

CITY MULTI™ OUTDOOR UNITS

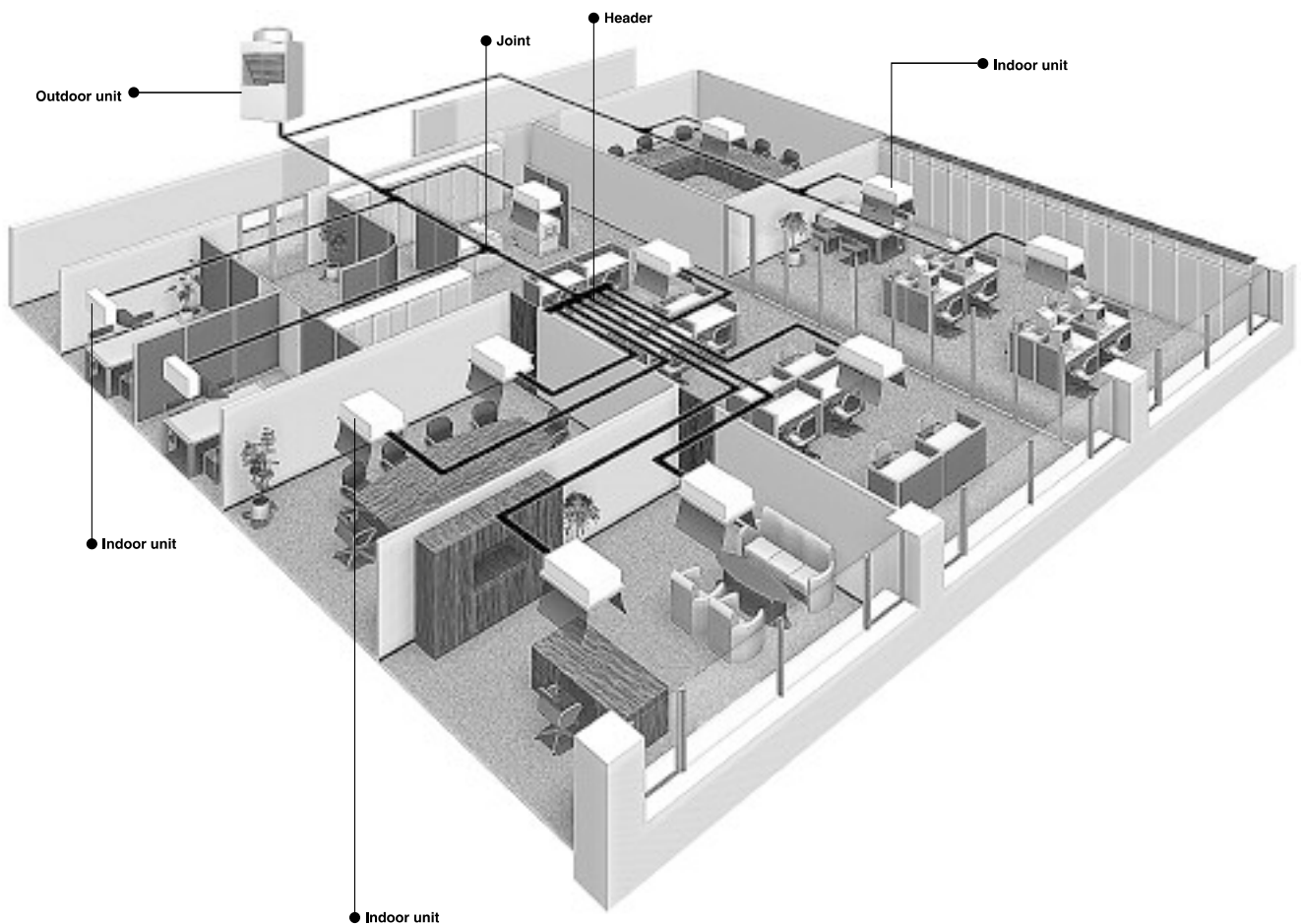
Y SERIES

Y SERIES

1. SPECIFICATIONS
2. CAPACITY TABLES
 - 2.1 Correction by temperature
 - 2.2 Correction by total indoor
 - 2.3 Correction by refrigerant piping length
 - 2.4 Correction at frosting and defrosting
 - 2.5 Temp. range of running
3. SOUND LEVELS
4. EXTERNAL DIMENSIONS
5. ELECTRICAL WIRING DIAGRAMS
6. REFRIGERANT CIRCUIT DIAGRAMS AND THERMAL SENSORS

- Y-2
- Y-9
- Y-9
- Y-12
- Y-15
- Y-18
- Y-18
- Y-19
- Y-21
- Y-27
- Y-29

- Y
- R2
- WY
- WR2
- S
- OP



Heat pump: PUHY-P-Y(S)GM-A(-BS) Cooling-only: PUY-P-YGM-A(-BS)

	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	
	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP	34HP	36HP	38HP	40HP	42HP	44HP	46HP	48HP	50HP	
Y Heat pump	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Y Cooling-only	●	●	●	●																			

1. SPECIFICATIONS

R410A Data G2

Model			PUY-P200YGM-A(-BS)		PUY-P250YGM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50 / 60Hz			
Cooling capacity (Nominal)	*1	kW	22.4		28.0	
		kcal / h	19,300		24,100	
		Btu / h	76,400		95,500	
	*2	kcal / h	20,000		25,000	
		Power input kW	6.14		7.72	
	Current input A		10.3 / 9.8 / 9.4		13.0 / 12.3 / 11.9	
COP (kW / kW)		3.65		3.63		
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)			
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)			
			0 ~ 43°C (32 ~ 109°F) (When the Outdoor is at a position lower than the Indoors)			
Heating capacity (Nominal)	*3	kW	-		-	
		kcal / h	-		-	
		Btu / h	-		-	
	*3	Power input kW	-		-	
		Current input A	-		-	
	COP (kW / kW)		-		-	
Temp. range of heating	Indoor temp.	D.B.	-			
	Outdoor temp.	W.B.	-			
Indoor unit connectable	Total capacity	50 ~ 130% of outdoor unit capacity				
	Model / Quantity	P20 ~ P250 / 1 ~ 13		P20 ~ P250 / 1 ~ 16		
Noise level (measured in anechoic room)	dB <A>		56 / 56		57 / 57	
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø9.52 (ø3/8") Flare		ø9.52 (ø3/8") Flare	
	Gas (Low press.)	mm (in.)	ø19.05 (ø3/4") Brazed		ø12.7 (ø1/2") Flare, total length >=90m ø22.2 (ø7/8") 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	mm		1,840 x 990 x 840		1,840 x 990 x 840	
	in.		72-1/2" x 39" x 33-1/8"		72-1/2" x 39" x 33-1/8"	
Net weight	kg (lb)		218 (481)		233 (514)	
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			
	Motor output	kW	4.7		6.7	
	Case heater	kW	0.045 x 1 (240V)		0.045 x 1 (240V)	
	Lubricant		MEL56		MEL32	
FAN	Air flow rate	m ³ / min	200		200	
		L / s	3,333		3,333	
		cfm	7,063		7,063	
	External static press.		0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)	
	Type x Quantity		Propeller fan x 1		Propeller fan x 1	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor	
Motor output	kW	0.38		0.38		
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, pipe-in-pipe structure			
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)			
	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 7.0 kg (16 lb)		R410A x 9.5 kg (21 lb)	
	Control		LEV and HIC circuit			
Drawing	External		YGM-W656-818 1/2			
	Wiring		YGM-W274-627			
	Refrigerant circle		YGM-rcd-200-350ygm-c			
Standard attachment	Document		Installation Manual			
	Accessory		Details refer to External Drw YGM- W656-818 1/2			
Optional parts			High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S-G Header : CMY-Y104/108/1010-G		High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S/L-G 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 cooling conditions	*3 Nominal heating conditions	Unit converter
	Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
	Outdoor : 35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412
	Pipe length : 7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m ³ /min x 35.31
	Level difference : 0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536
* Nominal conditions *1, *3 are subject to JIS B8615-1.				* Above specification data is subject to rounding variation.
* Due to continuing improvement, above specifications may be subject to change without notice.				

Ref. : Spec_y_p200_250ygm-c

1. SPECIFICATIONS

Model			PUY-P300YGM-A(-BS)	PUY-P350YGM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50 / 60Hz		
Cooling capacity (Nominal)	*:1	kW	33.5	40.0	
	*:1	kcal / h	28,800	34,400	
	*:1	Btu / h	114,300	136,500	
	*:2	kcal / h	30,000	35,000	
		Power input	kW	9.57	11.39
		Current input	A	16.1 / 15.3 / 14.7	19.2 / 18.2 / 17.6
COP (kW / kW)			3.50	3.51	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)		
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)		
			0 ~ 43°C (32 ~ 109°F) (When the Outdoor is at a position lower than the Indoors)		
Heating capacity (Nominal)	*:3	kW	-	-	
	*:3	kcal / h	-	-	
	*:3	Btu / h	-	-	
		Power input	kW	-	-
		Current input	A	-	-
	COP (kW / kW)			-	-
Temp. range of heating	Indoor temp.	D.B.	-		
	Outdoor temp.	W.B.	-		
Indoor unit connectable	Total capacity	50 ~ 130% of outdoor unit capacity			
	Model / Quantity	P20 ~ P250 / 1 ~ 19		P20 ~ P250 / 1 ~ 20	
Noise level (measured in anechoic room)	dB <A>	59 / 59		60 / 60	
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø9.52 (ø3/8") Flare (ø12.7 (ø1/2") Flare, total length >=40m)		
	Gas (Low press.)	mm (in.)	ø22.2 (ø7/8") Braze ø28.58 (ø1-1/8") 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	mm		1,840 x 990 x 840	1,840 x 990 x 840
	in.		72-1/2" x 39" x 33-1/8"	72-1/2" x 39" x 33-1/8"
Net weight	kg (lb)		233 (514)	233 (514)
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	8.0	9.6
	Case heater	kW	0.045 x 1 (240V)	0.045 x 1 (240V)
	Lubricant		MEL32	
FAN	Air flow rate	m ³ / min	200	200
		L / s	3,333	3,333
		cfm	7,063	7,063
	External static press.		0 Pa (0 mmH ₂ O)	
	Type x Quantity		Propeller fan x 1	
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	
	Motor output	kW	0.38	0.38
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, pipe-in-pipe structure	
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa (601 psi)	
	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 9.5 kg (21 lb)	R410A x 9.5 kg (21 lb)
	Control		LEV and HIC circuit	
Drawing	External		YGM-W656-818 1/2	
	Wiring		YGMW274-627	
	Refrigerant circle		YGM-rcd-200-350ygm	
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw YGM- W656-818 1/2	
Optional parts			High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S/L-G 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 cooling conditions	*:3 Nominal heating conditions	Unit converter
	Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
	Outdoor : 35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412
	Pipe length : 7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m ³ /min x 35.31
	Level difference : 0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536
* Nominal conditions *:1, *:3 are subject to JIS B8615-1.				*Above specification data is subject to rounding variation.
* Due to continuing improvement, above specifications may be subject to change without notice.				

1. SPECIFICATIONS

R410A Data G2

Model			PUHY-P200YGM-A(-BS)	PUHY-P250YGM-A(-BS)
Power source			3-phase 4-wire 380-400-415V 50 / 60Hz	
Cooling capacity (Nominal)	*1	kW	22.4	28.0
	*1	kcal / h	19,300	24,100
	*1	Btu / h	76,400	95,500
	*2	kcal / h	20,000	25,000
	Power input	kW	6.14	7.72
	Current input	A	10.3 / 9.8 / 9.4	13.0 / 12.3 / 11.9
COP (kW / kW)			3.65	3.63
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)	
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)	
			0 ~ 43°C (32 ~ 109°F) (When the Outdoor is at a position lower than the Indoors)	
Heating capacity (Nominal)	*3	kW	25.0	31.5
	*3	kcal / h	21,500	27,100
	*3	Btu / h	85,300	107,500
	Power input	kW	5.98	7.62
	Current input	A	10.0 / 9.5 / 9.2	12.8 / 12.2 / 11.7
	COP (kW / kW)			4.18
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)	
	Outdoor temp.	W.B.	- 20 ~ 15.5°C (- 4 ~ 60°F)	
Indoor unit connectable	Total capacity	50 ~ 130% of outdoor unit capacity		
	Model / Quantity	P20 ~ P250 / 1 ~ 13		P20 ~ P250 / 1 ~ 16
Noise level (measured in anechoic room)	dB <A>	56 / 56		57 / 57
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø9.52 (ø3/8") Flare	
	Gas (Low press.)	mm (in.)	ø19.05 (ø3/4") Brazed	
			(ø12.7 (ø1/2") Flare, total length >=90m) ø22.2 (ø7/8") 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	mm	1,840 x 990 x 840		1,840 x 990 x 840
	in.	72-1/2" x 39" x 33-1/8"		72-1/2" x 39" x 33-1/8"
Net weight	kg (lb)	218 (481)		233 (514)
Heat exchanger			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		
	Motor output	kW	4.7	6.7
	Case heater	kW	0.045 x 1 (240V)	
	Lubricant	MEL56		MEL32
FAN	Air flow rate	m ³ / min	200	200
		L / s	3,333	3,333
		cfm	7,063	7,063
	External static press.	0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)
	Type x Quantity	Propeller fan x 1		Propeller fan x 1
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor
Motor output	kW	0.38	0.38	
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, pipe-in-pipe structure	
Protection	High pressure protection	High pressure sensor, High pressure switch 4.15 MPa (601 psi)		
	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 7.0 kg (16 lb)	R410A x 9.5 kg (21 lb)	
	Control	LEV and HIC circuit		
Drawing	External	YGM-W656-818 1/2		
	Wiring	YGM-W274-627		
	Refrigerant circle	YGM-rcd-200-350ygmhp		
Standard attachment	Document	Installation Manual		
	Accessory	Details refer to External Drw YGM-W656-818 1/2		
Optional parts			High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S-G Header : CMY-Y104/108/1010-G	High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S/L-G 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 cooling conditions	*:3 Nominal heating conditions	Unit converter
	Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
	Outdoor : 35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412
	Pipe length : 7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m ³ /min x 35.31
Level difference : 0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536	
* Nominal conditions *:1, *:3 are subject to JIS B8615-1.				* Above specification data is subject to rounding variation.
* Due to continuing improvement, above specifications may be subject to change without notice.				

Ref. : Spec_y_p200_250ygm

1. SPECIFICATIONS

Model			PUHY-P300YGM-A(-BS)	PUHY-P350YGM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50 / 60Hz		
Cooling capacity (Nominal)	*1	kW	33.5	40.0	
		kcal / h	28,800	34,400	
		Btu / h	114,300	136,500	
	*2	kcal / h	30,000	35,000	
		Power input kW	9.57	11.39	
	Current input A	16.1 / 15.3 / 14.7		19.2 / 18.2 / 17.6	
COP (kW / kW)		3.50		3.51	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)		
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)		
			0 ~ 43°C (32 ~ 109°F) (When the Outdoor is at a position lower than the Indoors)		
Heating capacity (Nominal)	*3	kW	37.5	45.0	
		kcal / h	32,300	38,700	
		Btu / h	128,000	153,500	
	Power input kW	9.10		11.02	
	Current input A	15.3 / 14.5 / 14.0		18.6 / 17.6 / 17.0	
	COP (kW / kW)		4.12		4.08
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)		
	Outdoor temp.	W.B.	- 20 ~ 15.5°C (- 4 ~ 60°F)		
Indoor unit connectable	Total capacity	50 ~ 130% of outdoor unit capacity			
	Model / Quantity	P20 ~ P250 / 1 ~ 19		P20 ~ P250 / 1 ~ 20	
Noise level (measured in anechoic room)	dB <A>	59 / 59		60 / 60	
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø9.52 (ø3/8") Flare (ø12.7 (ø1/2") Flare, total length >=40m)		
	Gas (Low press.)	mm (in.)	ø22.2 (ø7/8") 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	mm	1,840 x 990 x 840		1,840 x 990 x 840
	in.	72-1/2" x 39" x 33-1/8"		72-1/2" x 39" x 33-1/8"
Net weight	kg (lb)	233 (514)		233 (514)
Heat exchanger			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		
	Motor output kW	8.0		9.6
	Case heater kW	0.045 x 1 (240V)		0.045 x 1 (240V)
	Lubricant	MEL32		MEL32
FAN	Air flow rate	m ³ / min	200	
		L / s	3,333	
		cfm	7,063	
	External static press.	0 Pa (0 mmH ₂ O)		0 Pa (0 mmH ₂ O)
	Type x Quantity	Propeller fan x 1		Propeller fan x 1
	Control, Driving mechanism	Inverter-control, Direct-driven by motor		Inverter-control, Direct-driven by motor
	Motor output kW	0.38		0.38
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, pipe-in-pipe structure	
Protection	High pressure protection	High pressure sensor, High pressure switch 4.15 MPa (601 psi)		
	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 9.5 kg (21 lb)		R410A x 9.5 kg (21 lb)
	Control	LEV and HIC circuit		
Drawing	External	YGM-W656-818 1/2		
	Wiring	YGM-W274-627		
	Refrigerant circle	YGM-rcd-200-350ygmhp		
Standard attachment	Document	Installation Manual		
	Accessory	Details refer to External Drw YGM-W656-818 1/2		
Optional parts			High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S/L-G 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 cooling conditions	*3 Nominal heating conditions	Unit converter
Indoor :	27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
Outdoor :	35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412
Pipe length :	7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m ³ /min x 35.31
Level difference :	0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536
* Nominal conditions *1, *3 are subject to JIS B8615-1.				*Above specification data is subject to rounding variation.
* Due to continuing improvement, above specifications may be subject to change without notice.				

