential load 60,000BTU/h, the maximum system capacity is 63,000BTU/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	
Maximum Capacity × Room1 Capacity after the Temperature Correction/(Room1,2 Total Capacity after the Temperature Correction)	
$= 63,000 \times (30,000 \times 1.03) / (30,000 \times 1.03 + 36,000 \times 0.95)$	
$= 30,000 \text{ BTU/h}$	OK: fulfills the load 27,000BTU/h
Room2	
Maximum Capacity × Room2 Capacity after the Temperature Correction/(Room1,2 Total Capacity after the Temperature Correction)	
$= 63,000 \times (36,000 \times 0.95) / (30,000 \times 1.03 + 36,000 \times 0.95)$	
$= 33,000 \text{ BTU/h}$	OK: fulfills the load 32,000BTU/h

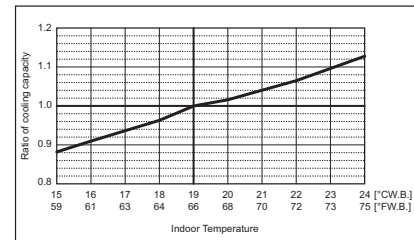


Fig.1 Indoor unit temperature correction
To be used to correct indoor unit only

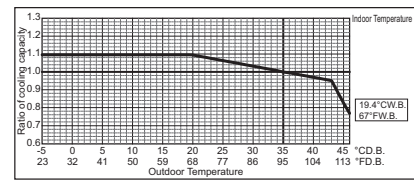


Fig.2 Outdoor unit temperature correction
To be used to correct outdoor unit only

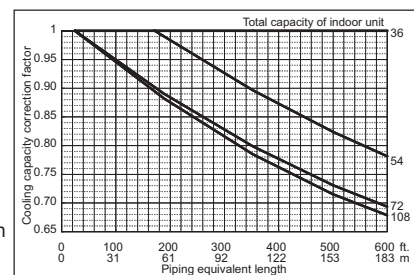


Fig.3 Correction of refrigerant piping length

9. CAPACITY TABLES

<Heating>

Design Condition	
Outdoor Design Wet Bulb Temperature	27 °F
Total Heating Load	61,000 BTU/h
Room1	
Indoor Design Dry Bulb Temperature	73 °F
Heating Load	29,000 BTU/h
Room2	
Indoor Design Dry Bulb Temperature	75 °F
Heating Load	32,000 BTU/h
<Other>	
Indoor/Outdoor Equivalent Piping Length	164 ft.

2. Heating Calculation

(1) Temporary Selection of Indoor Units

Room1	
PEFY-P30	34,000 BTU/h (Rated)
Room2	
PEFY-P36	40,000 BTU/h (Rated)

(2) Total Indoor Units Capacity

$$P30 + P36 = P66$$

(3) Selection of Outdoor Unit

The HP72 outdoor unit is selected as total indoor units capacity is P66

PUHY-HP72	80,000 BTU/h
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(4) Total Indoor Units Capacity Correction Calculation

Room1	
Indoor Design Dry Bulb Temperature Correction (73°F)	0.90 (Refer to Fig.4)
Room2	
Indoor Design Dry Bulb Temperature Correction (75°F)	0.86 (Refer to Fig.4)

Total Indoor Units Capacity (CTi)

$$\begin{aligned}
 CTi &= \Sigma (\text{Indoor Unit Rating} \times \text{Indoor Design Temperature Correction}) \\
 &= 34,000 \times 0.90 + 40,000 \times 0.86 \\
 &= 65,000 \text{ BTU/h}
 \end{aligned}$$

(5) Outdoor Unit Correction Calculation

Outdoor Design Wet Bulb Temperature Correction (27°F)	0.98 (Refer to Fig.5)
Piping Length Correction (164 ft.)	0.97 (Refer to Fig.6)
Defrost Correction	0.89 (Refer to Tbl.1)

Total Outdoor Unit Capacity (CTo)

$$\begin{aligned}
 CTo &= \text{Outdoor Unit Rating} \times \text{Outdoor Design Temperature Correction} \times \text{Piping Length Correction} \times \text{Defrost Correction} \\
 &= 80,000 \times 0.98 \times 0.97 \times 0.89 \\
 &= 67,000 \text{ BTU/h}
 \end{aligned}$$

(6) Determination of Maximum System Capacity

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

$$CTi = 65,000 < CTo = 67,000, \text{ thus, select CTi.}$$

$$CTx = CTi = 65,000 \text{ BTU/h}$$

(7) Comparison with Essential Load

Against the essential load 61,000BTU/h, the maximum system capacity is 65,000BTU/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	
= 34,000 × 0.90	
= 31,000 BTU/h	OK: fulfills the load 29,000BTU/h
Room2	
Indoor Unit Rating × Indoor Design Temperature Correction	
= 40,000 × 0.86	
= 34,000 BTU/h	OK: fulfills the load 32,000BTU/h

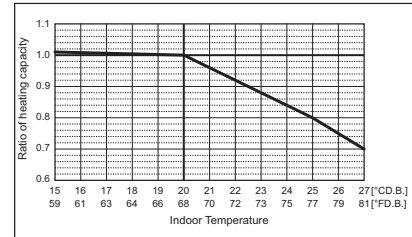


Fig.4 Indoor unit temperature correction
To be used to correct indoor unit only

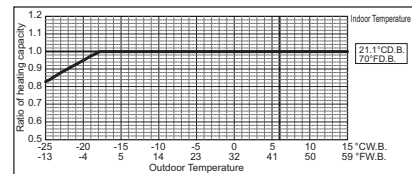


Fig.5 Outdoor unit temperature correction
To be used to correct outdoor unit only

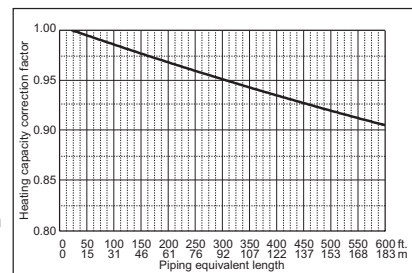


Fig.6 Correction of refrigerant piping length

Tbl.1 Table of correction factor at frost and defrost

Outdoor inlet air temp. °C	6	4	2	1	0	-2	-4	-6	-8	-10	-20
Outdoor inlet air temp. °F	43	39	36	34	32	28	25	21	18	14	-4
PURY-HP72	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.93	0.93	0.95	0.95
PURY-HP96	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.93	0.93	0.95	0.95
PURY-HP144	1.00	0.98	0.89	0.86	0.88	0.90	0.91	0.92	0.92	0.95	0.95
PURY-HP192	1.00	0.98	0.89	0.86	0.88	0.90	0.91	0.92	0.92	0.95	0.95

9. CAPACITY TABLES

9-2. Correction by Temperature (Standard Performance)

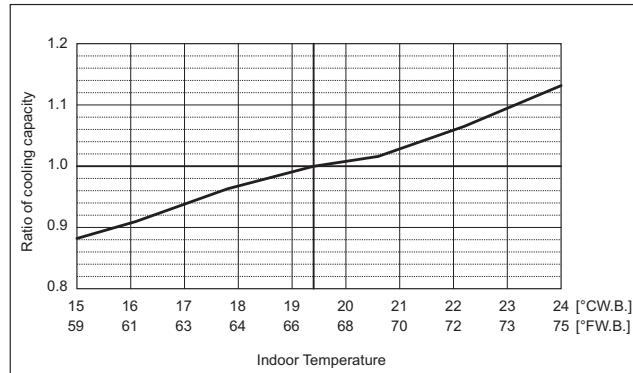
9-2-1. Cooling Capacity

CITY MULTI could have various capacities at different design temperatures. Using the nominal cooling/heating capacity value and the ratio below, the capacity can be observed at various temperatures.

PUHY-		P72TLMU/YLMU		P96TLMU/YLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	72,000		96,000	
	kW	21.1		28.1	
Rated cooling capacity	Input kW	4.55		6.39	
	BTU/h	69,000		92,000	
	kW	20.2		27.0	
	Input kW	3.93	4.30	5.55	6.19

Indoor unit temperature correction

To be used to correct indoor unit capacity only

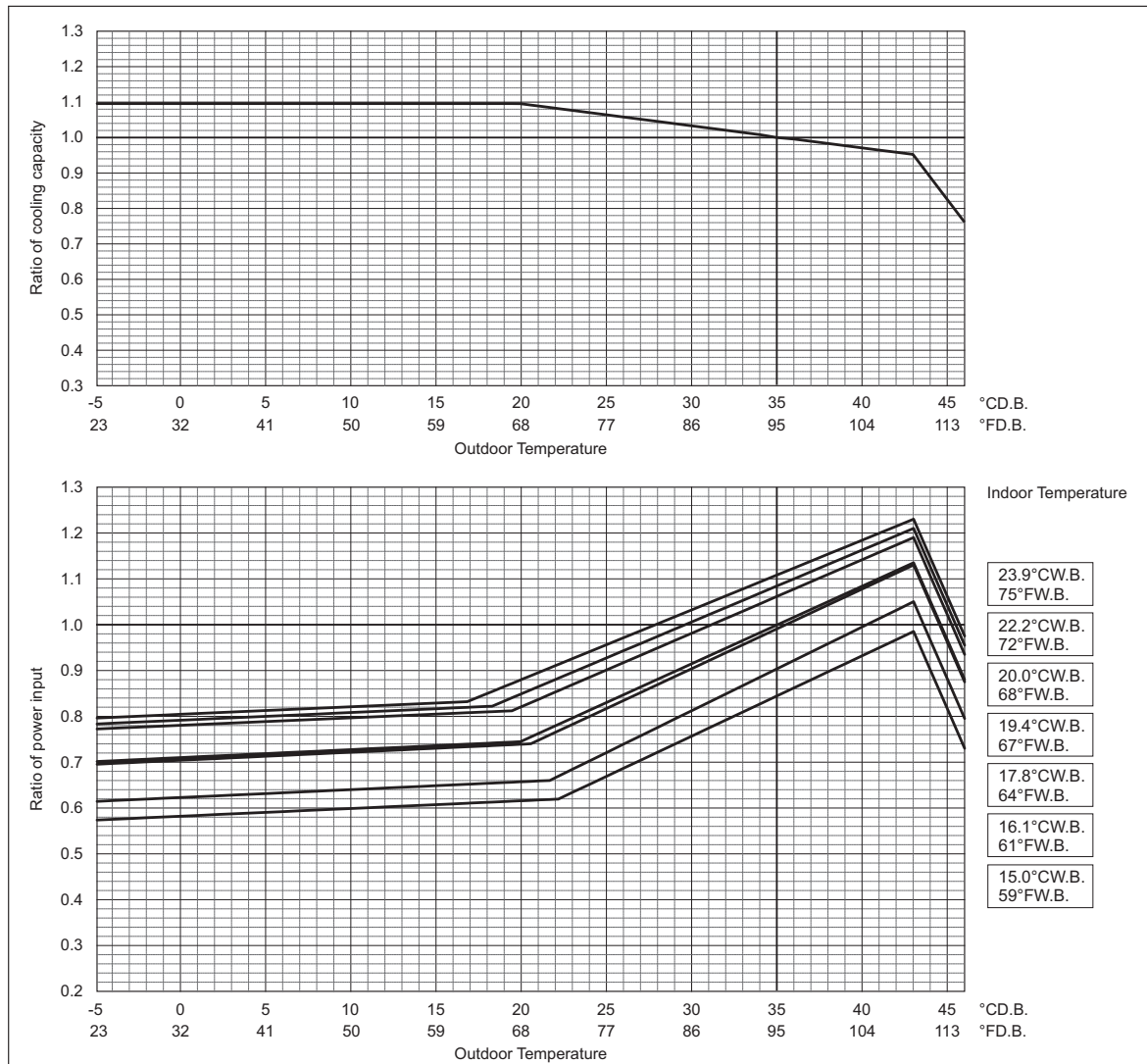


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

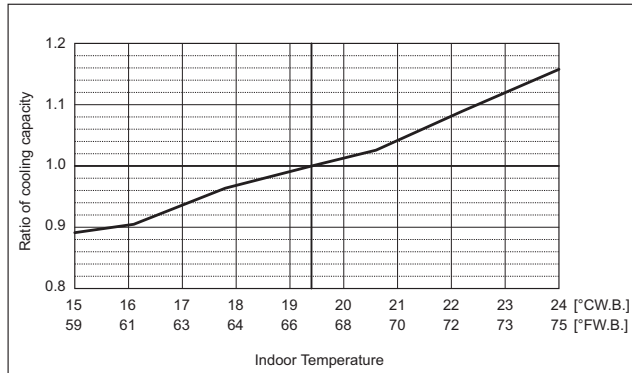
9-2. Correction by Temperature (Standard Performance), cont.

9-2-1. Cooling Capacity

PUHY-		P120TLMU/YLMU		P144TLMU/YLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	120,000		144,000	
	kW	35.2		42.2	
Rated cooling capacity	Input	8.07		10.38	
	BTU/h	114,000		137,000	
Rated cooling capacity	Input	33.4		40.2	
	kW	7.27	7.60	9.35	9.78

Indoor unit temperature correction

To be used to correct indoor unit capacity only

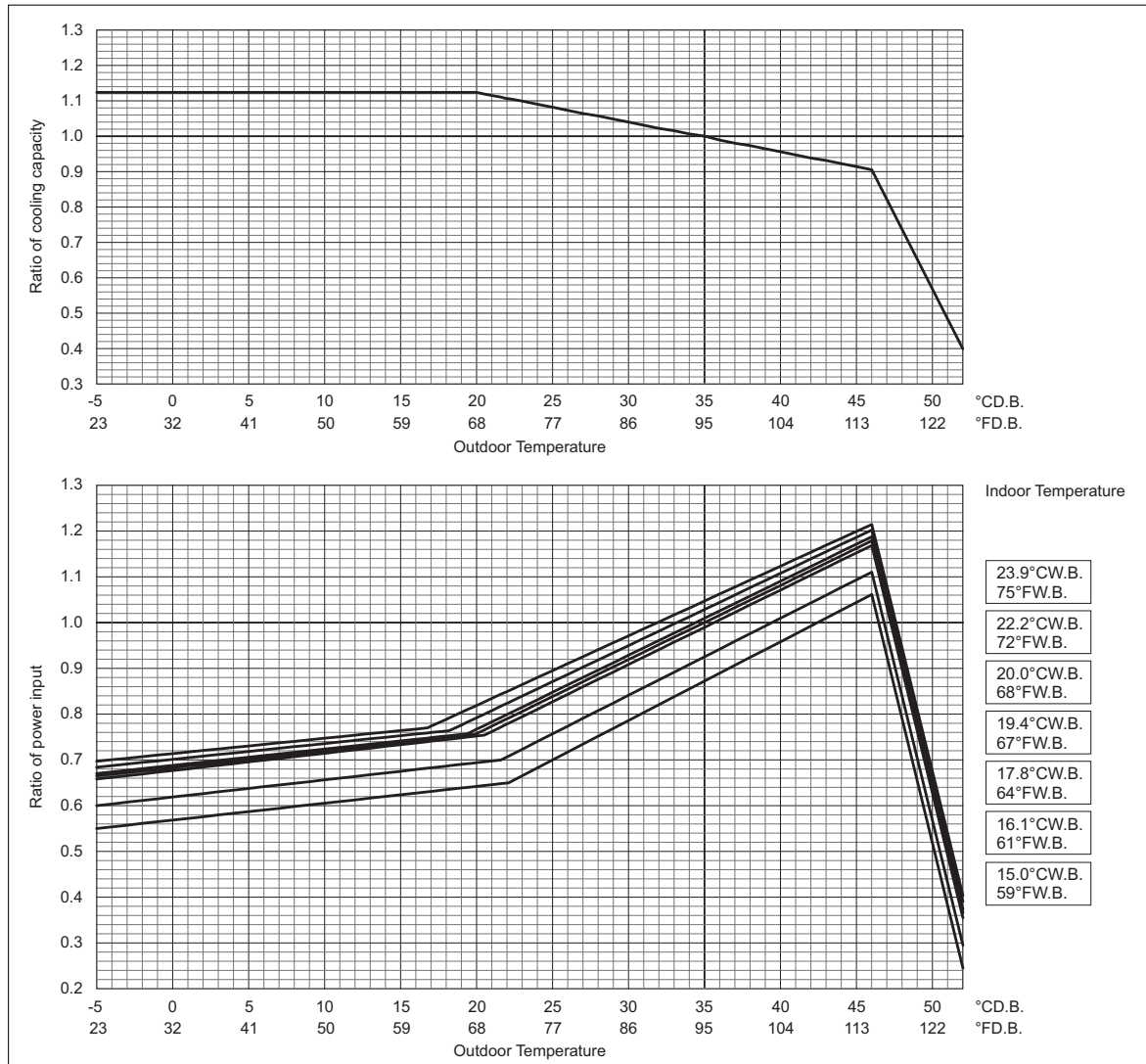


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

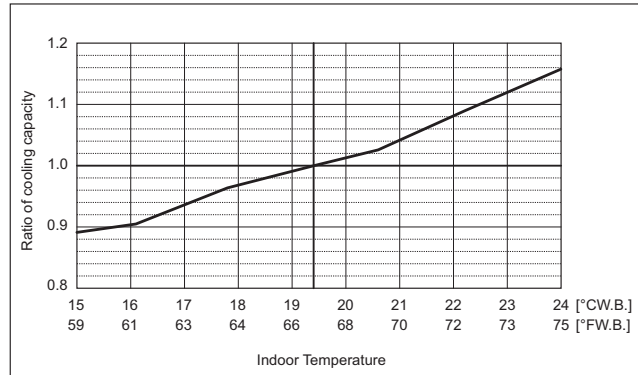
9-2. Correction by Temperature (Standard Performance), cont.

9-2-1. Cooling Capacity

PUHY-		P168TLMU/YLMU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	168,000	
	kW	49.2	
Rated cooling capacity	BTU/h	161,000	
	kW	47.2	
Input	kW	12.39	12.52

Indoor unit temperature correction

To be used to correct indoor unit capacity only

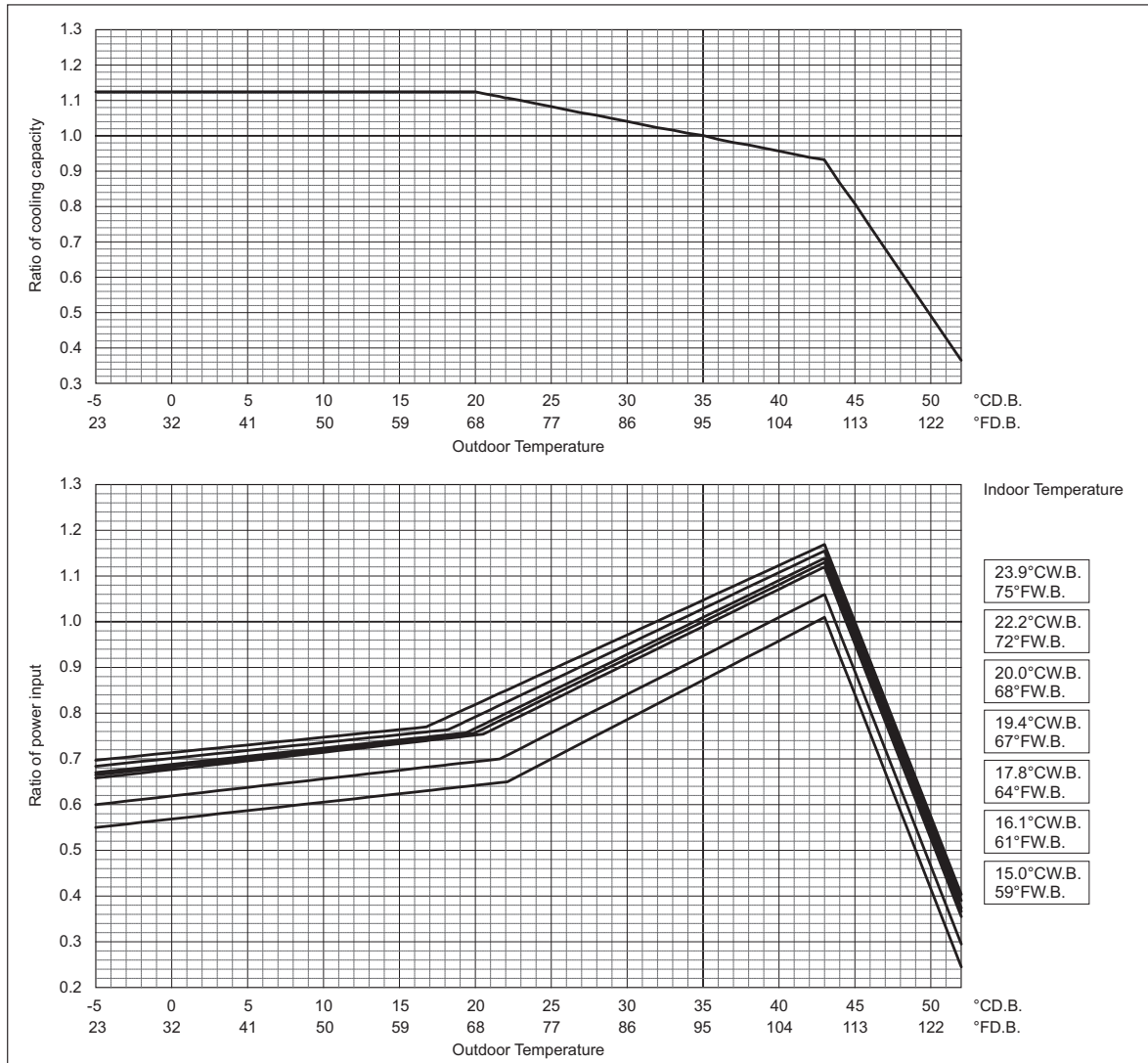


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

9-2. Correction by Temperature (Standard Performance), cont.

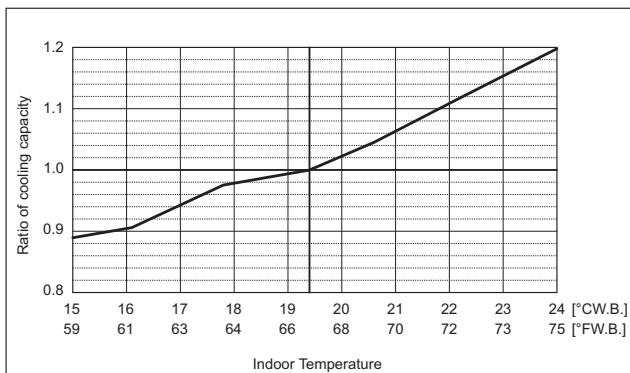
9-2-1. Cooling Capacity

PUHY-		P144TSLMU/YSLMU		P168TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal	BTU/h	144,000		168,000	
cooling	kW	42.2		49.2	
capacity	Input	10.09		12.56	
Rated	BTU/h	137,000		161,000	
cooling	kW	40.2		47.2	
capacity	Input	8.92	9.69	11.03	12.11

PUHY-		P192TSLMU/YSLMU	
		Non-Ducted	Ducted
Nominal	BTU/h	192,000	
cooling	kW	56.3	
capacity	Input	14.23	
Rated	BTU/h	183,000	
cooling	kW	53.6	
capacity	Input	13.03	13.26

Indoor unit temperature correction

To be used to correct indoor unit capacity only

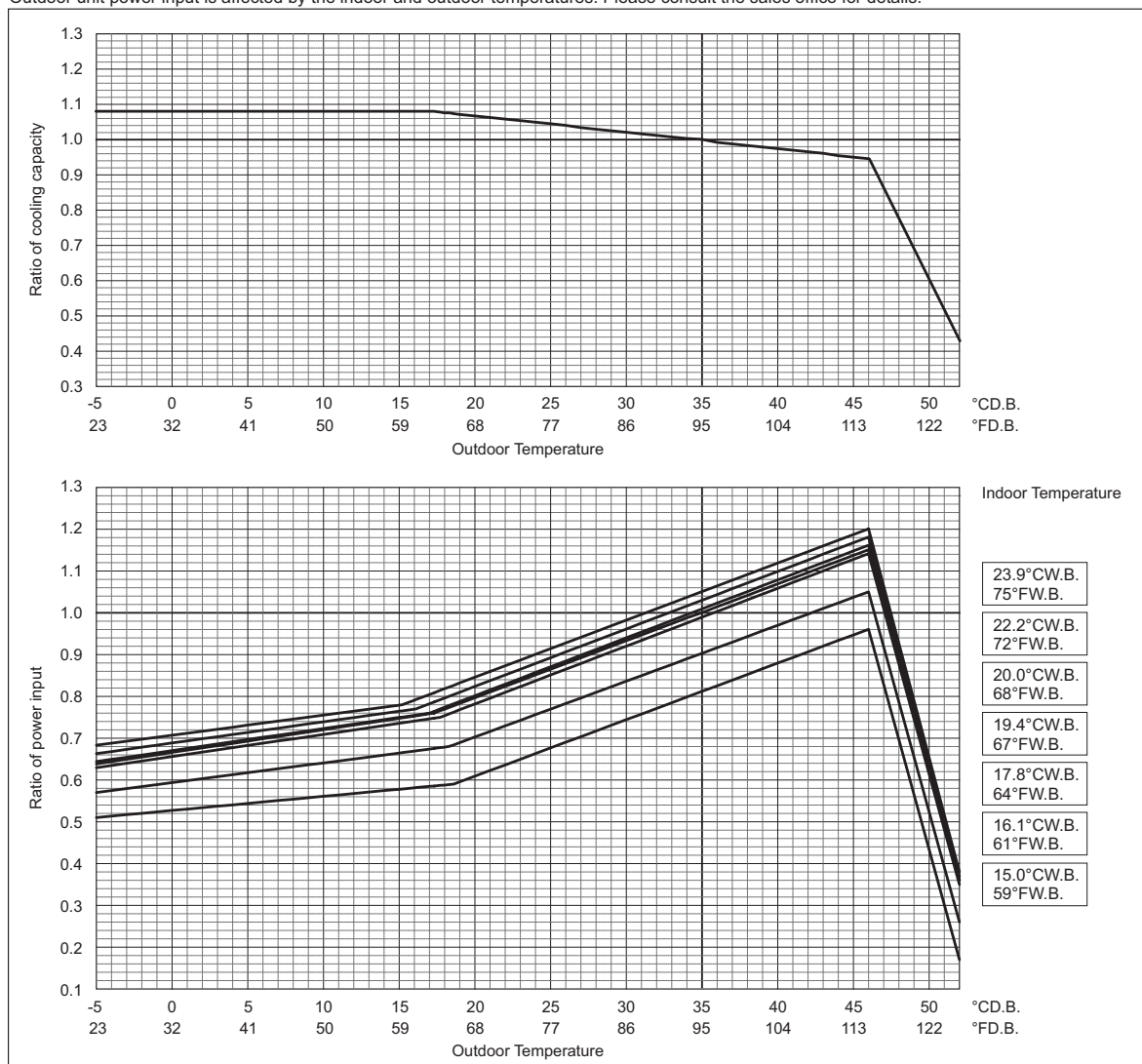


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

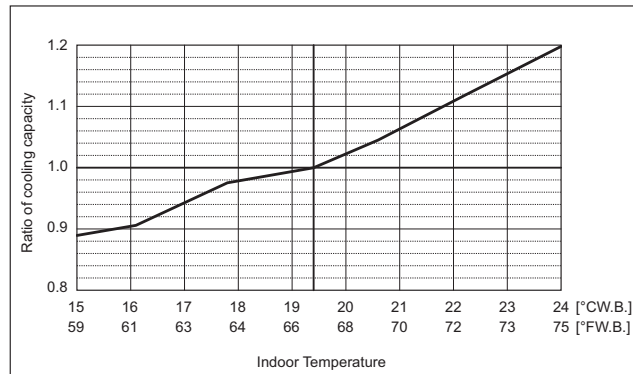
9-2. Correction by Temperature (Standard Performance), cont.

9-2-1. Cooling Capacity

PUHY-		P216TSLMU/YSLMU		P240TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	Input	BTU/h	216,000	240,000	
		kW	63.3	70.3	
Rated cooling capacity	Input	BTU/h	206,000	228,000	
		kW	60.4	66.8	
		BTU/h	14.99	15.36	16.87
		kW			17.13

Indoor unit temperature correction

To be used to correct indoor unit capacity only

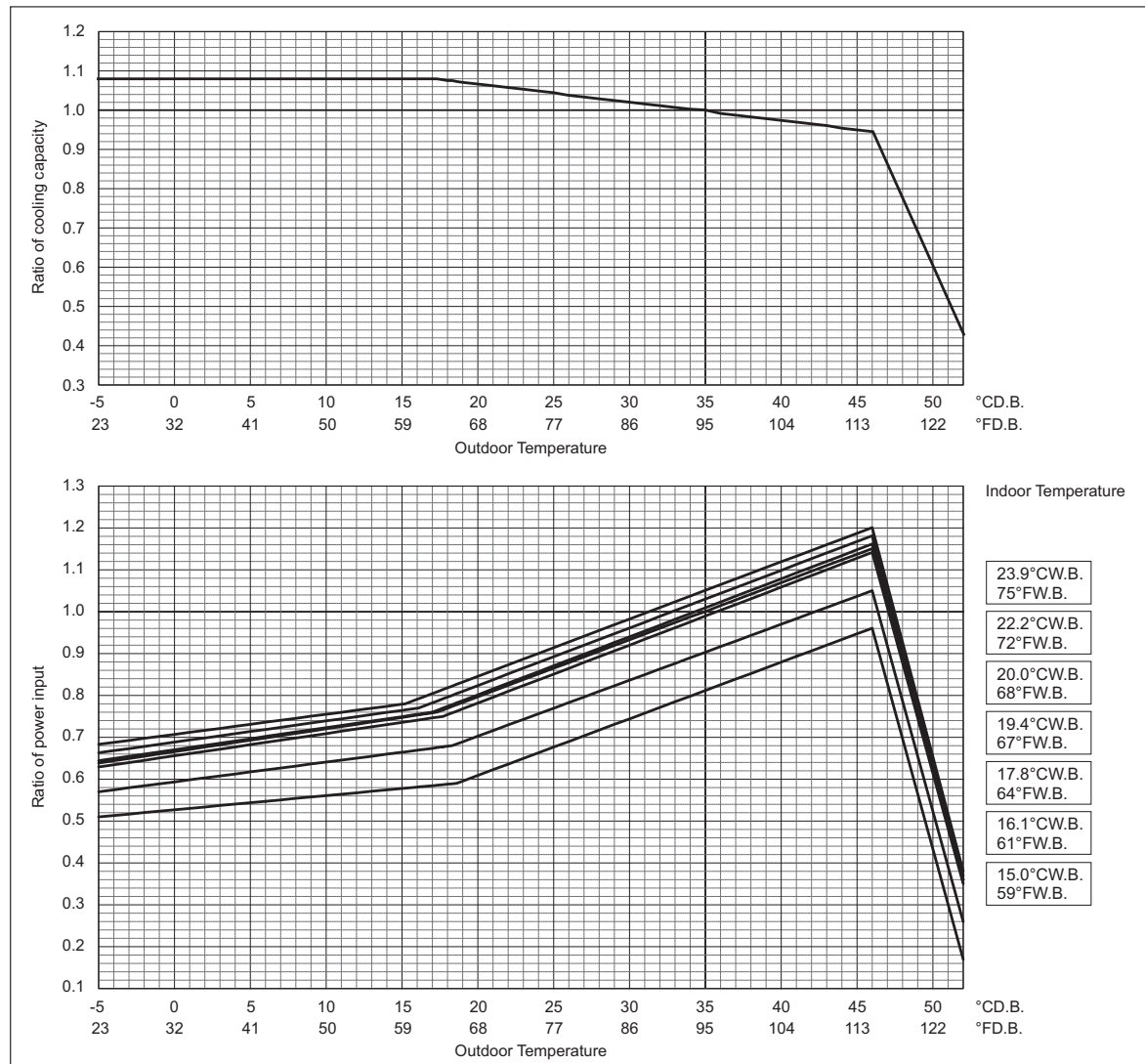


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

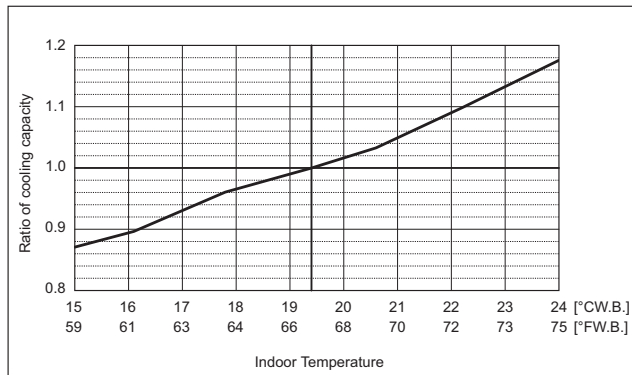
9-2. Correction by Temperature (Standard Performance), cont.

9-2-1. Cooling Capacity

PUHY-		P264TSLMU/YSLMU		P288TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	264,000		288,000	
	kW	77.4		84.4	
Rated cooling capacity	Input	19.61		21.83	
	BTU/h	252,000		275,000	
Rated cooling capacity	kW	73.9		80.6	
	Input	17.85	18.38	19.69	20.73

Indoor unit temperature correction

To be used to correct indoor unit capacity only

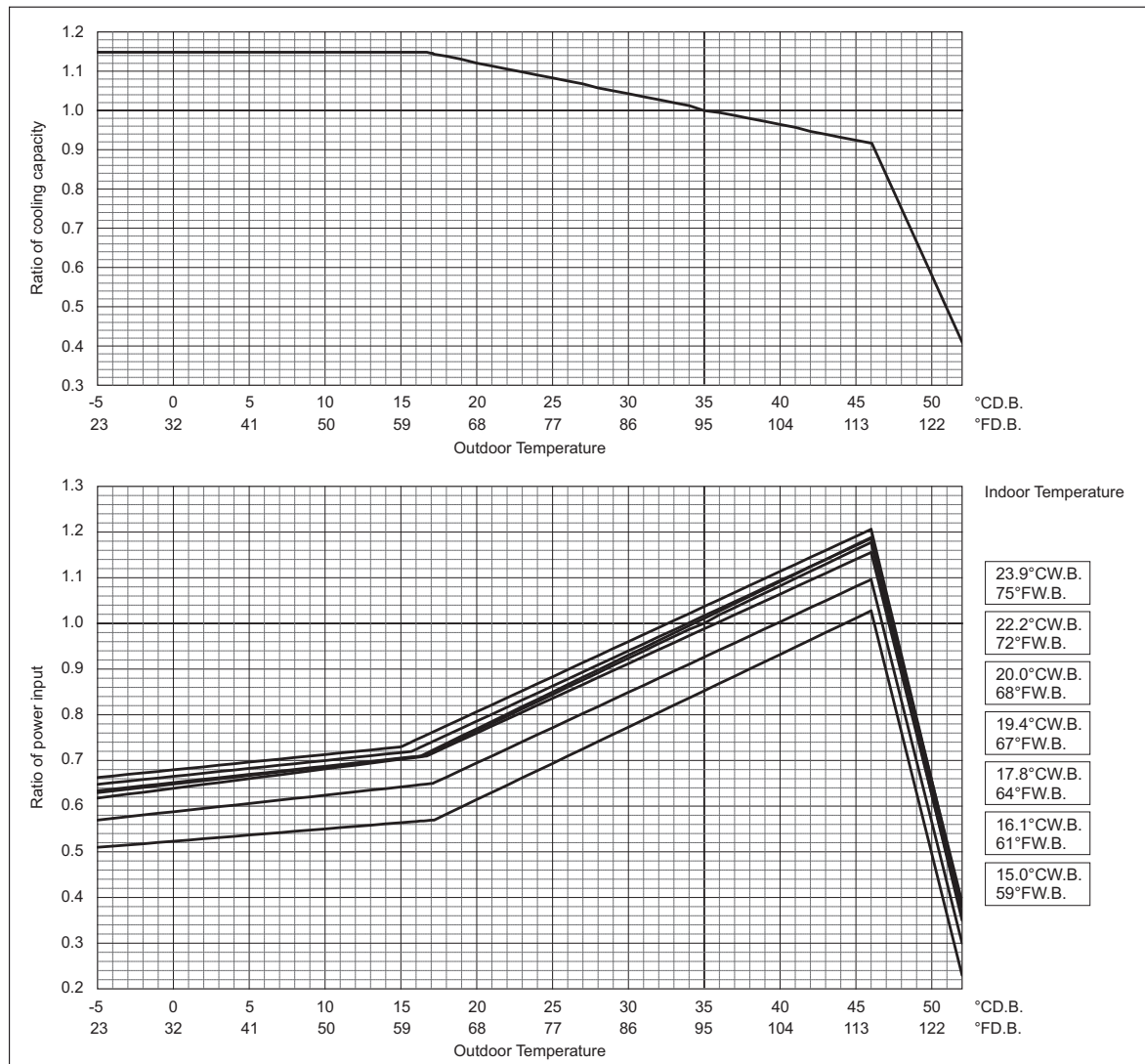


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

9-2. Correction by Temperature (Standard Performance), cont.

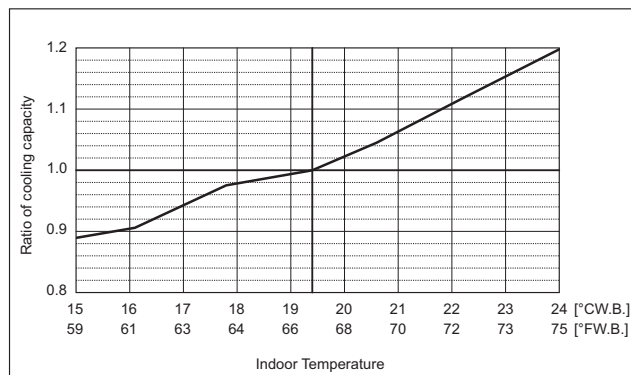
9-2-1. Cooling Capacity

PUHY-		P312TSLMU/YSLMU		P336TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal	BTU/h	312,000		336,000	
cooling	kW	91.4		98.5	
capacity	Input	23.73		26.07	
Rated	BTU/h	297,000		320,000	
cooling	kW	87.0		93.8	
capacity	Input	21.48	22.47	23.34	24.69

PUHY-		P360TSLMU/YSLMU	
		Non-Ducted	Ducted
Nominal	BTU/h	360,000	
cooling	kW	105.5	
capacity	Input	27.94	
Rated	BTU/h	342,000	
cooling	kW	100.2	
capacity	Input	25.25	26.50

Indoor unit temperature correction

To be used to correct indoor unit capacity only

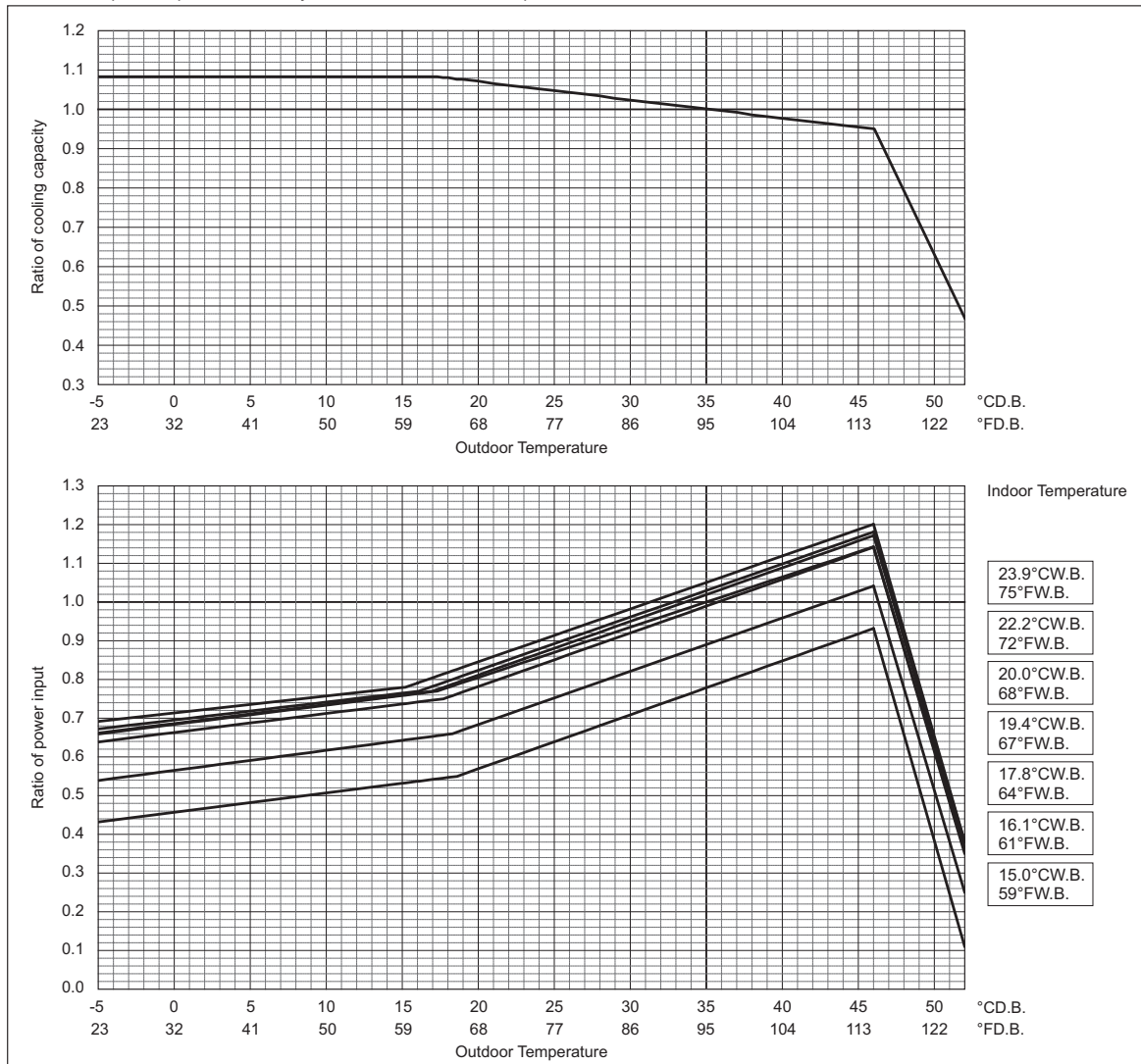


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

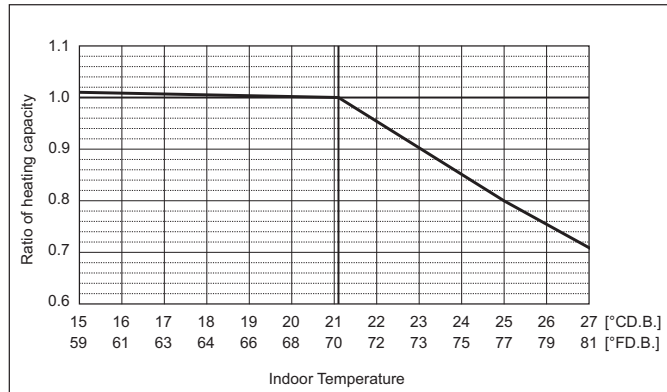
9-2. Correction by Temperature (Standard Performance), cont.

9-2-2. Heating Capacity

PUHY-		P72TLMU/YLMU		P96TLMU/YLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	80,000		108,000	
	kW	23.4		31.7	
	Input kW	5.48		7.65	
Rated Heating capacity	BTU/h	76,000		103,000	
	kW	22.3		30.2	
	Input kW	4.83	5.32	6.82	7.34

Indoor unit temperature correction

To be used to correct indoor unit capacity only

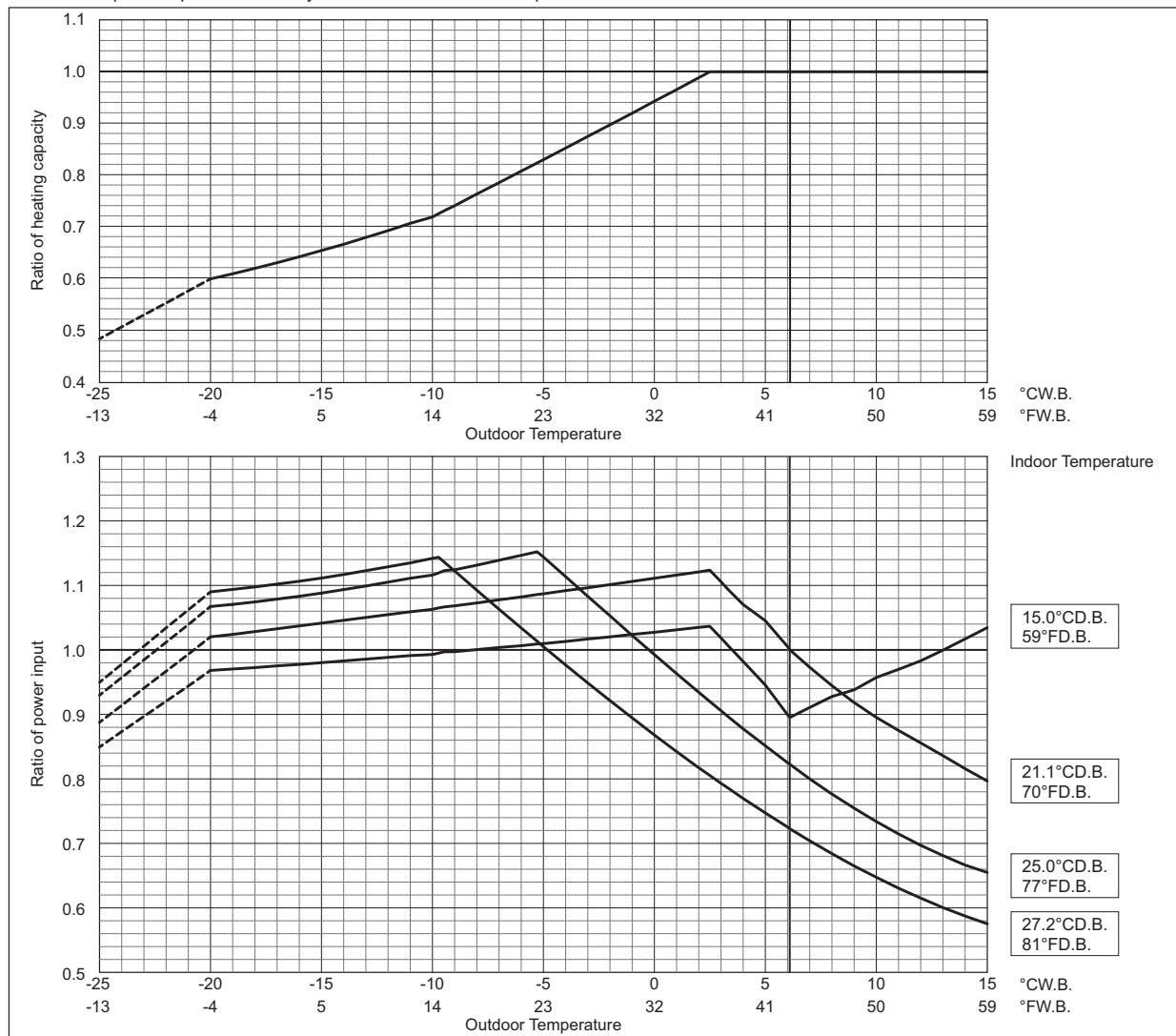


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

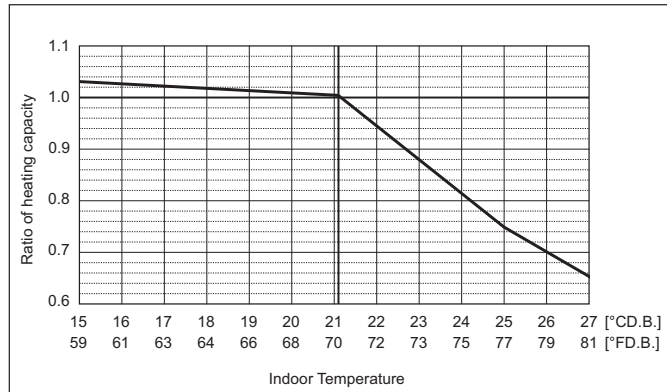
9-2. Correction by Temperature (Standard Performance), cont.

9-2-2. Heating Capacity

PUHY-		P120TLMU/YLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	135,000	
	kW	39.6	
	Input kW	9.84	
Rated Heating capacity	BTU/h	129,000	
	kW	37.8	
	Input kW	8.79	9.42

Indoor unit temperature correction

To be used to correct indoor unit capacity only

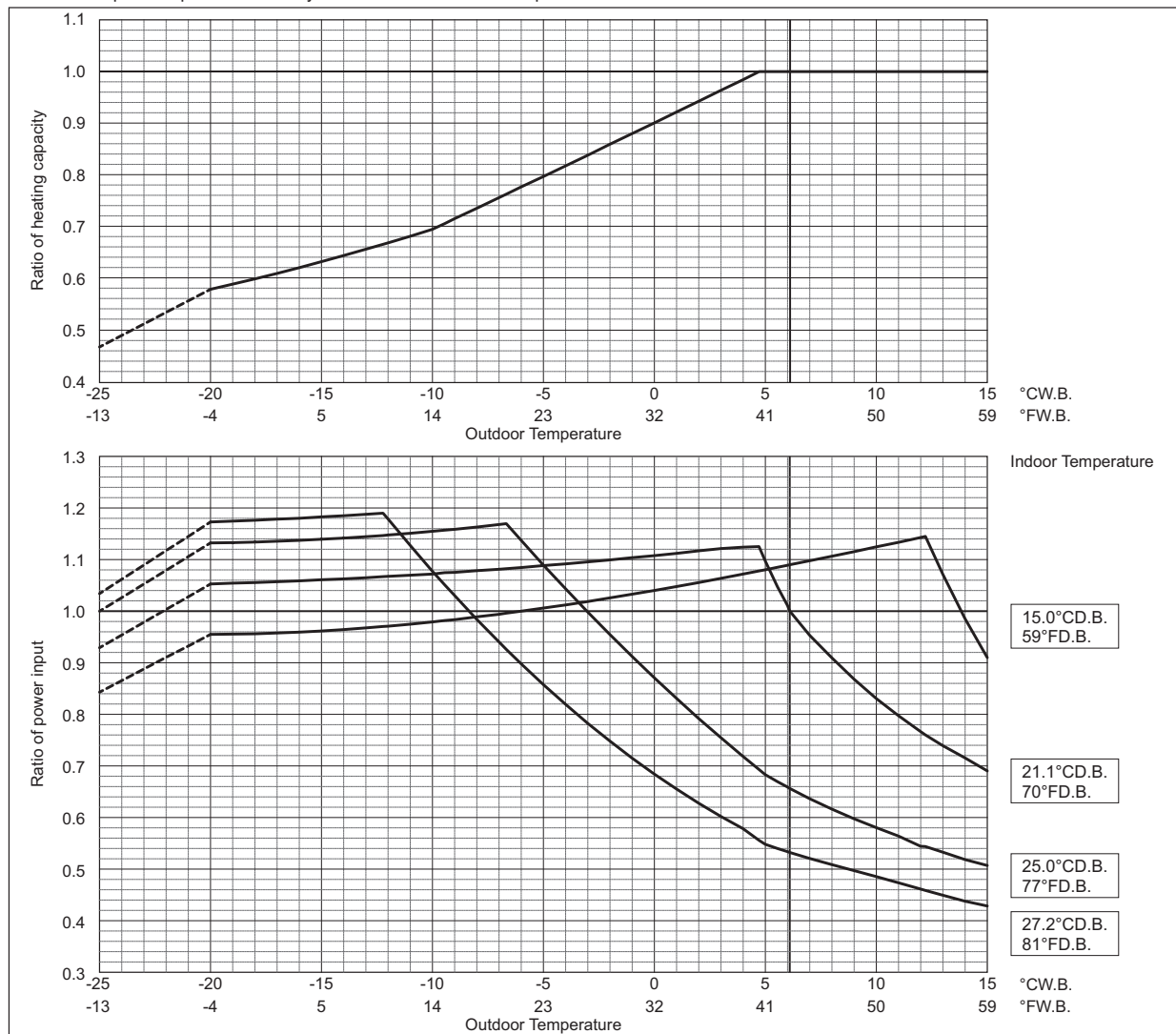


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

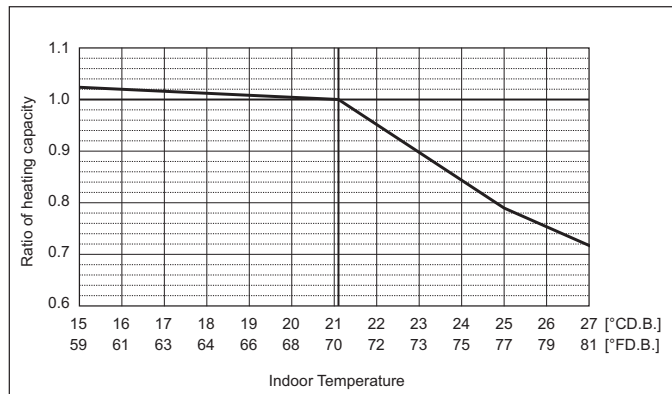
9-2. Correction by Temperature (Standard Performance), cont.

