

# 2002 DATA BOOK

MITSUBISHI ELECTRIC EUROPE B.V.

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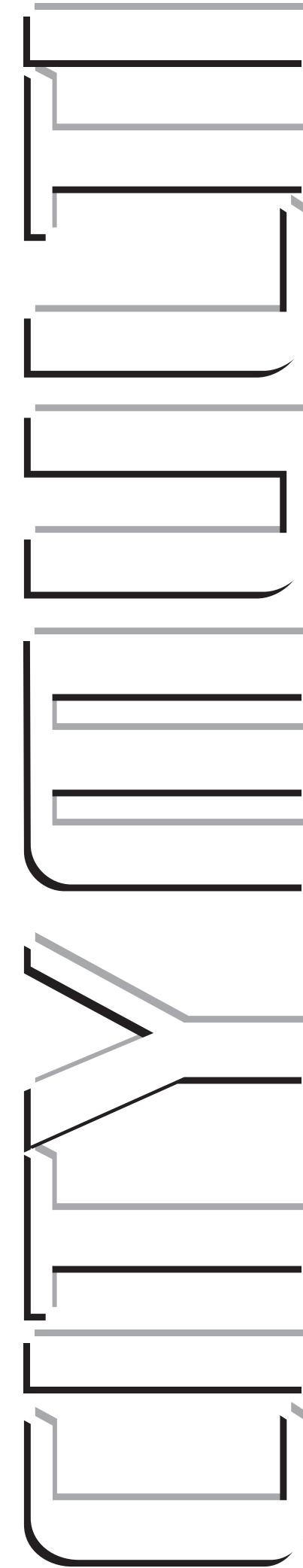
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# CITY MULTI DATA BOOK 2002

MITSUBISHI  
ELECTRIC  
AIR CONDITIONING SYSTEMS



MITSUBISHI  
ELECTRIC  
AIR CONDITIONING SYSTEMS

CITY MULTI

# DATA BOOK



2002  
AIR CONDITIONERS CITY MULTI

# CITY MULTI

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## CITY MULTI OUTDOOR UNIT

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#### R407C refrigerant & CE units

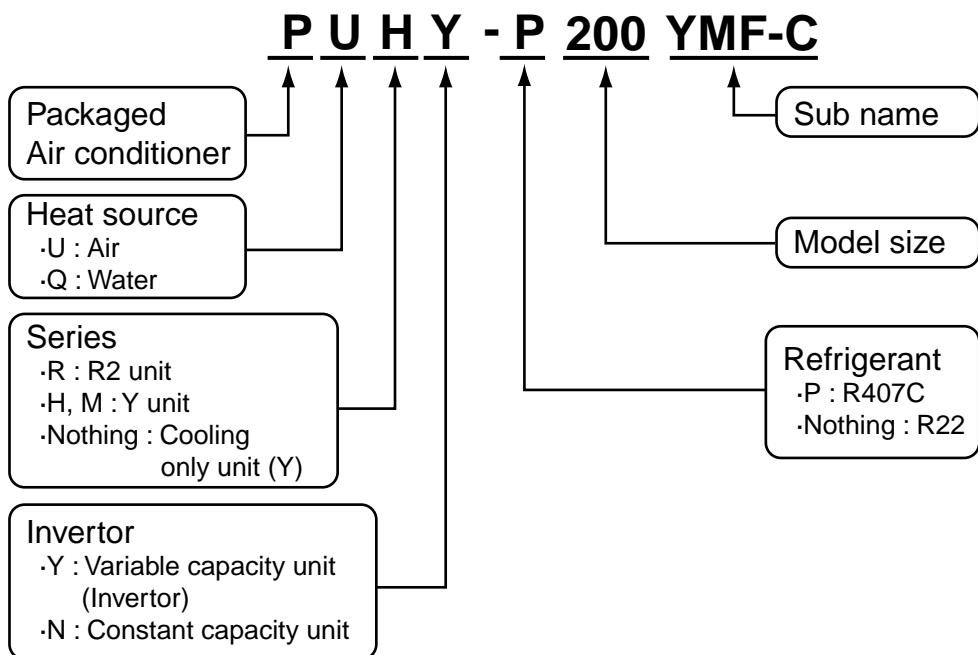
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WR2 series	PQRY-P200-250YMF-C .....	95
Cooling only	PUY-P200-250YMF-C .....	123

# Introduction

## CITY MULTI OUTDOOR UNITS

Standard	Refrigerant	Series	Model Name	71 (2.8HP)	125 (5HP)	200 (8HP)	250 (10HP)	315 (13HP)	400 (16HP)	500 (20HP)	600 (24HP)	650 (26HP)	700 (28HP)	750 (30HP)
CE	R407C	Y series	PUMY-P-YMA		●									
			PUHY-P-YMF-C			●	●							
		Big Y series	PUHY-P-YMF-B						●	●				
		Super Y series	PUHY-P-YSMF-B								●	●	●	●
		R2 series	PURY-P-YMF-C			●	●							
									●	●				
		WR2 series	PQRY-P-YMF-C			●	●							
		Cooling Only	PUY-P-YMF-C			●	●							
Non-CE	R22	Y series	PUMY-YMA		●									
			PUHY-YMF-C			●	●							
		Big Y series	PUHY-YMF-B						●	●				
		Super Y series	PUHY-YSMF-B								●	●	●	●
		R2 series	PURY-YMF-C			●	●							
		Cooling Only	PUY-YMF-C			●	●							
		Y series	PUMY-YM		●									
		Big Y series	PUHY-YMC					●	●	●				
Non-CE	R22	Heat Pump	PUMY-VM	●	●									
			PUHY-TM-C			●	●							
		Cooling Only	PUY-TM-C			●	●							

Meaning of model name



# PUMY-P-125YMA

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Y-5(R407C)

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# 1. Specifications

Model name			PUMY-P125YMA				
			Cooling		Heating		
Capacity		kW	*1	14.0	16.0		
		kcal/h	*2	12,500	-		
Power source			3N ~ 380/400/415V 50Hz				
Power input		kW	5.95		5.58		
Current		A	9.6/9.1/8.8		9.2/8.8/8.5		
Fan	Type × Quantity		Propeller fan × 2				
	Airflow rate		90				
	Motor output		0.06 × 2				
Compressor	Type		Hermetic				
	Motor output		3.5				
	Crankcase heater		-				
Refrigerant / Lubricant			R407C/MEL32				
External finish			Steel plate painting with polyester powder < MUNSELL 5Y8/1 >				
External dimension		mm	1280(H)×1020(W)×350+30(D)				
Protection devices	High pressure protection		3.0MPa				
	Compressor / Fan		Internal thermal switch / Internal thermal switch				
	Inverter		Over current protection , Overheat protection				
Refrigerant piping diameter		Liquid / Gas	φ9.52 / φ19.05 (Flare)				
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity				
	Model / Quantity		Model 20 ~ 125 / 1 ~ 8				
Noise level		dB<A>	*3	54			
Net weight		kg	127				
Operating temperature range			Indoor: 15°CWB ~ 24°CWB Outdoor: -5°CDB ~ 46°CDB	Indoor: 15°CDB ~ 27°CDB Outdoor: -15°CWB ~ 15.5°CWB			

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

*1 Cooling Indoor : 27°CDB/19°CWB	Outdoor : 35°CDB	*2 Cooling Indoor : 27°CDB/19.5°CWB	Outdoor : 35°CDB
Heating Indoor : 20°CDB	Outdoor : 7°CDB/6°CWB	Pipe length : 5m	Height difference : 0m
Pipe length : 7.5m	Height difference : 0m		

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

## 2. Capacity Table

### 2-1. Correction by temperature

#### Cooling

- Standard Specifications

		PUMY-P125YMA
Capacity	kW	14.0
Input	kW	5.95
Source	V	380/400/415
Current	A	9.6/9.1/8.8

Y-5(R407C)

- Calculation

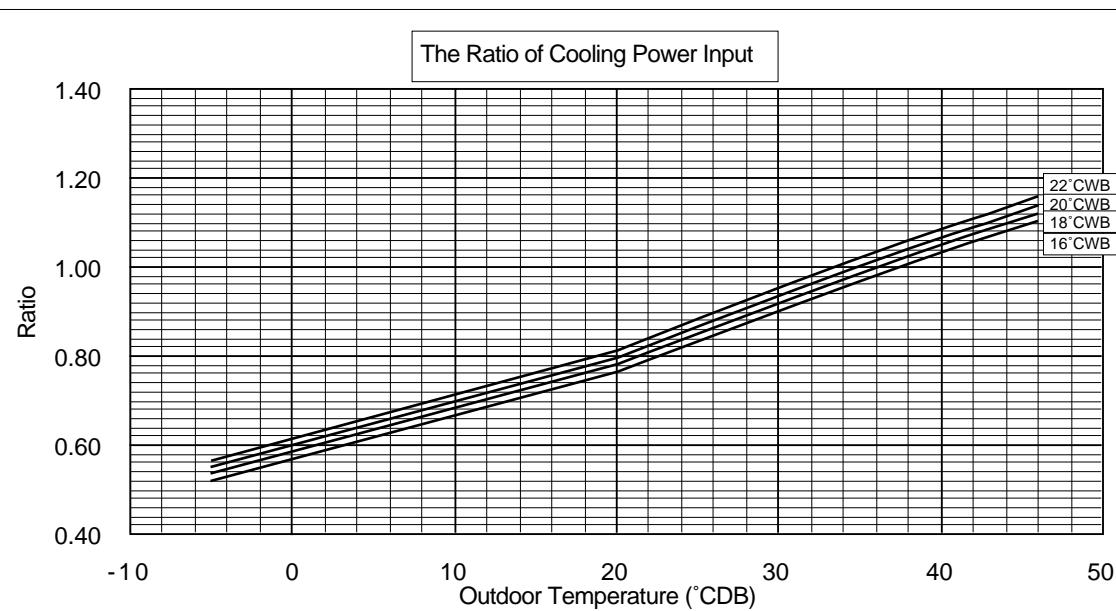
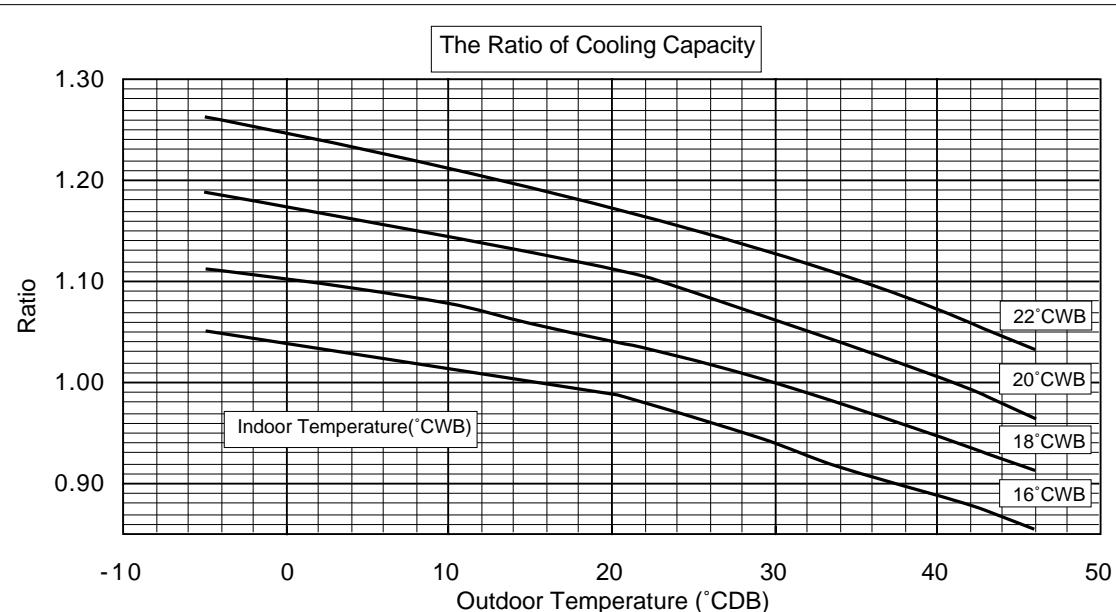
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.94}$$

\* Capacity'  
Input'  
Current'

After correction



## Heating

- Standard Specifications

		PUMY-P125YMA
Capacity	kW	16.0
Input	kW	5.58
Source	V	380/400/415
Current	A	9.2/8.8/8.5

- Calculation

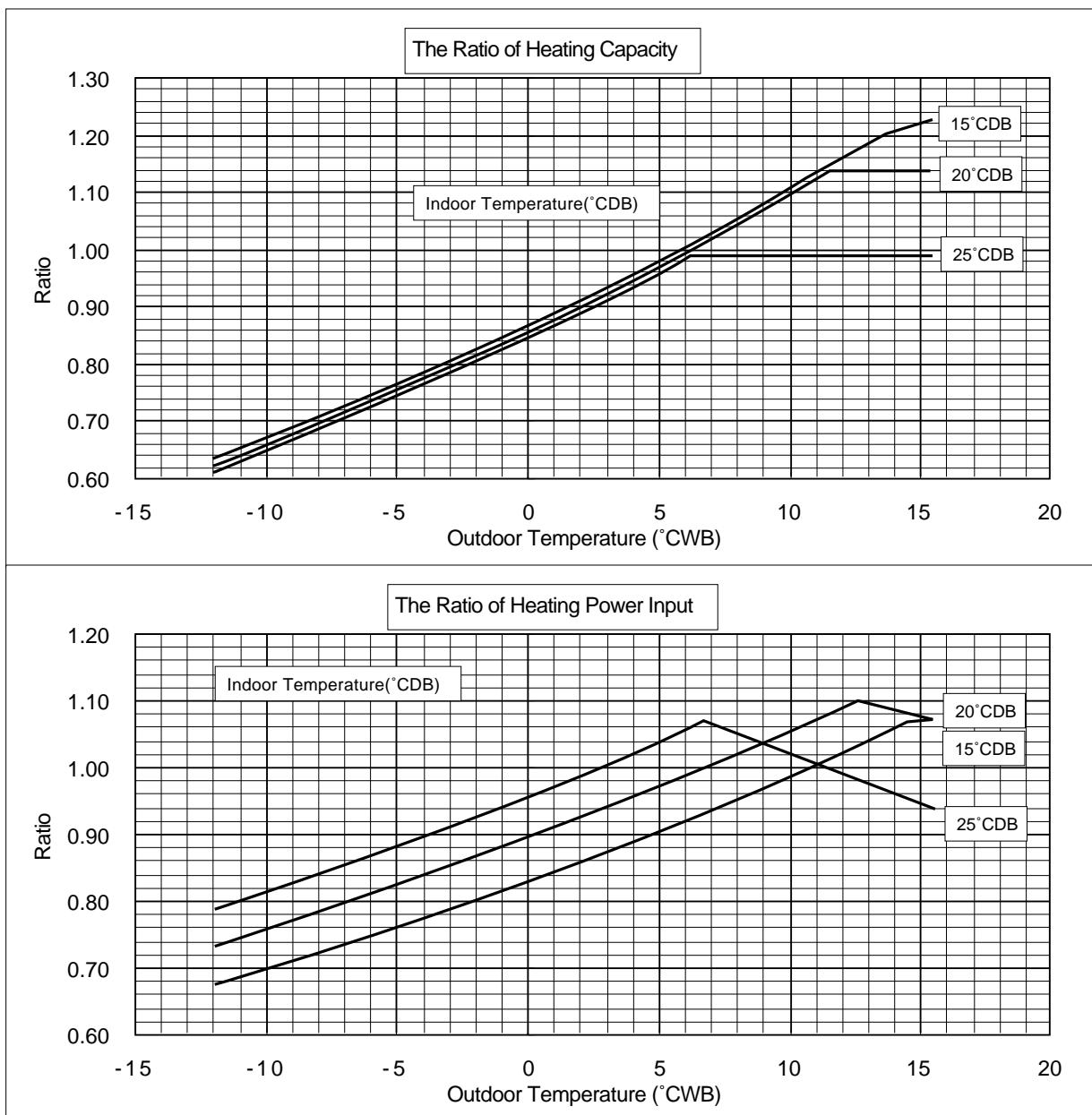
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.92}$$

\*Capacity'  
Input'  
Current'

} After correction

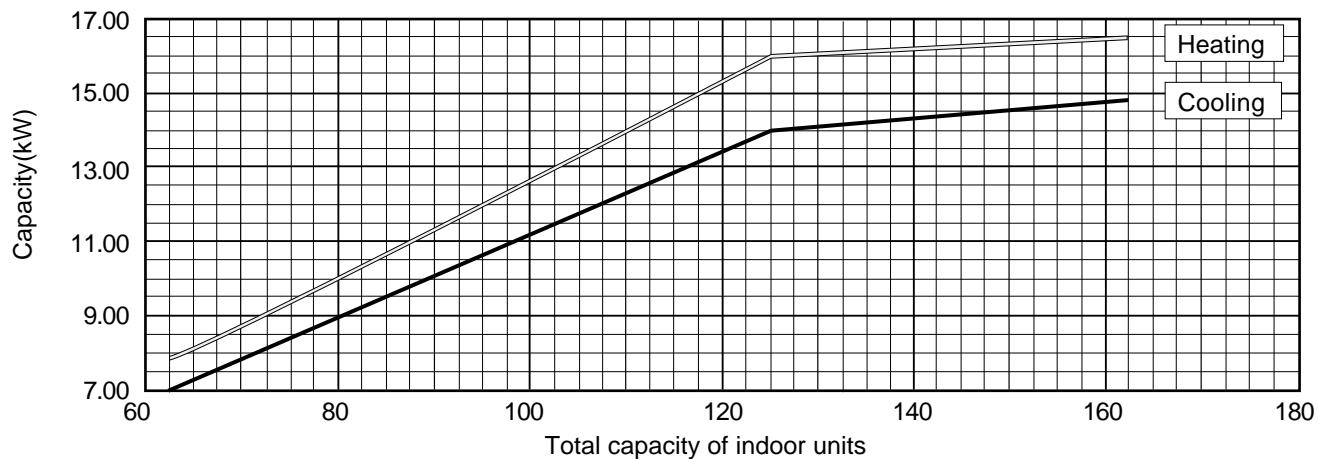


## 2-2. Correction by total indoor

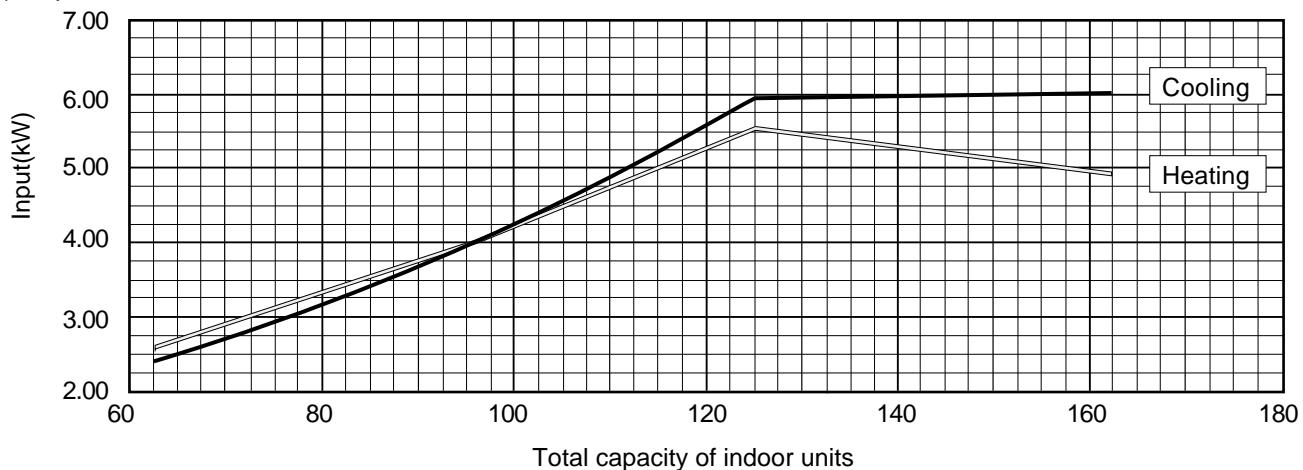
**PUMY-P125YMA**

**Y-5(R407C)**

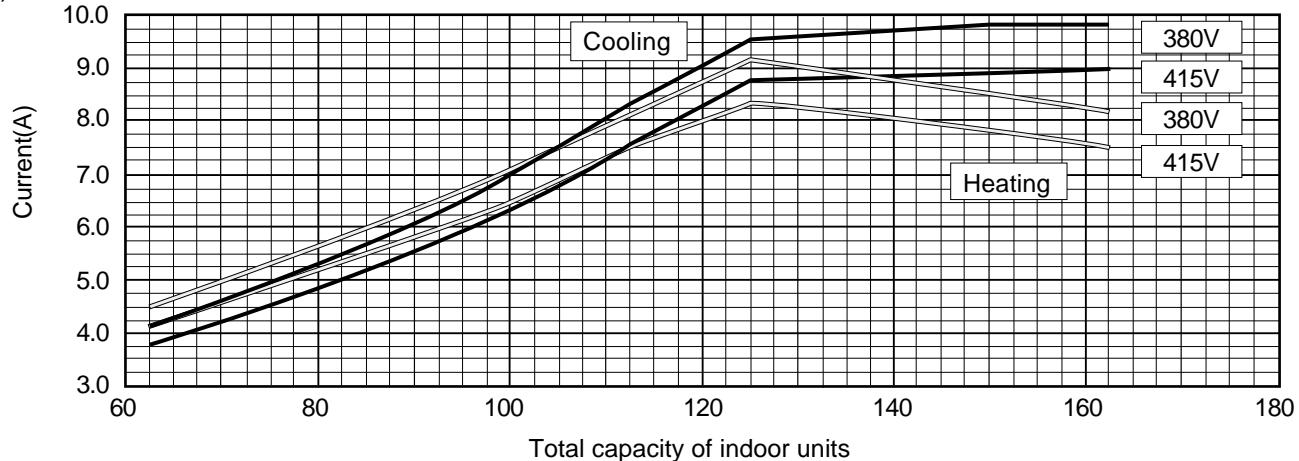
### 1) Capacity



### 2) Input



### 3) Current

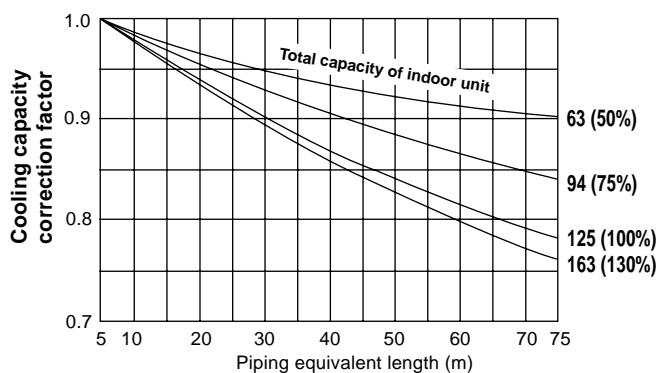


## 2-3 Correction by refrigerant piping length

To obtain a decrease in cooling/heating capacity due to refrigerant piping extension, multiply by the capacity correction factor based on the refrigerant piping equivalent length in the table below.

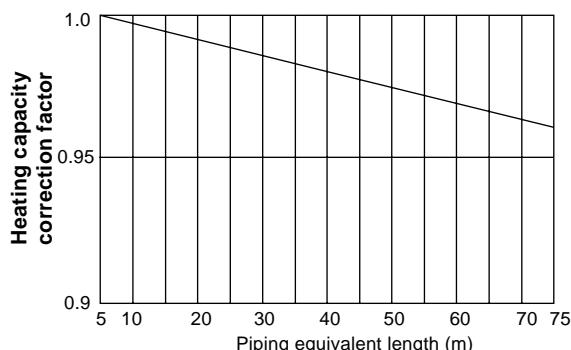
- Cooling capacity correction

PUMY-P125YMA



- Heating capacity correction

PUMY-P125YMA



- How to obtain piping equivalent length

① PUMY-P125YMA

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

## 2-4 Correction at frosting and defrosting

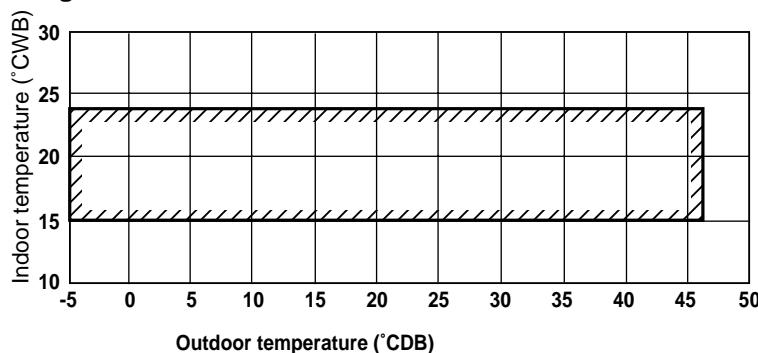
When a decrease in heating capacity due to frosted and defrosting operations is considered, the value multiplied by the correction factor in the table below represents the heating capacity.

Correction factor table

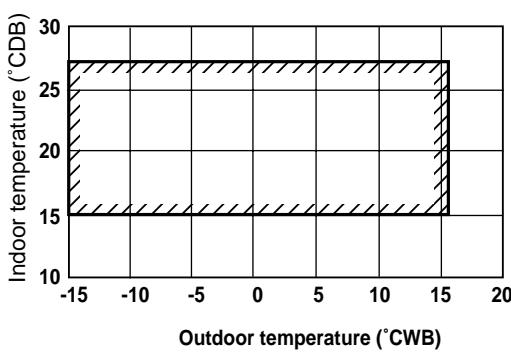
Outdoor inlet air temp (°CWB)	6	4	2	0	-2	-4	-6	-8	-10
Correction factor	1.0	0.98	0.89	0.88	0.89	0.9	0.95	0.95	0.95

## 2-5 Operation limit

- Cooling



- Heating

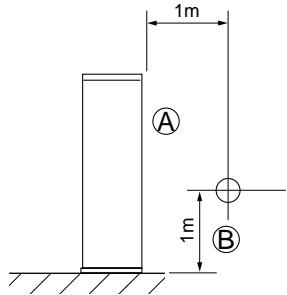


### 3. Sound Levels

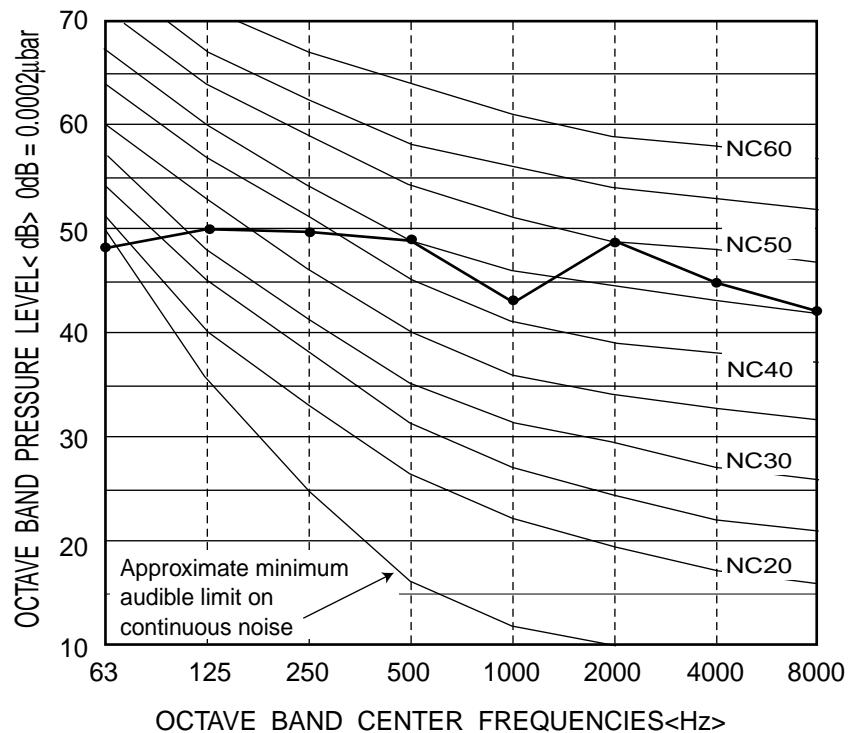
Y-5(R407C)

PUMY-P125YMA

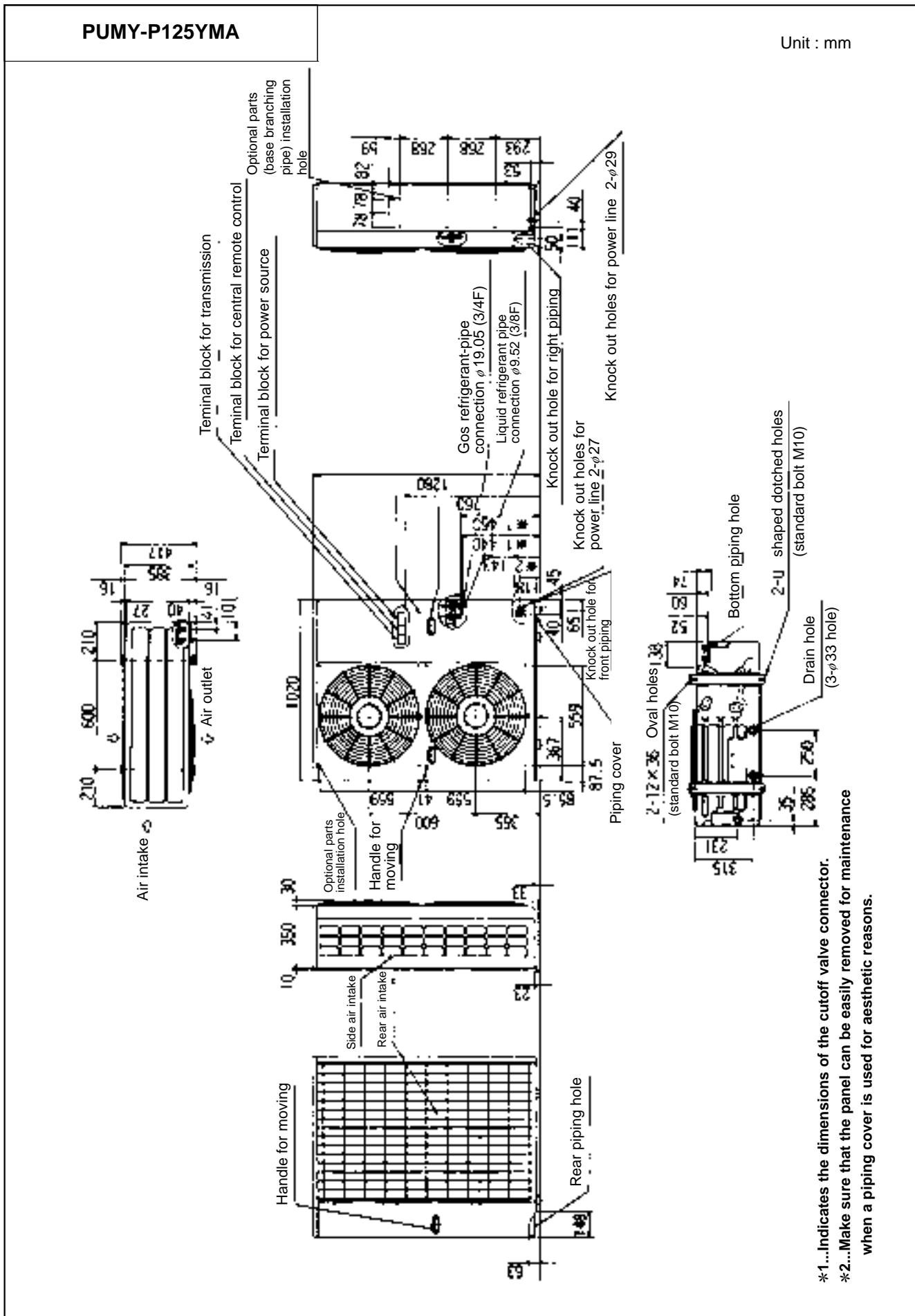
Measurement condition



Sound pressure level in anechoic room
57 dB (A)



## 4. External Dimensions

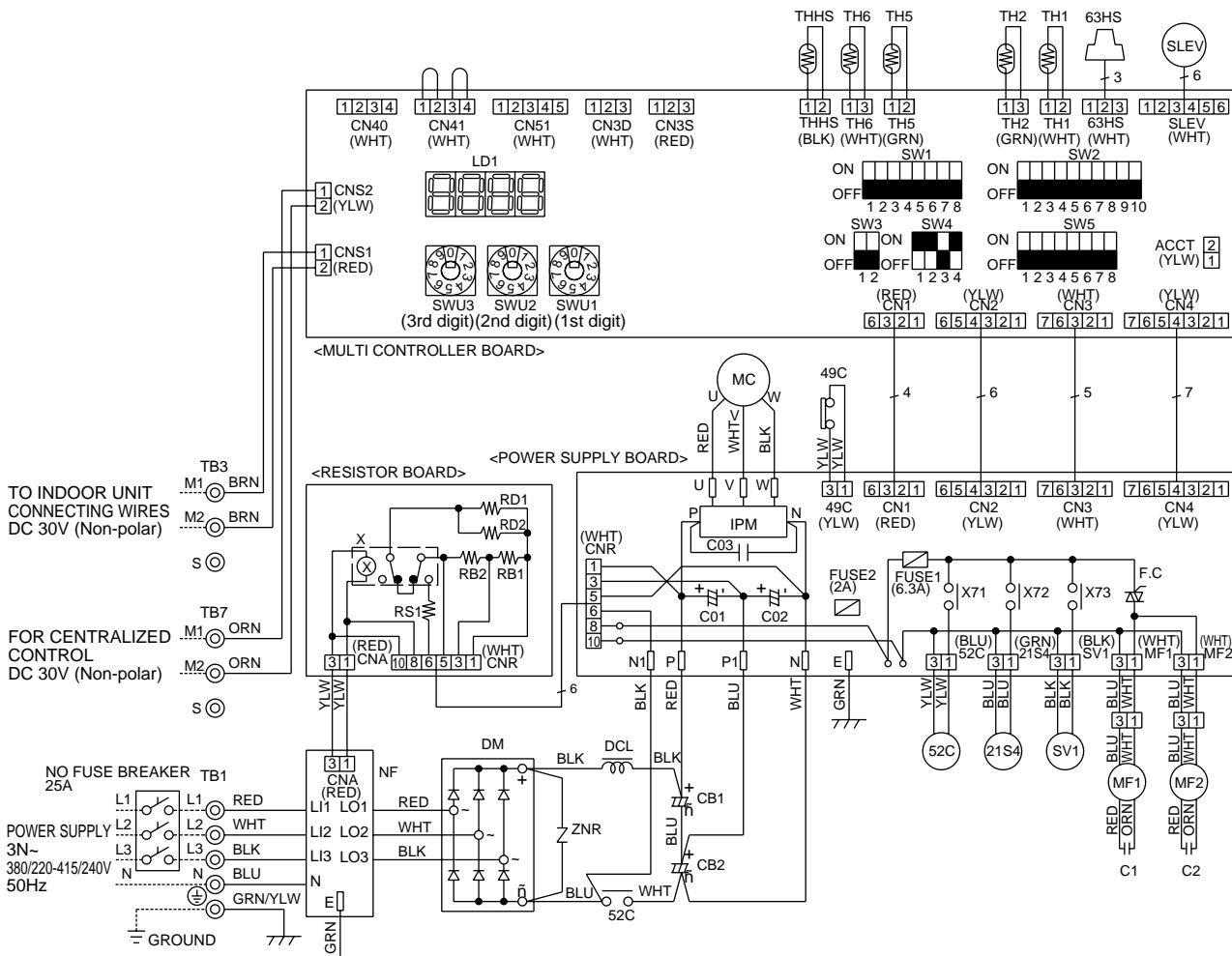


# 5. Electrical Wiring Diagram

## PUMY-P125YMA

### <SYMBOL EXPLANATION>

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
ACCT	CONNECTOR <CURRENT DETECTION>	C1,C2	FAN MOTOR CAPACITOR	SV1	SOLENOID VALVE <HOT GAS BYPASS>	TH2	THERMISTOR <LOW PRESSURE SATURATED TEMPERATURE DETECTION>
CB1,CB2	SMOOTHING CAPACITOR	DM	DIODE MODULE	SW1	SWITCH <DISPLAY SELECTION>	TH5	THERMISTOR <PIPE TEMPERATURE DETECTION & JUDGING DEFROST>
CNA	CONNECTOR <POWER SUPPLY>	DCL	REACTOR	SW2	SWITCH <FUNCTION SELECTION>	TH6	THERMISTOR <OUTDOOR TEMPERATURE DETECTION>
CNR	CONNECTOR <DISCHARGE CIRCUIT, POWER SUPPLY>	F.C	FAN CONTROL	SW3	SWITCH <TEST RUN>		
CNS1	CONNECTOR <MULTI SYSTEM>	FUSE1	FUSE (6.3A)	SW4	SWITCH <MODEL SELECTION>	X	RELAY
CNS2	CONNECTOR <CENTRALIZED CONTROL>	FUSE2	FUSE (2A)	SW5	SWITCH <FUNCTION SELECTION>	X71	RELAY <MAGNETIC CONTACTOR>
CN1	CONNECTOR <CONTROLLER DRIVE CONTROL>	IPM	INTELLIGENT POWER MODULE	SWU1	SWITCH <UNIT ADDRESS SELECTION 1ST DIGIT>	X72	RELAY <4-WAY VALVE>
CN2	CONNECTOR <POWER SYNC SIGNAL PROTECTION>	LD1	DIGITAL INDICATION LED <OPERATION INSPECTION INDICATION>	SWU2	SWITCH <UNIT ADDRESS SELECTION 2ND DIGIT>	X73	RELAY <SOLENOID VALVE>
CN3	CONNECTOR <POWER SUPPLY 30V,12V,5V>			SWU3	SWITCH <UNIT ADDRESS SELECTION 3RD DIGIT>	ZNR	VARISTOR
CN4	CONNECTOR <INVERTER SIGNAL 5V>	MC	COMPRESSOR <INNER THERMOSTAT>	TB1	TERMINAL BLOCK <POWER SUPPLY>	21S4	4-WAY VALVE
CN40	CONNECTOR <CENTRALIZED CONTROL POWER SUPPLY>	MF1,MF2	FAN MOTOR <INNER THERMOSTAT>	TB3	TERMINAL BLOCK <TRANSMISSION>	49C	THERMAL SWITCH <COMPRESSOR>
CN41	CONNECTOR <FOR STORING JUMPER CONNECTOR>	NF	NOISE FILTER	TB7	TERMINAL BLOCK <CENTRALIZED CONTROL>	52C	MAGNETIC CONTACTOR
CN51	CONNECTOR <COMPRESSOR DRIVE SIGNAL OUTPUT>	RS1	RESISTOR <RUSH CURRENT PROTECT>	THHS	THERMISTOR <IPM RADIATOR PANEL TEMPERATURE DETECTION>	63HS	HIGH PRESSURE SENSOR <DISCHARGE PRESSURE DETECTION>
CN3D	CONNECTOR <AUTO CHANGE OVER SIGNAL>	RB1,RB2	RESISTOR <VOLTAGE BALANCE ADJUSTMENT>	TH1	THERMISTOR <DISCHARGE TEMPERATURE DETECTION>		
CN3S	CONNECTOR <DEMAND SIGNAL>	RD1,RD2	RESISTOR <DISCHARGE>				
C01,C02	SMOOTHING CAPACITOR	SLEV	EXPANSION VALVE				
C03	CAPACITOR <FILTER>						



NOTES : 1. Refer to the wiring diagrams of the indoor units for details on wiring of each indoor unit.

2. Symbols used in wiring diagram above are. (◎): Terminal block, (□□□): Connector, (□): Insertion tab.

3. Self-diagnosis function

The indoor and outdoor units can be diagnosed automatically using the self-diagnosis switch (SW1) and LD1(LED indication) found on the multi-controller of the outdoor unit.

LED indication : Set all contacts of SW1 to OFF.

1. During normal operation

The LED indicates the drive state of the controller in the outdoor unit.

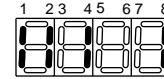
Bit	1	2	3	4	5	6	7	8
Indication	Compressor operated	52C	21S4	SV1	-	-	-	Always lit

2. 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)

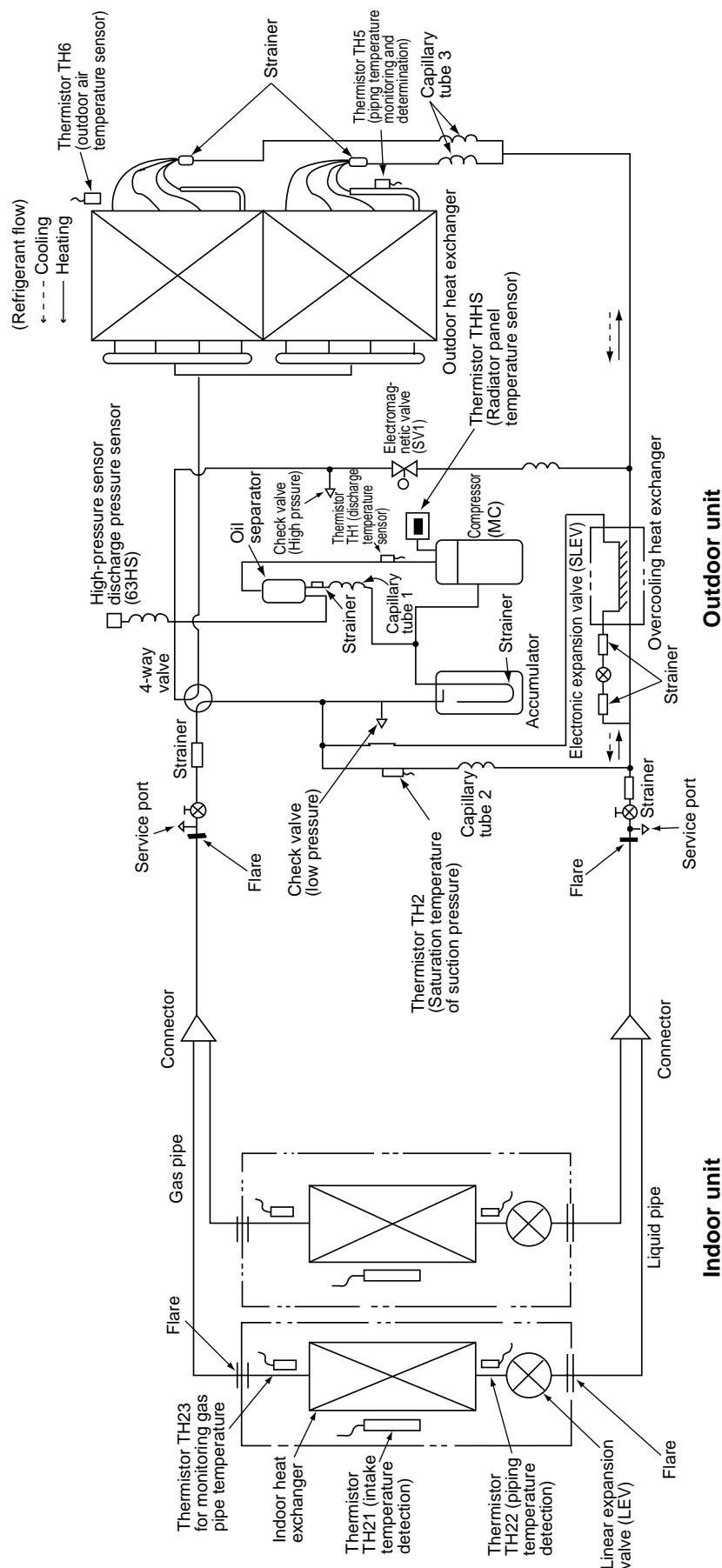
When the compressor and SV1 are turned during cooling operation.



## 6. Refrigerant Circuit Diagram And Thermal Sensor

PUMY-P125YMA

Y-5(R407C)





# PUHY-P200YMF-C, PUHY-P250YMF-C

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Y-8,10(R407C)

# 1. Specifications

Model name		PUHY-P200YMF-C				
		Cooling		Heating		
Capacity	kW	*1	22.4	25.0		
	kcal/h	*2	20,000	-		
Power source		3N ~ 380/400/415V 50/60Hz				
Power input		kW	8.64	7.98		
Current		A	14.5/13.8/13.3	13.4/12.7/12.3		
Fan	Type X Quantity	Propeller fan X 1				
	Airflow rate	m³/min	185			
	Motor output	kW	0.38			
Compressor	Type	Hermetic				
	Motor output	kW	5.5			
	Crankcase heater	kW	0.062(240V)			
Refrigerant / Lubricant		R407C/MEL32				
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>				
External dimension		mm	1715(H)X990(W)X840(L)			
Protection devices	High pressure protection		2.94MPa			
	Compressor / Fan		Over current protection / Thermal switch			
	Inverter		DC bus current protection, thermal switch			
Refrigerant piping diameter		Liquid / Gas	ø12.7 flare / ø25.4 Flange			
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity			
	Model / Quantity		Model 20 ~ 250 / 1 ~ 13			
Noise level		dB<A>	*3	56		
Net weight		kg	225			
Operating temperature range		Indoor:15°CWB ~ 24°CWB Outdoor:-5°CDB ~ 43°CDB (0°CDB ~ 43°CDB with outdoor unit at lower position)		Indoor:15°CDB ~ 27°CDB Outdoor:-15°CWB ~ 15.5°CWB		

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 Cooling Indoor : 27°CDB/19°CWB Outdoor : 35°CDB  
 Heating Indoor : 20°CDB Outdoor : 7°CDB/6°CWB  
 Pipe length : 7.5m Height difference : 0m

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

Model name		PUHY-P250YMF-C				
		Cooling		Heating		
Capacity	kW	*1	28.0	31.5		
	kcal/h	*2	25,000	-		
Power source		3N ~ 380/400/415V 50/60Hz				
Power input		kW	10.89	10.15		
Current		A	18.3/17.4/16.8	17.1/16.2/15.6		
Fan	Type X Quantity	Propeller fan X 1				
	Airflow rate	m³/min	185			
	Motor output	kW	0.38			
Compressor	Type	Hermetic				
	Motor output	kW	7.5			
	Crankcase heater	kW	0.062(240V)			
Refrigerant / Lubricant		R407C/MEL32				
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>				
External dimension		mm	1715(H)X990(W)X840(L)			
Protection devices	High pressure protection	2.94MPa				
	Compressor / Fan	Over current protection / Thermal switch				
	Inverter	DC bus current protection, thermal switch				
Refrigerant piping diameter		Liquid / Gas	ø12.7 flare / ø28.58 Flange			
Indoor unit	Total capacity	50 ~ 130% of outdoor unit capacity				
	Model / Quantity	Model 20 ~ 250 / 1 ~ 16				
Noise level		dB<A>	*3	57		
Net weight		kg	231			
Operating temperature range		Indoor:15°CWB ~ 24°CWB Outdoor:-5°CDB ~ 43°CDB (0°CDB ~ 43°CDB with outdoor unit at lower position)		Indoor:15°CDB ~ 27°CDB Outdoor:-15°CWB~15.5°CWB		

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 Cooling Indoor : 27°CDB/19°CWB Outdoor : 35°CDB

\*2 Cooling Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

Heating Indoor : 20°CDB

Outdoor : 7°CDB/6°CWB

Pipe length : 5m

Height difference : 0m

Pipe length : 7.5m

Height difference : 0m

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

## 2. Capacity Tables

### 2-1. Correction by temperature

#### Cooling

- Standard Specifications

	PUHY-P200YMF-C	PUHY-P250YMF-C
Capacity kW	22.4	28.0
Input kW	8.64	10.89
Source V	380/400/415	
Current A	14.5/13.8/13.3	18.3/17.4/16.8

- Calculation

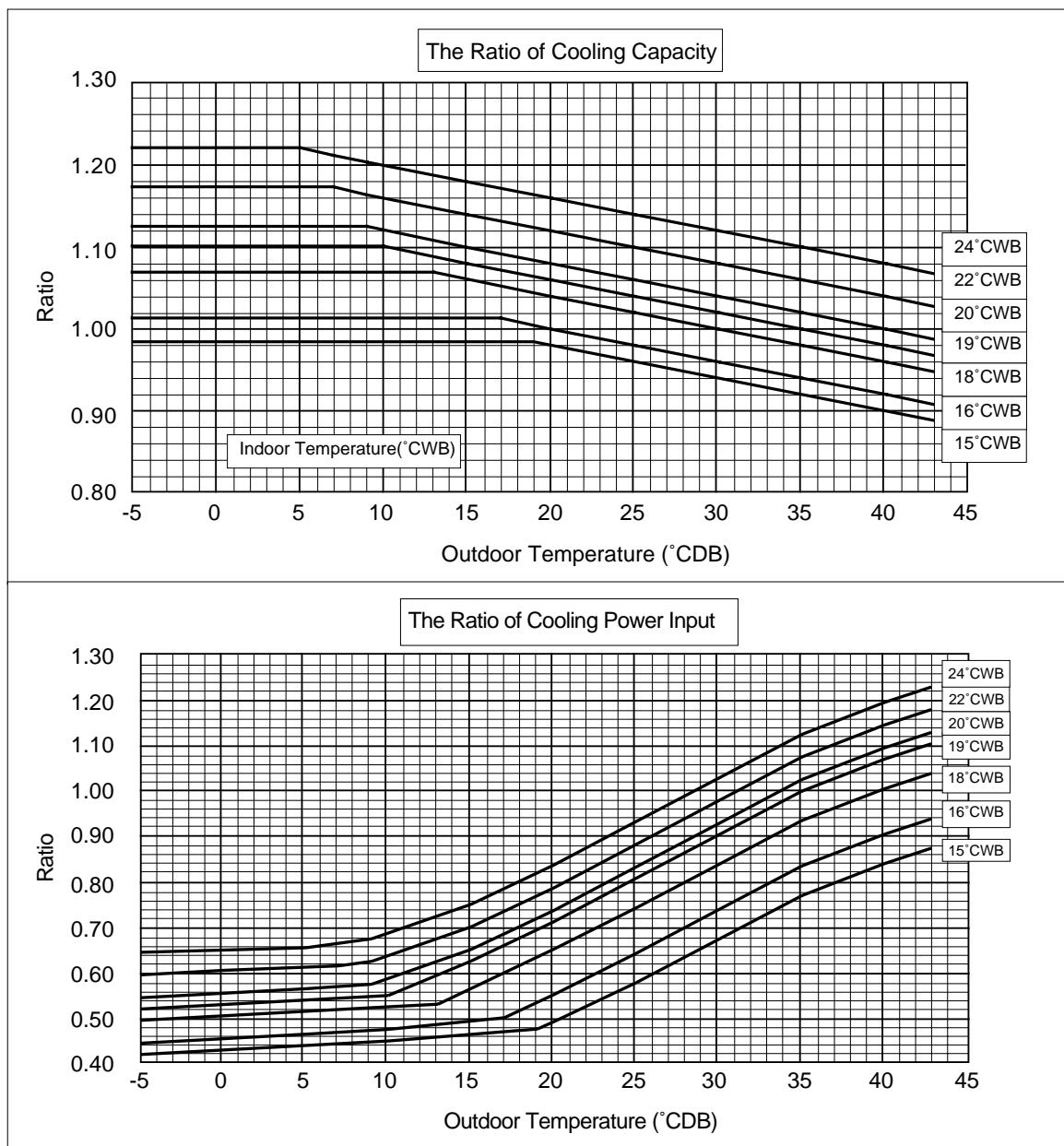
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.90}$$

\* Capacity'  
Input'  
Current'

} After correction



## Heating

- Standard Specifications

	PUHY-P200YMF-C	PUHY-P250YMF-C
Capacity kW	25.0	31.5
Input kW	7.89	10.15
Source V	380/400/415	
Current A	13.4/12.7/12.3	17.1/16.2/15.6

- Calculation

$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

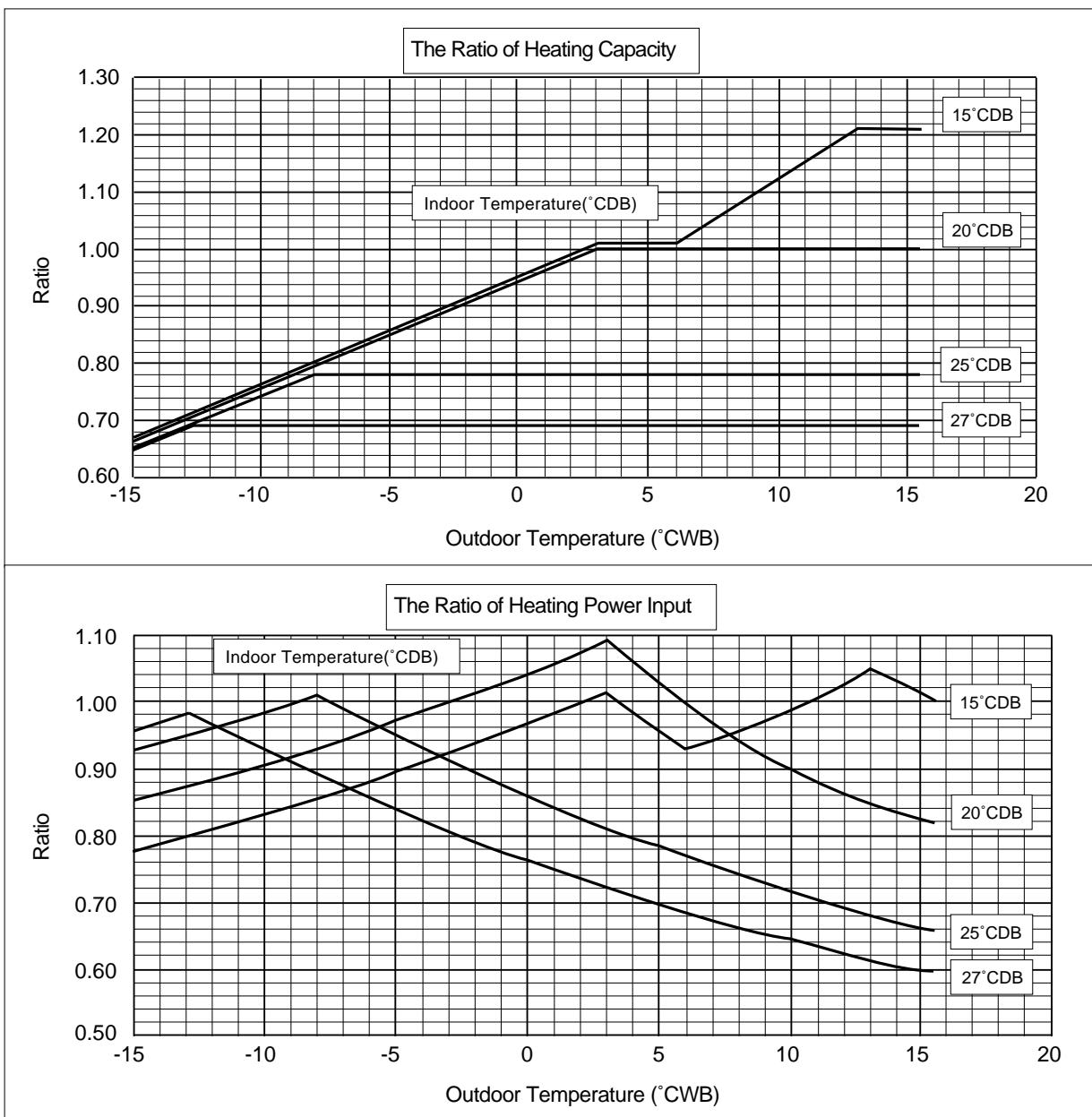
$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.90}$$

\*Capacity'  
Input'  
Current'

} After correction

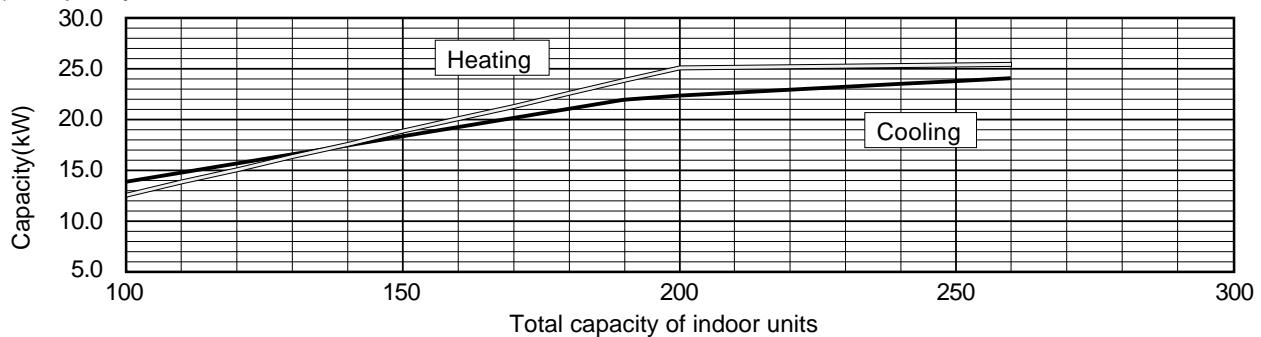
Y-8,10(R407C)



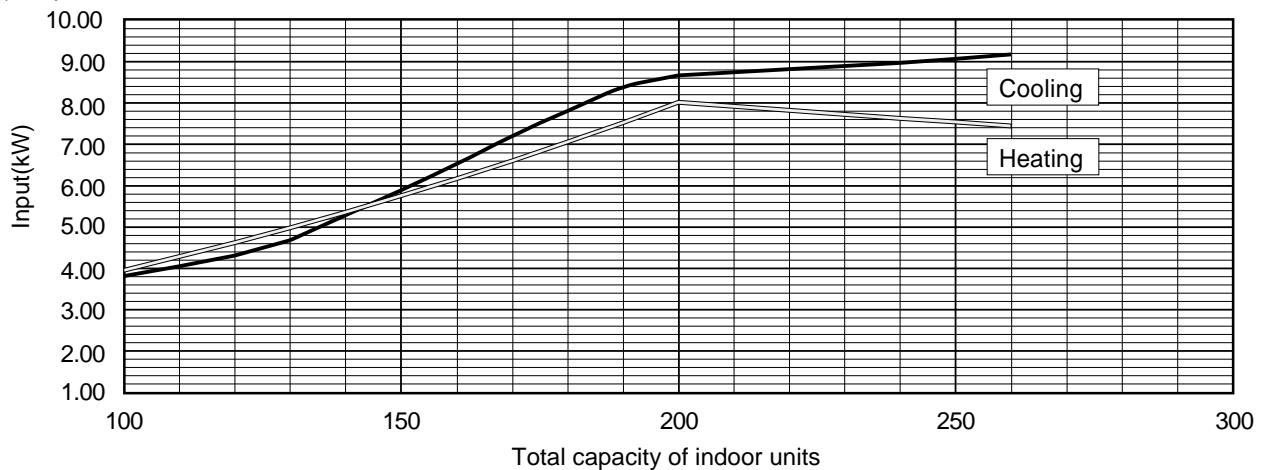
## 2-2. Correction by total indoor

**PUHY-P200YMF-C**

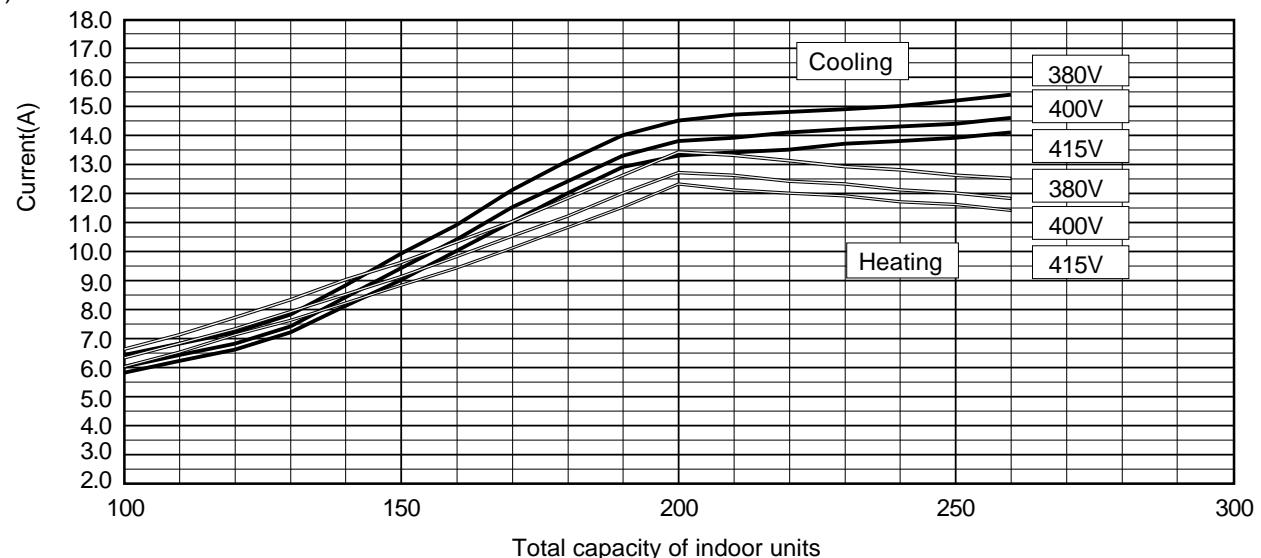
### 1) Capacity



### 2) Input

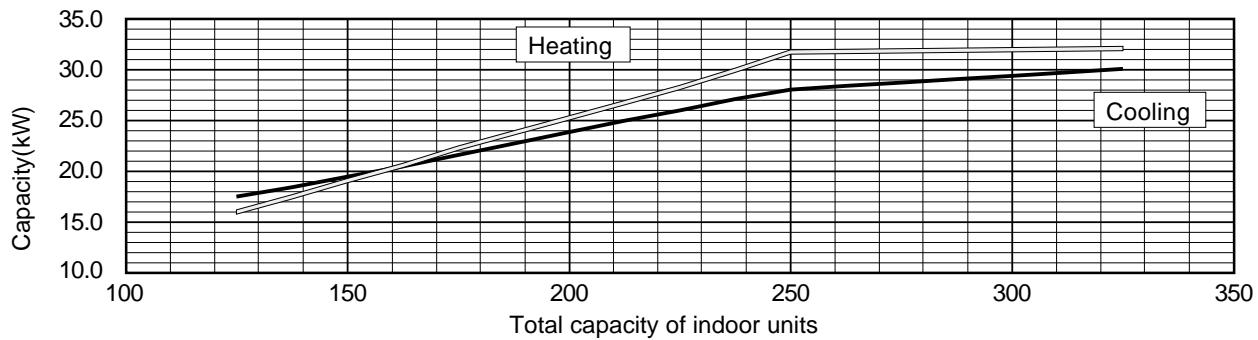


### 3) Current

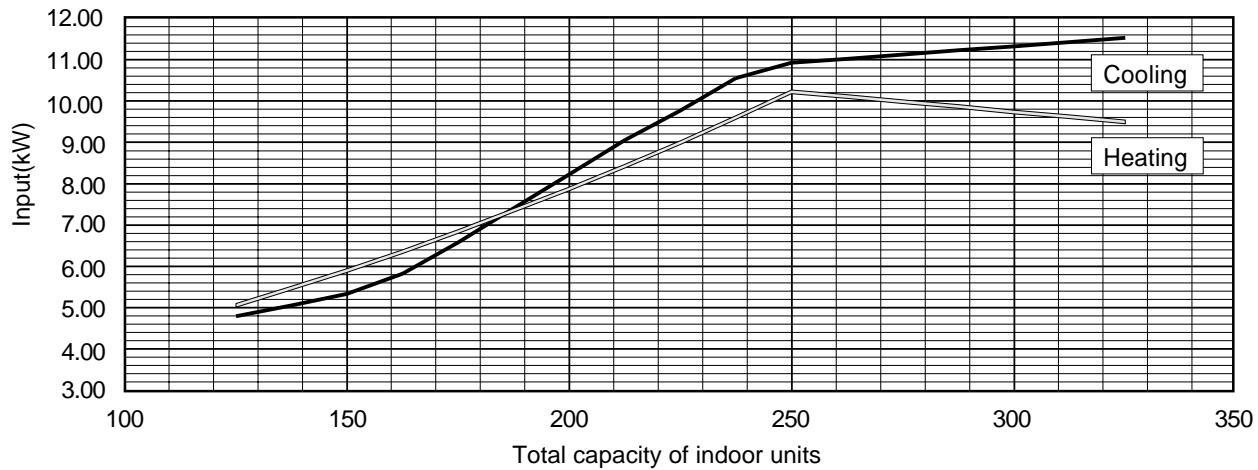


**PUHY-P250YMF-C**

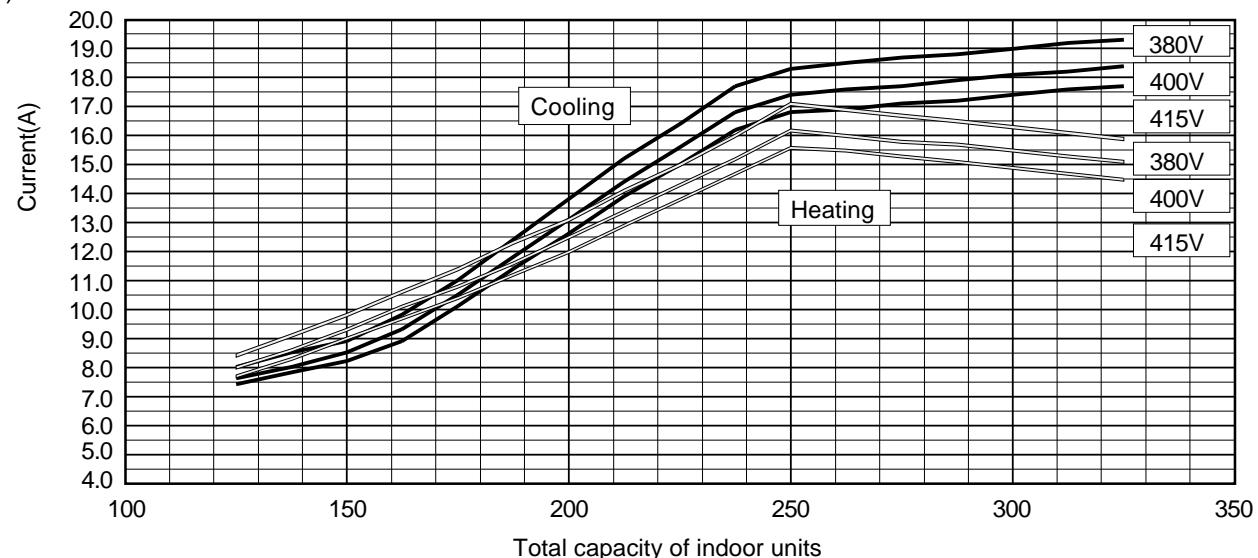
## 1) Capacity



## 2) Input



## 3) Current

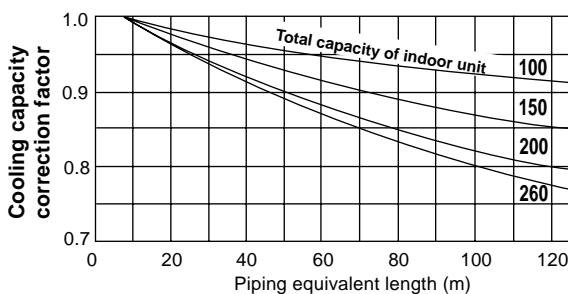


## 2-3 Correction by refrigerant piping length

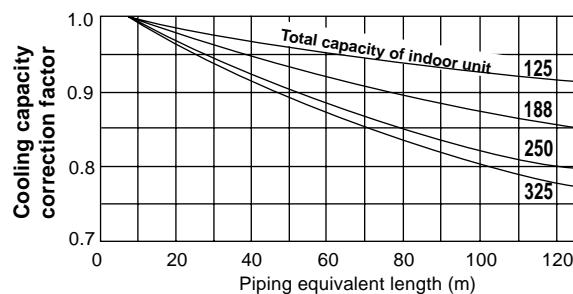
To obtain a decrease in cooling/heating capacity due to refrigerant piping extension, multiply by the capacity correction factor based on the refrigerant piping equivalent length in the table below.

- Cooling capacity correction

PUHY-P200YMF-C

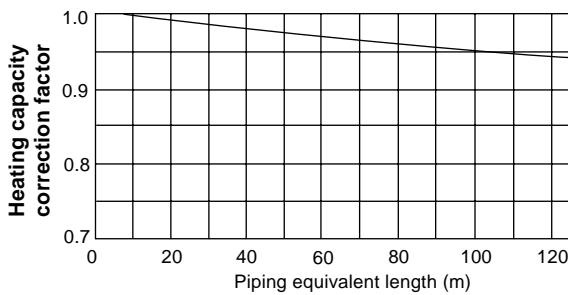


PUHY-P250YMF-C

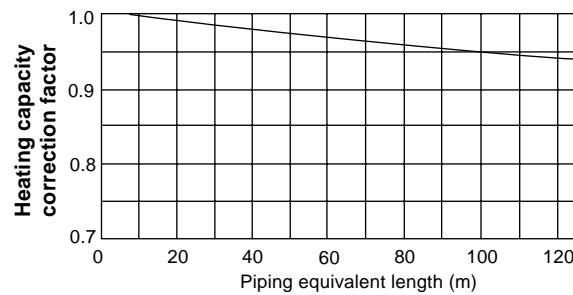


- Heating capacity correction

PUHY-P200YMF-C



PUHY-P250YMF-C



- How to obtain piping equivalent length

- ① PUHY-P200YMF-C

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.47 × number of bent on the piping)m

- ② PUHY-P250YMF-C

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

## 2-4 Correction at frosting and defrosting

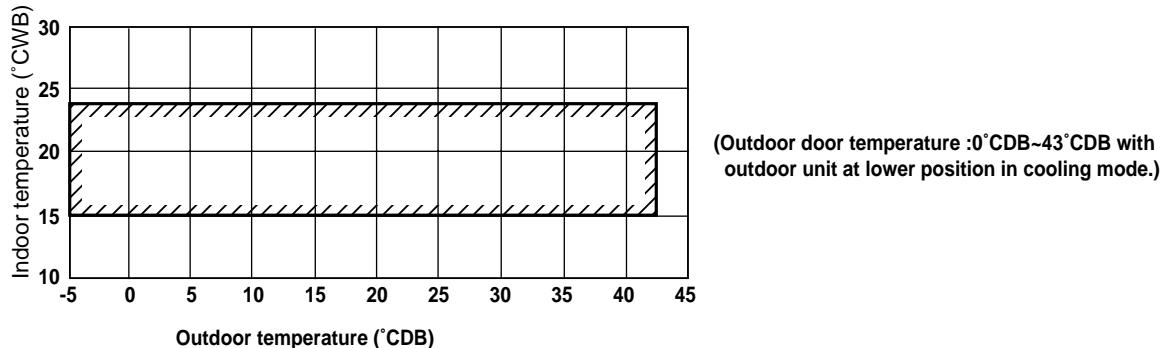
When a decrease in heating capacity due to frosted and defrosting operations is considered, the value multiplied by the correction factor in the table below represents the heating capacity.

Correction factor table

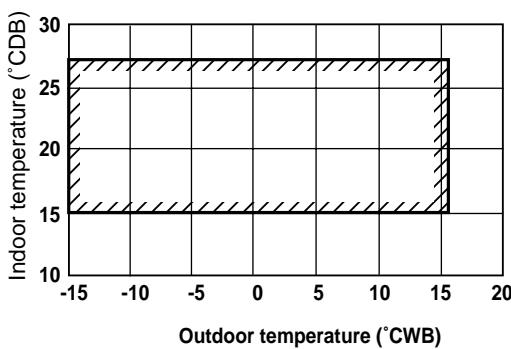
Outdoor inlet air temp (°CWB)	6	4	2	0	-2	-4	-6	-8	-10
Correction factor	1.0	0.95	0.84	0.83	0.87	0.9	0.95	0.95	0.95

## 2-5 Operation limit

- Cooling



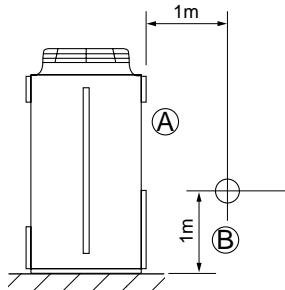
- Heating



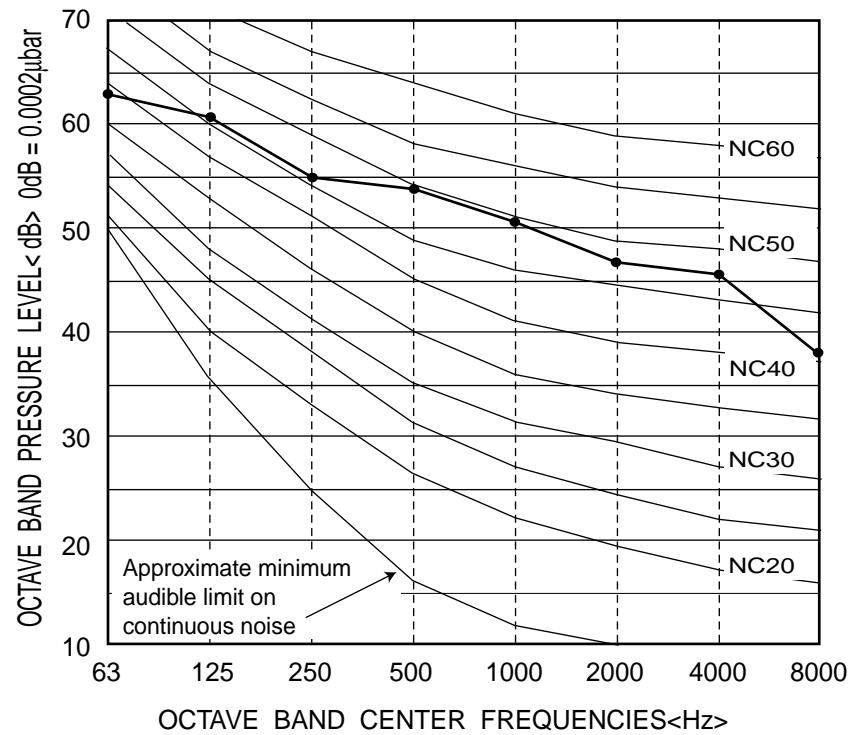
### 3. Sound Levels

#### PUHY-P200YMF-C

Measurement condition

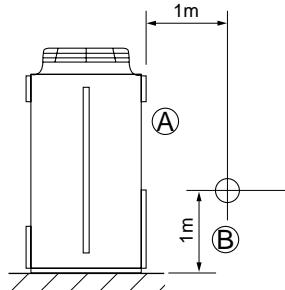


Sound pressure level in anechoic room
56 dB (A)

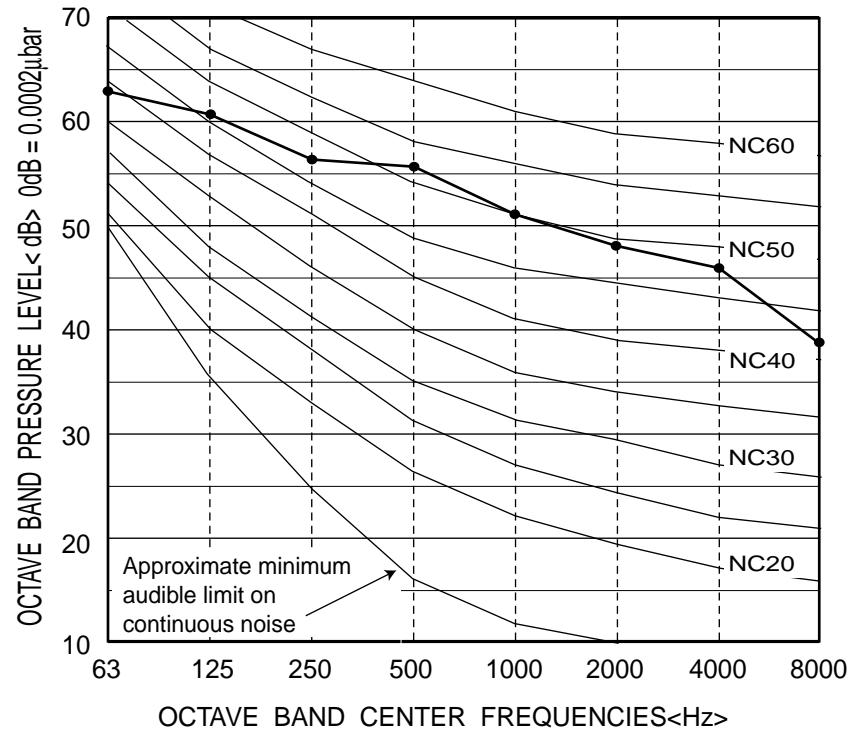


#### PUHY-P250YMF-C

Measurement condition



Sound pressure level in anechoic room
57 dB (A)

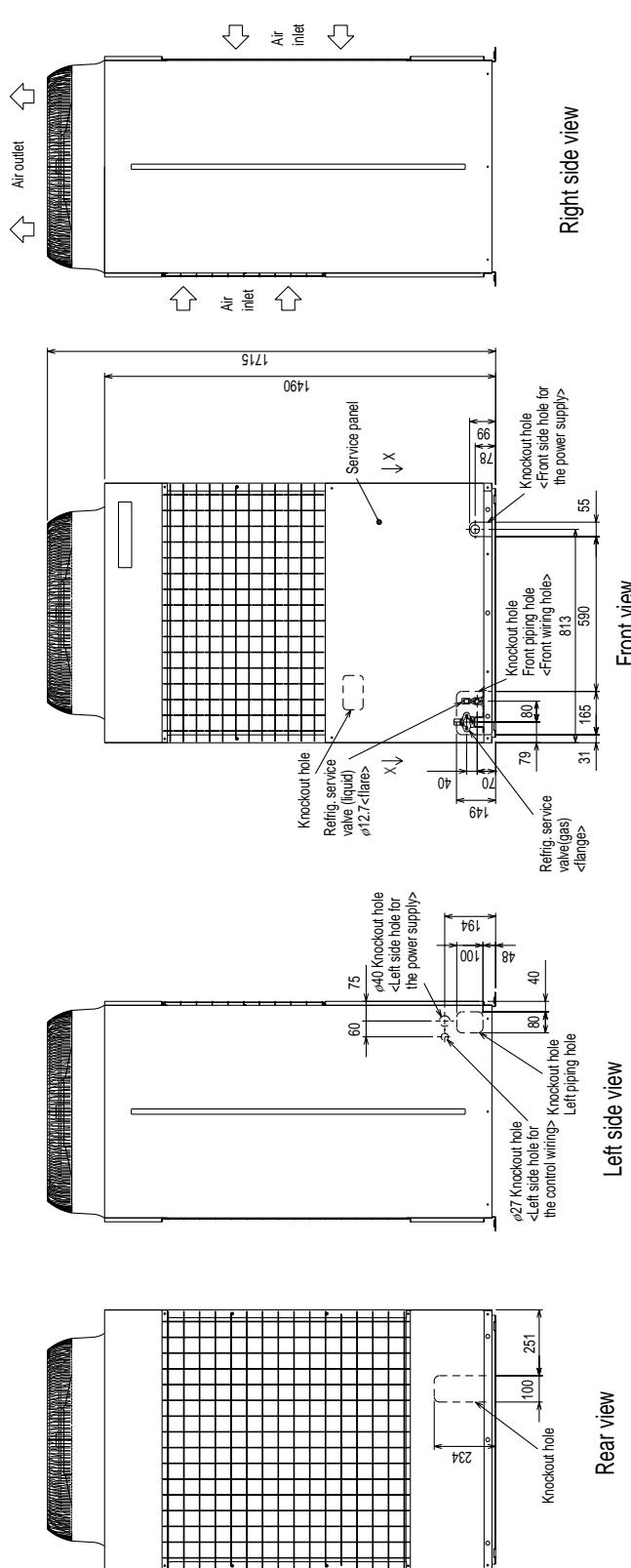
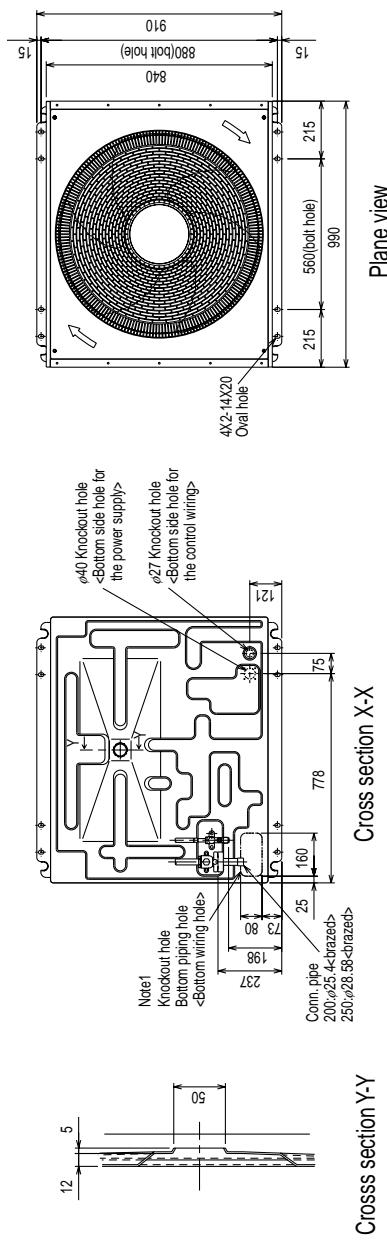


## 4. External Dimensions

PUHY-P200,250YMF-C

Unit : mm

- <Accessory>
- Refrigerant (gas) conn. pipe ..... 1 pc.  
(The connecting pipe is fixed with the unit)
  - Packing for conn. pipe ..... 1 pc.  
(Attached near the ball valve)
  - Wiring mounting board
  - Conduit mounting plate  
(Painted the same color as the unit body)
  - φ40 ..... 1 pc.  
φ33 ..... 1 pc.
  - φ27 ..... 1 pc.
  - Tapping screw 4 X 10 ..... 6 pcs.
  - Note.1 Please leave a space under the outdoor unit for the piping. When you connect the piping from the bottom.
- (Please be careful not to close the hole of the bottom plate by the basement)

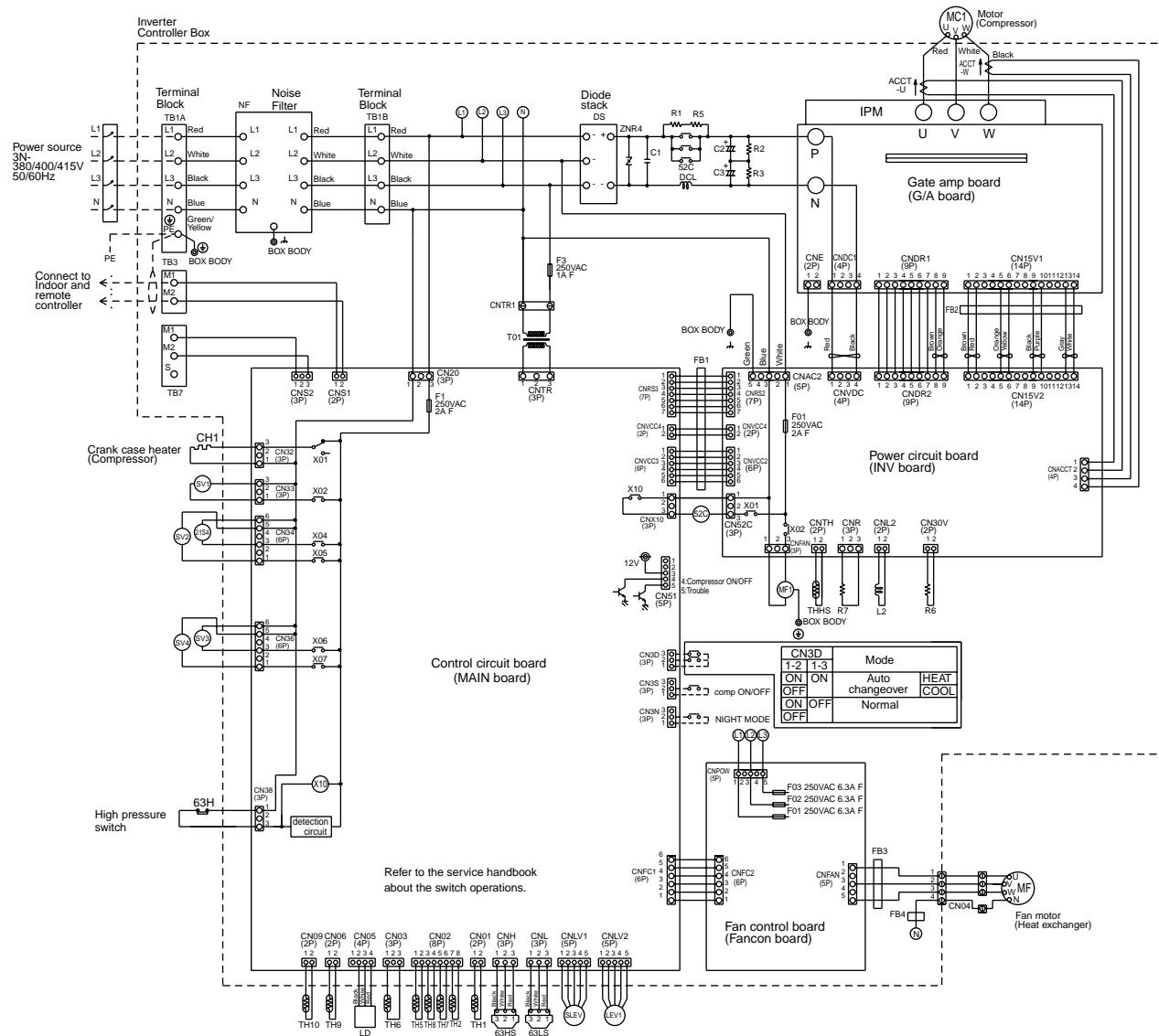


Y-8,10(R407C)

# 5. Electrical Wiring Diagram

**PUHY-P200, 250YMF-C**

V-8.10(R407C)

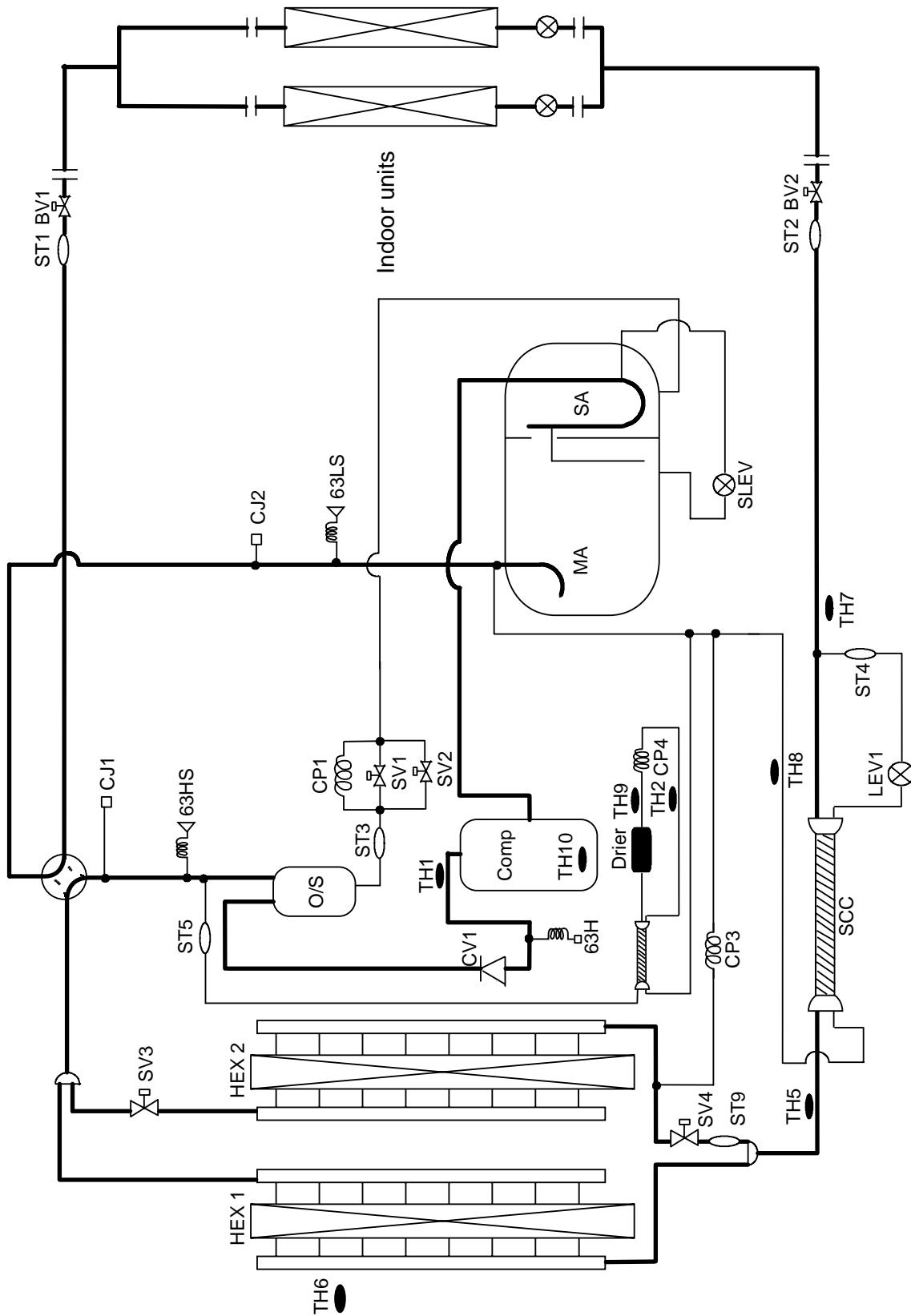


## <SYMBOL EXPLANATION>

Symbol	N a m e	Symbol	N a m e	Symbol	N a m e	Symbol	N a m e
DCL	DC reactor (Power factor improvement)	SV4	Solenoid valve (Heat exchanger capacity control)	TH1	Thermistor Discharge pipe temp. detect	TH10	Compressor shell temp.
ACCT-U,W	Current Sensor	LEV1	Electronic expansion valve (Sub-cool coil bypass)	TH2	Saturation evapo. temp. detect	THHS	Radiator panel temp. detect
ZNR4	Varistor	SLEV	Electronic expansion valve(Oil return)	TH5	Pipe temp. detect	LD	Accumulator liquid level detect
52C	Magnetic contactor (Inverter main circuit)	63HS	High pressure sensor	TH6	OA temp. detect	X1-10	Aux. relay
MF1	Fan motor (Radiator panel)	63LS	Low pressure sensor	TH7	liquid outlet temp. detect at Sub-cool coil	FB1-4	Ferrite core
21S4	4-way valve	L2	Choke coil (Transmission)	TH8	bypass outlet temp. detect at Sub-cool coil	⊕	Earth terminal
SV1,SV2	Solenoid valve (Discharge-suction bypass)	IPM	Intelligent power module	TH9	High pressure liquid. temp.		
SV3	Solenoid valve (Heat exchanger capacity control)						

## 6. Refrigerant Circuit Diagram And Thermal Sensor

PUHY-P200, 250YMF-C



Y-8,10(R407C)

v-8,10(R407C)

# PUHY-P400YMF-B, PUHY-P500YMF-B

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Big Y(R407C)

# 1. Specifications

Big Y(R407C)

Model name			PUHY-P400YMF-B	
			Cooling Heating	
Capacity	kcal/h	40,000	45,000	
	kW	46.5	52.3	
	BTU/h	158,800	178,600	
Power source			3N ~ 380/400/415V 50/60Hz	
Power input		kW	16.9	15.9
Current		A	28.2/26.8/25.8	26.5/25.2/24.3
Fan	Type X Quantity	Propeller fan X2		
	Airflow rate	m³/min	370	
	Motor output	kW	0.35 X 2	
Compressor	Type	Hermetic		
	Motor output	kW	4.5 + 7.5	
	Crankcase heater	kW	0.045 + 0.056	
Refrigerant / Lubricant			R407C / MEL32	
External finish			Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>	
External dimension		mm	1715(H) X 1990(W) X 840(L)	
Protection devices	High pressure protection		30kg/cm²G(2.94MPa)	
	Compressor / Fan		Overcurrent protection / Thermal switch	
	Inverter		DC bus current protection, thermal switch	
Refrigerant piping diameter		Liquid / Gas	ø 15.88 flare / ø 34.93 Flange	
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity	
	Model / Quantity		Model 25 ~ 250 / 1 ~ 20	
Noise level		dB<A>	*	60 / 61
Net weight		kg	455	
Operating temperature range			Indoor: 15°CWB ~ 24°CWB Outdoor: -5°CDB ~ 43°CDB (10°CDB ~ 43°CDB with outdoor unit at lower position, or with indoor unit 25 type only is working.)	Indoor: 15°CDB ~ 27°CDB Outdoor: -12°CWB ~ 15.5°CWB (-12°CWB~10°CWB with indoor unit 25 type only is working)

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

**Cooling** Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

**Heating** Indoor : 21°CDB Outdoor : 7°CDB/6°CWB

Pipe length : 5m Height difference : 0m

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

\* It is measured in anechoic room.

Model name			PUHY-P500YMF-B	
			Cooling	Heating
Capacity	kcal/h	50,000	56,000	
	kW	58.2	65.1	
	BTU/h	198,500	222,300	
Power source			3N ~ 380/400/415V 50/60Hz	
Power input		kW	21.3	19.65
Current		A	35.1/33.4/32.2	32.8/31.1/30.0
Fan	Type	Propeller fan X 2		
	Airflow rate	m³/min	370	
	Motor output	kW	0.35 X 2	
Compressor	Type	Hermetic		
	Motor output	kW	7.5 + 7.5	
	Crankcase heater	kW	0.045 + 0.056	
Refrigerant / Lubricant			R407C / MEL32	
External finish			Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>	
External dimension		mm	1715(H) X 1990(W) X 840(L)	
Protection devices	High pressure protection		30kg/cm²G(2.94MPa)	
	Compressor / Fan		Overcurrent protection / Thermal switch	
	Inverter		DC bus current protection, thermal switch	
Refrigerant piping diameter		Liquid / Gas	φ 15.88 flare / φ 34.93 Flange	
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity	
	Model / Quantity		Model 25 ~ 250 / 1 ~ 20	
Noise level		dB<A>	*	60 / 61
Net weight		kg	475	
Operating temperature range			Indoor: 15°CWB ~ 24°CWB Outdoor: -5°CDB ~ 43°CDB (10°CDB ~ 43°CDB with outdoor unit at lower position, or with indoor unit 25 type only is working.)	Indoor: 15°CDB ~ 27°CDB Outdoor: -12°CWB ~ 15.5°CWB (-12°CWB~10°CWB with indoor unit 25 type only is working)

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

**Cooling** Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

**Heating** Indoor : 21°CDB Outdoor : 7°CDB/6°CWB

Pipe length : 5m

Height difference : 0m

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

\* It is measured in anechoic room.

## 2. Capacity Tables

### 2-1. Correction by temperature

#### Cooling

•Standard Specifications

		PUHY-P400YMF-B	PUHY-P500YMF-B
Capacity	kcal/h	40,000	50,000
	kW	46.5	58.2
	BTU/h	158,800	198,500
Input	kW	16.9	21.3
Source	V	380/400/415	
Current	A	28.2/26.8/25.8	35.1/33.4/32.2

•Calculation

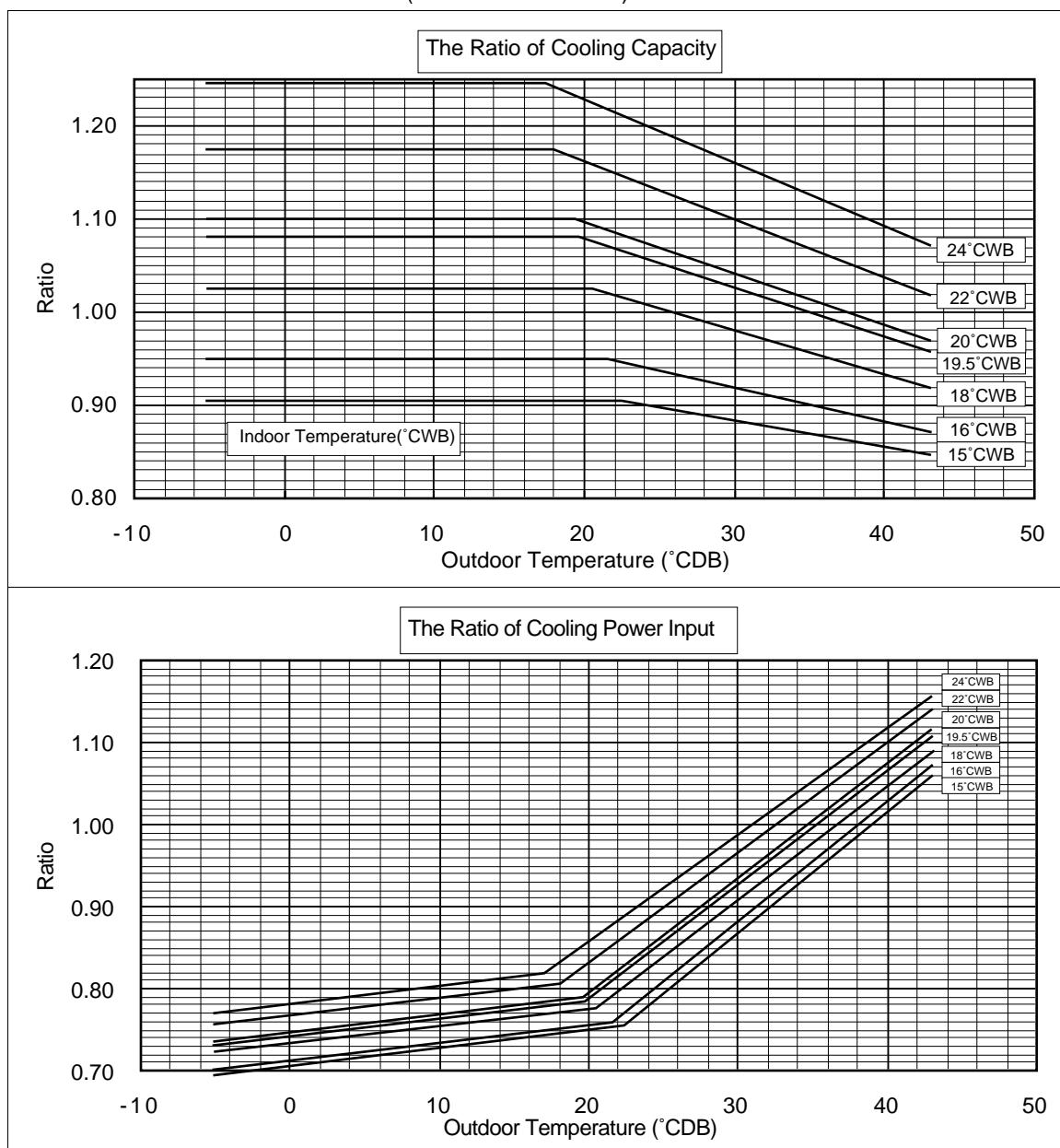
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.91(\text{:PUHY-P400YMF-B}) \\ \times 0.92(\text{:PUHY-P500YMF-B})}$$

\*Capacity'  
Input'  
Current'

} After correction



## Heating

### • Standard Specifications

		PUHY-P400YMF-B	PUHY-P500YMF-B
Capacity	kcal/h	45,000	56,000
	kW	52.3	65.1
	BTU/h	178,600	222,300
Input	kW	15.9	19.65
Source	V	380/400/415	
Current	A	26.5/25.2/24.3	32.8/31.1/30.0

### • Calculation

$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

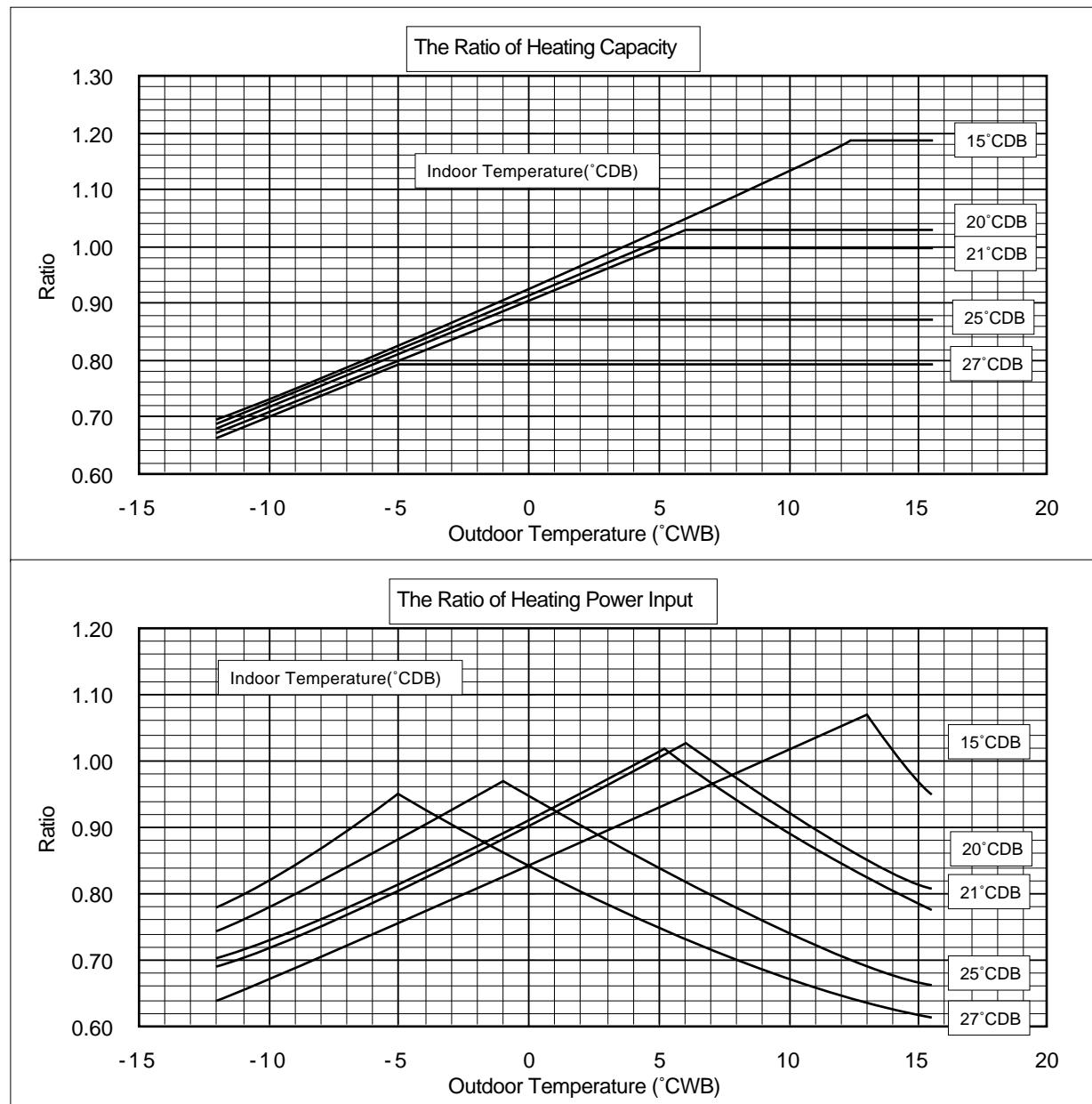
$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.91} \quad (\text{:PUHY-P400-500YMF-B})$$

\*Capacity'

Input'

Current'

} After correction

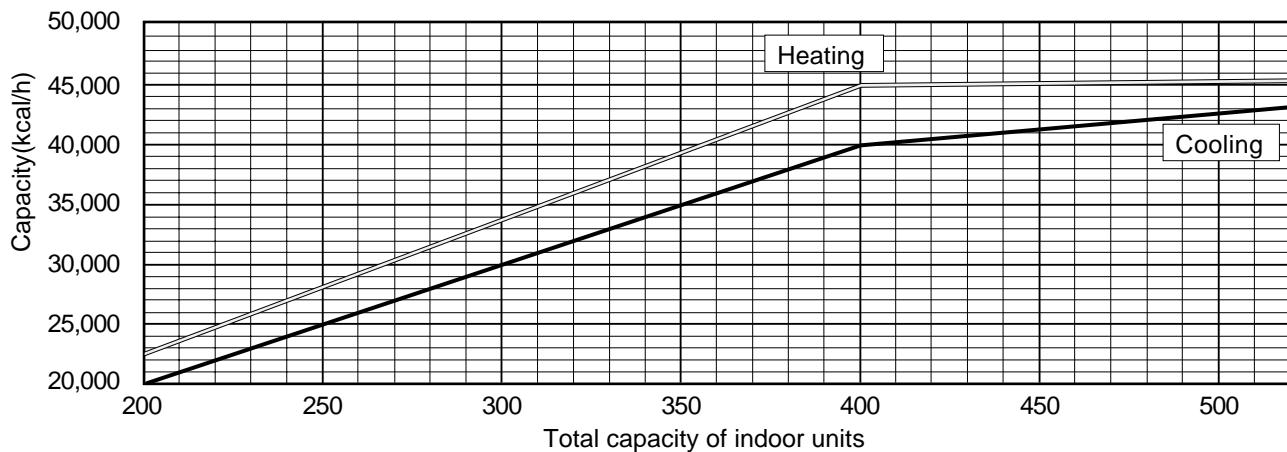


## 2-2. Correction by total indoor

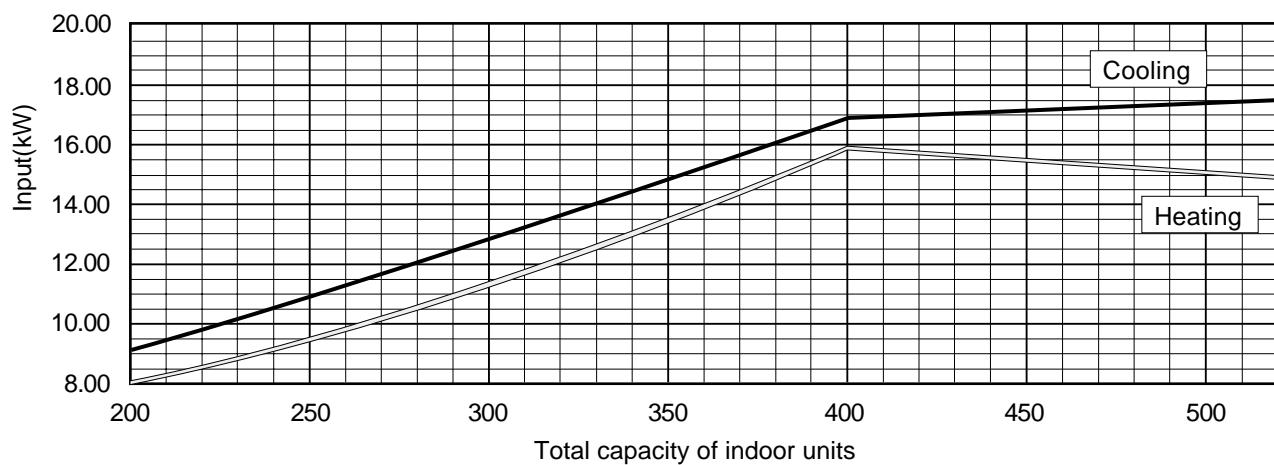
**Big Y(R407C)**

**PUHY-P400YMF-B**

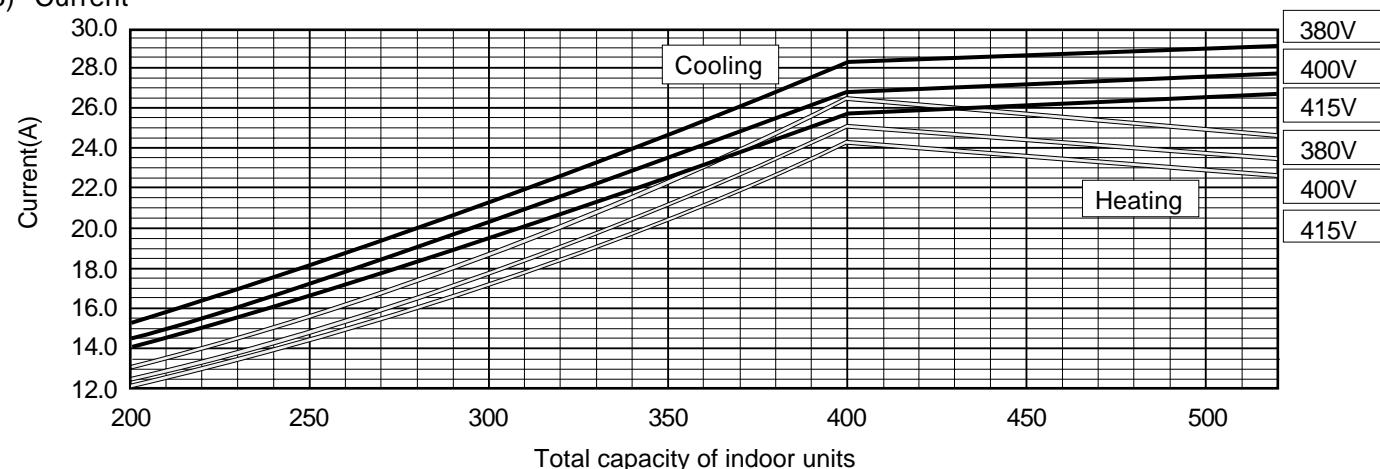
### 1) Capacity



### 2) Input

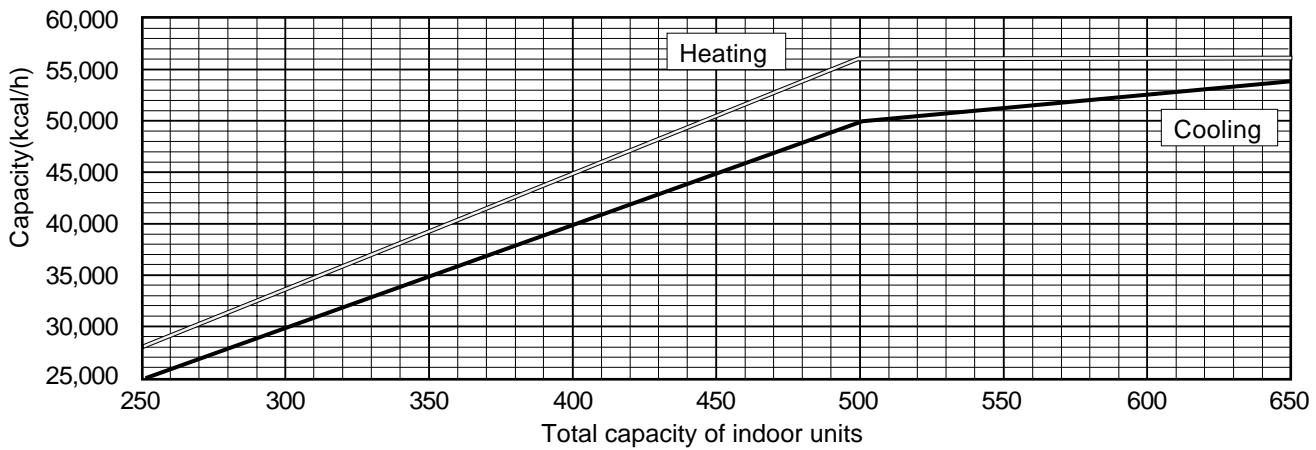


### 3) Current

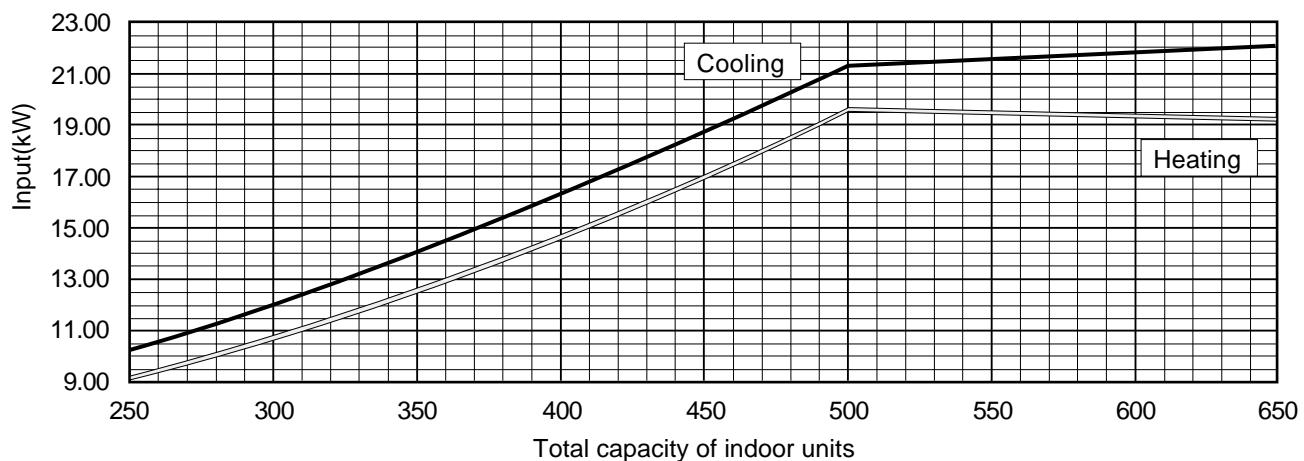


**PUHY-P500YMF-B**

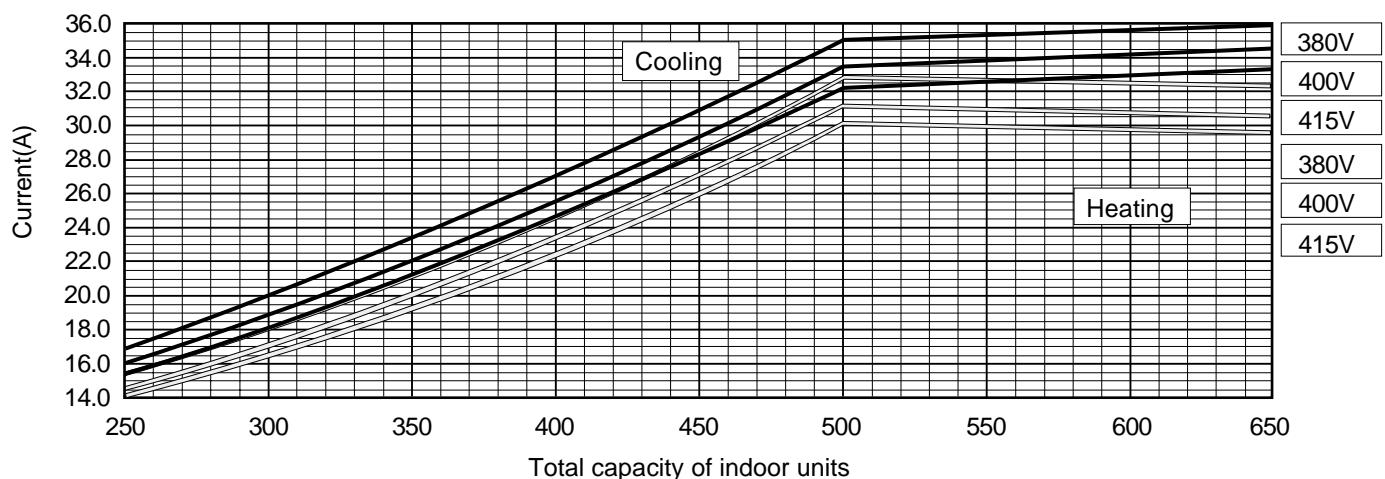
## 1) Capacity



## 2) Input



## 3) Current

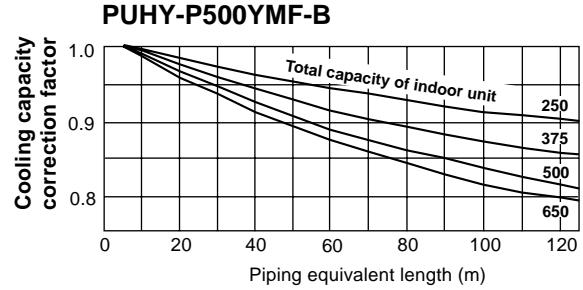
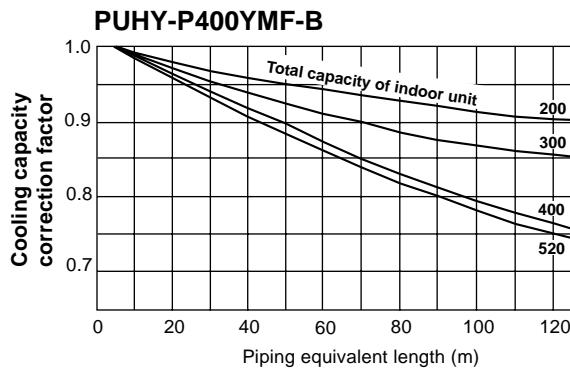


Big Y(R407C)

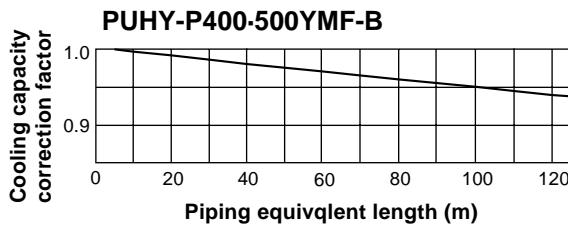
## 2-3 Correction by refrigerant piping length

To obtain a decrease in cooling/heating capacity due to refrigerant piping extension, multiply by the capacity correction factor based on the refrigerant piping equivalent length in the table below.

