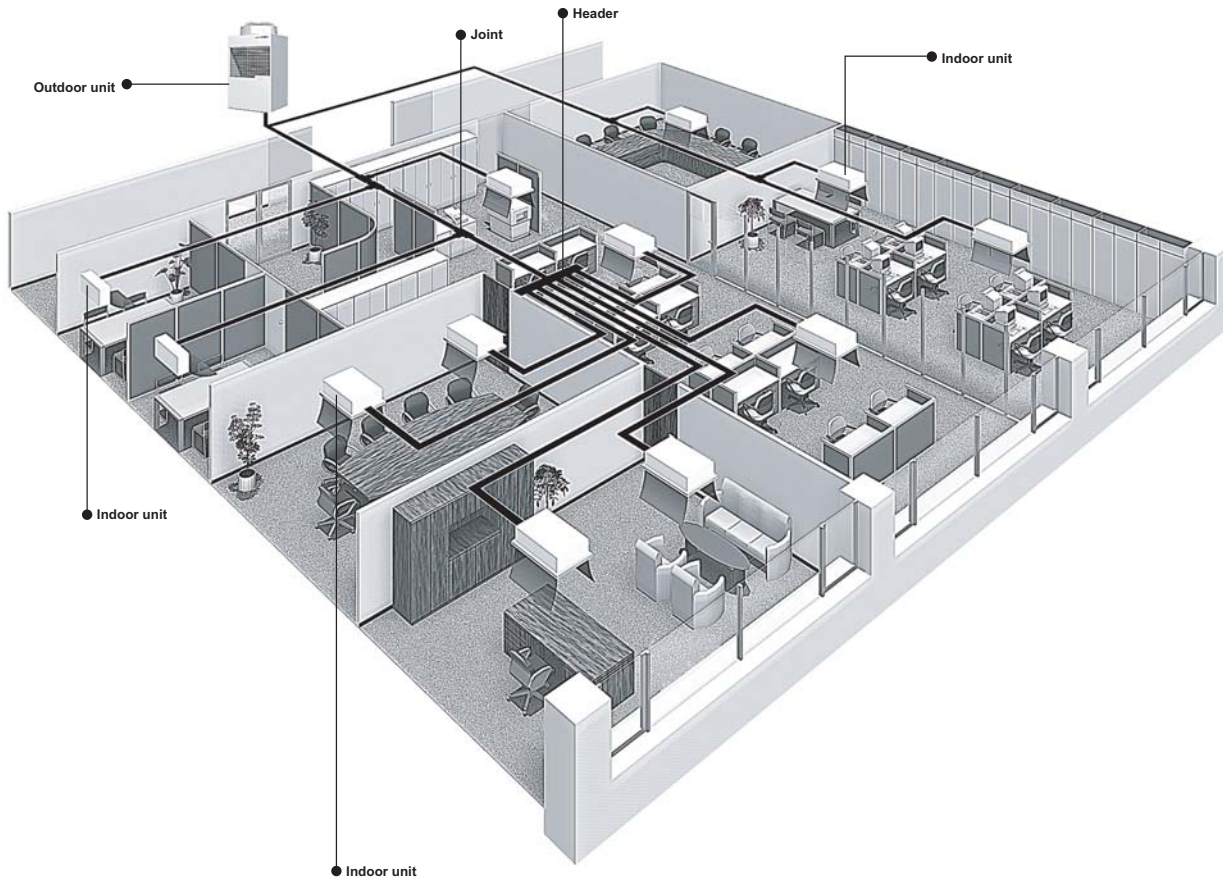


## OUTDOOR UNITS

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# CITY MULTI™ OUTDOOR UNITS

# Y SERIES



Heat pump: PUHY-P-TGMU-A(-BS)

	P72	P96	P108	P126	P144	P168	P192	P204	P216	P234
	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP
Nominal cooling cap.*1 BTU/h	72,000	96,000	108,000	126,000	144,000	168,000	192,000	204,000	216,000	234,000
Nominal heating cap.*2 BTU/h	80,000	108,000	120,000	140,000	160,000	188,000	216,000	228,000	248,000	268,000
<b>Y Heat pump</b>	●	●	●	●	●	●	●	●	●	●

\* Nominal conditions \*1, \*2 are referable at the Specification sheet.

# 1. SPECIFICATIONS

DATA U3

Model			PUHY-P72TGMU-A(-BS)		PUHY-P96TGMU-A(-BS)		
Power source			3-phase 3-wire 208-230 V 60Hz				
Cooling capacity (Nominal)	*1	BTU / h	72,000		96,000		
	*1	kW	21.1		28.1		
		Power input	6.48		8.67		
		Current input(208-230)	19.9-18.0		26.7-24.1		
		COP (kW / kW)	3.25		3.24		
Temp. range of cooling	Indoor		59 to 75 degFW.B. (15 to 24 degCW.B.)				
	Outdoor		23 to 109 degFD.B. (-5 to 43 degCD.B.) 32 to 109 degFD.B. ( 0 to 43degCD.B. ) Outdoor unit below Indoor unit				
Heating capacity (Nominal)	*2	BTU / h	80,000		108,000		
	*2	kW	23.4		31.7		
		Power input	6.33		8.56		
		Current input(208-230)	19.5-17.6		26.4-23.8		
		COP (kW / kW)	3.69		3.70		
Temp. range of heating	Indoor		59 to 81 degFD.B. (15 to 27 degCD.B.)				
	Outdoor		-4 to 60 degFW.B. (-20 to 15.5 degCW.B.)				
Indoor unit connectable	Total capacity		50-130% of outdoor unit capacity		50-130% of outdoor unit capacity		
	Model / Quantity		P06-P96 / 1-13		P06-P96 / 1-16		
Noise level (measured in anechoic room)		dB <A>	56		57		
Diameter of refrigerant pipe (O.D.)	Liquid (High press.)		3/8 (9.52) Flare		3/8 (9.52) Flare (1/2 (12.7) total length>=295ft,(90m))		
	Gas (Low press.)		3/4 (19.05) Brazed + Flare		7/8 (22.2) Brazed		
External finish			Pre-coated galvanized sheets(+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension H x W x D		in.	72-15/32 x 39 x 33-3/32		72-15/32 x 39 x 33-3/32		
		mm	1,840 x 990 x 840		1,840 x 990 x 840		
Net weight		lbs(kg)	490 (222)		524 (237)		
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic comp.		Inverter scroll hermetic comp.		
	Manufacturer		AC&R Works,MITSUBISHI ELECTRIC CORPORATION				
	Starting method		Inverter		Inverter		
	Motor output		kW	4.7		6.7	
	Case heater		kW	0.057(230V)		0.057(230V)	
	Lubricant		MEL32		MEL32		
FAN	Airflow rate	cfm	7,050		7,050		
		m3 / min	200		200		
		L / s	3,333		3,333		
	External static press.	in.WG(Pa)	0 (0)		0 (0)		
	Type x Quantity		Propeller fan x 1		Propeller fan x 1		
	Control, Driving mechanism		Inverter-control , Direct-driven		Inverter-control , Direct-driven		
	Motor output		kW	0.38 x 1		0.38 x 1	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,pipe-in-pipe structure				
Protection	High pressure protection		High pressure sensor, High pressure switch 601 psi (4.15 MPa)				
	Inverter circuit (COMP., FAN)		Over-current protection,Over-heat protection				
	Compressor		Over-heat protection				
	Fan motor		Thermal switch				
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)				
Refrigerant	Type x Original charge		R410A x (15 lbs + 7 oz) (7.0kg)		R410A x (20 lbs + 16 oz) (9.5kg)		
	Control		indoor LEV and HIC circuit				
Drawing	External		W659658				
	Wiring		W274649				
	Refrigerant cycle		-				
Standard attachment	Document		Installation Manual		Installation Manual		
	Accessory		Details refer to External Drw W659658		Details refer to External Drw W659658		
Optional parts			High static pressure motor : PAC-KBU04MT-U-F Joint : CMY-Y102S-G Header:CMY-Y104/108/1010-G		High static pressure motor : PAC-KBU04MT-U-F Joint : CMY-Y102S-G,CMY-Y102L-G1 Header:CMY-Y104/108/1010-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.				

Note :	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
	Indoor : 80degF D.B. / 67degF W.B. (26.7degC D.B. / 19.4degC W.B.)  Outdoor : 95degF D.B. (35degC D.B.)  Pipe length : 25 ft. (7.6 m)  Level difference : 0 ft. (0 m)	70degF D.B. (21.1degC D.B.)  47degF D.B. / 43degF W.B. (8.3degC D.B. / 6.1degC W.B.)  25 ft. (7.6 m)  0 ft. (0 m)	kcal/h = kW x 860 BTU/h = kW x 3,412 cfm = m3/min x 35.31 lbs = kg / 0.4536  *Above specification data is subject to rounding variation.
*Due to continuing improvement, above specification may be subject to change without notice.			

Ref.: Spec\_PUHY-P72-96TGMU

# 1. SPECIFICATIONS

DATA U3

Model			PUHY-P108TGMU-A(-BS)	PUHY-P126TGMU-A(-BS)
Power source			3-phase 3-wire 208-230 V 60Hz	
Cooling capacity (Nominal)	*1	BTU / h	108,000	126,000
	*1	kW	31.7	36.9
	Power input		9.73	11.36
	Current input(208-230)		30.0-27.1	35.0-31.6
	COP (kW / kW)		3.25	3.24
Temp. range of cooling	Indoor		59 to 75 degFW.B. (15 to 24 degCW.B.)	
	Outdoor		23 to 109 degFD.B. (-5 to 43 degCD.B.) 32 to 109 degFD.B. ( 0 to 43degCD.B. ) Outdoor unit below Indoor unit	
Heating capacity (Nominal)	*2	BTU / h	120,000	140,000
	*2	kW	35.2	41.0
	Power input		9.92	11.67
	Current input(208-230)		30.6-27.6	36.0-32.5
	COP (kW / kW)		3.54	3.51
Temp. range of heating	Indoor		59 to 81 degFD.B. (15 to 27 degCD.B.)	
	Outdoor		-4 to 60 degFW.B. (-20 to 15.5 degCW.B.)	
Indoor unit connectable	Total capacity		50-130% of outdoor unit capacity	
	Model / Quantity		P06-P96 / 1-19	
Noise level (measured in anechoic room)		dB <A>		60
Diameter of refrigerant pipe (O.D.)	Liquid (High press.)		3/8 (9.52) Flare (1/2 (12.7) total length>=131ft.(40m))	
	Gas (Low press.)		7/8 (22.2) Brazed	
External finish			Pre-coated galvanized sheets(+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>	
External dimension H x W x D		in.		72-15/32 x 39 x 33-3/32
		mm		1,840 x 990 x 840
Net weight		lbs(kg)		524 (237)
Heat exchanger			Salt-resistant cross fin & copper tube	
Compressor	Type		Inverter scroll hermetic comp.	
	Manufacturer		AC&R Works,MITSUBISHI ELECTRIC CORPORATION	
	Starting method		Inverter	
	Motor output		kW	
	Case heater		kW	
	Lubricant		MEL32	
	FAN		Airflow rate	
		cfm		7,050
		m3 / min		200
		L / s		3,333
		External static press.		in.WG(Pa)
		0 (0)		0 (0)
		Type x Quantity		Propeller fan x 1
		Control, Driving mechanism		Inverter-control , Direct-driven
		Motor output		kW
		0.38 x 1		0.64 x 1
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,pipe-in-pipe structure	
Protection	High pressure protection		High pressure sensor, High pressure switch 601 psi (4.15 MPa)	
	Inverter circuit (COMP. , FAN)		Over-current protection,Over-heat protection	
	Compressor		Over-heat protection	
	Fan motor		Thermal switch	
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)	
Refrigerant	Type x Original charge		lbs + oz (kg)	
	Control		indoor LEV and HIC circuit	
Drawing	External		W659658	
	Wiring		W274649	
	Refrigerant cycle		-	
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw W659658	
Optional parts			High static pressure motor : PAC-KBU04MT-U-F Joint : CMY-Y102S-G,CMY-Y102L-G1 Header:CMY-Y104/108/1010-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.	

Note :	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
	Indoor : 80degF D.B. / 67degF W.B. (26.7degC D.B. / 19.4degC W.B.)	70degF D.B. (21.1degC D.B.)	kcal/h = kW x 860 BTU/h = kW x 3,412 cfm = m3/min x 35.31 lbs = kg / 0.4536
	Outdoor : 95degF D.B. (35degC D.B.)	47degF D.B. / 43degF W.B. (8.3degC D.B. / 6.1degC W.B.)	
	Pipe length : 25 ft. (7.6 m)	25 ft. (7.6 m)	
	Level difference : 0 ft. (0 m)	0 ft. (0 m)	
*Due to continuing improvement, above specification may be subject to change without notice.			*Above specification data is subject to rounding variation.

Ref.: Spec\_PUHY-P108-126TGMU

# 1. SPECIFICATIONS

Model			PUHY-P144TGMU-A(-BS)		PUHY-P168TGMU-A(-BS)		
Power source			3-phase 3-wire 208-230 V 60Hz				
Cooling capacity (Nominal)	*1	BTU / h	144,000		168,000		
	*1	kW	42.2		49.2		
		Power input	14.20		14.97		
		Current input(208-230)	43.8-39.6		46.1-41.7		
		COP (kW / kW)	2.97		3.28		
Temp. range of cooling	Indoor		59 to 75 degFW.B. (15 to 24 degCW.B.)				
	Outdoor		23 to 109 degFD.B. (-5 to 43 degCD.B.)				
			32 to 109 degFD.B. ( 0 to 43degCD.B. ) Outdoor unit below Indoor unit				
Heating capacity (Nominal)	*2	BTU / h	160,000		188,000		
	*2	kW	46.9		55.1		
		Power input	13.67		15.02		
		Current input(208-230)	42.1-38.1		46.3-41.9		
		COP (kW / kW)	3.43		3.66		
Temp. range of heating	Indoor		59 to 81 degFD.B. (15 to 27 degCD.B.)				
	Outdoor		-4 to 60 degFW.B. (-20 to 15.5 degCW.B.)				
Indoor unit connectable	Total capacity		50-130% of outdoor unit capacity		50-130% of outdoor unit capacity		
	Model / Quantity		P06-P96 / 1-22		P06-P96 / 1-24		
Noise level (measured in anechoic room)		dB <A>	61		61		
Diameter of refrigerant pipe (O.D.)	Liquid (High press.)		1/2 (12.7) Flare		5/8 (15.88) Flare		
	Gas (Low press.)		1-1/8 (28.58) Brazed		1-1/8 (28.58) Brazed		
External finish			Pre-coated galvanized sheets(+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension H x W x D		in.	72-15/32 x 50-13/16 x 33-3/32		72-15/32 x 78-3/8 x 33-3/32		
		mm	1,840 x 1,290 x 840		1,840 x 1,990 x 840		
Net weight		lbs(kg)	616 (279)		1,022 (463)		
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic comp.		Inverter scroll hermetic comp. + Scroll hermetic comp.		
	Manufacturer		AC&R Works,MITSUBISHI ELECTRIC CORPORATION				
	Starting method		Inverter		Inverter + Direct		
	Motor output		kW	9.7		6.8 + 5.3	
	Case heater		kW	0.057(230V)		0.057 x 2 (230V)	
	Lubricant		MEL32		MEL32		
FAN	Airflow rate		cfm	8,450		14,100	
			m3 / min	240		400	
			L / s	4,000		6,667	
	External static press.		in.WG(Pa)	0 (0)		0 (0)	
	Type x Quantity		Propeller fan x 1		Propeller fan x 2		
	Control, Driving mechanism		Inverter-control , Direct-driven		Inverter-control , Direct-driven		
	Motor output		kW	0.64 x 1		0.38 x 2	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,pipe-in-pipe structure				
Protection	High pressure protection		High pressure sensor, High pressure switch 601 psi (4.15 MPa)				
	Inverter circuit (COMP. , FAN)		Over-current protection,Over-heat protection				
	Compressor		Over-heat protection				
	Fan motor		Thermal switch				
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)				
Refrigerant	Type x Original charge		R410A x (28 lbs + 11 oz) (13.0kg)		R410A x (48 lbs + 9 oz) (22.0kg)		
	Control		indoor LEV and HIC circuit				
Drawing	External		W659659		W659660		
	Wiring		W274649		W274650		
	Refrigerant cycle		-		-		
Standard attachment	Document		Installation Manual		Installation Manual		
	Accessory		Details refer to External Drw W659659		Details refer to External Drw W659660		
Optional parts			High static pressure motor : PAC-KBU04MT-U-F Joint : CMY-Y102S-G,CMY-Y102L-G1,CMY-Y202-G1 Header:CMY-Y104/108/1010-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.				

Note :	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
	Indoor : 80degF D.B. / 67degF W.B. (26.7degC D.B. / 19.4degC W.B.)	70degF D.B. (21.1degC D.B.)	
	Outdoor : 95degF D.B. (35degC D.B.)	47degF D.B. / 43degF W.B. (8.3degC D.B. / 6.1degC W.B.)	
	Pipe length : 25 ft. (7.6 m)	25 ft. (7.6 m)	
	Level difference : 0 ft. (0 m)	0 ft. (0 m)	
1. Nominal conditions *1, *2 are subject to JIS B8615-1.			*Above specification data is subject to rounding variation.
*Due to continuing improvement, above specification may be subject to change without notice.			