9-2-2. Heating Capacity

PUHY-		P144TLMU/YLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	160,000	
	kW	46.9	
	Input	kW	
Rated Heating capacity	BTU/h	152,000	
	kW	44.5	
	Input	kW	11.17 11.61

Indoor unit temperature correction

To be used to correct indoor unit capacity only

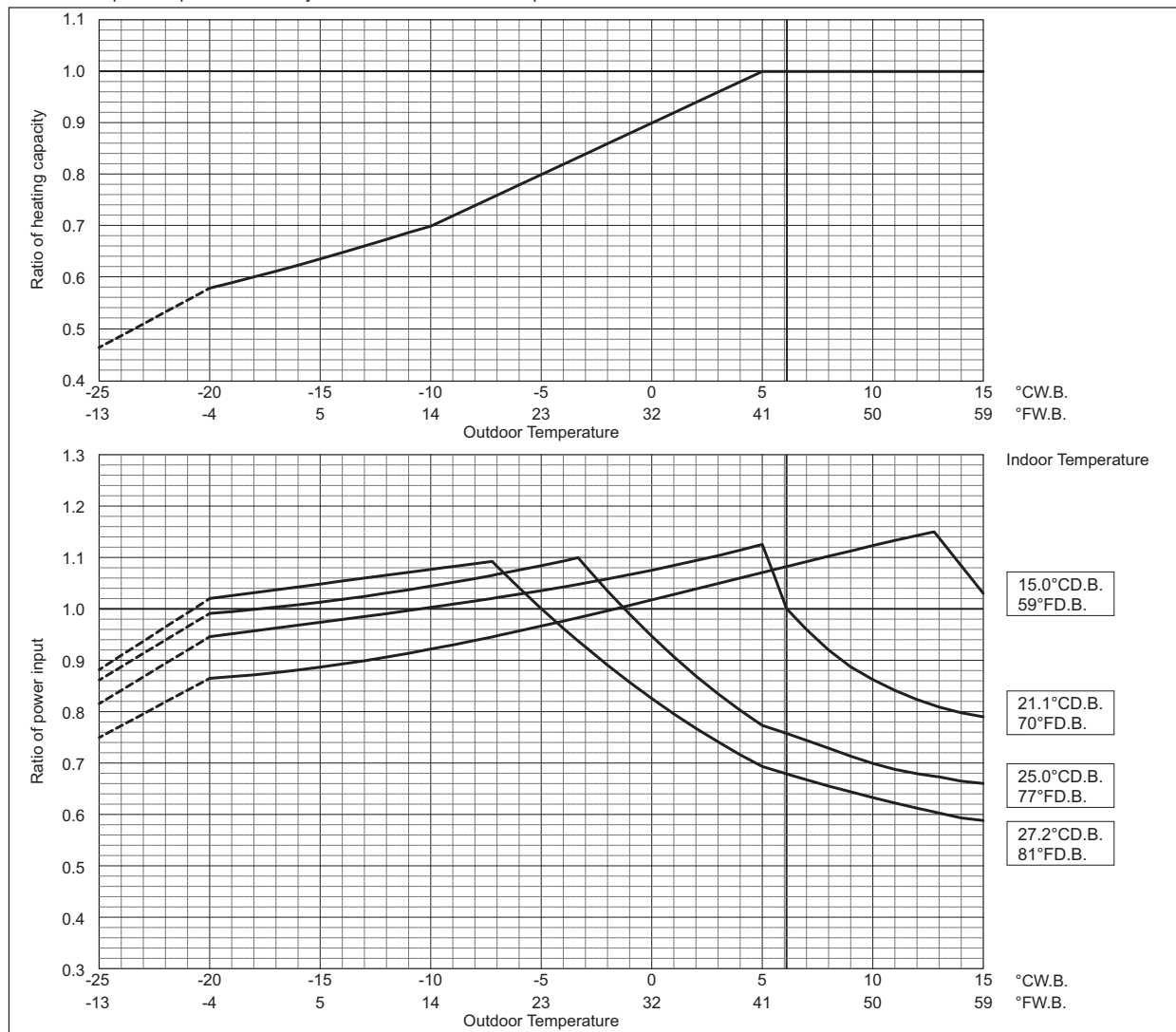


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

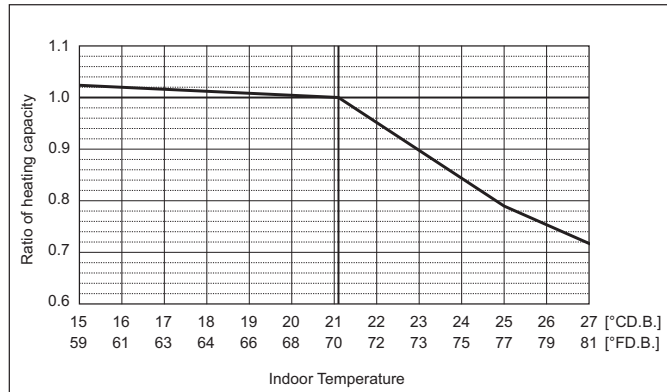
9-2. Correction by Temperature (Standard Performance), cont.

9-2-2. Heating Capacity

PUHY-		P168TLMU/YLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	188,000	
	kW	55.1	
	Input kW	14.91	
Rated Heating capacity	BTU/h	179,000	
	kW	52.5	
	Input kW	13.58	14.04

Indoor unit temperature correction

To be used to correct indoor unit capacity only

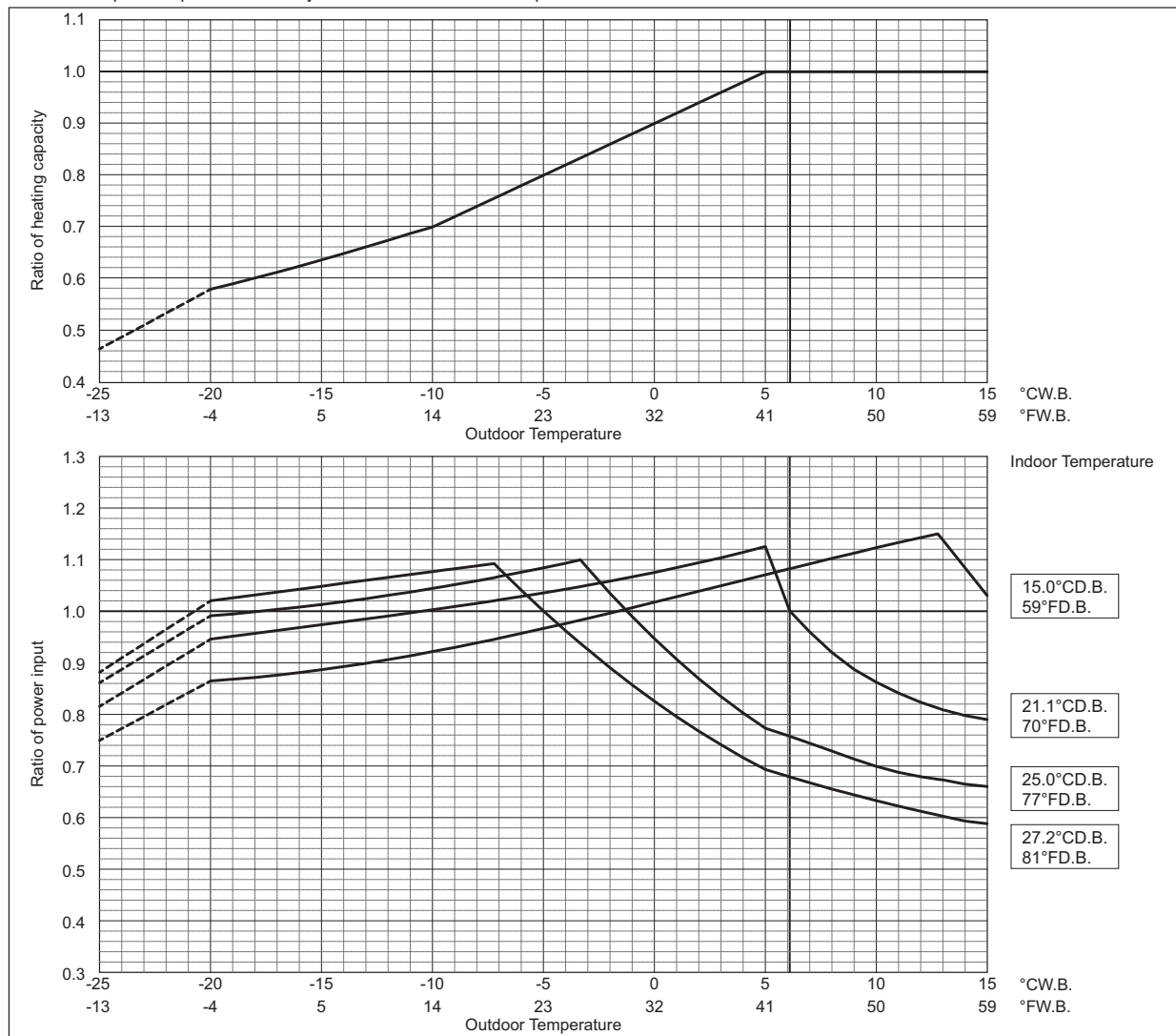


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

9-2. Correction by Temperature (Standard Performance), cont.

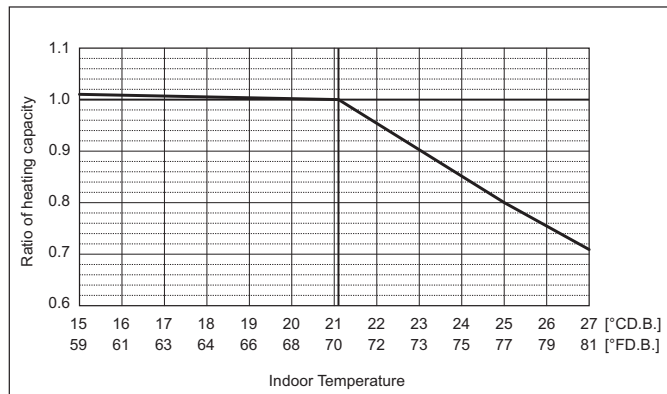
9-2-2. Heating Capacity

PUHY-		P144TSLMU/YSLMU		P168TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity		BTU/h	160,000	188,000	
		kW	46.9	55.1	
	Input	kW	11.88	14.60	
Rated Heating capacity		BTU/h	152,000	179,000	
		kW	44.5	52.5	
	Input	kW	10.56	11.44	13.13

PUHY-		P192TSLMU/YSLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	215,000	
	kW	63.0	
	Input kW	16.97	
Rated Heating capacity	BTU/h	205,000	
	kW	60.1	
	Input kW	15.87	15.41

Indoor unit temperature correction

To be used to correct indoor unit capacity only

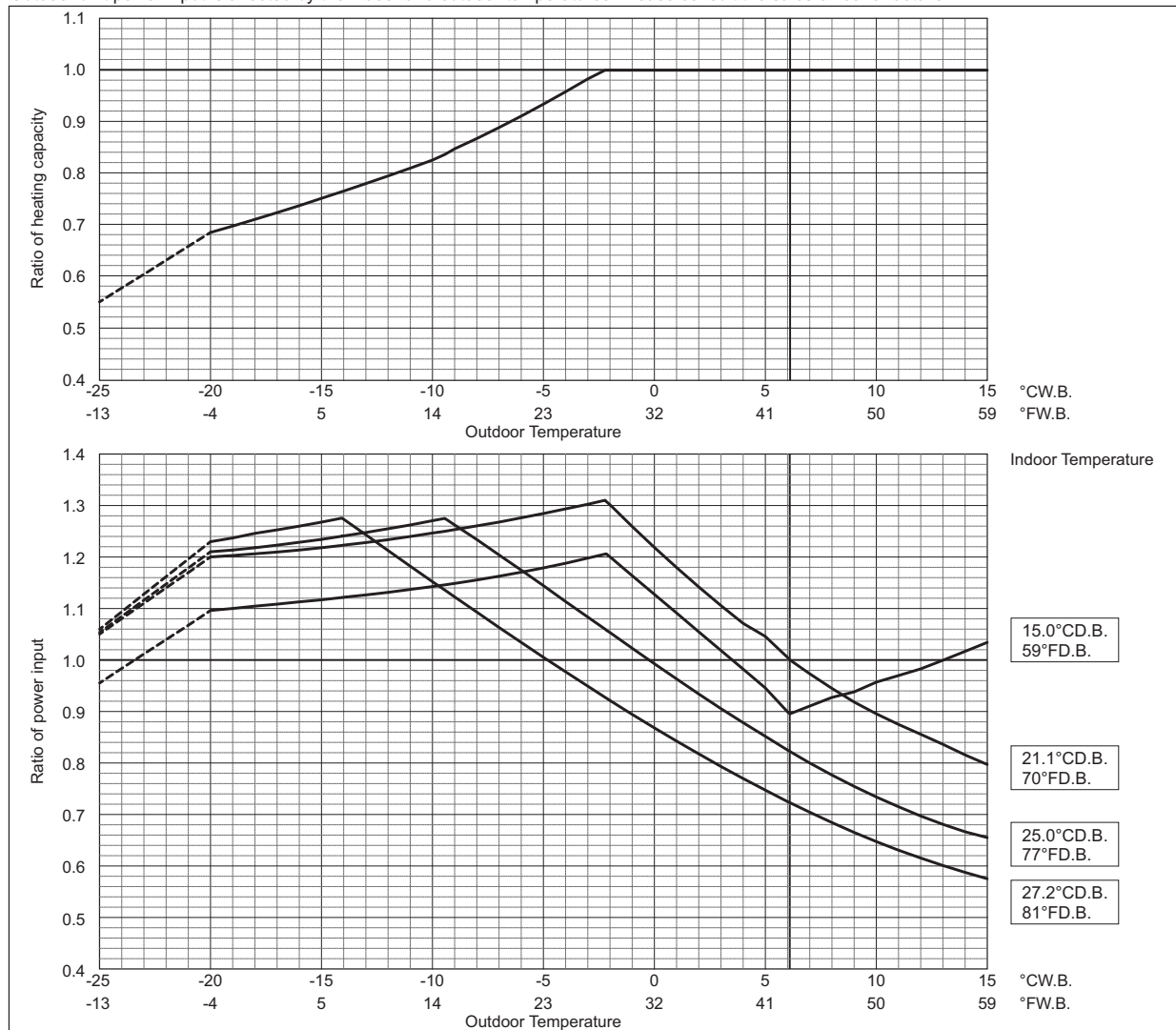


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

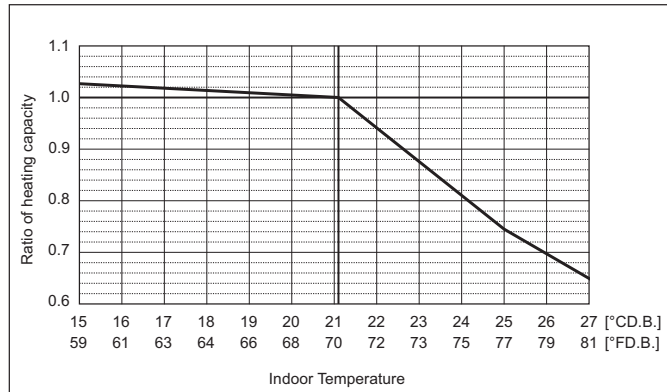
9-2. Correction by Temperature (Standard Performance), cont.

9-2-2. Heating Capacity

PUHY-		P216TSLMU/YSLMU		P240TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	243,000		270,000	
	kW	71.2		79.1	
	Input	19.46		21.69	
Rated Heating capacity	BTU/h	232,000		258,000	
	kW	68.0		75.6	
	Input	18.30	17.73	20.19	19.98

Indoor unit temperature correction

To be used to correct indoor unit capacity only

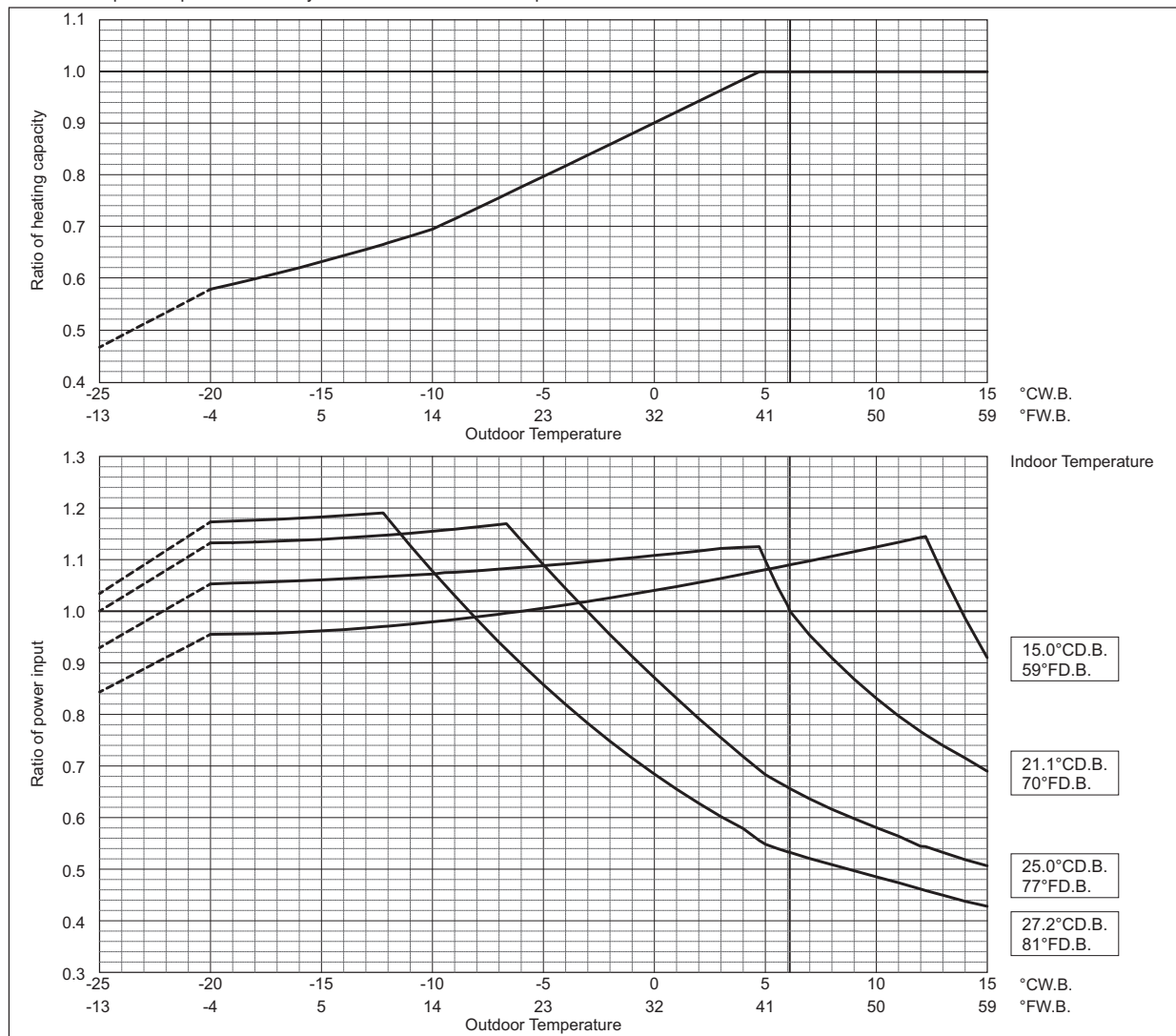


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

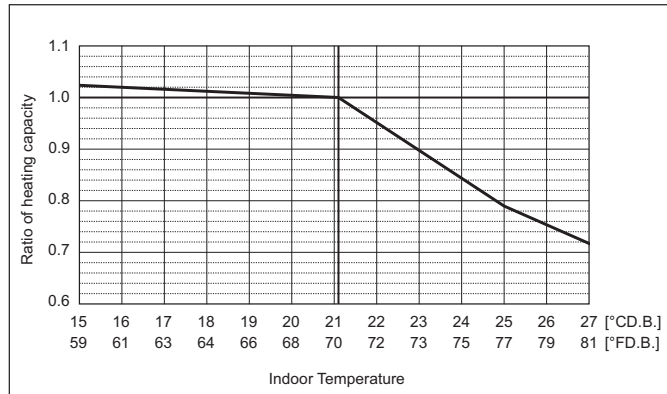
9-2. Correction by Temperature (Standard Performance), cont.

9-2-2. Heating Capacity

PUHY-		P264TSLMU/YSLMU		P288TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	295,000		323,000	
	kW	86.5		94.7	
	Input	kW		25.82	
Rated Heating capacity	BTU/h	281,000		308,000	
	kW	82.4		90.3	
	Input	21.52	21.20	23.91	24.21

Indoor unit temperature correction

To be used to correct indoor unit capacity only

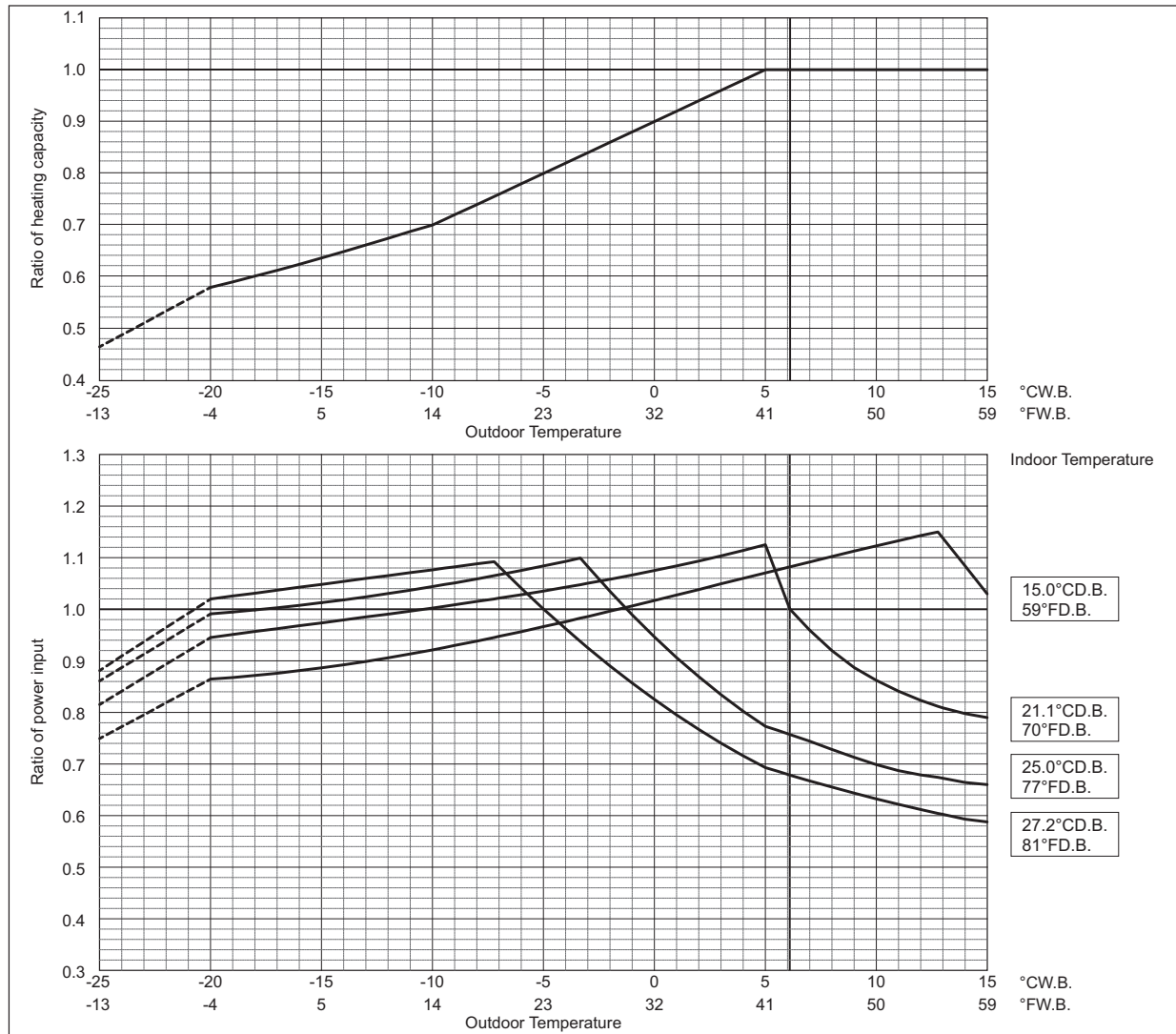


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

9-2. Correction by Temperature (Standard Performance), cont.

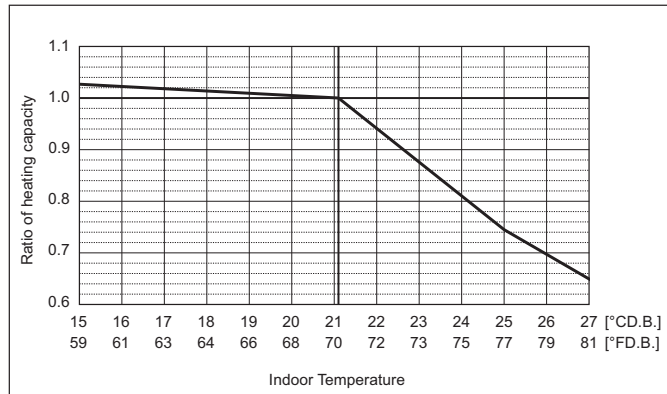
9-2-2. Heating Capacity

PUHY-		P312TSLMU/YSLMU		P336TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	350,000		378,000	
	kW	102.6		110.8	
	Input kW	28.41		31.42	
Rated Heating capacity	BTU/h	334,000		361,000	
	kW	97.9		105.8	
	Input kW	26.13	26.41	29.37	28.74

PUHY-		P360TSLMU/YSLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	405,000	
	kW	118.7	
	Input kW	33.83	
Rated Heating capacity	BTU/h	387,000	
	kW	113.4	
	Input kW	31.55	31.02

Indoor unit temperature correction

To be used to correct indoor unit capacity only

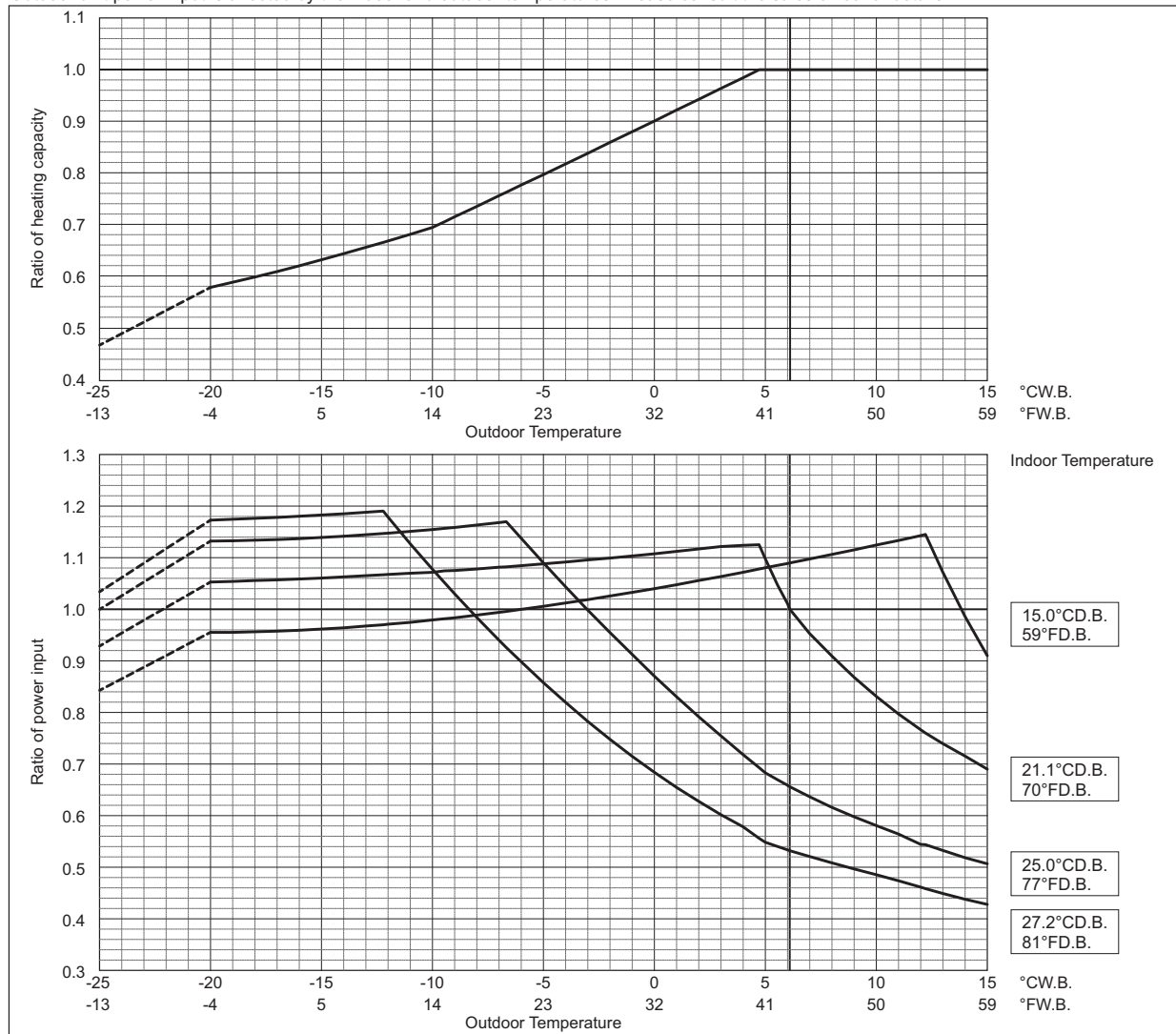


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

9-3. Correction by Temperature (High Heating Performance)

9-3-1. Cooling Capacity

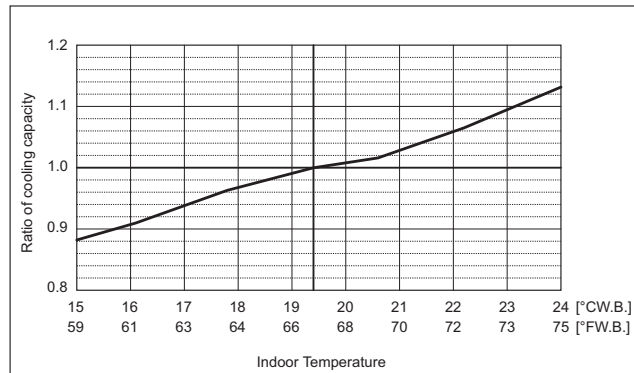
CITY MULTI could have various capacities at different designing temperatures. Using the nominal cooling/heating capacity values and the ratios below, the capacity can be found for various temperatures.

To select high heating performance mode, DipSW 6-2 must be set to ON. (In the low ambient temperature, heating capacity and power input become higher than those under standard mode.)

PUHY-		P72TLMU/YLMU		P96TLMU/YLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	72,000		96,000	
	kW	21.1		28.1	
	Input kW	4.55		6.39	
Rated cooling capacity	BTU/h	69,000		92,000	
	kW	20.2		27.0	
	Input kW	3.93	4.30	5.55	6.19

Indoor unit temperature correction

To be used to correct indoor unit capacity only

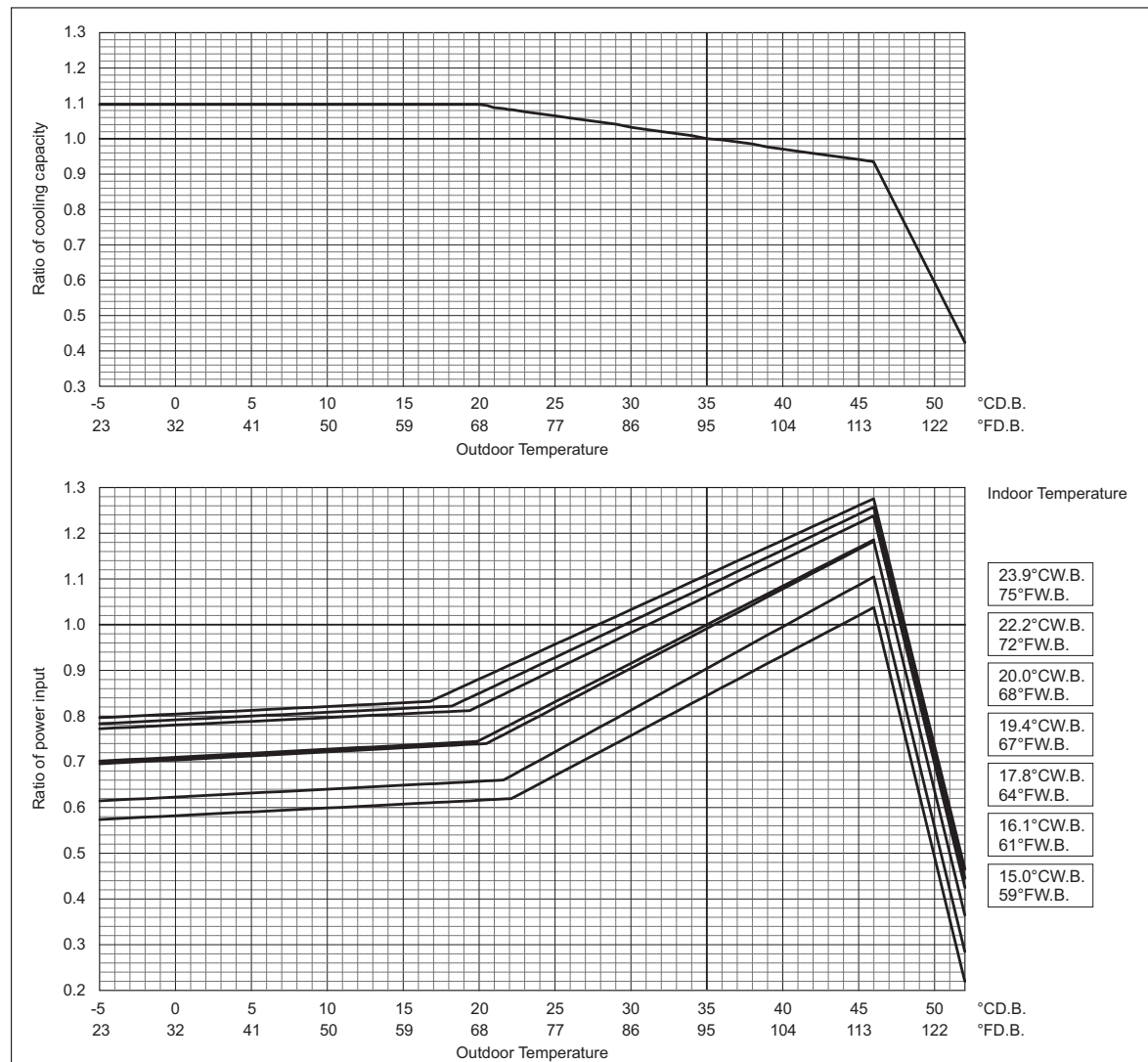


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

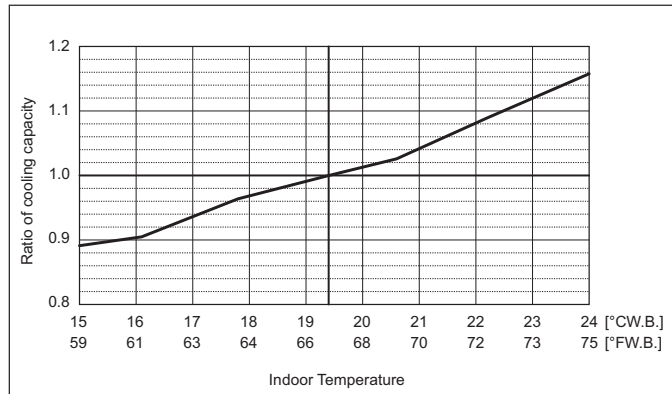
9-3. Correction by Temperature (High Heating Performance), cont.

9-3-1. Cooling Capacity

PUHY-		P120TLMU/YLMU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	12,000	
	kW	35.2	
	Input kW	8.07	
Rated cooling capacity	BTU/h	114,000	
	kW	33.4	
	Input kW	7.27	7.60

Indoor unit temperature correction

To be used to correct indoor unit capacity only

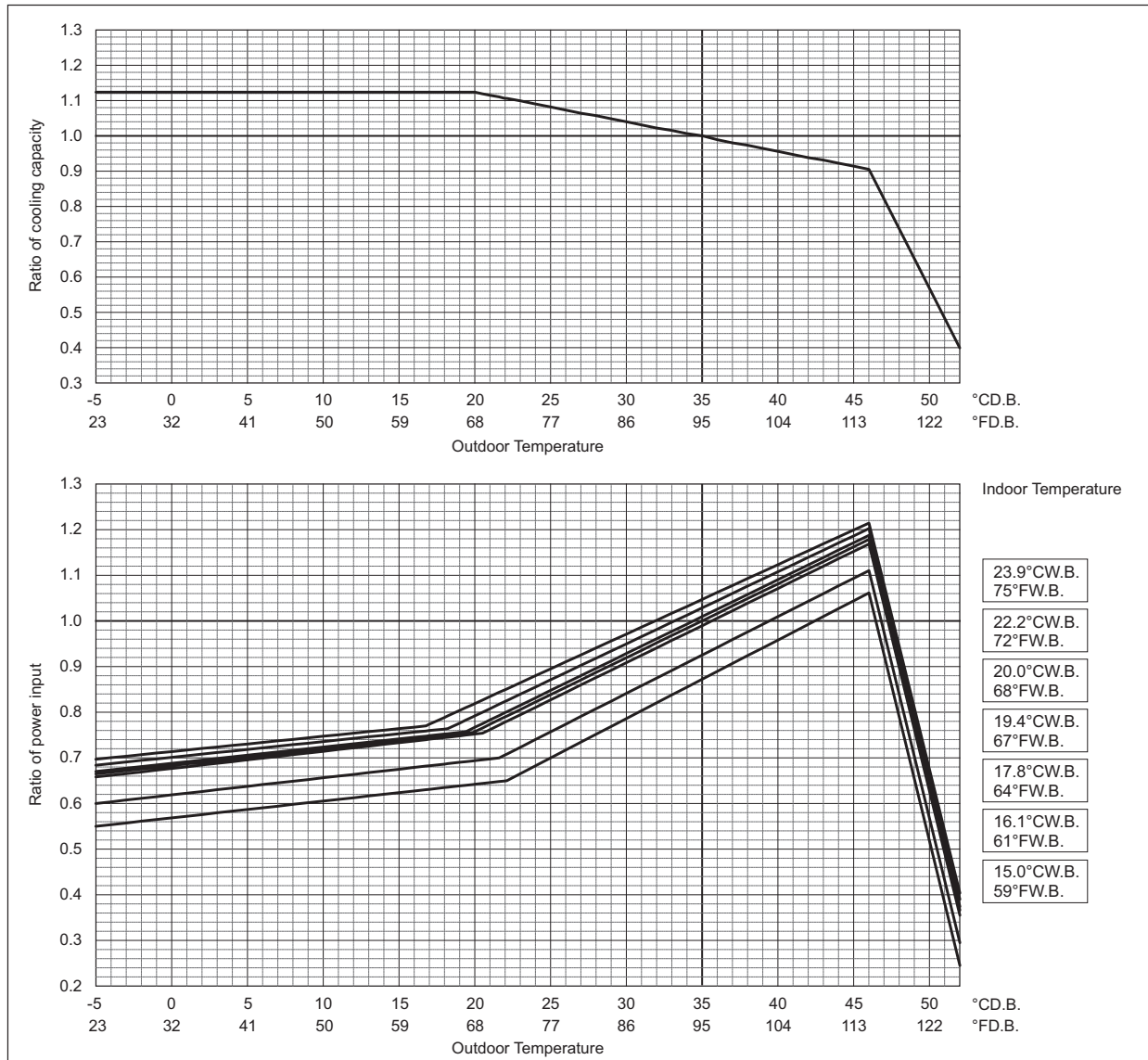


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

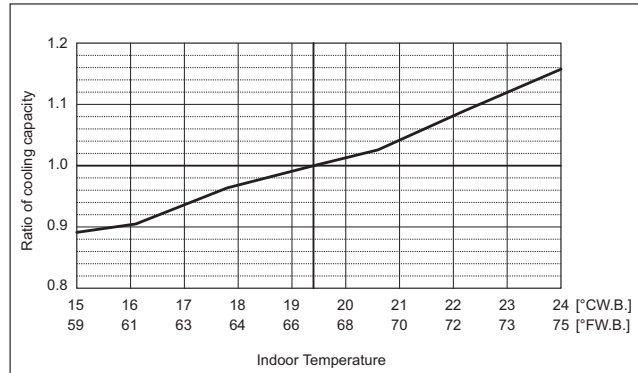
9-3. Correction by Temperature (High Heating Performance). cont.

9-3-1. Cooling Capacity

PUHY-		P144TLMU/YLMU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	144,000	
	kW	42.2	
	Input kW	10.38	
Rated cooling capacity	BTU/h	137,000	
	kW	40.2	
	Input kW	9.35	9.78

Indoor unit temperature correction

To be used to correct indoor unit capacity only

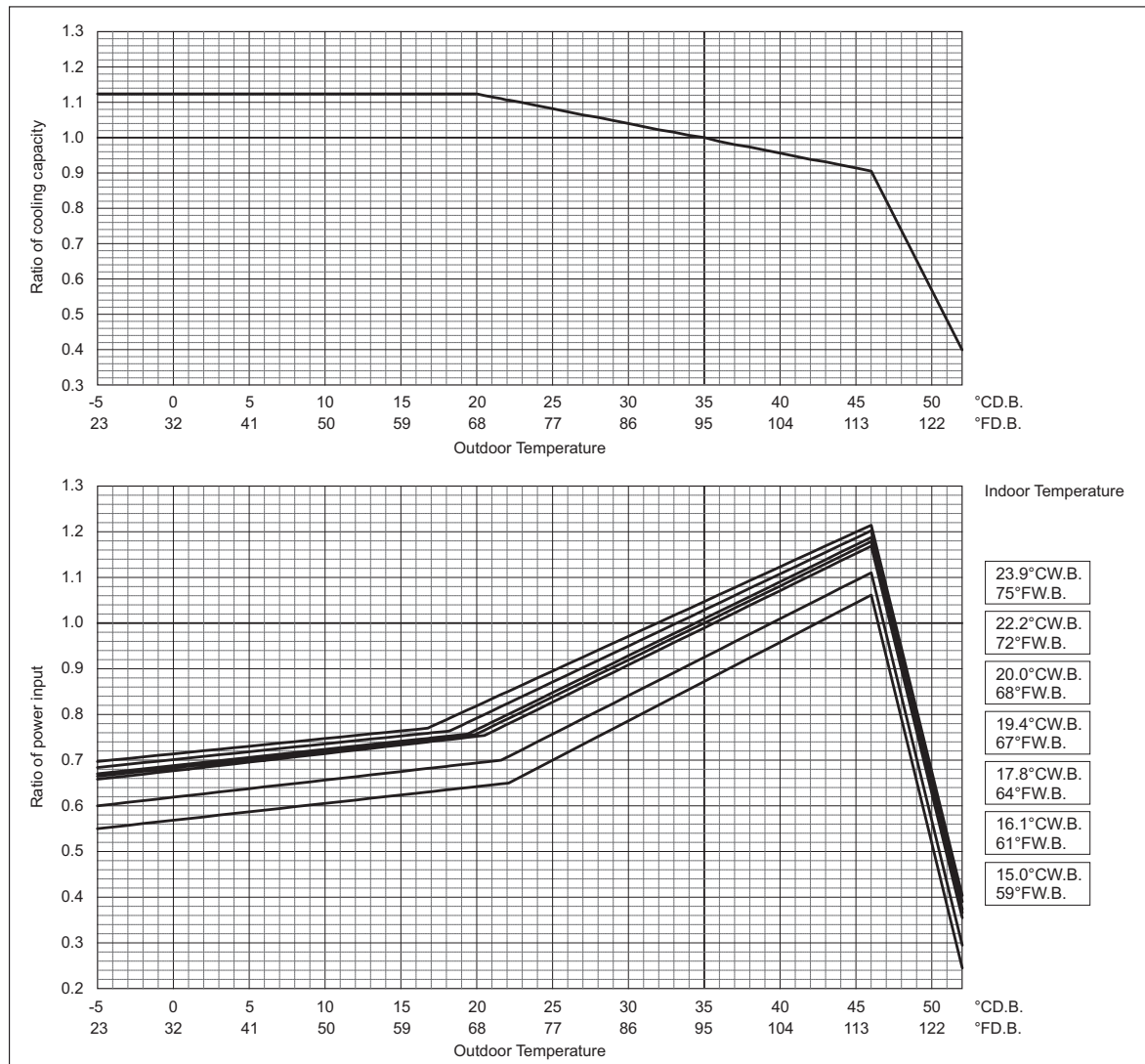


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

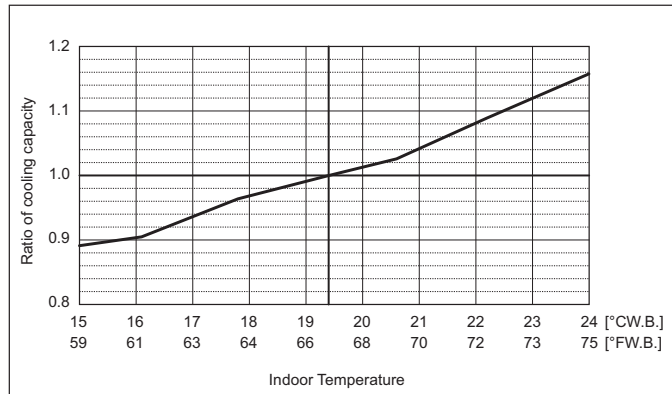
9-3. Correction by Temperature (High Heating Performance), cont.

9-3-1. Cooling Capacity

PUHY-		P168TLMU/YLMU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	168,000	
	kW	49.2	
Rated cooling capacity	BTU/h	161,000	
	kW	47.2	
Input	kW	12.39	12.52

Indoor unit temperature correction

To be used to correct indoor unit capacity only

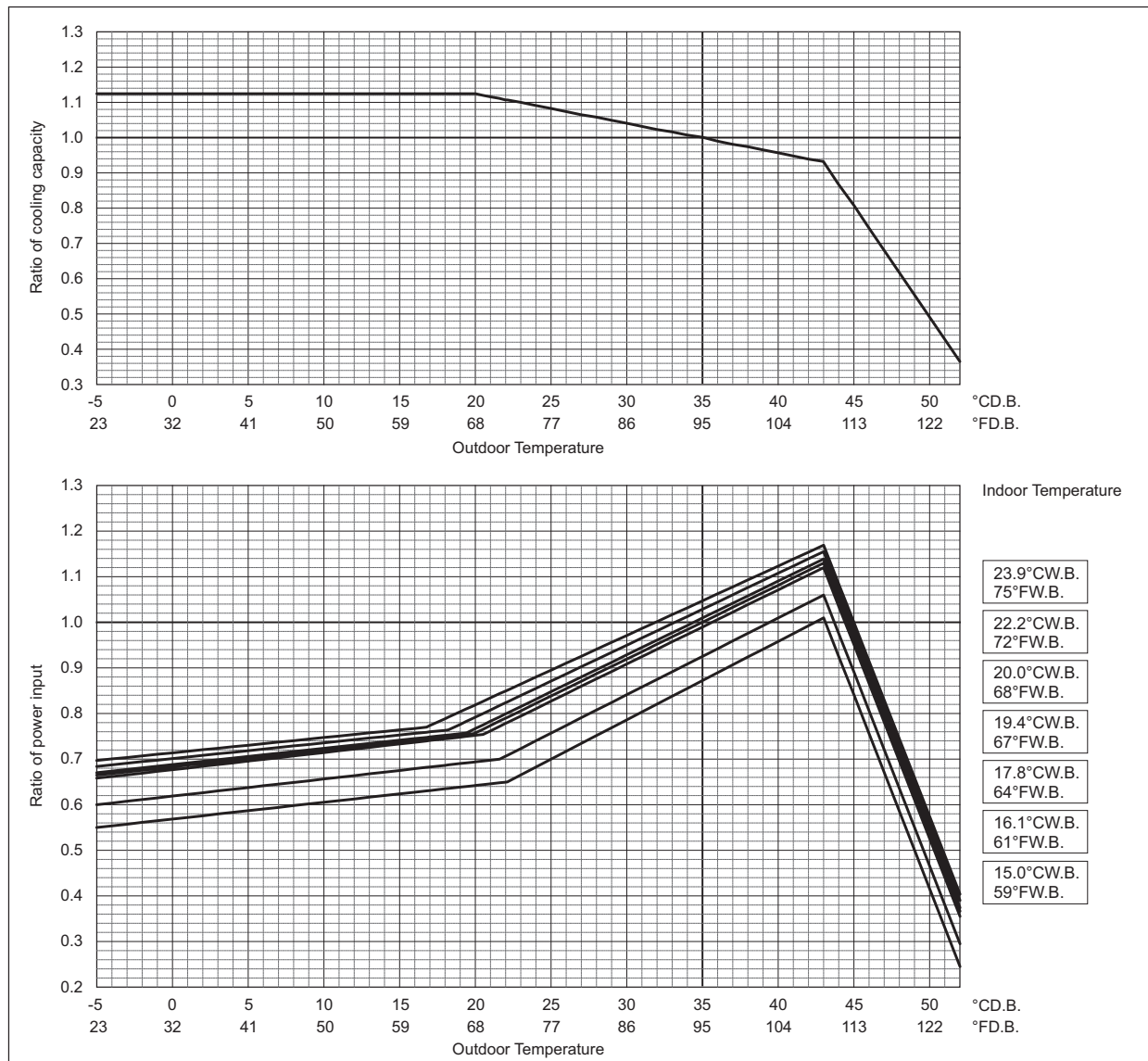


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

9-3. Correction by Temperature (High Heating Performance). cont.

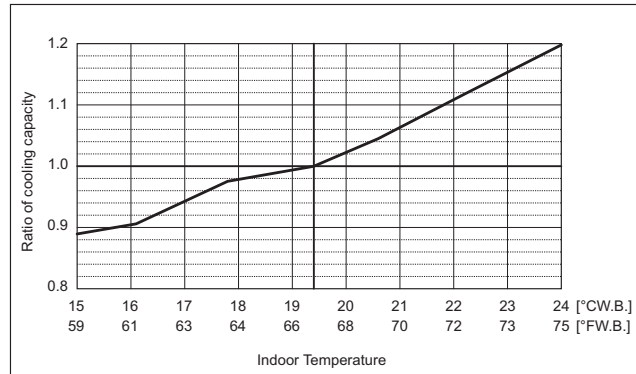
9-3-1. Cooling Capacity

PUHY-		P144TSLMU/YSLMU		P168TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	144,000		168,000	
	kW	42.2		49.2	
Input	kW	10.09		12.56	
Rated cooling capacity	BTU/h	137,000		161,000	
	kW	40.2		47.2	
Input	kW	8.92	9.69	11.03	12.11

PUHY-		P192TSLMU/YSLMU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	192,000	
	kW	56.3	
Input	kW	14.23	
Rated cooling capacity	BTU/h	183,000	
	kW	53.6	
Input	kW	13.03	13.26

Indoor unit temperature correction

To be used to correct indoor unit capacity only

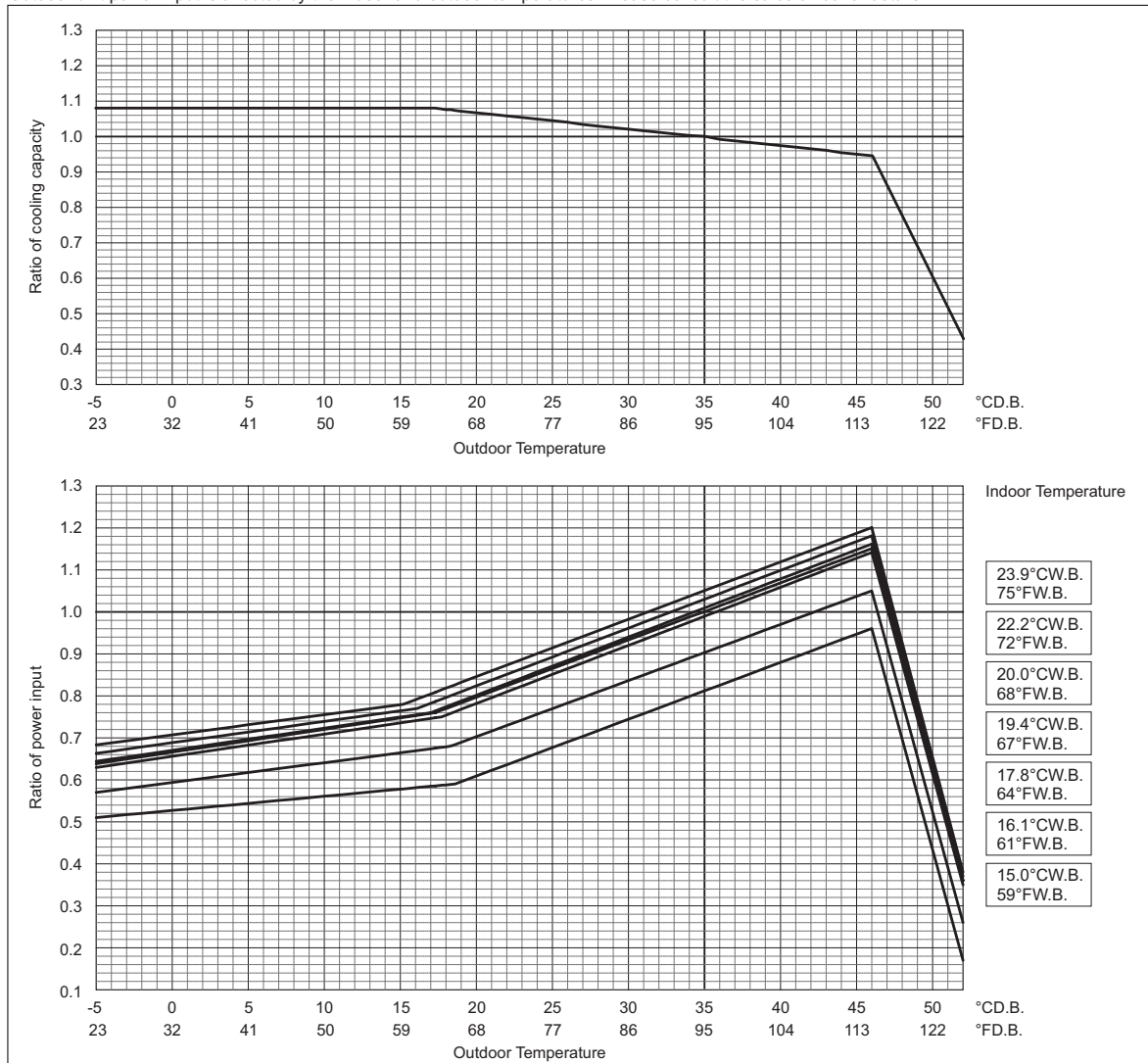


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

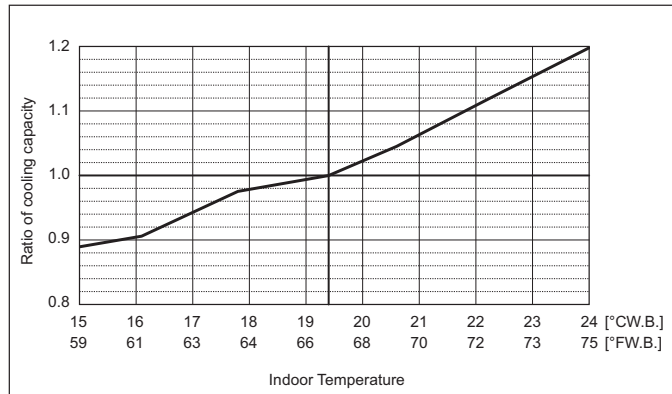
9-3. Correction by Temperature (High Heating Performance), cont.