- Cooling capacity correction



- Heating capacity correction



- How to obtain piping equivalent length

- ① PUHY-P400YMF-B

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

- ② PUHY-P500YMF-B

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

## 2-4 Correction at frosting and defrosting

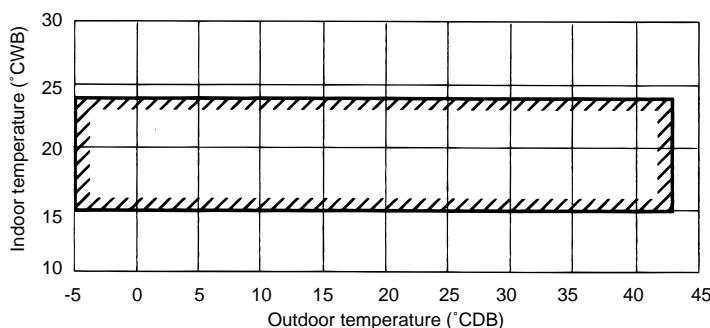
When a decrease in heating capacity due to frosted and defrosting operations is considered, the value multiplied by the correction factor in the table below represents the heating capacity.

**Correction factor table**

Outdoor inlet air temp (°CWB)	6	4	2	0	-2	-4	-6	-8	-10
Correction factor	1.0	0.98	0.89	0.89	0.90	0.92	0.95	0.95	0.95

## 2-5 Operation limit

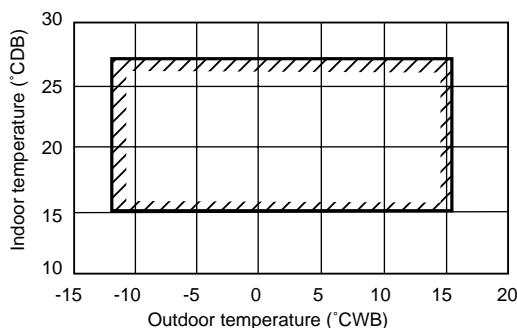
- Cooling



When the indoor unit is located above the outdoor unit for 4m or more, or indoor unit 25type only is working, the outdoor unit inlet air temperature becomes 10~43°CDB.

**Big Y(R407C)**

- Heating

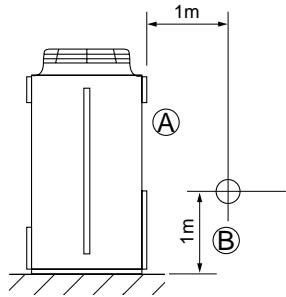


When the indoor unit 25type only is working, the outdoor unit inlet air temperature becomes -12~10°CWB.

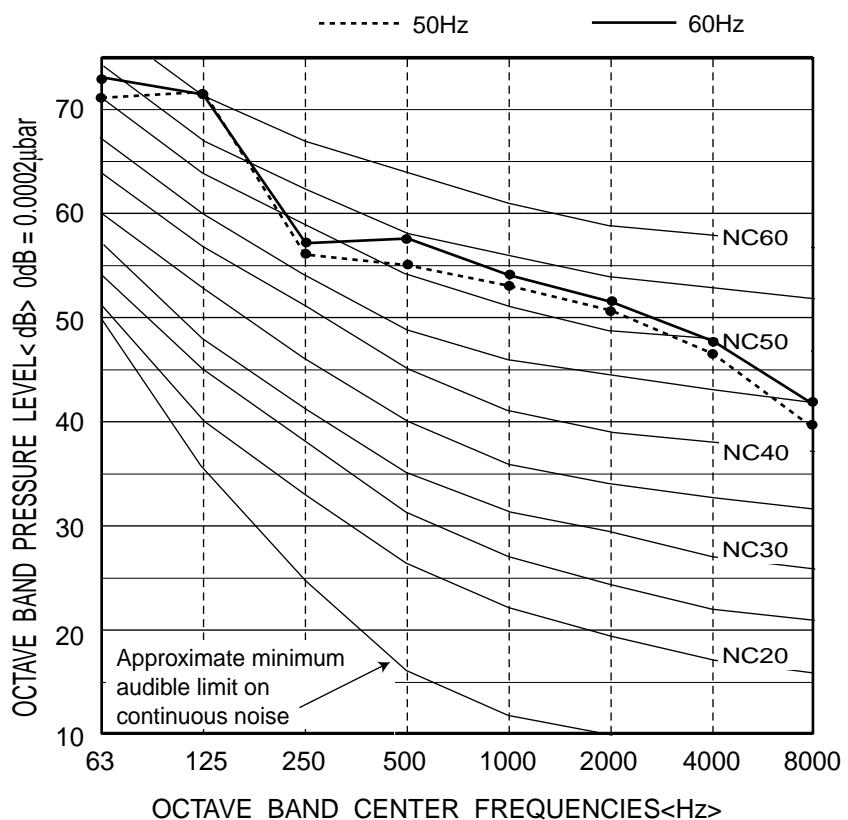
### 3. Sound Levels

#### PUHY-P400YMF-B

Measurement condition

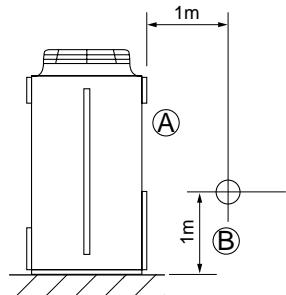


Sound pressure level in anechoic room
60 / 61 dB (A)

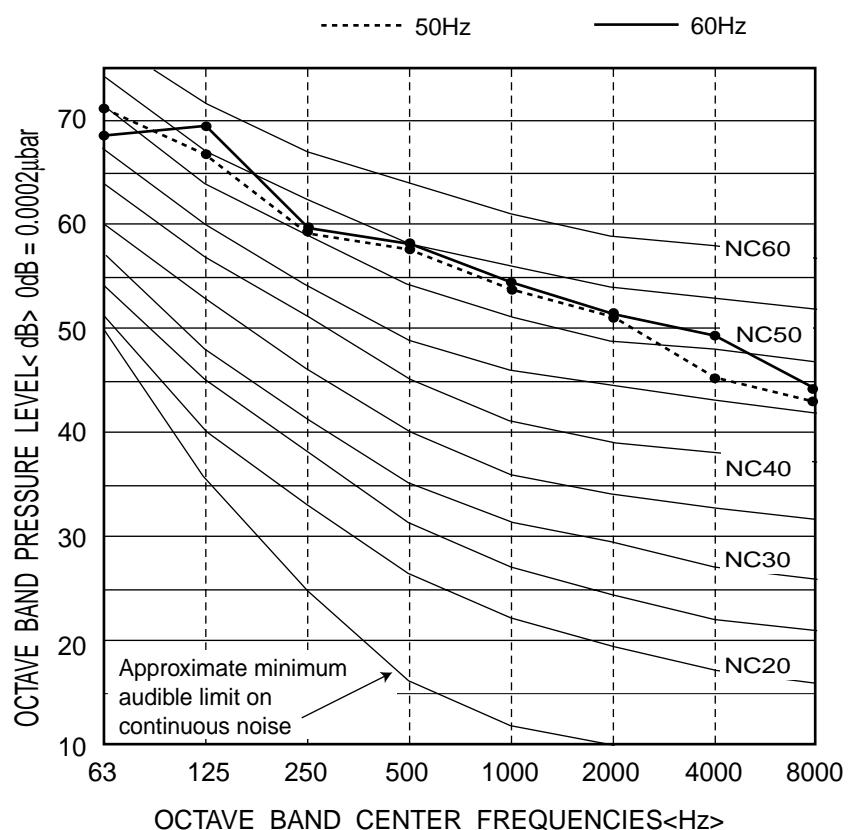


#### PUHY-P500YMF-B

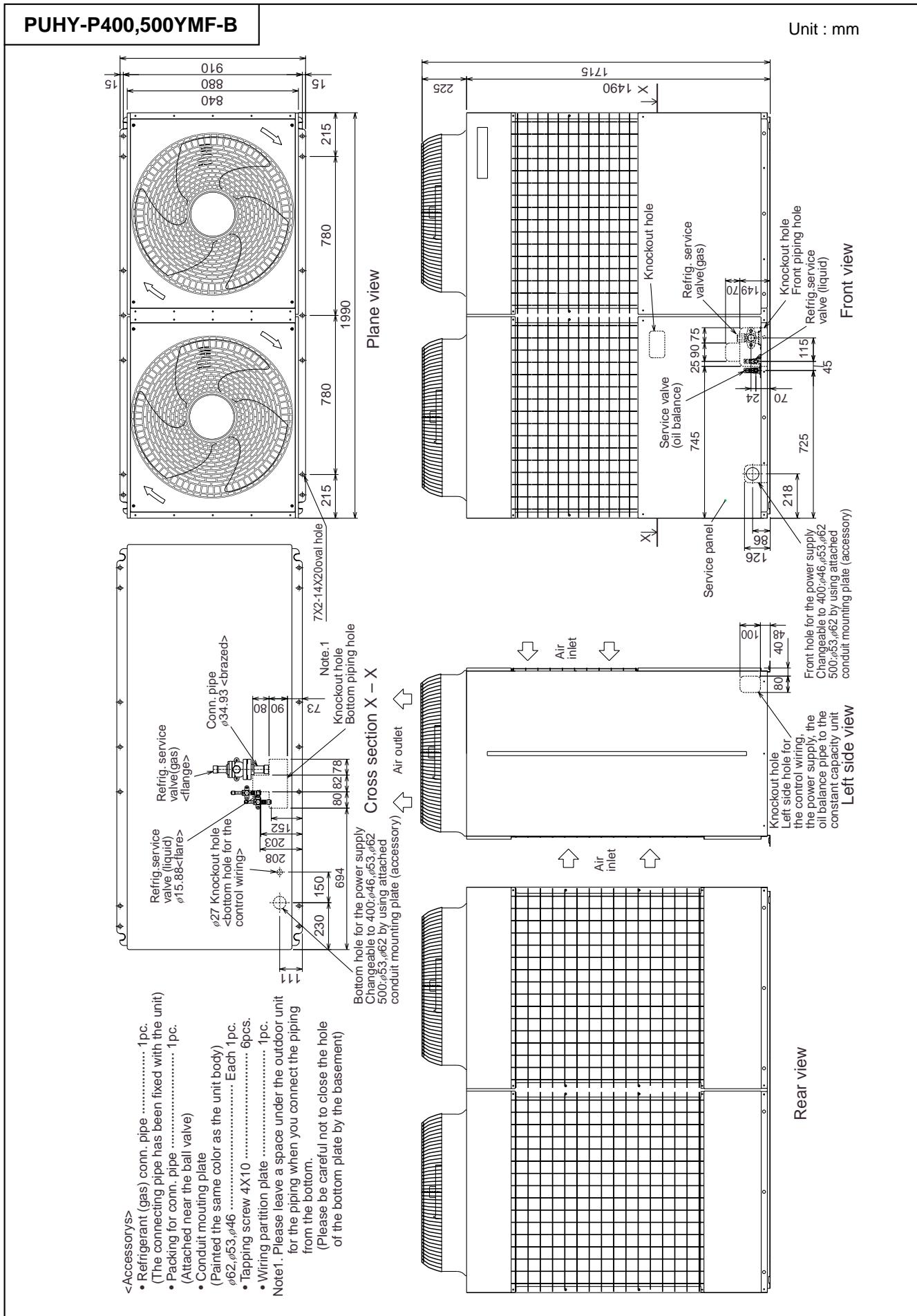
Measurement condition



Sound pressure level in anechoic room
60 / 61 dB (A)



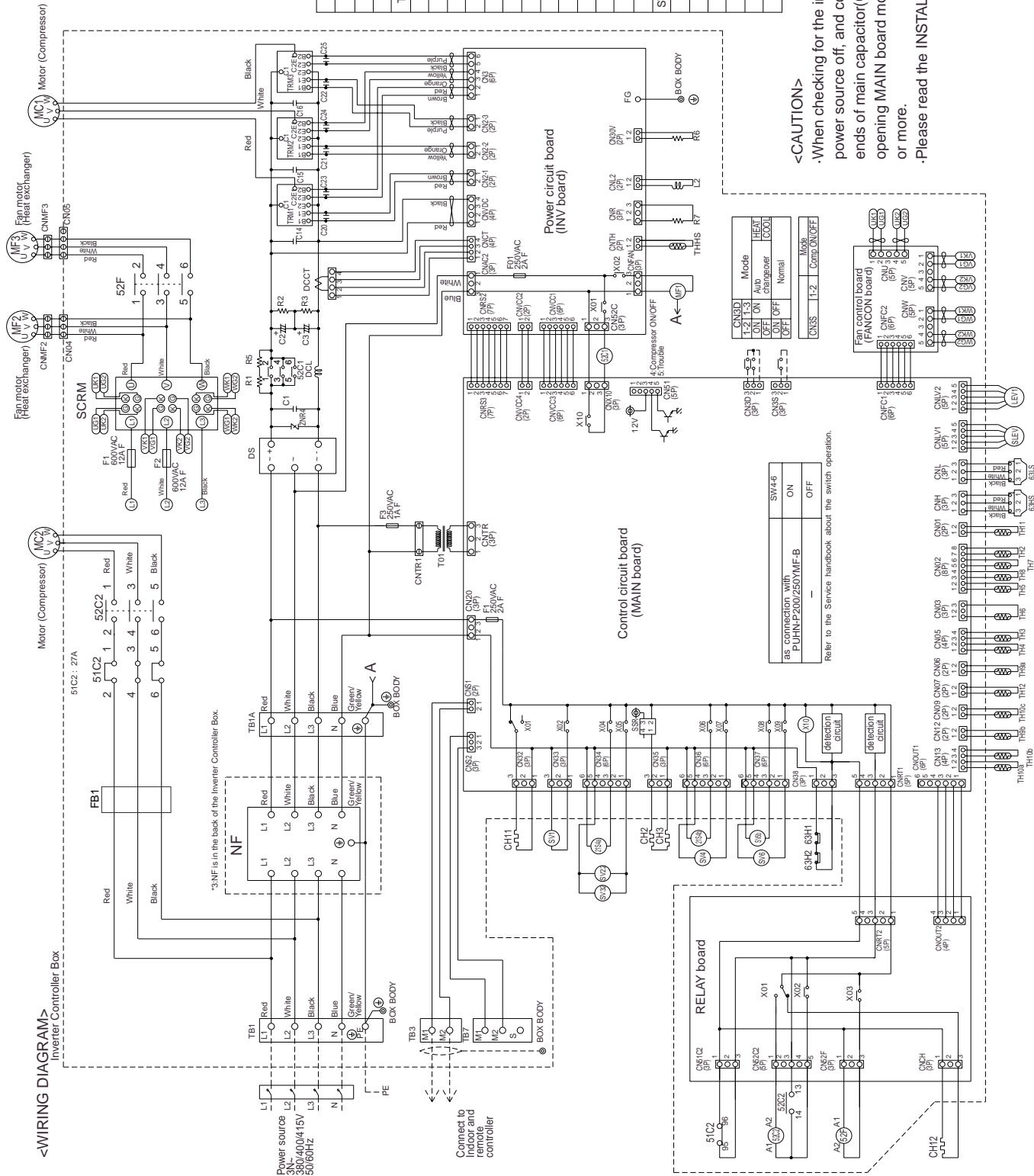
## 4. External Dimensions



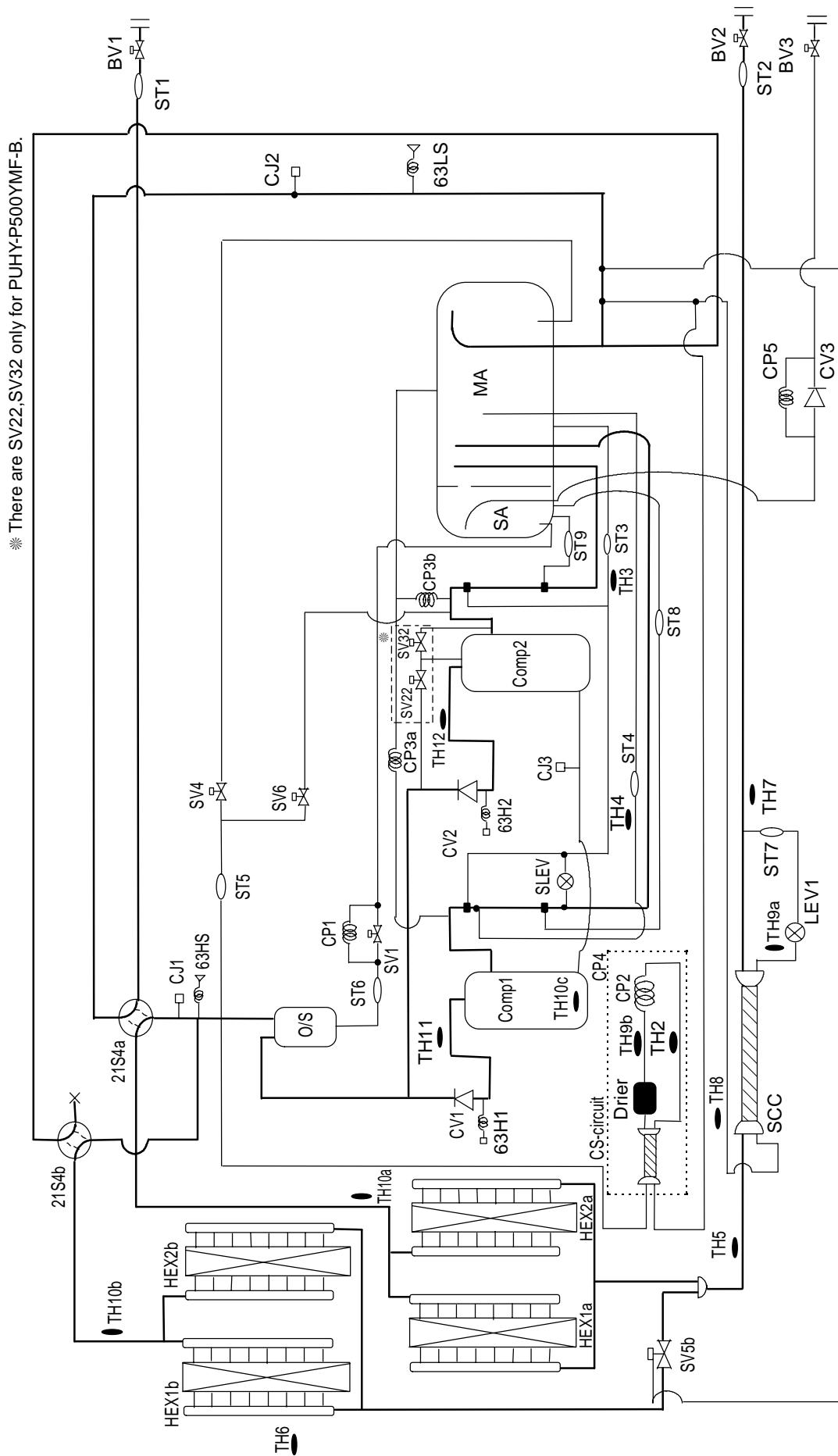
# Big Y(R407C)

## 5. Electrical Wiring Diagram

### PUHY-P400-500YMF-B



## **6. Refrigerant Circuit Diagram And Thermal Sensor**



Big Y(R407C)

**Big Y(R407C)**

PUHY-P600YSMF-B, PUHY-P650YSMF-B  
PUHY-P700YSMF-B, PUHY-P750YSMF-B

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Super Y(R407C)

# 1. Specifications

This unit consists of a combination of PUHY-P400YMF-B and PUHN-P200YMF-B.

Model name		PUHY-P600YSMF-B	
		Cooling	Heating
Capacity	kcal/h	60,000	67,400
	kW	69.8	78.3
	BTU/h	238,200	267,500
Power source		3N ~ 380/400/415V 50/60Hz	
Power input		kW	25.5 22.95
Current		A	42.5/40.4/38.9 38.3/36.4/35.0
Refrigerant / Lubricant		R407C/MEL32	
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>	
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity
	Model / Quantity		Model 20 ~ 250 / 2 ~ 32
Noise level		dB<A> (50/60Hz)	* 61.5 / 62
Refrigerant piping diameter (main)		Liquid / Gas	ø19.05 / ø34.93
Operating temperature range		Indoor:15°CWB ~ 24°CWB Outdoor:-5°CDB ~ 43°CDB (10°CDB~43°CDB with outdoor unit at lower position, or with indoor unit 20 or 25 type only is working)	Indoor:15°CDB ~ 27°CDB Outdoor:-15°CWB ~ 15.5°CWB (-12°CWB~10°CWB with indoor unit 20 or 25 type only is working)
Model name		PUHY-P400YMF-B	PUHN-P200YMF-B
Fan	Type X Quantity		Propeller fan X 2
	Airflow rate	m³/min	370
	Motor output	kW	0.35 X 2
Compressor	Type		Hermetic
	Motor output	kW	4.5 + 7.5
	Crankcase heater	kW	0.045 + 0.056
External dimension		mm	1715(H)X 1990(W)X 840(L) 1715(H)X 990(W)X 840(L)
Protection devices	High pressure protection		30kg/cm²G(2.94MPa)
	Compressor / Fan		Overcurrent protection / Thermal switch
	Inverter		DC bus current protection, thermal switch
Refrigerant piping diameter		Liquid / Gas	ø 15.88 flare / ø 34.93 Flange ø 12.7 flare / ø 28.58 Flange
Net weight		kg	455 240

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

**Cooling** Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

**Heating** Indoor : 21°CDB Outdoor : 7°CDB/6°CWB

Pipe length : 10m Height difference : 0m

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

\* It is measured in anechoic room.

This unit consists of a combination of PUHY-P400YMF-B and PUHN-P250YMF-B.

Model name		PUHY-P650YSMF-B	
		Cooling	Heating
Capacity	kcal/h	65,000	73,000
	kW	75.6	84.9
	BTU/h	258,100	289,800
Power source		3N ~ 380/400/415V 50/60Hz	
Power input		27.45	25.2
Current		45.8/43.5/41.9	42.0/39.9/38.5
Refrigerant / Lubricant		R407C/MEL32	
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>	
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity
	Model / Quantity		Model 20 ~ 250 / 2 ~ 32
Noise level		* dB<A> (50/60Hz)	62.0 / 62.5
Refrigerant piping diameter (main)		Liquid / Gas	ø 19.05 / ø41.28
Operating temperature range		Indoor:15°CWB ~ 24°CWB Outdoor:-5°CDB ~ 43°CDB (10°CDB~43°CDB with outdoor unit at lower position, or with indoor unit 20 or 25 type only is working)	Indoor:15°CDB ~ 27°CDB Outdoor:-15°CWB ~ 15.5°CWB (-12°CWB~10°CWB with indoor unit 20 or 25 type only is working)

Model name		PUHY-P400YMF-B	
Fan	Type X Quantity	Propeller fan X 2	Propeller fan X 1
	Airflow rate	m³/min	370
	Motor output	kW	0.35 X 2
Type		Hermetic	
Compressor	Motor output	kW	4.5 + 7.5
	Crankcase heater	kW	0.045 + 0.056
External dimension		mm	1715(H)X 1990(W)X 840(L)
Protection devices	High pressure protection		30kg/cm²G(2.94MPa)
	Compressor / Fan		Overcurrent protection / Thermal switch
	Inverter		DC bus current protection, thermal switch
Refrigerant piping diameter		Liquid / Gas	ø 15.88 flare / ø 34.93 Flange
Net weight		kg	455
			255

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

**Cooling** Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

**Heating** Indoor : 21°CDB Outdoor : 7°CDB/6°CWB

Pipe length : 10m Height difference : 0m

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

\* It is measured in anechoic room.

This unit consists of a combination of PUHY-P500YMF-B and PUHN-P200YMF-B.

Model name		PUHY-P700YSMF-B	
		Cooling	Heating
Capacity	kcal/h	70,000	78,400
	kW	81.5	91.1
	BTU/h	277,900	311,200
Power source		3N ~ 380/400/415V 50/60Hz	
Power input		kW	30.5 26.95
Current		A	50.3/47.8/46.1 44.9/42.7/41.2
Refrigerant / Lubricant		R407C/MEL32	
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>	
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity
	Model / Quantity		Model 20 ~ 250 / 2 ~ 32
Noise level		dB<A> (50/60Hz)	*
Refrigerant piping diameter (main)		Liquid / Gas	ø19.05 / ø41.28
Operating temperature range		Indoor:15°CWB ~ 24°CWB Outdoor:-5°CDB ~ 43°CDB (10°CDB~43°CDB with outdoor unit at lower position, or with indoor unit 20 or 25 type only is working)	Indoor:15°CDB ~ 27°CDB Outdoor:-15°CWB ~ 15.5°CWB (-12°CWB~10°CWB with indoor unit 20 or 25 type only is working)
Model name		PUHY-P500YMF-B	PUHN-P200YMF-B
Fan	Type X Quantity		Propeller fan X 2
	Airflow rate	m³/min	370 185
	Motor output	kW	0.35 X 2 0.35 X 1
Compressor	Type		Hermetic
	Motor output	kW	7.5 + 7.5 5.5
	Crankcase heater	kW	0.045 + 0.056 0.056
External dimension		mm	1715(H)X 1990(W)X 840(L) 1715(H)X 990(W)X 840(L)
Protection devices	High pressure protection		30kg/cm²G(2.94MPa)
	Compressor / Fan		Overcurrent protection / Thermal switch
	Inverter		DC bus current protection, thermal switch
Refrigerant piping diameter		Liquid / Gas	ø 15.88 flare / ø 34.93 Flange ø 12.7 flare / ø 28.58 Flange
Net weight		kg	475 240

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

**Cooling** Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

**Heating** Indoor : 21°CDB Outdoor : 7°CDB/6°CWB

Pipe length : 10m Height difference : 0m

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

\* It is measured in anechoic room.

This unit consists of a combination of PUHY-P500YMF-B and PUHN-P250YMF-B.

Model name		PUHY-P750YSMF-B	
		Cooling	Heating
Capacity	kcal/h	75,000	84,000
	kW	87.3	97.7
	BTU/h	297,800	333,500
Power source		3N ~ 380/400/415V 50/60Hz	
Power input		kW	32.4
Current		A	53.5/50.8/48.9
Refrigerant / Lubricant		R407C/MEL32	
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>	
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity
	Model / Quantity		Model 20 ~ 250 / 2 ~ 32
Noise level		dB<A> (50/60Hz)	* 62.0 / 62.5
Refrigerant piping diameter (main)		Liquid / Gas	ø19.05 / ø41.28
Operating temperature range		Indoor:15°CWB ~ 24°CWB Outdoor:-5°CDB ~ 43°CDB (10°CDB~43°CDB with outdoor unit at lower position, or with indoor unit 20 or 25 type only is working)	Indoor:15°CDB ~ 27°CDB Outdoor:-15°CWB ~ 15.5°CWB (-12°CWB~10°CWB with indoor unit 20 or 25 type only is working)
		PUHY-P500YMF-B	PUHN-P250YMF-B
Fan	Type X Quantity		Propeller fan X 2
	Airflow rate		370
	Motor output		0.35 X 2
Compressor	Type		Hermetic
	Motor output		7.5 + 7.5
	Crankcase heater		0.045 + 0.056
External dimension		mm	1715(H)X 1990(W)X 840(L)
Protection devices	High pressure protection		30kg/cm <sup>2</sup> G(2.94MPa)
	Compressor / Fan		Overcurrent protection / Thermal switch
	Inverter		DC bus current protection, thermal switch
Refrigerant piping diameter		Liquid / Gas	ø 15.88 flare / ø 34.93 Flange
Net weight		kg	475
			255

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

**Cooling** Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

**Heating** Indoor : 21°CDB Outdoor : 7°CDB/6°CWB

Pipe length : 10m Height difference : 0m

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

\* It is measured in anechoic room.

## 2. Capacity Tables

### 2-1. Correction by temperature

#### Cooling

•Standard Specifications

		PUHY-P600YSMF-B	PUHY-P650YSMF-B	PUHY-P700YSMF-B	PUHY-P750YSMF-B
Capacity	kcal/h	60,000	65,000	70,000	75,000
	kW	69.8	75.6	81.5	87.3
	BTU/h	238,200	258,100	277,900	297,800
Input	kW	25.5	27.45	30.5	32.4
Source	V	380/400/415			
Current	A	42.5/40.4/38.9	45.8/43.5/41.9	50.3/47.8/46.1	53.5/50.8/48.9

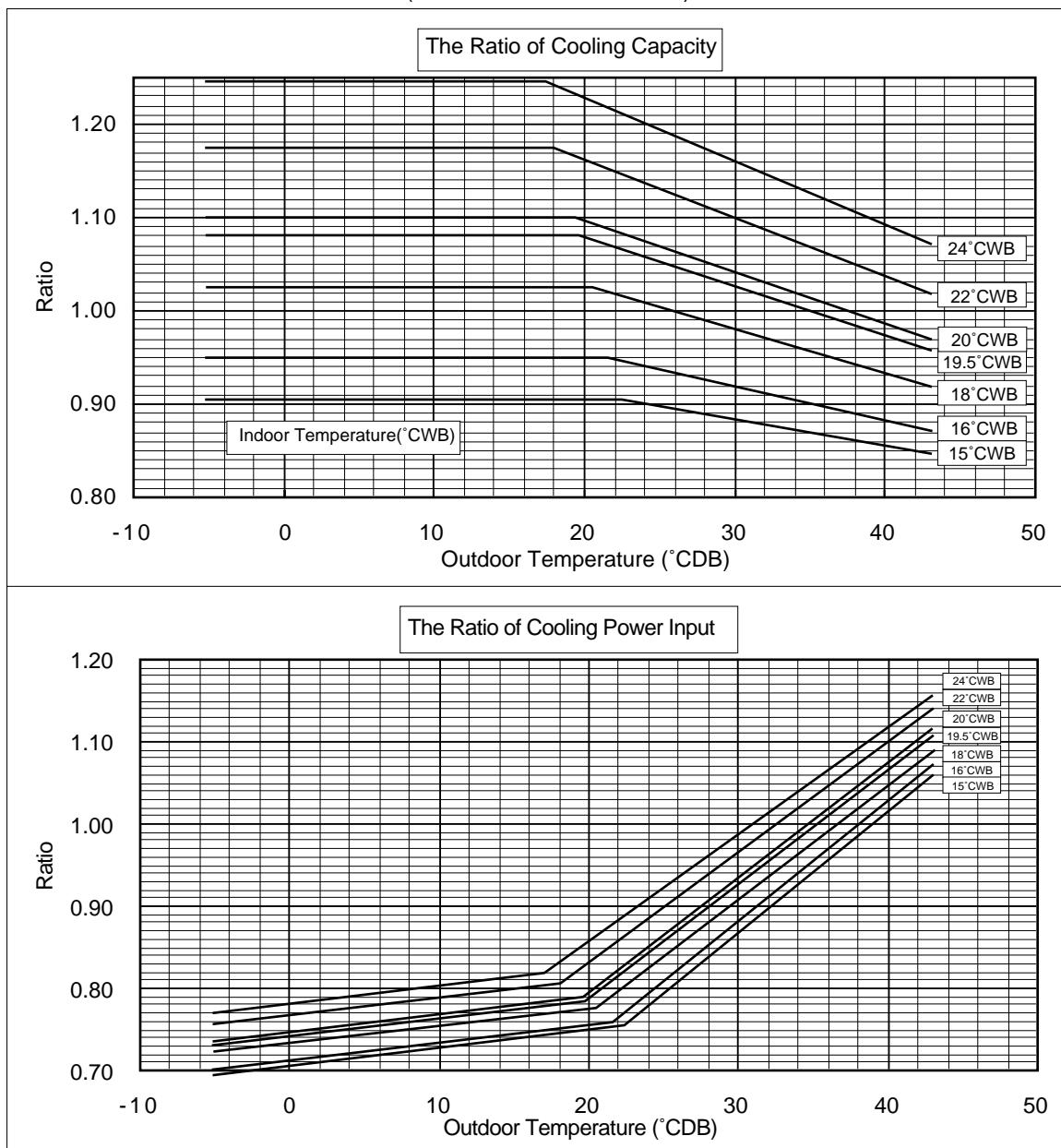
•Calculation

$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3 \times \text{Source} \times 0.91(\text{:PUHY-P600-650YSMF-B})}} \\ \times 0.92(\text{:PUHY-P700-750YSMF-B})$$

} After correction  
\*Capacity'  
Input'  
Current'



## Heating

### •Standard Specifications

		PUHY-P600YSMF-B	PUHY-P650YSMF-B	PUHY-P700YSMF-B	PUHY-P750YSMF-B
Capacity	kcal/h	67,400	73,000	78,400	84,000
	kW	78.3	84.9	91.1	97.7
	BTU/h	267,500	289,800	311,200	333,500
Input	kW	22.95	25.2	26.95	28.95
Source	V	380/400/415			
Current	A	38.3/36.4/35.0	42.0/39.9/38.5	44.9/42.7/41.2	48.3/45.9/44.2

### •Calculation

$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

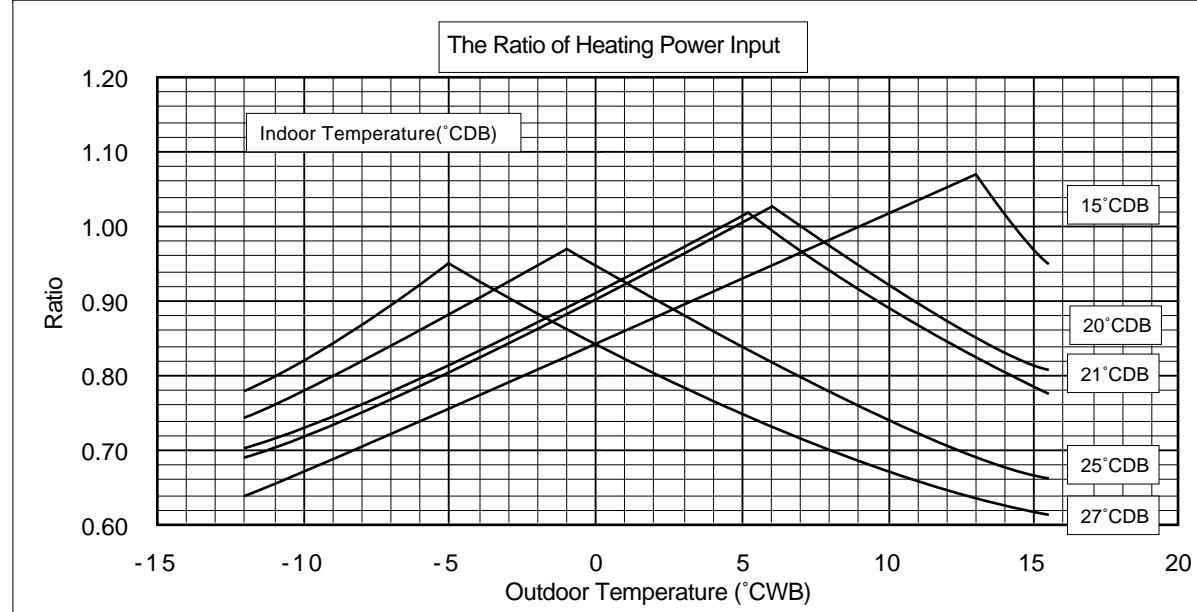
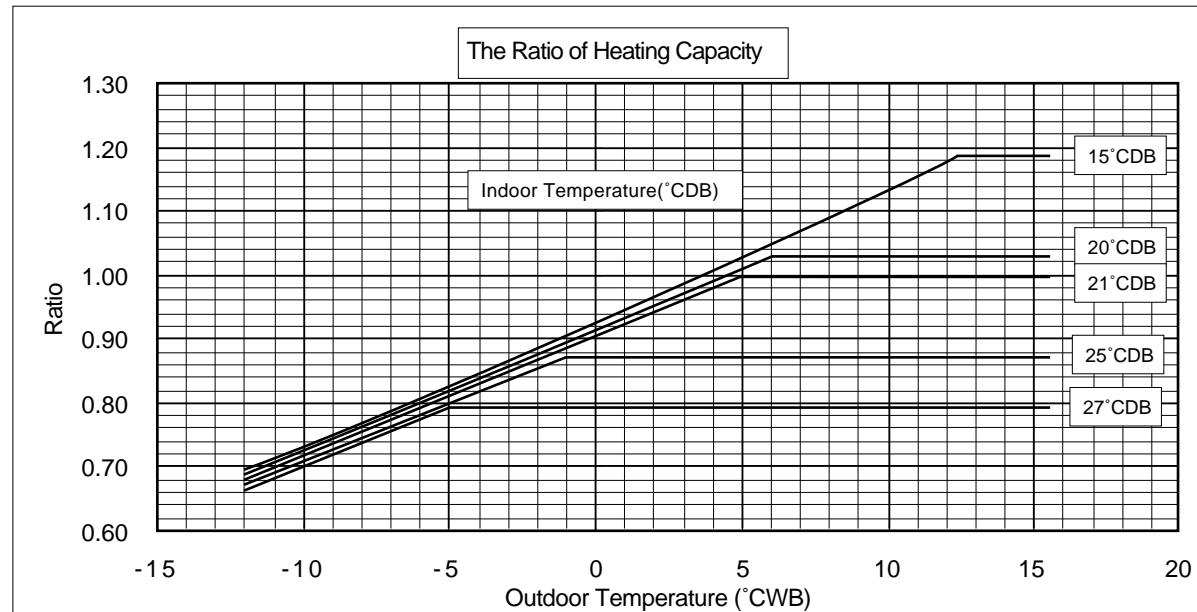
$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.91} \quad (\text{:PUHY-P600-650-700-750YSMF-B})$$

\*Capacity'

Input'

Current'

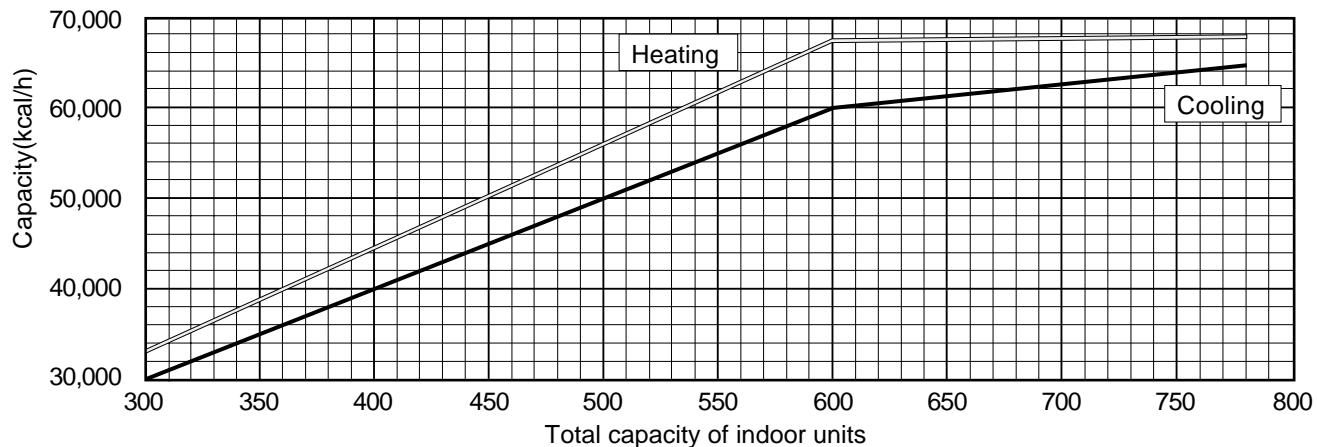
} After correction



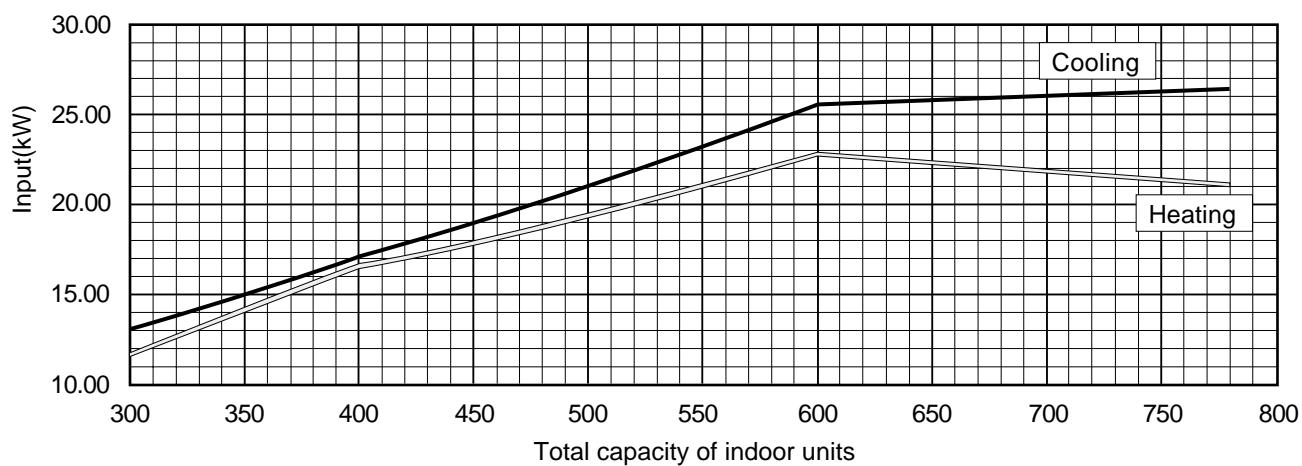
## 2-2. Correction by total indoor

**PUHY-P600YSMF-B**

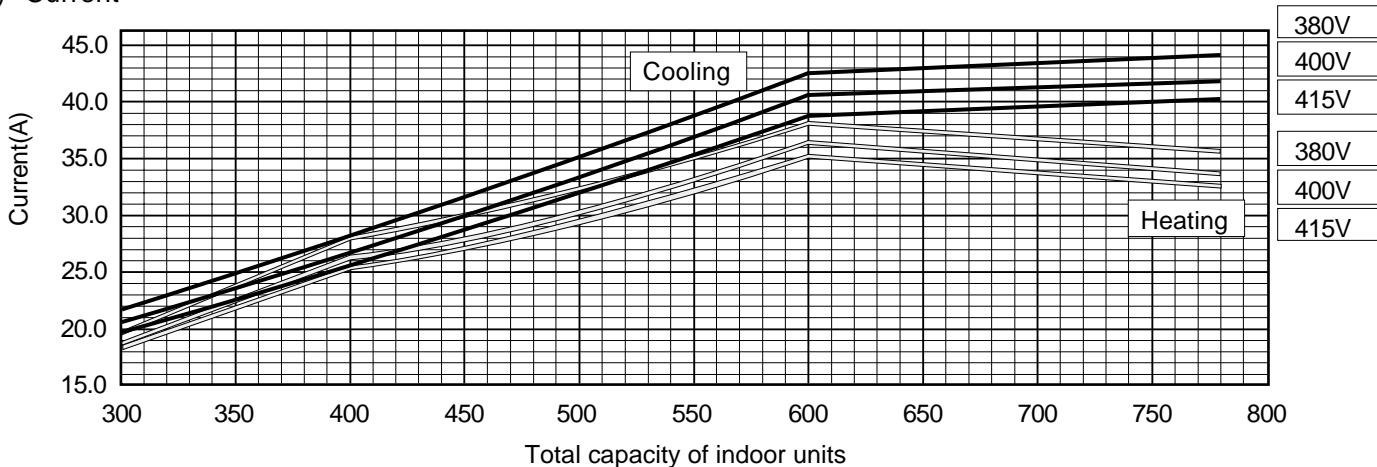
### 1) Capacity



### 2) Input

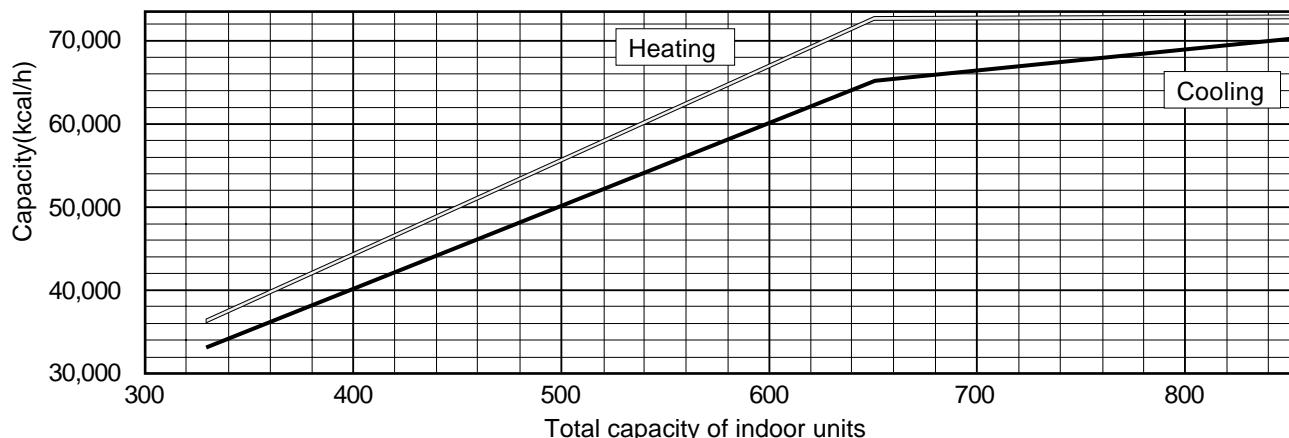


### 3) Current

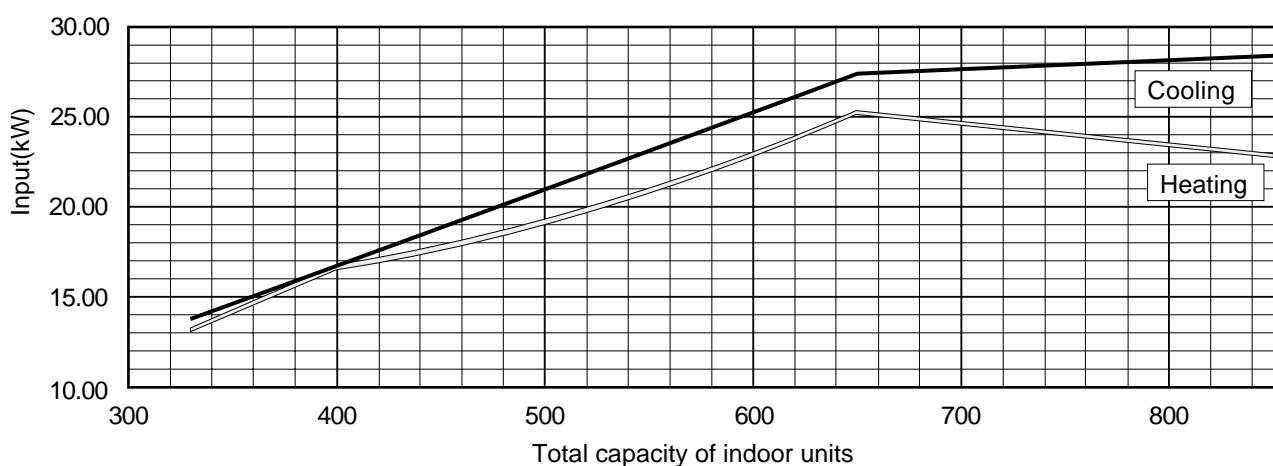


**PUHY-P650YSMF-B**

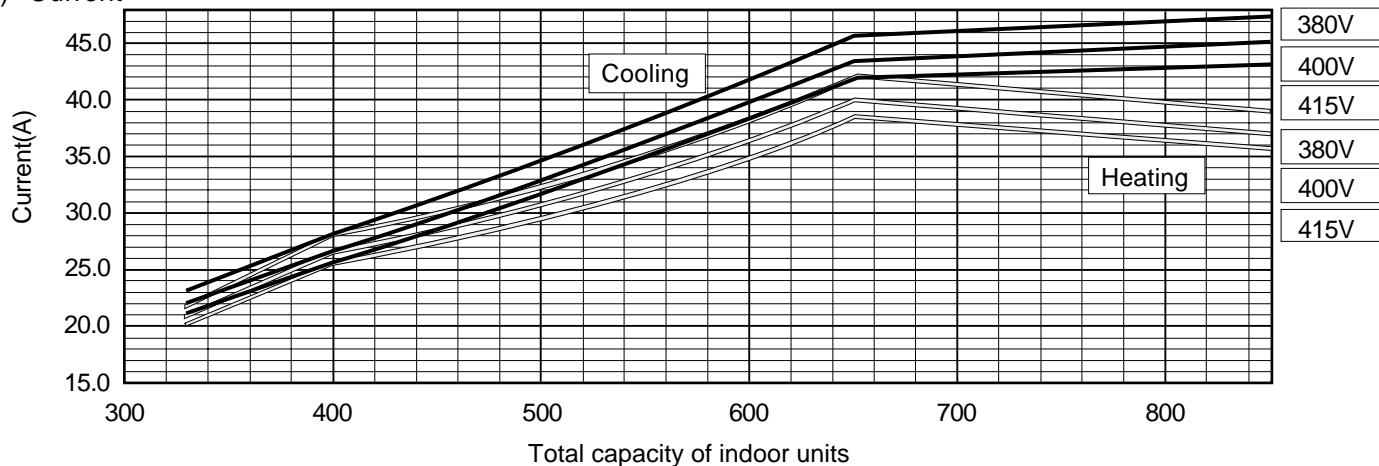
1) Capacity



2) Input



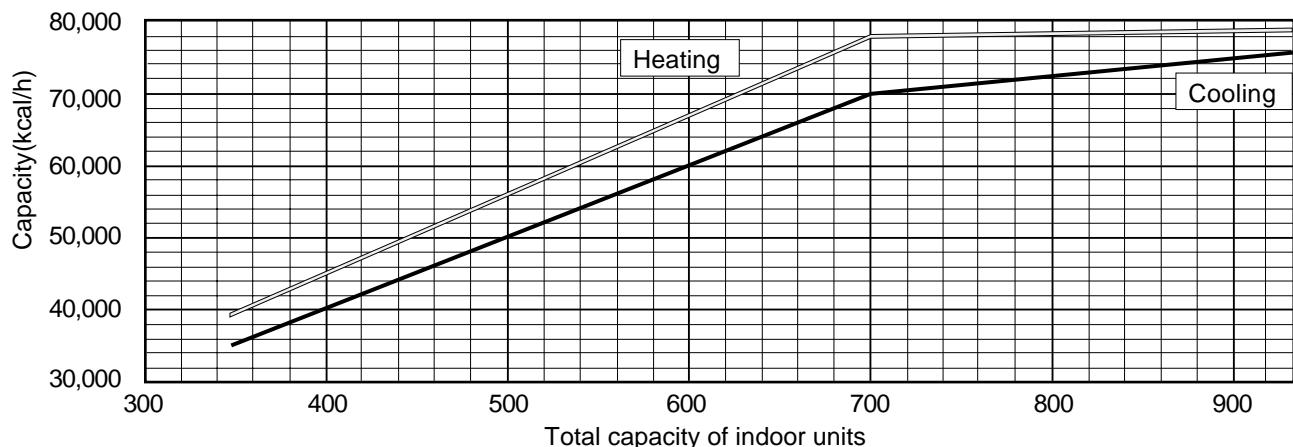
3) Current



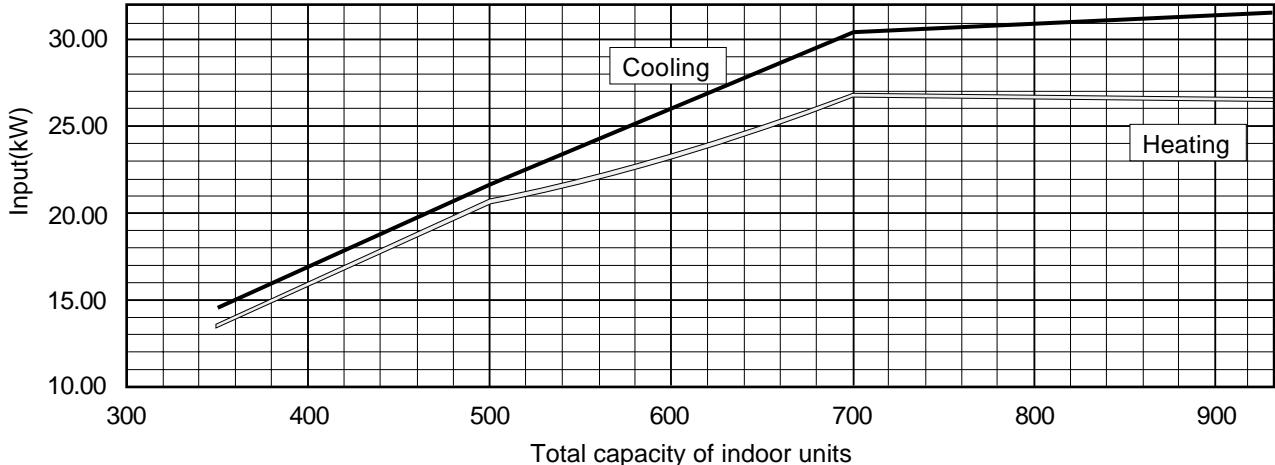
Super Y(R407C)

## PUHY-P700YSMF-B

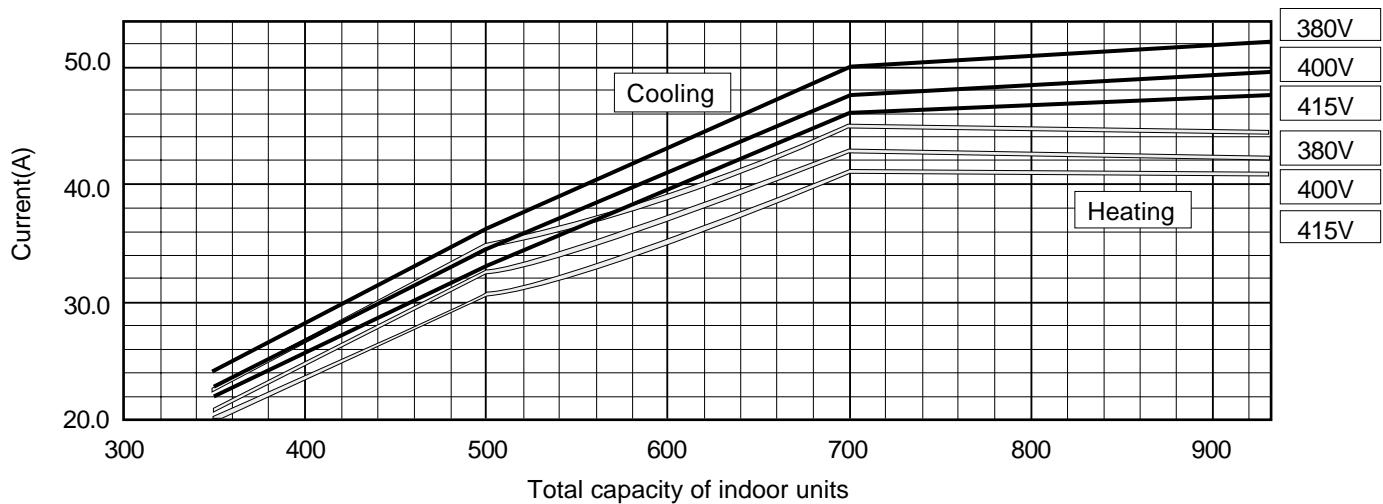
### 1) Capacity



### 2) Input

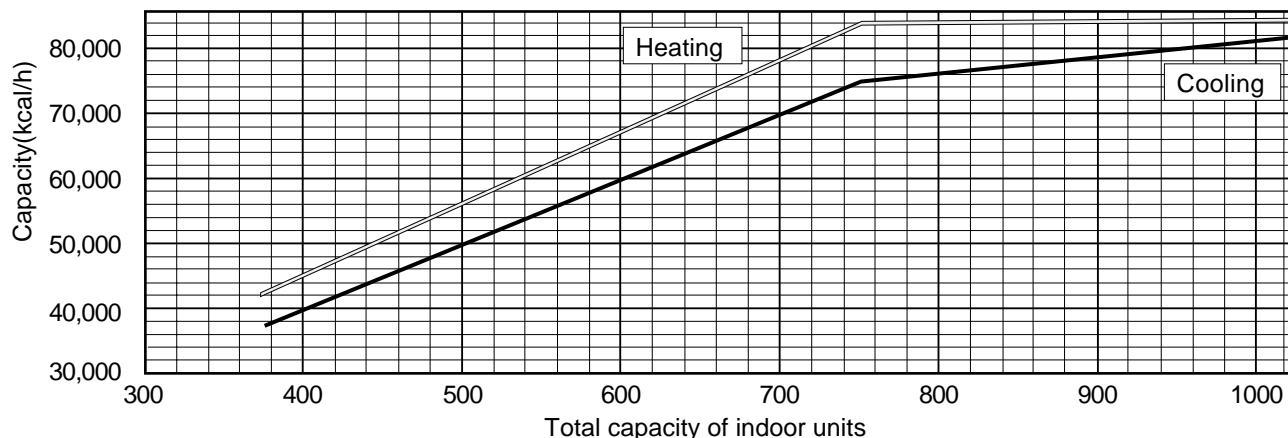


### 3) Current

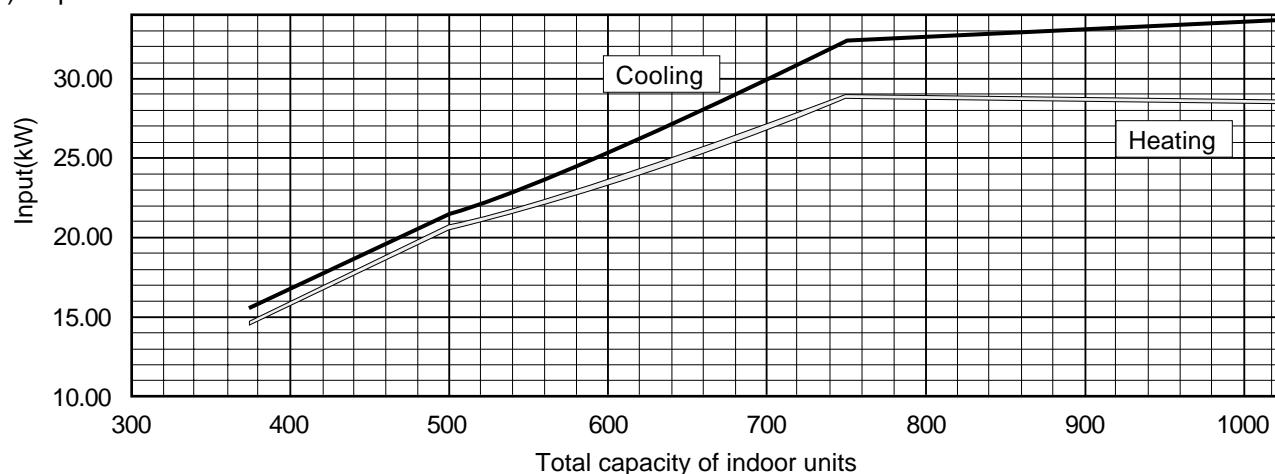


## PUHY-P750YSMF-B

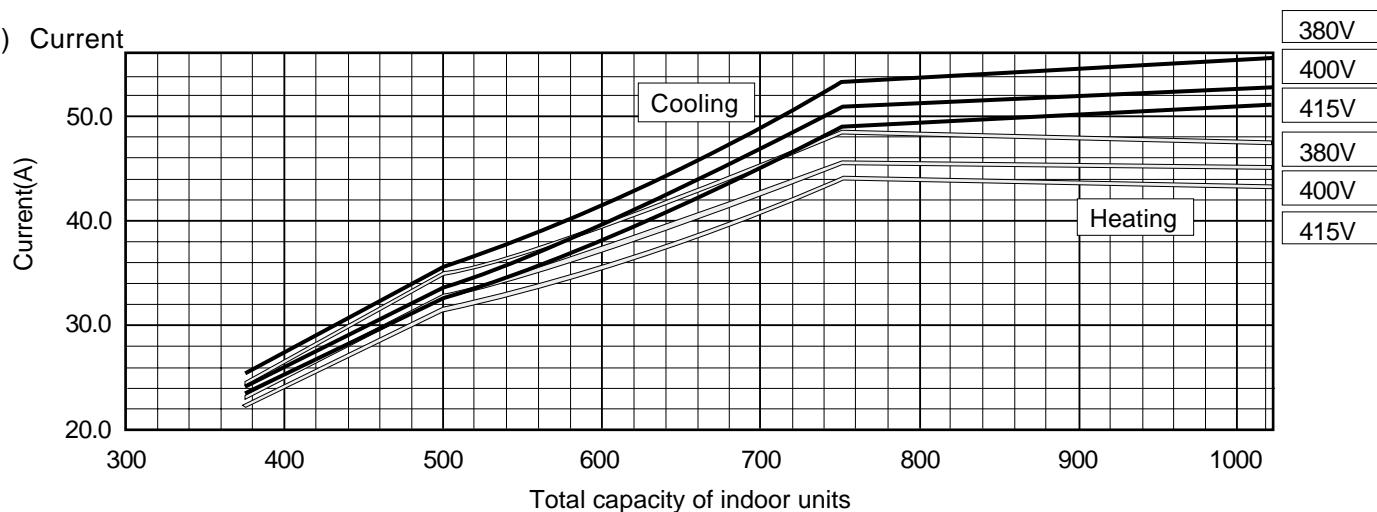
## 1) Capacity



## 2) Input



## 3) Current



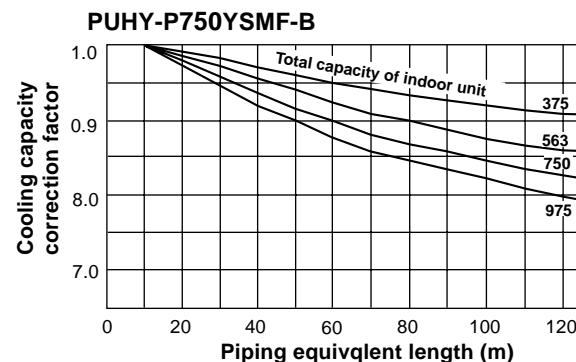
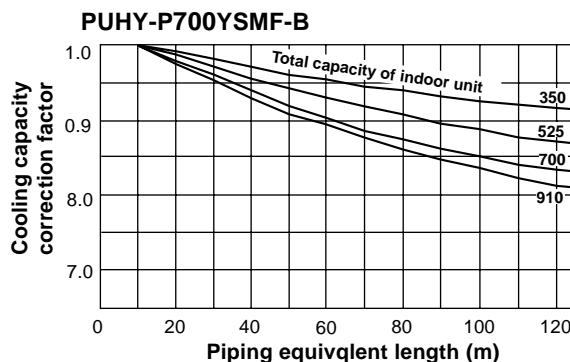
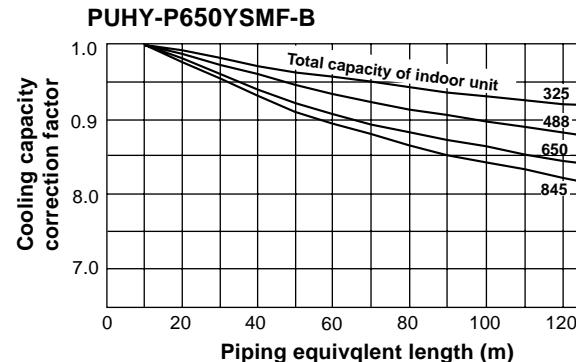
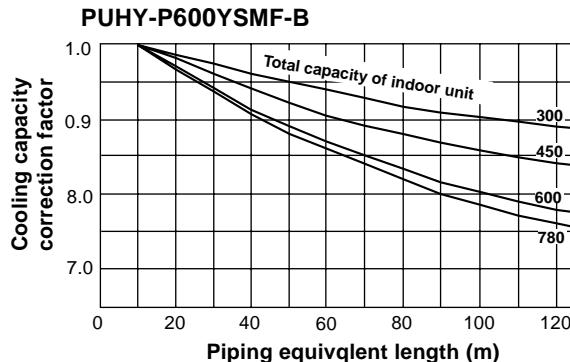
Super Y(R407C)

380V
400V
415V
380V
400V
415V

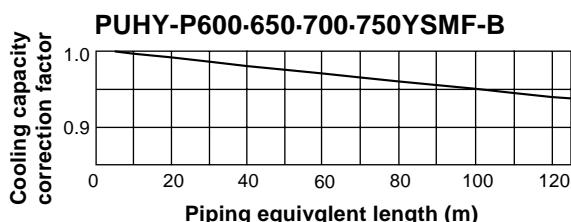
## 2-3 Correction by refrigerant piping length

To obtain a decrease in cooling/heating capacity due to refrigerant piping extension, multiply by the capacity correction factor based on the refrigerant piping equivalent length in the table below.

### • Cooling capacity correction



### • Heating capacity correction



#### • How to obtain piping equivalent length

##### ① PUHY-P600YSMF-B

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

##### ② PUHY-P650 ~ 750YSMF-B

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.95 X number of bent on the piping)m

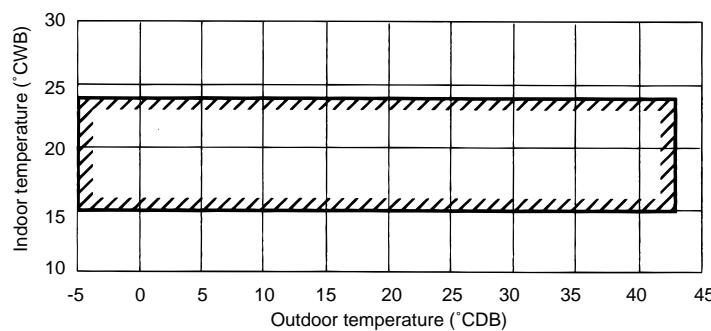
## 2-4 Correction at frosting and defrosting

When a decrease in heating capacity due to frosted and defrosting operations is considered, the value multiplied by the correction factor in the table below represents the heating capacity.

Outdoor inlet air temp (°CWB)	6	4	2	0	-2	-4	-6	-8	-10
Correction factor	1.0	0.98	0.89	0.89	0.90	0.92	0.95	0.95	0.95

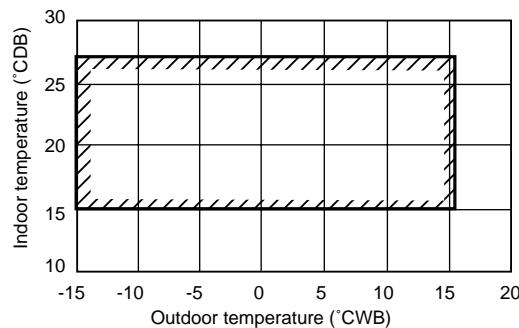
## 2-5 Operation limit

- Cooling



When the indoor unit is located above the outdoor unit for 4m or more, or indoor unit 20 or 25type only is working, the outdoor unit inlet air temperature becomes 10~43°CDB.

- Heating

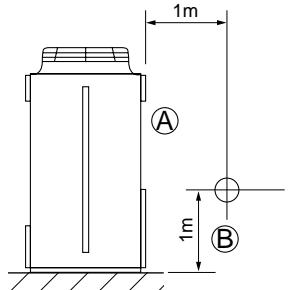


When the indoor unit 20 or 25type only is working, the outdoor unit inlet air temperature becomes -15~10°CWB.

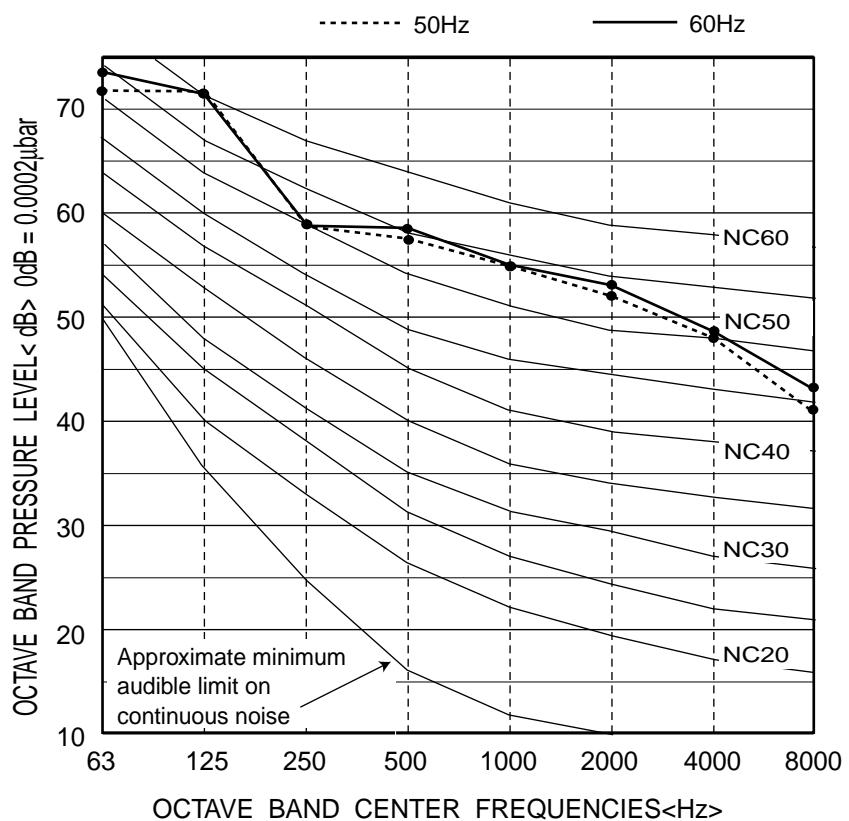
### 3. Sound Levels

#### PUHY-P600YSMF-B

Measurement condition

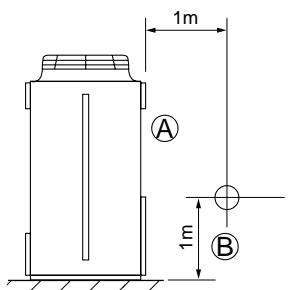


Sound pressure level in anechoic room
61.5 / 62.0 dB (A)

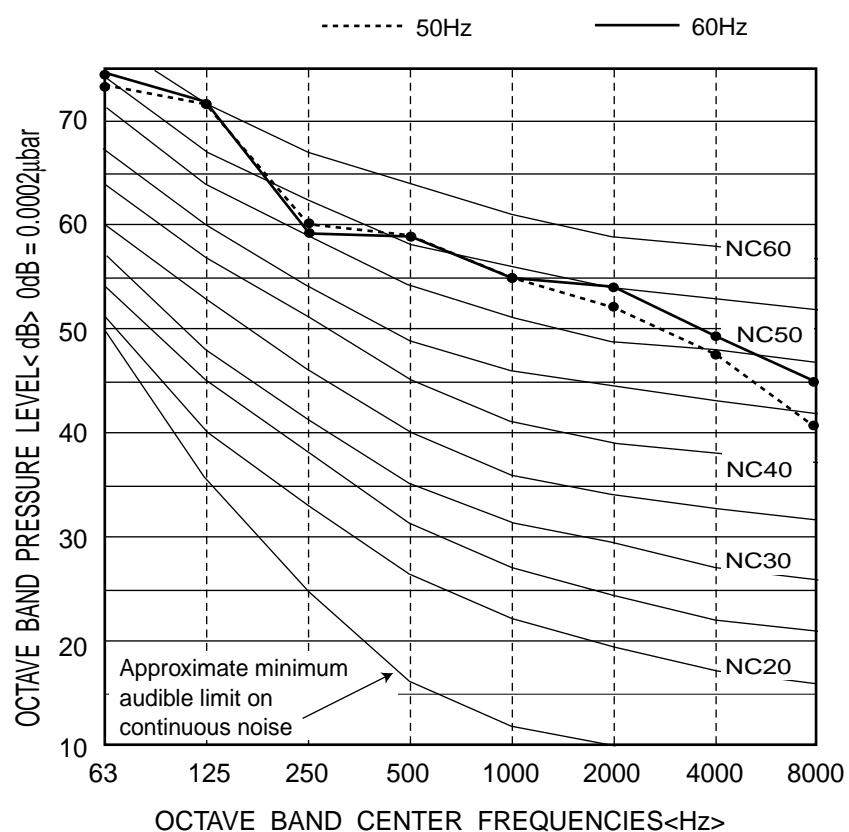


#### PUHY-P650YSMF-B

Measurement condition

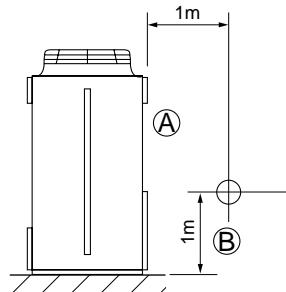


Sound pressure level in anechoic room
62.0 / 62.5 dB (A)

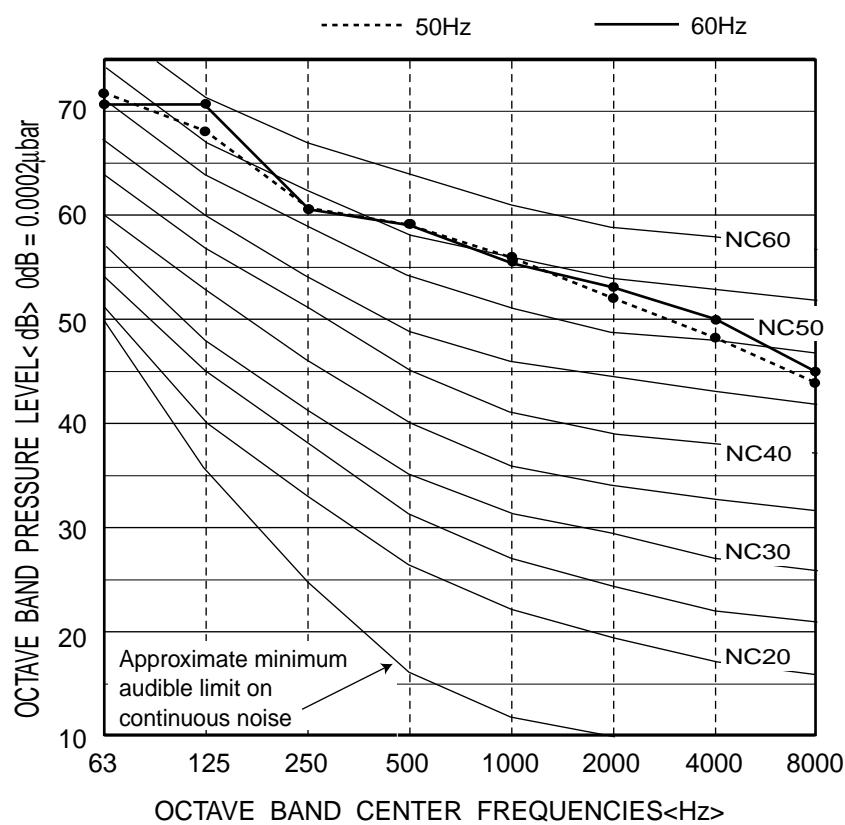


**PUHY-P700YSMF-B**

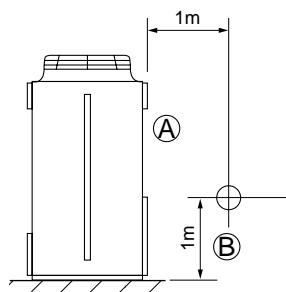
Measurement condition



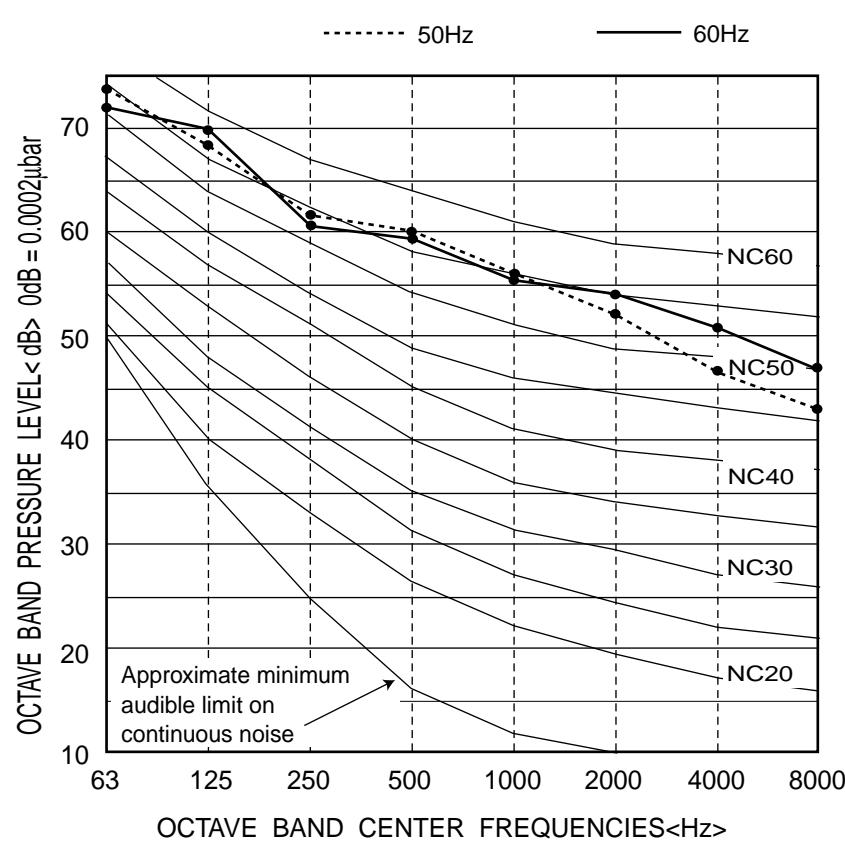
Sound pressure level in anechoic room
61.5 / 62.0 dB (A)

**PUHY-P750YSMF-B**

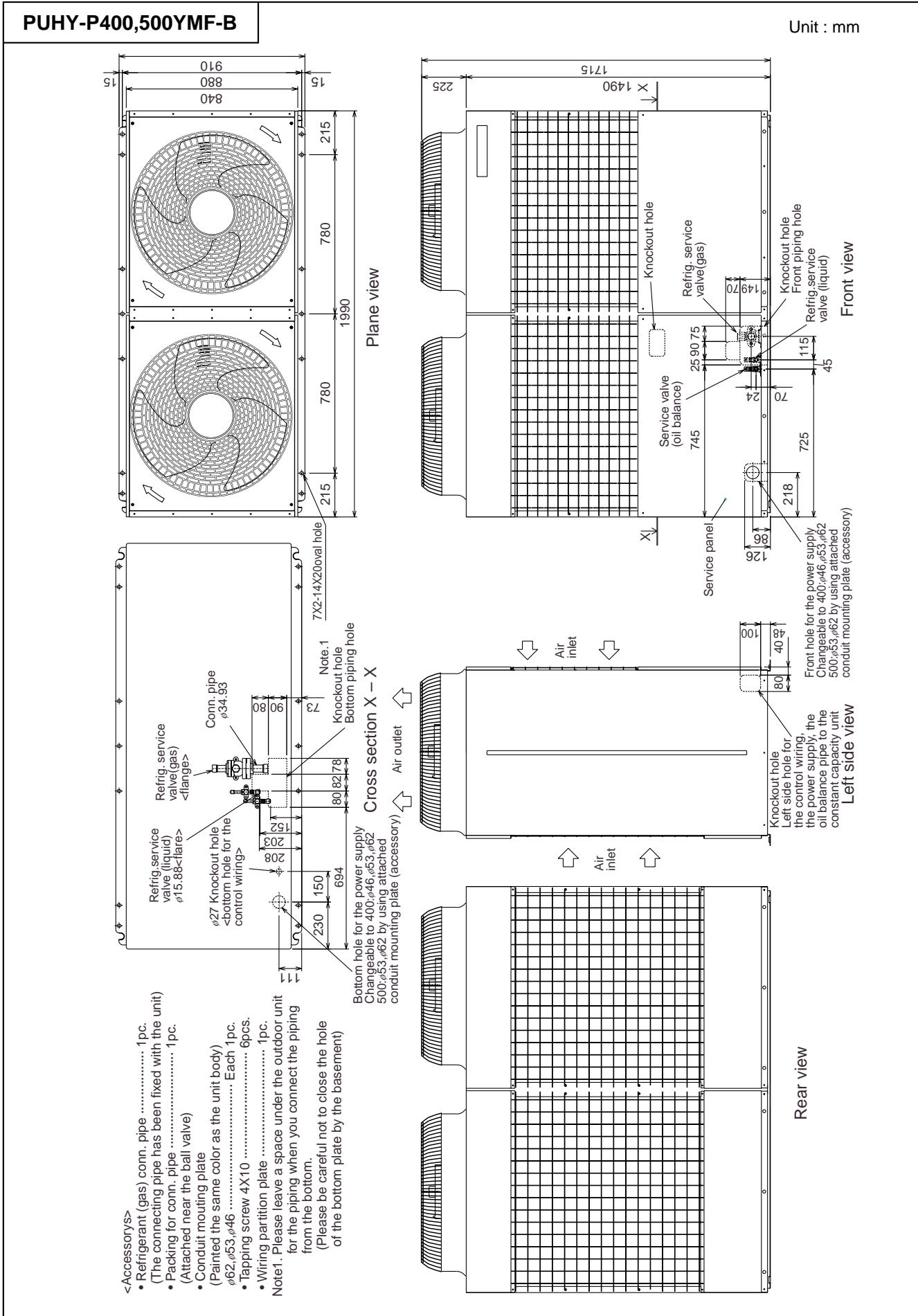
Measurement condition

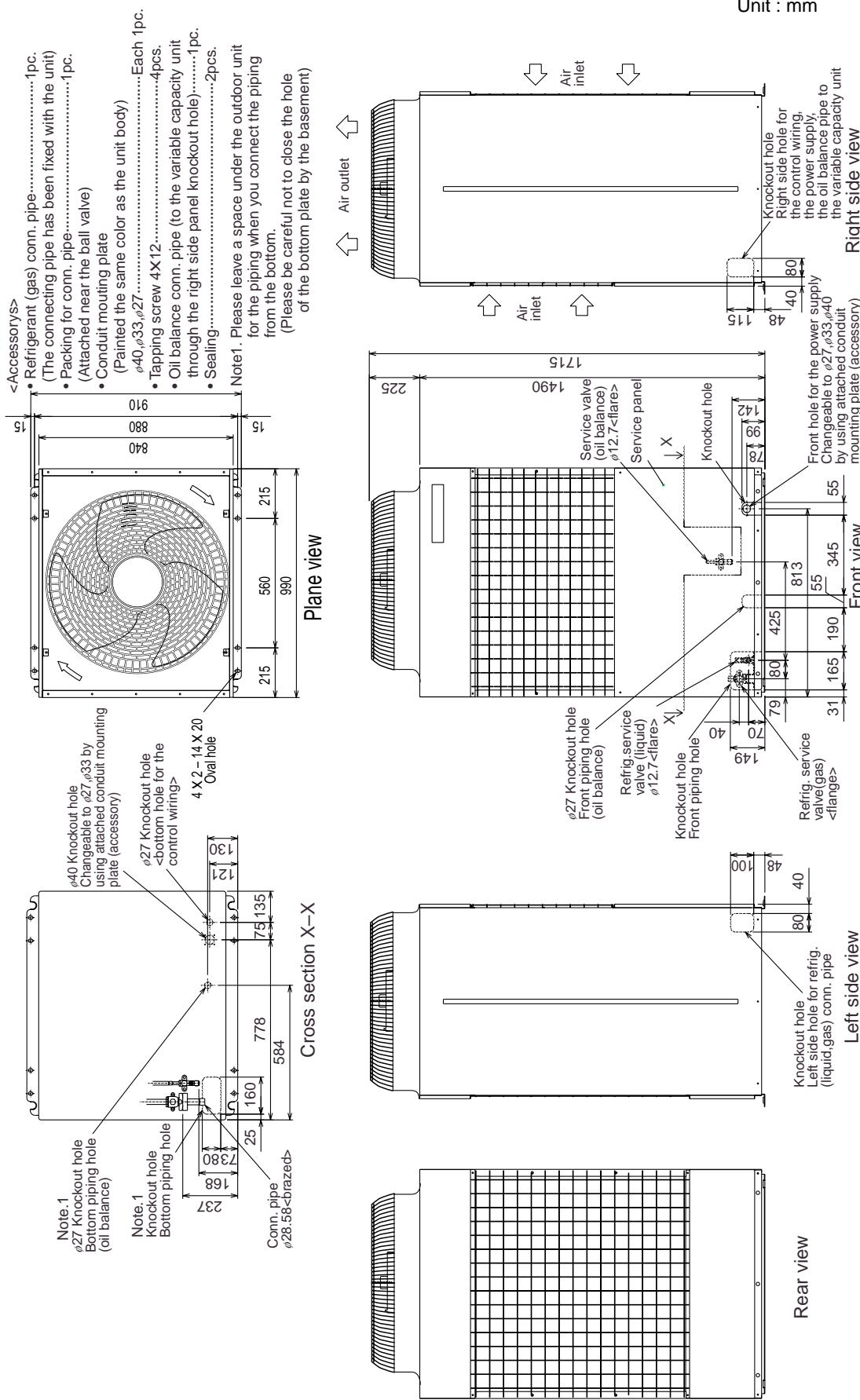


Sound pressure level in anechoic room
62.0 / 62.5 dB (A)



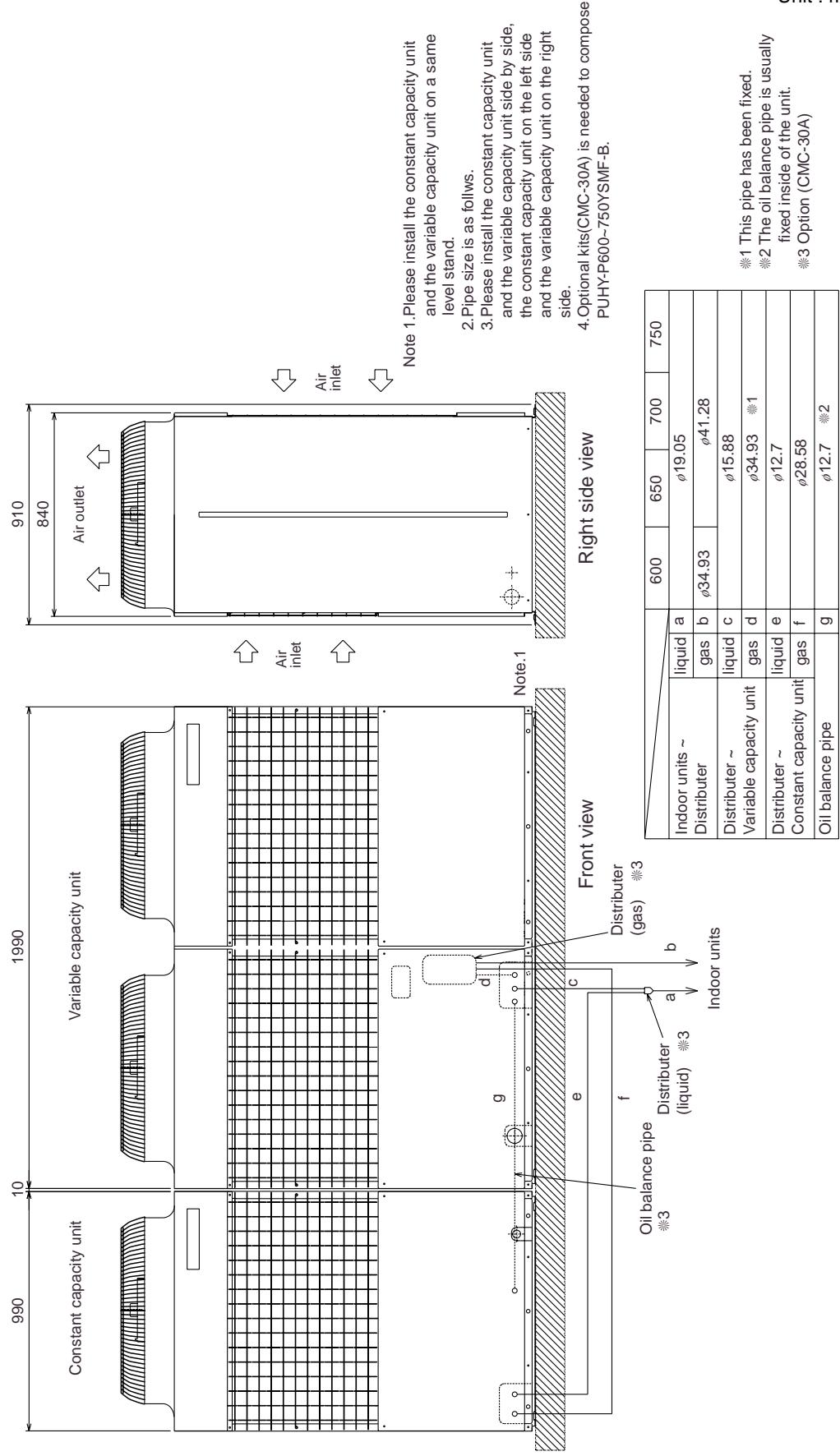
## **4. External Dimensions**



**PUHN-P200, 250YMF-B**

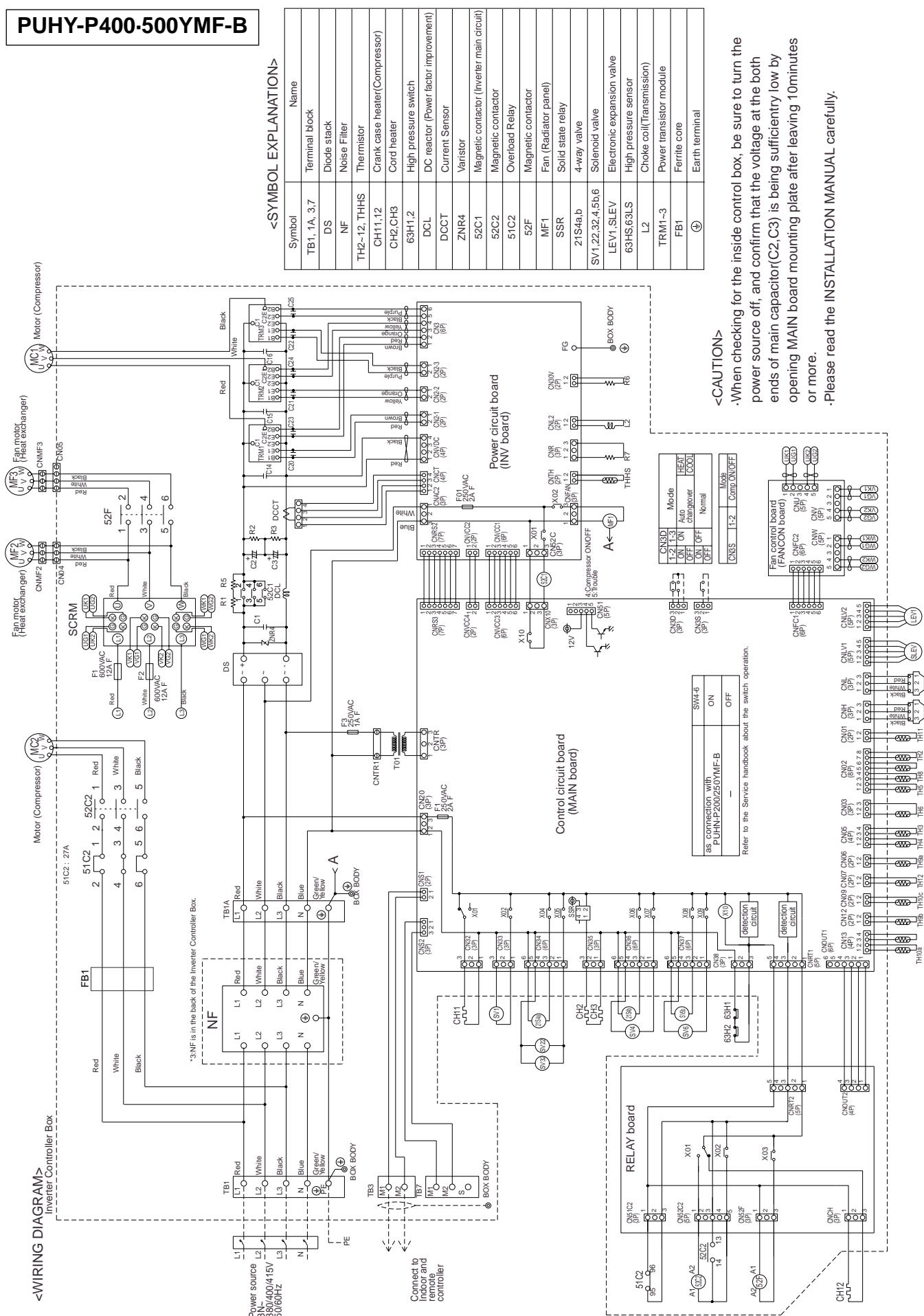
**PUHY-P600,650,700,750YSMF-B**

Unit : mm



## **5. Electrical Wiring Diagram**

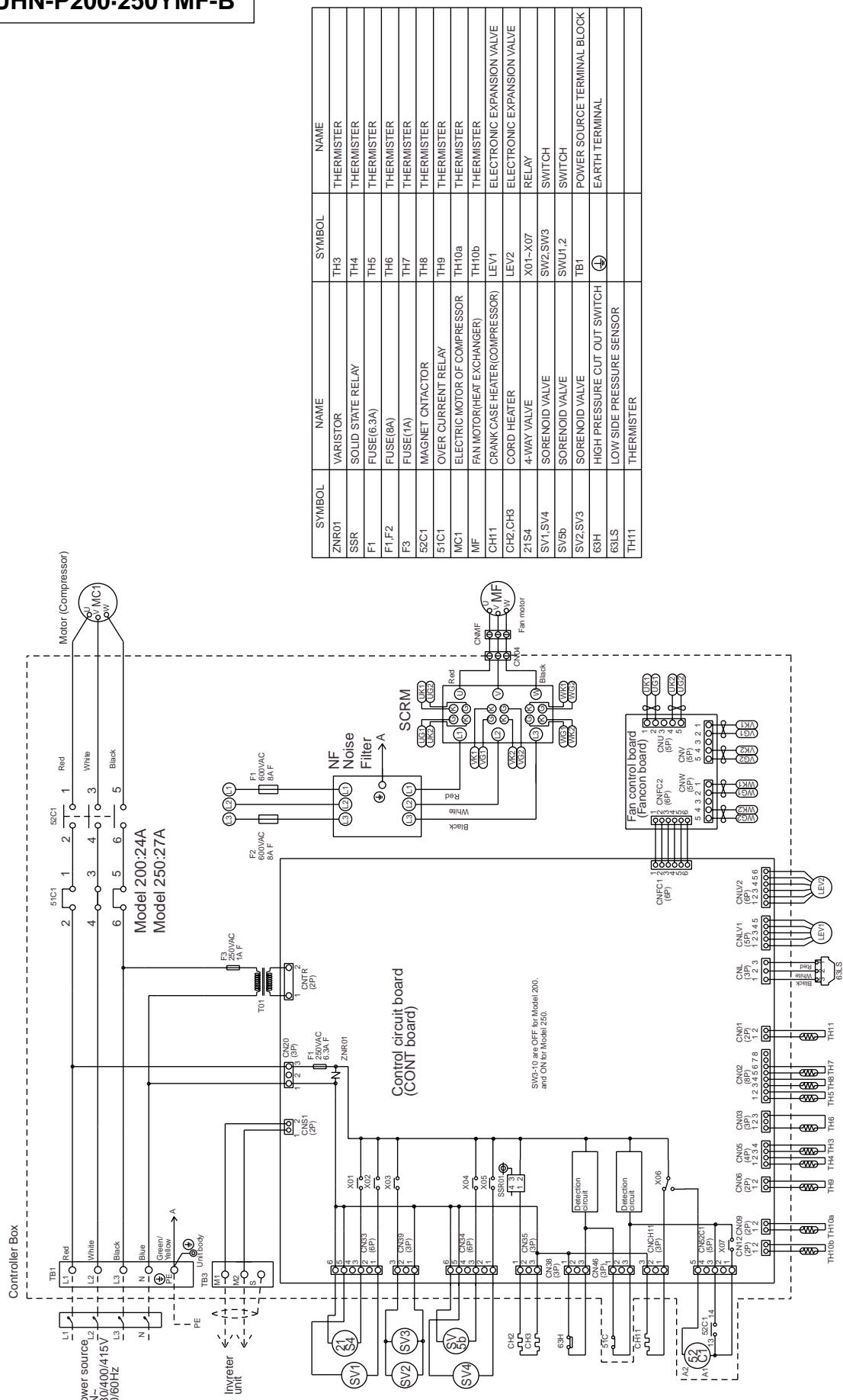
# **PUHY-P400-500YMF-B**



Super Y(R407C)

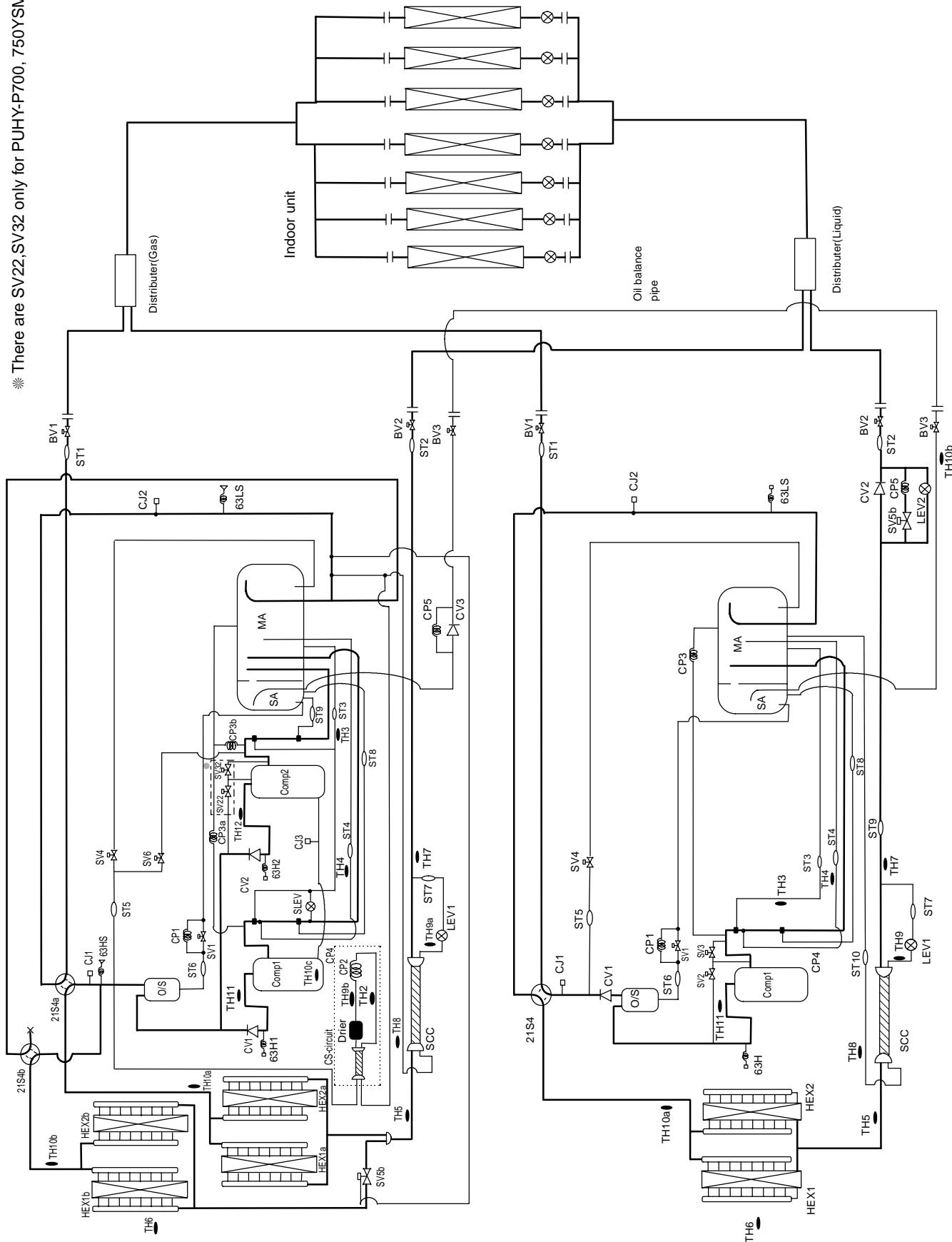
Super Y(R407C)

**PUHN-P200-250YMF-B**



## 6. Refrigerant Circuit Diagram And Thermal Sensor

\* There are SV22,SV32 only for PUHY-P700, 750YSMF-B.



Super Y (R407C)



# PURY-P200YMF-C, PURY-P250YMF-C

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R2(R407C)

# 1. Specifications

R2(R407C)

Model name		PURY-P200YMF-C				
		Cooling		Heating		
Capacity	kW	*1	22.4	25.0		
	kcal/h	*2	20,000	-		
Power source		3N~380/400/415V 50/60Hz				
Power input		kW	8.64	7.98		
Current		A	14.5/13.8/13.3	13.4/12.7/12.3		
Fan	Type	Propeller fan×1				
	Airflow rate	m³/min	185			
	Motor output	kW	0.38			
Compressor	Type	Hermetic				
	Motor output	kW	5.5			
	Crankcase heater	kW	0.062(240V)			
Refrigerant / Lubricant		R407C/MEL32				
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>				
External dimension		mm	1715(H)×990(W)×840(L)			
Protection devices	High pressure protection		2.94MPa			
	Compressor / Fan		Over current protection / Thermal switch			
	Inverter		DC bus current protection, thermal switch			
Refrigerant piping diameter		High press. / Low press.	ø19.05 flare / ø25.4 Flange			
Indoor unit	Total capacity		50~150% of outdoor unit capacity			
	Model / Quantity		Model 20~250 / 1~15			
Noise level		dB<A>	*3	56		
Net weight		kg	241			
Operating temperature range			Indoor:15°CWB ~ 24°CWB Outdoor:-5°CDB ~ 43°CDB	Indoor:15°CDB ~ 27°CDB Outdoor:-15°CWB ~ 15.5°CWB		
			-5°CDB/-6°CWB ~ 21°CDB/15.5°CWB with cooling/heating mixed operation.			

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 Cooling Indoor : 27°CDB/19°CWB Outdoor : 35°CDB

\*2 Cooling Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

Heating Indoor : 20°CDB

Outdoor : 7°CDB/6°CWB

Pipe length : 5m

Height difference : 0m

Pipe length : 7.5m

Height difference : 0m

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

Model name			PURY-P250YMF-C		
			Cooling	Heating	
Capacity		kW	*1 28.0	31.5	
		kcal/h	*2 25,000	-	
Power source			3N ~ 380/400/415V 50/60Hz		
Power input		kW	10.89	10.15	
Current		A	18.3/17.4/16.8	17.1/16.2/15.6	
Fan	Type	Quantity	Propeller fan X 1		
	Airflow rate	m³/min	185		
	Motor output	kW	0.38		
Compressor	Type		Hermetic		
	Motor output	kW	7.5		
	Crankcase heater	kW	0.062(240V)		
Refrigerant / Lubricant			R407C/MEL32		
External finish			Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>		
External dimension		mm	1715(H) X 990(W) X 840(L)		
Protection devices	High pressure protection		2.94MPa		
	Compressor / Fan		Over current protection / Thermal switch		
	Inverter		DC bus current protection, thermal switch		
Refrigerant piping diameter		High press. / Low press.	ø 19.05 flare / ø 28.58 Flange		
Indoor unit	Total capacity		50 ~ 150% of outdoor unit capacity		
	Model / Quantity		Model 20 ~ 250 / 1 ~ 16		
Noise level		dB<A>	*3	57	
Net weight		kg	247		
Operating temperature range			Indoor: 15°CWB ~ 24°CWB Outdoor: -5°CDB ~ 43°CDB	Indoor: 15°CDB ~ 27°CDB Outdoor: -15°CWB ~ 15.5°CWB	
			-5°CDB/-6°CWB ~ 21°CDB/15.5°CWB with cooling/heating mixed operation.		

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 Cooling Indoor : 27°CDB/19°CWB Outdoor : 35°CDB

\*2 Cooling Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

Heating Indoor : 20°CDB

Outdoor : 7°CDB/6°CWB

Pipe length : 5m

Height difference : 0m

Pipe length : 7.5m

Height difference : 0m

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

R2(R407C)

## 2. Capacity Tables

### 2-1. Correction by temperature

#### Cooling

- Standard Specifications

	PURY-P200YMF-C	PURY-P250YMF-C
Capacity kW	22.4	28.0
Input kW	8.64	10.89
Source V	380/400/415	
Current A	14.5/13.8/13.3	18.3/17.4/16.8

- Calculation

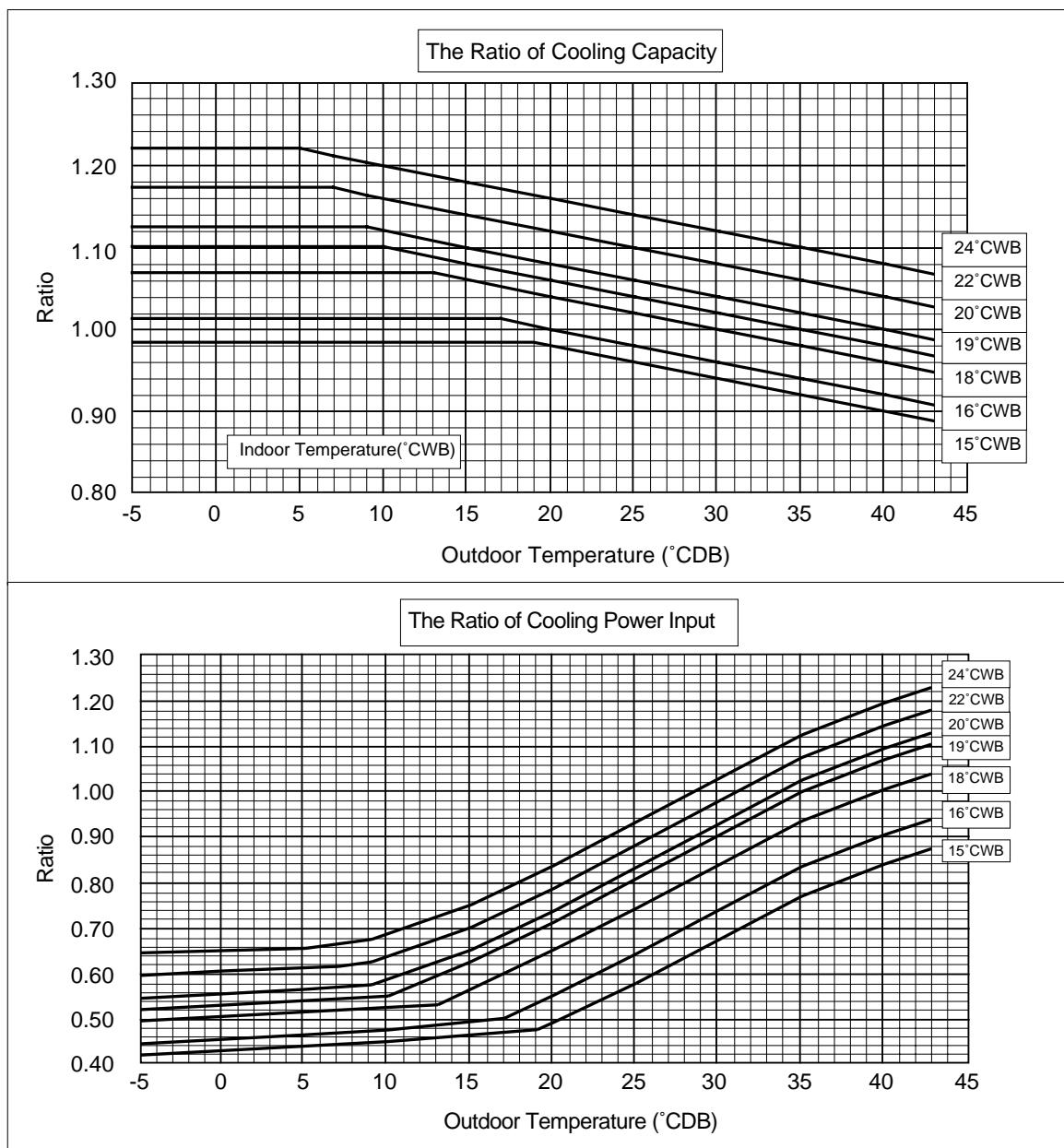
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.90}$$

\* Capacity'  
Input'  
Current'

} After correction



## Heating

- Standard Specifications

	PURY-P200YMF-C	PURY-P250YMF-C
Capacity kW	25.0	31.5
Input kW	7.98	10.15
Source V	380/400/415	
Current A	13.4/12.7/12.3	17.1/16.2/15.6

- Calculation

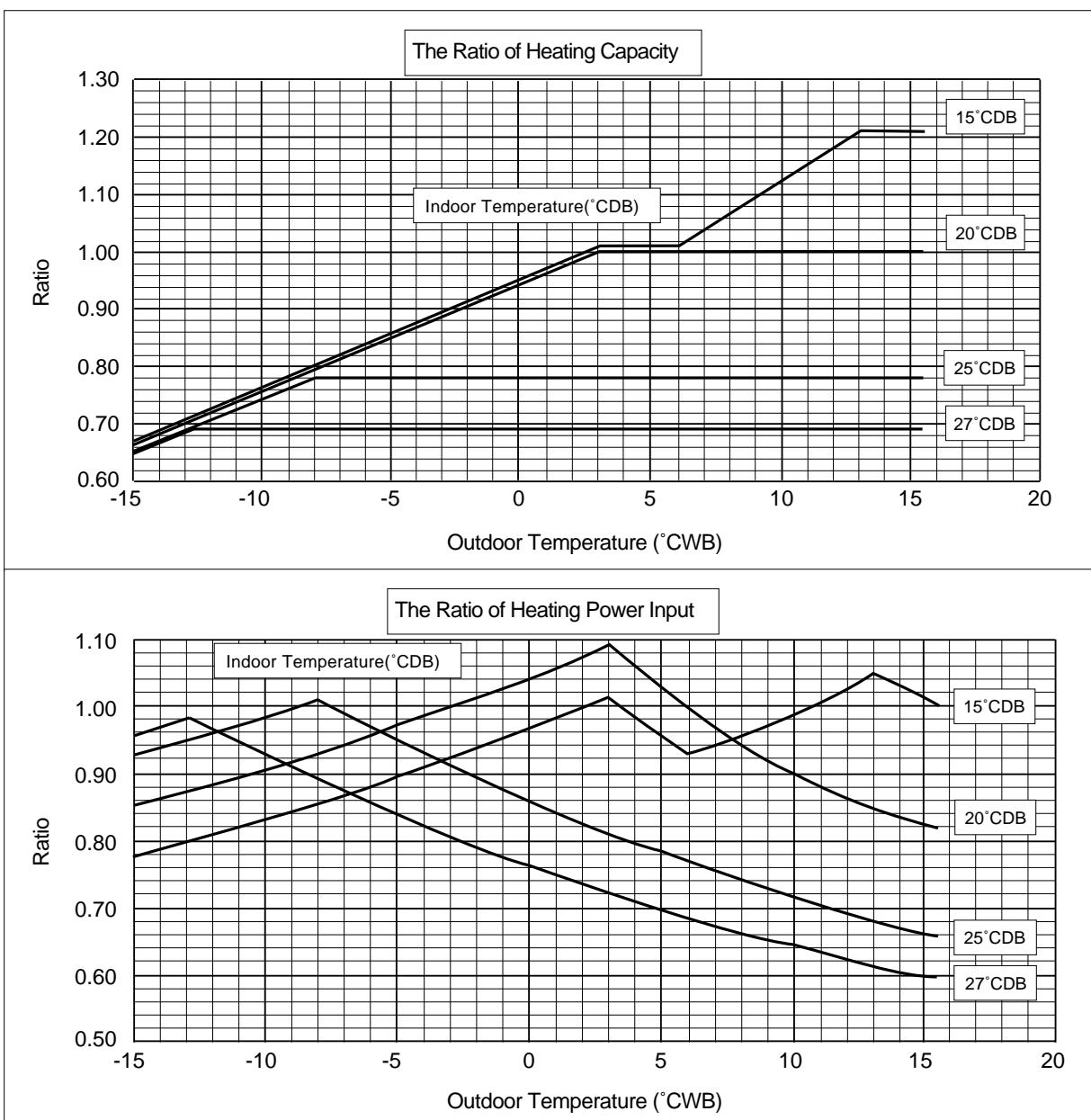
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.90}$$

※ Capacity'  
Input'  
Current'

} After correction

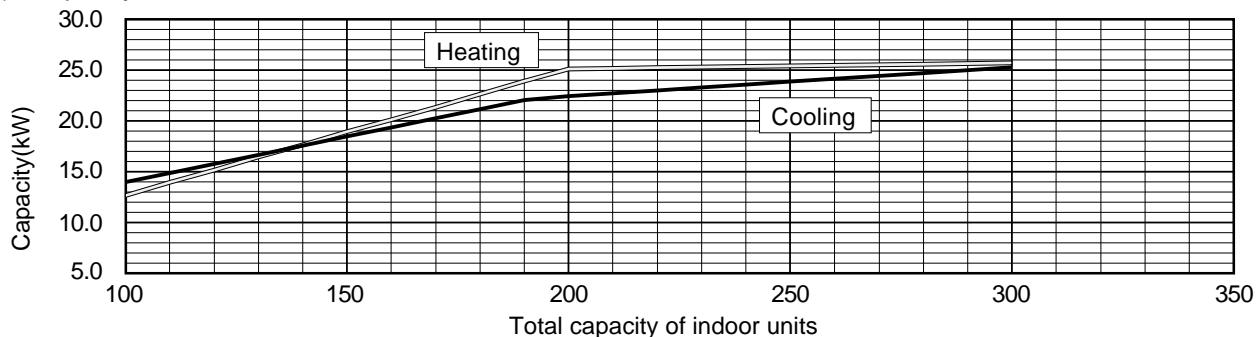


**R2(R407C)**

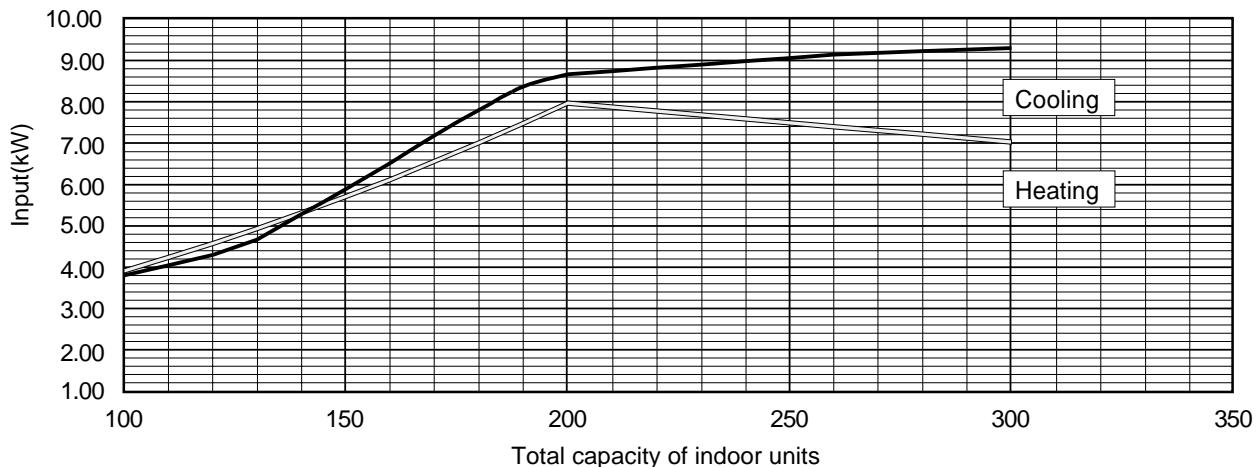
## 2-2. Correction by total indoor

PURY-P200YMF-C

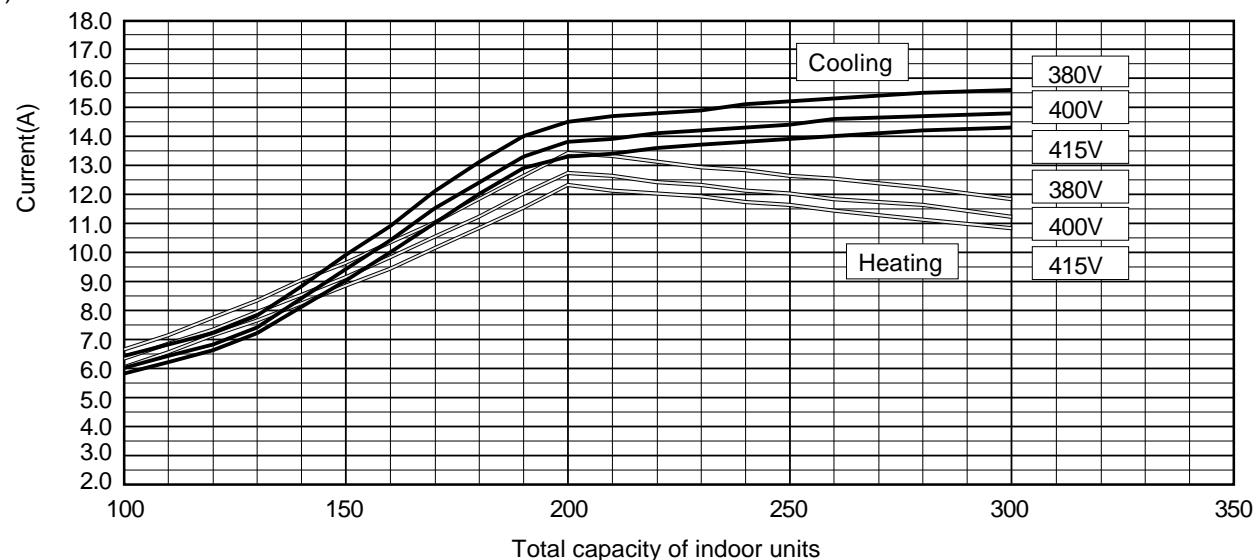
### 1) Capacity



### 2) Input

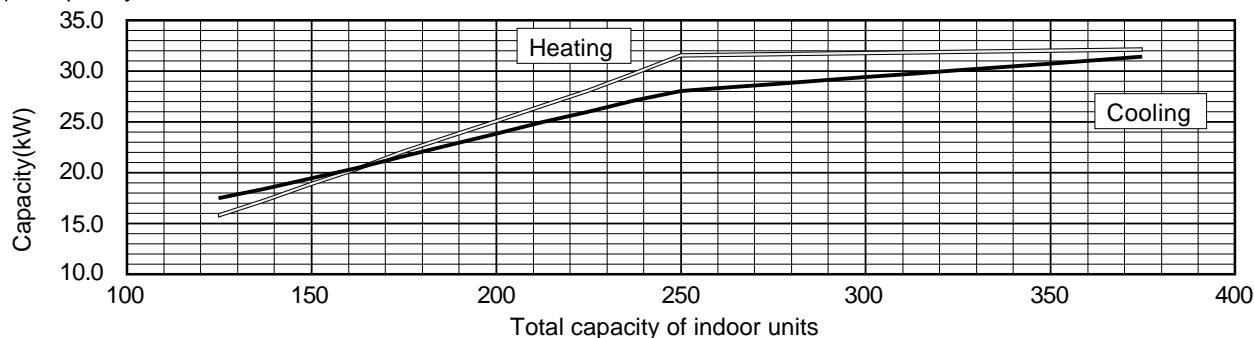


### 3) Current

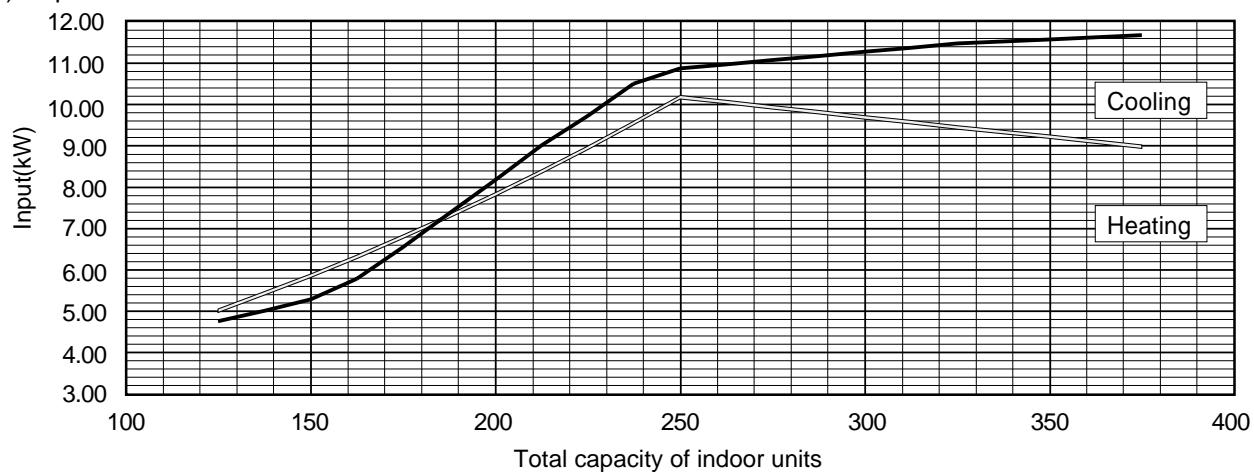


**PURY-P250YMF-C**

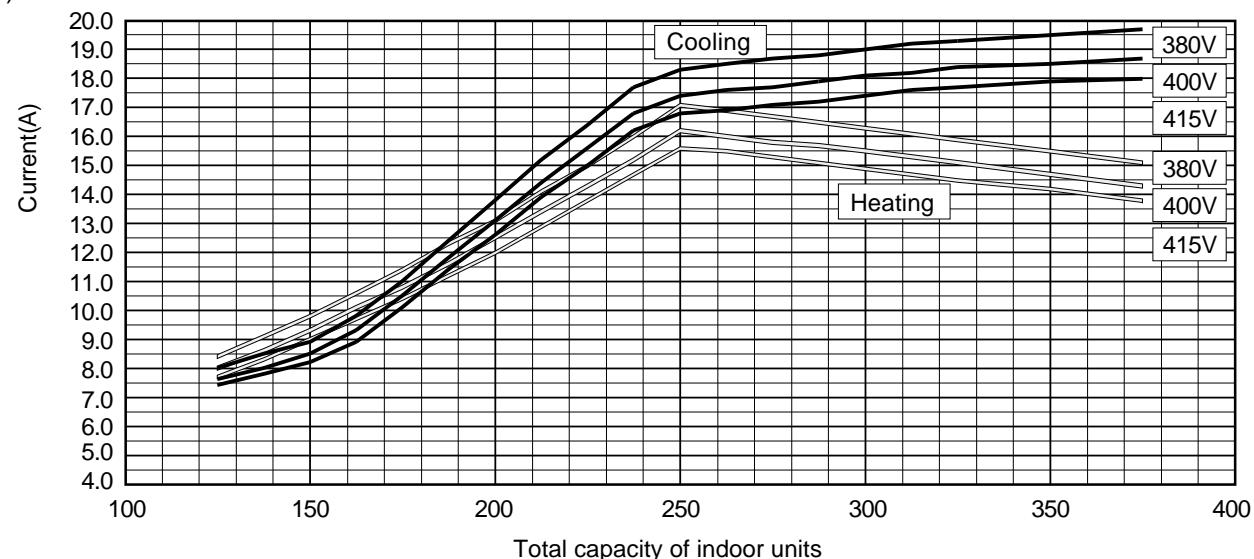
## 1) Capacity



## 2) Input



## 3) Current

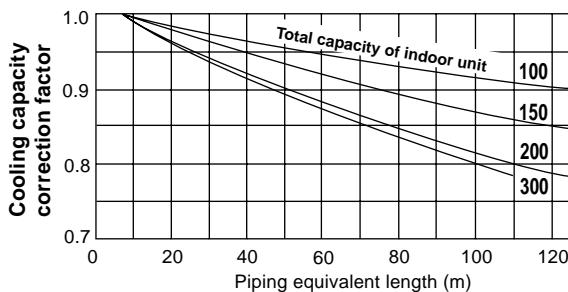
**R2(R407C)**

## 2-3 Correction by refrigerant piping length

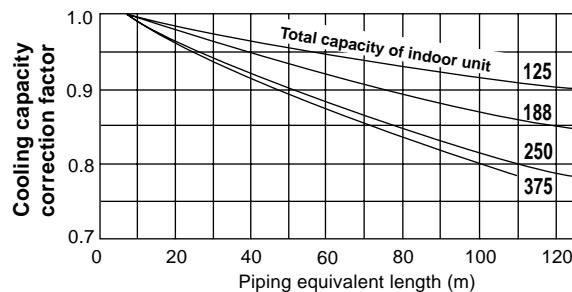
To obtain a decrease in cooling/heating capacity due to refrigerant piping extension, multiply by the capacity correction factor based on the refrigerant piping equivalent length in the table below.