1. SPECIFICATIONS

R410A Data G2

Model			PUHY-P400YGM-A(-BS)	PUHY-P450YGM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50 / 60Hz		
Cooling capacity (Nominal)	*1	kW	45.0	50.0	
	*1	kcal / h	38,700	43,000	
	*1	Btu / h	153,500	170,600	
	*2	kcal / h	40,000	45,000	
	Power input		kW	13.42	13.61
	Current input		A	22.6 / 21.5 / 20.7	22.9 / 21.8 / 21.0
COP (kW / kW)			3.35	3.67	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)		
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)		
			0 ~ 43°C (32 ~ 109°F) (When the Outdoor is at a position lower than the Indoors)		
Heating capacity (Nominal)	*3	kW	50.0	56.0	
	*3	kcal / h	43,000	48,200	
	*3	Btu / h	170,600	191,100	
	Power input		kW	12.43	13.86
	Current input		A	20.9 / 19.9 / 19.2	23.3 / 22.2 / 21.4
	COP (kW / kW)			4.02	4.04
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)		
	Outdoor temp.	W.B.	- 20 ~ 15.5°C (- 4 ~ 60°F)		
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity		
	Model / Quantity		P20 ~ P250 / 1 ~ 22	P20 ~ P250 / 1 ~ 24	
Noise level (measured in anechoic room)		dB <A>	61 / 61	60 / 61	
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø12.7 (ø1/2") Flare	ø15.88 (ø5/8") Flare	
	Gas (Low press.)	mm (in.)	ø28.58 (ø1-1/8") Brazed	ø28.58 (ø1-1/8") 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	mm		1,840 x 1,290 x 840	1,840 x 1,990 x 840	
	in.		72-1/2" x 50-13/16" x 33-1/8"	72-1/2" x 78-3/8" x 33-1/8"	
Net weight		kg (lb)	275 (607)	455 (1,004)	
Heat exchanger			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		
	Motor output		kW	9.7	6.8 + 5.3
	Case heater		kW	0.045 x 1 (240V)	0.045 x 2 (240V)
	Lubricant		MEL32		
FAN	Air flow rate	m ³ / min	240	400	
		L / s	4,000	6,667	
		cfm	8,476	14,126	
	External static press.		0 Pa (0 mmH ₂ O)		
	Type x Quantity		Propeller fan x 1		
	Control, Driving mechanism		Inverter-control, Direct-driven by motor		
Motor output		kW	0.64	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 4.15 MPa (601 psi)		
	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 13.0 kg (29 lb)	R410A x 22.0 kg (49 lb)	
	Control LEV and HIC circuit				
Drawing	External		YGM-W656-819 1/2	YGM-W656-820 1/2	
	Wiring		YGM-W274-627	YGM-W274-629	
	Refrigerant circle		YGM-rcd-400ygmhp	YGM-rcd-450-650ygmhp	
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw YGM-W656-819 1/2		
Optional parts			High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S/L-G Header : CMY-Y104/108/1010-G	High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S/L-G, 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 cooling conditions	*:3 Nominal heating conditions	Unit converter
	Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
	Outdoor : 35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412
	Pipe length : 7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m ³ /min x 35.31
	Level difference : 0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536
* Nominal conditions *:1, *:3 are subject to JIS B8615-1.				* Above specification data is subject to rounding variation.
* Due to continuing improvement, above specifications may be subject to change without notice.				

Ref. : Spec_y_p400_450ygm

1. SPECIFICATIONS

R410A Data G2

Model			PUHY-P500YGM-A(-BS)	PUHY-P550YGM-A(-BS)
Power source			3-phase 4-wire 380-400-415V 50 / 60Hz	
Cooling capacity (Nominal)	*1	kW	56.0	63.0
		kcal / h	48,200	54,200
		Btu / h	191,100	215,000
	*2	kcal / h	50,000	55,000
		Power input kW	15.59	17.08
	Current input A		26.3 / 25.0 / 24.0	28.8 / 27.3 / 26.4
COP (kW / kW)		3.59	3.69	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)	
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)	
			0 ~ 43°C (32 ~ 109°F) (When the Outdoor is at a position lower than the Indoors)	
Heating capacity (Nominal)	*3	kW	63.0	67.0
		kcal / h	54,200	57,600
		Btu / h	215,000	228,600
	Power input kW		15.89	16.37
		Current input A	26.8 / 25.4 / 24.5	27.6 / 26.2 / 25.3
	COP (kW / kW)		3.96	4.09
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)	
	Outdoor temp.	W.B.	-20 ~ 15.5°C (- 4 ~ 60°F)	
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity	
	Model / Quantity		P20 ~ P250 / 1 ~ 24	P20 ~ P250 / 2 ~ 24
Noise level (measured in anechoic room)	dB <A>		60 / 61	61 / 62
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø15.88 (ø5/8") Flare	
	Gas (Low press.)	mm (in.)	ø28.58 (ø1-1/8") 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	mm		1,840 x 1,990 x 840	1,840 x 1,990 x 840
	in.		72-1/2" x 78-3/8" x 33-1/8"	72-1/2" x 78-3/8" x 33-1/8"
Net weight	kg (lb)		455 (1,004)	455 (1,004)
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	
	Motor output kW		8.2 + 5.3	9.3 + 5.3
	Case heater kW		0.045 x 2 (240V)	0.045 x 2 (240V)
	Lubricant		MEL32	MEL32
FAN	Air flow rate	m ³ / min	400	400
		L / s	6,667	6,667
		cfm	14,126	14,126
	External static press.		0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	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 4.15 MPa (601 psi)	
	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 22.0 kg (49 lb)	R410A x 22.0 kg (49 lb)
	Control		LEV and HIC circuit	
Drawing	External		YGM-W656-820 1/2	
	Wiring		YGM-W274-629	
	Refrigerant circle		YGM-rcd-450-650ygmhp	
Standard attachment	Document		Installation Manual	
	Accessory		Details refer to External Drw YGM-W656-820 1/2	
Optional parts			High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S/L-G, 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 cooling conditions	*3 Nominal heating conditions	Unit converter
Indoor :	27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
Outdoor :	35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412
Pipe length :	7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m ³ /min x 35.31
Level difference :	0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536
* Nominal conditions *1, *3 are subject to JIS B8615-1.				*Above specification data is subject to rounding variation.
* Due to continuing improvement, above specifications may be subject to change without notice.				

Ref. : Spec_y_p500_550ygm

1. SPECIFICATIONS

R410A Data G2

Model			PUHY-P600YGM-A(-BS)	PUHY-P650YGM-A(-BS)	
Power source			3-phase 4-wire 380-400-415V 50 / 60Hz		
Cooling capacity (Nominal)	*1	kW	67.4	73.0	
	*1	kcal / h	58,000	62,800	
	*1	Btu / h	230,000	249,100	
	*2	kcal / h	60,000	65,000	
	Power input		kW	17.59	19.65
	Current input		A	29.6 / 28.2 / 27.1	33.1 / 31.5 / 30.3
COP (kW / kW)			3.83	3.72	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)		
	Outdoor	D.B.	- 5 ~ 43°C (23 ~ 109°F)		
			0 ~ 43°C (32 ~ 109°F) (When the Outdoor is at a position lower than the Indoors)		
Heating capacity (Nominal)	*3	kW	75.0	81.5	
	*3	kcal / h	64,500	70,100	
	*3	Btu / h	255,900	278,100	
	Power input		kW	17.73	19.82
	Current input		A	29.9 / 28.4 / 27.4	33.4 / 31.7 / 30.6
	COP (kW / kW)			4.23	4.11
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)		
	Outdoor temp.	W.B.	-20 ~ 15.5°C (- 4 ~ 60°F)		
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity		
	Model / Quantity		P20 ~ P250 / 2 ~ 32	P20 ~ P250 / 2 ~ 32	
Noise level (measured in anechoic room)		dB <A>	61 / 62	62 / 62.5	
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø15.88 (ø5/8") Flare	ø15.88 (ø5/8") Flare	
	Gas (Low press.)	mm (in.)	ø28.58 (ø1-1/8") Brazed	ø28.58 (ø1-1/8") 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	mm		1,840 x 1,990 x 840	1,840 x 1,990 x 840	
	in.		72-1/2" x 78-3/8" x 33-1/8"	72-1/2" x 78-3/8" x 33-1/8"	
Net weight		kg (lb)	455 (1,004)	455 (1,004)	
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		
	Motor output		kW	10.1 + 5.3	10.9 + 5.3
	Case heater		kW	0.045 x 2 (240V)	0.045 x 2 (240V)
	Lubricant			MEL32	MEL32
FAN	Air flow rate	m ³ / min	400	400	
		L / s	6,667	6,667	
		cfm	14,126	14,126	
	External static press.			0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
	Type x Quantity			Propeller fan x 2	Propeller fan x 2
	Control, Driving mechanism			Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
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 4.15 MPa (601 psi)		
	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 22.0 kg (49 lb)	R410A x 22.0 kg (49 lb)	
	Control		LEV and HIC circuit		
Drawing	External		YGM-W656-820 1/2		
	Wiring		YGM-W274-629		
	Refrigerant circle		YGM-rcd-450-650ygmhp		
Standard attachment	Document		Installation Manual		
	Accessory		Details refer to External Drw YGM-W656-820 1/2		
Optional parts			High static pressure motor : PAC-KBU04MT-F (60 Pa) Joint : CMY-Y102S/L-G, 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 cooling conditions	*:3 Nominal heating conditions	Unit converter
	Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)	27°CDB/19.5°CWB (81°FDB/67°FWB)	20°CDB (68°FDB)	kcal/h = kW x 860
	Outdoor : 35°CDB (95°FDB)	35°CDB (95°FDB)	7°CDB/6°CWB (45°FDB/43°FWB)	Btu/h = kW x 3,412
	Pipe length : 7.5 m (24-9/16 ft)	5 m (16-3/8 ft)	7.5 m (24-9/16 ft)	cfm = m ³ /min x 35.31
	Level difference : 0 m (0 ft)	0 m (0 ft)	0 m (0 ft)	lb = kg / 0.4536
* Nominal conditions *:1, *:3 are subject to JIS B8615-1.				* Above specification data is subject to rounding variation.
* Due to continuing improvement, above specifications may be subject to change without notice.				

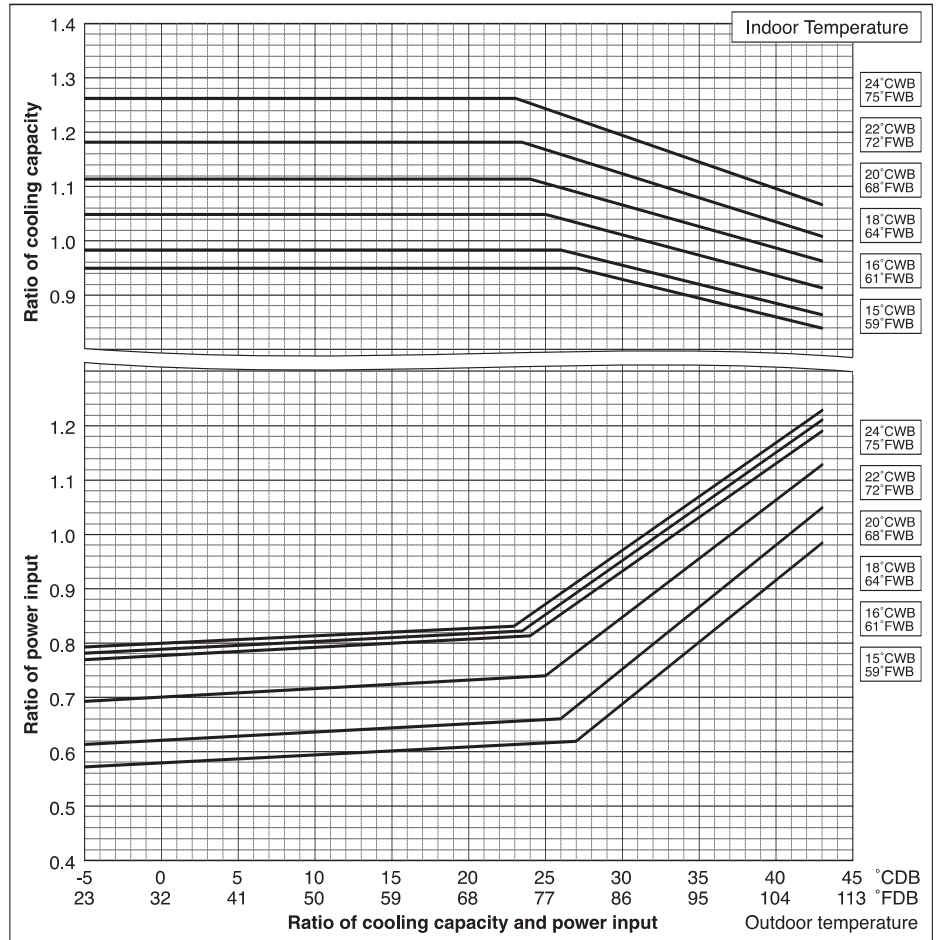
Ref. : Spec_y_p600_650ygm

2. CAPACITY TABLES

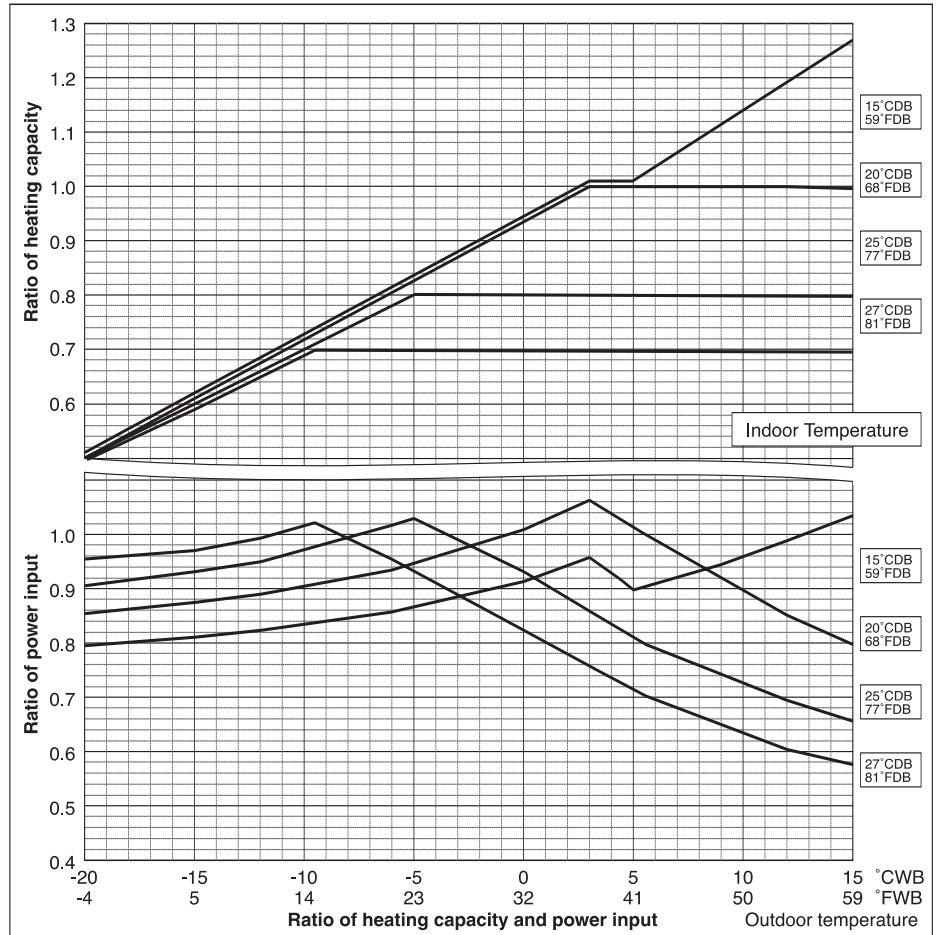
2-1. Correction by temperature

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-		P200YGM	P250YGM
Nominal Cooling Capacity	kW	22.4	28.0
	kcal/h	19,300	24,100
	Btu/h	76,400	95,500
Input	kW	6.14	7.72



PUHY-		P200YGM	P250YGM
Nominal Heating Capacity	kW	25.0	31.5
	kcal/h	21,500	27,100
	Btu/h	85,300	107,500
Input	kW	5.98	7.62



Ref.cbt_p200-250

2. CAPACITY TABLES

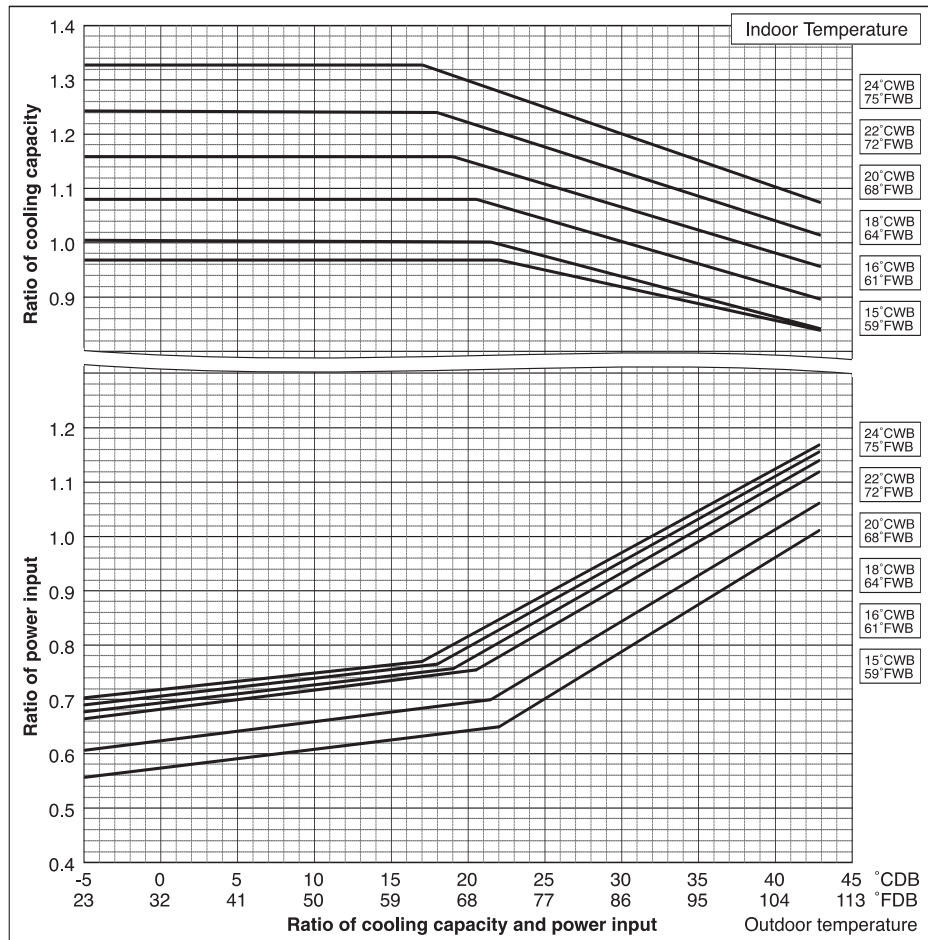
R410A Data G2

2-1. 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.