9-3-1. Cooling Capacity

PUHY-		P216TSLMU/YSLMU		P240TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	216,000		240,000	
	kW	63.3		70.3	
	Input kW	16.43		18.36	
Rated cooling capacity	BTU/h	206,000		228,000	
	kW	60.4		66.8	
	Input kW	14.99	15.36	16.87	17.13

Indoor unit temperature correction

To be used to correct indoor unit capacity only

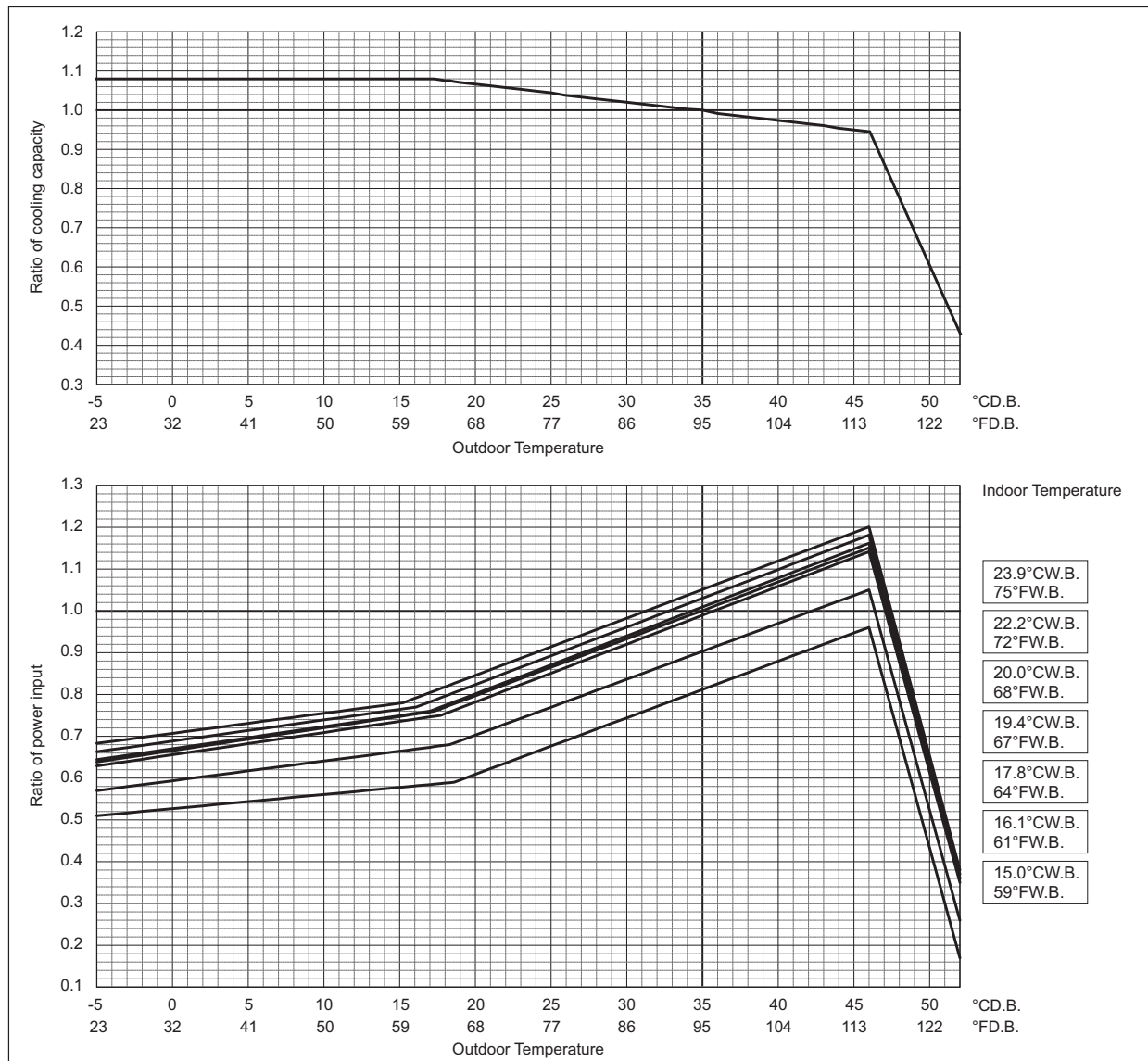


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

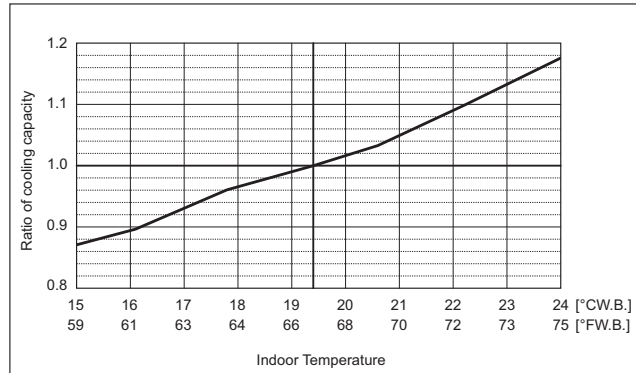
9-3. Correction by Temperature (High Heating Performance). cont.

9-3-1. Cooling Capacity

PUHY-		P264TSLMU/YSLMU		P288TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	264,000		288,000	
	kW	77.4		84.4	
	Input kW	19.61		21.83	
Rated cooling capacity	BTU/h	252,000		275,000	
	kW	73.9		80.6	
	Input kW	17.85	18.38	19.69	20.73

Indoor unit temperature correction

To be used to correct indoor unit capacity only

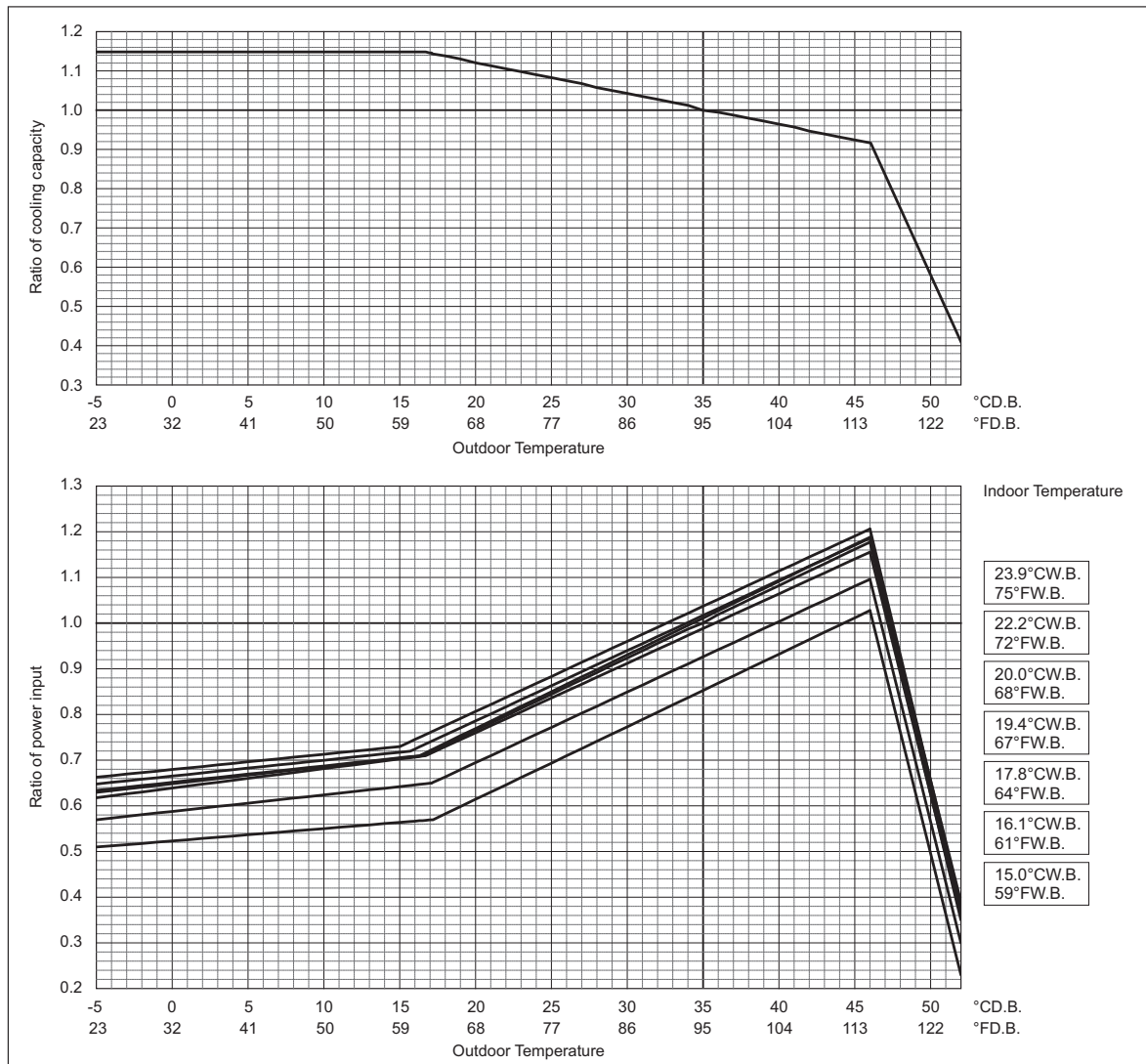


Outdoor unit temperature correction

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.



9. CAPACITY TABLES

9-3. Correction by Temperature (High Heating Performance), cont.

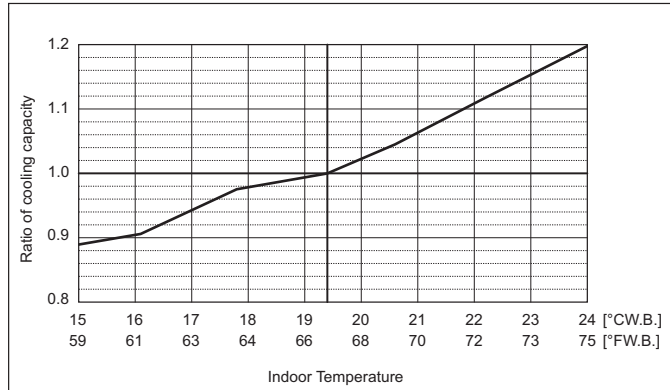
9-3-1. Cooling Capacity

PUHY-		P312TSLMU/YSLMU		P336TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	312,000		336,000	
	kW	91.4		98.5	
	Input	23.73		26.07	
Rated cooling capacity	BTU/h	297,000		320,000	
	kW	87.0		93.8	
	Input	21.48	22.47	23.34	24.69

PUHY-		P360TSLMU/YSLMU	
		Non-Ducted	Ducted
Nominal cooling capacity	BTU/h	360,000	
	kW	105.5	
	Input	27.94	
Rated cooling capacity	BTU/h	342,000	
	kW	100.2	
	Input	25.25	26.50

Indoor unit temperature correction

To be used to correct indoor unit capacity only

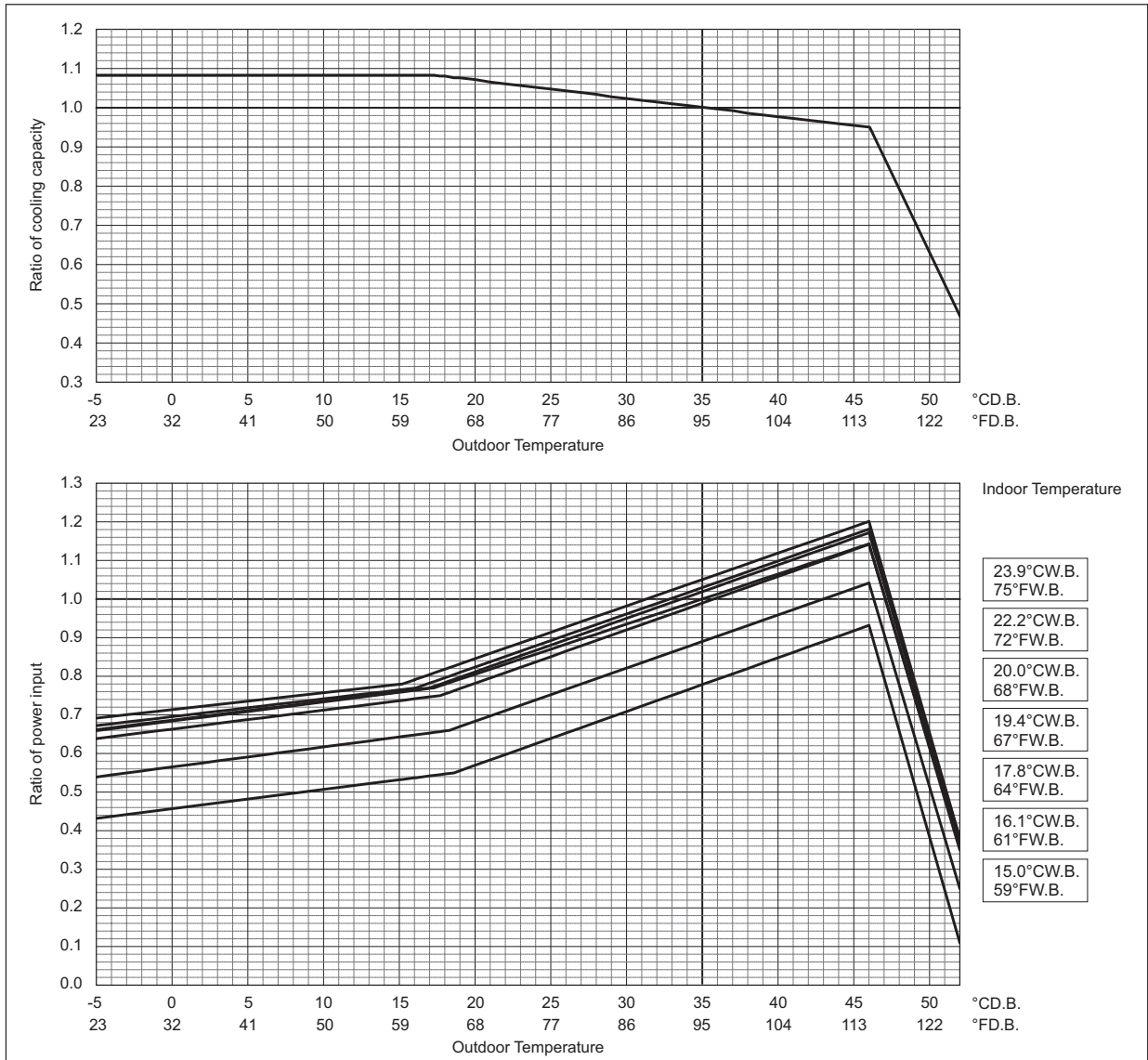


Outdoor unit temperature correction

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.



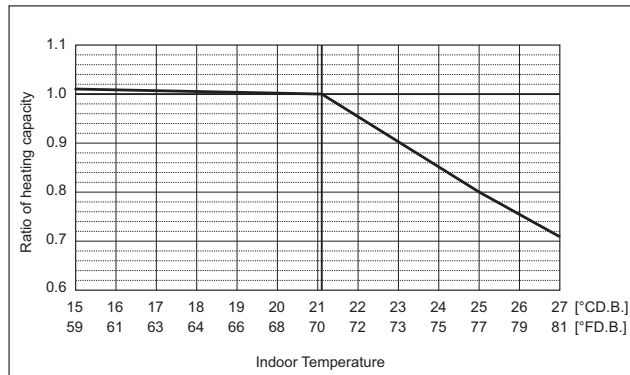
9. CAPACITY TABLES

9-3. Correction by Temperature (High Heating Performance). cont.

9-3-2. Heating Capacity

PUHY-		P72TLMU/YLMU		P96TLMU/YLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	80,000		108,000	
	kW	23.4		31.7	
	Input kW	5.48		7.65	
Rated Heating capacity	BTU/h	76,000		103,000	
	kW	22.3		30.2	
	Input kW	4.83	5.32	6.82	7.34

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

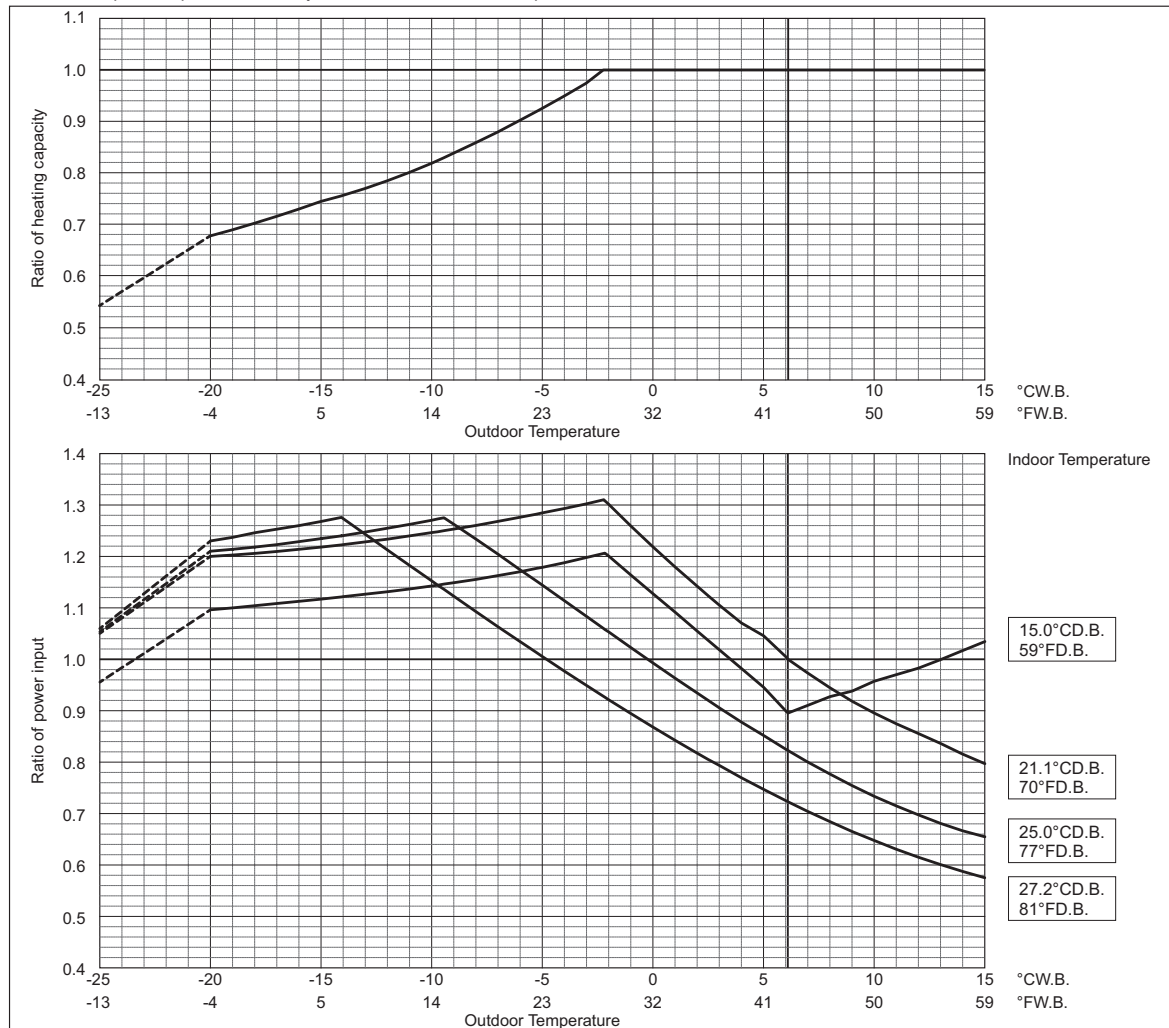


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

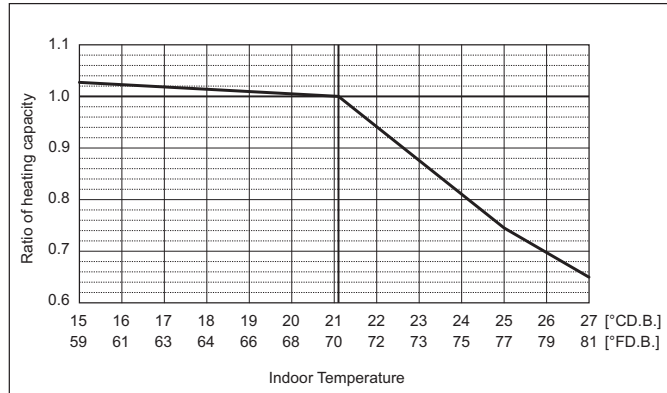
9-3. Correction by Temperature (High Heating Performance), cont.

9-3-2. Heating Capacity

PUHY-		P120TLMU/YLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	135,000	
	kW	39.6	
	Input	kW	
Rated Heating capacity	BTU/h	129,000	
	kW	37.8	
	Input	8.79	9.42

Indoor unit temperature correction

To be used to correct indoor unit capacity only

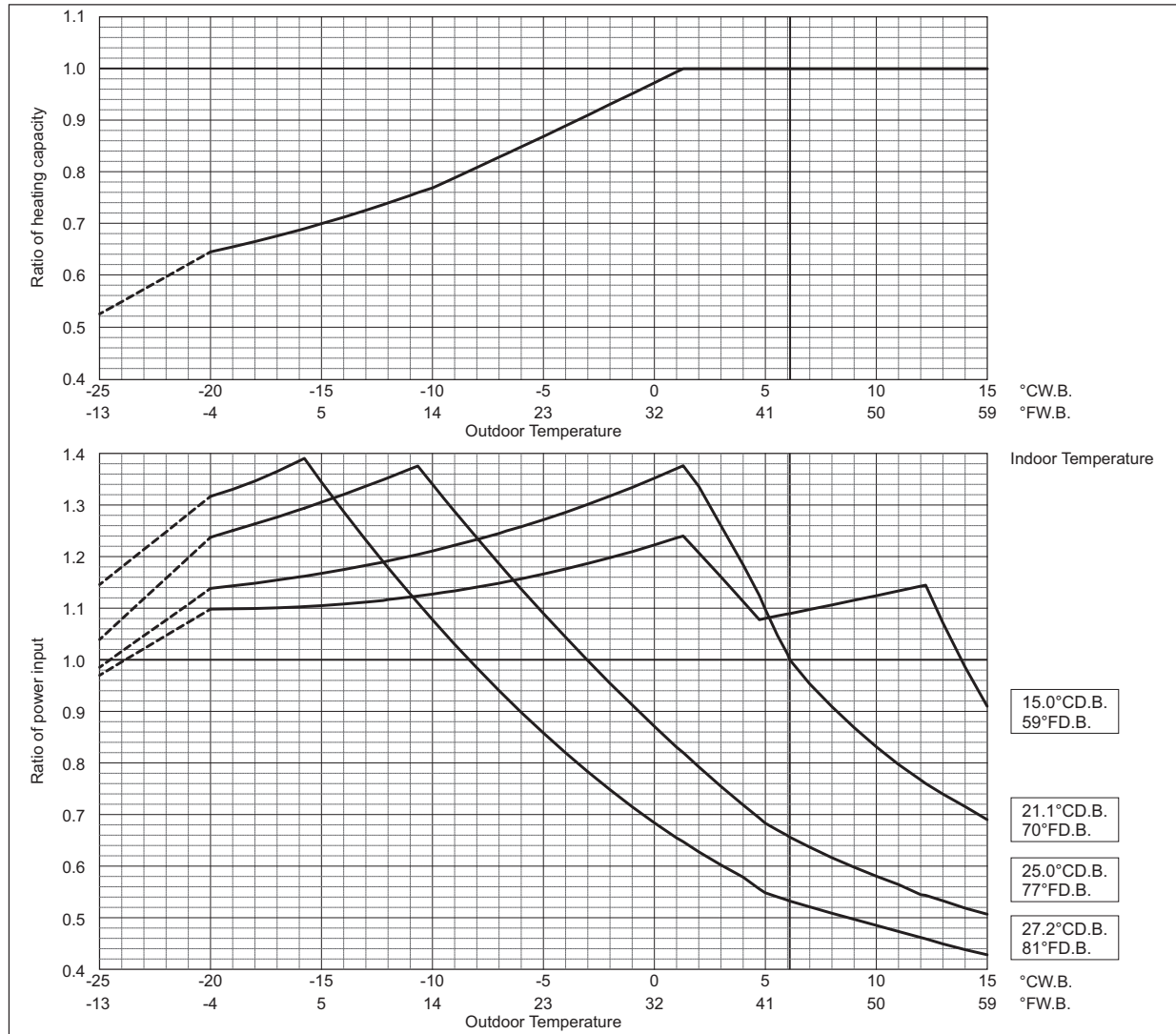


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

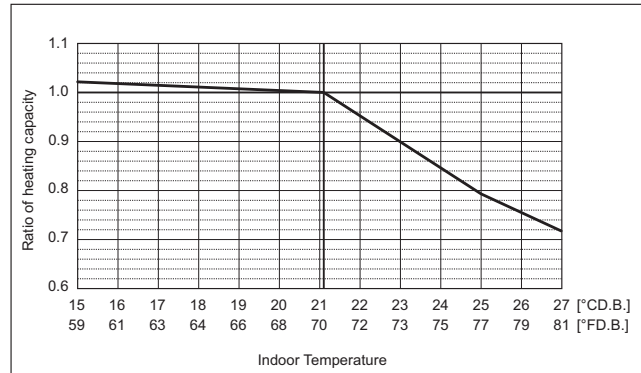
9-3. Correction by Temperature (High Heating Performance). cont.

9-3-2. Heating Capacity

PUHY-		P144TLMU/YLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	160,000	
	kW	46.9	
	Input	kW	
Rated Heating capacity	BTU/h	152,000	
	kW	44.5	
	Input	kW	11.17 11.61

Indoor unit temperature correction

To be used to correct indoor unit capacity only

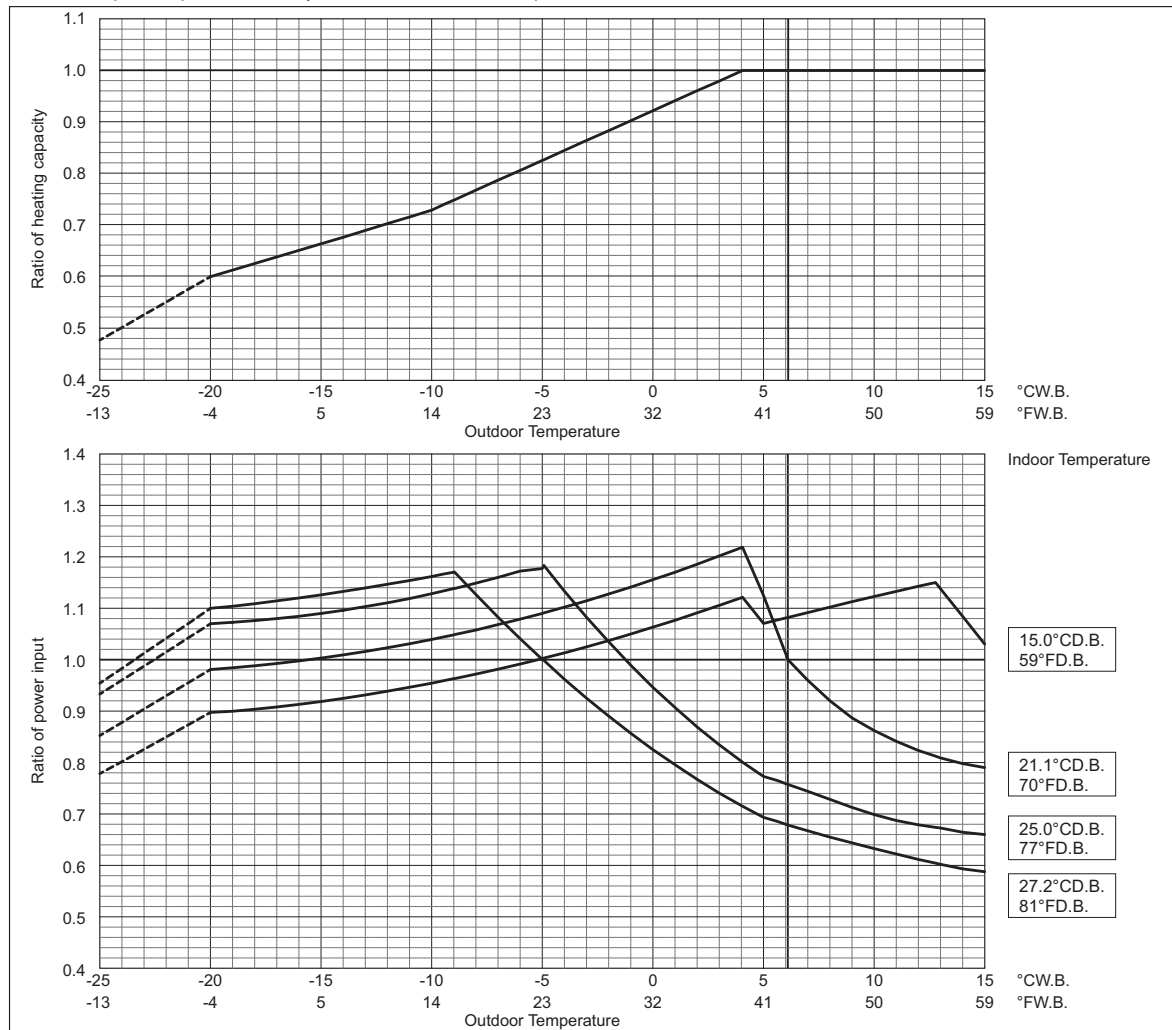


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

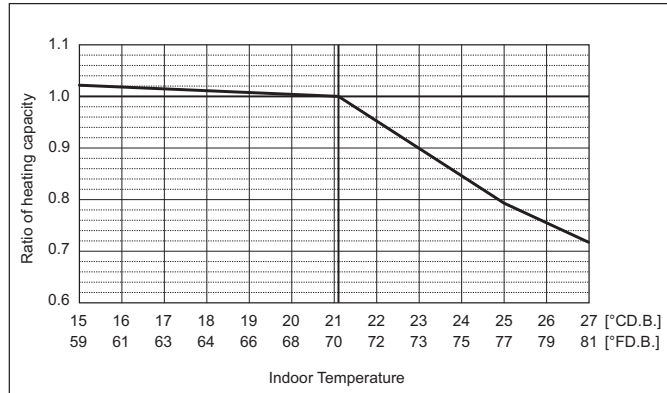
9-3. Correction by Temperature (High Heating Performance), cont.

9-3-2. Heating Capacity

PUHY-		P168TLMU/YLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	188,000	
	kW	55.1	
	Input kW	14.91	
Rated Heating capacity	BTU/h	179,000	
	kW	52.5	
	Input kW	13.58	14.04

Indoor unit temperature correction

To be used to correct indoor unit capacity only

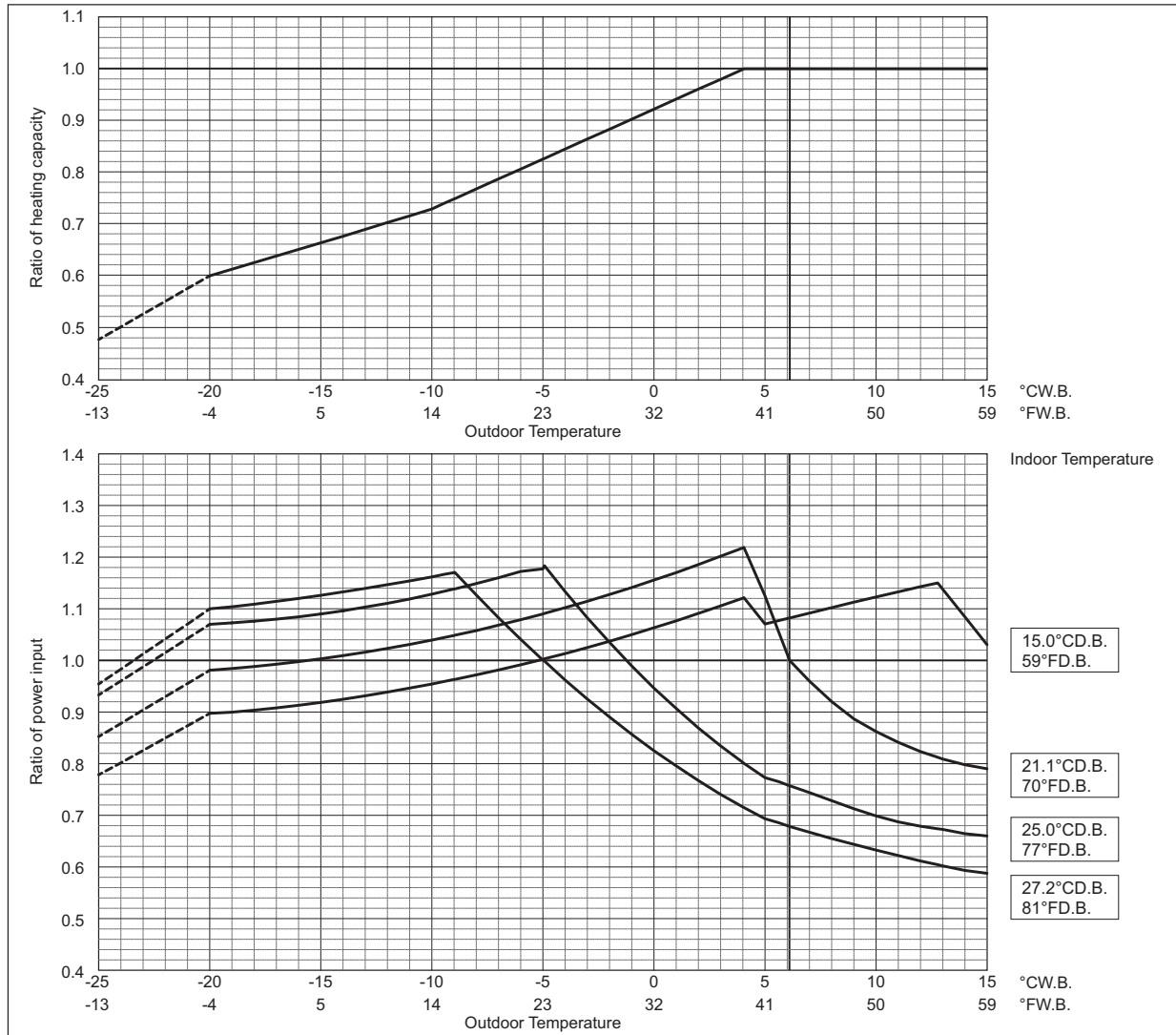


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

9-3. Correction by Temperature (High Heating Performance). cont.

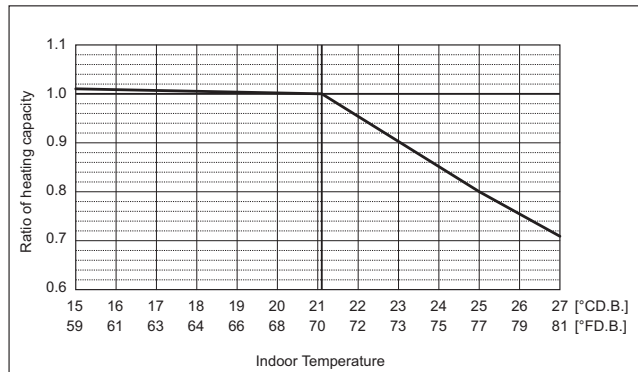
9-3-2. Heating Capacity

PUHY-		P144TSLMU/YSLMU		P168TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	160,000		188,000	
	kW	46.9		55.1	
	Input kW	11.88		14.60	
Rated Heating capacity	BTU/h	152,000		179,000	
	kW	44.5		52.5	
	Input kW	10.56	11.44	13.13	13.90

PUHY-		P192TSLMU/YSLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	215,000	
	kW	63.0	
	Input kW	16.97	
Rated Heating capacity	BTU/h	205,000	
	kW	60.1	
	Input kW	15.87	15.41

Indoor unit temperature correction

To be used to correct indoor unit capacity only

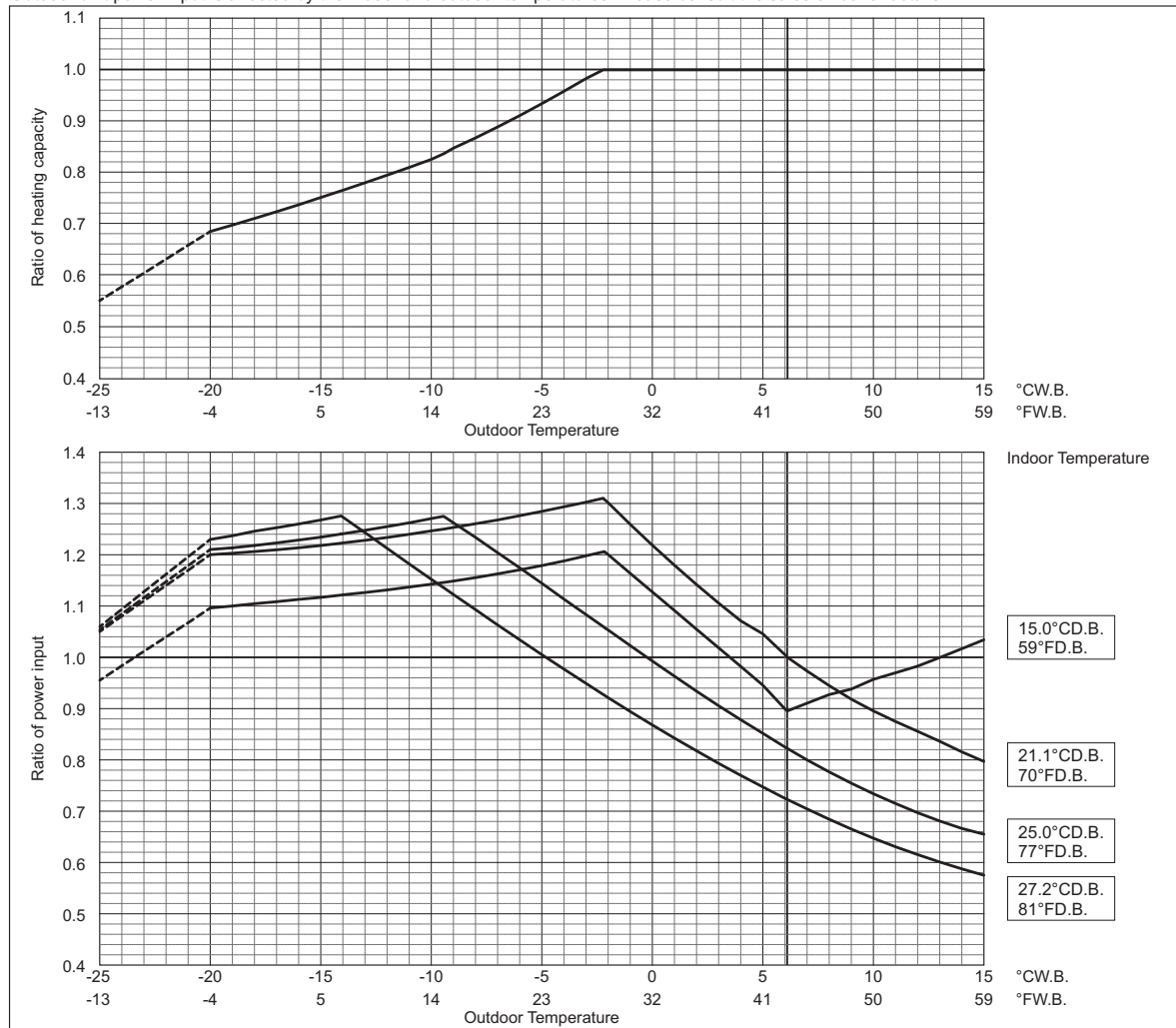


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

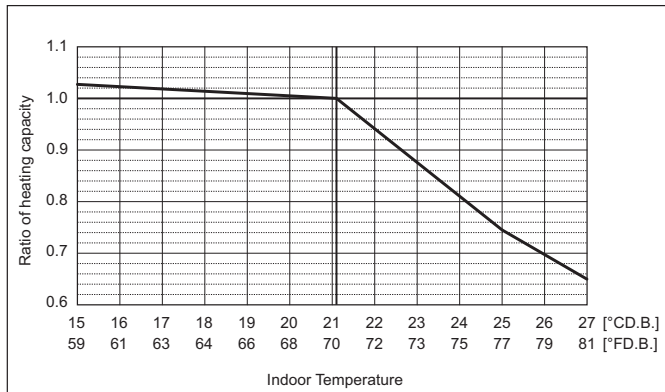
9-3. Correction by Temperature (High Heating Performance), cont.

9-3-2. Heating Capacity

PUHY-		P216TSLMU/YSLMU		P240TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	243,000		270,000	
	kW	71.2		79.1	
	Input kW	19.46		21.69	
Rated Heating capacity	BTU/h	232,000		258,000	
	kW	68.0		75.6	
	Input kW	18.30	17.73	20.19	19.98

Indoor unit temperature correction

To be used to correct indoor unit capacity only

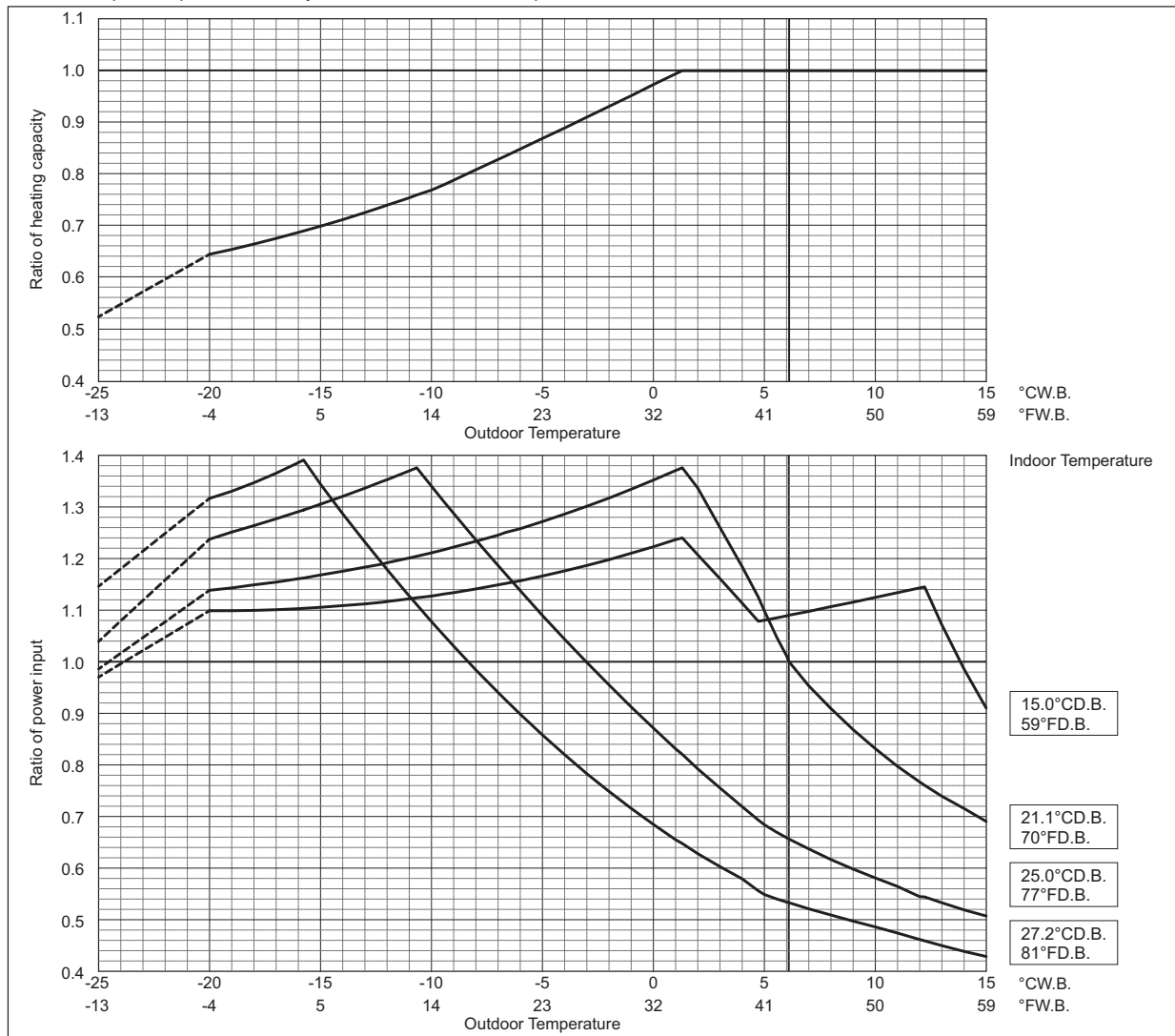


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

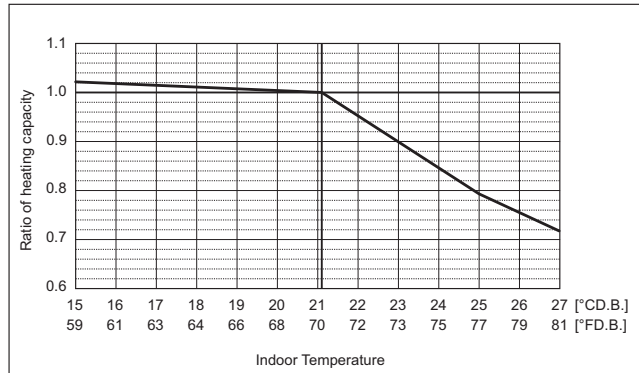
9-3. Correction by Temperature (High Heating Performance). cont.

9-3-2. Heating Capacity

PUHY-		P264TSLMU/YSLMU		P288TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	295,000		323,000	
	kW	86.5		94.7	
	Input	23.07		25.82	
Rated Heating capacity	BTU/h	281,000		308,000	
	kW	82.4		90.3	
	Input	21.52	21.20	23.91	24.21

Indoor unit temperature correction

To be used to correct indoor unit capacity only

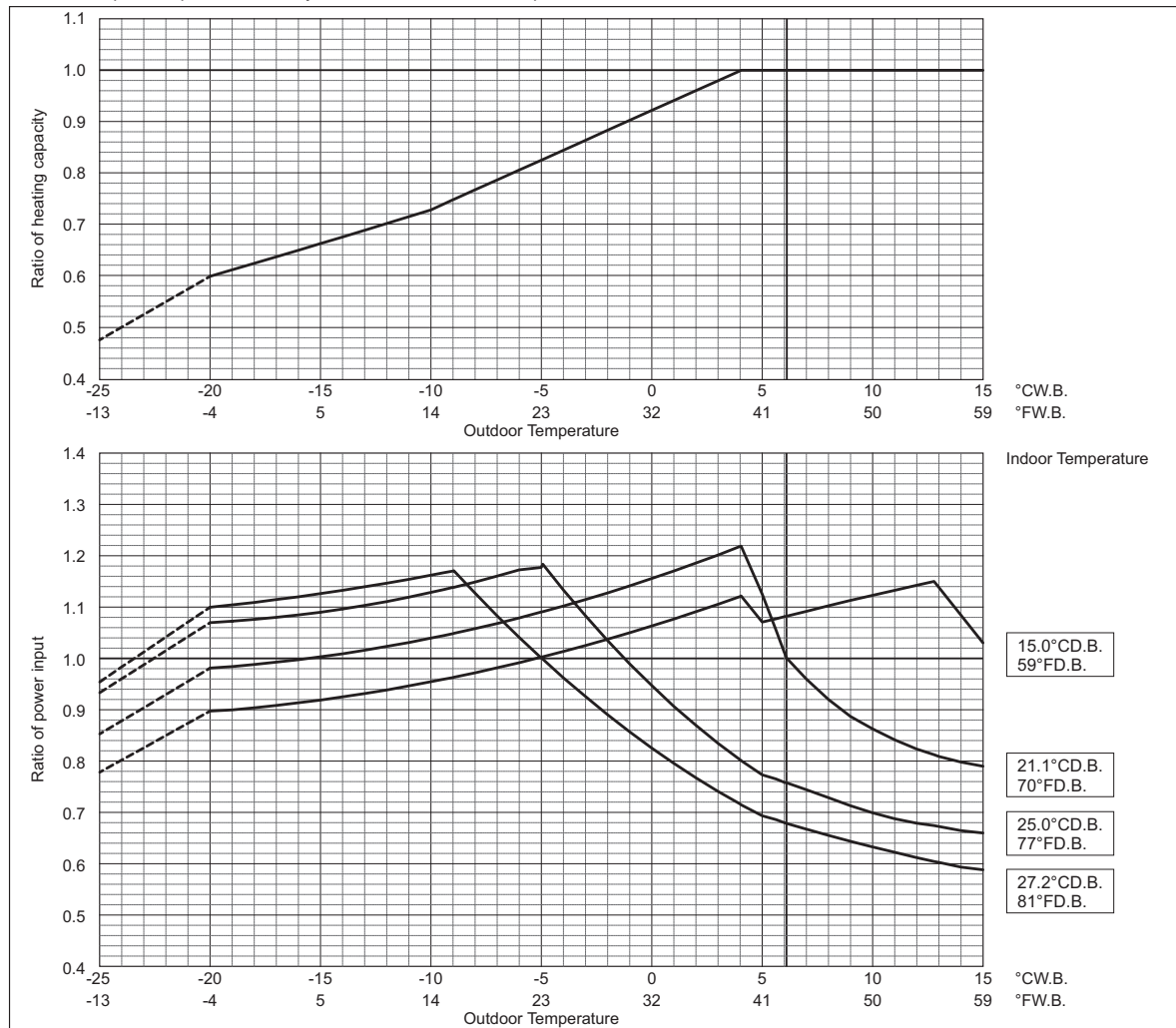


Outdoor unit temperature correction

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.



Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

9. CAPACITY TABLES

9-3. Correction by Temperature (High Heating Performance), cont.

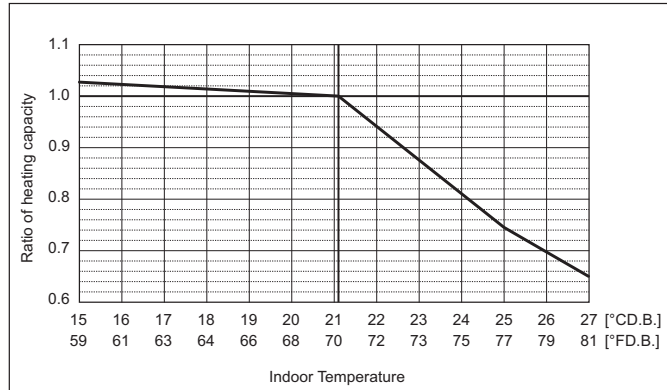
9-3-2. Heating Capacity

PUHY-		P312TSLMU/YSLMU		P336TSLMU/YSLMU	
		Non-Ducted	Ducted	Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	350,000		378,000	
	kW	102.6		110.8	
	Input kW	28.41		31.42	
Rated Heating capacity	BTU/h	334,000		361,000	
	kW	97.9		105.8	
	Input kW	26.13	26.41	29.37	28.74

PUHY-		P360TSLMU/YSLMU	
		Non-Ducted	Ducted
Nominal Heating capacity	BTU/h	405,000	
	kW	118.7	
	Input kW	33.83	
Rated Heating capacity	BTU/h	387,000	
	kW	113.4	
	Input kW	31.55	31.02

Indoor unit temperature correction

To be used to correct indoor unit capacity only

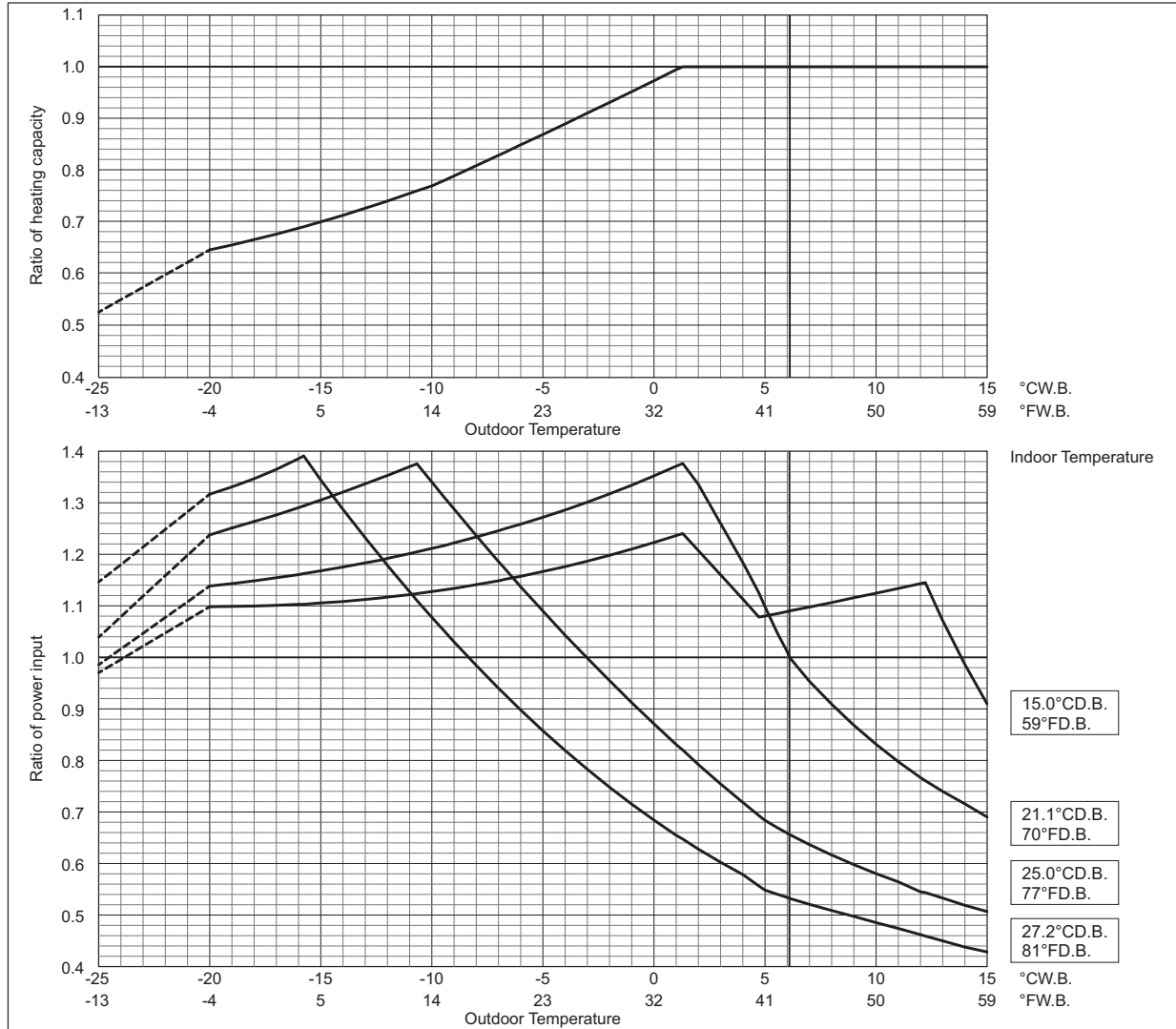


Outdoor unit temperature correction

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.