- **Cooling capacity correction**

PURY-P200YMF-C

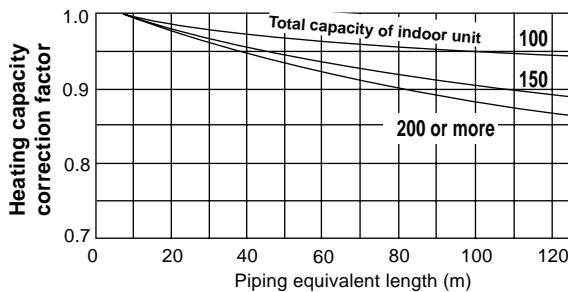


PURY-P250YMF-C

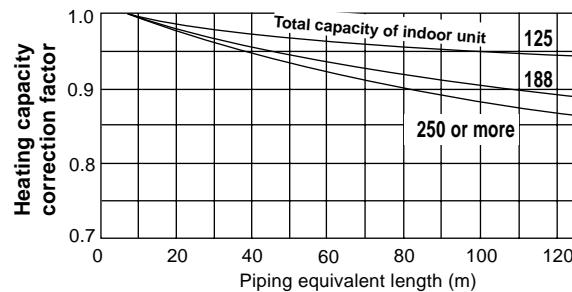


- **Heating capacity correction**

PURY-P200YMF-C



PURY-P250YMF-C



- How to obtain piping equivalent length

- ① PURY-P200YMF-C

Equivalent length = (Actual piping length to the farthest indoor unit) + (0.47 × number of bent on the piping)m

- ② PURY-P250YMF-C

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

## 2-4 Correction at frosting and defrosting

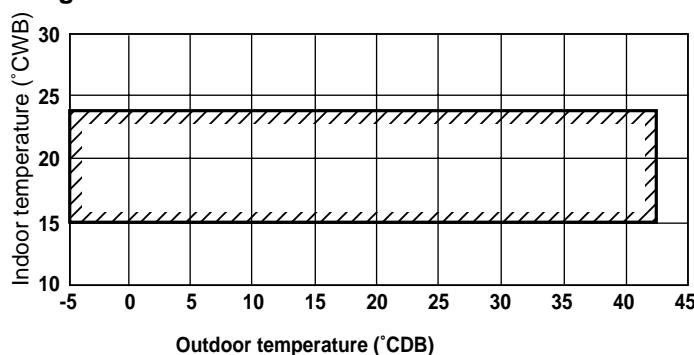
When a decrease in heating capacity due to frosted and defrosting operations is considered, the value multiplied by the correction factor in the table below represents the heating capacity.

Correction factor table

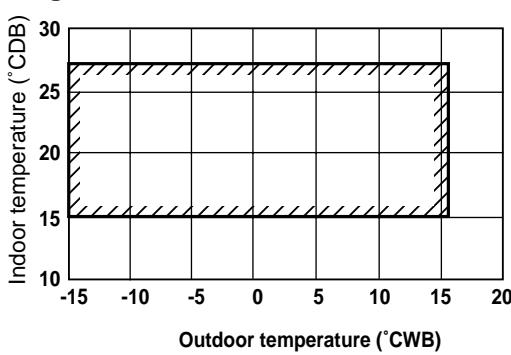
Outdoor inlet air temp (°CWB)	6	4	2	0	-2	-4	-6	-8	-10
Correction factor	1.0	0.95	0.84	0.83	0.87	0.9	0.95	0.95	0.95

## 2-5 Operation limit

- Cooling



- Heating



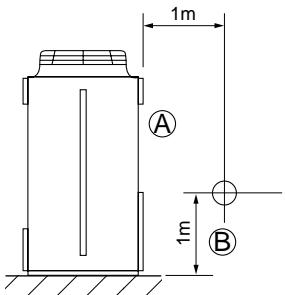
※ Outdoor temperature : -5°CDB/-6°CWB ~ 21°CDB/15.5°CWB in cooling/heating mixed mode.

R2(R407C)

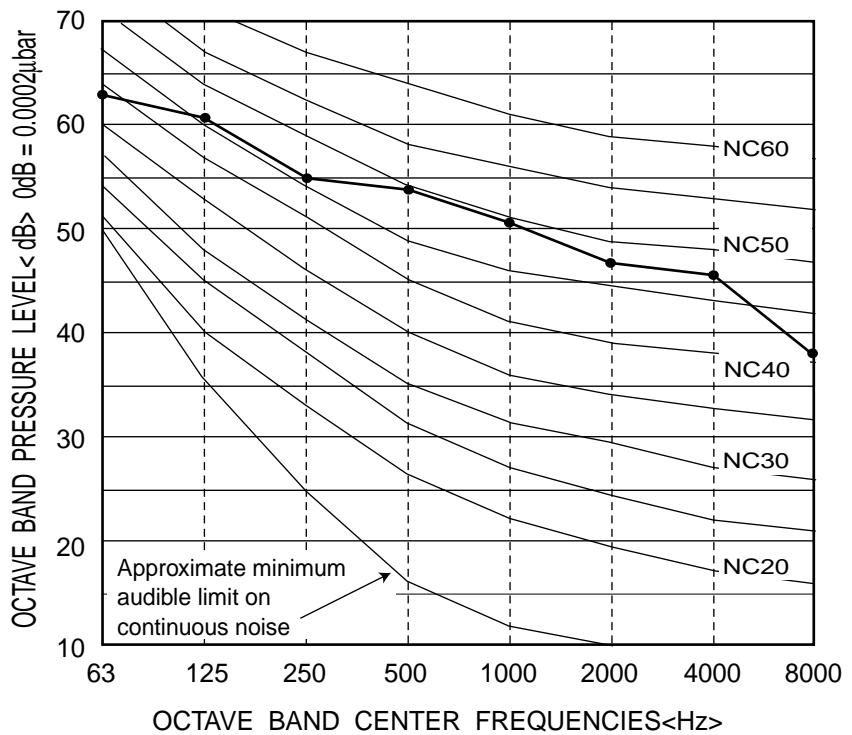
### 3. Sound Levels

#### PURY-P200YMF-C

Measurement condition

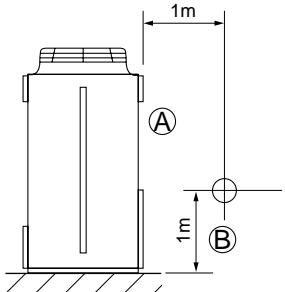


Sound pressure level in anechoic room
56 dB (A)

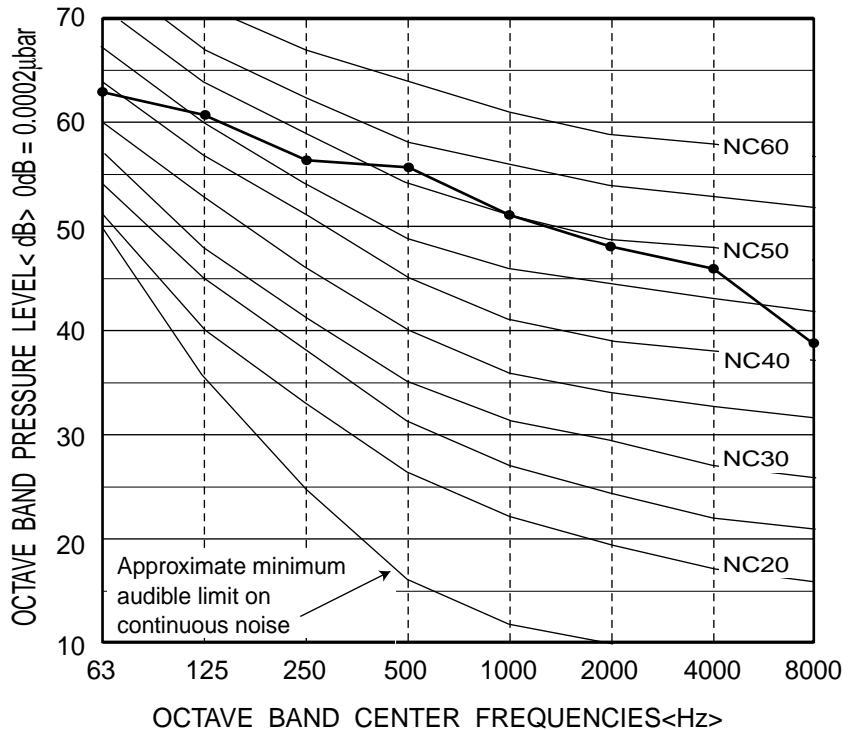


#### PURY-P250YMF-C

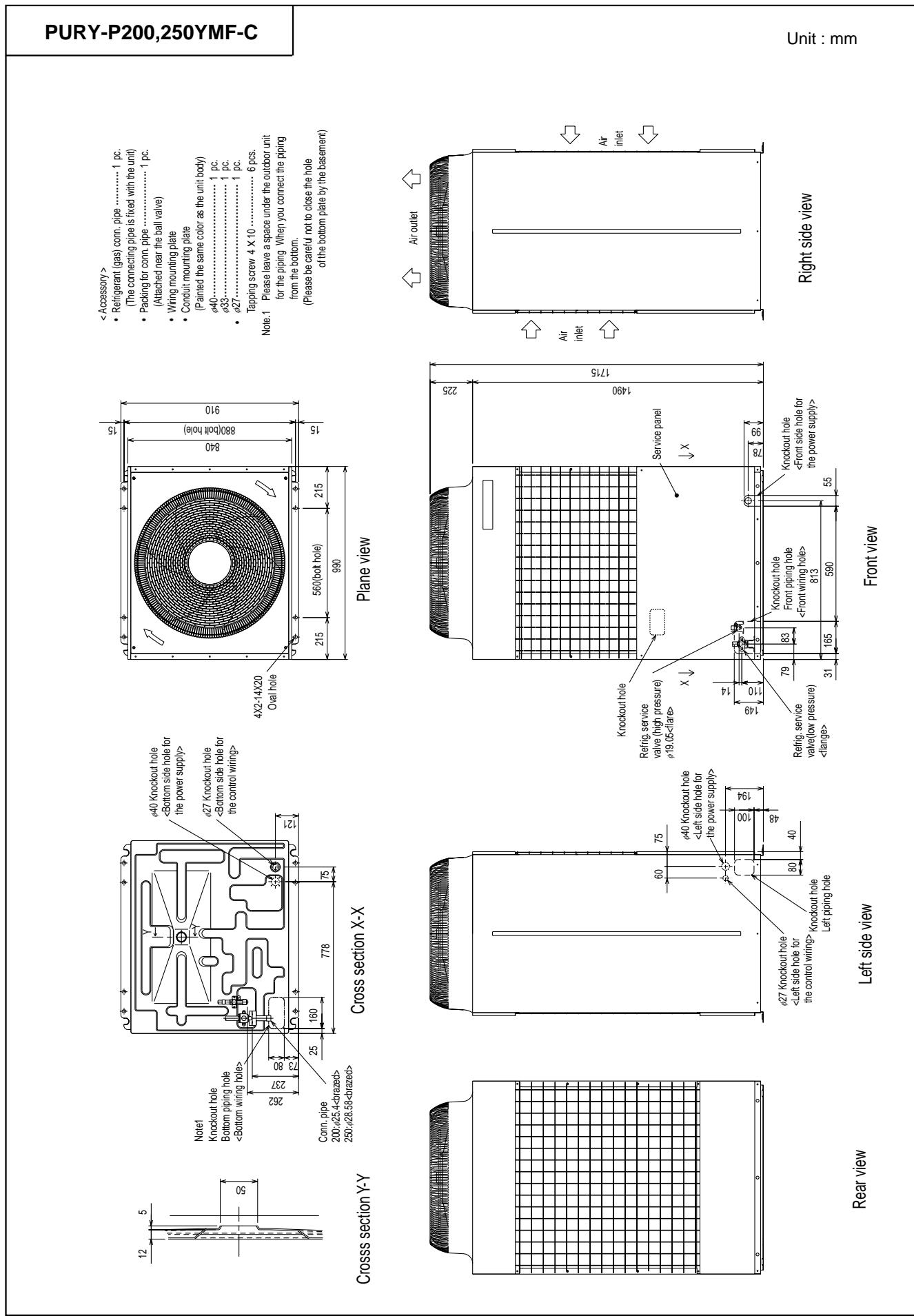
Measurement condition



Sound pressure level in anechoic room
57 dB (A)

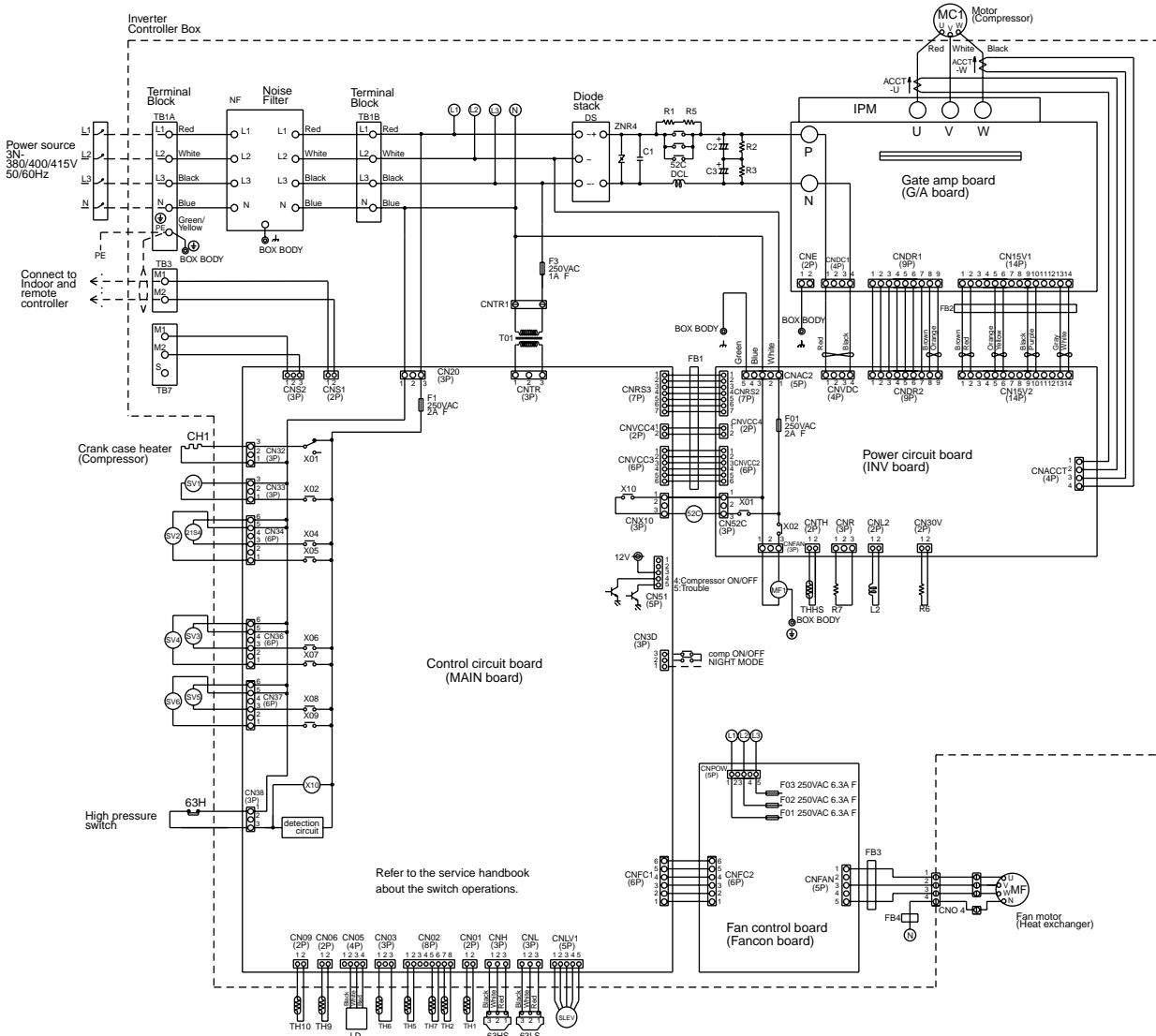


## 4. External Dimensions



# 5. Electrical Wiring Diagram

PURY-P200, 250YMF-C

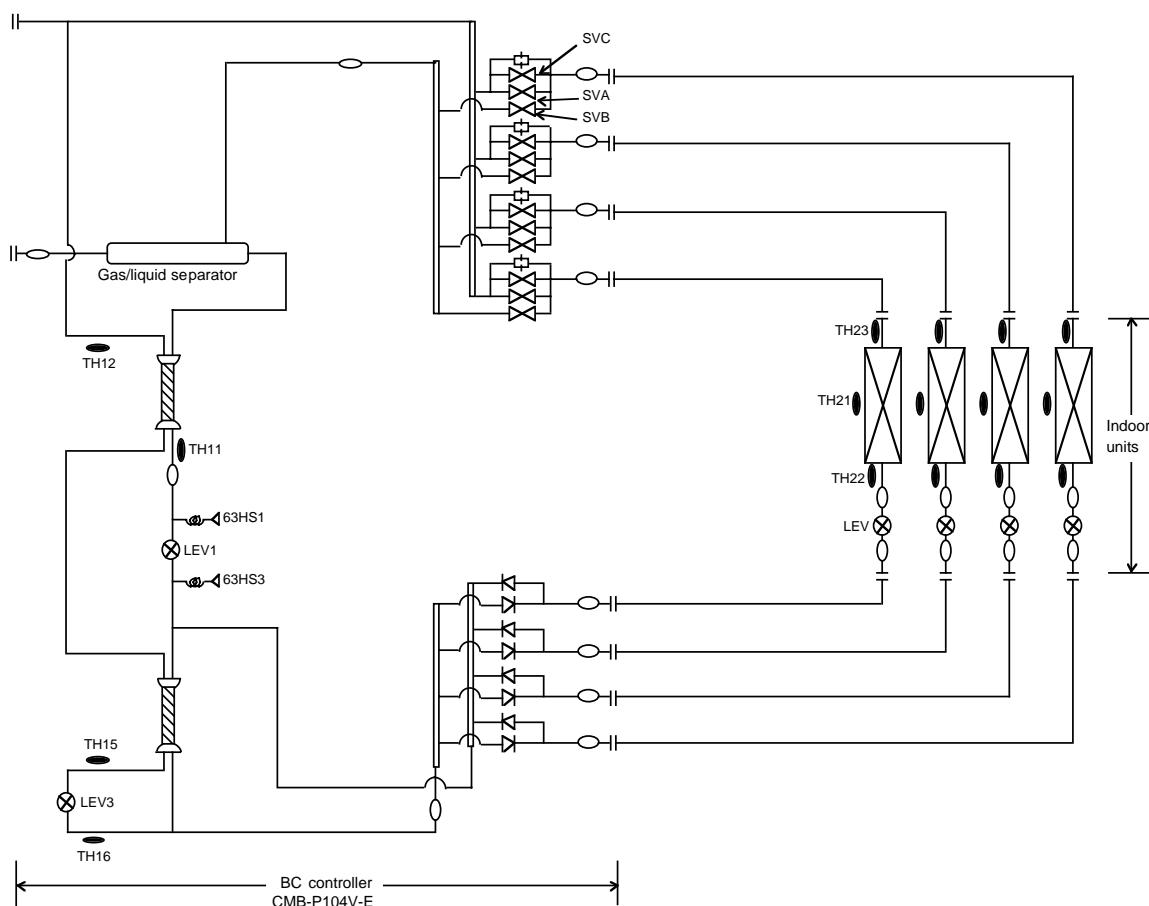
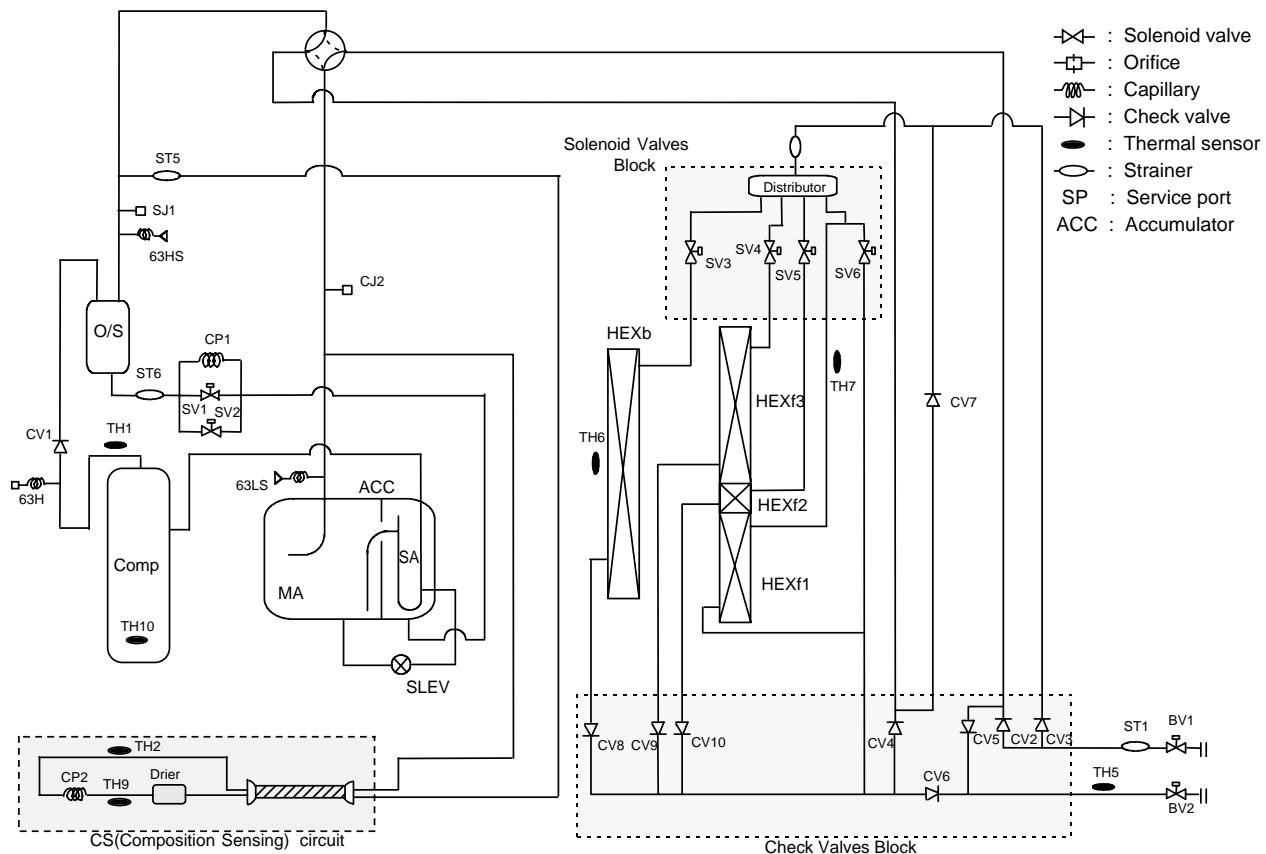


## <SYMBOL EXPLANATION>

Symbol	Name	Symbol	Name	Symbol	Name	Symbol	Name
DCL	DC reactor (Power factor improvement)	SV1, SV2	Solenoid valve (Discharge-suction bypass)	TH1	Thermistor	THHS	Radiator panel temp. detect
ACCT-U,W	Current Sensor	SV3-SV6	Solenoid valve (Heat exchanger capacity control)	TH2		LD	Accumulator liquid level detect
ZNR4	Varistor	SLEV	Electronic expansion valve(Oil return)	TH6		X1-10	Aux. relay
52C	Magnetic contactor (Inverter main circuit)	63HS	High pressure sensor	TH7		FB1-4	Ferrite core
MF1	Fan motor (Radiator panel)	63LS	Low pressure sensor	TH9			Earth terminal
21S4	4-way valve	IPM	Intelligent power module	TH10			

## 6. Refrigerant Circuit Diagram And Thermal Sensor

PURY-P200, 250YMF-C



R2(R407C)

**R2(R407C)**

# PURY-P400YMF-C, PURY-P500YMF-C

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Big R2(R407C)

# 1. Specifications

Model name		PURY-P400YMF-C				
		Cooling		Heating		
Capacity	kW	*1	45.0	50.0		
	kcal/h	*2	40,000	-		
Power source		3N~380/400/415V 50/60Hz				
Power input		kW	16.36	15.20		
Current		A	27.6/26.2/25.2	25.6/24.3/23.4		
Fan	Type	Propeller fan×2				
	Airflow rate	m³/min	370			
	Motor output	kW	0.35 × 2			
Compressor	Type	Hermetic				
	Motor output	kW	7.5 + 4.5			
	Crankcase heater	kW	0.045 + 0.045			
Refrigerant / Lubricant		R407C/MEL32				
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>				
External dimension		mm	1715(H)×1990(W)×840(L)			
Protection devices	High pressure protection		30kg/cm² G(2.94MPa)			
	Compressor / Fan		Overcurrent protection / Thermal switch			
	Inverter		DC bus current protection, thermal switch			
Refrigerant piping diameter		High press. / Low press.	ø25.4 Flange / ø34.93 Flange			
Indoor unit	Total capacity		50~150% of outdoor unit capacity			
	Model / Quantity		Model P20~250 / 2~24			
Noise level		dB<A>	*3	60/61		
Net weight		kg	470			
Operating temperature range			Indoor : 15°CWB~24°CWB Outdoor : -5°CDB~43°CDB	Indoor : 15°CDB~27°CDB Outdoor : -15°CWB~15.5°CWB		
			-5°CDB/-6°CWB ~ 21°CDB/15.5°CWB with cooling/heating mixed operation.			

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 Cooling Indoor : 27°CDB/19°CWB Outdoor : 35°CDB

\*2 Cooling Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

Heating Indoor : 20°CDB

Outdoor : 7°CDB/6°CWB

Pipe length : 5m

Height difference : 0m

Pipe length : 7.5m

Height difference : 0m

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

Model name			PURY-P500YMF-C				
			Cooling		Heating		
Capacity	kW	*1	56.0	63.0			
	kcal/h	*2	50,000	-			
Power source			3N~380/400/415V 50/60Hz				
Power input		kW	20.51	19.03			
Current		A	34.6/32.8/31.7	32.1/30.5/29.4			
Fan	Type	X	Quantity	Propeller fan X2			
	Airflow rate	m³/min		370			
	Motor output	kW		0.35 X 2			
Compressor	Type			Hermetic			
	Motor output	kW		7.5 + 4.5			
	Crankcase heater	kW		0.045 + 0.045			
Refrigerant / Lubricant			R407C/MEL32				
External finish			Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>				
External dimension		mm	1715(H) X 1990(W) X 840(L)				
Protection devices	High pressure protection		30kg/cm² G(2.94MPa)				
	Compressor / Fan		Overcurrent protection / Thermal switch				
	Inverter		DC bus current protection, thermal switch				
Refrigerant piping diameter		High press. / Low press.	ø25.4 Flange / ø34.93 Flange				
Indoor unit	Total capacity		50~150% of outdoor unit capacity				
	Model / Quantity		Model P20~250 / 2~24				
Noise level		dB<A>	*3	60/61			
Net weight		kg	500				
Operating temperature range			Indoor : 15°CWB~24°CWB Outdoor : -5°CDB~43°CDB	Indoor : 15°CDB~27°CDB Outdoor : -15°CWB~15.5°CWB			
			-5°CDB/-6°CWB ~ 21°CDB/15.5°CWB with cooling/heating mixed operation.				

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 Cooling Indoor : 27°CDB/19°CWB Outdoor : 35°CDB

\*2 Cooling Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB

Heating Indoor : 20°CDB

Outdoor : 7°CDB/6°CWB

Pipe length : 5m

Height difference : 0m

Pipe length : 7.5m

Height difference : 0m

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

## 2. Capacity Tables

### 2-1. Correction by temperature

#### Cooling

- Standard Specifications

	PURY-P400YMF-C	PURY-P500YMF-C
Capacity kW	45.0	56.0
Input kW	16.36	20.51
Source V	380/400/415	
Current A	27.6/26.2/25.2	34.6/32.8/31.7

- Calculation

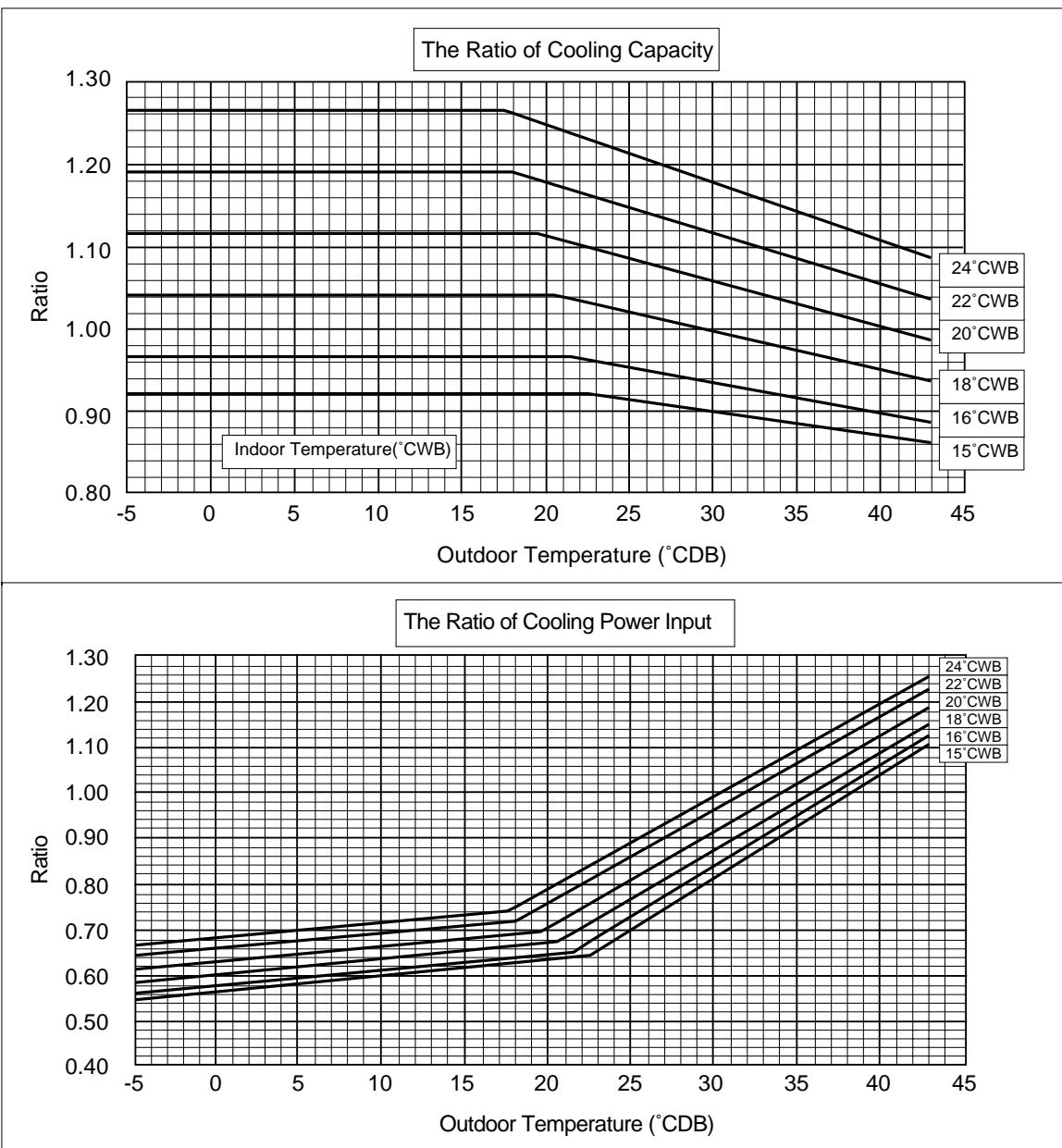
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.90}$$

\* Capacity'  
Input'  
Current'

} After correction



## Heating

- Standard Specifications

	PURY-P400YMF-C	PURY-P500YMF-C
Capacity kW	50.0	63.0
Input kW	15.20	19.03
Source V	380/400/415	
Current A	25.6/24.3/23.4	32.1/30.5/29.4

- Calculation

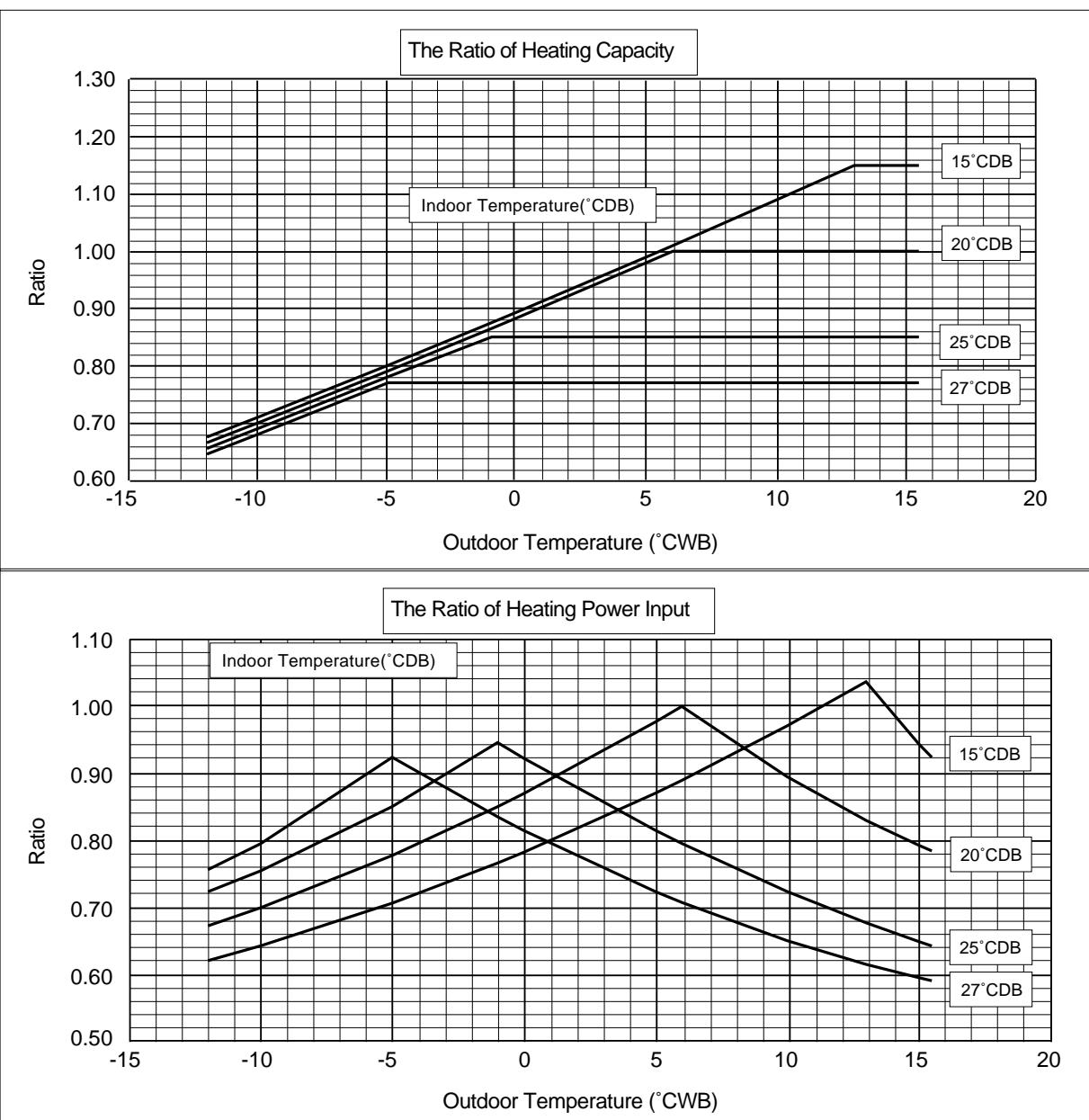
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.90}$$

$$\left. \begin{array}{l} \text{*Capacity}' \\ \text{Input}' \\ \text{Current}' \end{array} \right\}$$

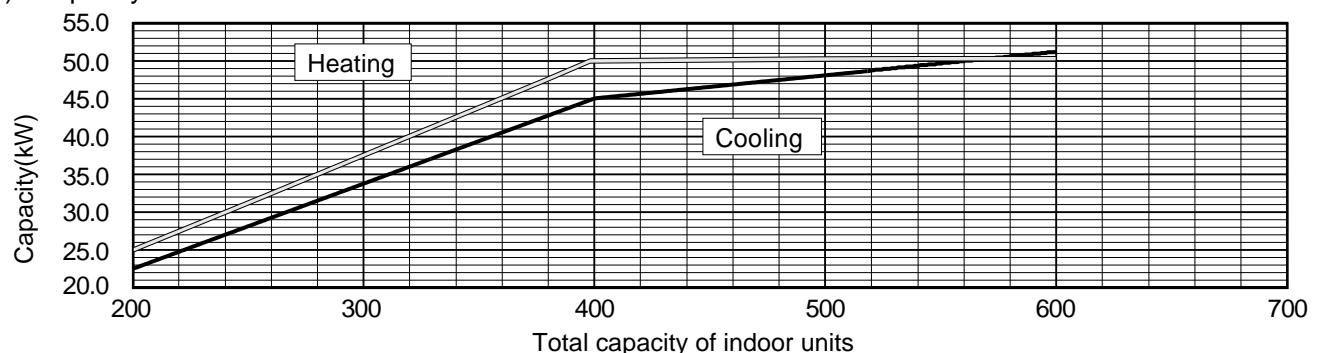
} After correction



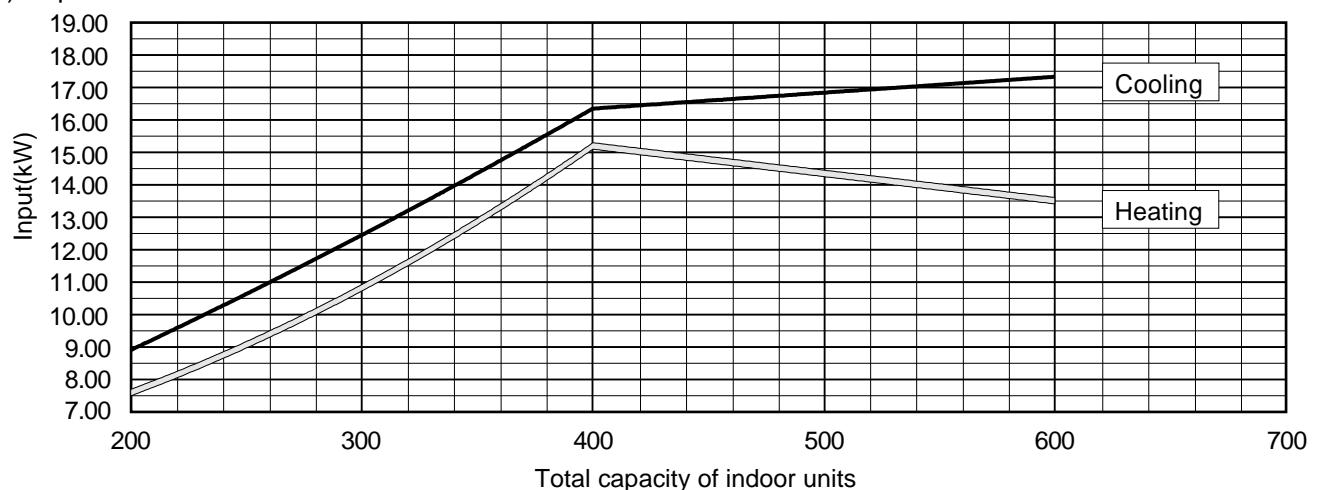
## 2-2. Correction by total indoor

**PURY-P400YMF-C**

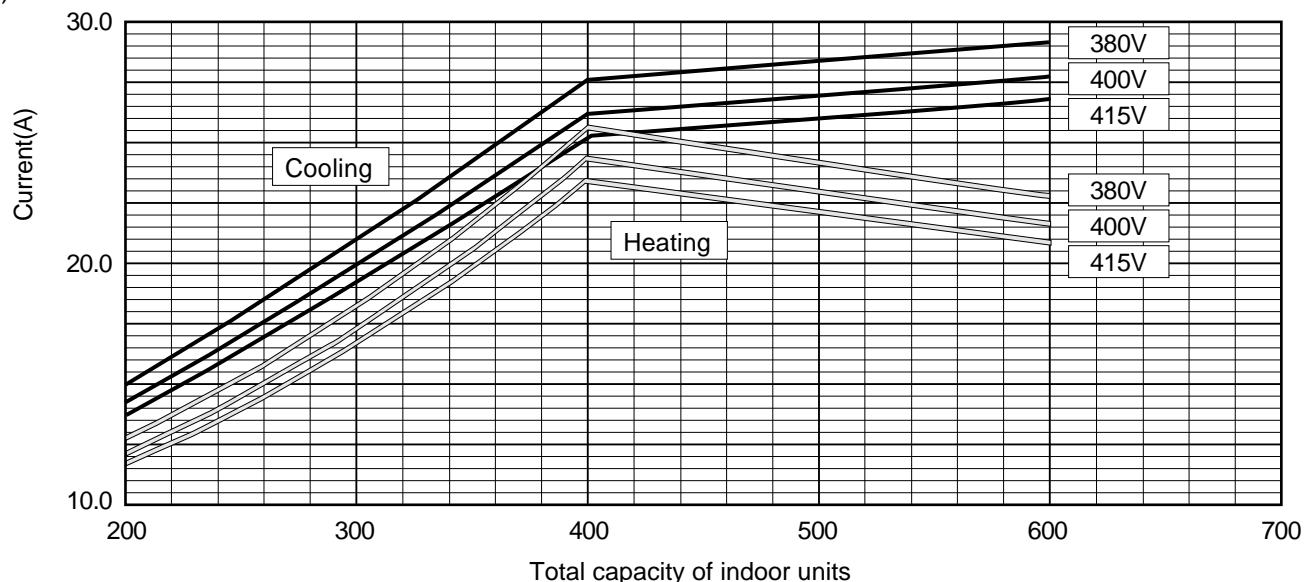
### 1) Capacity



### 2) Input

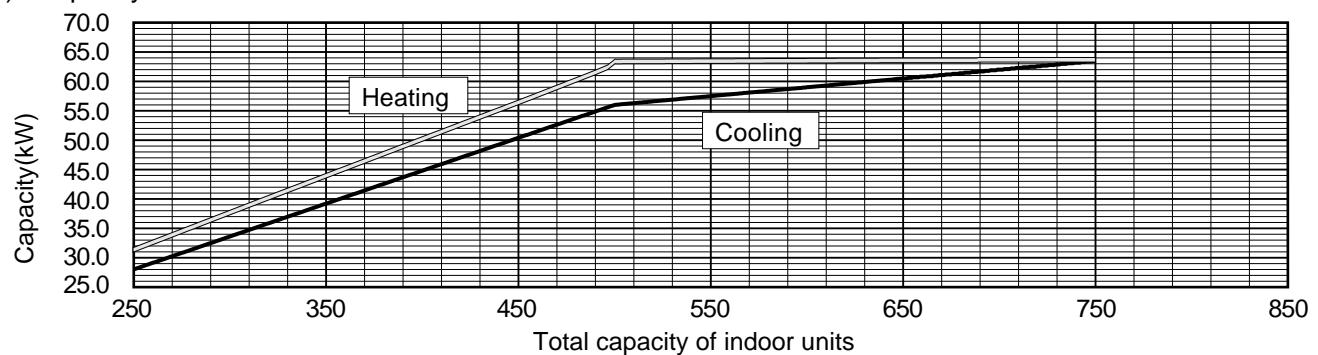


### 3) Current

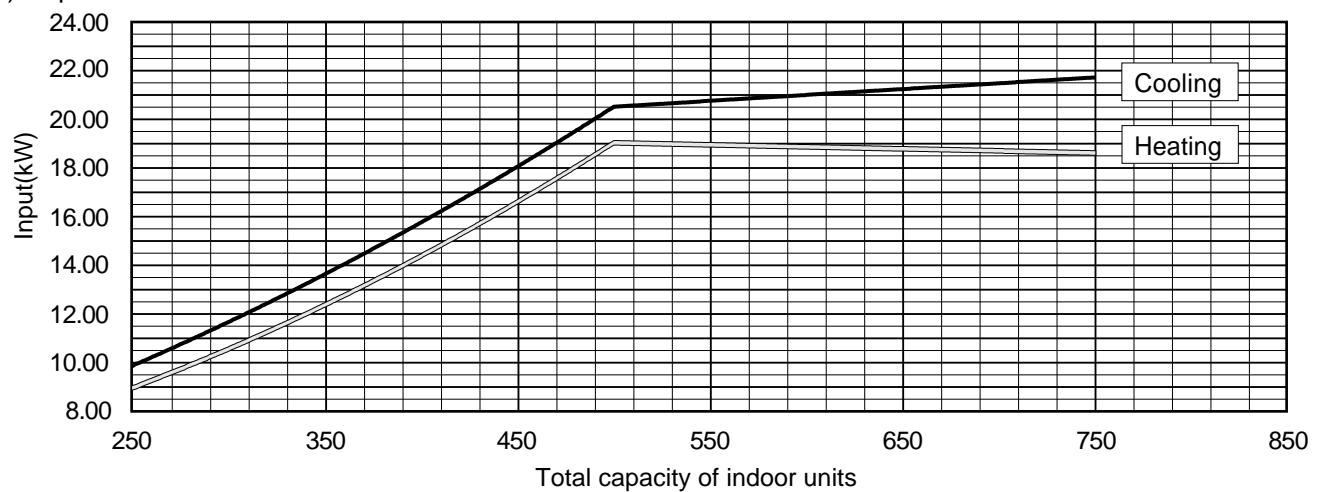


**PURY-P500YMF-C**

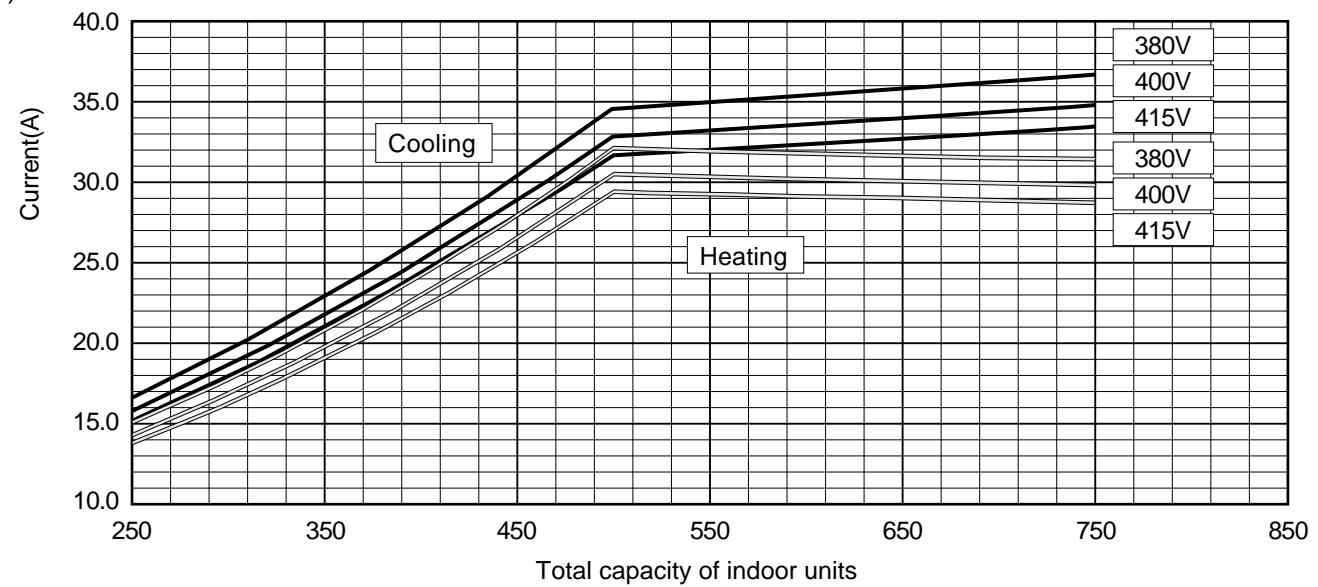
## 1) Capacity



## 2) Input



## 3) Current



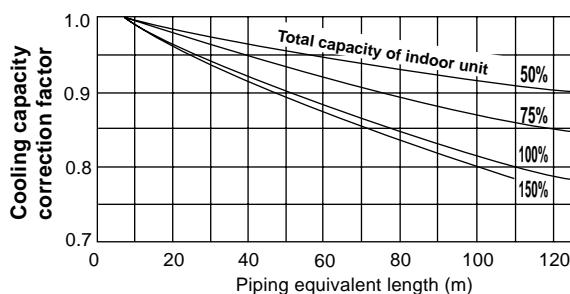
Big R2(R407C)

## 2-3 Correction by refrigerant piping length

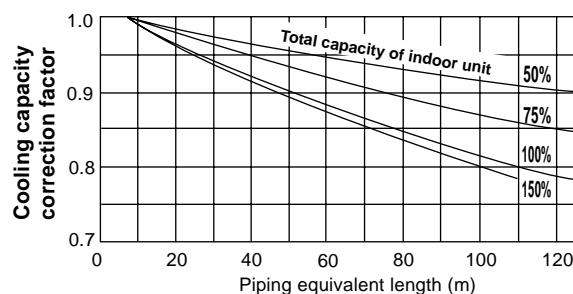
To obtain a decrease in cooling/heating capacity due to refrigerant piping extension, multiply by the capacity correction factor based on the refrigerant piping equivalent length in the table below.

- Cooling capacity correction

PURY-P400YMF-C

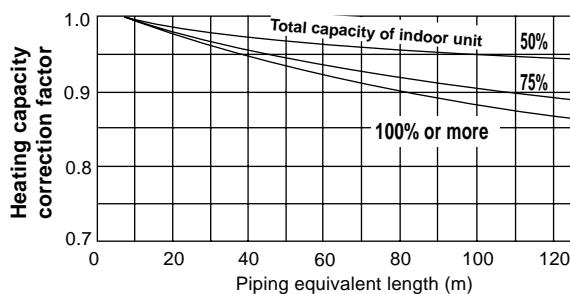


PURY-P500YMF-C

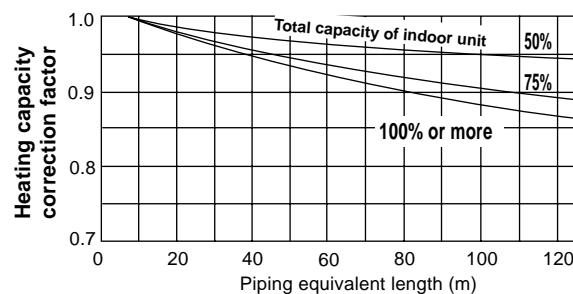


- Heating capacity correction

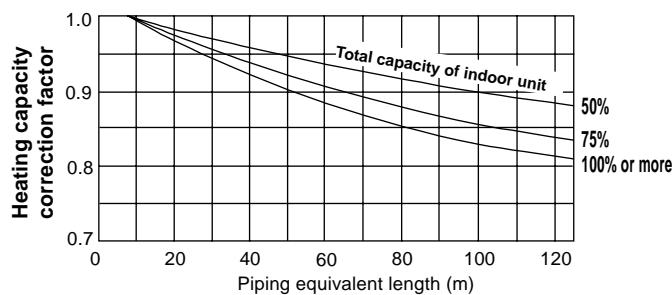
PURY-P400YMF-C



PURY-P500YMF-C



\* In case of using  $\phi 22.22$  pipe  
PURY-P400, 500YMF-C



- How to obtain piping equivalent length

- ① PURY-P400YMF-C

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

- ② PURY-P500YMF-C

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

## 2-4 Correction at frosting and defrosting

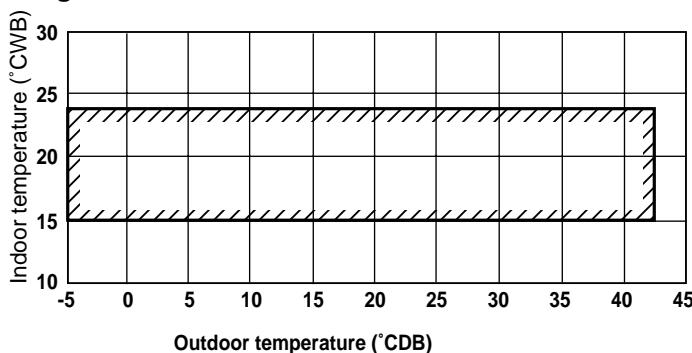
When a decrease in heating capacity due to frosted and defrosting operations is considered, the value multiplied by the correction factor in the table below represents the heating capacity.

Correction factor table

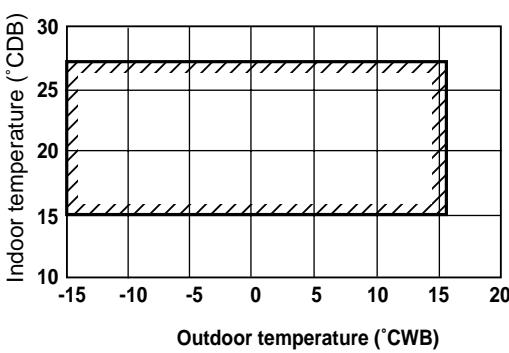
Outdoor inlet air temp (°CWB)	6	4	2	0	-2	-4	-6	-8	-10
Correction factor	1.0	0.95	0.84	0.83	0.87	0.9	0.95	0.95	0.95

## 2-5 Operation limit

- Cooling



- Heating

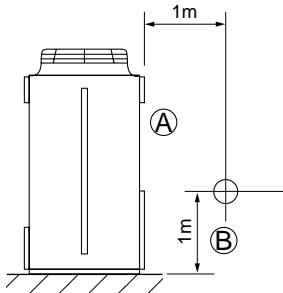


※ Outdoor temperature : -5°CDB/-6°CWB ~ 21°CDB/15.5°CWB in cooling/heating mixed mode.

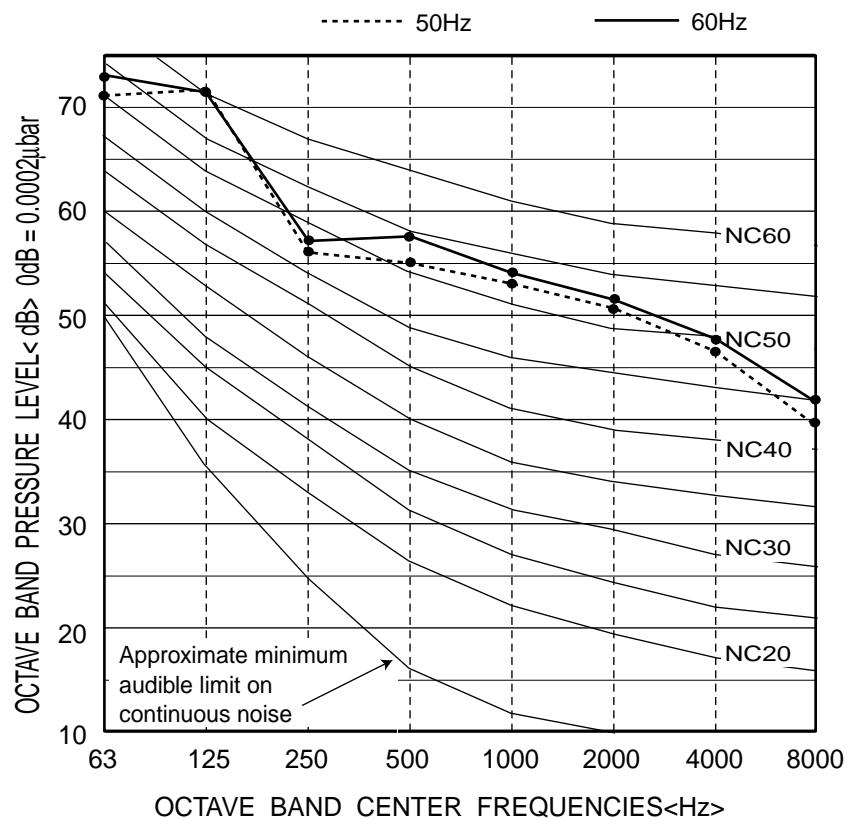
### 3. Sound Levels

**PURY-P400YMF-C**

Measurement condition

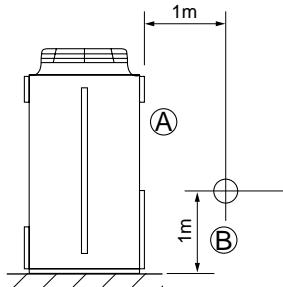


Sound pressure level in anechoic room
60/61 dB (A)

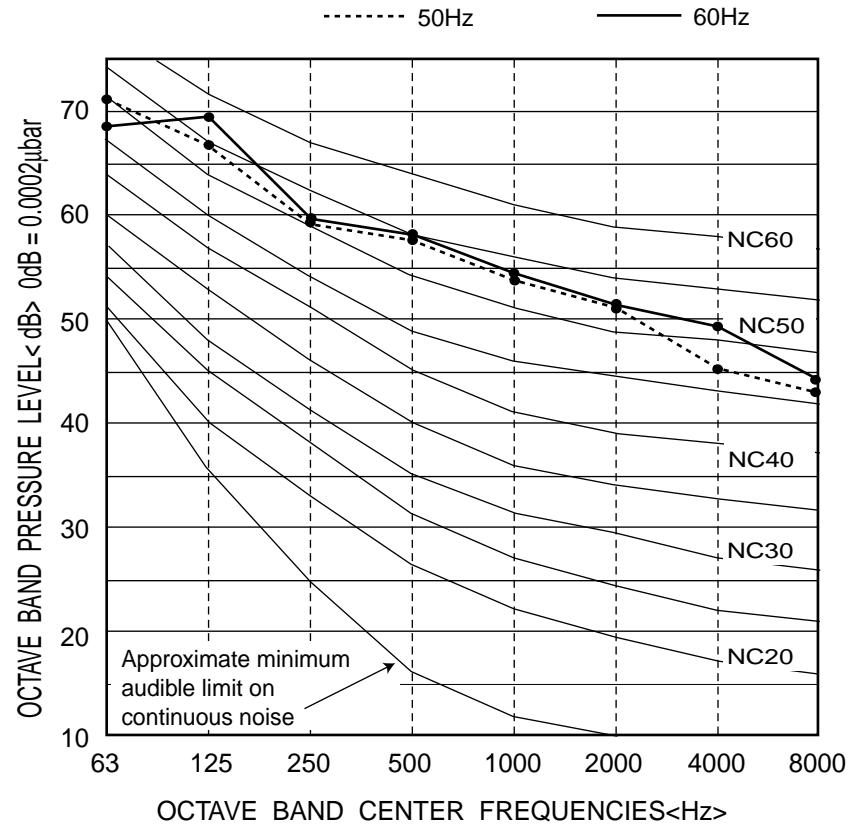


**PURY-P500YMF-C**

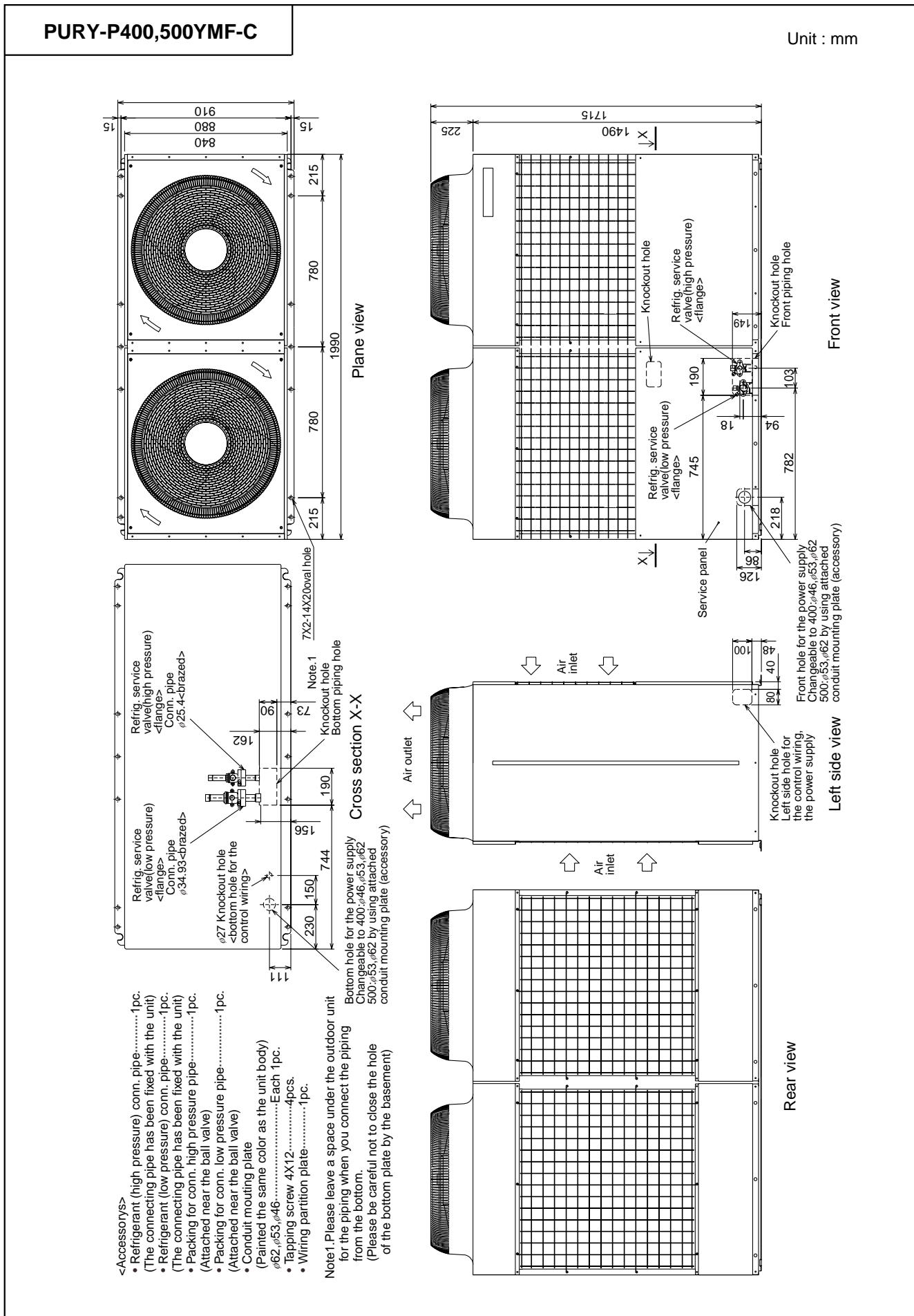
Measurement condition



Sound pressure level in anechoic room
60/61 dB (A)

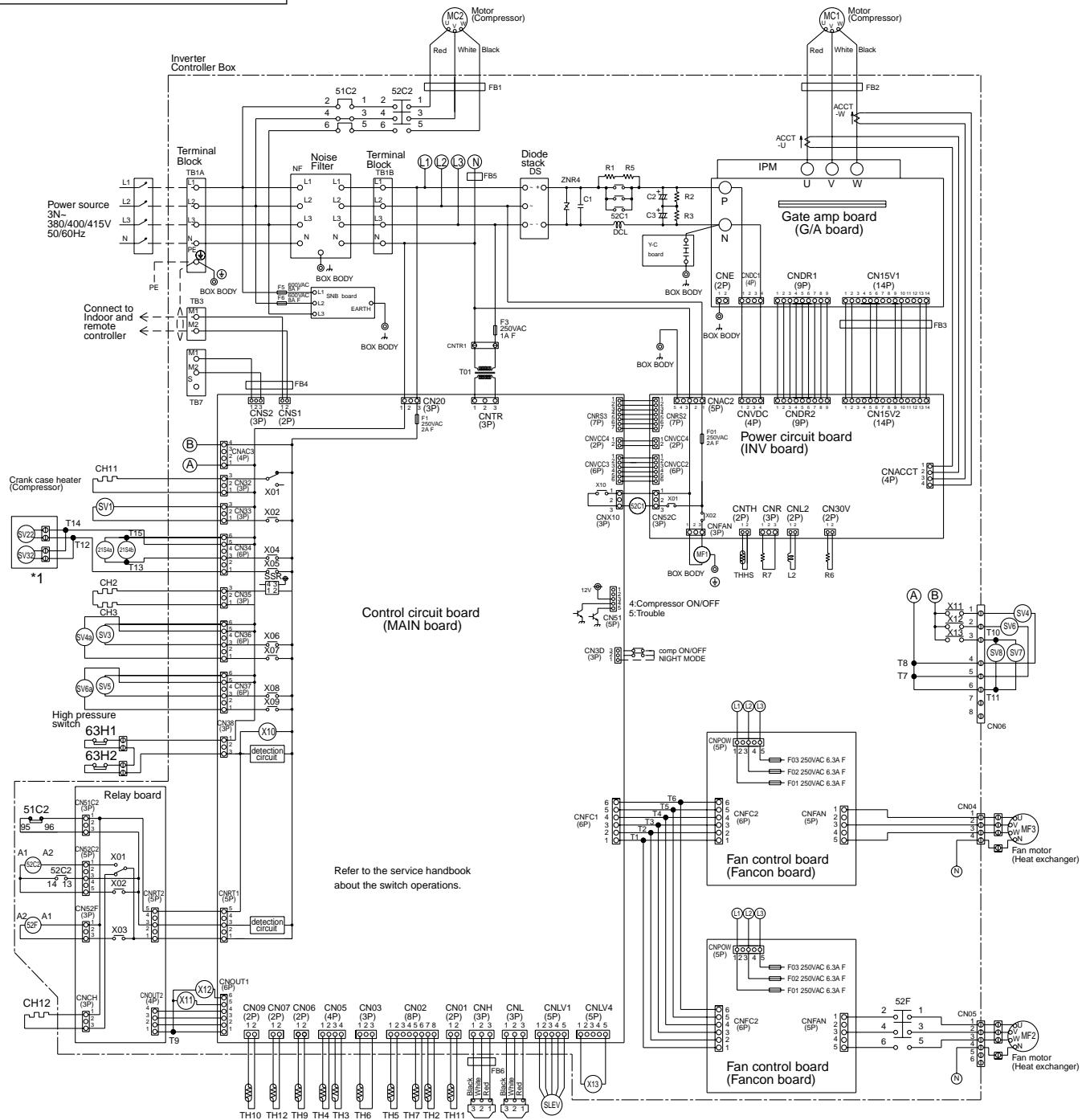


## **4. External Dimensions**



# 5. Electrical Wiring Diagram

## PURY-P400, 500YMF-C



### <Symbol explanation>

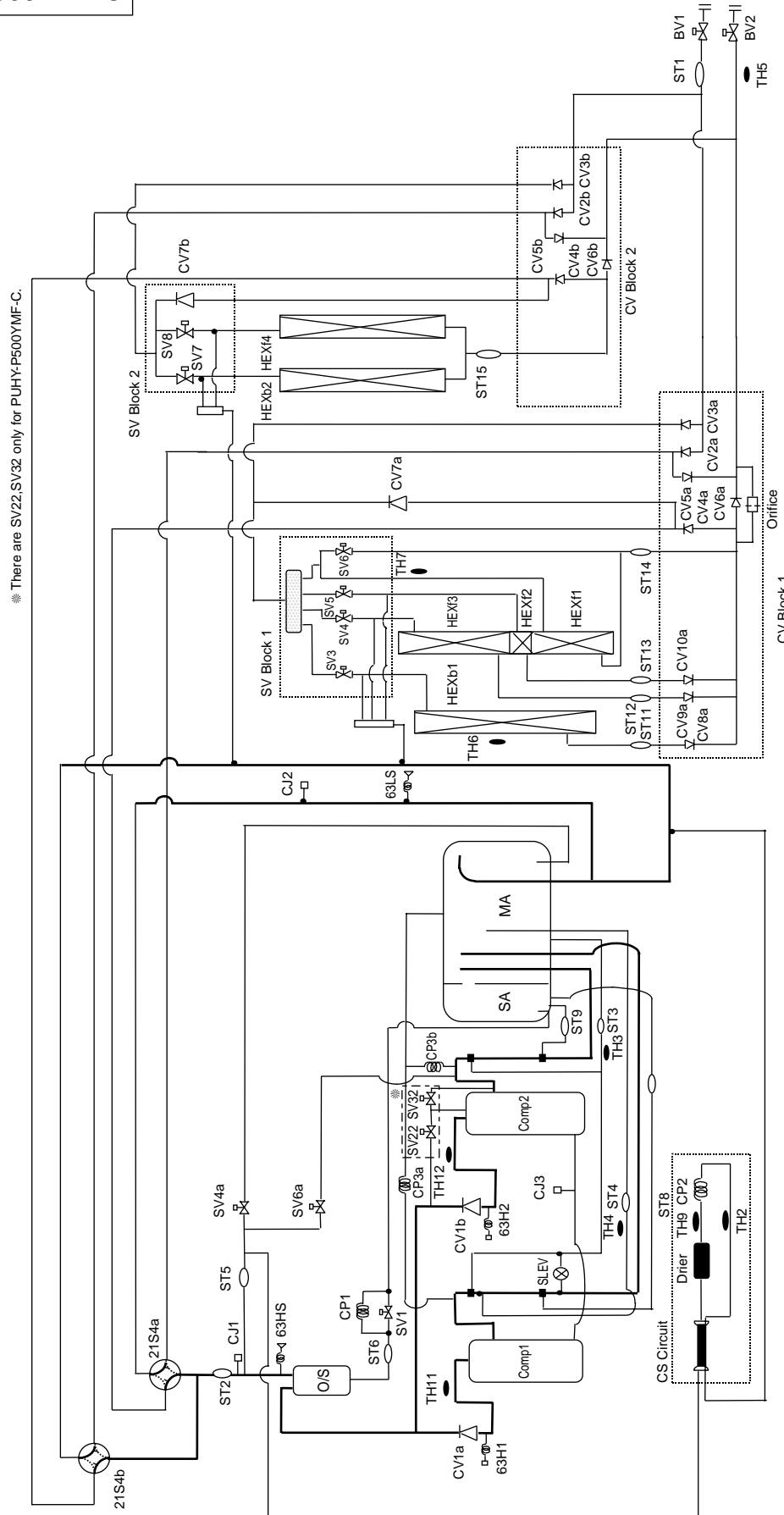
Symbol	Name	Symbol	Name
DCL	DC reactor (Power factor improvement)	IPM	Intelligent power module
ACCT-U,W	Current Sensor	TH11,12	Thermistor
ZNR4	Varistor	TD	Discharge pipe temp. detect
52C1	Magnetic contactor (Inverter main circuit)	TH2	Saturation evapo. temp. detect
52C2	Magnetic contactor	TH3	Accumulator liquid temp. detect
51C2	Overload relay	TH4	Lower (temp. detect)
52F	Magnetic contactor(Fan motor)	TH5	Upper (temp. detect)
MF1	Fan motor (Radiator panel)	TH6	Pipe temp. detect(Fex outlet)
21S4a,4b	4-way valve	TH7	OA temp. detect
SV1,22,32	Solenoid valve	TH8	Pipe temp.(Hex inlet)
4a,6a		TH9	High pressure liquid temp.
SV3,4,5,6	Solenoid valve	TH10	Compressor shell temp.
7,8	(Heat exchanger capacity control)	TH11	Radiator panel temp. detect
SLEV	Electronic expansion valve(Oil return)	X1,2,4-13	Aux. relay
63HS	High pressure sensor	FB1-6	Ferrite core
63LS	Low pressure sensor	FB1-6	Earth terminal
63H1,2	High pressure switch	T1-15	Terminal
L2	Choke coil(Transmission)		

### <Difference of appliance>

Appliance	Name
PURY-P400YMF-C	**+* are not existed
PURY-P500YMF-C	All exists

## 6. Refrigerant Circuit Diagram And Thermal Sensor

PURY-P400, 500YMF-C





# PQRY-P200YMF-C, PQRY-P250YMF-C

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WR2(R407C)

# 1. Specifications

Model name		PQRY-P200YMF-C	
		Cooling	Heating
Capacity	kW	22.4	25.0
Power source		3N ~ 380/400/415V 50Hz/60Hz	
Power input	kW	7.60	7.40
Current	A	12.8/12.1/11.7	12.4/11.8/11.4
Compressor	Type	Hermetic	
	Motor output	kW	5.5
	Crankcase heater	kW	0.062(240V)
Heat exchanger	Type	Double coil	
	Water volume in the coil	l	10.5
Circulating water	Volume	m <sup>3</sup> / h	3.88
	Pressure drop	kPa	8
Refrigerant / Lubricant		R407C/MEL32	
External finish		Steel plate acrylic paint	
External dimension		1670(H)X 1150(W)X 500(L)	
Protection devices	High pressure protection		30kg/cm <sup>2</sup> G(2.94MPa)
	Compressor		Over current protection
	Inverter		DC bus current protection, thermal switch
Refrigerant piping diameter	High press. / Low press.	ø 19.05 flare / ø 25.4 Flange	
Indoor unit	Total capacity		50 ~ 150% of heat source unit capacity
	Model / Quantity		Model 20~ 140 / 1~ 15
Noise level		dB<A>	*
Net weight		kg	270
Operating temperature range		Indoor:15°CWB ~ 24°CWB Water :10°C ~ 45°C	Indoor:15°CDB ~ 27°CDB Water :10°C ~ 45°C

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

**Cooling** Indoor : 27°CDB/19°CWB Water temperature : 30°C

**Heating** Indoor : 20°CDB Water temperature : 20°C

Pipe length : 7.5m Height difference : 0m

2.When the total capacity of indoor units exceeds 130% of heat source units capacity, the operating temperature range of circulating water is 15°C ~ 45°C.

3.The ambient temperature of heat source unit has to be kept below 40°C (dry valve).

The ambient relative humidity of heat source unit has to be kept below 80%.

4.This unit can not be installed in the outdoor. (No protection against the weather.)

\* It is measured in anechoic room.

Model name		PQRY-P250YMF-C	
		Cooling	Heating
Capacity	kW	28.0	31.5
Power source		3N ~ 380/400/415V 50Hz/60Hz	
Power input	kW	9.70	9.40
Current	A	16.3/15.5/14.9	15.8/15.0/14.5
Compressor	Type	Hermetic	
	Motor output	kW	7.5
	Crankcase heater	kW	0.062(240V)
Heat exchanger	Type	Double coil	
	Water volume in the coil	l	13
Circulating water	Volume	m <sup>3</sup> / h	4.93
	Pressure drop	kPa	10
Refrigerant / Lubricant		R407C/MEL32	
External finish		Steel plate acrylic paint	
External dimension		1670(H)X 1150(W)X 500(L)	
Protection devices	High pressure protection		30kg/cm <sup>2</sup> G(2.94MPa)
	Compressor		Over current protection
	Inverter		DC bus current protection, thermal switch
Refrigerant piping diameter	High press. / Low press.	φ 19.05 flare / φ 28.58 Flange	
Indoor unit	Total capacity		50 ~ 150% of heat source unit capacity
	Model / Quantity		Model 20~ 140 / 1~ 16
Noise level		* dB<A>	52
Net weight		kg	280
Operating temperature range		Indoor:15°CWB ~24°CWB Water :10°C ~45°C	Indoor:15°CDB ~27°CDB Water :10°C ~45°C

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 Cooling Indoor : 27°CDB/19°CWB Water temperature : 30°C

Heating Indoor : 20°CDB Water temperature : 20°C  
Pipe length : 7.5m Height difference : 0m

2.When the total capacity of indoor units exceeds 130% of heat source units capacity, the operating temperature range of circulating water is 15°C ~ 45°C.

3.The ambient temperature of heat source unit has to be kept below 40°C (dry valve).  
The ambient relative humidity of heat source unit has to be kept below 80%.

4.This unit can not be installed in the outdoor. (No protection against the weather.)

\* It is measured in anechoic room.

WR2(R407C)

## 2. Capacity Tables

### 2-1. Correction by temperature

#### Cooling

- Standard Specifications

		PQRY-P200YMF-C	PQRY-P250YMF-C
Capacity	kW	22.4	28.0
Input	kW	7.60	9.70
Source	V	380/400/415	
Current	A	12.8/12.1/11.7	
		16.3/15.5/14.9	

- Calculation

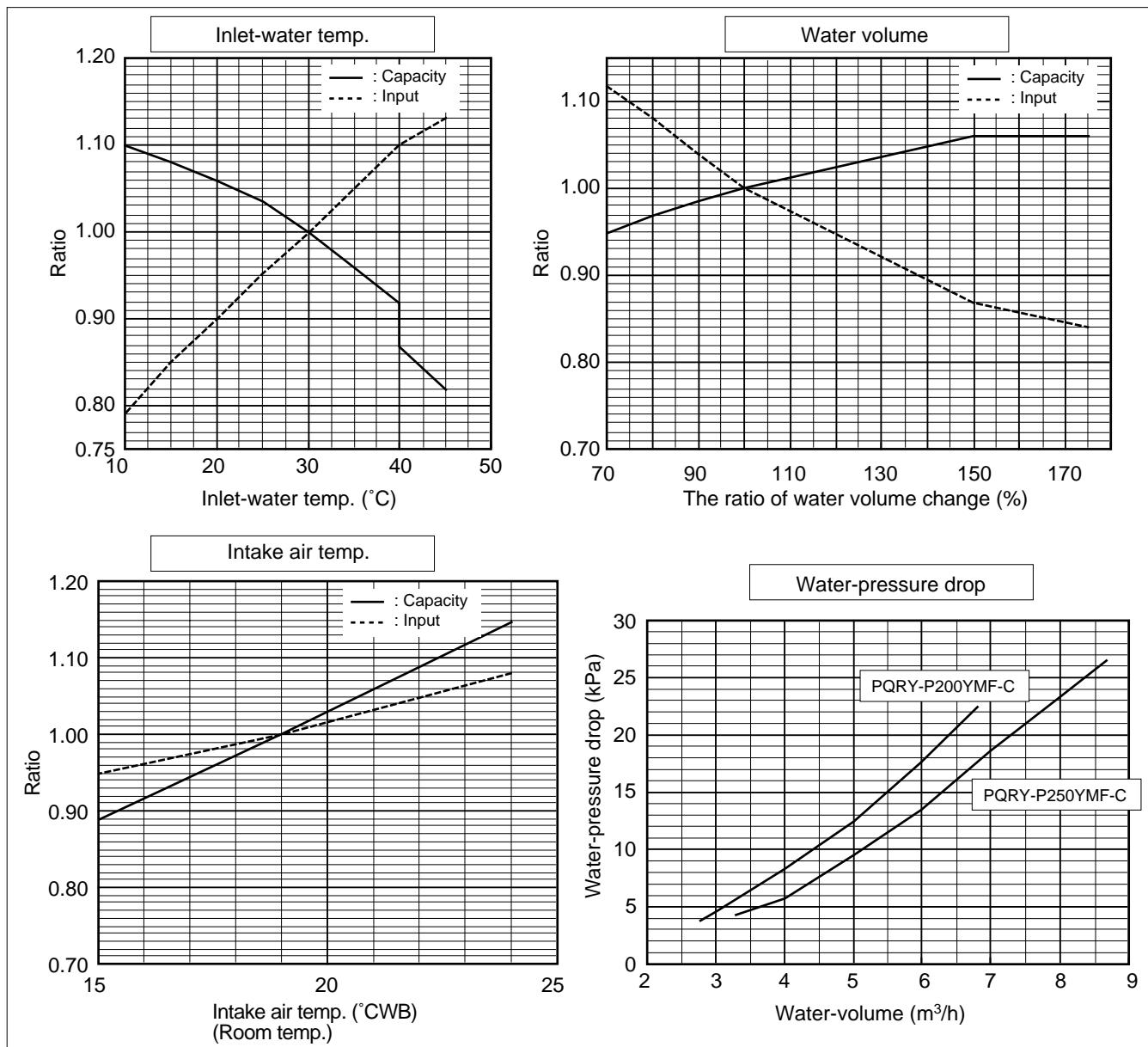
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.9}$$

\* Capacity'  
Input'  
Current'

} After correction



## Heating

- Standard Specifications

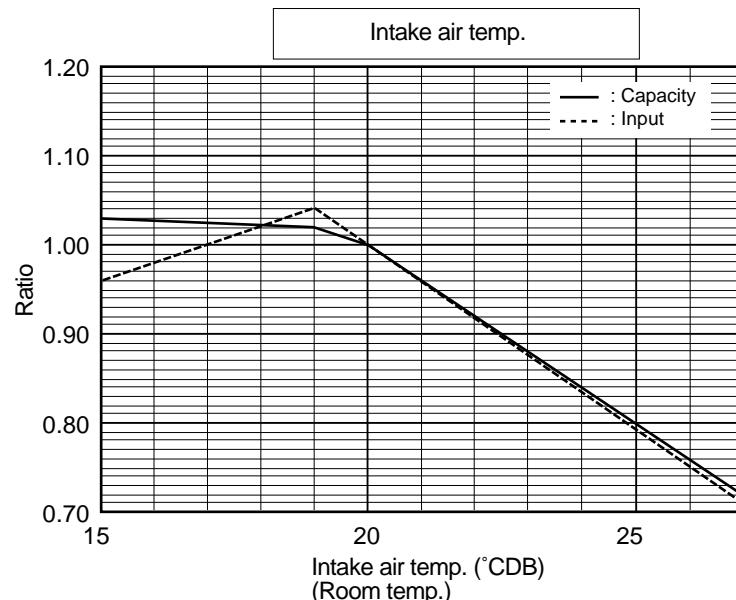
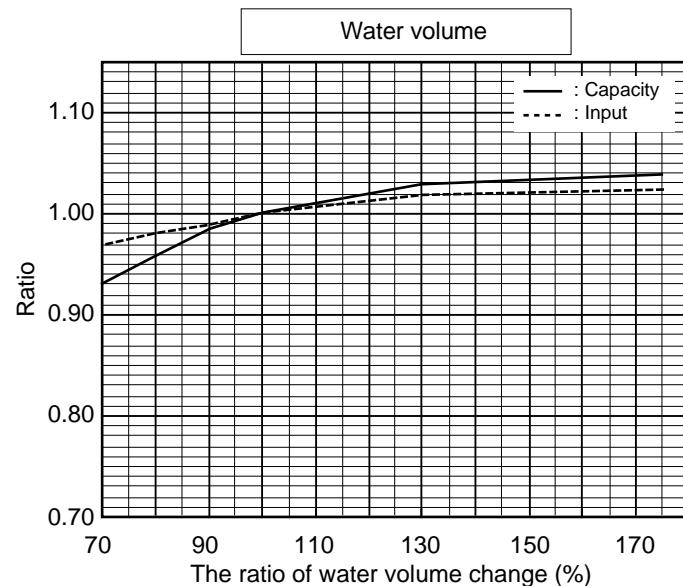
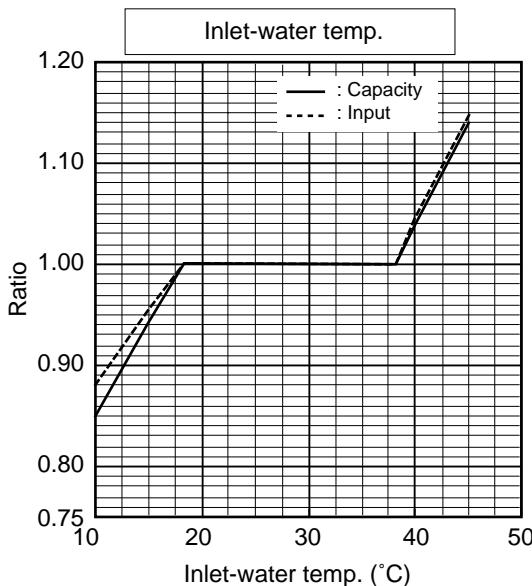
		PQRY-P200YMF-C	PQRY-P250YMF-C
Capacity	kW	25.0	31.5
Input	kW	7.40	9.40
Source	V	380/400/415	
Current	A	12.4/11.8/11.4	
		15.8/15.0/14.5	

- Calculation

$$\begin{aligned} \text{Capacity}' &= \text{Capacity} \times \text{Ratio} \\ \text{Input}' &= \text{Input} \times \text{Ratio} \\ \text{Current}' &= \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.9} \end{aligned}$$

※ Capacity'  
Input'  
Current'

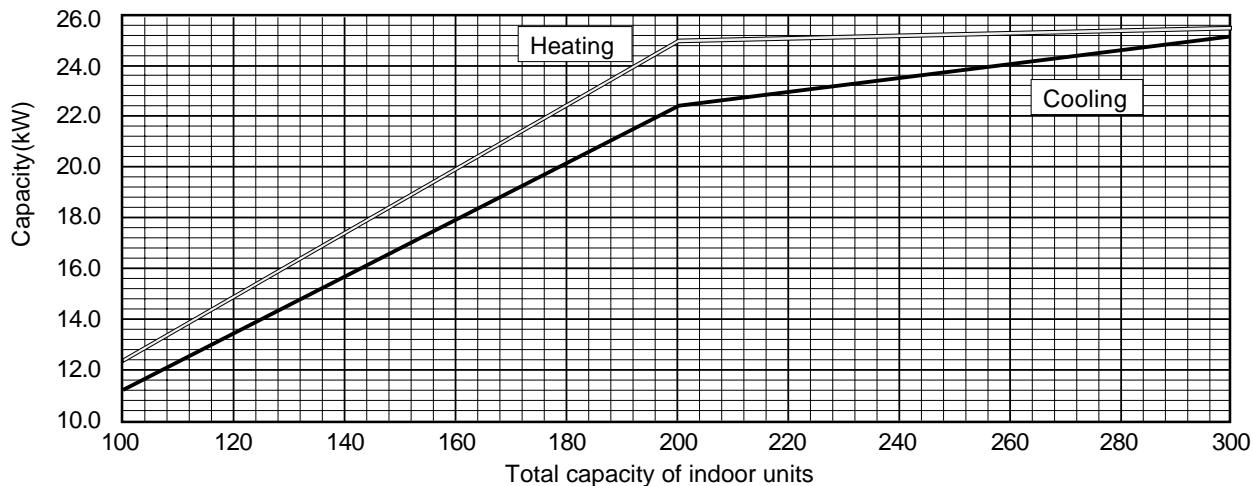
} After correction



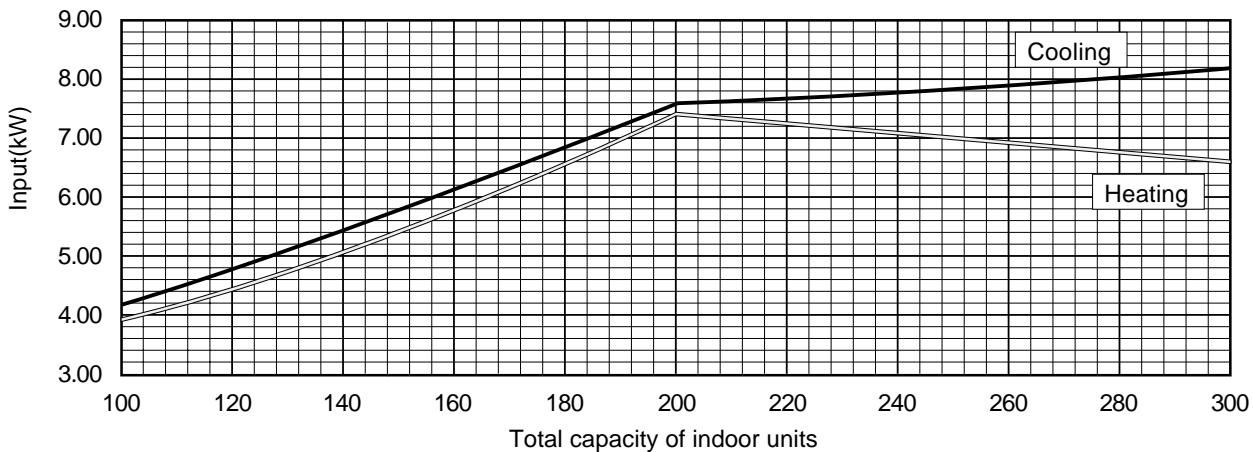
## 2-2. Correction by total indoor

PQRY-P200YMF-C

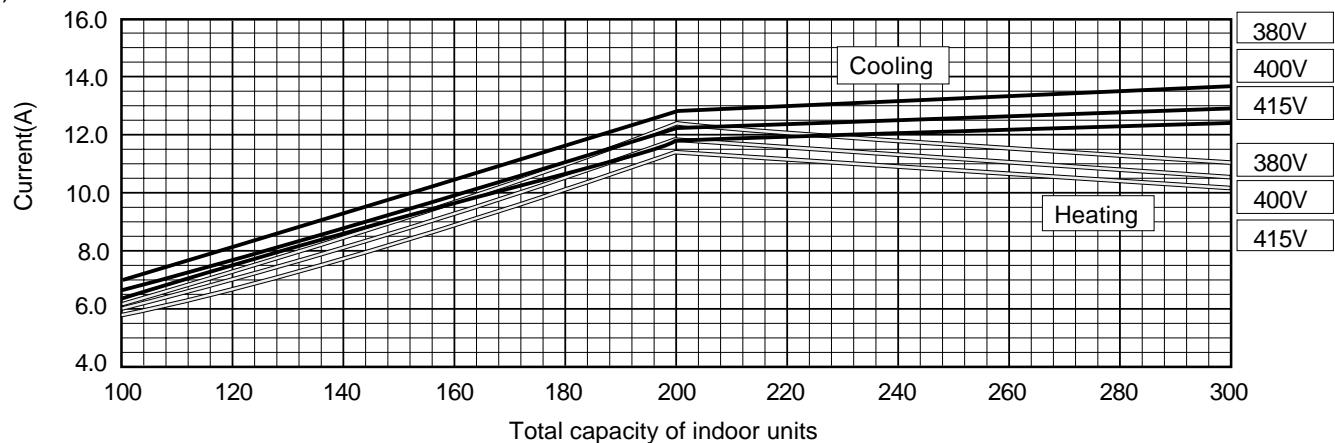
### 1) Capacity



### 2) Input

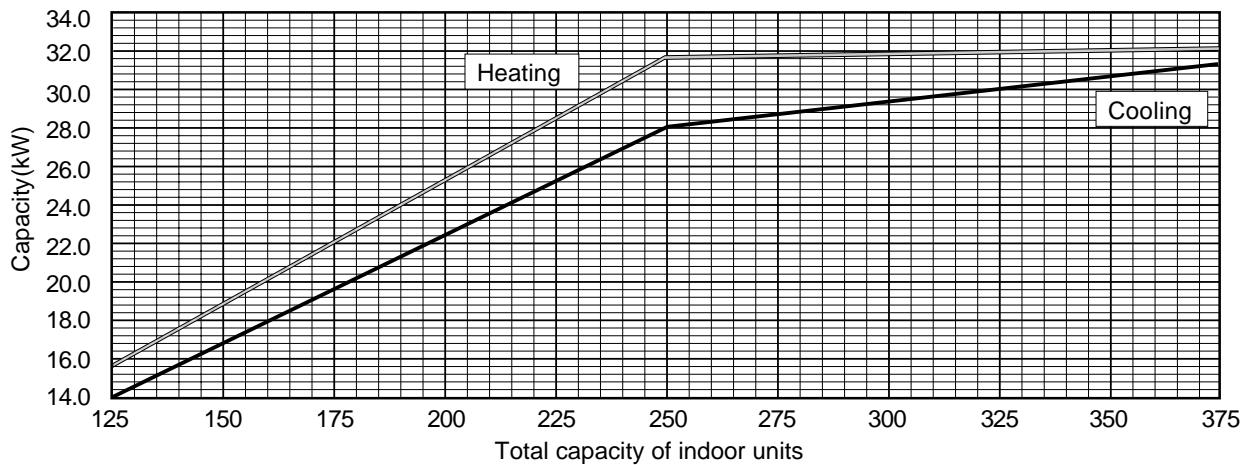


### 3) Current

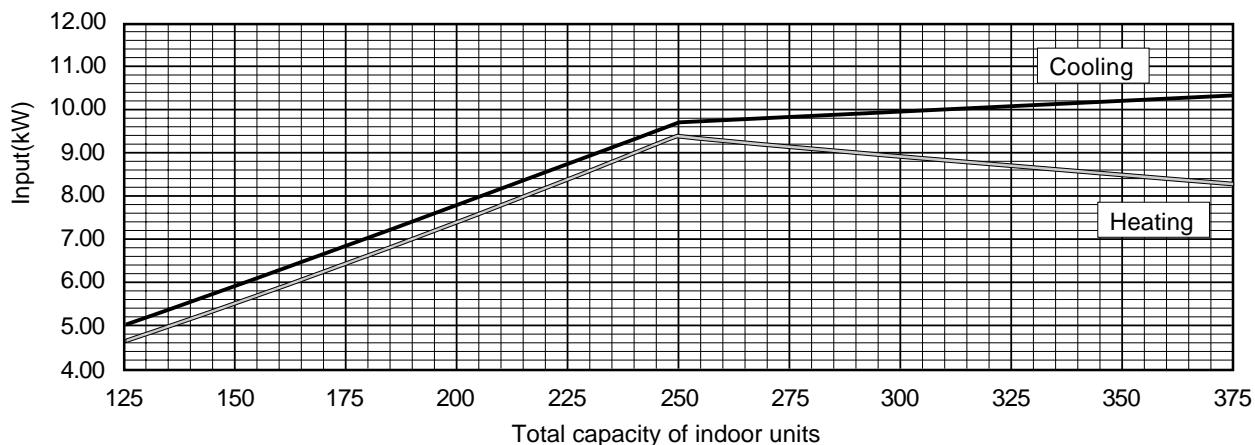


### PQRY-P250YMF-C

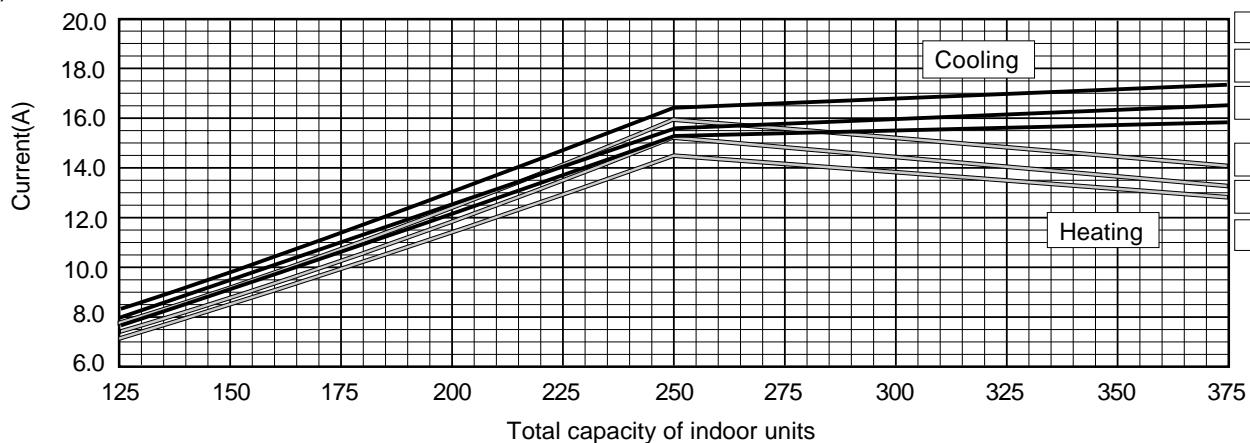
#### 1) Capacity



#### 2) Input



#### 3) Current



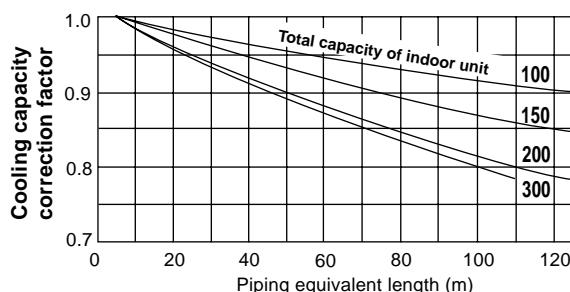
WR2(R407C)

## 2-3 Correction by refrigerant piping length

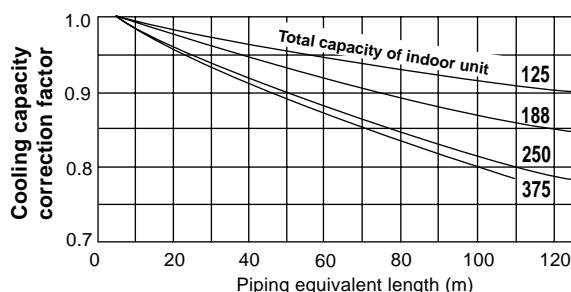
To obtain a decrease in cooling/heating capacity due to refrigerant piping extension, multiply by the capacity correction factor based on the refrigerant piping equivalent length in the table below.

- Cooling capacity correction

PQRY-P200YMF-C

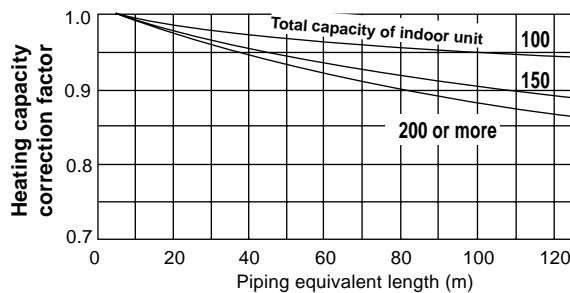


PQRY-P250YMF-C

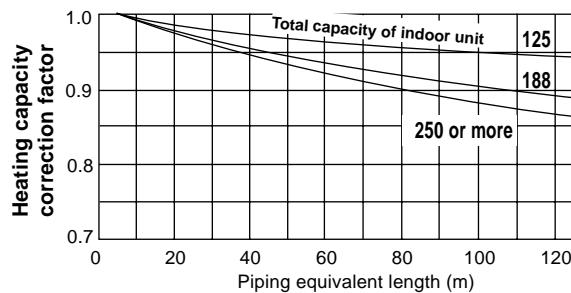


- Heating capacity correction

PQRY-P200YMF-C



PQRY-P250YMF-C



- How to obtain piping equivalent length

- ① PQRY-P200YMF-C

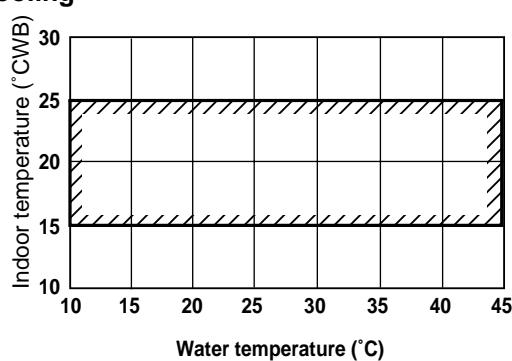
Equivalent length = (Actual piping length to the farthest indoor unit) + (0.47 × number of bent on the piping)m

- ② PQRY-P250YMF-C

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

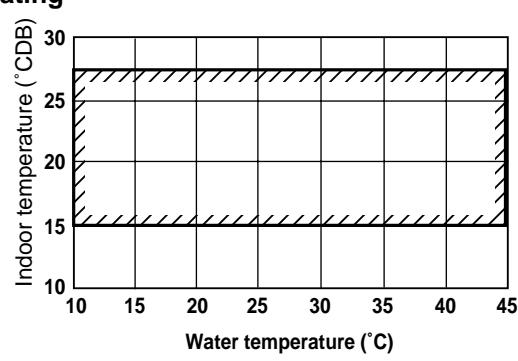
## 2-4 Operation limit

- Cooling



(Indoor capacity  $\geq 130\%$  : Water temp. 15~45°C)

- Heating

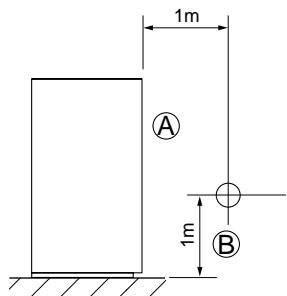


(Indoor capacity  $\geq 130\%$  : Water temp. 15~45°C)

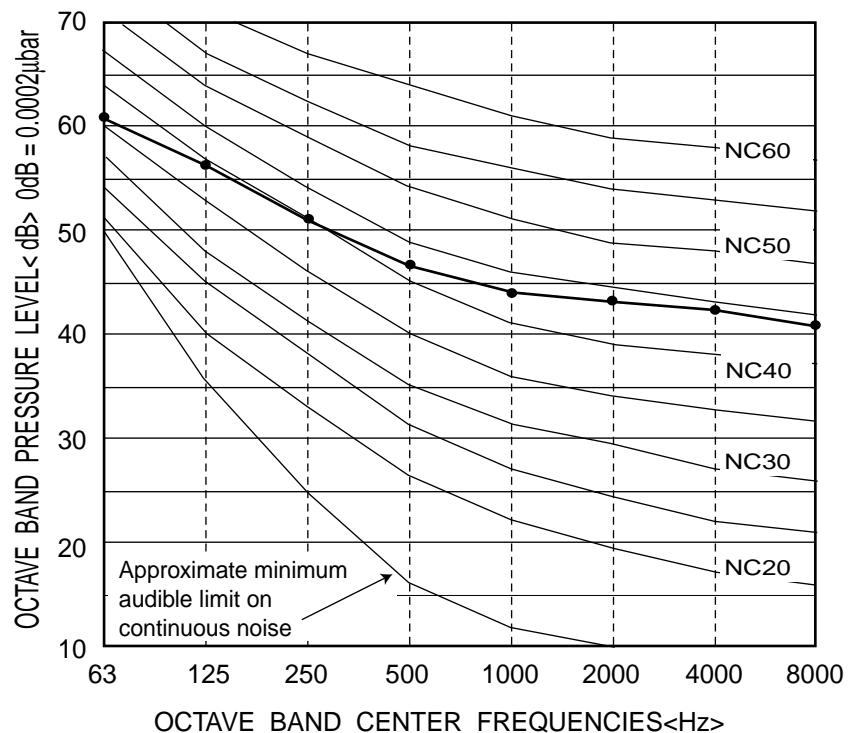
### 3. Sound Levels

#### PQRY-P200YMF-C

Measurement condition

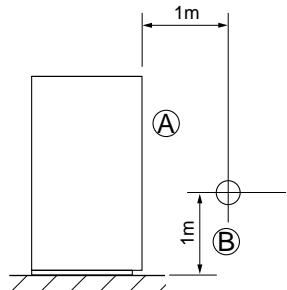


Sound pressure level in anechoic room
51 dB (A)

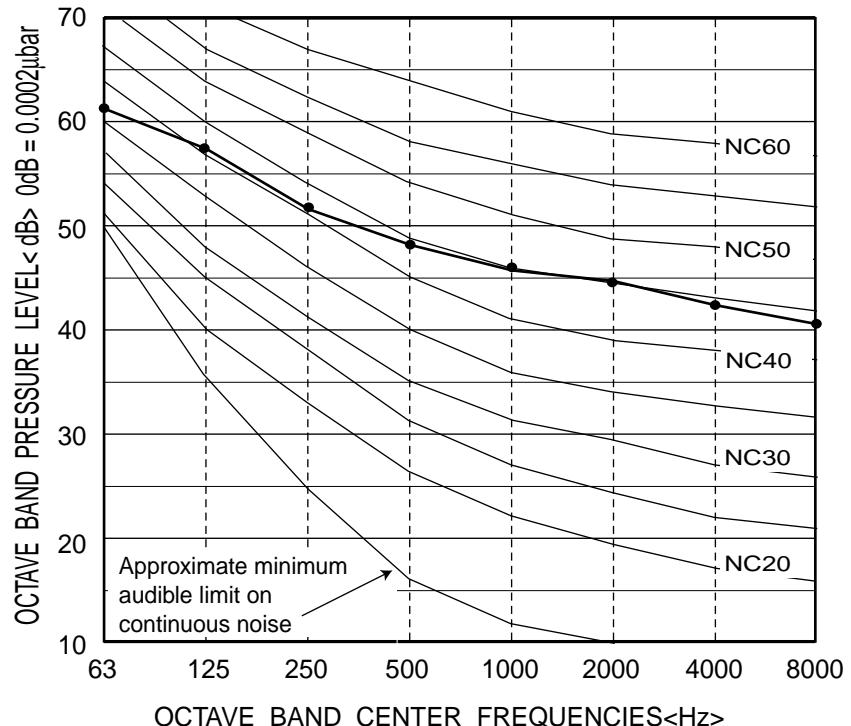


#### PQRY-P250YMF-C

Measurement condition



Sound pressure level in anechoic room
52 dB (A)



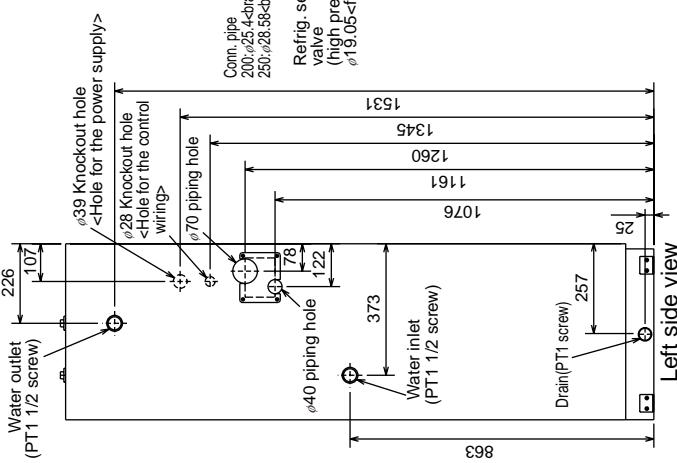
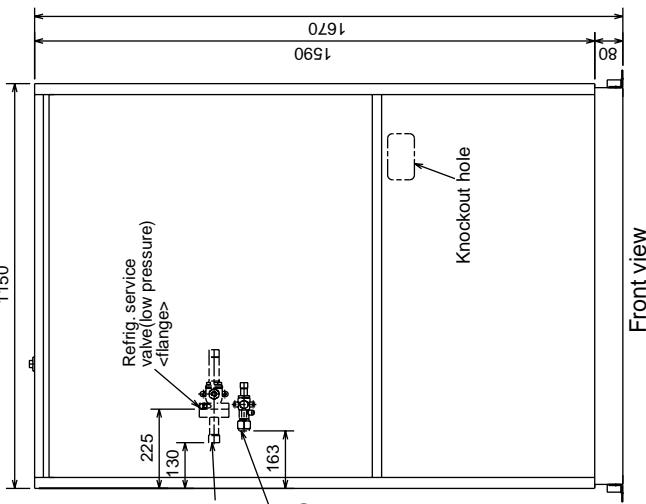
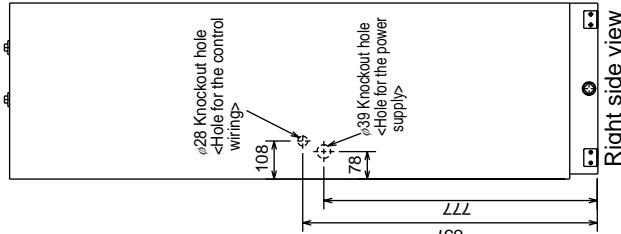
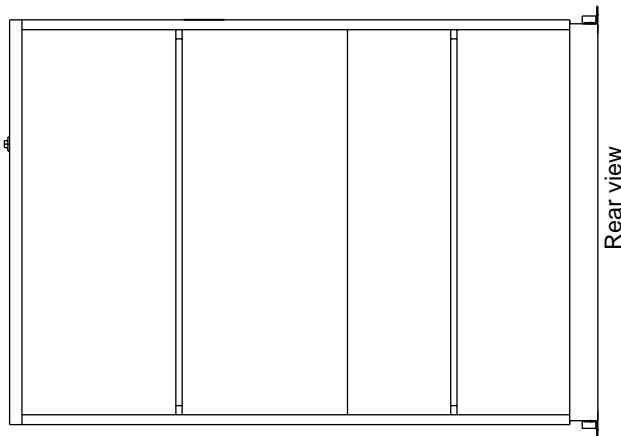
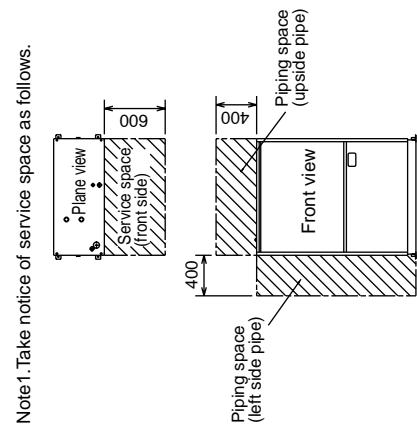
WR2(R407C)

## **4. External Dimensions**

**PQRY-P200,250YMF-C**

Unit : mm

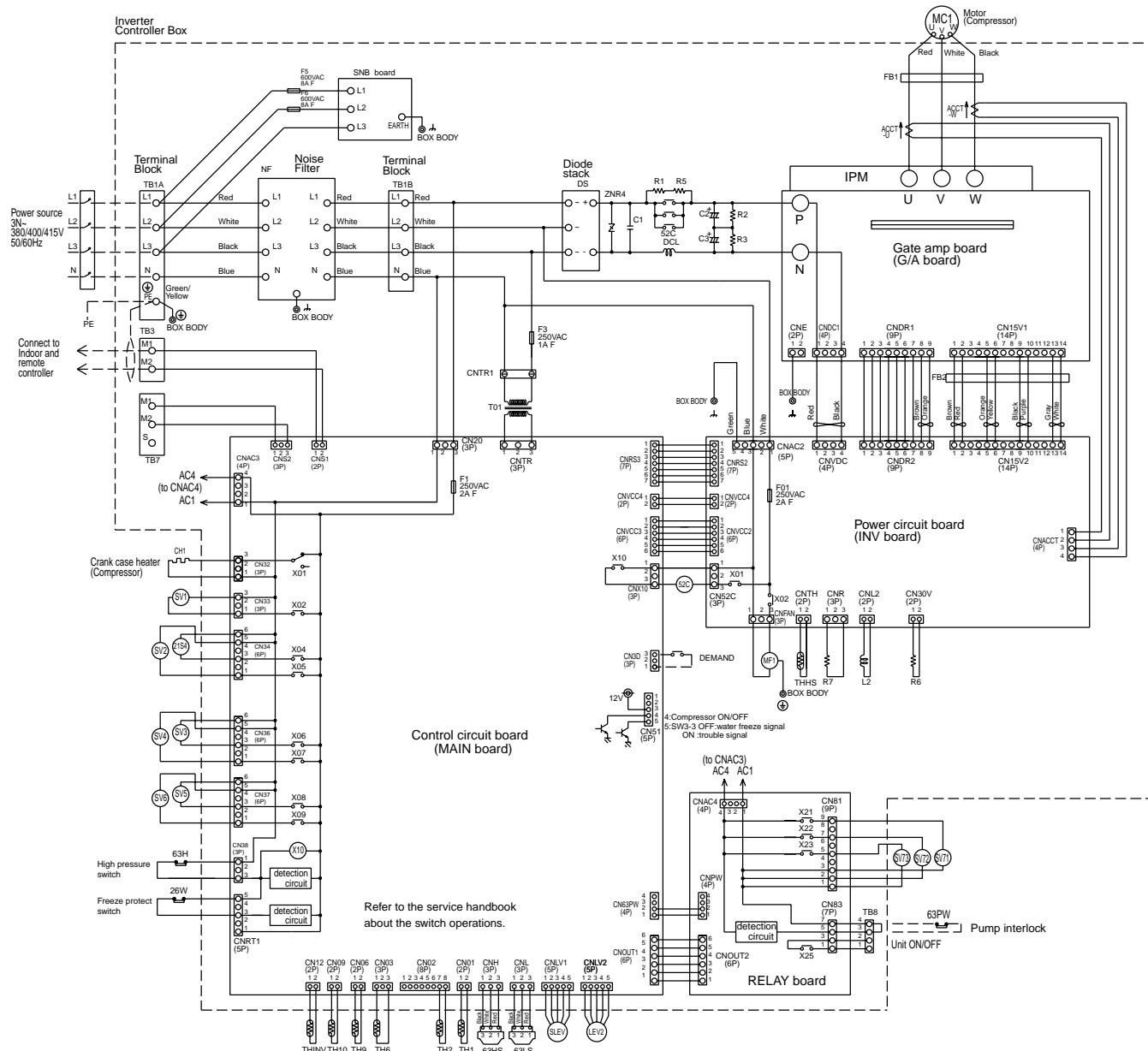
Note 1. Take notice of service space as follows.