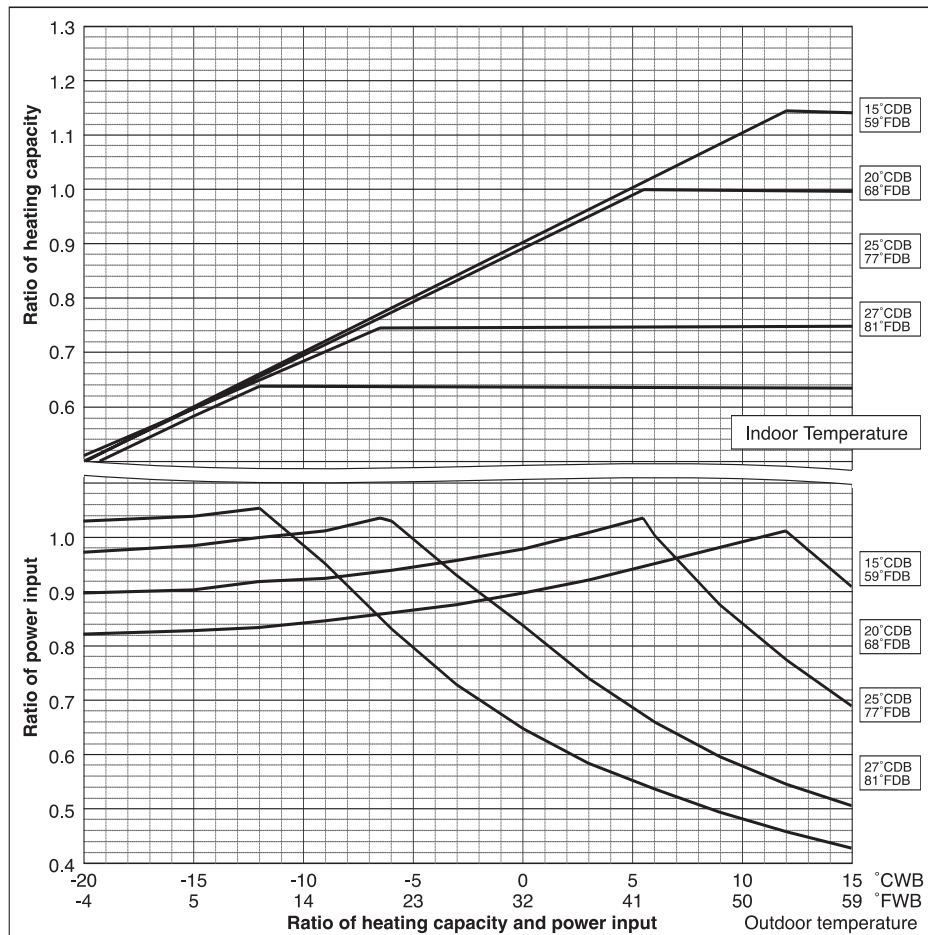
PUHY-		P300YGM	P350YGM
Nominal Cooling Capacity	kW	33.5	40.0
	kcal/h	28,800	34,400
	Btu/h	114,300	136,500
Input	kW	9.57	11.39

PUHY-		P400YGM
Nominal Cooling Capacity	kW	45.0
	kcal/h	38,700
	Btu/h	153,500
Input	kW	13.42



PUHY-		P300YGM	P350YGM
Nominal Heating Capacity	kW	37.5	45.0
	kcal/h	32,300	38,700
	Btu/h	128,000	153,500
Input	kW	9.10	11.02

PUHY-		P400YGM
Nominal Heating Capacity	kW	50.0
	kcal/h	43,000
	Btu/h	170,600
Input	kW	12.43



Ref:cbt_p300-400

2. CAPACITY TABLES

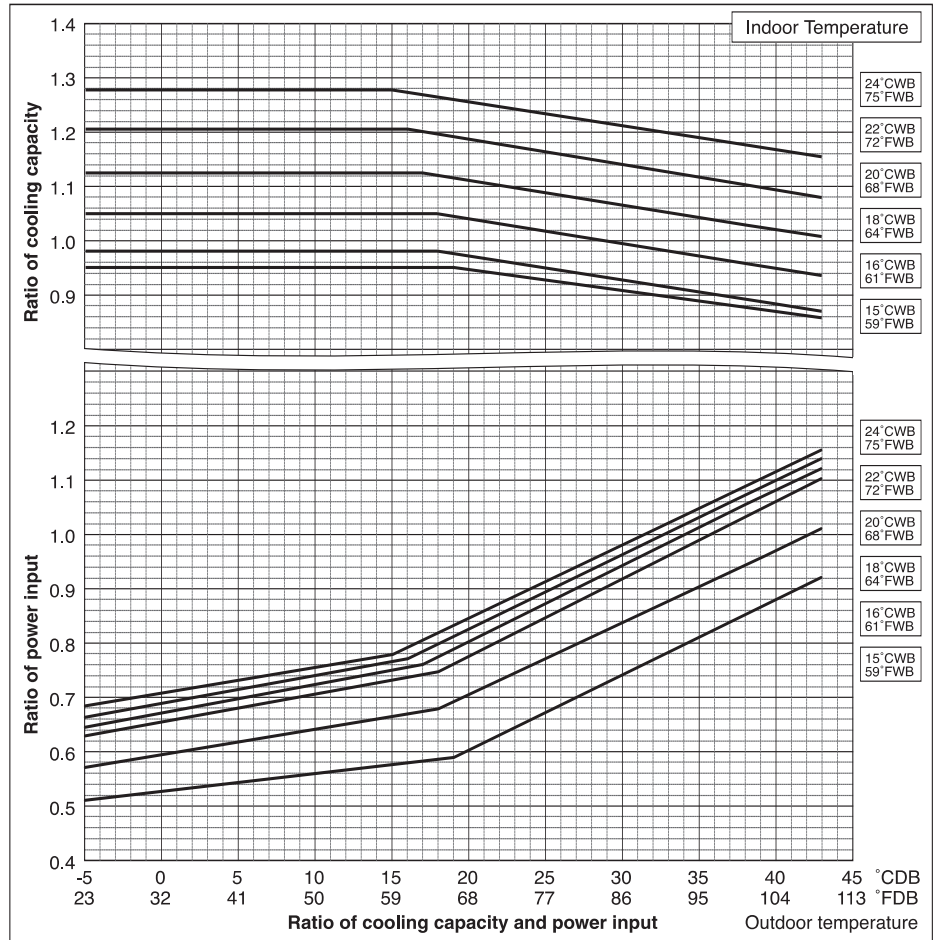
2-1. Correction by temperature

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-		P450YGM	P500YGM
Nominal Cooling Capacity	kW	50.0	56.0
	kcal/h	43,000	48,200
	Btu/h	170,600	191,100
Input	kW	13.61	15.59

PUHY-		P550YGM	P600YGM
Nominal Cooling Capacity	kW	63.0	67.4
	kcal/h	54,200	58,000
	Btu/h	215,000	230,000
Input	kW	17.08	17.59

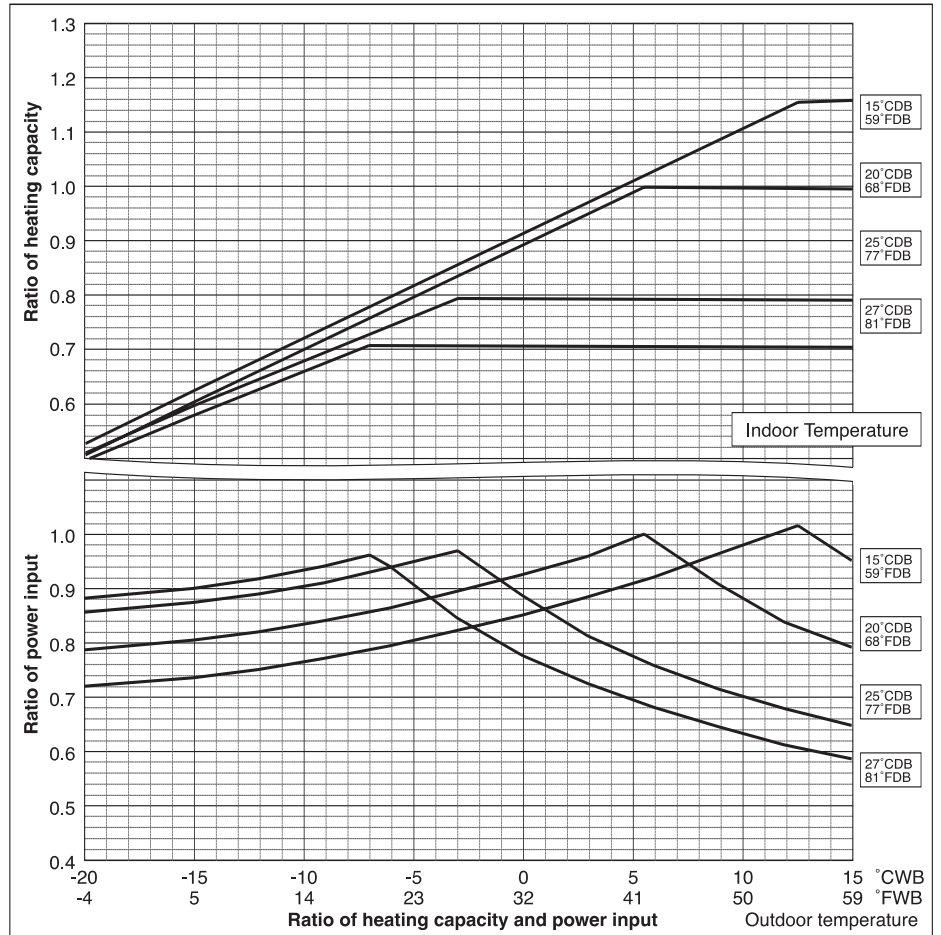
PUHY-		P650YGM
Nominal Cooling Capacity	kW	73.0
	kcal/h	62,800
	Btu/h	249,100
Input	kW	19.65



PUHY-		P450YGM	P500YGM
Nominal Heating Capacity	kW	56.0	63.0
	kcal/h	48,200	54,200
	Btu/h	191,100	215,000
Input	kW	13.86	15.89

PUHY-		P550YGM	P600YGM
Nominal Heating Capacity	kW	67.0	75.0
	kcal/h	57,600	64,500
	Btu/h	228,600	255,900
Input	kW	16.37	17.73

PUHY-		P650YGM
Nominal Heating Capacity	kW	81.5
	kcal/h	70,100
	Btu/h	278,100
Input	kW	19.82



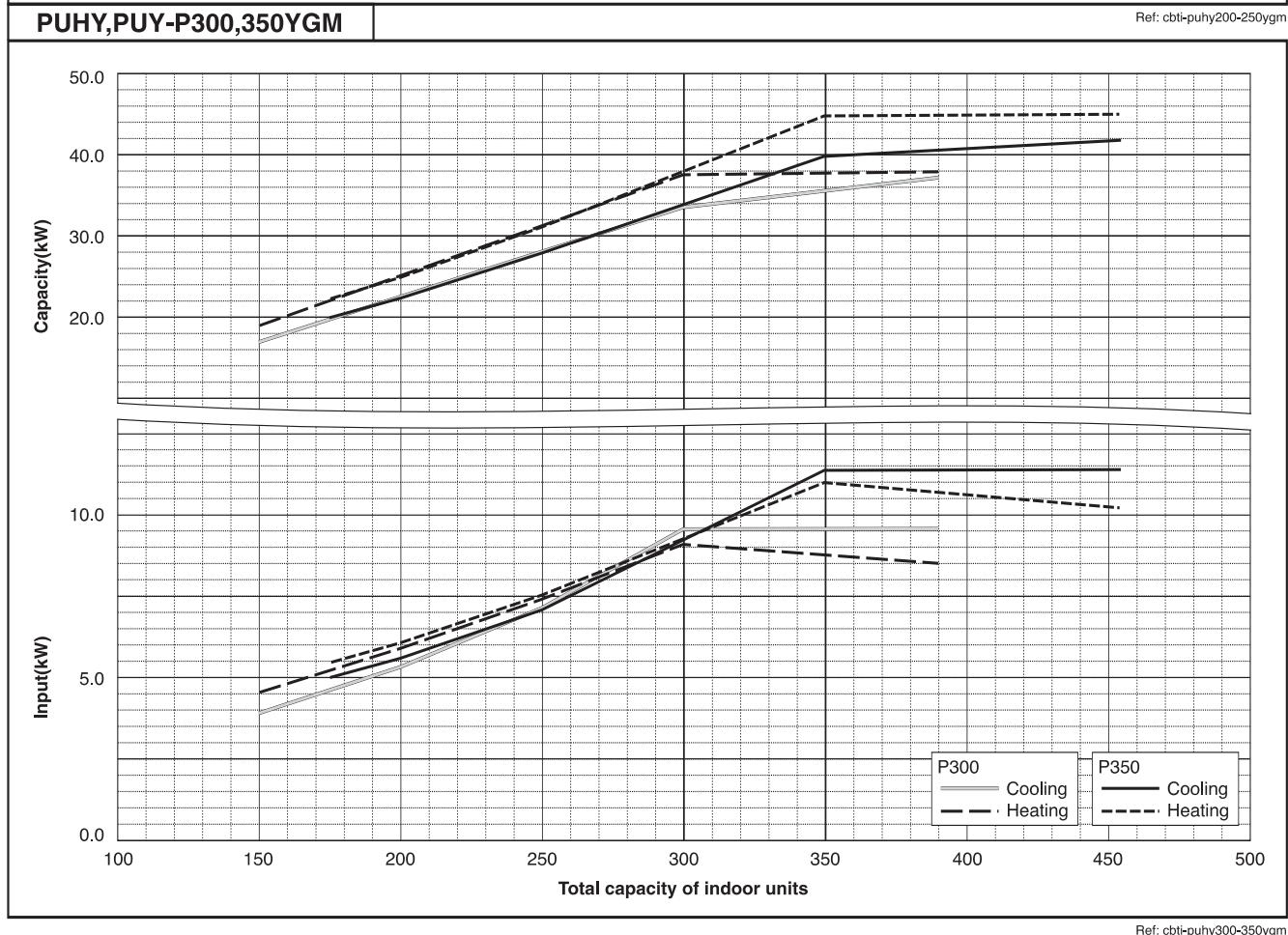
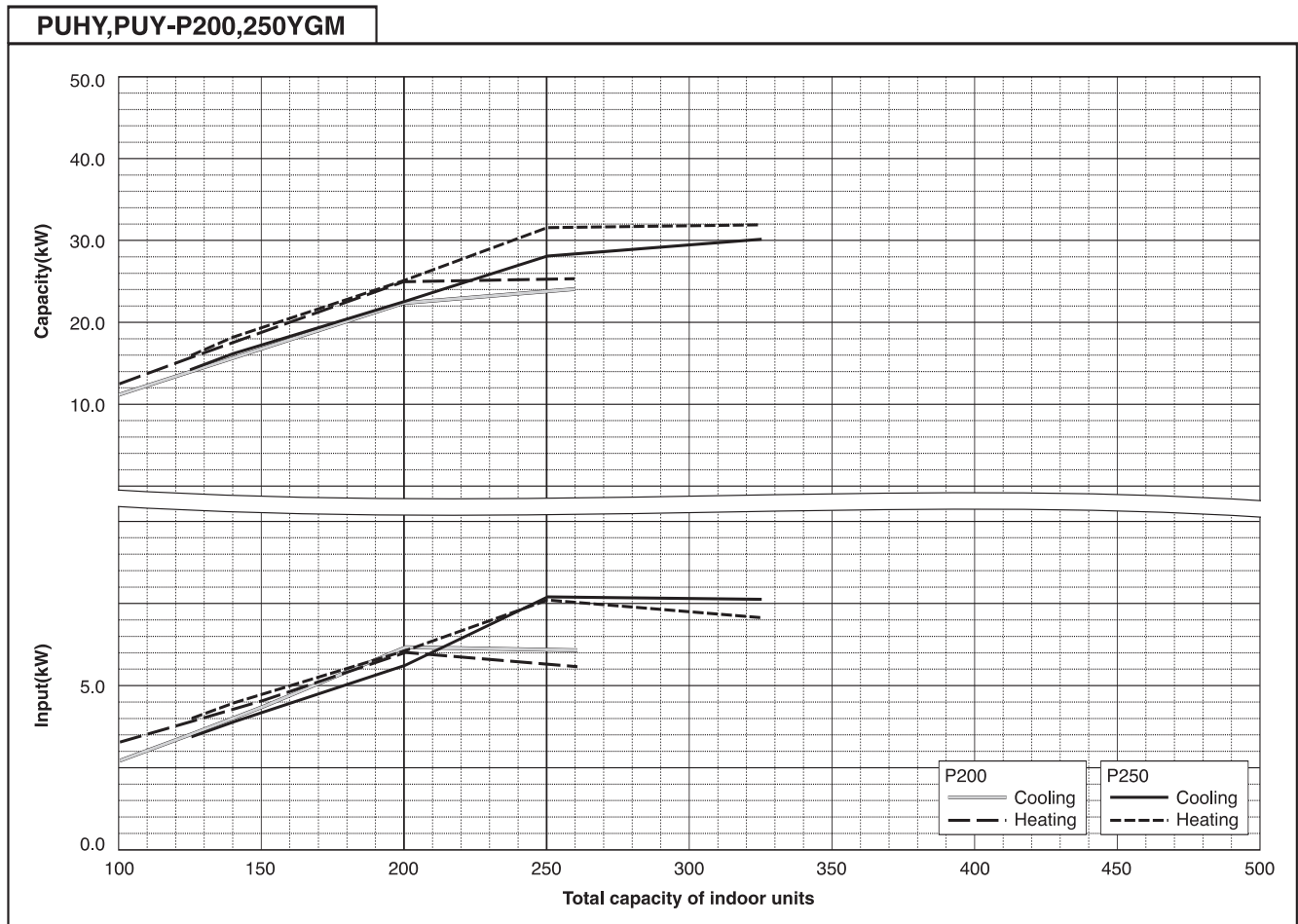
Ref.cbt_p450-650

