

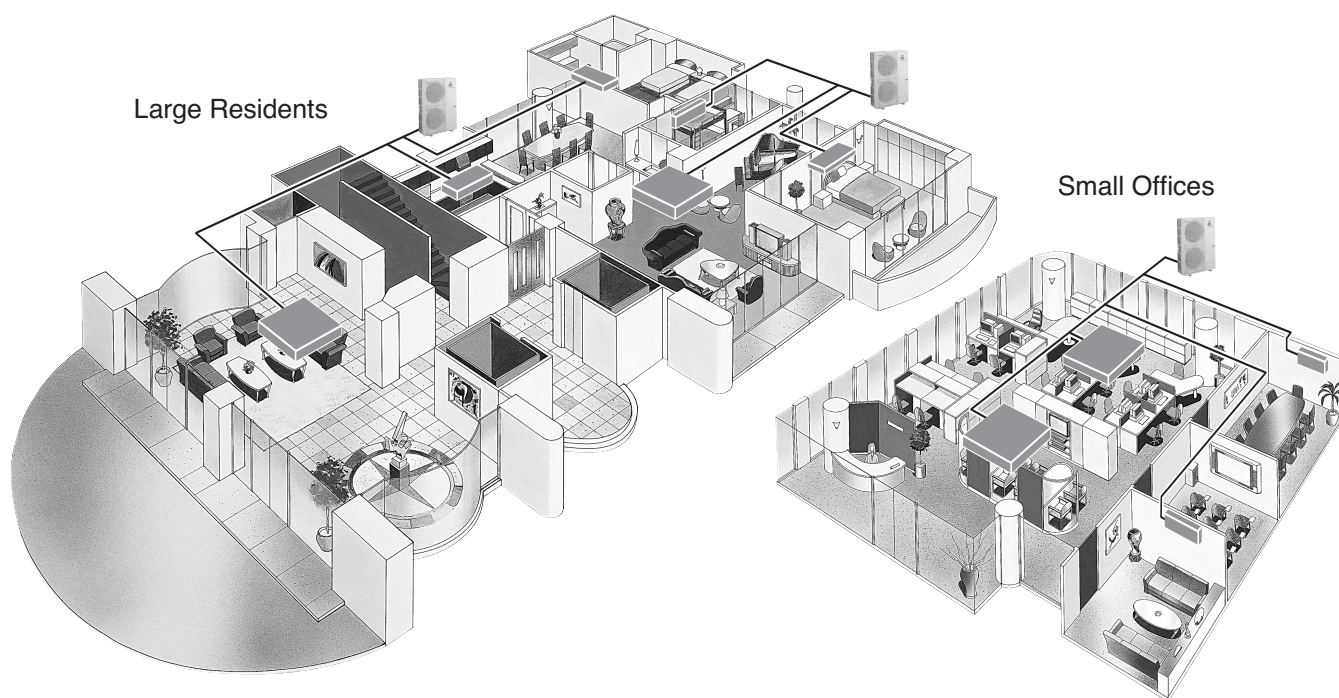
CITY MULTI™ OUTDOOR UNITS

S SERIES

S SERIES

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Heat pump: PUMY-P-YHMA

3-phase 4-wire 380-400-415V/50Hz	100 4HP	125 5HP	140 6HP
S Heat pump	●	●	●

Heat pump: PUMY-P-VHMA

1-phase 2-wire 220-230-240V/50Hz 220V/60Hz	100 4HP	125 5HP	140 6HP
S Heat pump	●	●	●

1. SPECIFICATIONS

R410A Data G4

Model			PUMY-P100YHMA	PUMY-P125YHMA
Power source			3-phase 4-wire 380-400-415V 50Hz	
Cooling capacity (Nominal)	*1	kW	11.2	14.0
	*1	kcal / h	9,600	12,000
	*1	Btu / h	38,200	47,800
	*2	kcal / h	-	12,500
	Power input	kW	3.30	4.27
	Current input	A	5.28-5.02-4.84	6.83-6.49-6.26
COP (kW / kW)			3.39	3.28
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)	
	Outdoor	D.B.	- 5 ~ 46°C (23 ~ 115°F)	
			10 to 46°C D.B. (50 to 115°F D.B.) : in case of connecting PKFY-P20/P25 type indoor unit.	
Heating capacity (Nominal)	*3	kW	12.5	16.0
	*3	kcal / h	10,800	13,800
	*3	Btu / h	42,700	54,600
	Power input	kW	3.63	4.29
	Current input	A	5.81-5.52-5.32	6.87-6.52-6.29
	COP (kW / kW)		3.44	3.73
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)	
	Outdoor temp.	W.B.	-15 ~ 15°C (5 ~ 59°F)	
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity	
	Model / Quantity		P15 ~ P125 / 1 ~ 6	P15 ~ P140 / 1 ~ 8
Noise level (measured in anechoic room)		dB <A>	49 / 51	50 / 52
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø9.52 (ø3/8") Flare	ø9.52 (ø3/8") Flare
	Gas (Low press.)	mm (in.)	ø15.88 (ø5/8") Flare	ø15.88 (ø5/8") Flare

External finish			Galvanized steel sheet <MUNSELL 3Y 7.8/1.1>	
External dimension H x W x D		mm	1,350 x 950 x 330	1,350 x 950 x 330
		in.	53-3/16" x 37-7/16" x 13"	53-3/16" x 37-7/16" x 13"
Net weight		kg (lb)	140 (309)	140 (309)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
Compressor	Type		Inverter scroll hermetic comp.	
	Manufacturer		MITSUBISHI ELECTRIC CORPORATION	
	Starting method		Inverter	
	Motor output	kW	1.9	2.4
	Case heater	kW	-	-
	Lubricant		MEL56	MEL56
FAN	Air flow rate	m³ / min	100	100
		L / s	1667	1667
		cfm	3532	3532
	External static press.		0 Pa	0 Pa
	Type x Quantity		Propeller fan x 2	Propeller fan x 2
	Control, Driving mechanism		DC-control, Direct-driven by motor	DC-control, Direct-driven by motor
	Motor output	kW	0.06 x 2	0.06 x 2
HIC circuit (HIC: Heat Inter-Changer)			-	
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa	
	Inverter circuit (COMP. / FAN)		Over-heat protection, Over-current protection	
	Compressor		Discharge thermo protection, Over-current protection	
	Fan motor		Over-heat protection, Voltage protection	
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)	
Refrigerant	Type x Original charge		R410A x 8.5kg (19 lb)	R410A x 8.5kg (19 lb)
	Control		LEV circuit	
Drawing	External		YHM-BK01-B328	
	Wiring		YHM-RG79-V020	
	Refrigerant circle		RC_VBN-050092	
Standard attachment	Document		Installation Manual	
	Accessory		Grounded lead wire x 2	
Optional parts			Joint: CMY-Y62-G-E Header:CMY-Y64/68-G-E	Joint: CMY-Y62-G-E Header:CMY-Y64/68-G-E
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 = m³/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_s_p100_125YHMA

1. SPECIFICATIONS

R410A Data G4

Model			PUMY-P140YHMA	
Power source			3-phase 4-wire 380-400-415V 50Hz	
Cooling capacity (Nominal)	*1	kW	15.5	
	*1	kcal / h	13,300	
	*1	Btu / h	52,900	
	*2	kcal / h	14,000	
	Power input	kW	5.32	
	Current input	A	8.51-8.09-7.80	
	COP (kW / kW)		2.91	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)	
	Outdoor	D.B.	- 5 ~ 46°C (23 ~ 115°F)	
10 to 46° CD.B. (50 to 115° FD.B.) : in case of connecting PKFY-P20/P25 type indoor unit.				
Heating capacity (Nominal)	*3	kW	18.0	
	*3	kcal / h	15,500	
	*3	Btu / h	61,400	
	Power input	kW	5.32	
	Current input	A	8.51-8.09-7.80	
	COP (kW / kW)		3.38	
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)	
	Outdoor temp.	W.B.	-15 ~ 15°C (5 ~ 59°F)	
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity	
	Model / Quantity		P15 ~ P140 / 1 ~ 8	
Noise level (measured in anechoic room)	dB <A>		51 / 53	
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø9.52 (ø3/8") Flare	
	Gas (Low press.)	mm (in.)	ø15.88 (ø5/8") Flare	

External finish			Galvanized steel sheet <MUNSELL 3Y 7.8/1.1>		
External dimension H x W x D		mm	1,350 x 950 x 330 53-3/16" x 37-7/16" x 13"		
		in.			
Net weight		kg (lb)	140 (309)		
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic comp.		
	Manufacturer		MITSUBISHI ELECTRIC CORPORATION		
	Starting method		Inverter		
	Motor output	kW	2.9		
	Case heater	kW	-		
	Lubricant		MEL56		
FAN	Air flow rate	m³ / min	100		
		L / s	1667		
		cfm	3532		
	External static press.		0 Pa		
	Type x Quantity		Propeller fan x 2		
	Control, Driving mechanism		DC-control, Direct-driven by motor		
	Motor output	kW	0.06 x 2		
HIC circuit (HIC: Heat Inter-Changer)			-		
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa		
	Inverter circuit (COMP. / FAN)		Over-heat protection, Over-current protection		
	Compressor		Discharge thermo protection, Over-current protection		
	Fan motor		Over-heat protection, Voltage protection		
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)		
Refrigerant	Type x Original charge		R410A x 8.5kg (19 lb)		
	Control		LEV circuit		
Drawing	External		YHM-BK01-B328		
	Wiring		YHM-RG79-V020		
	Refrigerant circle		RC_VBN-050092		
Standard attachment	Document		Installation Manual		
	Accessory		Grounded lead wire x 2		
Optional parts			Joint: CMY-Y62-G-E Header:CMY-Y64/68-G-E		
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 :			Unit converter	
*1 Nominal cooling conditions			kcal/h = kW x 860	
Indoor : 27°CDB/19°CWB (81°FDB/66°FWB)			Btu/h = kW x 3,412	
Outdoor : 35°CDB (95°FDB)			cfm = m³/min x 35.31	
Pipe length : 7.5 m (24-9/16 ft)			lb = kg / 0.4536	
Level difference : 0 m (0 ft)			*Above specification data is subject to rounding variation.	
*2 Nominal cooling conditions				
Indoor : 27°CDB/19.5°CWB (81°FDB/67°FWB)				
Outdoor : 35°CDB (95°FDB)				
Pipe length : 5 m (16-3/8 ft)				
Level difference : 0 m (0 ft)				
*3 Nominal heating conditions				
Indoor : 20°CDB (68°FDB)				
Outdoor : 7°CDB/6°CWB (45°FDB/43°FWB)				
Pipe length : 7.5 m (24-9/16 ft)				
Level difference : 0 m (0 ft)				

* Nominal conditions *1, *3 are subject to JIS B8615-1.
* Due to continuing improvement, above specifications may be subject to change without notice.