<Accessory>	
Refrigerant (low pressure) conn. pipe	... 1pc.
(The connecting pipe is fixed with the unit)	
Packing for conn. pipe	..... 1pc.
(Attached near the ball valve)	
Wiring mounting board	..... 1pc.
-Tapping screw M4	..... 4pcs.
-Lifting bolt M12	..... 2pcs.
-Bushing	..... 2pcs.

## 5. Electrical Wiring Diagram

PQRY-P200, 250YMF-C



### <Symbol explanation>

no fuse breaker

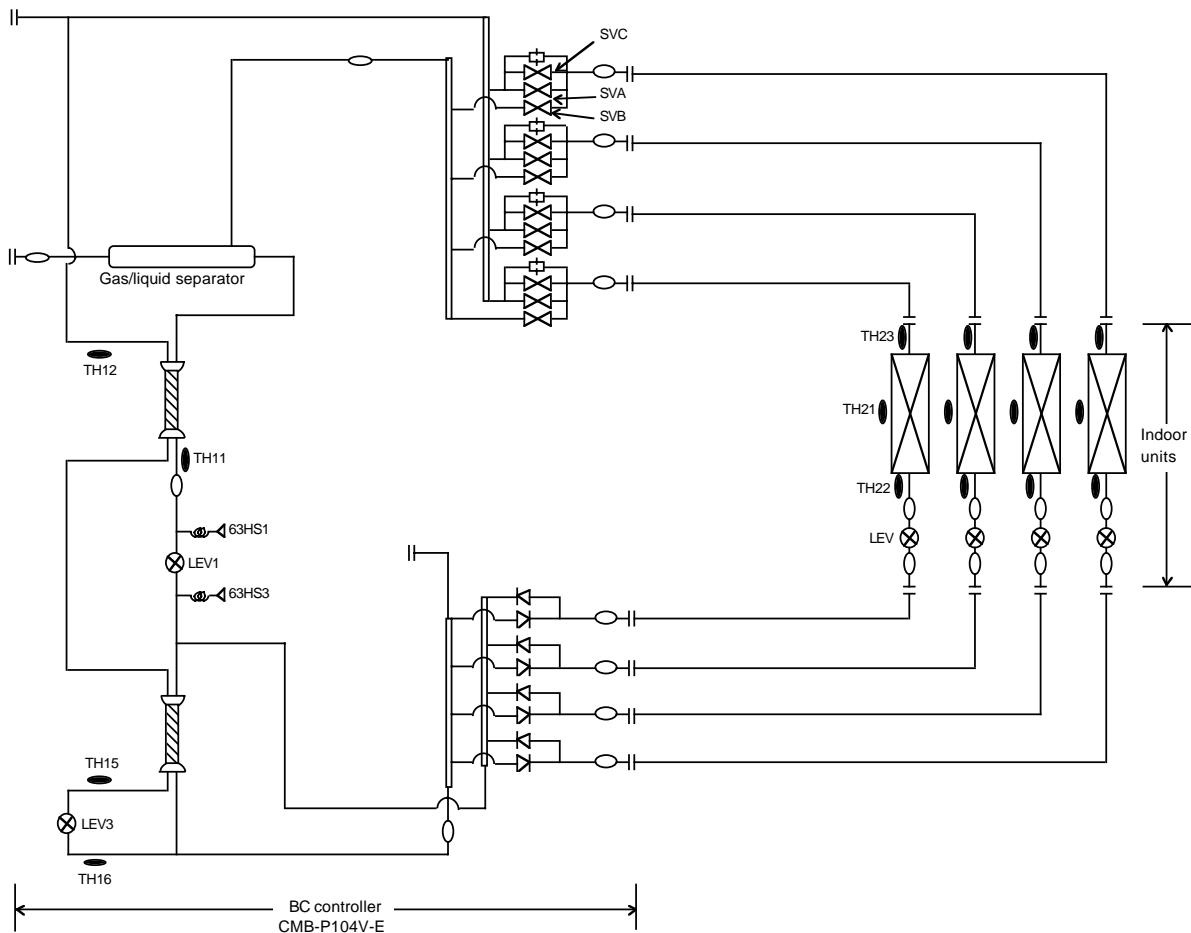
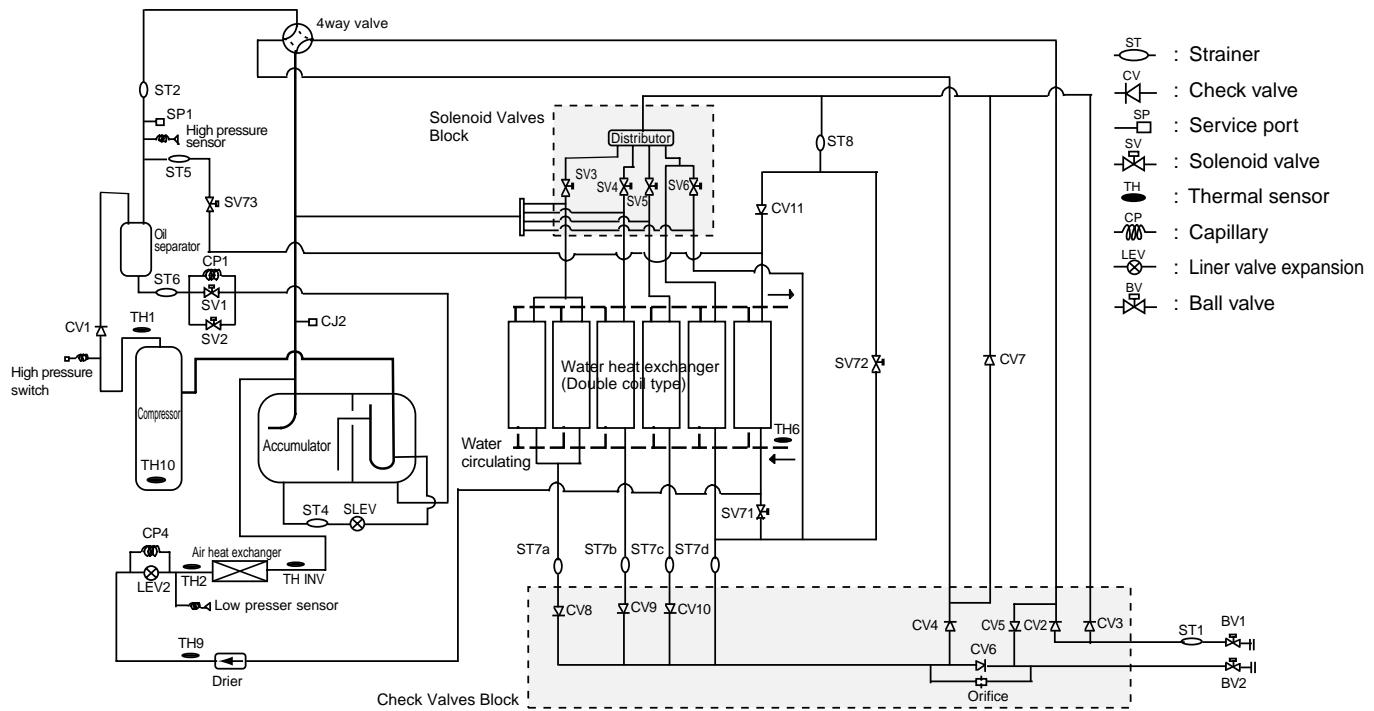
PQRY-P200YMF-C	30A
PQRY-P250YMF-C	50A

Symbol	Name	Symbol	Name
DCL	DC reactor (Power factor improvement)	63HS	High pressure sensor
ACCT-U,W	Current Sensor	63LS	Low pressure sensor
ZNR4	Varistor	L2	Choke coil(Transmission)
52C	Magnetic contactor (Inverter main circuit)	IPM	Intelligent power module
MF1	Fan motor (Radiator panel)	TH1	Thermistor
21S4	4-way valve	TH2	Discharge pipe temp. detect
SV1,SV2	Solenoid valve (Discharge-suction bypass)	TH6	Saturation evapo. temp. detect
SV3-6	Solenoid valve (Heat exchanger capacity control)	TH9	OA temp. detect
SV71-73	Solenoid valve (Heat exchanger capacity control)	TH10	High pressure liquid temp.
LEV2	Electronic expansion valve (Heat exchanger for inverter)	THINV	Compressor shell temp.
SLEV	Electronic expansion valve(Oil return)	THHS	Outlet temp. detect of heat exchanger for inverter
		X1-10	Radiator panel temp. detect
		X21-25	Aux. relay
		FB1-2	Ferrite core
		⊕	Earth terminal

**WR2(R407C)**

## 6. Refrigerant Circuit Diagram And Thermal Sensor

PQRY-P200, 250YMF-C



## 7. System design guide

### 7-1 Designing of water circuit system

#### 1) Example of basic water circuit

The water circuit of the water heat source CITY MULTI connects the heat source unit with the cooling tower/auxiliary heat source/heat storage tank/circulation pump with a single system water piping as shown in the figure below. The selector valve automatically controls to circulate water toward the cooling tower in the cooling season, while toward the heat storage tank in the heating season. If the circulation water temperature is kept in a range of 10~45°C\* regardless of the building load, the water heat source CITY MULTI can be operated for either cooling or heating. Therefore in the summer when only cooling load exists, the temperature rise of circulation water will be suppressed by operating the cooling tower. While in the winter when heating load increases, the temperature of circulation water may be dropped below 10°C. Under such situation, the circulation water will be heated with the auxiliary heat source if it drops below a certain temperature.

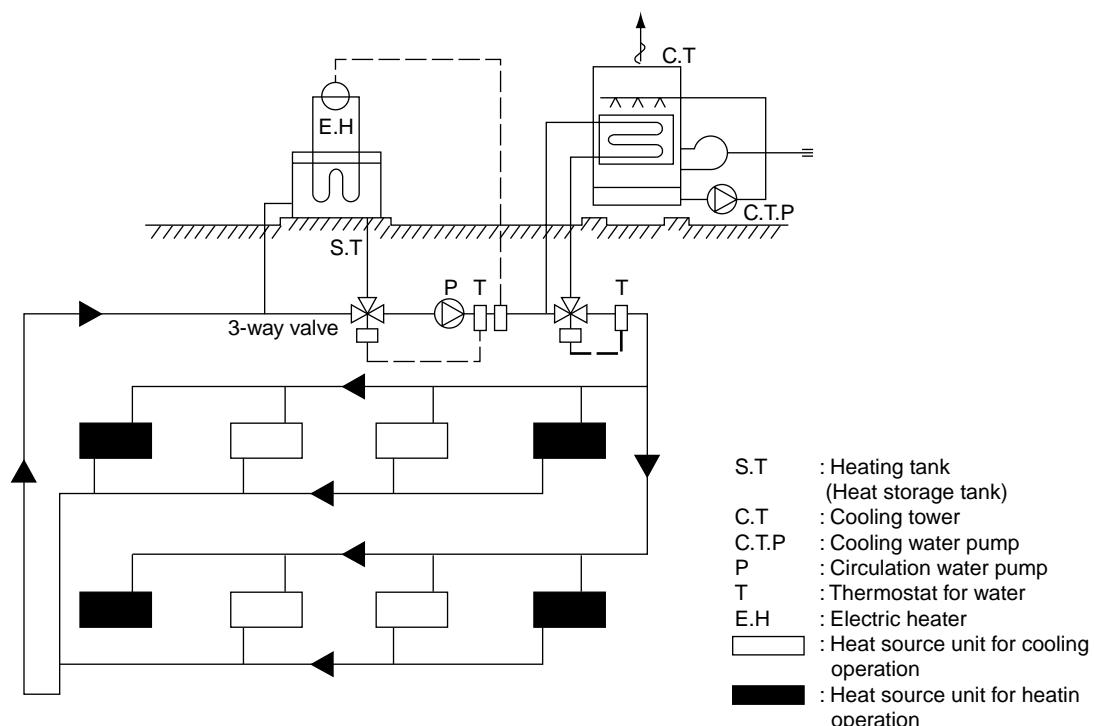
When the thermal balance between cooling and heating operation is in a correct proportion, the operation of the

auxiliary heat source and cooling tower is not required. In order to control the above thermal balance properly and use thermal energy effectively, utilizing of heat storage tanks, and night-time discounted electric power as a auxiliary heat source will be economical. Meantime as this system uses plural sets of heat source unit equipped with water heat exchangers, water quality control is important. Therefore it is recommended to use closed type cooling towers as much as possible to prevent the circulation water from being contaminated. When open type cooling towers are used, it is essential to provide proper maintenance control such as that to install water treatment system to prevent troubles caused by contaminated circulation water.

\*15~45°C : 50%~150% of indoor units can be connected

\*10~40°C : 50%~130% of indoor units can be connected

#### Example of basic water circuit for water heat source CITY MULTI



The indoor unit and refrigerant piping system are excluded in this figure.

## 2) Cooling tower

### a) Types of cooling tower

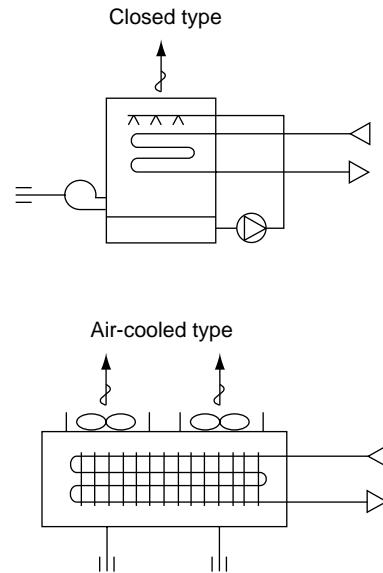
The cooling towers presently used include the open type cooling tower, open type cooling tower + heat exchanger, closed type cooling tower, and air-cooled type cooling tower. However, as the quality control of circulation water is essential when units are installed in decentralized state inside a building, the closed type cooling tower is generally employed in such case.

Although the circulation water will not be contaminated by atmospheric air, it is recommended to periodically blow water inside the system and replenish fresh water instead.

In a district where the coil may be frozen in the winter, it is necessary to apply antifreeze solution to the circulation water, or take freeze protection measures such as to automatically discharge water inside the cooling coil at the stopping of the pump.

When the open type cooling tower is used, be sure to install a water quality control device in addition to the freeze protection measures, as the water may be deteriorated by atmospheric contaminants entered into the cooling tower and dissolved into the circulation water.

### Types of cooling towers



### b) Calculation method of cooling tower capacity

All units of the water heat source CITY MULTI may possibly be in cooling operation temporarily (at pulling down) in the summer, however, it is not necessary to determine the capacity according to the total cooling capacity of all CITY MULTI units as this system has a wide operating water temperature range

( 15~45°C : 130% over  
10~45°C : 130% or less ).

It is determined in accordance with the value obtained by adding the maximum cooling load of an actual building, the input heat equivalent value of all CITY MULTI units, and the cooling load of the circulating pumps. Please check for the values of the cooling water volume and circulation water volume.

$$\text{Cooling tower capacity} = \frac{Q_c + 860 \times (\sum Q_w + R_w)}{3,900} \quad (\text{Refrigeration ton})$$

$Q_c$  : Maximum cooling load under actual state (kcal/h)

$Q_w$  : Total input of water heat source CITY MULTI at simultaneous operation under maximum state (kW)

$P_w$  : Shaft power of circulation pumps (kW)

### 3) Auxiliary heat source and heat storage tank

When the heating load is larger than the cooling load, the circulation water temperature lowers in accordance with the heat balance of the system. It should be heated by the auxiliary heat source in order to keep the inlet water temperature within the operating range

$$( \begin{array}{l} 15^{\circ}\text{C} \text{ or more : } 130\% \text{ over} \\ 10^{\circ}\text{C} \text{ or more : } 130\% \text{ or less} \end{array} )$$

of the water heat source CITY MULTI.

Further in order to operate the water heat source CITY MULTI effectively, it is recommended to utilize the heat storage tank to cover the warming up load in the morning and the insufficient heat amount.

Effective heat utilization can be expected to cover insufficient heat at the warming up in the next morning or peak load time by storing heat by installing a heat storage tank or operating a low load auxiliary heat source at the stopping of the water heat source CITY MULTI. As it can also be possible to reduce the running cost through the heat storage by using the discounted night-time electric power, using both auxiliary heat source and heat storage tank together is recommended.

The effective temperature difference of an ordinary heat storage tank shows about 5deg. even with the storing temperature at 45°C.

However with the water heat source CITY MULTI, it can be utilized as heating heat source up to 15°C with an effective temperature of a high 30deg. approximately, thus the capacity of the heat storage tank can be minimized.

#### a) Auxiliary heat source

The following can be used as the auxiliary heat source.

- Boiler (Heavy oil, kerosine, gas, electricity)
- Electric heat (Insertion of electric heater into heat storage tank)
- Outdoor air (Air-heat source heat pump chiller)
- Warm discharge water (Exhaust water heat from machines inside building and hot water supply)
- Utilization of night-time lighting
- Solar heat

Please note that the auxiliary heat source should be selected after studying your operating environment and economical feasibility.

#### Determining the auxiliary heat source capacity

For the CITY MULTI water heat source system, a heat storage tank is recommended to use. When employment of the heat storage tank is difficult, the warming up operation should be arranged to cover the starting up heating load. Since the holding water inside the piping circuit owns heat capacity and the warming up operation can be assumed for about one hour except that in a cold region, the heat storage tank capacity is required to be that at the maximum daily heating load including the warming up load at the next morning of the holiday.

However the auxiliary heat source capacity should be determined by the daily heating load including warming up load on the week day.

For the load at the next morning of the holiday, heat storage is required by operating the auxiliary heat source even outside of the ordinary working hour.

#### When heat storage tank is not used

$$QH = HC_T \left( 1 - \frac{1}{COP_h} \right) - 1000 \times V_w \times \Delta T - 860 \times P_w$$

QH	: Auxiliary heat source capacity	(kcal/h)
HC <sub>T</sub>	: Total heating capacity of each water heat source CITY MULTI	(kcal/h)
COP <sub>H</sub>	: COP of water heat source CITY MULTI at heating	
V <sub>w</sub>	: Holding water volume inside piping	(m <sup>3</sup> )
ΔT	: Allowable water temperature drop = T <sub>WH</sub> - T <sub>WL</sub>	(°C)
T <sub>WH</sub>	: Heat source water temperature at high temperature side	(°C)
T <sub>WL</sub>	: Heat source water temperature at low temperature side	(°C)
P <sub>w</sub>	: Heat source water pump shaft power	(kW)

WR2(R407C)

### When heat storage tank is used;

$$QH = \frac{HQ_{1T} \left( 1 - \frac{1}{COP_h} \right) - 860 \times Pw \times T_2}{T_1} \times K \quad (\text{Kcal})$$

$QH_{1T}$	: Total of heating load on weekday including warming up	(kcal/day)
$T_1$	: Operating hour of auxiliary heat source	(h)
$T_2$	: Operating hour of heat source water pump	(h)
$K$	: Allowance factor (Heat storage tank, piping loss, etc.)	1.05~1.10

$HQ_{1T}$  is calculated from the result of steady state load calculation similarly by using the equation below.  
 $HQ_{1T} = 1.15 \times (\sum Q'a + \sum Q'b + \sum Q'c + \sum Q'd + \sum Q'f) T_2 - \psi (\sum Q'e_1 + \sum Q'e_2 + \sum Q'e_3) (T_2 - 1)$

$Q'a$	: Thermal load from external wall/roof in each zone	(kcal/h)
$Q'b$	: Thermal load from glass window in each zone	(kcal/h)
$Q'c$	: Thermal load from partition/ceiling/floor in each zone	(kcal/h)
$Q'd$	: Thermal load by infiltration in each zone	(kcal/h)
$Q'f$	: Fresh outdoor air load in each zone	(kcal/h)
$Q'e_1$	: Thermal load from human body in each zone	(kcal/h)
$Q'e_2$	: Thermal load from lighting fixture in each zone	(kcal/h)
$Q'e_3$	: Thermal load from equipment in each zone	(kcal/h)
$\psi$	: Radiation load rate	0.6~0.8
$T_2$	: Air conditioning hour	

### b) Heat storage tank

Heat storage tank can be classified by types into the open type heat storage tank exposed to atmosphere, and the closed type heat storage tank with structure separated from atmosphere. Although the size of the tank and its installation place should be taken into account, the closed type tank is being usually employed by con-

sidering corrosion problems.

The capacity of heat storage tanks is determined in accordance with the daily maximum heating load that includes warming up load to be applied for the day after the holiday.

### When auxiliary heat source is operated during operation and even after stopping of water heat source CITY MULTI unit

$$V = \frac{HQ_{2T} \left( 1 - \frac{1}{COP_h} \right) - 860 \times Pw \times T_2 - QH \times T_2}{\Delta T \times 1000 \times \eta V} \quad (\text{ton})$$

### When auxiliary heat source is operated after stopping of water heat source CITY MULTI unit

$$V = \frac{HQ_{2T} \left( 1 - \frac{1}{COP_h} \right) - 860 \times Pw \times T_2}{\Delta T \times 1000 \times \eta V} \quad (\text{ton})$$

$HQ_{2T}$	: Maximum heating load including load required for the day after the holiday (kcal/day)
$\Delta T$	: Temperature difference utilized by heat storage tank (deg)
$\eta V$	: Heat storage tank efficiency

$$HQ_{2T} : 1.3 \times (\sum Q'a + \sum Q'c + \sum Q'd + \sum Q'f) T_2 - \psi (\sum Q'e_2 + \sum Q'e_3) (T_2 - 1)$$

#### 4) Piping system

The following items should be kept in your mind in planning / designing water circuits.

- a) All units should be constituted in a single circuit in principle.
- b) When plural numbers of the water heat source CITY MULTI unit are installed, the rated circulating water flow rate should be kept by making the piping resistance to each unit almost same value. As an example, the reverse return system as shown below may be employed.
- c) Depending on the structure of a building, the water circuit may be prefabricated by making the layout uniform.
- d) When a closed type piping circuit is constructed, install an expansion tank usable commonly for a make-up water

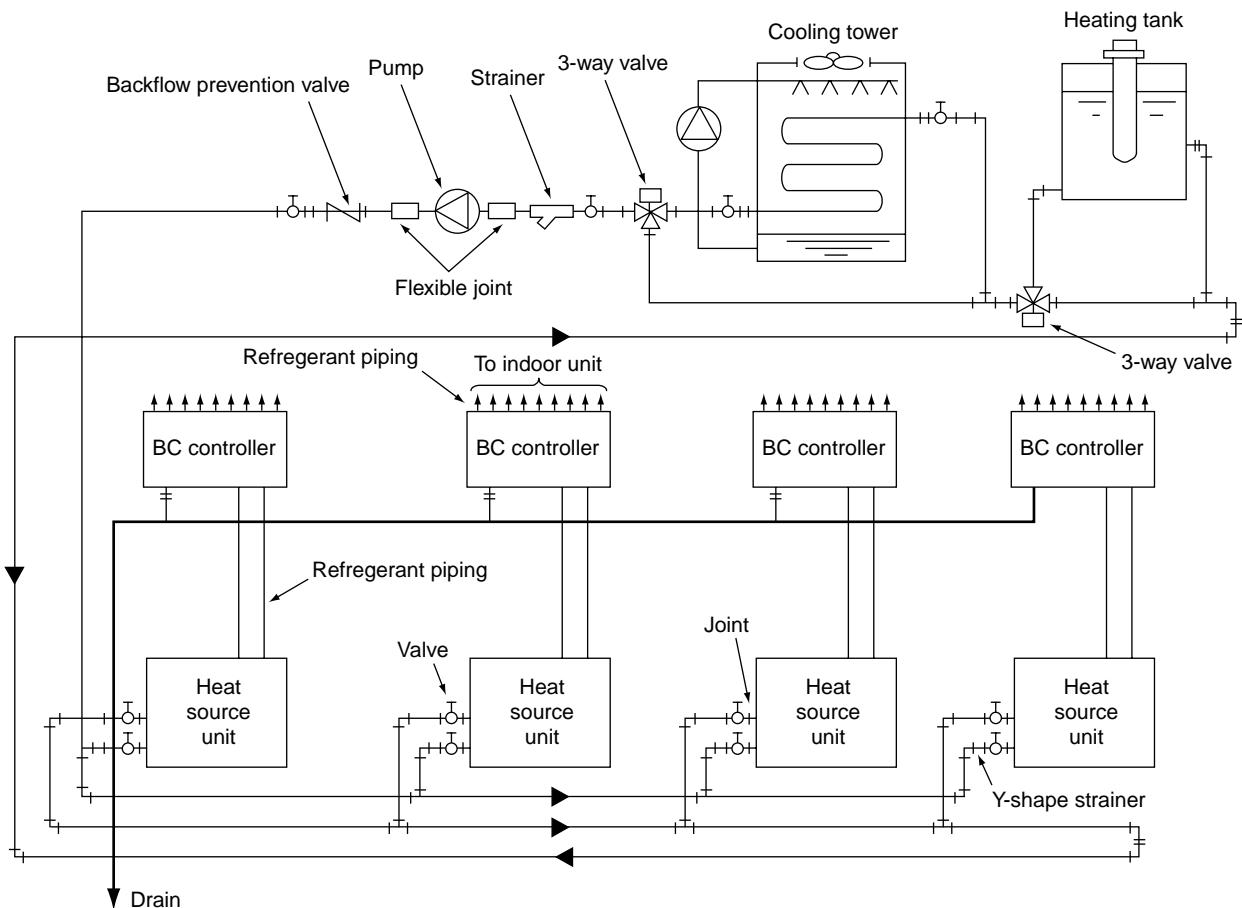
tank to absorb the expansion/contraction of water caused by temperature fluctuation.

- e) If the operating temperature range of circulation water stays within the temperature near the normal temperature (summer : 30°C, winter : 20°C), thermal insulation or anti-sweating work is not required for the piping inside buildings.

In case of the conditions below, however, thermal insulation is required.

- When well water is used for heat source water.
- When piped to outdoor or a place where freezing may be caused.
- When vapor condensation may be generated on piping due to an increase in dry bulb temperature caused by the entry of fresh outdoor air.

#### System example of water circuit



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## 5) Cleaning of water heat exchanger

For the water heat exchanger, scale adheres in less amount generally in the case of closed type cooling towers. However in a long period of use, scale will adhere that may lower the heat exchange capacity and increase the water resistance.

In such case, conduct cleaning work under the proce-

dure given below.

The cleaning work procedure generally used is as follows. However as the cleaning agents have various differences in their cleaning effect, corrosion characteristics, processing time, and condensation for use, conduct the work after consulting the relating maker.

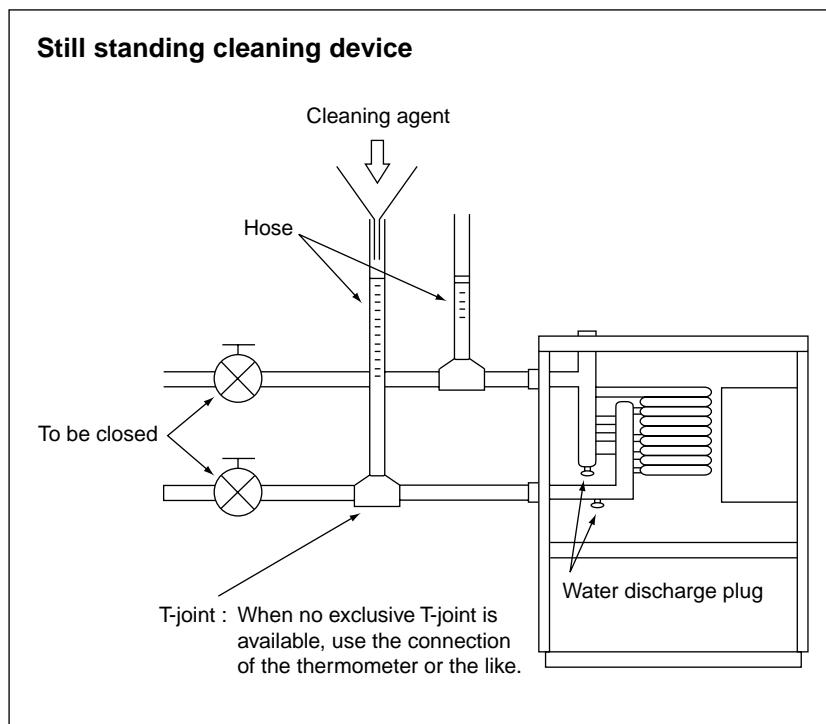


### a) Still standing method

This method feeds the raw liquid or diluted solution of cleaning agent into the water circuit and leave it for a while, and requires only a simple device.

- Since the cleaning time required differs by the agent of each maker, be sufficiently careful for the time and not to exceed the time specified.

- Fully recover the cleaning liquid through the water discharge plug of the heat exchanger, and then fully clean the water circuit with clean water. If the water washing can not be made sufficiently, neutralization processing will be effective.

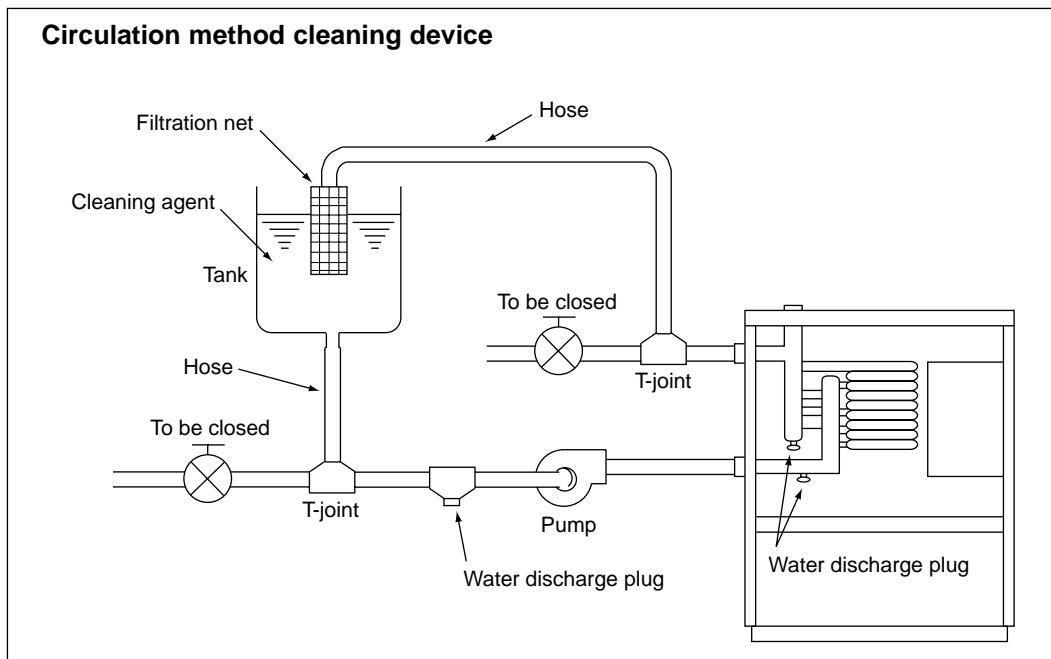


### b) Circulation method

Although this method can clean in shorter time than that required by the still standing method, be careful that the circulation pump may be damaged if using cleaning agent with strong corrosive characteristics.

- After completing washing work, fully recover the washing liquid through the water discharge plug installed at the bottom of the piping and that at the heat exchanger.
- Conduct water washing for three times or more after removing cleaning agent. If this can not be made satisfactorily, apply neutralization treatment. Full replacement of water can be ascertained by measuring the PH of the water.
- Note that it may be required to control the cleaning time depending on the scale generation or water quality.
- At cleaning work, remove or shut down the instruments like water pressure gauges so that the cleaning liquid will not enter into them.

- Check for the connections of piping beforehand so that cleaning agent will not leak from the piping during cleaning work.
- Start cleaning operation after fully mixing the cleaning agent with water.
- Cleaning at the earlier timing is recommended as the removal of scale will be difficult if it has accumulated seriously. Periodical cleaning is necessary in a district with inferior water quality.
- Conduct water washing sufficiently with clear water after cleaning work as all cleaning agents own strong acidity.
- To verify the completion of cleaning, remove the hose and observe the inner wall of the piping whether it is clean.
- Be sufficiently careful for fire when using inflammable cleaning agent (GOSPEL R).



### Example of cleaning agents

Name	Shape	Condensation	Time	Makers
CLEARLITE RK	Powder/Liquid	10~20%	2~3Hr.	Koei Kagaku
CLEARLITE ACE	Powder/Liquid	3~5%	1~3Hr.	Koei Kagaku
GOSPEL R	Liquid			Gospel Kako
GOSPEL SR	Powder			
ADDITION DR	Powder			Marusan
SS-100	Liquid			
NEOLUX F	Powder			Seiwa kogyo
DISCALER	Powder	4~7%		Saver Kagaku

WR2(R407C)

## 6) Practical System Examples and Circulation

### Water Control

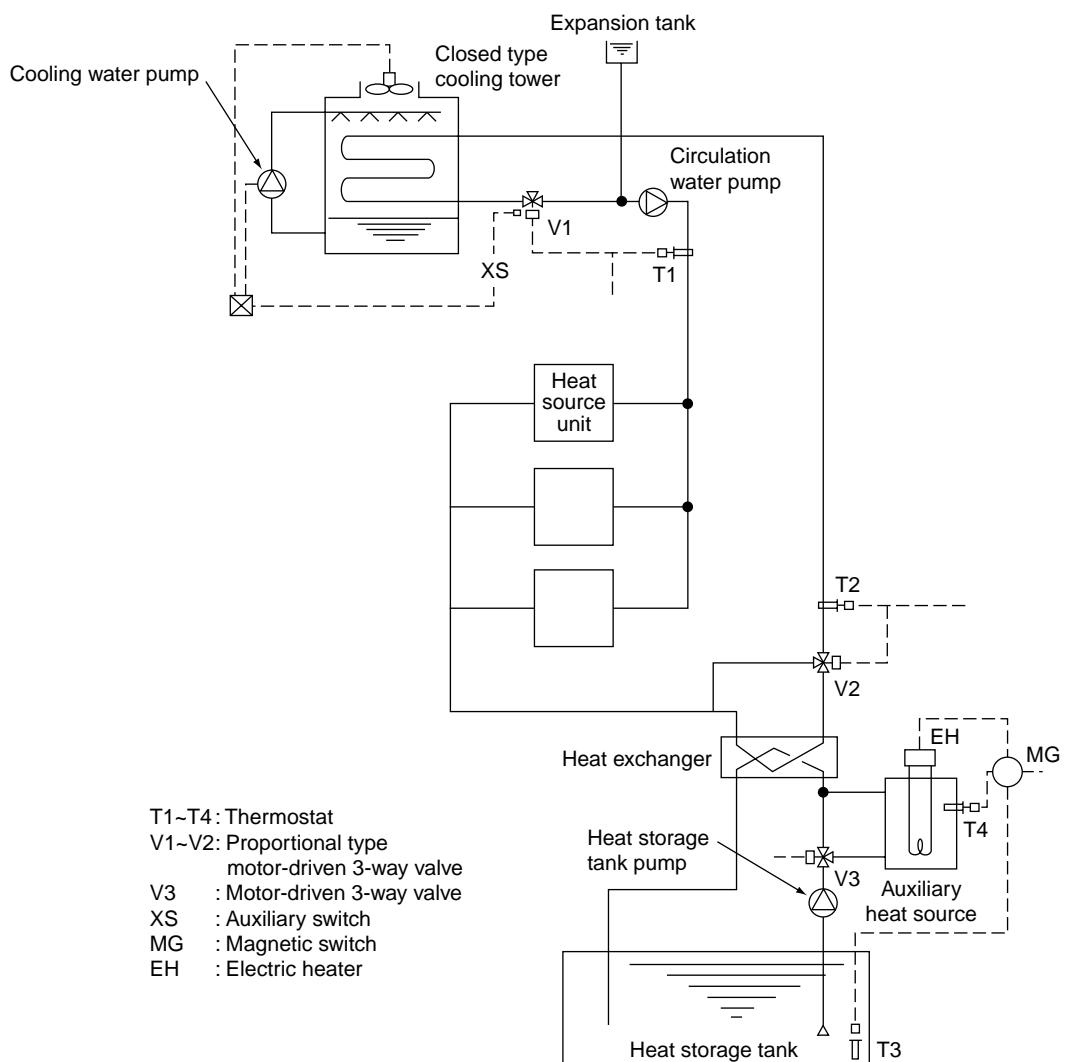
Since the CITY MULTI WR2 is of water heat source system, versatile systems can be constituted by combining it with various heat sources.

The practical system examples are given below.

Either cooling or heating operation can be performed if the circulation water temperature of the CITY MULTI

WR2 stays within a range of 15~45°C. However, the circulation water temperature near 32°C for cooling and 20°C for heating is recommended by taking the life, power consumption and capacity of the air conditioning units into consideration. The detail of the control is also shown below.

### Example-1 Combination of closed type cooling tower and hot water heat storage tank (using underground hollow slab)



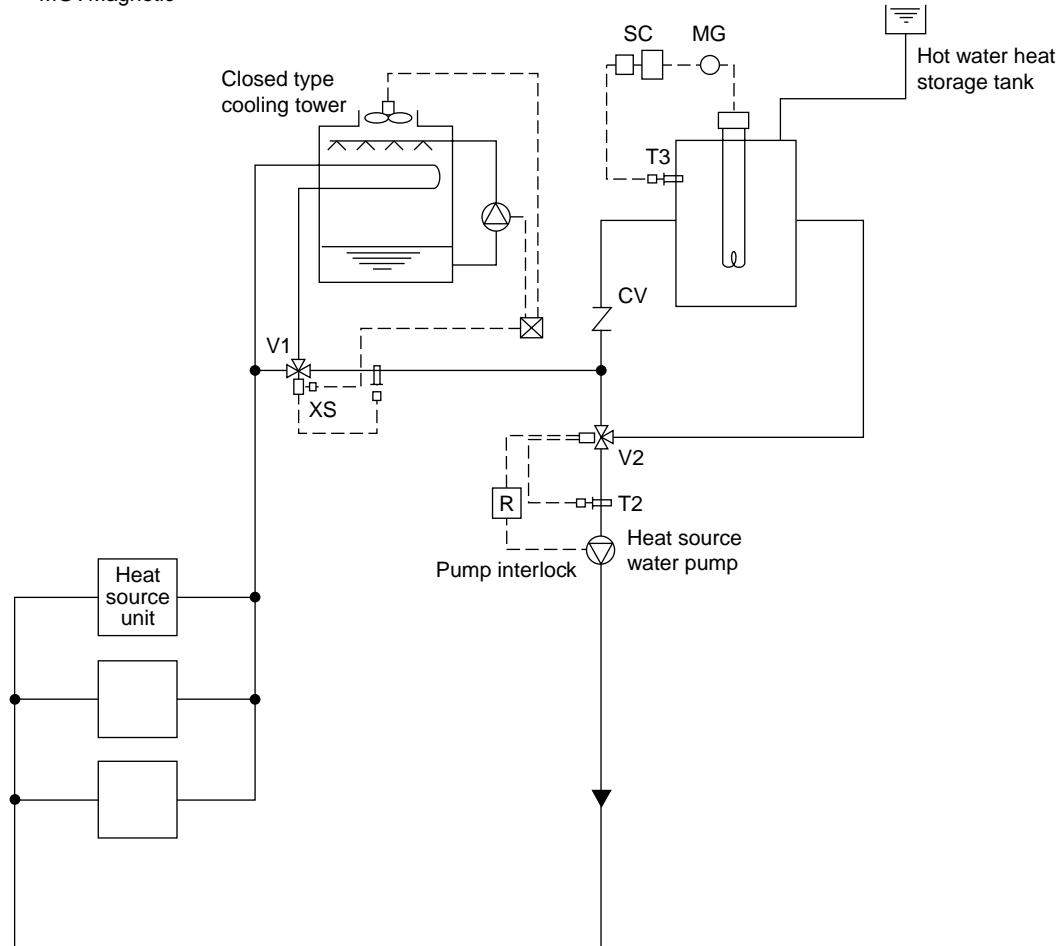
By detecting the circulation water temperature of the CITY MULTI WR2 system with T1 (around 32°C) and T2 (around 20°C), the temperature will be controlled by opening/closing V1 in the summer and V2 in the winter.

In the summer, as the circulation water temperature rises exceeding the set temperature of T1, the bypass port of V1 will open to lower the circulation water temperature. While in the winter, as the circulation water temperature drops, V2 will open following the command of T2 to rise the circulation water temperature.

The water inside the heat storage tank will be heated by the auxiliary heat source by V3 being opened with timer operation in the night-time. The electric heater of the auxiliary heat source will be controlled by T3 and the timer. The start/stop control of the fan and pump of the closed type cooling tower is applied with the step control of the fan and pump following the command of the auxiliary switch XS of V1, that operates only the fan at the light load while the fan and pump at the maximum load thus controlling water temperature and saving motor power.

**Example-2 Combination of closed type cooling tower and hot water heat storage tank**

T1 : Proportional type, insertion system thermostat  
 T2 : Proportional type, insertion system thermostat  
 T3 : Proportional type, insertion system thermostat  
 V1 : Proportional type, motor-driven 3-way valve  
 V2 : Proportional type, motor-driven 3-way valve  
 XS : Auxiliary switch (Duplex switch type)  
 SC : Step controller  
 R : Relay  
 MG : Magnetic



=In the summer, as the circulation water temperature rises exceeding the set temperature of T1, the bypass port of V1 will open to lower the circulation water temperature. In the winter, if the circulation water temperature stays below 25°C, V2 will open/close by the command of T2 to keep the circulation water temperature constant.

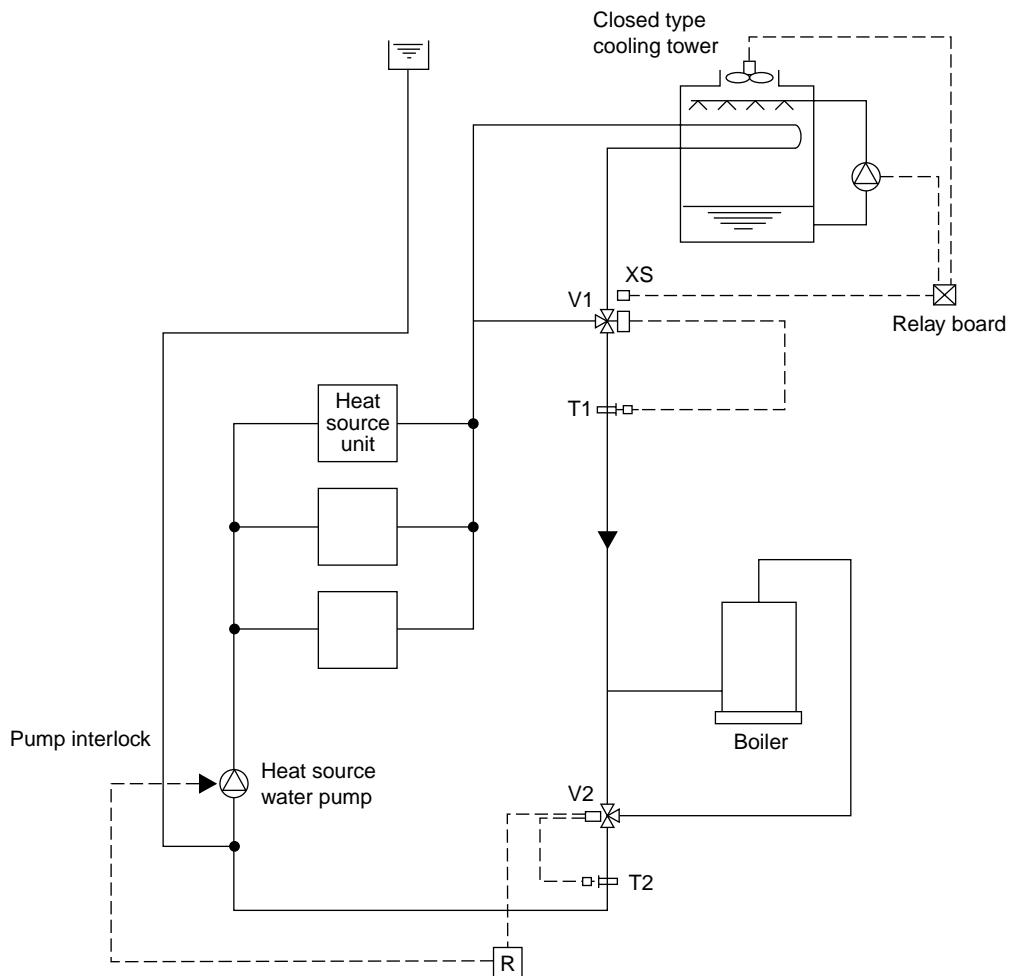
The temperature of the hot water inside the heat storage tank will be controlled through the step control of the electric heater by step controller operation following the command of T3.

During the stopping of the heat source water pump, the bypass port of V2 will be closed fully by interlocking thus preventing the high temperature water from entering into the system at the starting of the pump.

The start/stop control of the fan and pump of the closed type cooling tower is applied with the step control of the fan and pump following the command of the auxiliary switch XS of V1, that operates only the fan at the light load while the fan and pump at the maximum load thus controlling water temperature and saving motor power.

### Example-3 Combination of closed type cooling tower and boiler

T1 : Proportional type, insertion system thermostat  
 T2 : Proportional type, insertion system thermostat  
 T3 : Proportional type, insertion system thermostat  
 V1 : Proportional type, motor-driven 3-way valve  
 S : Selector switch  
 R : Relay  
 XS : Auxiliary switch (Duplex switch type)



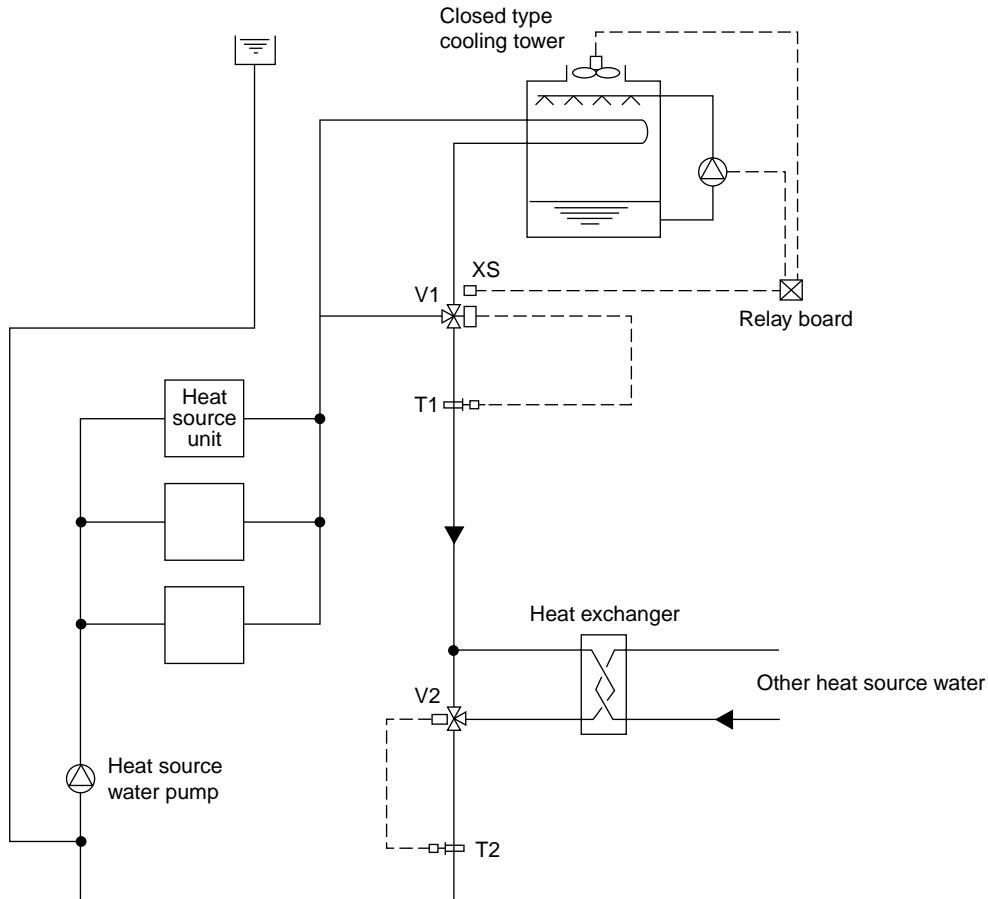
In the summer, as the circulation water temperature rises exceeding the set temperature of T1, the bypass port of V1 will close to lower the circulation water temperature. In the winter, if the circulation water temperature drops below 25°C, V2 will conduct water temperature control to keep the circulation water temperature constant.

During the stopping of the heat source water pump, the bypass port of V2 will be closed fully by interlocking.

The start/stop control of the fan and pump of the closed type cooling tower is applied with the step control following the command of the auxiliary switch XS of V1, thus controlling water temperature and saving motor power.

**Example-4 Combination of closed type cooling tower and heat exchanger (of other heat source)**

T1 : Proportional type, insertion system thermostat  
 T2 : Proportional type, insertion system thermostat  
 V1 : Proportional type, motor-driven 3-way valve  
 V2 : Proportional type, motor-driven 3-way valve  
 S : Selector switch  
 R : Relay  
 XS : Auxiliary switch (Duplex switch type)

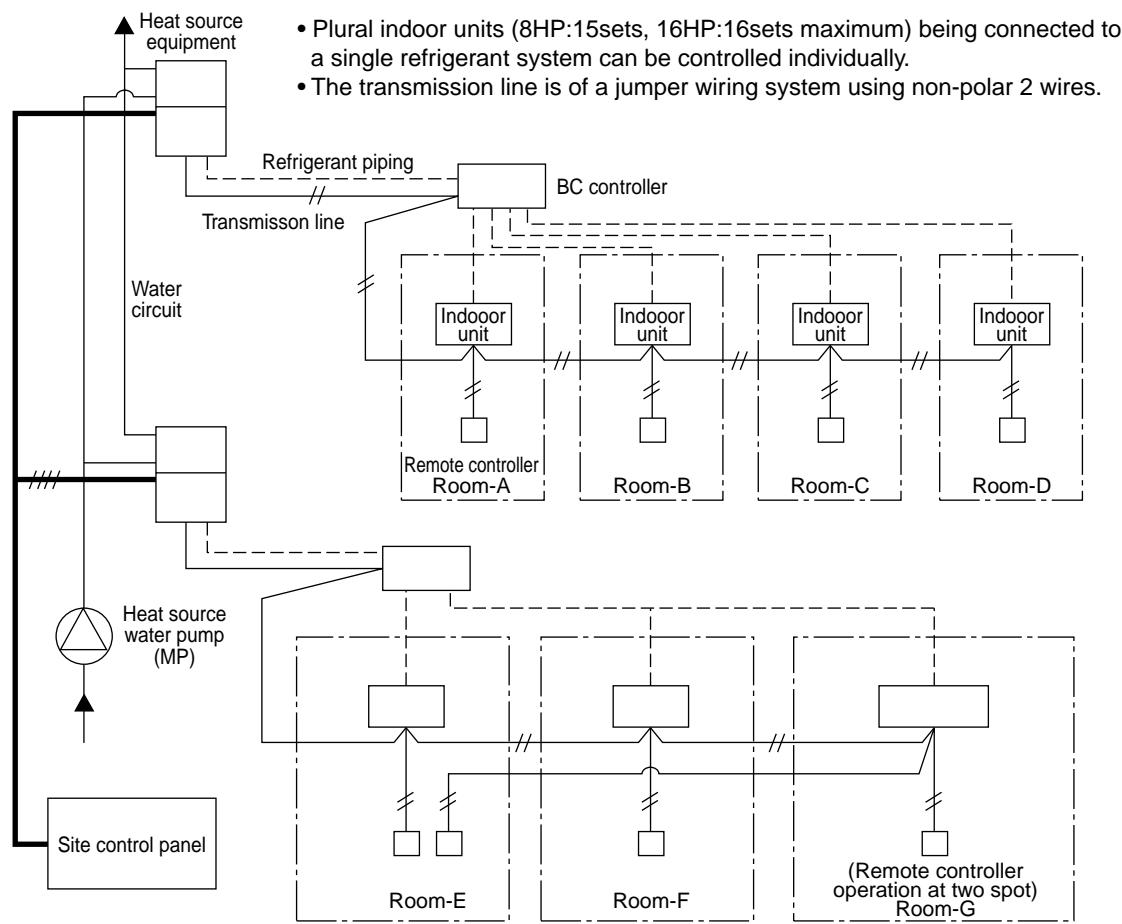


In the summer, as the circulation water temperature rises exceeding the set temperature of T1, the bypass port of V1 will close to lower the circulation water temperature. In the winter, if the circulation water temperature drops below 26°C, V2 will conduct water temperature control to keep the circulation water temperature constant.

During the stopping of the heat source water pump, the bypass port of V2 will be closed fully by interlocking.

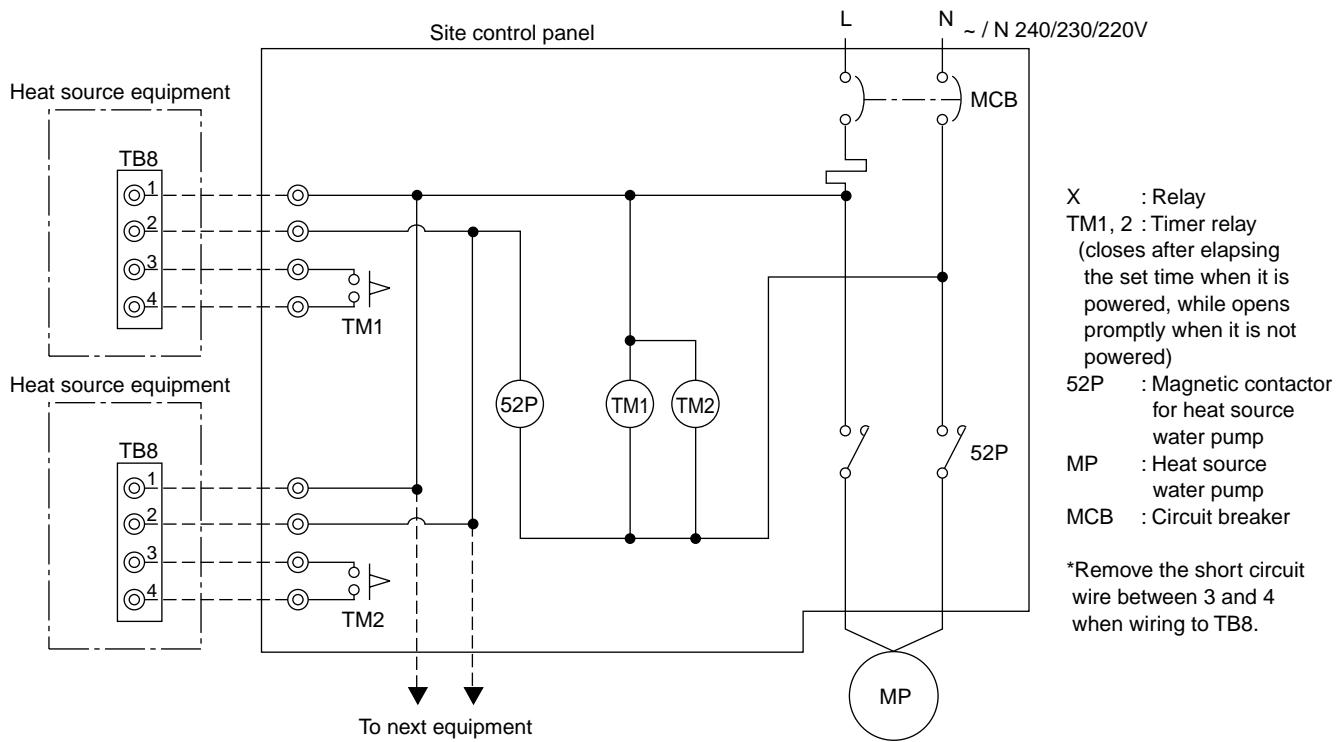
The start/stop control of the fan and pump of the closed type cooling tower is applied with the step control following the command of the auxiliary switch XS of V1, thus controlling water temperature and saving motor power.

## 7) Pump interlock circuit



### Wiring diagram

This circuit uses the "Terminal block for pump interlock (TB8)" inside the electrical parts box of the heat source equipment. This circuit is for interlocking of the heat source equipment operation and the heat source water pump.



**Operation ON signal**

Terminal No.	TB8-1, 2	
Output	Relay contacts output	Rated voltage : L1 - N : 220 ~ 240V Rated load : 1A
Operation	<ul style="list-style-type: none"> <li>• When Dip switch 2-7 is OFF The relay closes during compressor operation.</li> <li>• When DIP switch 2-7 is ON. The relay closes during reception of cooling or the heating operation signal from the controller. (Note : It is output even if the thermostat is OFF (when the compressor is stopped).)</li> </ul>	

**Pump Interlock**

Terminal No.	TB8-3, 4	
Input	Level signal	
Operation	If the circuit between TB8-3 and TB8-4 is open, compressor operation is prohibited.	

## 7-2.WATER PIPING WORK

Although the water piping for the CITY MULTI WR2 system does not differ from that for ordinary air conditioning systems, pay special attention to the items below in conducting the piping work.

### 1) Items to be observed on installation work

- In order to equalize piping resistance for each unit, adapt the reverse return system.
- Mount a joint and a valve onto the water outlet/inlet of the unit to allow for maintenance, inspection and replacement work. Be sure to mount a strainer at the water inlet piping of the unit. (The strainer is required at the circulation water inlet to protect the heat source unit.)
- \* The installation example of the heat source unit is shown right.
- Be sure to provide an air relief opening on the water piping properly, and purge air after feeding water to the piping system.
- Condensate will generate at the low temperature part inside the heat source equipment. Connect drain piping to the drain piping connection located at the bottom of the heat source equipment to discharge it outside the equipment.
- At the center of the header of the heat exchanger water inlet inside the unit, a plug for water discharge is being provided.  
Use it for maintenance work or the like.
- Mount a backflow prevention valve and a flexible joint for vibration control onto the pump.
- Provide a sleeve to the penetrating parts of the wall to prevent the piping.
- Fasten the piping with metal fitting, arrange the piping not to expose to cutting or bending force, and pay sufficient care for possible vibration.
- Be careful not to erroneously judge the position of the inlet and outlet of water.  
(Lower position : Inlet, Upper position : Outlet)

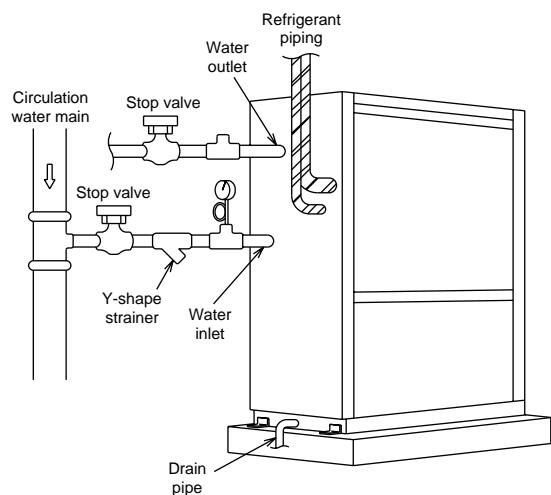
### 2) Thermal insulation work

Thermal insulation or antisweating work is not required for the piping inside buildings in the case of the CITY MULTI WR2 system if the operating temperature range of circulation water stays within the temperature near the normal (summer : 30°C, winter : 20°C).

In case of the conditions below, however, thermal insulation is required.

- Use of well water for heat source water
- Outdoor piping portions
- Indoor piping portions where freezing may be caused in winter
- A place where vapor condensation may be generated on piping due to an increase in dry bulb temperature inside the ceiling caused by the entry of fresh outdoor air
- Drain piping portions

**Installation example of heat source unit**



### 3) Water treatment and water quality control

For the circulation water cooling tower of the CITY MULTI WR2 system, employment of the closed type is recommended to keep water quality. However, in the case that an open type cooling tower is employed or the circulating water quality is inferior, scale will adhere onto the water heat exchanger leading to the decreased heat exchange capacity or the corrosion of the heat exchanger. Be sufficiently careful for water quality control and water treatment at the installation of the circulation water system.

#### • Removal of impurities inside piping

Be careful not to allow impurities such as welding fragment, remaining sealing material and rust from mixing into the piping during installation work.

#### • Water treatment

The water quality standards have been established by the industry (Japan Refrigeration, Air Conditioning Industry Association, in case of Japan) for water treatment to be applied.

	Items	Standard values
Standard items	PH(25°C)	7.0 ~ 8.0
	Electric conductivity (25°C)( $\mu\text{s}/\text{cm}$ )	300 or less
	Chlorine ion $\text{Cl}^-$ (mg/l)	50 or less
	Sulfate ion $\text{SO}_4^{2-}$ (mg/l)	50 or less
	M-alkalinity $\text{CaCO}_3$ (mg/l)	50 or less
	Total hardness $\text{CaCO}_3$ (mg/l)	70 or less
Reference items Note.1	Iron Fe (mg/l)	1.0 or less
	Sulfur ion $\text{S}^{2-}$ (mg/l)	Not be detected
	Ammonium ion $\text{NH}_4^+$ (mg/l)	Not be detected
	Silica $\text{SiO}_2$ (mg/l)	30 or less

Note.1 It is clearly found that the component of the reference items will be hazardous, however, the quantitative relationship between the content and hazard has not been clarified yet. Therefore, they are listed as the reference items.

In order to keep the water quality within such standards, you are kindly requested to conduct bleeding-off by overflow and periodical water quality tests, and use inhibitors to suppress condensation or corrosion. Since piping may be corroded by some kinds of inhibitor, consult an appropriate water treatment expert for proper water treatment.

#### (4) Pump interlock

Operating the heat source unit without circulation water inside the water piping can cause a trouble. Be sure to provide interlocking for the unit operation and water circuit. Since the terminal block is being provided inside the unit, use it as required.

WR2(R407C)



# PUY-P200YMF-C, PUY-P250YMF-C

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C/O(R407C)

# 1. Specifications

Model name		PUY-P200YMF-C	
		Cooling	
Capacity	kW	*1	22.4
	kcal/h	*2	20,000
Power source		3N ~ 380/400/415V 50/60Hz	
Power input		8.64	
Current		14.5/13.8/13.3	
Fan	Type X Quantity	Propeller fan X 1	
	Airflow rate	m³/min	185
	Motor output	kW	0.38
Compressor	Type	Hermetic	
	Motor output	kW	5.5
	Crankcase heater	kW	0.062(240V)
Refrigerant / Lubricant		R407C/MEL32	
External finish		Steel plate painting with polyester powder <MUNSELL 5Y8/1 or similar>	
External dimension		1715(H)X990(W)X840(L)	
Protection devices	High pressure protection		2.94MPa
	Compressor / Fan		Over current protection / Thermal switch
	Inverter		DC bus current protection, thermal switch
Refrigerant piping diameter		ø12.7 flare / ø25.4 Flange	
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity
	Model / Quantity		Model 20 ~ 250 / 1 ~ 13
Noise level		dB<A>	*3 56
Net weight		kg	223
Operating temperature range		Indoor:15°CWB ~ 24°CWB Outdoor:-5°CDB ~ 43°CDB (0°CDB ~ 43°CDB with outdoor unit at lower position)	

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 Cooling Indoor : 27°CDB/19°CWB Outdoor : 35°CDB      \*2 Cooling Indoor : 27°CDB/19.5°CWB Outdoor : 35°CDB  
Pipe length : 7.5m Height difference : 0m      Pipe length : 5m Height difference : 0m

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

Model name			PUY-P250YMF-C		
			Cooling		
Capacity		kW	*1	28.0	
		kcal/h	*2	25,000	
Power source			3N ~ 380/400/415V 50/60Hz		
Power input		kW	10.89		
Current		A	18.3/17.4/16.8		
Fan	Type X Quantity		Propeller fan X 1		
	Airflow rate	m³/min	185		
	Motor output	kW	0.38		
Compressor	Type		Hermetic		
	Motor output	kW	7.5		
	Crankcase heater	kW	0.062(240V)		
Refrigerant / Lubricant			R407C/MEL32		
External finish			Steel plate painting with polyester powder < MUNSELL 5Y8/1 or similar >		
External dimension		mm	1715(H)X990(W)X840(L)		
Protection devices	High pressure protection		2.94MPa		
	Compressor / Fan		Over current protection / Thermal switch		
	Inverter		DC bus current protection, thermal switch		
Refrigerant piping diameter		Liquid / Gas	φ12.7 flare / φ28.58 Flange		
Indoor unit	Total capacity		50 ~ 130% of outdoor unit capacity		
	Model / Quantity		Model 20 ~ 250 / 1 ~ 16		
Noise level		dB<A>	*3	57	
Net weight		kg	230		
Operating temperature range			Indoor: 15°CWB ~ 24°CWB Outdoor: -5°CDB ~ 43°CDB (0°CDB ~ 43°CDB with outdoor unit at lower position)		

Note: 1.Cooling/heating capacity indicates the maximum value at operation under the following condition.

\*1 **Cooling** Indoor : 27°CDB/19°CWB   Outdoor : 35°CDB      \*2 **Cooling** Indoor : 27°CDB/19.5°CWB   Outdoor : 35°CDB  
Pipe length : 7.5m      Height difference : 0m      Pipe length : 5m      Height difference : 0m

\*3 It is measured in anechoic room.

2.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

## 2. Capacity Tables

### 2-1. Correction by temperature

#### Cooling

- Standard Specifications

	PUY-P200YMF-C	PUY-P250YMF-C
Capacity kW	22.4	28.0
Input kW	8.64	10.89
Source V	380/400/415	
Current A	14.5/13.8/13.3	13.4/12.7/12.3

- Calculation

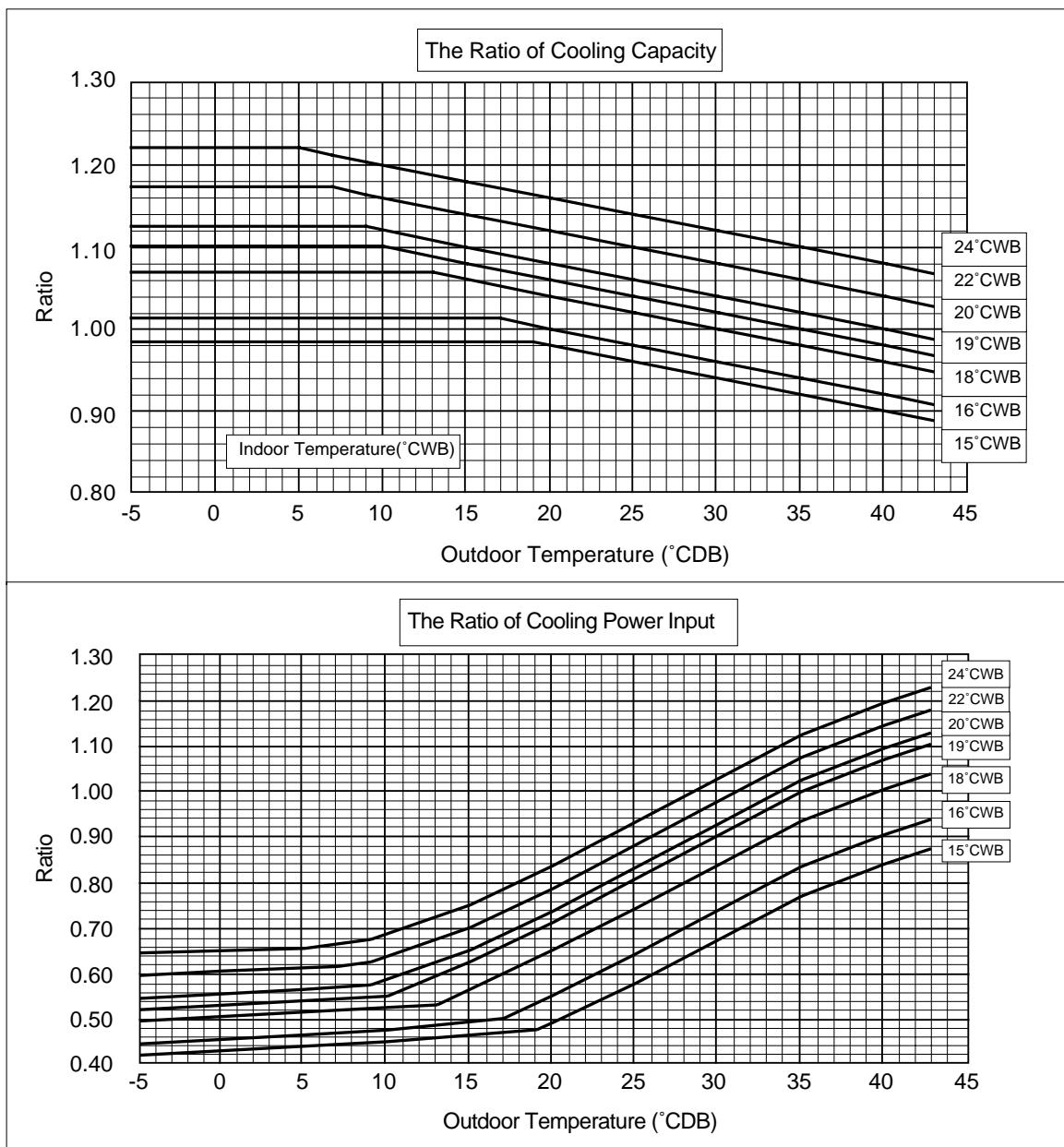
$$\text{Capacity}' = \text{Capacity} \times \text{Ratio}$$

$$\text{Input}' = \text{Input} \times \text{Ratio}$$

$$\text{Current}' = \frac{\text{Input}' \times 1000}{\sqrt{3} \times \text{Source} \times 0.90}$$

\* Capacity'  
Input'  
Current'

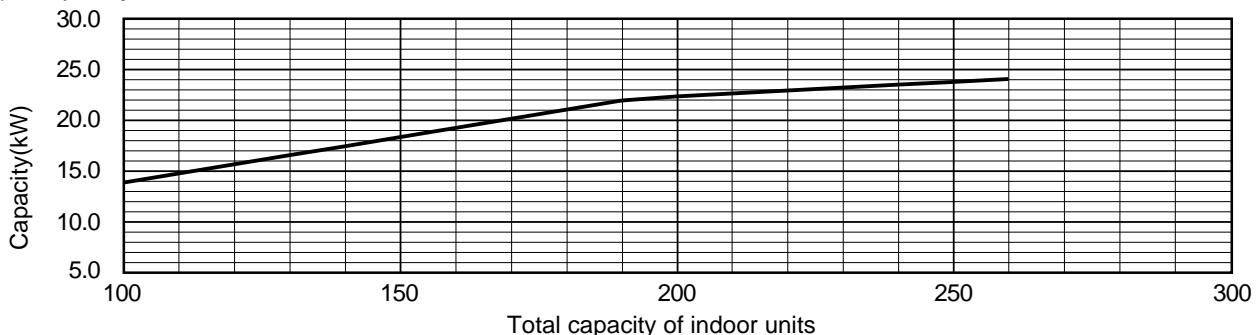
} After correction



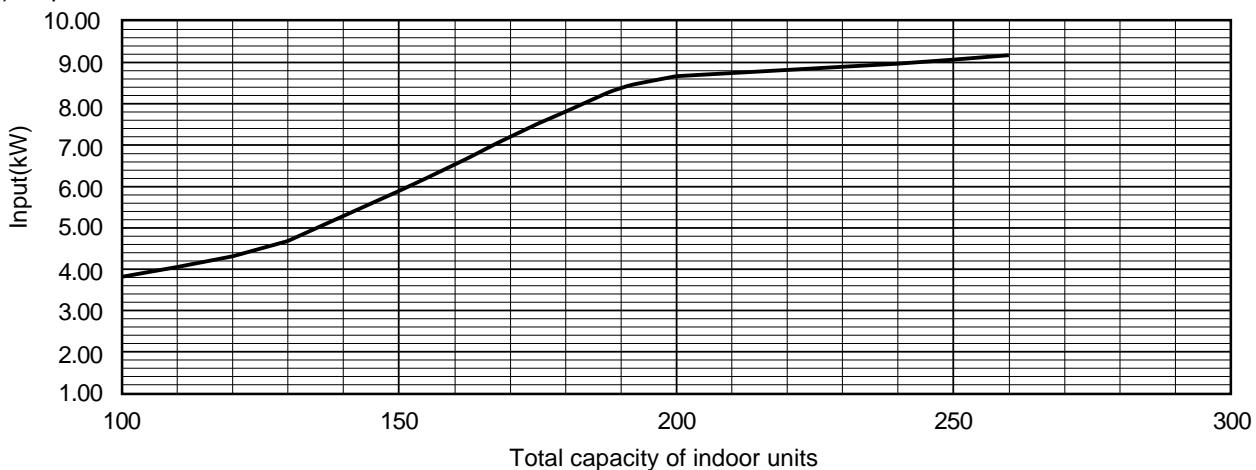
## 2-2. Correction by total indoor

**PUY-P200YMF-C**

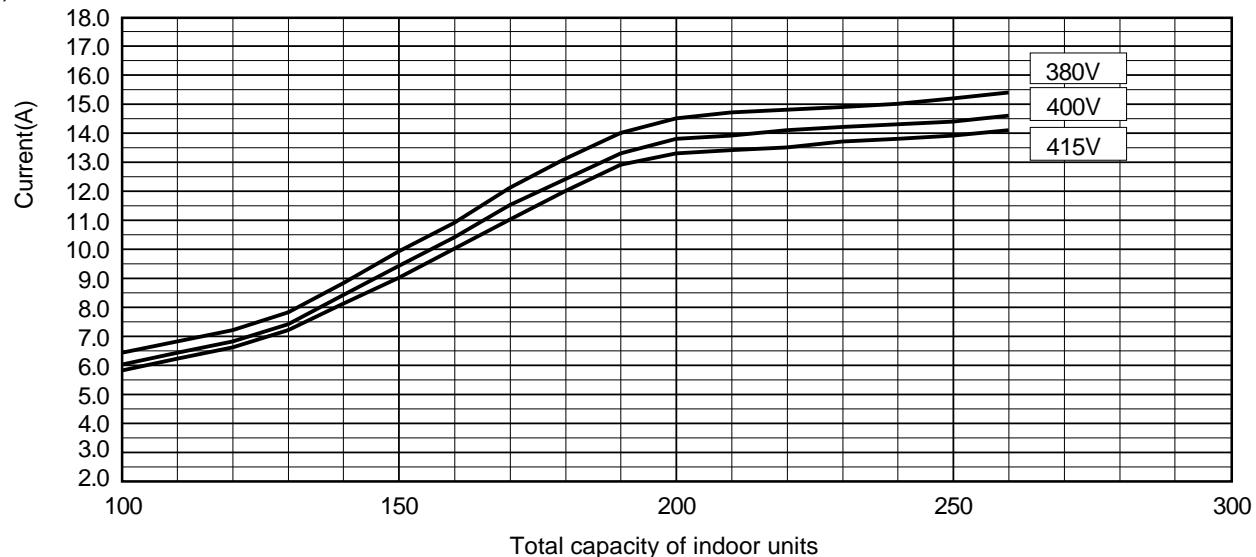
### 1) Capacity



### 2) Input



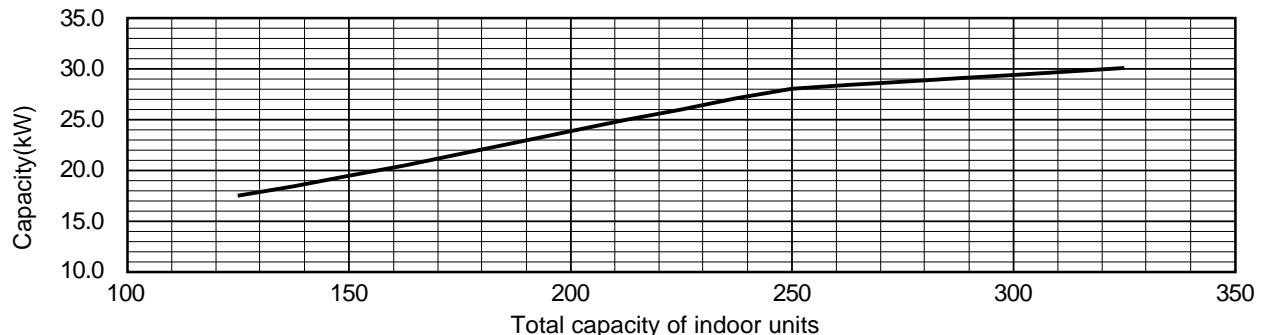
### 3) Current



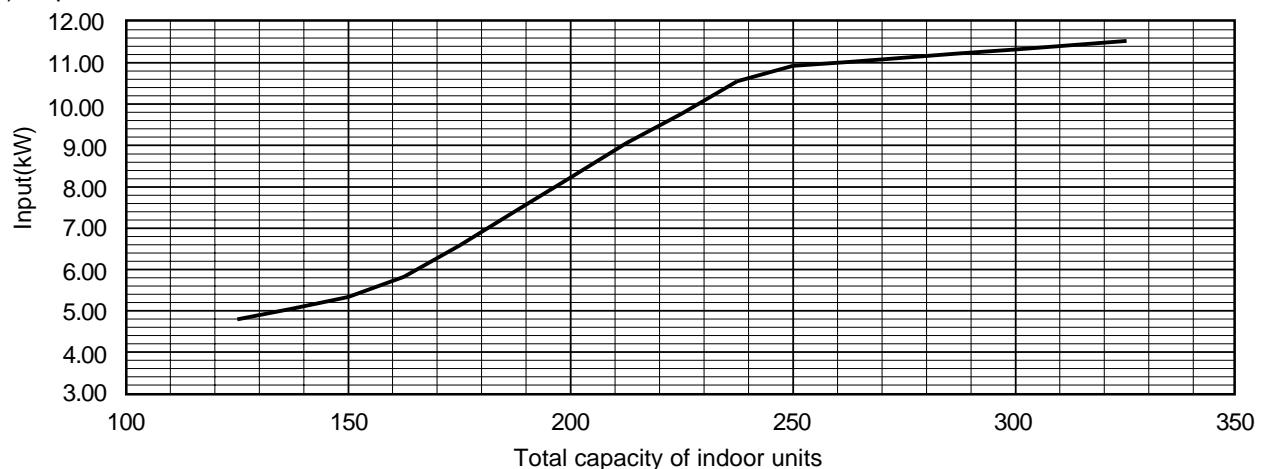
C/O(R407C)

## PUY-P250YMF-C

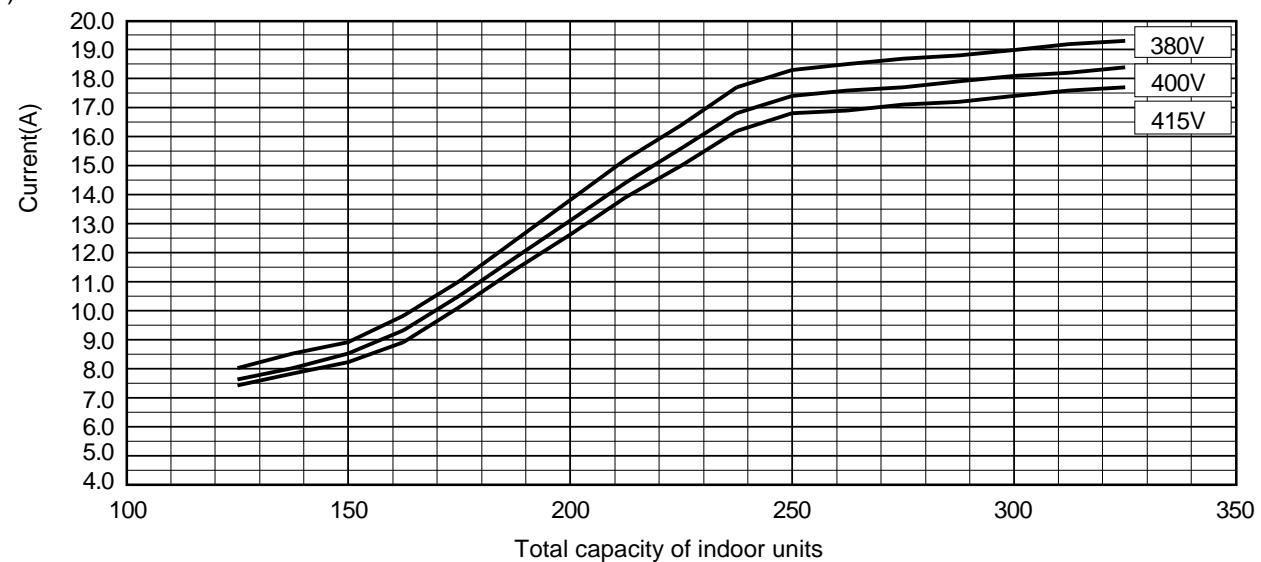
### 1) Capacity



### 2) Input



### 3) Current

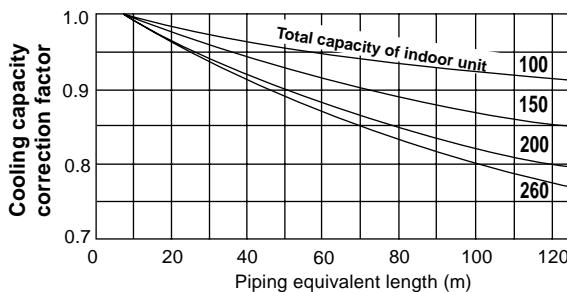


## 2-3 Correction by refrigerant piping length

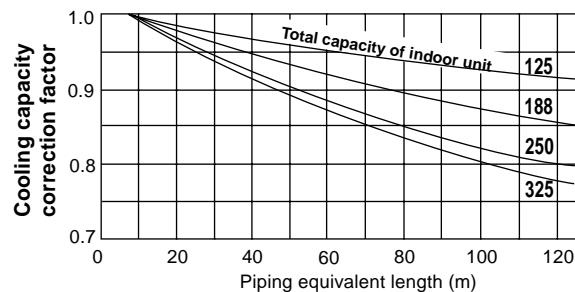
To obtain a decrease in cooling capacity due to refrigerant piping extension, multiply by the capacity correction factor based on the refrigerant piping equivalent length in the table below.

- **Cooling capacity correction**

PUY-P200YMF-C



PUY-P250YMF-C



- How to obtain piping equivalent length

- ① PUY-P200YMF-C

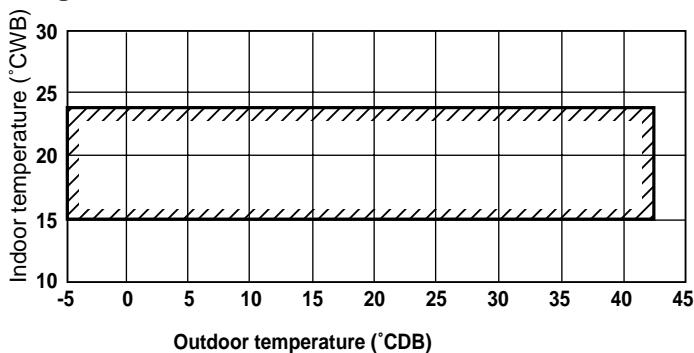
Equivalent length = (Actual piping length to the farthest indoor unit) + (0.47 × number of bent on the piping)m

- ② PUY-P250YMF-C

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

## 2-4 Operation limit

- **Cooling**

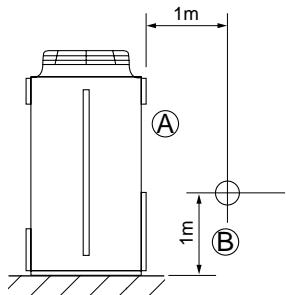


(Outdoor temperature :0°CDB~ 43°CDB with outdoor unit at lower position in cooling mode.)

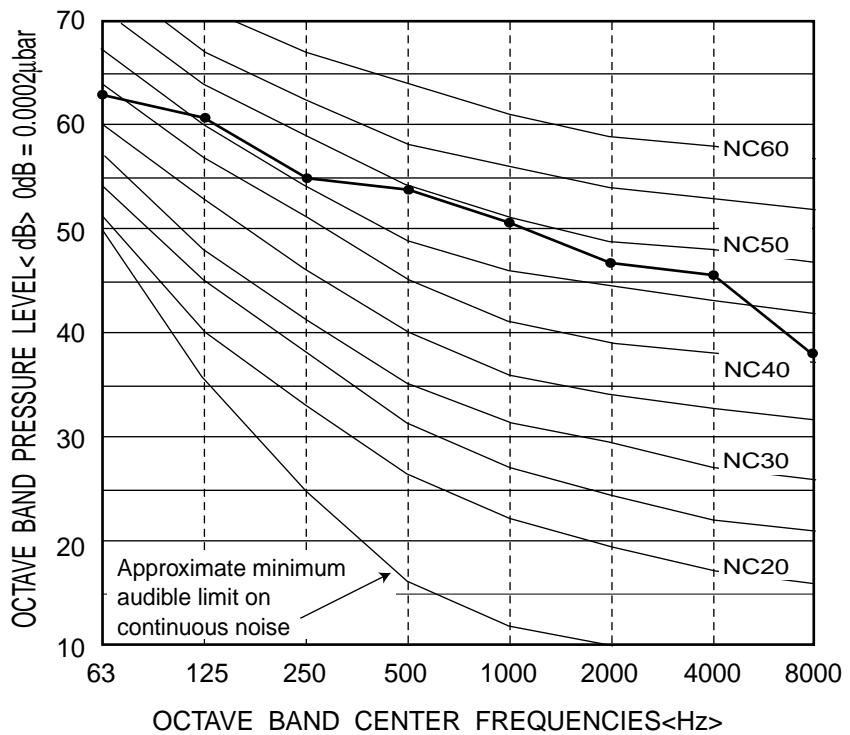
### 3. Sound Levels

**PUY-P200YMF-C**

Measurement condition

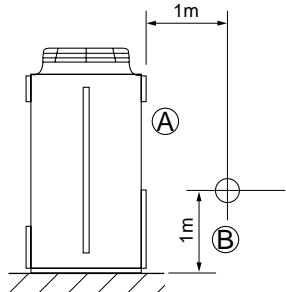


Sound pressure level in anechoic room
56 dB (A)

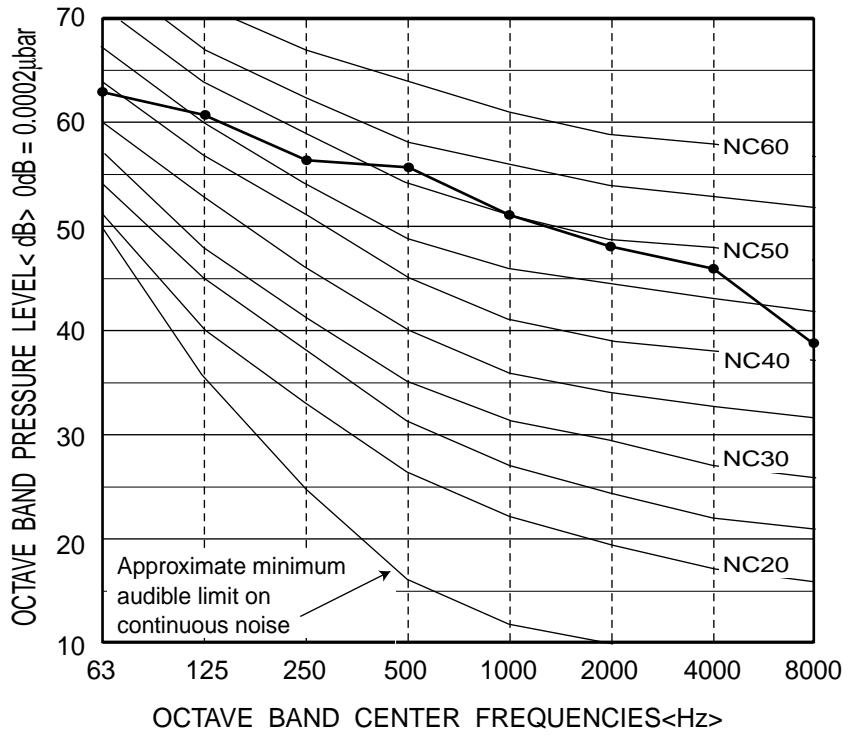


**PUY-P250YMF-C**

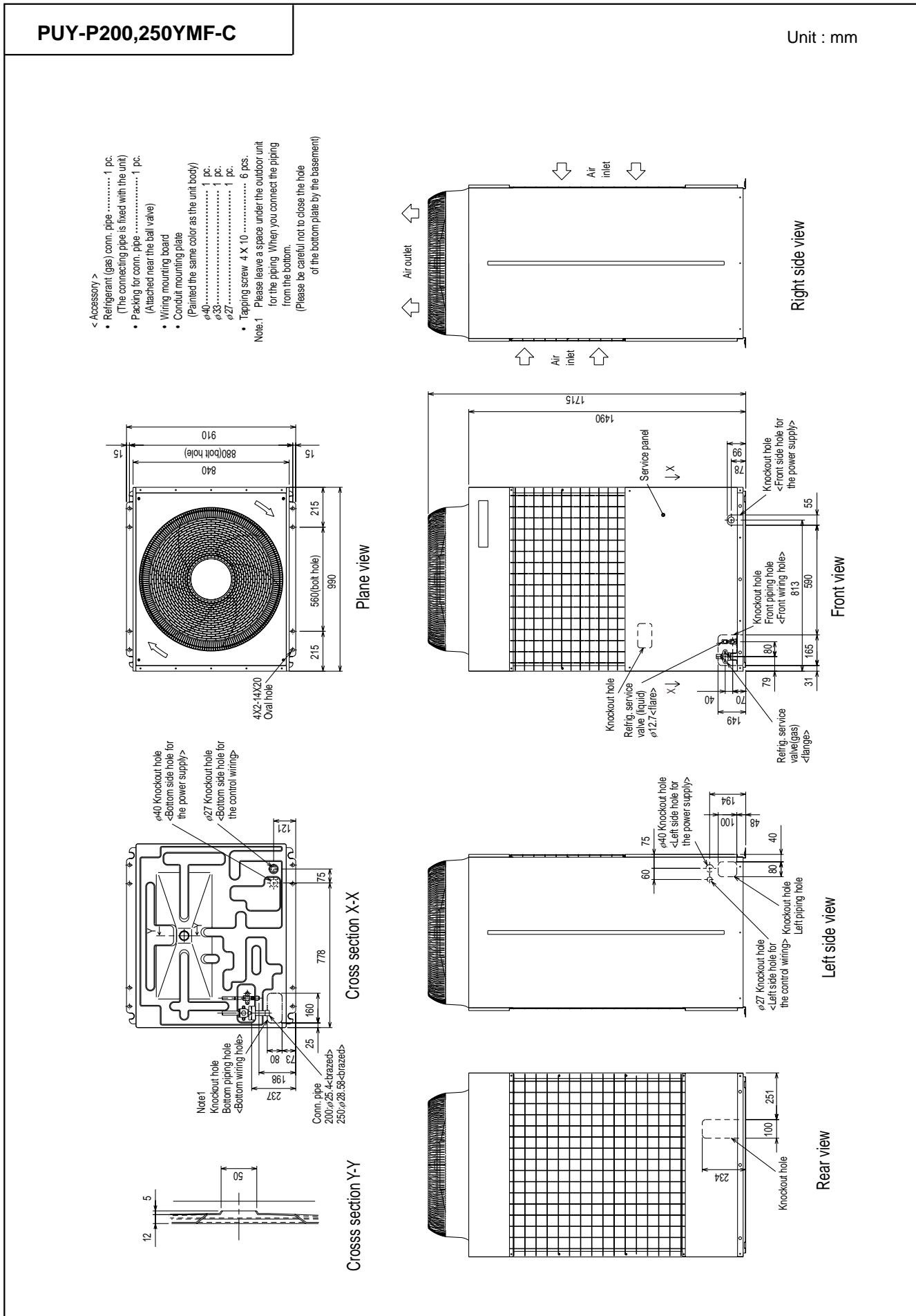
Measurement condition



Sound pressure level in anechoic room
57 dB (A)

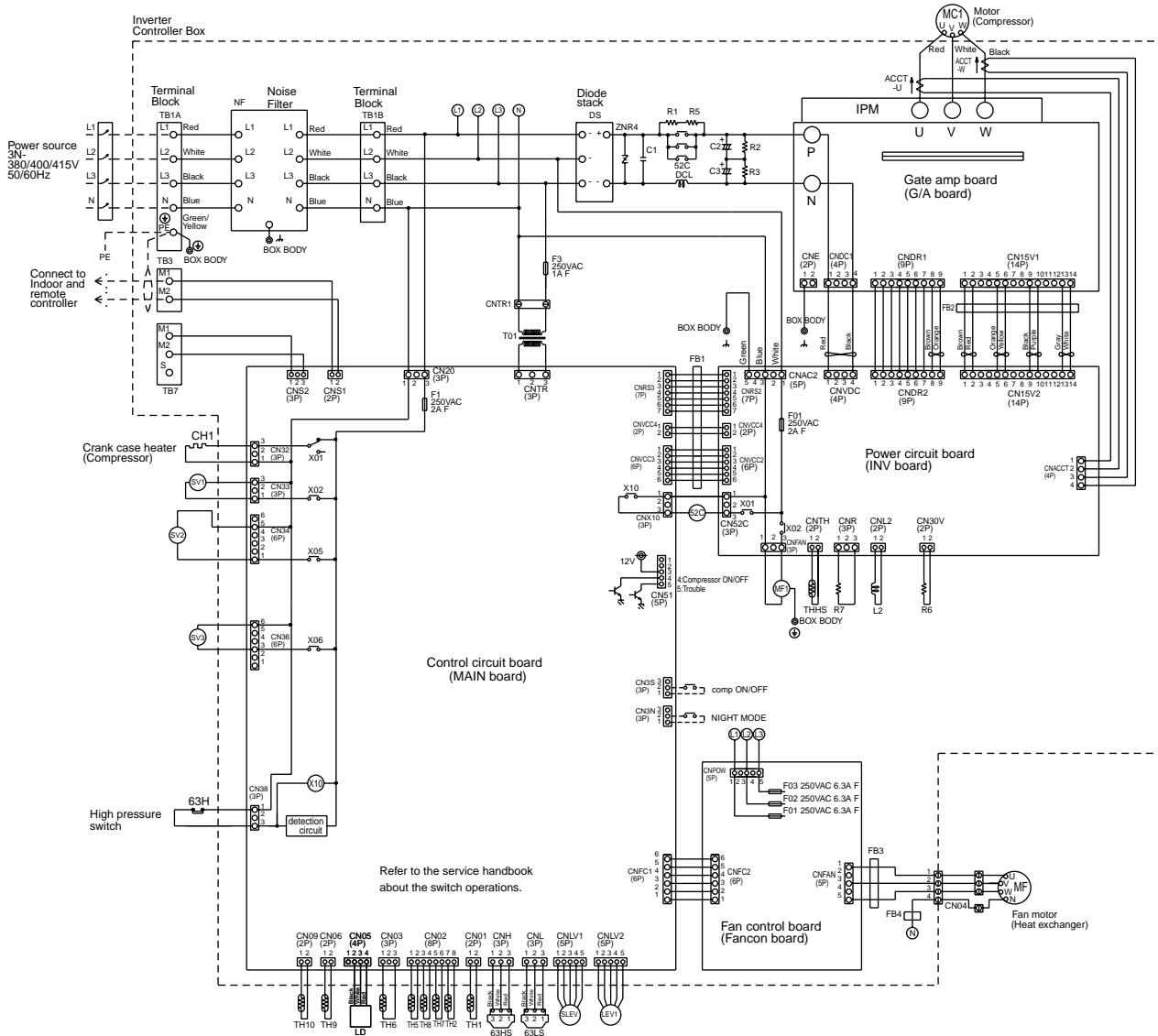


## 4. External Dimensions



# 5. Electrical Wiring Diagram

PUY-P200 , 250YMF-C

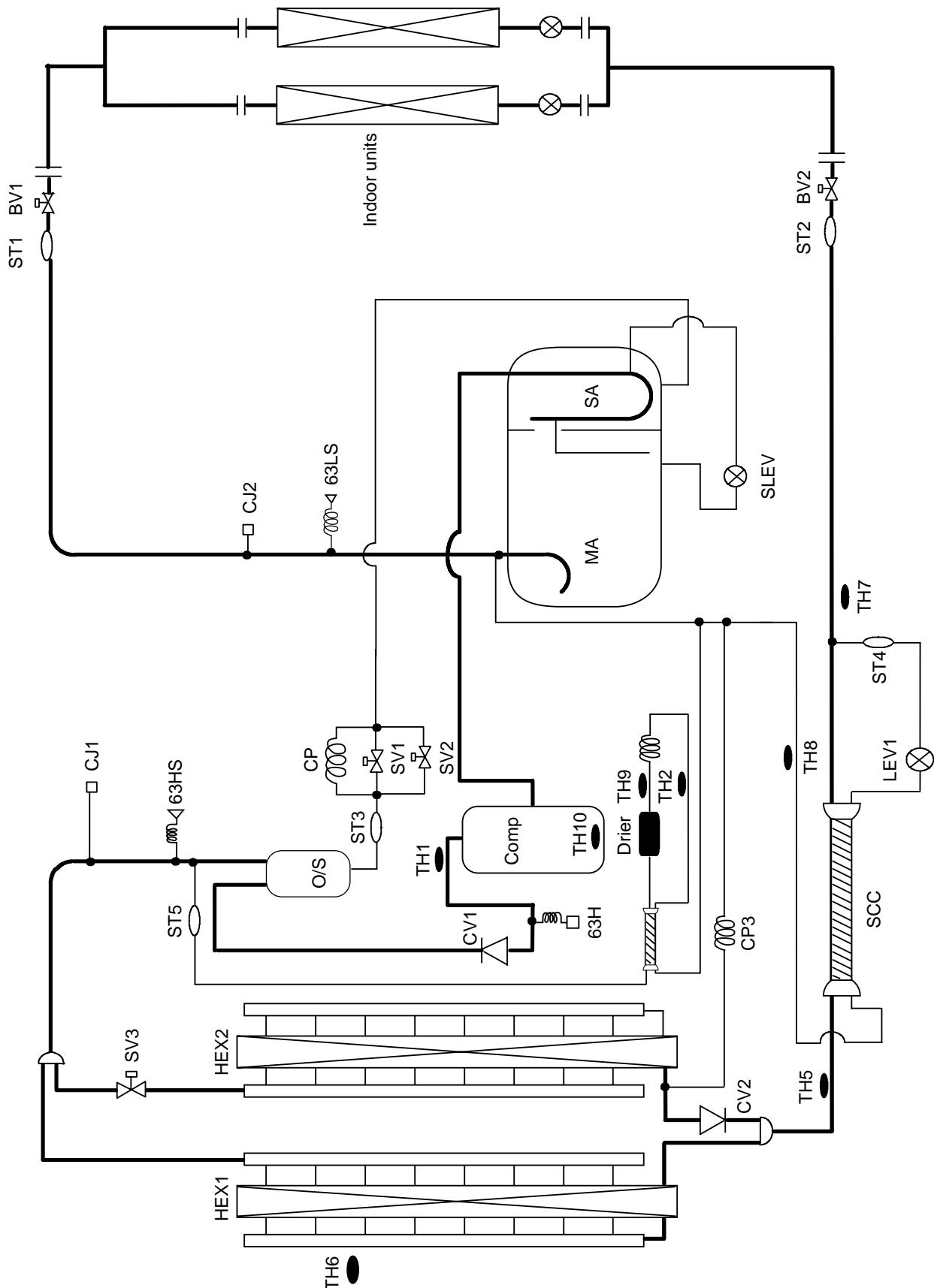


## <SYMBOL EXPLANATION>

Symbol	Name	Symbol	Name	Symbol	Name	Symbol	Name
DCL	DC reactor (Power factor improvement)	LEV1	Electronic expansion valve (Sub-cool coil bypass)	TH2	Saturation evapo. temp. detect	TH10	Compressor shell temp.
ACCT-U,W	Current Sensor	SLEV	Electronic expansion valve(Oil return)	TH5	Pipe temp. detect	THHS	Radiator panel temp. detect
ZNR4	Varistor	63HS	High pressure sensor	TH6	OA temp. detect	X1~10	Aux. relay
52C	Magnetic contactor (Inverter main circuit)	63LS	Low pressure sensor	TH7	liquid outlet temp. detect at Sub-cool coil	FB1~4	Ferrite core
MF1	Fan motor (Radiator panel)	L2	Choke coil(Transmission)	TH8	bypass outlet temp. detect at Sub-cool coil	(⊕)	Earth terminal
SV1,SV2	Solenoid valve (Discharge-suction bypass)	IPM	Intelligent power module	TH9	High pressure liquid. temp.		
SV3	Solenoid valve (Heat exchanger capacity control)	TH1	Thermistor	Discharge pipe temp. detect			

## **6. Refrigerant Circuit Diagram And Thermal Sensor**

**PUY-P200 , 250YMF-C**



C/O(R407C)



## II Indoor Units

### CITY MULTI INDOOR UNIT

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# Introduction

## CITY MULTI

### INDOOR UNITS

Type	Model Name	20	25	32	40	50	63	71	80	100	125	140	200	250
Ceiling concealed	PEFY-P-VML-A	●	●	●										
	PEFY-P-VMH-A				●	●	●	●	●	●	●	●	●	●
	PEFY-P-VMM-A	●	●	●	●	●	●	●	●	●	●	●	●	●
Ceiling mounted built-in	PDFY-P-VM-A	●	●	●	●	●	●	●	●	●	●	●	●	●
Floor standing (Exposed)	PFFY-P-VLEM-A	●	●	●	●	●	●	●						
Floor standing (Concealed)	PFFY-P-VLRM-A	●	●	●	●	●	●	●						
Cassette ceiling (1-way flow)	PMFY-P-VBM-A	●	●	●	●									
Cassette ceiling (2-way flow)	PLFY-P-VLMD-A	●	●	●	●	●	●	●		●	●	●		
Cassette ceiling (4-way flow)	PLFY-P-VKM-A			●	●	●	●							
	PLFY-P-VAM-A									●	●	●		
Wall mounted	PKFY-P-VAM-A	●	●											
	PKFY-P-VGM-A			●	●	●								
Ceiling suspended	PCFY-P-VGM-A				●		●			●	●			
OA Processing unit (Include humidifier)	GUF-RDH			(50)			(100)							
OA Processing unit (Non humidifier)	GUF-RD			(50)			(100)							
Non-CE Indoor unit (Wall mounted)	PKFY-P-VFM-A						●			●				
60Hz only Cassette ceiling (2-way flow)	PLFY-P-NLMD	●	●	●	●	●	●		●	●	●			

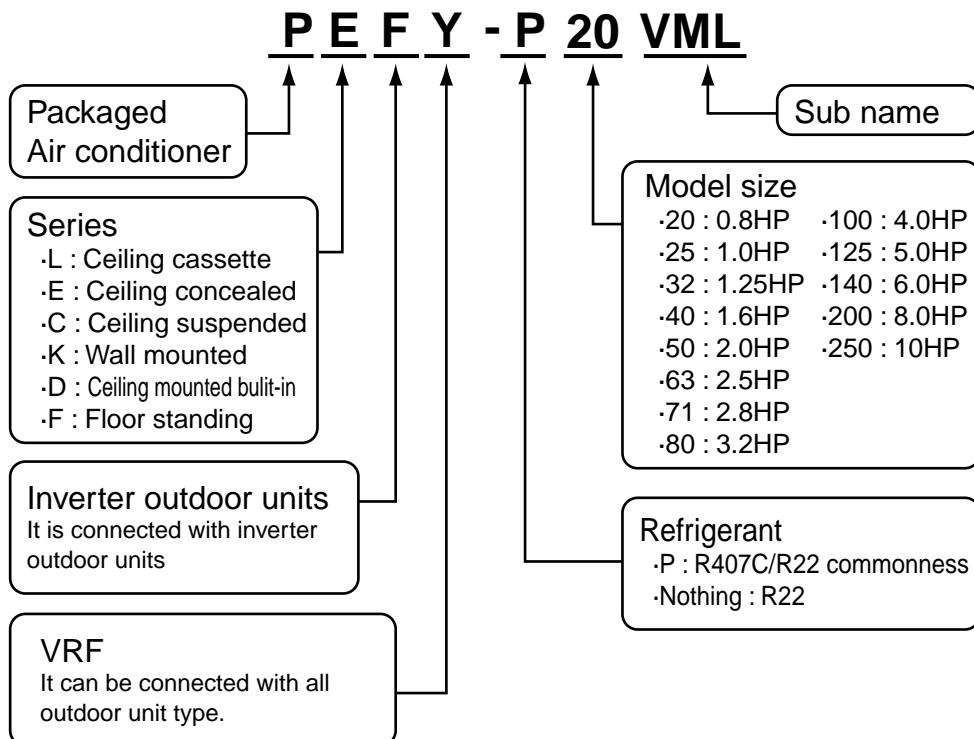
### LOSSNAY UNITS

Model Name	25	35	50	80	100	150	200
LGH-RS2	●	●	●	●	●	●	●

### BC controllers

Model Name	104	105	106	108	1010	1013	1016
CMB-P-V-F	●	●	●	●	●	●	●
CMB-P-V-FA					●	●	●
CMB-P-V-FB					●		

## Meaning of model name





**PEFY-P-**  
**VML-A/VMH-A**

## Ceiling concealed

**PEFY-P-VML-A**  
**PEFY-P-VMH-A**

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# 1. Specifications

			PEFY-P20VML-A	PEFY-P25VML-A	PEFY-P32VML-A
Power source			~220-240V 50Hz / 60Hz		
Cooling capacity	※ 1	kW	2.2	2.8	3.6
	※ 2	kcal/h	2,000	2,500	3,150
Heating capacity	※ 1	kW	2.5	3.2	4.0
Power consumption (50/60Hz)	Cooling	kW	0.05/0.06	0.07/0.09	
	Heating	kW	0.05/0.06	0.07/0.09	
Current	Cooling	A	0.24/0.28	0.32/0.42	
	Heating	A	0.24/0.28	0.32/0.42	
External finish			Galvanizing		
Dimension	Height	mm	225		
	Width	mm	720		
	Depth	mm	550		
Net weight			18		
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)		
Fan	Type		Sirocco fan×1		
	Airflow rate (Lo-Mid-Hi)	m³/min	5.4-6.5-7.9		6.0-7.5-9.5
	External static pressure	Pa	5		
Motor	Type		Single phase induction motor		
	Output	kW	0.023	0.032	
Air filter			PP Honeycomb fabric (washable)		
Refrigerant pipe dimension	Gas (Brazing)	mm	ø 12.7		
	Liquid (Brazing)	mm	ø 6.35		
Drain pipe dimension			R1 (External thread)		
Noise level (Lo-Mid-Hi)	※ 5	dB(A)	29-33-36	30-35-40	

			PEFY-P40VMH-A	PEFY-P50VMH-A	PEFY-P63VMH-A	PEFY-P71VMH-A
Power source			~ 220-240V 50Hz /60Hz			
Cooling capacity	※ 1	kW	4.5	5.6	7.1	8.0
	※ 2	kcal/h	4,000	5,000	6,300	7,100
Heating capacity	※ 1	kW	5.0	6.3	8.0	9.0
Power consumption (50/60Hz)	Cooling	kW	0.19/0.23	0.24/0.30	0.26/0.33	
	Heating	kW	0.19/0.23	0.24/0.30	0.26/0.33	
Current	Cooling	A	0.88/1.06	1.12/1.38	1.20/1.51	
	Heating	A	0.88/1.06	1.12/1.38	1.20/1.51	
External finish			Galvanizing			
Dimension	Height	mm	380			
	Width	mm	750		1000	
	Depth	mm	900			
Net weight			44	45	50	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)			
Fan	Type		Sirocco fan×1			
	Airflow rate (Lo-Hi)	m³/min	10.0-14.0		13.5-19.0	15.5-22.0
	External static pressure※ 3	Pa	50/100/200			
Motor	220V	Pa	100/150/200			
	230, 240V	Pa				
	Type		Single phase induction motor			
Output ※ 4			0.08	0.12	0.14	
Air filter (option)			Synthetic fiber unwoven cloth filter(long life)			
Refrigerant pipe dimension	Gas (Flare)	mm	ø 12.7	ø 15.88		
	Liquid (Flare)	mm	ø 6.35	ø 9.52		
Drain pipe dimension			32 (1-1/4 inch)			
Noise level (Lo-Hi)	220V	dB(A)	27-34		32-38	32-39
	230, 240V	dB(A)	31-37		36-41	35-41

Note: ※ 1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB

Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

※ 2 Cooling capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

※ 3 The external static pressure is set to 100Pa (at 220V) /150Pa (at 230, 240V) at factory shipment.

※ 4 The value are that at 240V.

※ 5 It is measured in anechoic room.

**PEFY-P-  
VML-A/VMH-A**

			PEFY-P80VMH-A	PEFY-P100VMH-A	PEFY-P125VMH-A	PEFY-P140VMH-A		
Power source			~ 220-240V 50Hz /60Hz					
Cooling capacity	※ 1	kW	9.0	11.2	14.0	16.0		
	※ 2	kcal/h	8,000	10,000	12,500	14,000		
Heating capacity		※ 1	kW	10.0	12.5	16.0		
Power consumption (50/60Hz)	Cooling	kW	0.32/0.40		0.48/0.58	0.48/0.59		
	Heating	kW	0.32/0.40		0.48/0.58	0.48/0.59		
Current	Cooling	A	1.47/1.83		2.34/2.66	2.35/2.70		
	Heating	A	1.47/1.83		2.34/2.66	2.35/2.70		
External finish			Galvanizing					
Dimension	Height	mm	380					
	Width	mm	1000	1200				
	Depth	mm	900					
Net weight		kg	50	70				
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
Fan	Type		Sirocco fan X 1	Sirocco fan X 2				
	Airflow rate (Lo-Hi)	m³/min	18.0-25.0	26.5-38.0		28.0-40.0		
	External static pressure ③	220V 230, 240V	Pa	50/100/200 100/150/200				
Motor	Type		Single phase induction motor					
	Output ④	kW	0.18	0.26				
Air filter (option)			Synthetic fiber unwoven cloth filter(long life)					
Refrigerant pipe dimension	Gas (Flare)	mm	ø 15.88	ø 19.05				
	Liquid (Flare)	mm	ø 9.52					
Drain pipe dimension			32 (1-1/4 inch)					
Noise level (Lo-Hi) ⑦	220V	dB(A)	35-41	34-42				
	230, 240V	dB(A)	38-43	38-44				

			PEFY-P200VMH-A	PEFY-P250VMH-A
Power source			3N ~ 380-415V 50Hz / 60Hz	
Cooling capacity	※ 1	kW	22.4	28.0
	※ 2	kcal/h	20,000	25,000
Heating capacity		※ 1	kW	25.0
Power consumption (50/60Hz)	Cooling	kW	0.99/1.14	1.23/1.41
	Heating	kW	0.99/1.14	1.23/1.41
Current	Cooling	A	1.62/1.86	2.0/2.3
	Heating	A	1.62/1.86	2.0/2.3
External finish			Galvanizing	
Dimension	Height	mm	470	
	Width	mm	1250	
	Depth	mm	1120	
Net weight		kg	100	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)	
Fan	Type		Sirocco fan X 2	
	Airflow rate	m³/min	58.0	72.0
	External static pressure ⑤	380V 400, 415V	Pa	110/220 130/260
Motor	Type		3-phase induction motor	
	Output ⑥	kW	0.76	1.08
Air filter (option)			Synthetic fiber unwoven cloth filter(long life)	
Refrigerant pipe dimension	Gas (Brazing)	mm	ø 25.4	ø 28.58
	Liquid (Brazing)	mm	ø 12.7	
Drain pipe dimension			32 (1-1/4 inch)	
Noise level ⑦	380V	dB(A)	42(110Pa)/45(220Pa)	50(110Pa)/52(220Pa)
	400, 415V	dB(A)	44(130Pa)/47(260Pa)	52(130Pa)/54(260Pa)

Note: ① Cooling/Heating capacity indicates the maximum value at operation under the following condition.  
 Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB  
 Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

② Cooling capacity indicates the maximum value at operation under the following condition.  
 Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

③ The external static pressure is set to 100Pa (at 220V) /150Pa (at 230, 240V) at factory shipment.

④ The value are that at 240V.

⑤ The external static pressure is set to 110Pa (at 380V) /130Pa (at 400, 415V) at factory shipment.

⑥ The value are that at 415V.

⑦ It is measured in anechoic room.