2. CAPACITY TABLES

R410A Data G2

2-2. Correction by total indoor

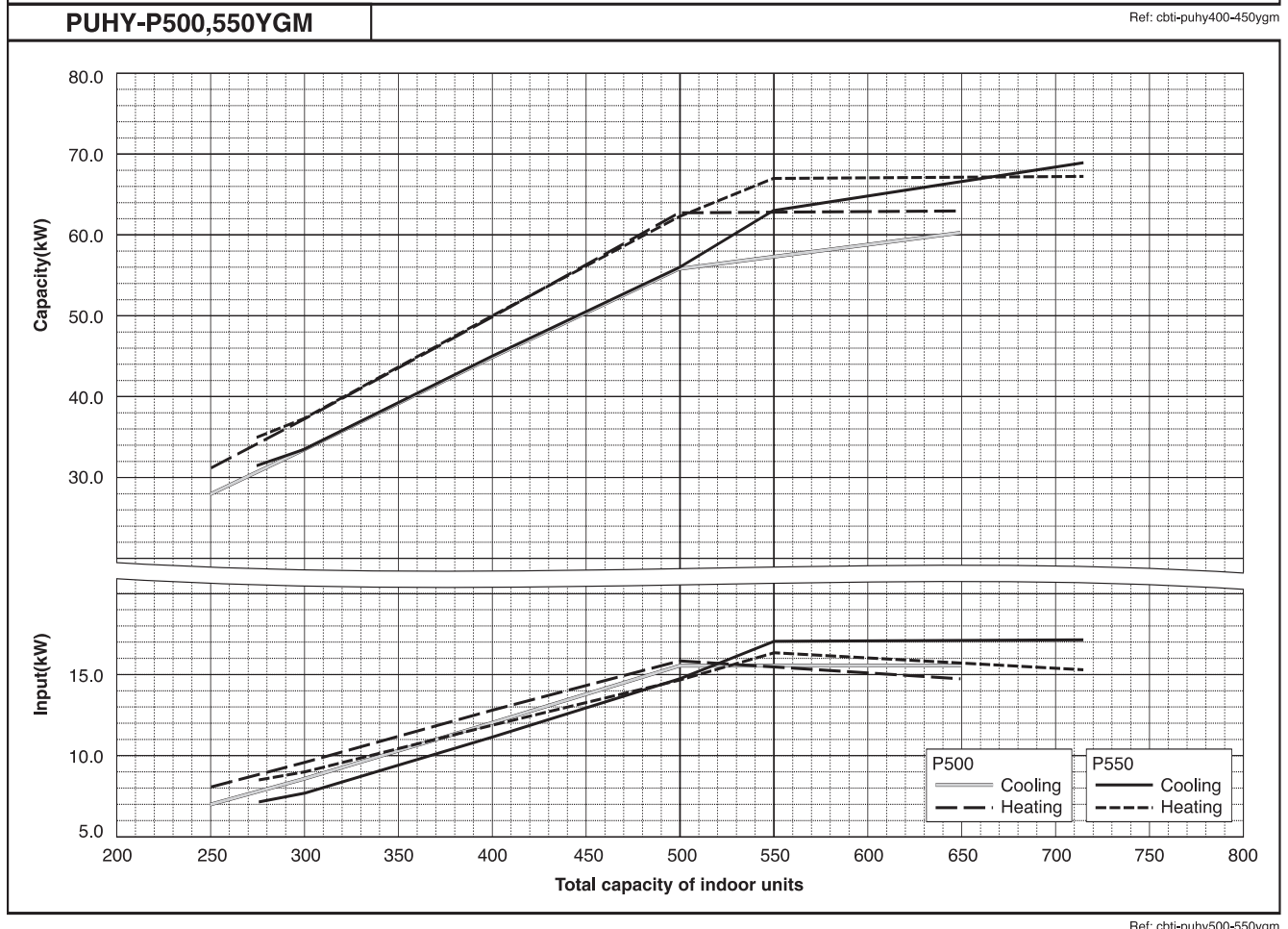
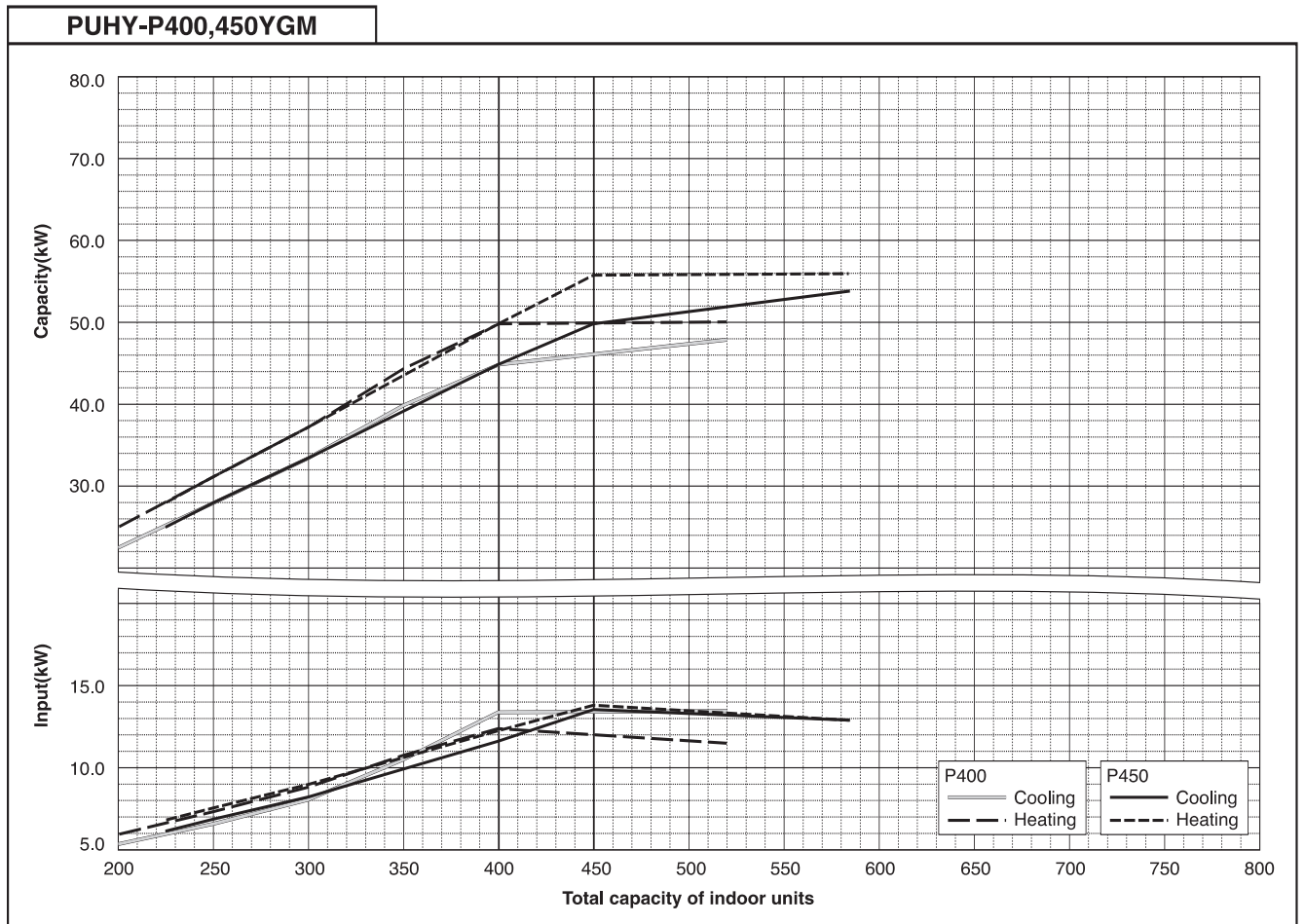
CITY MULTI™ system has different capacity and input at different total capacity of indoor unit connected. Using following tables, the maximum capacity can be observed so as to ensure the system having enough capacity.



2. CAPACITY TABLES

2-2. 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.

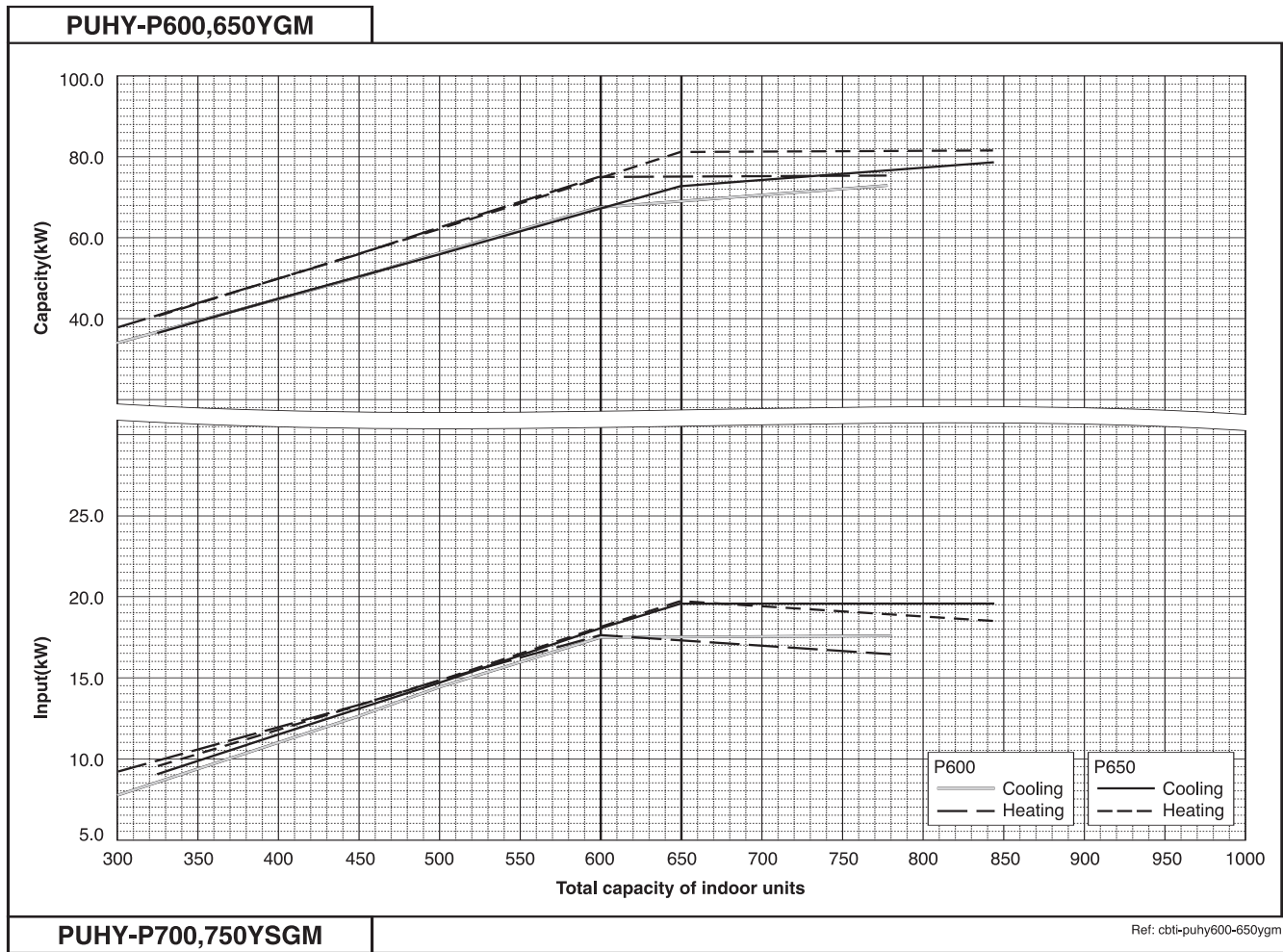


2. CAPACITY TABLES

R410A Data G2

2-2. Correction by total indoor

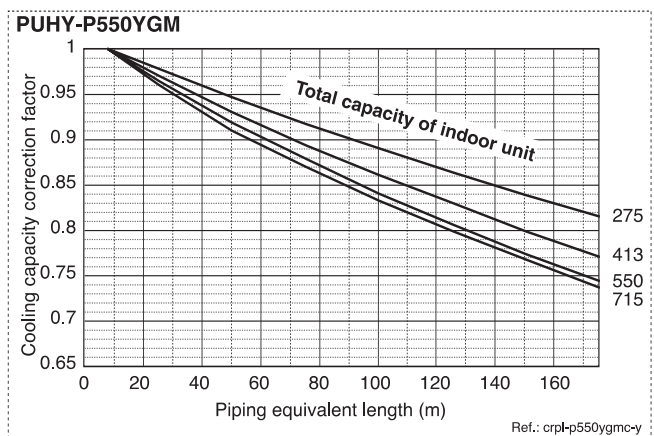
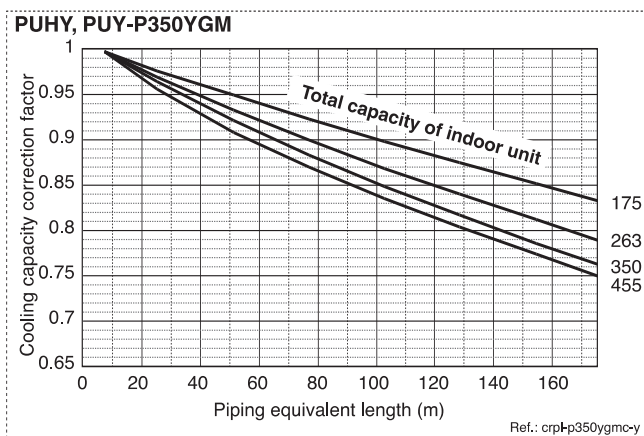
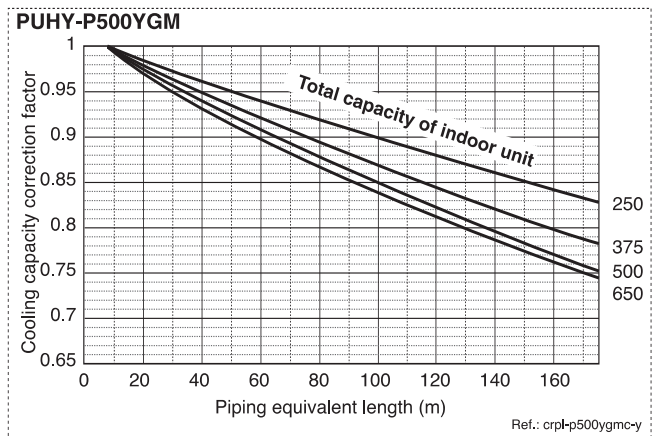
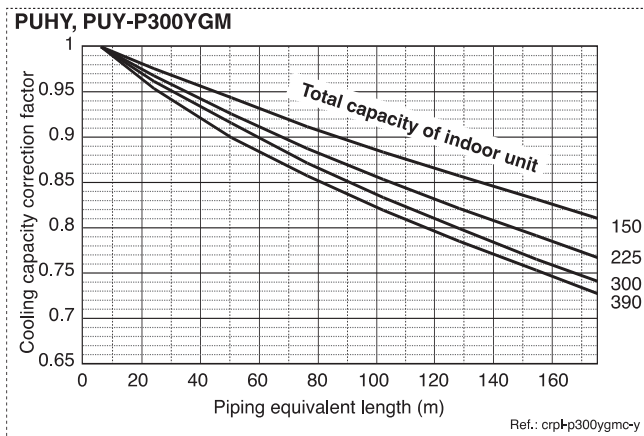
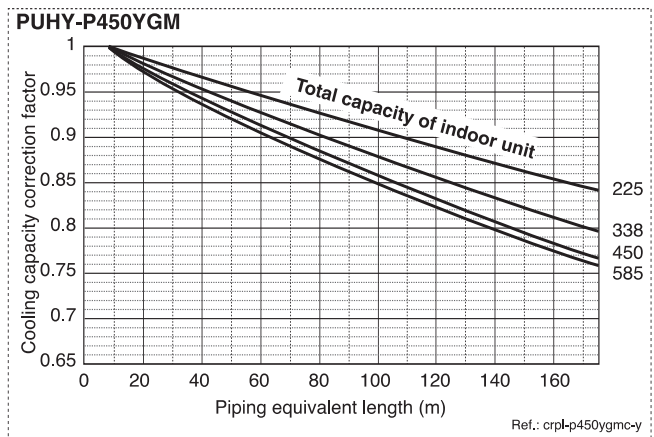
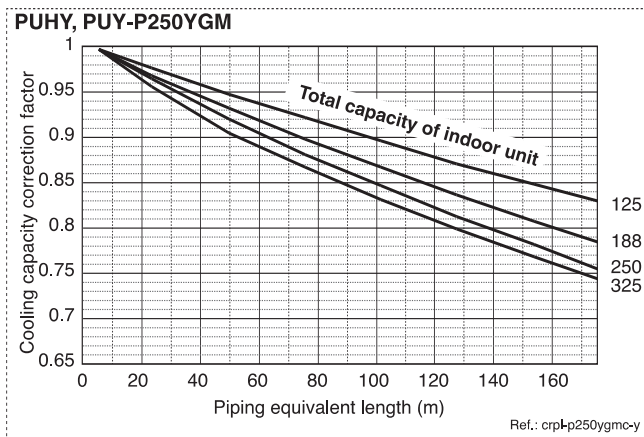
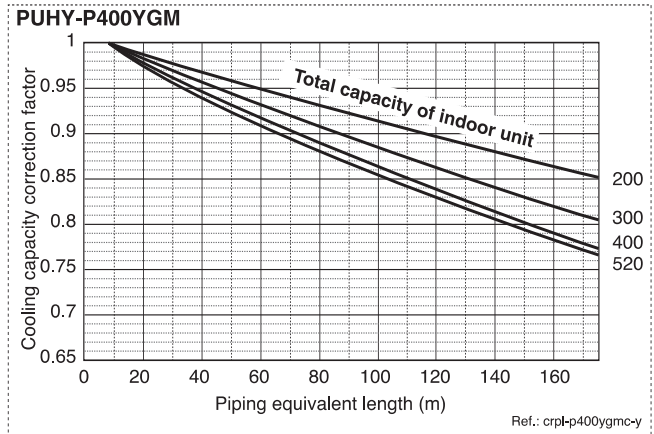
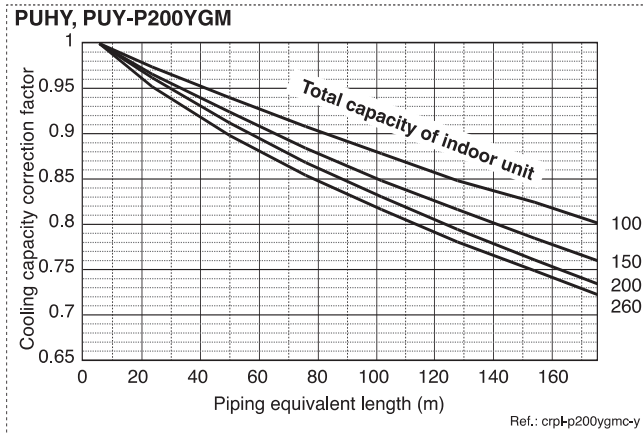
CITY MULTI™ system has different capacity and input at different total capacity of indoor unit connected. Using following tables, the maximum capacity can be observed so as to ensure the system having enough capacity.