# 1. SPECIFICATIONS

DATA U3

Model			PUHY-P192TGMU-A(-BS)		PUHY-P204TGMU-A(-BS)	
Power source			3-phase 3-wire 208-230 V 60Hz			
Cooling capacity (Nominal)	*1	BTU / h	192,000		204,000	
	*1	kW	56.3		59.8	
	Power input		17.34		18.71	
	Current input(208-230)		A		53.4-48.3	
	COP (kW / kW)		3.24		3.19	
Temp. range of cooling	Indoor		59 to 75 degFW.B. (15 to 24 degCW.B.)			
	Outdoor		23 to 109 degFD.B. (-5 to 43 degCD.B.) 32 to 109 degFD.B. ( 0 to 43degCD.B. ) Outdoor unit below Indoor unit			
Heating capacity (Nominal)	*2	BTU / h	216,000		228,000	
	*2	kW	63.3		66.8	
	Power input		17.48		18.65	
	Current input(208-230)		A		53.9-48.7	
	COP (kW / kW)		3.62		3.58	
Temp. range of heating	Indoor		59 to 81 degFD.B. (15 to 27 degCD.B.)			
	Outdoor		-4 to 60 degFW.B. (-20 to 15.5 degCW.B.)			
Indoor unit connectable	Total capacity		50-130% of outdoor unit capacity		50-130% of outdoor unit capacity	
	Model / Quantity		P06-P96 / 1-24		P06-P96 / 1-24	
Noise level (measured in anechoic room)		dB <A>		62		
Diameter of refrigerant pipe (O.D.)	Liquid (High press.)		in. (mm)		5/8 (15.88) Flare	
	Gas (Low press.)		in. (mm)		1-1/8 (28.58) Braze	
External finish			Pre-coated galvanized sheets(+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>			
External dimension H x W x D		in.		72-15/32 x 78-3/8 x 33-3/32		
		mm		1,840 x 1,990 x 840		
Net weight		lbs(kg)		1,022 (463)		
Heat exchanger			Salt-resistant cross fin & copper tube			
Compressor	Type		Inverter scroll hermetic comp. + Scroll hermetic comp.		Inverter scroll hermetic comp. + Scroll hermetic comp.	
	Manufacturer		AC&R Works,MITSUBISHI ELECTRIC CORPORATION			
	Starting method		Inverter + Direct		Inverter + Direct	
	Motor output		kW		8.2 + 5.3	
	Case heater		kW		0.057 x 2 (230V)	
	Lubricant		MEL32		MEL32	
	FAN	Airflow rate		cfm		14,100
		m3 / min		400		
		L / s		6,667		
External static press.		in.WG(Pa)		0 (0)		
Type x Quantity		Propeller fan x 2		Propeller fan x 2		
Control, Driving mechanism		Inverter-control , Direct-driven		Inverter-control , Direct-driven		
Motor output		kW		0.38 x 2		
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,pipe-in-pipe structure			
Protection	High pressure protection		High pressure sensor, High pressure switch 601 psi (4.15 MPa)			
	Inverter circuit (COMP. , FAN)		Over-current protection,Over-heat protection			
	Compressor		Over-heat protection			
	Fan motor		Thermal switch			
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)			
Refrigerant	Type x Original charge		lbs + oz (kg)		R410A x (48 lbs + 9 oz) (22.0kg)	
	Control		indoor LEV and HIC circuit			
Drawing	External		W659660			
	Wiring		W274650			
	Refrigerant cycle		-			
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw W659660			
Optional parts			High static pressure motor : PAC-KBU04MT-U-F Joint : CMY-Y102S-G,CMY-Y102L-G1,CMY-Y202-G1 Header:CMY-Y104/108/1010-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.			

Note :	*1 Nominal cooling conditions	*2 Nominal heating conditions	Unit converter
	Indoor : 80degF D.B. / 67degF W.B. (26.7degC D.B. / 19.4degC W.B.)	70degF D.B. (21.1degC D.B.)	kcal/h = kW x 860 BTU/h = kW x 3,412 cfm = m3/min x 35.31 lbs = kg / 0.4536
	Outdoor : 95degF D.B. (35degC D.B.)	47degF D.B. / 43degF W.B. (8.3degC D.B. / 6.1degC W.B.)	
	Pipe length : 25 ft. (7.6 m)	25 ft. (7.6 m)	
	Level difference : 0 ft. (0 m)	0 ft. (0 m)	
*Due to continuing improvement, above specification may be subject to change without notice.			*Above specification data is subject to rounding variation.

Ref.: Spec\_PUHY-P192-204TGMU

# 1. SPECIFICATIONS

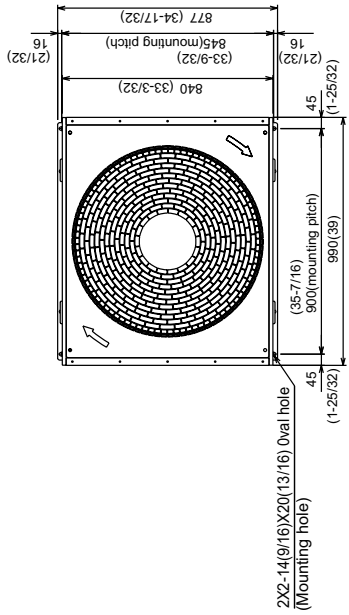
Model			PUHY-P216TGMU-A(-BS)		PUHY-P234TGMU-A(-BS)		
Power source			3-phase 3-wire 208-230 V 60Hz				
Cooling capacity (Nominal)	*1	BTU / h	216,000		234,000		
	*1	kW	63.3		68.6		
		Power input	19.92		21.62		
		Current input(208-230)	A		66.6-60.3		
		COP (kW / kW)	3.17		3.17		
Temp. range of cooling	Indoor		59 to 75 degFW.B. (15 to 24 degCW.B.)				
	Outdoor		23 to 109 degFD.B. (-5 to 43 degCD.B.)				
			32 to 109 degFD.B. ( 0 to 43degCD.B. ) Outdoor unit below Indoor unit				
Heating capacity (Nominal)	*2	BTU / h	248,000		268,000		
	*2	kW	72.7		78.5		
		Power input	21.03		23.11		
		Current input(208-230)	A		71.2-64.4		
		COP (kW / kW)	3.45		3.39		
Temp. range of heating	Indoor		59 to 81 degFD.B. (15 to 27 degCD.B.)				
	Outdoor		-4 to 60 degFW.B. (-20 to 15.5 degCW.B.)				
Indoor unit connectable	Total capacity		50-130% of outdoor unit capacity		50-130% of outdoor unit capacity		
	Model / Quantity		P06-P96 / 1-32		P06-P96 / 1-32		
Noise level (measured in anechoic room)		dB <A>	62.5		63		
Diameter of refrigerant pipe (O.D.)	Liquid (High press.)		in. (mm)		5/8 (15.88) Flare		
	Gas (Low press.)		in. (mm)		1-1/8 (28.58) Brazed		
External finish			Pre-coated galvanized sheets(+powder coating for -BS type) <MUNSELL 5Y 8/1 or similar>				
External dimension H x W x D		in.	72-15/32 x 78-3/8 x 33-3/32		72-15/32 x 78-3/8 x 33-3/32		
		mm	1,840 x 1,990 x 840		1,840 x 1,990 x 840		
Net weight		lbs(kg)	1,022 (463)		1,022 (463)		
Heat exchanger			Salt-resistant cross fin & copper tube		Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic comp. + Scroll hermetic comp.		Inverter scroll hermetic comp. + Scroll hermetic comp.		
	Manufacturer		AC&R Works,MITSUBISHI ELECTRIC CORPORATION				
	Starting method		Inverter + Direct		Inverter + Direct		
	Motor output		kW	10.1 + 5.3		10.9 + 5.3	
	Case heater		kW	0.057 x 2 (230V)		0.057 x 2 (230V)	
	Lubricant		MEL32		MEL32		
FAN	Airflow rate		cfm	14,100		14,100	
			m3 / min	400		400	
			L / s	6,667		6,667	
	External static press.		in.WG(Pa)	0 (0)		0 (0)	
	Type x Quantity		Propeller fan x 2		Propeller fan x 2		
	Control, Driving mechanism		Inverter-control , Direct-driven		Inverter-control , Direct-driven		
Motor output		kW	0.38 x 2		0.38 x 2		
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe,pipe-in-pipe structure				
Protection	High pressure protection		High pressure sensor, High pressure switch 601 psi (4.15 MPa)				
	Inverter circuit (COMP. , FAN)		Over-current protection,Over-heat protection				
	Compressor		Over-heat protection				
	Fan motor		Thermal switch				
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)				
Refrigerant	Type x Original charge		lbs + oz (kg)		R410A x (48 lbs + 9 oz) (22.0kg)		
	Control		indoor LEV and HIC circuit				
Drawing	External		W659660				
	Wiring		W274650				
	Refrigerant cycle		-				
Standard attachment	Document		Installation Manual				
	Accessory		Details refer to External Drw W659660				
Optional parts			High static pressure motor : PAC-KBU04MT-U-F Joint : CMY-Y102S-G,CMY-Y102L-G1,CMY-Y202-G1 Header:CMY-Y104/108/1010-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.				

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

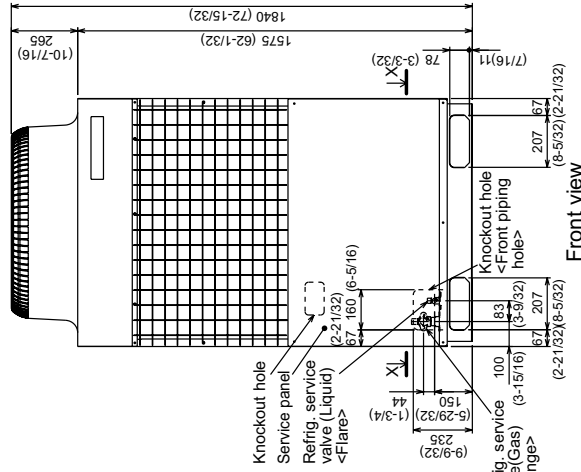
\*Due to continuing improvement, above specification may be subject to change without notice.

PUHY-P72,96,108TGMU-A(-BS)

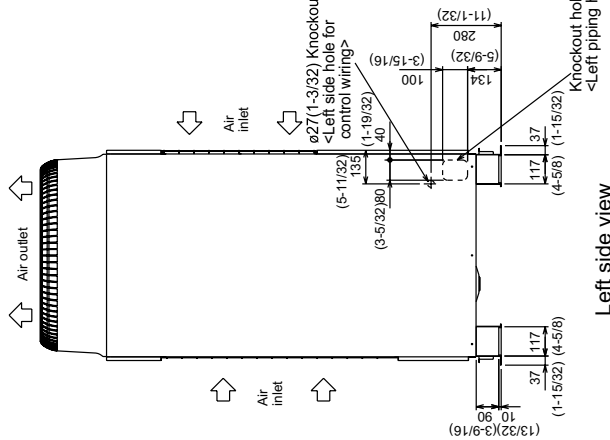
Draw. : PUHY-TGMU\_W659658 1/2  
Unit : mm(in)



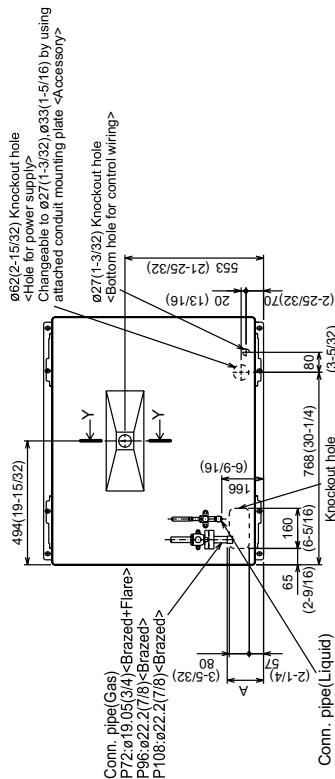
Top view



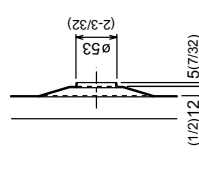
Front view



Left side view



Cross section X-X



Cross section Y-Y

Model	A
72	132(5-7/32)
96	136(5-3/8)
108	136(5-3/8)

- <Accessories>
- Refrigerant (Gas) conn. pipe.....1pc.  
(P72type:Packaged in the accessory kit)  
(P96,P108type:Already installed on the unit)
  - Packing for conn. pipe.....1pc.
  - P72type:Not attached
  - Conduit mounting plate  
ø33(1-5/16),ø27(1-3/32).....1pc.Each
  - Tapping screw M4.....2pcs.
  - Diameter-Adjusting Adapter.....2pcs.  
(5/16→1/4 inch)

Note1. Use the opening at the bottom of the unit when running the power supply line from the front or from the side of the unit.  
Note2. Please refer to the next page for information regarding necessary spacing around the unit and foundation work.







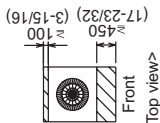
Spacing PUHY-P126,144TGMU-A(-BS)

Drw. : PUHY-TGMU\_W659659 2/2  
Unit : mm(in)

1.Space required around unit

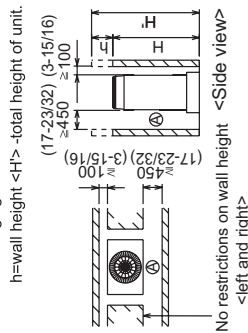
• In case of single installation  
[Basic rules for spacing the unit]

- ① There must be a minimum of 100 (3-15/16) of back space. However, provide 450 (17-23/32) or more of back space as front space for easier access when servicing the unit.



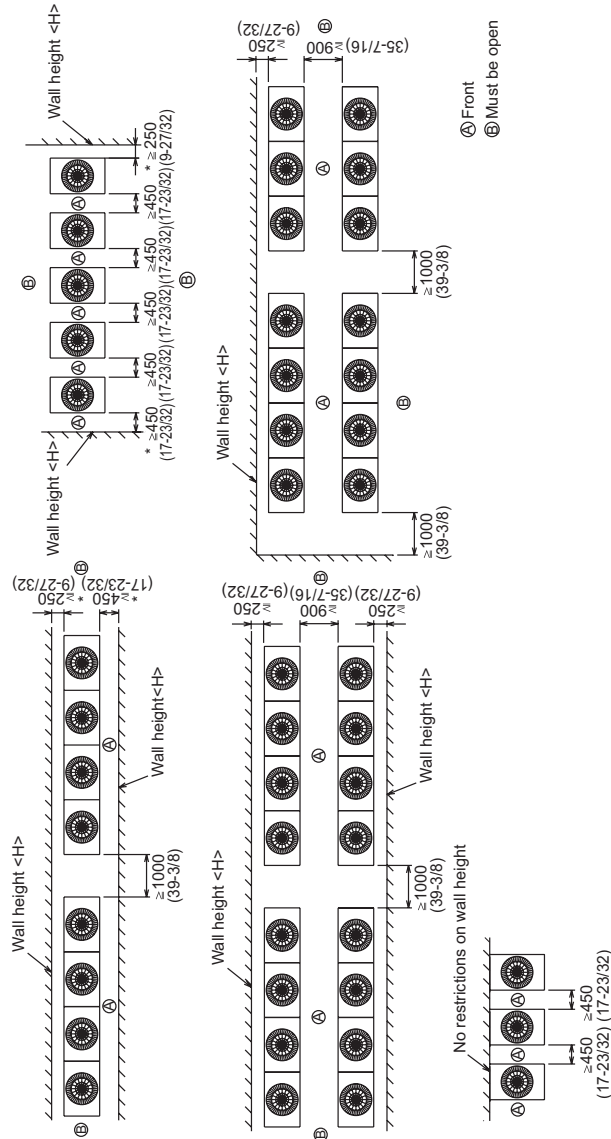
[When inlet air enters from right and left sides of unit]

- ① Wall heights <H> of the front and the back sides shall be within total height of unit.
- ② When wall height <H> exceeds total height of unit, add <h> dimension to 450(17-23/32), 100(3-15/16) of the following figure.



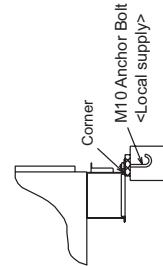
• In case of collective installation and continuous installation

- ① Space required for collective installation and continuous installation:  
When installing several units, provide the space between each block considering passage for air and people.
- ② Open in two directions.
- ③ In case of wall height <H> exceeds total height of unit, add <h> dimension (h=wall height <H>-total height of unit) to \* marked dimension.
- ④ If there is a wall at both the front and the rear of the unit, install up to four units consecutively in the side direction and provide a space of 1000(39-3/8) or more as inlet space/passage space for each four units.



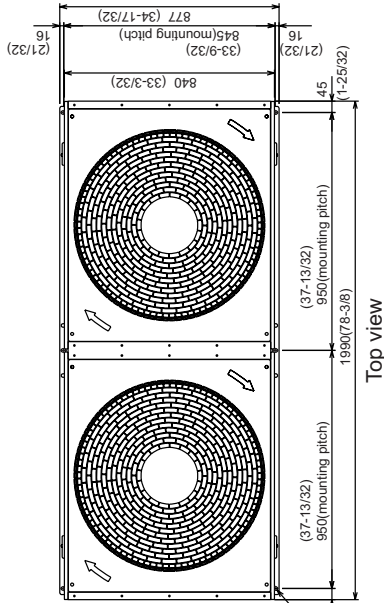
2.Foundation work

- ① When building the foundation, give full attention to the floor strength, drain water disposal <drain water flows out of the unit, during operation>, piping and wiring routes.
- ② Be sure that the corners are firmly seated. If the corners are not firmly seated, the installation feet may be bent.
- ③ When down piping and down wiring are performed, be sure that foundation and base work does not block the base through holes.