## 2. Capacity Tables

### 2-1.Cooling Capacity (In combination with PUMY-(P)125YM(A))

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

**PEFY-P-VML-A,VMH-A**

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
20 (2.2)	20.0	2.2	1.8	2.3	1.9	2.4	1.9	2.6	2.0
	22.5	2.1	1.8	2.3	1.9	2.4	1.9	2.6	2.0
	25.0	2.1	1.8	2.3	1.9	2.4	1.9	2.5	2.0
	27.5	2.1	1.8	2.2	1.9	2.4	1.9	2.5	2.0
	30.0	2.1	1.8	2.2	1.9	2.3	1.9	2.5	1.9
	32.5	2.0	1.8	2.2	1.9	2.3	1.9	2.5	1.9
	35.0	2.0	1.8	2.1	1.9	2.3	1.8	2.4	1.9
	37.5	2.0	1.8	2.1	1.9	2.2	1.8	2.4	1.9
	40.0	2.0	1.7	2.1	1.8	2.2	1.8	2.4	1.9
	46.0	1.9	1.7	2.0	1.8	2.1	1.8	2.3	1.9
25 (2.8)	20.0	2.8	2.2	2.9	2.3	3.1	2.3	3.3	2.3
	22.5	2.7	2.2	2.9	2.3	3.1	2.2	3.2	2.3
	25.0	2.7	2.1	2.9	2.3	3.1	2.2	3.2	2.3
	27.5	2.7	2.1	2.8	2.2	3.0	2.2	3.2	2.3
	30.0	2.6	2.1	2.8	2.2	3.0	2.2	3.2	2.3
	32.5	2.6	2.1	2.8	2.2	2.9	2.2	3.1	2.3
	35.0	2.6	2.1	2.7	2.2	2.9	2.2	3.1	2.3
	37.5	2.5	2.1	2.7	2.2	2.9	2.2	3.0	2.2
	40.0	2.5	2.0	2.7	2.2	2.8	2.1	3.0	2.2
	46.0	2.4	2.0	2.6	2.1	2.7	2.1	2.9	2.2
32 (3.6)	20.0	3.6	2.7	3.7	2.8	4.0	2.8	4.2	2.9
	22.5	3.5	2.7	3.7	2.8	4.0	2.8	4.2	2.9
	25.0	3.5	2.7	3.7	2.8	3.9	2.8	4.1	2.9
	27.5	3.4	2.7	3.6	2.8	3.9	2.8	4.1	2.8
	30.0	3.4	2.6	3.6	2.8	3.8	2.7	4.1	2.8
	32.5	3.3	2.6	3.6	2.7	3.8	2.7	4.0	2.8
	35.0	3.3	2.6	3.5	2.7	3.7	2.7	4.0	2.8
	37.5	3.2	2.6	3.5	2.7	3.7	2.7	3.9	2.8
	40.0	3.2	2.5	3.4	2.7	3.6	2.7	3.9	2.7
	46.0	3.1	2.5	3.3	2.6	3.5	2.6	3.7	2.7
40 (4.5)	20.0	4.5	3.3	4.7	3.5	5.0	3.5	5.3	3.6
	22.5	4.4	3.3	4.6	3.5	5.0	3.4	5.2	3.5
	25.0	4.3	3.3	4.6	3.4	4.9	3.4	5.2	3.5
	27.5	4.3	3.3	4.6	3.4	4.9	3.4	5.1	3.5
	30.0	4.2	3.2	4.5	3.4	4.8	3.4	5.1	3.5
	32.5	4.2	3.2	4.4	3.4	4.7	3.3	5.0	3.5
	35.0	4.1	3.2	4.4	3.3	4.7	3.3	5.0	3.4
	37.5	4.1	3.1	4.3	3.3	4.6	3.3	4.9	3.4
	40.0	4.0	3.1	4.3	3.3	4.5	3.3	4.8	3.4
	46.0	3.8	3.0	4.1	3.2	4.3	3.2	4.6	3.3
50 (5.6)	20.0	5.5	3.9	5.8	4.1	6.2	4.1	6.6	4.2
	22.5	5.5	3.9	5.8	4.1	6.2	4.0	6.5	4.1
	25.0	5.4	3.9	5.7	4.0	6.1	4.0	6.4	4.1
	27.5	5.3	3.8	5.7	4.0	6.0	4.0	6.4	4.1
	30.0	5.3	3.8	5.6	4.0	5.9	3.9	6.3	4.1
	32.5	5.2	3.7	5.5	3.9	5.9	3.9	6.2	4.0
	35.0	5.1	3.7	5.5	3.9	5.8	3.9	6.2	4.0
	37.5	5.0	3.7	5.4	3.9	5.7	3.8	6.1	4.0
	40.0	5.0	3.6	5.3	3.8	5.6	3.8	6.0	3.9
	46.0	4.8	3.5	5.1	3.7	5.4	3.7	5.8	3.8
63 (7.1)	20.0	7.0	5.2	7.4	5.4	7.9	5.3	8.3	5.5
	22.5	6.9	5.1	7.3	5.3	7.8	5.3	8.2	5.4
	25.0	6.9	5.1	7.3	5.3	7.7	5.3	8.2	5.4
	27.5	6.8	5.0	7.2	5.3	7.7	5.2	8.1	5.4
	30.0	6.7	5.0	7.1	5.2	7.5	5.2	8.0	5.3
	32.5	6.6	4.9	7.0	5.2	7.5	5.1	7.9	5.3
	35.0	6.5	4.9	6.9	5.1	7.3	5.1	7.8	5.3
	37.5	6.4	4.8	6.8	5.1	7.2	5.0	7.7	5.2
	40.0	6.3	4.8	6.7	5.1	7.2	5.0	7.6	5.2
	46.0	6.1	4.7	6.5	4.9	6.9	4.9	7.3	5.1

**Cooling Capacity (In combination with PUMY-(P)125YM(A))****PEFY-P-VML-A,VMH-A**

CA:Capacity(kW)

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
71 (8.0)	20.0	7.9	5.8	8.3	6.0	8.9	6.0	9.4	6.1
	22.5	7.8	5.7	8.2	6.0	8.8	5.9	9.3	6.1
	25.0	7.7	5.7	8.2	5.9	8.7	5.9	9.2	6.1
	27.5	7.6	5.6	8.1	5.9	8.6	5.8	9.1	6.0
	30.0	7.5	5.6	8.0	5.8	8.5	5.8	9.0	6.0
	32.5	7.4	5.5	7.9	5.8	8.4	5.7	8.9	5.9
	35.0	7.3	5.4	7.8	5.7	8.3	5.7	8.8	5.9
	37.5	7.2	5.4	7.7	5.7	8.2	5.6	8.7	5.8
	40.0	7.1	5.4	7.6	5.6	8.1	5.6	8.6	5.8
	46.0	6.8	5.2	7.3	5.5	7.7	5.4	8.2	5.6
80 (9.0)	20.0	8.9	6.5	9.4	6.8	10.0	6.8	10.6	6.9
	22.5	8.8	6.5	9.3	6.7	9.9	6.7	10.4	6.9
	25.0	8.7	6.4	9.2	6.7	9.8	6.7	10.4	6.8
	27.5	8.6	6.4	9.1	6.7	9.7	6.6	10.3	6.8
	30.0	8.5	6.3	9.0	6.6	9.5	6.5	10.2	6.8
	32.5	8.3	6.2	8.9	6.6	9.5	6.5	10.0	6.7
	35.0	8.2	6.2	8.8	6.5	9.3	6.4	9.9	6.6
	37.5	8.1	6.1	8.6	6.4	9.2	6.4	9.8	6.6
	40.0	8.0	6.1	8.6	6.4	9.1	6.3	9.6	6.5
	46.0	7.7	5.9	8.2	6.2	8.7	6.1	9.3	6.4
100 (11.2)	20.0	11.1	8.7	11.6	9.1	12.5	9.1	13.1	9.3
	22.5	10.9	8.7	11.5	9.1	12.3	9.0	13.0	9.3
	25.0	10.8	8.6	11.5	9.0	12.2	9.0	12.9	9.2
	27.5	10.7	8.5	11.3	9.0	12.1	8.9	12.8	9.2
	30.0	10.5	8.5	11.2	8.9	11.9	8.8	12.6	9.1
	32.5	10.4	8.4	11.1	8.8	11.8	8.8	12.5	9.1
	35.0	10.2	8.3	10.9	8.8	11.6	8.7	12.3	9.0
	37.5	10.1	8.3	10.8	8.7	11.4	8.6	12.2	9.0
	40.0	10.0	8.2	10.6	8.6	11.3	8.6	12.0	8.9
	46.0	9.6	8.0	10.2	8.5	10.8	8.4	11.5	8.7
125 (14.0)	20.0	13.9	10.1	14.6	10.5	15.6	10.5	16.4	10.8
	22.5	13.7	10.0	14.4	10.4	15.4	10.4	16.2	10.7
	25.0	13.5	9.9	14.3	10.4	15.3	10.3	16.1	10.6
	27.5	13.4	9.9	14.2	10.3	15.1	10.2	16.0	10.6
	30.0	13.2	9.8	14.0	10.2	14.9	10.1	15.8	10.5
	32.5	13.0	9.6	13.8	10.2	14.7	10.1	15.6	10.4
	35.0	12.8	9.6	13.7	10.1	14.5	10.0	15.4	10.3
	37.5	12.6	9.5	13.4	10.0	14.3	9.9	15.2	10.2
	40.0	12.5	9.4	13.3	9.9	14.1	9.8	15.0	10.1
	46.0	12.0	9.2	12.8	9.7	13.5	9.5	14.4	9.9
140 (16.0)	20.0	15.8	11.6	16.6	12.0	17.8	12.0	18.8	12.3
	22.5	15.6	11.4	16.5	11.9	17.6	11.9	18.6	12.2
	25.0	15.5	11.4	16.4	11.9	17.4	11.8	18.4	12.1
	27.5	15.3	11.3	16.2	11.8	17.2	11.7	18.2	12.1
	30.0	15.0	11.1	16.0	11.7	17.0	11.6	18.0	12.0
	32.5	14.8	11.0	15.8	11.6	16.8	11.5	17.9	11.9
	35.0	14.6	10.9	15.6	11.5	16.5	11.4	17.6	11.8
	37.5	14.4	10.8	15.4	11.4	16.3	11.3	17.4	11.7
	40.0	14.2	10.8	15.2	11.3	16.1	11.2	17.2	11.6
	46.0	13.7	10.5	14.6	11.1	15.4	10.9	16.5	11.3
200 (22.4)	20.0	22.2	16.5	23.3	17.2	24.9	17.1	26.3	17.6
	22.5	21.9	16.4	23.1	17.1	24.6	17.0	26.0	17.5
	25.0	21.6	16.3	22.9	17.0	24.4	16.9	25.8	17.4
	27.5	21.4	16.1	22.7	16.9	24.1	16.8	25.5	17.3
	30.0	21.1	16.0	22.4	16.8	23.8	16.6	25.3	17.2
	32.5	20.7	15.8	22.1	16.7	23.5	16.5	25.0	17.1
	35.0	20.4	15.7	21.8	16.5	23.2	16.3	24.6	16.9
	37.5	20.2	15.5	21.5	16.4	22.8	16.2	24.4	16.8
	40.0	19.9	15.4	21.3	16.3	22.6	16.1	24.0	16.7
	46.0	19.2	15.1	20.5	15.9	21.6	15.7	23.1	16.3
250 (28.0)	20.0	27.7	20.6	29.1	21.4	31.2	21.3	32.8	21.9
	22.5	27.4	20.4	28.8	21.3	30.8	21.2	32.5	21.8
	25.0	27.0	20.2	28.6	21.2	30.5	21.0	32.2	21.6
	27.5	26.7	20.1	28.3	21.0	30.2	20.9	31.9	21.5
	30.0	26.3	19.9	28.0	20.9	29.7	20.7	31.6	21.4
	32.5	25.9	19.7	27.7	20.7	29.4	20.5	31.2	21.2
	35.0	25.5	19.5	27.3	20.5	29.0	20.3	30.8	21.0
	37.5	25.2	19.3	26.9	20.3	28.6	20.1	30.5	20.9
	40.0	24.9	19.2	26.6	20.2	28.2	20.0	30.0	20.7
	46.0	23.9	18.7	25.6	19.7	27.0	19.5	28.8	20.2

PEFY-P-  
VML-A/VMH-A

## 2-2.Heating Capacity (In combination with PUMY-(P)125YM(A))

**PEFY-P-VML-A,VMH-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB		
		15.0	20.0	25.0
°CWB	SHC	SHC	SHC	
20	-12.0	1.6	1.6	1.5
	-10.0	1.7	1.6	1.6
	-5.0	1.9	1.9	1.9
	0.0	2.2	2.1	2.1
	2.5	2.3	2.3	2.3
	6.0	2.5	2.5	2.5
	7.5	2.6	2.6	2.5
	10.0	2.8	2.7	2.5
	12.5	2.9	2.8	2.5
	15.5	3.1	2.8	2.5
25	-12.0	2.0	2.0	2.0
	-10.0	2.1	2.1	2.1
	-5.0	2.4	2.4	2.4
	0.0	2.8	2.8	2.7
	2.5	3.0	2.9	2.9
	6.0	3.2	3.2	3.2
	7.5	3.3	3.3	3.2
	10.0	3.5	3.5	3.2
	12.5	3.7	3.5	3.2
	15.5	3.9	3.5	3.2
32	-12.0	2.5	2.5	2.5
	-10.0	2.7	2.6	2.6
	-5.0	3.1	3.0	3.0
	0.0	3.5	3.4	3.4
	2.5	3.7	3.7	3.6
	6.0	4.0	4.0	3.9
	7.5	4.2	4.1	4.0
	10.0	4.4	4.4	4.0
	12.5	4.7	4.4	4.0
	15.5	4.9	4.4	4.0
40	-12.0	3.2	3.1	3.1
	-10.0	3.4	3.3	3.2
	-5.0	3.8	3.8	3.7
	0.0	4.3	4.3	4.2
	2.5	4.6	4.6	4.5
	6.0	5.0	5.0	4.9
	7.5	5.2	5.2	5.0
	10.0	5.5	5.5	5.0
	12.5	5.9	5.5	5.0
	15.5	6.2	5.5	5.0
50	-12.0	4.0	3.9	3.9
	-10.0	4.2	4.2	4.1
	-5.0	4.8	4.8	4.7
	0.0	5.5	5.4	5.3
	2.5	5.8	5.8	5.7
	6.0	6.3	6.3	6.2
	7.5	6.6	6.5	6.2
	10.0	7.0	6.9	6.2
	12.5	7.4	7.0	6.2
	15.5	7.7	7.0	6.2
63	-12.0	5.1	5.0	4.9
	-10.0	5.4	5.3	5.2
	-5.0	6.1	6.0	5.9
	0.0	6.9	6.9	6.8
	2.5	7.4	7.3	7.2
	6.0	8.0	8.0	7.9
	7.5	8.3	8.3	7.9
	10.0	8.8	8.8	7.9
	12.5	9.4	8.8	7.9
	15.5	9.8	8.8	7.9

Unit size	Outdoor air temp.	Indoor air temp.:°CDB		
		15.0	20.0	25.0
°CWB	SHC	SHC	SHC	
71	-12.0	5.7	5.6	5.5
	-10.0	6.0	5.9	5.8
	-5.0	6.9	6.8	6.7
	0.0	7.8	7.7	7.6
	2.5	8.3	8.2	8.1
	6.0	9.1	9.0	8.9
	7.5	9.4	9.3	8.9
	10.0	9.9	9.9	8.9
	12.5	10.5	9.9	8.9
	15.5	11.1	9.9	8.9
80	-12.0	6.4	6.2	6.1
	-10.0	6.7	6.6	6.5
	-5.0	7.6	7.5	7.4
	0.0	8.7	8.6	8.5
	2.5	9.2	9.2	9.0
	6.0	10.1	10.0	9.9
	7.5	10.4	10.4	9.9
	10.0	11.1	11.0	9.9
	12.5	11.7	11.0	9.9
	15.5	12.3	11.0	9.9
100	-12.0	8.0	7.8	7.7
	-10.0	8.4	8.2	8.1
	-5.0	9.6	9.4	9.3
	0.0	10.9	10.7	10.6
	2.5	11.5	11.4	11.3
	6.0	12.6	12.5	12.3
	7.5	13.0	12.9	12.4
	10.0	13.8	13.7	12.4
	12.5	14.6	13.8	12.4
	15.5	15.4	13.8	12.4
125	-12.0	10.2	10.0	9.8
	-10.0	10.7	10.6	10.4
	-5.0	12.2	12.1	11.9
	0.0	13.9	13.8	13.6
	2.5	14.8	14.7	14.5
	6.0	16.1	16.0	15.8
	7.5	16.7	16.6	15.8
	10.0	17.7	17.6	15.8
	12.5	18.7	17.7	15.8
	15.5	19.7	17.7	15.8
140	-12.0	11.5	11.2	11.0
	-10.0	12.1	11.9	11.7
	-5.0	13.8	13.6	13.4
	0.0	15.6	15.5	15.3
	2.5	16.6	16.5	16.3
	6.0	18.1	18.0	17.8
	7.5	18.8	18.6	17.8
	10.0	19.9	19.8	17.8
	12.5	21.1	19.9	17.8
	15.5	22.1	19.9	17.8
200	-12.0	15.9	15.6	15.3
	-10.0	16.8	16.5	16.2
	-5.0	19.1	18.9	18.6
	0.0	21.7	21.5	21.2
	2.5	23.1	22.9	22.6
	6.0	25.1	25.0	24.7
	7.5	26.1	25.9	24.8
	10.0	27.6	27.5	24.8
	12.5	29.3	27.6	24.8
	15.5	30.8	27.6	24.8
250	-12.0	20.1	19.7	19.3
	-10.0	21.1	20.8	20.4
	-5.0	24.1	23.8	23.4
	0.0	27.3	27.1	26.7
	2.5	29.1	28.8	28.5
	6.0	31.7	31.5	31.1
	7.5	32.8	32.6	31.2
	10.0	34.8	34.6	31.2
	12.5	36.9	34.8	31.2
	15.5	38.7	34.8	31.2

### 2-3.Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

**PEFY-P-VML-A,VMH-A**

CA:Capacity(kW)  
SH:FSensitive heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB			
		°CDB	CA	SHC	CA	SHC									
20 (2.2)	20.0	2.2	1.8	2.2	1.9	2.3	1.9	2.3	1.9	2.4	2.0	2.5	1.9	2.6	1.9
	22.5	2.1	1.8	2.2	1.9	2.3	1.8	2.3	1.9	2.4	1.9	2.4	1.9	2.5	1.9
	25.0	2.1	1.8	2.2	1.9	2.2	1.8	2.3	1.9	2.3	1.9	2.4	1.9	2.5	1.9
	27.5	2.1	1.8	2.1	1.9	2.2	1.8	2.3	1.9	2.3	1.9	2.4	1.9	2.5	1.8
	30.0	2.1	1.8	2.1	1.9	2.2	1.8	2.2	1.9	2.3	1.9	2.4	1.9	2.5	1.8
	32.5	2.0	1.8	2.1	1.8	2.2	1.8	2.2	1.8	2.3	1.9	2.4	1.9	2.4	1.8
	35.0	2.0	1.8	2.1	1.8	2.2	1.8	2.2	1.8	2.2	1.9	2.3	1.9	2.4	1.8
	37.5	2.0	1.8	2.0	1.8	2.1	1.8	2.2	1.8	2.2	1.9	2.3	1.9	2.4	1.8
	40.0	2.0	1.8	2.0	1.8	2.1	1.8	2.2	1.8	2.2	1.9	2.3	1.8	2.4	1.8
	43.0	2.0	1.7	2.0	1.8	2.1	1.8	2.1	1.8	2.2	1.9	2.3	1.8	2.3	1.8
25 (2.8)	20.0	2.7	2.2	2.8	2.2	2.9	2.2	3.0	2.2	3.0	2.3	3.1	2.2	3.2	2.2
	22.5	2.7	2.2	2.8	2.2	2.9	2.2	2.9	2.2	3.0	2.3	3.1	2.2	3.2	2.2
	25.0	2.7	2.1	2.7	2.2	2.9	2.2	2.9	2.2	3.0	2.3	3.1	2.2	3.2	2.1
	27.5	2.7	2.1	2.7	2.2	2.8	2.1	2.9	2.2	2.9	2.2	3.1	2.2	3.2	2.1
	30.0	2.6	2.1	2.7	2.2	2.8	2.1	2.9	2.2	2.9	2.2	3.0	2.2	3.1	2.1
	32.5	2.6	2.1	2.7	2.2	2.8	2.1	2.8	2.1	2.9	2.2	3.0	2.2	3.1	2.1
	35.0	2.6	2.1	2.6	2.1	2.7	2.1	2.8	2.1	2.9	2.2	3.0	2.2	3.1	2.1
	37.5	2.5	2.1	2.6	2.1	2.7	2.1	2.8	2.1	2.8	2.2	2.9	2.2	3.1	2.1
	40.0	2.5	2.1	2.6	2.1	2.7	2.1	2.7	2.1	2.8	2.2	2.9	2.1	3.0	2.1
	43.0	2.5	2.0	2.5	2.1	2.7	2.1	2.7	2.1	2.8	2.2	2.9	2.1	3.0	2.1
32 (3.6)	20.0	3.5	2.7	3.6	2.8	3.7	2.7	3.8	2.7	3.9	2.8	4.0	2.7	4.2	2.7
	22.5	3.5	2.7	3.6	2.7	3.7	2.7	3.8	2.7	3.9	2.8	4.0	2.7	4.1	2.7
	25.0	3.5	2.7	3.5	2.7	3.7	2.7	3.7	2.7	3.8	2.8	4.0	2.7	4.1	2.6
	27.5	3.4	2.6	3.5	2.7	3.6	2.7	3.7	2.7	3.8	2.8	3.9	2.7	4.1	2.6
	30.0	3.4	2.6	3.5	2.7	3.6	2.6	3.7	2.7	3.7	2.8	3.9	2.7	4.0	2.6
	32.5	3.3	2.6	3.4	2.7	3.6	2.6	3.6	2.7	3.7	2.7	3.9	2.7	4.0	2.6
	35.0	3.3	2.6	3.4	2.7	3.5	2.6	3.6	2.6	3.7	2.7	3.8	2.7	4.0	2.6
	37.5	3.3	2.6	3.3	2.6	3.5	2.6	3.6	2.6	3.6	2.7	3.8	2.7	3.9	2.6
	40.0	3.2	2.6	3.3	2.6	3.5	2.6	3.5	2.6	3.6	2.7	3.7	2.6	3.9	2.6
	43.0	3.2	2.5	3.3	2.6	3.4	2.6	3.5	2.6	3.6	2.7	3.7	2.6	3.8	2.6
40 (4.5)	20.0	4.4	3.3	4.5	3.4	4.7	3.3	4.8	3.4	4.9	3.5	5.0	3.4	5.2	3.3
	22.5	4.4	3.3	4.5	3.4	4.6	3.3	4.7	3.3	4.8	3.4	5.0	3.4	5.2	3.3
	25.0	4.3	3.3	4.4	3.4	4.6	3.3	4.7	3.3	4.8	3.4	5.0	3.3	5.1	3.2
	27.5	4.3	3.3	4.4	3.3	4.5	3.3	4.6	3.3	4.7	3.4	4.9	3.3	5.1	3.2
	30.0	4.2	3.2	4.3	3.3	4.5	3.2	4.6	3.3	4.7	3.4	4.9	3.3	5.0	3.2
	32.5	4.2	3.2	4.3	3.3	4.5	3.2	4.5	3.3	4.6	3.4	4.8	3.3	5.0	3.2
	35.0	4.1	3.2	4.2	3.3	4.4	3.2	4.5	3.2	4.6	3.3	4.8	3.3	5.0	3.2
	37.5	4.1	3.2	4.2	3.2	4.4	3.2	4.5	3.2	4.5	3.3	4.7	3.3	4.9	3.2
	40.0	4.1	3.1	4.1	3.2	4.3	3.2	4.4	3.2	4.5	3.3	4.7	3.2	4.9	3.2
	43.0	4.0	3.1	4.1	3.2	4.3	3.1	4.4	3.2	4.4	3.3	4.6	3.2	4.8	3.1
50 (5.6)	20.0	5.5	3.9	5.6	4.0	5.8	3.9	5.9	3.9	6.0	4.0	6.3	3.9	6.5	3.8
	22.5	5.4	3.9	5.5	3.9	5.8	3.9	5.9	3.9	6.0	4.0	6.2	3.9	6.4	3.8
	25.0	5.4	3.8	5.5	3.9	5.7	3.8	5.8	3.8	5.9	4.0	6.2	3.8	6.4	3.7
	27.5	5.3	3.8	5.4	3.9	5.7	3.8	5.8	3.8	5.9	3.9	6.1	3.8	6.3	3.7
	30.0	5.3	3.8	5.4	3.9	5.6	3.8	5.7	3.8	5.8	3.9	6.0	3.8	6.3	3.7
	32.5	5.2	3.8	5.3	3.8	5.5	3.7	5.7	3.8	5.8	3.9	6.0	3.8	6.2	3.7
	35.0	5.2	3.7	5.3	3.8	5.5	3.7	5.6	3.7	5.7	3.9	5.9	3.8	6.2	3.7
	37.5	5.1	3.7	5.2	3.8	5.4	3.7	5.5	3.7	5.7	3.8	5.9	3.7	6.1	3.6
	40.0	5.0	3.7	5.2	3.8	5.4	3.7	5.5	3.7	5.6	3.8	5.8	3.7	6.0	3.6
	43.0	5.0	3.6	5.1	3.7	5.3	3.6	5.4	3.7	5.5	3.8	5.8	3.7	6.0	3.6
63 (7.1)	20.0	7.0	5.1	7.1	5.2	7.4	5.1	7.5	5.1	7.7	5.3	8.0	5.2	8.2	5.0
	22.5	6.9	5.1	7.0	5.2	7.3	5.1	7.5	5.1	7.6	5.3	7.9	5.1	8.2	5.0
	25.0	6.8	5.0	7.0	5.2	7.2	5.0	7.4	5.1	7.5	5.2	7.8	5.1	8.1	5.0
	27.5	6.7	5.0	6.9	5.1	7.2	5.0	7.3	5.1	7.5	5.2	7.7	5.1	8.0	4.9
	30.0	6.7	5.0	6.8	5.1	7.1	5.0	7.2	5.0	7.4	5.2	7.7	5.0	8.0	4.9
	32.5	6.6	4.9	6.7	5.1	7.0	4.9	7.2	5.0	7.3	5.2	7.6	5.0	7.9	4.9
	35.0	6.5	4.9	6.7	5.0	7.0	4.9	7.1	5.0	7.2	5.1	7.5	5.0	7.8	4.9
	37.5	6.5	4.9	6.6	5.0	6.9	4.9	7.0	4.9	7.2	5.1	7.5	5.0	7.7	4.8
	40.0	6.4	4.8	6.5	5.0	6.8	4.9	7.0	4.9	7.1	5.1	7.4	4.9	7.7	4.8
	43.0	6.3	4.8	6.4	4.9	6.7	4.8	6.9	4.9	7.0	5.0	7.3	4.9	7.6	4.8

PEFY-P-  
VML-A/VMH-A

## Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

### PEFY-P-VML-A,VMH-A

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA										
71 (8.0)	20.0	7.8	5.7	8.0	5.8	8.3	5.7	8.5	5.7	8.6	5.9	9.0	5.8	9.3	5.6
	22.5	7.8	5.7	7.9	5.8	8.2	5.7	8.4	5.7	8.6	5.9	8.9	5.7	9.2	5.6
	25.0	7.7	5.6	7.8	5.8	8.2	5.6	8.3	5.7	8.5	5.8	8.8	5.7	9.1	5.5
	27.5	7.6	5.6	7.8	5.7	8.1	5.6	8.2	5.6	8.4	5.8	8.7	5.7	9.0	5.5
	30.0	7.5	5.6	7.7	5.7	8.0	5.6	8.2	5.6	8.3	5.8	8.6	5.6	9.0	5.5
	32.5	7.4	5.5	7.6	5.6	7.9	5.5	8.1	5.6	8.2	5.7	8.6	5.6	8.9	5.4
	35.0	7.4	5.5	7.5	5.6	7.8	5.5	8.0	5.5	8.2	5.7	8.5	5.6	8.8	5.4
	37.5	7.3	5.4	7.4	5.6	7.8	5.5	7.9	5.5	8.1	5.7	8.4	5.5	8.7	5.4
	40.0	7.2	5.4	7.4	5.5	7.7	5.4	7.8	5.5	8.0	5.6	8.3	5.5	8.6	5.4
	43.0	7.1	5.4	7.3	5.5	7.6	5.4	7.7	5.4	7.9	5.6	8.2	5.5	8.5	5.3
80 (9.0)	20.0	8.8	6.5	9.0	6.6	9.4	6.5	9.5	6.5	9.7	6.7	10.1	6.5	10.4	6.3
	22.5	8.7	6.4	8.9	6.6	9.3	6.4	9.5	6.5	9.6	6.7	10.0	6.5	10.4	6.3
	25.0	8.6	6.4	8.8	6.5	9.2	6.4	9.4	6.4	9.5	6.6	9.9	6.4	10.3	6.3
	27.5	8.6	6.3	8.7	6.5	9.1	6.3	9.3	6.4	9.5	6.6	9.8	6.4	10.2	6.2
	30.0	8.5	6.3	8.6	6.4	9.0	6.3	9.2	6.3	9.4	6.5	9.7	6.4	10.1	6.2
	32.5	8.4	6.2	8.6	6.4	8.9	6.2	9.1	6.3	9.3	6.5	9.6	6.3	10.0	6.2
	35.0	8.3	6.2	8.5	6.3	8.8	6.2	9.0	6.3	9.2	6.5	9.5	6.3	9.9	6.1
	37.5	8.2	6.2	8.4	6.3	8.7	6.2	8.9	6.2	9.1	6.4	9.5	6.3	9.8	6.1
	40.0	8.1	6.1	8.3	6.3	8.6	6.1	8.8	6.2	9.0	6.4	9.4	6.2	9.7	6.1
	43.0	8.0	6.1	8.2	6.2	8.5	6.1	8.7	6.1	8.9	6.3	9.3	6.2	9.6	6.0
100 (11.2)	20.0	11.0	8.7	11.2	8.9	11.6	8.7	11.9	8.8	12.1	9.1	12.5	8.9	13.0	8.7
	22.5	10.9	8.6	11.1	8.9	11.5	8.7	11.8	8.8	12.0	9.1	12.4	8.9	12.9	8.6
	25.0	10.8	8.6	11.0	8.8	11.4	8.6	11.6	8.7	11.9	9.0	12.3	8.8	12.8	8.6
	27.5	10.6	8.5	10.9	8.8	11.3	8.6	11.5	8.7	11.8	9.0	12.2	8.8	12.7	8.6
	30.0	10.5	8.5	10.8	8.7	11.2	8.5	11.4	8.6	11.6	9.0	12.1	8.7	12.5	8.5
	32.5	10.4	8.4	10.6	8.6	11.1	8.5	11.3	8.6	11.5	8.9	12.0	8.7	12.4	8.5
	35.0	10.3	8.4	10.5	8.6	11.0	8.4	11.2	8.6	11.4	8.9	11.9	8.7	12.3	8.5
	37.5	10.2	8.3	10.4	8.5	10.9	8.4	11.1	8.5	11.3	8.8	11.8	8.6	12.2	8.4
	40.0	10.1	8.3	10.3	8.5	10.8	8.3	11.0	8.5	11.2	8.8	11.6	8.6	12.1	8.4
	43.0	9.9	8.2	10.2	8.4	10.6	8.3	10.8	8.4	11.1	8.7	11.5	8.5	12.0	8.3
125 (14.0)	20.0	13.7	10.0	14.0	10.2	14.6	10.0	14.8	10.1	15.1	10.4	15.7	10.1	16.2	9.8
	22.5	13.6	10.0	13.9	10.2	14.4	9.9	14.7	10.0	15.0	10.3	15.5	10.0	16.1	9.8
	25.0	13.4	9.9	13.7	10.1	14.3	9.9	14.6	10.0	14.8	10.3	15.4	10.0	16.0	9.7
	27.5	13.3	9.8	13.6	10.0	14.1	9.8	14.4	9.9	14.7	10.2	15.3	9.9	15.8	9.7
	30.0	13.2	9.8	13.4	10.0	14.0	9.8	14.3	9.8	14.6	10.1	15.1	9.9	15.7	9.6
	32.5	13.0	9.7	13.3	9.9	13.9	9.7	14.1	9.8	14.4	10.1	15.0	9.8	15.5	9.6
	35.0	12.9	9.6	13.2	9.8	13.7	9.6	14.0	9.7	14.3	10.0	14.8	9.8	15.4	9.5
	37.5	12.7	9.5	13.0	9.8	13.6	9.6	13.9	9.7	14.1	10.0	14.7	9.7	15.3	9.5
	40.0	12.6	9.5	12.9	9.7	13.4	9.5	13.7	9.6	14.0	9.9	14.6	9.7	15.1	9.4
	43.0	12.4	9.4	12.7	9.6	13.3	9.4	13.6	9.5	13.8	9.8	14.4	9.6	15.0	9.4
140 (16.0)	20.0	15.7	11.5	16.0	11.7	16.6	11.4	17.0	11.5	17.3	11.9	17.9	11.5	18.6	11.2
	22.5	15.5	11.4	15.8	11.6	16.5	11.4	16.8	11.4	17.1	11.8	17.8	11.5	18.4	11.2
	25.0	15.4	11.3	15.7	11.6	16.3	11.3	16.6	11.4	17.0	11.7	17.6	11.4	18.2	11.1
	27.5	15.2	11.2	15.5	11.5	16.2	11.2	16.5	11.3	16.8	11.7	17.4	11.4	18.1	11.0
	30.0	15.0	11.1	15.4	11.4	16.0	11.2	16.3	11.2	16.6	11.6	17.3	11.3	17.9	11.0
	32.5	14.9	11.1	15.2	11.3	15.8	11.1	16.2	11.2	16.5	11.5	17.1	11.2	17.8	10.9
	35.0	14.7	11.0	15.0	11.2	15.7	11.0	16.0	11.1	16.3	11.5	17.0	11.2	17.6	10.9
	37.5	14.6	10.9	14.9	11.2	15.5	10.9	15.8	11.0	16.2	11.4	16.8	11.1	17.4	10.8
	40.0	14.4	10.8	14.7	11.1	15.4	10.9	15.7	11.0	16.0	11.3	16.6	11.1	17.3	10.8
	43.0	14.2	10.7	14.5	11.0	15.2	10.8	15.5	10.9	15.8	11.3	16.4	11.0	17.1	10.7
200 (22.4)	20.0	22.0	16.4	22.4	16.8	23.3	16.4	23.7	16.5	24.2	17.1	25.1	16.6	26.0	16.2
	22.5	21.7	16.3	22.2	16.7	23.1	16.3	23.5	16.5	24.0	17.0	24.9	16.5	25.8	16.1
	25.0	21.5	16.2	22.0	16.6	22.8	16.2	23.3	16.4	23.7	16.9	24.6	16.5	25.5	16.0
	27.5	21.3	16.1	21.7	16.5	22.6	16.1	23.1	16.3	23.5	16.8	24.4	16.4	25.3	15.9
	30.0	21.1	16.0	21.5	16.4	22.4	16.0	22.8	16.2	23.3	16.7	24.2	16.3	25.1	15.9
	32.5	20.8	15.9	21.3	16.3	22.2	15.9	22.6	16.1	23.1	16.6	24.0	16.2	24.9	15.8
	35.0	20.6	15.8	21.1	16.1	22.0	15.8	22.4	16.0	22.8	16.5	23.7	16.1	24.6	15.7
	37.5	20.4	15.6	20.8	16.0	21.7	15.7	22.2	15.9	22.6	16.4	23.5	16.0	24.4	15.6
	40.0	20.2	15.5	20.6	15.9	21.5	15.6	22.0	15.8	22.4	16.3	23.3	16.0	24.2	15.5
	43.0	19.9	15.4	20.3	15.8	21.2	15.5	21.7	15.7	22.1	16.2	23.0	15.9	23.9	15.5
250 (28.0)	20.0	27.4	20.4	28.0	20.9	29.1	20.4	29.7	20.6	30.2	21.2	31.4	20.7	32.5	20.1
	22.5	27.2	20.3	27.7	20.7	28.8	20.3	29.4	20.4	30.0	21.1	31.1	20.5	32.2	20.0
	25.0	26.9	20.1	27.4	20.6	28.6	20.1	29.1	20.3	29.7	21.0	30.8	20.4	31.9	19.9
	27.5	26.6	20.0	27.2	20.5	28.3	20.0	28.8	20.2	29.4	20.9	30.5	20.3	31.6	19.8
	30.0	26.3	19.9	26.9	20.3	28.0	19.9	28.6	20.1	29.1	20.7	30.2	20.2	31.4	19.7
	32.5	26.0	19.7	26.6	20.2	27.7	19.8	28.3	20.0	28.8	20.6	30.0	20.1	31.1	19.6
	35.0	25.8	19.6	26.3	20.1	27.4	19.6	28.0	19.9	28.6	20.5	29.7	20.0	30.8	19.5
	37.5	25.5	19.4	26.0	19.9	27.2	19.5	27.7	19.7	28.3	20.4	29.4	19.9	30.5	19.4
	40.0	25.2	19.3	25.8	19.8	26.9	19.4	27.4	19.6	28.0	20.3	29.1	19.8	30.2	19.3
	43.0	24.9	19.2	25.4	19.6	26.5	19.3	27.1	19.5	27.7	20.1				

## 2-4.Heating Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

PEFY-P-VML-A,VMH-A

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC	SHC	SHC	SHC
20	-15.0	1.7	1.6	1.6	1.6
	-10.0	1.9	1.9	1.9	1.7
	-5.0	2.1	2.1	2.0	1.7
	0.0	2.4	2.4	2.0	1.7
	2.5	2.5	2.5	2.0	1.7
	6.0	2.5	2.5	2.0	1.7
	7.5	2.6	2.5	2.0	1.7
	10.0	2.8	2.5	2.0	1.7
	12.5	3.0	2.5	2.0	1.7
	15.5	3.0	2.5	2.0	1.7
25	-15.0	2.1	2.1	2.1	2.1
	-10.0	2.4	2.4	2.4	2.2
	-5.0	2.7	2.7	2.5	2.2
	0.0	3.1	3.0	2.5	2.2
	2.5	3.2	3.2	2.5	2.2
	6.0	3.2	3.2	2.5	2.2
	7.5	3.4	3.2	2.5	2.2
	10.0	3.6	3.2	2.5	2.2
	12.5	3.8	3.2	2.5	2.2
	15.5	3.9	3.2	2.5	2.2
32	-15.0	2.7	2.6	2.6	2.6
	-10.0	3.1	3.0	3.0	2.8
	-5.0	3.4	3.4	3.1	2.8
	0.0	3.8	3.8	3.1	2.8
	2.5	4.0	4.0	3.1	2.8
	6.0	4.0	4.0	3.1	2.8
	7.5	4.2	4.0	3.1	2.8
	10.0	4.5	4.0	3.1	2.8
	12.5	4.8	4.0	3.1	2.8
	15.5	4.8	4.0	3.1	2.8
40	-15.0	3.3	3.3	3.3	3.3
	-10.0	3.8	3.8	3.7	3.5
	-5.0	4.3	4.2	3.9	3.5
	0.0	4.8	4.7	3.9	3.5
	2.5	5.0	5.0	3.9	3.5
	6.0	5.1	5.0	3.9	3.5
	7.5	5.3	5.0	3.9	3.5
	10.0	5.6	5.0	3.9	3.5
	12.5	6.0	5.0	3.9	3.5
	15.5	6.1	5.0	3.9	3.5
50	-15.0	4.2	4.2	4.1	4.1
	-10.0	4.8	4.8	4.7	4.3
	-5.0	5.4	5.3	4.9	4.3
	0.0	6.0	5.9	4.9	4.3
	2.5	6.3	6.2	4.9	4.3
	6.0	6.4	6.3	4.9	4.3
	7.5	6.6	6.3	4.9	4.3
	10.0	7.1	6.3	4.9	4.3
	12.5	7.5	6.3	4.9	4.3
	15.5	7.6	6.3	4.9	4.3
63	-15.0	5.4	5.3	5.2	5.2
	-10.0	6.1	6.0	6.0	5.5
	-5.0	6.9	6.8	6.2	5.5
	0.0	7.6	7.5	6.2	5.5
	2.5	8.0	7.9	6.2	5.5
	6.0	8.1	8.0	6.2	5.5
	7.5	8.4	8.0	6.2	5.5
	10.0	9.0	8.0	6.2	5.5
	12.5	9.6	8.0	6.2	5.5
	15.5	9.7	8.0	6.2	5.5

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC	SHC	SHC	SHC
71	-15.0	6.0	5.9	5.9	5.9
	-10.0	6.9	6.8	6.7	6.2
	-5.0	7.7	7.6	7.0	6.2
	0.0	8.6	8.5	7.0	6.2
	2.5	9.0	8.9	7.0	6.2
	6.0	9.1	9.0	7.0	6.2
	7.5	9.5	9.0	7.0	6.2
	10.0	10.1	9.0	7.0	6.2
	12.5	10.8	9.0	7.0	6.2
	15.5	10.9	9.0	7.0	6.2
80	-15.0	6.7	6.6	6.5	6.5
	-10.0	7.6	7.5	7.4	6.9
	-5.0	8.6	8.5	7.8	6.9
	0.0	9.5	9.4	7.8	6.9
	2.5	10.0	9.9	7.8	6.9
	6.0	10.1	10.0	7.8	6.9
	7.5	10.5	10.0	7.8	6.9
	10.0	11.2	10.0	7.8	6.9
	12.5	12.0	10.0	7.8	6.9
	15.5	12.1	10.0	7.8	6.9
100	-15.0	8.4	8.2	8.2	8.1
	-10.0	9.6	9.4	9.3	8.6
	-5.0	10.7	10.6	9.8	8.6
	0.0	11.9	11.8	9.8	8.6
	2.5	12.5	12.4	9.8	8.6
	6.0	12.6	12.5	9.8	8.6
	7.5	13.2	12.5	9.8	8.6
	10.0	14.1	12.5	9.8	8.6
	12.5	15.0	12.5	9.8	8.6
	15.5	15.1	12.5	9.8	8.6
125	-15.0	10.7	10.6	10.5	10.4
	-10.0	12.2	12.1	11.9	11.0
	-5.0	13.7	13.6	12.5	11.0
	0.0	15.3	15.1	12.5	11.0
	2.5	16.0	15.8	12.5	11.0
	6.0	16.2	16.0	12.5	11.0
	7.5	16.8	16.0	12.5	11.0
	10.0	18.0	16.0	12.5	11.0
	12.5	19.1	16.0	12.5	11.0
	15.5	19.4	16.0	12.5	11.0
140	-15.0	12.1	11.9	11.8	11.7
	-10.0	13.8	13.6	13.4	12.4
	-5.0	15.5	15.3	14.0	12.4
	0.0	17.2	17.0	14.0	12.4
	2.5	18.0	17.8	14.0	12.4
	6.0	18.2	18.0	14.0	12.4
	7.5	19.0	18.0	14.0	12.4
	10.0	20.2	18.0	14.0	12.4
	12.5	21.5	18.0	14.0	12.4
	15.5	21.8	18.0	14.0	12.4
200	-15.0	16.7	16.5	16.4	16.3
	-10.0	19.1	18.9	18.6	17.3
	-5.0	21.5	21.2	19.5	17.3
	0.0	23.8	23.6	19.5	17.3
	2.5	25.0	24.8	19.5	17.3
	6.0	25.3	25.0	19.5	17.3
	7.5	26.3	25.0	19.5	17.3
	10.0	28.1	25.0	19.5	17.3
	12.5	29.9	25.0	19.5	17.3
	15.5	30.3	25.0	19.5	17.3
250	-15.0	21.1	20.8	20.6	20.5
	-10.0	24.1	23.8	23.4	21.7
	-5.0	27.1	26.7	24.6	21.7
	0.0	30.0	29.7	24.6	21.7
	2.5	31.5	31.2	24.6	21.7
	6.0	31.8	31.5	24.6	21.7
	7.5	33.2	31.5	24.6	21.7
	10.0	35.4	31.5	24.6	21.7
	12.5	37.7	31.5	24.6	21.7
	15.5	38.1	31.5	24.6	21.7

**PEFY-P-  
VML-A/VMH-A**

## 2-5.Cooling Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

CA:Capacity(kcal/h)

SHC:Sensible heat Capacity(kcal/h)

**PEFY-P-VML-A,VMH-A**

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
20	20.0	1813	1558	1901	1629	2049	1626	2157	1680	2192	1738	2320	1715	2459	1690
	22.5	1813	1558	1894	1625	2031	1618	2131	1670	2164	1727	2290	1704	2424	1679
	25.0	1799	1551	1876	1617	2008	1609	2105	1659	2137	1717	2259	1693	2389	1667
	27.5	1784	1545	1857	1609	1985	1599	2079	1649	2110	1706	2229	1682	2354	1656
	30.0	1770	1538	1839	1601	1962	1590	2052	1639	2083	1696	2198	1671	2319	1644
	32.5	1755	1532	1821	1593	1939	1580	2026	1629	2055	1686	2167	1660	2285	1633
	35.0	1741	1525	1802	1585	1916	1571	2000	1619	2028	1675	2137	1650	2250	1622
	37.5	1726	1519	1784	1577	1893	1562	1974	1609	2001	1665	2106	1639	2215	1611
	40.0	1712	1512	1766	1569	1870	1552	1948	1598	1974	1655	2076	1628	2180	1600
	43.0	1695	1504	1744	1559	1843	1541	1916	1586	1941	1642	2039	1616	2139	1586
25	20.0	2266	1820	2377	1899	2561	1897	2697	1955	2740	2017	2900	1989	3073	1959
	22.5	2266	1820	2367	1895	2539	1887	2664	1942	2705	2004	2862	1975	3030	1944
	25.0	2248	1812	2345	1884	2510	1875	2631	1928	2671	1990	2824	1961	2986	1929
	27.5	2230	1803	2322	1874	2482	1863	2598	1915	2637	1976	2786	1947	2943	1915
	30.0	2212	1795	2299	1863	2453	1850	2566	1902	2603	1963	2748	1933	2899	1900
	32.5	2194	1786	2276	1853	2424	1838	2533	1889	2569	1949	2709	1919	2856	1885
	35.0	2176	1778	2253	1842	2395	1826	2500	1876	2535	1936	2671	1905	2812	1871
	37.5	2158	1769	2230	1832	2367	1814	2467	1862	2501	1923	2633	1891	2769	1856
	40.0	2140	1761	2207	1822	2338	1802	2434	1849	2467	1909	2595	1877	2725	1842
	43.0	2118	1751	2180	1809	2304	1787	2395	1834	2426	1893	2549	1861	2673	1824
32	20.0	2855	2233	2995	2328	3227	2326	3398	2395	3452	2468	3654	2433	3872	2396
	22.5	2855	2233	2983	2322	3199	2314	3357	2378	3409	2450	3606	2415	3817	2377
	25.0	2833	2222	2954	2309	3163	2298	3315	2361	3366	2433	3558	2397	3763	2358
	27.5	2810	2211	2925	2295	3127	2282	3274	2344	3323	2416	3510	2379	3708	2339
	30.0	2787	2201	2896	2282	3091	2267	3233	2327	3280	2398	3462	2361	3653	2320
	32.5	2765	2190	2868	2269	3055	2251	3191	2310	3237	2381	3414	2343	3598	2301
	35.0	2742	2179	2839	2255	3018	2235	3150	2293	3194	2364	3366	2325	3544	2282
	37.5	2719	2168	2810	2242	2982	2220	3109	2276	3151	2347	3318	2307	3489	2264
	40.0	2696	2157	2781	2229	2946	2204	3067	2260	3109	2330	3270	2290	3434	2245
	43.0	2669	2145	2746	2213	2902	2186	3018	2239	3057	2309	3212	2268	3368	2223
40	20.0	3625	2773	3803	2889	4098	2888	4315	2971	4383	3057	4640	3014	4917	2968
	22.5	3625	2773	3788	2882	4063	2872	4262	2948	4329	3035	4579	2991	4848	2943
	25.0	3597	2760	3751	2864	4017	2852	4210	2926	4274	3012	4518	2967	4778	2919
	27.5	3568	2746	3715	2847	3971	2832	4157	2904	4220	2990	4457	2944	4708	2894
	30.0	3539	2732	3678	2830	3925	2811	4105	2883	4165	2967	4396	2921	4639	2870
	32.5	3511	2718	3641	2813	3879	2791	4052	2861	4111	2945	4335	2898	4569	2846
	35.0	3482	2704	3605	2796	3833	2771	4000	2839	4056	2923	4274	2875	4500	2821
	37.5	3453	2690	3568	2779	3787	2751	3948	2817	4002	2901	4213	2852	4430	2797
	40.0	3424	2676	3531	2761	3741	2731	3895	2796	3947	2879	4152	2829	4361	2774
	43.0	3389	2660	3487	2741	3686	2707	3832	2770	3882	2853	4078	2802	4277	2745
50	20.0	4532	3258	4753	3386	5123	3391	5393	3477	5479	3566	5800	3514	6146	3459
	22.5	4532	3258	4735	3377	5078	3370	5328	3447	5411	3536	5724	3483	6059	3425
	25.0	4496	3240	4689	3354	5021	3343	5262	3418	5343	3506	5648	3452	5972	3393
	27.5	4460	3222	4643	3331	4963	3316	5197	3389	5275	3476	5571	3421	5886	3360
	30.0	4424	3203	4597	3308	4906	3289	5131	3360	5207	3446	5495	3390	5799	3327
	32.5	4388	3185	4552	3286	4848	3262	5066	3331	5139	3417	5419	3359	5712	3295
	35.0	4352	3166	4506	3263	4791	3235	5000	3302	5070	3387	5342	3328	5625	3263
	37.5	4316	3148	4460	3240	4734	3209	4934	3273	5002	3358	5266	3298	5538	3231
	40.0	4280	3130	4414	3218	4676	3183	4869	3244	4934	3329	5190	3268	5451	3199
	43.0	4237	3108	4359	3191	4607	3151	4790	3210	4852	3294	5098	3232	5347	3161
63	20.0	5710	4263	5989	4437	6455	4438	6796	4559	6904	4687	7309	4620	7744	4548
	22.5	5710	4263	5966	4425	6399	4412	6713	4524	6818	4651	7212	4582	7635	4508
	25.0	5665	4241	5908	4398	6326	4380	6630	4488	6732	4614	7116	4544	7525	4468
	27.5	5620	4219	5851	4370	6254	4347	6548	4453	6646	4578	7020	4507	7416	4429
	30.0	5574	4196	5793	4342	6181	4315	6465	4418	6560	4542	6924	4469	7306	4390
	32.5	5529	4174	5735	4315	6109	4282	6383	4383	6475	4506	6828	4432	7197	4350
	35.0	5484	4151	5677	4287	6037	4250	6300	4348	6389	4471	6731	4395	7087	4312
	37.5	5438	4129	5620	4260	5964	4218	6217	4313	6303	4435	6635	4358	6978	4273
	40.0	5393	4107	5562	4232	5892	4186	6135	4278	6217	4400	6539	4322	6868	4234
	43.0	5338	4080	5493	4200	5805	4147	6036	4237	6114	4358	6424	4278	6737	4189

**Cooling Capacity**

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

CA:Capacity(kcal/h)

SHC:Sensible heat Capacity(kcal/h)

**PEFY-P-VML-A, VMH-A**

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB			
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	
71	20.0	6435	4764	6750	4956	7274	4959	7659	5093	7780	5233	8237	5157	8728	5077
	22.5	6435	4764	6724	4944	7211	4930	7566	5052	7684	5191	8128	5114	8604	5031
	25.0	6385	4739	6659	4912	7130	4893	7472	5012	7587	5150	8020	5071	8481	4986
	27.5	6334	4714	6593	4880	7048	4856	7379	4972	7490	5109	7911	5029	8358	4942
	30.0	6282	4688	6528	4849	6966	4819	7286	4932	7393	5068	7803	4986	8234	4897
	32.5	6231	4663	6463	4818	6885	4782	7193	4892	7297	5027	7695	4944	8111	4853
	35.0	6180	4637	6398	4786	6803	4745	7100	4852	7200	4987	7586	4902	7987	4808
	37.5	6129	4612	6333	4755	6722	4709	7007	4813	7103	4946	7478	4860	7864	4764
	40.0	6078	4587	6268	4724	6640	4672	6914	4773	7006	4906	7369	4818	7740	4721
	43.0	6016	4557	6190	4687	6542	4629	6802	4726	6890	4858	7239	4769	7592	4669
80	20.0	7251	5395	7605	5613	8196	5615	8629	5768	8767	5928	9281	5843	9834	5752
	22.5	7251	5395	7576	5599	8125	5583	8525	5723	8658	5882	9159	5795	9695	5701
	25.0	7194	5366	7503	5564	8033	5541	8420	5678	8549	5836	9036	5747	9556	5651
	27.5	7136	5338	7429	5528	7941	5500	8315	5633	8440	5790	8914	5699	9417	5601
	30.0	7079	5309	7356	5493	7849	5458	8210	5588	8331	5744	8792	5652	9278	5551
	32.5	7021	5281	7283	5458	7758	5417	8105	5543	8222	5698	8670	5604	9139	5501
	35.0	6963	5252	7209	5423	7666	5376	8000	5498	8113	5653	8548	5557	9000	5451
	37.5	6906	5224	7136	5388	7574	5335	7895	5454	8004	5608	8426	5510	8861	5402
	40.0	6848	5196	7063	5353	7482	5294	7790	5410	7895	5563	8304	5463	8722	5353
	43.0	6779	5162	6975	5311	7371	5245	7664	5357	7764	5509	8157	5408	8555	5295
100	20.0	9063	7285	9507	7601	10245	7593	10787	7826	10958	8074	11601	7962	12293	7844
	22.5	9063	7285	9470	7584	10157	7555	10656	7773	10822	8019	11448	7905	12119	7784
	25.0	8993	7252	9378	7542	10042	7505	10525	7720	10686	7965	11296	7849	11945	7725
	27.5	8920	7218	9287	7500	9927	7456	10393	7667	10550	7911	11143	7793	11771	7666
	30.0	8848	7184	9195	7458	9812	7408	10262	7614	10413	7857	10990	7737	11597	7607
	32.5	8776	7151	9103	7417	9697	7359	10131	7561	10277	7803	10837	7681	11423	7549
	35.0	8704	7117	9012	7375	9582	7310	10000	7509	10141	7749	10685	7626	11250	7490
	37.5	8632	7083	8920	7334	9467	7262	9869	7456	10005	7696	10532	7570	11076	7432
	40.0	8560	7050	8828	7293	9352	7214	9738	7404	9868	7643	10379	7515	10902	7374
	43.0	8474	7010	8718	7243	9214	7156	9580	7342	9705	7579	10196	7449	10693	7305
125	20.0	11329	8392	11883	8731	12807	8735	13484	8971	13698	9218	14501	9086	15366	8943
	22.5	11329	8392	11837	8709	12696	8684	1320	8900	13527	9145	14310	9010	15149	8864
	25.0	11241	8348	11723	8653	12552	8619	13156	8829	13357	9073	14119	8934	14931	8784
	27.5	11151	8303	11608	8598	12408	8554	12992	8758	13187	9001	13929	8859	14714	8706
	30.0	11060	8258	11494	8542	12265	8489	12828	8688	13017	8929	13738	8785	14497	8627
	32.5	10970	8214	11379	8487	12121	8424	12664	8618	12846	8857	13547	8710	14279	8549
	35.0	10880	8169	11265	8432	11977	8360	12500	8548	12676	8786	13356	8636	14062	8471
	37.5	10790	8125	11150	8378	11834	8296	12336	8478	12506	8715	13165	8563	13845	8394
	40.0	10700	8080	11035	8323	11690	8232	12172	8409	12335	8644	12974	8489	13627	8317
	43.0	10592	8027	10898	8258	11518	8155	11975	8326	12131	8560	12745	8402	13367	8225
140	20.0	12689	9465	13309	9850	14344	9852	15102	10122	15342	10406	16241	10256	17210	10095
	22.5	12689	9465	13258	9825	14219	9796	14918	10043	15151	10325	16028	10171	16966	10006
	25.0	12590	9416	13130	9763	14058	9723	14734	9964	14960	10244	15814	10088	16723	9918
	27.5	12489	9366	13001	9702	13897	9651	14551	9886	14769	10164	15600	10004	16480	9831
	30.0	12388	9316	12873	9640	13737	9579	14367	9807	14579	10084	15386	9921	16236	9743
	32.5	12287	9266	12745	9579	13576	9507	14184	9729	14388	10004	15172	9838	15993	9657
	35.0	12186	9217	12616	9518	13415	9435	14000	9652	14197	9925	14959	9756	15749	9570
	37.5	12085	9167	12488	9457	13254	9363	13816	9574	14006	9846	14745	9674	15506	9484
	40.0	11984	9118	12360	9396	13093	9292	13633	9497	13816	9767	14531	9593	15263	9399
	43.0	11863	9059	12206	9323	12900	9207	13412	9405	13587	9673	14275	9495	14971	9296
200	20.0	18126	13746	19013	14314	20491	14312	21574	14715	21916	15141	23202	14924	24585	14692
	22.5	18126	13746	18940	14279	20313	14232	21311	14604	21644	15027	22896	14805	24238	14567
	25.0	17985	13677	18756	14192	20083	14130	21049	14493	21372	14913	22591	14687	23890	14443
	27.5	17841	13606	18573	14105	19854	14028	20787	14382	21099	14800	22286	14570	23542	14320
	30.0	17697	13536	18390	14018	19624	13926	20525	14272	20827	14688	21980	14453	23195	14197
	32.5	17553	13466	18207	13931	19394	13825	20262	14162	20554	14575	21675	14337	22847	14075
	35.0	17408	13396	18023	13845	19164	13723	20000	14053	20282	14464	21370	14221	22499	13954
	37.5	17264	13326	17840	13759	18934	13623	19738	13944	20009	14352	21064	14105	22151	13832
	40.0	17120	13256	17657	13673	18704	13522	19475	13835	19737	14241	20759	13990	21804	13712
	43.0	16947	13173	17437	13570	18428	13402	19161	13705	19410	14109	20392	13853	21387	13568
250	20.0	22658	17092	23766	17795	25613	17794	26967	18291	27396	18815	29002	18544	30732	18256
	22.5	22658	17092	23675	17751	25392	17694	26639	18151	27055	18672	28621	18396	30297	18099
	25.0	22481	17005	23446	17641	25104	17566	26311	18012	26714	18529	28239	18248	29862	17944
	27.5	22301	16916	23216	17532	24817	17437	25984	17873	26374	18387	27857	18100	29428	17789
	30.0	22121	16828	22987	17423	24530									

## 2-6.Heating Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

**PEFY-P-VML-A,VMH-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
71	-15.0	5530	5447	5365	5332
	-10.0	6309	6227	6144	5691
	-5.0	7089	7006	6433	5691
	0.0	7868	7786	6433	5691
	2.5	8258	8000	6433	5691
	6.0	8330	8000	6433	5691
	7.5	8680	8000	6433	5691
	10.0	9264	8000	6433	5691
	12.5	9847	8000	6433	5691
	15.5	9979	8000	6433	5691
80	-15.0	6221	6128	6036	5998
	-10.0	7098	7005	6912	6402
	-5.0	7975	7882	7237	6402
	0.0	8852	8759	7237	6402
	2.5	9290	9000	7237	6402
	6.0	9371	9000	7237	6402
	7.5	9765	9000	7237	6402
	10.0	10421	9000	7237	6402
	12.5	11078	9000	7237	6402
	15.5	11227	9000	7237	6402
100	-15.0	7742	7626	7511	7465
	-10.0	8833	8718	8602	7967
	-5.0	9924	9809	9006	7967
	0.0	11015	10900	9006	7967
	2.5	11561	11200	9006	7967
	6.0	11662	11200	9006	7967
	7.5	12152	11200	9006	7967
	10.0	12969	11200	9006	7967
	12.5	13786	11200	9006	7967
	15.5	13971	11200	9006	7967
125	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959
	-5.0	12405	12261	11258	9959
	0.0	13769	13625	11258	9959
	2.5	14451	14000	11258	9959
	6.0	14577	14000	11258	9959
	7.5	15190	14000	11258	9959
	10.0	16211	14000	11258	9959
	12.5	17232	14000	11258	9959
	15.5	17464	14000	11258	9959
140	-15.0	11060	10895	10730	10664
	-10.0	12619	12454	12289	11381
	-5.0	14177	14012	12866	11381
	0.0	15736	15571	12866	11381
	2.5	16515	16000	12866	11381
	6.0	16660	16000	12866	11381
	7.5	17360	16000	12866	11381
	10.0	18527	16000	12866	11381
	12.5	19694	16000	12866	11381
	15.5	19959	16000	12866	11381
200	-15.0	15484	15253	15022	14929
	-10.0	17666	17435	17204	15934
	-5.0	19848	19617	18012	15934
	0.0	22031	21800	18012	15934
	2.5	23122	22400	18012	15934
	6.0	23324	22400	18012	15934
	7.5	24304	22400	18012	15934
	10.0	25938	22400	18012	15934
	12.5	27572	22400	18012	15934
	15.5	27942	22400	18012	15934
250	-15.0	19355	19066	18777	18662
	-10.0	22082	21794	21505	19918
	-5.0	24810	24522	22515	19918
	0.0	27538	27249	22515	19918
	2.5	28902	28000	22515	19918
	6.0	29155	28000	22515	19918
	7.5	30380	28000	22515	19918
	10.0	32422	28000	22515	19918
	12.5	34465	28000	22515	19918
	15.5	34928	28000	22515	19918

## 2-7.Cooling Capacity (In combination with PQRY-P200-250YMF-C)

**PEFY-P-VML-A,VMH-A**

CA:Capacity(kW)

SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°C	CA	SHC	CA										
20	10	2.1	1.8	2.2	1.9	2.4	1.9	2.4	1.9	2.5	2.0	2.6	2.0	2.8	1.9
	20	2.1	1.8	2.1	1.9	2.3	1.8	2.3	1.9	2.4	2.0	2.5	1.9	2.7	1.9
	30	2.0	1.7	2.0	1.8	2.1	1.8	2.2	1.8	2.3	1.9	2.4	1.9	2.5	1.9
	40	1.7	1.6	1.8	1.7	1.9	1.7	1.9	1.7	2.0	1.8	2.1	1.8	2.2	1.8
	45	1.6	1.6	1.7	1.7	1.8	1.6	1.8	1.7	1.9	1.8	2.0	1.7	2.1	1.7
25	10	2.7	2.2	2.8	2.2	3.0	2.2	3.1	2.3	3.2	2.3	3.3	2.3	3.5	2.3
	20	2.6	2.1	2.7	2.2	2.9	2.2	3.0	2.2	3.1	2.3	3.2	2.3	3.4	2.2
	30	2.5	2.0	2.6	2.1	2.7	2.1	2.8	2.1	2.9	2.2	3.0	2.2	3.2	2.2
	40	2.2	1.9	2.2	2.0	2.4	2.0	2.4	2.0	2.5	2.1	2.6	2.1	2.8	2.0
	45	2.0	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.4	2.0	2.5	2.0	2.6	2.0
32	10	3.5	2.7	3.6	2.8	3.9	2.8	4.0	2.8	4.1	2.9	4.3	2.9	4.5	2.8
	20	3.4	2.6	3.5	2.7	3.7	2.7	3.8	2.7	3.9	2.8	4.1	2.8	4.4	2.7
	30	3.2	2.5	3.3	2.6	3.5	2.6	3.6	2.6	3.7	2.7	3.9	2.7	4.1	2.7
	40	2.8	2.3	2.9	2.4	3.1	2.4	3.1	2.5	3.2	2.6	3.4	2.5	3.6	2.5
	45	2.6	2.3	2.7	2.4	2.9	2.3	3.0	2.4	3.0	2.5	3.2	2.4	3.4	2.4
40	10	4.4	3.3	4.5	3.4	4.8	3.4	5.0	3.4	5.1	3.6	5.4	3.5	5.7	3.4
	20	4.2	3.2	4.4	3.3	4.6	3.3	4.8	3.4	4.9	3.5	5.2	3.4	5.5	3.4
	30	4.0	3.1	4.1	3.2	4.4	3.2	4.5	3.2	4.6	3.4	4.9	3.3	5.2	3.3
	40	3.5	2.9	3.6	3.0	3.8	2.9	3.9	3.0	4.0	3.1	4.3	3.1	4.5	3.0
	45	3.3	2.8	3.4	2.9	3.6	2.9	3.7	2.9	3.8	3.0	4.0	3.0	4.2	2.9
50	10	5.5	3.9	5.6	4.0	6.0	4.0	6.2	4.0	6.3	4.1	6.7	4.1	7.1	4.0
	20	5.3	3.8	5.4	3.9	5.8	3.9	5.9	3.9	6.1	4.0	6.5	4.0	6.8	3.9
	30	5.0	3.6	5.1	3.7	5.5	3.7	5.6	3.7	5.8	3.9	6.1	3.8	6.4	3.8
	40	4.3	3.3	4.5	3.4	4.7	3.4	4.9	3.4	5.0	3.6	5.3	3.5	5.6	3.5
	45	4.1	3.2	4.2	3.3	4.5	3.3	4.6	3.3	4.7	3.5	5.0	3.4	5.3	3.3
63	10	6.9	5.1	7.2	5.3	7.6	5.2	7.8	5.3	8.0	5.5	8.5	5.4	9.0	5.3
	20	6.7	5.0	6.9	5.1	7.3	5.1	7.5	5.1	7.8	5.3	8.2	5.2	8.6	5.2
	30	6.3	4.8	6.5	4.9	6.9	4.9	7.1	5.0	7.3	5.2	7.7	5.1	8.1	5.0
	40	5.5	4.4	5.7	4.5	6.0	4.5	6.2	4.6	6.4	4.8	6.7	4.7	7.1	4.6
	45	5.2	4.3	5.3	4.4	5.7	4.4	5.8	4.4	6.0	4.6	6.3	4.6	6.7	4.5
71	10	7.8	5.7	8.1	5.9	8.6	5.8	8.8	5.9	9.1	6.1	9.6	6.0	10.1	5.9
	20	7.5	5.6	7.8	5.7	8.3	5.7	8.5	5.7	8.7	6.0	9.2	5.9	9.7	5.8
	30	7.1	5.4	7.3	5.5	7.8	5.5	8.0	5.5	8.2	5.7	8.7	5.7	9.2	5.6
	40	6.2	4.9	6.4	5.1	6.8	5.0	7.0	5.1	7.2	5.3	7.6	5.2	8.0	5.1
	45	5.8	4.7	6.0	4.9	6.4	4.9	6.6	4.9	6.8	5.1	7.1	5.1	7.5	5.0
80	10	8.8	6.5	9.1	6.6	9.6	6.6	9.9	6.7	10.2	6.9	10.8	6.8	11.4	6.7
	20	8.5	6.3	8.7	6.5	9.3	6.4	9.5	6.5	9.8	6.7	10.4	6.6	10.9	6.5
	30	8.0	6.1	8.3	6.2	8.8	6.2	9.0	6.3	9.3	6.5	9.8	6.4	10.3	6.3
	40	6.9	5.6	7.2	5.7	7.6	5.7	7.8	5.8	8.1	6.0	8.5	5.9	9.0	5.8
	45	6.5	5.4	6.8	5.6	7.2	5.5	7.4	5.6	7.6	5.8	8.0	5.7	8.5	5.7
100	10	10.9	8.7	11.3	9.0	12.0	8.9	12.3	9.0	12.7	9.4	13.4	9.2	14.1	9.1
	20	10.5	8.5	10.9	8.8	11.6	8.7	11.9	8.8	12.2	9.2	12.9	9.0	13.6	8.9
	30	9.9	8.2	10.3	8.5	10.9	8.4	11.2	8.6	11.5	8.9	12.2	8.8	12.8	8.6
	40	8.6	7.6	8.9	7.9	9.5	7.8	9.7	8.0	10.0	8.3	10.6	8.2	11.2	8.1
	45	8.1	7.4	8.4	7.7	8.9	7.6	9.2	7.8	9.5	8.1	10.0	8.0	10.5	7.9
125	10	13.7	10.0	14.1	10.3	15.0	10.2	15.4	10.3	15.9	10.7	16.7	10.5	17.7	10.3
	20	13.2	9.8	13.6	10.1	14.5	10.0	14.8	10.1	15.3	10.5	16.1	10.3	17.0	10.1
	30	12.4	9.4	12.8	9.7	13.6	9.6	14.0	9.7	14.4	10.1	15.2	9.9	16.1	9.7
	40	10.8	8.6	11.2	8.9	11.9	8.8	12.2	9.0	12.5	9.3	13.2	9.2	14.0	9.0
	45	10.2	8.3	10.5	8.6	11.2	8.5	11.5	8.7	11.8	9.0	12.5	8.9	13.2	8.8
140	10	15.6	11.4	16.1	11.8	17.1	11.7	17.6	11.8	18.1	12.2	19.1	12.0	20.2	11.8
	20	15.0	11.2	15.6	11.5	16.5	11.4	17.0	11.5	17.5	11.9	18.4	11.8	19.5	11.5
	30	14.2	10.7	14.7	11.1	15.6	11.0	16.0	11.1	16.5	11.5	17.4	11.3	18.4	11.1
	40	12.3	9.8	12.8	10.2	13.6	10.1	13.9	10.3	14.3	10.7	15.1	10.5	16.0	10.3
	45	11.6	9.5	12.0	9.8	12.8	9.8	13.1	9.9	13.5	10.3	14.3	10.2	15.0	10.0
200	10	21.9	16.4	22.6	16.9	24.0	16.7	24.6	16.9	25.4	17.6	26.8	17.3	28.3	17.0
	20	21.1	16.0	21.8	16.5	23.1	16.3	23.7	16.6	24.5	17.2	25.8	16.9	27.2	16.6
	30	19.9	15.4	20.5	15.9	21.8	15.8	22.4	16.0	23.1	16.6	24.3	16.4	25.7	16.1
	40	17.3	14.2	17.9	14.7	19.0	14.5	19.5	14.8	20.1	15.4	21.2	15.2	22.4	14.9
	45	16.3	13.7	16.8	14.2	17.9	14.1	18.4	14.4	18.9	15.0	20.0	14.7	21.1	14.5
250	10	27.3	20.4	28.2	21.0	30.0	20.8	30.8	21.0	31.7	21.8	33.5	21.5	35.3	21.1
	20	26.3	19.9	27.2	20.5	28.9	20.3	29.7	20.6	30.6	21.4	32.3	21.0	34.0	20.6
	30	24.8	19.1	25.7	19.8	27.3	19.6	28.0	19.9	28.8	20.6	30.4	20.3	32.1	20.0
	40	21.6	17.6	22.3	18.2	23.7	18.1	24.4	18.4	25.1	19.1	26.5	18.8	27.9	18.5
	45	20.4	17.0	21.1	17.7	22.4	17.5	23.0	17.8	23.6	18.6	25.0	18.3	26.3	18.0

**PEFY-P**  
**VML-A/VMH-A**

## 2-8.Heating Capacity (In combination with PQRY-P200-250YMF-C)

**PEFY-P-VML-A,VMH-A**

SHC:Sensible heat Capacity(kW)

Unit size	Water temp. °C	Indoor air temp.:°CDB				
		15 SHC(kW)	19 SHC(kW)	20 SHC(kW)	25 SHC(kW)	27 SHC(kW)
20	10	2.2	2.2	2.1	1.7	1.5
	20	2.6	2.6	2.5	2.0	1.8
	30	2.6	2.6	2.5	2.0	1.8
	40	2.7	2.7	2.6	2.1	1.9
	45	2.9	2.9	2.9	2.3	2.1
25	10	2.8	2.8	2.7	2.2	2.0
	20	3.3	3.3	3.2	2.6	2.3
	30	3.3	3.3	3.2	2.6	2.3
	40	3.4	3.4	3.3	2.7	2.4
	45	3.8	3.7	3.6	2.9	2.6
32	10	3.5	3.5	3.4	2.7	2.4
	20	4.1	4.1	4.0	3.2	2.9
	30	4.1	4.1	4.0	3.2	2.9
	40	4.3	4.2	4.2	3.3	3.0
	45	4.7	4.7	4.6	3.6	3.3
40	10	4.4	4.3	4.3	3.4	3.1
	20	5.2	5.1	5.0	4.0	3.6
	30	5.2	5.1	5.0	4.0	3.6
	40	5.4	5.3	5.2	4.2	3.7
	45	5.9	5.8	5.7	4.6	4.1
50	10	5.5	5.5	5.4	4.3	3.9
	20	6.5	6.4	6.3	5.0	4.5
	30	6.5	6.4	6.3	5.0	4.5
	40	6.7	6.7	6.6	5.2	4.7
	45	7.4	7.3	7.2	5.7	5.2
63	10	7.0	6.9	6.8	5.4	4.9
	20	8.2	8.2	8.0	6.4	5.8
	30	8.2	8.2	8.0	6.4	5.8
	40	8.6	8.5	8.3	6.7	6.0
	45	9.4	9.3	9.1	7.3	6.6
71	10	7.9	7.8	7.7	6.1	5.5
	20	9.3	9.2	9.0	7.2	6.5
	30	9.3	9.2	9.0	7.2	6.5
	40	9.6	9.5	9.4	7.5	6.7
	45	10.6	10.5	10.3	8.2	7.4
80	10	8.8	8.7	8.5	6.8	6.1
	20	10.3	10.2	10.0	8.0	7.2
	30	10.3	10.2	10.0	8.0	7.2
	40	10.7	10.6	10.4	8.3	7.5
	45	11.7	11.6	11.4	9.1	8.2
100	10	10.9	10.8	10.6	8.5	7.7
	20	12.9	12.8	12.5	10.0	9.0
	30	12.9	12.8	12.5	10.0	9.0
	40	13.4	13.3	13.0	10.4	9.4
	45	14.7	14.5	14.3	11.4	10.3
125	10	14.0	13.9	13.6	10.9	9.8
	20	16.5	16.3	16.0	12.8	11.5
	30	16.5	16.3	16.0	12.8	11.5
	40	17.1	17.0	16.6	13.3	12.0
	45	18.8	18.6	18.2	14.6	13.1
140	10	15.8	15.6	15.3	12.2	11.0
	20	18.5	18.4	18.0	14.4	13.0
	30	18.5	18.4	18.0	14.4	13.0
	40	19.3	19.1	18.7	15.0	13.5
	45	21.1	20.9	20.5	16.4	14.8
200	10	21.9	21.7	21.3	17.0	15.3
	20	25.8	25.5	25.0	20.0	18.0
	30	25.8	25.5	25.0	20.0	18.0
	40	26.8	26.5	26.0	20.8	18.7
	45	29.4	29.1	28.5	22.8	20.5
250	10	27.6	27.3	26.8	21.4	19.3
	20	32.4	32.1	31.5	25.2	22.7
	30	32.4	32.1	31.5	25.2	22.7
	40	33.7	33.4	32.8	26.2	23.6
	45	37.0	36.6	35.9	28.7	25.9

## 2-9.Cooling Capacity (In combination with PURY-P400-500YMF-C)

**PEFY-P-VML-A,VMH-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	CA:Capacity(kW)											
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA								
20	20.0	2.0	1.8	2.1	1.9	2.3	1.9	2.4	2.0	2.6	2.0	2.7	1.9
	22.5	2.0	1.8	2.1	1.9	2.3	1.8	2.4	2.0	2.6	1.9	2.7	1.9
	25.0	2.0	1.8	2.1	1.8	2.2	1.8	2.4	2.0	2.5	1.9	2.7	1.9
	27.5	2.0	1.8	2.1	1.8	2.2	1.8	2.4	1.9	2.5	1.9	2.6	1.9
	30.0	2.0	1.8	2.1	1.8	2.2	1.8	2.3	1.9	2.5	1.9	2.6	1.9
	32.5	2.0	1.7	2.0	1.8	2.2	1.8	2.3	1.9	2.4	1.9	2.6	1.9
	35.0	1.9	1.7	2.0	1.8	2.1	1.8	2.3	1.9	2.4	1.9	2.5	1.9
	37.5	1.9	1.7	2.0	1.8	2.1	1.8	2.2	1.9	2.4	1.9	2.5	1.8
	40.0	1.9	1.7	2.0	1.8	2.1	1.8	2.2	1.9	2.3	1.9	2.4	1.8
	43.0	1.9	1.7	1.9	1.8	2.1	1.8	2.2	1.9	2.3	1.8	2.4	1.8
25	20.0	2.6	2.1	2.7	2.2	2.9	2.2	3.1	2.3	3.3	2.3	3.5	2.3
	22.5	2.6	2.1	2.7	2.2	2.9	2.2	3.1	2.3	3.3	2.3	3.4	2.2
	25.0	2.6	2.1	2.7	2.2	2.9	2.2	3.0	2.3	3.2	2.3	3.4	2.2
	27.5	2.5	2.1	2.6	2.2	2.8	2.1	3.0	2.3	3.2	2.2	3.3	2.2
	30.0	2.5	2.1	2.6	2.1	2.8	2.1	3.0	2.3	3.1	2.2	3.3	2.2
	32.5	2.5	2.1	2.6	2.1	2.8	2.1	2.9	2.2	3.1	2.2	3.2	2.2
	35.0	2.5	2.0	2.6	2.1	2.7	2.1	2.9	2.2	3.0	2.2	3.2	2.2
	37.5	2.5	2.0	2.5	2.1	2.7	2.1	2.8	2.2	3.0	2.2	3.1	2.1
	40.0	2.4	2.0	2.5	2.1	2.7	2.1	2.8	2.2	3.0	2.2	3.1	2.1
	43.0	2.4	2.0	2.5	2.1	2.6	2.1	2.8	2.2	2.9	2.1	3.0	2.1
32	20.0	3.3	2.6	3.5	2.7	3.7	2.7	4.0	2.9	4.2	2.8	4.5	2.8
	22.5	3.3	2.6	3.5	2.7	3.7	2.7	4.0	2.8	4.2	2.8	4.4	2.8
	25.0	3.3	2.6	3.4	2.7	3.7	2.7	3.9	2.8	4.1	2.8	4.4	2.7
	27.5	3.3	2.6	3.4	2.7	3.6	2.7	3.9	2.8	4.1	2.8	4.3	2.7
	30.0	3.2	2.6	3.4	2.7	3.6	2.6	3.8	2.8	4.0	2.7	4.2	2.7
	32.5	3.2	2.5	3.3	2.6	3.5	2.6	3.8	2.8	4.0	2.7	4.2	2.7
	35.0	3.2	2.5	3.3	2.6	3.5	2.6	3.7	2.7	3.9	2.7	4.1	2.7
	37.5	3.2	2.5	3.3	2.6	3.5	2.6	3.7	2.7	3.8	2.7	4.0	2.6
	40.0	3.1	2.5	3.2	2.6	3.4	2.6	3.6	2.7	3.8	2.7	4.0	2.6
	43.0	3.1	2.5	3.2	2.6	3.4	2.5	3.5	2.7	3.7	2.6	3.9	2.6
40	20.0	4.1	3.2	4.3	3.3	4.7	3.3	5.0	3.5	5.3	3.5	5.6	3.4
	22.5	4.1	3.2	4.3	3.3	4.6	3.3	4.9	3.5	5.2	3.4	5.5	3.4
	25.0	4.1	3.2	4.3	3.3	4.6	3.3	4.9	3.5	5.2	3.4	5.5	3.4
	27.5	4.1	3.2	4.2	3.3	4.5	3.3	4.8	3.4	5.1	3.4	5.4	3.3
	30.0	4.0	3.1	4.2	3.3	4.5	3.2	4.8	3.4	5.0	3.4	5.3	3.3
	32.5	4.0	3.1	4.2	3.2	4.4	3.2	4.7	3.4	5.0	3.3	5.2	3.3
	35.0	4.0	3.1	4.1	3.2	4.4	3.2	4.6	3.4	4.9	3.3	5.1	3.2
	37.5	3.9	3.1	4.1	3.2	4.3	3.2	4.6	3.3	4.8	3.3	5.1	3.2
	40.0	3.9	3.1	4.0	3.2	4.3	3.1	4.5	3.3	4.7	3.3	5.0	3.2
	43.0	3.9	3.1	4.0	3.2	4.2	3.1	4.4	3.3	4.7	3.2	4.9	3.2
50	20.0	5.2	3.7	5.4	3.9	5.8	3.9	6.2	4.1	6.6	4.0	7.0	4.0
	22.5	5.2	3.7	5.4	3.9	5.8	3.9	6.2	4.1	6.5	4.0	6.9	3.9
	25.0	5.1	3.7	5.3	3.8	5.7	3.8	6.1	4.0	6.4	4.0	6.8	3.9
	27.5	5.1	3.7	5.3	3.8	5.6	3.8	6.0	4.0	6.3	3.9	6.7	3.9
	30.0	5.0	3.7	5.2	3.8	5.6	3.8	5.9	4.0	6.2	3.9	6.6	3.8
	32.5	5.0	3.6	5.2	3.8	5.5	3.7	5.8	3.9	6.2	3.9	6.5	3.8
	35.0	4.9	3.6	5.1	3.7	5.4	3.7	5.8	3.9	6.1	3.8	6.4	3.7
	37.5	4.9	3.6	5.1	3.7	5.4	3.7	5.7	3.9	6.0	3.8	6.3	3.7
	40.0	4.9	3.6	5.0	3.7	5.3	3.6	5.6	3.8	5.9	3.7	6.2	3.7
	43.0	4.8	3.6	5.0	3.7	5.2	3.6	5.5	3.8	5.8	3.7	6.1	3.6
63	20.0	6.5	4.9	6.9	5.1	7.4	5.1	7.9	5.4	8.4	5.3	8.9	5.2
	22.5	6.5	4.9	6.8	5.1	7.3	5.1	7.8	5.4	8.3	5.3	8.7	5.2
	25.0	6.5	4.9	6.8	5.1	7.2	5.0	7.7	5.3	8.1	5.2	8.6	5.1
	27.5	6.4	4.9	6.7	5.0	7.2	5.0	7.6	5.3	8.0	5.2	8.5	5.1
	30.0	6.4	4.8	6.6	5.0	7.1	5.0	7.5	5.2	7.9	5.1	8.4	5.1
	32.5	6.3	4.8	6.6	5.0	7.0	4.9	7.4	5.2	7.8	5.1	8.2	5.0
	35.0	6.3	4.8	6.5	4.9	6.9	4.9	7.3	5.2	7.7	5.1	8.1	5.0
	37.5	6.2	4.8	6.4	4.9	6.8	4.9	7.2	5.1	7.6	5.0	8.0	4.9
	40.0	6.2	4.7	6.4	4.9	6.7	4.8	7.1	5.1	7.5	5.0	7.9	4.9
	43.0	6.1	4.7	6.3	4.8	6.6	4.8	7.0	5.0	7.3	4.9	7.7	4.8
71	20.0	7.4	5.5	7.7	5.7	8.3	5.7	8.9	6.0	9.4	5.9	10.0	5.8
	22.5	7.4	5.5	7.7	5.7	8.2	5.7	8.8	6.0	9.3	5.9	9.8	5.8
	25.0	7.3	5.5	7.6	5.7	8.2	5.6	8.7	5.9	9.2	5.8	9.7	5.7
	27.5	7.2	5.4	7.5	5.6	8.1	5.6	8.6	5.9	9.0	5.8	9.6	5.7
	30.0	7.2	5.4	7.5	5.6	8.0	5.5	8.5	5.8	8.9	5.7	9.4	5.6
	32.5	7.1	5.4	7.4	5.5	7.9	5.5	8.3	5.8	8.8	5.7	9.3	5.6
	35.0	7.1	5.3	7.3	5.5	7.8	5.5	8.2	5.7	8.7	5.6	9.1	5.5
	37.5	7.0	5.3	7.2	5.5	7.7	5.4	8.1	5.7	8.6	5.6	9.0	5.5
	40.0	7.0	5.3	7.2	5.4	7.6	5.4	8.0	5.7	8.4	5.6	8.9	5.4
	43.0	6.9	5.2	7.1	5.4	7.5	5.3	7.9	5.6	8.3	5.5	8.7	5.4
80	20.0	8.3	6.2	8.7	6.5	9.4	6.5	10.0	6.8	10.6	6.7	11.2	6.6
	22.5	8.3	6.2	8.7	6.4	9.3	6.4	9.9	6.8	10.5	6.7	11.1	6.6
	25.0	8.2	6.2	8.6	6.4	9.2	6.4	9.8	6.7	10.3	6.6	10.9	6.5
	27.5	8.1	6.1	8.5	6.4	9.1	6.3	9.6	6.7	10.2	6.6	10.8	6.4
	30.0	8.1	6.1	8.4	6.3	9.0	6.3	9.5	6.6	10.0	6.5	10.6	6.4
	32.5	8.0	6.1	8.3	6.3	8.9	6.2	9.4	6.6	9.9	6.4	10.4	6.3
	35.0	8.0	6.0	8.2	6.2	8.8	6.2	9.3	6.5	9.8	6.4	10.3	6.3
	37.5	7.9	6.0	8.1	6.2	8.6	6.1	9.1	6.5	9.6	6.3	10.1	6.2
	40.0	7.8	6.0	8.1	6.2	8.5	6.1	9.0	6.4	9.5	6.3	10.0	6.2
	43.0	7.7	5.9	8.0	6.1	8.4	6.0	8.9	6.3	9.3	6.2	9.8	6.1

**PEFY-P-  
VML-A/VMH-A**

## Cooling Capacity (In combination with PURY-P400-500YMF-C)

**PEFY-P-VML-A,VMH-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB		
°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC
100	20.0	10.3	8.4	10.8	8.7	11.6	8.7	12.5	9.3	13.2	9.2	14.0	9.0	
	22.5	10.3	8.4	10.8	8.7	11.5	8.7	12.3	9.2	13.0	9.1	13.8	8.9	
	25.0	10.2	8.3	10.7	8.7	11.4	8.6	12.1	9.2	12.8	9.0	13.6	8.9	
	27.5	10.1	8.3	10.6	8.6	11.3	8.6	12.0	9.1	12.7	9.0	13.4	8.8	
	30.0	10.1	8.3	10.5	8.6	11.2	8.5	11.8	9.0	12.5	8.9	13.2	8.7	
	32.5	10.0	8.2	10.3	8.5	11.0	8.5	11.7	9.0	12.3	8.8	13.0	8.7	
	35.0	9.9	8.2	10.2	8.5	10.9	8.4	11.5	8.9	12.1	8.8	12.8	8.6	
	37.5	9.8	8.1	10.1	8.4	10.8	8.3	11.4	8.9	12.0	8.7	12.6	8.5	
	40.0	9.7	8.1	10.0	8.4	10.6	8.3	11.2	8.8	11.8	8.6	12.4	8.5	
	43.0	9.6	8.1	9.9	8.3	10.5	8.2	11.0	8.7	11.6	8.6	12.2	8.4	
125	20.0	12.9	9.6	13.5	10.0	14.6	10.0	15.6	10.6	16.5	10.4	17.5	10.3	
	22.5	12.9	9.6	13.5	10.0	14.4	10.0	15.4	10.5	16.3	10.3	17.2	10.2	
	25.0	12.8	9.6	13.3	9.9	14.3	9.9	15.2	10.4	16.1	10.2	17.0	10.1	
	27.5	12.7	9.5	13.2	9.9	14.1	9.8	15.0	10.3	15.8	10.2	16.7	10.0	
	30.0	12.6	9.5	13.1	9.8	13.9	9.7	14.8	10.2	15.6	10.1	16.5	9.9	
	32.5	12.5	9.4	12.9	9.7	13.8	9.7	14.6	10.2	15.4	10.0	16.2	9.8	
	35.0	12.4	9.4	12.8	9.7	13.6	9.6	14.4	10.1	15.2	9.9	16.0	9.7	
	37.5	12.3	9.3	12.7	9.6	13.5	9.5	14.2	10.0	15.0	9.8	15.7	9.6	
	40.0	12.2	9.3	12.5	9.5	13.3	9.4	14.0	9.9	14.8	9.7	15.5	9.5	
	43.0	12.0	9.2	12.4	9.5	13.1	9.4	13.8	9.8	14.5	9.6	15.2	9.4	
140	20.0	14.7	11.0	15.4	11.4	16.6	11.4	17.8	12.1	18.8	11.9	20.0	11.7	
	22.5	14.7	11.0	15.4	11.4	16.5	11.4	17.6	12.0	18.6	11.8	19.7	11.6	
	25.0	14.6	10.9	15.2	11.3	16.3	11.3	17.4	11.9	18.3	11.7	19.4	11.5	
	27.5	14.5	10.9	15.1	11.3	16.1	11.2	17.1	11.8	18.1	11.6	19.1	11.4	
	30.0	14.4	10.8	14.9	11.2	15.9	11.1	16.9	11.7	17.8	11.5	18.8	11.3	
	32.5	14.3	10.8	14.8	11.1	15.7	11.0	16.7	11.6	17.6	11.4	18.6	11.2	
	35.0	14.1	10.7	14.6	11.1	15.6	11.0	16.5	11.5	17.4	11.3	18.3	11.1	
	37.5	14.0	10.6	14.5	11.0	15.4	10.9	16.2	11.4	17.1	11.2	18.0	11.0	
	40.0	13.9	10.6	14.3	10.9	15.2	10.8	16.0	11.3	16.9	11.1	17.7	10.9	
	43.0	13.8	10.5	14.2	10.8	15.0	10.7	15.8	11.2	16.6	11.0	17.4	10.8	
200	20.0	20.6	15.8	21.6	16.4	23.3	16.4	24.9	17.4	26.4	17.1	28.0	16.9	
	22.5	20.6	15.8	21.5	16.4	23.1	16.3	24.6	17.2	26.0	17.0	27.6	16.7	
	25.0	20.4	15.7	21.3	16.3	22.8	16.2	24.3	17.1	25.7	16.9	27.2	16.6	
	27.5	20.3	15.6	21.1	16.2	22.6	16.1	24.0	17.0	25.3	16.7	26.8	16.4	
	30.0	20.1	15.5	20.9	16.1	22.3	16.0	23.7	16.9	25.0	16.6	26.4	16.3	
	32.5	20.0	15.4	20.7	16.0	22.0	15.9	23.4	16.7	24.6	16.5	26.0	16.2	
	35.0	19.8	15.4	20.5	15.9	21.8	15.7	23.1	16.6	24.3	16.3	25.6	16.0	
	37.5	19.6	15.3	20.3	15.8	21.5	15.6	22.7	16.5	23.9	16.2	25.2	15.9	
	40.0	19.5	15.2	20.1	15.7	21.3	15.5	22.4	16.4	23.6	16.1	24.8	15.8	
	43.0	19.3	15.1	19.8	15.6	21.0	15.4	22.1	16.2	23.2	15.9	24.3	15.6	
250	20.0	25.8	19.6	27.0	20.4	29.1	20.4	31.1	21.6	33.0	21.3	34.9	20.9	
	22.5	25.8	19.6	26.9	20.4	28.9	20.3	30.8	21.4	32.5	21.1	34.4	20.8	
	25.0	25.6	19.5	26.7	20.2	28.5	20.1	30.4	21.3	32.1	20.9	34.0	20.6	
	27.5	25.4	19.4	26.4	20.1	28.2	20.0	30.0	21.1	31.7	20.8	33.5	20.4	
	30.0	25.1	19.3	26.1	20.0	27.9	19.9	29.6	20.9	31.2	20.6	33.0	20.2	
	32.5	24.9	19.2	25.9	19.9	27.6	19.7	29.2	20.8	30.8	20.4	32.5	20.1	
	35.0	24.7	19.1	25.6	19.7	27.2	19.6	28.8	20.6	30.4	20.3	32.0	19.9	
	37.5	24.5	19.0	25.4	19.6	26.9	19.4	28.4	20.5	29.9	20.1	31.5	19.7	
	40.0	24.3	18.9	25.1	19.5	26.6	19.3	28.0	20.3	29.5	20.0	31.0	19.6	
	43.0	24.1	18.8	24.8	19.4	26.2	19.1	27.6	20.1	29.0	19.8	30.4	19.4	

## 2-10.Heating Capacity (In combination with PURY-P400-500YMF-C)

**PEFY-P-VML-A,VMH-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0		20.0	
		SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
20	-15.0	1.6	1.5	1.5	1.5
	-10.0	1.8	1.8	1.7	1.7
	-5.0	2.0	2.0	2.0	1.9
	0.0	2.2	2.2	2.1	1.9
	2.5	2.4	2.3	2.1	1.9
	6.0	2.5	2.5	2.1	1.9
	7.5	2.6	2.5	2.1	1.9
	10.0	2.7	2.5	2.1	1.9
	12.5	2.9	2.5	2.1	1.9
	15.5	2.9	2.5	2.1	1.9
25	-15.0	2.0	2.0	1.9	1.9
	-10.0	2.3	2.2	2.2	2.2
	-5.0	2.6	2.5	2.5	2.5
	0.0	2.9	2.8	2.7	2.5
	2.5	3.0	3.0	2.7	2.5
	6.0	3.2	3.2	2.7	2.5
	7.5	3.3	3.2	2.7	2.5
	10.0	3.5	3.2	2.7	2.5
	12.5	3.7	3.2	2.7	2.5
	15.5	3.7	3.2	2.7	2.5
32	-15.0	2.5	2.5	2.4	2.4
	-10.0	2.8	2.8	2.8	2.7
	-5.0	3.2	3.2	3.1	3.1
	0.0	3.6	3.5	3.4	3.1
	2.5	3.8	3.7	3.4	3.1
	6.0	4.0	4.0	3.4	3.1
	7.5	4.2	4.0	3.4	3.1
	10.0	4.4	4.0	3.4	3.1
	12.5	4.6	4.0	3.4	3.1
	15.5	4.6	4.0	3.4	3.1
40	-15.0	3.1	3.1	3.0	3.0
	-10.0	3.6	3.5	3.5	3.4
	-5.0	4.0	4.0	3.9	3.9
	0.0	4.5	4.4	4.3	3.9
	2.5	4.7	4.7	4.3	3.9
	6.0	5.0	5.0	4.3	3.9
	7.5	5.2	5.0	4.3	3.9
	10.0	5.4	5.0	4.3	3.9
	12.5	5.7	5.0	4.3	3.9
	15.5	5.8	5.0	4.3	3.9
50	-15.0	3.9	3.9	3.8	3.7
	-10.0	4.5	4.4	4.3	4.3
	-5.0	5.0	5.0	4.9	4.9
	0.0	5.6	5.6	5.4	4.9
	2.5	5.9	5.9	5.4	4.9
	6.0	6.4	6.3	5.4	4.9
	7.5	6.6	6.3	5.4	4.9
	10.0	6.9	6.3	5.4	4.9
	12.5	7.2	6.3	5.4	4.9
	15.5	7.2	6.3	5.4	4.9
63	-15.0	5.0	4.9	4.8	4.7
	-10.0	5.7	5.6	5.5	5.4
	-5.0	6.4	6.3	6.2	6.2
	0.0	7.2	7.1	6.8	6.2
	2.5	7.5	7.5	6.8	6.2
	6.0	8.1	8.0	6.8	6.2
	7.5	8.3	8.0	6.8	6.2
	10.0	8.7	8.0	6.8	6.2
	12.5	9.1	8.0	6.8	6.2
	15.5	9.2	8.0	6.8	6.2
71	-15.0	5.6	5.5	5.4	5.3
	-10.0	6.4	6.3	6.2	6.1
	-5.0	7.2	7.1	7.0	6.9
	0.0	8.0	8.0	7.7	6.9
	2.5	8.5	8.4	7.7	6.9
	6.0	9.1	9.0	7.7	6.9
	7.5	9.4	9.0	7.7	6.9
	10.0	9.8	9.0	7.7	6.9
	12.5	10.3	9.0	7.7	6.9
	15.5	10.4	9.0	7.7	6.9
80	-15.0	6.2	6.1	6.0	5.9
	-10.0	7.1	7.0	6.9	6.8
	-5.0	8.0	7.9	7.8	7.7
	0.0	8.9	8.8	8.5	7.7
	2.5	9.4	9.3	8.5	7.7
	6.0	10.1	10.0	8.5	7.7
	7.5	10.4	10.0	8.5	7.7
	10.0	10.9	10.0	8.5	7.7
	12.5	11.4	10.0	8.5	7.7
	15.5	11.5	10.0	8.5	7.7

Unit size	Outdoor air temp.	Indoor air temp.: °CDB				
		SHC:Sensible heat Capacity(kW)				SHC(kW)
		15.0	20.0	25.0	27.0	
100	-15.0	7.8	7.7	7.5	7.4	
	-10.0	8.9	8.8	8.6	8.5	
	-5.0	10.0	9.9	9.8	9.6	
	0.0	11.2	11.0	10.6	9.6	
	2.5	11.8	11.6	10.6	9.6	
	6.0	12.6	12.5	10.6	9.6	
	7.5	13.0	12.5	10.6	9.6	
	10.0	13.6	12.5	10.6	9.6	
	12.5	14.3	12.5	10.6	9.6	
	15.5	14.4	12.5	10.6	9.6	
125	-15.0	10.0	9.8	9.6	9.5	
	-10.0	11.4	11.2	11.0	10.9	
	-5.0	12.8	12.6	12.5	12.3	
	0.0	14.3	14.1	13.6	12.3	
	2.5	15.1	14.9	13.6	12.3	
	6.0	16.2	16.0	13.6	12.3	
	7.5	16.6	16.0	13.6	12.3	
	10.0	17.4	16.0	13.6	12.3	
	12.5	18.3	16.0	13.6	12.3	
	15.5	18.4	16.0	13.6	12.3	
140	-15.0	11.2	11.0	10.9	10.7	
	-10.0	12.8	12.6	12.4	12.2	
	-5.0	14.4	14.2	14.1	13.9	
	0.0	16.1	15.9	15.3	13.9	
	2.5	17.0	16.8	15.3	13.9	
	6.0	18.2	18.0	15.3	13.9	
	7.5	18.7	18.0	15.3	13.9	
	10.0	19.6	18.0	15.3	13.9	
	12.5	20.5	18.0	15.3	13.9	
	15.5	20.7	18.0	15.3	13.9	
200	-15.0	15.6	15.3	15.1	14.8	
	-10.0	17.8	17.5	17.3	17.0	
	-5.0	20.0	19.8	19.5	19.3	
	0.0	22.3	22.1	21.3	19.3	
	2.5	23.5	23.3	21.3	19.3	
	6.0	25.2	25.0	21.3	19.3	
	7.5	26.0	25.0	21.3	19.3	
	10.0	27.2	25.0	21.3	19.3	
	12.5	28.5	25.0	21.3	19.3	
	15.5	28.8	25.0	21.3	19.3	
250	-15.0	19.6	19.3	19.0	18.7	
	-10.0	22.4	22.1	21.7	21.4	
	-5.0	25.2	24.9	24.6	24.3	
	0.0	28.2	27.8	26.8	24.3	
	2.5	29.7	29.4	26.8	24.3	
	6.0	31.8	31.5	26.8	24.3	
	7.5	32.8	31.5	26.8	24.3	
	10.0	34.3	31.5	26.8	24.3	
	12.5	35.9	31.5	26.8	24.3	
	15.5	36.2	31.5	26.8	24.3	

**PEFY-P-  
VML-A/VMH-A**

## 2-11.Cooling Capacity (In combination with PU(H)Y-200-250TM-C)

CA:Capacity(kcal/h)

SHC:Sensible heat Capacity(kcal/h)

### PEFY-P-VML-A,VMH-A

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.05°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
20	20.0	1870	1585	1939	1646	2077	1638	2180	1690	2215	1747	2353	1727	2491	1701
	22.5	1870	1585	1939	1646	2077	1638	2180	1690	2207	1745	2330	1719	2451	1688
	25.0	1864	1582	1926	1641	2050	1627	2150	1678	2171	1730	2292	1705	2411	1675
	27.5	1832	1568	1895	1627	2017	1613	2112	1663	2134	1716	2254	1691	2372	1662
	30.0	1801	1553	1864	1613	1984	1599	2075	1648	2097	1702	2216	1678	2332	1649
	32.5	1769	1539	1832	1599	1950	1586	2037	1634	2060	1688	2178	1664	2293	1636
	35.0	1738	1525	1801	1585	1917	1572	2000	1619	2023	1674	2140	1651	2253	1623
	37.5	1706	1510	1770	1571	1884	1558	1963	1605	1986	1660	2101	1638	2213	1610
	40.0	1675	1496	1738	1558	1851	1545	1925	1590	1950	1646	2063	1624	2174	1598
	43.0	1637	1479	1700	1541	1811	1529	1880	1573	1905	1629	2018	1609	2126	1582
25	20.0	2337	1855	2424	1921	2596	1912	2725	1968	2768	2030	2941	2005	3113	1973
	22.5	2337	1855	2424	1921	2596	1912	2725	1968	2759	2026	2912	1994	3064	1957
	25.0	2330	1851	2408	1914	2563	1898	2687	1952	2713	2007	2865	1977	3014	1940
	27.5	2290	1832	2369	1896	2521	1880	2640	1933	2667	1989	2817	1959	2965	1923
	30.0	2251	1814	2330	1878	2480	1862	2593	1914	2621	1971	2770	1941	2915	1906
	32.5	2212	1795	2290	1860	2438	1845	2547	1895	2575	1952	2722	1924	2866	1889
	35.0	2172	1777	2251	1842	2397	1827	2500	1876	2529	1934	2674	1907	2816	1873
	37.5	2133	1758	2212	1825	2355	1810	2453	1858	2483	1916	2627	1889	2767	1856
	40.0	2094	1740	2173	1807	2313	1792	2407	1839	2437	1898	2579	1872	2717	1839
	43.0	2046	1718	2126	1786	2264	1771	2350	1817	2382	1877	2522	1851	2658	1820
32	20.0	2945	2278	3054	2357	3271	2346	3434	2411	3488	2484	3706	2454	3923	2414
	22.5	2945	2278	3054	2357	3271	2346	3434	2411	3477	2479	3670	2440	3860	2393
	25.0	2935	2273	3034	2347	3229	2328	3385	2391	3419	2456	3610	2417	3798	2371
	27.5	2886	2249	2985	2324	3177	2305	3327	2367	3361	2432	3550	2395	3736	2349
	30.0	2836	2225	2935	2301	3124	2282	3268	2342	3303	2408	3490	2372	3673	2328
	32.5	2787	2201	2886	2278	3072	2260	3209	2318	3245	2385	3430	2350	3611	2306
	35.0	2737	2178	2836	2255	3020	2237	3150	2294	3187	2362	3370	2327	3548	2285
	37.5	2687	2154	2787	2233	2967	2214	3091	2270	3129	2339	3310	2305	3486	2264
	40.0	2638	2131	2738	2210	2915	2192	3032	2246	3071	2316	3250	2283	3424	2242
	43.0	2578	2103	2678	2183	2852	2165	2962	2218	3001	2288	3178	2257	3349	2217
40	20.0	3740	2831	3878	2926	4154	2914	4361	2992	4430	3078	4705	3041	4981	2992
	22.5	3740	2831	3878	2926	4154	2914	4361	2992	4415	3072	4660	3023	4902	2964
	25.0	3727	2825	3853	2914	4100	2890	4299	2965	4341	3041	4584	2994	4823	2936
	27.5	3664	2794	3790	2884	4034	2861	4224	2934	4268	3011	4507	2964	4744	2908
	30.0	3601	2763	3727	2854	3967	2831	4150	2903	4194	2981	4431	2935	4664	2880
	32.5	3538	2733	3664	2825	3901	2802	4075	2871	4120	2950	4355	2906	4585	2852
	35.0	3476	2702	3602	2796	3834	2773	4000	2840	4047	2920	4279	2878	4506	2824
	37.5	3413	2672	3539	2766	3768	2744	3925	2809	3973	2890	4203	2849	4427	2797
	40.0	3350	2642	3476	2737	3701	2715	3850	2779	3899	2861	4127	2821	4347	2770
	43.0	3274	2606	3401	2702	3622	2681	3761	2742	3811	2825	4035	2787	4252	2737
50	20.0	4675	3335	4847	3436	5192	3425	5451	3504	5537	3594	5882	3550	6227	3491
	22.5	4675	3335	4847	3436	5192	3425	5451	3504	5519	3586	5825	3526	6128	3453
	25.0	4659	3326	4816	3420	5126	3394	5374	3470	5426	3545	5729	3487	6028	3415
	27.5	4580	3286	4737	3380	5042	3354	5280	3428	5334	3505	5634	3448	5929	3378
	30.0	4502	3245	4659	3341	4959	3315	5187	3386	5242	3464	5539	3409	5830	3341
	32.5	4423	3205	4581	3302	4876	3276	5093	3344	5150	3424	5444	3371	5731	3304
	35.0	4344	3164	4502	3263	4793	3238	5000	3303	5058	3384	5349	3333	5632	3267
	37.5	4266	3124	4424	3224	4710	3200	4907	3263	4966	3344	5254	3295	5533	3230
	40.0	4187	3085	4345	3186	4627	3161	4813	3222	4874	3305	5159	3257	5434	3194
	43.0	4093	3037	4251	3140	4527	3116	4701	3174	4764	3258	5044	3212	5315	3151
63	20.0	5890	4355	6108	4496	6542	4480	6868	4593	6977	4721	7411	4662	7846	4586
	22.5	5890	4355	6108	4496	6542	4480	6868	4593	6953	4711	7339	4634	7721	4541
	25.0	5871	4346	6068	4477	6458	4441	6771	4551	6837	4661	7219	4587	7596	4495
	27.5	5771	4296	5969	4429	6354	4394	6653	4501	6721	4612	7099	4540	7471	4450
	30.0	5672	4247	5870	4382	6249	4347	6535	4450	6605	4563	6979	4493	7346	4405
	32.5	5573	4198	5772	4334	6144	4300	6418	4400	6489	4515	6859	4446	7221	4361
	35.0	5474	4149	5673	4287	6039	4253	6300	4350	6373	4467	6740	4400	7097	4316
	37.5	5375	4100	5574	4240	5935	4206	6182	4300	6257	4419	6620	4354	6972	4272
	40.0	5276	4052	5475	4193	5830	4160	6065	4251	6141	4371	6500	4308	6847	4228
	43.0	5157	3994	5357	4138	5704	4105	5923	4192	6002	4314	6356	4254	6697	4176
71	20.0	6638	4869	6883	5024	7373	5006	7740	5130	7862	5271	8352	5206	8842	5121
	22.5	6638	4869	6883	5024	7373	5006	7740	5130	7836	5260	8271	5173	8701	5069
	25.0	6616	4858	6839	5002	7278	4963	7631	5083	7706	5203	8136	5120	8560	5017
	27.5	6504	4801	6727	4948	7160	4909	7498	5026	7575	5148	8001	5066	8420	4966
	30.0	6393	4745	6616	4894	7042	4855	7365	4968	7444	5092	7866	5013	8279	4915
	32.5	6281	4690	6504	4840	6924	4802	7233	4911	7313	5037	7730	4960	8138	4864
	35.0	6169	4634	6393	4786	6806	4749	7100	4855	7183	4982	7595	4908	7998	4814
	37.5	6057	4579												

**Cooling Capacity (In combination with PU(H)Y-200-250TM-C)****PEFY-P-VML-A, VMH-A**

CA:Capacity(kcal/h)

SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.05°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
80	20.0	7480	5512	7756	5689	8307	5668	8721	5812	8859	5971	9411	5898	9963	5801
	22.5	7480	5512	7756	5689	8307	5668	8721	5812	8830	5959	9319	5861	9804	5743
	25.0	7455	5499	7705	5665	8201	5620	8598	5758	8682	5896	9167	5801	9646	5686
	27.5	7329	5436	7580	5604	8068	5559	8449	5693	8535	5833	9015	5741	9487	5628
	30.0	7203	5374	7454	5543	7935	5499	8299	5629	8388	5771	8863	5682	9329	5571
	32.5	7077	5311	7329	5483	7802	5439	8150	5565	8240	5709	8710	5622	9170	5514
	35.0	6951	5249	7204	5423	7669	5380	8000	5501	8093	5647	8558	5563	9012	5457
	37.5	6825	5187	7078	5363	7536	5321	7850	5438	7946	5586	8406	5505	8853	5401
	40.0	6699	5126	6953	5303	7403	5262	7701	5375	7798	5525	8254	5447	8695	5345
	43.0	6548	5052	6802	5232	7243	5191	7522	5300	7622	5453	8071	5377	8504	5279
100	20.0	9350	7424	9695	7690	10384	7655	10901	7877	11074	8123	11764	8025	12453	7901
	22.5	9350	7424	9695	7690	10384	7655	10901	7877	11037	8109	11649	7983	12255	7833
	25.0	9318	7409	9632	7661	10251	7598	10748	7814	10853	8035	11459	7912	12057	7766
	27.5	9161	7335	9475	7589	10085	7527	10561	7738	10669	7961	11269	7842	11859	7698
	30.0	9004	7261	9318	7518	9919	7456	10374	7662	10485	7888	11078	7772	11661	7631
	32.5	8846	7187	9161	7446	9752	7385	10187	7587	10301	7815	10888	7702	11463	7564
	35.0	8689	7113	9004	7375	9586	7315	10000	7512	10116	7742	10698	7633	11265	7497
	37.5	8531	7040	8848	7304	9420	7245	9813	7437	9932	7670	10507	7564	11066	7431
	40.0	8374	6967	8691	7234	9254	7175	9626	7363	9748	7598	10317	7495	10868	7365
	43.0	8185	6880	8502	7150	9054	7092	9402	7274	9527	7512	10089	7413	10631	7286
125	20.0	11687	8577	12118	8850	12980	8819	13627	9037	13842	9286	14704	9171	15567	9021
	22.5	11687	8577	12118	8850	12980	8819	13627	9037	13796	9266	14562	9114	15319	8930
	25.0	11648	8557	12040	8812	12814	8742	13435	8955	13566	9167	14324	9019	15071	8839
	27.5	11451	8458	11844	8716	12606	8648	13201	8854	13336	9069	14086	8925	14824	8749
	30.0	11254	8359	11648	8621	12398	8553	12967	8753	13106	8971	13848	8832	14576	8659
	32.5	11058	8262	11452	8526	12191	8459	12734	8652	12876	8874	13610	8739	14328	8570
	35.0	10861	8164	11255	8432	11983	8366	12500	8553	12645	8777	13372	8646	14081	8481
	37.5	10664	8067	11059	8338	11775	8273	12266	8453	12415	8681	13134	8554	13833	8393
	40.0	10468	7971	10863	8245	11567	8180	12033	8355	12185	8586	12896	8463	13585	8305
	43.0	10232	7856	10628	8134	11318	8070	11752	8237	11909	8472	12611	8354	13288	8200
140	20.0	13090	9671	13572	9983	14538	9945	15262	10198	15503	10481	16469	10351	17434	10181
	22.5	13090	9671	13572	9983	14538	9945	15262	10198	15452	10459	16309	10287	17157	10080
	25.0	13046	9648	13485	9940	14352	9861	15047	10105	15194	10349	16043	10182	16880	9979
	27.5	12825	9538	13265	9834	14119	9755	14785	9992	14936	10239	15776	10077	16602	9878
	30.0	12605	9429	13045	9728	13886	9650	14523	9879	14679	10131	15510	9973	16325	9779
	32.5	12385	9320	12826	9622	13653	9546	14262	9768	14421	10023	15243	9870	16048	9680
	35.0	12164	9211	12606	9517	13421	9442	14000	9657	14163	9915	14977	9767	15770	9581
	37.5	11944	9103	12387	9413	13188	9338	13738	9546	13905	9809	14710	9665	15493	9483
	40.0	11724	8996	12167	9309	12955	9235	13477	9437	13647	9702	14444	9563	15216	9385
	43.0	11459	8868	11903	9185	12676	9112	13163	9306	13338	9576	14124	9442	14883	9269
200	20.0	18700	14035	19389	14501	20768	14443	21803	14822	22148	15246	23527	15057	24906	14813
	22.5	18700	14035	19389	14501	20768	14443	21803	14822	22074	15215	23299	14968	24510	14670
	25.0	18637	14004	19264	14441	20502	14323	21495	14690	21706	15060	22918	14820	24114	14528
	27.5	18322	13849	18950	14291	20170	14175	21121	14531	21338	14907	22537	14673	23718	14387
	30.0	18007	13695	18636	14141	19837	14027	20748	14373	20969	14754	22157	14527	23321	14247
	32.5	17692	13541	18322	13993	19505	13880	20374	14216	20601	14602	21776	14381	22925	14107
	35.0	17378	13388	18009	13845	19172	13733	20000	14060	20233	14450	21395	14236	22529	13969
	37.5	17063	13236	17695	13698	18840	13587	19626	13904	19864	14300	21015	14092	22133	13830
	40.0	16748	13084	17381	13551	18507	13442	19252	13750	19496	14150	20634	13949	21737	13693
	43.0	16371	12903	17005	13376	18108	13269	18804	13565	19054	13972	20177	13778	21261	13529
250	20.0	23374	17455	24236	18030	25961	17958	27254	18425	27685	18947	29409	18712	31133	18408
	22.5	23374	17455	24236	18030	25961	17958	27254	18425	27593	18908	29123	18600	30638	18228
	25.0	23296	17416	24080	17954	25628	17809	26869	18260	27132	18714	28647	18414	30142	18050
	27.5	22902	17221	23687	17766	25212	17622	26402	18060	26672	18521	28172	18230	29647	17873
	30.0	22509	17027	23295	17578	24797	17436	25935	17862	26212	18329	27696	18046	29152	17697
	32.5	22116	16834	22903	17392	24381	17251	25467	17664	25751	18138	27220	17863	28657	17522
	35.0	21722	16642	22511	17206	23966	17067	25000	17468	25291	17948	26744	17681	28161	17347
	37.5	21329	16451	22119	17021	23550	16885	24533	17273	24831	17759	26268	17500	27666	17174
	40.0	20935	16261	21727	16837	23134	16702	24065	17079	24370	17571	25793	17320	27171	17001
	43.0	20463	16034	21256	16618	22635	16485	23505	16847	23818	17347	25222	17106	26576	16796

**PEFY-P-**  
**VML-A/VMH-A**

## 2-12.Heating Capacity (In combination with PUHY-200-250TM-C)

**PEFY-P-VML-A,VMH-A**

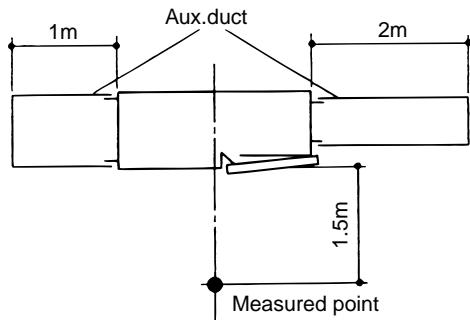
Unit size	Outdoor air temp. °CWB	Indoor air temp.: °CDB			
		15	21	25	27
		SHC	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051

Unit size	Outdoor air temp. °CWB	Indoor air temp.: °CDB			
		15	21	25	27
		SHC	SHC	SHC	SHC
71	-15.0	5530	5447	5365	5332
	-10.0	6309	6227	6144	5691
	-5.0	7089	7006	6433	5691
	0.0	7868	7786	6433	5691
	2.5	8258	8000	6433	5691
	6.0	8330	8000	6433	5691
	7.5	8680	8000	6433	5691
	10.0	9264	8000	6433	5691
	12.5	9847	8000	6433	5691
	15.5	9979	8000	6433	5691
80	-15.0	6221	6128	6036	5998
	-10.0	7098	7005	6912	6402
	-5.0	7975	7882	7237	6402
	0.0	8852	8759	7237	6402
	2.5	9290	9000	7237	6402
	6.0	9371	9000	7237	6402
	7.5	9765	9000	7237	6402
	10.0	10421	9000	7237	6402
	12.5	11078	9000	7237	6402
	15.5	11227	9000	7237	6402
100	-15.0	7742	7626	7511	7465
	-10.0	8833	8718	8602	7967
	-5.0	9924	9809	9006	7967
	0.0	11015	10900	9006	7967
	2.5	11561	11200	9006	7967
	6.0	11662	11200	9006	7967
	7.5	12152	11200	9006	7967
	10.0	12969	11200	9006	7967
	12.5	13786	11200	9006	7967
	15.5	13971	11200	9006	7967
125	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959
	-5.0	12405	12261	11258	9959
	0.0	13769	13625	11258	9959
	2.5	14451	14000	11258	9959
	6.0	14577	14000	11258	9959
	7.5	15190	14000	11258	9959
	10.0	16211	14000	11258	9959
	12.5	17232	14000	11258	9959
	15.5	17464	14000	11258	9959
140	-15.0	11060	10895	10730	10664
	-10.0	12619	12454	12289	11381
	-5.0	14177	14012	12866	11381
	0.0	15736	15571	12866	11381
	2.5	16515	16000	12866	11381
	6.0	16660	16000	12866	11381
	7.5	17360	16000	12866	11381
	10.0	18527	16000	12866	11381
	12.5	19694	16000	12866	11381
	15.5	19959	16000	12866	11381
200	-15.0	15484	15253	15022	14929
	-10.0	17666	17435	17204	15934
	-5.0	19848	19617	18012	15934
	0.0	22031	21800	18012	15934
	2.5	23122	22400	18012	15934
	6.0	23324	22400	18012	15934
	7.5	24304	22400	18012	15934
	10.0	25938	22400	18012	15934
	12.5	27572	22400	18012	15934
	15.5	27942	22400	18012	15934
250	-15.0	19355	19066	18777	18662
	-10.0	22082	21794	21505	19918
	-5.0	24810	24522	22515	19918
	0.0	27538	27249	22515	19918
	2.5	28902	28000	22515	19918
	6.0	29155	28000	22515	19918
	7.5	30380	28000	22515	19918
	10.0	32422	28000	22515	19918
	12.5	34465	28000	22515	19918
	15.5	34928	28000	22515	19918