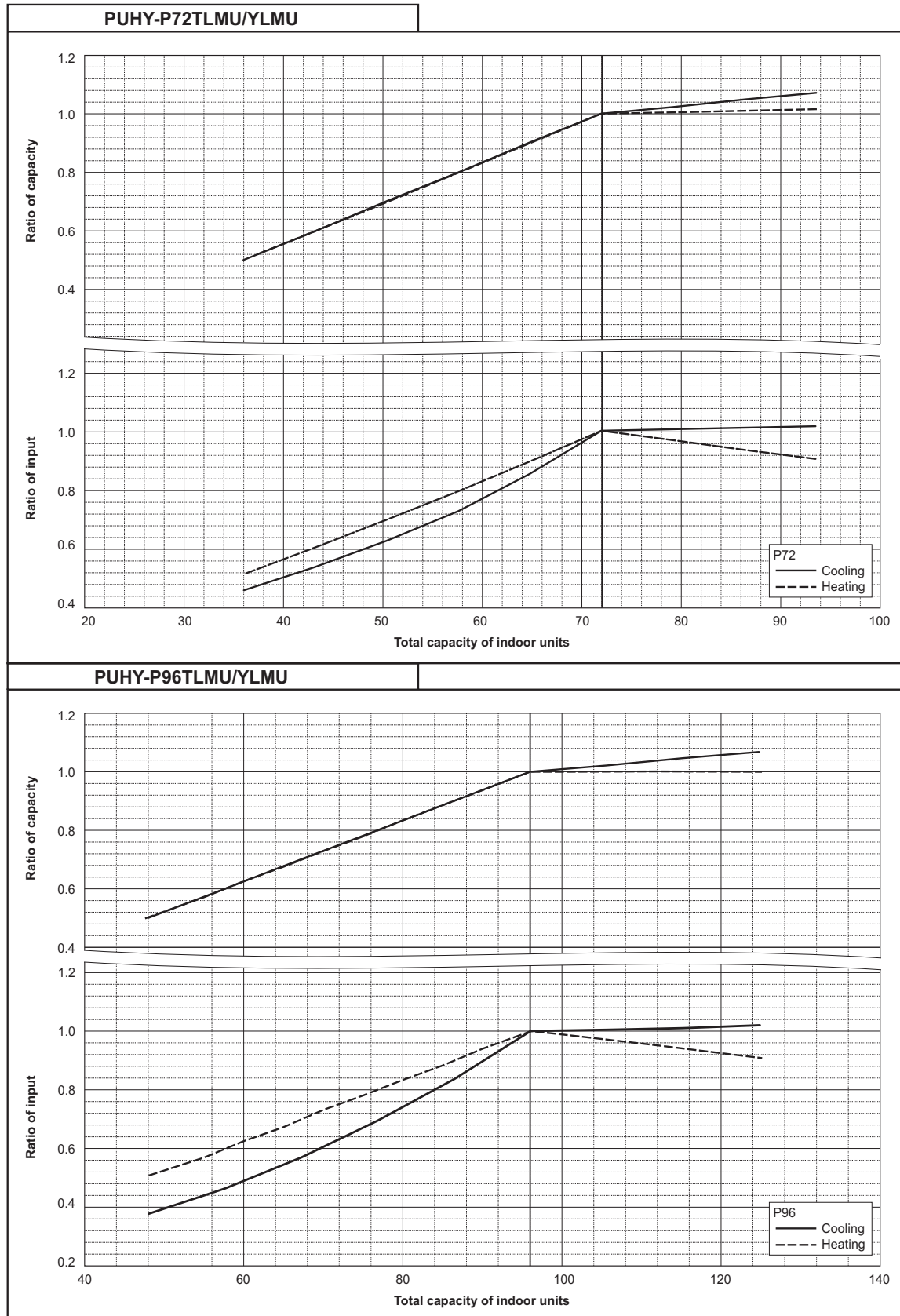
Values in the heating temperature correction diagram in the range below -20°C (-4°F) are reference values and not guaranteed values. Do not use these reference values for selecting outdoor unit models.

When using the units at outdoor temperatures below -20°C (-4°F), install a backup heater.

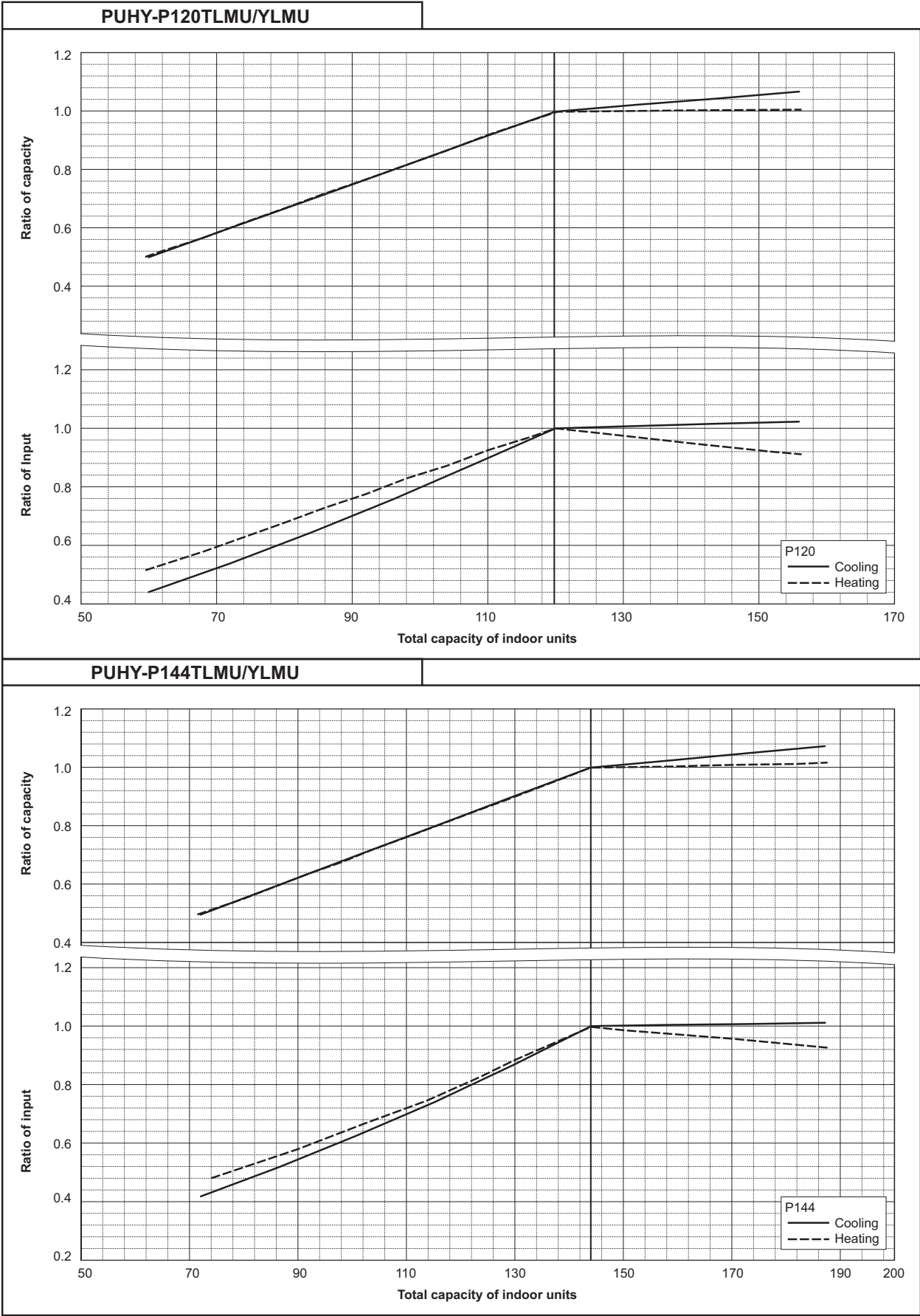
9. CAPACITY TABLES

9-4. Correction by Total Indoor

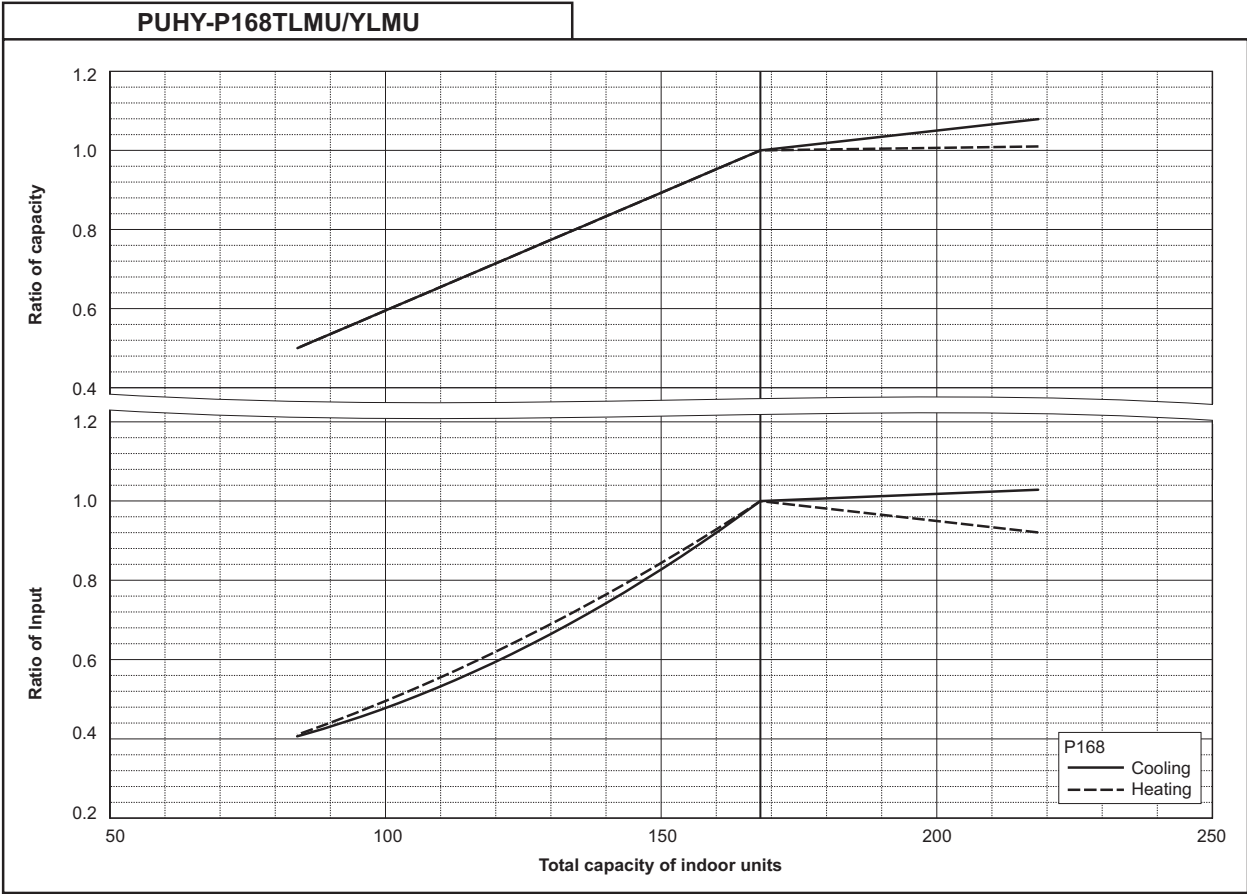
CITY MULTI system have different capacities and inputs when many combinations of indoor units with different total capacities are connected. Using following tables, the maximum capacity can be found to ensure the system is installed with enough capacity for a particular application.



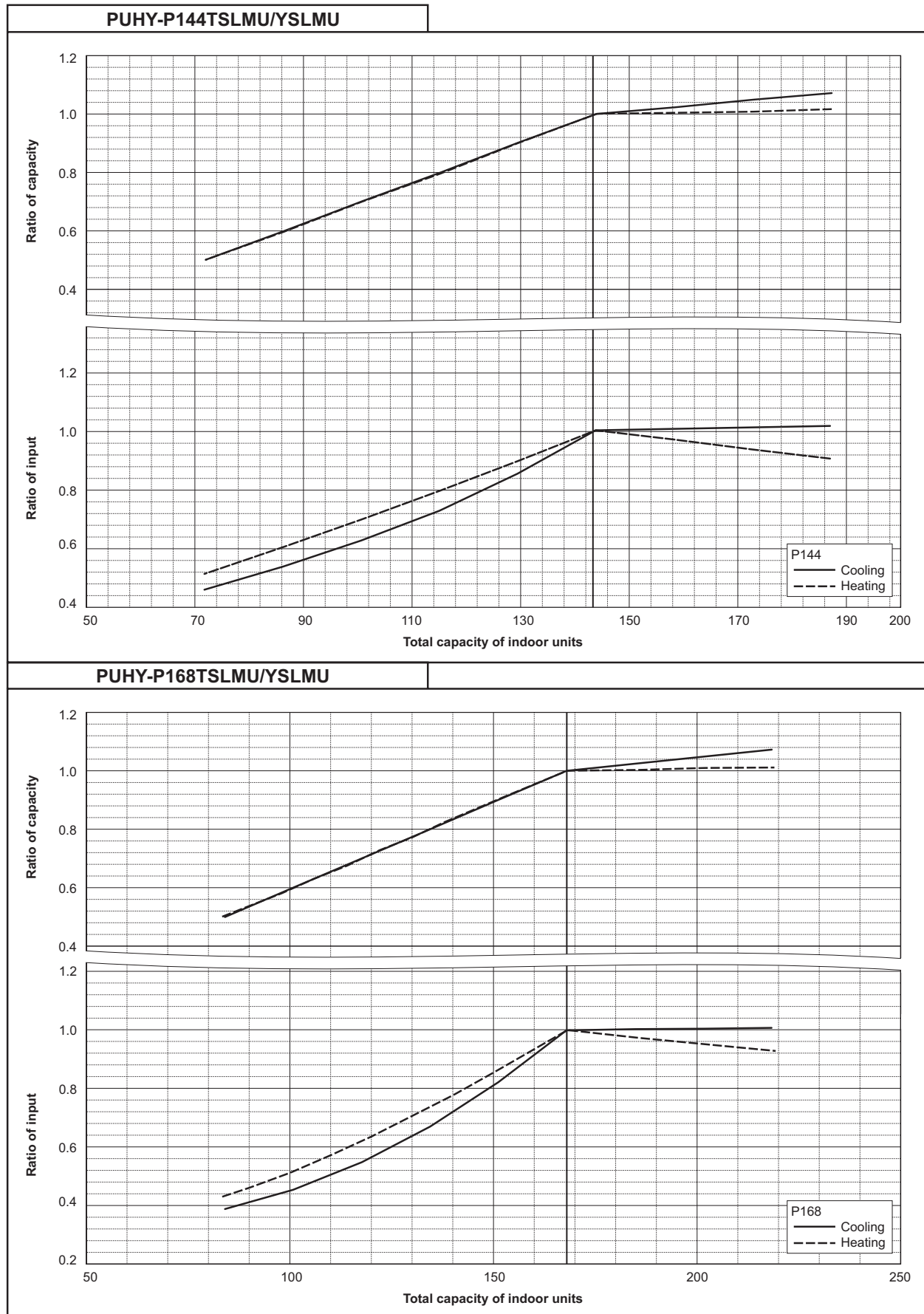
9. CAPACITY TABLES



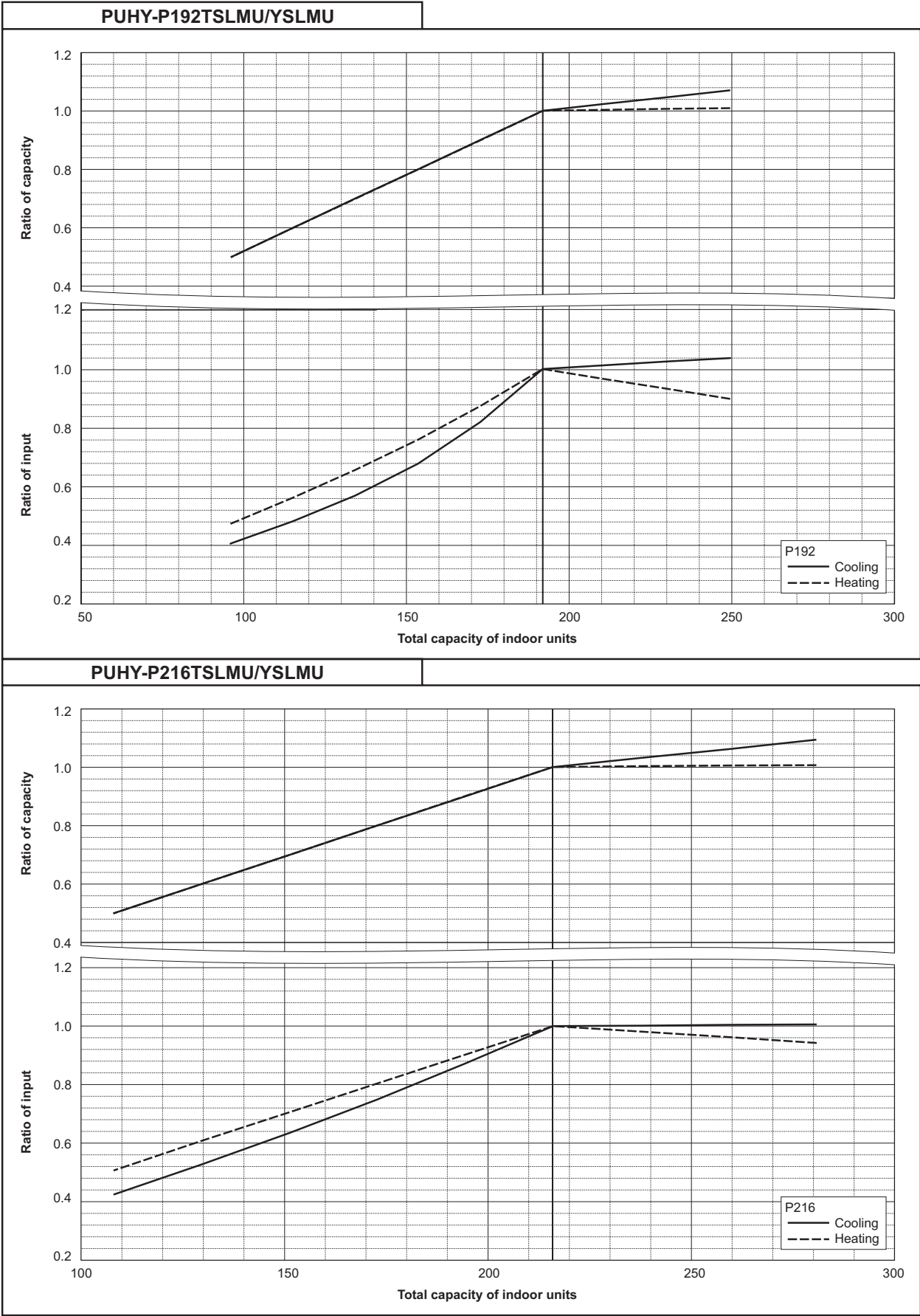
9. CAPACITY TABLES



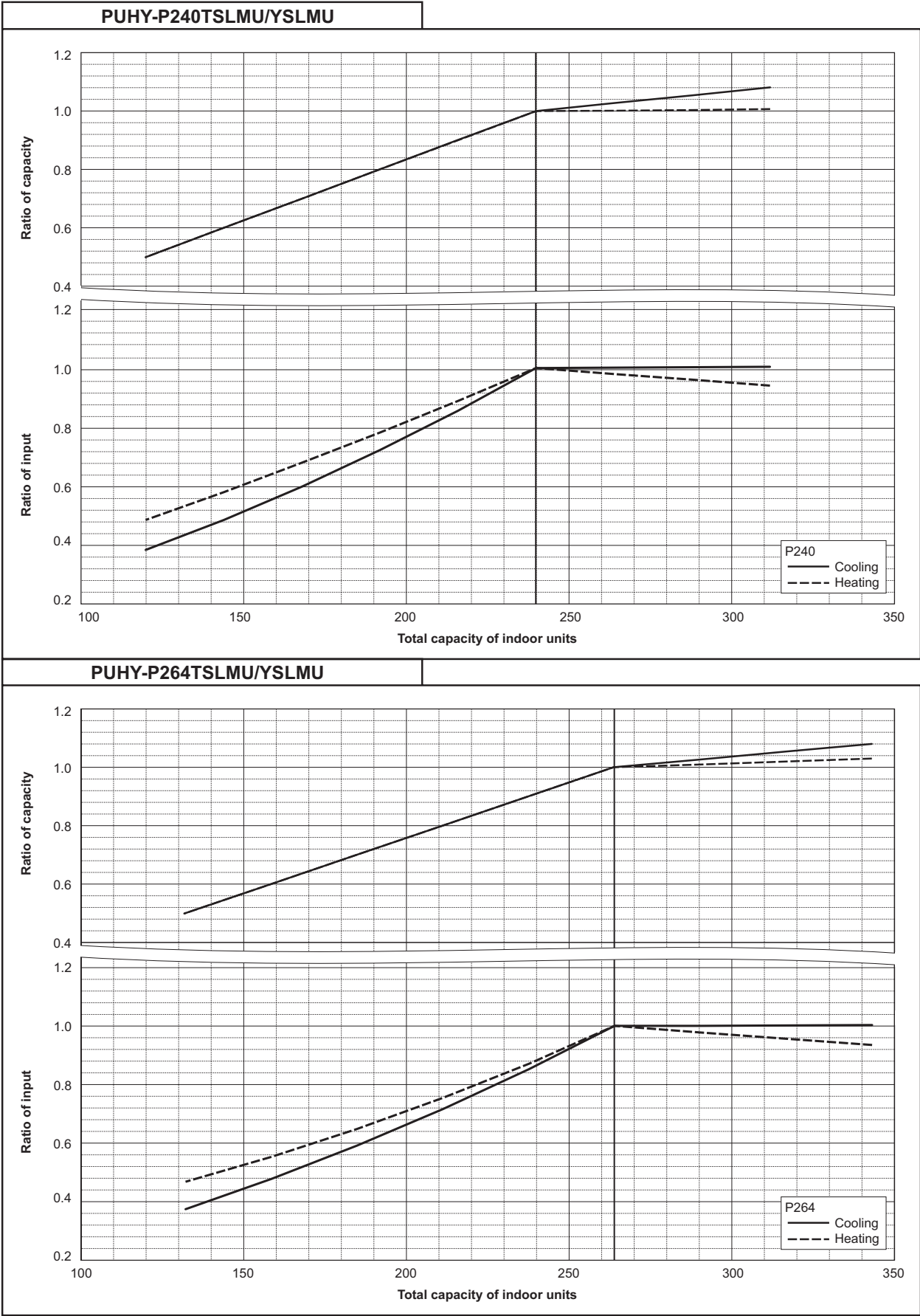
9. CAPACITY TABLES



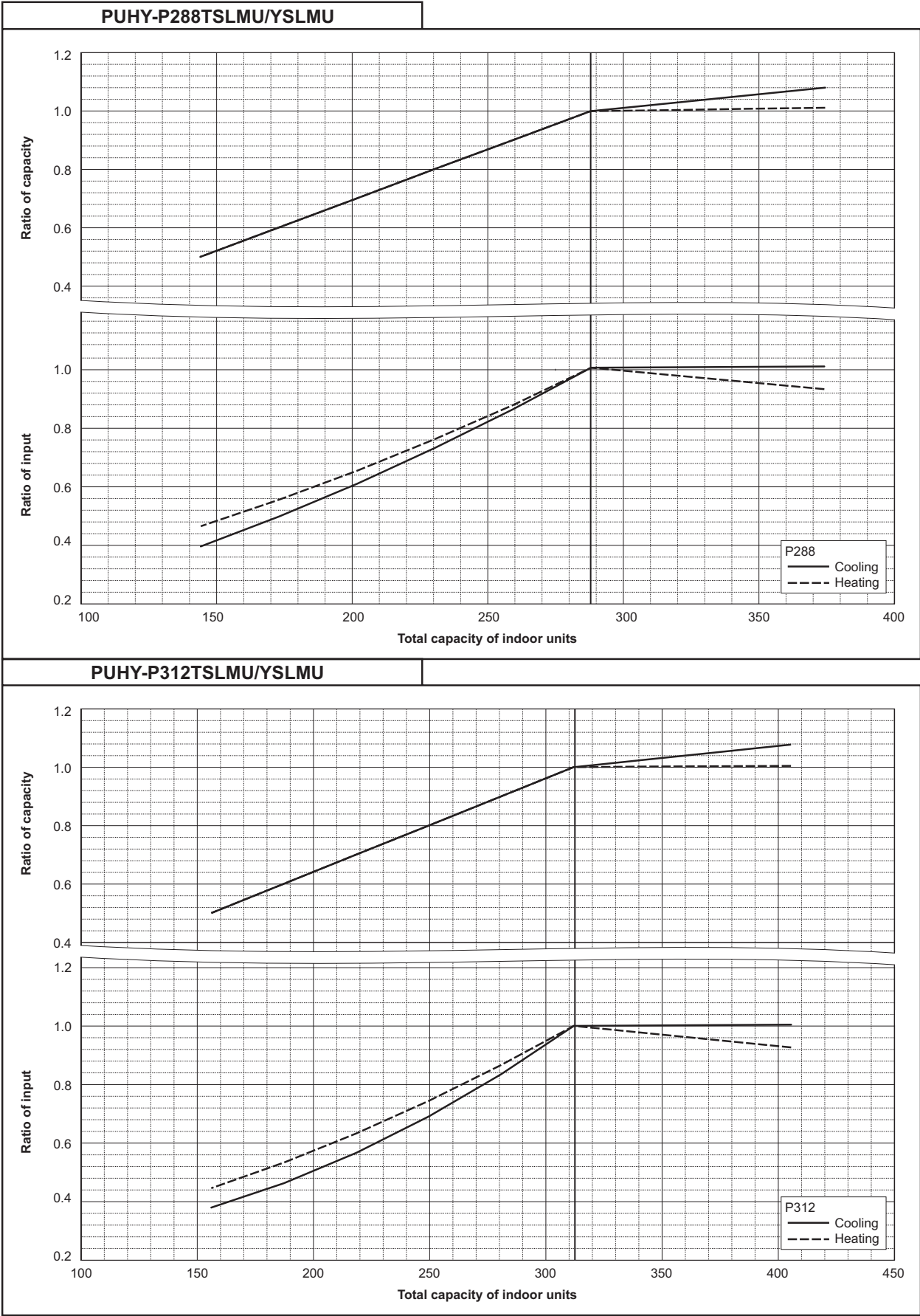
9. CAPACITY TABLES



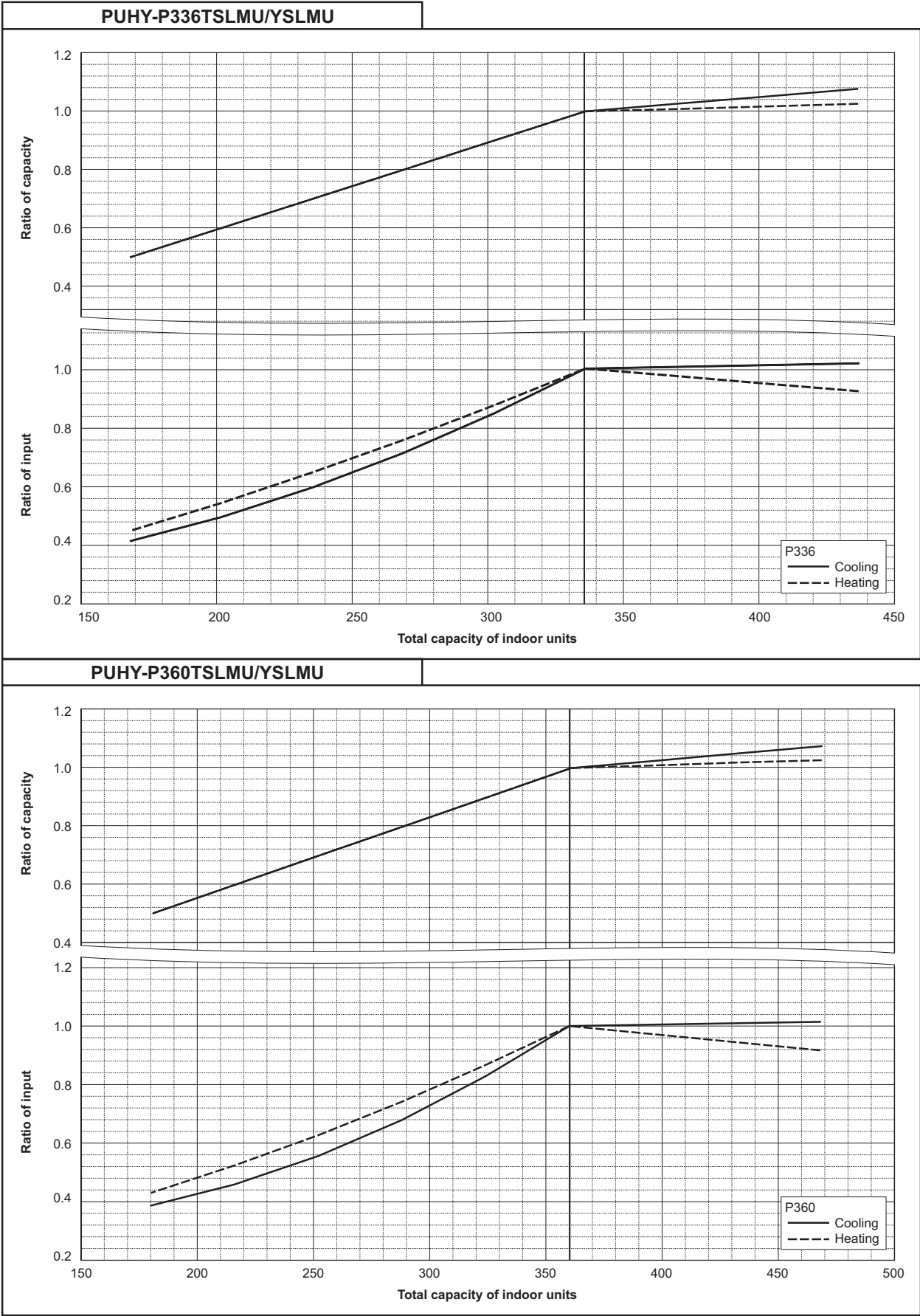
9. CAPACITY TABLES



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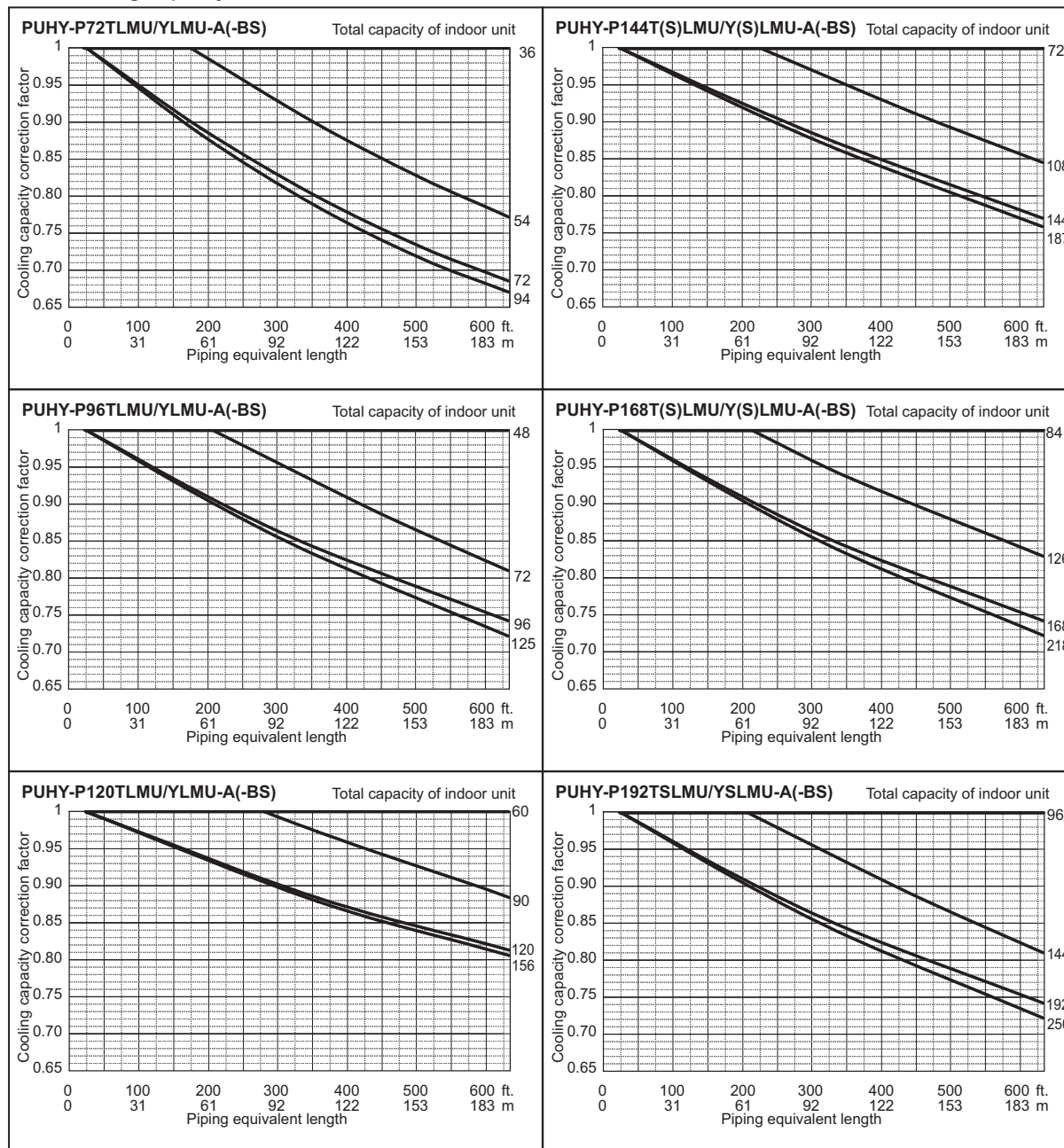


9. CAPACITY TABLES

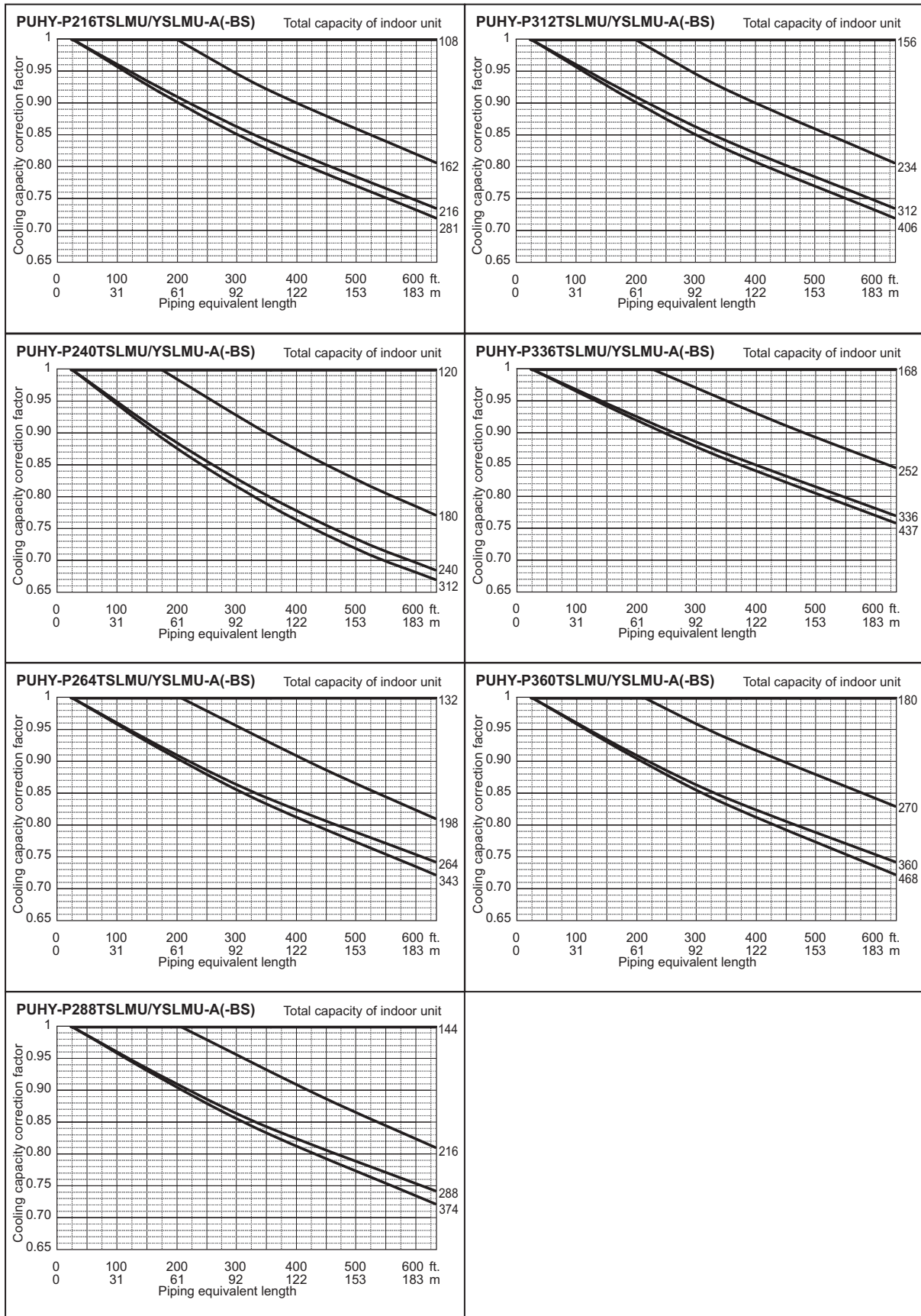
9-5. Correction by Refrigerant Piping Length

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 9-4-1 and 9-4-2, the capacity can be observed. 9-4-3 shows how to obtain the equivalent length of piping.

9-4-1. Cooling Capacity Correction



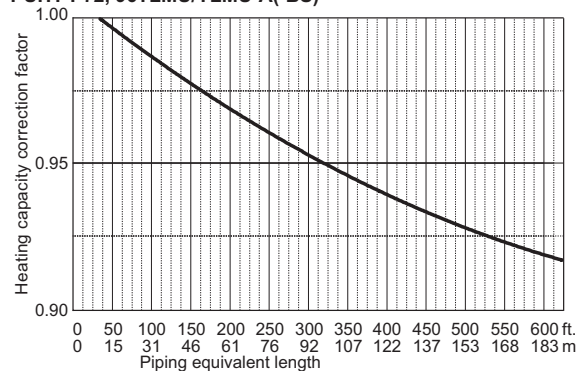
9. CAPACITY TABLES



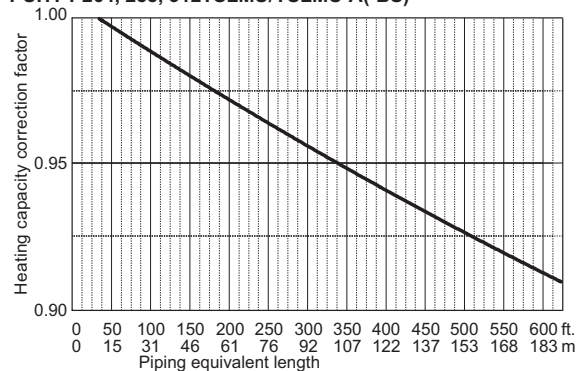
9. CAPACITY TABLES

9-4-2. Heating Capacity Correction

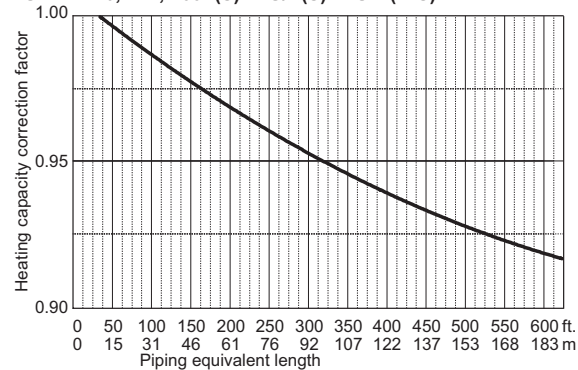
PUHY-P72, 96TLMU/YLMU-A(-BS)



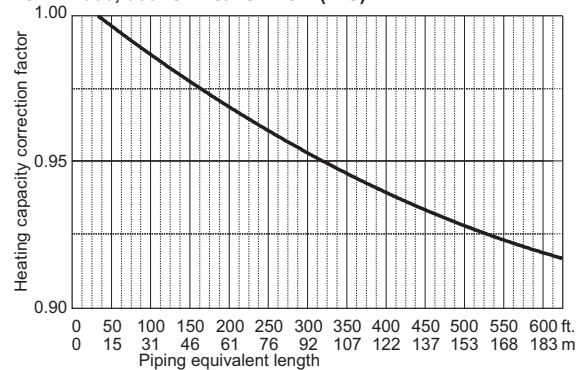
PUHY-P264, 288, 312TSLMU/YSLMU-A(-BS)



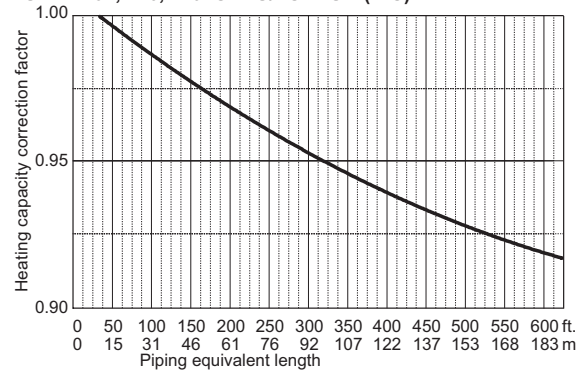
PUHY-P120, 144, 168T(S)LMU/Y(S)LMU-A(-BS)



PUHY-P336, 360TSLMU/YSLMU-A(-BS)



PUHY-P192, 216, 240TSLMU/YSLMU-A(-BS)



9. CAPACITY TABLES

9-4-3. How to obtain the equivalent piping length

(1) PUHY-P72, 96, 120, 144, 168, 192, 216, 240T(S)LMU/Y(S)LMU

Equivalent length = (Actual piping length to the farthest indoor unit) + (1.64 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]

(2) PUHY-P264, 288, 312TSLMU/YSLMU

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]

(3) PUHY-P336, 360TSLMU/YSLMU

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]

9-6. 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.

Correction Factor at Frost and Defrost

Outdoor inlet air temp. °C	6	4	2	1	0	-2	-4	-6	-8	-10	-20
Outdoor inlet air temp. °F	43	39	36	34	32	28	25	21	18	14	-4
PUHY-P72TLMU-A (-BS)	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.95	0.95	0.95	0.95
PUHY-P96TLMU-A (-BS)	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.95	0.95	0.95	0.95
PUHY-P120TLMU-A (-BS)	1.00	0.93	0.82	0.80	0.82	0.86	0.90	0.90	0.95	0.95	0.95
PUHY-P144TLMU-A (-BS)	1.00	0.93	0.82	0.80	0.82	0.86	0.90	0.90	0.95	0.95	0.95
PUHY-P168TLMU-A (-BS)	1.00	0.93	0.82	0.80	0.82	0.86	0.90	0.90	0.95	0.95	0.95
PUHY-P144TSLMU-A (-BS)	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.95	0.95	0.95	0.95
PUHY-P168TSLMU-A (-BS)	1.00	0.98	0.89	0.87	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P192TSLMU-A (-BS)	1.00	0.98	0.89	0.86	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P216TSLMU-A (-BS)	1.00	0.94	0.87	0.86	0.87	0.88	0.90	0.90	0.93	0.95	0.95
PUHY-P240TSLMU-A (-BS)	1.00	0.94	0.84	0.86	0.87	0.88	0.90	0.90	0.93	0.95	0.95
PUHY-P264TSLMU-A (-BS)	1.00	0.98	0.89	0.88	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P288TSLMU-A (-BS)	1.00	0.98	0.89	0.88	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P312TSLMU-A (-BS)	1.00	0.98	0.89	0.88	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P336TSLMU-A (-BS)	1.00	0.94	0.87	0.86	0.87	0.88	0.90	0.90	0.93	0.95	0.95
PUHY-P360TSLMU-A (-BS)	1.00	0.94	0.87	0.86	0.87	0.88	0.90	0.90	0.93	0.95	0.95
PUHY-P72YLMU-A (-BS)	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.95	0.95	0.95	0.95
PUHY-P96YLMU-A (-BS)	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.95	0.95	0.95	0.95
PUHY-P120YLMU-A (-BS)	1.00	0.93	0.82	0.80	0.82	0.86	0.90	0.90	0.95	0.95	0.95
PUHY-P144YLMU-A (-BS)	1.00	0.93	0.82	0.80	0.82	0.86	0.90	0.90	0.95	0.95	0.95
PUHY-P168YLMU-A (-BS)	1.00	0.93	0.82	0.80	0.82	0.86	0.90	0.90	0.95	0.95	0.95
PUHY-P144YSLMU-A (-BS)	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.95	0.95	0.95	0.95
PUHY-P168YSLMU-A (-BS)	1.00	0.98	0.89	0.87	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P192YSLMU-A (-BS)	1.00	0.98	0.89	0.86	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P216YSLMU-A (-BS)	1.00	0.94	0.87	0.86	0.87	0.88	0.90	0.90	0.93	0.95	0.95
PUHY-P240YSLMU-A (-BS)	1.00	0.94	0.84	0.86	0.87	0.88	0.90	0.90	0.93	0.95	0.95
PUHY-P264YSLMU-A (-BS)	1.00	0.98	0.89	0.88	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P288YSLMU-A (-BS)	1.00	0.98	0.89	0.88	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P312YSLMU-A (-BS)	1.00	0.98	0.89	0.88	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY-P336YSLMU-A (-BS)	1.00	0.94	0.87	0.86	0.87	0.88	0.90	0.90	0.93	0.95	0.95
PUHY-P360YSLMU-A (-BS)	1.00	0.94	0.87	0.86	0.87	0.88	0.90	0.90	0.93	0.95	0.95

* The correction factors in the table above are used for a full-load and additional capacity.

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 additional capacity: K_0

Partial load factor: A

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

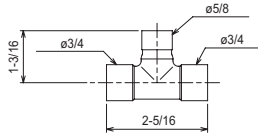
10. OPTIONAL PARTS

10-1. Branch Joints

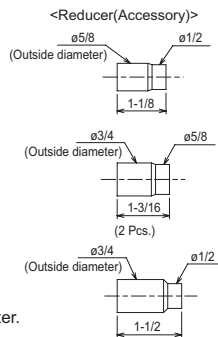
Piping for CITY MULTI systems can be easily performed with branch joints and headers provided by Mitsubishi Electric Corp. For PUHY-P-T(S)LMU/Y(S)LMU, the following sets of branch joints are available. Details for installing the branch joint sets are found in the System Design section or in the Branch Joint Installation Manual.

CMY-Y102SS-G2

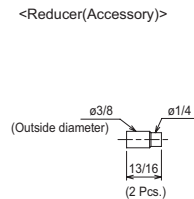
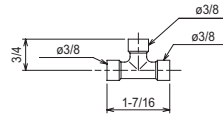
For Gas pipe:



*Pipe diameter is indicated by inside diameter.



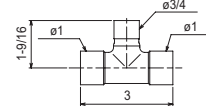
For Liquid pipe:



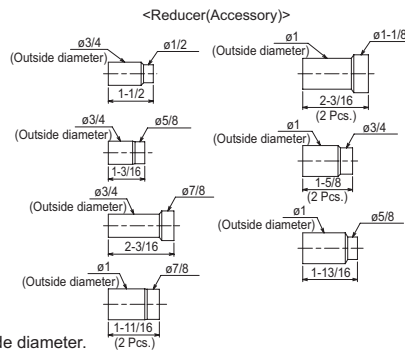
in.

CMY-Y102LS-G2

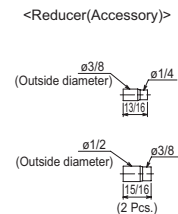
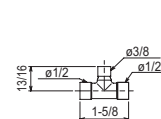
For Gas pipe:



*Pipe diameter is indicated by inside diameter.



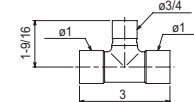
For Liquid pipe:



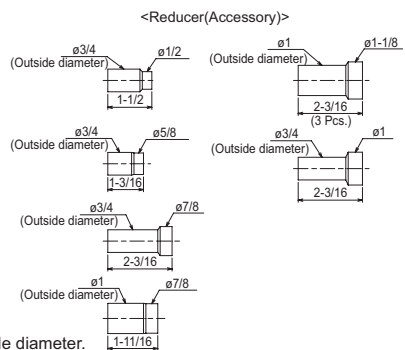
in.

CMY-Y202S-G2

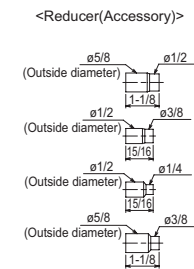
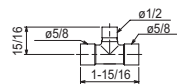
For Gas pipe:



*Pipe diameter is indicated by inside diameter.



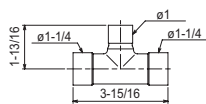
For Liquid pipe:



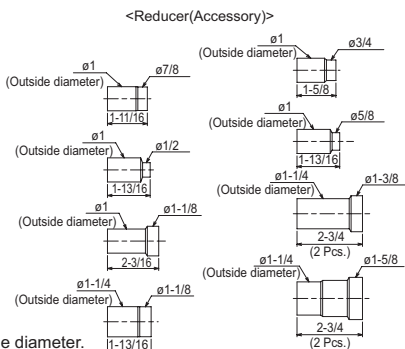
in.

CMY-Y302S-G2

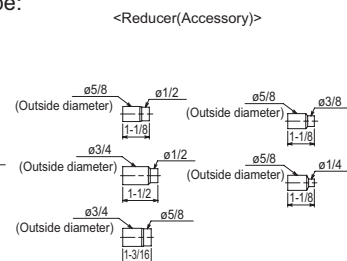
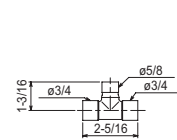
For Gas pipe:



*Pipe diameter is indicated by inside diameter.



For Liquid pipe:



in.

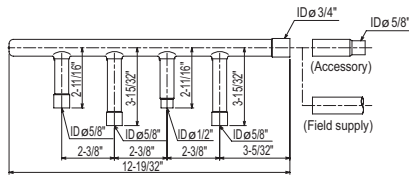
10. OPTIONAL PARTS

10-2. Headers

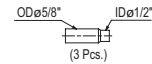
Piping for CITY MULTI systems can be easily performed with branch joints and headers provided by Mitsubishi Electric Corp. For PUHY-P-T(S)LMU/Y(S)LMU, the following sets of headers are available. Details for installing the headers are found in the System Design section or in the Outdoor Unit Installation Manual.

CMY-Y104C-G

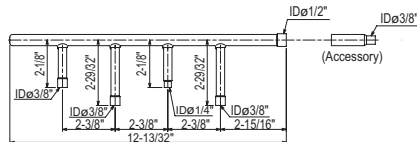
For gas pipe:



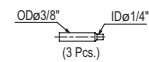
<Reducer(Accessory)>



For liquid pipe:



<Reducer(Accessory)>

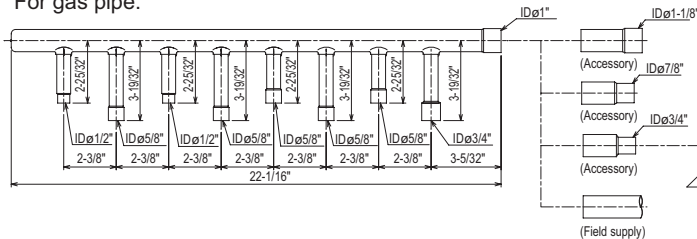


ID: Inner Diameter OD: Outer Diameter

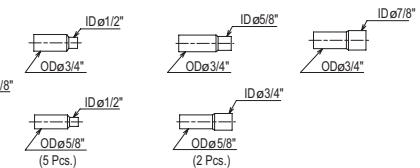
NOTE: Besides above mentioned accessories, caps for 1/4", 3/8", 1/2", 5/8" pipes (each diameter 1 piece) are included in the Header set.

CMY-Y108C-G

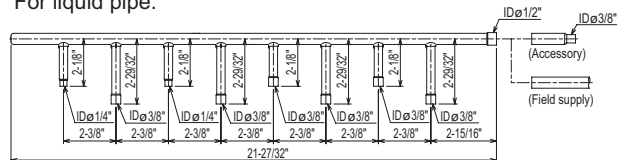
For gas pipe:



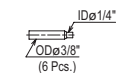
<Reducer(Accessory)>



For liquid pipe:



<Reducer(Accessory)>

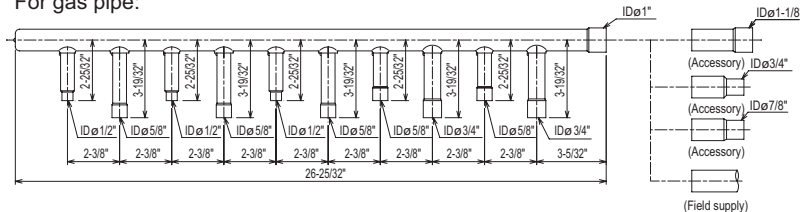


ID: Inner Diameter OD: Outer Diameter

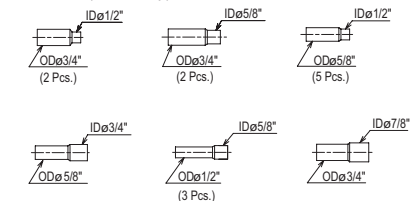
NOTE: Besides above mentioned accessories, caps for 1/4", 3/8", 1/2", 5/8" pipes (each diameter 2 pieces) and 1 cap for 3/4" pipe are included in the Header set.

CMY-Y1010C-G

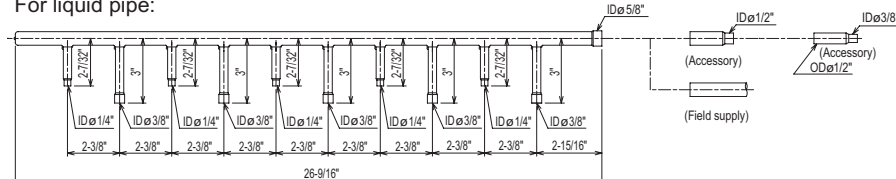
For gas pipe:



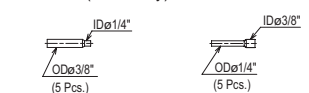
<Reducer(Accessory)>



For liquid pipe:



<Reducer(Accessory)>



ID: Inner Diameter OD: Outer Diameter

NOTE: Besides above mentioned accessories, caps for 1/4", 3/8", 1/2", 5/8" pipes (each diameter 2 pieces) and 1 cap for 3/4" pipe are included in the Header set.