2-3. 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 2.3a and 2.3b, the capacity can be observed. 2.3c shows how to obtain the equivalent length of piping.

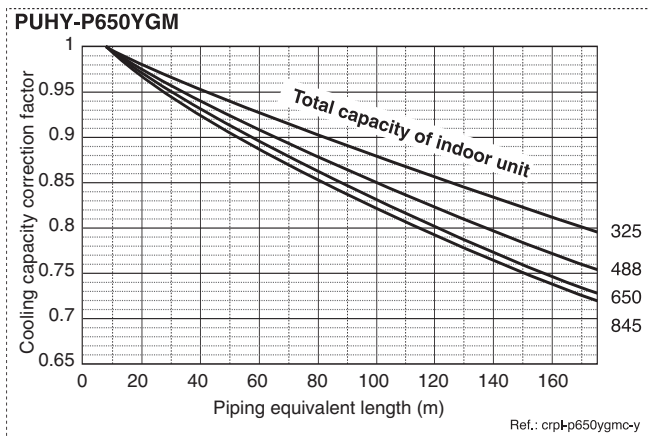
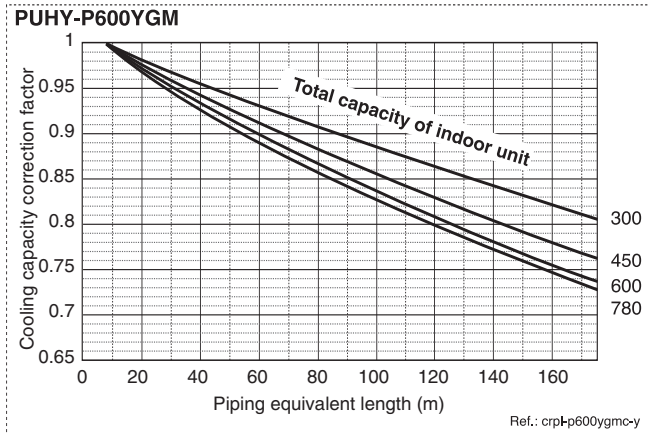
2-3a. Cooling capacity correction



2-3. 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 2.3a and 2.3b, the capacity can be observed. 2.3c shows how to obtain the equivalent length of piping.

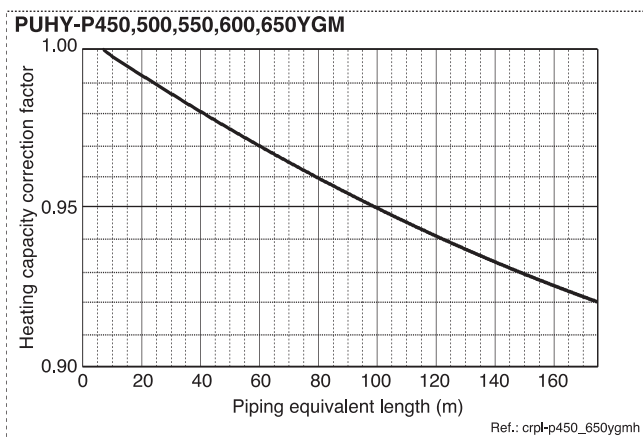
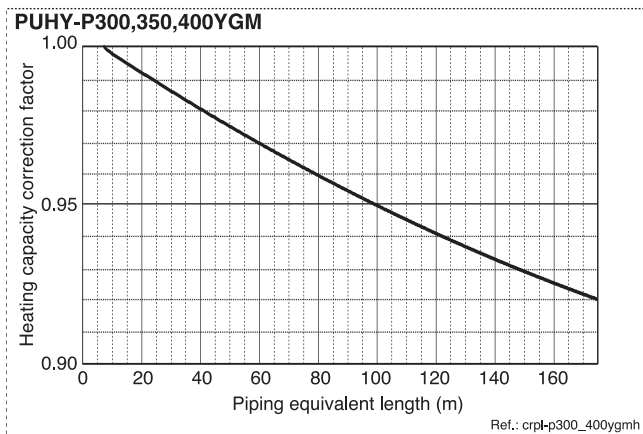
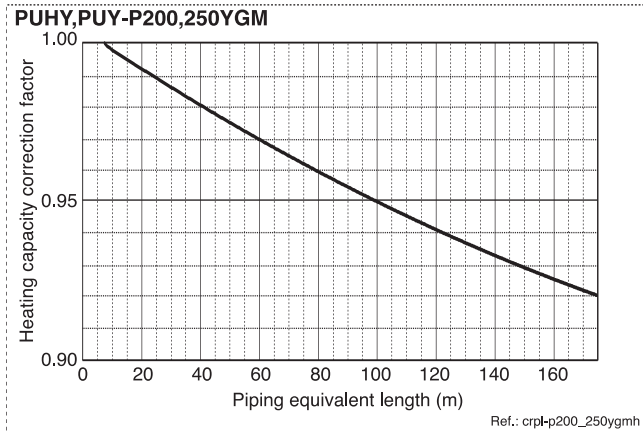
2-3a. Cooling capacity correction



2-3. 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 2.3a and 2.3b, the capacity can be observed. 2.3c shows how to obtain the equivalent length of piping.

2-3b. Heating capacity correction



2-3c. How to obtain the equivalent length of piping

- 1 **PU(H)Y, PURY-P200YGM**
Equivalent length = (Actual piping length to the farthest indoor unit) + (0.35 x number of bent on the piping) m
- 2 **PU(H)Y, PURY-P250,300YGM**
Equivalent length = (Actual piping length to the farthest indoor unit) + (0.42 x number of bent on the piping) m
- 3 **PU(H)Y, PURY-P350YGM**
Equivalent length = (Actual piping length to the farthest indoor unit) + (0.47 x number of bent on the piping) m
- 4 **PUHY, PURY-P400,450,500,550,600,650YGM**
Equivalent length = (Actual piping length to the farthest indoor unit) + (0.50 x number of bent on the piping) m

2-4. Correction at frosting and defrosting

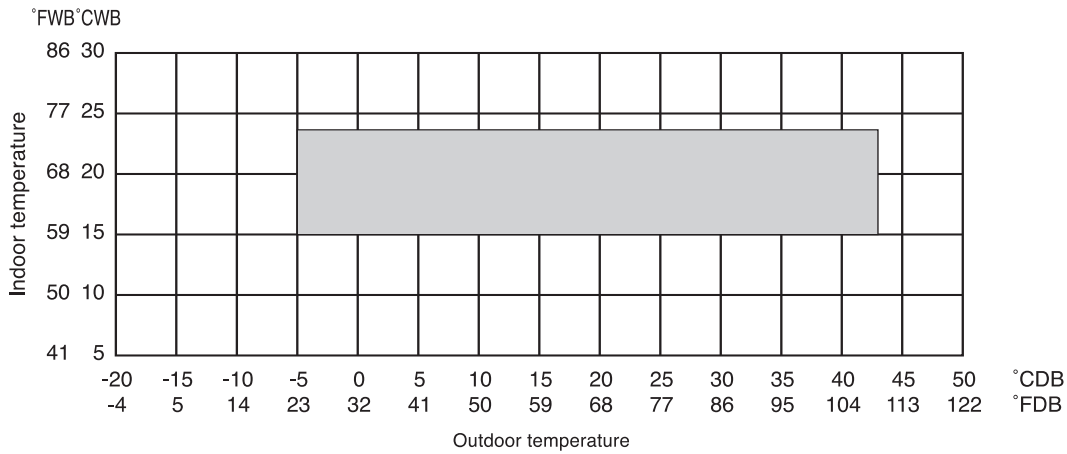
Due to frosting at the outdoor heat exchanger and the automatic defrosting operation, the heating capacity of the outdoor unit should be considered by multiplying the correction factor which shown in the table below.

Table of correction factor at frosting and defrosting

Outdoor inlet air temp. °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,PUY,PURY-P200,250YGM	1.0	0.95	0.84	0.83	0.83	0.87	0.90	0.95	0.95	0.95	0.95
PUHY,PUY,PURY-P300YGM	1.0	0.93	0.82	0.80	0.82	0.86	0.90	0.90	0.95	0.95	0.95
PUHY,PUY,PURY-P350YGM	1.0	0.93	0.85	0.83	0.84	0.86	0.90	0.90	0.95	0.95	0.95
PUHY,PURY-P400YGM	1.0	0.95	0.90	0.87	0.88	0.89	0.90	0.95	0.95	0.95	0.95
PUHY,PURY-P450,500YGM	1.0	0.98	0.89	0.86	0.89	0.90	0.92	0.95	0.95	0.95	0.95
PUHY,PURY-P550,600,650YGM	1.0	0.94	0.87	0.86	0.87	0.88	0.90	0.90	0.93	0.93	0.93

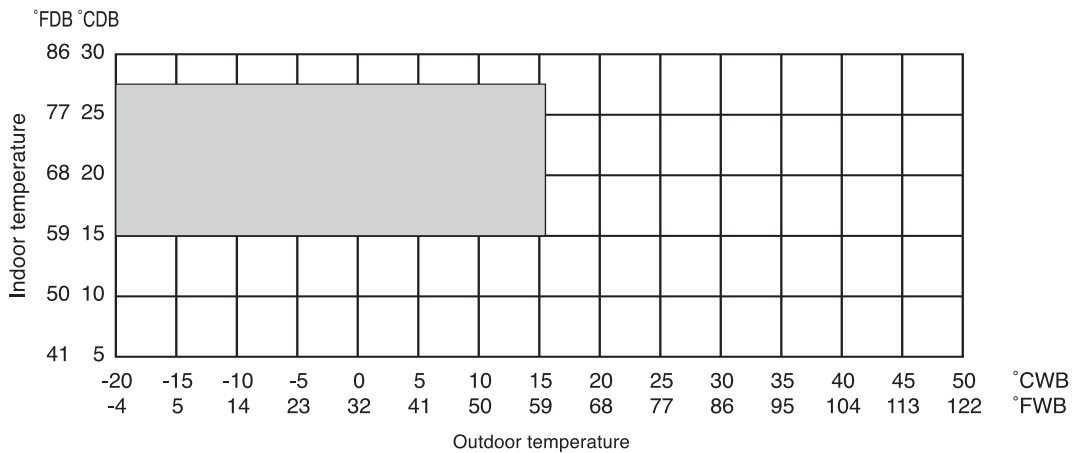
2-5. Temp. range of running

• 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.

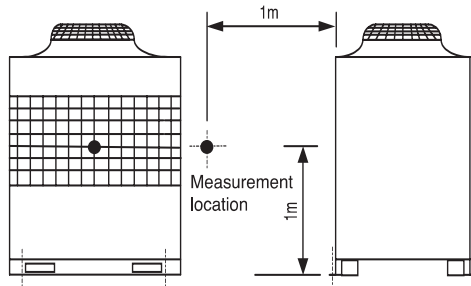
• Heating



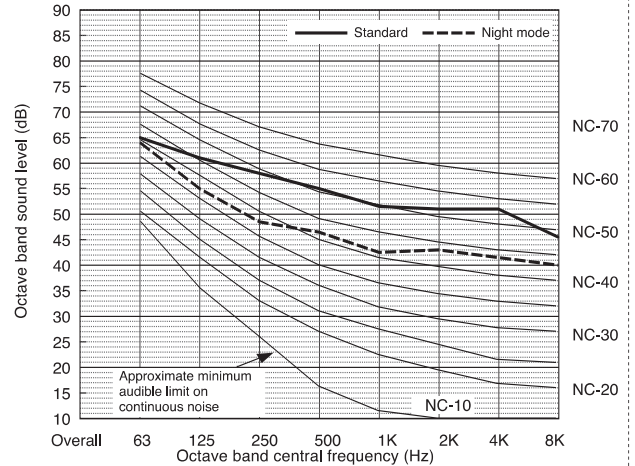
Ref.: tr-ygm-y

3. SOUND LEVELS

Measurement condition
PUY-P200,250,300,350YGM
PUHY-P200,250,300,350,400YGM



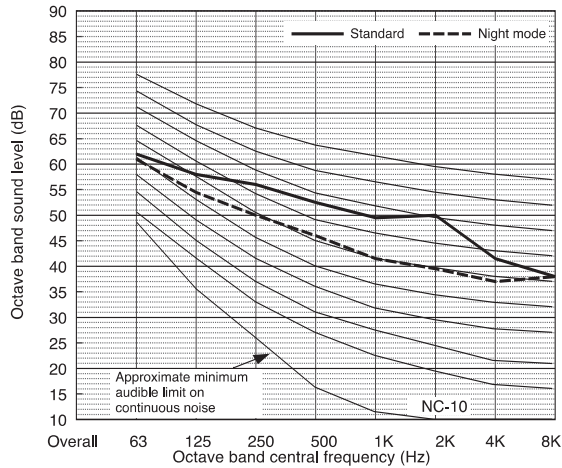
Sound level of PUHY, PUY-P300YGM-A(-BS) Ref. : P300YGM-WYNB0-3618



		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	65	61	58	55	51.5	51	51	45.5	59
	60Hz	64	61	58	55	51.5	51	51	45.5	59
Night mode	50/60Hz	64	55	48.5	46.5	42.5	43	41.5	40	51

* 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.

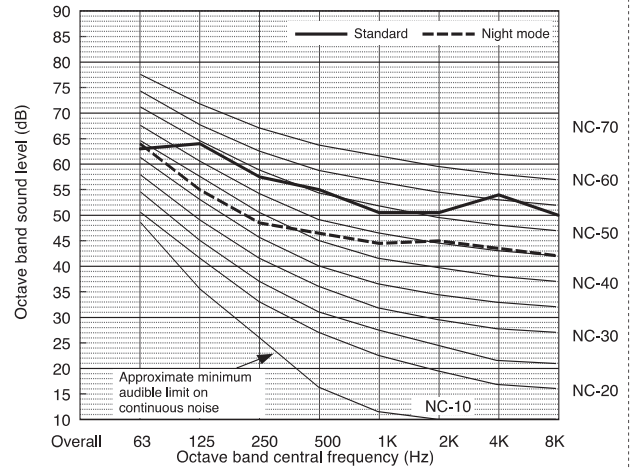
Sound level of PUHY, PUY-P200YGM-A(-BS) Ref. : P200YGM-WYNB0-3616



		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	62	58	56	52.5	49.5	50	41.5	38	56
	60Hz	62	58	56	52.5	49.5	50	41.5	38	56
Night mode	50/60Hz	61	54.5	50	46	41.5	39.5	37	38	49

* 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.

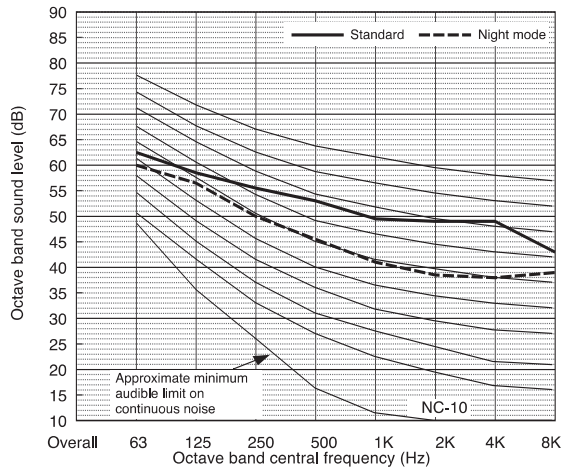
Sound level of PUHY, PUY-P350YGM-A(-BS) Ref. : P350YGM-WYNB0-3619



		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	63	64	57.5	55	50.5	50.5	54	50	60
	60Hz	63	64	57.5	55	50.5	50.5	54	50	60
Night mode	50/60Hz	64	55	48.5	46.5	44.5	45	43.5	42	52

* 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.