Ref. : Spec_s_p140YHMA

1. SPECIFICATIONS

R410A Data G4

Model			PUMY-P100VHMA	PUMY-P125VHMA
Power source			1-phase 220-230-240V 50Hz, 1-phase 220V 60Hz	
Cooling capacity (Nominal)	*1	kW	11.2	14.0
	*1	kcal / h	9,600	12,000
	*1	Btu / h	38,200	47,800
	*2	kcal / h	10,000	12,500
	Power input	kW	3.34	4.32
	Current input	A	15.4-14.8-14.1, 15.4	20.0-19.1-18.3, 20.0
COP (kW / kW)			3.35	3.24
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)	
	Outdoor	D.B.	- 5 ~ 46°C (23 ~ 115°F)	
			10 to 46°C D.B. (50 to 115°F D.B.) : in case of connecting PKFY-P20 / P25 type indoor unit.	
Heating capacity (Nominal)	*3	kW	12.5	16.0
	*3	kcal / h	10,800	13,800
	*3	Btu / h	42,700	54,600
	Power input	kW	3.66	4.33
	Current input	A	16.9-16.2-15.5, 16.9	20.0-19.1-18.3, 20.0
	COP (kW / kW)		3.42	3.69
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)	
	Outdoor temp.	W.B.	-15 ~ 15°C (5 ~ 59°F)	
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity	
	Model / Quantity		P15 ~ P125 / 1 ~ 6	P15 ~ P140 / 1 ~ 8
Noise level (measured in anechoic room)		dB <A>	49 / 51	50 / 52
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø9.52 (ø3/8") Liquid	ø9.52 (ø3/8") Liquid
	Gas (Low press.)	mm (in.)	ø15.88 (ø5/8") Gas	ø15.88 (ø5/8") Gas

External finish			Galvanized steel sheet <MUNSELL 3Y 7.8/1.1>	
External dimension H x W x D		mm	1,350 x 950 x 330	
		in.	53-3/16" x 37-7/16" x 13"	
Net weight		kg (lb)	127 (280 lb)	
Heat exchanger			Salt-resistant cross fin & copper tube	
Compressor	Type		Inverter scroll hermetic comp.	
	Manufacturer		MITSUBISHI ELECTRIC CORPORATION	
	Starting method		Inverter	
	Motor output	kW	2.2	
	Case heater	kW	-	
	Lubricant		MEL56 x 2.3 L	
FAN	Air flow rate	m³ / min	100	
		L / s	1667	
		cfm	3532	
	External static press.		0 Pa	
	Type x Quantity		Propeller fan x 2	
	Control, Driving mechanism		DC-control, Direct-driven by motor	
	Motor output	kW	0.06 x 2	
HIC circuit (HIC: Heat Inter-Changer)			-	
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa	
	Inverter circuit (COMP. / FAN)		Over-heat protection, Over-current protection	
	Compressor		Discharge thermo protection, Over-current protection	
	Fan motor		Over-heat protection, Voltage protection	
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)	
Refrigerant	Type x Original charge		R410A x 8.5kg (19 lb)	
	Control		LEV circuit	
Drawing	External		VHM-BK01-B434	
	Wiring		VHM-RG79-V221	
	Refrigerant circle		RC_VBN-050092	
Standard attachment	Document		Installation Manual	
	Accessory		Grounded lead wire x 2	
Optional parts			Joint: CMY-Y62-G-E Header:CMY-Y64/68-G-E	
Remark			In case of connecting All fresh air type indoor unit PEFY-P-VHM-E-F, only one indoor unit can be connected with one PUMY. 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 = m³/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_s_p100_125VHMA

1. SPECIFICATIONS

R410A Data G4

Model			PUMY-P140VHMA	
Power source			1-phase 220-230-240V 50Hz, 1-phase 220V 60Hz	
Cooling capacity (Nominal)	*1	kW	15.5	
	*1	kcal / h	13,300	
	*1	Btu / h	52,900	
	*2	kcal / h	14,000	
	Power input	kW	5.35	
	Current input	A	24.7-23.6-22.7, 24.7	
	COP (kW / kW)		2.9	
Temp. range of cooling	Indoor	W.B.	15 ~ 24°C (59 ~ 75°F)	
	Outdoor	D.B.	- 5 ~ 46°C (23 ~ 115°F)	
10 to 46° CD.B. (50 to 115° FD.B.) : in case of connecting PKFY-P20/P25 type indoor unit.				
Heating capacity (Nominal)	*3	kW	18.0	
	*3	kcal / h	15,500	
	*3	Btu / h	61,400	
	Power input	kW	5.58	
	Current input	A	25.8-24.7-23.6, 25.8	
	COP (kW / kW)		3.23	
Temp. range of heating	Indoor temp.	D.B.	15 ~ 27°C (59 ~ 81°F)	
	Outdoor temp.	W.B.	-15 ~ 15°C (5 ~ 59°F)	
Indoor unit connectable	Total capacity		50 ~ 130% of outdoor unit capacity	
	Model / Quantity		P15 ~ P140 / 1 ~ 8	
Noise level (measured in anechoic room)	dB <A>		51 / 53	
Diameter of refrigerant pipe	Liquid (High press.)	mm (in.)	ø9.52 (ø3/8") Liquid	
	Gas (Low press.)	mm (in.)	ø15.88 (ø5/8") Gas	

External finish			Galvanized steel sheet <MUNSELL 3Y 7.8/1.1>		
External dimension H x W x D		mm	1,350 x 950 x 330 53-3/16" x 37-7/16" x 13"		
		in.			
Net weight		kg (lb)	127 (280 lb)		
Heat exchanger			Salt-resistant cross fin & copper tube		
Compressor	Type		Inverter scroll hermetic comp.		
	Manufacturer		MITSUBISHI ELECTRIC CORPORATION		
	Starting method		Inverter		
	Motor output	kW	3.3		
	Case heater	kW	-		
	Lubricant		MEL56 x 2.3L		
FAN	Air flow rate	m³ / min	100		
		L / s	1667		
		cfm	3532		
	External static press.		0 Pa		
	Type x Quantity		Propeller fan x 2		
	Control, Driving mechanism		DC-control, Direct-driven by motor		
	Motor output	kW	0.06 x 2		
	HIC circuit (HIC: Heat Inter-Changer)			-	
Protection	High pressure protection		High pressure sensor, High pressure switch 4.15 MPa		
	Inverter circuit (COMP. / FAN)		Over-heat protection, Over-current protection		
	Compressor		Discharge thermo protection, Over-current protection		
	Fan motor		Over-heat protection, Voltage protection		
Defrosting method			Auto-defrost mode (Reversed refrigerant circle)		
Refrigerant	Type x Original charge		R410A x 8.5kg (19 lb)		
	Control		LEV circuit		
Drawing	External		VHM-BK01-B434		
	Wiring		VHM-RG79-V221		
	Refrigerant circle		RC_VBN-050092		
Standard attachment	Document		Installation Manual		
	Accessory		Grounded lead wire x 2		
Optional parts			Joint: CMY-Y62-G-E Header:CMY-Y64/68-G-E		
Remark			In case of connecting All fresh air type indoor unit PEFY-P-VHM-E-F, only one indoor unit can be connected with one PUMY. 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 = m³/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_s_p140VHMA

2. CAPACITY TABLES

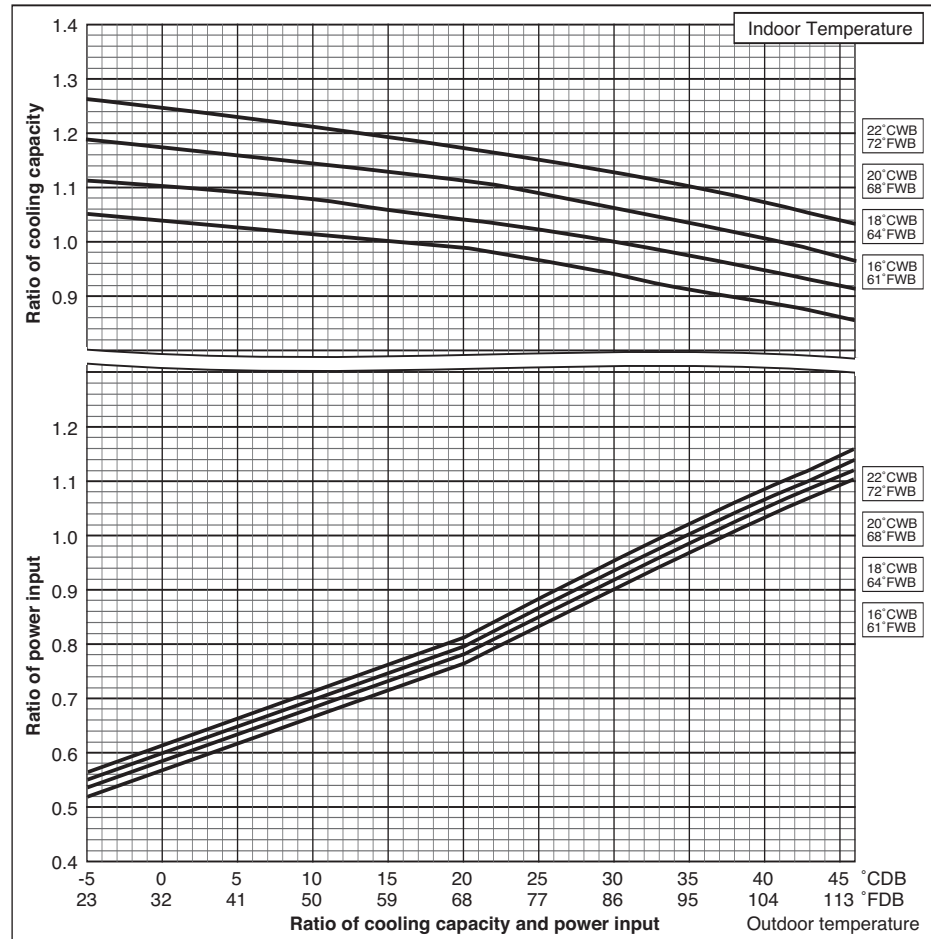
R410A Data G4

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.