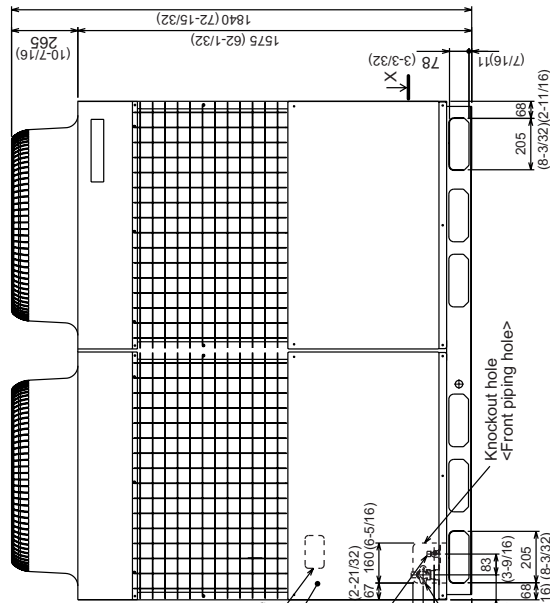


PUHY-P168,192,204,216,234TGMU-A(-BS)

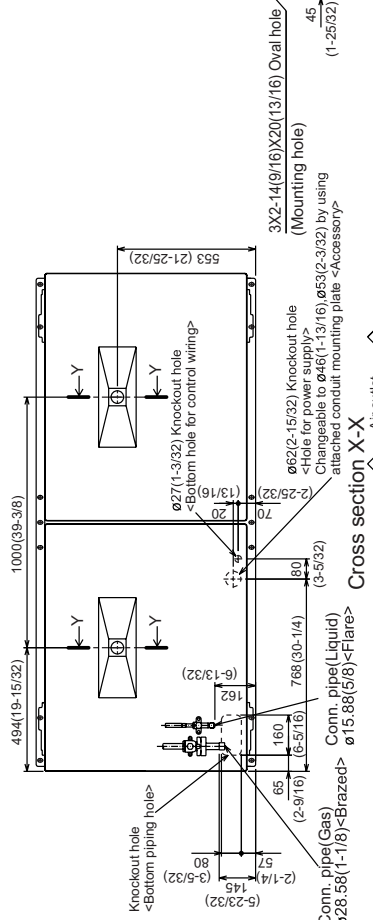
Draw : PUHY-TGMU\_W659660 1/2  
Unit : mm(in)



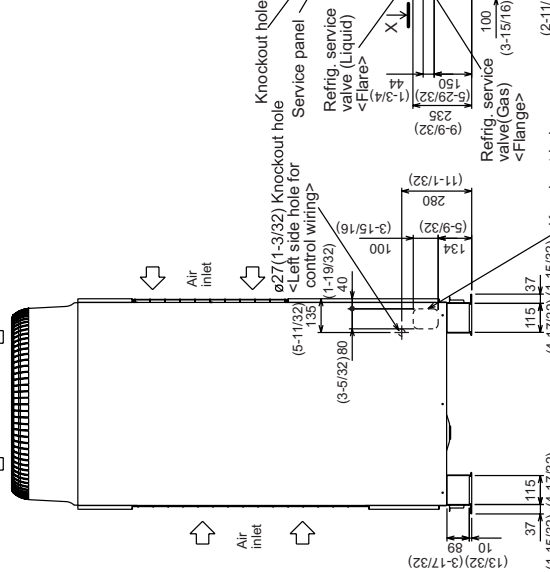
Top view



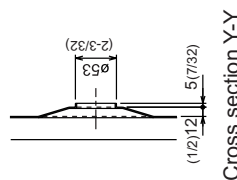
Front view



Cross section X-X



Left side view



Cross section Y-Y

- <Accessories>
- Refrigerant (Gas) conn. pipe .....1pc.  
(Already installed on the unit)
  - Packing for conn. pipe .....1pc.  
(Attached near the ball valve)
  - Conduit mounting plate  
ø53(2-3/32),ø46(1-13/16) .....1pc.Each
  - Tapping screw M4 .....2pcs.
  - Diameter-Adjusting Adapter .....2pcs.  
(5/16→1/4 inch)

Note1. Use the opening at the bottom of the unit when running the power supply line from the front or from the side of the unit.  
Note2. Please refer to the next page for information regarding necessary spacing around the unit and foundation work.

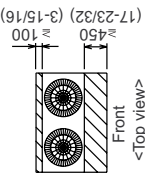
Spacing PUHY-P168,192,204,216,234TGMU-A(-BS)

Drw. :PUHY-TGMU\_W659660 2/2  
Unit : mm(in)

1.Space required around unit

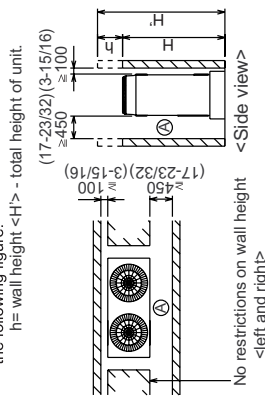
In case of single installation  
[Basic rules for spacing the unit]

- ① There must be a minimum of 100(3-15/16) of back space. However, provide 450(17-23/32) or more of back space as front space for easier access when servicing the unit.



[When inlet air enters from right and left sides of unit]

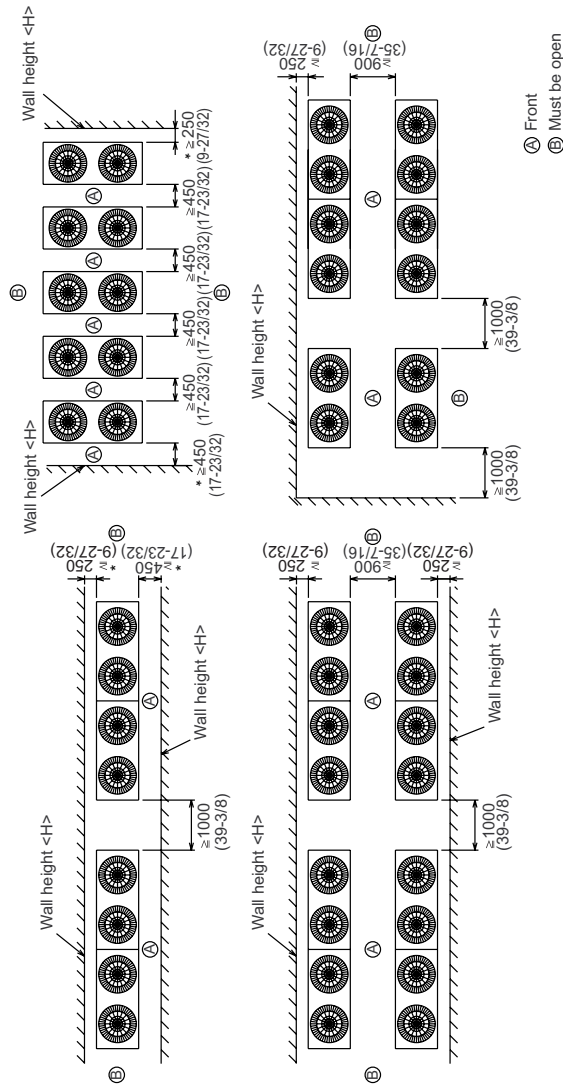
- ① Wall heights <H> of the front and the back sides shall be within total height of unit.
- ② When wall height <H> exceeds total height of unit, add <h>-dimension to 450(17-23/32), 100(3-15/16) of the following figure.



No restrictions on wall height <left and right>

In case of collective installation and continuous installation

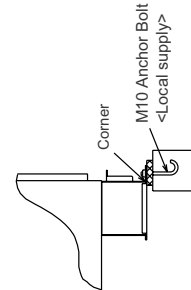
- ① Space required for collective installation and continuous installation:  
When installing several units, provide the space between each block considering passage for air and people.
- ② Open in two directions.
- ③ In case of wall height <H> exceeds total height of unit, add <h>- dimension (h=wall height <H>-total height of unit) to \* marked dimension.
- 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 1000(39-3/8) or more as inlet space/passage space for each three units.



Ⓐ Front  
Ⓑ Must be open

2.Foundation work

- ① When building the foundation, give full attention to the floor strength, drain water disposal <drain water flows out of the unit, during operation>, piping and wiring routes.
- ② Be sure that the corners are firmly seated. If the corners are not firmly seated, the installation feet may be bent.
- ③ When down piping and down wiring are performed, be sure that foundation and base work does not block the base through holes.



## PUHY-P72,96,108,126,144TGMU-A(-BS)

Draw. :PUHY-TGMU\_W274649

<Symbol explanation>

Symbol	Name
TB1.3.7	Terminal block
ACCT	AC Current Sensor
DCCT	DC Current Sensor
DCL	DC reactor
52C	Relay (Inverter main circuit)
MF1	Motor Fan Radiator panel
CH11	Crank case heater (Compressor)
21S4a.b	4-way valve
SV1	Solenoid valve (Discharge-suction bypass)
SV5b	Solenoid valve (heat exchanger capacity control)
LEV1	Electronic expansion valve
TH11	Thermistor (SC coil)
TH5	Discharge pipe temp. detect
TH6	Pipe temp. detect (Hex outlet)
TH7	OA temp. detect
TH8	liquid outlet temp. detect at Sub-cool coil
TH8	bypass outlet temp. detect at Sub-cool coil
THHS1.5	Radiator panel temp. detect
63H1	High pressure switch
63HS	High pressure sensor (Heat)
63LS	Low pressure sensor
L1.L2	Choke coil (Transmission)
Z20	Function device
⊕	. G Ground terminal

\*1 The broken lines indicate field wiring.

\*2 Function according to switch operation. (SW4-7, CN3D 1-2P, and CN3D 1-3P)

SW4-7, OFF (Compressor ON/OFF and NIGHT MODE)	CN3D Compressor 1-3P	CN3D NIGHT 1-2P	MODE
OPEN	ON/OFF	OPEN	OFF
SHORT	OFF	SHORT	ON

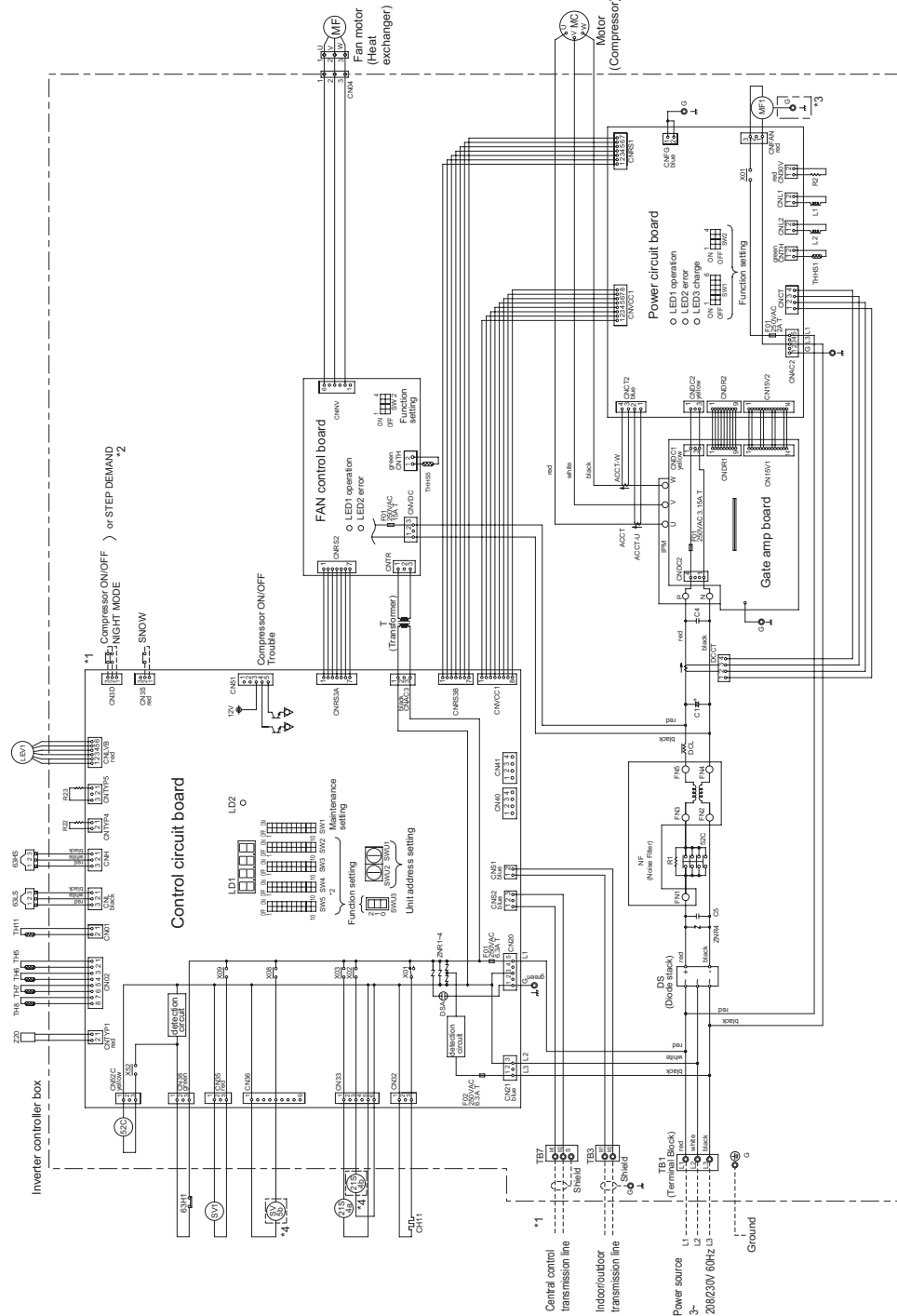
SW4-7-ON (STEP DEMAND)

CN3D 1-2P	OPEN	SHORT
CN3D 1-3P	OPEN 100%	SHORT 0%
	OPEN 75%	SHORT 50%

<Difference of appliance>

○ exist X: not exist

Model	*3	*4
P72/96/108	○	X
P126/144	X	○



## PUHY-P168,192,204,216,234TGMU-A(-BS)

Drw.: PUHY-TGMU\_W274650

<Symbol explanation>

Symbol	Name
TB1.3.7	Terminal block
ACCT	AC Current Sensor
DCCT	DC Current Sensor
DCL	DC reactor
52C1	Relay(Inverter main circuit)
52C2	Magnetic contactor(No.2 Compressor)
51C2	Overload relay(No.2 Compressor)
52F	Magnetic contactor(Fan motor)
MF3	Motor Fan (Radiator panel)
CH11.12	C-rank case heater(Compressor)
21S4a.b	4-way valve
SV1.3	Solenoid valve (Discharge-suction bypass)
SV5b	Solenoid valve (Heat exchanger capacity control)
LEV1	Electronic expansion valve
TH11.12	Thermistor (Discharge pipe temp. detect)
TH5	Pipe temp.detect(hex outlet)
TH6	OA temp. detect
TH7	liquid outlet temp.detect at Sub-cool coil
TH8	bypass outlet temp.detect at Sub-cool coil
THHS1.5	Radiator panel temp. detect
63H1.2	High pressure switch
63HS	High pressure sensor
63LS	Low pressure sensor
L1.L2	Choke coil(Transmission)
Z20	Function device
⊕, G	Ground terminal

\*1 The broken lines indicate field wiring.

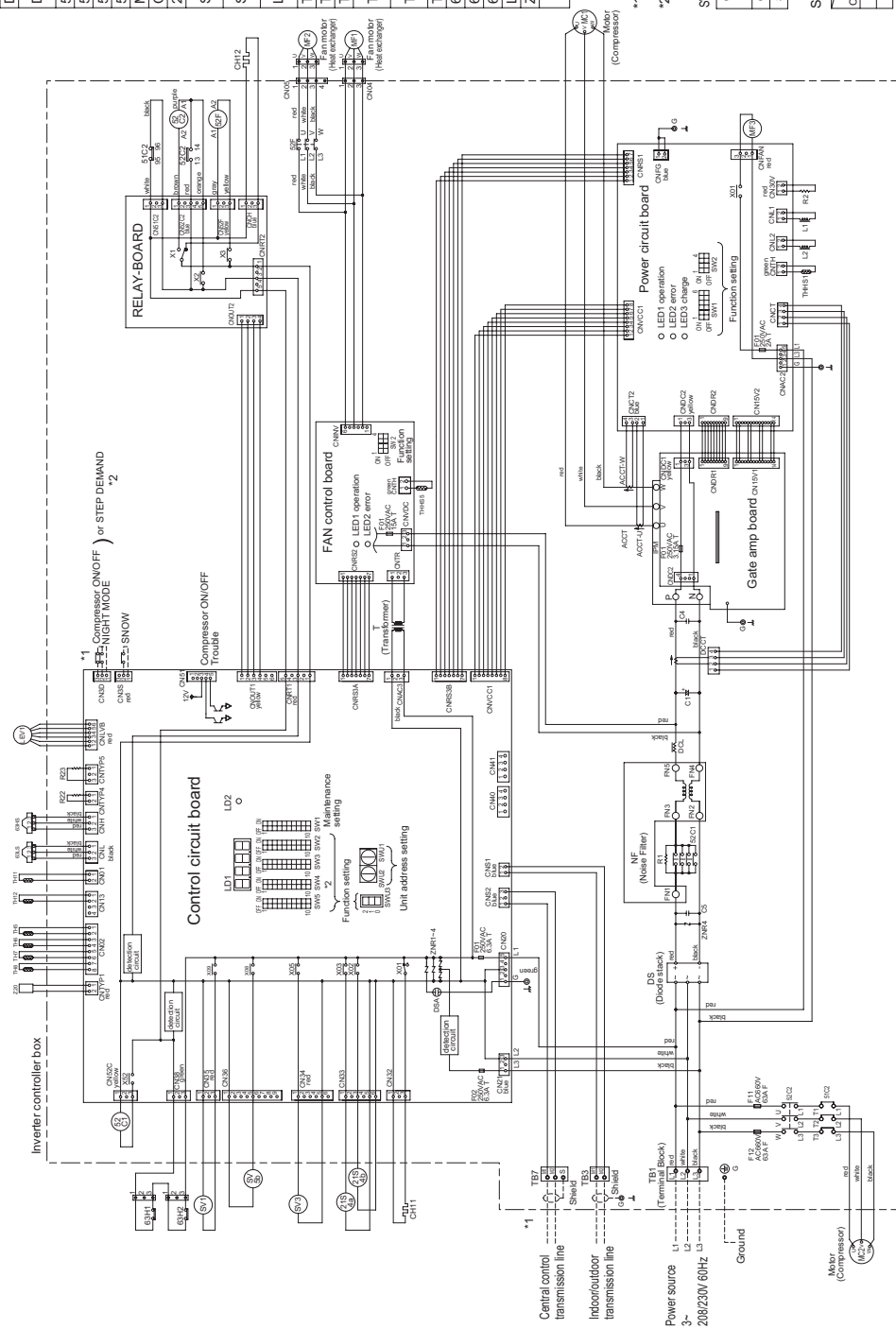
\*2 Function according to switch operation.  
(SW4-7,CNSD 1-2P and CNSD 1-3P)