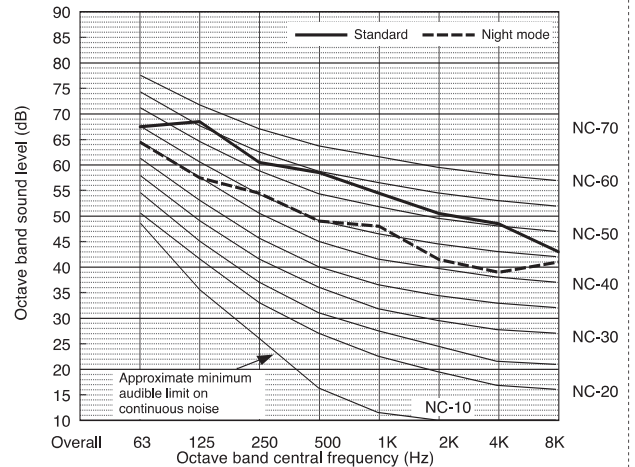
Sound level of PUHY, PUY-P250YGM-A(-BS) Ref. : P250YGM-WYNB0-3617



		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	62.5	58.5	55.5	53	49.5	49	49	43	57
	60Hz	62.5	58.5	55.5	53	49.5	49	49	43	57
Night mode	50/60Hz	60	56.5	50	45.5	41	38.5	38	39	49

* 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.

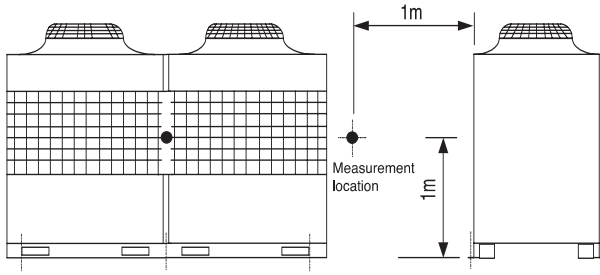
Sound level of PUHY, PUY-P400YGM-A(-BS) Ref. : P400YGM-WYNB0-3620



		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	67.5	68.5	60.5	58.5	54.5	50.5	48.5	43	61
	60Hz	67.5	68.5	60.5	58.5	54.5	50.5	48.5	43	61
Night mode	50/60Hz	64.5	57.5	54.5	49	48	41.5	39	41	53

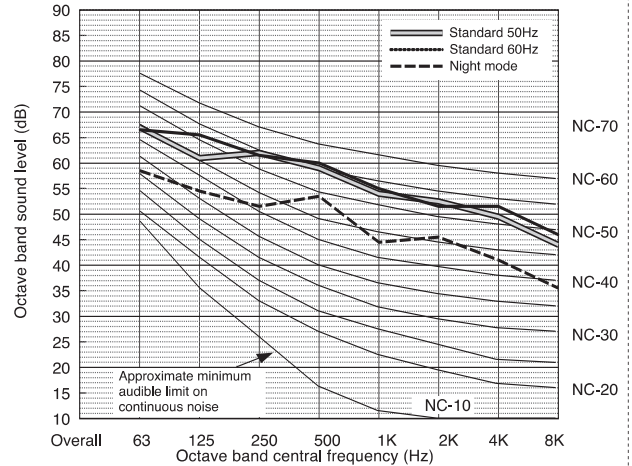
* When Night Mode is set, the A/C system's capacity is limited. The system could return to normal operation from Night Mode automatically in the case that the operation condition is severe.

Measurement condition PUHY-P450,500,550,600,650YGM



Sound level of PUHY-P550YGM-A(-BS)

Ref. : P550YGM-WYNB0-3623

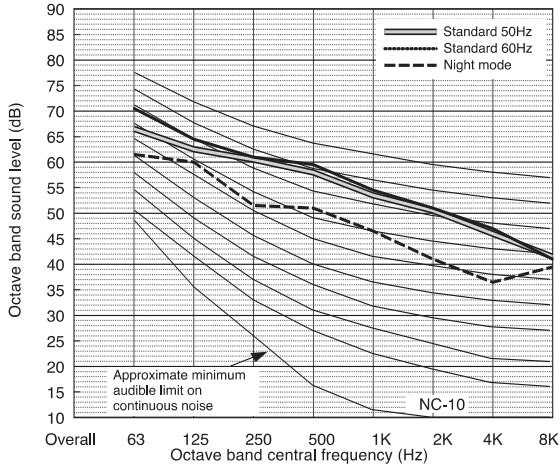


		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	67	61	62	59	54	52.5	49.5	44	61
	60Hz	66.5	65.5	61.5	60	55	51.5	46	46	62
Night mode	50/60Hz	58.5	54.5	51.5	53.5	44.5	45.5	41	35.5	54

* 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-P450YGM-A(-BS)

Ref. : P450YGM-WYNB0-3621

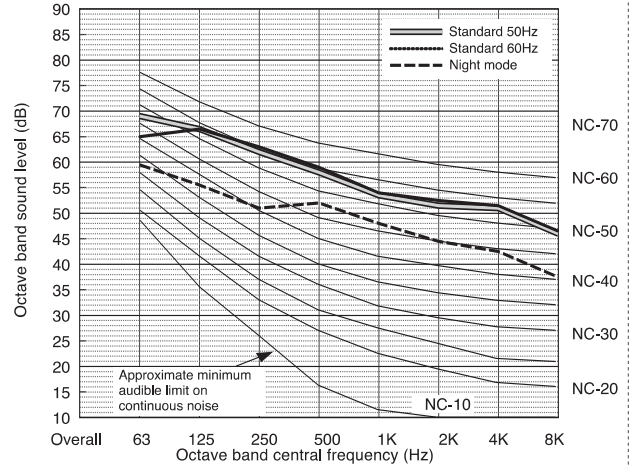


		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	66.5	62.5	60.5	58	53.5	50.5	46	41.5	60
	60Hz	70.5	64.5	61	59.5	54.5	51	47	41	61
Night mode	50/60Hz	61.5	60	51.5	51	46.5	41	36.5	39.5	53

* 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-P600YGM-A(-BS)

Ref. : P600YGM-WYNB0-3624

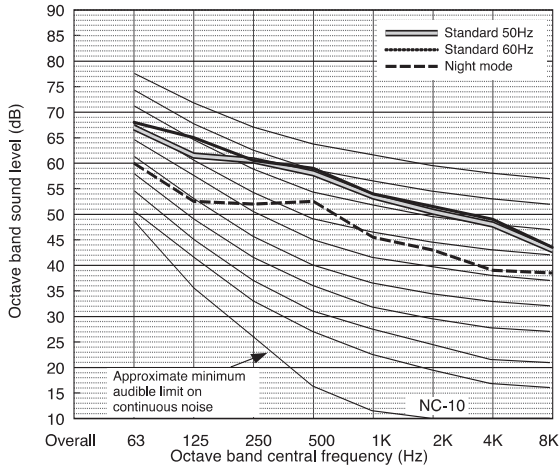


		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	69	66.5	62	58	53.5	51.5	51	46	61
	60Hz	65	66.5	63	59	54	52.5	51.5	46.5	62
Night mode	50/60Hz	59.5	55.5	51	52	48	44.5	42.5	37.5	54

* 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-P500YGM-A(-BS)

Ref. : P500YGM-WYNB0-3622

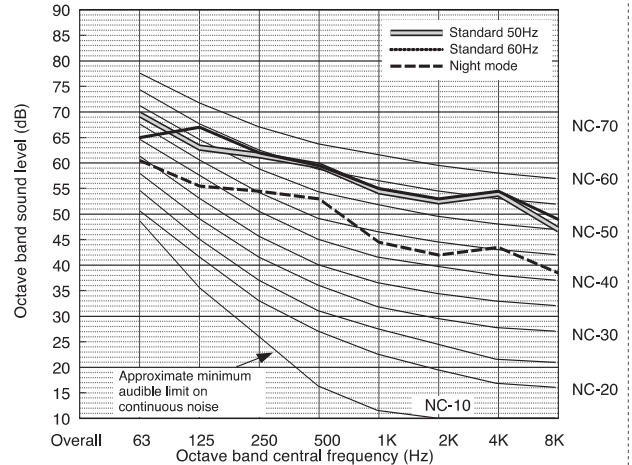


		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	67	61.5	60.5	58	53.5	50.5	48	43	60
	60Hz	68	65	60.5	59	54	51.5	49	43.5	61
Night mode	50/60Hz	60	52.5	52	52.5	45.5	43	39	38.5	53

* 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-P650YGM-A(-BS)

Ref. : P650YGM-WYNB0-3625

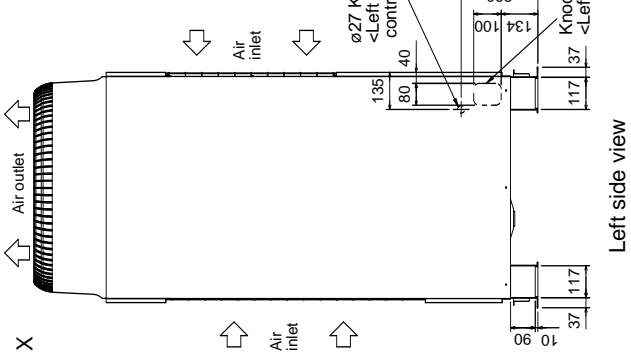
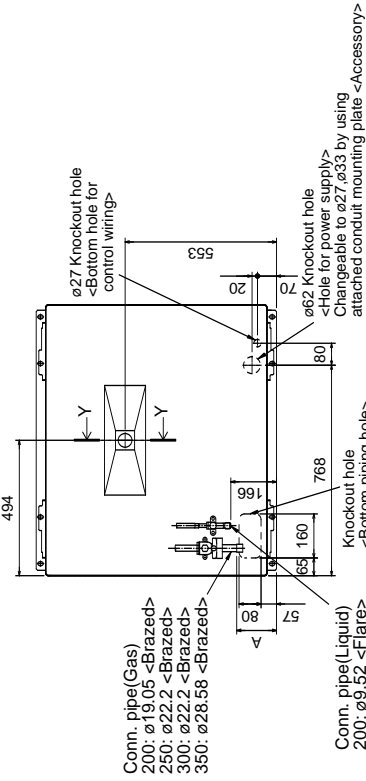
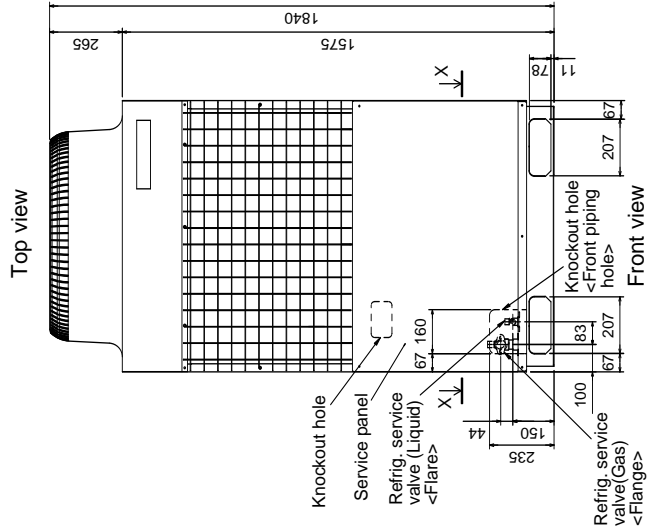
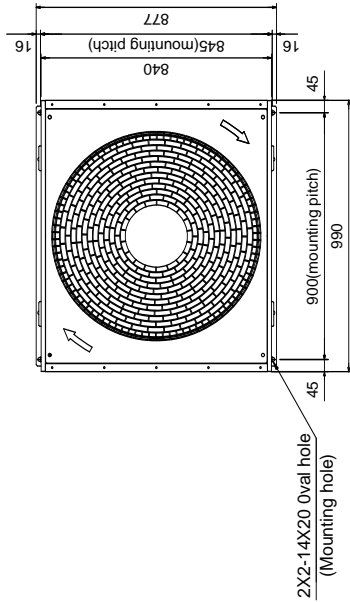


		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	69.5	63	61.5	59.5	54.5	52.5	54	47	62
	60Hz	65	67	62	59.5	55	53	54.5	49	62.5
Night mode	50/60Hz	60.5	55.5	54.5	53	44.5	42	43.5	38.5	54

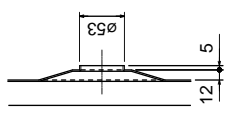
* When Night Mode is set, the A/C system's capacity is limited. The system could return to normal operation from Night Mode automatically in the case that the operation condition is severe.

PUHY,PUY-P200,250,300,350YGM-A-(BS)

Drw. : YGM-W656-818 1/2
Unit : mm



Cross section X - X



Cross section Y - Y

- Conn. pipe (Gas)
200: ø19.05 <Brazed>
250: ø22.2 <Brazed>
300: ø22.2 <Brazed>
350: ø28.58 <Brazed>
- Conn. pipe (Liquid)
200: ø9.52 <Flare>
250: ø9.52 <Flare>
300: ø9.52 <Flare>
350: ø12.7 <Flare>

Model	A
200	132
250	136
300	136
350	146

- <Accessories>
- Refrigerant (Gas) conn. pipe.....1 pc. (P200type: Packaged in the accessory kit)
 - Packing for conn. pipe.....1 pc. (P250, P300, P350type: Already installed on the unit)
 - Conduit mounting plate (P200type: Not attached) (P250, P300, P350type: Attached near the ball valve) ø33, ø27.....1 pc. Each
 - Tapping screw M4.....2 pcs.

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.

Y
R2
WY
WR2
S
OP

Spacing PUHY,PUY-P200,250,300,350YGM-A(-BS)

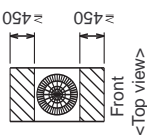
Drw. : YGM-W656-818 2/2
Unit : mm

1.Space required around unit

* In case of single installation

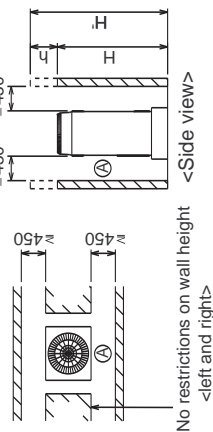
[Basic rules for spacing the unit]

- 1 Since the service from the back of unit is required, provide the back space 450 mm or above as the front.



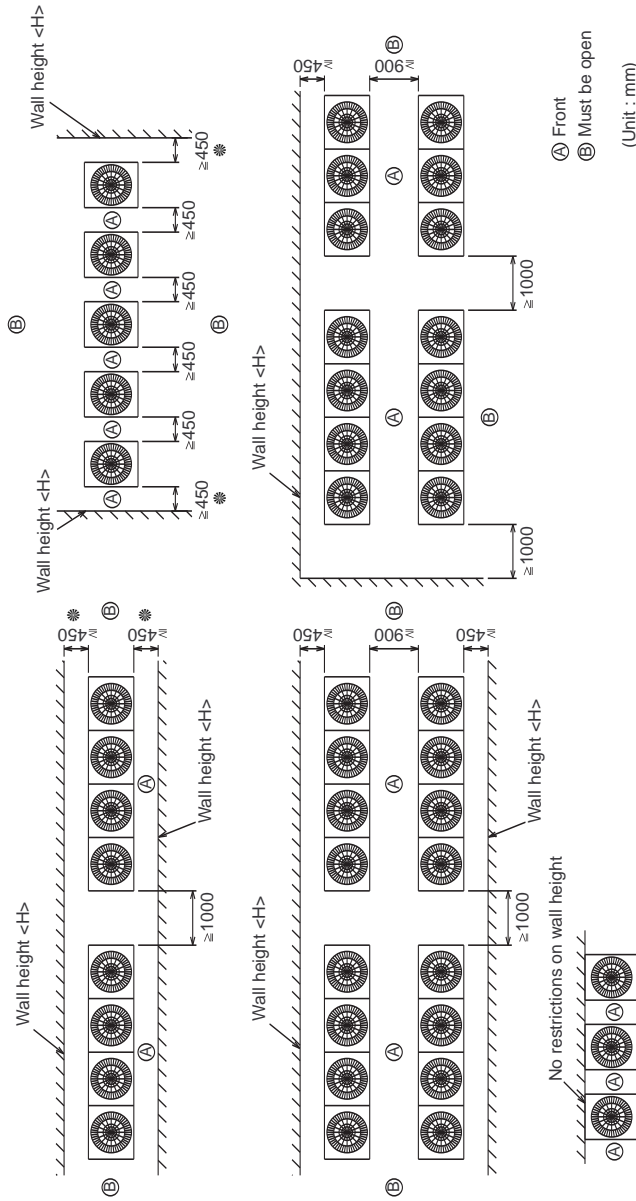
[When inlet air enters from right and left sides of unit]

- 1 Wall heights $\langle H \rangle$ of the front and the back sides shall be within total height of unit.
- 2 When wall height $\langle H \rangle$ exceeds total height of unit, add $\langle h \rangle$ dimension to 450 of the following figure.
h = wall height $\langle H \rangle$ - total height of unit.



* In case of collective installation and continuous installation

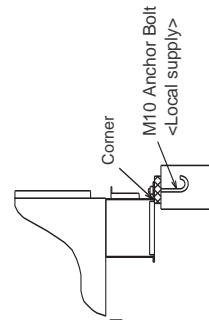
- 1 Space required for collective installation and continuous installation:
When installing several units, provide the space between each block considering passage for air and people.
- 2 Open in two directions.
- 3 In case of wall height $\langle H \rangle$ exceeds total height of unit, add $\langle h \rangle$ dimension (h = wall height $\langle H \rangle$ - 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 mm or more as inlet space/passage space for each four units.