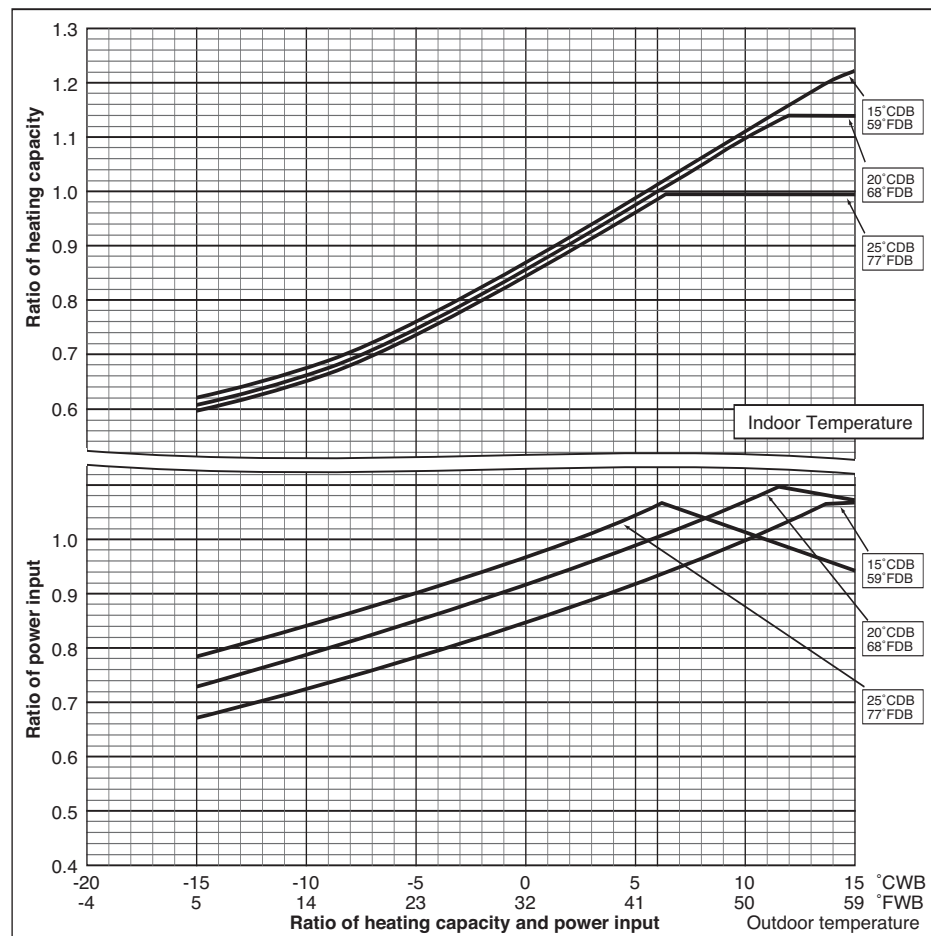
PUMY-		P100YHMA	P125YHMA
Nominal	kW	11.2	14.0
Cooling Capacity	kcal/h	9,600	12,000
	Btu/h	38,200	47,800
Input	kW	3.30	4.27

PUMY-		P140YHMA
Nominal	kW	15.5
Cooling Capacity	kcal/h	13,300
	Btu/h	52,900
Input	kW	5.32



PUMY-		P100YHMA	P125YHMA
Nominal	kW	12.5	16.0
Heating Capacity	kcal/h	10,800	13,800
	Btu/h	42,700	54,600
Input	kW	3.63	4.29

PUMY-		P140YHMA
Nominal	kW	18.0
Heating Capacity	kcal/h	15,500
	Btu/h	61,400
Input	kW	5.32



Ref:cbt_p100-140

2. CAPACITY TABLES

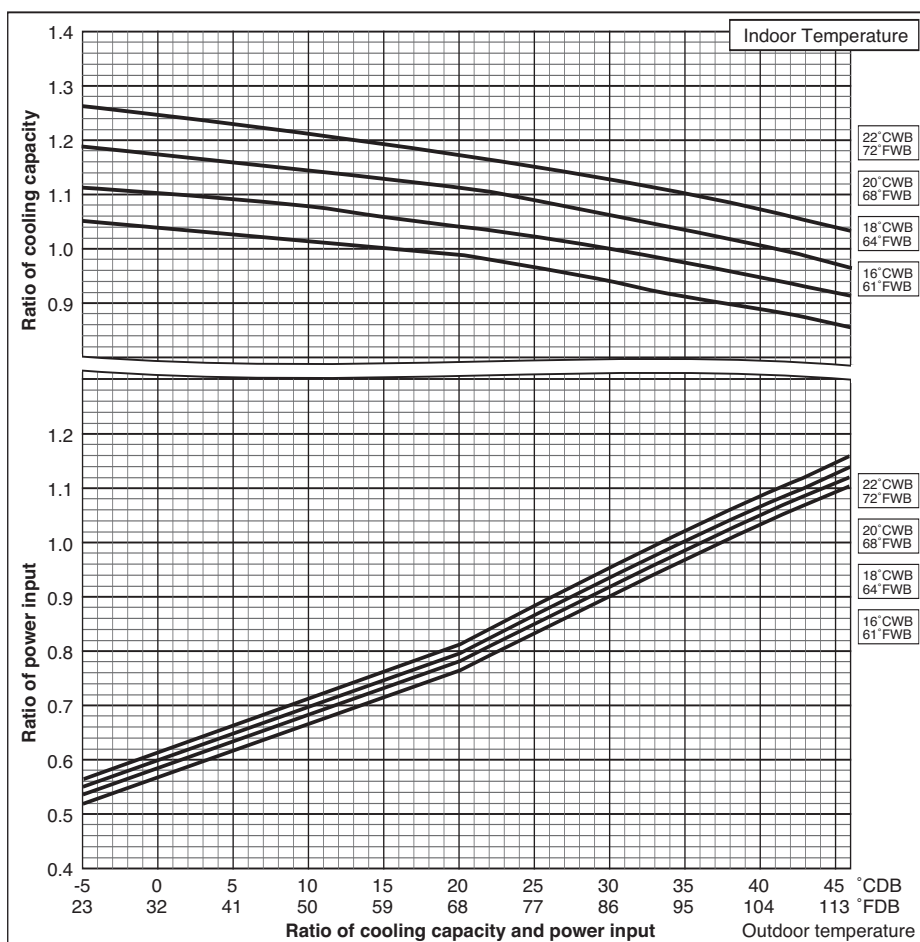
R410A Data G4

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.

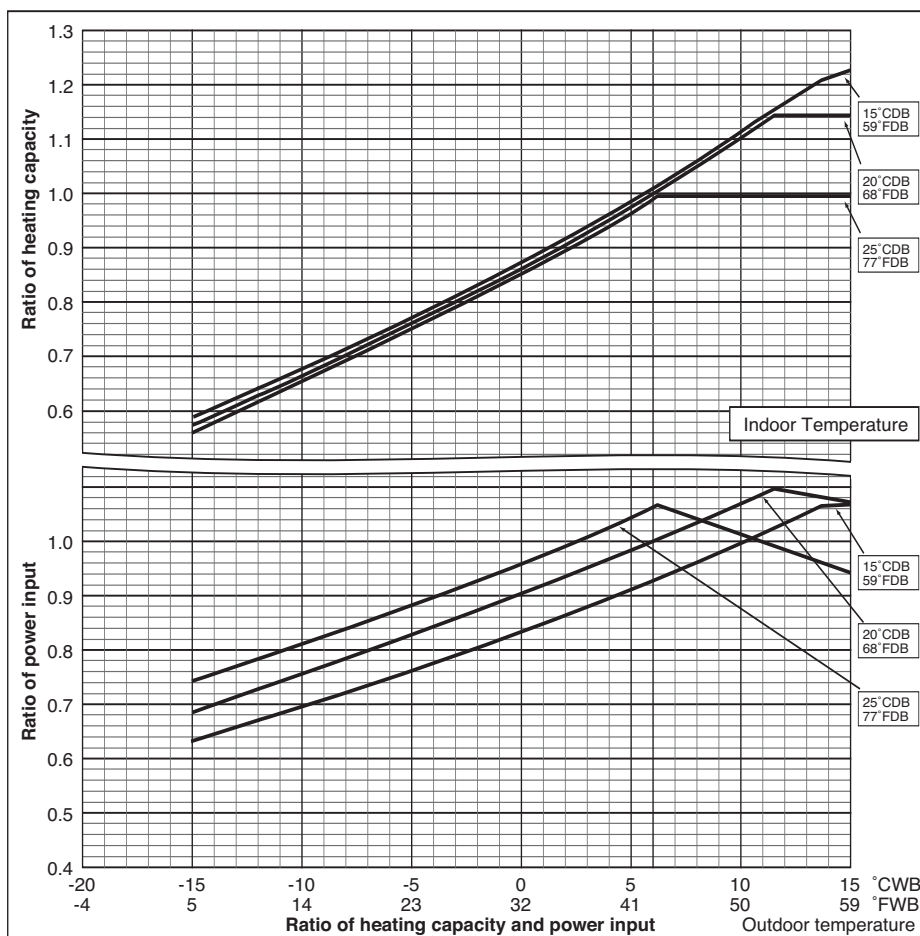
PUMY-		P100VHMA	P125VHMA
Nominal	kW	11.2	14.0
Cooling	kcal/h	9,600	12,000
Capacity	Btu/h	38,200	47,800
Input	kW	3.34	4.32

PUMY-		P140VHMA
Nominal	kW	15.5
Cooling	kcal/h	13,300
Capacity	Btu/h	52,900
Input	kW	5.35



PUMY-		P100VHMA	P125VHMA
Nominal	kW	12.5	16.0
Heating	kcal/h	10,800	13,800
Capacity	Btu/h	42,700	54,600
Input	kW	3.66	4.33

PUMY-		P140VHMA
Nominal	kW	18.0
Heating	kcal/h	15,500
Capacity	Btu/h	61,400
Input	kW	5.58