SW4-7:OFF (Compressor ON/OFF and NIGHT MODE)

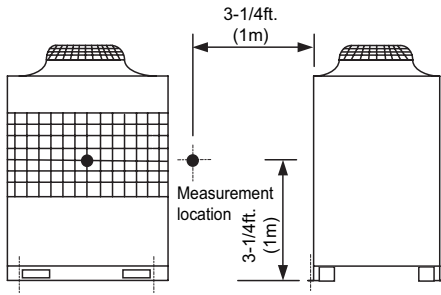
CNSD	Compressor	CNSD	NIGHT
1-3P	ON/OFF	1-2P	MODE
OPEN	ON	OPEN	OFF
SHORT	OFF	SHORT	ON

SW4-7:ON (STEP DEMAND)

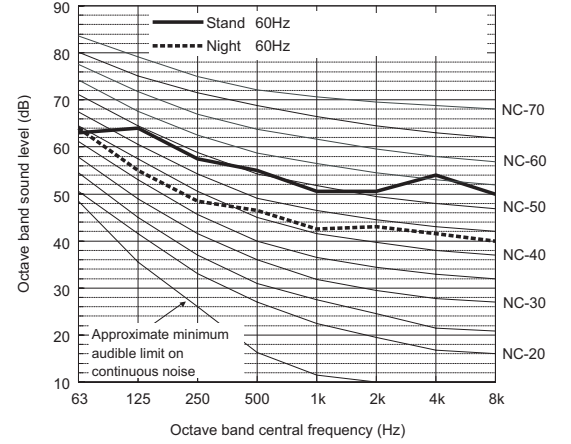
CNSD 1-2P	OPEN	SHORT
CNSD 1-3P	OPEN	100%
	SHORT	0%
		75%
		50%



**Measurement condition**  
**PUHY-P72,96,108,126,144TGMU-A(-BS)**



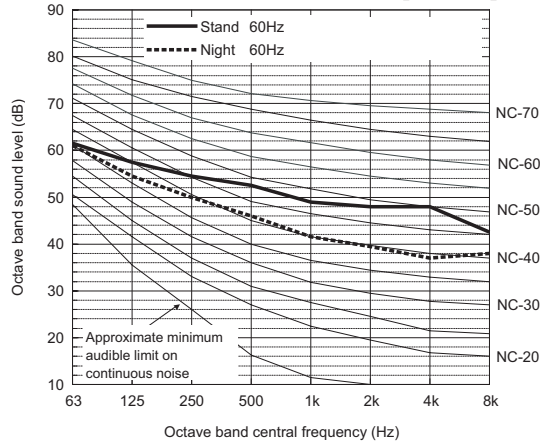
**Sound level of PUHY-P108TGMU-A(-BS)** Ref.:NC\_PUHY-P108TGMU\_WYBN0-4263



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	63.0	64.0	57.5	55.0	50.5	50.5	54.0	50.0	60.0
Night Mode	60Hz	64.0	55.0	48.5	46.5	42.5	43.0	41.5	40.0	51.0

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

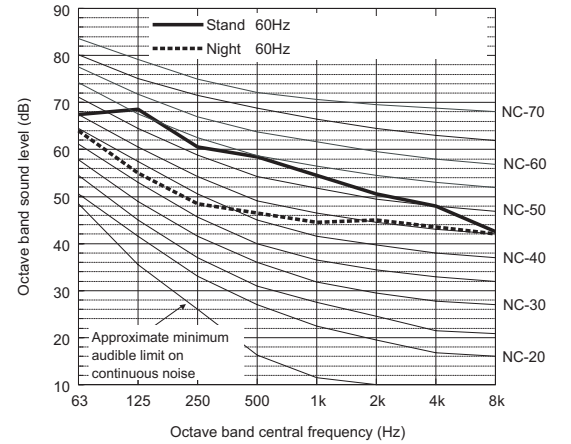
**Sound level of PUHY-P72TGMU-A(-BS)** Ref.:NC\_PUHY-P72TGMU\_WYBN0-4261



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	61.5	57.5	54.5	52.5	49.0	48.0	48.0	42.5	56.0
Night Mode	60Hz	61.0	54.5	50.0	46.0	41.5	39.5	37.0	38.0	49.0

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

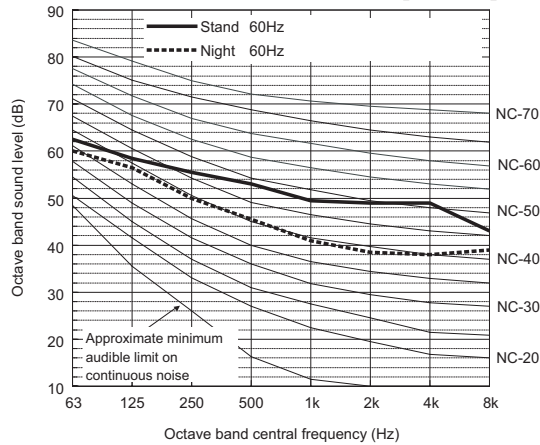
**Sound level of PUHY-P126TGMU-A(-BS)** Ref.:NC\_PUHY-P126TGMU\_WYBN0-4264



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	67.5	68.5	60.5	58.5	54.5	50.5	48.0	42.5	61.0
Night Mode	60Hz	64.0	55.0	48.5	46.5	44.5	45.0	43.5	42.0	52.0

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

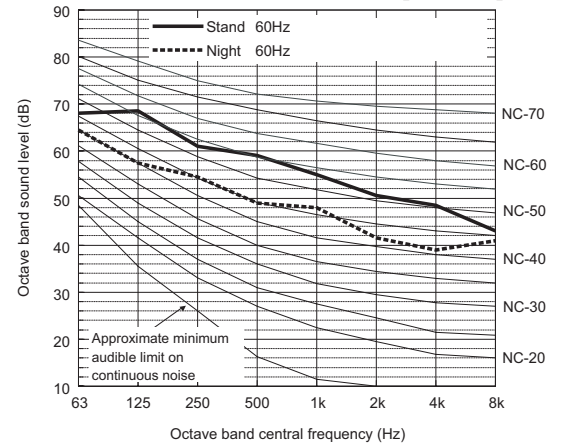
**Sound level of PUHY-P96TGMU-A(-BS)** Ref.:NC\_PUHY-P96TGMU\_WYBN0-4262



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	62.5	58.5	55.5	53.0	49.5	49.0	49.0	43.0	57.0
Night Mode	60Hz	60.0	56.5	50.0	45.5	41.0	38.5	38.0	39.0	49.0

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

**Sound level of PUHY-P144TGMU-A(-BS)** Ref.:NC\_PUHY-P144TGMU\_WYBN0-4265

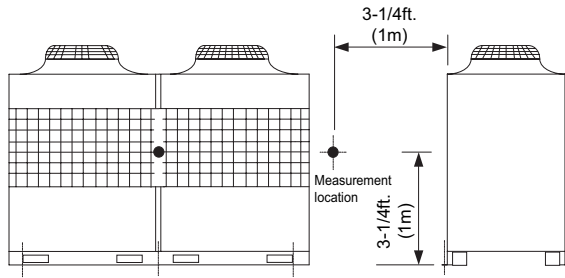


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	68.0	68.5	61.0	59.0	55.0	50.5	48.5	43.0	61.0
Night Mode	60Hz	64.5	57.5	54.5	49.0	48.0	41.5	39.0	41.0	53.0

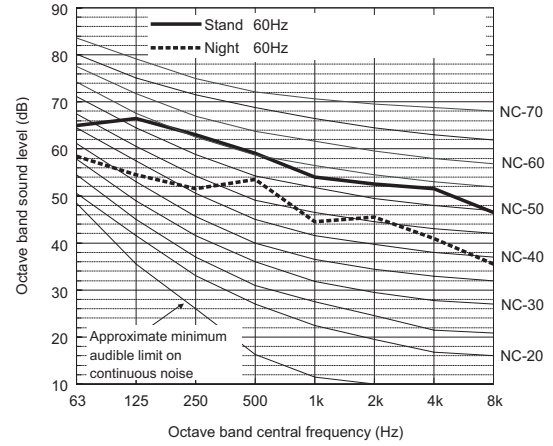
When Night Mode is set, the A/C system's capacity is limited. The system could return to normal operation from Night Mode automatically in the case that the operation condition is severe.



**Measurement condition**  
**PUHY-P168,192,204,216,234TGMU-A(-BS)**



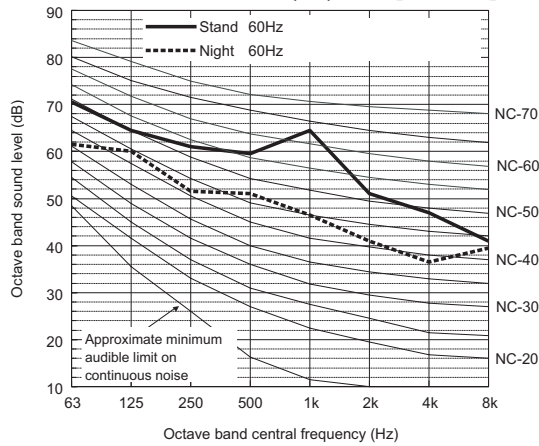
**Sound level of PUHY-P204TGMU-A(-BS)** Ref.:NC\_PUHY-P204TGMU\_WYNB0-4268



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	65.0	66.5	63.0	59.0	54.0	52.5	51.5	46.5	62.0
Night Mode	60Hz	58.5	54.5	51.5	53.5	44.5	45.5	41.0	35.5	54.0

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

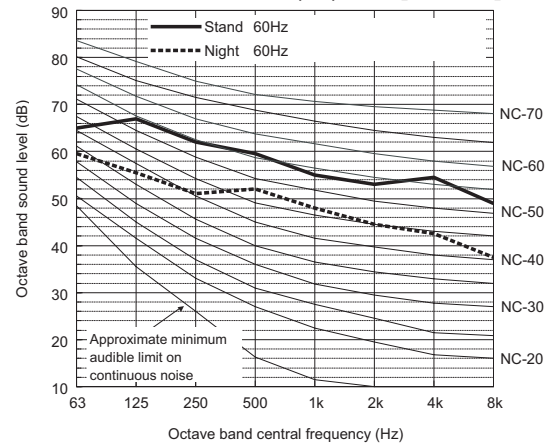
**Sound level of PUHY-P168TGMU-A(-BS)** Ref.:NC\_PUHY-P168TGMU\_WYNB0-4266



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	70.5	64.5	61.0	59.5	64.5	51.0	47.0	41.0	61.0
Night Mode	60Hz	61.5	60.0	51.5	51.0	46.5	41.0	36.5	39.5	53.0

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

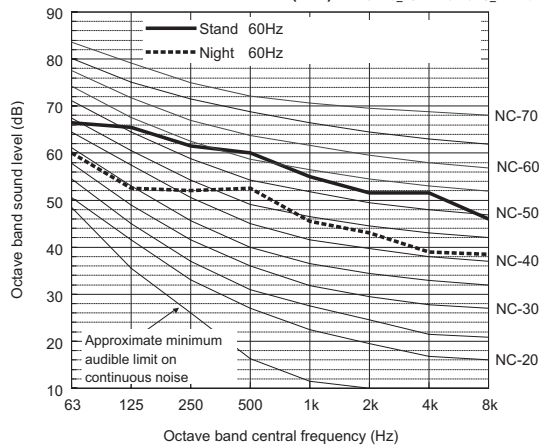
**Sound level of PUHY-P216TGMU-A(-BS)** Ref.:NC\_PUHY-P216TGMU\_WYNB0-4269



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	65.0	67.0	62.0	59.5	55.0	53.0	54.5	49.0	62.5
Night Mode	60Hz	59.5	55.5	51.0	52.0	48.0	44.5	42.5	37.5	54.0

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

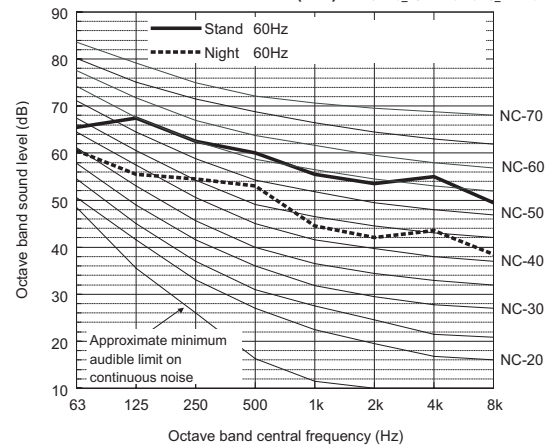
**Sound level of PUHY-P192TGMU-A(-BS)** Ref.:NC\_PUHY-P192TGMU\_WYNB0-4267



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	66.5	65.5	61.5	60.0	55.0	51.5	51.5	46.0	62.0
Night Mode	60Hz	60.0	52.5	52.0	52.5	45.5	43.0	39.0	38.5	53.0

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

**Sound level of PUHY-P234TGMU-A(-BS)** Ref.:NC\_PUHY-P234TGMU\_WYNB0-4270

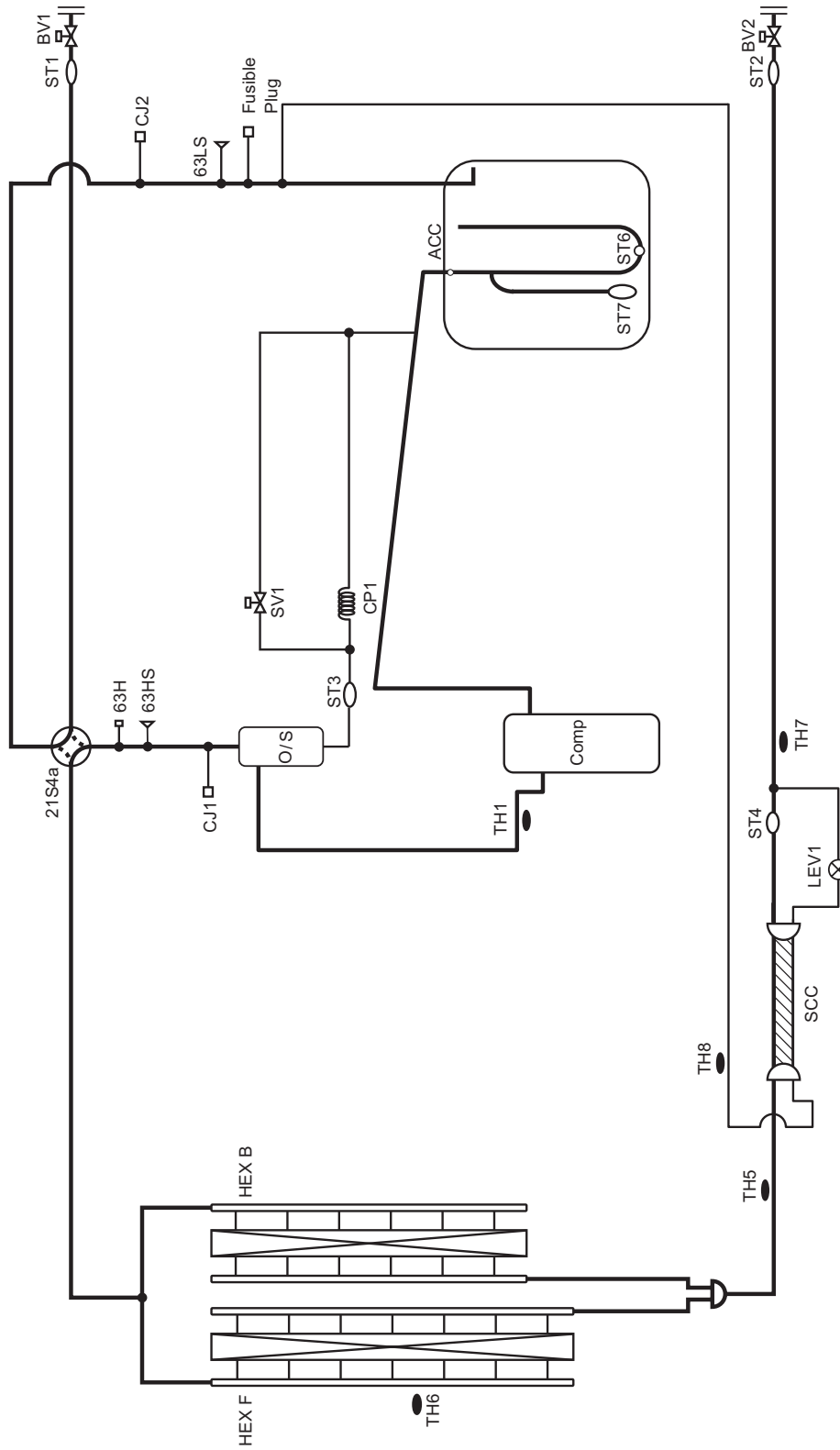


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard	60Hz	65.5	67.5	62.5	60.0	55.5	53.5	55.0	49.5	63.0
Night Mode	60Hz	60.5	55.5	54.5	53.0	44.5	42.0	43.5	38.5	54.0