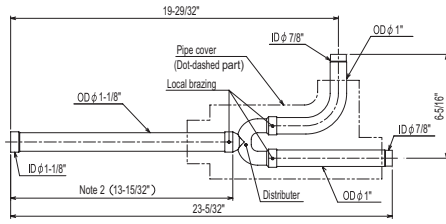
10. OPTIONAL PARTS

10-3. Twinning Kit

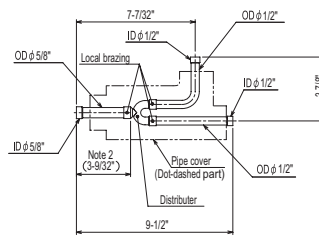
Twinning Kit is necessary for PUHY-P-TSLMU/YSLMU to combine the refrigerant flows of the PUHY-P-TLMU/YLMU units.

CMY-Y100CBK3

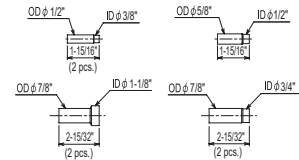
For Gas pipe:



For Liquid pipe:



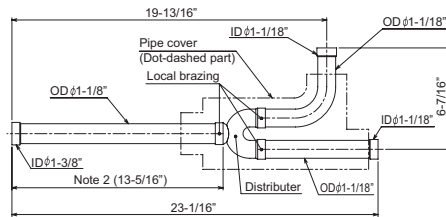
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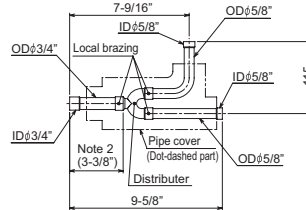
ID: Inner Diameter OD: Outer Diameter

CMY-Y200CBK2

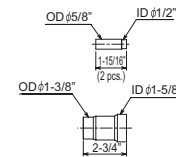
For Gas pipe:



For Liquid pipe:



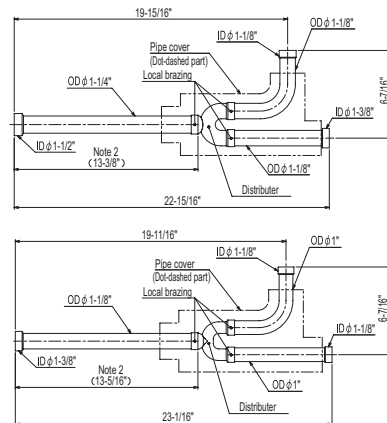
<Deformed pipe(Accessory)>



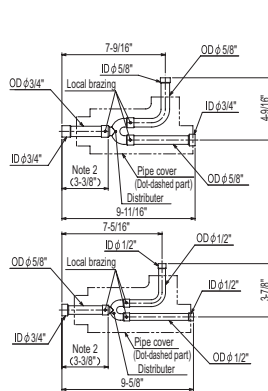
ID: Inner Diameter OD: Outer Diameter

CMY-Y300CBK2

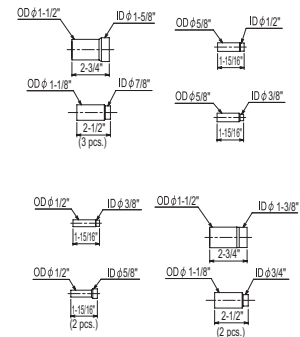
For Gas pipe:



For Liquid pipe:

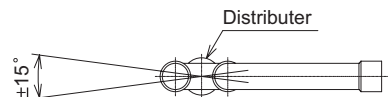


<Reducer(Accessory)>



ID: Inner Diameter OD: Outer Diameter

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



The angle of the branch pipe for high pressure is within $\pm 15^\circ$ against the horizontal plane.

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

10. OPTIONAL PARTS

10-4. Low Ambient Kit

Low Ambient Kit allows system to operate at 100% cooling capacity at reduced outdoor temperatures. Complete kit includes hood with control damper assembly and wind deflectors.

PUHY Y-Series Outdoor Units - Down to -10° F DB (-23° C DB) Outdoor Temp.

PURY R2-Series Outdoor Units - Down to -10° F DB (-23° C DB) Outdoor Temp.

- Normal heating performance is unaffected by the low ambient kit
- Hood and wind deflectors constructed of 20 gauge, hot-dipped galvanized G-90 steel
- Heavy-duty polyester-based powder paint finish
- Designed to work with both 208/230 and 460 3-phase units
- NEMA 4X control box protects electrical components from the elements
- ETL recognized component
- Kit easily installs connects to outdoor unit with plug in electrical connections
- Wind deflectors easily install with existing (wire guard) fasteners

Notes:

- Hood and wind deflectors must be used to achieve low operational range
- Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.
- The outdoor unit may require additional mounting restraints depending on the mounting location. See engineering manual or installation instructions for guidelines.
- Clearances for the sides and back of the outdoor unit must be at least 6" greater than standard installation guidelines.

Part Number	Description	Electrical	Net Wt.	Ship Wt.	Carton Dimensions L x W x H
LAHK-1	"Low Ambient Hood Assembly (master) with damper control box For single fan modules	"208/230 1-phase .20 amp"	64 lbs. (29 kg)	70 lbs. (32 kg)	43" L x 36" W x 30-1/2" H (1,092 x 914 x 775 mm)
LAHK-2	"Low Ambient Hood Assembly (subordinate) Combined with the LAHK-1 for double fan (P120 and P144) modules"	"Controlled by LAHK-1"	56 lbs. (25 kg)	62 lbs. (28 kg)	43" L x 36" W x 30-1/2" H (1,092 x 914 x 775 mm)
SWDK-1	Side Wind Deflector, includes 2 pieces (fits all modules)	N/A	45 lbs. (20 kg)	50 lbs. (23 kg)	54" L x 20" W x 9" H (1,372 x 508 x 229 mm)
RWDK-1	Rear Wind Deflector (1 fits S module, 2 fit the XL module)	N/A	37 lbs. (17 kg)	42 lbs. (19 kg)	54" L x 33" W x 9" H (1,372 x 838 x 229 mm)
RWDK-2	Rear Wind Deflector (1 fits L module)	N/A	40 lbs. (18 kg)	45 lbs. (20 kg)	54" L x 45" W x 9" H (1,372 x 1,143 x 229 mm)

Components Required per Outdoor unit(s)

For outdoor units with multiple modules, the minimum 1-3/16" separation between the modules is recommended. If modules are placed farther apart than 15" apart, more than 1 set of SWDK-1 side wind deflectors may be needed. For multiple units or module sets placed in a row, only one side wind deflector kit (SWDK-1) is need to cover the two outside module coil surfaces.

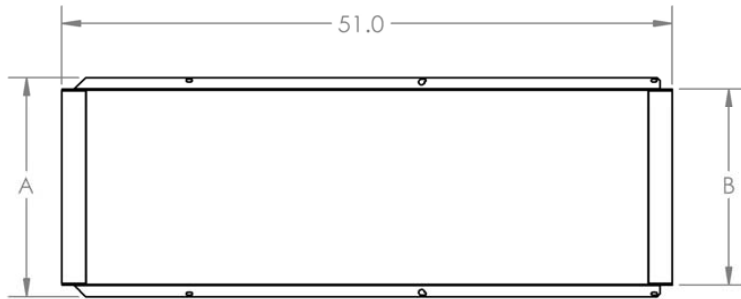
PUHY-P-T/Y(S)LMU Series

Unit model	Module Size			Component Quantity				
	S	L	XL	LAHK-1	LAHK-2	SWDK-1	RWDK-1	RWDK-2
PUHY-P72(T,Y)LMU-A	1			1		1	1	
PUHY-P96(T,Y)LMU-A		1		1		1		1
PUHY-P120(T,Y)LMU-A			1	1	1	1	2	
PUHY-P144(T,Y)LMU-A			1	1	1	1	2	
PUHY-P144(T,Y)SLMU-A	2			2		1	2	
PUHY-P168(T,Y)LMU-A			1	1	1	1	2	
PUHY-P168(T,Y)SLMU-A	1	1		2		1	1	1
PUHY-P192(T,Y)SLMU-A	1		1	2	1	1	3	
PUHY-P216(T,Y)SLMU-A		1	1	2	1	1	2	1
PUHY-P240(T,Y)SLMU-A			2	2	2	1	4	
PUHY-P264(T,Y)SLMU-A	2		1	3	1	1	4	
PUHY-P288(T,Y)SLMU-A	1	1	1	3	1	1	3	1
PUHY-P312(T,Y)SLMU-A	1		2	3	2	1	5	
PUHY-P336(T,Y)SLMU-A		1	2	3	2	1	4	1
PUHY-P360(T,Y)SLMU-A			3	3	3	1	6	

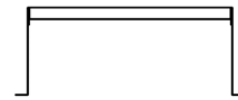
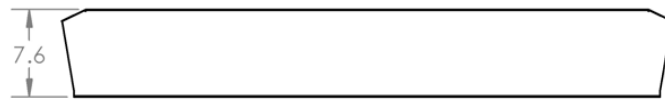
10. OPTIONAL PARTS

Dimensions

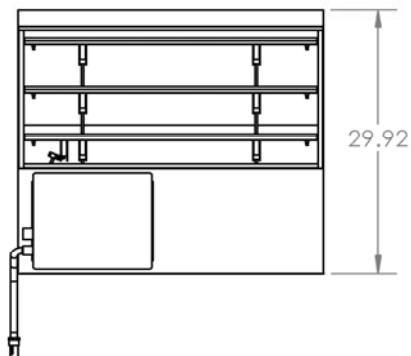
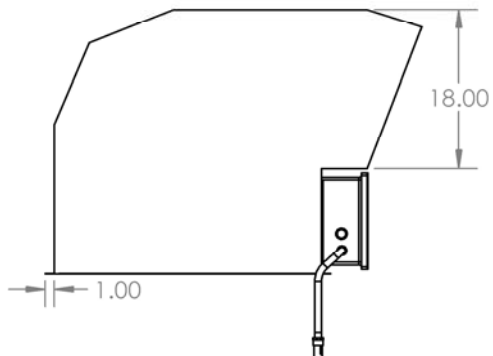
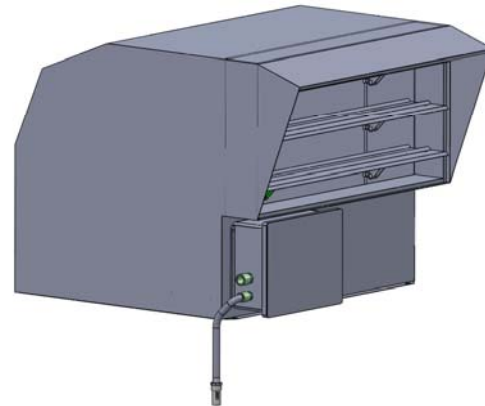
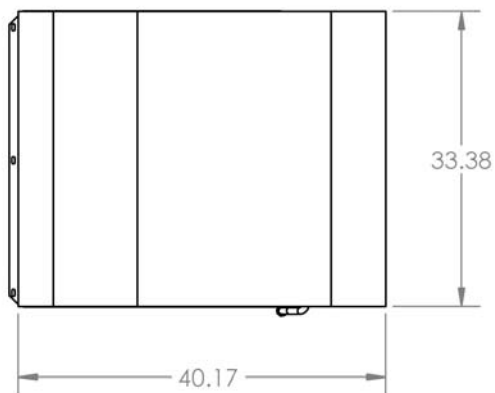
Wind Deflectors SWDK-1, RWDK-1 and RWDK-2



DIM.	SWDK-1	RWDK-1	RWDK-2
A	19.13	31.8	43.6
B	17.13	29.8	41.6



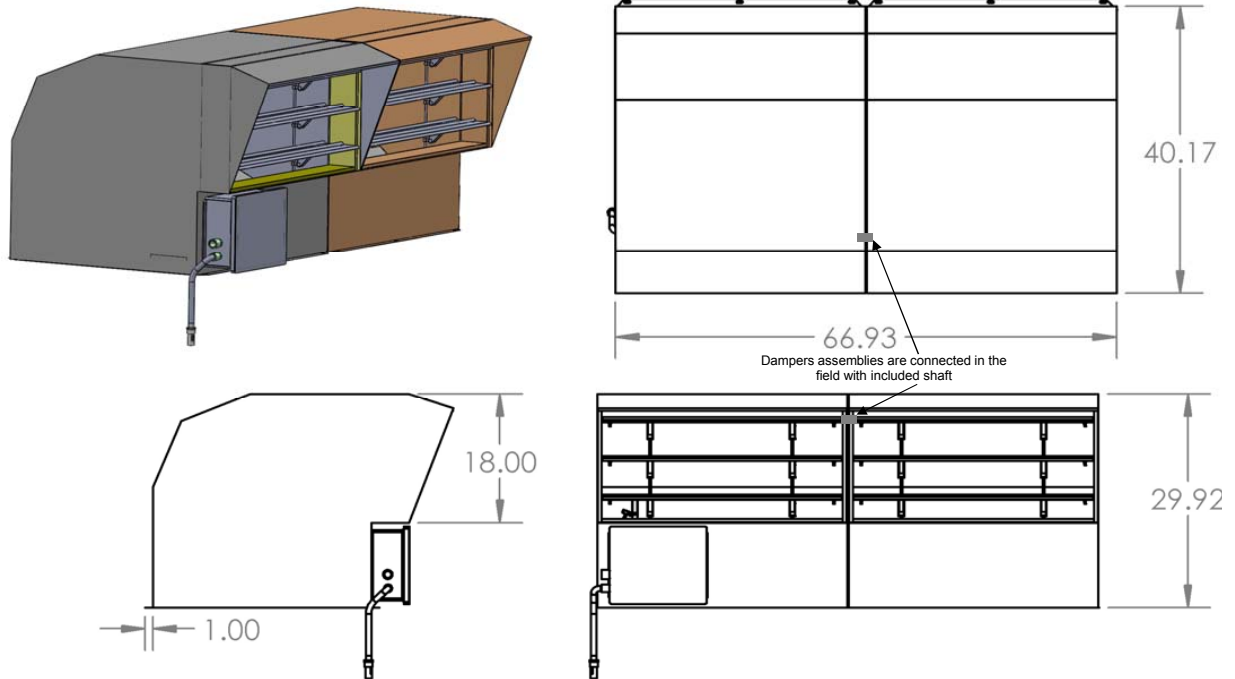
Low Ambient Hood LAHK-1 (used alone for single fan modules P72 and P96 sizes)



10. OPTIONAL PARTS

Dimensions

Low Ambient Hood LAHK-1 with LAHK-2 (combined for dual fan (P120 and P144) modules)



10. OPTIONAL PARTS

10-5. Snow/Hail Guards Kit

- Protects outdoor unit coil surfaces from hail damage and snow build-up in severe climates.
- 20-gauge, hot-dipped galvanized G-90 steel construction.
- Heavy-duty polyester-based powder paint finish to match equipment.
- Installs easily using existing and provided fasteners

Notes:

- SGK Series:
Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater. Clearances for the sides and back of the outdoor unit must be at least 17" greater than standard installation guidelines.
- For best coil protection, two and three module units must be mounted with the minimum 1-3/16" separation.
- For best snow and hail protection use SHK-1 with SGK series snow/hail guards.

Kit Number	Description	Net Weight	Ship Weight	Carton Dimensions L x W x H
SGK-1	Side Snow/Hail Guards 19-1/8" wide (2 per kit)	(2) x 18 lbs.	41 lbs.	52"L x 20"W x 20"H
SGK-2	Rear Snow/Hail Guard 31-3/4" wide	19 lbs.	24 lbs.	52"L x 33"W x 20"H
SGK-3	Rear Snow/Hail Guard 43-1/2" wide	24 lbs.	29 lbs.	52"L x 45"W x 20"H
SHK-1	Snow Hood for Snow/Hail Protection	41 lbs.	47 lbs.	32"L x 34"W x 30-1/2"H

Components Required per Outdoor unit(s)

For models with two or three units, selections are based on a distance of 1-3/16" separation between the modules.
For further separation between the modules, additional components may be required.

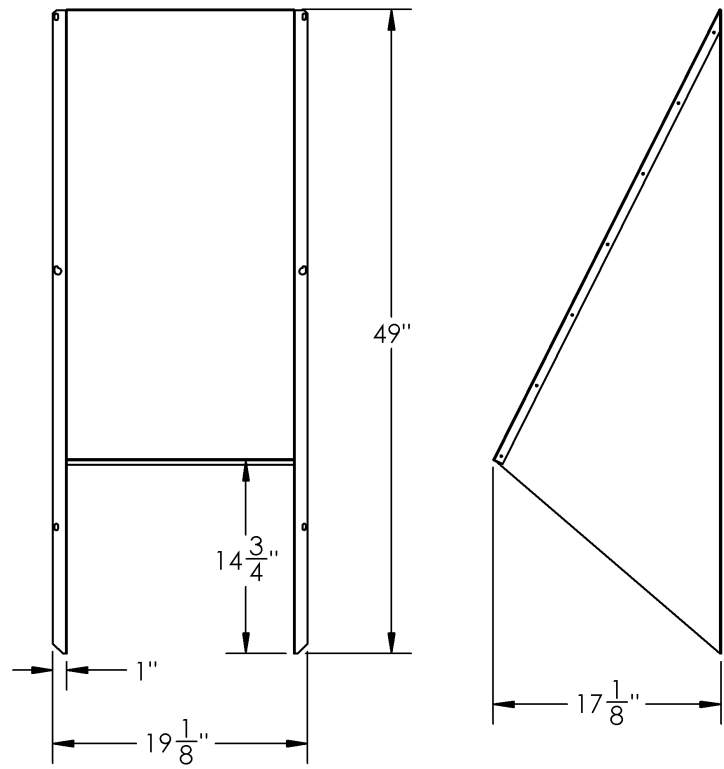
PUHY-P-T/Y(S)LMU Series

Unit model	Module Size			Component Qty			
	S	L	XL	SGK-1	SGK-2	SGK-3	SHK-1
PUHY-P72(T,Y)LMU-A	1			1	1		1
PUHY-P96(T,Y)LMU-A		1		1		1	1
PUHY-P120(T,Y)LMU-A			1	1	2		2
PUHY-P144(T,Y)LMU-A			1	1	2		2
PUHY-P144(T,Y)SLMU-A	2			1	2		2
PUHY-P168(T,Y)LMU-A			1	1	2		2
PUHY-P168(T,Y)SLMU-A	1	1		1	1	1	2
PUHY-P192(T,Y)SLMU-A	1		1	1	3		3
PUHY-P216(T,Y)SLMU-A		1	1	1	2	1	3
PUHY-P240(T,Y)SLMU-A			2	1	4		4
PUHY-P264(T,Y)SLMU-A	2		1	1	4		4
PUHY-P288(T,Y)SLMU-A	1	1	1	1	3	1	4
PUHY-P312(T,Y)SLMU-A	1		2	1	5		5
PUHY-P336(T,Y)SLMU-A		1	2	1	4	1	5
PUHY-P360(T,Y)SLMU-A			3	1	6		6

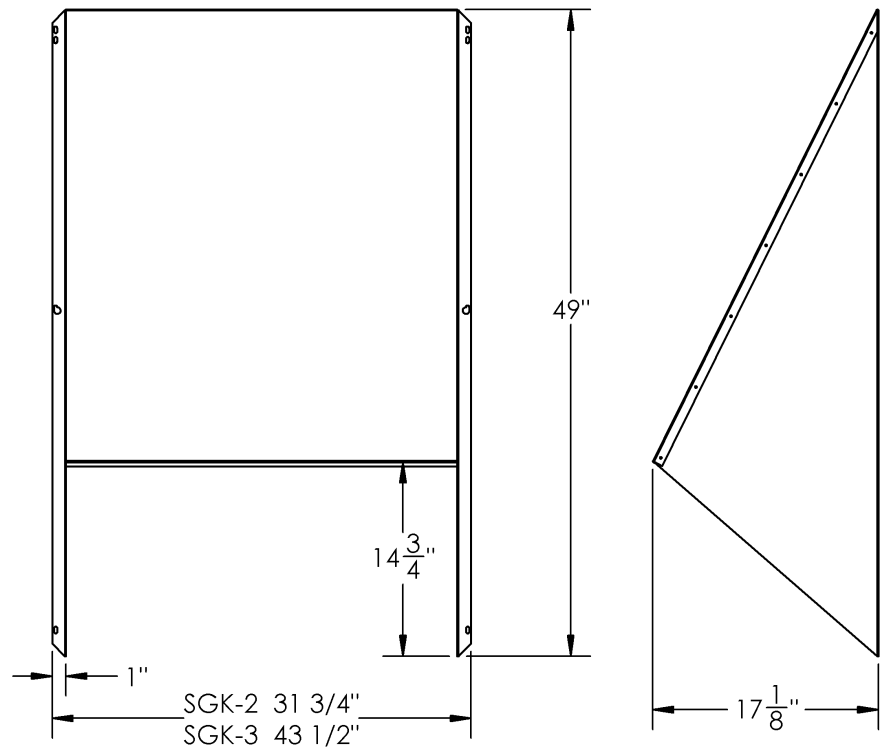
10. OPTIONAL PARTS

Dimensions

Snow/Hail Guards SGK-1 (2 PER KIT)



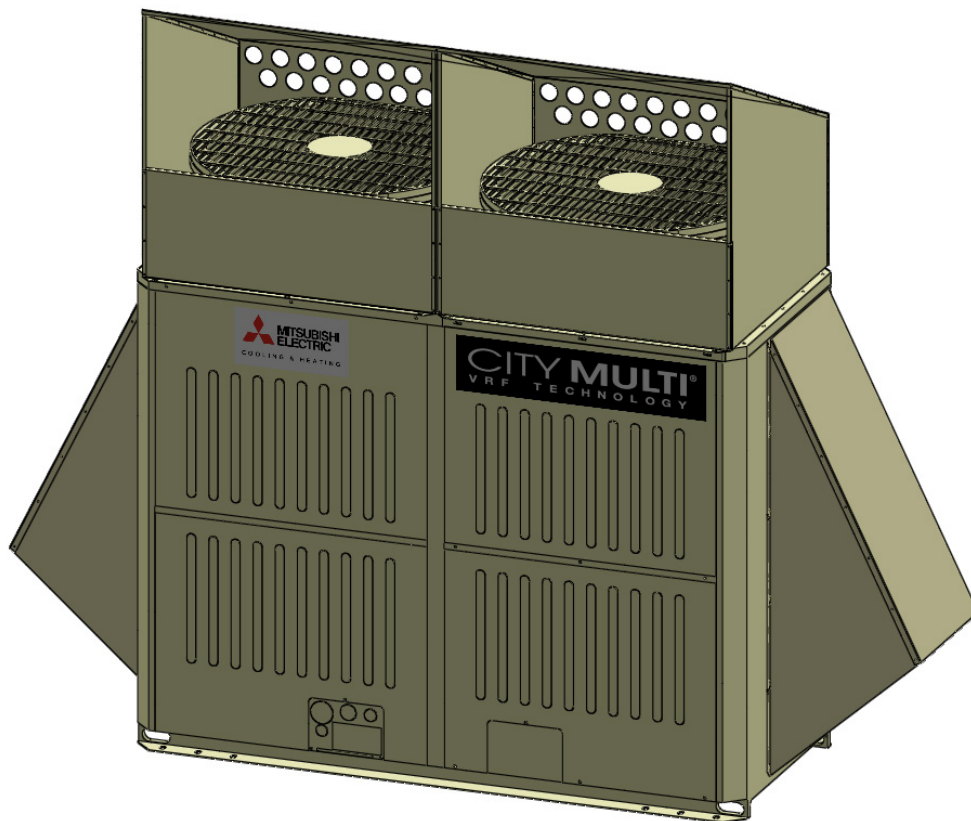
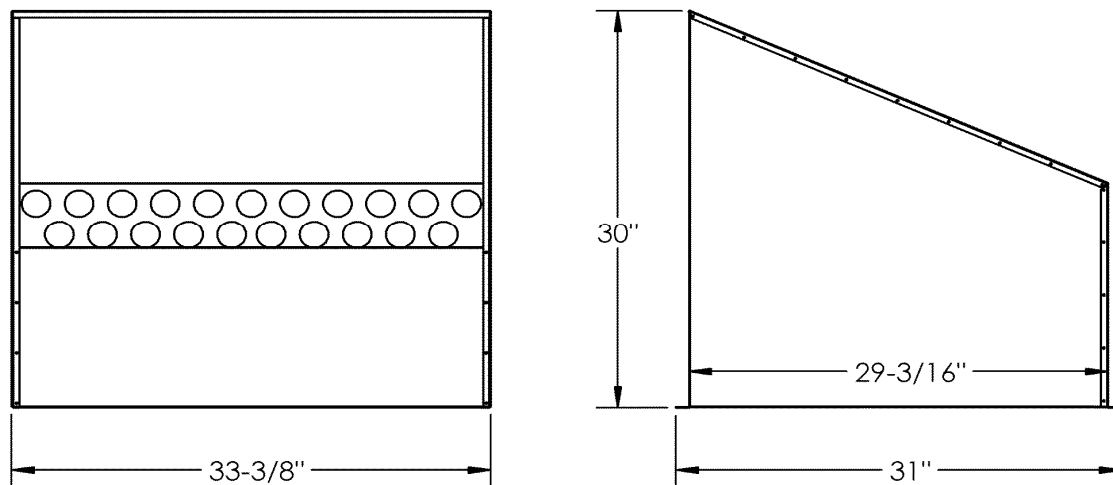
Snow/Hail Guards SGK-2, and SGK-3



10. OPTIONAL PARTS

Dimensions

Snow/Hail Guards SHK-1



10. OPTIONAL PARTS

10-6. Base Pan Heater Kits

If there is a risk that the drain water will freeze inside the outdoor unit, the installation of a base heater is recommended. The base heaters described below are for exclusive use with the T/Y(S)LMU model.

- Prevents ice from building up on the outdoor unit base when operating in heating mode for an extended period of time during low temperature, high humidity conditions.
- Operation of base pan heater is controlled by outdoor unit
 - Energized when unit is in heating mode, compressor is running and outdoor temp drops below 39° F.
 - Connects to CN51 on the outdoor control board of CITY MULTI PUHY L-Generation Units.

Base Pan Heater Kits 208/230V

Base Pan Heater Kits	Included Parts	Rated Voltage	Power Input
Small Module	PAC-BH04EHT-E-US (Heater) PAC-BH01KTT-E (Relay Box)	208 / 230 V	122 / 150 W
Large Module	PAC-BH05EHT-E-US (Heater) PAC-BH01KTT-E (Relay Box)	208 / 230 V	162 / 198 W
XL Module	PAC-BH06EHT-E-US (Heater) PAC-BH01KTT-E (Relay Box)	208 / 230 V	310 / 378 W

Base Pan Heater Kits 460V

Base Pan Heater Kits	Included Parts	Rated Voltage	Power Input
Small Module	PAC-BH04EHY-E-US (Heater) PAC-BH01KTY-E (Relay Box)	460V	183 W
Large Module	PAC-BH05EHY-E-US (Heater) PAC-BH01KTY-E (Relay Box)	460V	254 W
XL Module	PAC-BH06EHY-E-US (Heater) PAC-BH01KTY-E (Relay Box)	460V	454 W

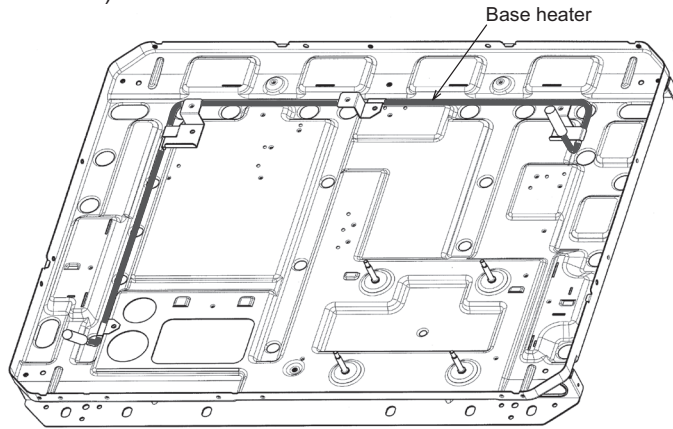
Base Pan Heater Kits Required Per Outdoor Unit(s)

PUHY-P-T/Y(S)LMU Series

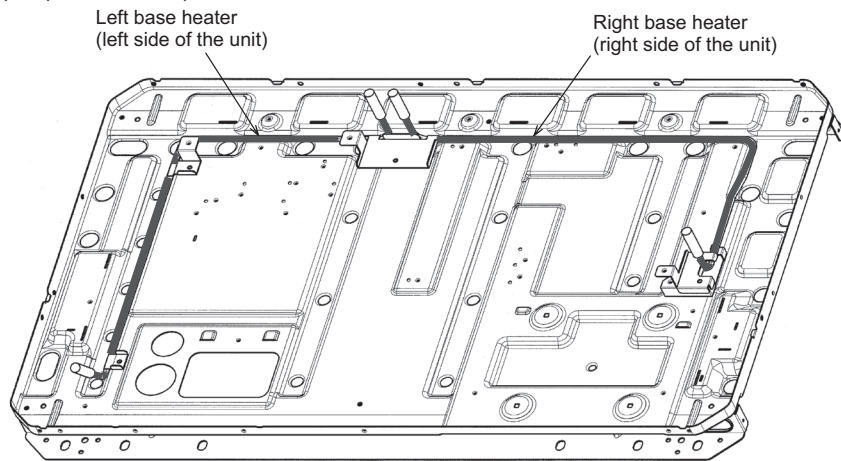
Unit model	Base Pan Heater Kits		
	Small	Large	XL
PUHY-P72(T,Y)LMU-A	1	-	-
PUHY-P96(T,Y)LMU-A	-	1	-
PUHY-P120(T,Y)LMU-A	-	-	1
PUHY-P144(T,Y)LMU-A	-	-	1
PUHY-P168(T,Y)LMU-A	-	-	1
PUHY-P144(T,Y)SLMU-A	2	-	-
PUHY-P168(T,Y)SLMU-A	1	1	-
PUHY-P192(T,Y)SLMU-A	1	-	1
PUHY-P216(T,Y)SLMU-A	-	1	1
PUHY-P240(T,Y)SLMU-A	-	-	2
PUHY-P264(T,Y)SLMU-A	2	-	1
PUHY-P288(T,Y)SLMU-A	1	1	1
PUHY-P312(T,Y)SLMU-A	1	-	2
PUHY-P336(T,Y)SLMU-A	-	1	2
PUHY-P360(T,Y)SLMU-A	-	-	3

10. OPTIONAL PARTS

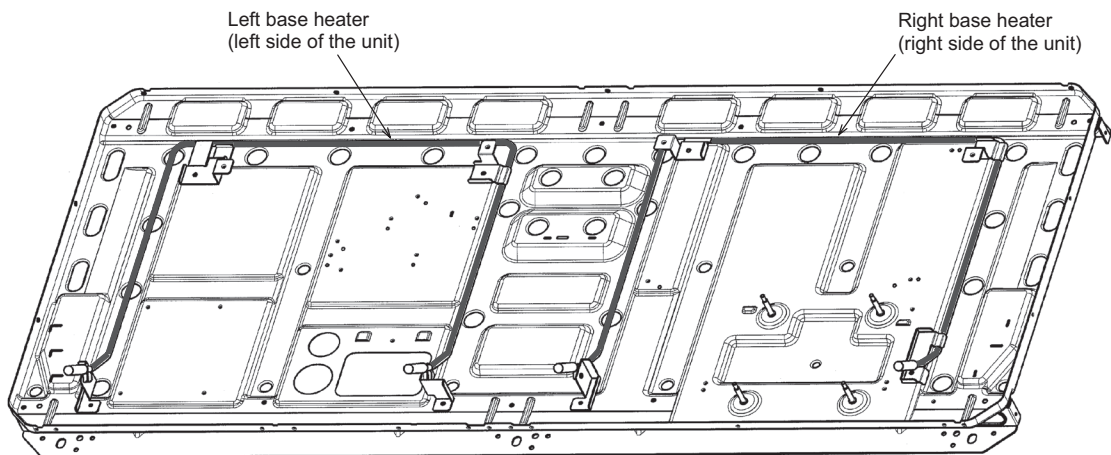
PAC-BH04EH(T,Y)-E (for S module)



PAC-BH05EH(T,Y)-E (for L module)



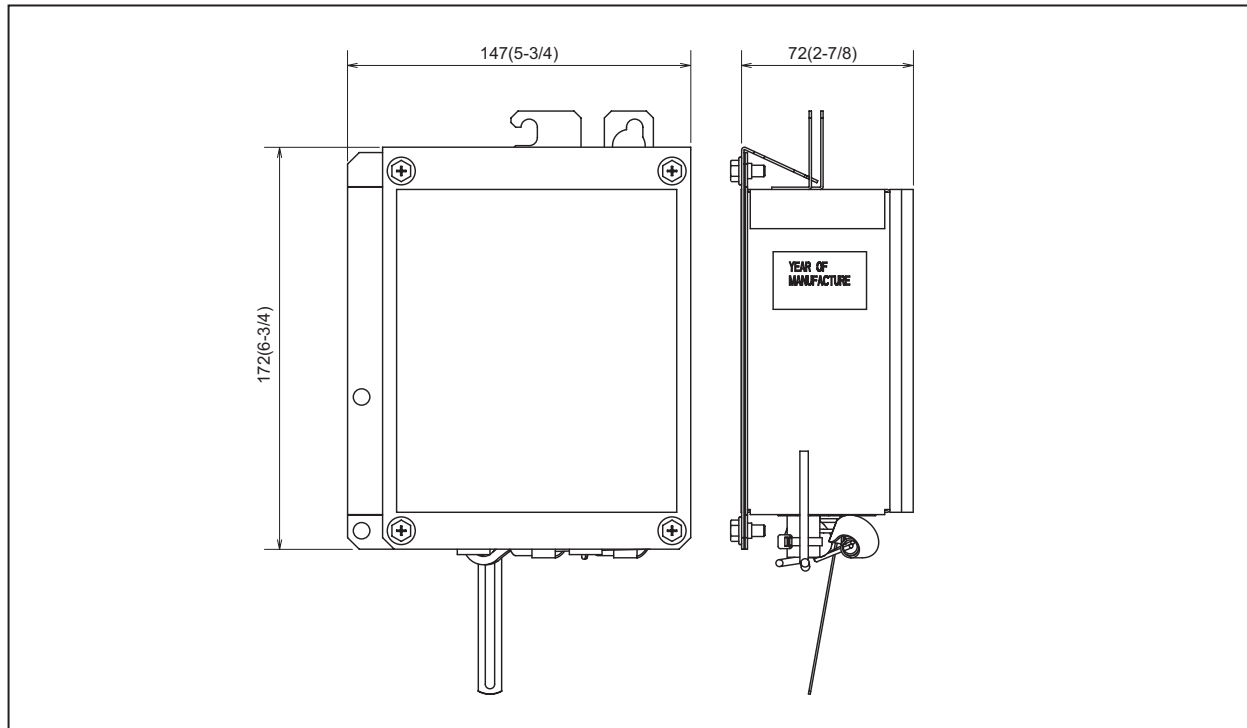
PAC-BH06EH(T,Y)-E (for XL module)



10. OPTIONAL PARTS

10-7. Relay Box

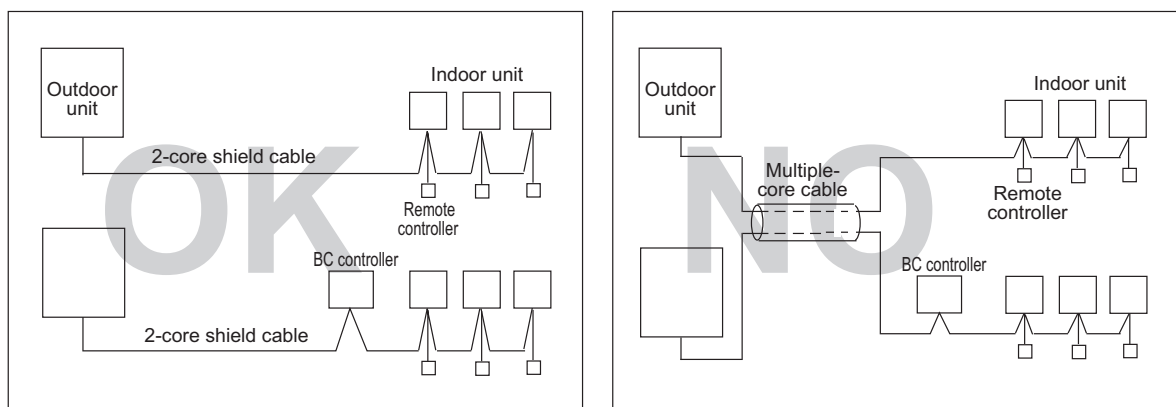
If there is a risk that the drain water will freeze inside the outdoor unit, the installation of a base heater is recommended. PAC-BH01KT(T,Y)-E is a relay box for controlling the electric base heater. For details, refer to the relay box Installation Manual.



11. ELECTRICAL WORK

11-1. 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.



- ⑧ When the System controller is connected to TB7 side and TLMU outdoor unit model is used, connect a PAC-SC51KUA to TB7 side. If a PAC-SC51KUA cannot be used, connect the System controller to TB3 side.
 - When YLMU outdoor unit model is used, the male power supply connector can be connected to CN40, and the System controller can be connected to TB7 side.
 - When the male power supply connector is connected from TLMU outdoor unit to CN40, the power is supplied to TB7 side even when the main power of the TLMU outdoor unit is switched off, and the System controller may store an error in the error history and emit an alarm signal.
 - If only LOSSNAY units or outdoor units in different refrigerant circuits are connected to TB7 side, the male power supply connector can be connected from TLMU outdoor unit to CN40.
 - Up to three System controllers can be connected to TB3 side.

For the details, refer to 2-3 "System configuration restrictions".

11. ELECTRICAL WORK

11-2. Power Supply for Indoor and Outdoor Units

1-2-1. Electrical Characteristics of the Indoor Units

Symbols: MCA : Min.Circuit Amps (=1.25xFLA) FLA : Full Load Amps					
IFM :Indoor Fan Motor					
Model	Indoor Unit				IFM
	Hz	Volts	Voltage range	MCA(A)	FLA(A)
PLFY-P08NCMU-ER4	60Hz	208 / 230V	198 to 253V	0.29 / 0.29	0.23 / 0.23
PLFY-P12NCMU-ER4				0.35 / 0.35	0.28 / 0.28
PLFY-P15NCMU-ER4				0.35 / 0.35	0.28 / 0.28
PLFY-P12NBMU-ER2				0.64 / 0.64	0.51 / 0.51
PLFY-P15NBMU-ER2				0.64 / 0.64	0.51 / 0.51
PLFY-P18NBMU-ER2				0.64 / 0.64	0.51 / 0.51
PLFY-P24NBMU-ER2				0.64 / 0.64	0.51 / 0.51
PLFY-P30NBMU-ER2				0.64 / 0.64	0.51 / 0.51
PLFY-P36NBMU-ER2				1.25 / 1.25	1.00 / 1.00
PMFY-P06NBMU-ER5	60Hz	208 / 230V	188 to 253V	0.25 / 0.25	0.20 / 0.20
PMFY-P08NBMU-ER5				0.25 / 0.25	0.20 / 0.20
PMFY-P12NBMU-ER5				0.26 / 0.26	0.21 / 0.21
PMFY-P15NBMU-ER5				0.33 / 0.33	0.26 / 0.26
PEFY-P06NMAU-E3	60Hz	208 / 230V	188 to 253V	1.05 / 1.05	0.84 / 0.84
PEFY-P08NMAU-E3				1.05 / 1.05	0.84 / 0.84
PEFY-P12NMAU-E3				1.20 / 1.20	0.96 / 0.96
PEFY-P15NMAU-E3				1.45 / 1.45	1.16 / 1.16
PEFY-P18NMAU-E3				1.56 / 1.56	1.25 / 1.25
PEFY-P24NMAU-E3				2.73 / 2.73	2.18 / 2.18
PEFY-P27NMAU-E3				2.73 / 2.73	2.18 / 2.18
PEFY-P30NMAU-E3				2.73 / 2.73	2.18 / 2.18
PEFY-P36NMAU-E3				3.32 / 3.32	2.66 / 2.66
PEFY-P48NMAU-E3				3.41 / 3.41	2.73 / 2.73
PEFY-P54NMAU-E3				3.31 / 3.31	2.65 / 2.65
PEFY-P06NMSU-ER2	60Hz	208 / 230V	188 to 253V	0.47 / 0.50	0.32 / 0.31
PEFY-P08NMSU-ER2				0.47 / 0.50	0.41 / 0.39
PEFY-P12NMSU-ER2				0.68 / 0.74	0.46 / 0.43
PEFY-P15NMSU-ER2				1.20 / 1.33	0.47 / 0.45
PEFY-P18NMSU-ER2				1.20 / 1.33	0.64 / 0.60
PEFY-P24NMSU-ER2				1.57 / 1.73	0.88 / 0.83
PEFY-P15NMHU-E2				1.63 / 1.50	1.30 / 1.20
PEFY-P18NMHU-E2				1.63 / 1.50	1.30 / 1.20
PEFY-P24NMHU-E2				2.11 / 1.83	1.69 / 1.46
PEFY-P27NMHU-E2				2.35 / 2.13	1.88 / 1.70
PEFY-P30NMHU-E2				2.70 / 2.45	2.16 / 1.96
PEFY-P36NMHU-E2				4.16 / 3.67	3.32 / 2.94
PEFY-P48NMHU-E2				4.16 / 3.67	3.32 / 2.94
PEFY-P54NMHU-E2				4.18 / 3.69	3.34 / 2.95
PEFY-P72NMHSU-E			187 to 253V	7.7	6.2
PEFY-P96NMHSU-E				8.2	6.6

11. ELECTRICAL WORK

Symbols: MCA : Min.Circuit Amps (=1.25xFLA) FLA : Full Load Amps					
IFM :Indoor Fan Motor					
Model	Indoor Unit				IFM
	Hz	Volts	Voltage range	MCA(A)	FLA(A)
PCFY-P15NKMU-ER1	60Hz	208 / 230V	188 to 253V	0.44 / 0.44	0.35 / 0.35
PCFY-P24NKMU-ER1				0.52 / 0.52	0.41 / 0.41
PCFY-P30NKMU-ER1				1.22 / 1.22	0.97 / 0.97
PCFY-P36NKMU-ER1				1.22 / 1.22	0.97 / 0.97
PKFY-P06NBMU-E2	60Hz	208 / 230V	198 to 253V	0.19 / 0.19	0.15 / 0.15
PKFY-P08NHMU-E2				0.38 / 0.38	0.30 / 0.30
PKFY-P12NHMU-E2				0.38 / 0.38	0.30 / 0.30
PKFY-P15NHMU-E2				0.38 / 0.38	0.30 / 0.30
PKFY-P18NHMU-E2				0.38 / 0.38	0.30 / 0.30
PKFY-P24NKMU-E2.TH				0.63 / 0.63	0.50 / 0.50
PKFY-P30NKMU-E2.TH				0.63 / 0.63	0.50 / 0.50
PFFY-P06NEMU-E	60Hz	208 / 230V	188 to 253V	0.32 / 0.34	0.25 / 0.27
PFFY-P08NEMU-E				0.32 / 0.34	0.25 / 0.27
PFFY-P12NEMU-E				0.34 / 0.38	0.27 / 0.30
PFFY-P15NEMU-E				0.40 / 0.44	0.32 / 0.35
PFFY-P18NEMU-E				0.48 / 0.53	0.38 / 0.42
PFFY-P24NEMU-E				0.59 / 0.64	0.47 / 0.51
PFFY-P06NRMU-E	60Hz	208 / 230V	188 to 253V	0.32 / 0.34	0.25 / 0.27
PFFY-P08NRMU-E				0.32 / 0.34	0.25 / 0.27
PFFY-P12NRMU-E				0.34 / 0.38	0.27 / 0.30
PFFY-P15NRMU-E				0.40 / 0.44	0.32 / 0.35
PFFY-P18NRMU-E				0.48 / 0.53	0.38 / 0.42
PFFY-P24NRMU-E				0.59 / 0.64	0.47 / 0.51
PVFY-P12NAMU-E	60Hz	208 / 230V	188 to 253V	3.00 / 3.00	2.4 / 2.4
PVFY-P18NAMU-E				3.00 / 3.00	2.4 / 2.4
PVFY-P24NAMU-E				3.00 / 3.00	2.4 / 2.4
PVFY-P30NAMU-E				4.13 / 4.13	3.3 / 3.3
PVFY-P36NAMU-E				4.13 / 4.13	3.3 / 3.3
PVFY-P48NAMU-E				5.63 / 5.63	4.5 / 4.5
PVFY-P54NAMU-E				5.63 / 5.63	4.5 / 4.5
PWFY-P36NMU-E-AU				0.09	-
PWFY-P72NMU-E-AU				0.09	-

11. ELECTRICAL WORK

11-2-2. Electrical Characteristics of the Outdoor Units at Cooling Mode

Symbols : MCA : Min. Circuit Amps						
SC : Starting Current						
PUHY-P-T(S)LMU		Outdoor Units				
Model name	Combination					
		Hz	Volts	Voltage range	MCA(A)	SC(A)
PUHY-P72TLMU-A(-BS)	-	60Hz	208/230V	188 to 253V	24 / 22	35 / 35
PUHY-P96TLMU-A(-BS)	-				32 / 29	50 / 45
PUHY-P120TLMU-A(-BS)	-				42 / 39	60 / 60
PUHY-P144TLMU-A(-BS)	-				46 / 43	70 / 70
PUHY-P168TLMU-A(-BS)	-				58 / 54	90 / 80
PUHY-P144TSLMU-A(-BS)	PUHY-P72TLMU-A(BS)				24 / 22	35 / 35
	PUHY-P72TLMU-A(BS)				24 / 22	35 / 35
PUHY-P168TSLMU-A(-BS)	PUHY-P72TLMU-A(BS)				24 / 22	35 / 35
	PUHY-P96TLMU-A(BS)				32 / 29	50 / 45
PUHY-P192TSLMU-A(-BS)	PUHY-P72TLMU-A(BS)				24 / 22	35 / 35
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
PUHY-P216TSLMU-A(-BS)	PUHY-P96TLMU-A(BS)				32 / 29	50 / 45
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
PUHY-P240TSLMU-A(-BS)	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
PUHY-P264TSLMU-A(-BS)	PUHY-P72TLMU-A(BS)				24 / 22	35 / 35
	PUHY-P72TLMU-A(BS)				24 / 22	35 / 35
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
PUHY-P288TSLMU-A(-BS)	PUHY-P72TLMU-A(BS)				24 / 22	35 / 35
	PUHY-P96TLMU-A(BS)				32 / 29	50 / 45
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
PUHY-P312TSLMU-A(-BS)	PUHY-P72TLMU-A(BS)				24 / 22	35 / 35
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
PUHY-P336TSLMU-A(-BS)	PUHY-P96TLMU-A(BS)				32 / 29	50 / 45
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
PUHY-P360TSLMU-A(-BS)	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60
	PUHY-P120TLMU-A(BS)				42 / 39	60 / 60

11. ELECTRICAL WORK

11-2-2. Electrical Characteristics of the Outdoor Units at Cooling Mode

Symbols : MCA : Min. Circuit Amps SC : Starting Current							
PUHY-P-Y(S)KMU-U		Outdoor Units					
Model name	Combination						Compressor
		Hz	Volts	Voltage range	MCA(A)	MOC(P)(A)	SC(A)
PUHY-P72YLMU-A(-BS)	-	60Hz	460V	414 to 506V	11	15	7
PUHY-P96YLMU-A(-BS)	-				14	20	7
PUHY-P120YLMU-A(-BS)	-				19	30	7
PUHY-P144YLMU-A(-BS)	-				21	35	7
PUHY-P168YLMU-A(-BS)	-				26	40	7
PUHY-P144YSLMU-A(-BS)	PUHY-P72YLMU-A(-BS)				11	15	7
	PUHY-P72YLMU-A(-BS)				11	15	7
PUHY-P168YSLMU-A(-BS)	PUHY-P72YLMU-A(-BS)				11	15	7
	PUHY-P96YLMU-A(-BS)				14	20	7
PUHY-P192YSLMU-A(-BS)	PUHY-P72YLMU-A(-BS)				11	15	7
	PUHY-P120YLMU-A(-BS)				19	30	7
PUHY-P216YSLMU-A(-BS)	PUHY-P96YLMU-A(-BS)				14	20	7
	PUHY-P120YLMU-A(-BS)				19	30	7
PUHY-P240YSLMU-A(-BS)	PUHY-P120YLMU-A(-BS)				19	30	7
	PUHY-P120YLMU-A(-BS)				19	30	7
PUHY-P264YSLMU-A(-BS)	PUHY-P72YLMU-A(-BS)				11	15	7
	PUHY-P72YLMU-A(-BS)				11	15	7
	PUHY-P120YLMU-A(-BS)				19	30	7
PUHY-P288YSLMU-A(-BS)	PUHY-P72YLMU-A(-BS)				11	15	7
	PUHY-P96YLMU-A(-BS)				14	20	7
	PUHY-P120YLMU-A(-BS)				19	30	7
PUHY-P312YSLMU-A(-BS)	PUHY-P72YLMU-A(-BS)				11	15	7
	PUHY-P120YLMU-A(-BS)				19	30	7
	PUHY-P120YLMU-A(-BS)				19	30	7
PUHY-P336YSLMU-A(-BS)	PUHY-P96YLMU-A(-BS)				14	20	7
	PUHY-P120YLMU-A(-BS)				19	30	7
	PUHY-P120YLMU-A(-BS)				19	30	7
PUHY-P360YSLMU-A(-BS)	PUHY-P120YLMU-A(-BS)				19	30	7
	PUHY-P120YLMU-A(-BS)				19	30	7
	PUHY-P120YLMU-A(-BS)				19	30	7

11. ELECTRICAL WORK

11-3. 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 wire thickness (mm ² /AWG)		
		Main cable	Branch	Ground
PUHY-P-TLMU-A	P72	5.3/10	-	5.3/10
	P96	8.4/8	-	8.4/8
	P120	13.3/6	-	13.3/6
	P144	13.3/6	-	13.3/6
	P168	21.2/4	-	21.2/4
Total operating current of the indoor unit	F0 = 15 or less *1	2.1/14	2.1/14	2.1/14
	F0 = 20 or less *1	3.3/12	3.3/12	3.3/12
	F0 = 30 or less *1	5.3/10	5.3/10	5.3/10

3-phase 3-wire, 460V, 60Hz		Minimum wire thickness (mm ² /AWG)		
		Main cable	Branch	Ground
PUHY-P-YLMU-A	P72	2.1/14	-	2.1/14
	P96	3.3/12	-	3.3/12
	P120	5.3/10	-	5.3/10
	P144	5.3/10	-	5.3/10
	P168	8.4/8	-	8.4/8
Total operating current of the indoor unit	F0 = 15 or less *1	2.1/14	2.1/14	2.1/14
	F0 = 20 or less *1	3.3/12	3.3/12	3.3/12
	F0 = 30 or less *1	5.3/10	5.3/10	5.3/10

*1 Please take the larger of F1 or F2 as the value for F0.

F1 = Total operating maximum current of the indoor units × 1.2

F2 = {V1 × (Quantity of Type1)/C} + {V1 × (Quantity of Type2)/C} + {V1 × (Quantity of Type3)/C} + {V1 × (Quantity of Others)/C}

Indoor unit		V1	V2
Type1	PLFY-NBMU, PMFY-NBMU, PEFY-NMSU, PCFY-NKMU, PKFY-NHMU, PKFY-NKMU	18.6	2.4
Type2	PEFY-NMAU	38	1.6
Type3	PEFY-NMHSU	13.8	4.8
Others	Other indoor unit	0	0

C : Multiple of tripping current at tripping time 0.01s

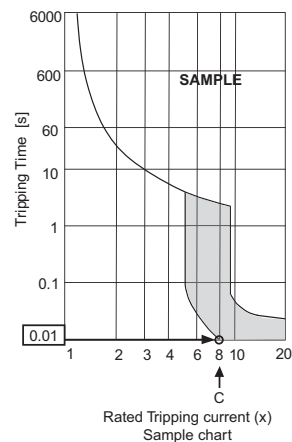
Please pick up "C" from the tripping characteristic of the breaker.

<Example of "F2" calculation>

*Condition PEFY-NMSU × 4 + PEFY-NMAU × 1, C = 8 (refer to right sample chart)

F2 = 18.6 × 4/8 + 38 × 1/8
= 14.05

→16 A breaker (Tripping current = 8 × 16 A at 0.01s)



*2 Current sensitivity is calculated using the following formula.

G1 = (V2 × Quantity of Type1) + (V2 × Quantity of Type2) + (V2 × Quantity of Type3) + (V2 × Quantity of Others) + (V3 × Wire length [km])

G1	Current sensitivity	Wire thickness	V3
30 or less	30 mA 0.1sec or less	1.5 mm ²	48
100 or less	100 mA 0.1sec or less	2.5 mm ²	56
		4.0 mm ²	66

1. Use dedicated power supplies for the outdoor unit and indoor 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 245 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.