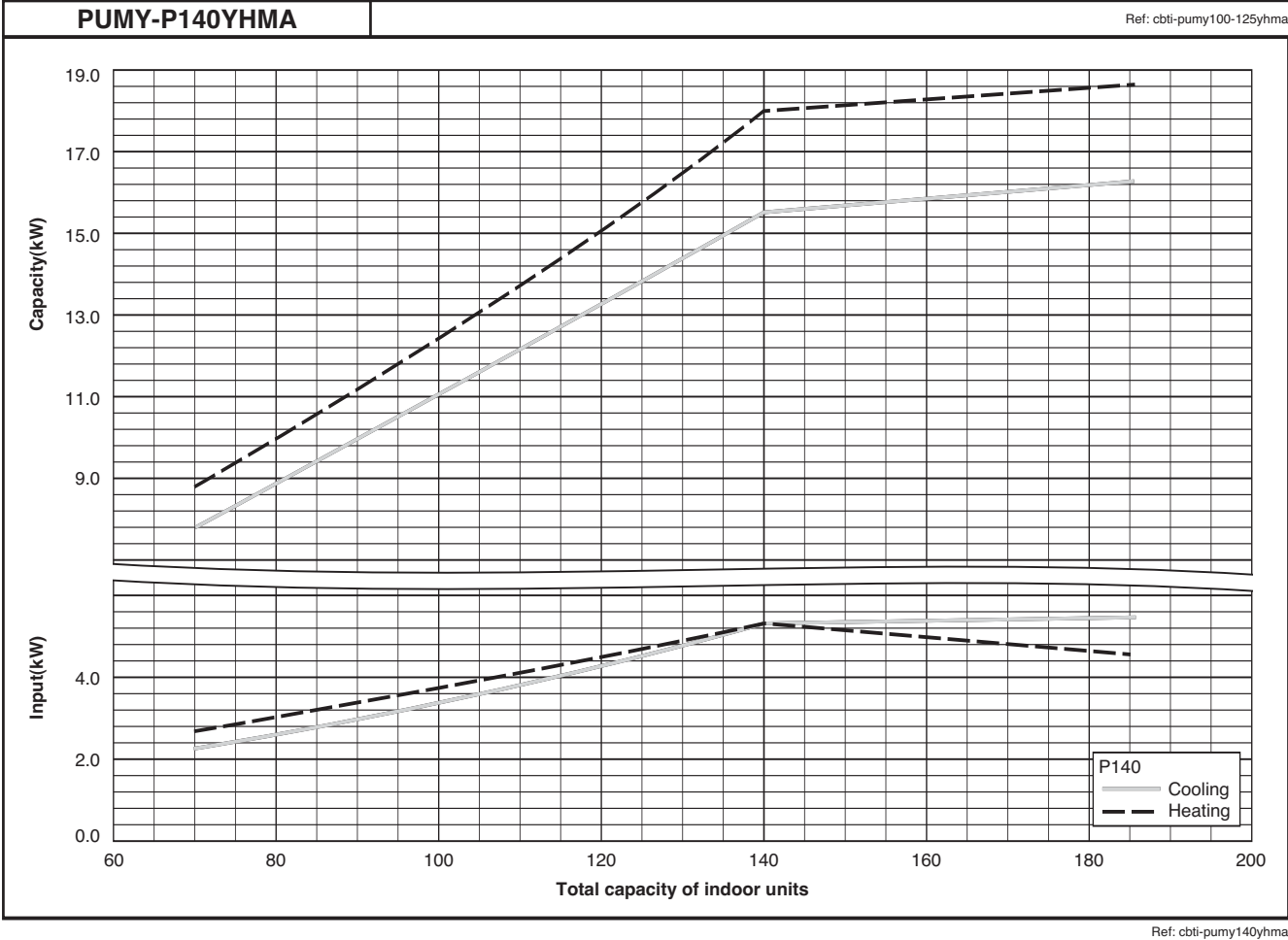
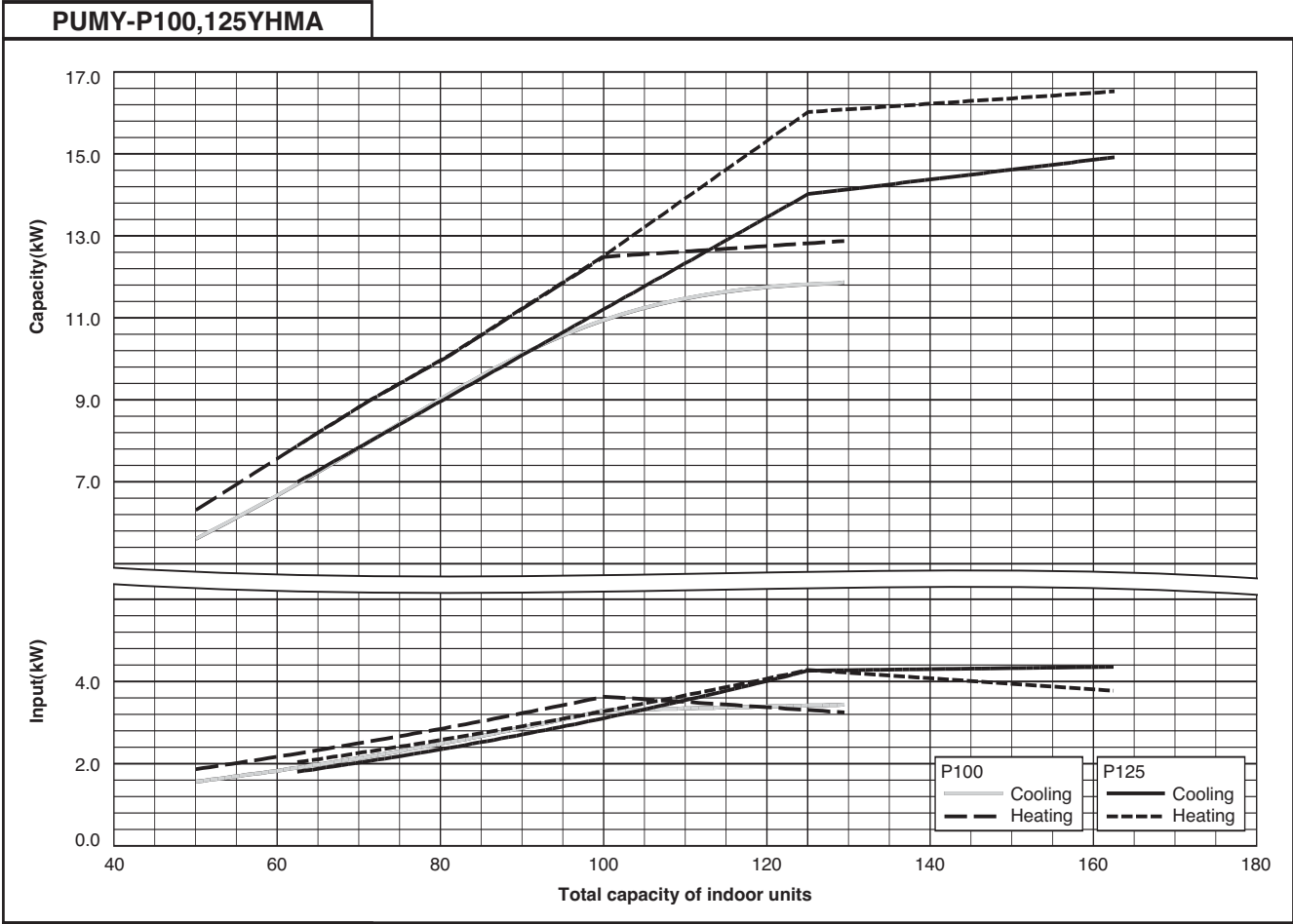


Ref:cbt_p100-140

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.