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

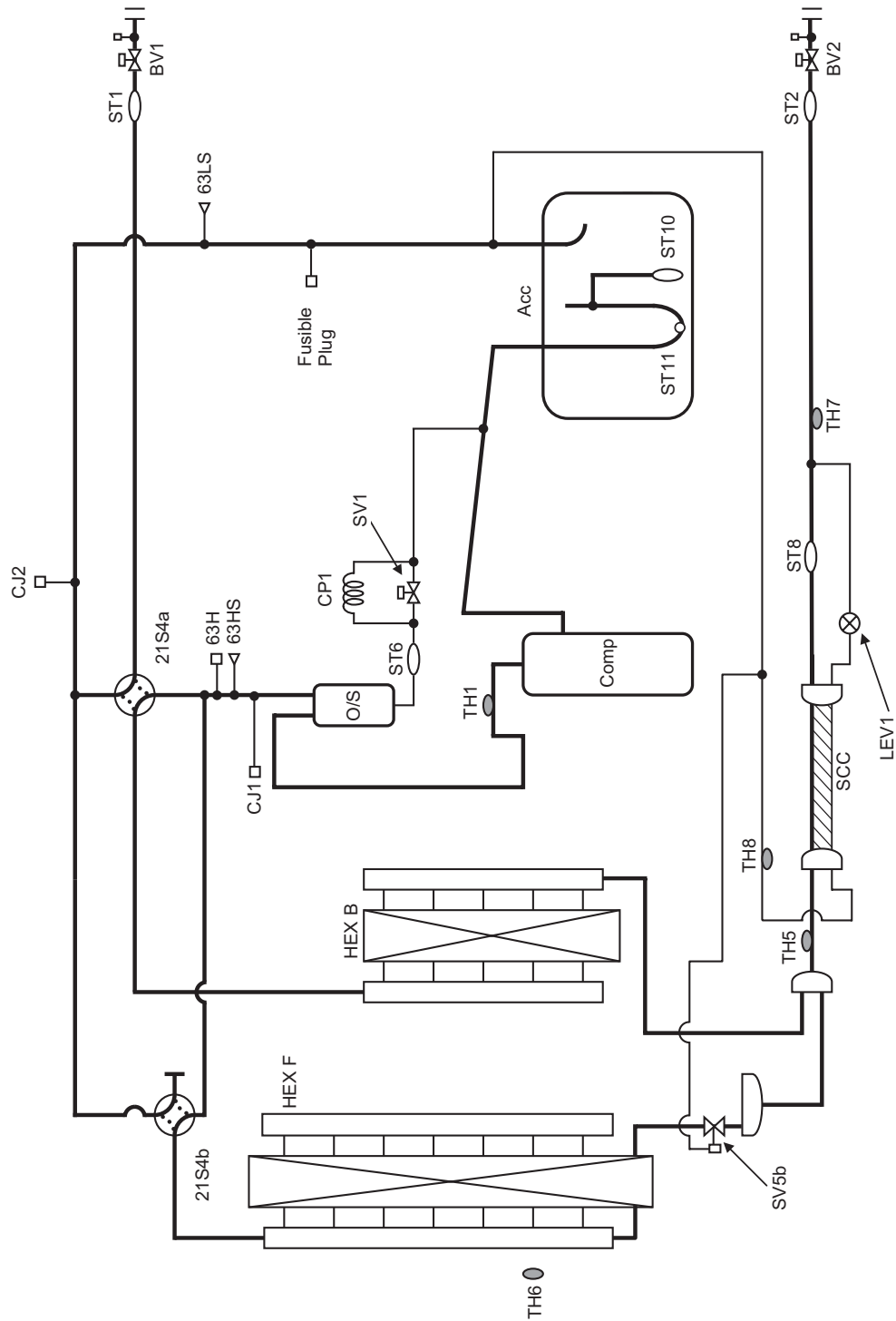
PUHY-P72,96,108TGMU-A(-BS)

Drw. : RC\_PUHY-P72-108TGMU



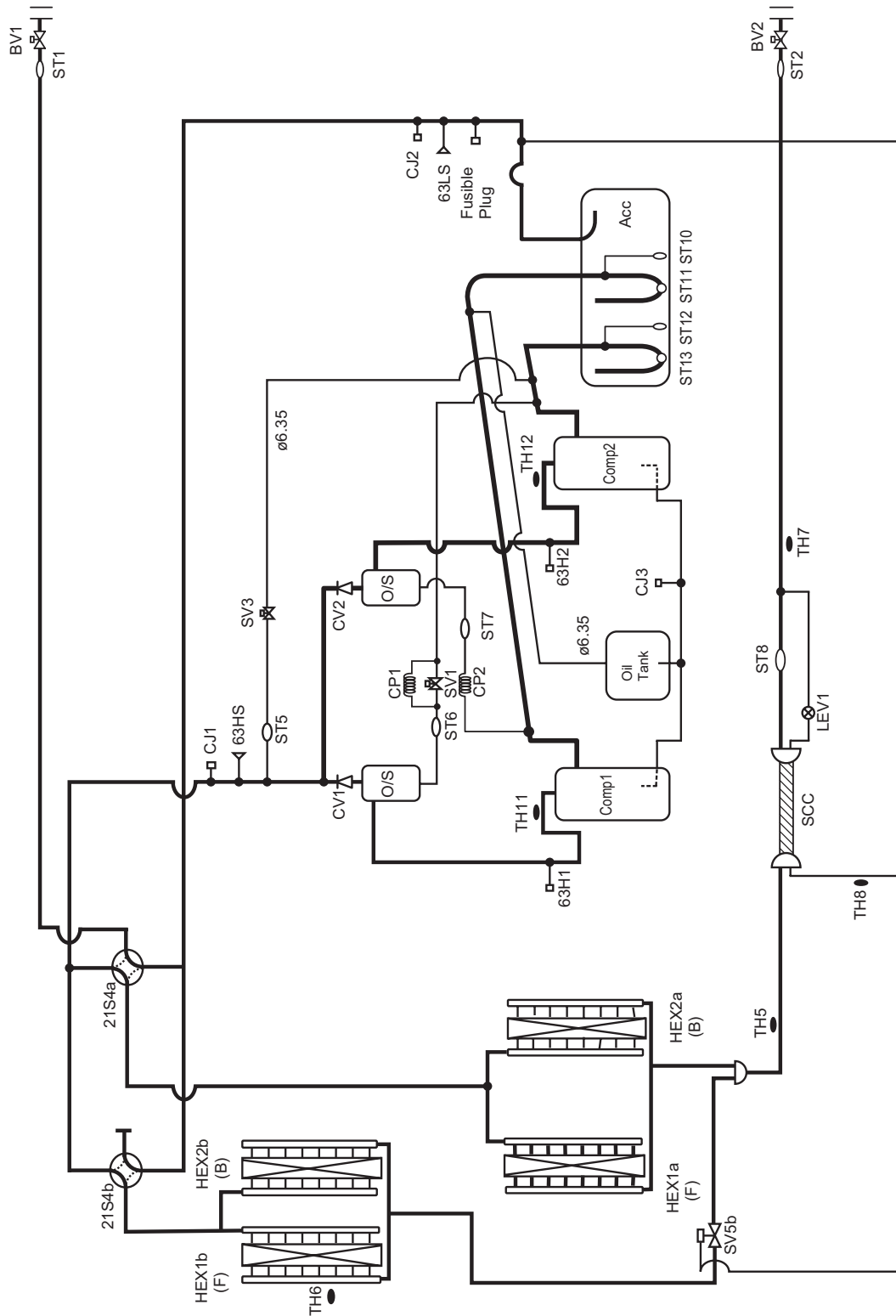
PUHY-P126,144TGMU-A(-BS)

Drw. : RC\_PUHY-P126-144TGMU



PUHY-P168,192,204,216,234TGMU-A(-BS)

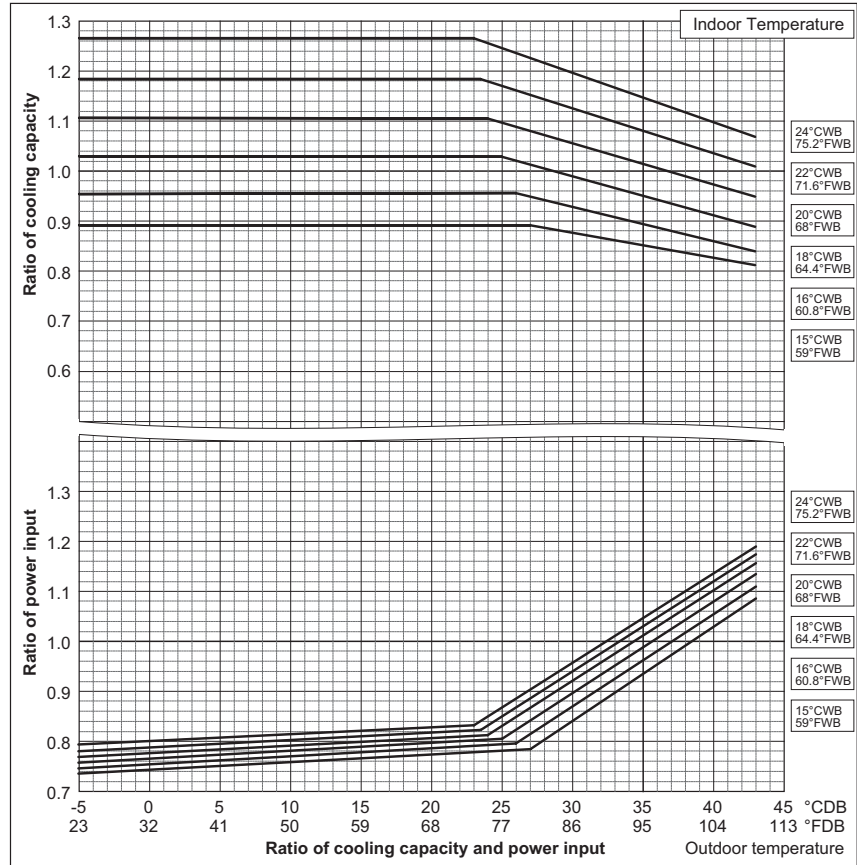
Draw. : RC\_PUHY-P168-234TGMU



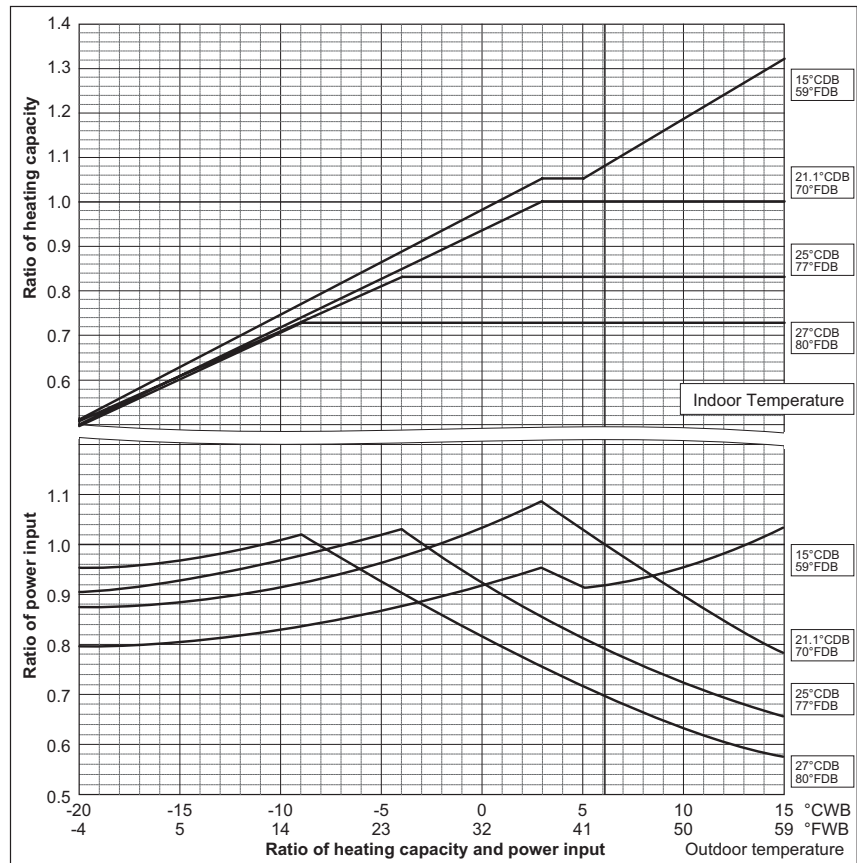
## 6-1. Correction by temperature

CITY MULTI™ could have varied capacity at different designing temperature. Using the nominal cooling/heating capacity value and the ratio below, the capacity can be observed at various temperature.

	PUHY-	P72TGMU	P96TGMU
Nominal Cooling Capacity	kW	21.1	28.1
	BTU/h	72,000	96,000
Input	kW	6.48	8.67



	PUHY-	P72TGMU	P96TGMU
Nominal Heating Capacity	kW	23.4	31.7
	BTU/h	80,000	108,000
Input	kW	6.33	8.56

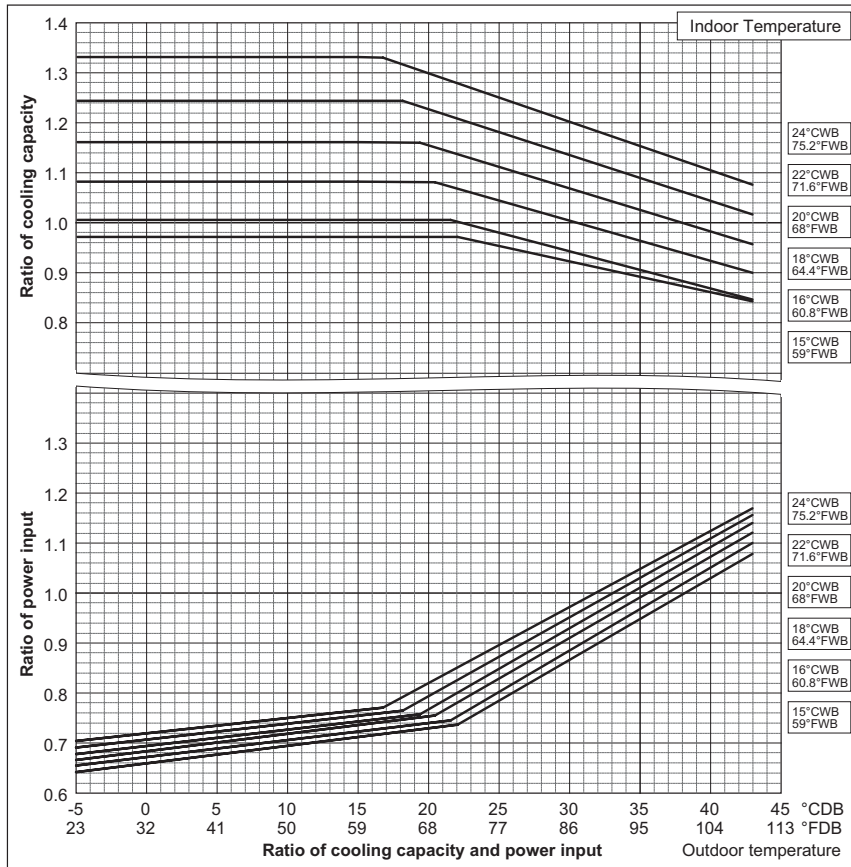


Ref:CbT\_PUHY-P72-96TGMU

# 6. CAPACITY TABLES

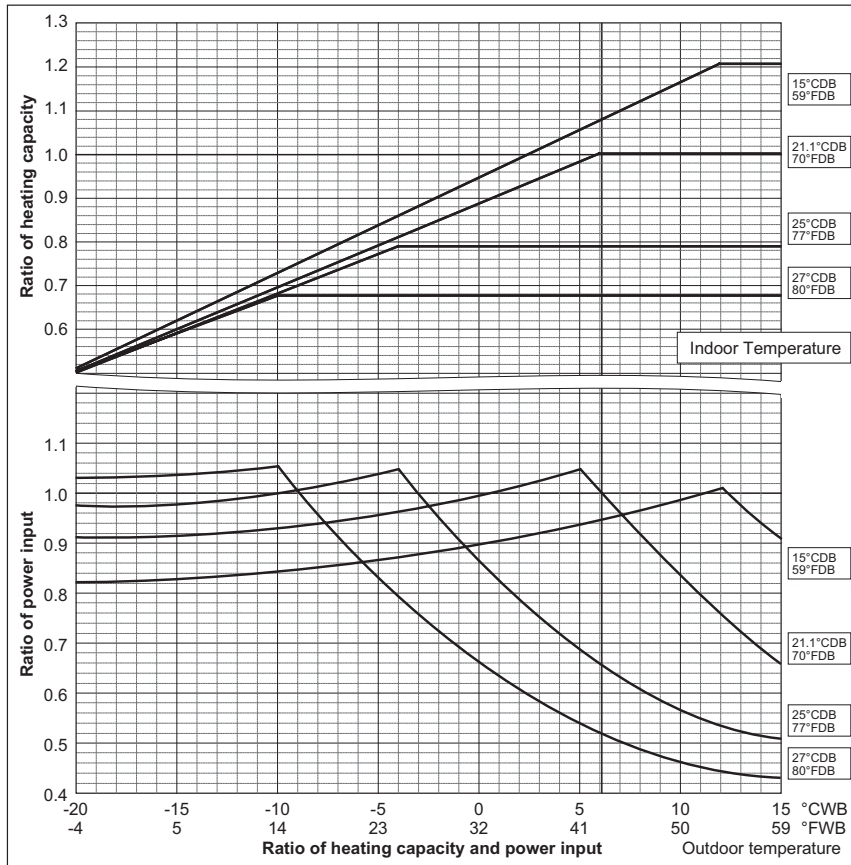
PUHY-		P108TGMU	P126TGMU
Nominal Cooling Capacity	kW	31.7	36.9
	BTU/h	108,000	126,000
Input	kW	9.73	11.36