⚠ 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

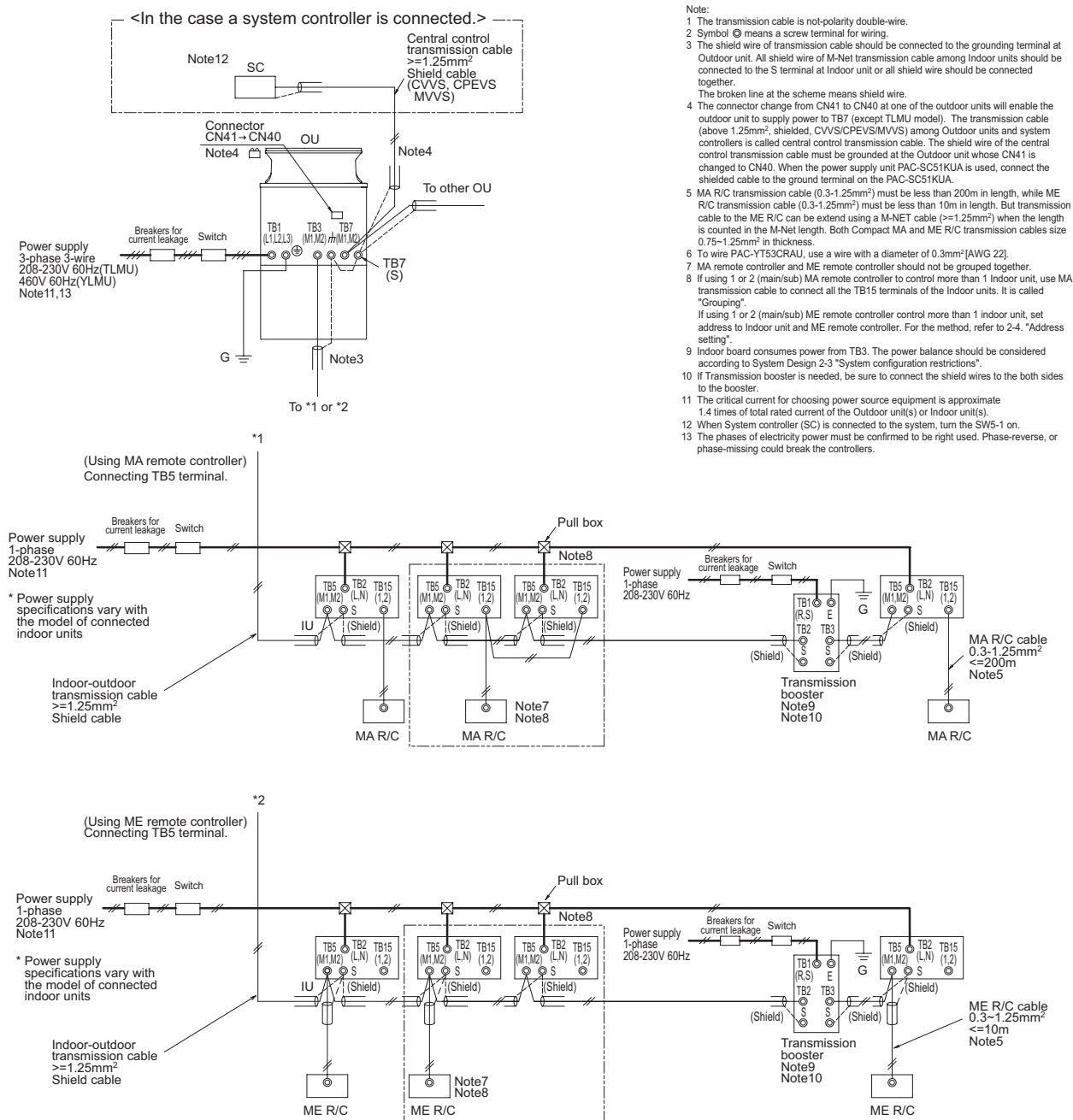
- The breakers for current leakage should support Inverter circuit. (e.g. Mitsubishi Electric's NV-C series or equivalent). If no earth leakage breaker is installed, it may cause an electric shock.
- Breakers for current leakage should combine using of switch.
- Do not use anything other than a breaker 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.

11. ELECTRICAL WORK

11-4. Power Supply Examples

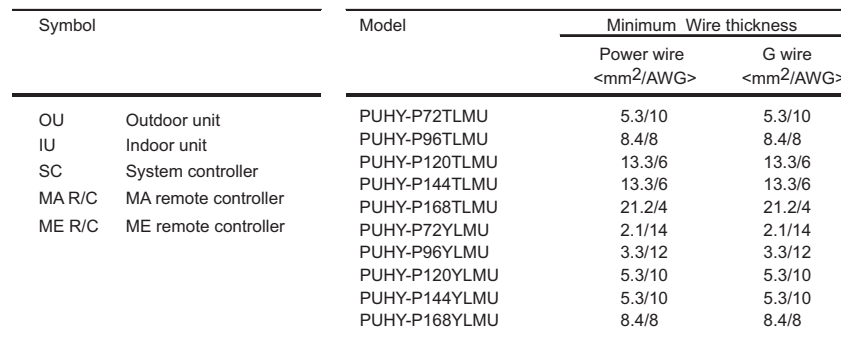
The local standards and/or regulations is applicable at a higher priority.

11-4-1. PUHY-P72, 96, 120, 144, 168TLMU/YLMU



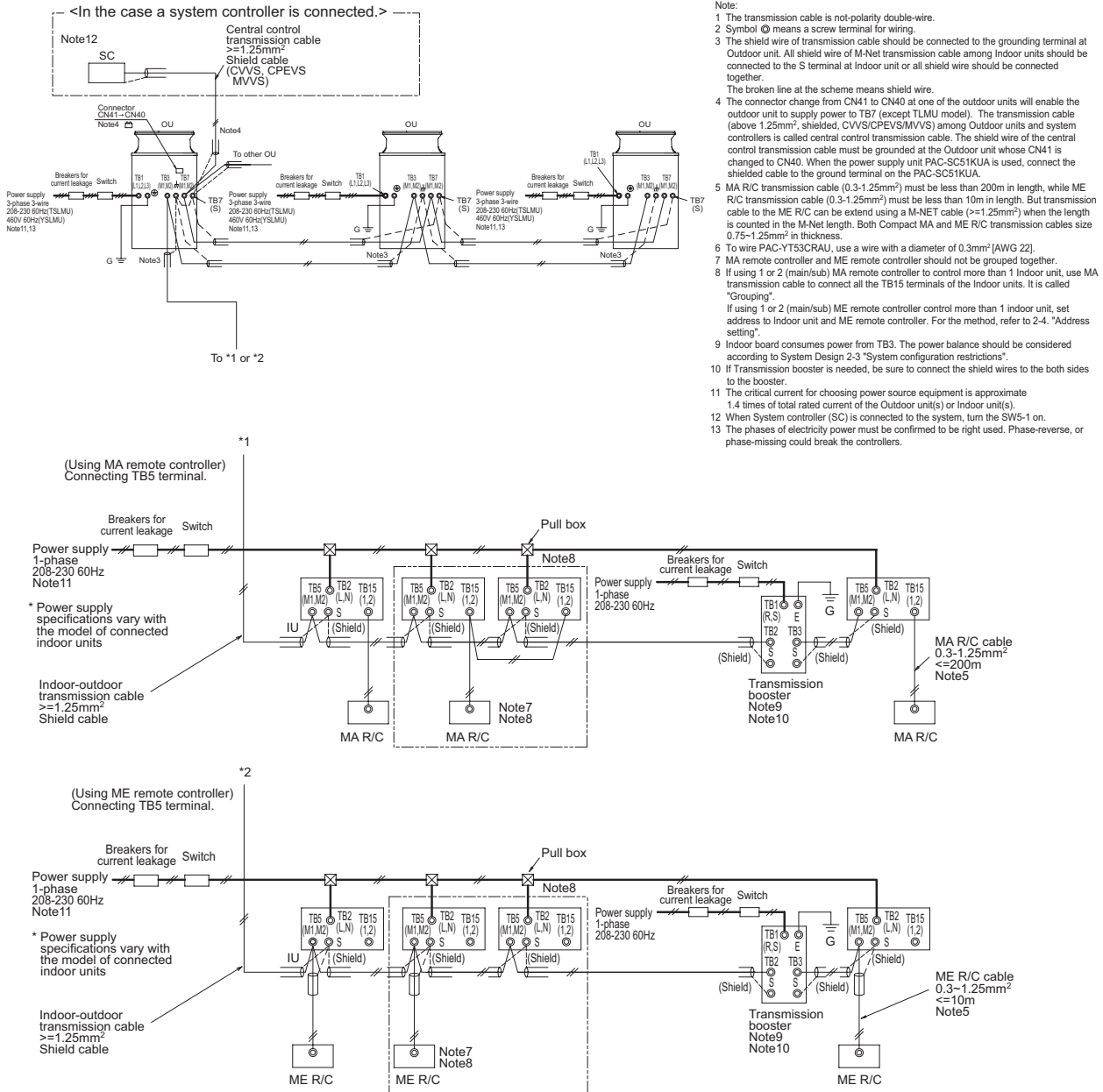
Symbol		Model	Minimum Wire thickness	
			Power wire <mm ² /AWG>	G wire <mm ² /AWG>
OU	Outdoor unit	PUHY-P72TLMU	5.3/10	5.3/10
IU	Indoor unit	PUHY-P96TLMU	8.4/8	8.4/8
SC	System controller	PUHY-P120TLMU	13.3/6	13.3/6
MA R/C	MA remote controller	PUHY-P144TLMU	13.3/6	13.3/6
ME R/C	ME remote controller	PUHY-P168TLMU	21.2/4	21.2/4
		PUHY-P72YLMU	2.1/14	2.1/14
		PUHY-P96YLMU	3.3/12	3.3/12
		PUHY-P120YLMU	5.3/10	5.3/10
		PUHY-P144YLMU	5.3/10	5.3/10

11-4-2. PUHY-P192, 216, 240TSLMU
PUHY-P144, 168, 192, 216, 240YSLMU



11. ELECTRICAL WORK

The local standards and/or regulations is applicable at a higher priority.
11-4-3. PUHY-P264, 288, 312, 336, 360TSLMU/YSLMU



- Note:**
- The transmission cable is not-polarity double-wire.
 - Symbol means a screw terminal for wiring.
 - 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.
 - The connector change from CN41 to CN40 at one of the outdoor units will enable the outdoor unit to supply power to TB7 (except TLMU model). The transmission cable (above 1.25mm², shielded, C/VVS/CPEVS/MVVS) among Outdoor units and system controllers is called central control transmission cable. The shield wire of the central control transmission cable must be grounded at the Outdoor unit whose CN41 is changed to CN40. When the power supply unit PAC-SC51KUA is used, connect the shielded cable to the ground terminal on the PAC-SC51KUA.
 - MA R/C transmission cable (0.3-1.25mm²) must be less than 200m in length, while ME R/C transmission cable (0.3-1.25mm²) must be less than 10m in length. But transmission cable to the ME R/C can be extended using a M-NET cable (≥1.25mm²) when the length is counted in the M-Net length. Both Compact MA and ME R/C transmission cables size 0.75-1.25mm² in thickness.
 - To wire PAC-YT53CRAU, use a wire with a diameter of 0.3mm² (AWG 22).
 - MA remote controller and ME remote Controller should not be grouped together.
 - 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".
 - If using 1 or 2 (main/sub) ME remote controller control more than 1 Indoor unit, set address to Indoor unit and ME remote controller. For the method, refer to 2-4 "Address setting".
 - Indoor board consumes power from TB3. The power balance should be considered according to System Design 2-3 "System configuration restrictions".
 - If Transmission booster is needed, be sure to connect the shield wires to the both sides to the booster.
 - 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).
 - When System controller (SC) is connected to the system, turn the SW5-1 on.
 - The Phases of electricity power must be confirmed to be right used. Phase-reverse, or phase-missing could break the controllers.

Symbol		Model	Wire thickness	
			Power wire <mm ² /AWG>	G wire <mm ² /AWG>
OU	Outdoor unit	PUHY-P72TLMU	5.3/10	5.3/10
IU	Indoor unit	PUHY-P96TLMU	8.4/8	8.4/8
SC	System controller	PUHY-P120TLMU	13.3/6	13.3/6
MA R/C	MA remote controller	PUHY-P144TLMU	13.3/6	13.3/6
ME R/C	ME remote controller	PUHY-P168TLMU	21.2/4	21.2/4
		PUHY-P72YLMU	2.1/14	2.1/14
		PUHY-P96YLMU	3.3/12	3.3/12
		PUHY-P120YLMU	5.3/10	5.3/10
		PUHY-P144YLMU	5.3/10	5.3/10
		PUHY-P168YLMU	8.4/8	8.4/8

12. M-NET CONTROL

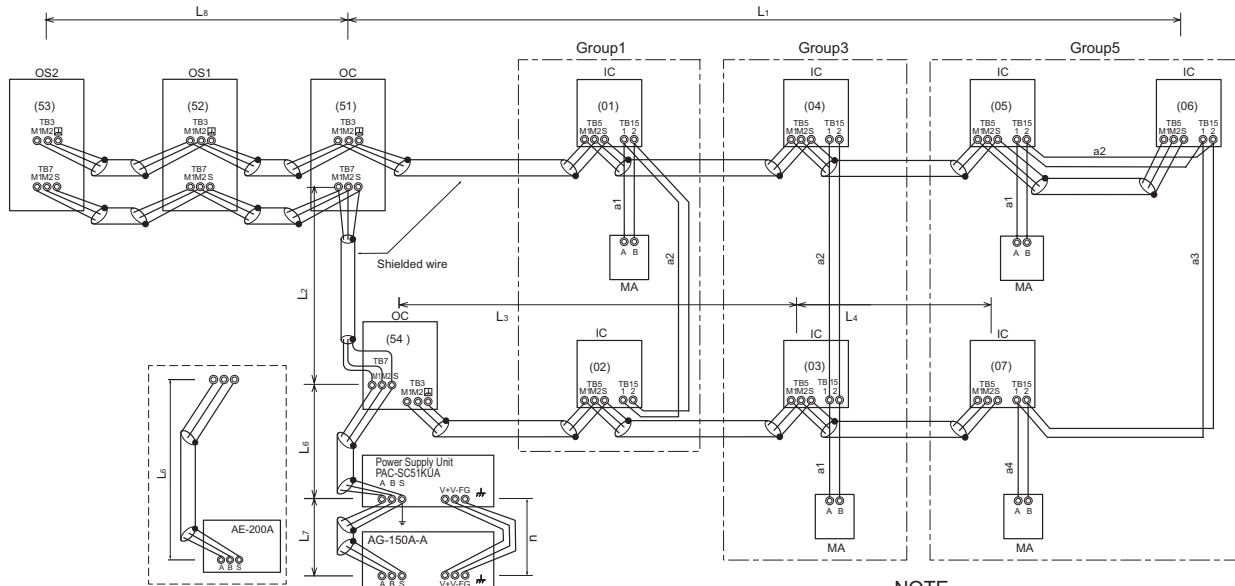
12-1. Transmission Cable Length Limitations

12-1-1. Using MA Remote controller

MA remote controller refers to Simple MA remote controller and wireless remote controller.

Long transmission cable causes voltage down, therefore, the length limitation should be obeyed to secure proper transmission.

Max. length via Outdoor (M-NET cable)	$L1+L2+L3+L4, L1+L2+L6+L7, L3+L4+L6+L7$	$\leq 500\text{m}[1640\text{ft.}]$	1.25mm^2 [AWG16] or thicker
Max. length to Outdoor (M-NET cable)	$L1+L8, L3+L4, L6, L2+L6+L8, L7$	$\leq 200\text{m}[656\text{ft.}]$	1.25mm^2 [AWG16] or thicker
Max. length from MA to Indoor	$a1+a2, a1+a2+a3+a4$	$\leq 200\text{m}[656\text{ft.}]$	$0.3\text{--}1.25\text{mm}^2$ [AWG22-16]
24VDC to AG-150A-A	n	$\leq 50\text{m}[164\text{ft.}]$	$0.75\text{--}2.0\text{mm}^2$ [AWG18-14]



OC, OS1, OS2 : Outdoor unit controller; IC: Indoor unit controller; MA: MA remote controller

NOTE
Do not daisy-chain remote controllers.

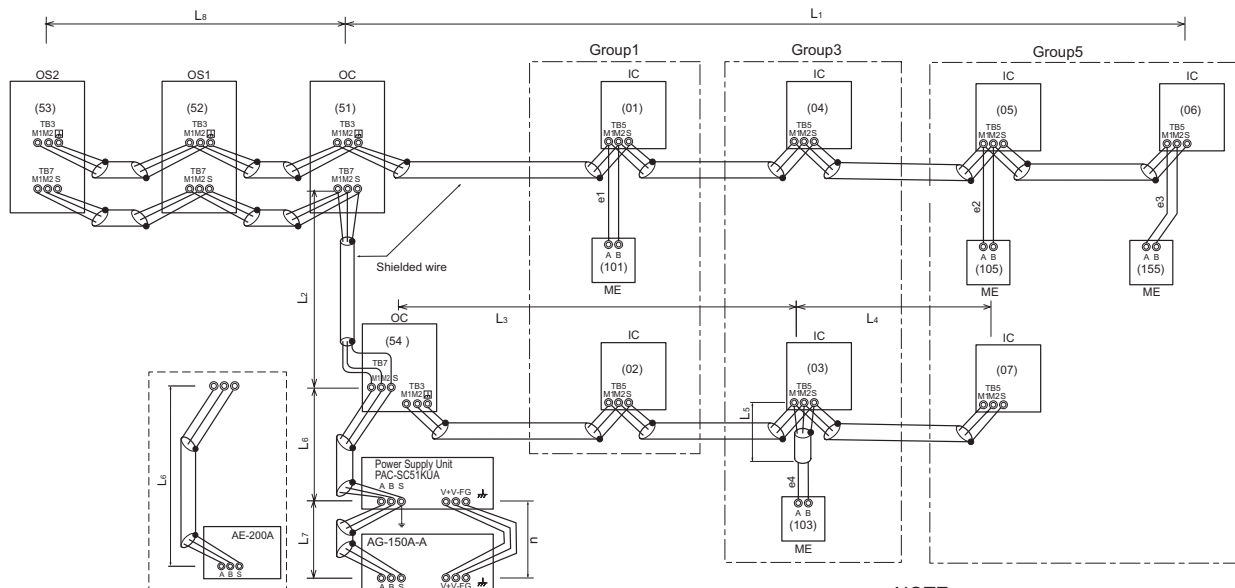
12-1-2. Using ME Remote controller

ME remote controller refers to Smart ME Controller.

Long transmission cable causes voltage down, therefore, the length limitation should be obeyed to secure proper transmission.

Max. length via Outdoor (M-NET cable)	$L1+L2+L3+L4, L1+L2+L6+L7, L1+L2+L3+L5, L3+L4+L6+L7$	$\leq 500\text{m}[1640\text{ft.}]$	1.25mm^2 [AWG16] or thicker
Max. length to Outdoor (M-NET cable)	$L1+L8, L3+L4, L6, L2+L6+L8, L7, L3+L5$	$\leq 200\text{m}[656\text{ft.}]$	1.25mm^2 [AWG16] or thicker
Max. length from ME to Indoor	$e1, e2+e3, e4$	$\leq 10\text{m}[32\text{ft.}]^*1$	$0.3\text{--}1.25\text{mm}^2$ [AWG22-16] *1
24VDC to AG-150A-A	n	$\leq 50\text{m}[164\text{ft.}]$	$0.75\text{--}2.0\text{mm}^2$ [AWG18-14]

*1. If the length from ME to Indoor exceed 10m, use 1.25mm^2 [AWG16] shielded cable, but the total length should be counted into Max. length via Outdoor.



OC, OS1, OS2: Outdoor unit controller; IC: Indoor unit controller; ME: ME remote controller

NOTE
Do not daisy-chain remote controllers.

12. M-NET CONTROL

12-2. Transmission Cable Specifications

	Transmission cables (Li)	ME Remote controller cables	MA Remote controller cables
Type of cable	Shielding wire (2-core) CVVS, CPEVS or MVVS	Sheathed 2-core cable (unshielded) CVV	
Cable size	More than 1.25mm ² [AWG16]	0.3 ~ 1.25mm ² [AWG22~16] *2	0.3 ~ 1.25mm ² [AWG22~16] *1 *2
Remarks	—	When 10m [32ft] is exceeded, use cables with the same specification as transmission cables.	Max length : 200m [656ft]

*1 To wire PAC-YT53CRAU, use a wire with a diameter of 0.3 mm² [AWG22]

*2 The use of cables 0.75 mm² [AWG18] or greater is recommended for easy handling.

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

12. M-NET CONTROL

12-3. System Configuration Restrictions

12-3-1. Common restrictions for the CITY MULTI system

For each Outdoor 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;
 *MA/ME remote controllers cannot be present together in 1 group.
 *To wire PAC-YT53CRAU, use a wire with a diameter of 0.3 mm² [AWG22]
- 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 unit.
- E) Maximum 6 System controllers are connectable when connecting to TB7 of the Outdoor unit, if the transmission power is supplied by the Outdoor unit. (Not applicable to TLMU model)
- F) 4 System controllers or more are connectable when connecting to TB7 of the Outdoor unit, if the transmission power is supplied by the power supply unit PAC-SC51KUA. Details refer to 12-3-3-C.
 *System controller connected as described in D) and E) would have a risk that the failure of connected Outdoor unit would stop power supply to the System controller.

12-3-2. Ensuring proper communication power for M-NET

In order to ensure proper communication among Outdoor 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 index of Indoor unit sized P06-P54 as 1, the equivalent power consumption index and supply capability index of others are listed at Table 12-3-1 and Table 12-3-2.

Table 12-3-1 The equivalent power consumption

Indoor unit			LOSSNAY	BC controller	PWFY			MA RC.	ME Remote controller/Adapter	
Sized P06-P54	Sized P72, 96	PEFY-AF1200 CFMR	LGH-RX-E	CMB	P36NMU-E-BU	P36NMU-E-AU	P72NMU-E-AU	PAC-YT53CRAU PAR-FA32MA PZ-41SLB PZ-60DR-E	PZ-52SF PAC-YG60MCA PAC-YG66DCA PAC-YG63MCA	PAR-U01MEDU PAC-IF01AHC-J
1	7	2	0	2	6	1	5	0	0.25	0.5

Centralized Remote controller					ON/OFF controller	MN Converter	M-NET Interface/Converter	Outdoor unit
AE-200A AE-50A	AG-150A-A EB-50GU-A	TC-24B	EW-50A	LMAPO4U-E BAC-HD150	PAC-YT40ANRA	CMS-MNG-E	MAC-333 PAC-SF83MA-E	TB7 power consumption
0	0.5	4	0	0	1	2	0	0

*RC: Remote Controller

Table 12-3-2 The equivalent power supply

Transmission Booster	Power supply unit	Expansion controller	BM ADAPTER	System Controller		Outdoor unit	Outdoor unit (except TLMU)	Outdoor unit TLMU
PAC-SF46EPA	PAC-SC51KUA	PAC-YG50ECA	BAC-HD150	AE-200A/AE-50A	EW-50A	Connector TB3 and TB7 total *	Connector TB7 only	Connector TB7 only
25	5	6	6	0 ¹	1.5	32	6	0

*If PAC-SC51KUA is used to supply power at TB7 side, no power supply need from Outdoor unit at TB7, Connector TB3 itself will therefore have 32.
 Not applicable to the PUMY model.

*1 AE-200A/AE-50A has a built-in function to supply power to the M-NET transmission line. The amount of power that an AE-200A or an AE-50A can supply is equivalent to the power required by an MN converter (CMS-MNG-E) that is used for maintenance.

With the equivalent power consumption values in Table 12-3-1 and Table 12-3-2, PAC-SF46EPA can be designed into the air-conditioner system to ensure proper system communication according to 12-3-2-A, B, C.

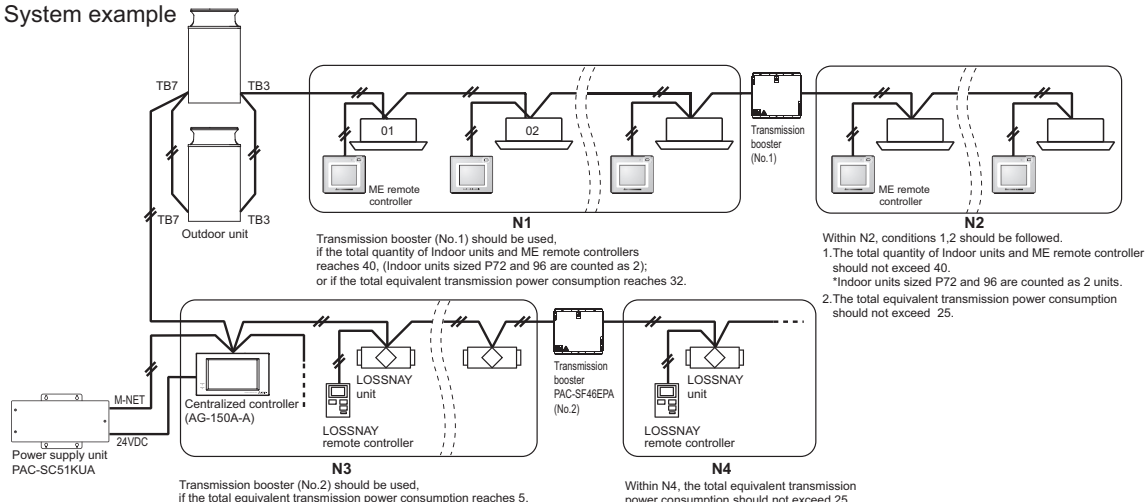
12-3-2-A) Firstly, count from TB3 at TB3 side the total quantity of Indoor units, ME remote controller, and System controllers.

If the total quantity reaches 40, a PAC-SF46EPA should be set. In this case, Indoor units sized P72 and 96 are counted as 2 indoor units, but MA remote controller(s) and PZ-41SLB are NOT counted.

12-3-2-B) Secondly, count from TB7 side to TB3 side the total transmission power consumption index. If the total power consumption reaches 32, a PAC-SF46EPA should be set. Yet, if a PAC-SC51KUA or another controller with a built-in power supply, such as PAC-YG50ECA, is used to supply power at TB7 side, count from index TB3 side only.

12-3-2-C) Thirdly, count from TB7 side the total transmission power consumption index, If the total power consumption reaches 6, a PAC-SF46EPA should be set.

■ System example



12. M-NET CONTROL

12-3-3. Ensuring proper power supply to System controller

The power to System controller (excluding AE-200A, AE-50A, EW-50A, BAC-HD150, LM-AP) is supplied via M-NET transmission line. M-NET transmission line at TB7 side is called Centralized control transmission line while one at TB3 side is called Indoor-Outdoor transmission line. There are 3 ways to supply power to the System controller.

A) Connecting to TB3 of the Outdoor unit and receiving power from the Outdoor unit.

B) Connecting to TB7 of the Outdoor unit and receiving power from the Outdoor unit. (Not applicable to TLMU model)

C) Connecting to TB7 of the Outdoor unit but receiving power from power supply unit PAC-SC51KUA.

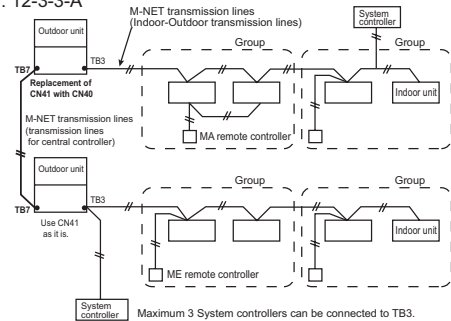
* System controllers (AE-200A, AE-50A, EW-50A, BAC-HD150, LM-AP) have a built-in function to supply power to the M-NET transmission lines, so no power needs to be supplied to the M-NET transmission lines from the outdoor units or from PAC-SC51KUA.

12-3-3-A. When connecting to TB3 of the Outdoor unit and receiving power from the Outdoor unit.

Maximum 3 System controllers can be connected to TB3.

If there is more than 1 Outdoor unit, it is necessary to replace power supply switch connector CN41 with CN40 on one Outdoor unit.

Fig. 12-3-3-A

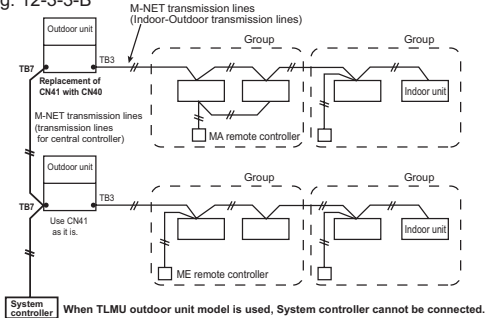


12-3-3-B. When connecting to TB7 of the Outdoor unit and receiving power from the Outdoor unit. (Not applicable to TLMU model)

Maximum 6 System controllers can be connected to TB7 and receiving power from the Outdoor unit. (Not applicable to TLMU model)

It is necessary to replace power supply switch connector CN41 with CN40 on one Outdoor unit.

Fig. 12-3-3-B



Note

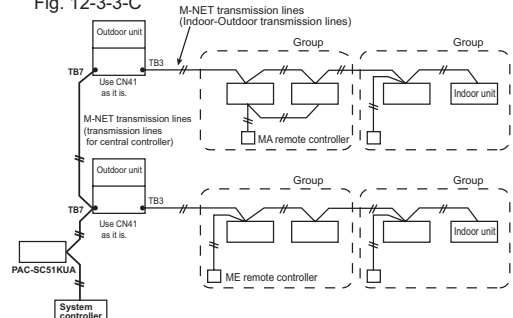
- When YLMU outdoor unit model is used, the male power supply connector can be connected to CN40, and the System controller can be connected to TB7 side.
- When the male power supply connector is connected from TLMU outdoor unit to CN40, the power is supplied to TB7 side even when the main power of the TLMU outdoor unit is switched off, and the System controller may store an error in the error history and emit an alarm signal.
- If only LOSSNAY units or outdoor units in different refrigerant circuits are connected to TB7 side, the male power supply connector can be connected from TLMU outdoor unit to CN40.

12-3-3-C. When connecting to TB7 of the Outdoor unit but receiving power from PAC-SC51KUA.

When using PAC-SC51KUA to supply transmission power, the power supply connector CN41 on the Outdoor units should be kept as it is. It is also a factory setting.

1 PAC-SC51KUA supports maximum 1 AG-150A-A or 1 EB-50GU-A unit due to the limited power 24VDC at its TB3. However, 1 PAC-SC51KUA supplies transmission power at its TB2 equal to 5 Indoor units, which is referable at Table 12-3-2. If PZ-52SF, System controller, ON/OFF controller connected to TB7 consume transmission power more than 5 (Indoor units), Transmission booster PAC-SF46EPA is needed. PAC-SF46EPA supplies transmission power equal to 25 Indoor units.

Fig. 12-3-3-C



CAUTION

■ AG-150A-A/EB-50GU-A*1 are recommended to connect to TB7 because it performs back-up to a number of data.

In an air conditioner system has more than 1 Outdoor units, AG-150A-A/EB-50GU-A receiving transmission power through TB3 or TB7 on one of the Outdoor units would have a risk that the connected Outdoor unit failure would stop power supply to AG-150A-A/EB-50GU-A and disrupt the whole system.

When applying apportioned electric power function, AG-150A-A/EB-50GU-A are necessary to connected to TB7 and has its own power supply unit PAC-SC51KUA.

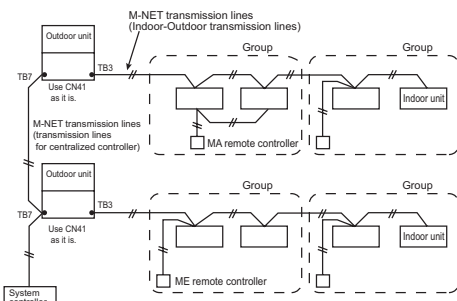
Note: Power supply unit PAC-SC51KUA is for AG-150A-A/EB-50GU-A.

*1: AG-150A-A is an example model of system controllers.

■ How to connect system controllers (AE-200A, AE-50A, EW-50A, BAC-HD150, LM-AP) to a given system System controllers (AE-200A, AE-50A, EW-50A, BAC-HD150, LM-AP) have a built-in function to supply power to the M-NET transmission lines, so no power needs to be supplied to the M-NET transmission lines from the outdoor units or from PAC-SC51KUA.

Leave the power supply connector on the outdoor unit connected to CN41 as it is. Refer to 2-3-2 for information about the power-supply capacity of each system controller (BAC-HD150, LM-AP) to the low-level system controllers.

Fig. 12-3-3-D



12. M-NET CONTROL

12-3-4. Power supply to LM-AP

1-phase 208-230V AC power supply is needed.

The power supply unit PAC-SC51KUA is not necessary when connecting only the LM-AP. Yet, make sure to change the power supply changeover connector CN41 to CN40 on the LM-AP.

12-3-5. Power supply to expansion controller

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

The power supply unit PAC-SC51KUA is not necessary.

The expansion controller supplies power through TB3, which equals 6 indoor units. (refer to Table 2-3-2)

12-3-6. 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 to move the power jumper from CN41 to CN40 on the BM ADAPTER.

12-3-7. Power supply to AE-200A/AE-50A/EW-50A

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

The power supply unit PAC-SC51KUA is not necessary when connecting only the AE-200A/AE-50A/EW-50A.

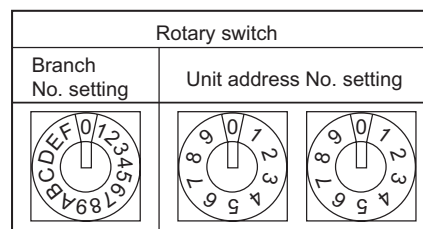
12. M-NET CONTROL

12-4. Address Setting

12-4-1. 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 unit, indoor unit and ME remote controller.
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".

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".

12. M-NET CONTROL

12-4-2. Rule of setting address

Unit		Address setting	Example	Note
Indoor unit		01 ~ 50	  10 1	Use the most recent address within the same group of indoor units. Make the indoor units address connected to the BC controller (Sub) larger than the indoor units address connected to the BC controller (Main). If applicable, set the sub BC controllers in an PURY system in the following order: (1) Indoor unit to be connected to the BC controller (Main) (2) Indoor unit to be connected to the BC controller (No.1 Sub) (3) Indoor unit to be connected to the BC controller (No.2 Sub) Set the address so that (1)<(2)<(3)
Outdoor unit		51 ~ 99, 100 (Note1)	  10 1	The smallest address of indoor unit in same refrigerant system + 50 Assign sequential address numbers to the outdoor 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)		52 ~ 99, 100	  10 1	The address of outdoor unit + 1 * 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 (Sub)		52 ~ 99, 100	  10 1	Lowest address within the indoor units connected to the BC controller (Sub) plus 50.
Local remote controller	ME, LOSSNAY Remote controller (Main)	101 ~ 150	1 Fixed   10 1	The smallest address of indoor unit in the group + 100 * The place of "100" is fixed to "1"
	ME, LOSSNAY Remote controller (Sub)	151 ~ 199, 200	1 Fixed   10 1	The address of main remote controller + 50 * The address automatically becomes "200" if it is set as "00"
System controller	ON/OFF remote controller	000, 201 ~ 250	   100 10 1	The smallest group No. to be managed + 200 * The smallest group No. to be managed is changeable.
	AE-200A/AE-50A AG-150A-A GB-24A EB-50GU-A EW-50A	000, 201 ~ 250	   100 10 1	
	PAC-YG50ECA	000, 201 ~ 250	   100 10 1	* Settings are made on the initial screen of AG-150A-A.
	BAC-HD150	000, 201 ~ 250	   100 10 1	* Settings are made with setting tool of BM ADAPTER.
	LMA04U-E	201 ~ 250	2 Fixed   10 1	

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

Note2: Outdoor 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.

12. M-NET CONTROL

12-4-3. System examples

Factory setting

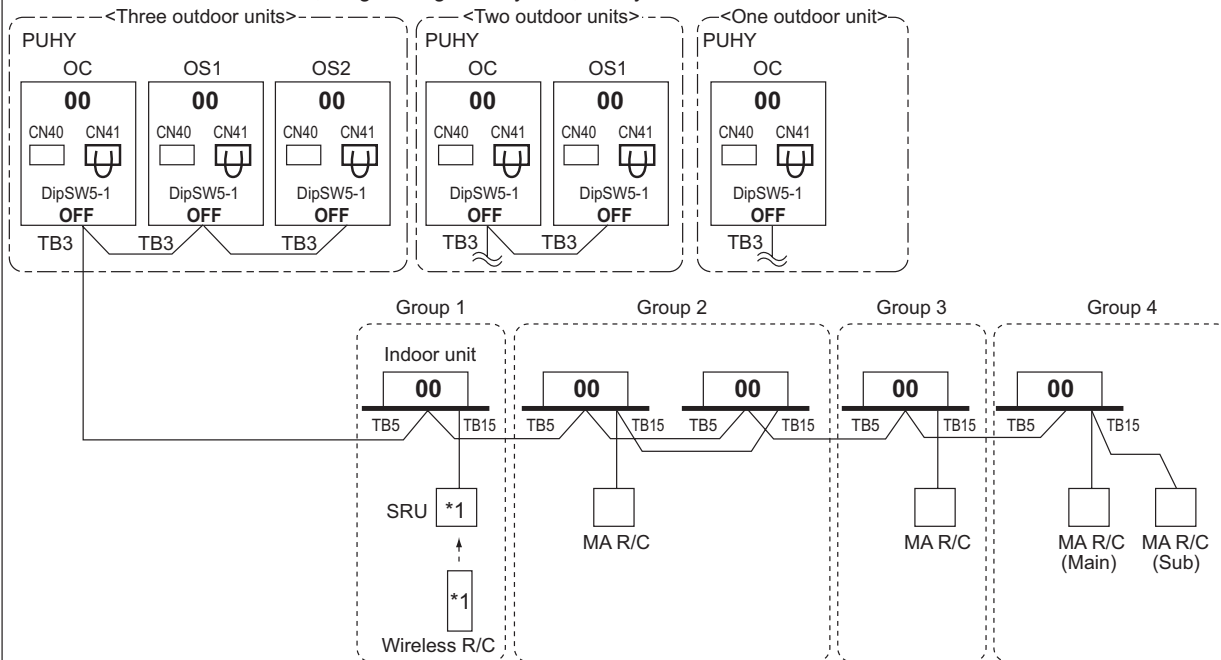
Original switch setting of the outdoors, indoors, controllers, LM-AP, and BM ADAPTER at shipment is as follows.

- Outdoor unit : Address: 00, CN41: ON (Jumper), DipSW5-1: OFF
- Indoor unit : Address: 00
- ME remote controller : Address: 101
- LM-AP : Address: 247, CN41: ON (Jumper), DipSW1-2: OFF
- BM ADAPTER : Address: 000, CN41: ON (Jumper)

Setting at the site

- DipSW5-1 (Outdoor) : When the System Controller is used, all the Dip SW5-1 at the outdoor units should be set to "ON". * Dip SW5-1 remains OFF when only LM-AP is used.
- DipSW1-2 (LM-AP) : When the LM-AP is used together with System Controller, DipSW1-2 at the LM-AP should be set to "ON".
- CN40/CN41 : Change jumper from CN41 to CN 40 at outdoor control board will activate central transmission power supply to TB7;
(Change jumper at only one outdoor unit when activating the transmission power supply without using a power supply unit.)
Change jumper from CN41 to CN 40 at LM-AP will activate transmission power supply to LM-AP itself;
Power supply unit is recommended to use for a system having more than 1 outdoor unit, because the central transmission power supply from TB7 of one of outdoor units is risking that the outdoor unit failure may let down the whole system controller system.

12-4-3-1. MA remote controller, Single-refrigerant-system, No System Controller



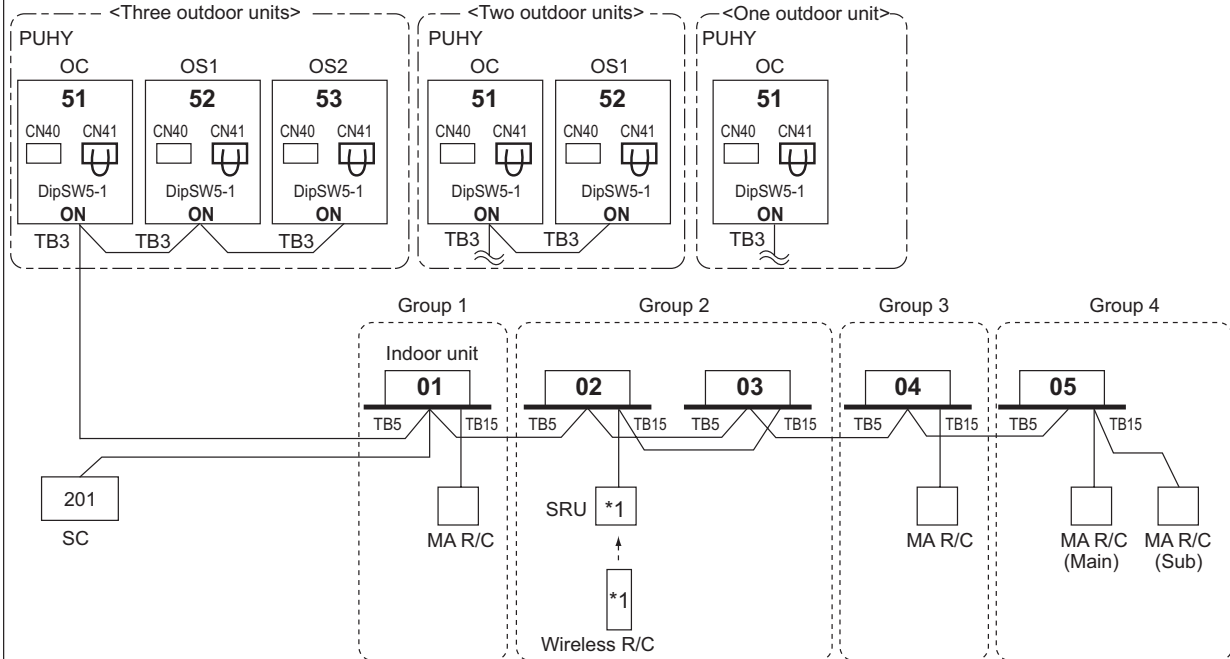
*1 For Wireless R/C and Signal receiver unit (SRU), channel 1, 2 and 3 are selectable and should be set to same channel.

NOTE:

1. Outdoor units OC, OS1 and OS2 in one refrigerant circuit system are automatically detected.
OC, OS1 and OS2 are ranked in descending order of capacity. If units are the same capacity, they are ranked in ascending order of their address.
2. No address setting is needed.
3. For a system having more than 32 indoor unit (P06-P54), confirm the need of Booster at **12-3 "System configuration restrictions"**.

12. M-NET CONTROL

12-4-3-2. MA remote controller, Single-refrigerant-system, System Controller



*1 For Wireless R/C and Signal receiver unit (SRU), channel 1, 2 and 3 are selectable and should be set to same channel.

*SC can be connected to TB3 side or TB7 side;

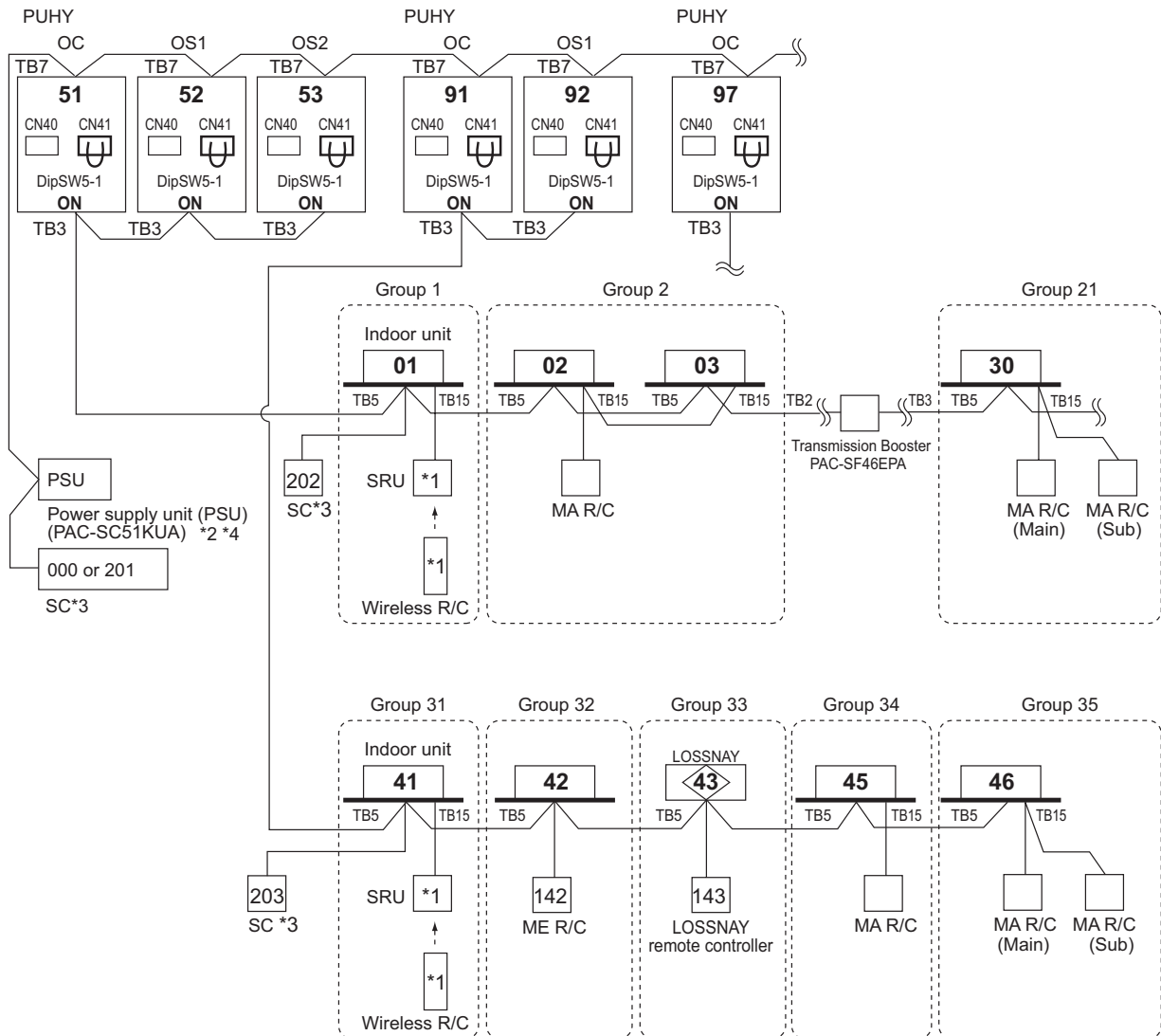
Should SC connected to TB7 side, change Jumper from CN41 to CN40 at the Outdoor unit module(except TLMU model) so as to supply power to the SC. When the SC is connected to TB7 side and TLMU outdoor unit model is used, connect the PAC-SC51KUA to TB7 side. If a PAC-SC51KUA cannot be used, connect the System controller to TB3 side. Up to three System controllers can be connected to TB3 side.

NOTE:

- Outdoor units OC, OS1 and OS2 in one refrigerant circuit system are automatically detected.
OC, OS1 and OS2 are ranked in descending order of capacity. If units are the same capacity, they are ranked in ascending order of their address.
- Address should be set to Indoor units and central controller.
- For a system having more than 32 indoor unit (P06-P54), confirm the need of Booster at **12-3 "System configuration restrictions"**.

12. M-NET CONTROL

12-4-3-3. MA remote controller, Multi-refrigerant-system, System Controller at TB7/TB3 side, Booster for long M-NET wiring



*1 For Wireless R/C and Signal receiver unit (SRU), channel 1, 2 and 3 are selectable and should be set to same channel.

*2 System controller should connect to TB7 at Outdoor and use power supply unit together in Multi-Refrigerant-System.

For AG-150A-A, 24VDC should be used with the PAC-SC51KUA.

For AE-200A, AE-50A, and EW-50A the power supply unit PAC-SC51KUA is unused.

*3 When multiple system controllers are connected in the system, set the controller with more functions than others as a "main" controller and others as "sub".

AE-200A, AE-50A, EW-50A, BAC-HD150, and LM-AP are for exclusive use as a "main" system controller and cannot be used as a "sub" system controller. Make the setting to only one of the system controllers for "prohibition of operation from local remote controller".

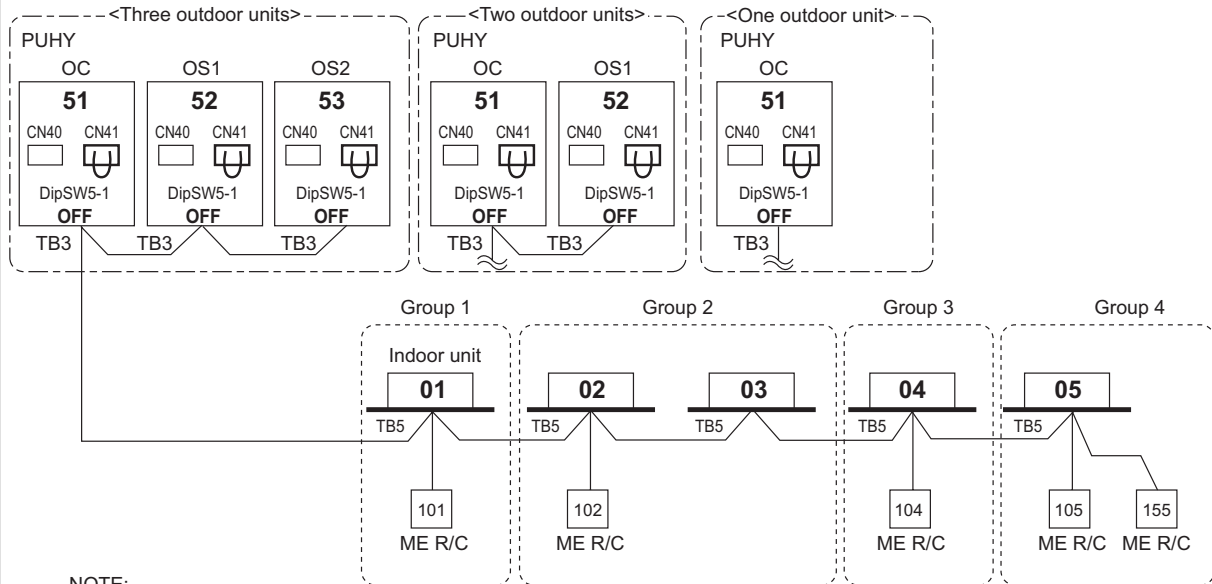
*4 The power supply unit is not necessary for AE-200A, AE-50A, EW-50A, BAC-HD150, and LM-AP.

NOTE:

- Outdoor units OC, OS1 and OS2 in one refrigerant circuit system are automatically detected. OC, OS1 and OS2 are ranked in descending order of capacity. If units are the same capacity, they are ranked in ascending order of their address.
- Address should be set to Indoor units, LOSSNAY and system controller.
- M-NET power is supplied by the Outdoor unit at TB3, while Indoor unit and ME remote controller consume the M-NET power for transmission use. The power balance is needed to consider for long M-NET wiring. Details refer to **12-3 "System configuration restrictions"**.

12. M-NET CONTROL

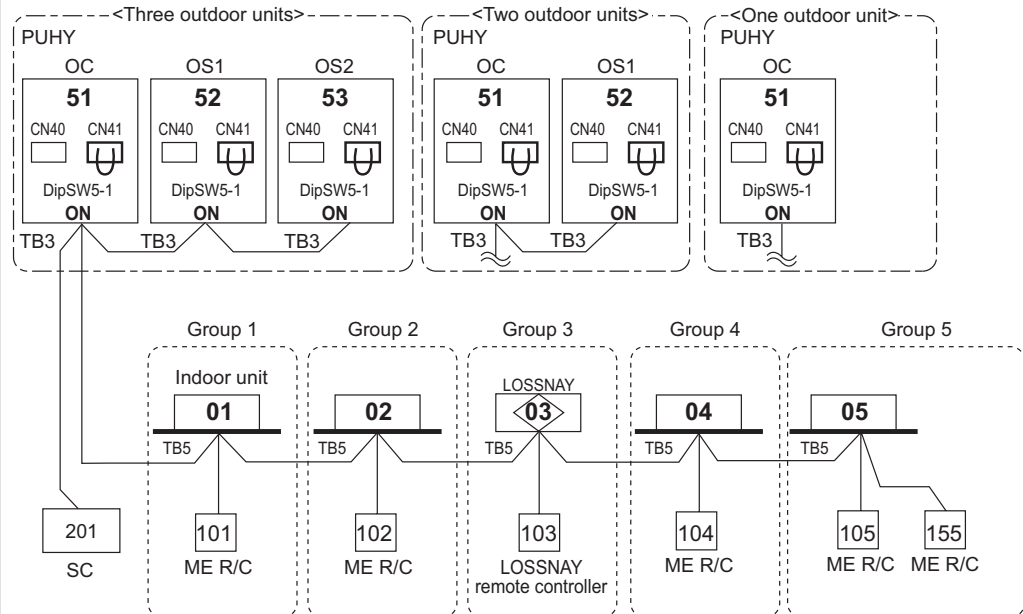
12-4-3-4. ME remote controller, Single-refrigerant-system, No system controller



NOTE:

1. Outdoor units OC, OS1 and OS2 in one refrigerant circuit system are automatically detected. OC, OS1 and OS2 are ranked in descending order of capacity. If units are the same capacity, they are ranked in ascending order of their address.
2. Address should be set to Indoor units, system controller and ME remote controllers.
3. M-NET power is supplied by the Outdoor unit at TB3, while Indoor unit and ME R/C consume the M-NET power for transmission use. The power balance is needed to consider for long M-NET wiring. Details refer to **12-3 "System configuration restrictions"**.

12-4-3-5. ME remote controller, Single-refrigerant-system, System controller, LOSSNAY



*SC can be connected to TB3 side or TB7 side;

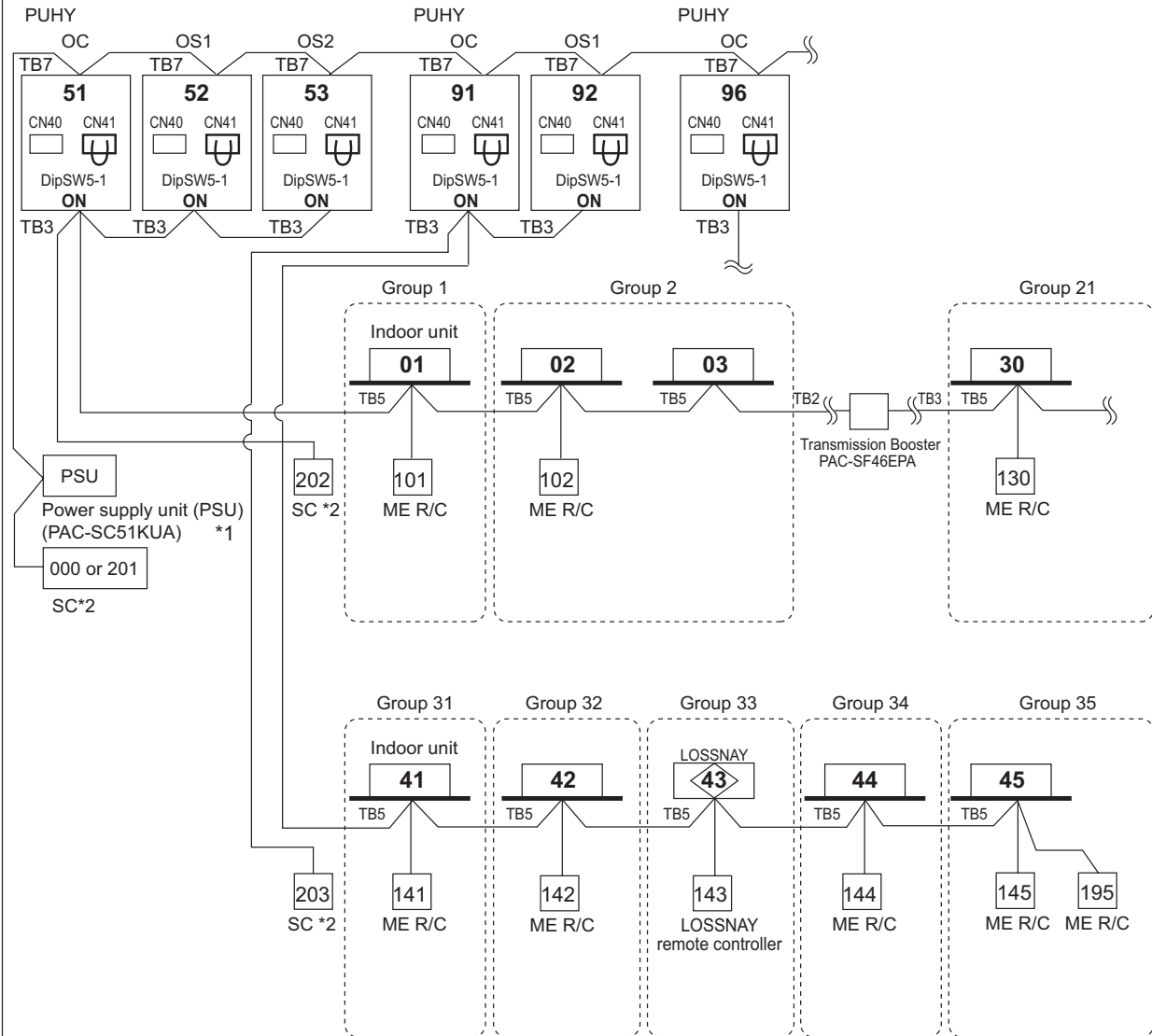
Should SC connected to TB7 side, change Jumper from CN41 to CN40 at the Outdoor unit module(except TLMU model) so as to supply power to the SC. When the SC is connected to TB7 side and TLMU outdoor unit model is used, connect the PAC-SC51KUA to TB7 side. If a PAC-SC51KUA cannot be used, connect the System controller to TB3 side. Up to three System controllers can be connected to TB3 side.