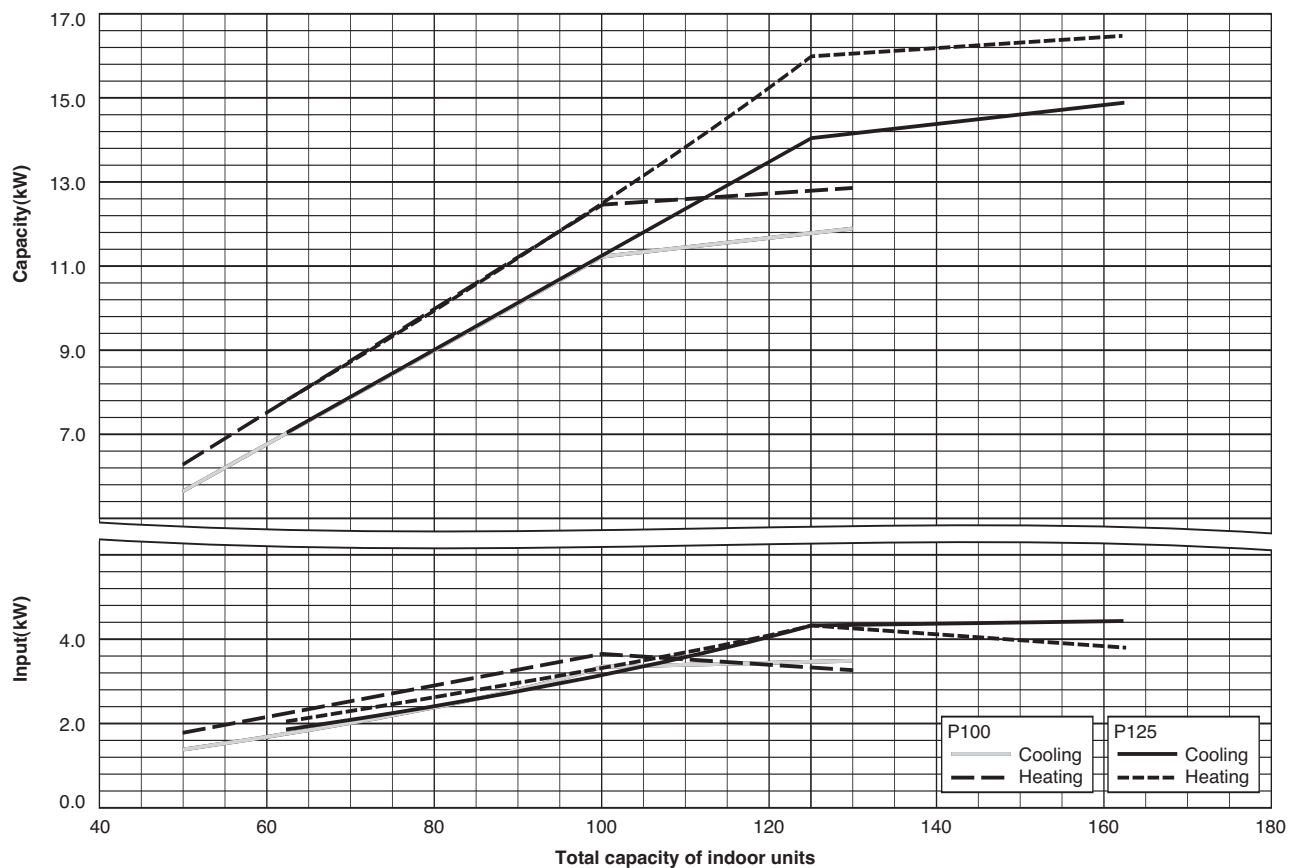
2. CAPACITY TABLES

R410A Data G4

2-2. Correction by total indoor

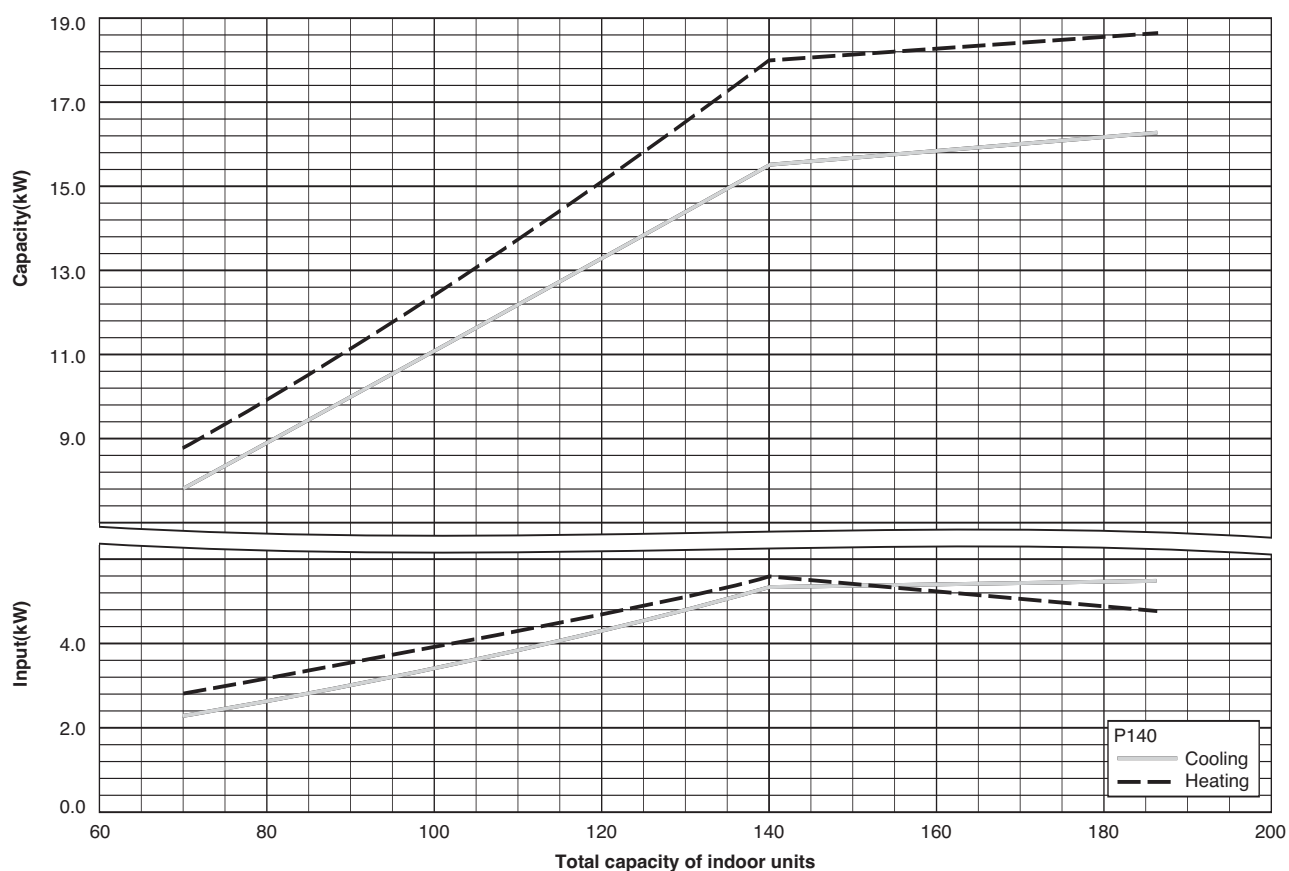
CITY MULTI™ system has different capacity and input at different total capacity of indoor unit connected. Using following tables, the maximum capacity can be observed so as to ensure the system having enough capacity.

PUMY-P100,125VHMA



PUMY-P140VHMA

Ref: cbti-pumy100-125vhma

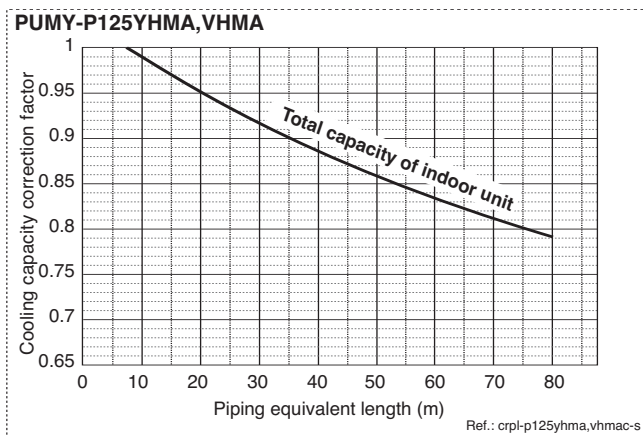
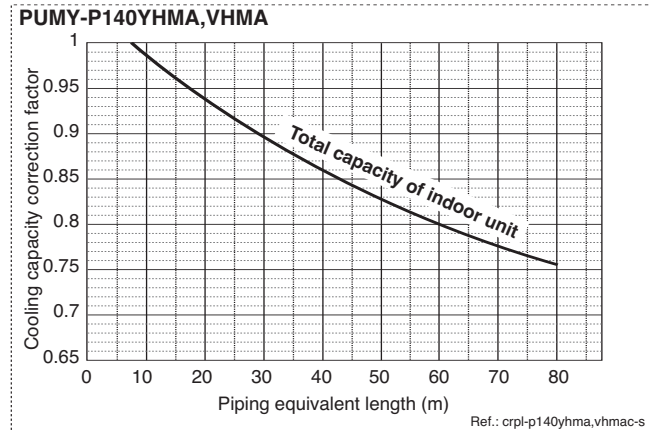
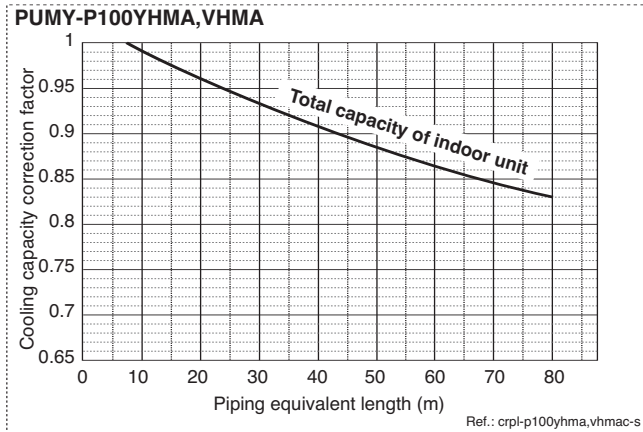


Ref: cbti-pumy140vhma

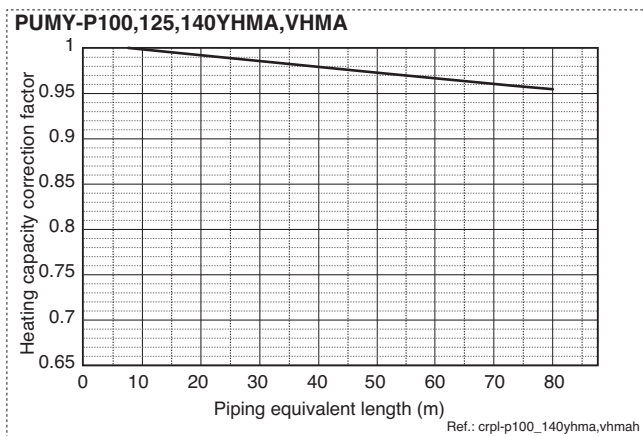
2-3. Correction by refrigerant piping length

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



2-3b. Heating capacity correction



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

1 PUMY-P100,125,140YHMA,VHMA

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.30 x number of bent on the piping) m

2-4. Correction at frosting and defrosting

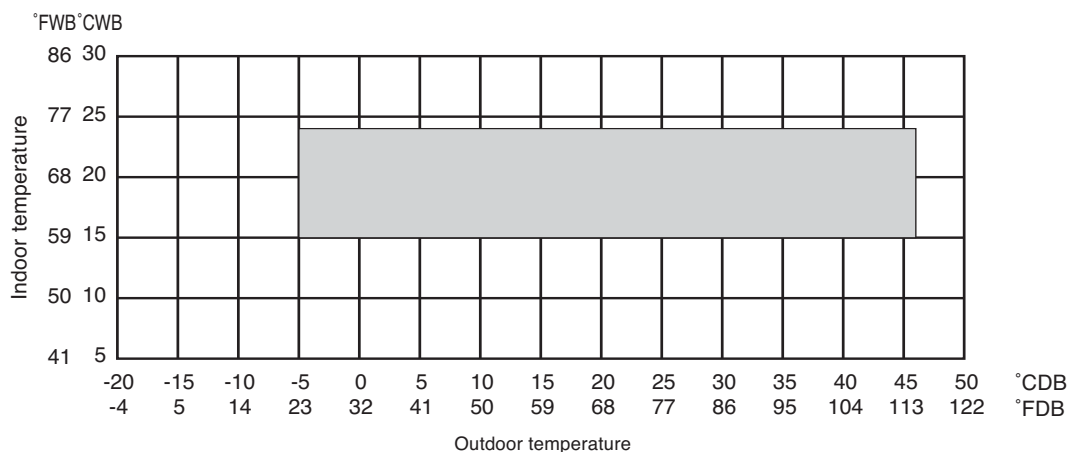
Due to frosting at the outdoor heat exchanger and the automatic defrosting operation, the heating capacity of the outdoor unit should be considered by multiplying the correction factor which shown in the table below.