PUHY-		P144TGMU
Nominal Cooling Capacity	kW	42.2
	BTU/h	144,000
Input	kW	14.20



PUHY-		P108TGMU	P126TGMU
Nominal Heating Capacity	kW	35.2	41.0
	BTU/h	120,000	140,000
Input	kW	9.92	11.67

PUHY-		P144TGMU
Nominal Heating Capacity	kW	46.9
	BTU/h	160,000
Input	kW	13.67



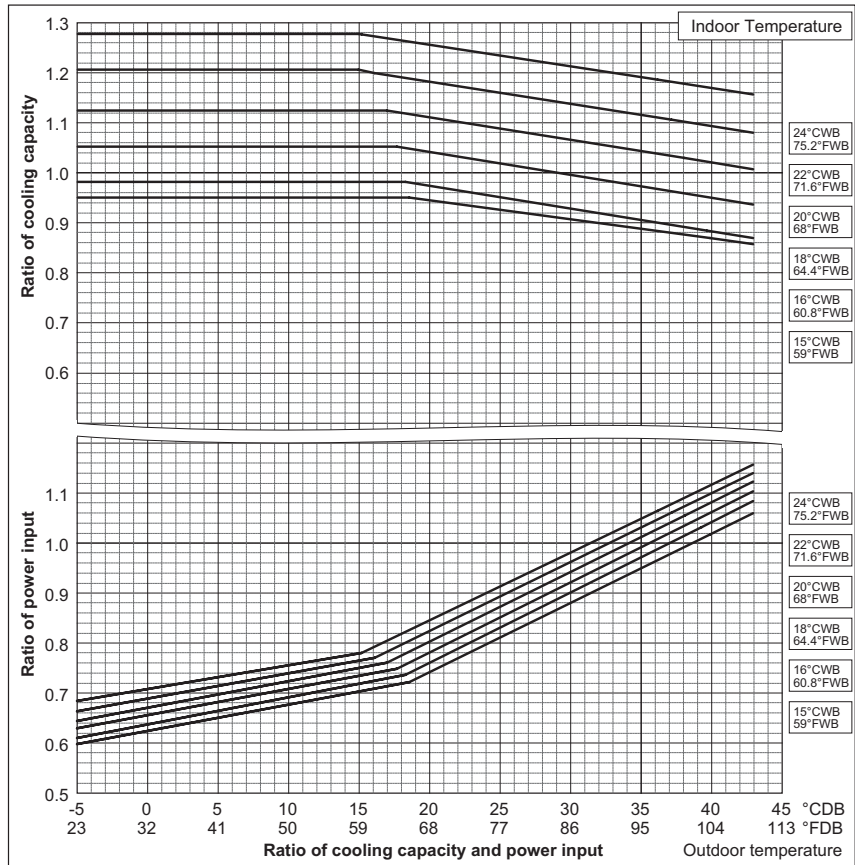
Ref.CbT\_PUHY-P108-144TGMU

# 6. CAPACITY TABLES

PUHY-		P168TGMU	P192TGMU
Nominal Cooling Capacity	kW	49.2	56.3
	BTU/h	168,000	192,000
Input	kW	14.97	17.34

PUHY-		P204TGMU	P216TGMU
Nominal Cooling Capacity	kW	59.8	63.3
	BTU/h	204,000	216,000
Input	kW	18.71	19.92

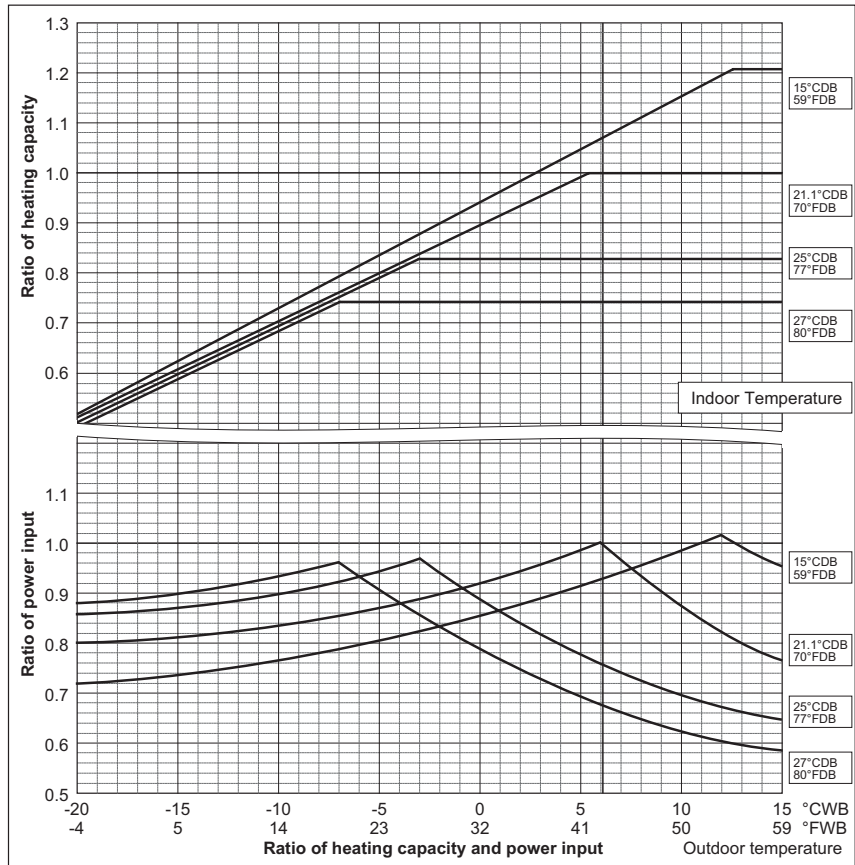
PUHY-		P234TGMU
Nominal Cooling Capacity	kW	68.6
	BTU/h	234,000
Input	kW	21.62



PUHY-		P168TGMU	P192TGMU
Nominal Heating Capacity	kW	55.1	63.3
	BTU/h	188,000	216,000
Input	kW	15.02	17.48

PUHY-		P204TGMU	P216TGMU
Nominal Heating Capacity	kW	66.8	72.7
	BTU/h	228,000	248,000
Input	kW	18.65	21.03

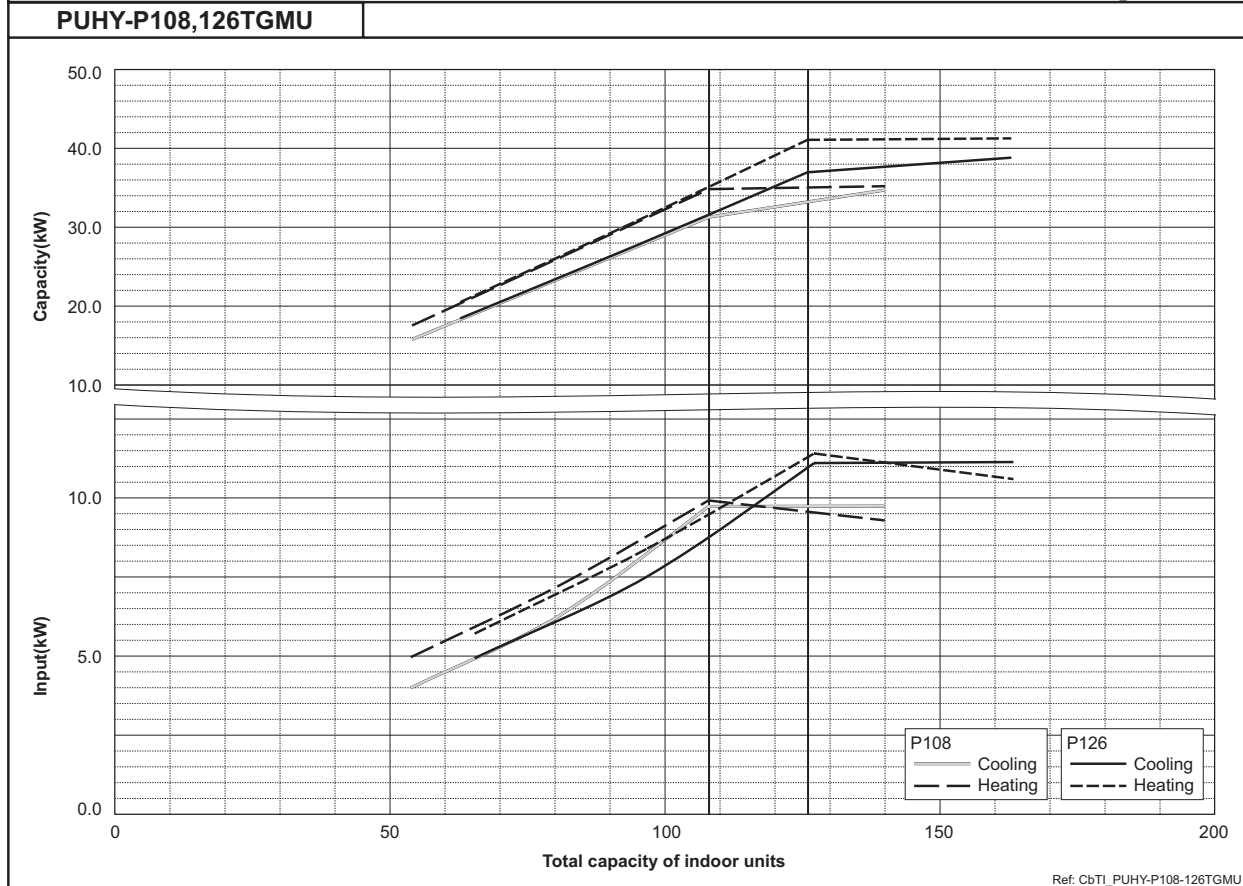
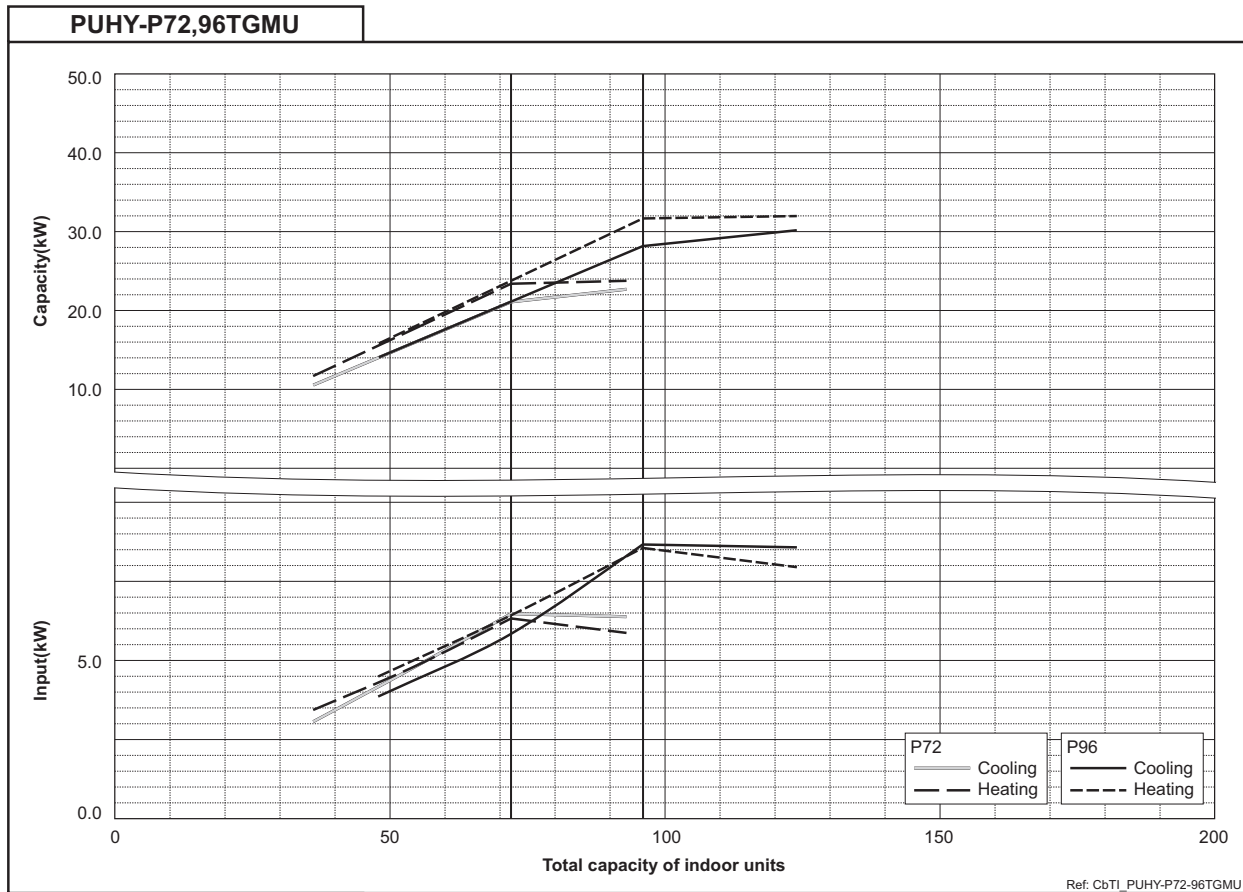
PUHY-		P234TGMU
Nominal Heating Capacity	kW	78.5
	BTU/h	268,000
Input	kW	23.11



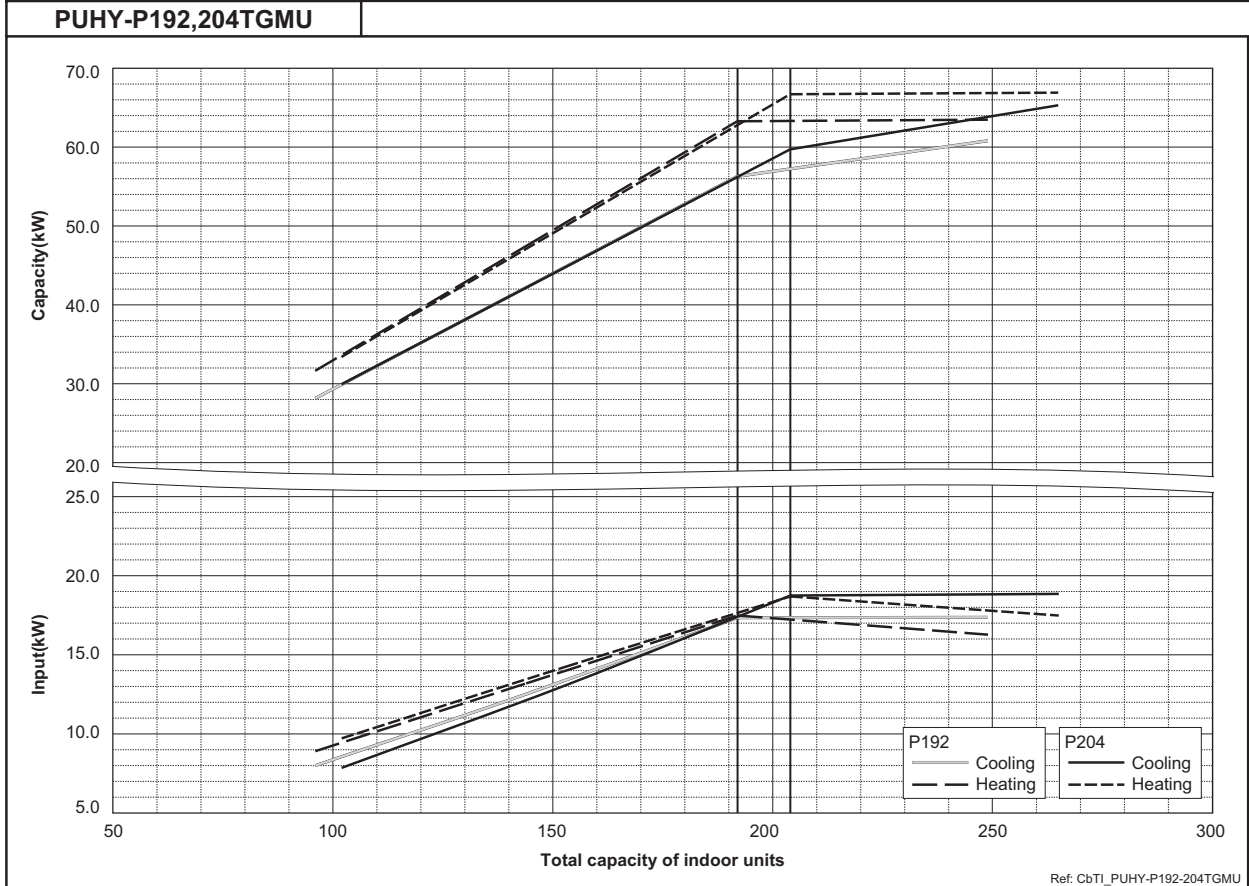
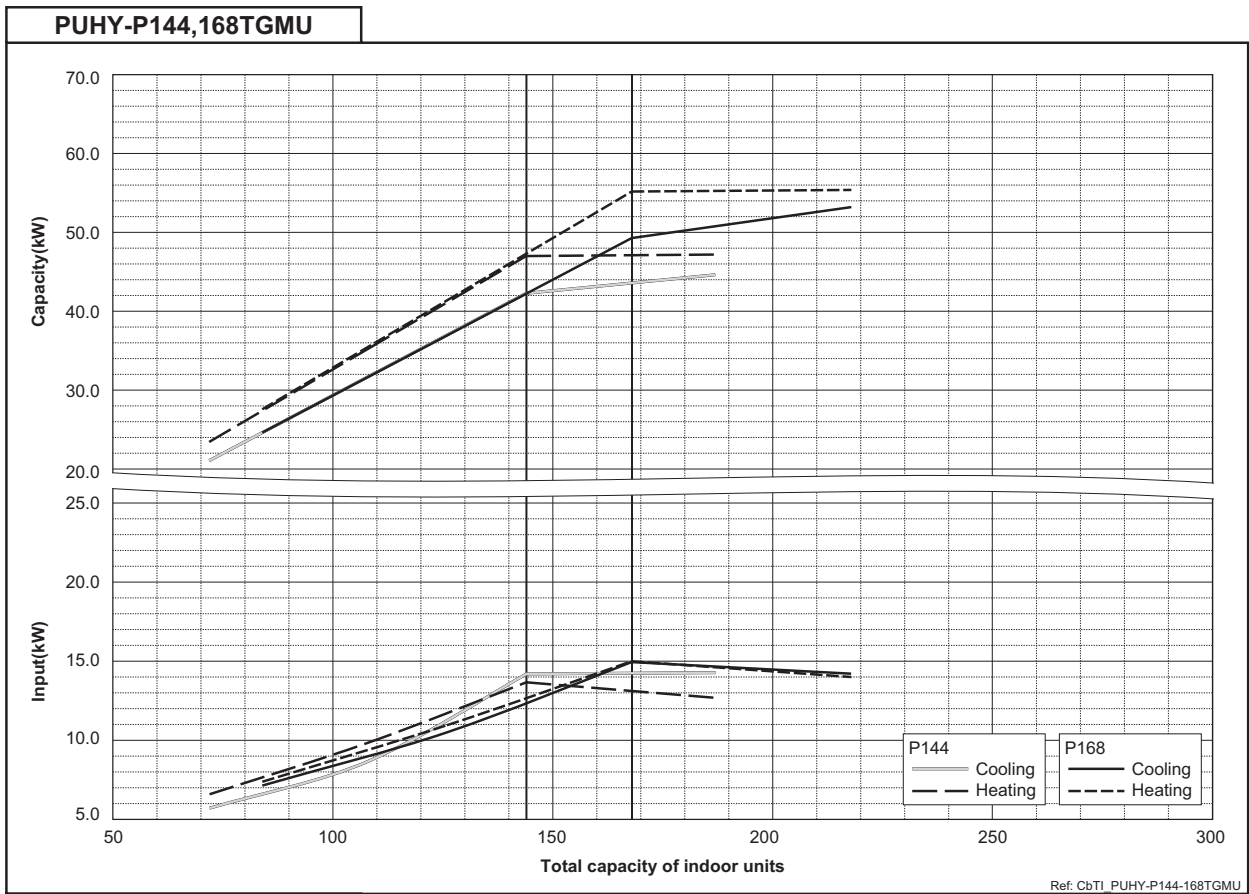
Ref:CbT\_PUHY-P168-234TGMU