NOTE:

1. Outdoor units OC, OS1 and OS2 in one refrigerant circuit system are automatically detected. OC, OS1 and OS2 are ranked in descending order of capacity. If units are the same capacity, they are ranked in ascending order of their address.
2. Address should be set to Indoor units, LOSSNAY central controller, ME remote controllers.
3. For a system having more than 32 indoor unit (P06-P54), confirm the need of Booster at **12-3 "System configuration restrictions"**.

12. M-NET CONTROL

12-4-3-6. ME remote controller, Multi-refrigerant-system, System Controller at TB7 side, LOSSNAY, Booster for long M-NET wiring



*1 System controller should connect to TB7 at Outdoor and use power supply unit together in Multi-Refrigerant-System.
For AG-150A-A, 24V DC should be used with the PAC-SC51KUA.

*2 When multiple system controllers are connected in the system, set the controller with more functions than others as a "main" controller and others as "sub".
TC-24A, AG-150A-A, AE-200A, AE-50A, EW-50A, BAC-HD150 and LM-AP are for exclusive use as a "main" system controller and cannot be used as a "sub" system controller.
Make the setting to only one of the system controllers for "prohibition of operation from local remote controller".

NOTE:

- Outdoor units OC, OS1 and OS2 in one refrigerant circuit system are automatically detected.
OC, OS1 and OS2 are ranked in descending order of capacity. If units are the same capacity, they are ranked in ascending order of their address.
- M-NET power is supplied by the Outdoor unit at TB3, while Indoor unit and ME remote controller consume the M-NET power for transmission use. The power balance is needed to consider for long M-NET wiring. Details refer to **12-3 "System configuration restrictions"**.

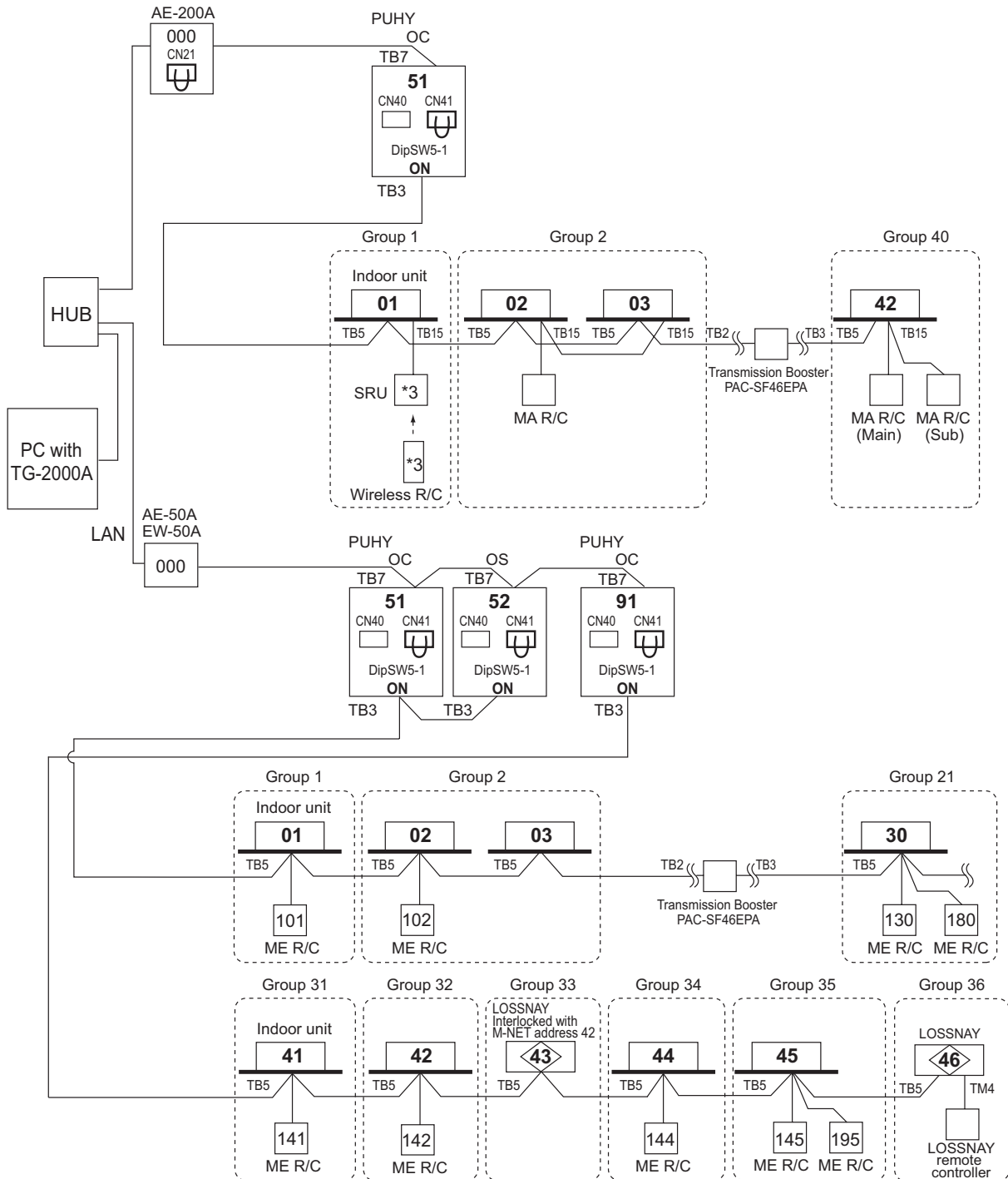
12. M-NET CONTROL

12-4-3-7. TG-2000A(*1)+AE-200A/AE-50A/EW-50A

AE-200A can control max. 50 indoor units;

TG-2000A can control max. 40 of AE-200A, AE-50A, and EW-50A;*2

TG-2000A can control max. 2000 indoor units.



*1 TG-2000A (Ver.6.5 or later) supports AE-200A/AE-50A (Ver.7.10 or later).

Contact your local distributor for which version of TG-2000A supports EW-50A.

*2 When AE-200A connected with AE-50A is connected, the number of AE-50A will be the maximum controllable number.

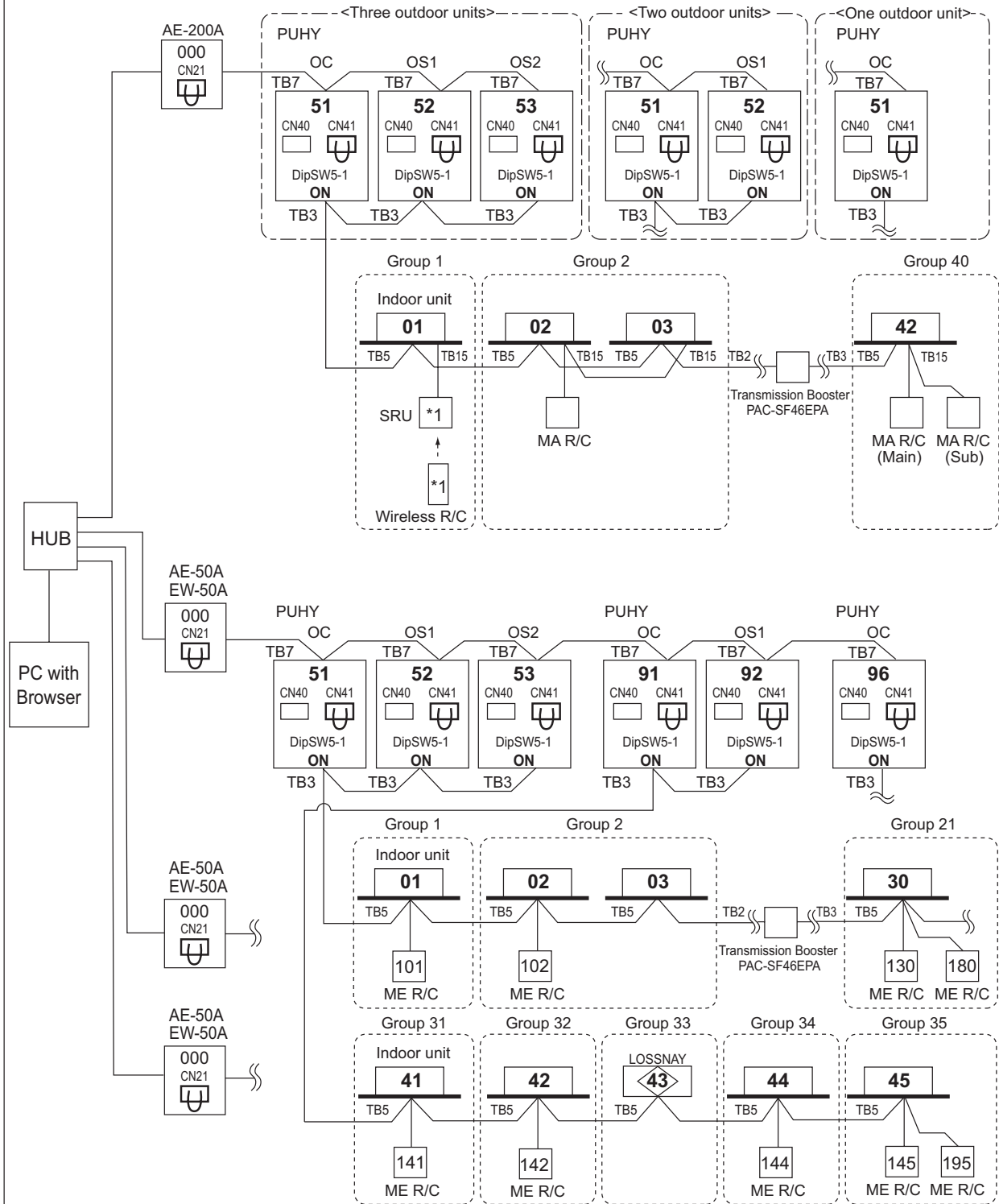
TG-2000A can control up to 40 AE-200A/AE-50A or AE-200A without AE-50A connection.

*3 For Wireless R/C and Signal receiver unit (SRU), channel 1, 2 and 3 are selectable and should be set to same channel.

12. M-NET CONTROL

12-4-3-8. AE-200A + AE-50A, EW-50A

AE-200A can control max. 200 indoor units/via AE-50A.



*1 For Wireless R/C and Signal receiver unit (SRU), channel 1, 2 and 3 are selectable and should be set to same channel.

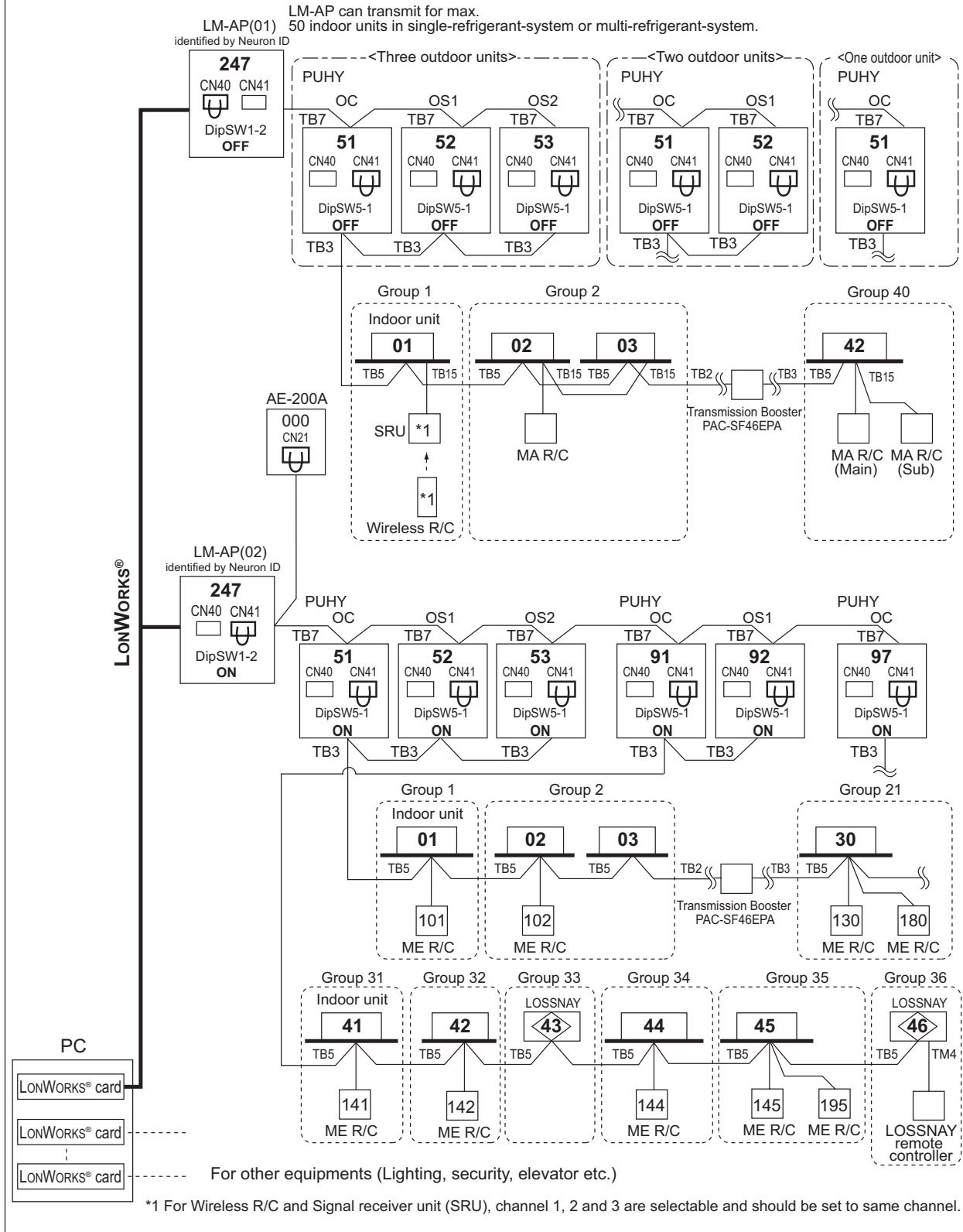
12. M-NET CONTROL

12-4-3-9. LM-AP

LM-AP can transmit for max. 50 indoor units;

If system controller (SC) is used, DipSW1-2 at LM-AP and DipSW5-1 at Outdoor unit should set to "ON".

Change Jumper from CN41 to CN40 to activate power supply to LM-AP itself for those LM-AP connected without system controller (SC).



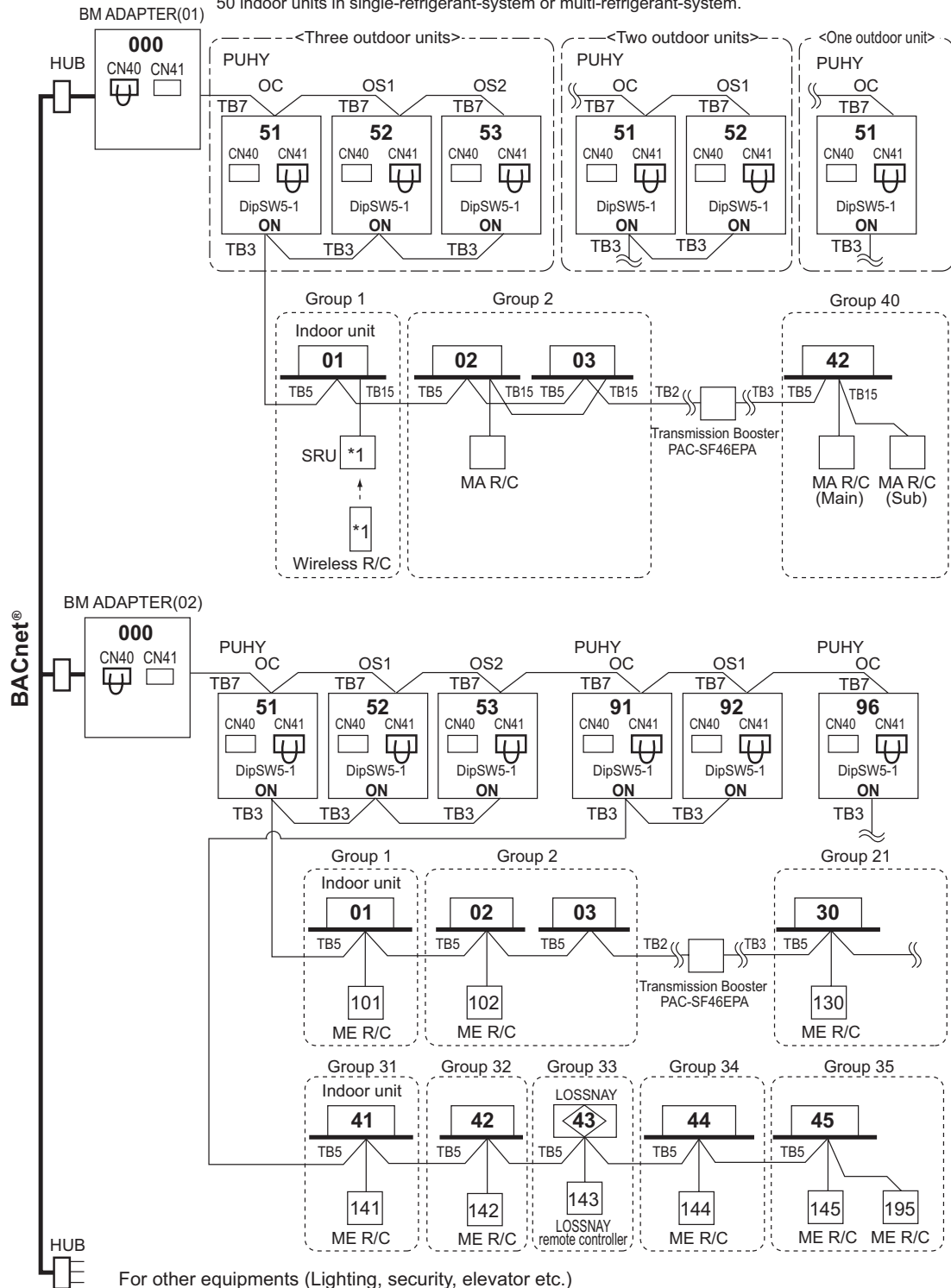
12. M-NET CONTROL

12-4-3-10. BM ADAPTER

BM ADAPTER can transmit max. 50 indoor units;

Change Jumper from CN41 to CN40 to activate power supply to BM ADAPTER itself for those BM ADAPTER connected without the power supply unit.

BM ADAPTER can transmit for max.
50 indoor units in single-refrigerant-system or multi-refrigerant-system.



*1 For Wireless R/C and Signal receiver unit (SRU), channel 1, 2 and 3 are selectable and should be set to same channel.

12-4-3-11. BM ADAPTER+AE-200A/AE-50A

NOTE

- It is not necessary to connect the M-NET transmission line to the TB3 on BM ADAPTER. Leave the power jumper of BM ADAPTER connected to CN41.
- *1 For Wireless R/C and Signal receiver unit (SRU), channel 1, 2 and 3 are selectable and should be set to same channel.
- *2 Consult your dealer for restrictions when connecting both AE-200A/AE-50A and BM ADAPTER.
- *3 In a system that uses AE-200A and/or AE-50A, each BM-ADAPTER must be connected to the M-NET line.

13. PIPING DESIGN

13-1. R410A Piping Material

The maximum operation pressure of R410A air conditioner is 4.15 MPa [601 psi]. The refrigerant piping should ensure the safety under the maximum operation pressure. You shall follow the local industrial standard.

13-2. Piping Design

13-2-1. PUHY-P72-168TLMU/YLMU Piping

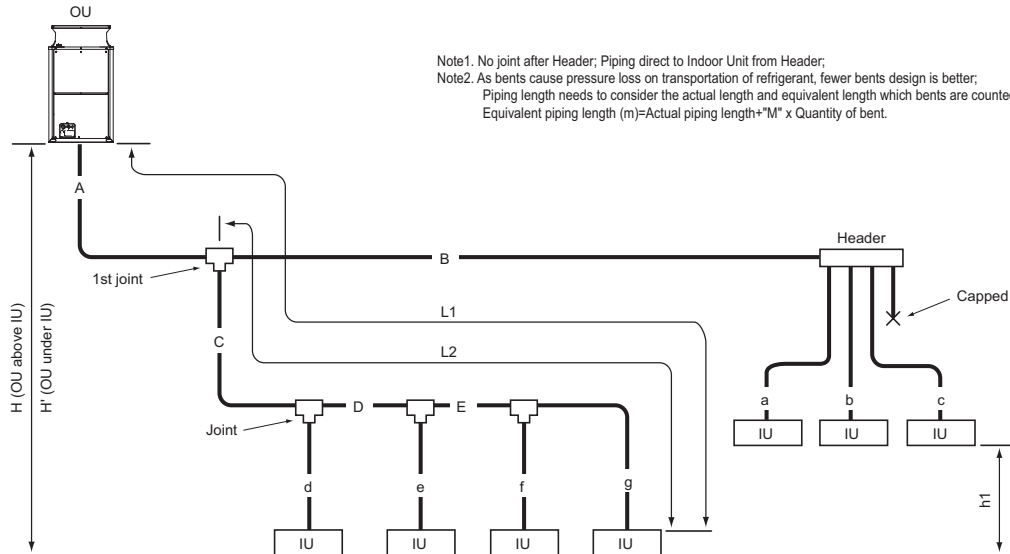


Fig. 13-2-1A Piping scheme

IU : Indoor unit , OU : Outdoor unit

Table13-2-1-1. Piping length

Item	Piping in the figure	Max. length (m [ft.])	Max. equivalent length (m [ft.])
Total piping length	A+B+C+D+E+a+b+c+d+e+f+g	1000 [3280]	-
Farthest IU from OU (L1)	A+C+D+E+g / A+B+c	165 [541]	190 [623]
Farthest IU from the first joint (L2)	C+D+E+g / B+c	40 [131] *3	40 [131]
Height between OU and IU (OU above IU)	H	50 [164] *1	-
Height between OU and IU (OU under IU)	H'	40 [131] *2	-
Height between IU and IU	h1	15 [49] *4	-

OU: Outdoor Unit, IU: Indoor Unit

*1 90 m [295 ft.] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*2 60 m [197 ft.] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*3 90 m [295 ft.] is available. When the piping length exceeds 40 m [131 ft.], use one size larger liquid pipe starting with the section of piping where 40 m [131 ft.] is exceeded and all piping after that point.

In the figure above, if the piping labeled "E" exceeds 40 m [131 ft.] (but does not exceed 90 m [295 ft.]), increase the size of the liquid piping labeled E, f, and g by one size.

*4 30 m [98 ft.] is available. If the height difference between indoor units exceeds 15 m [49 ft.] (but does not exceed 30 m [98 ft.]), use one-size larger pipes for indoor unit liquid pipes.

In the figure above, if "h1" exceeds 15 m [49 ft.], increase the size of the liquid piping labeled C, D, E, d, e, f, and g by one size.

Table13-2-1-3. Piping "A" size selection rule

Outdoor unit	Pipe(Liquid)	Pipe(Gas)
PUHY-P72T/YLMU	ø9.52 [3/8]	ø22.2 [7/8]
PUHY-P96T/YLMU	ø9.52 [3/8] *1	ø22.2 [7/8]
PUHY-P120T/YLMU	ø9.52 [3/8] *2	ø28.58 [1-1/8]
PUHY-P144T/YLMU	ø12.7 [1/2]	ø28.58 [1-1/8]
PUHY-P168T/YLMU	ø15.88 [5/8]	ø28.58 [1-1/8]

*1. L1>=90 m [295 ft.], ø12.70 mm [1/2 in.] ;

*2. L1>=40 m [131 ft.], ø12.70 mm [1/2 in.]

Table13-2-1-4. Piping "B", "C", "D", "E" size selection rule

Total down-stream Indoor capacity	Pipe(Liquid)	Pipe(Gas)
~ P54	ø9.52 [3/8]	ø15.88 [5/8]
P55 ~ P72	ø9.52 [3/8]	ø19.05 [3/4]
P73 ~ P108	ø9.52 [3/8]	ø22.20 [7/8]
P109 ~ P144	ø12.70 [1/2]	ø28.58 [1-1/8]
P145 ~ P240	ø15.88 [5/8]	ø28.58 [1-1/8]
P241 ~ P308	ø19.05 [3/4]	ø34.93 [1-3/8]
P309 ~	ø19.05 [3/4]	ø41.28 [1-5/8]

Table13-2-1-5. Piping "a", "b", "c", "d", "e", "f", "g" size selection rule

Indoor Unit size	Pipe(Liquid)	Pipe(Gas)
P06,P08,P12,P15,P18	ø6.35 [1/4]	ø12.70 [1/2]
P24,P27,P30,P36,P48,P54	ø9.52 [3/8]	ø15.88 [5/8]
P72	ø9.52 [3/8]	ø19.05 [3/4]
P96	ø9.52 [3/8]	ø22.20 [7/8]

Table13-2-1-2. Bent equivalent length "M"

Outdoor Model	M (m/bends [ft./bends])
PUHY-P72T/YLMU	0.35 [1.15]
PUHY-P96T/YLMU	0.42 [1.38]
PUHY-P120T/YLMU	0.42 [1.38]
PUHY-P144T/YLMU	0.50 [1.64]
PUHY-P168T/YLMU	0.50 [1.64]

Table13-2-1-6. Selection criteria for joints

Total down-stream Indoor capacity	Joint
~ P72	CMY-Y102SS-G2
P73 ~ P144	CMY-Y102LS-G2
P145 ~ P240	CMY-Y202S-G2
P241 ~	CMY-Y302S-G2

*Concerning detailed usage of joint parts, refer to its Installation Manual.

See the table below for the first joint of the outdoor unit described below.

Outdoor unit model	Joint model
P72 to P168	CMY-Y102LS-G2

Table13-2-1-7. R410 A Header selection rule

	4-branch Header	8-branch Header	10-branch Header
	CMY-Y104C-G	CMY-Y108C-G	CMY-Y1010C-G
Total down-stream Indoor capacity	<=P72	<=P144	<=P240

* CMY-Y104C-G can directly connect PUHY-P72T/YLMU, but can NOT directly connect PUHY-P96T/YLMU or above;

* CMY-Y108C-G can directly connect PUHY-P72-168T/Y(S)LMU, but can NOT directly connect PUHY-P192T/Y(S)LMU or above;

* CMY-Y1010C-G can directly connect PUHY-P72-240T/Y(S)LMU;

* CMY-Y104C-G can NOT connect P72~P96 Indoor, but CMY-Y108, Y1010C-G can do;

* Concerning detailed usage of Header parts, refer to its Installation Manual.

Note3. Indoor capacity is described as its model size;

For example, PEFY-P06NMAU-E3, its capacity is P06;

Note4. Total down-stream Indoor capacity is the summary of the model size of Indoors downstream.

For example, PEFY-P06NMAU-E3+PEFY-P08NMAU-E3: Total Indoor capacity=P06+P08=P14

Note5. Piping size determined by the Total down-stream indoor capacity is NOT necessary to be bigger than the up-stream one.

i.e. A>=B; A>=C=>D

13. PIPING DESIGN

13-2-2. PUHY-P144-240TSLMU/P144-240YSLMU Piping

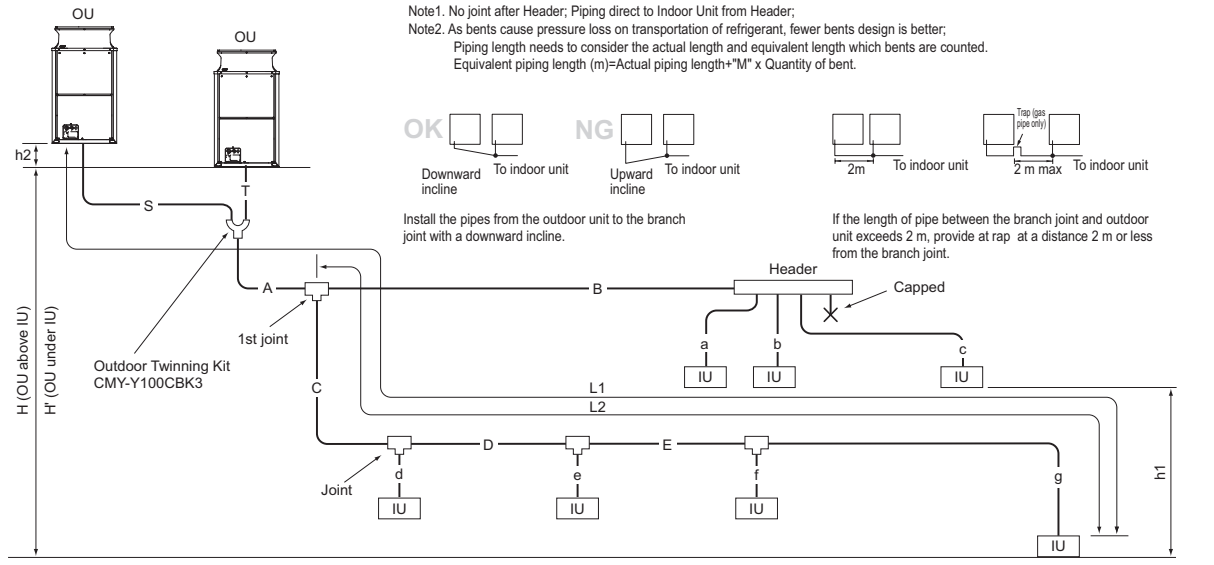


Table13-2-2-1. Piping length

Item	Piping in the figure	Max. length	Max. equivalent length
Total piping length	S+T+A+B+C+D+E+a+b+c+d+e+f+g	1000 [3280]	-
Distance between OU and OU	S+T	10[32]	-
Height between OU and OU	h2	0.1[0.3]	-
Farthest IU from OU (L1)	S(T)+A+C+D+E+g / S(T)+A+B+c	165 [541]	190 [623]
Farthest IU from the first joint (L2)	C+D+E+g / B+c	40 [131] *3	40 [131]
Height between OU and IU (OU above IU)	H	50 [164] *1	-
Height between OU and IU (OU under IU)	H'	40 [131] *2	-
Height between IU and IU	h1	15 [49] *4	-

OU: Outdoor Unit, IU: Indoor Unit

*1 90 m [295 ft.] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*2 60 m [197 ft.] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*3 90 m [295 ft.] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.

In the figure above, if the piping labeled "E" exceeds 40m [131ft] (but does not exceed 90 m [295 ft.]), increase the size of the liquid piping labeled E, f, and g by one size.

*4 30 m [98 ft.] is available. If the height difference between indoor units exceeds 15 m [49 ft.] (but does not exceed 30 m [98 ft.]), use one-size larger pipes for indoor unit liquid pipes. In the figure above, if "h1" exceeds 15 m [49 ft.], increase the size of the liquid piping labeled C, D, E, and g by one size.

Table13-2-2-3. Piping "A" size selection rule

Outdoor unit	Twinning kit	Pipe(Liquid)	Pipe(Gas)
PUHY-P144TSLMU/YSLMU	CMY-Y100CBK3	ø12.7[1/2]	ø28.58[1-1/8]
PUHY-P168-240TSLMU/YSLMU	CMY-Y100CBK3	ø15.88[5/8]	ø28.58[1-1/8]

For Piping size "S", "T", please refer to specification of the Twinning kit CMY-Y100CBK3 at the Outdoor unit's external drawing.

Table13-2-2-4. Piping "B", "C", "D", "E" size selection rule

Total down-stream Indoor capacity	Pipe(Liquid)	Pipe(Gas)
~ P54	ø9.52 [3/8]	ø15.88 [5/8]
P55 ~ P72	ø9.52 [3/8]	ø19.05 [3/4]
P73 ~ P108	ø9.52 [3/8]	ø22.20 [7/8]
P109 ~ P144	ø12.70 [1/2]	ø28.58 [1-1/8]
P145 ~ P240	ø15.88 [5/8]	ø28.58 [1-1/8]
P241 ~ P308	ø19.05 [3/4]	ø34.93 [1-3/8]
P309 ~	ø19.05 [3/4]	ø41.28 [1-5/8]

Table13-2-2-5. Piping "a", "b", "c", "d", "e", "f", "g" size selection rule

Indoor Unit size	Pipe(Liquid)	Pipe(Gas)
P06,P08,P12,P15,P18	ø6.35 [1/4]	ø12.70 [1/2]
P24,P27,P30,P36,P48,P54	ø9.52 [3/8]	ø15.88 [5/8]
P72	ø9.52 [3/8]	ø19.05 [3/4]
P96	ø9.52 [3/8]	ø22.20 [7/8]

Table13-2-2-2. Bends equivalent length "M"

Outdoor Model	M (m/bends [ft./bends])
PUHY-P144T/YSLMU	0.50 [1.64]
PUHY-P168T/YSLMU	0.50 [1.64]
PUHY-P192T/YSLMU	0.50 [1.64]
PUHY-P216T/YSLMU	0.50 [1.64]
PUHY-P240T/YSLMU	0.50 [1.64]

Table13-2-2-6. Selection criteria for joints

Total down-stream Indoor capacity	Joint
~ P72	CMY-Y102SS-G2
P73 ~ P144	CMY-Y102LS-G2
P145 ~ P240	CMY-Y202S-G2
P241 ~	CMY-Y302S-G2

*Concerning detailed usage of joint parts, refer to its Installation Manual.

*The total capacity of the units in the downstream of the branch joint on at least one of the piping lines that are connected to the branch joint should be 240 or below. If the total capacity of the units in the downstream of the branch joints on both lines is above 240 use two branch joints (CMY-Y302S-G2).

See the table below for the first joint of the outdoor unit described below.

Outdoor unit model	Joint model
P144 to P240	CMY-Y202S-G2

Table13-2-2-7. R410A Header selection rule

	4-branch Header	8-branch Header	10-branch Header
	CMY-Y104C-G	CMY-Y108C-G	CMY-Y1010C-G
Total down-stream Indoor capacity	<=P72	<=P144	<=P240

* CMY-Y104C-G can directly connect PUHY-P72T/YLMU, but can NOT directly connect PUHY-P96T/YLMU or above;

* CMY-Y108C-G can directly connect PUHY-P72~168T/Y(S)LMU, but can NOT directly connect PUHY-P192T/YSLMU or above;

* CMY-Y1010C-G can directly connect PUHY-P72~240T/Y(S)LMU;

* CMY-Y104C-G can NOT connect P72~P96 Indoor, but CMY-Y108, Y1010C-G can do;

* Concerning detailed usage of Header parts, refer to its Installation Manual.

Note3. Indoor capacity is described as its model size;

For example, PEFY-P06NMAU-E3, its capacity is P06;

Note4. Total down-stream Indoor capacity is the summary of the model size of Indoors downstream.

For example, PEFY-P06NMAU-E3+PEFY-P08NMAU-E3: Total Indoor capacity=P06+P08=P14

Note5. Piping size determined by the Total down-stream indoor capacity is NOT necessary

to be bigger than the up-stream one.

i.e. A>=B, A>=C>=D

13. PIPING DESIGN

13-2-3. PUHY-P264-360TSLMU/YSLMU Piping

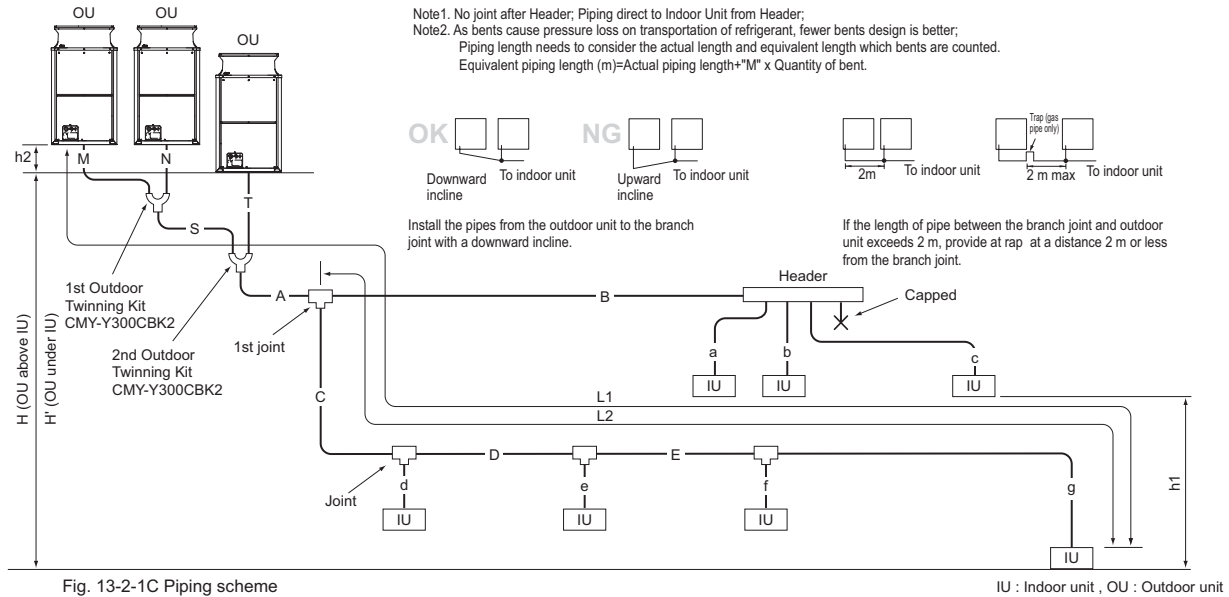


Table13-2-3-1. Piping length

Item	Piping in the figure	Max. length	Max. equivalent length
Total piping length	S+T+M+N+A+B+C+D+E+a+b+c+d+e+f+g	1000[3280]	-
Distance between OU and OU	M+N+S+T	10[32]	-
Height between OU and OU	h2	0.1[0.3]	-
Farthest IU from OU (L1)	M(N)+S+A+C+D+E+g / M(N)+S+A+B+c	165[541]	190[623]
Farthest IU from the first joint (L2)	C+D+E+g / B+c	40[131] *3	40[131]
Height between OU and IU (OU above IU)	H	50[164] *1	-
Height between OU and IU (OU under IU)	H'	40[131] *2	-
Height between IU and IU	h1	15[49] *4	-

OU: Outdoor Unit, IU: Indoor Unit

*1 90 m [295 ft.] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*2 60 m [197 ft.] is available depending on the model and installation conditions. For more detailed information, contact your local distributor.

*3 90 m [295 ft.] is available. When the piping length exceeds 40m [131ft], use one size larger liquid pipe starting with the section of piping where 40m [131ft] is exceeded and all piping after that point.

In the figure above, if the piping labeled "E" exceeds 40m [131ft] (but does not exceed 90 m [295 ft.]), increase the size of the liquid piping labeled E, f, and g by one size.

*4 30 m [98 ft.] is available. If the height difference between indoor units exceeds 15 m [49 ft.] (but does not exceed 30 m [98 ft.]), use one-size larger pipes for indoor unit liquid pipes.

In the figure above, if "h1" exceeds 15 m [49 ft.], increase the size of the liquid piping labeled C, D, E, and g by one size.

Table13-2-3-2. Bends equivalent length "M"

Outdoor Model	M (m/bends [ft./bends])
PUHY-P264T/YSLMU	0.70 [2.29]
PUHY-P288T/YSLMU	0.70 [2.29]
PUHY-P312T/YSLMU	0.70 [2.29]
PUHY-P336T/YSLMU	0.80 [2.62]
PUHY-P360T/YSLMU	0.80 [2.62]

Table13-2-3-3. Piping "A" size selection rule

Outdoor unit	Twinning kit	Pipe(Liquid)	Pipe(Gas)
PUHY-P264-312TSLMU/YSLMU	CMY-Y300CBK2	ø19.05[3/4]	ø34.93[1-3/8]
PUHY-P336,360TSLMU/YSLMU	CMY-Y300CBK2	ø19.05[3/4]	ø41.28[1-5/8]

For Piping size "M", "N", "S", "T", please refer to specification of the Twinning kit CMY-Y300CBK2 at the Outdoor unit's external drawing.

Table13-2-3-6. Selection criteria for joints

Total down-stream Indoor capacity	Joint
~ P72	CMY-Y102SS-G2
P73 ~ P144	CMY-Y102LS-G2
P145 ~ P240	CMY-Y202S-G2
P241 ~	CMY-Y302S-G2

*Concerning detailed usage of joint parts, refer to its Installation Manual.

*The total capacity of the units in the downstream of the branch joint on at least one of the piping lines that are connected to the branch joint should be 240 or below.

If the total capacity of the units in the downstream of the branch joints on both lines is above 240 use two branch joints (CMY-Y302S-G2).

See the table below for the first joint of the outdoor unit described below.

Outdoor unit model	Joint model
P264 to P360	CMY-Y302S-G2

Table13-2-3-4. Piping "B", "C", "D", "E" size selection rule

Total down-stream Indoor capacity	Pipe(Liquid)	Pipe(Gas)
~ P54	ø9.52 [3/8]	ø15.88 [5/8]
P55 ~ P72	ø9.52 [3/8]	ø19.05 [3/4]
P73 ~ P108	ø9.52 [3/8]	ø22.20 [7/8]
P109 ~ P144	ø12.70 [1/2]	ø28.58 [1-1/8]
P145 ~ P240	ø15.88 [5/8]	ø28.58 [1-1/8]
P241 ~ P308	ø19.05 [3/4]	ø34.93 [1-3/8]
P309 ~	ø19.05 [3/4]	ø41.28 [1-5/8]

Table13-2-3-5. Piping "a", "b", "c", "d", "e", "f", "g" size selection rule

Indoor Unit size	Pipe(Liquid)	Pipe(Gas)
P06,P08,P12,P15,P18	ø6.35 [1/4]	ø12.70 [1/2]
P24,P27,P30,P36,P48,P54	ø9.52 [3/8]	ø15.88 [5/8]
P72	ø9.52 [3/8]	ø19.05 [3/4]
P96	ø9.52 [3/8]	ø22.20 [7/8]

Table13-2-3-7. R410A Header selection rule

	4-branch Header	8-branch Header	10-branch Header
	CMY-Y104C-G	CMY-Y108C-G	CMY-Y1010C-G
Total down-stream Indoor capacity	≤P72	≤P144	≤P240

* CMY-Y104C-G can directly connect PUHY-P72T/YLMU, but can NOT directly connect PUHY-P96T/YLMU or above;

* CMY-Y108C-G can directly connect PUHY-P72-168T/Y(S)LMU, but can NOT directly connect PUHY-P192T/Y(S)LMU or above;

* CMY-Y1010C-G can directly connect PUHY-P72-240T/Y(S)LMU;

* CMY-Y104C-G can NOT connect P72-P96 indoor, but CMY-Y108,Y1010C-G can do;

* Concerning detailed usage of Header parts, refer to its Installation Manual.

Note3. Indoor capacity is described as its model size;

For example, PEFY-P06NMAU-E3, its capacity is P06;

Note4. Total down-stream Indoor capacity is the summary of the model size of Indoors downstream.

For example, PEFY-P06NMAU-E3+PEFY-P08NMAU-E3: Total Indoor capacity=P06+P08=P14

Note5. Piping size determined by the Total down-stream indoor capacity is NOT necessary

to be bigger than the up-stream one.

i.e. A>=B; A>=C>=D

13. PIPING DESIGN

■ 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.

Total index of the outdoor units		P72 T/YLMU	P96 T/YLMU	P120 T/YLMU	P144 T/YLMU	P168 T/YLMU	P144 T/YSLMU	P168 T/YSLMU	P192 T/YSLMU	P216 T/YSLMU	P240 T/YSLMU
Maximum refrigerant charge	Factory charged	7.5kg	10.3kg	11.8kg	11.8kg	11.8kg	15.0kg	17.8kg	19.3kg	22.1kg	23.6kg
	Charged on site	25.2kg	31.4kg	37.7kg	38.2kg	46.9kg	35.0kg	40.9kg	46.7kg	52.5kg	52.9kg
	Total for system	32.7kg	41.7kg	49.5kg	50.0kg	58.7kg	50.0kg	58.7kg	66.0kg	74.6kg	76.5kg
	Factory charged	16 lbs 9 oz	22 lbs 12 oz	26 lbs 1 oz	26 lbs 1 oz	26 lbs 1 oz	33 lbs 2 oz	39 lbs 4 oz	42 lbs 9 oz	48 lbs 12 oz	52 lbs 1 oz
	Charged on site	55 lbs 9 oz	69 lbs 4 oz	83 lbs 2 oz	84 lbs 4 oz	103 lbs 7 oz	77 lbs 3 oz	90 lbs 3 oz	103 lbs 0 oz	115 lbs 12 oz	116 lbs 10 oz
	Total for system	72 lbs 1 oz	91 lbs 15 oz	109 lbs 2 oz	110 lbs 4 oz	129 lbs 7 oz	110 lbs 4 oz	129 lbs 7 oz	145 lbs 8 oz	164 lbs 7 oz	168 lbs 10 oz

Total index of the outdoor units		P264 T/YSLMU	P288 T/YSLMU	P312 T/YSLMU	P336 T/YSLMU	P360 T/YSLMU
Maximum refrigerant charge	Factory charged	26.8kg	29.6kg	31.1kg	33.9kg	35.4kg
	Charged on site	65.7kg	72.1kg	70.6kg	71.0kg	69.5kg
	Total for system	92.5kg	101.7kg	101.7kg	104.9kg	104.9kg
	Factory charged	59 lbs 2 oz	65 lbs 5 oz	68 lbs 10 oz	74 lbs 12 oz	78 lbs 1 oz
	Charged on site	144 lbs 14 oz	159 lbs 0 oz	155 lbs 11 oz	156 lbs 9 oz	153 lbs 4 oz
	Total for system	203 lbs 15 oz	224 lbs 3 oz	224 lbs 3 oz	231 lbs 4 oz	231 lbs 4 oz

14. OUTDOOR INSTALLATION

14-1. 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.
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 Figure 14-2.
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.

14. OUTDOOR INSTALLATION

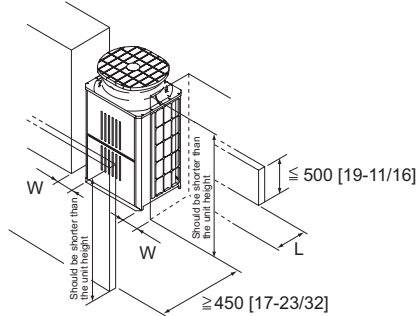
14-2. Installation Clearance Space

Clearances shown in this section are for proper airflow, installation, and service. Additional spacing may be required depending on local code.

In case of single installation

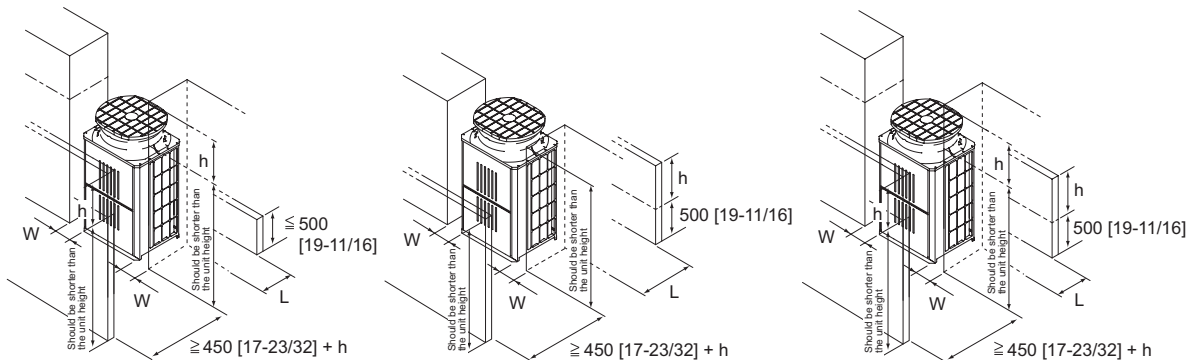
- Secure enough space around the unit as shown in the figure.
- If the wall height exceeds the height limit, widen the space labeled "L" and "W" by the amount that exceeds the limit (labeled <h> in the figure).

(1) Walls are lower than the height limit.



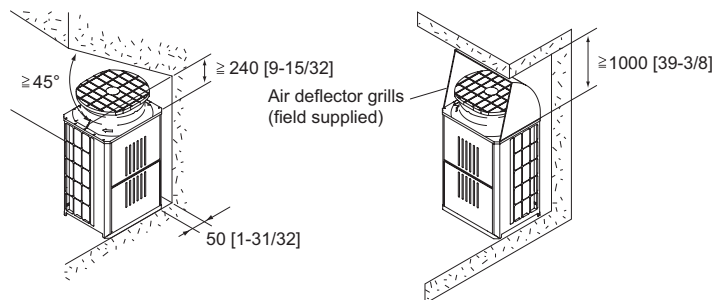
Condition	L	W
Minimum space behind the unit	≥ 100 [3-15/16]	≥ 50 [1-31/32]
Minimum space on both sides of the unit	≥ 300 [11-13/16]	≥ 15 [19/32]

(2) If the wall height (H) of the front, rear or side exceeds the wall height restriction



Condition	L	W
Minimum space behind the unit	≥ 100 [3-15/16] + h	≥ 50 [1-31/32] + h
Minimum space on both sides of the unit	≥ 300 [11-13/16] + h	≥ 15 [19/32] + h

(3) If there are obstacles at the upper part of the unit



(Unit : mm [in.])

14. OUTDOOR INSTALLATION

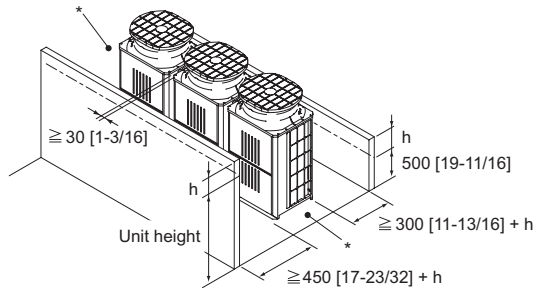
Clearances shown in this section are for proper airflow, installation, and service. Additional spacing may be required depending on local code.

In case of collective installation and continuous installation

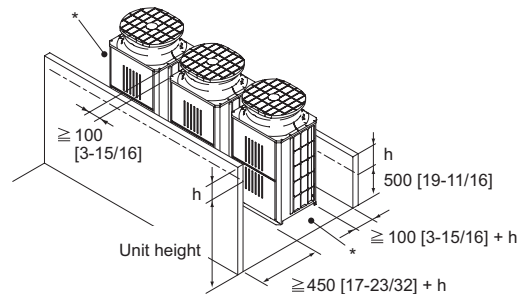
- When multiple units are installed adjacent to each other, secure enough space to allow for air circulation and passageways between groups of units as shown in the figures.
- * Leave both sides of each group of units open.
- As with single installation, if the wall height exceeds the height limit, widen the space in the front and the back of a given group of units by the amount that exceeds the limit (labeled <h> in the figure).
- If there is a wall at both the front and the rear of the unit, install up to six units (three units : P120, 144, 168) consecutively in the side direction and provide a space of 1000mm or more as inlet space/passage space for each six units (three units : P120, 144, 168).

(1) Side-by-side installation

<The space on both sides of a given group of units is minimum.>

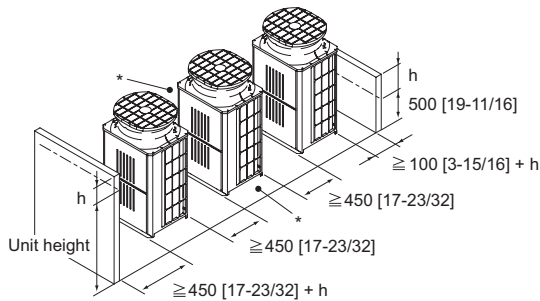


<The space on both sides of a given group of units is minimum.>

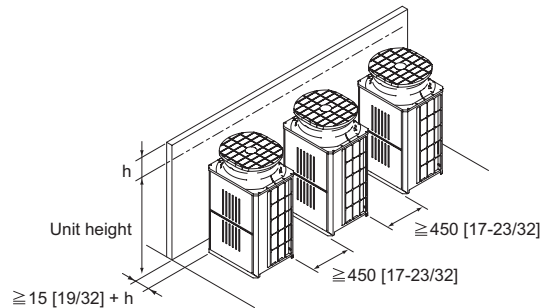


(2) Face-to-face installation

<There are walls in the front and the back of a given group of units.>

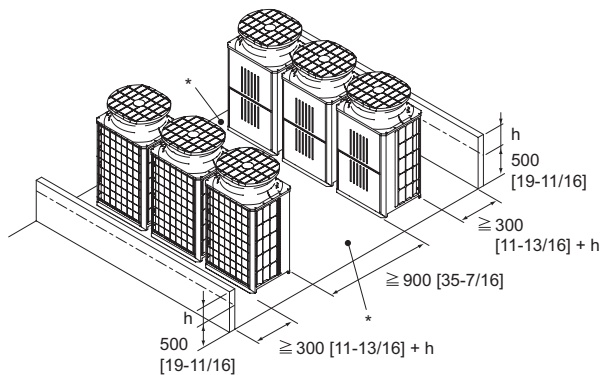


<There is a wall on one side.>

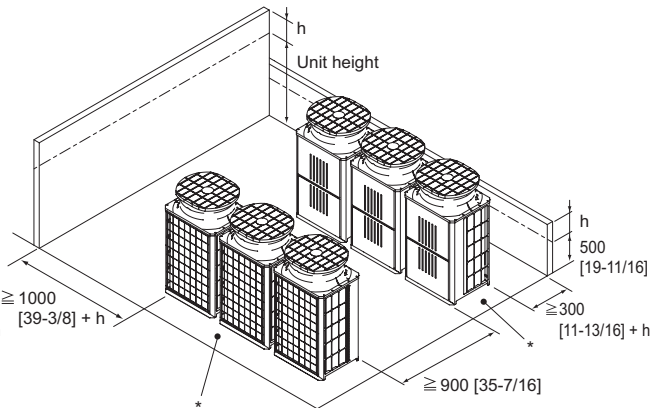


(3) Combination of face-to-face and side-by-side installations

<There are walls in the front and the back of a given group of units.>



<There is a wall on one side and either the front or the back of a given group of unit.>



(Unit : mm [in.])