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
PUMY-P100,125,140YHMA	1.0	0.98	0.855	0.85	0.845	0.89	0.90	0.95	0.95	0.95	-
PUMY-P100,125,140VHMA	1.0	0.98	0.855	0.85	0.845	0.89	0.90	0.95	0.95	0.95	-

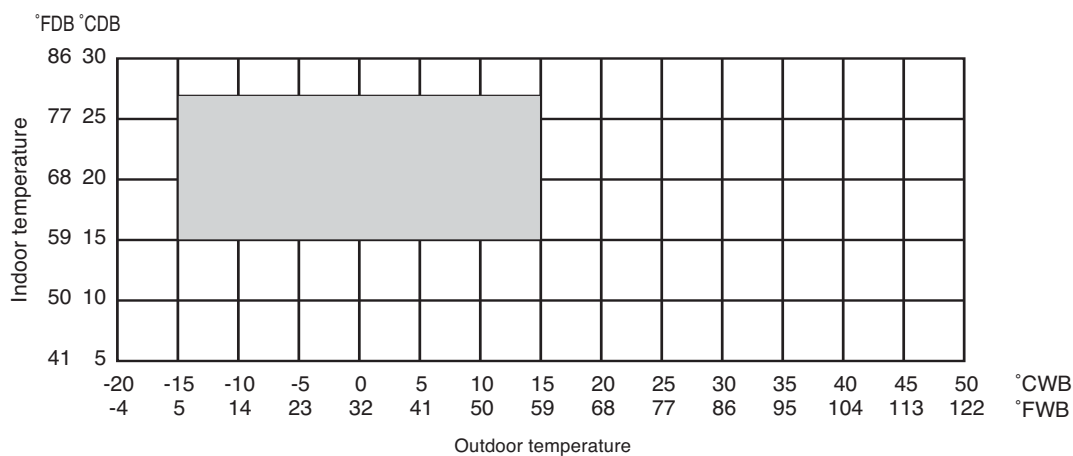
2-5. Temp. range of running

• Cooling



* 10 to 40°CDB (50 to 115°FDB): in case of connecting PKFY-P20/P25 type indoor unit.

• Heating

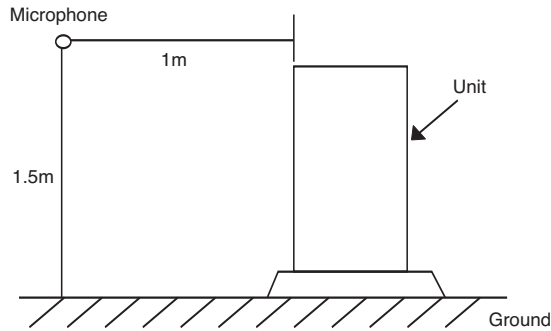


Ref.: tr-yhm,vhma-s

3. SOUND LEVELS

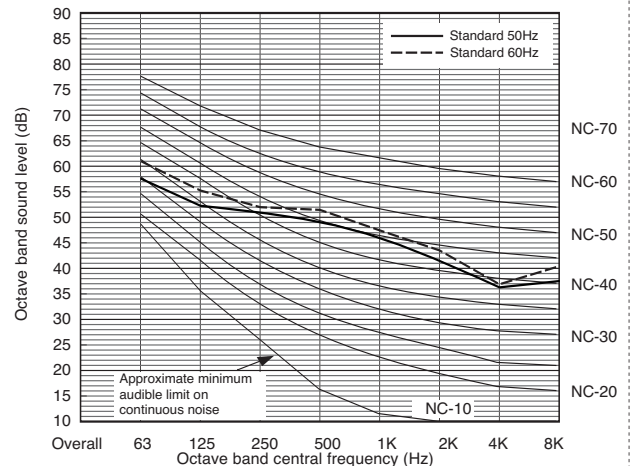
R410A Data G4

Measurement condition
PUMY-P100,125,140YHMA
PUMY-P100,125,140VHMA



Sound level of PUMY-P140YHMA,VHMA

Ref. : P140YHMA,VHMA-VBN-050093

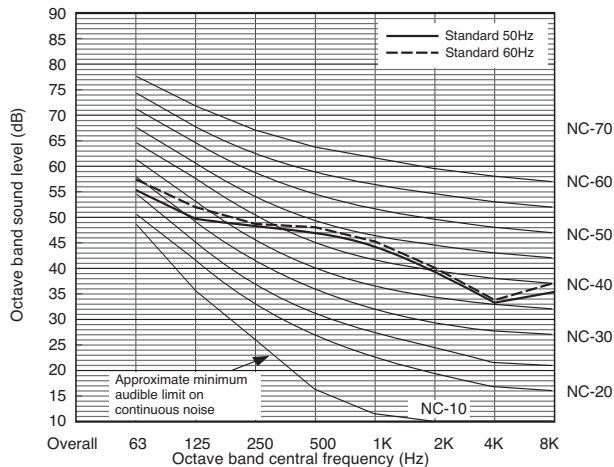


		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	57.2	51.7	49.9	49.8	45.5	41.1	35.9	37.1	51.0
	60Hz	60.9	55.4	52.1	51.4	47.5	43.2	37.1	40.3	53.0
Night mode	50/60Hz	-	-	-	-	-	-	-	-	-

* 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 PUMY-P100YHMA,VHMA

Ref. : P100YHMA,VHMA-VBN-050093

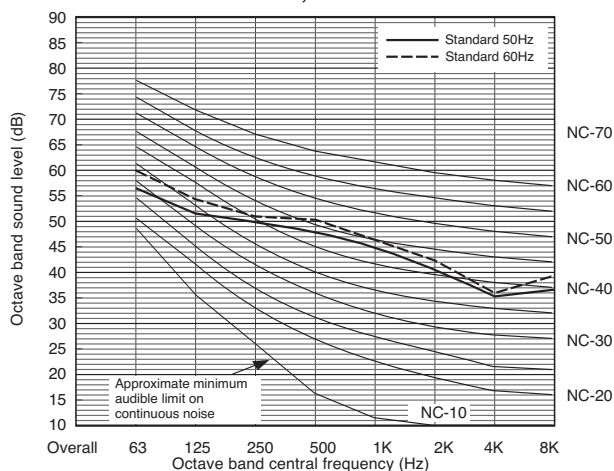


		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	55.2	49.7	47.9	47.8	43.5	39.1	33.9	35.1	49.0
	60Hz	58.9	53.4	50.1	49.4	45.5	41.2	35.1	38.3	51.0
Night mode	50/60Hz	-	-	-	-	-	-	-	-	-

* 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 PUMY-P125YHMA,VHMA

Ref. : P125YHMA,VHMA-VBN-050093

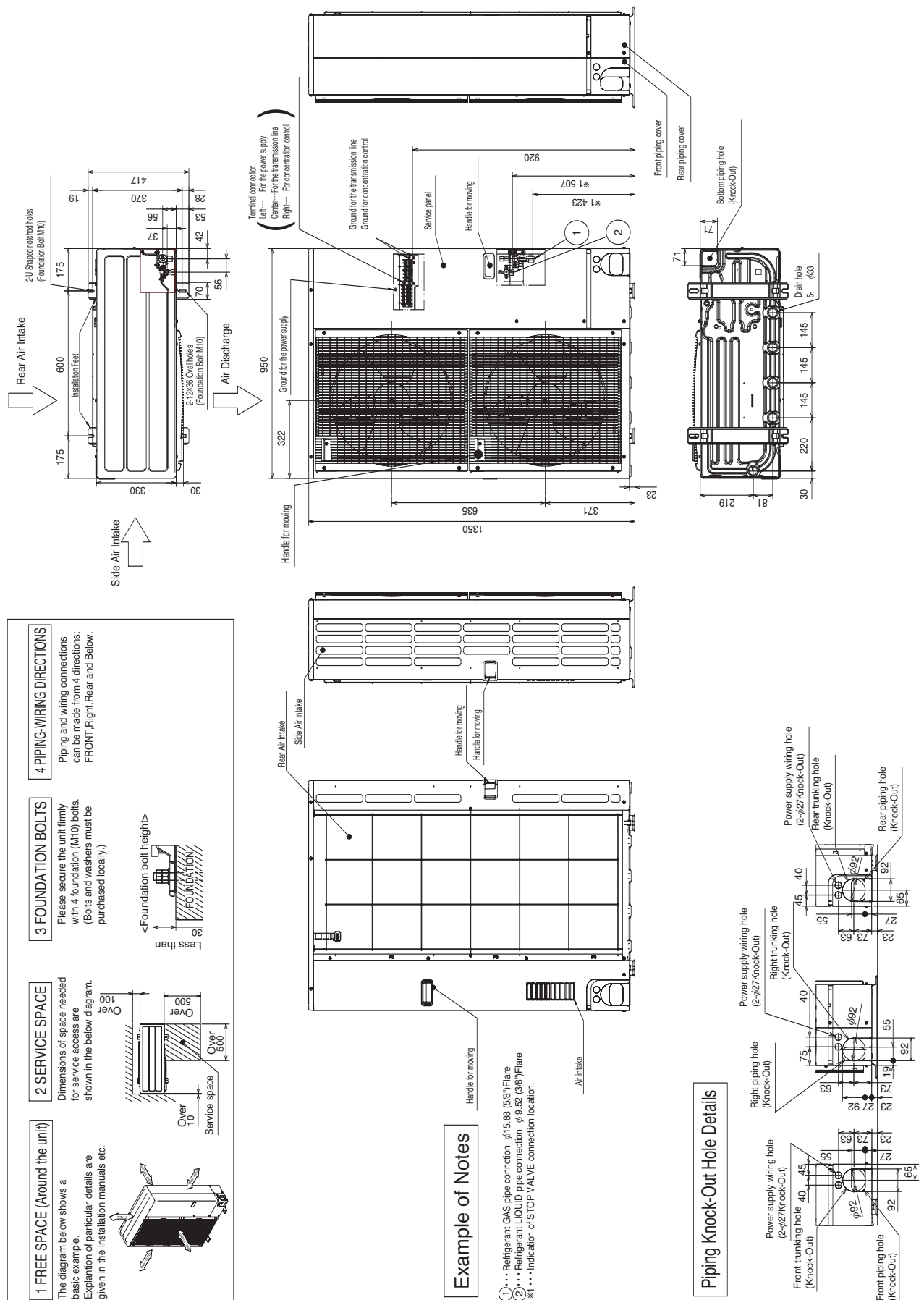


		63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Standard	50Hz	56.2	50.7	48.9	48.8	44.5	40.1	34.9	36.1	50.0
	60Hz	59.9	54.4	51.1	50.4	46.5	42.2	36.1	39.3	52.0
Night mode	50/60Hz	-	-	-	-	-	-	-	-	-

* 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.