(A) Front
(B) Must be open
(Unit : mm)

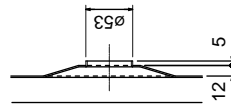
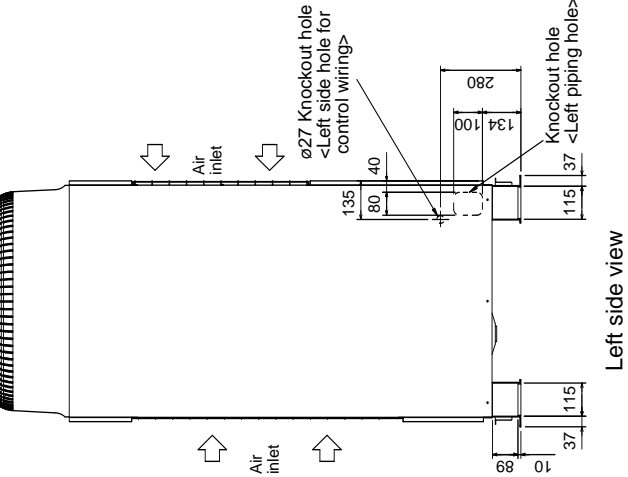
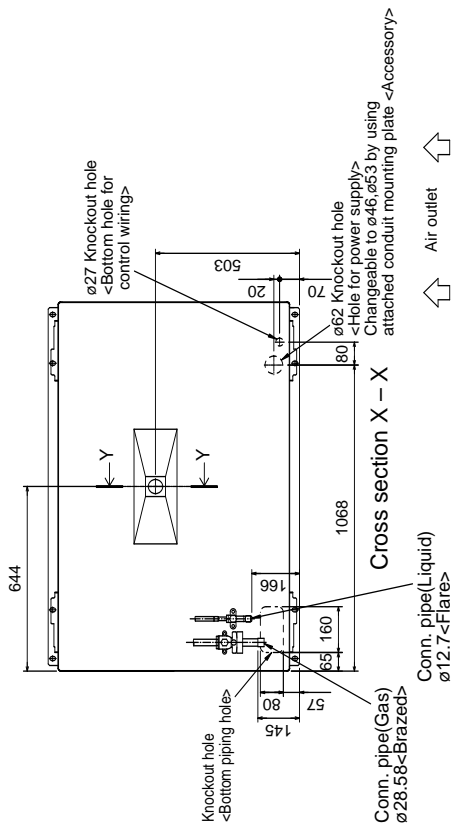
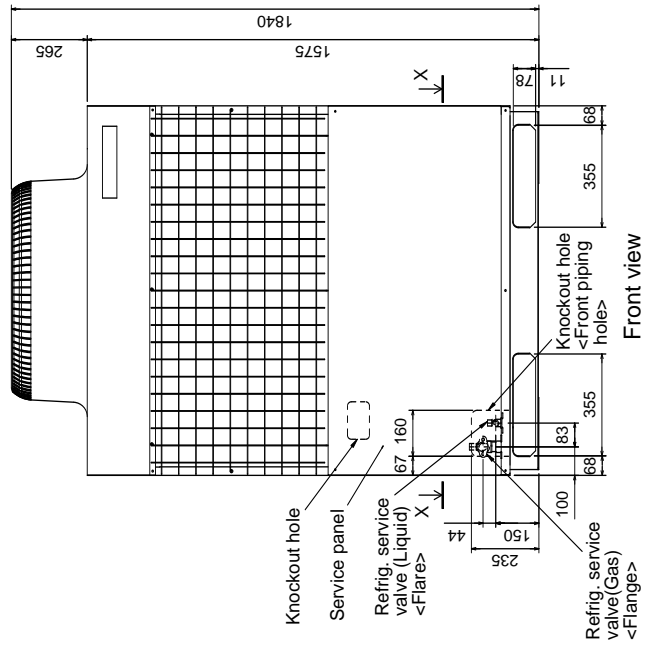
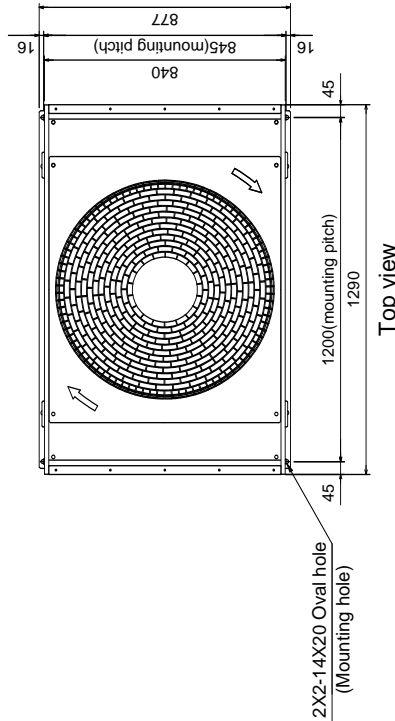
2.Foundation work

- 1 When building the foundation, give full attention to the floor strength, drain water disposal \langledrain water flows out of the unit, during operation></math>, 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-P400YGM-A(-BS)

Draw. : YGM-W656-819 1/2
Unit : mm



Cross section Y - Y

- <Accessories>
- Refrigerant (Gas) conn. pipe.....1 pc. (Already installed on the unit)
 - Packing for conn. pipe.....1 pc. (Attached near the ball valve)
 - Conduit mounting plate ø53, ø46.....1 pc. Each
 - Tapping screw M4.....2 pcs.

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-P400YGM-A(-BS)

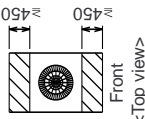
Drw. : YGM-W656-819 2/2
Unit : mm

1.Space required around unit

* In case of single installation

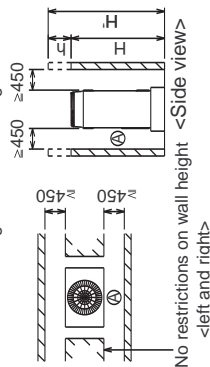
[Basic rules for spacing the unit]

- 1 Since the service from the back of unit is required, provide the back space 450 mm or above as the front.



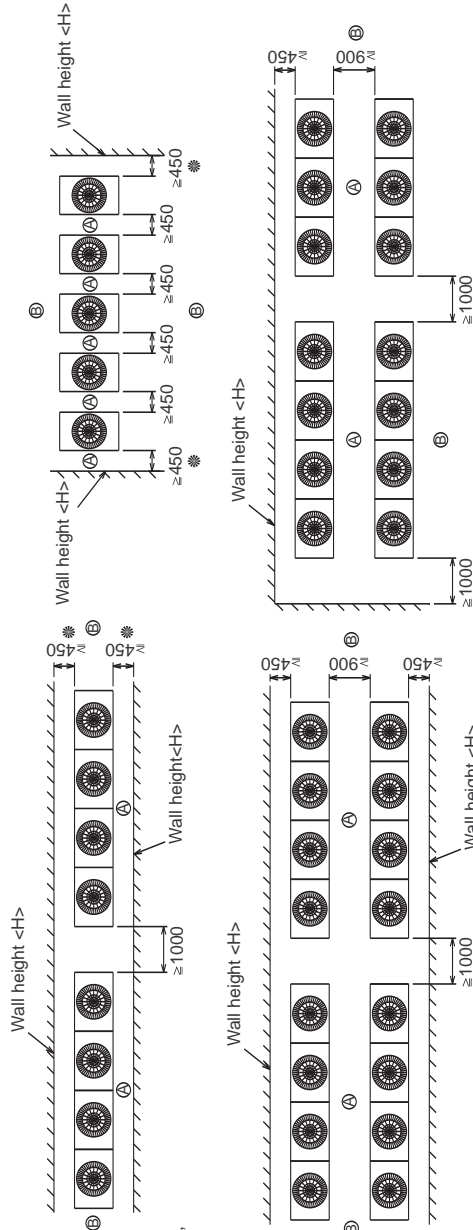
[When inlet air enters from right and left sides of unit]

- 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 of the following figure.
h=wall height <H> - total height of unit.



* In case of collective installation and continuous installation

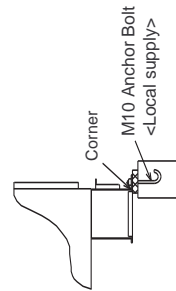
- 1 Space required for collective installation and continuous installation:
When installing several units, provide the space between each block considering passage for air and people.
- 2 Open in two directions.
- 3 In case of wall height <H> exceeds total height of unit, add <h> dimension (h=wall height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



(A) Front
(B) Must be open
(Unit : mm)

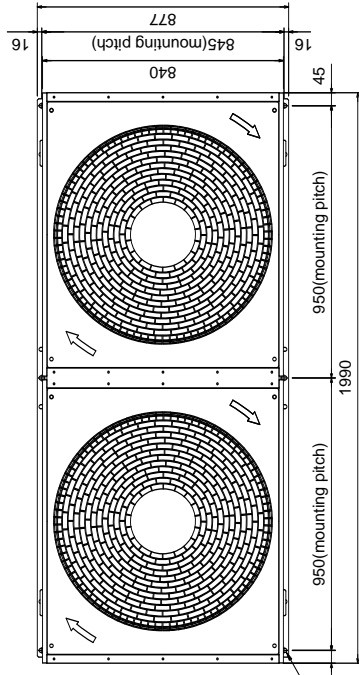
2.Foundation work

- 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.

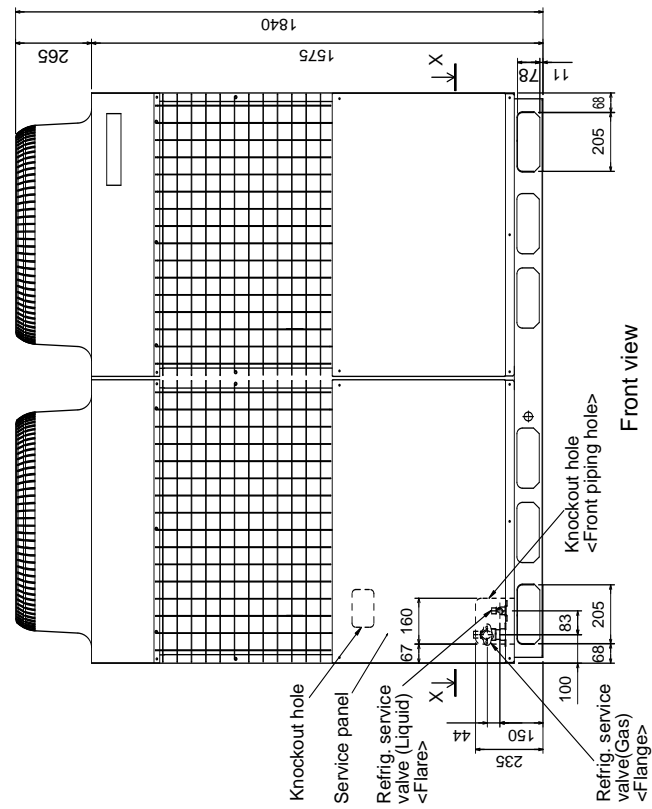


PUHY-P450,500,550,600,650YGM-A(-BS)

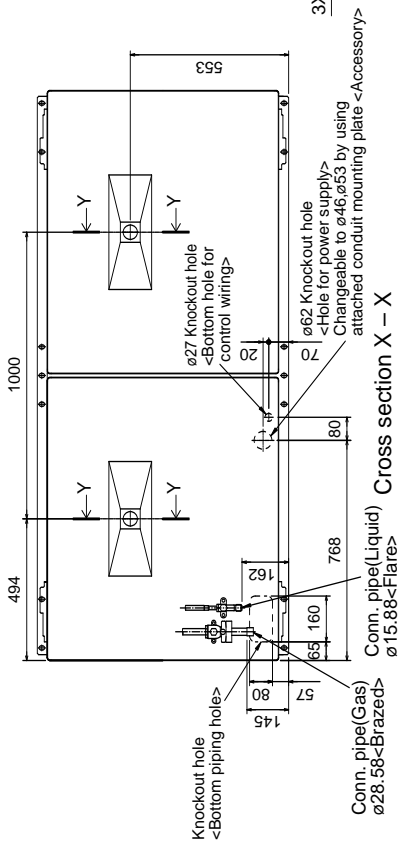
Drw. : YGM-W656-820 1/2
Unit : mm



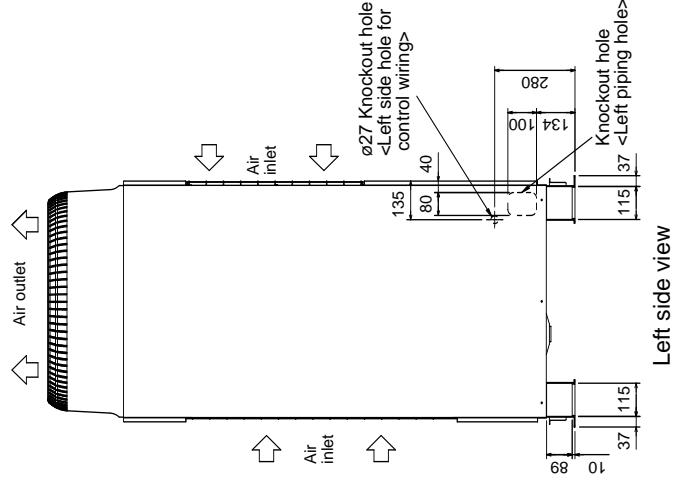
Top view



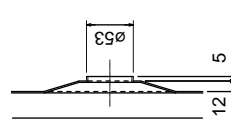
Front view



Cross section X - X



Left side view



Cross section Y - Y

- <Accessories>
- Refrigerant (Gas) conn. pipe.....1 pc. (Already installed on the unit)
 - Packing for conn. pipe.....1 pc. (Attached near the ball valve)
 - Conduit mounting plate $\phi 53$, $\phi 46$1 pc.Each
 - Tapping screw M4.....2 pcs.

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-P450,500,550,600,650YGM-A(-BS)

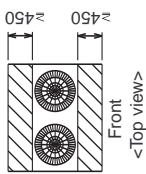
Drw. : YGM-W656-820 2/2
Unit : mm

1.Space required around unit

* In case of single installation

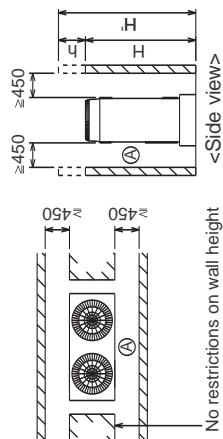
[Basic rules for spacing the unit]

- 1 Since the service from the back of unit is required, provide the back space 450 mm or above as the front.



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

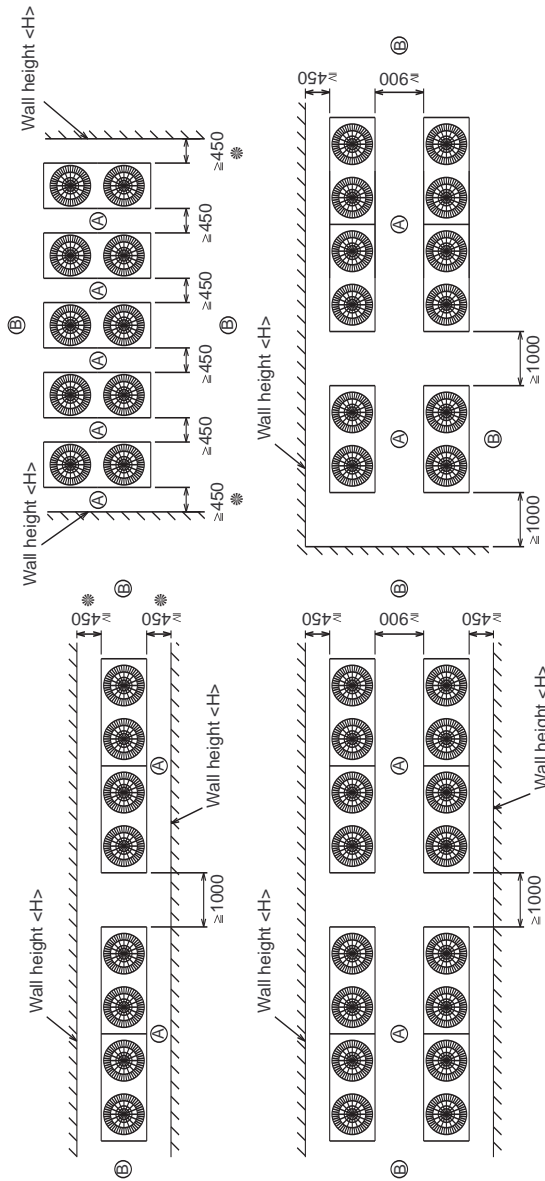
- 1 Wall heights <H> of the front and the back sides shall be within total height of unit.
- 2 When wall height <H> exceeds total height of unit, add <h> dimension to 450 of the following figure.
h=wall height <H> -total height of unit.



No restrictions on wall height <left and right>

* In case of collective installation and continuous installation

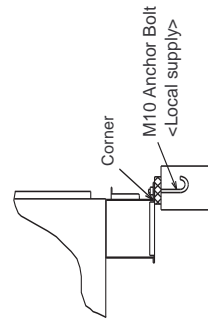
- 1 Space required for collective installation and continuous installation:
When installing several units, provide the space between each block considering passage for air and people.
- 2 Open in two directions.
- 3 In case of wall height <H> exceeds total height of unit, add <h> dimension (h=wall height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



(A) Front
(B) Must be open
(Unit : mm)

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 operations>, 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,PUY-P200,250,300,350YGM / PUHY-P400YGM

Drw. : YGM-W274-627

< Symbol explanation >

Symbol	Name
ACCT1	AC Current Sensor
DCCT1 #3	DC Current Sensor
DOL1	DC reactor (Power factor improvement)
S2C1	Magnetic contactor (Inverter main circuit)
MF1	Fan motor (Radiator panel)
CH11	Crank case heater (Compressor)
21S4a #5	4-way valve
21S4b	
21S4c #4	
SV1	Solenoid valve (Discharge-suction bypass)
SV5b	Solenoid valve
SV5c #4	(Heat exchanger capacity control)
LEV1	Electronic expansion valve (SC coil)
TH11	Discharge pipe temp. detect
TH5	Pipe temp.detect (Hex outlet)
TH6	OA temp.detect
TH7	liquid outlet temp.detect at Sub-cool coil
TH8	Radiator panel temp. detect
THHS1	High pressure switch
63H1	High pressure sensor
63H5	High pressure sensor
63LS	Low pressure sensor
L1,L2	Choke coil (Transmission)
Z20	Function device
	Earth terminal

< Difference of appliance >

Model name	Appliance
PUHY-P200YGM-A	*#3* and *#4* do not exist.
PUHY-P250,P300,P350YGM-A	*#4* do not exist.
PUHY-P400YGM-A	All exists
PUY-P200YGM-A	*#2*~*#5*~*#4*~*#5* do not exist.
PUY-P250,P300,P350YGM-A	*#2*~*#4*~*#5* do not exist.