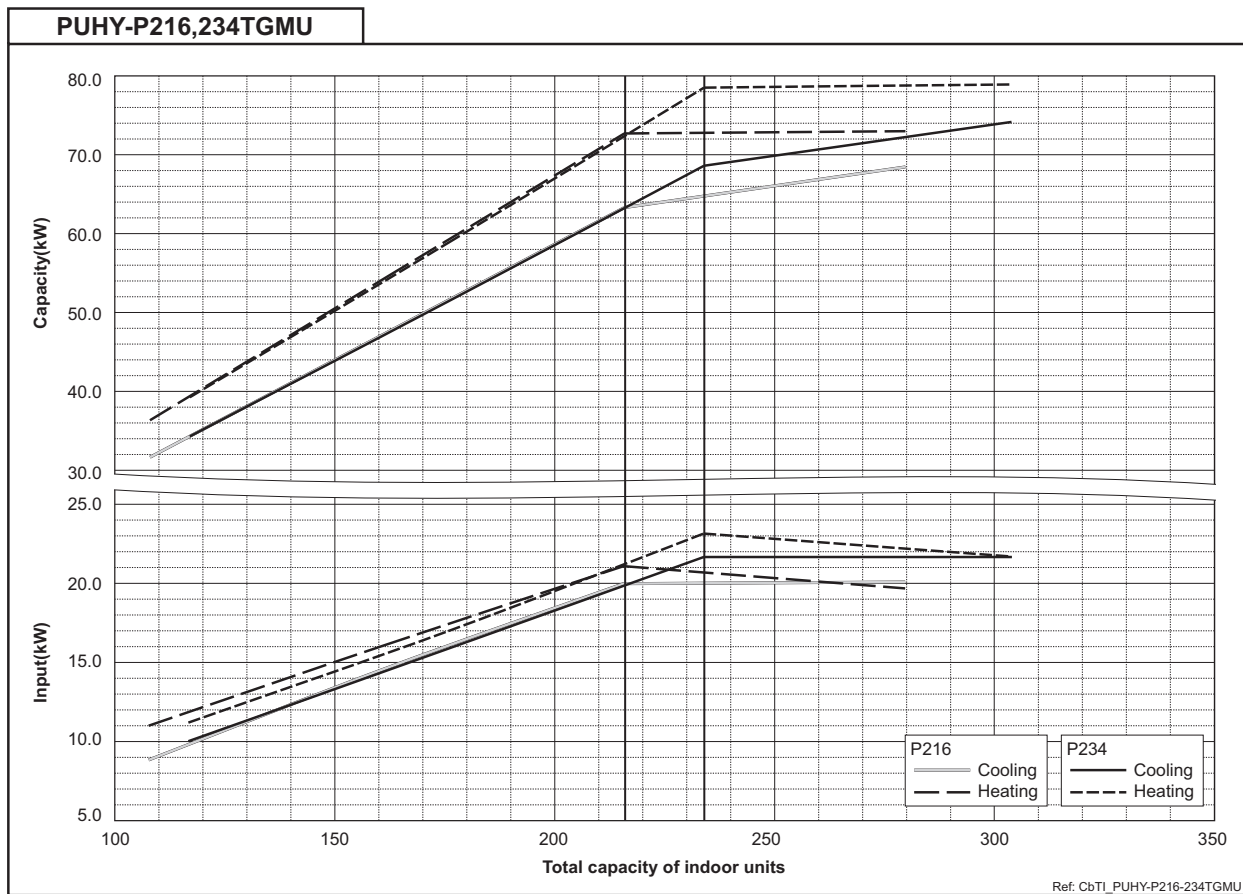
6-2. Correction by total indoor

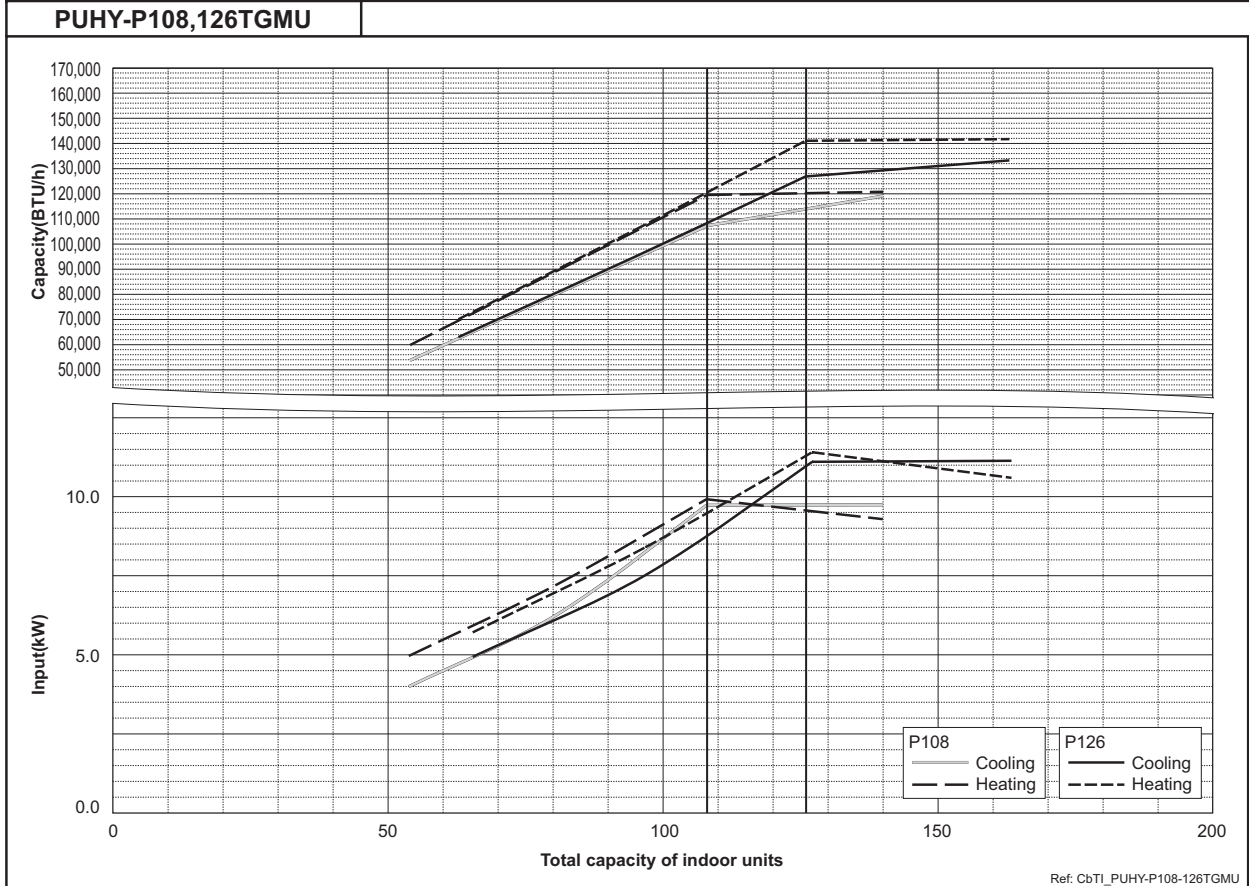
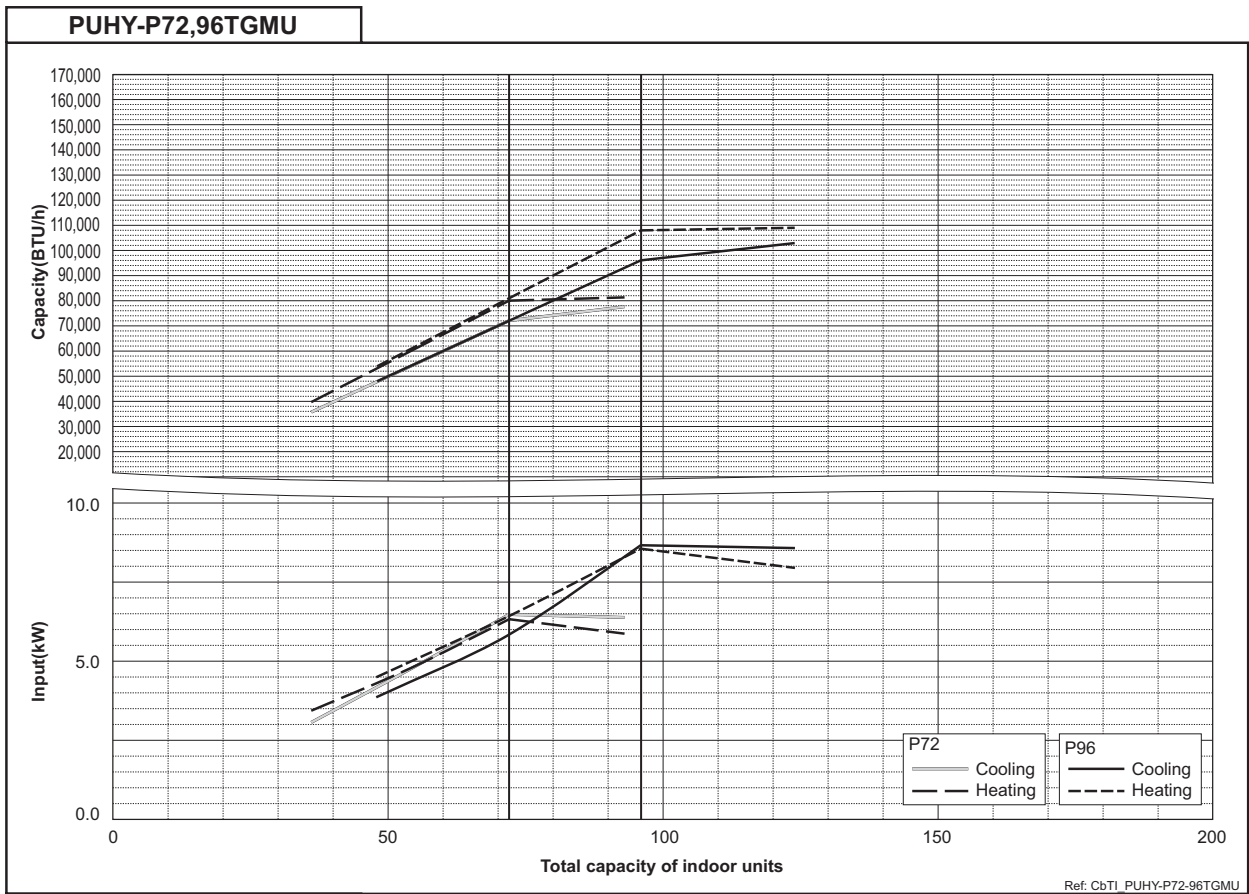
CITY MULTI™ system has different capacity and input at different total capacity of indoor unit connected. Using following tables, the maximum capacity can be observed so as to ensure the system having enough capacity.

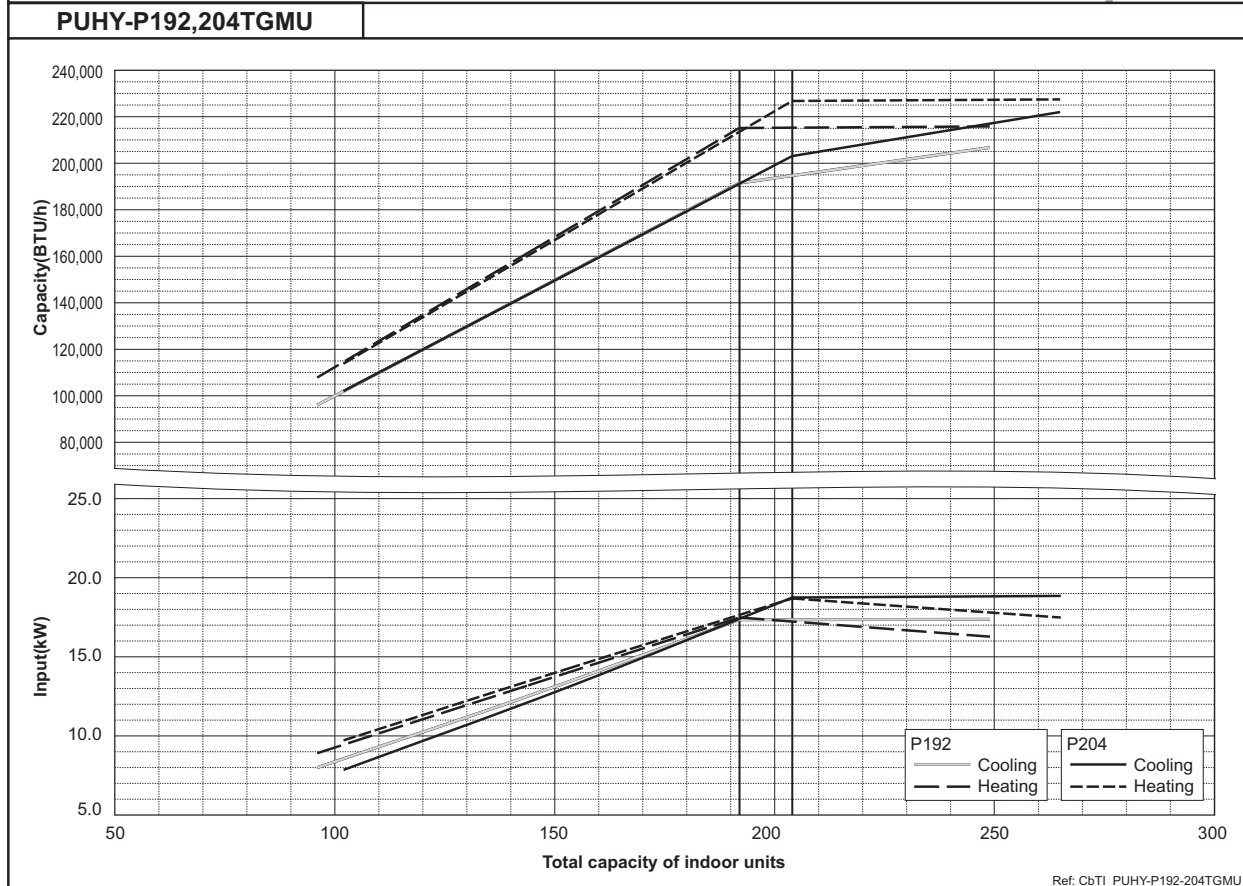
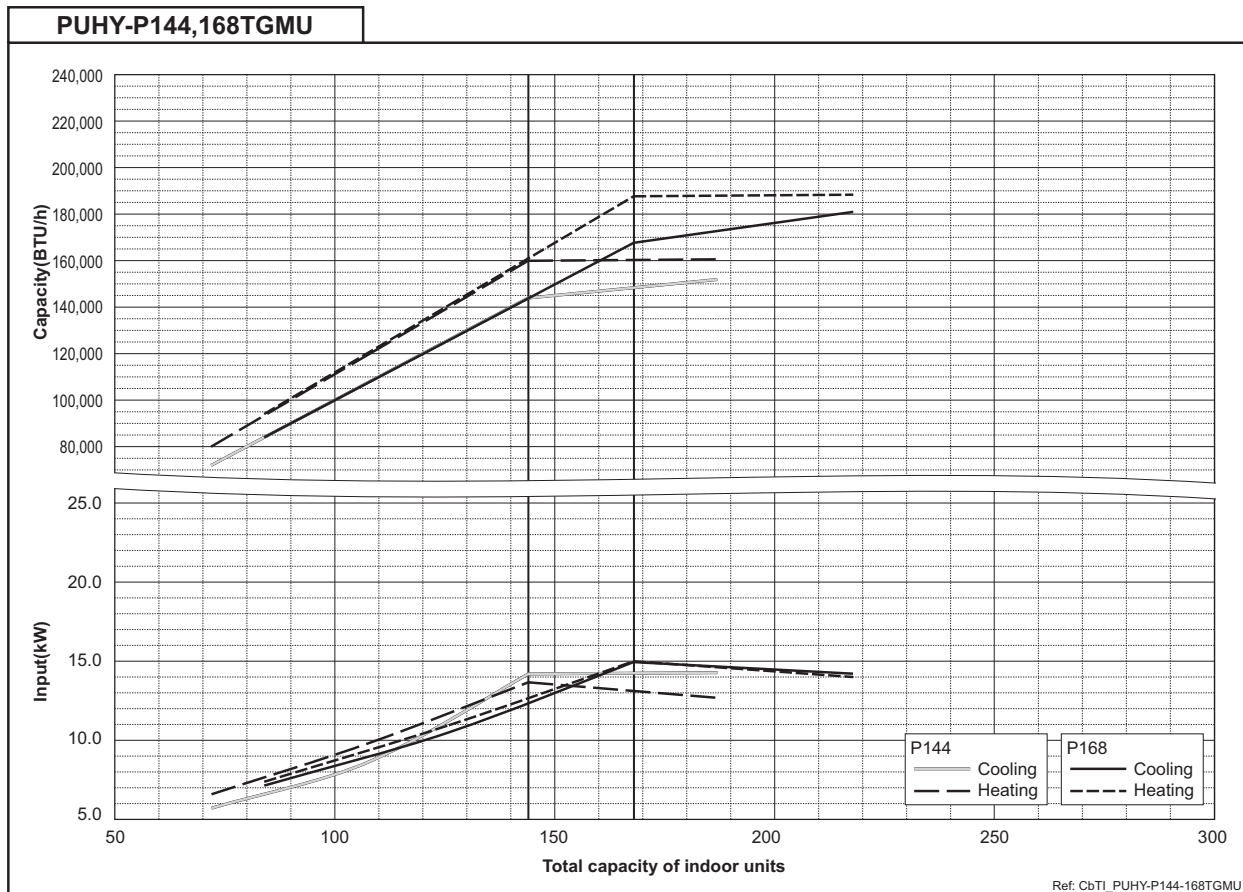