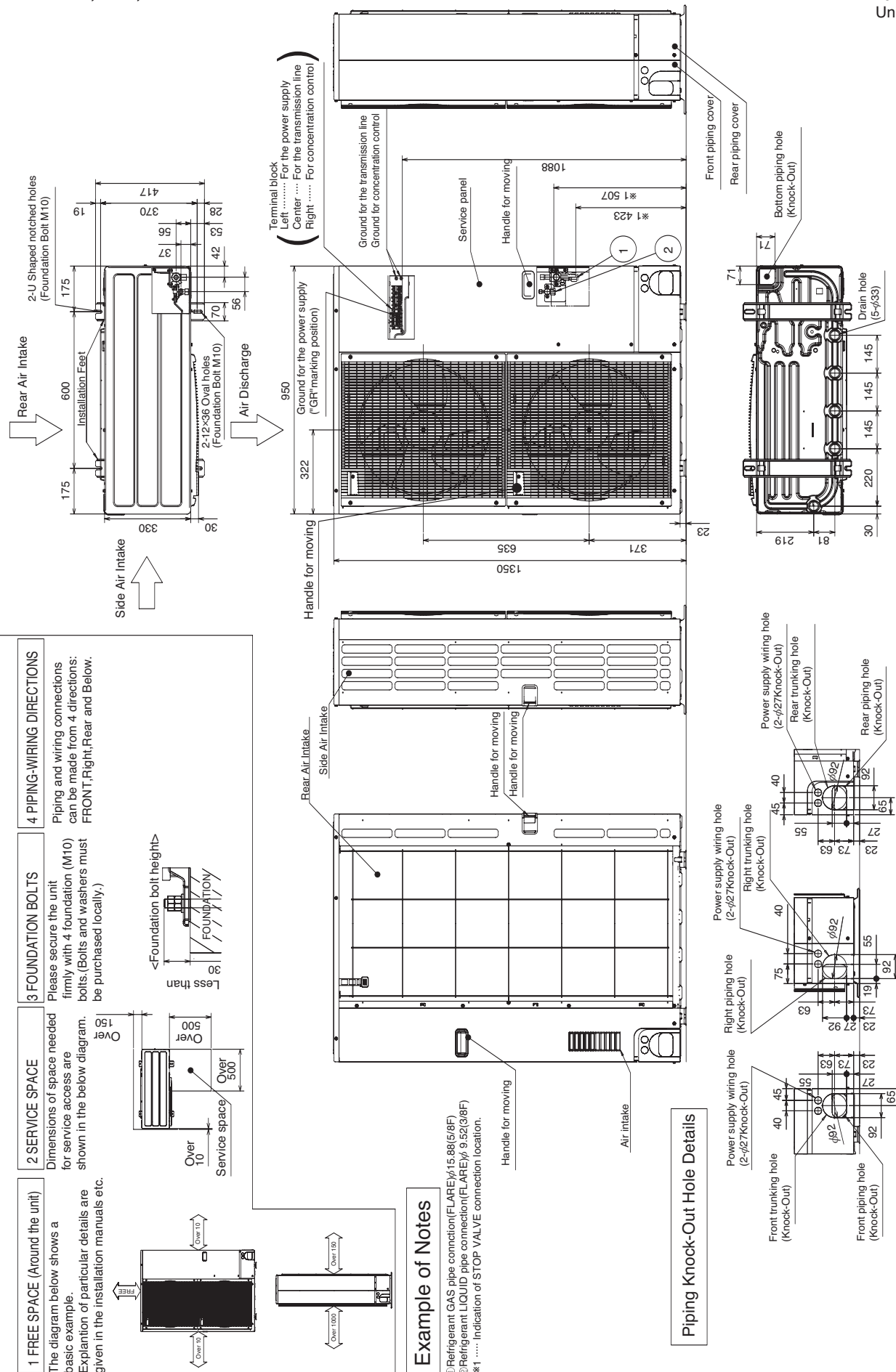
PUMY-P100,125,140YHMA

Draw : YHM-BK01-B328
Unit : mm



PUMY-P100,125,140VHMA

Drw. : VHM-BK01-B434
Unit : mm



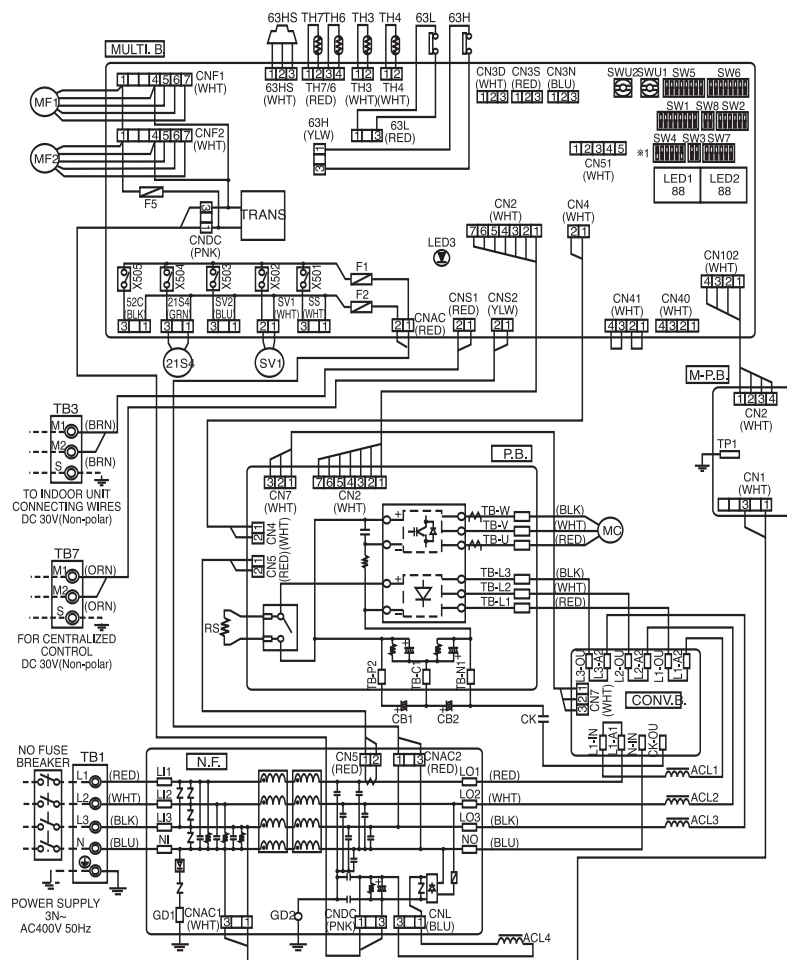
PUMY-P100,125,140YHMA

Drw. : YHM-RG79-V020

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block <Power Supply>	SV1	Connector<Bypass Valve>	N.F.	Noise Filter Circuit Board
TB3	Terminal Block <Transmission>	SS	Connector<For Option>	L1/L2/L3/N	Connection Terminal<L1/L2/L3/N-Power Supply>
TB7	Terminal Block <Centralized Control>	CN3D	Connector<For Option>	L01/L02/L03/N0	Connection Terminal<L1/L2/L3/N-Power Supply>
MC	Motor for Compressor	CN3S	Connector<For Option>	CNAC1	Connector<To Transmission Power Board>
MF1,MF2	Fan Motor	CN3N	Connector<For Option>	CNAC2	Connector<To Multi Controller Board>
21S4	Solenoid Valve<Four way valve>	CN51	Connector<For Option>	CNCT	Connector<To Power Circuit Board>
SV1	Solenoid Valve<Bypass valve>	X501-505	Relay	CN1	Connector<To Reactor>
TH3	Thermistor<Outdoor Pipe Temperature>	CONV.B.	Converter Circuit Board	FUSE	Fuse<6.3A>
TH4	Thermistor<Discharge Temperature>	L1-A1,L1-IN	Connection Terminal<L1-Power Supply>	M-P.B.	Transmission Power Board
TH6	Thermistor<Low Pressure Saturated Temperature>	L1-A2,L1-OU	Connection Terminal<L1-Power Supply>	CN1	Connector<To Noise Filter Circuit Board>
TH7	Thermistor<Outdoor Temperature>	L2-A2,L2-OU	Connection Terminal<L2-Power Supply>	CN2	Connector<To Multi Controller Board>
63HS	High Pressure Sensor<Discharge Pressure>	L3-A2,L3-OU	Connection Terminal<L3-Power Supply>		
63H	High Pressure Switch	N-IN	Connection Terminal		
63L	Low Pressure Switch	CK-OU	Connection Terminal		
CB1,CB2	Main Smoothing Capacitor	CN7	Connector<To Power Circuit Board>		
CK	Capacitor				
RS	Rush Current Protect Resistor				
ACL1-ACL4	Reactor				
P.B	Power Circuit Board				
TB-U/V/W	Connection Terminal<U/V/W-Phase>				
TB-L1/L2/L3	Connection Terminal<L1/L2/L3-Power Supply>				
TB-P2	Connection Terminal				
TB-C1	Connection Terminal				
TB-N1	Connection Terminal				
CN2	Connection <To Multi Controller Board>				
CN4	Connection <To Multi Controller Board>				
CN5	Connection <To Noise Filter Circuit Board>				
CNDC	Connection <To Multi Controller Board>				
MULTI.B.	Multi Controller Board				
F1,F2	Fuse<6.3A>				
F500	Fuse<3A>				
SW1	Switch<Display Selection>				
SW2	Switch<Function Selection>				
SW3	Switch<Test Run>				
SW4	Switch<Model Selection>				
SW5	Switch<Function Selection>				
SW6	Switch<Function Selection>				
SW7	Switch<Function Selection>				
SW8	Switch<Function Selection>				
SWU1	Switch<Unit Address Selection, 1st digit>				
SWU2	Switch<Unit Address Selection, 2nd digit>				
TRANS	Transformer				
LED1,2	Digital Indicator<Operation Inspection Display>				
LED3	LED<Power Supply to Main Microcomputer>				
CNS1	Connector<Multi System>				
CNS2	Connector<Centralized Control>				
CNAC	Connector<To Noise Filter Circuit Board>				
CNDC	Connector<To Noise Filter Circuit Board>				
CN2	Connector<To Power Circuit Board>				
CN4	Connector<To Power Circuit Board>				
CN40	Connector<Centralized Control Power Supply>				
CN41	Connector<For storing Jumper Connector>				
TH3	Connector<Thermistor>				
TH4	Connector<Thermistor>				
TH7/6	Connector<Thermistor>				
63HS	Connector<High Pressure Sensor>				
63H	Connector<High Pressure Switch>				
63L	Connector<Low Pressure Switch>				
CNF1,CNF2	Connector<Fan Motor>				
21S4	Connector<Four-way Valve>				

*1 MODEL SELECT 1:ON 0:OFF

MODELS	SW4
PUMY-P100YHMA	1 1 1 0 0 1 1 0
PUMY-P125YHMA	1 1 1 0 0 1 0 1
PUMY-P140YHMA	1 1 1 0 0 1 1 1



Cautions when Servicing

- ⚠ **WARNING:** When the main supply is turned off, the voltage [540 V] in the main capacitor will drop to 20 V in approx. 5 minutes (input voltage: 380 V). When servicing, make sure that LED1, LED2 on the outdoor circuit board goes out, and then wait for at least 5 minute. Components other than the outdoor board may be faulty: Check and take corrective action, referring to the service manual. Do not replace the outdoor board without checking.