*#1: 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	CN3D	NIGHT MODE
1-3P	ON/OFF	1-2P	MODE
OPEN	ON	OPEN	OFF
SHORT	OFF	SHORT	ON

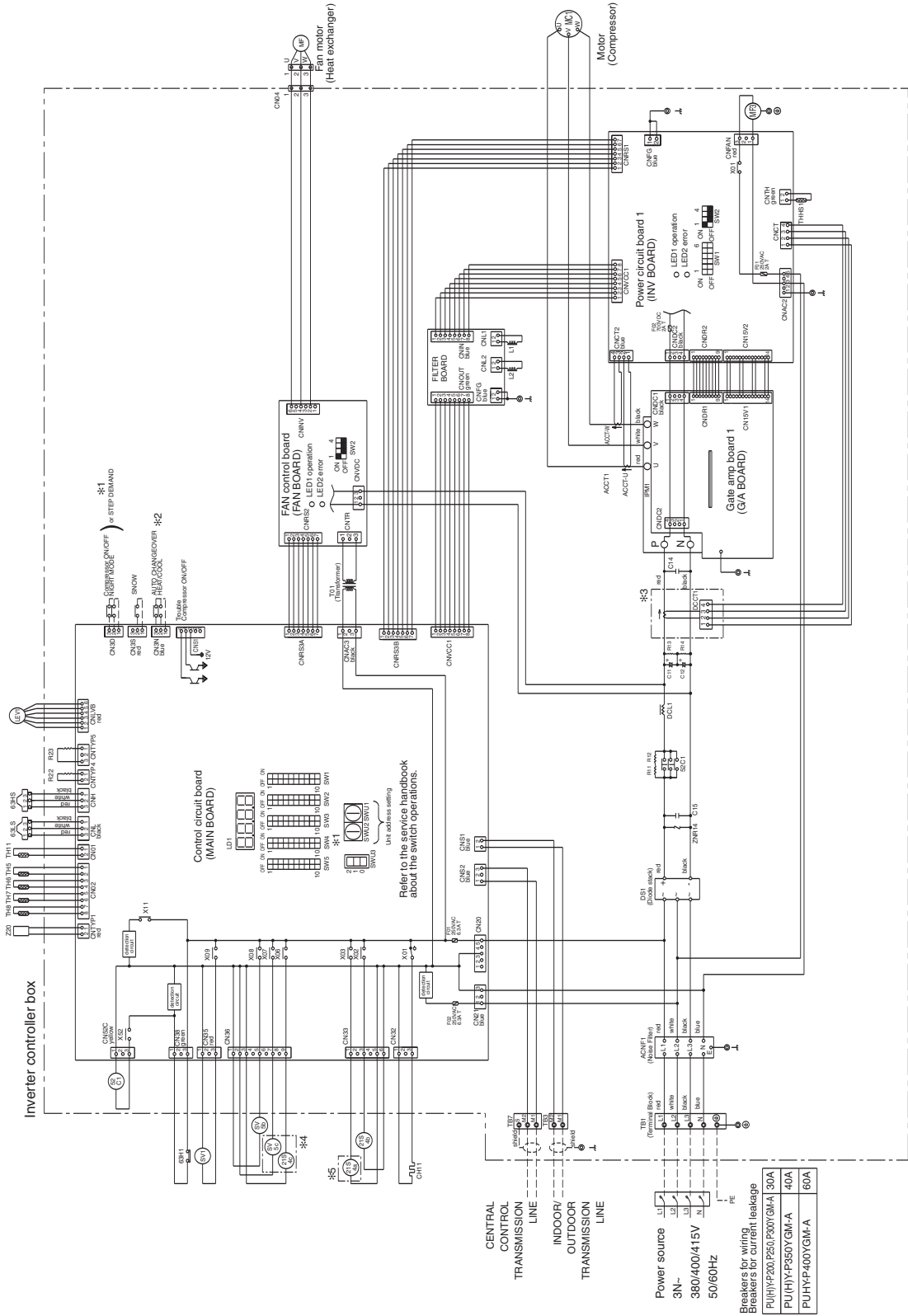
SW4-7:ON (STEP DEMAND)

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

*#2:Auto changeover (CN3N 1-2P,1-3P)

CN3N 1-3P	Auto changeover-OFF	Auto changeover-ON	COOL	HEAT
CN3N 1-2P	OPEN	OPEN	SHORT	SHORT

NOTE:The broken lines indicate field wiring.



Power source
3N-380/400/415V
50/60Hz

Breakers for wiring
Breakers for current leakage

PU(H)Y-P200,P250,P300YGM-A	30A
PU(H)Y-P350YGM-A	40A
PUHY-P400YGM-A	60A

PUHY-P450,500,550,600,650YGM-A(-BS)

Draw. : YGM-W274-629

< Symbol explanation >

Symbol	Name
ACCT1	AC Current Sensor
DCCT1	DC Current Sensor
DCL1	DC reactor (Power factor improvement)
52C1	Magnetic contactor (Inverter main circuit)
52C2	Magnetic contactor (No.2 Compressor)
51C2	Overload relay (No.2 Compressor)
52F	Magnetic contactor (Fan motor)
MF3	Fan motor (Radiator panel)
CH1,12	Crank case heater (Compressor)
21S4a,b,c	4-way valve
SV1,3	Solenoid valve (Discharge-suction bypass)
SV5b,c	Solenoid valve (Heat exchanger capacity control)
LEV1	Electronic expansion valve (SC coil)
TH1,12	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	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
⊕	Earth terminal

*1: Function according to switch operation.
(SW4-7:CN3D 1-2P and CN3D 1-3P)
SW4-7:OFF (Compressor ON/OFF and NIGHT MODE)

CN3D 1-3P	Compressor ON/OFF
OPEN	ON
SHORT	OFF
CN3D 1-2P	NIGHT MODE
OPEN	OFF
SHORT	ON

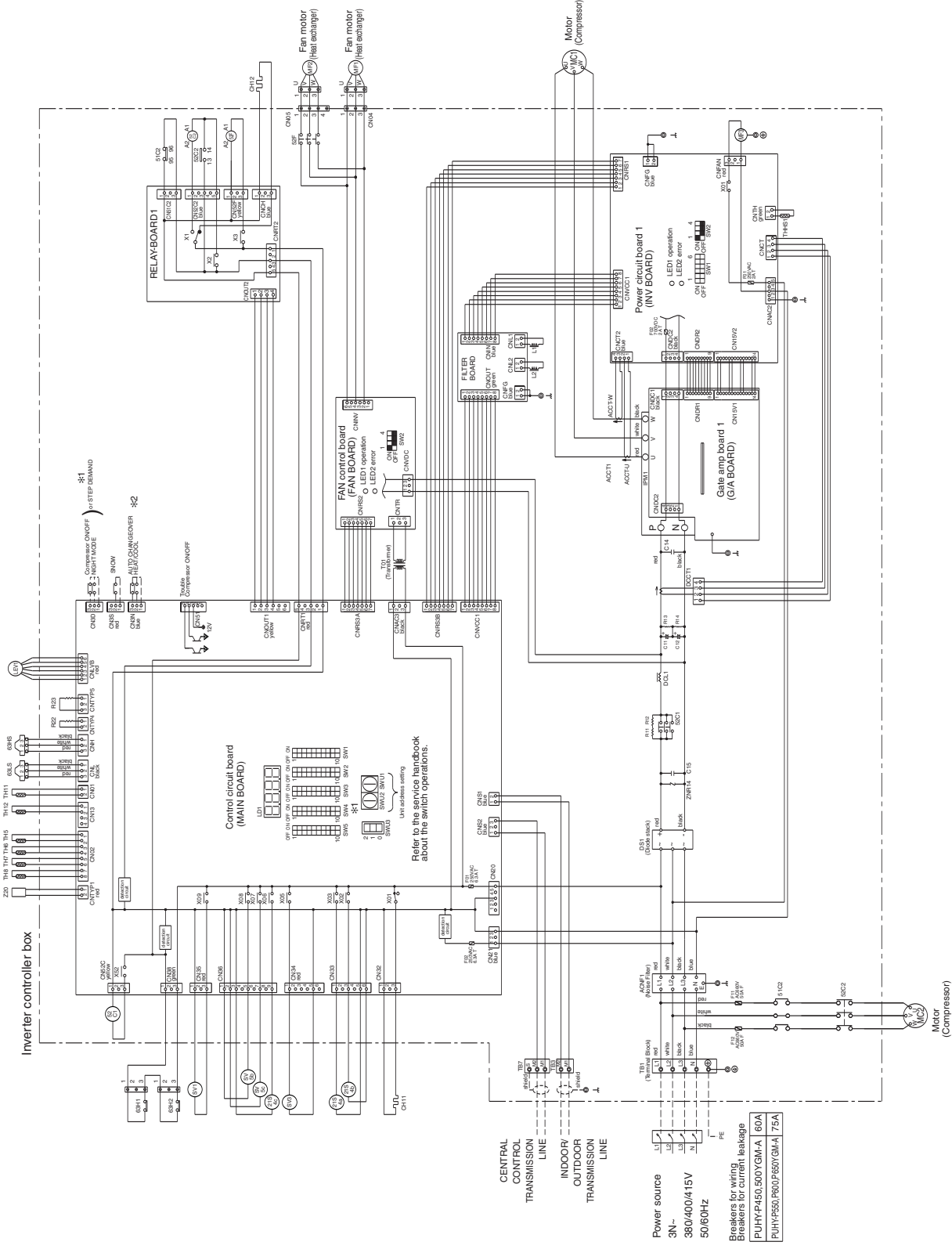
SW4-7:ON (STEP DEMAND)

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

*2:Auto changeover (CN3M 1-2P;1-3P)

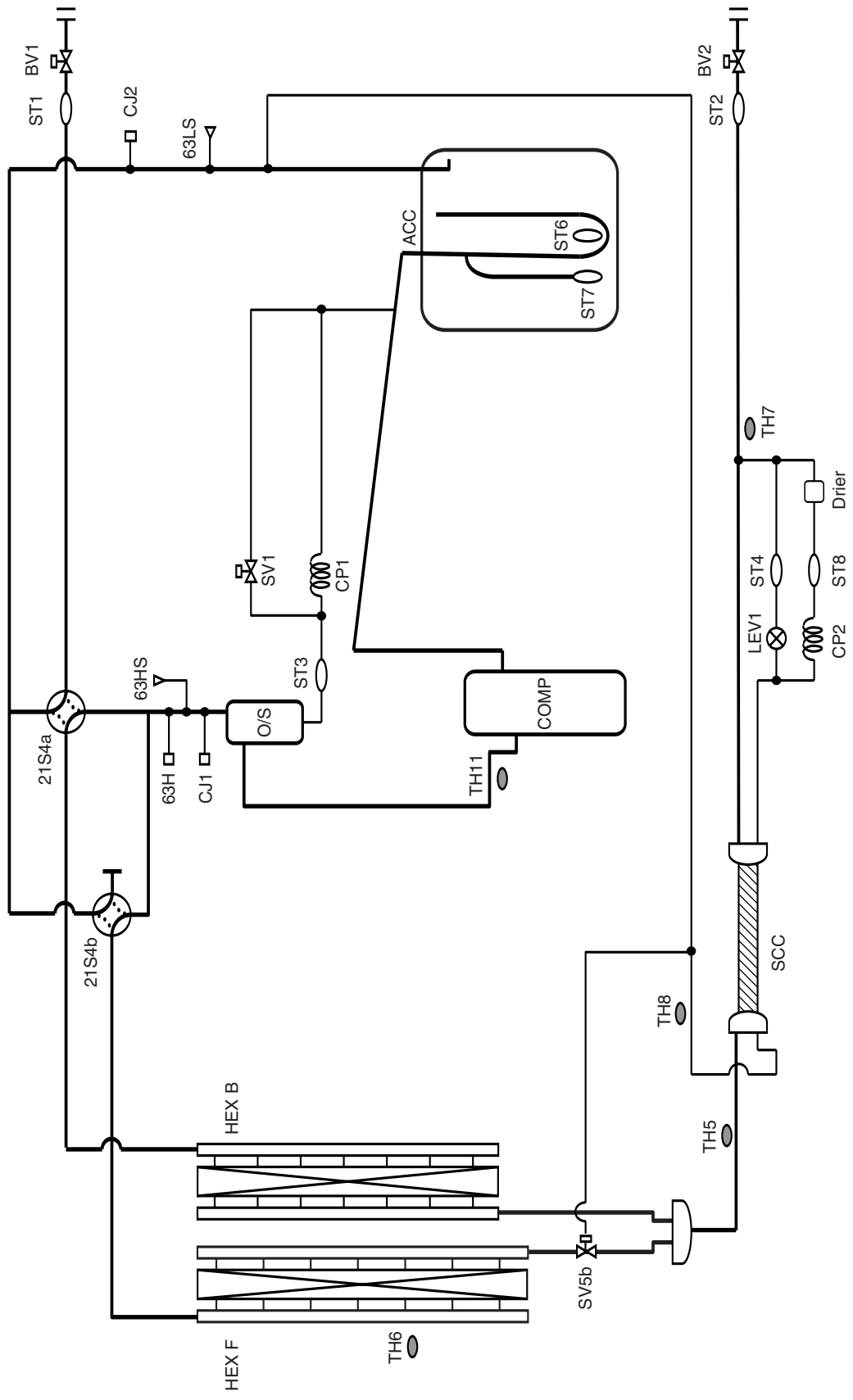
CN3M 1-3P	CN3M 1-2P	SHORT
OPEN	Auto changeover:OFF	-
SHORT	Auto changeover:ON	HEAT

NOTE:The broken lines indicate field wiring.



PUHY-P200,250,300,350YGM-A(-BS)

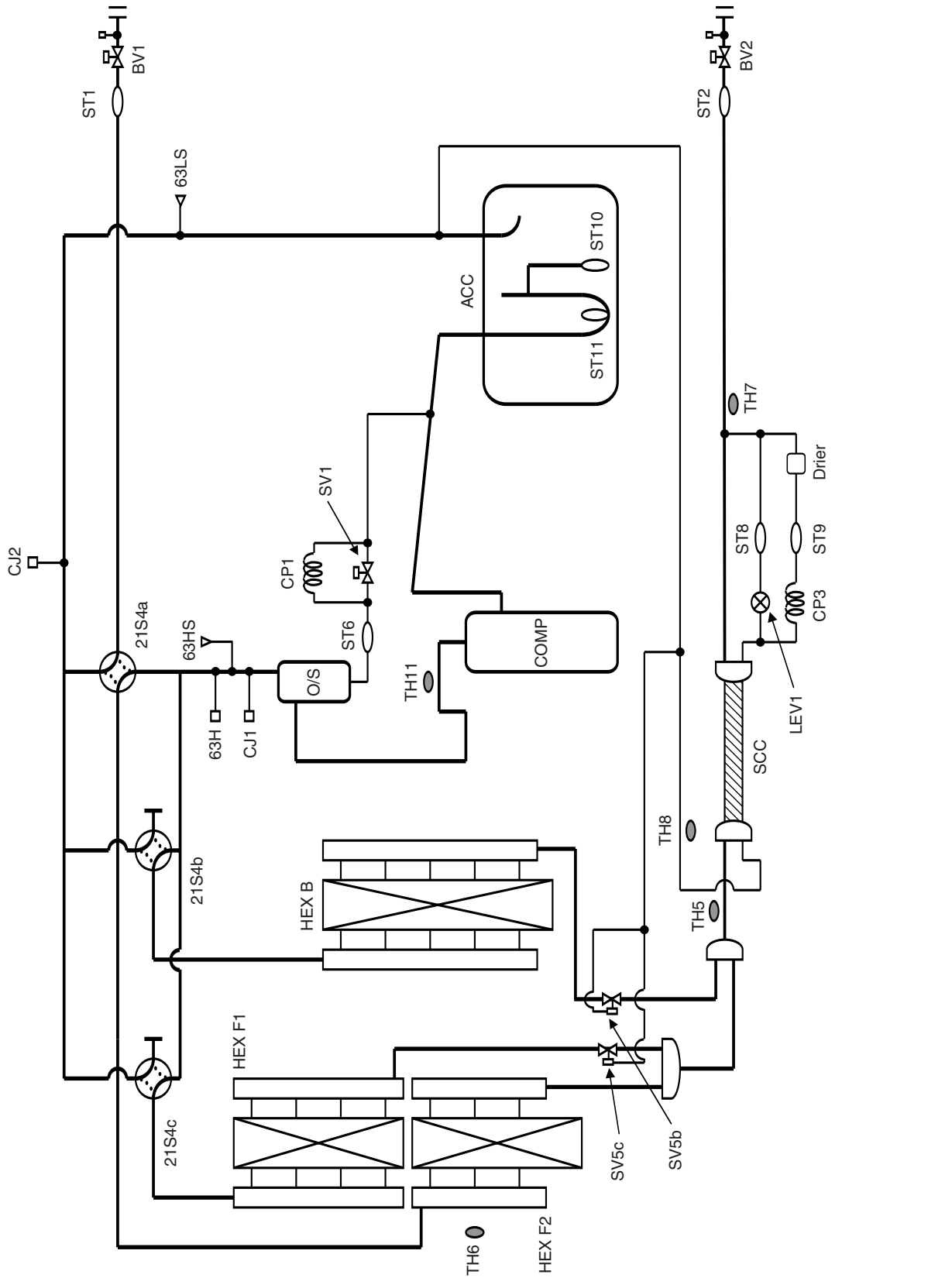
Drw. : YGM-rccd-200-350ygmhp



Y
R2
WY
WR2
S
OP

PUHY-P400YGM-A(-BS)

Drw. : YGM-rcd-400ygmhp



- Y
- R2
- WY
- WR2
- S
- OP

PUHY-P450,500,550,600,650YGM-A(-BS)

Drw. : YGM-rccd-450-650ygmhp