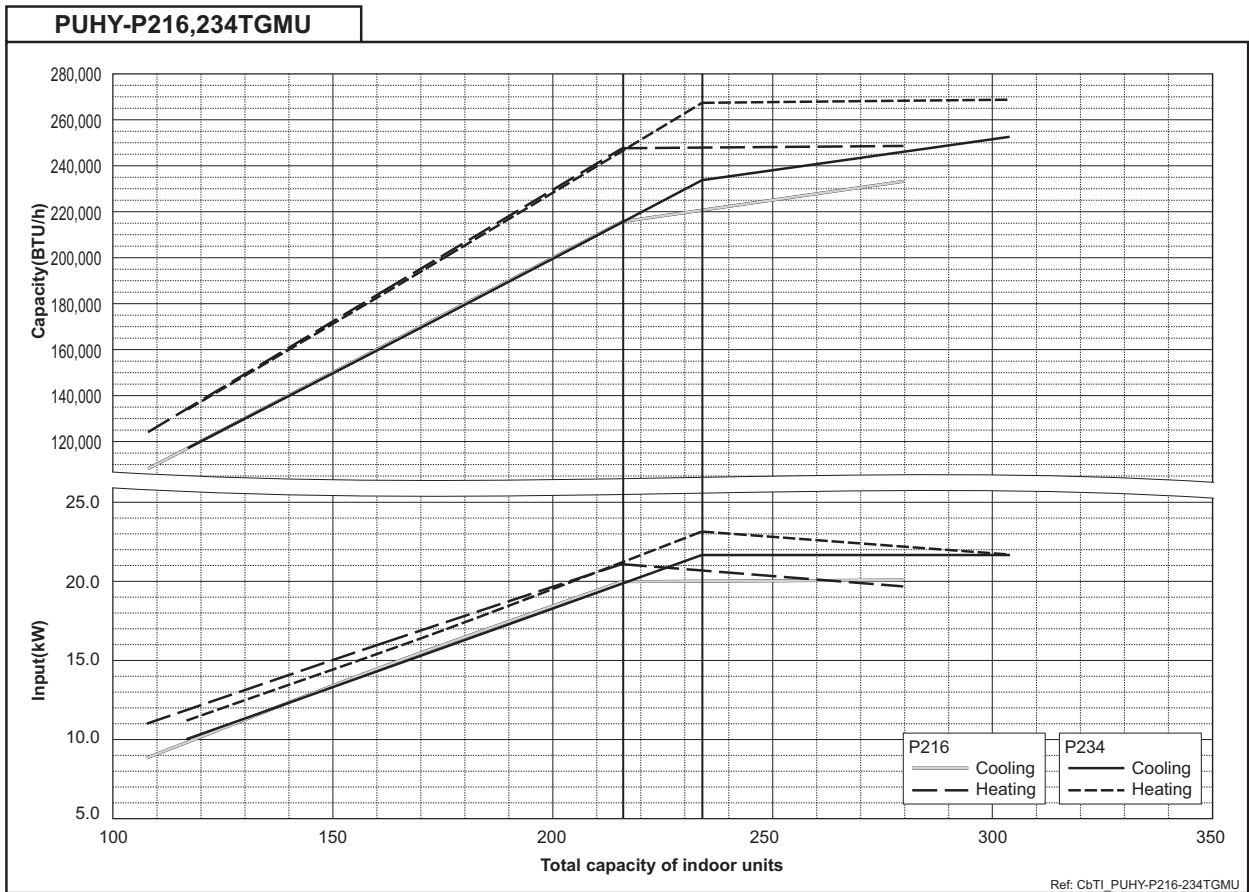








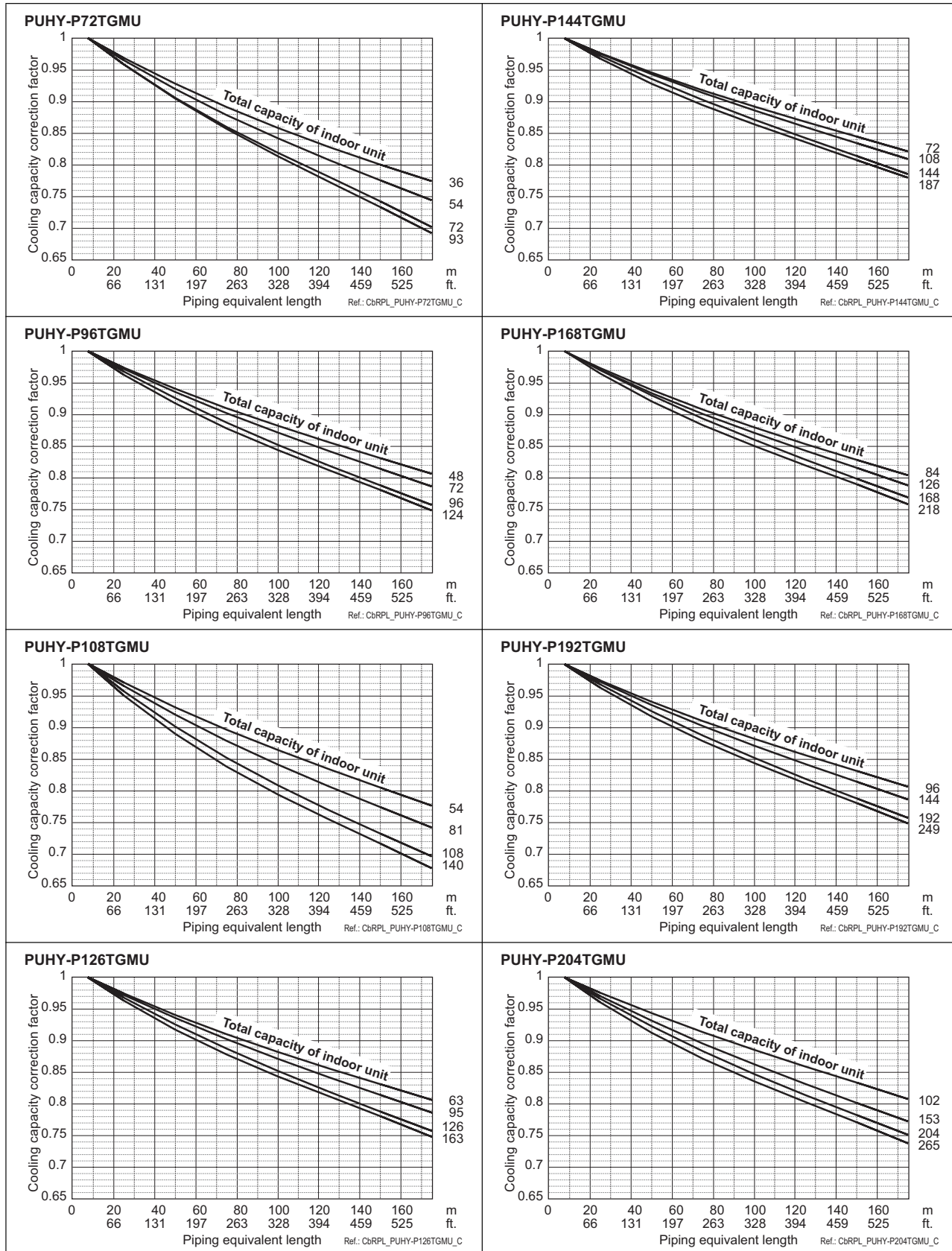


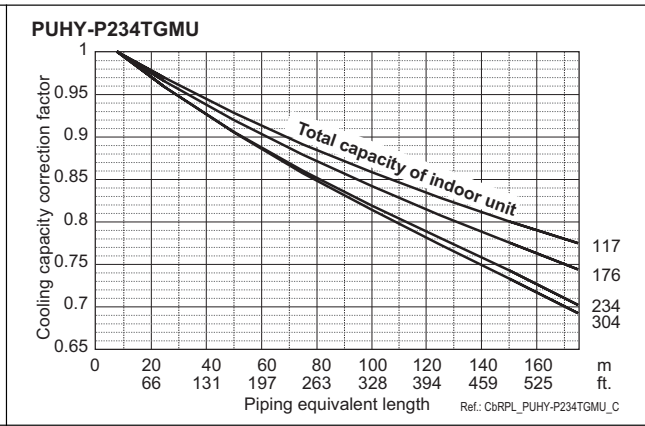
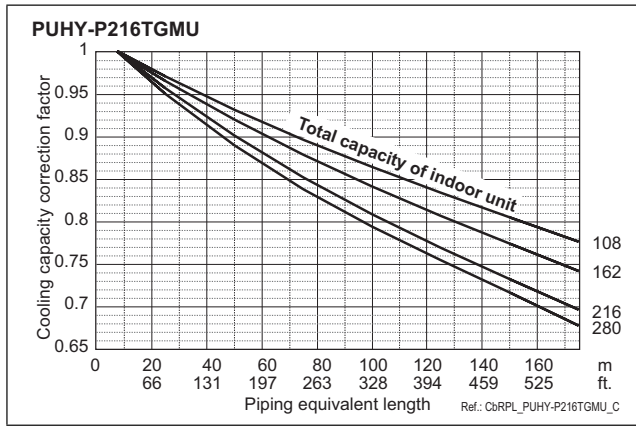


6-3. Correction by refrigerant piping length

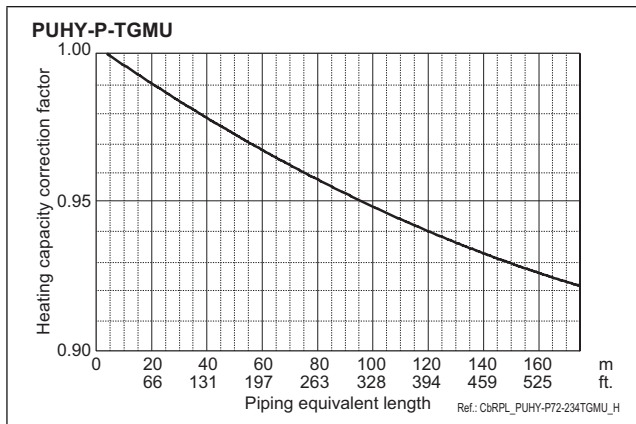
CITY MULTI™ system can extend the piping flexibly within its limitation for the actual situation. Yet, a decrease of cooling/heating capacity could happen correspondently. Using following correction factor according to the equivalent length of the piping shown at 6-3-1 and 6-3-2, the capacity can be observed. 6-3-3 shows how to obtain the equivalent length of piping.

6-3-1. Cooling capacity correction





**6-3-2. Heating capacity correction**



**6-3-3. How to obtain the equivalent length of piping**

**1 PUHY, PURY-P72TGMU**

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.35 x number of bent on the piping) m  
 + (1.15 x number of bent on the piping) ft.

**2 PUHY, PURY-P96,108TGMU**

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.42 x number of bent on the piping) m  
 + (1.38 x number of bent on the piping) ft.

**3 PUHY, PURY-P126TGMU**

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.47 x number of bent on the piping) m  
 + (1.54 x number of bent on the piping) ft.

**4 PUHY, PURY-P144,168,192,204,216,234TGMU**

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.50 x number of bent on the piping) m  
 + (1.64 x number of bent on the piping) ft.

Ref.: EPL\_TGMU

**6-4. Correction at frosting and defrosting**

Due to frosting at the outdoor heat exchanger and the automatic defrosting operation, the heating capacity of the outdoor unit should be considered by multiplying the correction factor which shown in the table below.

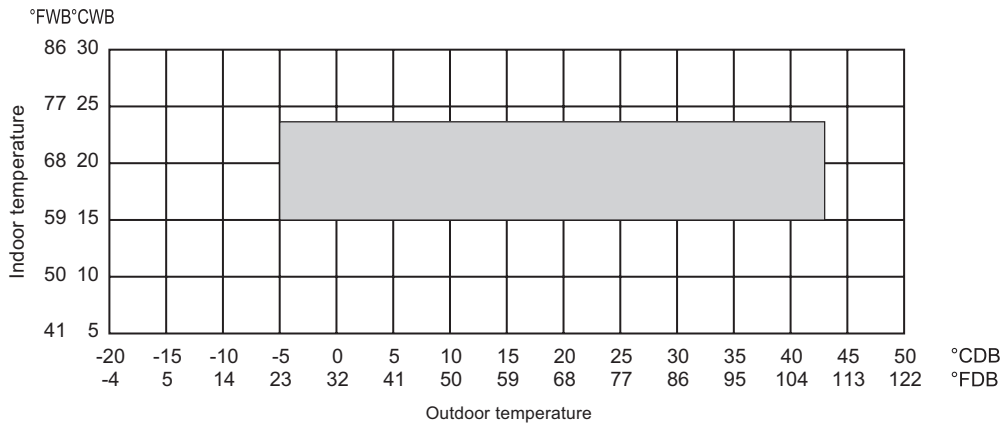
Table of correction factor at frosting and defrosting

Outdoor inlet air temp. °CWB	6	4	2	1	0	-2	-4	-6	-8	-10
Outdoor inlet air temp. °FWB	43	39	36	34	32	28	25	21	18	14
PUHY,PURY-P72,96TGMU	1.00	0.95	0.84	0.83	0.83	0.87	0.90	0.95	0.95	0.95
PUHY,PURY-P108TGMU	1.00	0.93	0.82	0.80	0.82	0.86	0.90	0.90	0.95	0.95
PUHY,PURY-P126,144TGMU	1.00	0.95	0.90	0.87	0.88	0.89	0.90	0.95	0.95	0.95
PUHY,PURY-P168,192TGMU	1.00	0.98	0.89	0.86	0.89	0.90	0.92	0.95	0.95	0.95
PUHY,PURY-P204TGMU	1.00	0.94	0.87	0.86	0.87	0.88	0.90	0.90	0.93	0.93
PUHY,PURY-P216,234TGMU	1.00	0.94	0.84	0.86	0.87	0.88	0.90	0.90	0.93	0.93

Ref.: CaF\_TGMU

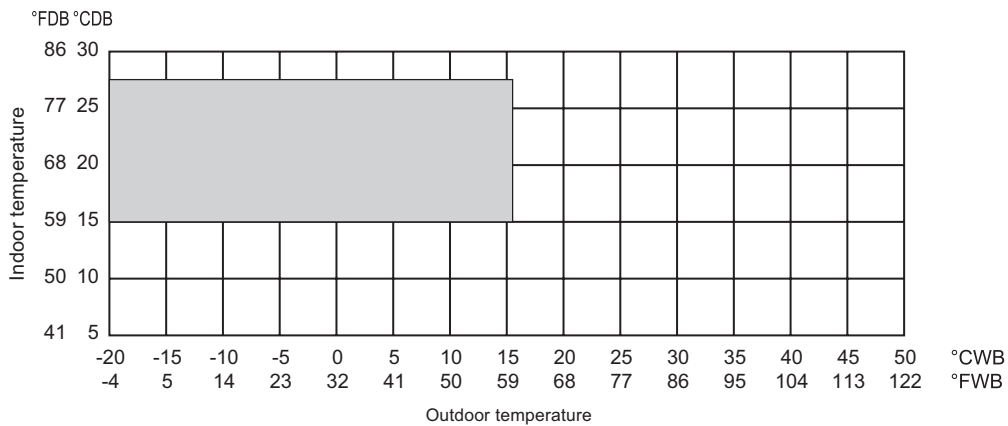
**6-5. Temp. range of running**

• Cooling



\* The operation temperature of outdoor unit is limited into 0~43°CDB (32~109°FDB) when the outdoor unit is at a position lower than the indoor units.

• Heating



Ref.: tr-ygm-y