### 3. Sound Levels

#### 3-1. Noise level(VML-A)

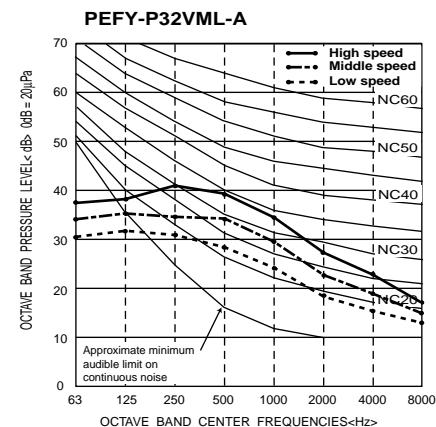
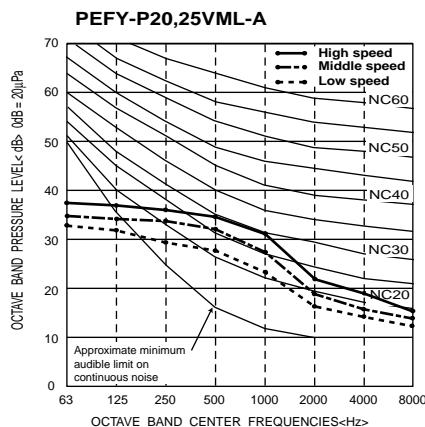
① Rear inlet model1



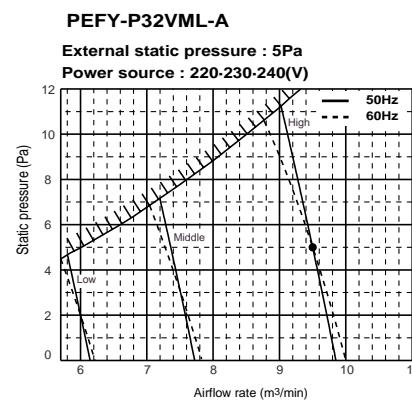
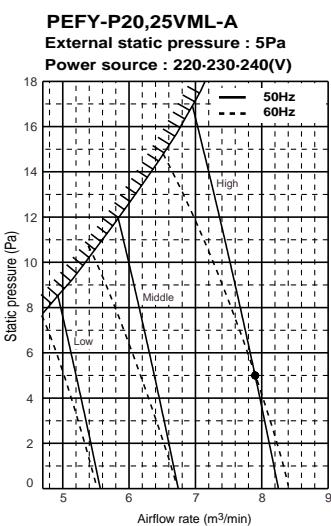
Noise level at anechoic room (Low-Mid-High) Unit : dB(A)	
Model	Noise level (A weighted)
PEFY-P20VML-A	29-33-36
PEFY-P25VML-A	
PEFY-P32VML-A	30-35-40

PEFY-P-  
VML-A/VMH-A

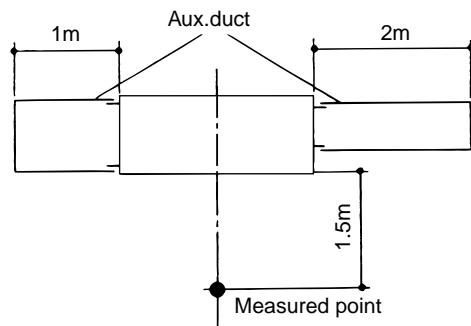
#### 3-2. NC curves(VML-A)



#### 3-3. Fan characteristics curves(VML-A)



### 3-4. Noise level(VMH-A)

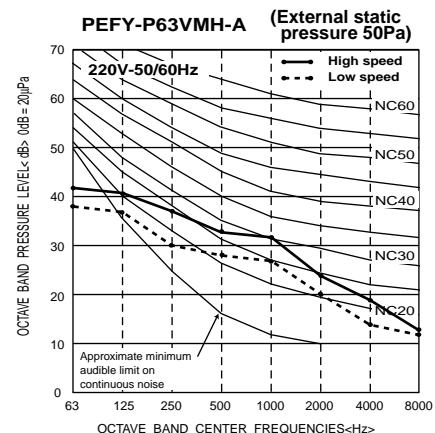
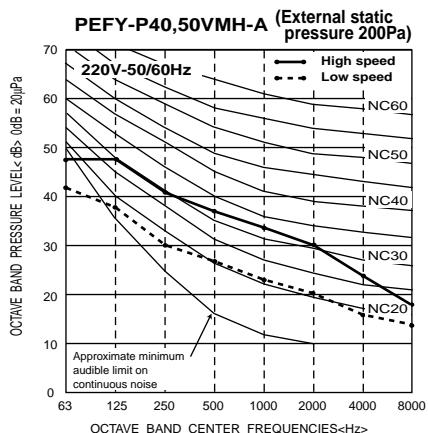
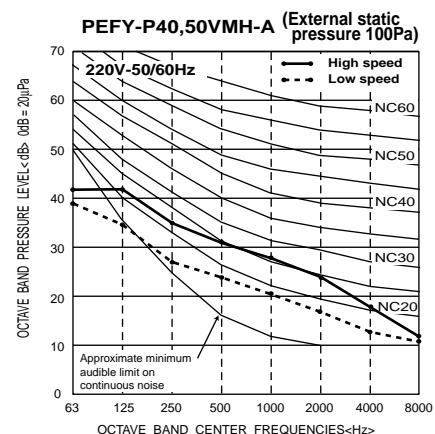
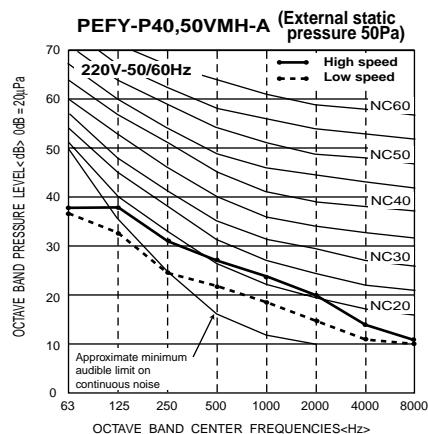


- ※ PEFY-P40~140VMH-A  
Low : 50Pa (at 220V) / 100Pa (at 230, 240V)  
Mid : 100Pa (at 220V) / 150Pa (at 230, 240V)  
High : 200Pa (at 220, 230, 240V)
- ※ PEFY-P200, 250VMH-A  
Low : 110Pa (at 380V) / 130Pa (at 400, 415V)  
High : 220Pa (at 380V) / 260Pa (at 400, 415V)

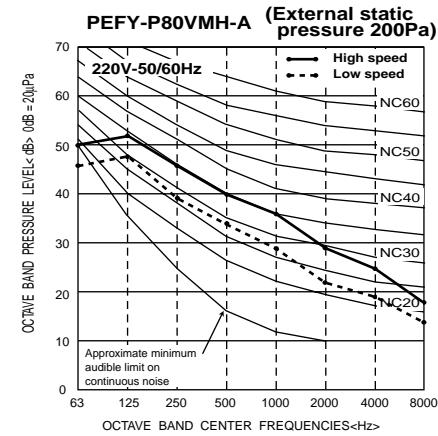
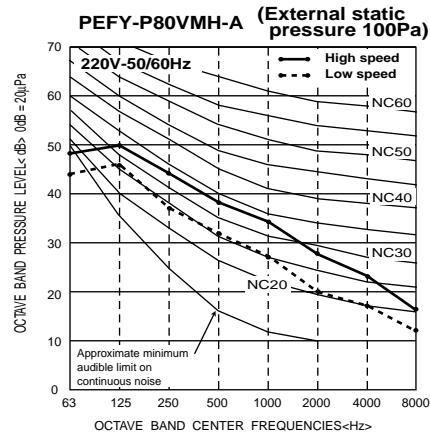
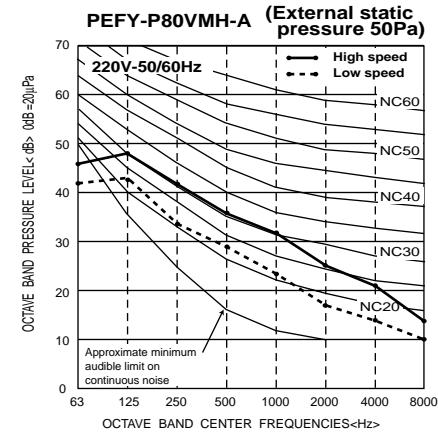
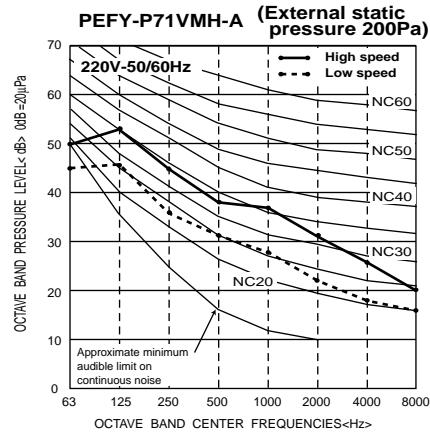
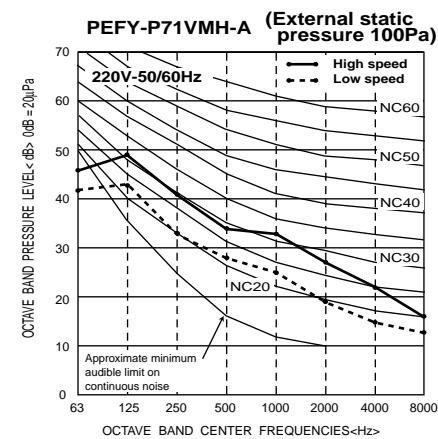
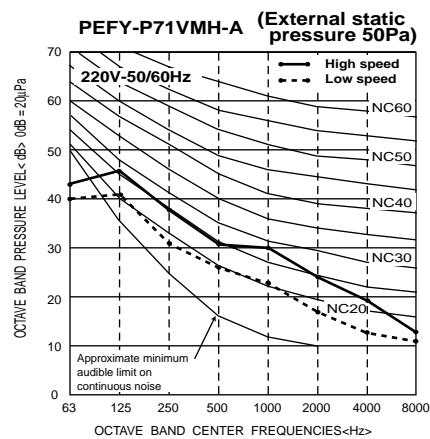
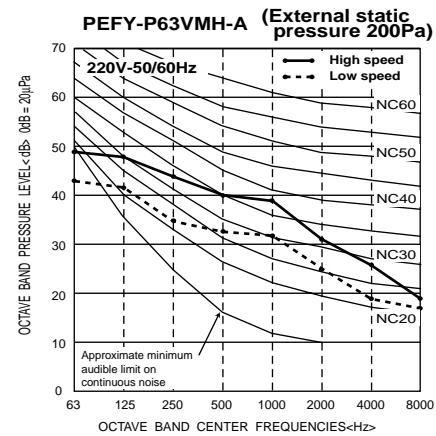
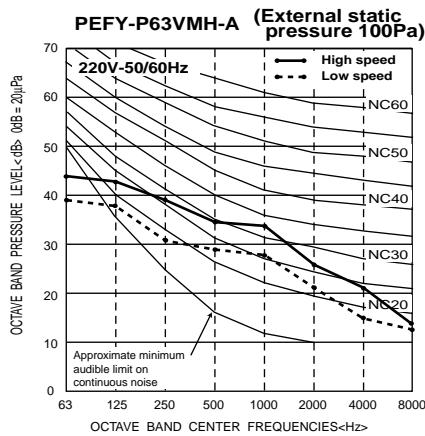
Noise level at anechoic room (Low-High) Unit : dB(A)

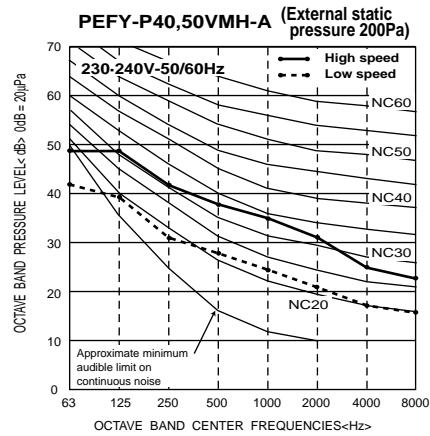
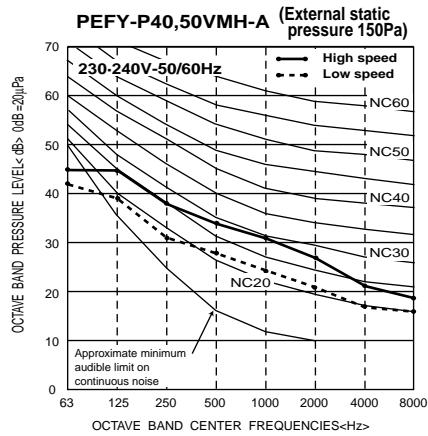
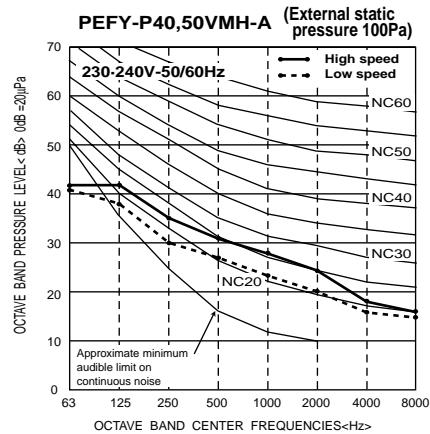
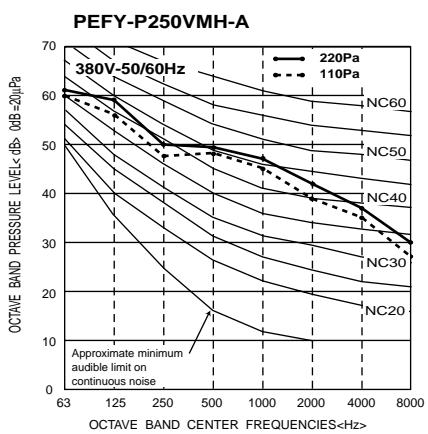
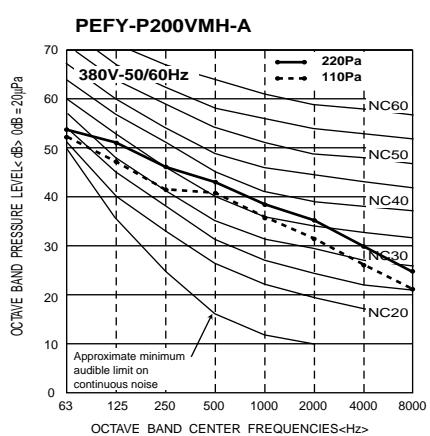
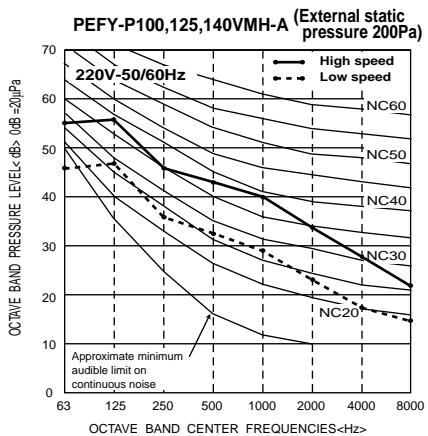
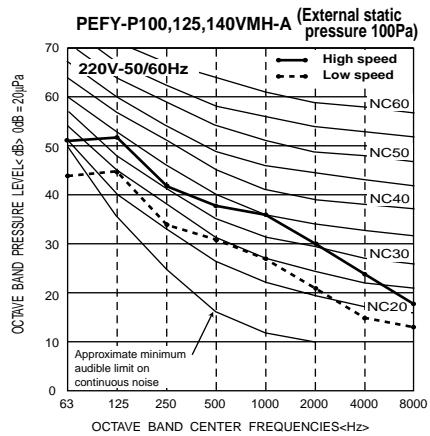
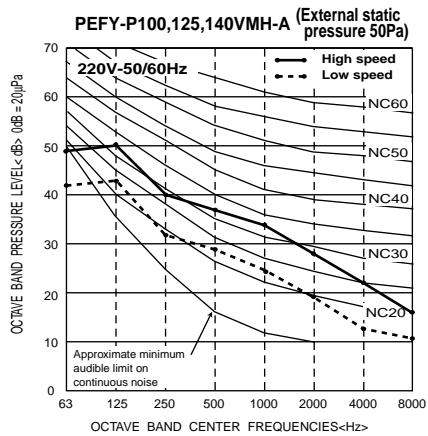
Model	External static pressure*			
	Low	Mid	High	
PEFY-P40, 50 VMH-A	220V	25-30	27-34	30-40
	230, 240V	30-34	31-37	31-41
PEFY- P63VMH-A	220V	31-36	32-38	36-43
	230, 240V	35-39	36-41	38-44
PEFY- P71VMH-A	220V	30-36	32-39	35-43
	230, 240V	34-39	35-41	37-44
PEFY- P80VMH-A	220V	32-39	35-41	37-43
	230, 240V	37-41	38-43	39-45
PEFY-P100, 125, 140VMH-A	220V	32-40	34-42	36-46
	230, 240V	36-42	38-44	38-47
PEFY- P200VMH-A	380V	42	—	45
	400, 415V	44	—	47
PEFY- P250VMH-A	380V	50	—	52
	400, 415V	52	—	54

### 3-5. NC curves(VMH-A)

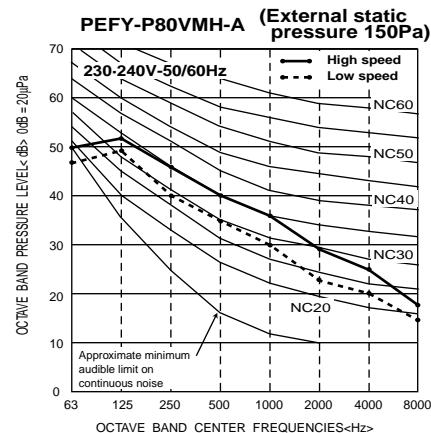
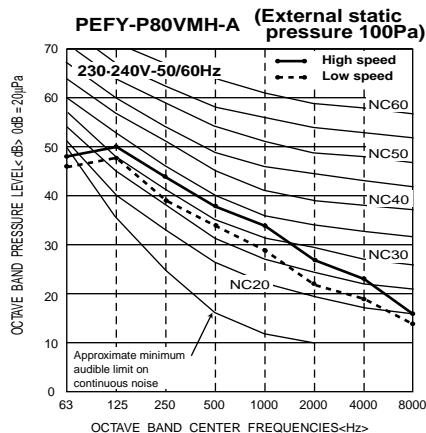
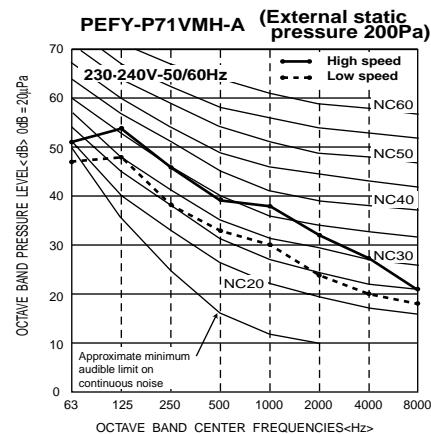
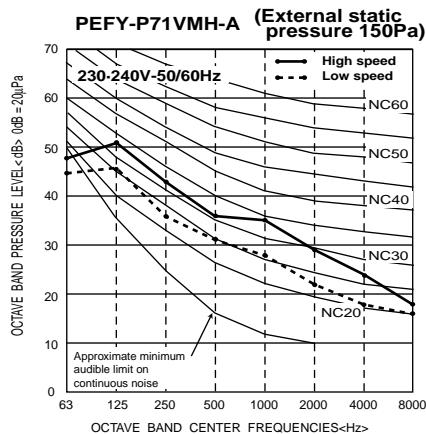
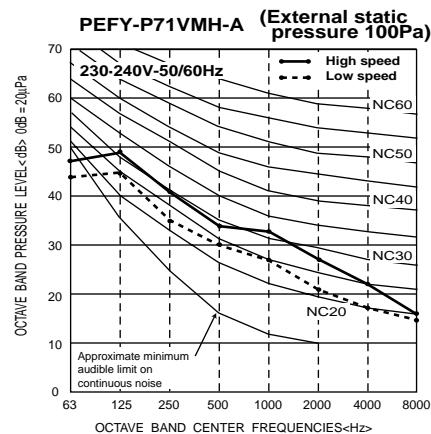
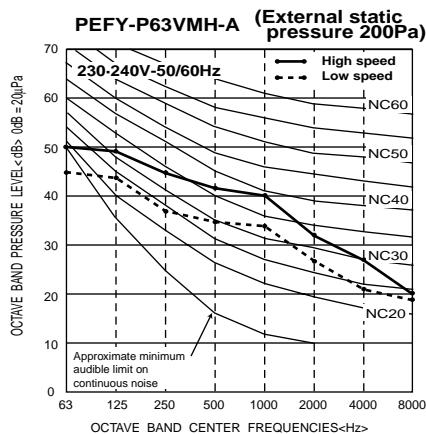
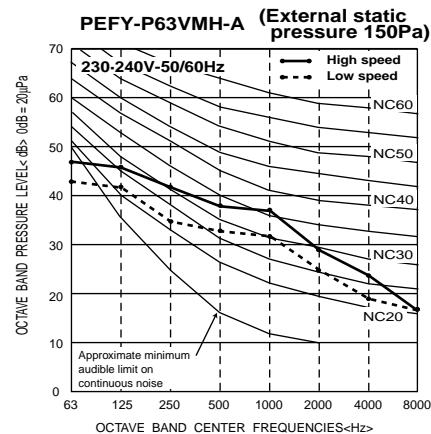
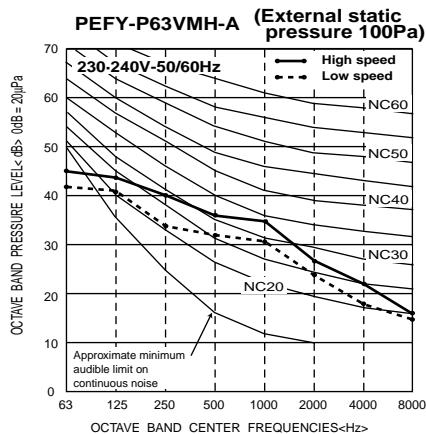


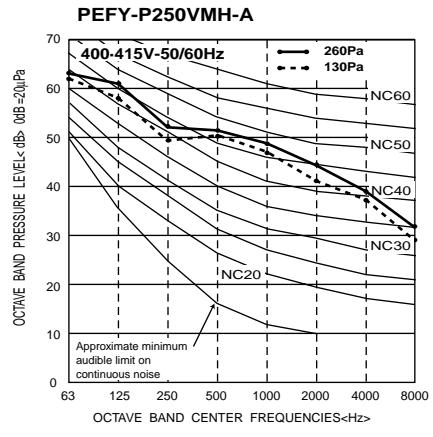
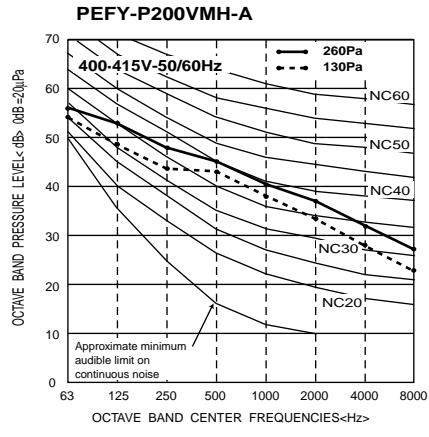
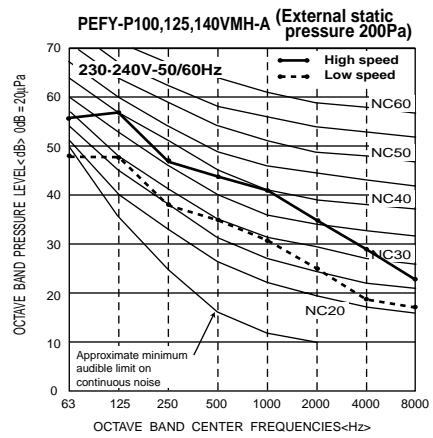
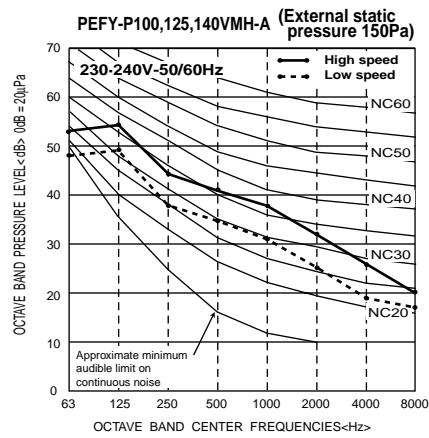
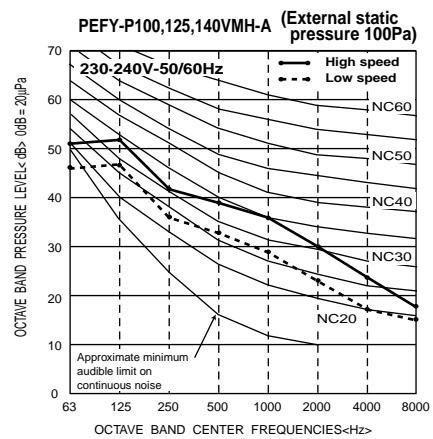
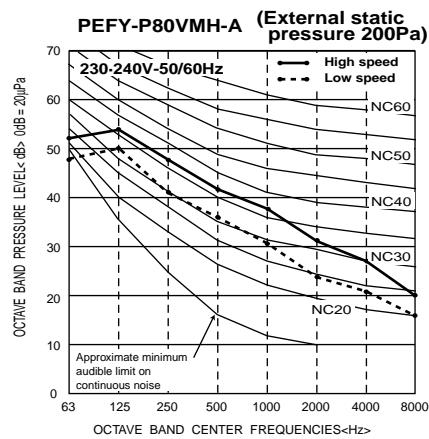
**PEFY-P-  
VML-A/VMH-A**





**PEFY-P-  
VML-A/VMH-A**

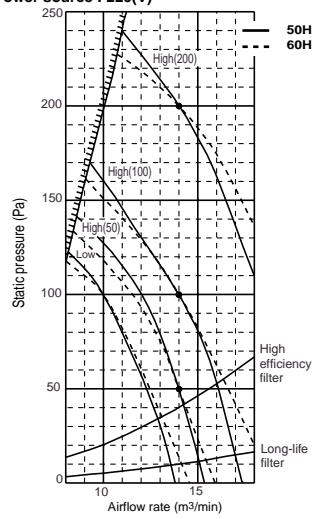




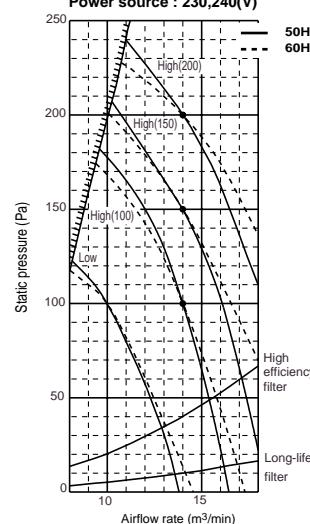
### 3-6. Fan characteristics curves(VMH-A)

**PEFY-P40,50VMH-A**

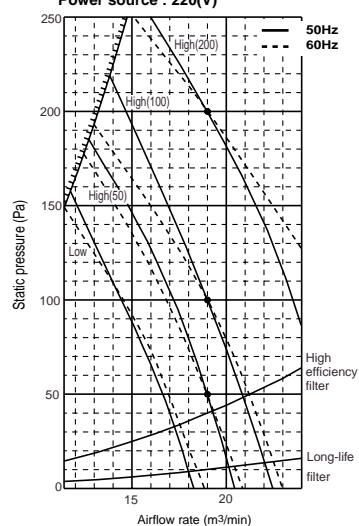
Suction : Back inlet  
External static pressure : 50,100,200Pa  
Power source : 220(V)

**PEFY-P40,50VMH-A**

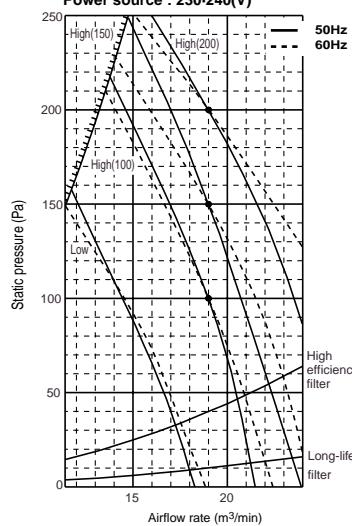
Suction : Back inlet  
External static pressure : 100,150,200Pa  
Power source : 230,240(V)

**PEFY-P63VMH-A**

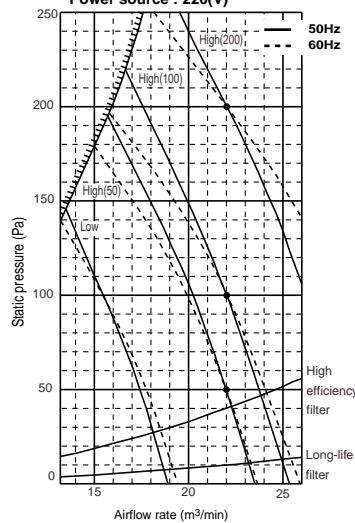
Suction : Back inlet  
External static pressure : 50,100,200Pa  
Power source : 220(V)

**PEFY-P63VMH-A**

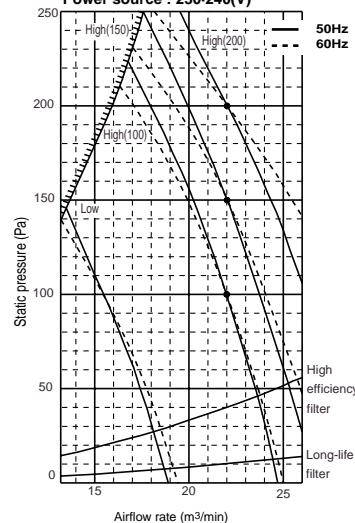
Suction : Back inlet  
External static pressure : 100,150,200Pa  
Power source : 230-240(V)

**PEFY-P71VMH-A**

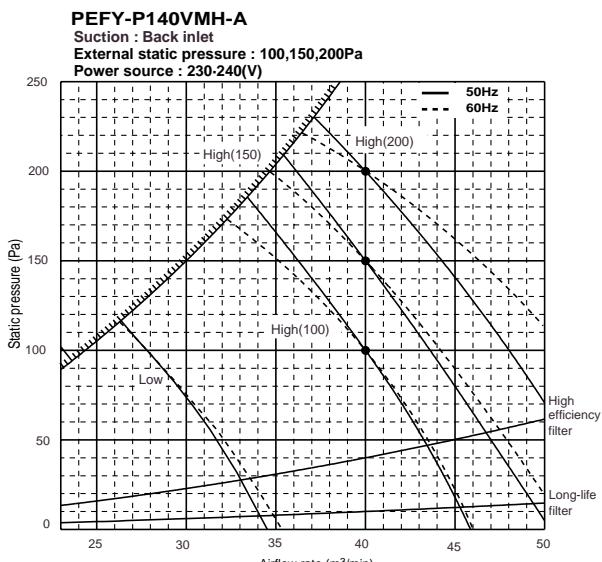
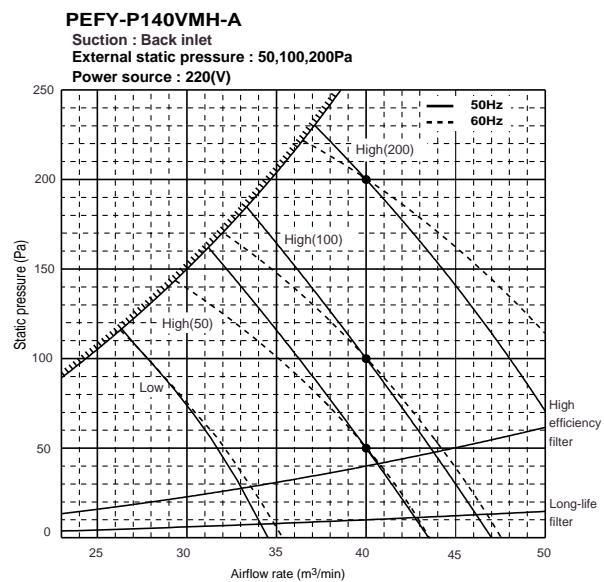
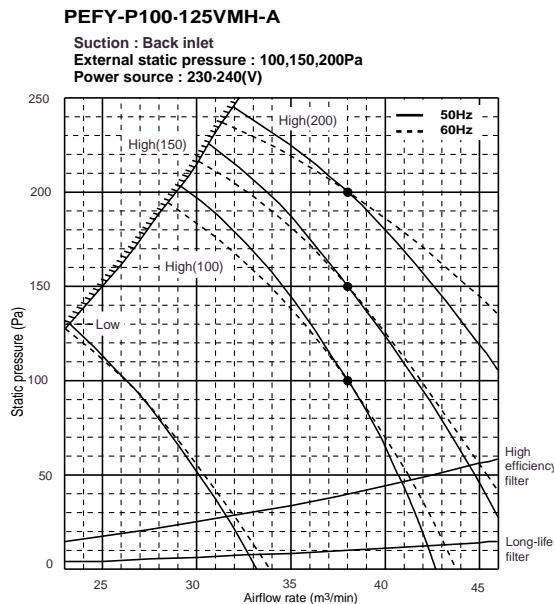
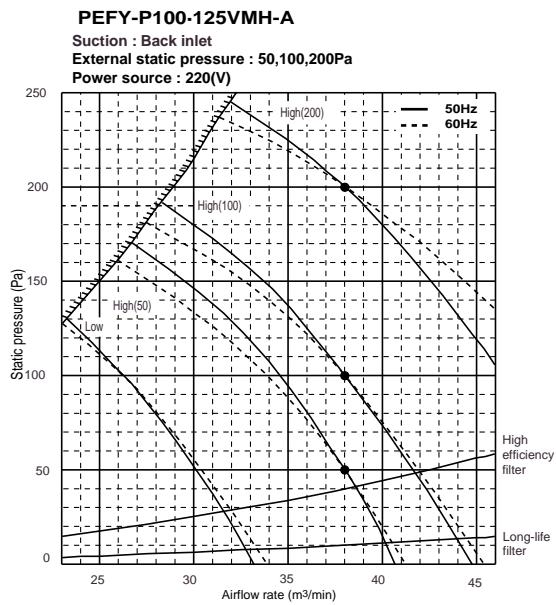
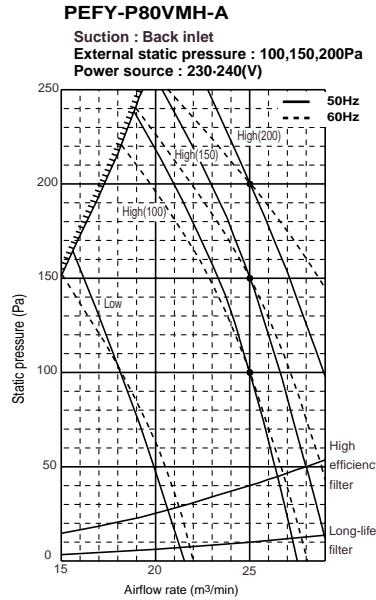
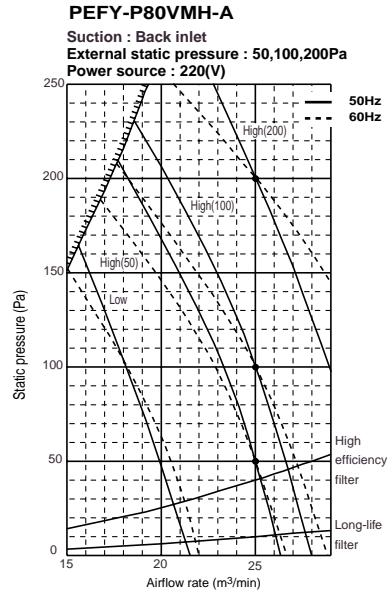
Suction : Back inlet  
External static pressure : 50,100,200Pa  
Power source : 220(V)

**PEFY-P71VMH-A**

Suction : Back inlet  
External static pressure : 100,150,200Pa  
Power source : 230-240(V)



**PEFY-P-  
VML-A/VMH-A**

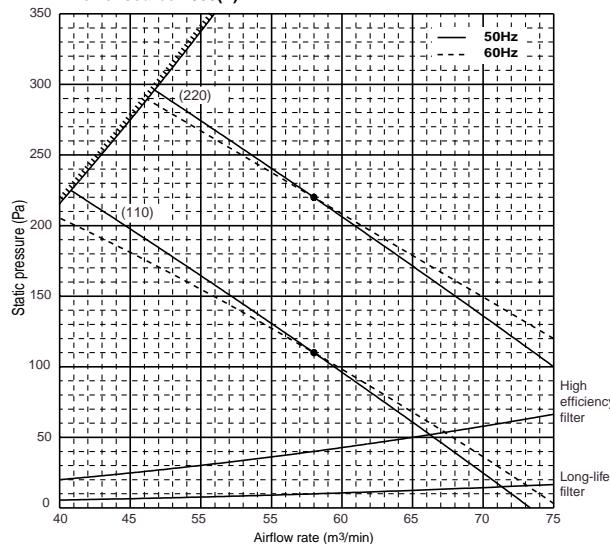


**PEFY-P200VMH-A**

Suction : Back inlet

External static pressure : 110,220Pa

Power source : 380(V)

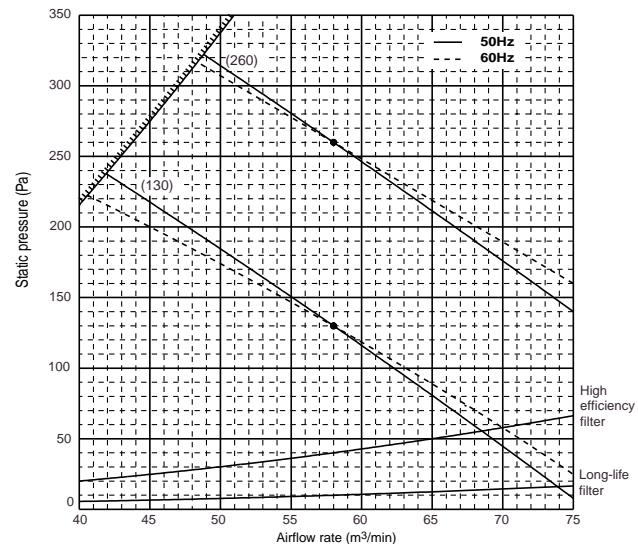


**PEFY-P200VMH-A**

Suction : Back inlet

External static pressure : 130,260Pa

Power source : 400-415(V)

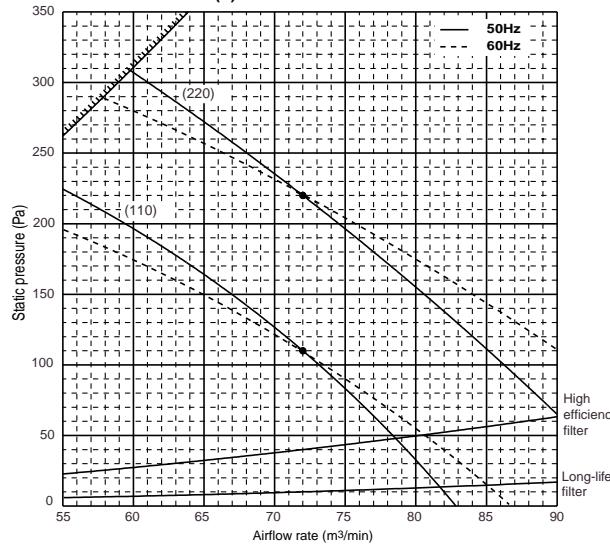


**PEFY-P250VMH-A**

Suction : Back inlet

External static pressure : 110,220Pa

Power source : 380(V)

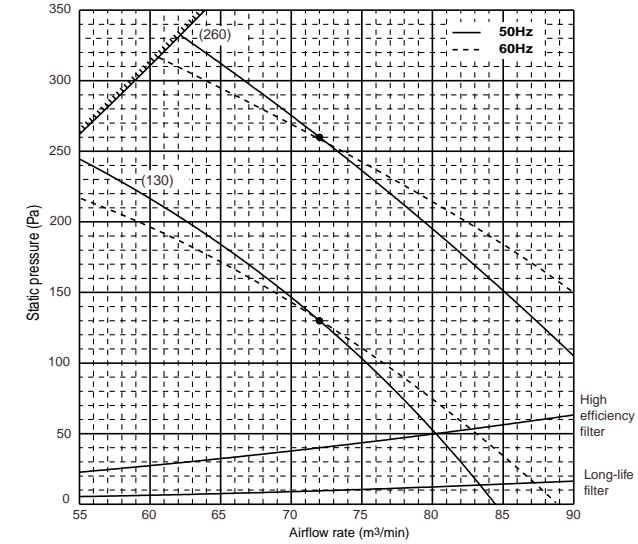


**PEFY-P250VMH-A**

Suction : Back inlet

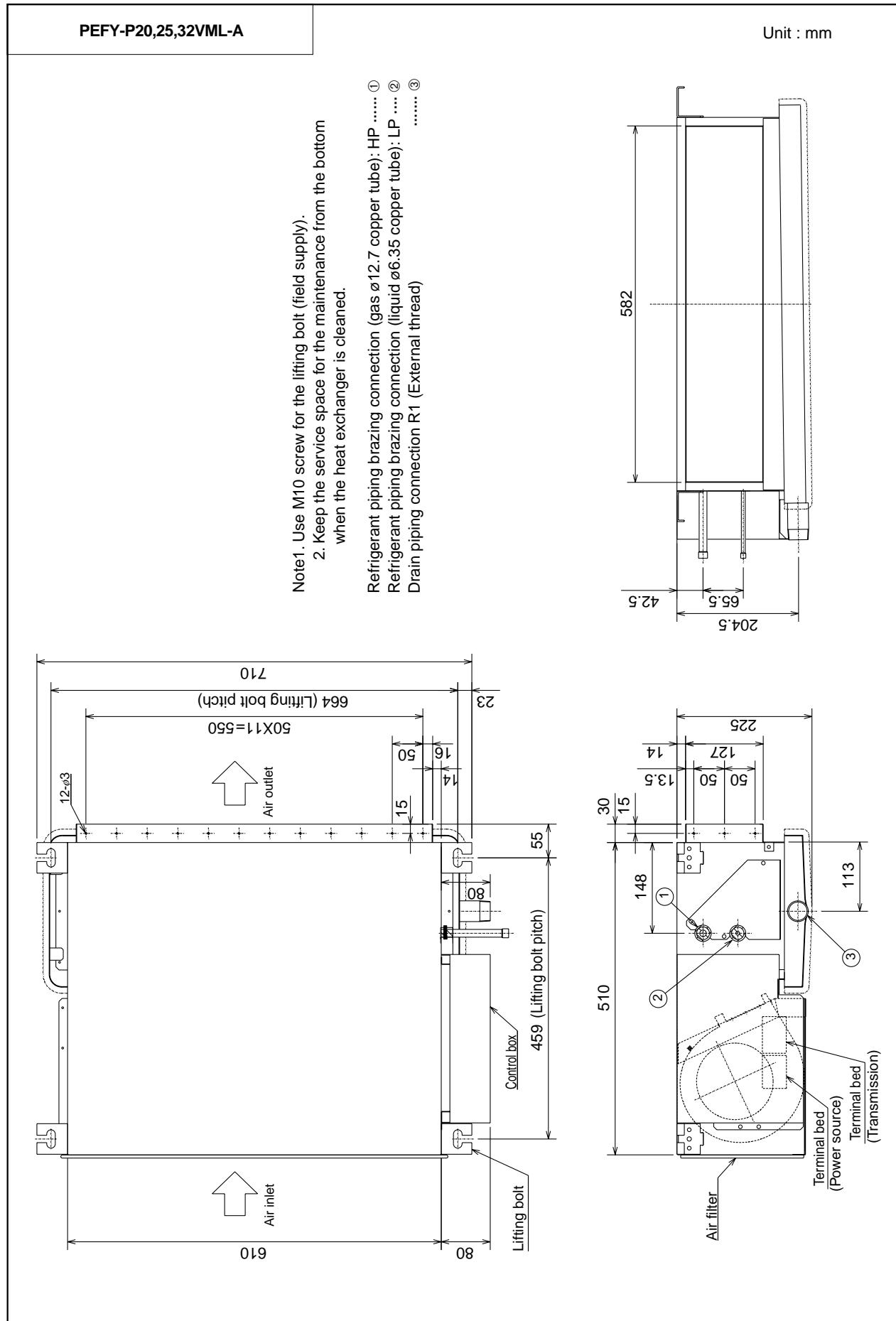
External static pressure : 130,260Pa

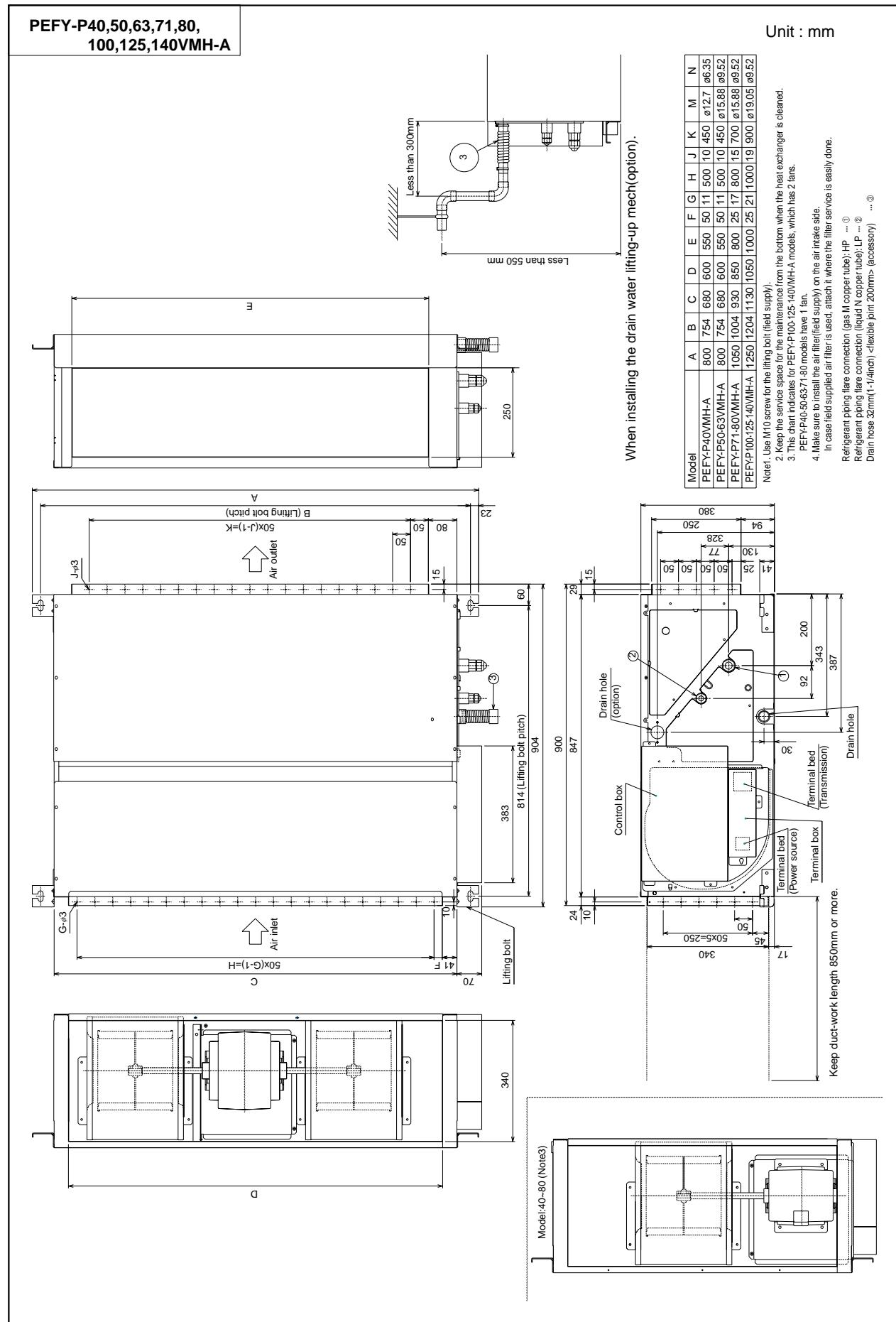
Power source : 400-415(V)



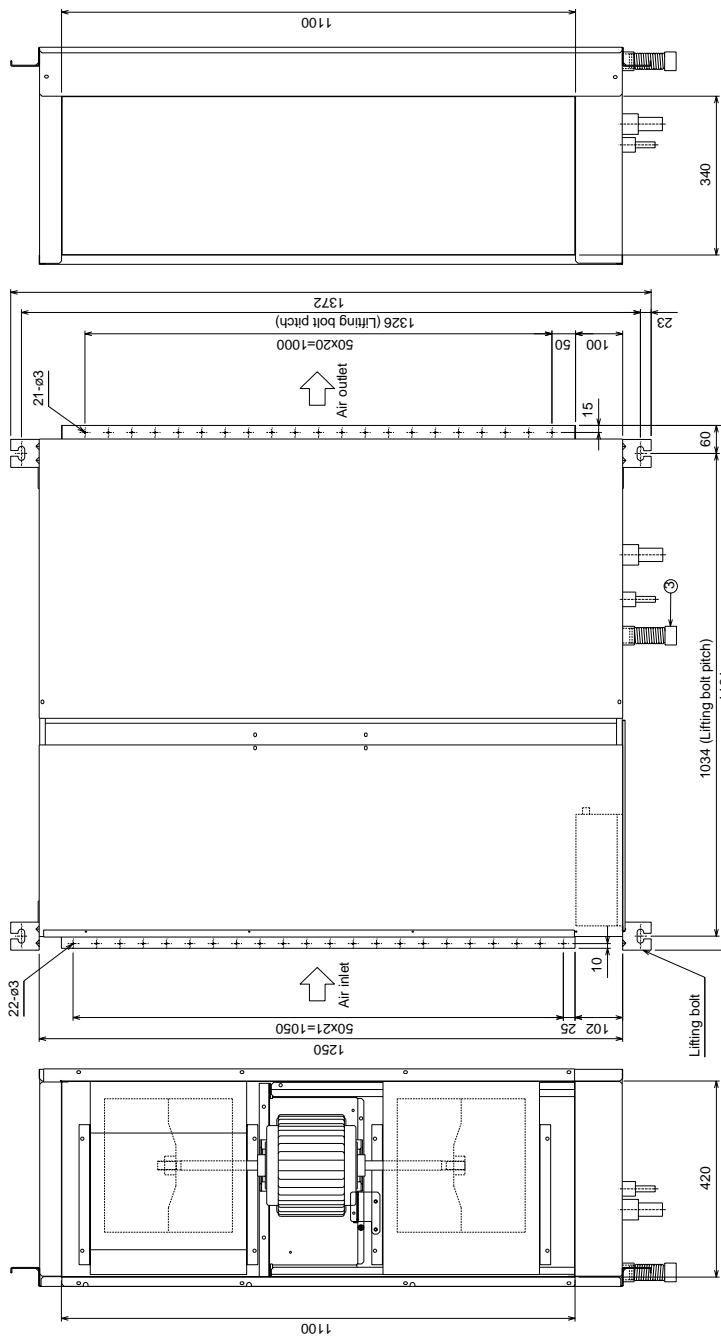
**PEFY-P-  
VML-A/VMH-A**

## 4. External Dimensions



VMH-A/VMH-H  
PEFY-P-

**PEFY-P200, 250VMH-A**

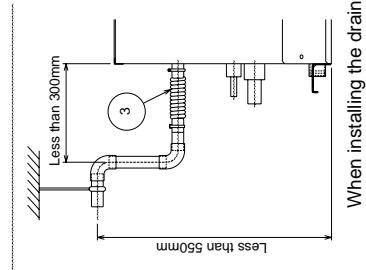


Note 1. Use M10 screw for the lifting bolt (field supply).  
2. Keep the service space for the maintenance from the bottom when the heat exchanger is cleaned.

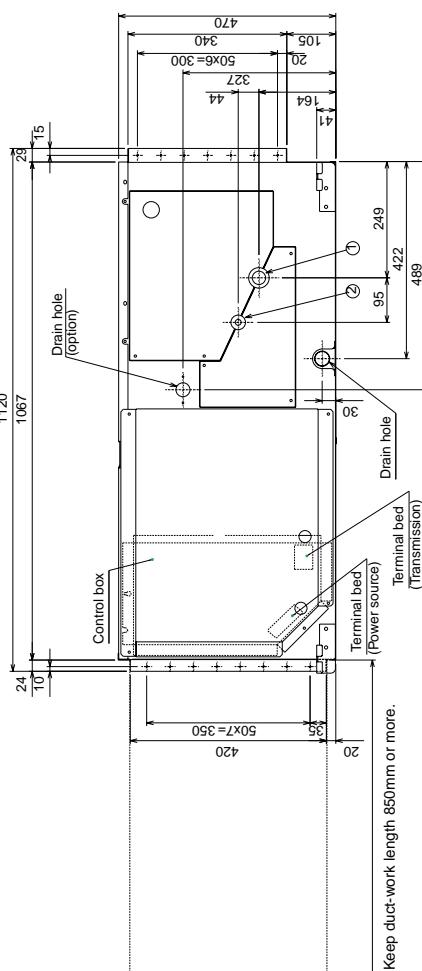
3. Make sure to install the air filter (field supply) on the air intake side.  
In case field supplied air filter is used, attach it where the filter service is easily done.

Model	A	B
PEFY-P200VMH-A	ø25.4	ø12.7
PEFY-P250VMH-A	ø28.58	ø12.7

Refrigerant piping bazing connection (gas A copper tube): HP ...①  
Refrigerant piping bazing connection (tube B copper tube): LP ...②  
Drain hose (28mm(1-1/4inch) flexible joint 200mm) (accessory) ...③



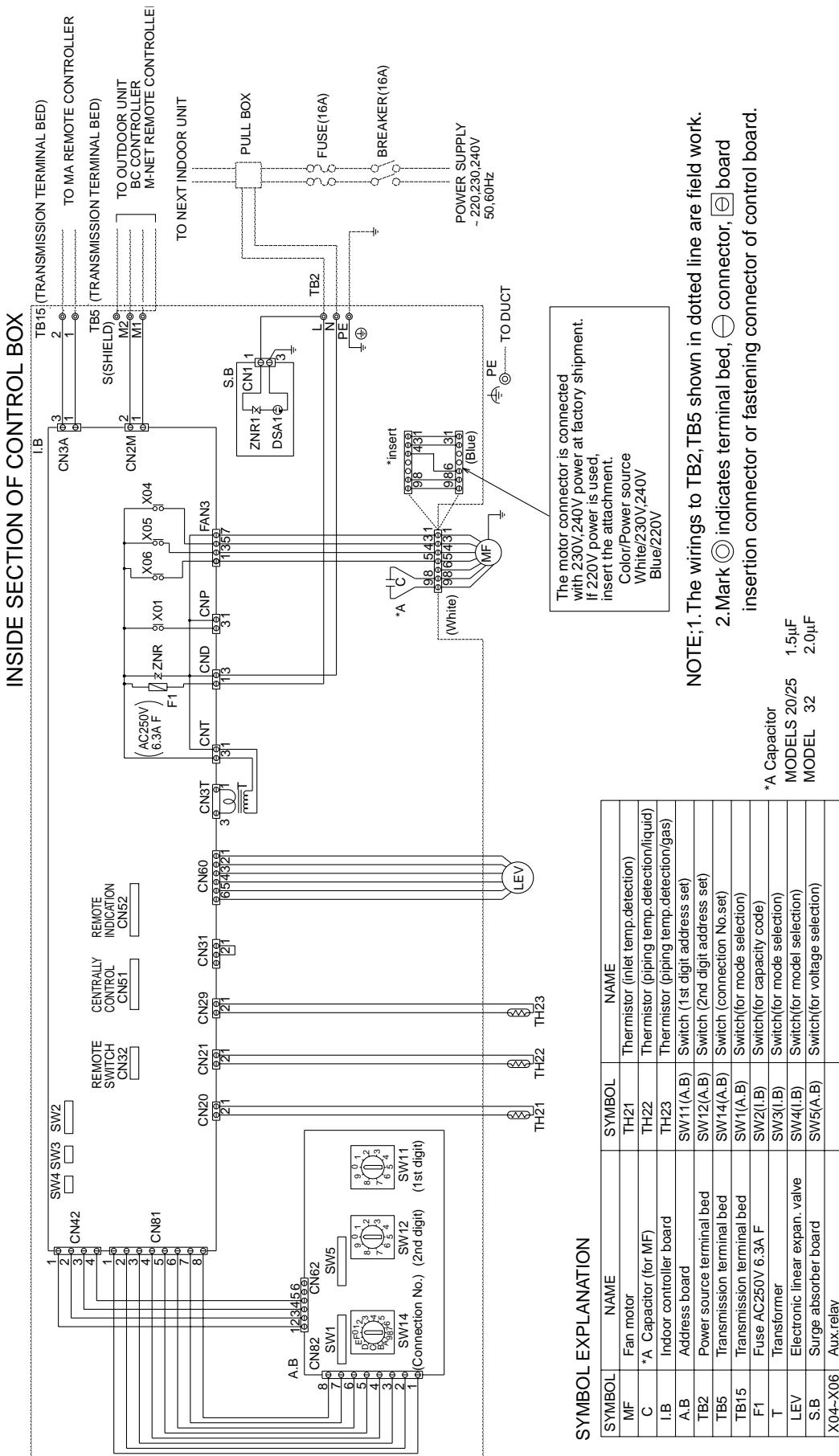
When installing the drain water lifting-up mech(option).



Keep duct-work length 850mm or more.

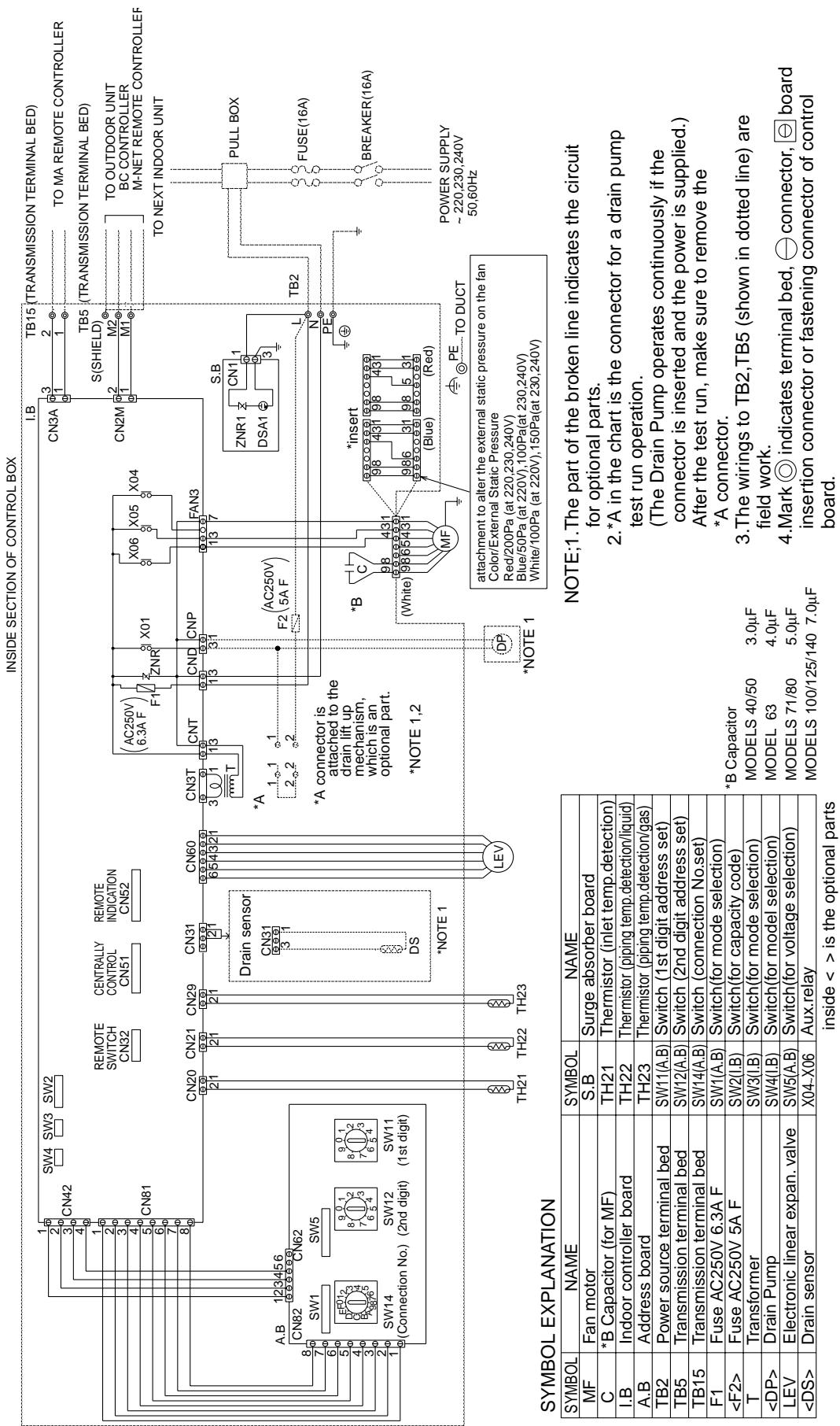
## 5. Electrical Wiring Diagrams

PEFY-P20~32VML-A

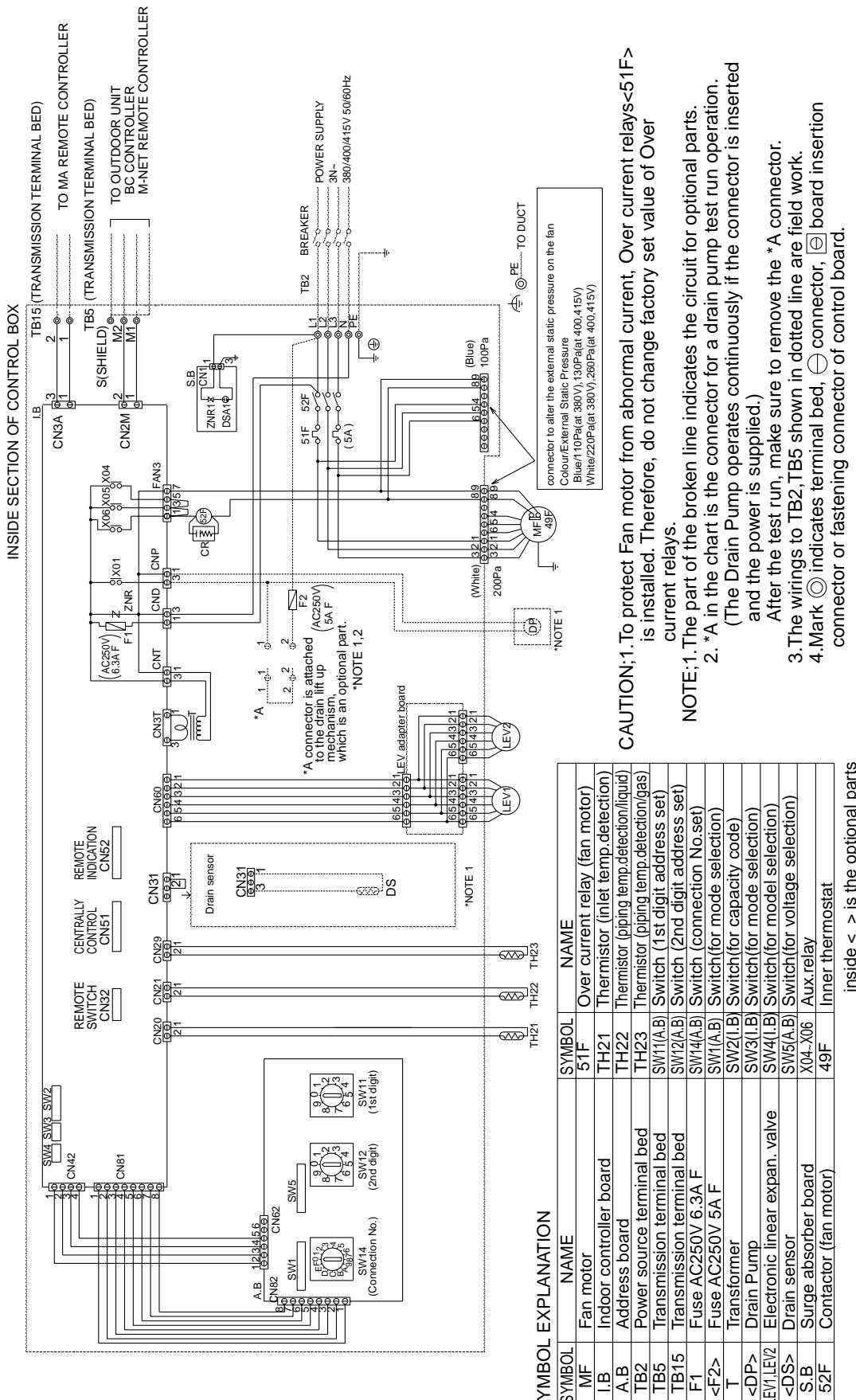


PEFY-P.  
VML-A/VMH-A

**PEFY-P40~140VMH-A**



## PEFY-P200-250VMH-A

VMH-A/VML-A  
PEFY-P

## 6. Options

Description	Model	Applicable capacity
Long life filter	PAC-KE32LAF-F	P20/P25/P32
	PAC-KE86LAF	P40/P50/P63
	PAC-KE88LAF	P71/P80
	PAC-KE89LAF	P100/P125/P140
	PAC-KE85LAF	P200/P250
Filter box	PAC-KE63TB-F	P40/P50/P63
	PAC-KE80TB-F	P71/P80
	PAC-KE140TB-F	P100/P125/P140
	PAC-KE250TB-F	P200/P250
Drain water lift-up kit	PAC-KE04DM-F	P40/P50/P63/P71/P80/P100 P125/P140/P200/P250

Ceiling concealed

PEFY-P-VMM-A

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PEFY-P-VMM-A

# 1. Specifications

			PEFY-P20VMM-A	PEFY-P25VMM-A	PEFY-P32VMM-A	PEFY-P40VMM-A	
Power source			~220-240V 50Hz				
Cooling capacity	※1	kW	2.2	2.8	3.6	4.5	
	※2	kcal/h	2,000	2,500	3,150	4,000	
Heating capacity	※1	kW	2.5	3.2	4.0	5.0	
Power consumption (50Hz)	Cooling	kW		0.15	0.17	0.19	
	Heating	kW		0.15	0.17	0.19	
Current	Cooling	A	0.73		0.81	0.92	
	Heating	A	0.73		0.81	0.92	
External finish			Galvanizing				
Dimension	Height	mm	295				
	Width	mm	815		935		
	Depth	mm	700				
Net weight		kg	27		33		
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)				
Fan	Type		Sirocco fanX 1		Sirocco fanX 2		
	Airflow rate (Lo-Mid-Hi)	m³/min	6.0-7.2-8.5		7.5-9.0-10.5		
	External static pressure	Pa	30/50/100				
Motor	Type		Single phase induction motor				
	Output	kW	0.15		0.17	0.19	
Air filter			PP Honeycomb fabric (washable)				
Refrigerant pipe dimension	Gas (Flare)	mm	ø 12.7				
	Liquid (Flare)	mm	ø 6.35				
Drain pipe dimension			R1 (External thread)				
Noise level (Lo-Mid-Hi) ※3		dB(A)	27-30-32		28-32-35		
					31-34-37		

			PEFY-P50VMM-A	PEFY-P63VMM-A	PEFY-P71VMM-A	PEFY-P80VMM-A			
Power source			~220-240V 50Hz						
Cooling capacity	※1	kW	5.6	7.1	8.0	9.0			
	※2	kcal/h	5,000	6,300	7,100	8,000			
Heating capacity	※1	kW	6.3	8.0	9.0	10.0			
Power consumption (50Hz)	Cooling	kW	0.20	0.22	0.25				
	Heating	kW	0.20	0.22	0.25				
Current	Cooling	A	0.98	1.07	1.15				
	Heating	A	0.98	1.07	1.15				
External finish			Galvanizing						
Dimension	Height	mm	295						
	Width	mm	935	1175					
	Depth	mm	700						
Net weight		kg	33	42					
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)						
Fan	Type		Sirocco fanX 2						
	Airflow rate (Lo-Hi)	m³/min	12.0-14.5-17.0	13.5-16.2-19.0	14.5-18.0-21.0				
	External static pressure	Pa	30/50/100						
Motor	Type		Single phase induction motor						
	Output	kW	0.20	0.22	0.25				
Air filter			PP Honeycomb fabric (washable)						
Refrigerant pipe dimension	Gas (Flare)	mm	ø 15.88						
	Liquid (Flare)	mm	ø 9.52						
Drain pipe dimension			R1 (External thread)						
Noise level (Lo-Mid-Hi) ※3		dB(A)	31-35-38		32-36-39				

Note: ① Cooling/Heating capacity indicates the maximum value at operation under the following condition.  
 Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB  
 Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

② Cooling capacity indicates the maximum value at operation under the following condition.  
 Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

③ It is measured in anechoic room.

			PEFY-P100VMM-A	PEFY-P125VMM-A	PEFY-P140VMM-A
Power source			~ 220-240V 50Hz		
Cooling capacity	※ 1	kW	11.2	14.0	16.0
	※ 2	kcal/h	10,000	12,500	14,000
Heating capacity	※ 1	kW	12.5	16.0	18.0
Power consumption (50/60Hz)	Cooling	kW	0.29	0.40	0.42
	Heating	kW	0.29	0.40	0.42
Current	Cooling	A	1.34	1.90	1.95
	Heating	A	1.34	1.90	1.95
External finish			Galvanizing		
Dimension	Height	mm	325		
	Width	mm	1415		1715
	Depth	mm	740		
Net weight		kg	62	65	70
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)		
Fan	Type		Sirocco fan×2		
	Airflow rate (Lo-Hi)	m³/min	23.0-33.0	28.0-40.0	29.5-42.0
	External static pressure	Pa	50/130		
Motor	Type		Single phase induction motor		
	Output	kW	0.29	0.40	0.42
Air filter			PP Honeycomb fabric (washable)		
Refrigerant pipe dimension	Gas (Flare)	mm	ø 19.05		
	Liquid (Flare)	mm	ø 9.52		
Drain pipe dimension			R1 (External thread)		
Noise level (Lo-Mid-Hi)	※ 3	dB(A)	40-44	42-45	42-45

Note: ※ 1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB

Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

※ 2 Cooling capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

※ 3 It is measured in anechoic room.

## 2. Capacity Table

### 2-1.Cooling Capacity (In combination with PUMY-(P)125YM(A))

**PEFY-P-VMM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
20 (2.2)	20.0	2.2	1.8	2.3	1.9	2.4	1.9	2.6	1.9
	22.5	2.1	1.8	2.3	1.9	2.4	1.9	2.6	1.9
	25.0	2.1	1.8	2.3	1.9	2.4	1.8	2.5	1.9
	27.5	2.1	1.8	2.2	1.9	2.4	1.8	2.5	1.9
	30.0	2.1	1.7	2.2	1.8	2.3	1.8	2.5	1.9
	32.5	2.0	1.7	2.2	1.8	2.3	1.8	2.5	1.9
	35.0	2.0	1.7	2.1	1.8	2.3	1.8	2.4	1.9
	37.5	2.0	1.7	2.1	1.8	2.2	1.8	2.4	1.9
	40.0	2.0	1.7	2.1	1.8	2.2	1.8	2.4	1.8
	46.0	1.9	1.7	2.0	1.8	2.1	1.7	2.3	1.8
25 (2.8)	20.0	2.8	2.1	2.9	2.2	3.1	2.2	3.3	2.2
	22.5	2.7	2.1	2.9	2.2	3.1	2.1	3.2	2.2
	25.0	2.7	2.1	2.9	2.1	3.1	2.1	3.2	2.2
	27.5	2.7	2.0	2.8	2.1	3.0	2.1	3.2	2.2
	30.0	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.2
	32.5	2.6	2.0	2.8	2.1	2.9	2.1	3.1	2.2
	35.0	2.6	2.0	2.7	2.1	2.9	2.1	3.1	2.1
	37.5	2.5	2.0	2.7	2.1	2.9	2.0	3.0	2.1
	40.0	2.5	1.9	2.7	2.1	2.8	2.0	3.0	2.1
	46.0	2.4	1.9	2.6	2.0	2.7	2.0	2.9	2.1
32 (3.6)	20.0	3.6	2.6	3.7	2.7	4.0	2.7	4.2	2.8
	22.5	3.5	2.6	3.7	2.7	4.0	2.7	4.2	2.8
	25.0	3.5	2.6	3.7	2.7	3.9	2.7	4.1	2.8
	27.5	3.4	2.6	3.6	2.7	3.9	2.7	4.1	2.8
	30.0	3.4	2.5	3.6	2.7	3.8	2.6	4.1	2.7
	32.5	3.3	2.5	3.6	2.7	3.8	2.6	4.0	2.7
	35.0	3.3	2.5	3.5	2.6	3.7	2.6	4.0	2.7
	37.5	3.2	2.5	3.5	2.6	3.7	2.6	3.9	2.7
	40.0	3.2	2.5	3.4	2.6	3.6	2.6	3.9	2.6
	46.0	3.1	2.4	3.3	2.5	3.5	2.5	3.7	2.6
40 (4.5)	20.0	4.5	3.4	4.7	3.5	5.0	3.5	5.3	3.6
	22.5	4.4	3.3	4.6	3.5	5.0	3.5	5.2	3.6
	25.0	4.3	3.3	4.6	3.5	4.9	3.5	5.2	3.6
	27.5	4.3	3.3	4.6	3.5	4.9	3.4	5.1	3.5
	30.0	4.2	3.3	4.5	3.4	4.8	3.4	5.1	3.5
	32.5	4.2	3.2	4.4	3.4	4.7	3.4	5.0	3.5
	35.0	4.1	3.2	4.4	3.4	4.7	3.3	5.0	3.5
	37.5	4.1	3.2	4.3	3.4	4.6	3.3	4.9	3.4
	40.0	4.0	3.2	4.3	3.3	4.5	3.3	4.8	3.4
	46.0	3.8	3.1	4.1	3.3	4.3	3.2	4.6	3.3
50 (5.6)	20.0	5.5	4.1	5.8	4.3	6.2	4.3	6.6	4.4
	22.5	5.5	4.1	5.8	4.3	6.2	4.2	6.5	4.4
	25.0	5.4	4.0	5.7	4.2	6.1	4.2	6.4	4.3
	27.5	5.3	4.0	5.7	4.2	6.0	4.2	6.4	4.3
	30.0	5.3	4.0	5.6	4.2	5.9	4.1	6.3	4.3
	32.5	5.2	3.9	5.5	4.1	5.9	4.1	6.2	4.2
	35.0	5.1	3.9	5.5	4.1	5.8	4.1	6.2	4.2
	37.5	5.0	3.9	5.4	4.1	5.7	4.0	6.1	4.2
	40.0	5.0	3.8	5.3	4.0	5.6	4.0	6.0	4.1
	46.0	4.8	3.7	5.1	3.9	5.4	3.9	5.8	4.0
63 (7.1)	20.0	7.0	5.2	7.4	5.4	7.9	5.3	8.3	5.5
	22.5	6.9	5.1	7.3	5.3	7.8	5.3	8.2	5.5
	25.0	6.9	5.1	7.3	5.3	7.7	5.3	8.2	5.4
	27.5	6.8	5.0	7.2	5.3	7.7	5.2	8.1	5.4
	30.0	6.7	5.0	7.1	5.2	7.5	5.2	8.0	5.4
	32.5	6.6	4.9	7.0	5.2	7.5	5.1	7.9	5.3
	35.0	6.5	4.9	6.9	5.1	7.3	5.1	7.8	5.3
	37.5	6.4	4.8	6.8	5.1	7.2	5.0	7.7	5.2
	40.0	6.3	4.8	6.7	5.1	7.2	5.0	7.6	5.2
	46.0	6.1	4.7	6.5	4.9	6.9	4.9	7.3	5.1

**Cooling Capacity (In combination with PUMY-(P)125YM(A))****PEFY-P-VMM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
71 (8.0)	20.0	7.9	5.8	8.3	6.0	8.9	6.0	9.4	6.1
	22.5	7.8	5.7	8.2	6.0	8.8	5.9	9.3	6.1
	25.0	7.7	5.7	8.2	5.9	8.7	5.9	9.2	6.1
	27.5	7.6	5.6	8.1	5.9	8.6	5.9	9.1	6.0
	30.0	7.5	5.6	8.0	5.9	8.5	5.8	9.0	6.0
	32.5	7.4	5.5	7.9	5.8	8.4	5.8	8.9	5.9
	35.0	7.3	5.5	7.8	5.8	8.3	5.7	8.8	5.9
	37.5	7.2	5.4	7.7	5.7	8.2	5.6	8.7	5.9
	40.0	7.1	5.4	7.6	5.7	8.1	5.6	8.6	5.8
	46.0	6.8	5.2	7.3	5.5	7.7	5.4	8.2	5.7
80 (9.0)	20.0	8.9	6.3	9.4	6.5	10.0	6.5	10.6	6.7
	22.5	8.8	6.2	9.3	6.5	9.9	6.5	10.4	6.6
	25.0	8.7	6.2	9.2	6.5	9.8	6.4	10.4	6.6
	27.5	8.6	6.1	9.1	6.4	9.7	6.4	10.3	6.5
	30.0	8.5	6.1	9.0	6.4	9.5	6.3	10.2	6.5
	32.5	8.3	6.0	8.9	6.3	9.5	6.2	10.0	6.4
	35.0	8.2	5.9	8.8	6.2	9.3	6.2	9.9	6.4
	37.5	8.1	5.9	8.6	6.2	9.2	6.1	9.8	6.3
	40.0	8.0	5.8	8.6	6.1	9.1	6.1	9.6	6.3
	46.0	7.7	5.7	8.2	6.0	8.7	5.9	9.3	6.1
100 (11.2)	20.0	11.1	8.5	11.6	8.9	12.5	8.8	13.1	9.1
	22.5	10.9	8.4	11.5	8.8	12.3	8.8	13.0	9.0
	25.0	10.8	8.4	11.5	8.8	12.2	8.7	12.9	9.0
	27.5	10.7	8.3	11.3	8.7	12.1	8.7	12.8	8.9
	30.0	10.5	8.2	11.2	8.7	11.9	8.6	12.6	8.9
	32.5	10.4	8.2	11.1	8.6	11.8	8.5	12.5	8.8
	35.0	10.2	8.1	10.9	8.5	11.6	8.4	12.3	8.8
	37.5	10.1	8.0	10.8	8.5	11.4	8.4	12.2	8.7
	40.0	10.0	8.0	10.6	8.4	11.3	8.3	12.0	8.6
	46.0	9.6	7.8	10.2	8.2	10.8	8.1	11.5	8.4
125 (14.0)	20.0	13.9	10.4	14.6	10.9	15.6	10.8	16.4	11.1
	22.5	13.7	10.3	14.4	10.8	15.4	10.7	16.2	11.1
	25.0	13.5	10.3	14.3	10.8	15.3	10.7	16.1	11.0
	27.5	13.4	10.2	14.2	10.7	15.1	10.6	16.0	10.9
	30.0	13.2	10.1	14.0	10.6	14.9	10.5	15.8	10.9
	32.5	13.0	10.0	13.8	10.5	14.7	10.4	15.6	10.8
	35.0	12.8	9.9	13.7	10.4	14.5	10.3	15.4	10.7
	37.5	12.6	9.8	13.4	10.3	14.3	10.2	15.2	10.6
	40.0	12.5	9.8	13.3	10.3	14.1	10.2	15.0	10.5
	46.0	12.0	9.5	12.8	10.0	13.5	9.9	14.4	10.3
140 (16.0)	20.0	15.8	11.6	16.6	12.1	17.8	12.0	18.8	12.3
	22.5	15.6	11.5	16.5	12.0	17.6	11.9	18.6	12.3
	25.0	15.5	11.4	16.4	11.9	17.4	11.9	18.4	12.2
	27.5	15.3	11.3	16.2	11.9	17.2	11.8	18.2	12.1
	30.0	15.0	11.2	16.0	11.8	17.0	11.6	18.0	12.0
	32.5	14.8	11.1	15.8	11.7	16.8	11.6	17.9	12.0
	35.0	14.6	11.0	15.6	11.6	16.5	11.4	17.6	11.8
	37.5	14.4	10.9	15.4	11.4	16.3	11.3	17.4	11.8
	40.0	14.2	10.8	15.2	11.4	16.1	11.3	17.2	11.6
	46.0	13.7	10.5	14.6	11.1	15.4	11.0	16.5	11.4

PEFY-P-VMM-A

## 2-2.Heating Capacity (In combination with PUMY-(P)125YM(A))

**PEFY-P-VMM-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB		
		15.0	20.0	25.0
	°CWB	SHC	SHC	SHC
20	-12.0	1.6	1.6	1.5
	-10.0	1.7	1.6	1.6
	-5.0	1.9	1.9	1.9
	0.0	2.2	2.1	2.1
	2.5	2.3	2.3	2.3
	6.0	2.5	2.5	2.5
	7.5	2.6	2.6	2.5
	10.0	2.8	2.7	2.5
	12.5	2.9	2.8	2.5
	15.5	3.1	2.8	2.5
25	-12.0	2.0	2.0	2.0
	-10.0	2.1	2.1	2.1
	-5.0	2.4	2.4	2.4
	0.0	2.8	2.8	2.7
	2.5	3.0	2.9	2.9
	6.0	3.2	3.2	3.2
	7.5	3.3	3.3	3.2
	10.0	3.5	3.5	3.2
	12.5	3.7	3.5	3.2
	15.5	3.9	3.5	3.2
32	-12.0	2.5	2.5	2.5
	-10.0	2.7	2.6	2.6
	-5.0	3.1	3.0	3.0
	0.0	3.5	3.4	3.4
	2.5	3.7	3.7	3.6
	6.0	4.0	4.0	3.9
	7.5	4.2	4.1	4.0
	10.0	4.4	4.4	4.0
	12.5	4.7	4.4	4.0
	15.5	4.9	4.4	4.0
40	-12.0	3.2	3.1	3.1
	-10.0	3.4	3.3	3.2
	-5.0	3.8	3.8	3.7
	0.0	4.3	4.3	4.2
	2.5	4.6	4.6	4.5
	6.0	5.0	5.0	4.9
	7.5	5.2	5.2	5.0
	10.0	5.5	5.5	5.0
	12.5	5.9	5.5	5.0
	15.5	6.2	5.5	5.0
50	-12.0	4.0	3.9	3.9
	-10.0	4.2	4.2	4.1
	-5.0	4.8	4.8	4.7
	0.0	5.5	5.4	5.3
	2.5	5.8	5.8	5.7
	6.0	6.3	6.3	6.2
	7.5	6.6	6.5	6.2
	10.0	7.0	6.9	6.2
	12.5	7.4	7.0	6.2
	15.5	7.7	7.0	6.2
63	-12.0	5.1	5.0	4.9
	-10.0	5.4	5.3	5.2
	-5.0	6.1	6.0	5.9
	0.0	6.9	6.9	6.8
	2.5	7.4	7.3	7.2
	6.0	8.0	8.0	7.9
	7.5	8.3	8.3	7.9
	10.0	8.8	8.8	7.9
	12.5	9.4	8.8	7.9
	15.5	9.8	8.8	7.9

Unit size	Outdoor air temp.	Indoor air temp.: °CDB		
		15.0	20.0	25.0
	°CWB	SHC	SHC	SHC
71	-12.0	5.7	5.6	5.5
	-10.0	6.0	5.9	5.8
	-5.0	6.9	6.8	6.7
	0.0	7.8	7.7	7.6
	2.5	8.3	8.2	8.1
	6.0	9.1	9.0	8.9
	7.5	9.4	9.3	8.9
	10.0	9.9	9.9	8.9
	12.5	10.5	9.9	8.9
	15.5	11.1	9.9	8.9
80	-12.0	6.4	6.2	6.1
	-10.0	6.7	6.6	6.5
	-5.0	7.6	7.5	7.4
	0.0	8.7	8.6	8.5
	2.5	9.2	9.2	9.0
	6.0	10.1	10.0	9.9
	7.5	10.4	10.4	9.9
	10.0	11.1	11.0	9.9
	12.5	11.7	11.0	9.9
	15.5	12.3	11.0	9.9
100	-12.0	8.0	7.8	7.7
	-10.0	8.4	8.2	8.1
	-5.0	9.6	9.4	9.3
	0.0	10.9	10.7	10.6
	2.5	11.5	11.4	11.3
	6.0	12.6	12.5	12.3
	7.5	13.0	12.9	12.4
	10.0	13.8	13.7	12.4
	12.5	14.6	13.8	12.4
	15.5	15.4	13.8	12.4
125	-12.0	10.2	10.0	9.8
	-10.0	10.7	10.6	10.4
	-5.0	12.2	12.1	11.9
	0.0	13.9	13.8	13.6
	2.5	14.8	14.7	14.5
	6.0	16.1	16.0	15.8
	7.5	16.7	16.6	15.8
	10.0	17.7	17.6	15.8
	12.5	18.7	17.7	15.8
	15.5	19.7	17.7	15.8
140	-12.0	11.5	11.2	11.0
	-10.0	12.1	11.9	11.7
	-5.0	13.8	13.6	13.4
	0.0	15.6	15.5	15.3
	2.5	16.6	16.5	16.3
	6.0	18.1	18.0	17.8
	7.5	18.8	18.6	17.8
	10.0	19.9	19.8	17.8
	12.5	21.1	19.9	17.8
	15.5	22.1	19.9	17.8

### 2-3.Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

PEFY-P-VMM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA										
20 (2.2)	20.0	2.2	1.8	2.2	1.8	2.3	1.8	2.3	1.8	2.4	1.9	2.5	1.9	2.6	1.8
	22.5	2.1	1.8	2.2	1.8	2.3	1.8	2.3	1.8	2.4	1.9	2.4	1.8	2.5	1.8
	25.0	2.1	1.8	2.2	1.8	2.2	1.8	2.3	1.8	2.3	1.9	2.4	1.8	2.5	1.8
	27.5	2.1	1.8	2.1	1.8	2.2	1.8	2.3	1.8	2.3	1.9	2.4	1.8	2.5	1.8
	30.0	2.1	1.7	2.1	1.8	2.2	1.8	2.2	1.8	2.3	1.9	2.4	1.8	2.5	1.8
	32.5	2.0	1.7	2.1	1.8	2.2	1.8	2.2	1.8	2.3	1.9	2.4	1.8	2.4	1.8
	35.0	2.0	1.7	2.1	1.8	2.2	1.7	2.2	1.8	2.2	1.8	2.3	1.8	2.4	1.8
	37.5	2.0	1.7	2.0	1.8	2.1	1.7	2.2	1.8	2.2	1.8	2.3	1.8	2.4	1.8
	40.0	2.0	1.7	2.0	1.8	2.1	1.7	2.2	1.8	2.2	1.8	2.3	1.8	2.4	1.8
	43.0	2.0	1.7	2.0	1.8	2.1	1.7	2.1	1.8	2.2	1.8	2.3	1.8	2.3	1.7
25 (2.8)	20.0	2.7	2.1	2.8	2.1	2.9	2.1	3.0	2.1	3.0	2.2	3.1	2.1	3.2	2.0
	22.5	2.7	2.1	2.8	2.1	2.9	2.1	2.9	2.1	3.0	2.1	3.1	2.1	3.2	2.0
	25.0	2.7	2.0	2.7	2.1	2.9	2.0	2.9	2.1	3.0	2.1	3.1	2.1	3.2	2.0
	27.5	2.7	2.0	2.7	2.1	2.8	2.0	2.9	2.1	2.9	2.1	3.1	2.1	3.2	2.0
	30.0	2.6	2.0	2.7	2.1	2.8	2.0	2.9	2.0	2.9	2.1	3.0	2.1	3.1	2.0
	32.5	2.6	2.0	2.7	2.1	2.8	2.0	2.8	2.0	2.9	2.1	3.0	2.0	3.1	2.0
	35.0	2.6	2.0	2.6	2.0	2.7	2.0	2.8	2.0	2.9	2.1	3.0	2.0	3.1	2.0
	37.5	2.5	2.0	2.6	2.0	2.7	2.0	2.8	2.0	2.8	2.1	2.9	2.0	3.1	2.0
	40.0	2.5	2.0	2.6	2.0	2.7	2.0	2.7	2.0	2.8	2.1	2.9	2.0	3.0	2.0
	43.0	2.5	1.9	2.5	2.0	2.7	2.0	2.7	2.0	2.8	2.1	2.9	2.0	3.0	2.0
32 (3.6)	20.0	3.5	2.6	3.6	2.7	3.7	2.6	3.8	2.6	3.9	2.7	4.0	2.6	4.2	2.6
	22.5	3.5	2.6	3.6	2.7	3.7	2.6	3.8	2.6	3.9	2.7	4.0	2.6	4.1	2.6
	25.0	3.5	2.6	3.5	2.6	3.7	2.6	3.7	2.6	3.8	2.7	4.0	2.6	4.1	2.5
	27.5	3.4	2.6	3.5	2.6	3.6	2.6	3.7	2.6	3.8	2.7	3.9	2.6	4.1	2.5
	30.0	3.4	2.5	3.5	2.6	3.6	2.5	3.7	2.6	3.7	2.7	3.9	2.6	4.0	2.5
	32.5	3.3	2.5	3.4	2.6	3.6	2.5	3.6	2.6	3.7	2.6	3.9	2.6	4.0	2.5
	35.0	3.3	2.5	3.4	2.6	3.5	2.5	3.6	2.5	3.7	2.6	3.8	2.6	4.0	2.5
	37.5	3.3	2.5	3.3	2.6	3.5	2.5	3.6	2.5	3.6	2.6	3.8	2.5	3.9	2.5
	40.0	3.2	2.5	3.3	2.5	3.5	2.5	3.5	2.5	3.6	2.6	3.7	2.5	3.9	2.5
	43.0	3.2	2.5	3.3	2.5	3.4	2.5	3.5	2.5	3.6	2.6	3.7	2.5	3.8	2.5
40 (4.5)	20.0	4.4	3.4	4.5	3.4	4.7	3.4	4.8	3.4	4.9	3.5	5.0	3.4	5.2	3.3
	22.5	4.4	3.3	4.5	3.4	4.6	3.3	4.7	3.4	4.8	3.5	5.0	3.4	5.2	3.3
	25.0	4.3	3.3	4.4	3.4	4.6	3.3	4.7	3.4	4.8	3.5	5.0	3.4	5.1	3.3
	27.5	4.3	3.3	4.4	3.4	4.5	3.3	4.6	3.3	4.7	3.4	4.9	3.4	5.1	3.3
	30.0	4.2	3.3	4.3	3.4	4.5	3.3	4.6	3.3	4.7	3.4	4.9	3.3	5.0	3.3
	32.5	4.2	3.2	4.3	3.3	4.5	3.3	4.5	3.3	4.6	3.4	4.8	3.3	5.0	3.2
	35.0	4.1	3.2	4.2	3.3	4.4	3.2	4.5	3.3	4.6	3.4	4.8	3.3	5.0	3.2
	37.5	4.1	3.2	4.2	3.3	4.4	3.2	4.5	3.3	4.5	3.4	4.7	3.3	4.9	3.2
	40.0	4.1	3.2	4.1	3.3	4.3	3.2	4.4	3.2	4.5	3.4	4.7	3.3	4.9	3.2
	43.0	4.0	3.2	4.1	3.2	4.3	3.2	4.4	3.2	4.4	3.3	4.6	3.3	4.8	3.2
50 (5.6)	20.0	5.5	4.1	5.6	4.2	5.8	4.1	5.9	4.1	6.0	4.2	6.3	4.1	6.5	4.0
	22.5	5.4	4.1	5.5	4.1	5.8	4.1	5.9	4.1	6.0	4.2	6.2	4.1	6.4	4.0
	25.0	5.4	4.0	5.5	4.1	5.7	4.0	5.8	4.1	5.9	4.2	6.2	4.1	6.4	4.0
	27.5	5.3	4.0	5.4	4.1	5.7	4.0	5.8	4.0	5.9	4.2	6.1	4.1	6.3	4.0
	30.0	5.3	4.0	5.4	4.1	5.6	4.0	5.7	4.0	5.8	4.1	6.0	4.0	6.3	3.9
	32.5	5.2	3.9	5.3	4.0	5.5	4.0	5.7	4.0	5.8	4.1	6.0	4.0	6.2	3.9
	35.0	5.2	3.9	5.3	4.0	5.5	3.9	5.6	4.0	5.7	4.1	5.9	4.0	6.2	3.9
	37.5	5.1	3.9	5.2	4.0	5.4	3.9	5.5	3.9	5.6	4.1	5.9	4.0	6.1	3.9
	40.0	5.0	3.9	5.2	4.0	5.4	3.9	5.5	3.9	5.6	4.1	5.8	4.0	6.0	3.9
	43.0	5.0	3.8	5.1	3.9	5.3	3.9	5.4	3.9	5.5	4.0	5.8	3.9	6.0	3.8
63 (7.1)	20.0	7.0	5.1	7.1	5.2	7.4	5.1	7.5	5.1	7.7	5.3	8.0	5.2	8.2	5.0
	22.5	6.9	5.1	7.0	5.2	7.3	5.1	7.5	5.1	7.6	5.3	7.9	5.1	8.2	5.0
	25.0	6.8	5.0	7.0	5.2	7.2	5.0	7.4	5.1	7.5	5.2	7.8	5.1	8.1	5.0
	27.5	6.7	5.0	6.9	5.1	7.2	5.0	7.3	5.1	7.5	5.2	7.7	5.1	8.0	4.9
	30.0	6.7	5.0	6.8	5.1	7.1	5.0	7.2	5.0	7.4	5.2	7.7	5.1	8.0	4.9
	32.5	6.6	4.9	6.7	5.1	7.0	5.0	7.2	5.0	7.3	5.2	7.6	5.0	7.9	4.9
	35.0	6.5	4.9	6.6	5.0	6.9	4.9	7.0	4.9	7.2	5.1	7.5	5.0	7.8	4.9
	37.5	6.5	4.9	6.6	5.0	6.8	4.9	7.0	4.9	7.2	5.1	7.5	5.0	7.7	4.8
	40.0	6.4	4.8	6.5	5.0	6.8	4.9	7.0	4.9	7.1	5.1	7.4	4.9	7.7	4.8
	43.0	6.3	4.8	6.4	4.9	6.7	4.8	6.9	4.9	7.0	5.0	7.3	4.9	7.6	4.8

PEFY-P-VMM-A

## Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

### PEFY-P-VMM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA										
71 (8.0)	20.0	7.8	5.7	8.0	5.9	8.3	5.7	8.5	5.8	8.6	5.9	9.0	5.8	9.3	5.6
	22.5	7.8	5.7	7.9	5.8	8.2	5.7	8.4	5.7	8.6	5.9	8.9	5.7	9.2	5.6
	25.0	7.7	5.7	7.8	5.8	8.2	5.6	8.3	5.7	8.5	5.9	8.8	5.7	9.1	5.6
	27.5	7.6	5.6	7.8	5.7	8.1	5.6	8.2	5.7	8.4	5.8	8.7	5.7	9.0	5.5
	30.0	7.5	5.6	7.7	5.7	8.0	5.6	8.2	5.6	8.3	5.8	8.6	5.7	9.0	5.5
	32.5	7.4	5.5	7.6	5.7	7.9	5.5	8.1	5.6	8.2	5.8	8.6	5.6	8.9	5.5
	35.0	7.4	5.5	7.5	5.6	7.8	5.5	8.0	5.6	8.2	5.7	8.5	5.6	8.8	5.4
	37.5	7.3	5.5	7.4	5.6	7.8	5.5	7.9	5.5	8.1	5.7	8.4	5.6	8.7	5.4
	40.0	7.2	5.4	7.4	5.5	7.7	5.4	7.8	5.5	8.0	5.7	8.3	5.5	8.6	5.4
	43.0	7.1	5.4	7.3	5.5	7.6	5.4	7.7	5.4	7.9	5.6	8.2	5.5	8.5	5.3
80 (9.0)	20.0	8.8	6.2	9.0	6.4	9.4	6.2	9.5	6.2	9.7	6.4	10.1	6.2	10.4	6.0
	22.5	8.7	6.2	8.9	6.3	9.3	6.2	9.5	6.2	9.6	6.4	10.0	6.2	10.4	6.0
	25.0	8.6	6.1	8.8	6.3	9.2	6.1	9.4	6.1	9.5	6.3	9.9	6.1	10.3	6.0
	27.5	8.6	6.1	8.7	6.2	9.1	6.1	9.3	6.1	9.5	6.3	9.8	6.1	10.2	5.9
	30.0	8.5	6.1	8.6	6.2	9.0	6.0	9.2	6.1	9.4	6.2	9.7	6.1	10.1	5.9
	32.5	8.4	6.0	8.6	6.1	8.9	6.0	9.1	6.0	9.3	6.2	9.6	6.0	10.0	5.9
	35.0	8.3	6.0	8.5	6.1	8.8	5.9	9.0	6.0	9.2	6.2	9.5	6.0	9.9	5.8
	37.5	8.2	5.9	8.4	6.0	8.7	5.9	8.9	5.9	9.1	6.1	9.5	6.0	9.8	5.8
	40.0	8.1	5.9	8.3	6.0	8.6	5.9	8.8	5.9	9.0	6.1	9.4	5.9	9.7	5.8
	43.0	8.0	5.8	8.2	5.9	8.5	5.8	8.7	5.9	8.9	6.0	9.3	5.9	9.6	5.7
100 (11.2)	20.0	11.0	8.5	11.2	8.7	11.6	8.5	11.9	8.6	12.1	8.9	12.5	8.6	13.0	8.4
	22.5	10.9	8.4	11.1	8.6	11.5	8.4	11.8	8.5	12.0	8.8	12.4	8.6	12.9	8.4
	25.0	10.8	8.3	11.0	8.6	11.4	8.4	11.6	8.5	11.9	8.8	12.3	8.5	12.8	8.3
	27.5	10.6	8.3	10.9	8.5	11.3	8.3	11.5	8.4	11.8	8.7	12.2	8.5	12.7	8.3
	30.0	10.5	8.2	10.8	8.5	11.2	8.3	11.4	8.4	11.6	8.7	12.1	8.5	12.5	8.2
	32.5	10.4	8.2	10.6	8.4	11.1	8.2	11.3	8.3	11.5	8.6	12.0	8.4	12.4	8.2
	35.0	10.3	8.1	10.5	8.4	11.0	8.2	11.2	8.3	11.4	8.6	11.9	8.4	12.3	8.2
	37.5	10.2	8.1	10.4	8.3	10.9	8.1	11.1	8.2	11.3	8.5	11.8	8.3	12.2	8.1
	40.0	10.1	8.0	10.3	8.2	10.8	8.1	11.0	8.2	11.2	8.5	11.6	8.3	12.1	8.1
	43.0	9.9	8.0	10.2	8.2	10.6	8.0	10.8	8.2	11.1	8.4	11.5	8.3	12.0	8.1
125 (14.0)	20.0	13.7	10.4	14.0	10.6	14.6	10.4	14.8	10.5	15.1	10.8	15.7	10.5	16.2	10.2
	22.5	13.6	10.3	13.9	10.5	14.4	10.3	14.7	10.4	15.0	10.7	15.5	10.5	16.1	10.2
	25.0	13.4	10.2	13.7	10.5	14.3	10.2	14.6	10.3	14.8	10.7	15.4	10.4	16.0	10.1
	27.5	13.3	10.2	13.6	10.4	14.1	10.2	14.4	10.3	14.7	10.6	15.3	10.4	15.8	10.1
	30.0	13.2	10.1	13.4	10.3	14.0	10.1	14.3	10.2	14.6	10.6	15.1	10.3	15.7	10.0
	32.5	13.0	10.0	13.3	10.3	13.9	10.1	14.1	10.2	14.4	10.5	15.0	10.3	15.5	10.0
	35.0	12.9	10.0	13.2	10.2	13.7	10.0	14.0	10.1	14.3	10.5	14.8	10.2	15.4	9.9
	37.5	12.7	9.9	13.0	10.1	13.6	9.9	13.9	10.1	14.1	10.4	14.7	10.2	15.3	9.9
	40.0	12.6	9.8	12.9	10.1	13.4	9.9	13.7	10.0	14.0	10.3	14.6	10.1	15.1	9.9
	43.0	12.4	9.7	12.7	10.0	13.3	9.8	13.6	9.9	13.8	10.3	14.4	10.0	15.0	9.8
140 (16.0)	20.0	15.7	11.5	16.0	11.8	16.6	11.5	17.0	11.6	17.3	11.9	17.9	11.6	18.6	11.3
	22.5	15.5	11.4	15.8	11.7	16.5	11.4	16.8	11.5	17.1	11.9	17.8	11.5	18.4	11.2
	25.0	15.4	11.4	15.7	11.6	16.3	11.3	16.6	11.4	17.0	11.8	17.6	11.5	18.2	11.2
	27.5	15.2	11.3	15.5	11.5	16.2	11.3	16.5	11.4	16.8	11.7	17.4	11.4	18.1	11.1
	30.0	15.0	11.2	15.4	11.4	16.0	11.2	16.3	11.3	16.6	11.7	17.3	11.4	17.9	11.0
	32.5	14.9	11.1	15.2	11.4	15.8	11.1	16.2	11.2	16.5	11.6	17.1	11.3	17.8	11.0
	35.0	14.7	11.0	15.0	11.3	15.7	11.1	16.0	11.2	16.3	11.5	17.0	11.2	17.6	10.9
	37.5	14.6	11.0	14.9	11.2	15.5	11.0	15.8	11.1	16.2	11.5	16.8	11.2	17.4	10.9
	40.0	14.4	10.9	14.7	11.1	15.4	10.9	15.7	11.0	16.0	11.4	16.6	11.1	17.3	10.8
	43.0	14.2	10.8	14.5	11.1	15.2	10.8	15.5	10.9	15.8	11.3	16.4	11.0	17.1	10.8

## 2-4.Heating Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

PEFY-P-VMM-A

Unit size	Outdoor air temp. °CWB	Indoor air temp.: °CDB			
		15.0	20.0	25.0	27.0
		SHC	SHC	SHC	SHC
20	-15.0	1.7	1.6	1.6	1.6
	-10.0	1.9	1.9	1.9	1.7
	-5.0	2.1	2.1	2.0	1.7
	0.0	2.4	2.4	2.0	1.7
	2.5	2.5	2.5	2.0	1.7
	6.0	2.5	2.5	2.0	1.7
	7.5	2.6	2.5	2.0	1.7
	10.0	2.8	2.5	2.0	1.7
	12.5	3.0	2.5	2.0	1.7
	15.5	3.0	2.5	2.0	1.7
25	-15.0	2.1	2.1	2.1	2.1
	-10.0	2.4	2.4	2.4	2.2
	-5.0	2.7	2.7	2.5	2.2
	0.0	3.1	3.0	2.5	2.2
	2.5	3.2	3.2	2.5	2.2
	6.0	3.2	3.2	2.5	2.2
	7.5	3.4	3.2	2.5	2.2
	10.0	3.6	3.2	2.5	2.2
	12.5	3.8	3.2	2.5	2.2
	15.5	3.9	3.2	2.5	2.2
32	-15.0	2.7	2.6	2.6	2.6
	-10.0	3.1	3.0	3.0	2.8
	-5.0	3.4	3.4	3.1	2.8
	0.0	3.8	3.8	3.1	2.8
	2.5	4.0	4.0	3.1	2.8
	6.0	4.0	4.0	3.1	2.8
	7.5	4.2	4.0	3.1	2.8
	10.0	4.5	4.0	3.1	2.8
	12.5	4.8	4.0	3.1	2.8
	15.5	4.8	4.0	3.1	2.8
40	-15.0	3.3	3.3	3.3	3.3
	-10.0	3.8	3.8	3.7	3.5
	-5.0	4.3	4.2	3.9	3.5
	0.0	4.8	4.7	3.9	3.5
	2.5	5.0	5.0	3.9	3.5
	6.0	5.1	5.0	3.9	3.5
	7.5	5.3	5.0	3.9	3.5
	10.0	5.6	5.0	3.9	3.5
	12.5	6.0	5.0	3.9	3.5
	15.5	6.1	5.0	3.9	3.5
50	-15.0	4.2	4.2	4.1	4.1
	-10.0	4.8	4.8	4.7	4.3
	-5.0	5.4	5.3	4.9	4.3
	0.0	6.0	5.9	4.9	4.3
	2.5	6.3	6.2	4.9	4.3
	6.0	6.4	6.3	4.9	4.3
	7.5	6.6	6.3	4.9	4.3
	10.0	7.1	6.3	4.9	4.3
	12.5	7.5	6.3	4.9	4.3
	15.5	7.6	6.3	4.9	4.3
63	-15.0	5.4	5.3	5.2	5.2
	-10.0	6.1	6.0	6.0	5.5
	-5.0	6.9	6.8	6.2	5.5
	0.0	7.6	7.5	6.2	5.5
	2.5	8.0	7.9	6.2	5.5
	6.0	8.1	8.0	6.2	5.5
	7.5	8.4	8.0	6.2	5.5
	10.0	9.0	8.0	6.2	5.5
	12.5	9.6	8.0	6.2	5.5
	15.5	9.7	8.0	6.2	5.5

Unit size	Outdoor air temp. °CWB	SHC:Sensible heat Capacity(kW)			
		Indoor air temp.: °CDB			
		15.0	20.0	25.0	27.0
71	-15.0	6.0	5.9	5.9	5.9
	-10.0	6.9	6.8	6.7	6.2
	-5.0	7.7	7.6	7.0	6.2
	0.0	8.6	8.5	7.0	6.2
	2.5	9.0	8.9	7.0	6.2
	6.0	9.1	9.0	7.0	6.2
	7.5	9.5	9.0	7.0	6.2
	10.0	10.1	9.0	7.0	6.2
	12.5	10.8	9.0	7.0	6.2
	15.5	10.9	9.0	7.0	6.2
80	-15.0	6.7	6.6	6.5	6.5
	-10.0	7.6	7.5	7.4	6.9
	-5.0	8.6	8.5	7.8	6.9
	0.0	9.5	9.4	7.8	6.9
	2.5	10.0	9.9	7.8	6.9
	6.0	10.1	10.0	7.8	6.9
	7.5	10.5	10.0	7.8	6.9
	10.0	11.2	10.0	7.8	6.9
	12.5	12.0	10.0	7.8	6.9
	15.5	12.1	10.0	7.8	6.9
100	-15.0	8.4	8.2	8.2	8.1
	-10.0	9.6	9.4	9.3	8.6
	-5.0	10.7	10.6	9.8	8.6
	0.0	11.9	11.8	9.8	8.6
	2.5	12.5	12.4	9.8	8.6
	6.0	12.6	12.5	9.8	8.6
	7.5	13.2	12.5	9.8	8.6
	10.0	14.1	12.5	9.8	8.6
	12.5	15.0	12.5	9.8	8.6
	15.5	15.1	12.5	9.8	8.6
125	-15.0	10.7	10.6	10.5	10.4
	-10.0	12.2	12.1	11.9	11.0
	-5.0	13.7	13.6	12.5	11.0
	0.0	15.3	15.1	12.5	11.0
	2.5	16.0	15.8	12.5	11.0
	6.0	16.2	16.0	12.5	11.0
	7.5	16.8	16.0	12.5	11.0
	10.0	18.0	16.0	12.5	11.0
	12.5	19.1	16.0	12.5	11.0
	15.5	19.4	16.0	12.5	11.0
140	-15.0	12.1	11.9	11.8	11.7
	-10.0	13.8	13.6	13.4	12.4
	-5.0	15.5	15.3	14.0	12.4
	0.0	17.2	17.0	14.0	12.4
	2.5	18.0	17.8	14.0	12.4
	6.0	18.2	18.0	14.0	12.4
	7.5	19.0	18.0	14.0	12.4
	10.0	20.2	18.0	14.0	12.4
	12.5	21.5	18.0	14.0	12.4
	15.5	21.8	18.0	14.0	12.4

PEFY-P-VMM-A

## 2-5.Cooling Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

**PEFY-P-VMM-A**

CA:Capacity(kcal/h)  
SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB			
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	
20	20.0	1813	1520	1901	1588	2049	1585	2157	1637	2192	1691	2320	1668	2459	1644
	22.5	1813	1520	1894	1584	2031	1578	2131	1626	2164	1681	2290	1657	2424	1633
	25.0	1799	1513	1876	1576	2008	1568	2105	1616	2137	1670	2259	1646	2389	1621
	27.5	1784	1507	1857	1568	1985	1559	2079	1606	2110	1660	2229	1635	2354	1610
	30.0	1770	1500	1839	1560	1962	1549	2052	1595	2083	1649	2198	1625	2319	1598
	32.5	1755	1494	1821	1552	1939	1540	2026	1585	2055	1638	2167	1614	2285	1587
	35.0	1741	1487	1802	1544	1916	1530	2000	1575	2028	1628	2137	1603	2250	1575
	37.5	1726	1480	1784	1536	1893	1521	1974	1564	2001	1618	2106	1592	2215	1564
	40.0	1712	1474	1766	1527	1870	1511	1948	1554	1974	1607	2076	1581	2180	1553
	43.0	1695	1466	1744	1518	1843	1500	1916	1542	1941	1595	2039	1568	2139	1539
25	20.0	2266	1734	2377	1807	2561	1806	2697	1858	2740	1912	2900	1885	3073	1856
	22.5	2266	1734	2367	1802	2539	1796	2664	1844	2705	1898	2862	1870	3030	1841
	25.0	2248	1726	2345	1791	2510	1784	2631	1830	2671	1884	2824	1856	2986	1825
	27.5	2230	1717	2322	1781	2482	1771	2598	1816	2637	1870	2786	1841	2943	1810
	30.0	2212	1708	2299	1770	2453	1758	2566	1803	2603	1856	2748	1827	2899	1795
	32.5	2194	1700	2276	1759	2424	1746	2533	1789	2569	1842	2709	1812	2856	1780
	35.0	2176	1691	2253	1748	2395	1733	2500	1776	2535	1828	2671	1798	2812	1765
	37.5	2158	1682	2230	1738	2367	1721	2467	1762	2501	1814	2633	1784	2769	1750
	40.0	2140	1674	2207	1727	2338	1708	2434	1749	2467	1801	2595	1769	2725	1735
	43.0	2118	1663	2180	1714	2304	1693	2395	1732	2426	1784	2549	1752	2673	1717
32	20.0	2855	2160	2995	2249	3227	2249	3398	2312	3452	2378	3654	2344	3872	2308
	22.5	2855	2160	2983	2243	3199	2236	3357	2294	3409	2360	3606	2325	3817	2288
	25.0	2833	2149	2954	2229	3163	2220	3315	2277	3366	2342	3558	2307	3763	2269
	27.5	2810	2138	2925	2216	3127	2204	3274	2259	3323	2324	3510	2288	3708	2249
	30.0	2787	2127	2896	2202	3091	2188	3233	2242	3280	2306	3462	2270	3653	2230
	32.5	2765	2116	2868	2188	3055	2172	3191	2224	3237	2289	3414	2251	3598	2211
	35.0	2742	2104	2839	2175	3018	2156	3150	2207	3194	2271	3366	2233	3544	2191
	37.5	2719	2093	2810	2161	2982	2140	3109	2190	3151	2253	3318	2215	3489	2172
	40.0	2696	2083	2781	2148	2946	2124	3067	2173	3109	2236	3270	2197	3434	2153
	43.0	2669	2069	2746	2131	2902	2105	3018	2152	3057	2215	3212	2175	3368	2131
40	20.0	3625	2805	3803	2923	4098	2921	4315	3006	4383	3096	4640	3052	4917	3006
	22.5	3625	2805	3788	2916	4063	2906	4262	2985	4329	3074	4579	3029	4848	2982
	25.0	3597	2791	3751	2899	4017	2886	4210	2963	4274	3051	4518	3006	4778	2957
	27.5	3568	2778	3715	2882	3971	2866	4157	2941	4220	3029	4457	2983	4708	2933
	30.0	3539	2764	3678	2864	3925	2846	4105	2919	4165	3007	4396	2960	4639	2909
	32.5	3511	2750	3641	2847	3879	2826	4052	2898	4111	2985	4335	2937	4569	2885
	35.0	3482	2736	3605	2830	3833	2806	4000	2876	4056	2963	4274	2914	4500	2861
	37.5	3453	2722	3568	2813	3787	2786	3948	2855	4002	2941	4213	2892	4430	2837
	40.0	3424	2709	3531	2797	3741	2766	3895	2833	3947	2919	4152	2869	4361	2813
	43.0	3389	2692	3487	2776	3686	2742	3832	2808	3882	2893	4078	2842	4277	2785
50	20.0	4532	3420	4753	3560	5123	3560	5393	3660	5479	3764	5800	3710	6146	3653
	22.5	4532	3420	4735	3551	5078	3540	5328	3632	5411	3735	5724	3681	6059	3622
	25.0	4496	3402	4689	3529	5021	3515	5262	3604	5343	3707	5648	3651	5972	3591
	27.5	4460	3385	4643	3507	4963	3489	5197	3576	5275	3678	5571	3622	5886	3560
	30.0	4424	3367	4597	3486	4906	3463	5131	3548	5207	3650	5495	3592	5799	3529
	32.5	4388	3349	4552	3464	4848	3438	5066	3521	5139	3622	5419	3563	5712	3498
	35.0	4352	3332	4506	3442	4791	3413	5000	3493	5070	3594	5342	3534	5625	3468
	37.5	4316	3314	4460	3421	4734	3387	4934	3466	5002	3566	5266	3505	5538	3437
	40.0	4280	3297	4414	3399	4676	3362	4869	3439	4934	3538	5190	3476	5451	3407
	43.0	4237	3276	4359	3374	4607	3332	4790	3406	4852	3505	5098	3442	5347	3371
63	20.0	5710	4267	5989	4440	6455	4441	6796	4563	6904	4691	7309	4624	7744	4552
	22.5	5710	4267	5966	4429	6399	4416	6713	4528	6818	4655	7212	4586	7635	4512
	25.0	5665	4245	5908	4401	6326	4383	6630	4492	6732	4619	7116	4549	7525	4473
	27.5	5620	4222	5851	4374	6254	4351	6548	4457	6646	4583	7020	4511	7416	4433
	30.0	5574	4200	5793	4346	6181	4318	6465	4422	6560	4547	6924	4474	7306	4394
	32.5	5529	4177	5735	4319	6109	4286	6383	4387	6475	4511	6828	4437	7197	4355
	35.0	5484	4155	5677	4291	6037	4254	6300	4352	6389	4475	6731	4400	7087	4316
	37.5	5438	4133	5620	4264	5964	4222	6217	4317	6303	4440	6635	4363	6978	4278
	40.0	5393	4111	5562	4236	5892	4190	6135	4283	6217	4405	6539	4326	6868	4239
	43.0	5338	4084	5493	4204	5805	4151	6036	4241	6114	4362	6424	4282	6737	4193

**Cooling Capacity**

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-,Y(S)MC)