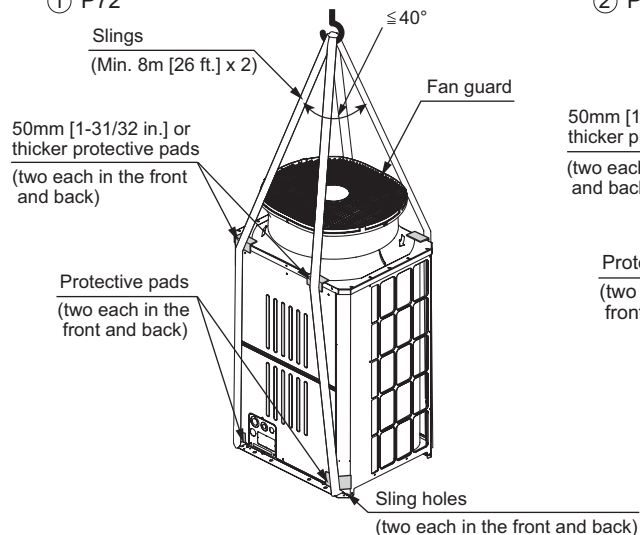
14. OUTDOOR INSTALLATION

14-3. Piping Direction

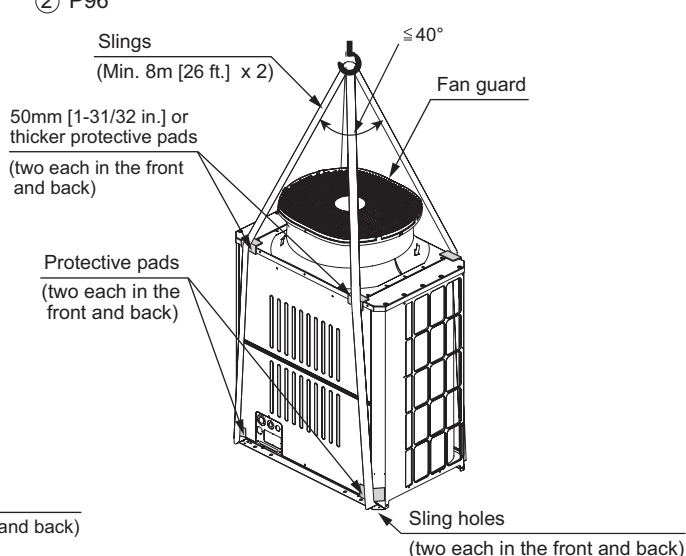
14-3-1. Lifting method

- When lifting the unit with ropes, run the ropes under the unit and use the lifting hole.
- Support the unit at four points with two ropes, and avoid giving mechanical shock.
- Suspension rope angle must be 40° or less, so as to avoid compressing fan guard.
- Use two ropes, each at least 8m [26 ft.] in length
- Use ropes strong enough to support the weight of the unit.
- Always suspend the unit from four corners. (It is dangerous to suspend a unit from two corners and must not be attempted.)
- Use protective pads to keep the ropes from scratching the panels on the unit.
- Use a 50mm [1-31/32 in.] or thicker cardboard or cloth as a protective pad on the top of the unit to prevent contact between the fan guard and slings.

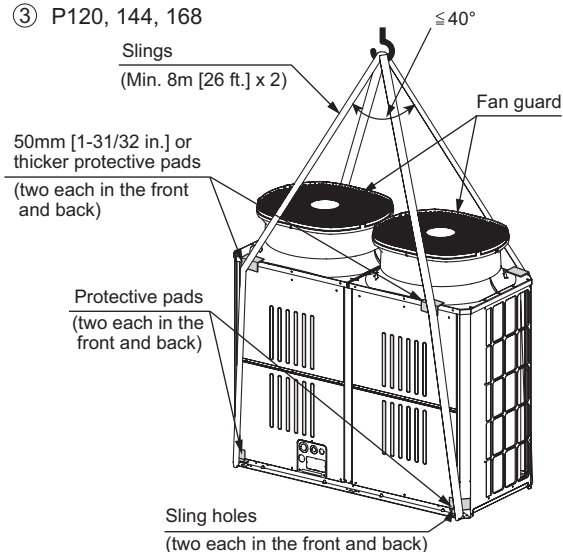
① P72



② P96



③ P120, 144, 168



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 PP bands.
- 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.

14. OUTDOOR INSTALLATION

14-3-2. 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 using a rubber cushion, install it so that the cushion covers the entire width of the unit leg.
- 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.

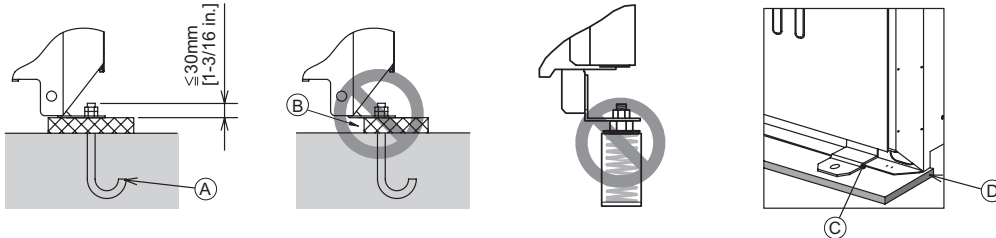
- (A) : M10 anchor bolt procured at the site.
 (B) : Corner is not seated.
 (C) : Fixing bracket for hole-in anchor bolt (3 locations to fix with screws).
 (D) : Anti-vibration rubber
 Install it so that the rubber covers the entire width of the unit leg.

⚠ 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 appropriate safety measures against strong winds and earthquakes to prevent the unit from falling.



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.

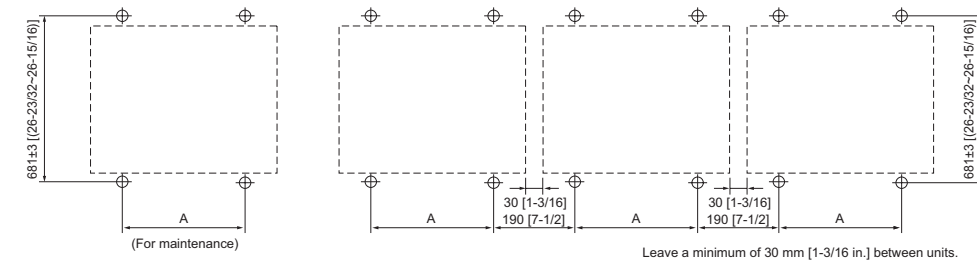
14-3-3. Anchor bolt positions

<P72, 96>

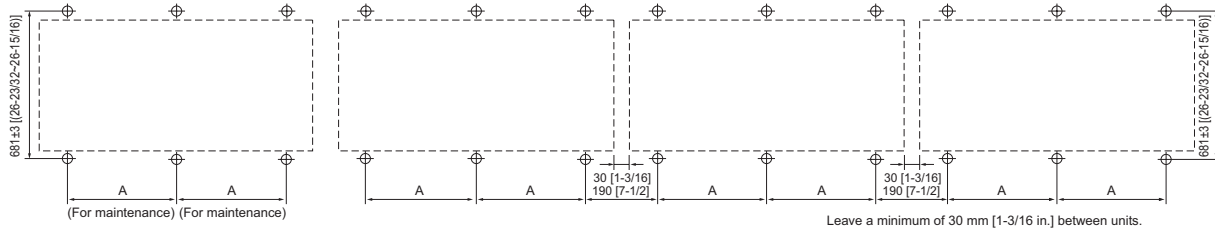
(Unit : mm [in.])

• Individual installation

• Collective installation



<P120, 144, 168>



PUHY	P72	P96	P120, 144, 168
A	760±2 [29-15/16(29-27/32~30)]	1060±2 [41-3/4(41-21/32~41-13/16)]	795±2 [31-5/16(31-1/4~31-13/32)]

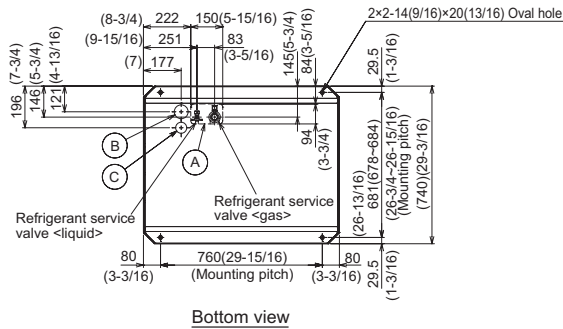
14. OUTDOOR INSTALLATION

14-3-4. Installation

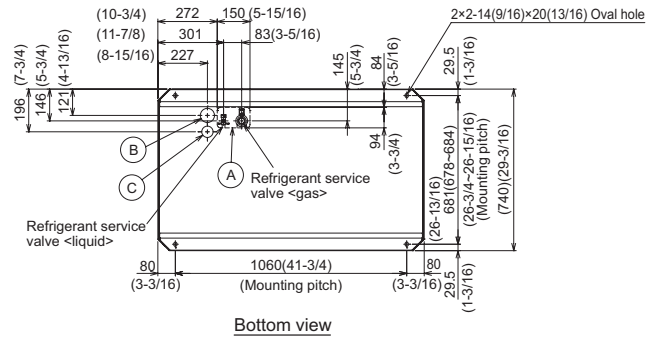
When the pipes and/or cables are routed at the bottom of the unit, make sure that the through hole at the base of the unit does not get blocked with the installation base.

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.

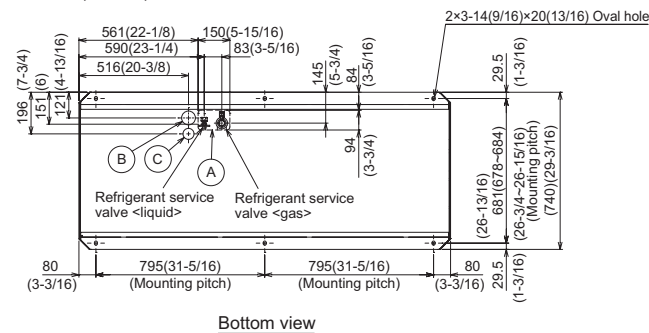
· P72



· P96



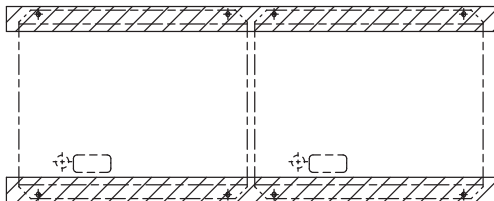
· P120, 144, 168



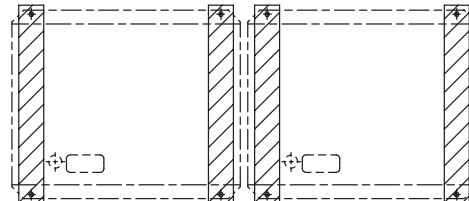
(Unit: mm [in.])

NO.	Usage	Specifications
(A)	For pipes	Bottom through hole 150 × 94 Knockout hole (5-29/32) (3-23/32)
(B)	For wires	Bottom through hole Knockout hole (2-9/16)
(C)	For wires	Bottom through hole Ø52 Knockout hole (2-1/16)

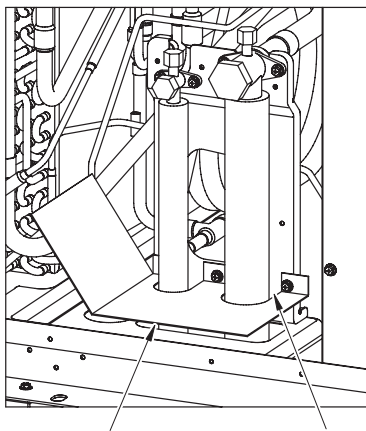
Installation base parallel to the unit's front panel



Installation base perpendicular to the unit's front panel



14-3-5. Refrigerant pipe routing



Example of closure materials
(field supply)

Fill the gap at the site

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

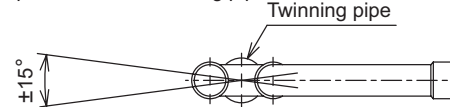
To prevent small animals, water and snow from entering the unit and damage its parts, close the gap around the edges of through holes for pipes and wires with filler plates.

14. OUTDOOR INSTALLATION

14-3-6. Twinning on the outdoor unit side

- The tilt angle of the twinning pipe
The tilt angle of the twinning pipe must be within $\pm 15^\circ$ with the horizontal plane.
Tilting the twinning pipe more than specified will cause damage to the unit.
- The length of the straight part of the pipe before the branching
For the twinning kit, always use the accessory piping parts.
The length of the straight part of pipe connected in front of the twinning pipe must be 500 mm [19-11/16 in.] or longer.
(Connect the field piping so that the length of the straight part of pipe connected in front of the twinning pipe can be 500 mm [19-11/16 in.] or longer.)
If the length is less than 500 mm [19-11/16 in.], it will cause damage to the unit.

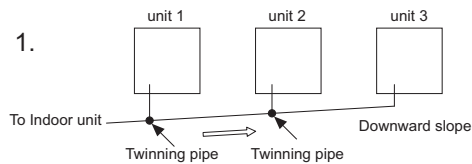
Note: See the following drawing for the fitting position of the twinning pipe.



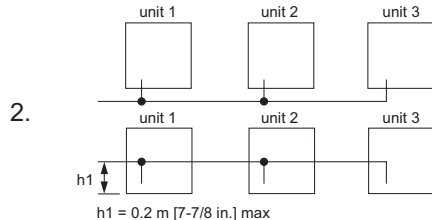
The tilt angle of the twinning pipe should be within $\pm 15^\circ$ with the horizontal plane.

• Precautions for outdoor unit combinations

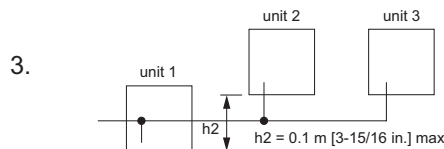
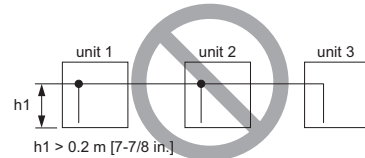
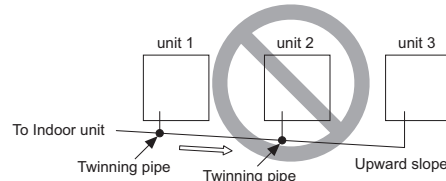
<A> Install the piping so that oil will not accumulate in the stopped outdoor unit.



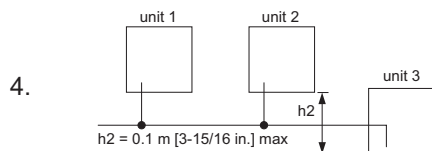
The NG example shows that oil accumulates because the units are installed on a reverse gradient while unit 1 is in operation, and unit 3 is stopped.



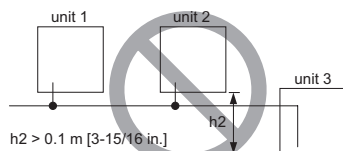
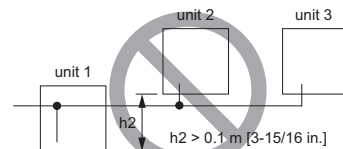
The NG example shows that oil accumulates into units 1 and 2 while unit 3 is in operation, and units 1 and 2 are stopped.
Vertical pipe height (h) should be 0.2 m [7-7/8 in.] or below.



The NG example shows that oil accumulates into unit 1 while unit 3 is in operation, and unit 1 is stopped. Vertical pipe height (h) should be 0.1 m [3-15/16 in.] or below.



The NG example shows that oil accumulates into unit 3 while unit 1 is in operation, and unit 3 is stopped. Vertical pipe height (h) should be 0.1 m [3-15/16 in.] or below.

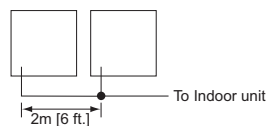


 When the piping on the outdoor unit side (from the twinning pipe) exceeds 2 m [6 ft.], ensure a trap (gas pipe only) within 2 m [6 ft.].

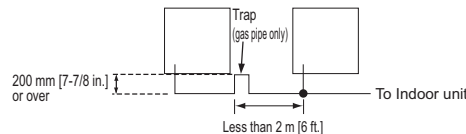
Make sure the height of the trap is 200 mm [7-7/8 in.] or more.

If there is no trap, oil can accumulate inside the pipe, causing a shortage of oil and may damage the compressor.

<2 m [6 ft.] or less>



<More than 2 m [6 ft.]>

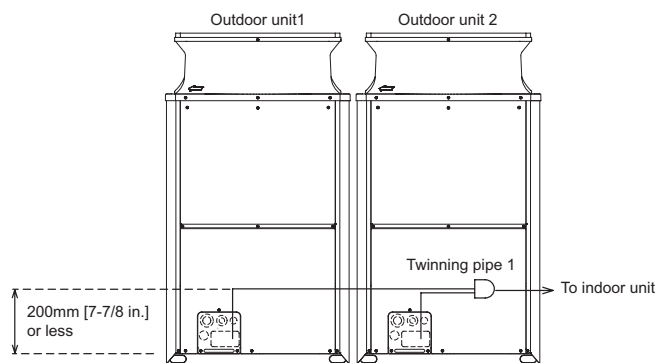


⚠ Caution:

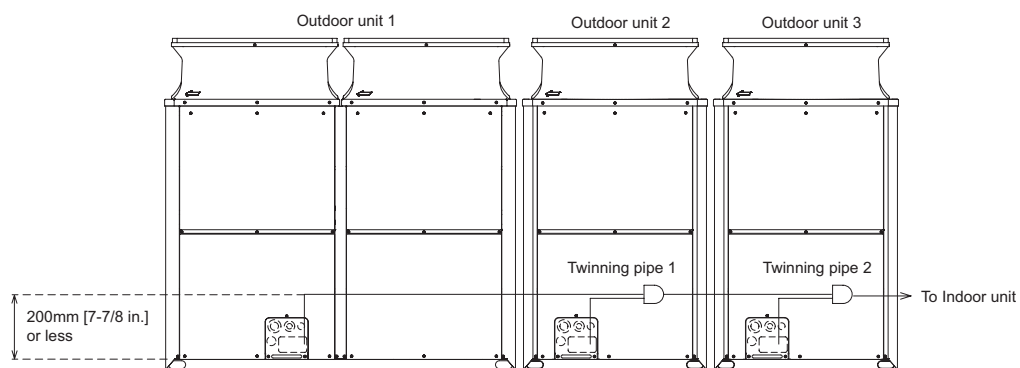
- Do not install traps other than the ones between outdoor units described on a separate sheet to prevent oil backflow and compressor start-up fail
 - Do not install solenoid valves to prevent oil backflow and compressor start-up failure.
 - Do not install a sight glass because it may show improper refrigerant flow.
- If a sight glass is installed, inexperienced technicians that use the glass may overcharge the refrigerant.

14. OUTDOOR INSTALLATION

<PUHY-P144YSLMU>



<PUHY-P264TSLMU/YSLMU>

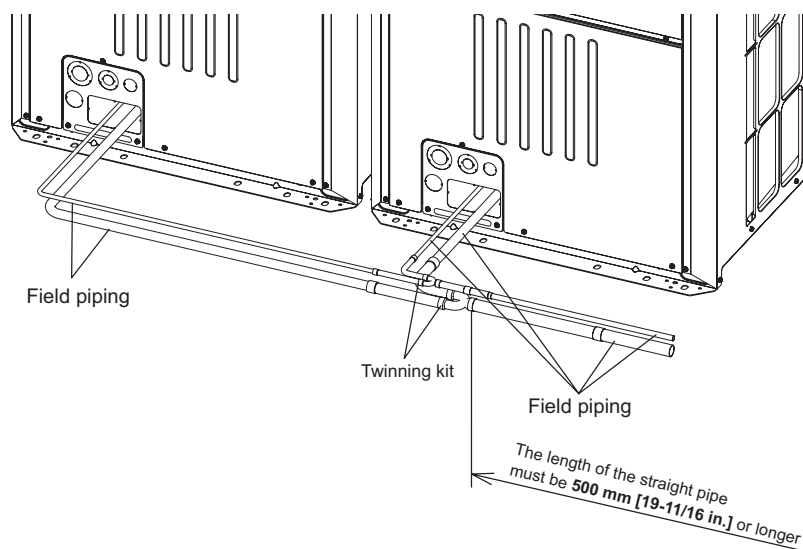


14. OUTDOOR INSTALLATION

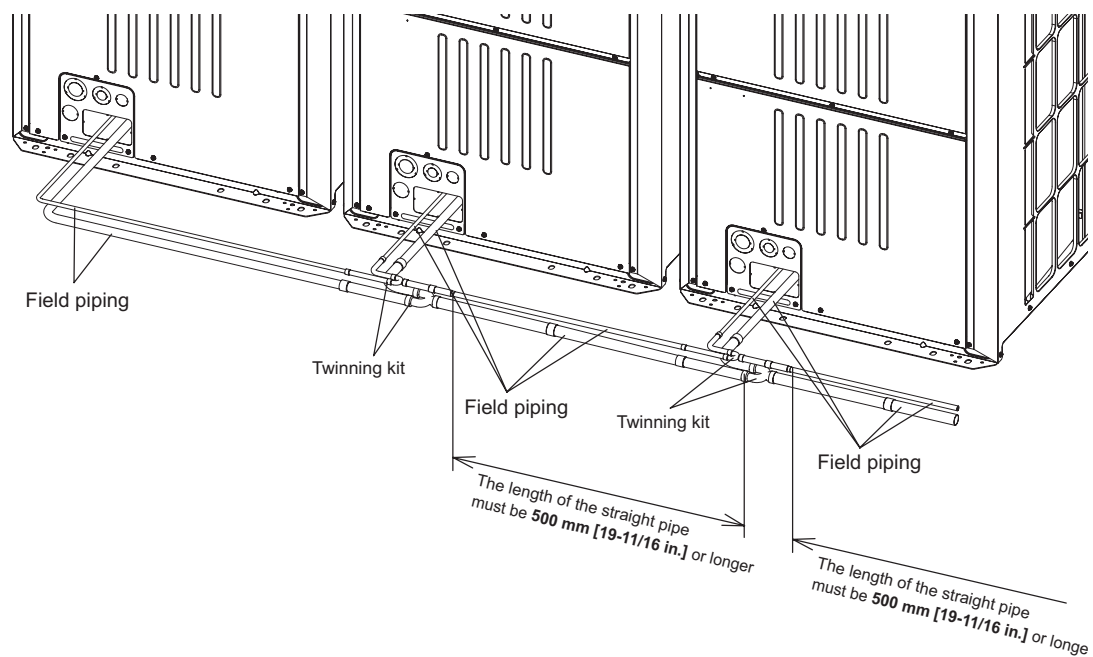
14-3-7. Twinning on the outdoor unit side

See the following drawing for connecting the pipes between the outdoor units.

<In case of 2units combination>



<In case of 3units combination>



CAUTION

The length of the straight pipe must be 500mm[19-11/16 in.] or longer.
If not, it may cause improper operation.

14. OUTDOOR INSTALLATION

14-4. Weather Countermeasures

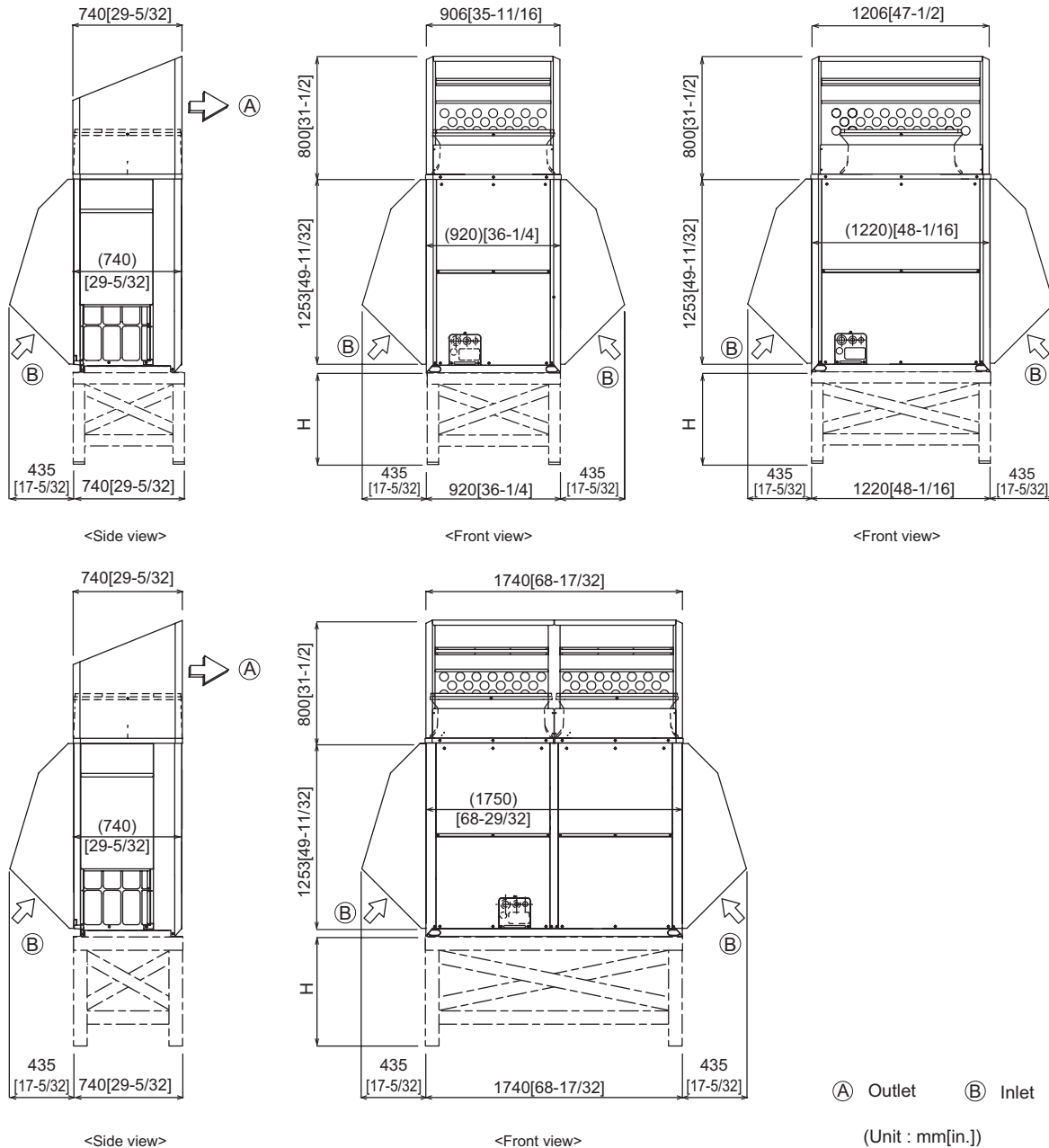
In cold and/or snowy areas, sufficient countermeasures to wind and snow damages should be taken for operating unit in normal and good condition in winter time. Surround the units with snow nets or fences to protect them from snow. Even in the other areas, full consideration is required for installation of unit in order to prevent abnormal operations caused by wind or snow. **When rain and snow directly fall on unit in the case of air-conditioning operations in 10 or less degrees centigrade outdoor air (50 or less degrees fahrenheit outdoor air), mount inlet and outlet ducts on unit for assuring stable operations.**

Countermeasure to snow and wind

Prevention the Outdoor unit from wind and snow damages in cold or snowy areas, snow hood shown below is recommended and helpful.

*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.

- Snow hood



14. OUTDOOR INSTALLATION

Note:

1. Height of frame base for snow damage prevention (H) shall be twice as high as expected snowfall. Width of frame base shall not exceed that of the unit. The frame base shall be made of angle steel, etc., and designed so that snow and wind slip through the structure. (If frame base is too wide, snow will be accumulated on it.)
2. Install unit so that wind will not directly lash against openings of inlet and outlet ducts.
3. Build frame base at customer referring to this figure.
Material : Galvanized steel plate 1.2T [1/16 in. T]
Painting : Overall painting with polyester powder
Color : Munsell 5Y8/1 (same as that of unit)
4. To install units side by side, install a filler plate between the fan guard and the outlet-side snow food as shown in Figure A.
(The filler plate provided accommodates the installation pitch of between 30-80 mm [1-3/16~3-5/32 in.].)
5. 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 to the unit base or take other appropriate measures to prevent water from freezing on the base.

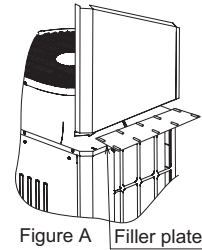
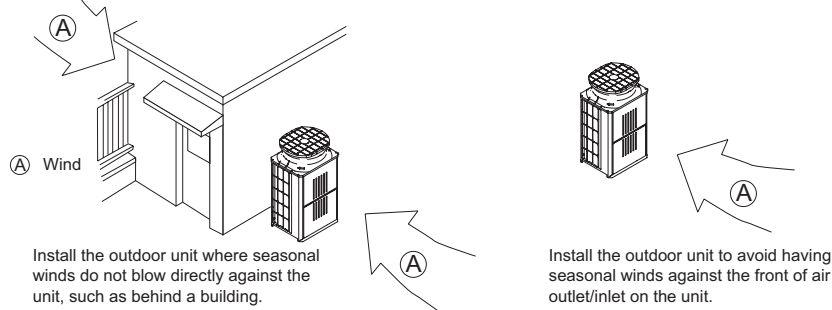


Figure A Filler plate

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.



14-5. Caution on Selecting Outdoor Units

Consult your dealer when the following issues on Y-Series system are the key concern.

- **Warm air** may flow out from the indoor unit during heating Thermo-OFF.
- **Refrigerant flow sound** may occur in the rooms with low background noise such as hotel rooms, hospital rooms, bedrooms, or conference rooms.

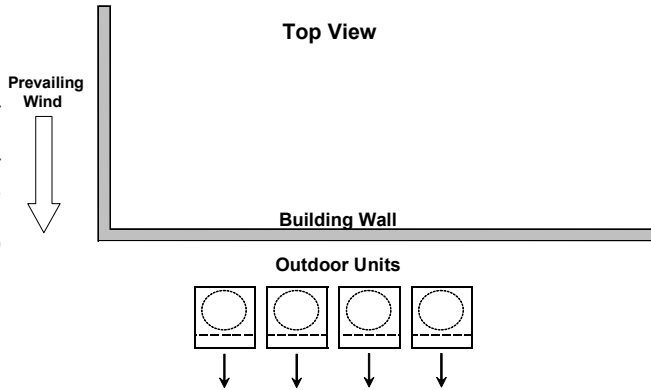
To avoid the above issues on Y-Series system, changing board settings on the indoor and outdoor units is required. Ask AC&R Works for details.

14. OUTDOOR INSTALLATION

14-6. Low Ambient Kit Application Guidelines

General Unit Placement and Clearances

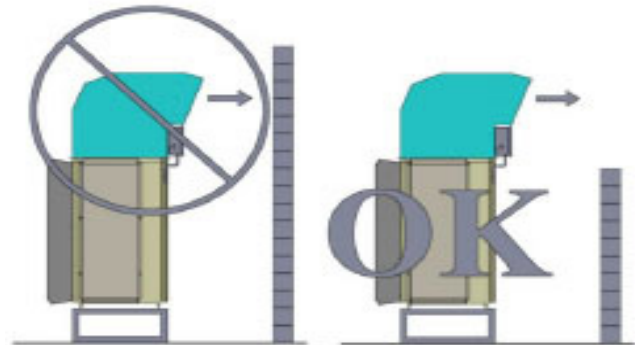
- Outdoor units should be located in an area protected from prevailing winds.
- In high wind locations, it may be advisable to install the outdoor units within a walled area.
- Hood discharge should be directed away from or perpendicular to the prevailing winds. Do not direct the hood discharge towards prevailing winds.
- When using the low ambient components, add an additional 7" to the standard mounting clearances.



The equipment support must be firmly attached to the ground or structure. The outdoor unit must be properly attached to this equipment support with 3/8" stainless steel or equal strength to at least a grade 5 bolt.

Note:

If the unit is located in an area with continuous high winds, the unit may require additional bracing. Contact your distributor for assistance.

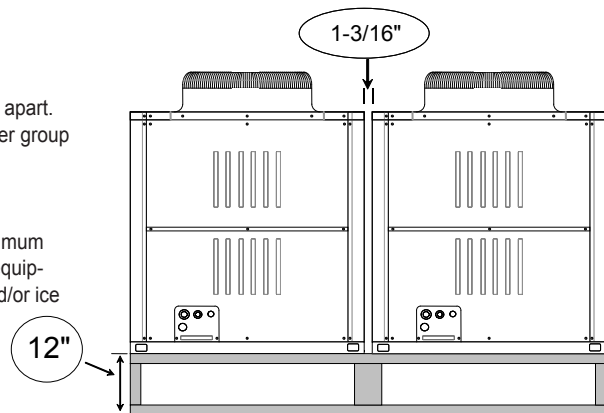


Equipment Supports

When modules are combined they should be placed the minimum 1-3/16" apart. By doing so only one set of side wind deflectors (SWDK-1) are required per group of modules.

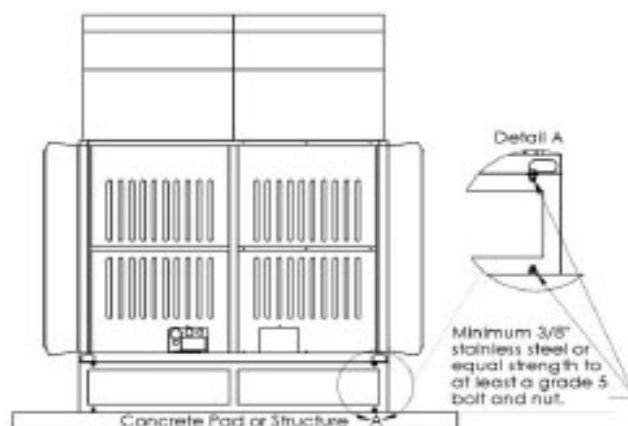
Note:

The equipment supports must elevate the unit at least 12" above the maximum expected snow depth or 12" above the ground, whichever is higher. The equipment supports must be an open construction to minimize snow drifting and/or ice formation during defrost.



14. OUTDOOR INSTALLATION

The equipment support must be firmly attached to the ground or structure. The outdoor unit must be properly attached to this equipment support with 3/8" stainless steel or equal strength to at least a grade 5 bolt.



Additional Rooftop Mounting Guidelines

The preferred mounting location for the outdoor units with a low ambient kit is on the ground. However, if this is not possible follow all additional installation guidelines when rooftop mounting. If you have any questions, please consult your distributor.

Note:

Low ambient hood(s) increase the overall height of the outdoor units and make them more susceptible to wind stresses. Follow all guidelines when using these for rooftop applications.

Outdoor units should be located in an area protected from prevailing winds. Hood discharge should be directed away from or perpendicular to the prevailing winds. Never toward prevailing winds.

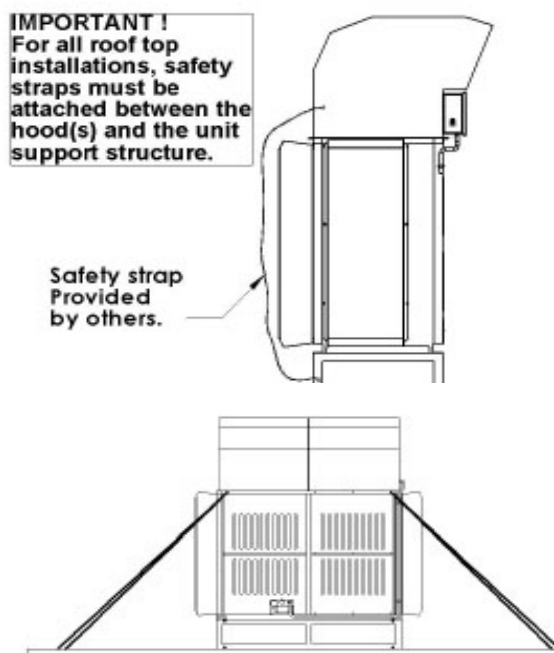
When using the low ambient components, add an additional 7" to the standard mounting clearances.

Note:

For all roof top installations, safety straps must be attached between the hood(s) and the equipment support structure. Straps should be a minimum 3/16" vinyl coated cable.

Straps must be attached to the hood where they will not interfere with the movement of the dampers. Attachment to both the hood and mounting structure is to be with a bolt through connection using a bolt 1/4" or larger in diameter.

The outdoor unit and equipment support should be firmly attached to the structure. Or, if the equipment support is the type that does not attach to the structure, refer to the equipment support manufacturer's guidelines for proper size and construction.



15. INSTALLATION INFORMATION

15-1. General precautions

15-1-1. Usage

- The air-conditioning system described in this Data Book is designed for human comfort.
- This product is not designed for preservation of food, animals, plants, precision equipment, or art objects.
To prevent quality loss, do not use the product for purposes other than what it is designed for.
- To reduce the risk of water leakage and electric shock, do not use the product for air-conditioning vehicles or vessels.

15-1-2. Installation Environment

- Do not install any unit other than the dedicated unit in a place where the voltage changes a lot, large amounts of mineral oil (e.g., cutting oil) are present, cooking oil may splash, or a large quantity of steam can be generated such as a kitchen.
- Do not install the unit in acidic or alkaline environment.
- Installation should not be performed in the locations exposed to chlorine or other corrosive gases. Avoid near a sewer.
- To reduce the risk of fire, do not install the unit in a place where flammable gas may be leaked or inflammable material is present.
- This air conditioning unit has a built-in microcomputer. Take the noise effects into consideration when deciding the installation position. Especially in a place where antenna or electronic device are installed, it is recommended that the air conditioning unit be installed away from them.
- Install the unit on a solid foundation according to the local safety measures against typhoons, wind gusts, and earthquakes to prevent the unit from being damaged, toppling over, and falling.

15-1-3. Backup System

- In a place where air conditioner's malfunctions may exert crucial influence, it is recommended to have two or more systems of single outdoor units with multiple indoor units.

15-1-4. Unit Characteristics

- Heat pump efficiency depends on outdoor temperature. In the heating mode, performance drops as the outside air temperature drops. In cold climates, performance can be poor. Warm air would continue to be trapped near the ceiling and the floor level would continue to stay cold. In this case, heat pumps require a supplemental heating system or air circulator. Before purchasing them, consult your local distributor for selecting the unit and system.
- When the outdoor temperature is low and the humidity is high, the heat exchanger on the outdoor unit side tends to collect frost, which reduces its heating performance. To remove the frost, Auto-defrost function will be activated and the heating mode will temporarily stop for 3-10 minutes. Heating mode will automatically resume upon completion of defrost process.
- Air conditioner with a heat pump requires time to warm up the whole room after the heating operation begins, because the system circulates warm air in order to warm up the whole room.
- The sound levels were obtained in an anechoic room. The sound levels during actual operation are usually higher than the simulated values due to ambient noise and echoes. Refer to the section on "SOUND LEVELS" for the measurement location.
- Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes even when operating normally. Please consider to avoid location where quietness is required.
- For BC controller, it is recommended to unit to be installed in places such as ceilings of corridor, restrooms and plant rooms.
- The total capacity of the connected indoor units can be greater than the capacity of the outdoor unit. However, when the connected indoor units operate simultaneously, each unit's capacity may become smaller than the rated capacity.
- When the unit is started up for the first time within 12 hours after power on or after power failure, it performs initial startup operation (capacity control operation) to prevent damage to the compressor. The initial startup operation requires 90 minutes maximum to complete, depending on the operation load.

15-1-5. Relevant Equipment

- Use an earth leakage breaker (ELB) with medium sensitivity, and an activation speed of 0.1 second or less.
- Consult your local distributor or a qualified technician when installing an earth leakage breaker.
- If the unit is inverter type, select an earth leakage breaker for handling high harmonic waves and surges.
- Leakage current is generated not only through the air conditioning unit but also through the power wires. Therefore, the leakage current of the main power supply is greater than the total leakage current of each unit. Take into consideration the capacity of the earth leakage breaker or leakage alarm when installing one at the main power supply. To measure the leakage current simply on site, use a measurement tool equipped with a filter, and clamp all the four power wires together. The leakage current measured on the ground wire may not accurate because the leakage current from other systems may be included to the measurement value.
- Do not install a phase advancing capacitor on the unit connected to the same power system with an inverter type unit and its equipment.
- If a large current flows due to the product malfunctions or faulty wiring, both the earth leakage breaker on the product side and the upstream overcurrent breaker may trip almost at the same time. Separate the power system or coordinate all the breakers depending on the system's priority level.

15-1-6. Unit Installation

- Your local distributor or a qualified technician must read the Installation Manual that is provided with each unit carefully before performing installation work.
- Consult your local distributor or a qualified technician when installing the unit. Improper installation by an unqualified person may result in water leakage, electric shock, or fire.
- Ensure there is enough space around each unit.

15. INSTALLATION INFORMATION

15-1-7. Optional Accessories

- Only use accessories recommended by Mitsubishi Electric. Consult your local distributor or a qualified technician when installing them. Improper installation by an unqualified person may result in water leakage, electric leakage, system breakdown, or fire.
- Some optional accessories may not be compatible with the air conditioning unit to be used or may not be suitable for the installation conditions. Check the compatibility when considering any accessories.
- Note that some optional accessories may affect the air conditioner's external form, appearance, weight, operating sound, and other characteristics.

15-1-8. Operation/Maintenance

- Read the Instruction Book that is provided with each unit carefully prior to use.
- Maintenance or cleaning of each unit may be risky and require expertise. Read the Instruction Book to ensure safety. Consult your local distributor or a qualified technician when special expertise is required such as when the indoor unit needs to be cleaned.

15-2. Precautions for Indoor unit

15-2-1. Operating Environment

- The refrigerant (R410A) used for air conditioner is non-toxic and nonflammable. However, if the refrigerant leaks, the oxygen level may drop to harmful levels. If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit even if the refrigerant should leak.
- If the units operate in the cooling mode at the humidity above 80%, condensation may collect and drip from the indoor units.

•

15-2-2. Unit Characteristics

- The return air temperature display on the remote controller may differ from the ones on the other thermometers.
- The clock on the remote controller may be displayed with a time lag of approximately one minute every month.
- The temperature using a built-in temperature sensor on the remote controller may differ from the actual room temperature due to the effect of the wall temperature.
- Use a built-in thermostat on the remote controller or a separately-sold thermostat when indoor units installed on or in the ceiling operate the automatic cooling/heating switchover.
- The room temperature may rise drastically due to Thermo OFF in the places where the air conditioning load is large such as computer rooms.
- Be sure to use a regular filter. If an irregular filter is installed, the unit may not operate properly, and the operation noise may increase.
- The room temperature may rise over the preset temperature in the environment where the heating air conditioning load is small.

15-2-3. Unit Installation

- For simultaneous cooling/heating operation type air conditioners (R2, H2i R2, WR2 series), the G-type BC controller cannot be connected to the P144 outdoor unit model or above, and the G- and GA-type BC controllers cannot be connected to the P264 model or above. The GB- and HB-type BC controllers (sub) cannot be connected to the outdoor unit directly, and be sure to use them with GA- and HA-type BC controllers (main).
- The insulation for low pressure pipe between the BC controller and outdoor unit shall be at least 20 mm thick. If the unit is installed on the top floor or in a high-temperature, high-humidity environment, thicker insulation may be necessary.
- Do not have any branching points on the downstream of the refrigerant pipe header.
- When a field-supplied external thermistor is installed or when a device for the demand control is used, abnormal stop of the unit or damage of the electromagnetic contactor may occur. Consult your local distributor for details.
- When indoor units operate a fresh air intake, install a filter in the duct (field-supplied) to remove the dust from the air.
- The 4-way or 2-way Airflow Ceiling Cassette Type units that have an outside air inlet can be connected to the duct, but need a booster fan to be installed at site. Refer to the chapter "Indoor Unit" for the available range for fresh air intake volume.
- Operating fresh air intake on the indoor unit may increase the sound pressure level.

15. INSTALLATION INFORMATION

15-3. Precautions for Fresh Air Intake Type Indoor Unit

15-3-1. Installation environment

- Outdoor unit with salt-resistant specification is recommended to use in a place where it is subject to salt air.
- Even when the unit with salt-resistant specification is used, it is not completely protected against corrosion. Be sure to follow the directions or precautions described in Instructions Book and Installation Manual for installation and maintenance. The salt-resistant specification is referred to the guidelines published by JRAIA (JRA9002).
- Install the unit in a place where the flow of discharge air is not obstructed. If not, the short-cycling of discharge air may occur.
- Provide proper drainage around the unit base, because the condensation may collect and drip from the outdoor units. Provide water-proof protection to the floor when installing the units on the rooftop.
- In a region where snowfall is expected, install the unit so that the outlet faces away from the direction of the wind, and install a snow guard to protect the unit from snow. Install the unit on a base approximately 50 cm higher than the expected snowfall. Close the openings for pipes and wiring, because the ingress of water and small animals may cause equipment damage. If SUS snow guard is used, refer to the Installation Manual that comes with the snow guard and take caution for the installation to avoid the risk of corrosion.
- When the unit is expected to operate continuously for a long period of time at outside air temperatures of below 0°C, take appropriate measures, such as the use of a unit base heater, to prevent icing on the unit base.
(Not applicable to the PUMY-P-NHMu series)
- Install the snow guard so that the outlet/inlet faces away from the direction of the wind.
- When the snow accumulates approximately 50 cm or more on the snow guard, remove the snow from the guard. Install a roof that is strong enough to withstand snow loads in a place where snow accumulates.
- Provide proper protection around the outdoor units in places such as schools to avoid the risk of injury.
- A cooling tower and heat source water circuit should be a closed circuit that water is not exposed to the atmosphere. When a tank is installed to ensure that the circuit has enough water, minimize the contact with outside air so that the oxygen from being dissolved in the water should be 1 mg/L or less.
- Install a strainer (50 mesh or more recommended) on the water pipe inlet on the heat source unit.
- Interlock the heat source unit and water circuit pump.
- Note the followings to prevent the freeze bursting of pipe when the heat source unit is installed in a place where the ambient temperature can be 0°C or below.
- Keep the water circulating to prevent it from freezing when the ambient temperature is 0°C or below.
- Before a long period of non use, be sure to purge the water out of the unit.
- Salt-resistant unit is resistant to salt corrosion, but not salt-proof.

Please note the following when installing and maintaining outdoor units in marine atmosphere.

1. Install the salt-resistant unit out of direct exposure to sea breeze, and minimize the exposure to salt water mist.
2. Avoid installing a sun shade over the outdoor unit, so that rain will wash away salt deposits off the unit.
3. Install the unit horizontally to ensure proper water drainage from the base of the unit.
Accumulation of water in the base of the outdoor unit will significantly accelerate corrosion.
4. Periodically wash salt deposits off the unit, especially when the unit is installed in a coastal area.
5. Repair all noticeable scratches after installation and during maintenance.
6. Periodically check the unit, and apply anti-rust agent and replace corroded parts as necessary.

15-3-2. Unit characteristics

- When the Thermo ON and OFF is frequently repeated on the indoor unit, the operation status of outdoor units may become unstable.

15-3-3. Relevant equipment

- Provide grounding in accordance with the local regulations.

15. INSTALLATION INFORMATION

15-4. Precautions for Control-related Items

15-4-1. Product specification

- To introduce the MELANS system, a consultation with us is required in advance. Especially to introduce the electricity charge apportioning function or energy-save function, further detailed consultation is required. Consult your local distributor for details.
- Billing calculation for AE-200A, AE-50A, EW-50A, AG-150A-A, EB-50GU-A, TG-2000A, or the billing calculation unit is unique and based on our original method. (Backup operation is included.) It is not based on the metering method, and do not use it for official business purposes. It is not the method that the amount of electric power consumption (input) by air conditioner is calculated. Note that the electric power consumption by air conditioner is apportioned by using the ratio corresponding to the operation status (output) for each air conditioner (indoor unit) in this method.
- In the apportioned billing function for AE-200A, AE-50A, EW-50A, AG-150A-A, and EB-50GU-A, use separate watt-hour meters for A-control units, K-control units, and packaged air conditioner for City Multi air conditioners. It is recommended to use an individual watt-hour meter for the large-capacity indoor unit (with two or more addresses).
- When using the peak cut function on the AE-200A, AE-50A, EW-50A, AG-150A-A, or EB-50GU-A, note that the control is performed once every minute and it takes time to obtain the effect of the control. Take appropriate measures such as lowering the criterion value. Power consumption may exceed the limits if AE-200A, AE-50A, EW-50A, AG-150A-A, or EB-50GU-A malfunctions or stops. Provide a back-up remedy as necessary.
- The controllers cannot operate while the indoor unit is OFF. (No error)
- Turn ON the power to the indoor unit when operating the controllers.
- When using the interlocked control function on the AE-200A, AE-50A, EW-50A, AG-150A-A, EB-50GU-A, PAC-YG66DCA, or PAC-YG63MCA, do not use it for the control for the fire prevention or security. (This function should never be used in the way that would put people's lives at risk.) Provide any methods or circuit that allow ON/OFF operation using an external switch in case of failure.

15-4-2. Installation environment

- The surge protection for the transmission line may be required in areas where lightning strikes frequently occur.
- A receiver for a wireless remote controller may not work properly due to the effect of general lighting. Leave a space of at least 1m between the general lighting and receiver.
- When the Auto-elevating panel is used and the operation is made by using a wired remote controller, install the wired remote controller to the place where all air conditioners controlled (at least the bottom part of them) can be seen from the wired remote controller. If not, the descending panel may cause damage or injury, and be sure to use a wireless remote controller designed for use with elevating panel (sold separately).
- Install the wired remote controller (switch box) to the place where the following conditions are met.
- Where installation surface is flat
- Where the remote controller can detect an accurate room temperature
- The temperature sensors that detect a room temperature are installed both on the remote controller and indoor unit. When a room temperature is detected using the sensor on the remote controller, the main remote controller is used to detect a room temperature. In this case, follow the instructions below.
- Install the controller in a place where it is not subject to the heat source.
- (If the remote controller faces direct sunlight or supply air flow direction, the remote controller cannot detect an accurate room temperature.)
- Install the controller in a place where an average room temperature can be detected.
- Install the controller in a place where no other wires are present around the temperature sensor.
- (If other wires are present, the remote controller cannot detect an accurate room temperature.)
- To prevent unauthorized access, always use a security device such as a VPN router when connecting AE-200A, AE-50A, EW-50A, AG-150A-A, EB-50GU-A, or TG-2000A to the Internet.

*1.EB-50GU-A, AE-200A, AE-50A, and EW-50A cannot be used to control K-control units.

16. STANDARD AND SEACOAST (BS) PROTECTION TREATMENT

16-1. Y-Series

Component	Base Material	Standard Models	Seacoast Protection Models (-BS)	Surface Treatment	Coating Thickness	
					External Surface	Internal Surface
External Panel Base	Alloyed Galvanized Steel Sheet	●	●	Thermoset Polyester-resin Powder Coating	≥70μm	≥70μm
External Front Panel	Alloyed Galvanized Steel Sheet	●		Polyester-resin Coating	≥15μm	≥5μm
			●	Thermoset Polyester-resin Powder Coating	≥85μm	≥75μm
Pillar	Alloyed Galvanized Steel Sheet	●		Polyester-resin Coating	≥30μm	
			●	Thermoset Polyester-resin Powder Coating	≥70μm	≥70μm
Compressor Cover	Galvanized Steel Sheet	●		No Treatment		
	Galvanized Aluminum Sheet		●	Thermoset Polyester-resin Powder Coating	≥70μm	≥70μm
Fin Guard	Steel Wires	●	●	Weather-resistant Polypropylene-resin Coating	≥300μm	≥300μm
Fan Guard and Drum	Weather-resistant Polypropylene Plastic	●	●	No Treatment		
Fan	Weather-resistant Acrylic Nitrile Styrene Plastic	●	●	No Treatment		
Fan Motor Frame	Galvanized Steel Sheet	●	●	No Treatment		
Fan Motor Shaft	High-carbon S35C Steel	●	●	Rust-prevention Coating		
Fan Motor Support	Galvanized Steel Sheet	●		No Treatment		
			●	Thermoset Polyester-resin Powder Coating	≥70μm	≥70μm
Heat Exchanger (Fin Only)	Aluminum Plate	●	●	Zinc coating		
Electrical Parts Box	Galvanized Steel Sheet	●		No Treatment		
	Galvanized Aluminum Sheet		●	Thermoset Polyester-resin Powder Coating	≥70μm	
Printed Circuit Board	Epoxy Resin	●		No Treatment		
			●	Polyurethane Coating	≥10μm	
Screws	Steel	●	●	Zinc-nickel Alloy Plating with a Chromate Film	≥5μm	

Application Guide

	Distance from the Sea		
	984' (300m)	1,640' (500m)	3,281' (1km)
Direct Exposure to Sea Breezes			
Facing Inland	Seacoast Protection (-BS) Models	Standard Models	
Facing Sea	Seacoast Protection (-BS) Models		
On an Island	Seacoast Protection (-BS) Models		
Indirect Exposure to Sea Breezes			
Facing Inland	Seacoast Protection (-BS) Models	Standard Models	
Facing Sea	Seacoast Protection (-BS) Models		
On an Island	Seacoast Protection (-BS) Models		

Material	Thermoset Polyester-resin Powder Coating	Cellulose and Zinc coating
Test Conditions	Salt-spray Test Method: JIS K2371 based on ISO9227	Salt-spray Test Method: JIS Z2371 based on ISO9227
Test Results	Conform to JRA9002 Criteria (960-hour test)	No unusual rust development to 960 hours

For optimum performance, follow the cautions listed below.

1. Avoid installing the unit in a location that is subjected to direct sea winds.
2. Do not attach a sunshade to the unit. Let the rain wash away any salt residue that may adhere to the unit.
3. Unit should be installed following instructions for proper operation and to ensure optimum water drainage.
4. . Periodically wash the unit
5. . If the panels become scratched, repair as soon possible.
6. . Inspect the unit at regular intervals. Paint the or replace parts when necessary.