NOTES:

- Refer to the wiring diagrams of the indoor units for details on wiring of each indoor unit.
- Self-diagnosis function
The indoor and outdoor units can be diagnosed automatically using the self-diagnosis switch (SW1) and LED1, LED2 (LED indication) found on the multi-controller of the outdoor unit.
LED indication : Set all contacts of SW1 to OFF.
- During normal operation
The LED indicates the drive state of the controller in the outdoor unit.

Bit	1	2	3	4	5	6	7	8
Indication	Compressor operated	52C	21S4	SV1	(SV2)	—	—	Always lit

When fault requiring inspection has occurred

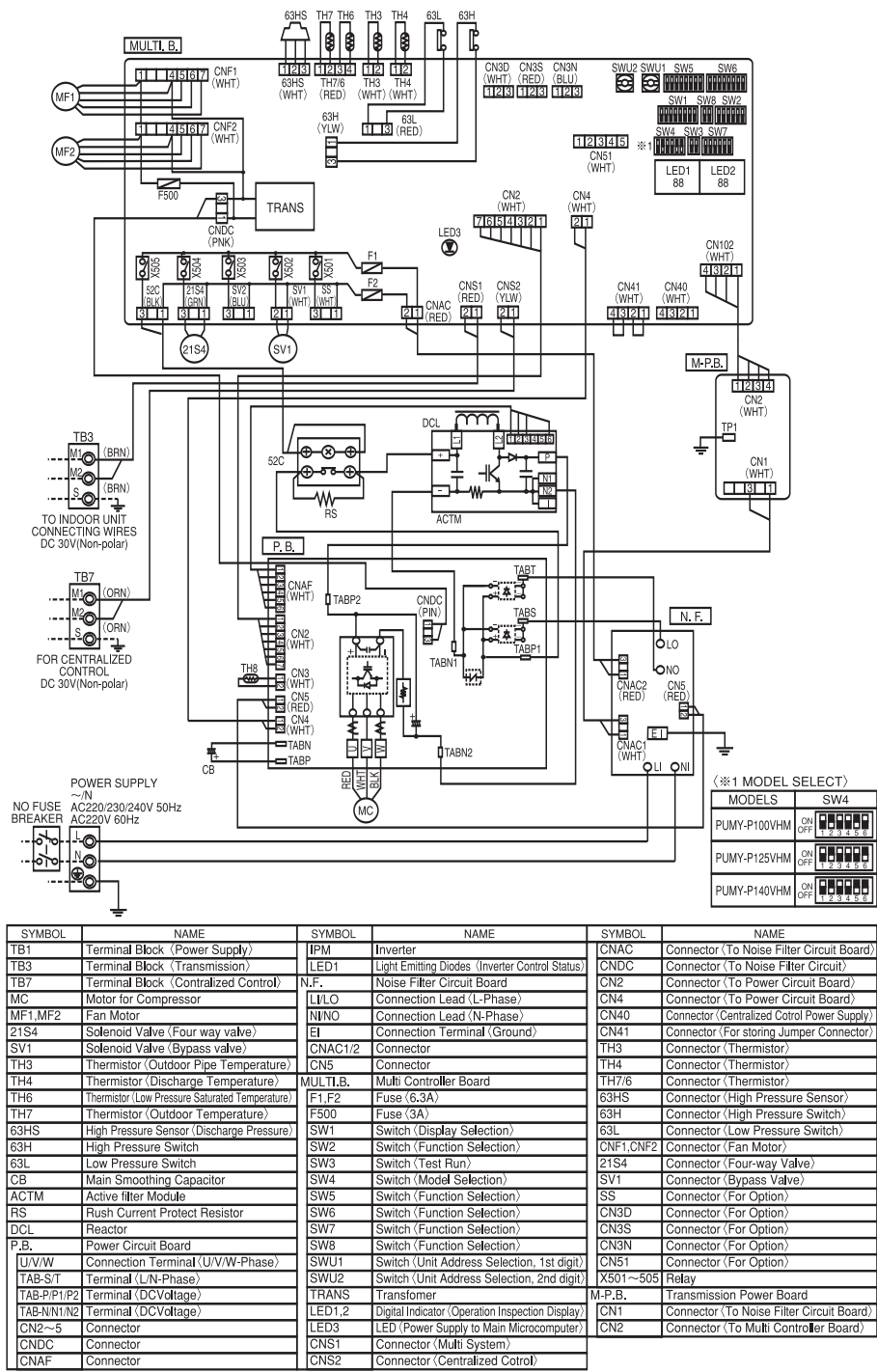
The LED alternately indicates the inspection code and the location of the unit in which the fault has occurred.

[Example]
When the compressor and SV1 are turned during cooling operation.



PUMY-P100,125,140VHMA

Drw. : VHM-RG79-V221



Cautions when Servicing

- ⚠ WARNING: When the main supply is turned off, the voltage [340 V] in the main capacitor will drop to 20 V in approx. 2 minutes (input voltage: 240 V). When servicing, make sure that LED1, LED2 on the outdoor circuit board goes out, and then wait for at least 1 minute.
- Components other than the outdoor board may be faulty: Check and take corrective action, referring to the service manual. Do not replace the outdoor board without checking.

NOTES:

- Refer to the wiring diagrams of the indoor units for details on wiring of each indoor unit.
- Self-diagnosis function
- The indoor and outdoor units can be diagnosed automatically using the self-diagnosis switch (SW1) and LED1, LED2 (LED indication) found on the multi-controller of the outdoor unit.
- LED indication : Set all contacts of SW1 to OFF.

- During normal operation
- The LED indicates the drive state of the controller in the outdoor unit.

Bit	1	2	3	4	5	6	7	8
Indication	Compressor operated	52C	21S4	SV1	(SV2)	—	—	Always lit

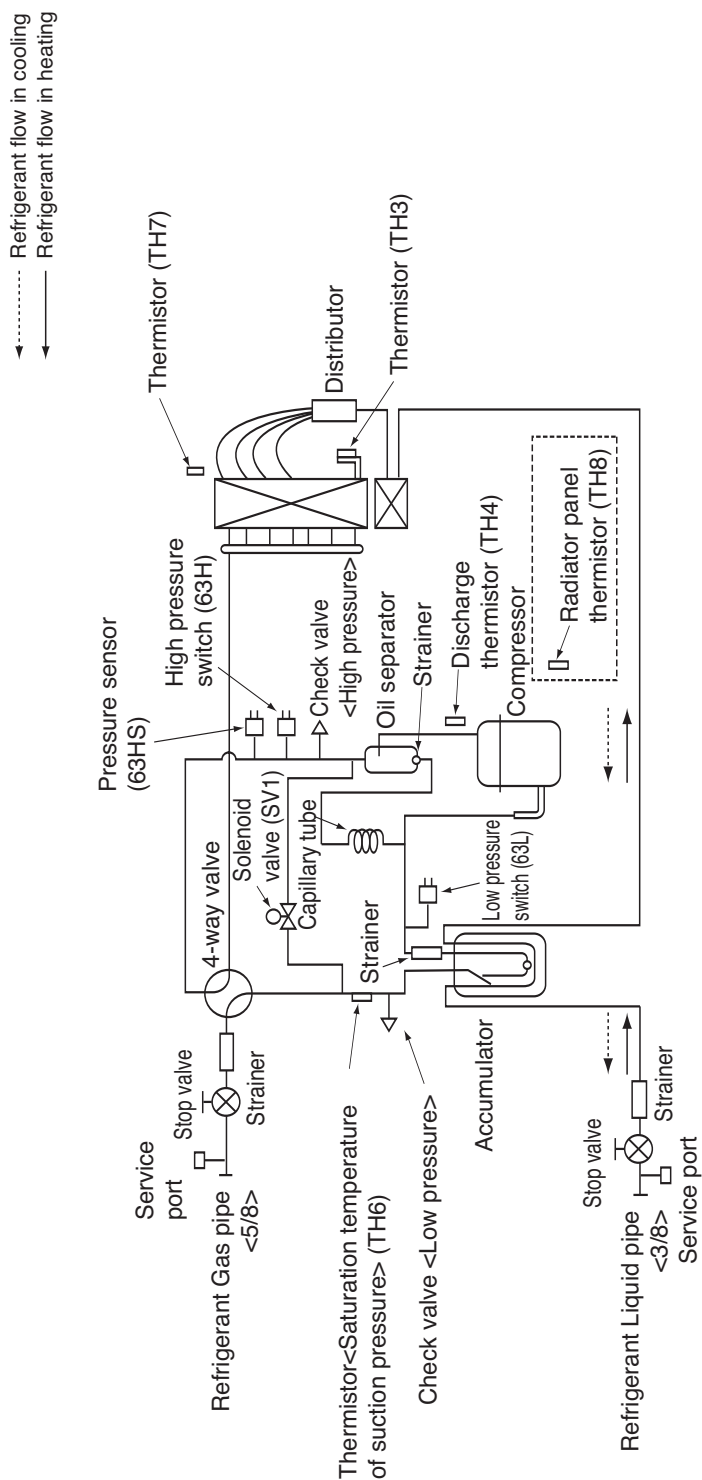
- When fault requiring inspection has occurred
- The LED alternately indicates the inspection code and the location of the unit in which the fault has occurred.

(Example)

When the compressor and SV1 are turned during cooling operation.

PUMY-P100,125,140YHMA
PUMY-P100,125,140VHMA

Drw. : RC_VBN-050092



Refrigerant piping specifications <dimensions of flared connector>

Capacity	Item	Liquid piping	Gas piping
Indoor unit	P20, P25, P32, P40, P50	φ 6.35 <1/4">Flare	φ 12.7 <1/2">Flare
	P63, P80, P100 P125, P140	φ 9.52 <3/8">Flare	φ 15.88 <5/8">Flare
	P100, P125, P140	φ 9.52 <3/8">Flare	φ 15.88 <5/8">Flare