**PEFY-P-VMM-A**

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
71	20.0	6435	4778	6750	4971	7274	4973	7659	5108	7780	5249	8237	5174	8728	5093
	22.5	6435	4778	6724	4958	7211	4944	7566	5067	7684	5208	8128	5131	8604	5047
	25.0	6385	4752	6659	4927	7130	4907	7472	5027	7587	5167	8020	5088	8481	5003
	27.5	6334	4727	6593	4895	7048	4870	7379	4987	7490	5126	7911	5045	8358	4958
	30.0	6282	4702	6528	4864	6966	4833	7286	4947	7393	5085	7803	5003	8234	4913
	32.5	6231	4676	6463	4833	6885	4797	7193	4908	7297	5045	7695	4961	8111	4869
	35.0	6180	4651	6398	4802	6803	4760	7100	4868	7200	5004	7586	4919	7987	4825
	37.5	6129	4626	6333	4770	6722	4724	7007	4829	7103	4964	7478	4877	7864	4781
	40.0	6078	4601	6268	4739	6640	4687	6914	4789	7006	4924	7369	4836	7740	4738
80	43.0	6016	4571	6190	4702	6542	4644	6802	4742	6890	4876	7239	4786	7592	4686
	20.0	7251	5192	7605	5395	8196	5402	8629	5539	8767	5680	9281	5597	9834	5507
	22.5	7251	5192	7576	5380	8125	5369	8525	5491	8658	5631	9159	5546	9695	5454
	25.0	7194	5163	7503	5343	8033	5325	8420	5444	8549	5583	9036	5496	9556	5401
	27.5	7136	5133	7429	5306	7941	5282	8315	5397	8440	5535	8914	5446	9417	5349
	30.0	7079	5104	7356	5270	7849	5239	8210	5350	8331	5487	8792	5396	9278	5296
	32.5	7021	5074	7283	5233	7758	5196	8105	5304	8222	5440	8670	5347	9139	5244
	35.0	6963	5044	7209	5197	7666	5153	8000	5257	8113	5392	8548	5298	9000	5193
	37.5	6906	5015	7136	5160	7574	5110	7895	5211	8004	5345	8426	5249	8861	5141
100	40.0	6848	4986	7063	5124	7482	5068	7790	5165	7895	5298	8304	5200	8722	5090
	43.0	6779	4950	6975	5081	7371	5017	7664	5110	7764	5242	8157	5142	8555	5029
	20.0	9063	7091	9507	7392	10245	7387	10787	7606	10958	7837	11601	7727	12293	7609
	22.5	9063	7091	9470	7375	10157	7348	10656	7551	10822	7781	11448	7669	12119	7549
	25.0	8993	7057	9378	7332	10042	7298	10525	7497	10686	7726	11296	7612	11945	7488
	27.5	8920	7023	9287	7290	9927	7248	10393	7443	10550	7671	11143	7554	11771	7428
	30.0	8848	6988	9195	7247	9812	7198	10262	7389	10413	7616	10990	7497	11597	7368
	32.5	8776	6954	9103	7205	9697	7149	10131	7336	10277	7561	10837	7440	11423	7309
	35.0	8704	6920	9012	7163	9582	7099	10000	7282	10141	7507	10685	7384	11250	7249
125	37.5	8632	6886	8920	7121	9467	7050	9869	7229	10005	7452	10532	7328	11076	7190
	40.0	8560	6852	8828	7079	9352	7001	9738	7176	9868	7398	10379	7271	10902	7131
	43.0	8474	6811	8718	7028	9214	6942	9580	7112	9705	7333	10196	7204	10693	7061
	20.0	11329	8681	11883	9043	12807	9040	13484	9300	13698	9573	14501	9437	15366	9292
	22.5	11329	8681	11837	9021	12696	8991	13320	9231	13527	9502	14310	9364	15149	9215
	25.0	11241	8639	11723	8967	12552	8928	13156	9162	13357	9432	14119	9291	14931	9138
	27.5	11151	8595	11608	8913	12408	8864	12992	9093	13187	9362	13929	9218	14714	9062
	30.0	11060	8551	11494	8860	12265	8801	12828	9025	13017	9292	13738	9145	14497	8986
	32.5	10970	8508	11379	8806	12121	8738	12664	8957	12846	9223	13547	9073	14279	8910
140	35.0	10880	8464	11265	8752	11977	8676	12500	8889	12676	9153	13356	9002	14062	8835
	37.5	10790	8421	11150	8699	11834	8613	12336	8821	12506	9084	13165	8930	13845	8760
	40.0	10700	8378	11035	8646	11690	8551	12172	8754	12335	9016	12974	8859	13627	8685
	43.0	10592	8326	10898	8582	11518	8477	11975	8674	12131	8934	12745	8774	13367	8596
	20.0	12689	9504	13309	9893	14344	9894	15102	10167	15342	10454	16241	10304	17210	10143
	22.5	12689	9504	13258	9868	14219	9838	14918	10088	15151	10373	16028	10220	16966	10055
	25.0	12590	9456	13130	9806	14058	9765	14734	10010	14960	10293	15814	10136	16723	9967
	27.5	12489	9406	13001	9745	13897	9693	14551	9931	14769	10213	15600	10053	16480	9880
	30.0	12388	9356	12873	9683	13737	9621	14367	9853	14579	10133	15386	9970	16236	9793
	32.5	12287	9307	12745	9622	13576	9549	14184	9776	14388	10054	15172	9888	15993	9706
	35.0	12186	9257	12616	9561	13415	9478	14000	9698	14197	9975	14959	9806	15749	9620
	37.5	12085	9208	12488	9500	13254	9407	13816	9621	14006	9896	14745	9724	15506	9535
	40.0	11984	9159	12360	9440	13093	9336	13633	9544	13816	9817	14531	9643	15263	9449
	43.0	11863	9100	12206	9367	12900	9251	13412	9453	13587	9724	14275	9546	14971	9348

PEFY-P-VMM-A

## 2-6.Heating Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

### PEFY-P-VMM-A

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
71	-15.0	5530	5447	5365	5332
	-10.0	6309	6227	6144	5691
	-5.0	7089	7006	6433	5691
	0.0	7868	7786	6433	5691
	2.5	8258	8000	6433	5691
	6.0	8330	8000	6433	5691
	7.5	8680	8000	6433	5691
	10.0	9264	8000	6433	5691
	12.5	9847	8000	6433	5691
	15.5	9979	8000	6433	5691
80	-15.0	6221	6128	6036	5998
	-10.0	7098	7005	6912	6402
	-5.0	7975	7882	7237	6402
	0.0	8852	8759	7237	6402
	2.5	9290	9000	7237	6402
	6.0	9371	9000	7237	6402
	7.5	9765	9000	7237	6402
	10.0	10421	9000	7237	6402
	12.5	11078	9000	7237	6402
	15.5	11227	9000	7237	6402
100	-15.0	7742	7626	7511	7465
	-10.0	8833	8718	8602	7967
	-5.0	9924	9809	9006	7967
	0.0	11015	10900	9006	7967
	2.5	11561	11200	9006	7967
	6.0	11662	11200	9006	7967
	7.5	12152	11200	9006	7967
	10.0	12969	11200	9006	7967
	12.5	13786	11200	9006	7967
	15.5	13971	11200	9006	7967
125	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959
	-5.0	12405	12261	11258	9959
	0.0	13769	13625	11258	9959
	2.5	14451	14000	11258	9959
	6.0	14577	14000	11258	9959
	7.5	15190	14000	11258	9959
	10.0	16211	14000	11258	9959
	12.5	17232	14000	11258	9959
	15.5	17464	14000	11258	9959
140	-15.0	11060	10895	10730	10664
	-10.0	12619	12454	12289	11381
	-5.0	14177	14012	12866	11381
	0.0	15736	15571	12866	11381
	2.5	16515	16000	12866	11381
	6.0	16660	16000	12866	11381
	7.5	17360	16000	12866	11381
	10.0	18527	16000	12866	11381
	12.5	19694	16000	12866	11381
	15.5	19959	16000	12866	11381

## 2-7.Cooling Capacity (In combination with PQRY-P200-250YMF-C)

**PEFY-P-VMM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°C	CA	SHC	CA										
20	10	2.1	1.8	2.2	1.9	2.4	1.8	2.4	1.9	2.5	1.9	2.6	1.9	2.8	1.9
	20	2.1	1.8	2.1	1.8	2.3	1.8	2.3	1.8	2.4	1.9	2.5	1.9	2.7	1.9
	30	2.0	1.7	2.0	1.8	2.1	1.7	2.2	1.8	2.3	1.9	2.4	1.8	2.5	1.8
	40	1.7	1.6	1.8	1.6	1.9	1.6	1.9	1.7	2.0	1.7	2.1	1.7	2.2	1.7
	45	1.6	1.5	1.7	1.6	1.8	1.6	1.8	1.6	1.9	1.7	2.0	1.7	2.1	1.7
25	10	2.4	1.9	2.5	2.0	2.7	2.0	2.8	2.0	2.8	2.1	3.0	2.0	3.2	2.0
	20	2.4	1.9	2.4	1.9	2.6	1.9	2.7	2.0	2.7	2.0	2.9	2.0	3.0	2.0
	30	2.2	1.8	2.3	1.9	2.4	1.9	2.5	1.9	2.6	2.0	2.7	1.9	2.9	1.9
	40	1.9	1.7	2.0	1.8	2.1	1.7	2.2	1.8	2.2	1.8	2.4	1.8	2.5	1.8
	45	1.8	1.6	1.9	1.7	2.0	1.7	2.1	1.7	2.1	1.8	2.2	1.8	2.4	1.7
32	10	3.5	2.6	3.6	2.7	3.9	2.7	4.0	2.7	4.1	2.8	4.3	2.7	4.5	2.7
	20	3.4	2.5	3.5	2.6	3.7	2.6	3.8	2.6	3.9	2.7	4.1	2.7	4.4	2.6
	30	3.2	2.5	3.3	2.5	3.5	2.5	3.6	2.5	3.7	2.6	3.9	2.6	4.1	2.6
	40	2.8	2.3	2.9	2.3	3.1	2.3	3.1	2.4	3.2	2.4	3.4	2.4	3.6	2.4
	45	2.6	2.2	2.7	2.3	2.9	2.2	3.0	2.3	3.0	2.4	3.2	2.3	3.4	2.3
40	10	4.4	3.3	4.5	3.5	4.8	3.4	5.0	3.5	5.1	3.6	5.4	3.5	5.7	3.5
	20	4.2	3.3	4.4	3.4	4.6	3.3	4.8	3.4	4.9	3.5	5.2	3.5	5.5	3.4
	30	4.0	3.2	4.1	3.3	4.4	3.2	4.5	3.3	4.6	3.4	4.9	3.4	5.2	3.3
	40	3.5	2.9	3.6	3.0	3.8	3.0	3.9	3.0	4.0	3.2	4.3	3.1	4.5	3.1
	45	3.3	2.8	3.4	2.9	3.6	2.9	3.7	3.0	3.8	3.1	4.0	3.0	4.2	3.0
50	10	5.5	4.1	5.6	4.2	6.0	4.2	6.2	4.2	6.3	4.4	6.7	4.3	7.1	4.2
	20	5.3	4.0	5.4	4.1	5.8	4.1	5.9	4.1	6.1	4.3	6.5	4.2	6.8	4.1
	30	5.0	3.8	5.1	4.0	5.5	3.9	5.6	4.0	5.8	4.1	6.1	4.1	6.4	4.0
	40	4.3	3.5	4.5	3.6	4.7	3.6	4.9	3.7	5.0	3.8	5.3	3.8	5.6	3.7
	45	4.1	3.4	4.2	3.5	4.5	3.5	4.6	3.6	4.7	3.7	5.0	3.7	5.3	3.6
63	10	6.9	5.1	7.2	5.3	7.6	5.2	7.8	5.3	8.0	5.5	8.5	5.4	9.0	5.3
	20	6.7	5.0	6.9	5.1	7.3	5.1	7.5	5.1	7.8	5.3	8.2	5.3	8.6	5.2
	30	6.3	4.8	6.5	4.9	6.9	4.9	7.1	5.0	7.3	5.2	7.7	5.1	8.1	5.0
	40	5.5	4.4	5.7	4.6	6.0	4.5	6.2	4.6	6.4	4.8	6.7	4.7	7.1	4.6
	45	5.2	4.3	5.3	4.4	5.7	4.4	5.8	4.4	6.0	4.6	6.3	4.6	6.7	4.5
71	10	7.8	5.7	8.1	5.9	8.6	5.8	8.8	5.9	9.1	6.1	9.6	6.0	10.1	5.9
	20	7.5	5.6	7.8	5.7	8.3	5.7	8.5	5.8	8.7	6.0	9.2	5.9	9.7	5.8
	30	7.1	5.4	7.3	5.5	7.8	5.5	8.0	5.6	8.2	5.8	8.7	5.7	9.2	5.6
	40	6.2	4.9	6.4	5.1	6.8	5.0	7.0	5.1	7.2	5.3	7.6	5.2	8.0	5.2
	45	5.8	4.8	6.0	4.9	6.4	4.9	6.6	5.0	6.8	5.2	7.1	5.1	7.5	5.0
80	10	8.8	6.2	9.1	6.4	9.6	6.3	9.9	6.4	10.2	6.6	10.8	6.5	11.4	6.4
	20	8.5	6.1	8.7	6.2	9.3	6.2	9.5	6.2	9.8	6.4	10.4	6.3	10.9	6.2
	30	8.0	5.8	8.3	6.0	8.8	5.9	9.0	6.0	9.3	6.2	9.8	6.1	10.3	6.0
	40	6.9	5.3	7.2	5.5	7.6	5.4	7.8	5.5	8.1	5.7	8.5	5.6	9.0	5.5
	45	6.5	5.1	6.8	5.3	7.2	5.2	7.4	5.3	7.6	5.5	8.0	5.4	8.5	5.3
100	10	10.9	8.4	11.3	8.7	12.0	8.6	12.3	8.8	12.7	9.1	13.4	9.0	14.1	8.8
	20	10.5	8.2	10.9	8.5	11.6	8.4	11.9	8.6	12.2	8.9	12.9	8.8	13.6	8.6
	30	9.9	8.0	10.3	8.2	10.9	8.2	11.2	8.3	11.5	8.6	12.2	8.5	12.8	8.4
	40	8.6	7.4	8.9	7.6	9.5	7.6	9.7	7.7	10.0	8.0	10.6	7.9	11.2	7.8
	45	8.1	7.1	8.4	7.4	8.9	7.3	9.2	7.5	9.5	7.8	10.0	7.7	10.5	7.6
125	10	13.7	10.3	14.1	10.7	15.0	10.6	15.4	10.7	15.9	11.1	16.7	10.9	17.7	10.7
	20	13.2	10.1	13.6	10.4	14.5	10.3	14.8	10.5	15.3	10.9	16.1	10.7	17.0	10.5
	30	12.4	9.7	12.8	10.1	13.6	10.0	14.0	10.1	14.4	10.5	15.2	10.4	16.1	10.2
	40	10.8	9.0	11.2	9.3	11.9	9.2	12.2	9.4	12.5	9.8	13.2	9.6	14.0	9.5
	45	10.2	8.7	10.5	9.0	11.2	8.9	11.5	9.1	11.8	9.5	12.5	9.4	13.2	9.2
140	10	15.6	11.5	16.1	11.8	17.1	11.7	17.6	11.8	18.1	12.3	19.1	12.1	20.2	11.9
	20	15.0	11.2	15.6	11.5	16.5	11.4	17.0	11.6	17.5	12.0	18.4	11.8	19.5	11.6
	30	14.2	10.8	14.7	11.1	15.6	11.0	16.0	11.2	16.5	11.6	17.4	11.4	18.4	11.2
	40	12.3	9.9	12.8	10.2	13.6	10.1	13.9	10.3	14.3	10.7	15.1	10.6	16.0	10.4
	45	11.6	9.6	12.0	9.9	12.8	9.8	13.1	10.0	13.5	10.4	14.3	10.2	15.0	10.1

PEFY-P-VMM-A

## 2-8.Heating Capacity (In combination with PQRY-P200-250YMF-C)

**PEFY-P-VMM-A**

SHC:Sensible heat Capacity(kW)

Unit size	Water temp. °C	Indoor air temp.: °CDB				
		15 SHC(kW)	19 SHC(kW)	20 SHC(kW)	25 SHC(kW)	27 SHC(kW)
20	10	2.2	2.2	2.1	1.7	1.5
	20	2.6	2.6	2.5	2.0	1.8
	30	2.6	2.6	2.5	2.0	1.8
	40	2.7	2.7	2.6	2.1	1.9
	45	2.9	2.9	2.9	2.3	2.1
25	10	2.8	2.8	2.7	2.2	2.0
	20	3.3	3.3	3.2	2.6	2.3
	30	3.3	3.3	3.2	2.6	2.3
	40	3.4	3.4	3.3	2.7	2.4
	45	3.8	3.7	3.6	2.9	2.6
32	10	3.5	3.5	3.4	2.7	2.4
	20	4.1	4.1	4.0	3.2	2.9
	30	4.1	4.1	4.0	3.2	2.9
	40	4.3	4.2	4.2	3.3	3.0
	45	4.7	4.7	4.6	3.6	3.3
40	10	4.4	4.3	4.3	3.4	3.1
	20	5.2	5.1	5.0	4.0	3.6
	30	5.2	5.1	5.0	4.0	3.6
	40	5.4	5.3	5.2	4.2	3.7
	45	5.9	5.8	5.7	4.6	4.1
50	10	5.5	5.5	5.4	4.3	3.9
	20	6.5	6.4	6.3	5.0	4.5
	30	6.5	6.4	6.3	5.0	4.5
	40	6.7	6.7	6.6	5.2	4.7
	45	7.4	7.3	7.2	5.7	5.2
63	10	7.0	6.9	6.8	5.4	4.9
	20	8.2	8.2	8.0	6.4	5.8
	30	8.2	8.2	8.0	6.4	5.8
	40	8.6	8.5	8.3	6.7	6.0
	45	9.4	9.3	9.1	7.3	6.6
71	10	7.9	7.8	7.7	6.1	5.5
	20	9.3	9.2	9.0	7.2	6.5
	30	9.3	9.2	9.0	7.2	6.5
	40	9.6	9.5	9.4	7.5	6.7
	45	10.6	10.5	10.3	8.2	7.4
80	10	8.8	8.7	8.5	6.8	6.1
	20	10.3	10.2	10.0	8.0	7.2
	30	10.3	10.2	10.0	8.0	7.2
	40	10.7	10.6	10.4	8.3	7.5
	45	11.7	11.6	11.4	9.1	8.2
100	10	10.9	10.8	10.6	8.5	7.7
	20	12.9	12.8	12.5	10.0	9.0
	30	12.9	12.8	12.5	10.0	9.0
	40	13.4	13.3	13.0	10.4	9.4
	45	14.7	14.5	14.3	11.4	10.3
125	10	14.0	13.9	13.6	10.9	9.8
	20	16.5	16.3	16.0	12.8	11.5
	30	16.5	16.3	16.0	12.8	11.5
	40	17.1	17.0	16.6	13.3	12.0
	45	18.8	18.6	18.2	14.6	13.1
140	10	15.8	15.6	15.3	12.2	11.0
	20	18.5	18.4	18.0	14.4	13.0
	30	18.5	18.4	18.0	14.4	13.0
	40	19.3	19.1	18.7	15.0	13.5
	45	21.1	20.9	20.5	16.4	14.8

## 2-9.Cooling Capacity (In combination with PURY-P400-500YMF-C)

PEFY-P-VMM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	CA:Capacity(kW)												
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB		
°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC
20	20.0	2.0	1.7	2.1	1.8	2.3	1.8	2.4	1.9	2.6	1.9	2.7	1.9	
	22.5	2.0	1.7	2.1	1.8	2.3	1.8	2.4	1.9	2.6	1.9	2.7	1.9	
	25.0	2.0	1.7	2.1	1.8	2.2	1.8	2.4	1.9	2.5	1.9	2.7	1.8	
	27.5	2.0	1.7	2.1	1.8	2.2	1.8	2.4	1.9	2.5	1.9	2.6	1.8	
	30.0	2.0	1.7	2.1	1.8	2.2	1.8	2.3	1.9	2.5	1.9	2.6	1.8	
	32.5	2.0	1.7	2.0	1.8	2.2	1.8	2.3	1.9	2.4	1.8	2.6	1.8	
	35.0	1.9	1.7	2.0	1.8	2.1	1.7	2.3	1.9	2.4	1.8	2.5	1.8	
	37.5	1.9	1.7	2.0	1.8	2.1	1.7	2.2	1.8	2.4	1.8	2.5	1.8	
	40.0	1.9	1.7	2.0	1.7	2.1	1.7	2.2	1.8	2.3	1.8	2.4	1.8	
	43.0	1.9	1.7	1.9	1.7	2.1	1.7	2.2	1.8	2.3	1.8	2.4	1.8	
25	20.0	2.6	2.0	2.7	2.1	2.9	2.1	3.1	2.2	3.3	2.2	3.5	2.1	
	22.5	2.6	2.0	2.7	2.1	2.9	2.1	3.1	2.2	3.3	2.1	3.4	2.1	
	25.0	2.6	2.0	2.7	2.1	2.9	2.0	3.0	2.2	3.2	2.1	3.4	2.1	
	27.5	2.5	2.0	2.6	2.0	2.8	2.0	3.0	2.1	3.2	2.1	3.3	2.1	
	30.0	2.5	2.0	2.6	2.0	2.8	2.0	3.0	2.1	3.1	2.1	3.3	2.1	
	32.5	2.5	2.0	2.6	2.0	2.8	2.0	2.9	2.1	3.1	2.1	3.2	2.0	
	35.0	2.5	1.9	2.6	2.0	2.7	2.0	2.9	2.1	3.0	2.1	3.2	2.0	
	37.5	2.5	1.9	2.5	2.0	2.7	2.0	2.8	2.1	3.0	2.0	3.1	2.0	
	40.0	2.4	1.9	2.5	2.0	2.7	2.0	2.8	2.1	3.0	2.0	3.1	2.0	
	43.0	2.4	1.9	2.5	2.0	2.6	1.9	2.8	2.1	2.9	2.0	3.0	2.0	
32	20.0	3.3	2.5	3.5	2.6	3.7	2.6	4.0	2.8	4.2	2.7	4.5	2.7	
	22.5	3.3	2.5	3.5	2.6	3.7	2.6	4.0	2.7	4.2	2.7	4.4	2.7	
	25.0	3.3	2.5	3.4	2.6	3.7	2.6	3.9	2.7	4.1	2.7	4.4	2.6	
	27.5	3.3	2.5	3.4	2.6	3.6	2.6	3.9	2.7	4.1	2.7	4.3	2.6	
	30.0	3.2	2.5	3.4	2.6	3.6	2.5	3.8	2.7	4.0	2.6	4.2	2.6	
	32.5	3.2	2.5	3.3	2.5	3.5	2.5	3.8	2.7	4.0	2.6	4.2	2.6	
	35.0	3.2	2.4	3.3	2.5	3.5	2.5	3.7	2.6	3.9	2.6	4.1	2.5	
	37.5	3.2	2.4	3.3	2.5	3.5	2.5	3.7	2.6	3.8	2.6	4.0	2.5	
	40.0	3.1	2.4	3.2	2.5	3.4	2.5	3.6	2.6	3.8	2.6	4.0	2.5	
	43.0	3.1	2.4	3.2	2.5	3.4	2.4	3.5	2.6	3.7	2.5	3.9	2.5	
40	20.0	4.1	3.2	4.3	3.4	4.7	3.4	5.0	3.6	5.3	3.5	5.6	3.5	
	22.5	4.1	3.2	4.3	3.4	4.6	3.3	4.9	3.5	5.2	3.5	5.5	3.4	
	25.0	4.1	3.2	4.3	3.3	4.6	3.3	4.9	3.5	5.2	3.5	5.5	3.4	
	27.5	4.1	3.2	4.2	3.3	4.5	3.3	4.8	3.5	5.1	3.4	5.4	3.4	
	30.0	4.0	3.2	4.2	3.3	4.5	3.3	4.8	3.5	5.0	3.4	5.3	3.3	
	32.5	4.0	3.2	4.2	3.3	4.4	3.3	4.7	3.4	5.0	3.4	5.2	3.3	
	35.0	4.0	3.1	4.1	3.3	4.4	3.2	4.6	3.4	4.9	3.4	5.1	3.3	
	37.5	3.9	3.1	4.1	3.2	4.3	3.2	4.6	3.4	4.8	3.3	5.1	3.3	
	40.0	3.9	3.1	4.0	3.2	4.3	3.2	4.5	3.4	4.7	3.3	5.0	3.2	
	43.0	3.9	3.1	4.0	3.2	4.2	3.2	4.4	3.3	4.7	3.3	4.9	3.2	
50	20.0	5.2	3.9	5.4	4.1	5.8	4.1	6.2	4.3	6.6	4.3	7.0	4.2	
	22.5	5.2	3.9	5.4	4.1	5.8	4.1	6.2	4.3	6.5	4.2	6.9	4.2	
	25.0	5.1	3.9	5.3	4.0	5.7	4.0	6.1	4.3	6.4	4.2	6.8	4.1	
	27.5	5.1	3.9	5.3	4.0	5.6	4.0	6.0	4.2	6.3	4.2	6.7	4.1	
	30.0	5.0	3.9	5.2	4.0	5.6	4.0	5.9	4.2	6.2	4.1	6.6	4.1	
	32.5	5.0	3.8	5.2	4.0	5.5	3.9	5.8	4.2	6.2	4.1	6.5	4.0	
	35.0	4.9	3.8	5.1	3.9	5.4	3.9	5.8	4.1	6.1	4.1	6.4	4.0	
	37.5	4.9	3.8	5.1	3.9	5.4	3.9	5.7	4.1	6.0	4.0	6.3	3.9	
	40.0	4.9	3.8	5.0	3.9	5.3	3.9	5.6	4.1	5.9	4.0	6.2	3.9	
	43.0	4.8	3.8	5.0	3.9	5.2	3.8	5.5	4.0	5.8	4.0	6.1	3.9	
63	20.0	6.5	4.9	6.9	5.1	7.4	5.1	7.9	5.4	8.4	5.3	8.9	5.2	
	22.5	6.5	4.9	6.8	5.1	7.3	5.1	7.8	5.4	8.3	5.3	8.7	5.2	
	25.0	6.5	4.9	6.8	5.1	7.2	5.0	7.7	5.3	8.1	5.2	8.6	5.2	
	27.5	6.4	4.9	6.7	5.0	7.2	5.0	7.6	5.3	8.0	5.2	8.5	5.1	
	30.0	6.4	4.8	6.6	5.0	7.1	5.0	7.5	5.2	7.9	5.2	8.4	5.1	
	32.5	6.3	4.8	6.6	5.0	7.0	4.9	7.4	5.2	7.8	5.1	8.2	5.0	
	35.0	6.3	4.8	6.5	4.9	6.9	4.9	7.3	5.2	7.7	5.1	8.1	5.0	
	37.5	6.2	4.8	6.4	4.9	6.8	4.9	7.2	5.1	7.6	5.0	8.0	4.9	
	40.0	6.2	4.7	6.4	4.9	6.7	4.8	7.1	5.1	7.5	5.0	7.9	4.9	
	43.0	6.1	4.7	6.3	4.8	6.6	4.8	7.0	5.0	7.3	4.9	7.7	4.8	
71	20.0	7.4	5.5	7.7	5.7	8.3	5.7	8.9	6.0	9.4	6.0	10.0	5.9	
	22.5	7.4	5.5	7.7	5.7	8.2	5.7	8.8	6.0	9.3	5.9	9.8	5.8	
	25.0	7.3	5.5	7.6	5.7	8.2	5.6	8.7	6.0	9.2	5.9	9.7	5.8	
	27.5	7.2	5.4	7.5	5.6	8.1	5.6	8.6	5.9	9.0	5.8	9.6	5.7	
	30.0	7.2	5.4	7.5	5.6	8.0	5.6	8.5	5.9	8.9	5.8	9.4	5.7	
	32.5	7.1	5.4	7.4	5.6	7.9	5.5	8.3	5.8	8.8	5.7	9.3	5.6	
	35.0	7.1	5.4	7.3	5.5	7.8	5.5	8.2	5.8	8.7	5.7	9.1	5.6	
	37.5	7.0	5.3	7.2	5.5	7.7	5.4	8.1	5.7	8.6	5.6	9.0	5.5	
	40.0	7.0	5.3	7.2	5.5	7.6	5.4	8.0	5.7	8.4	5.6	8.9	5.5	
	43.0	6.9	5.3	7.1	5.4	7.5	5.3	7.9	5.6	8.3	5.5	8.7	5.4	
80	20.0	8.3	6.0	8.7	6.2	9.4	6.2	10.0	6.5	10.6	6.4	11.2	6.3	
	22.5	8.3	6.0	8.7	6.2	9.3	6.2	9.9	6.5	10.5	6.4	11.1	6.3	
	25.0	8.2	5.9	8.6	6.1	9.2	6.1	9.8	6.4	10.3	6.3	10.9	6.2	
	27.5	8.1	5.9	8.5	6.1	9.1	6.1	9.6	6.4	10.2	6.3	10.8	6.1	
	30.0	8.1	5.9	8.4	6.1	9.0	6.0	9.5	6.3	10.0	6.2	10.6	6.1	
	32.5	8.0	5.8	8.3	6.0	8.9	6.0	9.4	6.3	9.9	6.1	10.4	6.0	
	35.0	8.0	5.8	8.2	6.0	8.8	5.9	9.3	6.2	9.8	6.1	10.3	6.0	
	37.5	7.9	5.8	8.1	5.9	8.6	5.9	9.1	6.1	9.6	6.0	10.1	5.9	
	40.0	7.8	5.7	8.1	5.9	8.5	5.8	9.0	6.1	9.5	6.0	10.0	5.9	
	43.0	7.7	5.7	8.0	5.8	8.4	5.8	8.9	6.0	9.3	5.9	9.8	5.8	

PEFY-P-VMM-A

## Cooling Capacity (In combination with PURY-P400-500YMF-C)

**PEFY-P-VMM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.												
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA								
100	20.0	10.3	8.1	10.8	8.5	11.6	8.5	12.5	9.0	13.2	8.9	14.0	8.7
	22.5	10.3	8.1	10.8	8.5	11.5	8.4	12.3	8.9	13.0	8.8	13.8	8.7
	25.0	10.2	8.1	10.7	8.4	11.4	8.4	12.1	8.9	12.8	8.7	13.6	8.6
	27.5	10.1	8.1	10.6	8.4	11.3	8.3	12.0	8.8	12.7	8.7	13.4	8.5
	30.0	10.1	8.0	10.5	8.3	11.2	8.3	11.8	8.8	12.5	8.6	13.2	8.5
	32.5	10.0	8.0	10.3	8.3	11.0	8.2	11.7	8.7	12.3	8.6	13.0	8.4
	35.0	9.9	7.9	10.2	8.2	10.9	8.2	11.5	8.6	12.1	8.5	12.8	8.3
	37.5	9.8	7.9	10.1	8.2	10.8	8.1	11.4	8.6	12.0	8.4	12.6	8.3
	40.0	9.7	7.9	10.0	8.1	10.6	8.0	11.2	8.5	11.8	8.4	12.4	8.2
	43.0	9.6	7.8	9.9	8.1	10.5	8.0	11.0	8.4	11.6	8.3	12.2	8.1
125	20.0	12.9	10.0	13.5	10.4	14.6	10.4	15.6	11.0	16.5	10.8	17.5	10.7
	22.5	12.9	10.0	13.5	10.4	14.4	10.3	15.4	10.9	16.3	10.8	17.2	10.6
	25.0	12.8	9.9	13.3	10.3	14.3	10.2	15.2	10.8	16.1	10.7	17.0	10.5
	27.5	12.7	9.9	13.2	10.2	14.1	10.2	15.0	10.8	15.8	10.6	16.7	10.4
	30.0	12.6	9.8	13.1	10.2	13.9	10.1	14.8	10.7	15.6	10.5	16.5	10.3
	32.5	12.5	9.8	12.9	10.1	13.8	10.0	14.6	10.6	15.4	10.4	16.2	10.2
	35.0	12.4	9.7	12.8	10.0	13.6	10.0	14.4	10.5	15.2	10.3	16.0	10.2
	37.5	12.3	9.7	12.7	10.0	13.5	9.9	14.2	10.4	15.0	10.3	15.7	10.1
	40.0	12.2	9.6	12.5	9.9	13.3	9.8	14.0	10.4	14.8	10.2	15.5	10.0
	43.0	12.0	9.6	12.4	9.9	13.1	9.7	13.8	10.3	14.5	10.1	15.2	9.9
140	20.0	14.7	11.0	15.4	11.5	16.6	11.5	17.8	12.1	18.8	12.0	20.0	11.8
	22.5	14.7	11.0	15.4	11.5	16.5	11.4	17.6	12.1	18.6	11.9	19.7	11.7
	25.0	14.6	11.0	15.2	11.4	16.3	11.3	17.4	12.0	18.3	11.8	19.4	11.6
	27.5	14.5	10.9	15.1	11.3	16.1	11.3	17.1	11.9	18.1	11.7	19.1	11.5
	30.0	14.4	10.9	14.9	11.2	15.9	11.2	16.9	11.8	17.8	11.6	18.8	11.4
	32.5	14.3	10.8	14.8	11.2	15.7	11.1	16.7	11.7	17.6	11.5	18.6	11.3
	35.0	14.1	10.8	14.6	11.1	15.6	11.0	16.5	11.6	17.4	11.4	18.3	11.2
	37.5	14.0	10.7	14.5	11.0	15.4	10.9	16.2	11.5	17.1	11.3	18.0	11.1
	40.0	13.9	10.6	14.3	11.0	15.2	10.8	16.0	11.4	16.9	11.2	17.7	11.0
	43.0	13.8	10.6	14.2	10.9	15.0	10.7	15.8	11.3	16.6	11.1	17.4	10.9

## 2-10.Heating Capacity (In combination with PURY-P400-500YMF-C)

**PEFY-P-VMM-A**

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.				
		Indoor air temp.: °CDB		SHC(kW)	
		15.0 °CWB	20.0 °CWB	25.0 °CWB	27.0 °CWB
20	-15.0	1.6	1.5	1.5	1.5
	-10.0	1.8	1.8	1.7	1.7
	-5.0	2.0	2.0	2.0	1.9
	0.0	2.2	2.2	2.1	1.9
	2.5	2.4	2.3	2.1	1.9
	6.0	2.5	2.5	2.1	1.9
	7.5	2.6	2.5	2.1	1.9
	10.0	2.7	2.5	2.1	1.9
	12.5	2.9	2.5	2.1	1.9
	15.5	2.9	2.5	2.1	1.9
25	-15.0	2.0	2.0	1.9	1.9
	-10.0	2.3	2.2	2.2	2.2
	-5.0	2.6	2.5	2.5	2.5
	0.0	2.9	2.8	2.7	2.5
	2.5	3.0	3.0	2.7	2.5
	6.0	3.2	3.2	2.7	2.5
	7.5	3.3	3.2	2.7	2.5
	10.0	3.5	3.2	2.7	2.5
	12.5	3.7	3.2	2.7	2.5
	15.5	3.7	3.2	2.7	2.5
32	-15.0	2.5	2.5	2.4	2.4
	-10.0	2.8	2.8	2.8	2.7
	-5.0	3.2	3.2	3.1	3.1
	0.0	3.6	3.5	3.4	3.1
	2.5	3.8	3.7	3.4	3.1
	6.0	4.0	4.0	3.4	3.1
	7.5	4.2	4.0	3.4	3.1
	10.0	4.4	4.0	3.4	3.1
	12.5	4.6	4.0	3.4	3.1
	15.5	4.6	4.0	3.4	3.1
40	-15.0	3.1	3.1	3.0	3.0
	-10.0	3.6	3.5	3.5	3.4
	-5.0	4.0	4.0	3.9	3.9
	0.0	4.5	4.4	4.3	3.9
	2.5	4.7	4.7	4.3	3.9
	6.0	5.0	5.0	4.3	3.9
	7.5	5.2	5.0	4.3	3.9
	10.0	5.4	5.0	4.3	3.9
	12.5	5.7	5.0	4.3	3.9
	15.5	5.8	5.0	4.3	3.9
50	-15.0	3.9	3.9	3.8	3.7
	-10.0	4.5	4.4	4.3	4.3
	-5.0	5.0	5.0	4.9	4.9
	0.0	5.6	5.6	5.4	4.9
	2.5	5.9	5.9	5.4	4.9
	6.0	6.4	6.3	5.4	4.9
	7.5	6.6	6.3	5.4	4.9
	10.0	6.9	6.3	5.4	4.9
	12.5	7.2	6.3	5.4	4.9
	15.5	7.2	6.3	5.4	4.9
63	-15.0	5.0	4.9	4.8	4.7
	-10.0	5.7	5.6	5.5	5.4
	-5.0	6.4	6.3	6.2	6.2
	0.0	7.2	7.1	6.8	6.2
	2.5	7.5	7.5	6.8	6.2
	6.0	8.1	8.0	6.8	6.2
	7.5	8.3	8.0	6.8	6.2
	10.0	8.7	8.0	6.8	6.2
	12.5	9.1	8.0	6.8	6.2
	15.5	9.2	8.0	6.8	6.2

**Heating Capacity (In combination with PURY-P400-500YMF-C)****PEFY-P-VMM-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0 °CWB	20.0 SHC(kW)	25.0 SHC(kW)	27.0 SHC(kW)
71	-15.0	5.6	5.5	5.4	5.3
	-10.0	6.4	6.3	6.2	6.1
	-5.0	7.2	7.1	7.0	6.9
	0.0	8.0	8.0	7.7	6.9
	2.5	8.5	8.4	7.7	6.9
	6.0	9.1	9.0	7.7	6.9
	7.5	9.4	9.0	7.7	6.9
	10.0	9.8	9.0	7.7	6.9
	12.5	10.3	9.0	7.7	6.9
	15.5	10.4	9.0	7.7	6.9
80	-15.0	6.2	6.1	6.0	5.9
	-10.0	7.1	7.0	6.9	6.8
	-5.0	8.0	7.9	7.8	7.7
	0.0	8.9	8.8	8.5	7.7
	2.5	9.4	9.3	8.5	7.7
	6.0	10.1	10.0	8.5	7.7
	7.5	10.4	10.0	8.5	7.7
	10.0	10.9	10.0	8.5	7.7
	12.5	11.4	10.0	8.5	7.7
	15.5	11.5	10.0	8.5	7.7
100	-15.0	7.8	7.7	7.5	7.4
	-10.0	8.9	8.8	8.6	8.5
	-5.0	10.0	9.9	9.8	9.6
	0.0	11.2	11.0	10.6	9.6
	2.5	11.8	11.6	10.6	9.6
	6.0	12.6	12.5	10.6	9.6
	7.5	13.0	12.5	10.6	9.6
	10.0	13.6	12.5	10.6	9.6
	12.5	14.3	12.5	10.6	9.6
	15.5	14.4	12.5	10.6	9.6

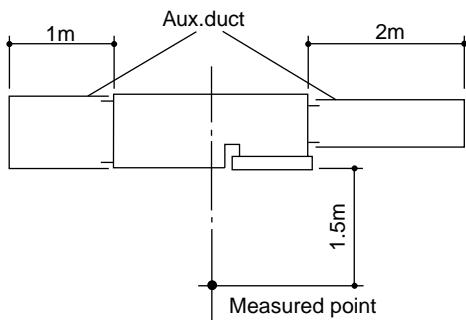
Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0 °CWB	20.0 SHC(kW)	25.0 SHC(kW)	27.0 SHC(kW)
125	-15.0	10.0	9.8	9.6	9.5
	-10.0	11.4	11.2	11.0	10.9
	-5.0	12.8	12.6	12.5	12.3
	0.0	14.3	14.1	13.6	12.3
	2.5	15.1	14.9	13.6	12.3
	6.0	16.2	16.0	13.6	12.3
	7.5	16.6	16.0	13.6	12.3
	10.0	17.4	16.0	13.6	12.3
	12.5	18.3	16.0	13.6	12.3
	15.5	18.4	16.0	13.6	12.3
140	-15.0	11.2	11.0	10.9	10.7
	-10.0	12.8	12.6	12.4	12.2
	-5.0	14.4	14.2	14.1	13.9
	0.0	16.1	15.9	15.3	13.9
	2.5	17.0	16.8	15.3	13.9
	6.0	18.2	18.0	15.3	13.9
	7.5	18.7	18.0	15.3	13.9
	10.0	19.6	18.0	15.3	13.9
	12.5	20.5	18.0	15.3	13.9
	15.5	20.7	18.0	15.3	13.9

PEFY-P-VMM-A

### 3. Sound Levels

#### 3-1. Noise level(VMM-A)

Ceiling concealed (VMM-A series)



Noise level at anechoic room (Low-Middle-High) Unit : dB(A)

Model	External static pressure※		
	Low	Mid	High
PEFY-P20VMM-A	23-28-31	27-30-32	29-34-39
PEFY-P25VMM-A	26-30-33	28-32-35	32-36-39
PEFY-P32VMM-A	29-32-35	31-34-37	33-37-41
PEFY-P40VMM-A	29-34-37	31-35-38	34-38-41
PEFY-P50VMM-A	30-34-37	31-35-38	34-38-41
PEFY-P63VMM-A	31-34-37	32-36-39	35-39-42
PEFY-P71VMM-A	40-44	-	43-47
PEFY-P80VMM-A	42-45	-	44-47
PEFY-P100VMM-A	42-45	-	44-47
PEFY-P125VMM-A			
PEFY-P140VMM-A			

※ PEFY-P20~80VMM-A

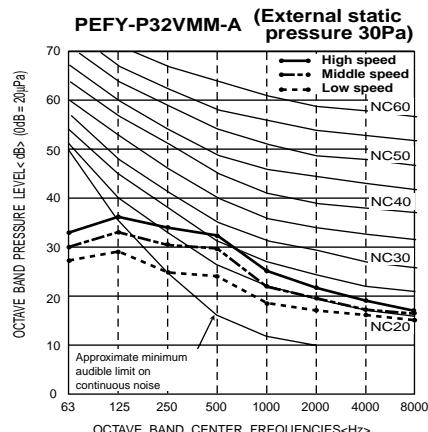
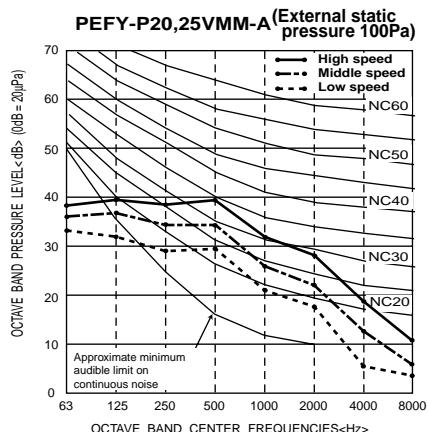
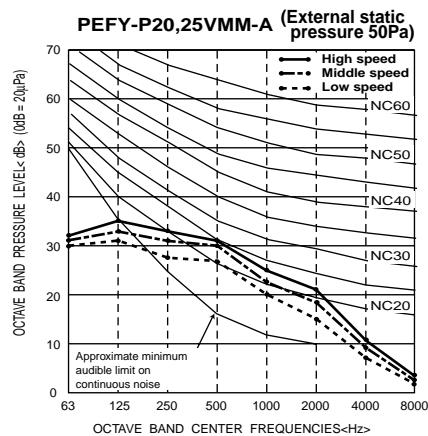
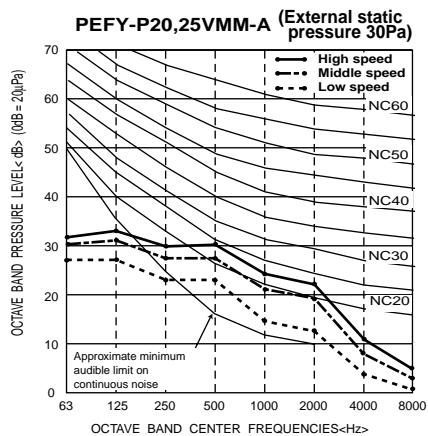
Low : 30Pa Mid : 50Pa High : 100Pa

※ PEFY-P100~140VMM-A

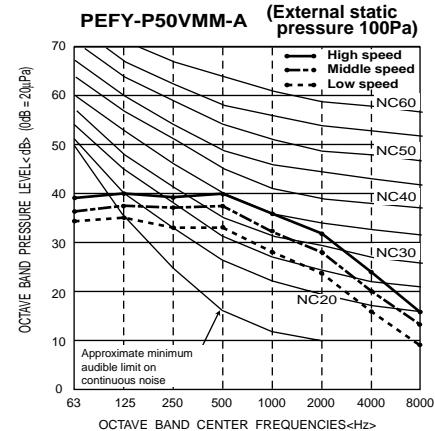
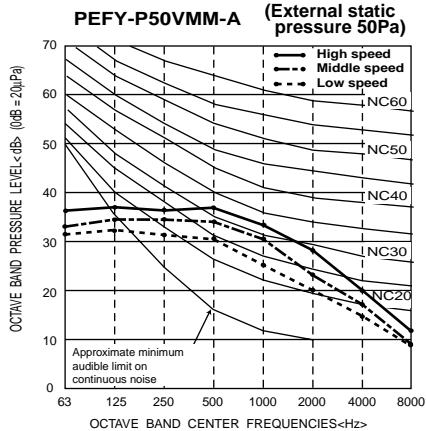
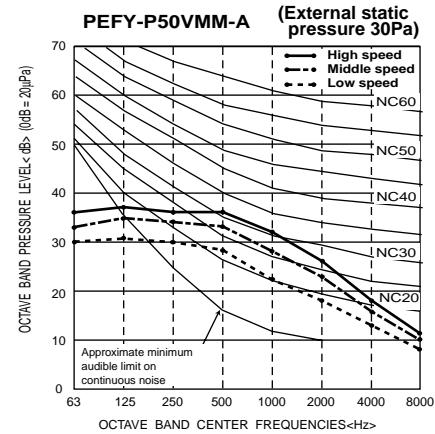
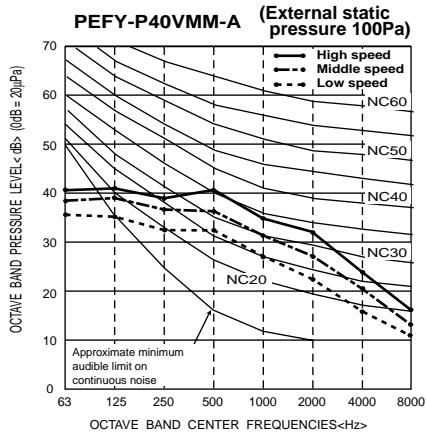
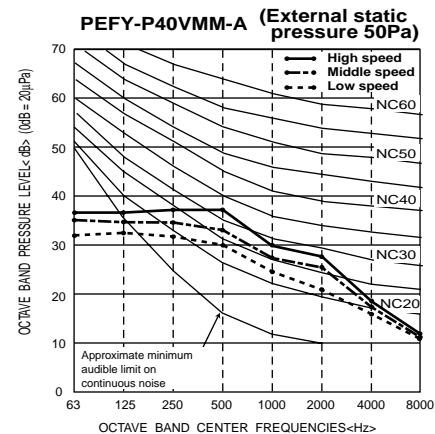
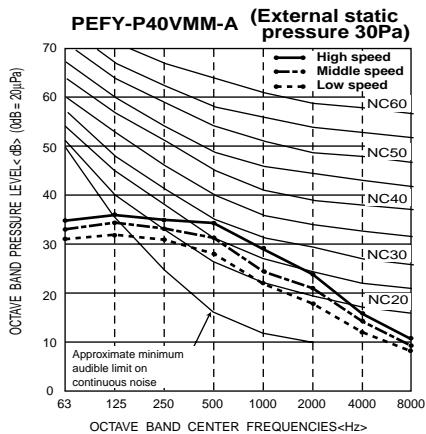
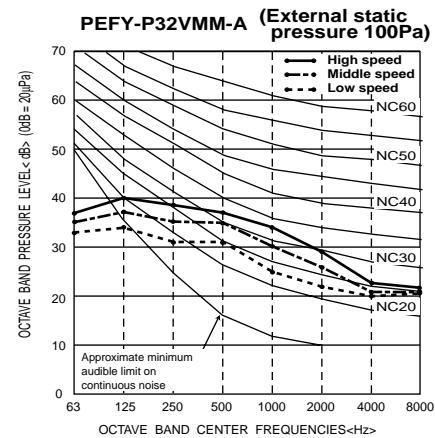
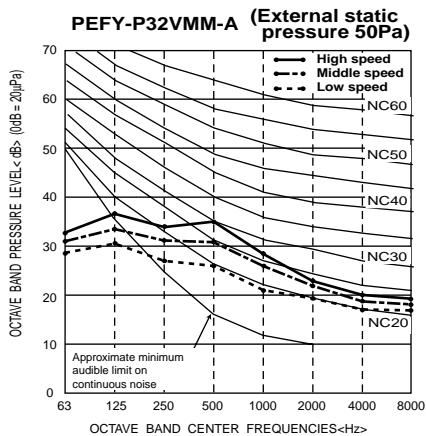
Low : 50Pa High : 130Pa

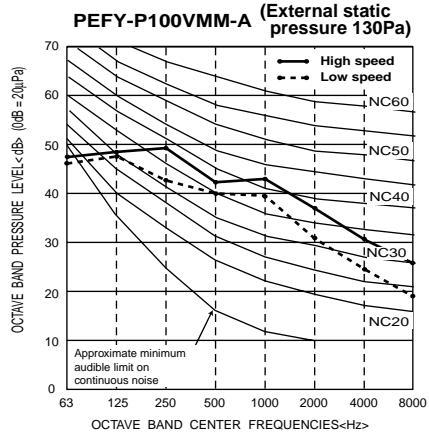
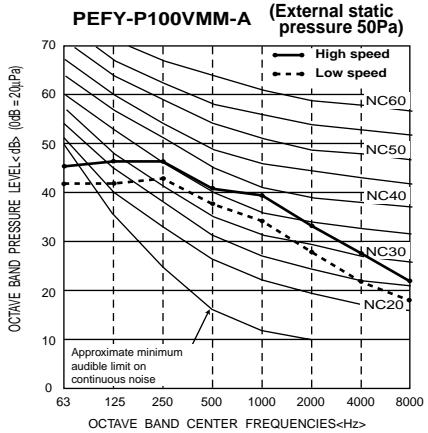
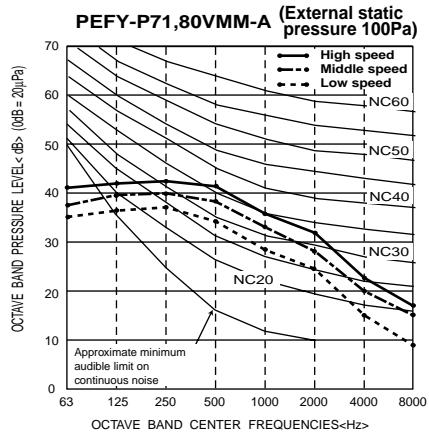
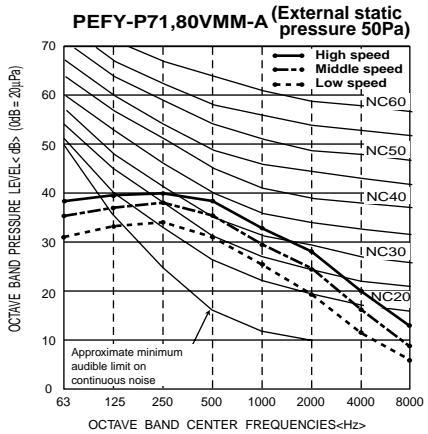
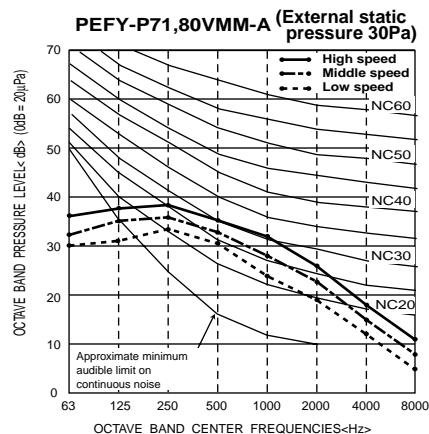
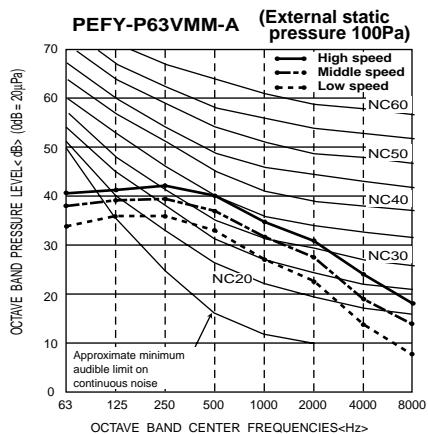
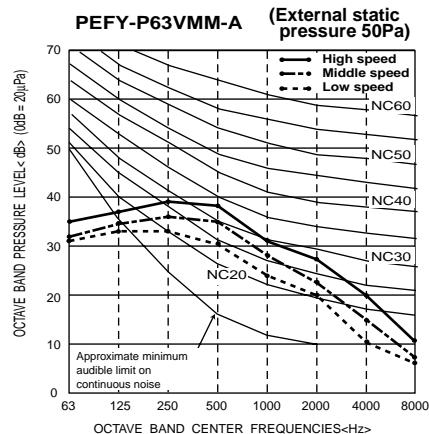
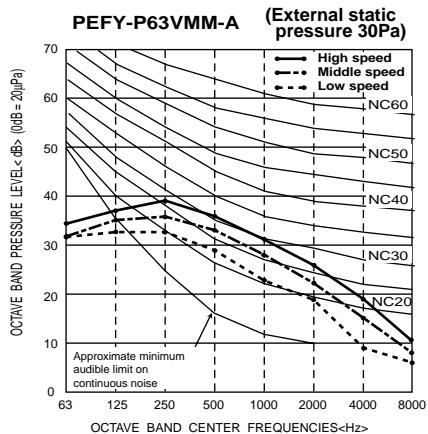
#### 3-2. NC curves(VMM-A)

##### 1) Back inlet

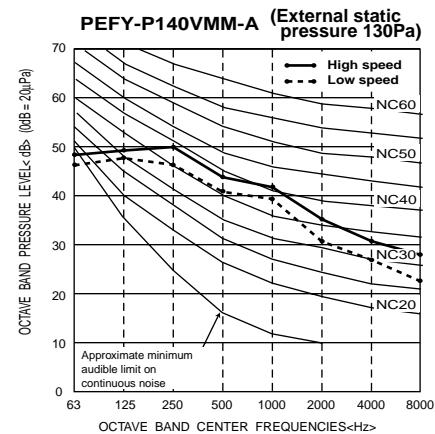
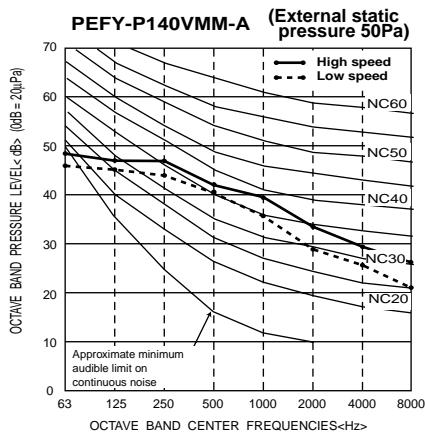
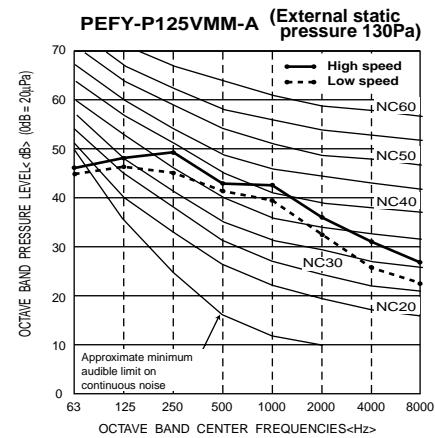
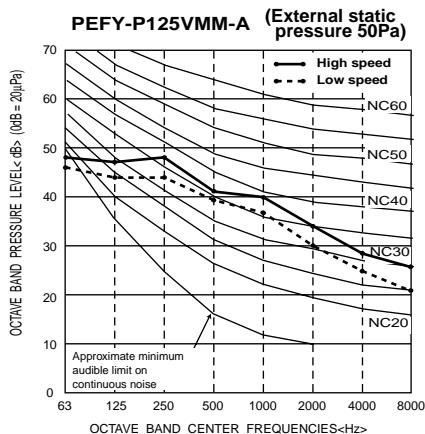


PEFY-P-VMM-A

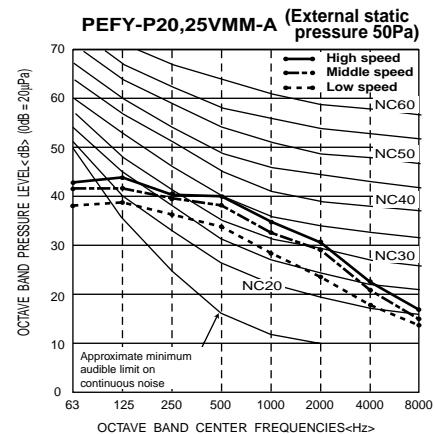
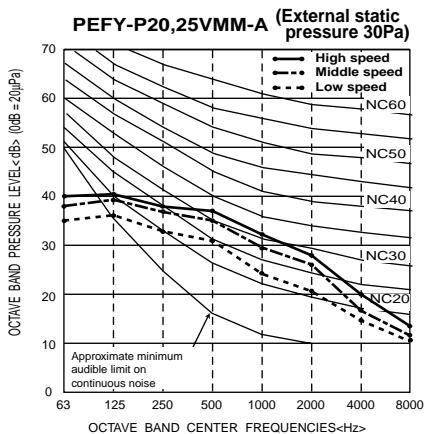


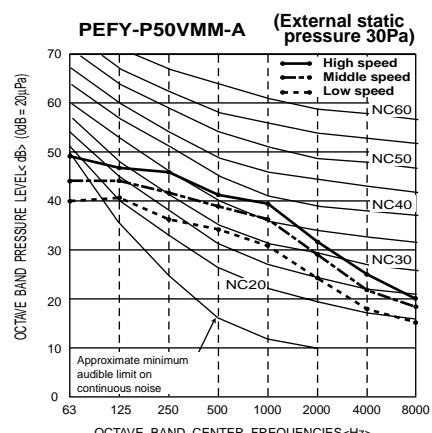
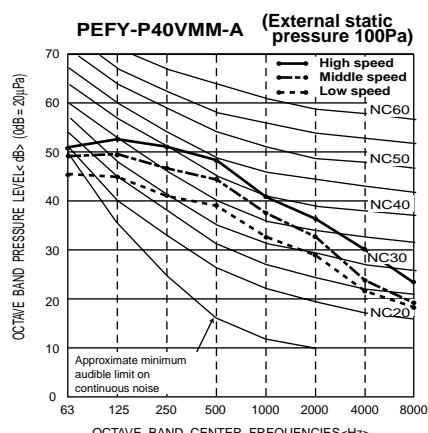
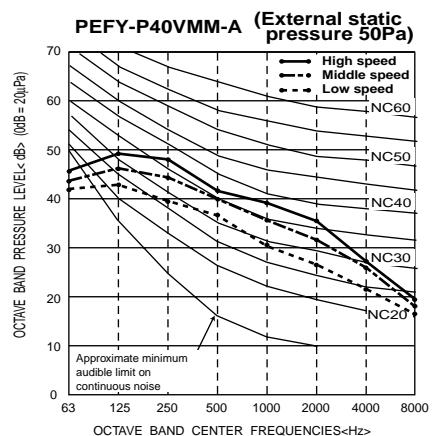
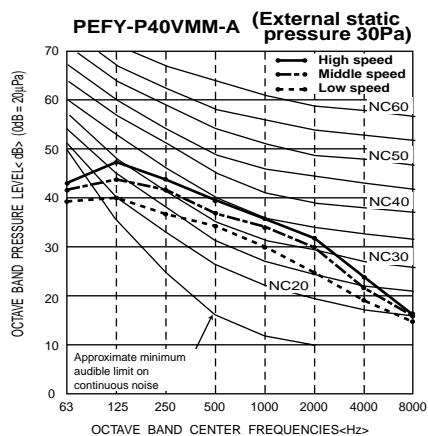
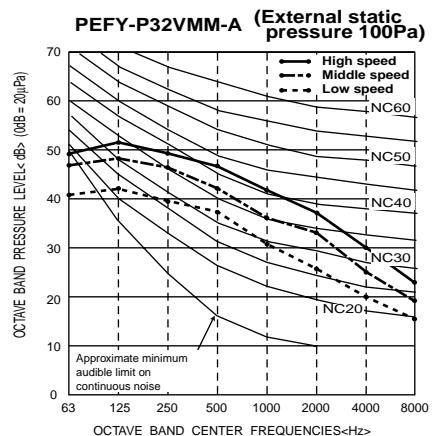
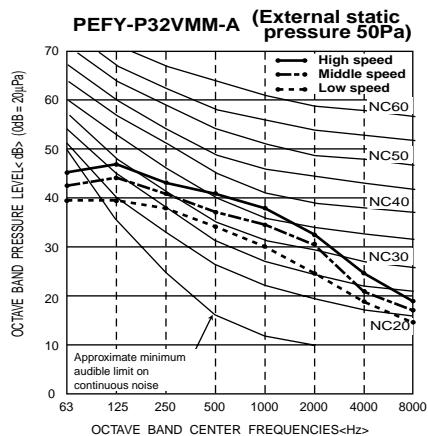
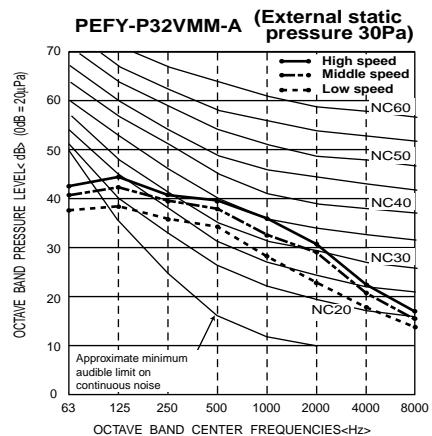
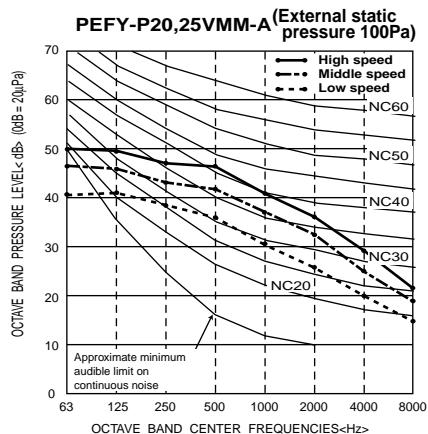


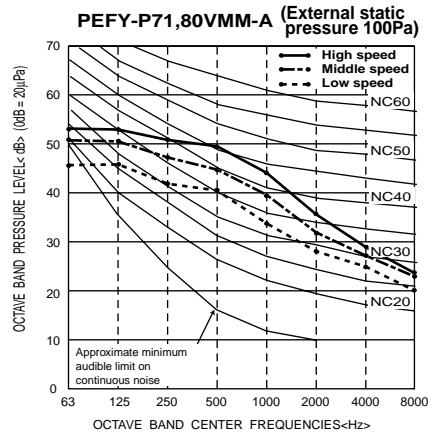
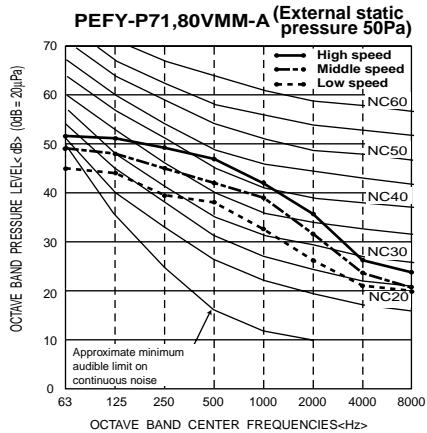
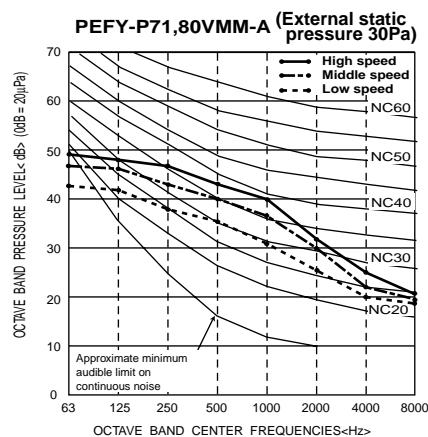
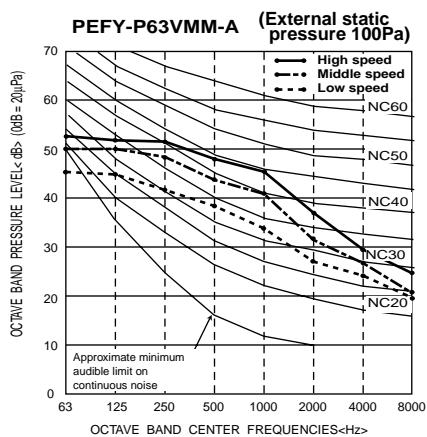
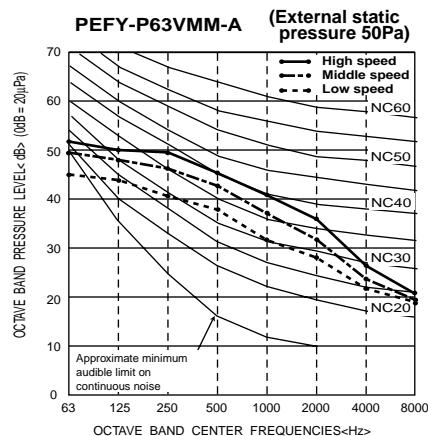
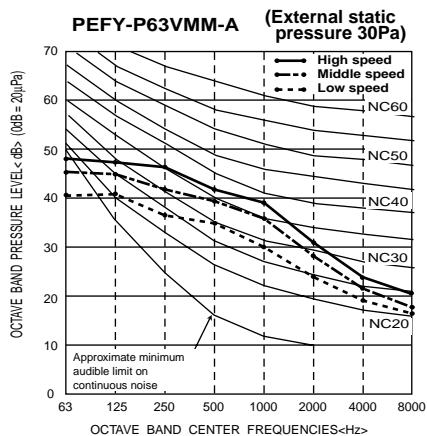
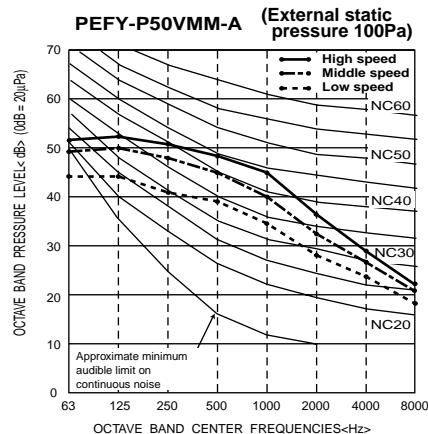
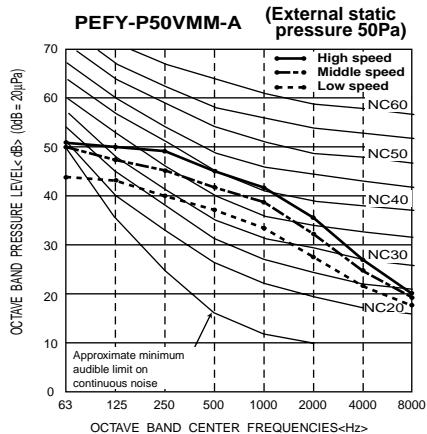
PEFY-P-VMM-A



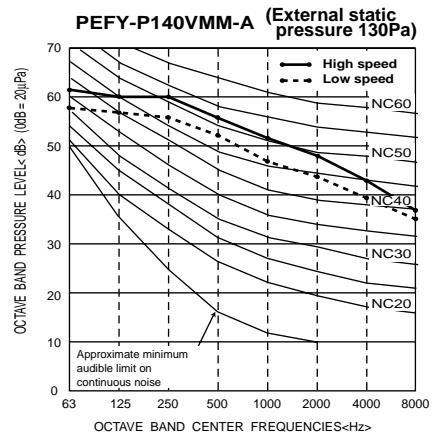
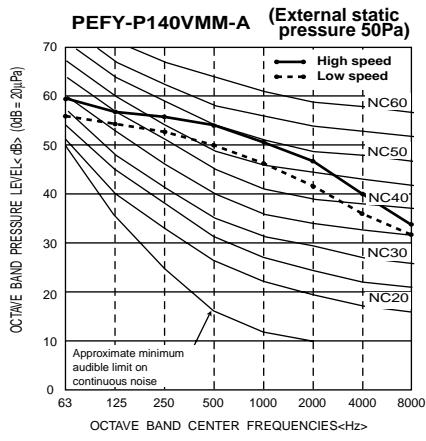
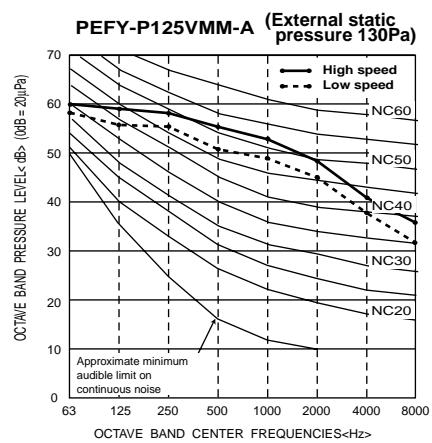
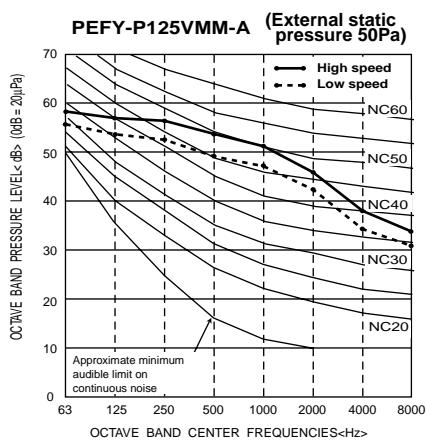
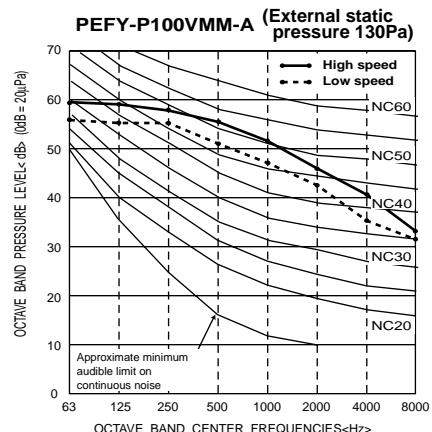
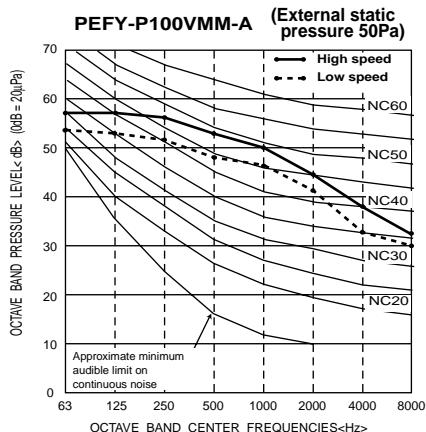
## 2) Bottom inlet







PEFY-P-VMM-A

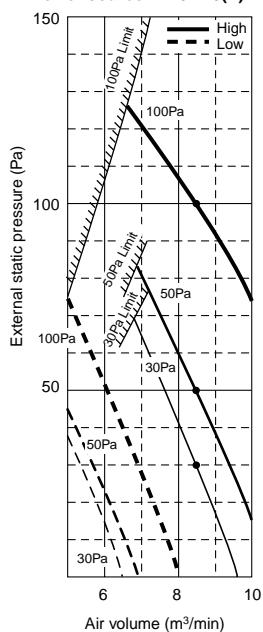


### 3-3. Fan characteristics curves(VMM-A)

**PEFY-P20,25VMM-A**

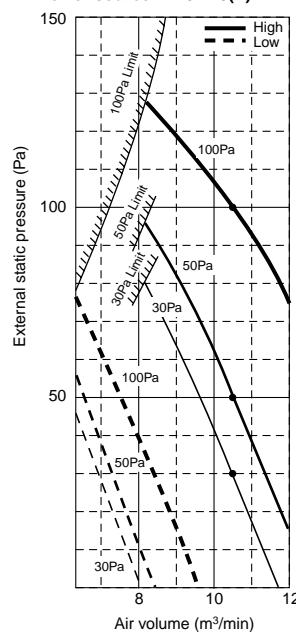
External static pressure : 30,50,100Pa

Power source : 220-240(V)

**PEFY-P32VMM-A**

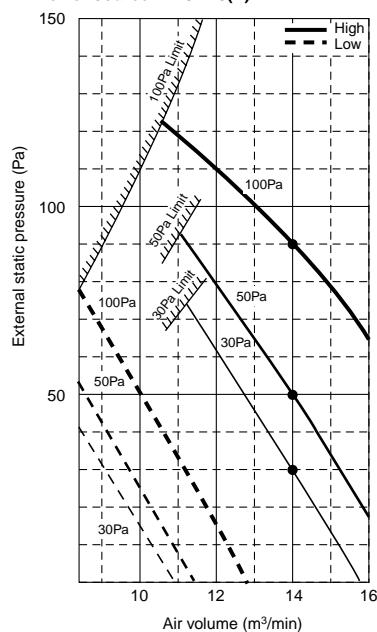
External static pressure : 30,50,100Pa

Power source : 220-240(V)

**PEFY-P40VMM-A**

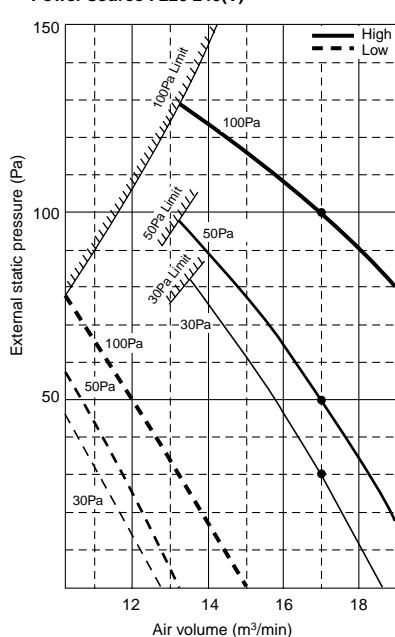
External static pressure : 30,50,100Pa

Power source : 220-240(V)

**PEFY-P50VMM-A**

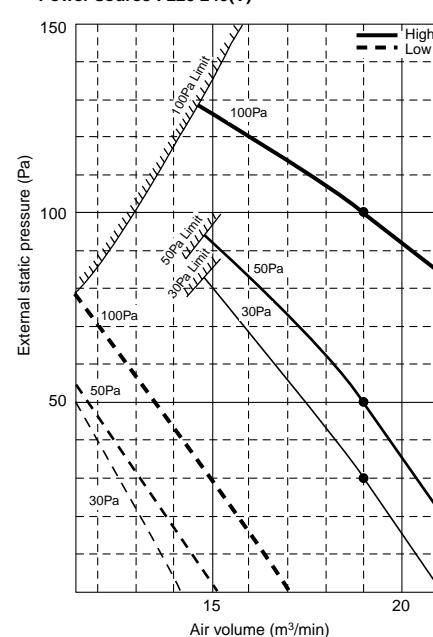
External static pressure : 30,50,100Pa

Power source : 220-240(V)

**PEFY-P63VMM-A**

External static pressure : 30,50,100Pa

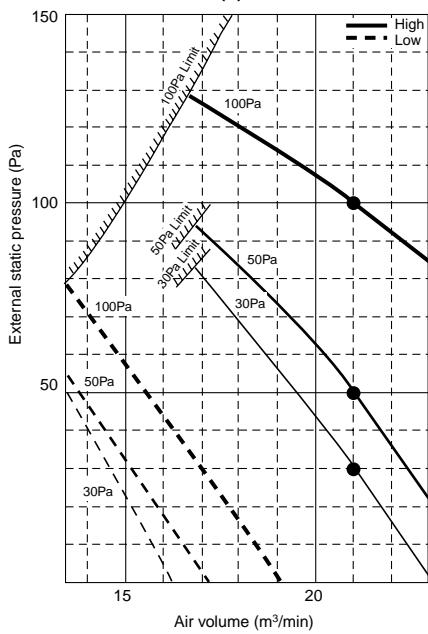
Power source : 220-240(V)

**PEFY-P-VMM-A**

PEFY-P71,80VMM-A

**External static pressure : 30,50,100Pa**

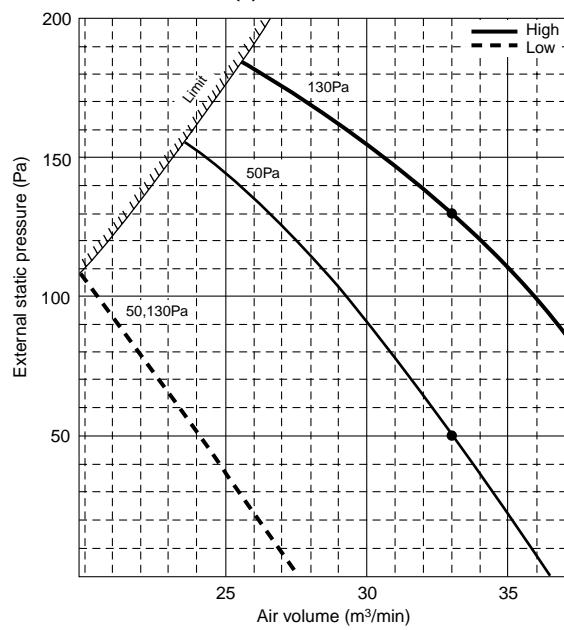
Power source : 220-240(V)



PEFY-P100VMM-A

**External static pressure : 50,130Pa**

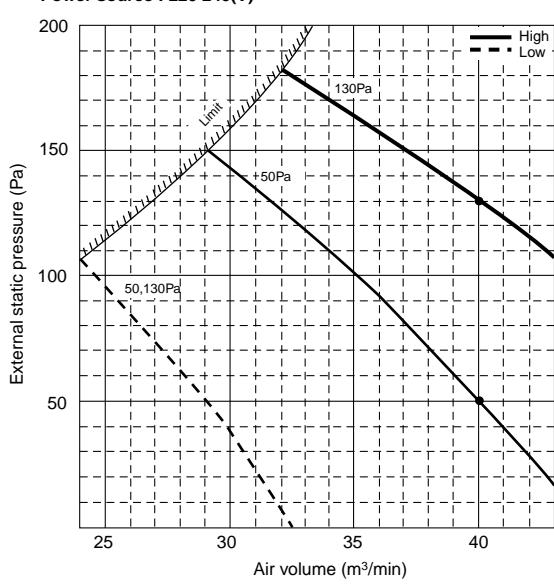
Power source : 220-240(V)



PEFY-P125VMM-A

External static pressure : 50,130Pa

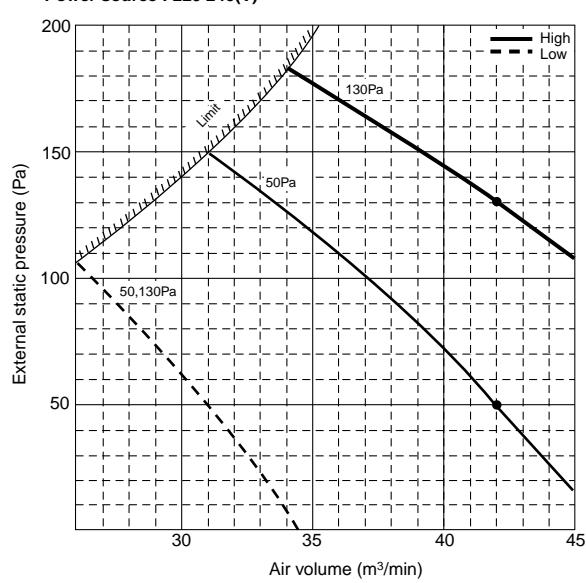
Power source : 220-240(V)



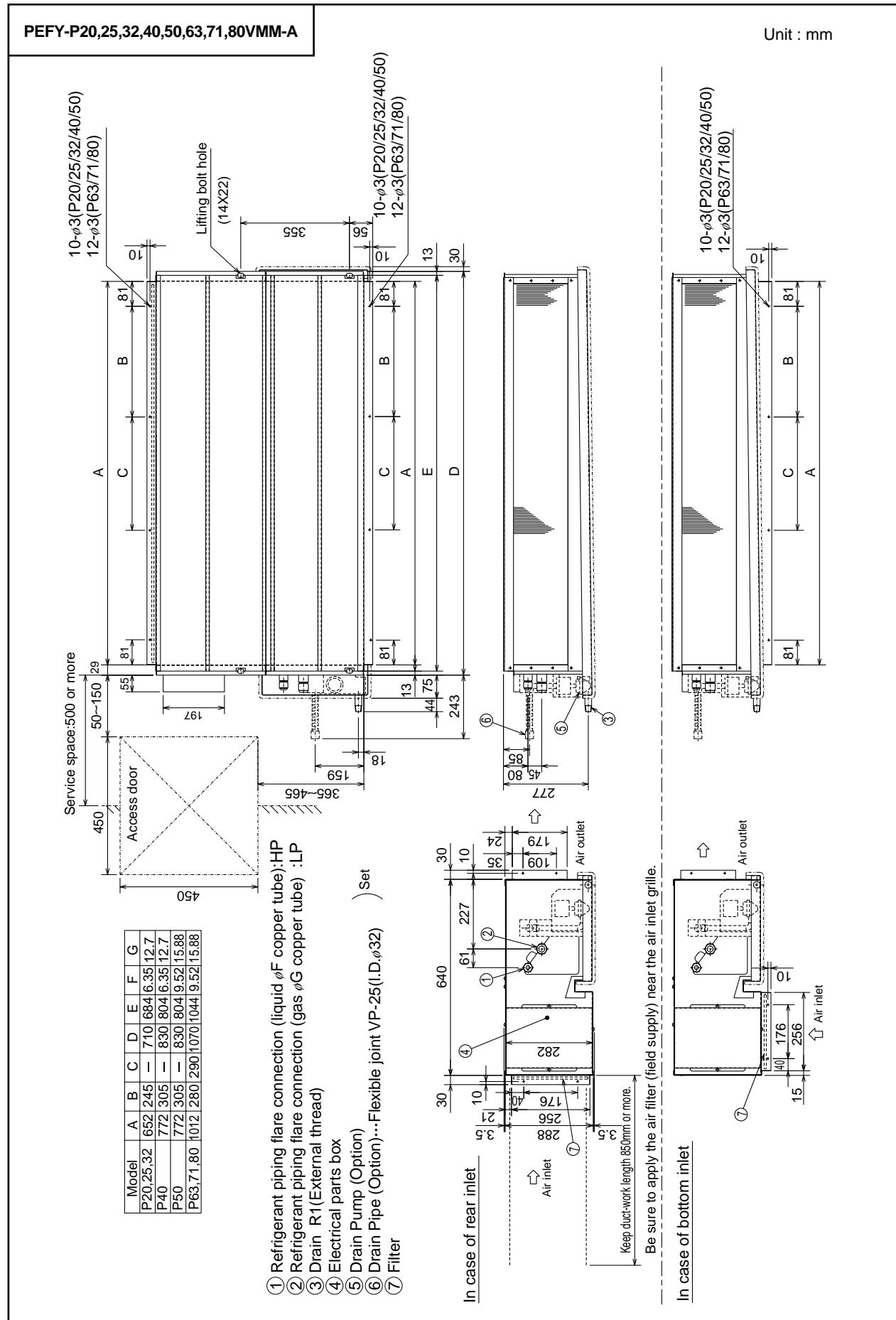
PEFY-P140VMM-A

External static pressure : 50,130Pa

**Power source : 220-240(V)**

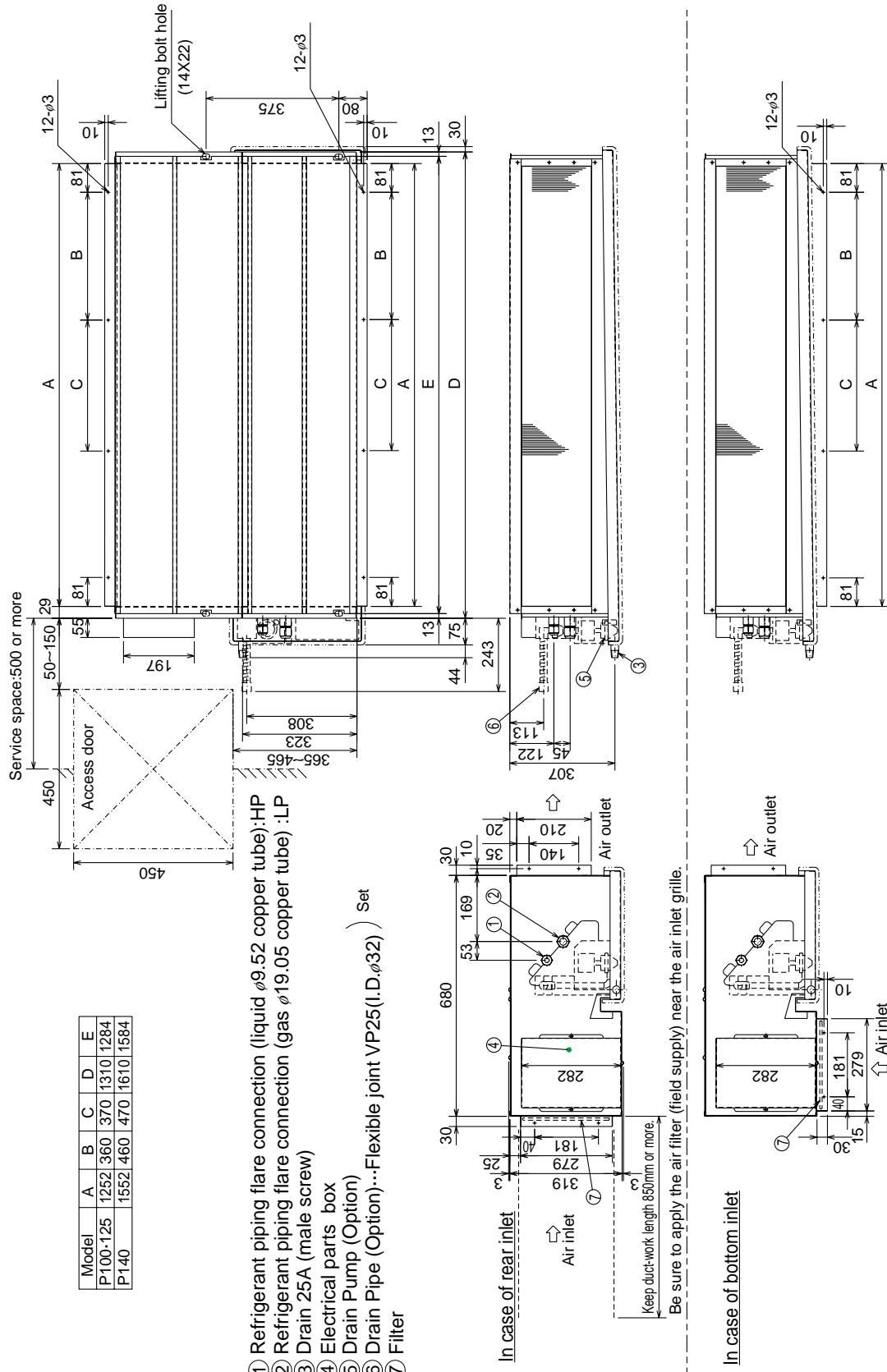


## 4. External Dimensions



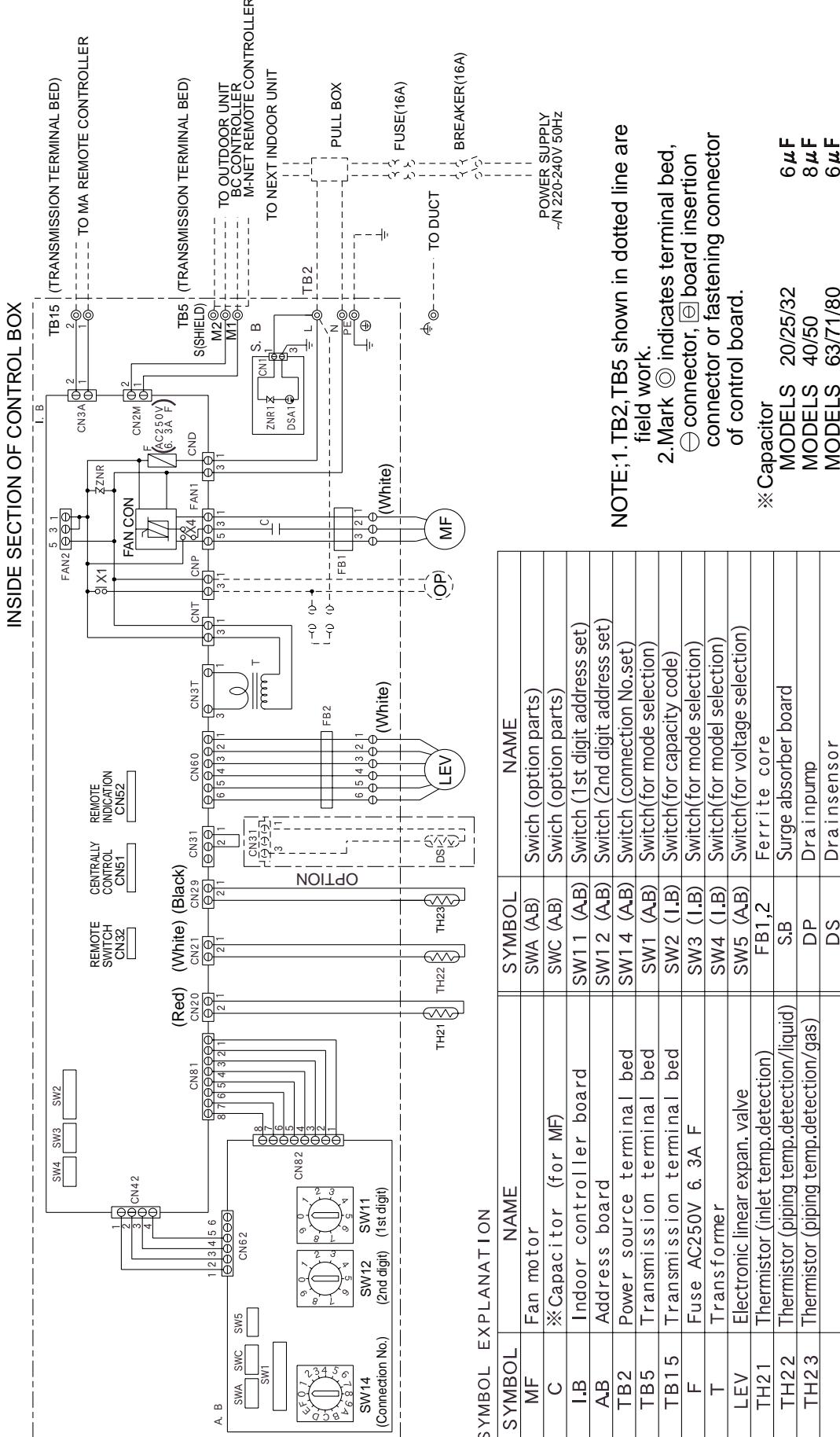
PEFY-P100,125,140VMM-A

Unit : mm

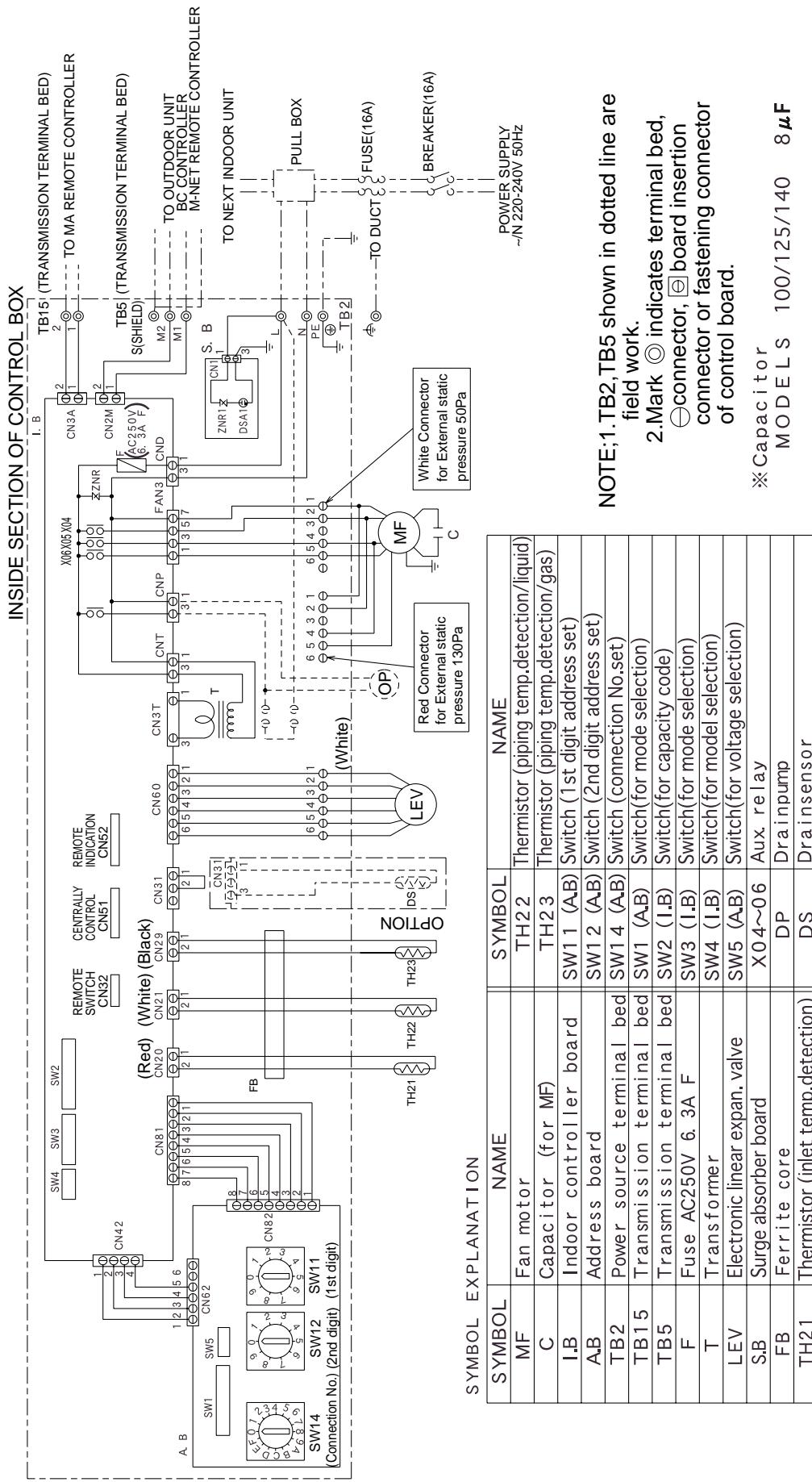


## 5. Electrical Wiring Diagrams

PEFY-P20~80VMM-A



## PEFY-P100~140VMM-A



## 6. Options

Description	Model	Applicable capacity
Circular duct flange	PAC-KE32EDF-F	PEFY-P20,25,32VMM-A
	PAC-KE50EDF-F	PEFY-P40,50VMM-A
	PAC-KE80EDF-F	PEFY-P63,71,80VMM-A
	PAC-KE125EDF-F	PEFY-P100,125VMM-A
	PAC-KE140EDF-F	PEFY-P140VMM-A
Drain water lift-up kit	PAC-KE03DM-F	PEFY-P20,25,32,40,50,63,71 80,100,125,140VMM-A

PEFY-P-VMM-A



Floor standing(Exposed)  
Floor standing(Concealed)

PFFY-P-VLEM-A  
PFFY-P-VLRM-A

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PFFY-P  
VLEM-A/VLRM-A

# 1. Specifications

Power source			PFFY-P20V/LEM-A	PFFY-P25V/LEM-A	PFFY-P32V/LEM-A	PFFY-P40V/LEM-A	PFFY-P50V/LEM-A	PFFY-P63V/LEM-A			
Cooling capacity			~ 220-240V 50Hz / ~ 208-230V 60Hz								
※ 1	kW	2.2	2.8	3.6	4.5	5.6	7.1				
	kcal/h	2,000	2,500	3,150	4,000	5,000	6,300				
Heating capacity	※ 1	kW	2.5	3.2	4.0	5.0	6.3	8.0			
	Cooling	kW	0.04 / 0.06	0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11				
Power consumption	Heating	kW	0.04 / 0.06	0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11				
	Cooling	A	0.19 / 0.25	0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47				
Current	Heating	A	0.19 / 0.25	0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47				
	External finish(Munsel No.)			Acrylic paint (5Y 8/1)							
Dimension	Height	mm	630								
	Width	mm	1,050		1,170		1,410				
	Depth	mm	220								
Net weight		kg	23	25	26	30	32				
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)								
Fan	Type		Sirocco fanX 1		Sirocco fanX 2						
	Airflow rate ※ 3 (Low-High)	m³/min	5.5-6.5		7.0-9.0		9.0-11.0				
	External static pressure	Pa	0								
Motor	Type		Single phase induction motor								
	Output	kW	0.02	0.03	0.035	0.045					
Air filter			PP Honeycomb fabric (washable)								
Refrigerant pipe dimension	Gas (Flare)	mm	ø 12.7				ø 15.88				
	Liquid (Flare)	mm	ø 6.35				ø 9.52				
Drain pipe dimension			Accessory hose ø 27 (top end : ø 20)								
Noise level (Low-High) ※ 3 ※ 4 ※ 5		dB(A)	34-40	35-40	38-43	40-46					

Power source			PFFY-P20V/LRM-A	PFFY-P25V/LRM-A	PFFY-P32V/LRM-A	PFFY-P40V/LRM-A	PFFY-P50V/LRM-A	PFFY-P63V/LRM-A			
Cooling capacity			~ 220-240V 50Hz / ~ 208-230V 60Hz								
※ 1	kW	2.2	2.8	3.6	4.5	5.6	7.1				
	kcal/h	2,000	2,500	3,150	4,000	5,000	6,300				
Heating capacity	※ 1	kW	2.5	3.2	4.0	5.0	6.3	8.0			
	Cooling	kW	0.04 / 0.06	0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11				
Power consumption	Heating	kW	0.04 / 0.06	0.06 / 0.07	0.065 / 0.075	0.085 / 0.09	0.1 / 0.11				
	Cooling	A	0.19 / 0.25	0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47				
Current	Heating	A	0.19 / 0.25	0.29 / 0.30	0.32 / 0.33	0.40 / 0.41	0.46 / 0.47				
	External finish(Munsel No.)			Galvanizing							
Dimension	Height	mm	639								
	Width	mm	886		1,006		1,246				
	Depth	mm	220								
Net weight		kg	18.5	20	21	25	27				
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)								
Fan	Type		Sirocco fanX 1		Sirocco fanX 2						
	Airflow rate ※ 3 (Low-High)	m³/min	5.5-6.5		7.0-9.0		9.0-11.0				
	External static pressure	Pa	0								
Motor	Type		Single phase induction motor								
	Output	kW	0.02	0.03	0.035	0.045					
Air filter			PP Honeycomb fabric (washable)								
Refrigerant pipe dimension	Gas (Flare)	mm	ø 12.7				ø 15.88				
	Liquid (Flare)	mm	ø 6.35				ø 9.52				
Drain pipe dimension			Accessory hose ø 27 (top end : ø 20)								
Noise level (Low-High) ※ 3 ※ 4 ※ 5		dB(A)	34-40	35-40	38-43	40-46					

Note: ※ 1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB

Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

※ 2 Cooling capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

※ 3 Air flow rate/noise level are in ( Low-High )

※ 4 Measured point : 1mx1m, Power supply : AC240V/50Hz

·1dB(A) lower at AC230V/50Hz

·2dB(A) lower at AC220V/50Hz

·3dB(A) lower at 1.5m×1.5m point

※ 5 It is measured in anechoic room.

## 2. Capacity Tables

### 2-1.Cooling Capacity (In combination with PUMY-(P)125YM(A))

PFFY-P-VLEM-AVLRM-A									
Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
20 (2.2)	20.0	2.2	1.9	2.3	2.0	2.4	2.0	2.6	2.1
	22.5	2.1	1.9	2.3	2.0	2.4	2.0	2.6	2.1
	25.0	2.1	1.9	2.3	2.0	2.4	2.0	2.5	2.0
	27.5	2.1	1.9	2.2	2.0	2.4	2.0	2.5	2.0
	30.0	2.1	1.9	2.2	2.0	2.3	1.9	2.5	2.0
	32.5	2.0	1.9	2.2	2.0	2.3	1.9	2.5	2.0
	35.0	2.0	1.8	2.1	1.9	2.3	1.9	2.4	2.0
	37.5	2.0	1.8	2.1	1.9	2.2	1.9	2.4	2.0
	40.0	2.0	1.8	2.1	1.9	2.2	1.9	2.4	2.0
	46.0	1.9	1.8	2.0	1.9	2.1	1.9	2.3	1.9
25 (2.8)	20.0	2.8	2.2	2.9	2.3	3.1	2.3	3.3	2.3
	22.5	2.7	2.2	2.9	2.3	3.1	2.3	3.2	2.3
	25.0	2.7	2.2	2.9	2.3	3.1	2.2	3.2	2.3
	27.5	2.7	2.1	2.8	2.3	3.0	2.2	3.2	2.3
	30.0	2.6	2.1	2.8	2.2	3.0	2.2	3.2	2.3
	32.5	2.6	2.1	2.8	2.2	2.9	2.2	3.1	2.3
	35.0	2.6	2.1	2.7	2.2	2.9	2.2	3.1	2.3
	37.5	2.5	2.1	2.7	2.2	2.9	2.2	3.0	2.2
	40.0	2.5	2.1	2.7	2.2	2.8	2.1	3.0	2.2
	46.0	2.4	2.0	2.6	2.1	2.7	2.1	2.9	2.2
32 (3.6)	20.0	3.6	2.6	3.7	2.7	4.0	2.6	4.2	2.7
	22.5	3.5	2.5	3.7	2.6	4.0	2.6	4.2	2.7
	25.0	3.5	2.5	3.7	2.6	3.9	2.6	4.1	2.7
	27.5	3.4	2.5	3.6	2.6	3.9	2.6	4.1	2.7
	30.0	3.4	2.5	3.6	2.6	3.8	2.6	4.1	2.6
	32.5	3.3	2.4	3.6	2.6	3.8	2.5	4.0	2.6
	35.0	3.3	2.4	3.5	2.5	3.7	2.5	4.0	2.6
	37.5	3.2	2.4	3.5	2.5	3.7	2.5	3.9	2.6
	40.0	3.2	2.4	3.4	2.5	3.6	2.5	3.9	2.6
	46.0	3.1	2.3	3.3	2.4	3.5	2.4	3.7	2.5
40 (4.5)	20.0	4.5	3.2	4.7	3.3	5.0	3.3	5.3	3.4
	22.5	4.4	3.2	4.6	3.3	5.0	3.3	5.2	3.4
	25.0	4.3	3.1	4.6	3.3	4.9	3.3	5.2	3.4
	27.5	4.3	3.1	4.6	3.3	4.9	3.2	5.1	3.3
	30.0	4.2	3.1	4.5	3.2	4.8	3.2	5.1	3.3
	32.5	4.2	3.1	4.4	3.2	4.7	3.2	5.0	3.3
	35.0	4.1	3.0	4.4	3.2	4.7	3.2	5.0	3.3
	37.5	4.1	3.0	4.3	3.2	4.6	3.1	4.9	3.2
	40.0	4.0	3.0	4.3	3.1	4.5	3.1	4.8	3.2
	46.0	3.8	2.9	4.1	3.1	4.3	3.0	4.6	3.1
50 (5.6)	20.0	5.5	4.0	5.8	4.2	6.2	4.2	6.6	4.3
	22.5	5.5	4.0	5.8	4.2	6.2	4.2	6.5	4.3
	25.0	5.4	4.0	5.7	4.2	6.1	4.1	6.4	4.2
	27.5	5.3	3.9	5.7	4.1	6.0	4.1	6.4	4.2
	30.0	5.3	3.9	5.6	4.1	5.9	4.1	6.3	4.2
	32.5	5.2	3.9	5.5	4.1	5.9	4.0	6.2	4.2
	35.0	5.1	3.8	5.5	4.0	5.8	4.0	6.2	4.1
	37.5	5.0	3.8	5.4	4.0	5.7	4.0	6.1	4.1
	40.0	5.0	3.8	5.3	4.0	5.6	3.9	6.0	4.1
	46.0	4.8	3.7	5.1	3.9	5.4	3.8	5.8	4.0
63 (7.1)	20.0	7.0	5.0	7.4	5.2	7.9	5.2	8.3	5.3
	22.5	6.9	5.0	7.3	5.2	7.8	5.2	8.2	5.3
	25.0	6.9	4.9	7.3	5.2	7.7	5.1	8.2	5.3
	27.5	6.8	4.9	7.2	5.1	7.7	5.1	8.1	5.2
	30.0	6.7	4.8	7.1	5.1	7.5	5.0	8.0	5.2
	32.5	6.6	4.8	7.0	5.0	7.5	5.0	7.9	5.1
	35.0	6.5	4.7	6.9	5.0	7.3	4.9	7.8	5.1
	37.5	6.4	4.7	6.8	4.9	7.2	4.9	7.7	5.1
	40.0	6.3	4.6	6.7	4.9	7.2	4.8	7.6	5.0
	46.0	6.1	4.5	6.5	4.8	6.9	4.7	7.3	4.9

PFFY-P  
VLEM-A/VLRM-A

## 2-2.Heating Capacity (In combination with PUMY-(P)125YM(A))

**PFFY-P-VLEM-A,VLRM-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB		
		15.0	20.0	25.0
	*CWB	SHC	SHC	SHC
20	-12.0	1.6	1.6	1.5
	-10.0	1.7	1.6	1.6
	-5.0	1.9	1.9	1.9
	0.0	2.2	2.1	2.1
	2.5	2.3	2.3	2.3
	6.0	2.5	2.5	2.5
	7.5	2.6	2.6	2.5
	10.0	2.8	2.7	2.5
	12.5	2.9	2.8	2.5
	15.5	3.1	2.8	2.5
25	-12.0	2.0	2.0	2.0
	-10.0	2.1	2.1	2.1
	-5.0	2.4	2.4	2.4
	0.0	2.8	2.8	2.7
	2.5	3.0	2.9	2.9
	6.0	3.2	3.2	3.2
	7.5	3.3	3.3	3.2
	10.0	3.5	3.5	3.2
	12.5	3.7	3.5	3.2
	15.5	3.9	3.5	3.2
32	-12.0	2.5	2.5	2.5
	-10.0	2.7	2.6	2.6
	-5.0	3.1	3.0	3.0
	0.0	3.5	3.4	3.4
	2.5	3.7	3.7	3.6
	6.0	4.0	4.0	3.9
	7.5	4.2	4.1	4.0
	10.0	4.4	4.4	4.0
	12.5	4.7	4.4	4.0
	15.5	4.9	4.4	4.0

Unit size	Outdoor air temp.	SHC:Sensible heat Capacity(kW)		
		15.0	20.0	25.0
	*CWB	SHC	SHC	SHC
40	-12.0	3.2	3.1	3.1
	-10.0	3.4	3.3	3.2
	-5.0	3.8	3.8	3.7
	0.0	4.3	4.3	4.2
	2.5	4.6	4.6	4.5
	6.0	5.0	5.0	4.9
	7.5	5.2	5.2	5.0
	10.0	5.5	5.5	5.0
	12.5	5.9	5.5	5.0
	15.5	6.2	5.5	5.0
50	-12.0	4.0	3.9	3.9
	-10.0	4.2	4.2	4.1
	-5.0	4.8	4.8	4.7
	0.0	5.5	5.4	5.3
	2.5	5.8	5.8	5.7
	6.0	6.3	6.3	6.2
	7.5	6.6	6.5	6.2
	10.0	7.0	6.9	6.2
	12.5	7.4	7.0	6.2
	15.5	7.7	7.0	6.2
63	-12.0	5.1	5.0	4.9
	-10.0	5.4	5.3	5.2
	-5.0	6.1	6.0	5.9
	0.0	6.9	6.9	6.8
	2.5	7.4	7.3	7.2
	6.0	8.0	8.0	7.9
	7.5	8.3	8.3	7.9
	10.0	8.8	8.8	7.9
	12.5	9.4	8.8	7.9
	15.5	9.8	8.8	7.9

## 2-3.Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

**PFFY-P-VLEM-A,VLRM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA										
20 (2.2)	20.0	2.2	1.9	2.2	2.0	2.3	1.9	2.3	2.0	2.4	2.0	2.5	2.0	2.6	2.0
	22.5	2.1	1.9	2.2	2.0	2.3	1.9	2.3	2.0	2.4	2.0	2.4	2.0	2.5	1.9
	25.0	2.1	1.9	2.2	1.9	2.2	1.9	2.3	2.0	2.3	2.0	2.4	2.0	2.5	1.9
	27.5	2.1	1.9	2.1	1.9	2.2	1.9	2.3	1.9	2.3	2.0	2.4	2.0	2.5	1.9
	30.0	2.1	1.9	2.1	1.9	2.2	1.9	2.2	1.9	2.3	2.0	2.4	2.0	2.5	1.9
	32.5	2.0	1.9	2.1	1.9	2.2	1.9	2.2	1.9	2.3	2.0	2.4	2.0	2.4	1.9
	35.0	2.0	1.8	2.1	1.9	2.2	1.9	2.2	1.9	2.2	2.0	2.3	2.0	2.4	1.9
	37.5	2.0	1.8	2.0	1.9	2.1	1.9	2.2	1.9	2.2	2.0	2.3	1.9	2.4	1.9
	40.0	2.0	1.8	2.0	1.9	2.1	1.9	2.2	1.9	2.2	2.0	2.3	1.9	2.4	1.9
	43.0	2.0	1.8	2.0	1.9	2.1	1.8	2.1	1.9	2.2	2.0	2.3	1.9	2.3	1.9
25 (2.8)	20.0	2.7	2.2	2.8	2.2	2.9	2.2	3.0	2.2	3.0	2.3	3.1	2.2	3.2	2.2
	22.5	2.7	2.2	2.8	2.2	2.9	2.2	2.9	2.2	3.0	2.3	3.1	2.2	3.2	2.2
	25.0	2.7	2.2	2.7	2.2	2.9	2.2	2.9	2.2	3.0	2.3	3.1	2.2	3.2	2.2
	27.5	2.7	2.1	2.7	2.2	2.8	2.2	2.9	2.2	2.9	2.3	3.1	2.2	3.2	2.2
	30.0	2.6	2.1	2.7	2.2	2.8	2.1	2.9	2.2	2.9	2.2	3.0	2.2	3.1	2.1
	32.5	2.6	2.1	2.7	2.2	2.8	2.1	2.8	2.2	2.9	2.2	3.0	2.2	3.1	2.1
	35.0	2.6	2.1	2.6	2.2	2.7	2.1	2.8	2.2	2.9	2.2	3.0	2.2	3.1	2.1
	37.5	2.5	2.1	2.6	2.1	2.7	2.1	2.7	2.1	2.8	2.2	2.9	2.2	3.1	2.1
	40.0	2.5	2.1	2.6	2.1	2.7	2.1	2.7	2.1	2.8	2.2	2.9	2.2	3.0	2.1
	43.0	2.5	2.1	2.5	2.1	2.7	2.1	2.7	2.1	2.8	2.2	2.9	2.1	3.0	2.1
32 (3.6)	20.0	3.5	2.5	3.6	2.6	3.7	2.5	3.8	2.5	3.9	2.6	4.0	2.5	4.2	2.5
	22.5	3.5	2.5	3.6	2.6	3.7	2.5	3.8	2.5	3.9	2.6	4.0	2.5	4.1	2.4
	25.0	3.5	2.5	3.5	2.5	3.7	2.5	3.7	2.5	3.8	2.6	4.0	2.5	4.1	2.4
	27.5	3.4	2.5	3.5	2.5	3.6	2.5	3.7	2.5	3.8	2.6	3.9	2.5	4.1	2.4
	30.0	3.4	2.5	3.5	2.5	3.6	2.5	3.7	2.5	3.7	2.5	3.9	2.5	4.0	2.4
	32.5	3.3	2.4	3.4	2.5	3.6	2.4	3.6	2.5	3.7	2.5	3.9	2.5	4.0	2.4
	35.0	3.3	2.4	3.4	2.5	3.5	2.4	3.6	2.4	3.7	2.5	3.8	2.5	4.0	2.4
	37.5	3.3	2.4	3.3	2.5	3.5	2.4	3.6	2.4	3.6	2.5	3.8	2.4	3.9	2.4
	40.0	3.2	2.4	3.3	2.4	3.5	2.4	3.5	2.4	3.6	2.5	3.7	2.4	3.9	2.4
	43.0	3.2	2.4	3.3	2.4	3.4	2.4	3.5	2.4	3.6	2.5	3.7	2.4	3.8	2.3
40 (4.5)	20.0	4.4	3.2	4.5	3.2	4.7	3.2	4.8	3.2	4.9	3.3	5.0	3.2	5.2	3.1
	22.5	4.4	3.2	4.5	3.2	4.6	3.1	4.7	3.2	4.8	3.3	5.0	3.2	5.2	3.1
	25.0	4.3	3.1	4.4	3.2	4.6	3.1	4.7	3.1	4.8	3.2	5.0	3.2	5.1	3.1
	27.5	4.3	3.1	4.4	3.2	4.5	3.1	4.6	3.1	4.7	3.2	4.9	3.1	5.1	3.0
	30.0	4.2	3.1	4.3	3.2	4.5	3.1	4.6	3.1	4.7	3.2	4.9	3.1	5.0	3.0
	32.5	4.2	3.1	4.3	3.1	4.5	3.1	4.5	3.1	4.6	3.2	4.8	3.1	5.0	3.0
	35.0	4.1	3.0	4.2	3.1	4.4	3.0	4.5	3.1	4.6	3.2	4.8	3.1	5.0	3.0
	37.5	4.1	3.0	4.2	3.1	4.4	3.0	4.5	3.0	4.5	3.1	4.7	3.1	4.9	3.0
	40.0	4.1	3.0	4.1	3.1	4.3	3.0	4.4	3.0	4.5	3.1	4.7	3.0	4.9	3.0
	43.0	4.0	3.0	4.1	3.0	4.3	3.0	4.4	3.0	4.4	3.1	4.6	3.0	4.8	2.9
50 (5.6)	20.0	5.5	4.0	5.6	4.1	5.8	4.0	5.9	4.0	6.0	4.2	6.3	4.0	6.5	3.9
	22.5	5.4	4.0	5.5	4.1	5.8	4.0	5.9	4.0	6.0	4.1	6.2	4.0	6.4	3.9
	25.0	5.4	4.0	5.5	4.0	5.7	4.0	5.8	4.0	5.9	4.1	6.2	4.0	6.4	3.9
	27.5	5.3	3.9	5.4	4.0	5.7	3.9	5.8	4.0	5.9	4.1	6.1	4.0	6.3	3.9
	30.0	5.3	3.9	5.4	4.0	5.6	3.9	5.7	3.9	5.8	4.1	6.0	4.0	6.3	3.8
	32.5	5.2	3.9	5.3	4.0	5.5	3.9	5.7	3.9	5.8	4.0	6.0	3.9	6.2	3.8
	35.0	5.2	3.8	5.3	3.9	5.5	3.9	5.6	3.9	5.7	4.0	5.9	3.9	6.2	3.8
	37.5	5.1	3.8	5.2	3.9	5.4	3.8	5.5	3.9	5.7	4.0	5.9	3.9	6.1	3.8
	40.0	5.0	3.8	5.2	3.9	5.4	3.8	5.5	3.8	5.6	4.0	5.8	3.9	6.0	3.8
	43.0	5.0	3.8	5.1	3.8	5.3	3.8	5.4	3.8	5.5	3.9	5.8	3.8	6.0	3.7
63 (7.1)	20.0	7.0	5.0	7.1	5.1	7.4	5.0	7.5	5.0	7.7	5.1	8.0	5.0	8.2	4.8
	22.5	6.9	4.9	7.0	5.0	7.3	4.9	7.5	4.9	7.6	5.1	7.9	4.9	8.2	4.8
	25.0	6.8	4.9	7.0	5.0	7.2	4.9	7.4	4.9	7.5	5.1	7.8	4.9	8.1	4.8
	27.5	6.7	4.9	6.9	5.0	7.2	4.9	7.3	4.9	7.5	5.0	7.7	4.9	8.0	4.7
	30.0	6.7	4.8	6.8	4.9	7.1	4.8	7.2	4.8	7.4	5.0	7.7	4.9	8.0	4.7
	32.5	6.6	4.8	6.7	4.9	7.0	4.8	7.2	4.8	7.3	5.0	7.6	4.8	7.9	4.7
	35.0	6.5	4.8	6.7	4.9	7.0	4.8	7.1	4.8	7.2	4.9	7.5	4.8	7.8	4.7
	37.5	6.5	4.7	6.6	4.8	6.9	4.7	7.0	4.8	7.2	4.9	7.5	4.8	7.7	4.6
	40.0	6.4	4.7	6.5	4.8	6.8	4.7	7.0	4.7	7.1	4.9	7.4	4.8	7.7	4.6
	43.0	6.3	4.6	6.4	4.7	6.7	4.7	6.9	4.7	7.0	4.8	7.3	4.7	7.6	4.6

**PFFY-P-VLEM-A/VLRM-A**

## 2-4.Heating Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

**PFFY-P-VLEM-A,VLRM-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0	20.0	25.0	27.0
'CWB	SHC	SHC	SHC	SHC	SHC
20	-15.0	1.7	1.6	1.6	1.6
	-10.0	1.9	1.9	1.9	1.7
	-5.0	2.1	2.1	2.0	1.7
	0.0	2.4	2.4	2.0	1.7
	2.5	2.5	2.5	2.0	1.7
	6.0	2.5	2.5	2.0	1.7
	7.5	2.6	2.5	2.0	1.7
	10.0	2.8	2.5	2.0	1.7
	12.5	3.0	2.5	2.0	1.7
	15.5	3.0	2.5	2.0	1.7
25	-15.0	2.1	2.1	2.1	2.1
	-10.0	2.4	2.4	2.4	2.2
	-5.0	2.7	2.7	2.5	2.2
	0.0	3.1	3.0	2.5	2.2
	2.5	3.2	3.2	2.5	2.2
	6.0	3.2	3.2	2.5	2.2
	7.5	3.4	3.2	2.5	2.2
	10.0	3.6	3.2	2.5	2.2
	12.5	3.8	3.2	2.5	2.2
	15.5	3.9	3.2	2.5	2.2
32	-15.0	2.7	2.6	2.6	2.6
	-10.0	3.1	3.0	3.0	2.8
	-5.0	3.4	3.4	3.1	2.8
	0.0	3.8	3.8	3.1	2.8
	2.5	4.0	4.0	3.1	2.8
	6.0	4.0	4.0	3.1	2.8
	7.5	4.2	4.0	3.1	2.8
	10.0	4.5	4.0	3.1	2.8
	12.5	4.8	4.0	3.1	2.8
	15.5	4.8	4.0	3.1	2.8

Unit size	Outdoor air temp.	Indoor air temp.:°CDB				SHC:Sensible heat Capacity(kW)	
		15.0	20.0	25.0	27.0	SHC	SHC
'CWB	SHC	SHC	SHC	SHC	SHC	SHC	SHC
40	-15.0	3.3	3.3	3.3	3.3	3.3	3.3
	-10.0	3.8	3.8	3.7	3.7	3.5	3.5
	-5.0	4.3	4.2	3.9	3.5		
	0.0	4.8	4.7	3.9	3.5		
	2.5	5.0	5.0	3.9	3.5		
	6.0	5.1	5.0	3.9	3.5		
	7.5	5.3	5.0	3.9	3.5		
	10.0	5.6	5.0	3.9	3.5		
	12.5	6.0	5.0	3.9	3.5		
	15.5	6.1	5.0	3.9	3.5		
50	-15.0	4.2	4.2	4.1	4.1	4.1	4.1
	-10.0	4.8	4.8	4.7	4.3		
	-5.0	5.4	5.3	4.9	4.3		
	0.0	6.0	5.9	4.9	4.3		
	2.5	6.3	6.2	4.9	4.3		
	6.0	6.4	6.3	4.9	4.3		
	7.5	6.6	6.3	4.9	4.3		
	10.0	7.1	6.3	4.9	4.3		
	12.5	7.5	6.3	4.9	4.3		
	15.5	7.6	6.3	4.9	4.3		
63	-15.0	5.4	5.3	5.2	5.2	5.2	5.2
	-10.0	6.1	6.0	6.0	5.5		
	-5.0	6.9	6.8	6.2	5.5		
	0.0	7.6	7.5	6.2	5.5		
	2.5	8.0	7.9	6.2	5.5		
	6.0	8.1	8.0	6.2	5.5		
	7.5	8.4	8.0	6.2	5.5		
	10.0	9.0	8.0	6.2	5.5		
	12.5	9.6	8.0	6.2	5.5		
	15.5	9.7	8.0	6.2	5.5		

**2-5.Cooling Capacity**

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

 CA:Capacity(kcal/h)  
 SHC:Sensible heat Capacity(kcal/h)
**PFFY-P-VLEM-A,VLRM-A**

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
20	20.0	1813	1620	1901	1696	2049	1692	2157	1751	2192	1814	2320	1790	2459	1765
	22.5	1813	1620	1894	1693	2031	1685	2131	1741	2164	1804	2290	1780	2424	1754
	25.0	1799	1614	1876	1685	2008	1675	2105	1731	2137	1793	2259	1769	2389	1743
	27.5	1784	1608	1857	1677	1985	1666	2079	1721	2110	1783	2229	1758	2354	1732
	30.0	1770	1601	1839	1669	1962	1657	2052	1711	2083	1773	2198	1748	2319	1720
	32.5	1755	1595	1821	1661	1939	1648	2026	1701	2055	1763	2167	1737	2285	1709
	35.0	1741	1588	1802	1653	1916	1638	2000	1691	2028	1752	2137	1726	2250	1698
	37.5	1726	1582	1784	1645	1893	1629	1974	1681	2001	1742	2106	1716	2215	1687
	40.0	1712	1575	1766	1637	1870	1620	1948	1671	1974	1732	2076	1705	2180	1676
	43.0	1695	1568	1744	1628	1843	1609	1916	1659	1941	1720	2039	1693	2139	1663
25	20.0	2266	1829	2377	1908	2561	1906	2697	1965	2740	2028	2900	1999	3073	1970
	22.5	2266	1829	2367	1904	2539	1896	2664	1952	2705	2014	2862	1985	3030	1955
	25.0	2248	1820	2345	1893	2510	1884	2631	1938	2671	2000	2824	1971	2986	1940
	27.5	2230	1812	2322	1883	2482	1872	2598	1925	2637	1987	2786	1957	2943	1925
	30.0	2212	1803	2299	1873	2453	1860	2566	1912	2603	1973	2748	1943	2899	1911
	32.5	2194	1795	2276	1862	2424	1848	2533	1899	2569	1960	2709	1929	2856	1896
	35.0	2176	1787	2253	1852	2395	1835	2500	1886	2535	1947	2671	1916	2812	1881
	37.5	2158	1778	2230	1842	2367	1823	2467	1873	2501	1933	2633	1902	2769	1867
	40.0	2140	1770	2207	1831	2338	1811	2434	1860	2467	1920	2595	1888	2725	1853
	43.0	2118	1760	2180	1819	2304	1797	2395	1844	2426	1904	2549	1871	2673	1835
32	20.0	2855	2088	2995	2171	3227	2173	3398	2230	3452	2290	3654	2257	3872	2221
	22.5	2855	2088	2983	2166	3199	2160	3357	2212	3409	2271	3606	2238	3817	2201
	25.0	2833	2077	2954	2151	3163	2143	3315	2194	3366	2253	3558	2218	3763	2181
	27.5	2810	2065	2925	2137	3127	2127	3274	2176	3323	2235	3510	2199	3708	2160
	30.0	2787	2054	2896	2123	3091	2110	3233	2158	3280	2216	3462	2180	3653	2140
	32.5	2765	2043	2868	2109	3055	2094	3191	2140	3237	2198	3414	2161	3598	2120
	35.0	2742	2031	2839	2095	3018	2077	3150	2122	3194	2180	3366	2142	3544	2101
	37.5	2719	2020	2810	2081	2982	2061	3109	2104	3151	2162	3318	2123	3489	2081
	40.0	2696	2008	2781	2067	2946	2044	3067	2087	3109	2143	3270	2105	3434	2061
	43.0	2669	1995	2746	2050	2902	2025	3018	2066	3057	2122	3212	2082	3368	2038
40	20.0	3625	2651	3803	2756	4098	2759	4315	2831	4383	2907	4640	2865	4917	2820
	22.5	3625	2651	3788	2749	4063	2742	4262	2808	4329	2884	4579	2840	4848	2794
	25.0	3597	2636	3751	2731	4017	2721	4210	2785	4274	2860	4518	2816	4778	2768
	27.5	3568	2622	3715	2713	3971	2700	4157	2762	4220	2837	4457	2792	4708	2742
	30.0	3539	2607	3678	2695	3925	2679	4105	2739	4165	2813	4396	2767	4639	2717
	32.5	3511	2593	3641	2677	3879	2658	4052	2717	4111	2790	4335	2743	4569	2692
	35.0	3482	2578	3605	2660	3833	2637	4000	2694	4056	2767	4274	2719	4500	2666
	37.5	3453	2564	3568	2642	3787	2616	3948	2671	4002	2744	4213	2695	4430	2641
	40.0	3424	2550	3531	2624	3741	2595	3895	2649	3947	2721	4152	2672	4361	2616
	43.0	3389	2532	3487	2603	3686	2570	3832	2622	3882	2694	4078	2643	4277	2587
50	20.0	4532	3358	4753	3494	5123	3495	5393	3590	5479	3689	5800	3635	6146	3578
	22.5	4532	3358	4735	3485	5078	3475	5328	3561	5411	3660	5724	3605	6059	3546
	25.0	4496	3340	4689	3463	5021	3449	5262	3533	5343	3631	5648	3575	5972	3515
	27.5	4460	3322	4643	3440	4963	3423	5197	3505	5275	3602	5571	3545	5886	3483
	30.0	4424	3304	4597	3418	4906	3397	5131	3476	5207	3573	5495	3515	5799	3452
	32.5	4388	3287	4552	3396	4848	3371	5066	3448	5139	3544	5419	3485	5712	3421
	35.0	4352	3269	4506	3374	4791	3345	5000	3420	5070	3516	5342	3456	5625	3390
	37.5	4316	3251	4460	3352	4734	3319	4934	3393	5002	3487	5266	3426	5538	3359
	40.0	4280	3233	4414	3330	4676	3294	4869	3365	4934	3459	5190	3397	5451	3328
	43.0	4237	3212	4359	3304	4607	3263	4790	3332	4852	3425	5098	3362	5347	3291
63	20.0	5710	4139	5989	4302	6455	4306	6796	4418	6904	4534	7309	4468	7744	4396
	22.5	5710	4139	5966	4291	6399	4280	6713	4381	6818	4497	7212	4429	7635	4355
	25.0	5665	4116	5908	4262	6326	4246	6630	4345	6732	4459	7116	4390	7525	4314
	27.5	5620	4093	5851	4234	6254	4213	6548	4308	6646	4422	7020	4351	7416	4274
	30.0	5574	4070	5793	4205	6181	4179	6465	4272	6560	4385	6924	4313	7306	4233
	32.5	5529	4047	5735	4177	6109	4146	6383	4236	6475	4348	6828	4274	7197	4193
	35.0	5484	4024	5677	4148	6037	4113	6300	4200	6389	4311	6731	4236	7087	4153
	37.5	5438	4001	5620	4120	5964	4080	6217	4164	6303	4275	6635	4198	6978	4113
	40.0	5393	3978	5562	4092	5892	4047	6135	4128	6217	4238	6539	4160	6868	4073
	43.0	5338	3951	5493	4058	5805	4007	6036	4086	6114	4195	6424	4115	6737	4026

**PFFY-P**  
**VLEM-A/VLRM-A**

## 2-6.Heating Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

PFFY-P-VLEM-A,VLRM-A

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525

Unit size	Outdoor air temp.	SHC:Sensible heat Capacity(kcal/h)			
		Indoor air temp.:°CDB			
		15	21	25	27
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051

## 2-7.Cooling Capacity (In combination with PQRY-P200-250YMF-C)

PFFY-P-VLEM-A,VLRM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.														
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB		
°C	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC
20	10	2.1	1.9	2.2	2.0	2.4	2.0	2.4	2.0	2.5	2.1	2.6	2.1	2.8	2.0	
	20	2.1	1.9	2.1	1.9	2.3	1.9	2.3	2.0	2.4	2.1	2.5	2.0	2.7	2.0	
	30	2.0	1.8	2.0	1.9	2.1	1.9	2.2	1.9	2.3	2.0	2.4	2.0	2.5	1.9	
	40	1.7	1.7	1.8	1.8	1.9	1.8	1.9	1.8	2.0	1.9	2.1	1.9	2.2	1.8	
	45	1.6	1.7	1.7	1.7	1.8	1.7	1.8	1.8	1.9	1.9	2.0	1.8	2.1	1.8	
25	10	2.7	2.2	2.8	2.2	3.0	2.2	3.1	2.3	3.2	2.4	3.3	2.3	3.5	2.3	
	20	2.6	2.1	2.7	2.2	2.9	2.2	3.0	2.2	3.1	2.3	3.2	2.3	3.4	2.2	
	30	2.5	2.1	2.6	2.1	2.7	2.1	2.8	2.2	2.9	2.2	3.0	2.2	3.2	2.2	
	40	2.2	1.9	2.2	2.0	2.4	2.0	2.4	2.0	2.5	2.1	2.6	2.1	2.8	2.0	
	45	2.0	1.9	2.1	1.9	2.2	1.9	2.3	2.0	2.4	2.0	2.5	2.0	2.6	2.0	
32	10	3.5	2.5	3.6	2.6	3.9	2.6	4.0	2.6	4.1	2.7	4.3	2.6	4.5	2.6	
	20	3.4	2.5	3.5	2.5	3.7	2.5	3.8	2.5	3.9	2.6	4.1	2.6	4.4	2.5	
	30	3.2	2.4	3.3	2.4	3.5	2.4	3.6	2.4	3.7	2.5	3.9	2.5	4.1	2.4	
	40	2.8	2.2	2.9	2.2	3.1	2.2	3.1	2.2	3.2	2.3	3.4	2.3	3.6	2.3	
	45	2.6	2.1	2.7	2.2	2.9	2.1	3.0	2.2	3.0	2.3	3.2	2.2	3.4	2.2	
40	10	4.4	3.2	4.5	3.3	4.8	3.2	5.0	3.3	5.1	3.4	5.4	3.3	5.7	3.3	
	20	4.2	3.1	4.4	3.2	4.6	3.2	4.8	3.2	4.9	3.3	5.2	3.2	5.5	3.2	
	30	4.0	3.0	4.1	3.1	4.4	3.0	4.5	3.1	4.6	3.2	4.9	3.1	5.2	3.1	
	40	3.5	2.7	3.6	2.8	3.8	2.8	3.9	2.8	4.0	2.9	4.3	2.9	4.5	2.8	
	45	3.3	2.6	3.4	2.7	3.6	2.7	3.7	2.7	3.8	2.8	4.0	2.8	4.2	2.8	
50	10	5.5	4.0	5.6	4.1	6.0	4.1	6.2	4.1	6.3	4.3	6.7	4.2	7.1	4.1	
	20	5.3	3.9	5.4	4.0	5.8	4.0	5.9	4.0	6.1	4.2	6.5	4.1	6.8	4.0	
	30	5.0	3.8	5.1	3.9	5.5	3.8	5.6	3.9	5.8	4.0	6.1	4.0	6.4	3.9	
	40	4.3	3.4	4.5	3.6	4.7	3.5	4.9	3.6	5.0	3.7	5.3	3.7	5.6	3.6	
	45	4.1	3.3	4.2	3.4	4.5	3.4	4.6	3.5	4.7	3.6	5.0	3.6	5.3	3.5	
63	10	6.9	5.0	7.2	5.1	7.6	5.1	7.8	5.1	8.0	5.3	8.5	5.2	9.0	5.1	
	20	6.7	4.8	6.9	5.0	7.3	4.9	7.5	5.0	7.8	5.2	8.2	5.1	8.6	5.0	
	30	6.3	4.6	6.5	4.8	6.9	4.7	7.1	4.8	7.3	5.0	7.7	4.9	8.1	4.8	
	40	5.5	4.2	5.7	4.4	6.0	4.3	6.2	4.4	6.4	4.6	6.7	4.5	7.1	4.4	
	45	5.2	4.1	5.3	4.2	5.7	4.2	5.8	4.3	6.0	4.4	6.3	4.4	6.7	4.3	

PFFY-P  
VLEM-A/VLRM-A

## 2-8.Heatling Capacity (In combination with PQRY-P200-250YMF-C)

PFFY-P-VLEM-A,VLRM-A

SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.:°CDB				
		15	19	20	25	27
°C	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
20	10	2.2	2.2	2.1	1.7	1.5
	20	2.6	2.6	2.5	2.0	1.8
	30	2.6	2.6	2.5	2.0	1.8
	40	2.7	2.7	2.6	2.1	1.9
	45	2.9	2.9	2.9	2.3	2.1
25	10	2.8	2.8	2.7	2.2	2.0
	20	3.3	3.3	3.2	2.6	2.3
	30	3.3	3.3	3.2	2.6	2.3
	40	3.4	3.4	3.3	2.7	2.4
	45	3.8	3.7	3.6	2.9	2.6
32	10	3.5	3.5	3.4	2.7	2.4
	20	4.1	4.1	4.0	3.2	2.9
	30	4.1	4.1	4.0	3.2	2.9
	40	4.3	4.2	4.2	3.3	3.0
	45	4.7	4.7	4.6	3.6	3.3
40	10	4.4	4.3	4.3	3.4	3.1
	20	5.2	5.1	5.0	4.0	3.6
	30	5.2	5.1	5.0	4.0	3.6
	40	5.4	5.3	5.2	4.2	3.7
	45	5.9	5.8	5.7	4.6	4.1
50	10	5.5	5.5	5.4	4.3	3.9
	20	6.5	6.4	6.3	5.0	4.5
	30	6.5	6.4	6.3	5.0	4.5
	40	6.7	6.7	6.6	5.2	4.7
	45	7.4	7.3	7.2	5.7	5.2
63	10	7.0	6.9	6.8	5.4	4.9
	20	8.2	8.2	8.0	6.4	5.8
	30	8.2	8.2	8.0	6.4	5.8
	40	8.6	8.5	8.3	6.7	6.0
	45	9.4	9.3	9.1	7.3	6.6

## 2-9.Cooling Capacity (In combination with PURY-P400-500YMF-C)

PFFY-P-VLEM-A,VLRM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB		
°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC
20	20.0	2.0	1.8	2.1	1.9	2.3	1.9	2.4	2.1	2.6	2.0	2.7	2.0	
	22.5	2.0	1.8	2.1	1.9	2.3	1.9	2.4	2.1	2.6	2.0	2.7	2.0	
	25.0	2.0	1.8	2.1	1.9	2.2	1.9	2.4	2.0	2.5	2.0	2.7	2.0	
	27.5	2.0	1.8	2.1	1.9	2.2	1.9	2.4	2.0	2.5	2.0	2.6	2.0	
	30.0	2.0	1.8	2.1	1.9	2.2	1.9	2.3	2.0	2.5	2.0	2.6	2.0	
	32.5	2.0	1.8	2.0	1.9	2.2	1.9	2.3	2.0	2.4	2.0	2.6	2.0	
	35.0	1.9	1.8	2.0	1.9	2.1	1.9	2.3	2.0	2.4	2.0	2.5	1.9	
	37.5	1.9	1.8	2.0	1.9	2.1	1.9	2.2	2.0	2.4	2.0	2.5	1.9	
	40.0	1.9	1.8	2.0	1.9	2.1	1.8	2.2	2.0	2.3	2.0	2.4	1.9	
	43.0	1.9	1.8	1.9	1.9	2.1	1.8	2.2	2.0	2.3	1.9	2.4	1.9	
25	20.0	2.6	2.1	2.7	2.2	2.9	2.2	3.1	2.3	3.3	2.3	3.5	2.3	
	22.5	2.6	2.1	2.7	2.2	2.9	2.2	3.1	2.3	3.3	2.3	3.4	2.2	
	25.0	2.6	2.1	2.7	2.2	2.9	2.2	3.0	2.3	3.2	2.3	3.4	2.2	
	27.5	2.5	2.1	2.6	2.2	2.8	2.2	3.0	2.3	3.2	2.3	3.3	2.2	
	30.0	2.5	2.1	2.6	2.2	2.8	2.1	3.0	2.3	3.1	2.2	3.3	2.2	
	32.5	2.5	2.1	2.6	2.1	2.8	2.1	2.9	2.3	3.1	2.2	3.2	2.2	
	35.0	2.5	2.1	2.6	2.1	2.7	2.1	2.9	2.2	3.0	2.2	3.2	2.2	
	37.5	2.5	2.0	2.5	2.1	2.7	2.1	2.8	2.2	3.0	2.2	3.1	2.1	
	40.0	2.4	2.0	2.5	2.1	2.7	2.1	2.8	2.2	3.0	2.2	3.1	2.1	
	43.0	2.4	2.0	2.5	2.1	2.6	2.1	2.8	2.2	2.9	2.2	3.0	2.1	
32	20.0	3.3	2.4	3.5	2.5	3.7	2.5	4.0	2.7	4.2	2.6	4.5	2.6	
	22.5	3.3	2.4	3.5	2.5	3.7	2.5	4.0	2.6	4.2	2.6	4.4	2.6	
	25.0	3.3	2.4	3.4	2.5	3.7	2.5	3.9	2.6	4.1	2.6	4.4	2.5	
	27.5	3.3	2.4	3.4	2.5	3.6	2.5	3.9	2.6	4.1	2.6	4.3	2.5	
	30.0	3.2	2.4	3.4	2.5	3.6	2.5	3.8	2.6	4.0	2.5	4.2	2.5	
	32.5	3.2	2.4	3.3	2.4	3.5	2.4	3.8	2.6	4.0	2.5	4.2	2.5	
	35.0	3.2	2.4	3.3	2.4	3.5	2.4	3.7	2.5	3.9	2.5	4.1	2.4	
	37.5	3.2	2.3	3.3	2.4	3.5	2.4	3.7	2.5	3.8	2.5	4.0	2.4	
	40.0	3.1	2.3	3.2	2.4	3.4	2.4	3.6	2.5	3.8	2.4	4.0	2.4	
	43.0	3.1	2.3	3.2	2.4	3.4	2.4	3.5	2.5	3.7	2.4	3.9	2.4	
40	20.0	4.1	3.0	4.3	3.2	4.7	3.2	5.0	3.3	5.3	3.3	5.6	3.2	
	22.5	4.1	3.0	4.3	3.2	4.6	3.2	4.9	3.3	5.2	3.3	5.5	3.2	
	25.0	4.1	3.0	4.3	3.1	4.6	3.1	4.9	3.3	5.2	3.2	5.5	3.2	
	27.5	4.1	3.0	4.2	3.1	4.5	3.1	4.8	3.3	5.1	3.2	5.4	3.2	
	30.0	4.0	3.0	4.2	3.1	4.5	3.1	4.8	3.2	5.0	3.2	5.3	3.1	
	32.5	4.0	3.0	4.2	3.1	4.4	3.1	4.7	3.2	5.0	3.2	5.2	3.1	
	35.0	4.0	3.0	4.1	3.1	4.4	3.0	4.6	3.2	4.9	3.1	5.1	3.1	
	37.5	3.9	2.9	4.1	3.0	4.3	3.0	4.6	3.2	4.8	3.1	5.1	3.0	
	40.0	3.9	2.9	4.0	3.0	4.3	3.0	4.5	3.1	4.7	3.1	5.0	3.0	
	43.0	3.9	2.9	4.0	3.0	4.2	3.0	4.4	3.1	4.7	3.0	4.9	3.0	
50	20.0	5.2	3.8	5.4	4.0	5.8	4.0	6.2	4.2	6.6	4.2	7.0	4.1	
	22.5	5.2	3.8	5.4	4.0	5.8	4.0	6.2	4.2	6.5	4.1	6.9	4.1	
	25.0	5.1	3.8	5.3	4.0	5.7	4.0	6.1	4.2	6.4	4.1	6.8	4.0	
	27.5	5.1	3.8	5.3	3.9	5.6	3.9	6.0	4.1	6.3	4.1	6.7	4.0	
	30.0	5.0	3.8	5.2	3.9	5.6	3.9	5.9	4.1	6.2	4.0	6.6	4.0	
	32.5	5.0	3.8	5.2	3.9	5.5	3.9	5.8	4.1	6.2	4.0	6.5	3.9	
	35.0	4.9	3.7	5.1	3.9	5.4	3.8	5.8	4.0	6.1	4.0	6.4	3.9	
	37.5	4.9	3.7	5.1	3.8	5.4	3.8	5.7	4.0	6.0	3.9	6.3	3.9	
	40.0	4.9	3.7	5.0	3.8	5.3	3.8	5.6	4.0	5.9	3.9	6.2	3.8	
	43.0	4.8	3.7	5.0	3.8	5.2	3.7	5.5	3.9	5.8	3.9	6.1	3.8	
63	20.0	6.5	4.8	6.9	4.9	7.4	5.0	7.9	5.2	8.4	5.1	8.9	5.1	
	22.5	6.5	4.8	6.8	4.9	7.3	4.9	7.8	5.2	8.3	5.1	8.7	5.0	
	25.0	6.5	4.7	6.8	4.9	7.2	4.9	7.7	5.1	8.1	5.1	8.6	5.0	
	27.5	6.4	4.7	6.7	4.9	7.2	4.8	7.6	5.1	8.0	5.0	8.5	4.9	
	30.0	6.4	4.7	6.6	4.8	7.1	4.8	7.5	5.0	7.9	5.0	8.4	4.9	
	32.5	6.3	4.7	6.6	4.8	7.0	4.8	7.4	5.0	7.8	4.9	8.2	4.8	
	35.0	6.3	4.6	6.5	4.8	6.9	4.7	7.3	5.0	7.7	4.9	8.1	4.8	
	37.5	6.2	4.6	6.4	4.7	6.8	4.7	7.2	4.9	7.6	4.8	8.0	4.7	
	40.0	6.2	4.6	6.4	4.7	6.7	4.7	7.1	4.9	7.5	4.8	7.9	4.7	
	43.0	6.1	4.5	6.3	4.7	6.6	4.6	7.0	4.8	7.3	4.7	7.7	4.6	

## 2-10.Heating Capacity (In combination with PURY-P400-500YMF-C)

**PFFY-P-VLEM-A,VLRM-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0	20.0	25.0	27.0
°CWB	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
20	-15.0	1.6	1.5	1.5	1.5
	-10.0	1.8	1.8	1.7	1.7
	-5.0	2.0	2.0	2.0	1.9
	0.0	2.2	2.2	2.1	1.9
	2.5	2.4	2.3	2.1	1.9
	6.0	2.5	2.5	2.1	1.9
	7.5	2.6	2.5	2.1	1.9
	10.0	2.7	2.5	2.1	1.9
	12.5	2.9	2.5	2.1	1.9
	15.5	2.9	2.5	2.1	1.9
25	-15.0	2.0	2.0	1.9	1.9
	-10.0	2.3	2.2	2.2	2.2
	-5.0	2.6	2.5	2.5	2.5
	0.0	2.9	2.8	2.7	2.5
	2.5	3.0	3.0	2.7	2.5
	6.0	3.2	3.2	2.7	2.5
	7.5	3.3	3.2	2.7	2.5
	10.0	3.5	3.2	2.7	2.5
	12.5	3.7	3.2	2.7	2.5
	15.5	3.7	3.2	2.7	2.5
32	-15.0	2.5	2.5	2.4	2.4
	-10.0	2.8	2.8	2.8	2.7
	-5.0	3.2	3.2	3.1	3.1
	0.0	3.6	3.5	3.4	3.1
	2.5	3.8	3.7	3.4	3.1
	6.0	4.0	4.0	3.4	3.1
	7.5	4.2	4.0	3.4	3.1
	10.0	4.4	4.0	3.4	3.1
	12.5	4.6	4.0	3.4	3.1
	15.5	4.6	4.0	3.4	3.1

Unit size	Outdoor air temp.	SHC:Sensible heat Capacity(kW)			
		15.0	20.0	25.0	27.0
°CWB	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
40	-15.0	3.1	3.1	3.0	3.0
	-10.0	3.6	3.5	3.5	3.4
	-5.0	4.0	4.0	3.9	3.9
	0.0	4.5	4.4	4.3	3.9
	2.5	4.7	4.7	4.3	3.9
	6.0	5.0	5.0	4.3	3.9
	7.5	5.2	5.0	4.3	3.9
	10.0	5.4	5.0	4.3	3.9
	12.5	5.7	5.0	4.3	3.9
	15.5	5.8	5.0	4.3	3.9
50	-15.0	3.9	3.9	3.8	3.7
	-10.0	4.5	4.4	4.3	4.3
	-5.0	5.0	5.0	4.9	4.9
	0.0	5.6	5.6	5.4	4.9
	2.5	5.9	5.9	5.4	4.9
	6.0	6.4	6.3	5.4	4.9
	7.5	6.6	6.3	5.4	4.9
	10.0	6.9	6.3	5.4	4.9
	12.5	7.2	6.3	5.4	4.9
	15.5	7.2	6.3	5.4	4.9
63	-15.0	5.0	4.9	4.8	4.7
	-10.0	5.7	5.6	5.5	5.4
	-5.0	6.4	6.3	6.2	6.2
	0.0	7.2	7.1	6.8	6.2
	2.5	7.5	7.5	6.8	6.2
	6.0	8.1	8.0	6.8	6.2
	7.5	8.3	8.0	6.8	6.2
	10.0	8.7	8.0	6.8	6.2
	12.5	9.1	8.0	6.8	6.2
	15.5	9.2	8.0	6.8	6.2

**PFFY-P  
VLEM-A/VLRM-A**

## 2-11.Cooling Capacity (In combination with PU(H)Y-200-250TM-C)

PFFY-P-VLEM-A,VLRM-A

CA:Capacity(kcal/h)  
SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.05°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
20	20.0	1870	1647	1939	1713	2077	1704	2180	1761	2215	1823	2353	1802	2491	1776
	22.5	1870	1647	1939	1713	2077	1704	2180	1761	2207	1821	2330	1794	2451	1763
	25.0	1864	1644	1926	1708	2050	1693	2150	1749	2171	1807	2292	1781	2411	1750
	27.5	1832	1630	1895	1694	2017	1680	2112	1734	2134	1793	2254	1767	2372	1738
	30.0	1801	1616	1864	1680	1984	1666	2075	1720	2097	1779	2216	1754	2332	1725
	32.5	1769	1602	1832	1667	1950	1653	2037	1706	2060	1765	2178	1741	2293	1712
	35.0	1738	1588	1801	1653	1917	1639	2000	1691	2023	1751	2140	1728	2253	1699
	37.5	1706	1574	1770	1640	1884	1626	1963	1677	1986	1737	2101	1715	2213	1687
	40.0	1675	1560	1738	1626	1851	1613	1925	1663	1950	1724	2063	1702	2174	1674
	43.0	1637	1543	1700	1610	1811	1597	1880	1646	1905	1707	2018	1686	2126	1659
25	20.0	2337	1863	2424	1931	2596	1922	2725	1978	2768	2040	2941	2015	3113	1984
	22.5	2337	1863	2424	1931	2596	1922	2725	1978	2759	2036	2912	2005	3064	1967
	25.0	2330	1860	2408	1923	2563	1907	2687	1962	2713	2018	2865	1987	3014	1950
	27.5	2290	1841	2369	1905	2521	1890	2640	1943	2667	2000	2817	1969	2965	1933
	30.0	2251	1822	2330	1887	2480	1872	2593	1924	2621	1981	2770	1952	2915	1917
	32.5	2212	1804	2290	1870	2438	1854	2547	1905	2575	1963	2722	1935	2866	1900
	35.0	2172	1786	2251	1852	2397	1837	2500	1886	2529	1945	2674	1917	2816	1883
	37.5	2133	1767	2212	1834	2355	1819	2453	1868	2483	1927	2627	1900	2767	1867
	40.0	2094	1749	2173	1817	2313	1802	2407	1849	2437	1909	2579	1883	2717	1850
	43.0	2046	1727	2126	1796	2264	1781	2350	1827	2382	1888	2522	1862	2658	1831
32	20.0	2945	2135	3054	2202	3271	2194	3434	2247	3488	2307	3706	2279	3923	2241
	22.5	2945	2135	3054	2202	3271	2194	3434	2247	3477	2302	3670	2264	3860	2218
	25.0	2935	2130	3034	2192	3229	2175	3385	2226	3419	2277	3610	2240	3798	2195
	27.5	2886	2105	2985	2168	3177	2151	3327	2200	3361	2252	3550	2216	3736	2171
	30.0	2836	2080	2935	2143	3124	2127	3268	2175	3303	2227	3490	2192	3673	2149
	32.5	2787	2055	2886	2119	3072	2103	3209	2149	3245	2202	3430	2168	3611	2126
	35.0	2737	2030	2836	2095	3020	2079	3150	2123	3187	2178	3370	2145	3548	2103
	37.5	2687	2005	2787	2071	2967	2055	3091	2098	3129	2153	3310	2121	3486	2081
	40.0	2638	1981	2738	2047	2915	2031	3032	2073	3071	2129	3250	2098	3424	2058
	43.0	2578	1951	2678	2019	2852	2003	2962	2043	3001	2100	3178	2070	3349	2032
40	20.0	3740	2711	3878	2795	4154	2786	4361	2853	4430	2929	4705	2893	4981	2845
	22.5	3740	2711	3878	2795	4154	2786	4361	2853	4415	2923	4660	2874	4902	2815
	25.0	3727	2704	3853	2783	4100	2761	4299	2826	4341	2891	4584	2843	4823	2786
	27.5	3664	2672	3790	2752	4034	2730	4224	2793	4268	2859	4507	2813	4744	2756
	30.0	3601	2640	3727	2721	3967	2699	4150	2760	4194	2827	4431	2783	4664	2727
	32.5	3538	2608	3664	2690	3901	2669	4075	2728	4120	2796	4355	2752	4585	2698
	35.0	3476	2577	3602	2660	3834	2639	4000	2696	4047	2764	4279	2722	4506	2670
	37.5	3413	2545	3539	2629	3768	2609	3925	2663	3973	2733	4203	2693	4427	2641
	40.0	3350	2514	3476	2599	3701	2579	3850	2631	3899	2702	4127	2663	4347	2613
	43.0	3274	2477	3401	2563	3622	2543	3761	2593	3811	2665	4035	2628	4252	2579
50	20.0	4675	3432	4847	3541	5192	3528	5451	3617	5537	3716	5882	3670	6227	3609
	22.5	4675	3432	4847	3541	5192	3528	5451	3617	5519	3708	5825	3647	6128	3573
	25.0	4659	3424	4816	3526	5126	3498	5374	3583	5426	3668	5729	3609	6028	3536
	27.5	4580	3384	4737	3488	5042	3460	5280	3543	5334	3629	5634	3571	5929	3500
	30.0	4502	3345	4659	3450	4959	3422	5187	3502	5242	3590	5539	3534	5830	3465
	32.5	4423	3306	4581	3412	4876	3385	5093	3462	5150	3551	5444	3497	5731	3429
	35.0	4344	3267	4502	3374	4793	3347	5000	3422	5058	3513	5349	3460	5632	3393
	37.5	4266	3228	4424	3337	4710	3310	4907	3383	4966	3474	5254	3423	5533	3358
	40.0	4187	3189	4345	3299	4627	3273	4813	3343	4874	3436	5159	3387	5434	3323
	43.0	4093	3143	4251	3255	4527	3229	4701	3296	4764	3390	5044	3343	5315	3281
63	20.0	5890	4234	6108	4364	6542	4350	6868	4452	6977	4569	7411	4512	7846	4437
	22.5	5890	4234	6108	4364	6542	4350	6868	4452	6953	4559	7339	4483	7721	4389
	25.0	5871	4223	6068	4344	6458	4310	6771	4409	6837	4508	7219	4434	7596	4343
	27.5	5771	4172	5969	4295	6354	4261	6653	4357	6721	4457	7099	4385	7471	4296
	30.0	5672	4122	5870	4246	6249	4213	6535	4305	6605	4407	6979	4337	7346	4250
	32.5	5573	4071	5772	4197	6144	4164	6418	4254	6489	4357	6859	4289	7221	4204
	35.0	5474	4021	5673	4148	6039	4116	6300	4202	6373	4307	6740	4241	7097	4158
	37.5	5375	3971	5574	4100	5935	4068	6182	4151	6257	4258	6620	4194	6972	4112
	40.0	5276	3922	5475	4052	5830	4020	6065	4100	6141	4209	6500	4147	6847	4067
	43.0	5157	3862	5357	3995	5704	3964	5923	4040	6002	4150	6356	4091	6697	4013

## 2-12.Heating Capacity (In combination with PUHY-200-250TM-C)

**PFFY-P-VLEM-A,VLRM-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
°CWB	SHC	SHC	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525

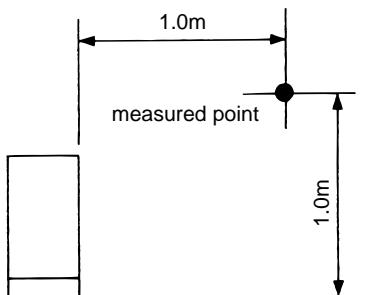
Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
°CWB	SHC	SHC	SHC	SHC	SHC
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051

**PFFY-P  
VLEM-A/VLRM-A**

### 3. Sound Levels

#### 3-1. Noise level

Floor standing

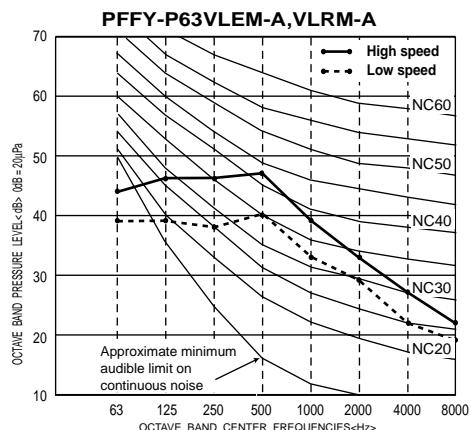
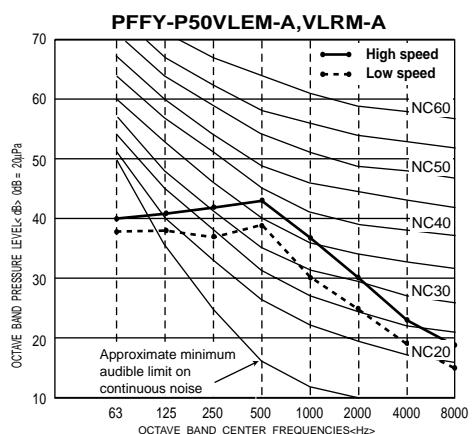
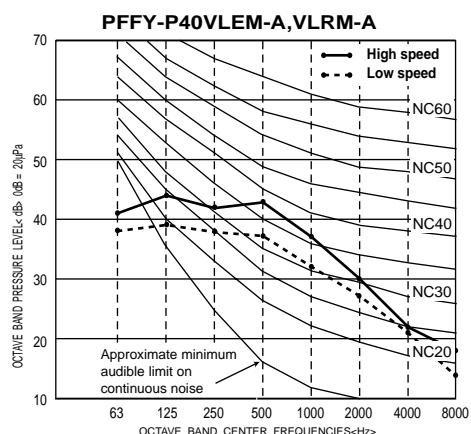
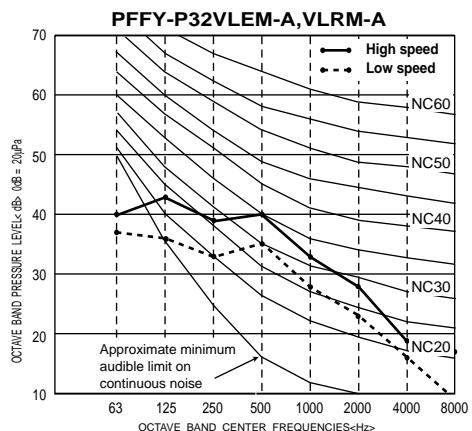
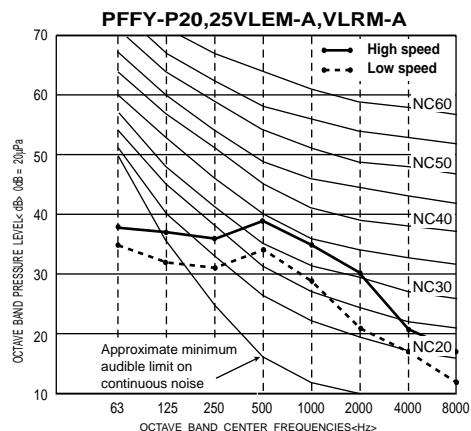


Noise level at anechoic room (Low-High)

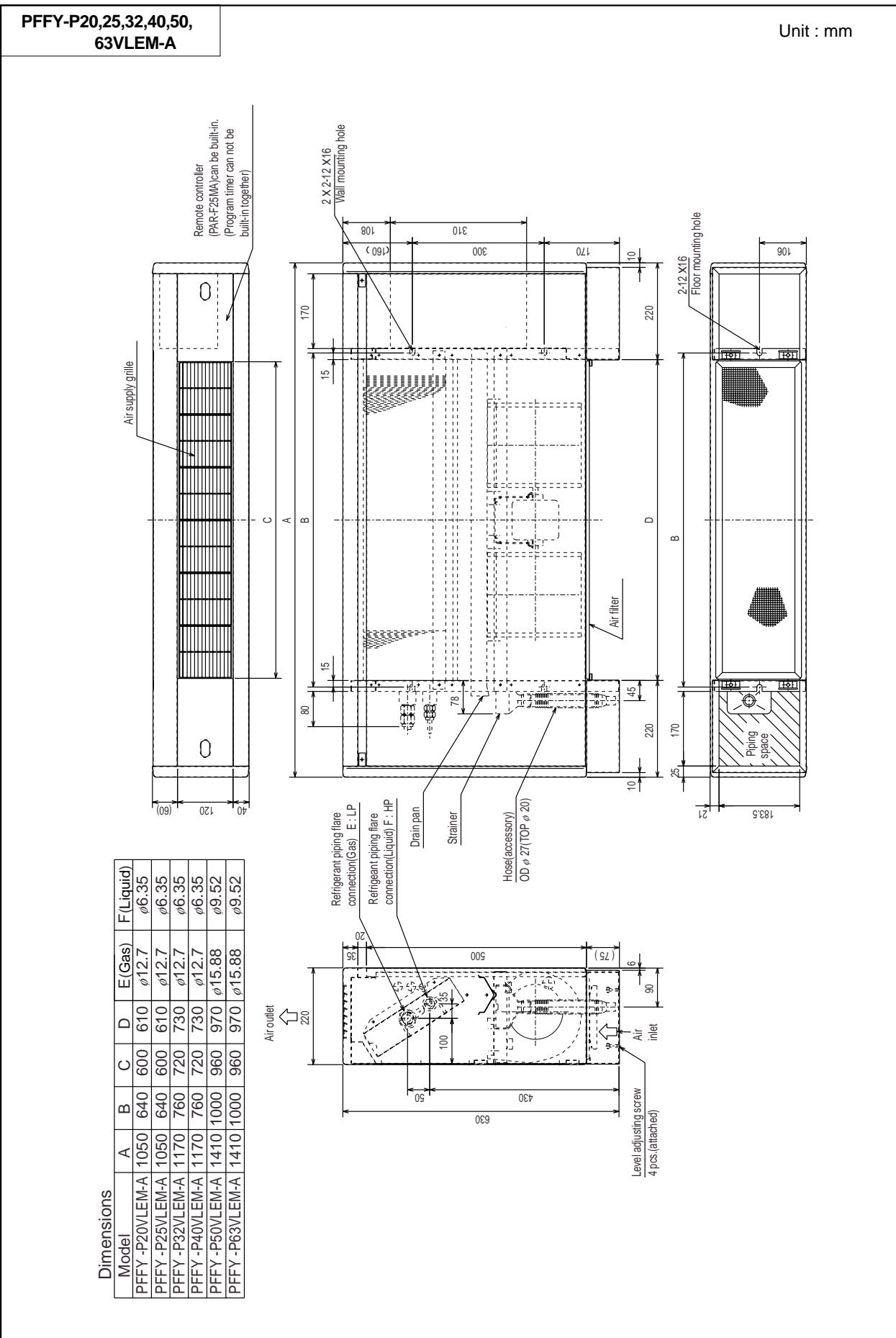
Unit : dB(A)

Model	Noise level (A weighted)
PFFY-P20VLEM-A PFFY-P20VLRM-A PFFY-P25VLEM-A PFFY-P25VLRM-A	34-40
PFFY-P32VLEM-A PFFY-P32VLRM-A	35-40
PFFY-P40VLEM-A PFFY-P40VLRM-A PFFY-P50VLEM-A PFFY-P50VLRM-A	38-43
PFFY-P63VLEM-A PFFY-P63VLRM-A	40-46

#### 3-2. NC curves



## 4. External Dimensions

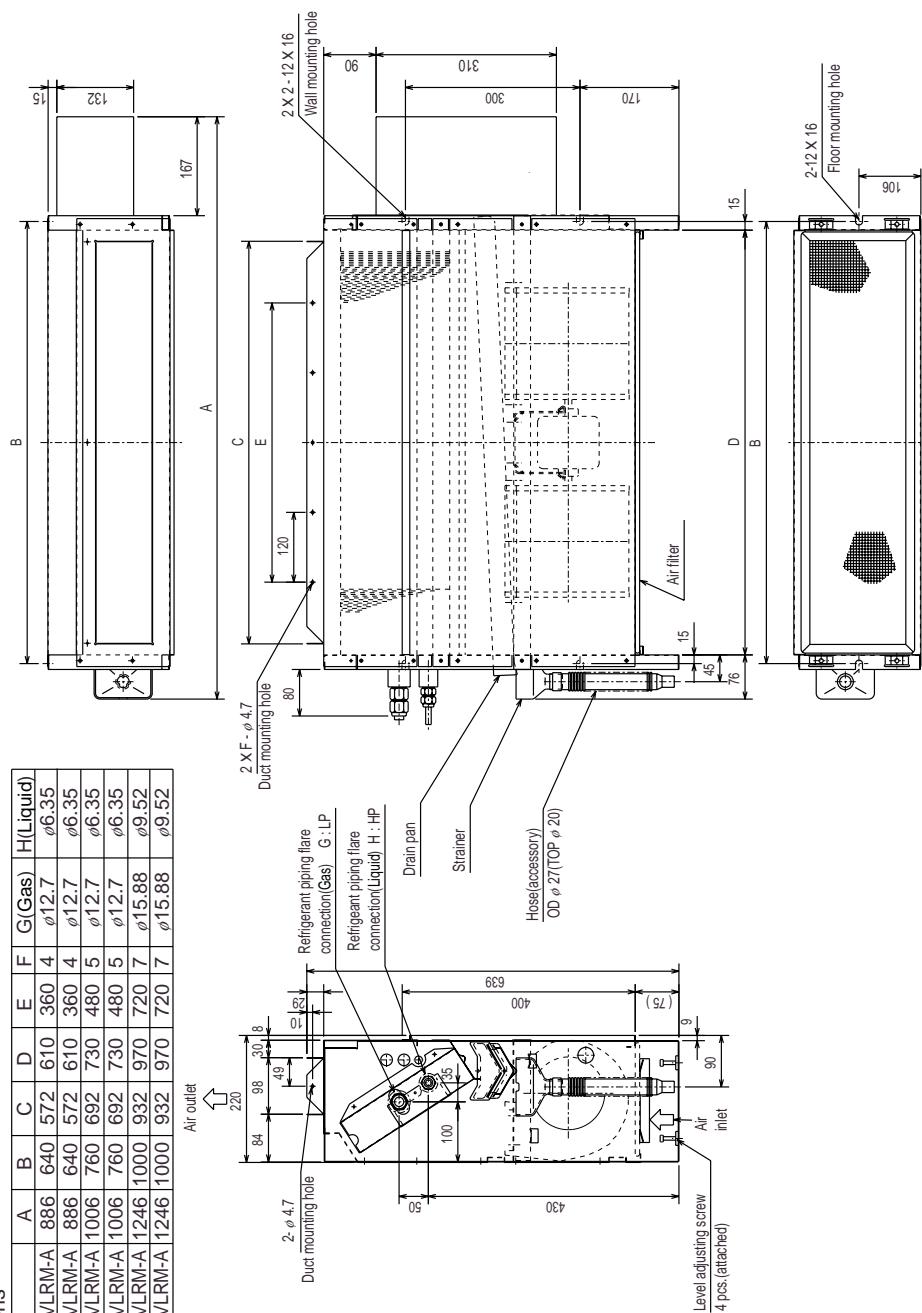


VLEM-A/VLRM-A  
PFFY-P

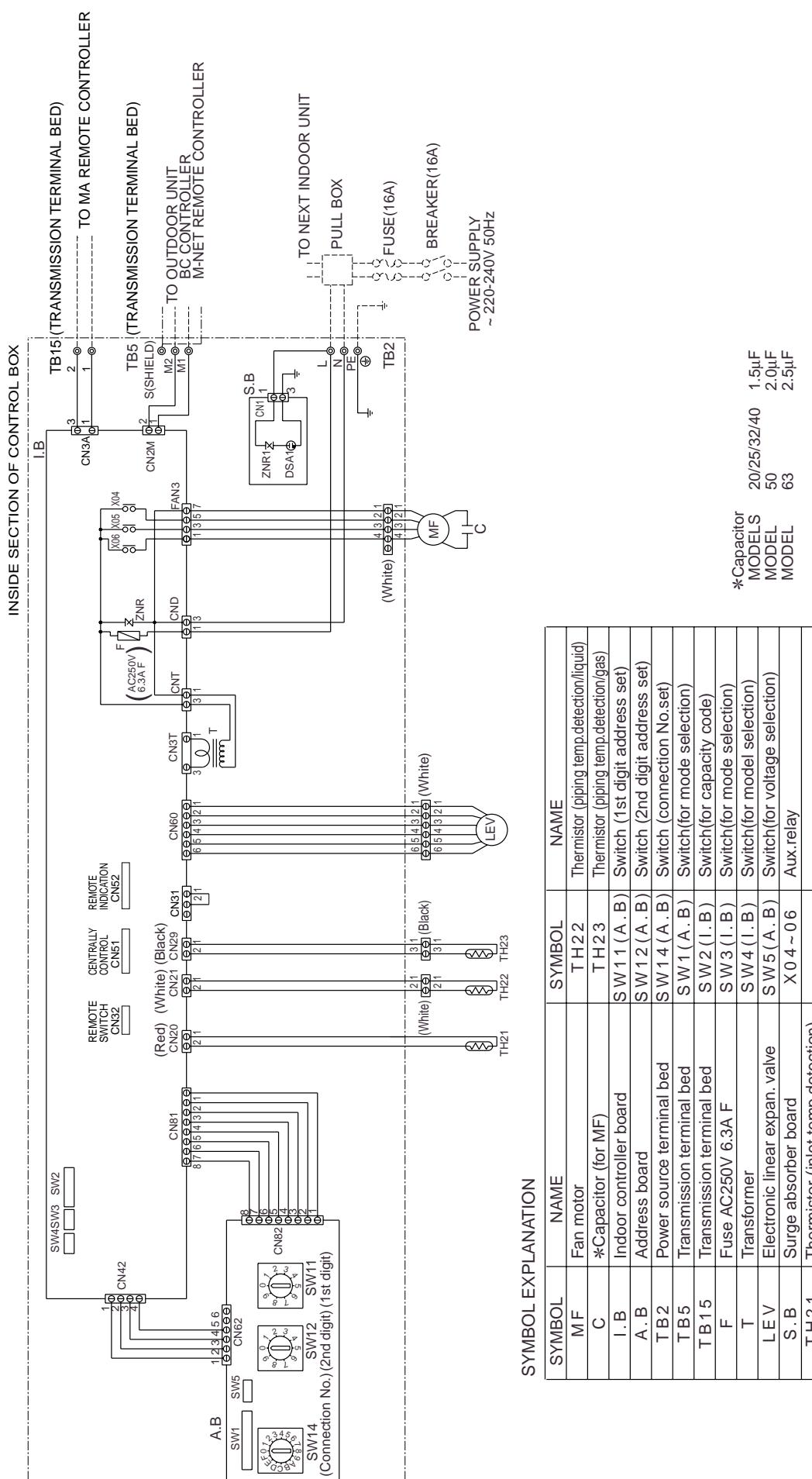
PFFY-P20,25,32,40,50,  
63VLRM-A

Unit : mm

Dimensions						
Model	A	B	C	D	E	F
PFFY-P20VLRM-A	886	640	572	610	360	4
PFFY-P25VLRM-A	886	640	572	610	360	4
PFFY-P32VLRM-A	1006	760	692	730	480	5
PFFY-P40VLRM-A	1006	760	692	730	480	5
PFFY-P50VLRM-A	1246	1000	932	970	720	7
PFFY-P63VLRM-A	1246	1000	932	970	720	7

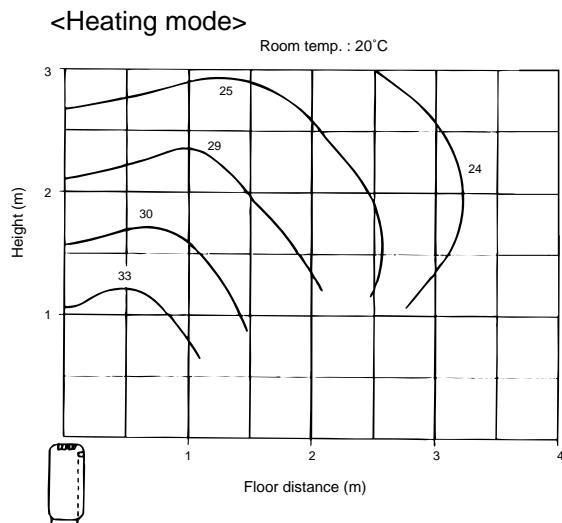
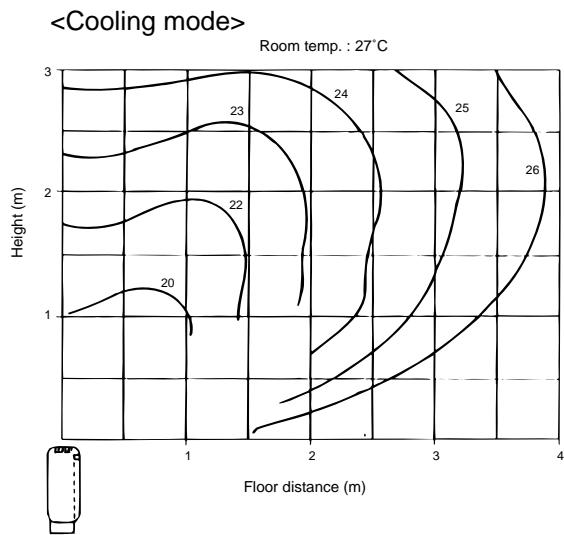


## 5. Electrical Wiring Diagram

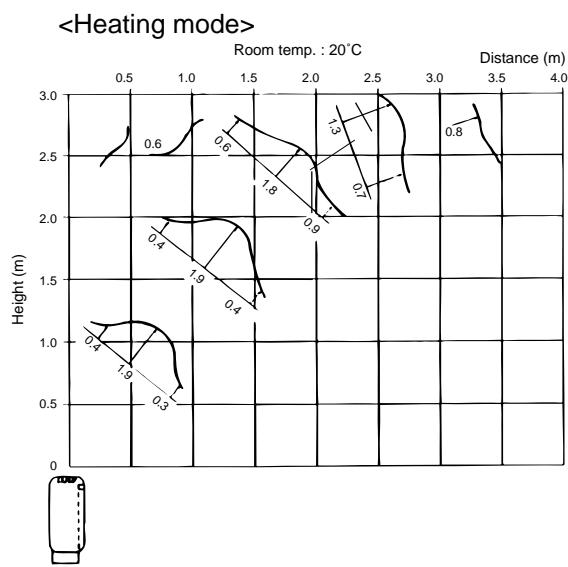
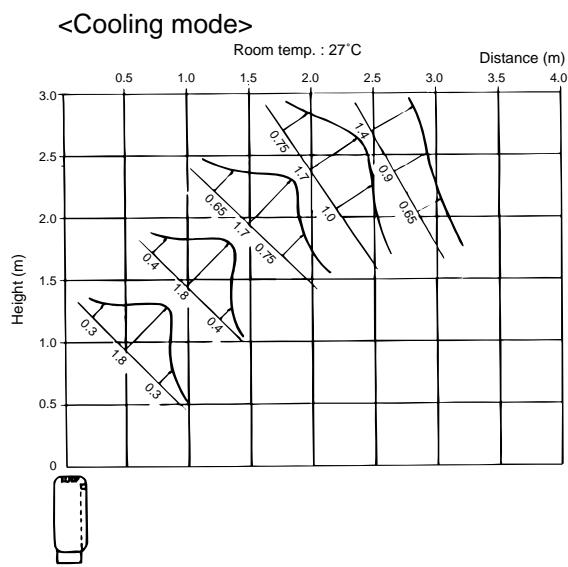


# 6. Temperature/Airflow distribution

## ● Temperature distribution



## ● Airflow distribution



Cassette ceiling (1-way flow)

PMFY-P-VBM-A

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PMFY-P-VBM-A

# 1. Specifications

			PMFY-P20VBM-A	PMFY-P25VBM-A	PMFY-P32VBM-A	PMFY-P40VBM-A
Power source			~220-240V 50Hz / ~ 200V 60Hz			
Cooling capacity	※1 kW		2.2	2.8	3.6	4.5
	※2 kcal/h		2,000	2,500	3,150	4,000
Heating capacity		※1 kW	2.5	3.2	4.0	5.0
Power consumption	Cooling kW		0.042	0.044	0.054	
	Heating kW		0.042	0.044	0.054	
Current	Cooling A		0.20	0.21	0.26	
	Heating A		0.20	0.21	0.26	
External finish			Panel : 0.98Y8.99/0.63			
Dimension ※3	Height mm		230 (30)			
	Width mm		812 (1000)			
	Depth mm		395 (470)			
Net weight ※3		kg	14 (3.0)			
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)			
Fan	Type		Line flow fan X 1			
	Airflow rate ※3 (Low-Mid2-Mid1-High)	m³/min	6.5-7.2-8.0-8.7	7.3-8.0-8.6-9.3	7.7-8.7-9.7-10.7	
	External static pressure	Pa	0			
Motor	Type		Single phase induction motor			
	Output	kW	0.028			
Air filter			PP Honeycomb fabric			
Refrigerant pipe dimension	Gas (Flare)	mm	Ø 12.7			
	Liquid (Flare)	mm	Ø 6.35			
Drain pipe dimension			VP-20			
Noise level (Low-Mid2-Mid1-High) ※4		dB(A)	27-30-33-35	32-34-36-37	33-35-37-39	

Note: ※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB

Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

※2 Cooling capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

※3 External dimension / net weight are shown in (panel), and airflow rate/noise level are in (low-middle2-middle1-high).

※4 It is measured in anechoic room.

## 2. Capacity Tables

### 2-1.Cooling Capacity (In combination with PUMY-(P)125YM(A))

PMFY-P-VBM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
20 (2.2)	20.0	2.2	1.9	2.3	1.9	2.4	1.9	2.6	2.0
	22.5	2.1	1.8	2.3	1.9	2.4	1.9	2.6	2.0
	25.0	2.1	1.8	2.3	1.9	2.4	1.9	2.5	2.0
	27.5	2.1	1.8	2.2	1.9	2.4	1.9	2.5	2.0
	30.0	2.1	1.8	2.2	1.9	2.3	1.9	2.5	2.0
	32.5	2.0	1.8	2.2	1.9	2.3	1.9	2.5	1.9
	35.0	2.0	1.8	2.1	1.9	2.3	1.9	2.4	1.9
	37.5	2.0	1.8	2.1	1.9	2.2	1.8	2.4	1.9
	40.0	2.0	1.8	2.1	1.8	2.2	1.8	2.4	1.9
	46.0	1.9	1.7	2.0	1.8	2.1	1.8	2.3	1.9
25 (2.8)	20.0	2.8	2.3	2.9	2.4	3.1	2.4	3.3	2.4
	22.5	2.7	2.3	2.9	2.4	3.1	2.3	3.2	2.4
	25.0	2.7	2.2	2.9	2.4	3.1	2.3	3.2	2.4
	27.5	2.7	2.2	2.8	2.3	3.0	2.3	3.2	2.4
	30.0	2.6	2.2	2.8	2.3	3.0	2.3	3.2	2.4
	32.5	2.6	2.2	2.8	2.3	2.9	2.3	3.1	2.4
	35.0	2.6	2.2	2.7	2.3	2.9	2.3	3.1	2.4
	37.5	2.5	2.2	2.7	2.3	2.9	2.3	3.0	2.3
	40.0	2.5	2.1	2.7	2.3	2.8	2.2	3.0	2.3
	46.0	2.4	2.1	2.6	2.2	2.7	2.2	2.9	2.3
32 (3.6)	20.0	3.6	2.6	3.7	2.7	4.0	2.7	4.2	2.8
	22.5	3.5	2.6	3.7	2.7	4.0	2.7	4.2	2.8
	25.0	3.5	2.6	3.7	2.7	3.9	2.7	4.1	2.8
	27.5	3.4	2.6	3.6	2.7	3.9	2.7	4.1	2.8
	30.0	3.4	2.5	3.6	2.7	3.8	2.6	4.1	2.7
	32.5	3.3	2.5	3.6	2.7	3.8	2.6	4.0	2.7
	35.0	3.3	2.5	3.5	2.6	3.7	2.6	4.0	2.7
	37.5	3.2	2.5	3.5	2.6	3.7	2.6	3.9	2.7
	40.0	3.2	2.5	3.4	2.6	3.6	2.6	3.9	2.7
	46.0	3.1	2.4	3.3	2.5	3.5	2.5	3.7	2.6
40 (4.5)	20.0	4.5	3.2	4.7	3.4	5.0	3.4	5.3	3.4
	22.5	4.4	3.2	4.6	3.3	5.0	3.3	5.2	3.4
	25.0	4.3	3.2	4.6	3.3	4.9	3.3	5.2	3.4
	27.5	4.3	3.2	4.6	3.3	4.9	3.3	5.1	3.4
	30.0	4.2	3.1	4.5	3.3	4.8	3.2	5.1	3.4
	32.5	4.2	3.1	4.4	3.3	4.7	3.2	5.0	3.3
	35.0	4.1	3.1	4.4	3.2	4.7	3.2	5.0	3.3
	37.5	4.1	3.0	4.3	3.2	4.6	3.2	4.9	3.3
	40.0	4.0	3.0	4.3	3.2	4.5	3.1	4.8	3.2
	46.0	3.8	2.9	4.1	3.1	4.3	3.0	4.6	3.2

### 2-2.Heating Capacity (In combination with PUMY-(P)125YM(A))

PMFY-P-VBM-A

Unit size	Outdoor air temp.	Indoor air temp.: °CDB		
		15.0		20.0
		°CWB	SHC	SHC
20	-12.0	1.6	1.6	1.5
	-10.0	1.7	1.6	1.6
	-5.0	1.9	1.9	1.9
	0.0	2.2	2.1	2.1
	2.5	2.3	2.3	2.3
	6.0	2.5	2.5	2.5
	7.5	2.6	2.6	2.5
	10.0	2.8	2.7	2.5
	12.5	2.9	2.8	2.5
	15.5	3.1	2.8	2.5
25	-12.0	2.0	2.0	2.0
	-10.0	2.1	2.1	2.1
	-5.0	2.4	2.4	2.4
	0.0	2.8	2.8	2.7
	2.5	3.0	2.9	2.9
	6.0	3.2	3.2	3.2
	7.5	3.3	3.3	3.2
	10.0	3.5	3.5	3.2
	12.5	3.7	3.5	3.2
	15.5	3.9	3.5	3.2

Unit size	Outdoor air temp.	Indoor air temp.: °CDB		
		15.0		20.0
		°CWB	SHC	SHC
32	-12.0	2.5	2.5	2.5
	-10.0	2.7	2.6	2.6
	-5.0	3.1	3.0	3.0
	0.0	3.5	3.4	3.4
	2.5	3.7	3.7	3.6
	6.0	4.0	4.0	3.9
	7.5	4.2	4.1	4.0
	10.0	4.4	4.4	4.0
	12.5	4.7	4.4	4.0
	15.5	4.9	4.4	4.0
40	-12.0	3.2	3.1	3.1
	-10.0	3.4	3.3	3.2
	-5.0	3.8	3.8	3.7
	0.0	4.3	4.3	4.2
	2.5	4.6	4.6	4.5
	6.0	5.0	5.0	4.9
	7.5	5.2	5.2	5.0
	10.0	5.5	5.5	5.0
	12.5	5.9	5.5	5.0
	15.5	6.2	5.5	5.0

PMFY-P-VBM-A

### 2-3.Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

**PMFY-P-VBM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.																			
		21.5°CDB 15°CWB				23°CDB 16°CWB				25°CDB 18°CWB				27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC					
20 (2.2)	20.0	2.2	1.8	2.2	1.9	2.3	1.9	2.3	1.9	2.4	2.0	2.5	1.9	2.6	1.9						
	22.5	2.1	1.8	2.2	1.9	2.3	1.8	2.3	1.9	2.4	2.0	2.4	1.9	2.5	1.9						
	25.0	2.1	1.8	2.2	1.9	2.2	1.8	2.3	1.9	2.3	1.9	2.4	1.9	2.5	1.9						
	27.5	2.1	1.8	2.1	1.9	2.2	1.8	2.3	1.9	2.3	1.9	2.4	1.9	2.5	1.9						
	30.0	2.1	1.8	2.1	1.9	2.2	1.8	2.2	1.9	2.3	1.9	2.4	1.9	2.5	1.8						
	32.5	2.0	1.8	2.1	1.8	2.2	1.8	2.2	1.9	2.3	1.9	2.4	1.9	2.4	1.8						
	35.0	2.0	1.8	2.1	1.8	2.2	1.8	2.2	1.8	2.2	1.9	2.3	1.9	2.4	1.8						
	37.5	2.0	1.8	2.0	1.8	2.1	1.8	2.2	1.8	2.2	1.9	2.3	1.9	2.4	1.8						
	40.0	2.0	1.8	2.0	1.8	2.1	1.8	2.2	1.8	2.2	1.9	2.3	1.9	2.4	1.8						
	43.0	2.0	1.7	2.0	1.8	2.1	1.8	2.1	1.8	2.2	1.9	2.3	1.8	2.3	1.8						
25 (2.8)	20.0	2.7	2.3	2.8	2.3	2.9	2.3	3.0	2.3	3.0	2.4	3.1	2.3	3.2	2.3						
	22.5	2.7	2.2	2.8	2.3	2.9	2.3	2.9	2.3	3.0	2.4	3.1	2.3	3.2	2.3						
	25.0	2.7	2.2	2.7	2.3	2.9	2.3	2.9	2.3	3.0	2.4	3.1	2.3	3.2	2.3						
	27.5	2.7	2.2	2.7	2.3	2.8	2.2	2.9	2.3	2.9	2.4	3.1	2.3	3.2	2.3						
	30.0	2.6	2.2	2.7	2.3	2.8	2.2	2.9	2.3	2.9	2.4	3.0	2.3	3.1	2.2						
	32.5	2.6	2.2	2.7	2.3	2.8	2.2	2.8	2.3	2.9	2.3	3.0	2.3	3.1	2.2						
	35.0	2.6	2.2	2.6	2.3	2.7	2.2	2.8	2.2	2.9	2.3	3.0	2.3	3.1	2.2						
	37.5	2.5	2.2	2.6	2.2	2.7	2.2	2.8	2.2	2.8	2.3	2.9	2.3	3.1	2.2						
	40.0	2.5	2.2	2.6	2.2	2.7	2.2	2.7	2.2	2.8	2.3	2.9	2.3	3.0	2.2						
	43.0	2.5	2.1	2.5	2.2	2.7	2.2	2.7	2.2	2.8	2.3	2.9	2.3	3.0	2.2						
32 (3.6)	20.0	3.5	2.6	3.6	2.7	3.7	2.6	3.8	2.6	3.9	2.7	4.0	2.6	4.2	2.6						
	22.5	3.5	2.6	3.6	2.7	3.7	2.6	3.8	2.6	3.9	2.7	4.0	2.6	4.1	2.6						
	25.0	3.5	2.6	3.5	2.6	3.7	2.6	3.8	2.6	3.9	2.7	4.0	2.6	4.1	2.5						
	27.5	3.4	2.6	3.5	2.6	3.6	2.6	3.7	2.6	3.8	2.7	3.9	2.6	4.1	2.5						
	30.0	3.4	2.5	3.5	2.6	3.6	2.6	3.7	2.6	3.7	2.7	3.9	2.6	4.0	2.5						
	32.5	3.3	2.5	3.4	2.6	3.6	2.5	3.6	2.6	3.7	2.6	3.9	2.6	4.0	2.5						
	35.0	3.3	2.5	3.4	2.6	3.5	2.5	3.6	2.5	3.7	2.6	3.8	2.6	4.0	2.5						
	37.5	3.3	2.5	3.3	2.6	3.5	2.5	3.6	2.5	3.6	2.6	3.8	2.6	3.9	2.5						
	40.0	3.2	2.5	3.3	2.5	3.5	2.5	3.5	2.5	3.6	2.6	3.7	2.5	3.9	2.5						
	43.0	3.2	2.5	3.3	2.5	3.4	2.5	3.5	2.5	3.6	2.6	3.7	2.5	3.8	2.5						
40 (4.5)	20.0	4.4	3.2	4.5	3.3	4.7	3.2	4.8	3.2	4.9	3.3	5.0	3.2	5.2	3.1						
	22.5	4.4	3.2	4.5	3.3	4.6	3.2	4.7	3.2	4.8	3.3	5.0	3.2	5.2	3.1						
	25.0	4.3	3.2	4.4	3.2	4.6	3.2	4.7	3.2	4.8	3.3	5.0	3.2	5.1	3.1						
	27.5	4.3	3.1	4.4	3.2	4.5	3.1	4.6	3.2	4.7	3.3	4.9	3.2	5.1	3.1						
	30.0	4.2	3.1	4.3	3.2	4.5	3.1	4.6	3.1	4.7	3.2	4.9	3.2	5.0	3.1						
	32.5	4.2	3.1	4.3	3.2	4.5	3.1	4.5	3.1	4.6	3.2	4.8	3.1	5.0	3.1						
	35.0	4.1	3.1	4.2	3.1	4.4	3.1	4.5	3.1	4.6	3.2	4.8	3.1	5.0	3.0						
	37.5	4.1	3.1	4.2	3.1	4.4	3.1	4.5	3.1	4.5	3.2	4.7	3.1	4.9	3.0						
	40.0	4.1	3.0	4.1	3.1	4.3	3.0	4.4	3.1	4.5	3.2	4.7	3.1	4.9	3.0						
	43.0	4.0	3.0	4.1	3.1	4.3	3.0	4.4	3.0	4.4	3.1	4.6	3.1	4.8	3.0						

### 2-4.Heating Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

**PMFY-P-VBM-A**

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0		20.0	
		'CWB	SHC	SHC	SHC
20	-15.0	1.7	1.6	1.6	1.6
	-10.0	1.9	1.9	1.9	1.7
	-5.0	2.1	2.1	2.0	1.7
	0.0	2.4	2.4	2.0	1.7
	2.5	2.5	2.5	2.0	1.7
	6.0	2.5	2.5	2.0	1.7
	7.5	2.6	2.5	2.0	1.7
	10.0	2.8	2.5	2.0	1.7
	12.5	3.0	2.5	2.0	1.7
	15.5	3.0	2.5	2.0	1.7
25	-15.0	2.1	2.1	2.1	2.1
	-10.0	2.4	2.4	2.4	2.2
	-5.0	2.7	2.7	2.5	2.2
	0.0	3.1	3.0	2.5	2.2
	2.5	3.2	3.2	2.5	2.2
	6.0	3.2	3.2	2.5	2.2
	7.5	3.4	3.2	2.5	2.2
	10.0	3.6	3.2	2.5	2.2
	12.5	3.8	3.2	2.5	2.2
	15.5	3.9	3.2	2.5	2.2
32	-15.0	2.7	2.6	2.6	2.6
	-10.0	3.1	3.0	3.0	2.8
	-5.0	3.4	3.4	3.1	2.8
	0.0	3.8	3.8	3.1	2.8
	2.5	4.0	4.0	3.1	2.8
	6.0	4.0	4.0	3.1	2.8
	7.5	4.2	4.0	3.1	2.8
	10.0	4.5	4.0	3.1	2.8
	12.5	4.8	4.0	3.1	2.8
	15.5	4.8	4.0	3.1	2.8
40	-15.0	3.3	3.3	3.3	3.3
	-10.0	3.8	3.8	3.7	3.5
	-5.0	4.3	4.2	3.9	3.5
	0.0	4.8	4.7	3.9	3.5
	2.5	5.0	5.0	3.9	3.5
	6.0	5.1	5.0	3.9	3.5
	7.5	5.3	5.0	3.9	3.5
	10.0	5.6	5.0	3.9	3.5
	12.5	6.0	5.0	3.9	3.5
	15.5	6.1	5.0	3.9	3.5

**2-5.Cooling Capacity**

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

**PMFY-P-VBM-A**

CA:Capacity(kcal/h)  
SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
20	20.0	1813	1564	1901	1635	2049	1632	2157	1687	2192	1745	2320	1722	2459	1697
	22.5	1813	1564	1894	1632	2031	1625	2131	1676	2164	1735	2290	1711	2424	1686
	25.0	1799	1557	1876	1624	2008	1615	2105	1666	2137	1724	2259	1700	2389	1674
	27.5	1784	1551	1857	1616	1985	1606	2079	1656	2110	1714	2229	1689	2354	1663
	30.0	1770	1544	1839	1608	1962	1596	2052	1646	2083	1703	2198	1678	2319	1652
	32.5	1755	1538	1821	1600	1939	1587	2026	1636	2055	1693	2167	1668	2285	1640
	35.0	1741	1531	1802	1592	1916	1577	2000	1626	2028	1683	2137	1657	2250	1629
	37.5	1726	1525	1784	1584	1893	1568	1974	1615	2001	1672	2106	1646	2215	1618
	40.0	1712	1518	1766	1576	1870	1559	1948	1605	1974	1662	2076	1636	2180	1607
	43.0	1695	1511	1744	1566	1843	1548	1916	1593	1941	1650	2039	1623	2139	1594
25	20.0	2266	1901	2377	1986	2561	1983	2697	2048	2740	2116	2900	2088	3073	2057
	22.5	2266	1901	2367	1982	2539	1974	2664	2035	2705	2103	2862	2074	3030	2043
	25.0	2248	1893	2345	1972	2510	1962	2631	2022	2671	2090	2824	2060	2986	2028
	27.5	2230	1885	2322	1962	2482	1950	2598	2009	2637	2077	2786	2046	2943	2014
	30.0	2212	1877	2299	1952	2453	1938	2566	1996	2603	2063	2748	2033	2899	2000
	32.5	2194	1868	2276	1942	2424	1926	2533	1983	2569	2050	2709	2019	2856	1985
	35.0	2176	1860	2253	1931	2395	1914	2500	1970	2535	2037	2671	2006	2812	1971
	37.5	2158	1852	2230	1921	2367	1902	2467	1957	2501	2024	2633	1992	2769	1957
	40.0	2140	1844	2207	1911	2338	1891	2434	1945	2467	2011	2595	1979	2725	1943
	43.0	2118	1834	2180	1899	2304	1876	2395	1929	2426	1996	2549	1962	2673	1926
32	20.0	2855	2163	2995	2252	3227	2252	3398	2315	3452	2382	3654	2348	3872	2311
	22.5	2855	2163	2983	2246	3199	2239	3357	2297	3409	2364	3606	2329	3817	2291
	25.0	2833	2152	2954	2233	3163	2223	3315	2280	3366	2346	3558	2310	3763	2272
	27.5	2810	2141	2925	2219	3127	2207	3274	2262	3323	2328	3510	2292	3708	2252
	30.0	2787	2129	2896	2205	3091	2191	3233	2245	3280	2310	3462	2273	3653	2233
	32.5	2765	2118	2868	2191	3055	2175	3191	2228	3237	2293	3414	2255	3598	2214
	35.0	2742	2107	2839	2178	3018	2159	3150	2210	3194	2275	3366	2237	3544	2195
	37.5	2719	2096	2810	2164	2982	2143	3109	2193	3151	2257	3318	2219	3489	2176
	40.0	2696	2085	2781	2151	2946	2127	3067	2176	3109	2240	3270	2200	3434	2157
	43.0	2669	2072	2746	2135	2902	2108	3018	2156	3057	2219	3212	2179	3368	2134
40	20.0	3625	2677	3803	2785	4098	2787	4315	2861	4383	2940	4640	2897	4917	2852
	22.5	3625	2677	3788	2778	4063	2770	4262	2839	4329	2917	4579	2873	4848	2826
	25.0	3597	2663	3751	2760	4017	2749	4210	2816	4274	2893	4518	2849	4778	2801
	27.5	3568	2649	3715	2742	3971	2728	4157	2793	4220	2870	4457	2825	4708	2775
	30.0	3539	2634	3678	2725	3925	2707	4105	2771	4165	2847	4396	2801	4639	2750
	32.5	3511	2620	3641	2707	3879	2687	4052	2748	4111	2824	4335	2777	4569	2725
	35.0	3482	2606	3605	2689	3833	2666	4000	2726	4056	2801	4274	2753	4500	2700
	37.5	3453	2591	3568	2672	3787	2645	3948	2703	4002	2778	4213	2730	4430	2675
	40.0	3424	2577	3531	2654	3741	2625	3895	2681	3947	2756	4152	2706	4361	2651
	43.0	3389	2560	3487	2633	3686	2600	3832	2655	3882	2729	4078	2678	4277	2621

**PMFY-P-VBM-A**

## 2-6.Heating Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

**PMFY-P-VBM-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201

## 2-7.Cooling Capacity (In combination with PQRY-P200-250YMF-C)

### PMFY-P-VBM-A

CA:Capacity(kW)

SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°C	CA	SHC	CA										
20	10	2.1	1.8	2.2	1.9	2.4	1.9	2.4	1.9	2.5	2.0	2.6	2.0	2.8	1.9
	20	2.1	1.8	2.1	1.9	2.3	1.9	2.3	1.9	2.4	2.0	2.5	1.9	2.7	1.9
	30	2.0	1.7	2.0	1.8	2.1	1.8	2.2	1.8	2.3	1.9	2.4	1.9	2.5	1.9
	40	1.7	1.6	1.8	1.7	1.9	1.7	1.9	1.7	2.0	1.8	2.1	1.8	2.2	1.8
	45	1.6	1.6	1.7	1.7	1.8	1.6	1.8	1.7	1.9	1.8	2.0	1.7	2.1	1.7
25	10	2.7	2.3	2.8	2.3	3.0	2.3	3.1	2.4	3.2	2.5	3.3	2.4	3.5	2.4
	20	2.6	2.2	2.7	2.3	2.9	2.3	3.0	2.3	3.1	2.4	3.2	2.4	3.4	2.3
	30	2.5	2.1	2.6	2.2	2.7	2.2	2.8	2.3	2.9	2.3	3.0	2.3	3.2	2.3
	40	2.2	2.0	2.2	2.1	2.4	2.1	2.4	2.1	2.5	2.2	2.6	2.2	2.8	2.1
	45	2.0	1.9	2.1	2.0	2.2	2.0	2.3	2.1	2.4	2.2	2.5	2.1	2.6	2.1
32	10	3.5	2.6	3.6	2.7	3.9	2.7	4.0	2.7	4.1	2.8	4.3	2.8	4.5	2.7
	20	3.4	2.5	3.5	2.6	3.7	2.6	3.8	2.6	3.9	2.7	4.1	2.7	4.4	2.6
	30	3.2	2.5	3.3	2.5	3.5	2.5	3.6	2.5	3.7	2.6	3.9	2.6	4.1	2.6
	40	2.8	2.3	2.9	2.3	3.1	2.3	3.1	2.4	3.2	2.4	3.4	2.4	3.6	2.4
	45	2.6	2.2	2.7	2.3	2.9	2.2	3.0	2.3	3.0	2.4	3.2	2.3	3.4	2.3
40	10	4.4	3.2	4.5	3.3	4.8	3.3	5.0	3.3	5.1	3.4	5.4	3.4	5.7	3.3
	20	4.2	3.1	4.4	3.2	4.6	3.2	4.8	3.2	4.9	3.3	5.2	3.3	5.5	3.2
	30	4.0	3.0	4.1	3.1	4.4	3.1	4.5	3.1	4.6	3.2	4.9	3.2	5.2	3.1
	40	3.5	2.8	3.6	2.8	3.8	2.8	3.9	2.9	4.0	3.0	4.3	2.9	4.5	2.9
	45	3.3	2.7	3.4	2.8	3.6	2.7	3.7	2.8	3.8	2.9	4.0	2.8	4.2	2.8

## 2-8.Heating Capacity (In combination with PQRY-P200-250YMF-C)

### PMFY-P-VBM-A

SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.: °CDB						
		15		19		20	25	
		°C	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	
20	10		2.2		2.2	2.1	1.7	1.5
	20		2.6		2.6	2.5	2.0	1.8
	30		2.6		2.6	2.5	2.0	1.8
	40		2.7		2.7	2.6	2.1	1.9
	45		2.9		2.9	2.9	2.3	2.1
25	10		2.8		2.8	2.7	2.2	2.0
	20		3.3		3.3	3.2	2.6	2.3
	30		3.3		3.3	3.2	2.6	2.3
	40		3.4		3.4	3.3	2.7	2.4
	45		3.8		3.7	3.6	2.9	2.6
32	10		3.5		3.5	3.4	2.7	2.4
	20		4.1		4.1	4.0	3.2	2.9
	30		4.1		4.1	4.0	3.2	2.9
	40		4.3		4.2	4.2	3.3	3.0
	45		4.7		4.7	4.6	3.6	3.3
40	10		4.4		4.3	4.3	3.4	3.1
	20		5.2		5.1	5.0	4.0	3.6
	30		5.2		5.1	5.0	4.0	3.6
	40		5.4		5.3	5.2	4.2	3.7
	45		5.9		5.8	5.7	4.6	4.1

PMFY-P-VBM-A

## 2-9.Cooling Capacity (In combination with PURY-P400-500YMF-C)

### PMFY-P-VBM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.: °CDB											
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA								
20	20.0	2.0	1.8	2.1	1.9	2.3	1.9	2.4	2.0	2.6	2.0	2.7	1.9
	22.5	2.0	1.8	2.1	1.9	2.3	1.9	2.4	2.0	2.6	2.0	2.7	1.9
	25.0	2.0	1.8	2.1	1.9	2.2	1.8	2.4	2.0	2.5	1.9	2.7	1.9
	27.5	2.0	1.8	2.1	1.8	2.2	1.8	2.4	2.0	2.5	1.9	2.6	1.9
	30.0	2.0	1.8	2.1	1.8	2.2	1.8	2.3	1.9	2.5	1.9	2.6	1.9
	32.5	2.0	1.8	2.0	1.8	2.2	1.8	2.3	1.9	2.4	1.9	2.6	1.9
	35.0	1.9	1.7	2.0	1.8	2.1	1.8	2.3	1.9	2.4	1.9	2.5	1.9
	37.5	1.9	1.7	2.0	1.8	2.1	1.8	2.2	1.9	2.4	1.9	2.5	1.8
	40.0	1.9	1.7	2.0	1.8	2.1	1.8	2.2	1.9	2.3	1.9	2.4	1.8
	43.0	1.9	1.7	1.9	1.8	2.1	1.8	2.2	1.9	2.3	1.9	2.4	1.8
25	20.0	2.6	2.2	2.7	2.3	2.9	2.3	3.1	2.4	3.3	2.4	3.5	2.4
	22.5	2.6	2.2	2.7	2.3	2.9	2.3	3.1	2.4	3.3	2.4	3.4	2.3
	25.0	2.6	2.2	2.7	2.3	2.9	2.3	3.0	2.4	3.2	2.4	3.4	2.3
	27.5	2.5	2.2	2.6	2.3	2.8	2.2	3.0	2.4	3.2	2.4	3.3	2.3
	30.0	2.5	2.2	2.6	2.2	2.8	2.2	3.0	2.4	3.1	2.3	3.3	2.3
	32.5	2.5	2.1	2.6	2.2	2.8	2.2	2.9	2.4	3.1	2.3	3.2	2.3
	35.0	2.5	2.1	2.6	2.2	2.7	2.2	2.9	2.3	3.0	2.3	3.2	2.3
	37.5	2.5	2.1	2.5	2.2	2.7	2.2	2.8	2.3	3.0	2.3	3.1	2.3
	40.0	2.4	2.1	2.5	2.2	2.7	2.2	2.8	2.3	3.0	2.3	3.1	2.2
	43.0	2.4	2.1	2.5	2.2	2.6	2.2	2.8	2.3	2.9	2.3	3.0	2.2
32	20.0	3.3	2.5	3.5	2.6	3.7	2.6	4.0	2.8	4.2	2.7	4.5	2.7
	22.5	3.3	2.5	3.5	2.6	3.7	2.6	4.0	2.7	4.2	2.7	4.4	2.7
	25.0	3.3	2.5	3.4	2.6	3.7	2.6	3.9	2.7	4.1	2.7	4.4	2.6
	27.5	3.3	2.5	3.4	2.6	3.6	2.6	3.9	2.7	4.1	2.7	4.3	2.6
	30.0	3.2	2.5	3.4	2.6	3.6	2.5	3.8	2.7	4.0	2.6	4.2	2.6
	32.5	3.2	2.5	3.3	2.5	3.5	2.5	3.8	2.7	4.0	2.6	4.2	2.6
	35.0	3.2	2.4	3.3	2.5	3.5	2.5	3.7	2.6	3.9	2.6	4.1	2.5
	37.5	3.2	2.4	3.3	2.5	3.5	2.5	3.7	2.6	3.8	2.6	4.0	2.5
	40.0	3.1	2.4	3.2	2.5	3.4	2.5	3.6	2.6	3.8	2.6	4.0	2.5
	43.0	3.1	2.4	3.2	2.5	3.4	2.4	3.5	2.6	3.7	2.5	3.9	2.5
40	20.0	4.1	3.1	4.3	3.2	4.7	3.2	5.0	3.4	5.3	3.3	5.6	3.3
	22.5	4.1	3.1	4.3	3.2	4.6	3.2	4.9	3.4	5.2	3.3	5.5	3.3
	25.0	4.1	3.1	4.3	3.2	4.6	3.2	4.9	3.3	5.2	3.3	5.5	3.2
	27.5	4.1	3.0	4.2	3.2	4.5	3.1	4.8	3.3	5.1	3.2	5.4	3.2
	30.0	4.0	3.0	4.2	3.1	4.5	3.1	4.8	3.3	5.0	3.2	5.3	3.2
	32.5	4.0	3.0	4.2	3.1	4.4	3.1	4.7	3.2	5.0	3.2	5.2	3.1
	35.0	4.0	3.0	4.1	3.1	4.4	3.1	4.6	3.2	4.9	3.2	5.1	3.1
	37.5	3.9	3.0	4.1	3.1	4.3	3.0	4.6	3.2	4.8	3.1	5.1	3.1
	40.0	3.9	3.0	4.0	3.1	4.3	3.0	4.5	3.2	4.7	3.1	5.0	3.1
	43.0	3.9	2.9	4.0	3.0	4.2	3.0	4.4	3.1	4.7	3.1	4.9	3.0

## 2-10.Heating Capacity (In combination with PURY-P400-500YMF-C)

### PMFY-P-VBM-A

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		Indoor air temp.: °CDB			
		15.0	20.0	25.0	27.0
20	-15.0	1.6	1.5	1.5	1.5
	-10.0	1.8	1.8	1.7	1.7
	-5.0	2.0	2.0	2.0	1.9
	0.0	2.2	2.2	2.1	1.9
	2.5	2.4	2.3	2.1	1.9
	6.0	2.5	2.5	2.1	1.9
	7.5	2.6	2.5	2.1	1.9
	10.0	2.7	2.5	2.1	1.9
	12.5	2.9	2.5	2.1	1.9
	15.5	2.9	2.5	2.1	1.9
25	-15.0	2.0	2.0	1.9	1.9
	-10.0	2.3	2.2	2.2	2.2
	-5.0	2.6	2.5	2.5	2.5
	0.0	2.9	2.8	2.7	2.5
	2.5	3.0	3.0	2.7	2.5
	6.0	3.2	3.2	2.7	2.5
	7.5	3.3	3.2	2.7	2.5
	10.0	3.5	3.2	2.7	2.5
	12.5	3.7	3.2	2.7	2.5
	15.5	3.7	3.2	2.7	2.5
32	-15.0	2.5	2.5	2.4	2.4
	-10.0	2.8	2.8	2.8	2.7
	-5.0	3.2	3.2	3.1	3.1
	0.0	3.6	3.5	3.4	3.1
	2.5	3.8	3.7	3.4	3.1
	6.0	4.0	4.0	3.4	3.1
	7.5	4.2	4.0	3.4	3.1
	10.0	4.4	4.0	3.4	3.1
	12.5	4.6	4.0	3.4	3.1
	15.5	4.6	4.0	3.4	3.1
40	-15.0	3.1	3.1	3.0	3.0
	-10.0	3.6	3.5	3.5	3.4
	-5.0	4.0	4.0	3.9	3.9
	0.0	4.5	4.4	4.3	3.9
	2.5	4.7	4.7	4.3	3.9
	6.0	5.0	5.0	4.3	3.9
	7.5	5.2	5.0	4.3	3.9
	10.0	5.4	5.0	4.3	3.9
	12.5	5.7	5.0	4.3	3.9
	15.5	5.8	5.0	4.3	3.9

## 2-11.Cooling Capacity (In combination with PU(H)Y-200-250TM-C)

**PMFY-P-VBM-A**

CA:Capacity(kcal/h)

SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.05°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	
20	20.0	1870	1591	1939	1652	2077	1644	2180	1696	2215	1755	2353	1734	2491	1708
	22.5	1870	1591	1939	1652	2077	1644	2180	1696	2207	1752	2330	1726	2451	1695
	25.0	1864	1588	1926	1647	2050	1633	2150	1684	2171	1737	2292	1712	2411	1682
	27.5	1832	1573	1895	1633	2017	1619	2112	1670	2134	1723	2254	1699	2372	1669
	30.0	1801	1559	1864	1619	1984	1606	2075	1655	2097	1709	2216	1685	2332	1656
	32.5	1769	1545	1832	1605	1950	1592	2037	1641	2060	1695	2178	1672	2293	1643
	35.0	1738	1531	1801	1592	1917	1578	2000	1626	2023	1681	2140	1658	2253	1631
	37.5	1706	1516	1770	1578	1884	1565	1963	1612	1986	1667	2101	1645	2213	1618
	40.0	1675	1502	1738	1564	1851	1551	1925	1597	1950	1653	2063	1632	2174	1605
	43.0	1637	1485	1700	1548	1811	1535	1880	1580	1905	1637	2018	1616	2126	1590
25	20.0	2337	1935	2424	2008	2596	1999	2725	2060	2768	2129	2941	2103	3113	2071
	22.5	2337	1935	2424	2008	2596	1999	2725	2060	2759	2125	2912	2093	3064	2055
	25.0	2330	1932	2408	2001	2563	1985	2687	2045	2713	2107	2865	2076	3014	2038
	27.5	2290	1914	2369	1984	2521	1967	2640	2026	2667	2089	2817	2058	2965	2022
	30.0	2251	1895	2330	1966	2480	1950	2593	2008	2621	2071	2770	2041	2915	2005
	32.5	2212	1877	2290	1949	2438	1933	2547	1989	2575	2053	2722	2024	2866	1989
	35.0	2172	1859	2251	1931	2397	1915	2500	1971	2529	2036	2674	2007	2816	1973
	37.5	2133	1841	2212	1914	2355	1898	2453	1953	2483	2018	2627	1990	2767	1957
	40.0	2094	1823	2173	1897	2313	1881	2407	1934	2437	2000	2579	1974	2717	1940
	43.0	2046	1802	2126	1876	2264	1861	2350	1913	2382	1979	2522	1954	2658	1921
32	20.0	2945	2208	3054	2281	3271	2272	3434	2332	3488	2398	3706	2369	3923	2330
	22.5	2945	2208	3054	2281	3271	2272	3434	2332	3477	2393	3670	2354	3860	2308
	25.0	2935	2203	3034	2272	3229	2253	3385	2311	3419	2369	3610	2331	3798	2285
	27.5	2886	2179	2985	2248	3177	2230	3327	2286	3361	2345	3550	2308	3736	2263
	30.0	2836	2154	2935	2225	3124	2207	3268	2261	3303	2321	3490	2285	3673	2241
	32.5	2787	2130	2886	2201	3072	2183	3209	2236	3245	2297	3430	2262	3611	2219
	35.0	2737	2106	2836	2178	3020	2160	3150	2212	3187	2273	3370	2239	3548	2197
	37.5	2687	2082	2787	2155	2967	2137	3091	2187	3129	2249	3310	2216	3486	2175
	40.0	2638	2058	2738	2132	2915	2114	3032	2163	3071	2226	3250	2194	3424	2154
	43.0	2578	2030	2678	2104	2852	2087	2962	2134	3001	2197	3178	2167	3349	2128
40	20.0	3740	2737	3878	2824	4154	2813	4361	2883	4430	2962	4705	2925	4981	2876
	22.5	3740	2737	3878	2824	4154	2813	4361	2883	4415	2955	4660	2906	4902	2847
	25.0	3727	2730	3853	2811	4100	2789	4299	2856	4341	2924	4584	2876	4823	2818
	27.5	3664	2698	3790	2781	4034	2758	4224	2824	4268	2892	4507	2846	4744	2789
	30.0	3601	2667	3727	2750	3967	2728	4150	2791	4194	2861	4431	2816	4664	2760
	32.5	3538	2635	3664	2720	3901	2698	4075	2759	4120	2830	4355	2786	4585	2732
	35.0	3476	2604	3602	2689	3834	2668	4000	2727	4047	2799	4279	2756	4506	2703
	37.5	3413	2573	3539	2659	3768	2638	3925	2695	3973	2768	4203	2727	4427	2675
	40.0	3350	2542	3476	2629	3701	2608	3850	2664	3899	2737	4127	2698	4347	2647
	43.0	3274	2505	3401	2594	3622	2573	3761	2626	3811	2701	4035	2663	4252	2613

**PMFY-P-VBM-A**

## 2-12.Heating Capacity (In combination with PUHY-200-250TM-C)

**PMFY-P-VBM-A**

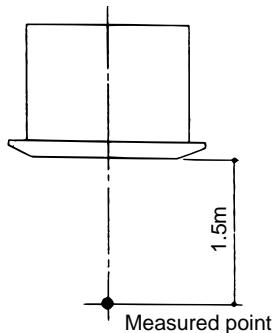
SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15		21	
		°CWB	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201

### 3. Sound Levels

#### 3-1. Noise level

Cassette ceiling (VBM-A series)

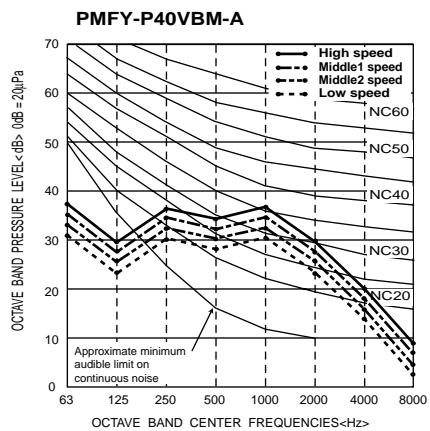
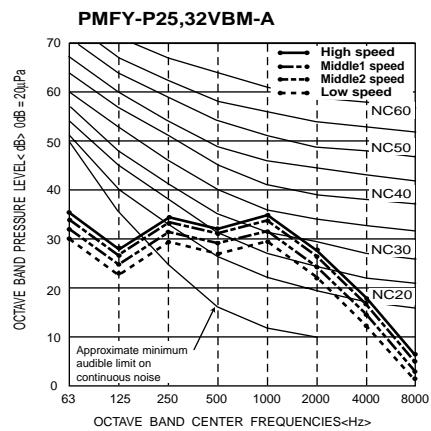
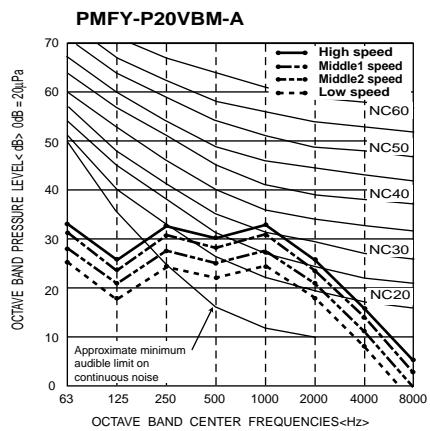


Noise level at anechoic room  
(Low-Middle2-Middle1-High)

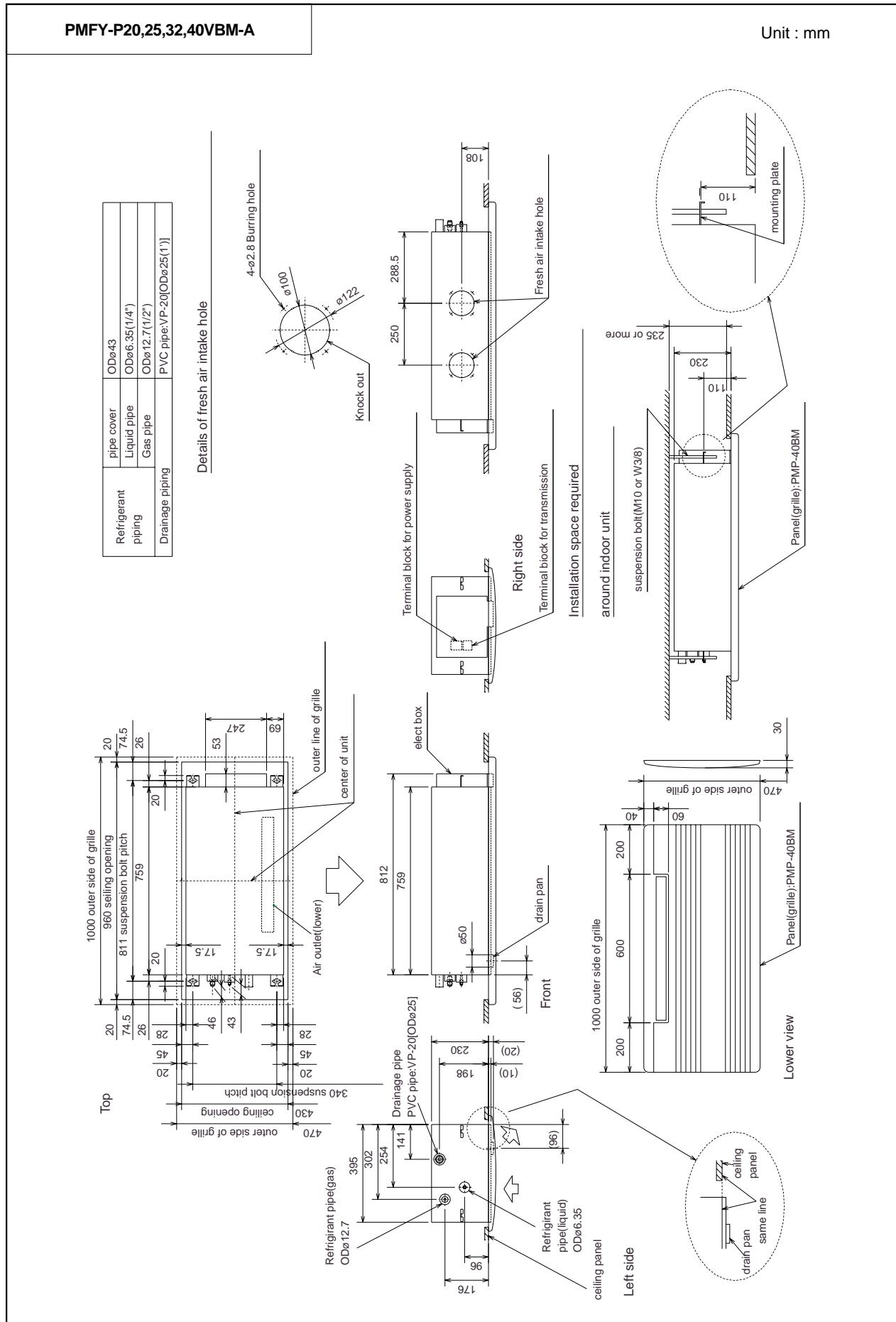
Unit : dB(A)

Model	Noise level (A weighted)
PMFY-P20VBM-A	27-30-33-35
PMFY-P25VBM-A PMFY-P32VBM-A	32-34-36-37
PMFY-P40VBM-A	33-35-37-39

#### 3-2. NC curves

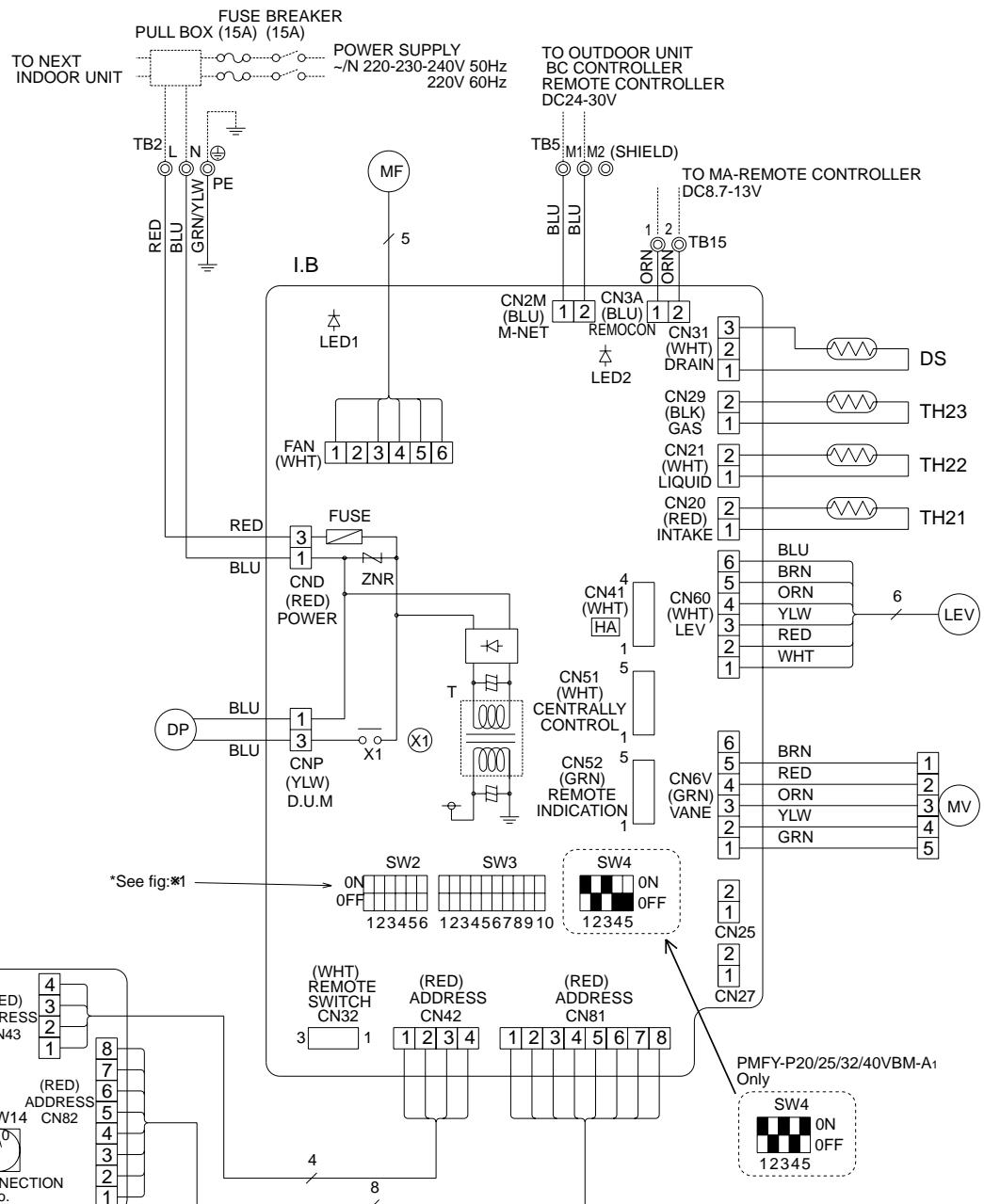


## **4. External Dimension**



**PMFY-P-VMB-A**

# 5. Electrical Wiring Diagram



## <SYMBOL EXPLANATION>

SYMBOL	NAME	SYMBOL	NAME
I.B	INDOOR CONTROLLER BOARD	MF	FAN MOTOR
CN25	CONNECTOR HUMIDIFIER	MV	VANE MOTOR
CN27	DAMPER	DP	DRAIN WATER LIFTING-UP MACH.
CN32	REMOTE SWITCH	DS	DRAIN SENSOR
CN41	H TERMINAL-A	TB2	TERMINAL POWER SUPPLY
CN51	CENTRALLY CONTROL	TB5	BLOCK TRANSMISSION
CN52	REMOTE INDICATION	TB15	MA-REMOTE CONTROLLER
SW2	SWITCH CAPACITY CODE	TH21	POWER SUPPLY
SW3	MODE SELECTION	THERMISTOR	TRANSMISSION
SW4	MODEL SELECTION	TH22	ROOM TEMPERATURE DETECTION (0°C/15kΩ, 25°C/5.4kΩ)
ZNR	VARISTOR		PIPE TEMPERATURE DETECTION/LIQUID (0°C/15kΩ, 25°C/5.4kΩ)
FUSE	FUSE(6.3A/250V)		PIPE TEMPERATURE DETECTION/GAS (0°C/15kΩ, 25°C/5.4kΩ)
X1	AUX.RELAY DRAIN PUMP	LEV	LINEAR EXPANSION VALVE
T	TRANSFORMER		
LED1	POWER SUPPLY(I.B)		
LED2	POWER SUPPLY(I.B)		
A.B	CIRCUIT BOARD		
SW1	SWITCH MODE SELECTION		
SW5	VOLTAGE SELECTION		
SW11	ADDRESS SETTING 1ST DIGIT		
SW12	ADDRESS SETTING 2ND DIGIT		
SW14	CONNECTION NO.		

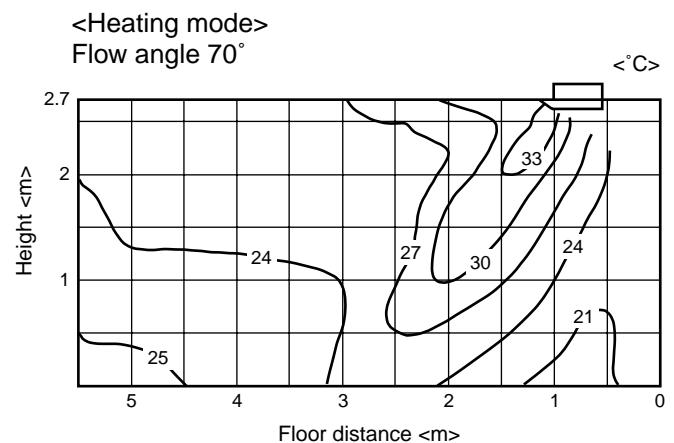
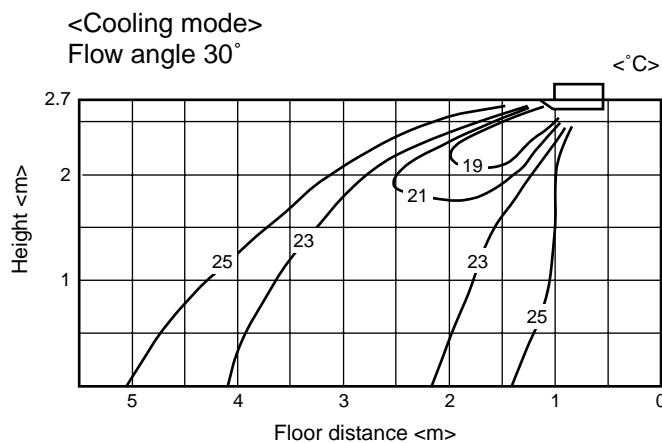
## NOTES:

- At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
- Symbol [S] of TB5 is the shield wire connection.
- Symbols used in wiring diagram above are,  
◎:terminal block, □□□:connector.
- The setting of the SW2 dip switches differs in the capacity for the detail, see the table <\*1>.
- Please set the switch SW5 according to the power supply voltage.  
Set SW5 to 240V side when the power supply is 230 and 240 volts.  
When the power supply is 220 volts, set SW5 to 220V side.

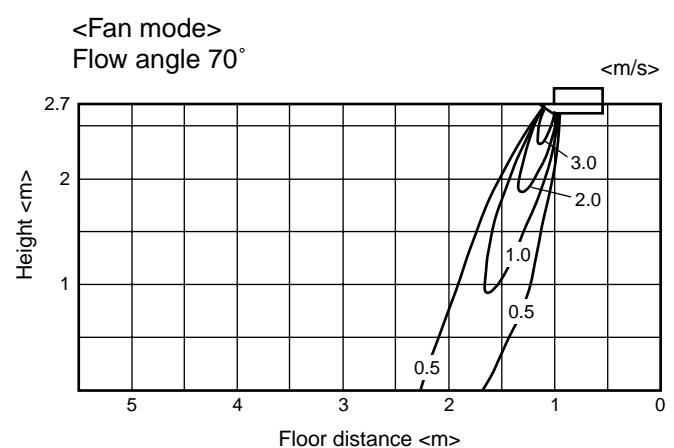
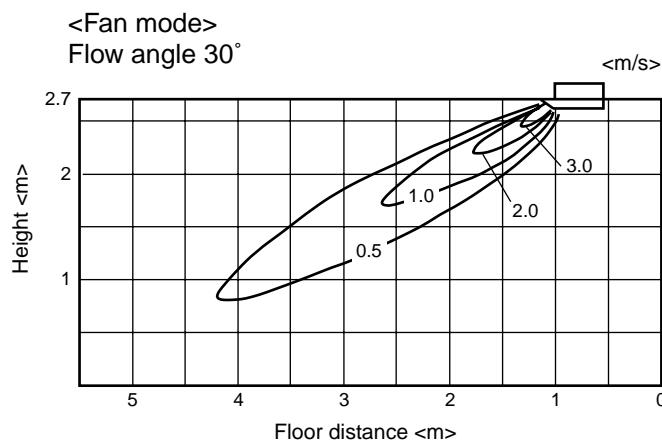
MODELS	SW2	SW3
P20VBM	ON  123456	ON  12345678910
P25VBM	ON  123456	ON  12345678910
P32VBM	ON  123456	ON  12345678910
P40VBM	ON  123456	ON  12345678910

## 6. Temperature/Airflow distribution

### ● Temperature distribution



### ● Airflow distribution



**PMFY-P-VBM-A**

## 7. Options

---

Description	Model	Applicable capacity
Decoration panel	PMP-40BM	P20/P25/P32/P40

## Cassette ceiling(2-way flow)

## PLFY-P-VLMD-A

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PLFY-P-VLMD-A

# 1. Specifications

			PLFY-P20VLMD-A	PLFY-P25VLMD-A	PLFY-P32VLMD-A	PLFY-P40VLMD-A	PLFY-P50VLMD-A			
Power source			~ 220-240V 50Hz							
Cooling capacity	※ 1	kW	2.2	2.8	3.6	4.5	5.6			
	※ 2	kcal/h	2,000	2,500	3,150	4,000	5,000			
Heating capacity	※ 1	kW	2.5	3.2	4.0	5.0	6.3			
Power consumption	Cooling	kW	0.09		0.10	0.16				
	Heating	kW	0.08		0.09	0.15				
Current	Cooling	A	0.43		0.48	0.77				
	Heating	A	0.38		0.43	0.71				
External finish(Munsel No.)			Unit : Galvanizing Panel : 0.70Y8.59/0.97							
Dimension ※ 3	Height	mm	338 <8>							
	Width	mm	768 <1,060>			1,008 <1,300>				
	Depth	mm	606 <670>							
Net weight ※ 3		kg	24 <7>		25 <7>	33.5 <8>	35 <8>			
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)							
Fan	Type		Sirocco fan× 1			Sirocco fan× 2				
	Airflow rate (Lo-Mid2-Mid1-Hi)	m³/min	6.0-6.5-7.3-8.0		6.5-7.0-7.8-8.5	9.0-10.5-11.5-12.5	10.0-11.0-12.0-13.0			
	External static pressure	Pa	0							
Motor	Type		Single phase induction motor							
	Output	kW	0.033		0.075					
Air filter			Synthetic fiber unwoven cloth filter (long life)							
Refrigerant pipe dimension	Gas (Flare)	mm	ø 12.7				ø 15.88			
	Liquid (Flare)	mm	ø 6.35				ø 9.52			
Drain pipe dimension			VP-25							
Noise level (Lo-Mid2-Mid1-Hi) ※ 4		dB(A)	28-30-33-35		29-31-34-36	29-32-34-36	32-34-36-38			

			PLFY-P63VLMD-A	PLFY-P80VLMD-A	PLFY-P100VLMD-A	PLFY-P125VLMD-A				
Power source			~ 220-240V 50Hz							
Cooling capacity	※ 1	kW	7.1	9.0	11.2	14.0				
	※ 2	kcal/h	6,300	8,000	10,000	12,500				
Heating capacity	※ 1	kW	8.0	10.0	12.5	16.0				
Power consumption	Cooling	kW	0.22	0.23	0.25	0.28				
	Heating	kW	0.21	0.22	0.24	0.27				
Current	Cooling	A	1.05	1.10	1.20	1.35				
	Heating	A	1.00	1.05	1.15	1.33				
External finish(Munsel No.)			Unit : Galvanizing Panel : 0.70V8.59/0.97							
Dimension ※ 3	Height	mm	338 <8>							
	Width	mm	1,358 <1,650>			1,708 <2,000>				
	Depth	mm	606 <670>							
Net weight ※ 3		kg	39 <10>		56 <11.5>					
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)							
Fan	Type		Sirocco fan× 2			Sirocco fan× 4				
	Airflow rate (Lo-Mid2-Mid1-Hi)	m³/min	13.0-14.0-16.0-18.0	15.0-17.0-19.0-21.0	21.0-23.0-26.0-29.0	24.0-27.0-30.0-33.0				
	External static pressure	Pa	0							
Motor	Type		Single phase induction motor							
	Output	kW	0.078		0.078× 2					
Air filter			Synthetic fiber unwoven cloth filter (long life)							
Refrigerant pipe dimension	Gas (Flare)	mm	ø 15.88		ø 19.05					
	Liquid (Flare)	mm	ø 9.52							
Drain pipe dimension			VP-25							
Noise level (Lo-Mid2-Mid1-Hi) ※ 4		dB(A)	32-34-37-39	36-38-41-43	37-39-41-43	40-42-44-46				

Note: ① Cooling/Heating capacity indicates the maximum value at operation under the following condition.  
Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB

Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

② Cooling capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

③ The figure in <> indicates panel's

④ It is measured in anechoic room.

## 2. Capacity Tables

### 2-1.Cooling Capacity (In combination with PUMY-125YM(A))

**PLFY-P-VLMD-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
20 (2.2)	20.0	2.2	1.8	2.3	1.8	2.4	1.8	2.6	1.9
	22.5	2.1	1.7	2.3	1.8	2.4	1.8	2.6	1.9
	25.0	2.1	1.7	2.3	1.8	2.4	1.8	2.5	1.9
	27.5	2.1	1.7	2.2	1.8	2.4	1.8	2.5	1.9
	30.0	2.1	1.7	2.2	1.8	2.3	1.8	2.5	1.9
	32.5	2.0	1.7	2.2	1.8	2.3	1.8	2.5	1.8
	35.0	2.0	1.7	2.1	1.8	2.3	1.8	2.4	1.8
	37.5	2.0	1.7	2.1	1.8	2.2	1.7	2.4	1.8
	40.0	2.0	1.7	2.1	1.8	2.2	1.7	2.4	1.8
	46.0	1.9	1.6	2.0	1.7	2.1	1.7	2.3	1.8
25 (2.8)	20.0	2.8	2.1	2.9	2.1	3.1	2.1	3.3	2.2
	22.5	2.7	2.0	2.9	2.1	3.1	2.1	3.2	2.2
	25.0	2.7	2.0	2.9	2.1	3.1	2.1	3.2	2.2
	27.5	2.7	2.0	2.8	2.1	3.0	2.1	3.2	2.1
	30.0	2.6	2.0	2.8	2.1	3.0	2.1	3.2	2.1
	32.5	2.6	2.0	2.8	2.1	2.9	2.0	3.1	2.1
	35.0	2.6	1.9	2.7	2.0	2.9	2.0	3.1	2.1
	37.5	2.5	1.9	2.7	2.0	2.9	2.0	3.0	2.1
	40.0	2.5	1.9	2.7	2.0	2.8	2.0	3.0	2.1
	46.0	2.4	1.9	2.6	2.0	2.7	1.9	2.9	2.0
32 (3.6)	20.0	3.6	2.5	3.7	2.6	4.0	2.6	4.2	2.7
	22.5	3.5	2.5	3.7	2.6	4.0	2.6	4.2	2.7
	25.0	3.5	2.5	3.7	2.6	3.9	2.6	4.1	2.7
	27.5	3.4	2.5	3.6	2.6	3.9	2.6	4.1	2.6
	30.0	3.4	2.4	3.6	2.6	3.8	2.5	4.1	2.6
	32.5	3.3	2.4	3.6	2.5	3.8	2.5	4.0	2.6
	35.0	3.3	2.4	3.5	2.5	3.7	2.5	4.0	2.6
	37.5	3.2	2.4	3.5	2.5	3.7	2.5	3.9	2.6
	40.0	3.2	2.4	3.4	2.5	3.6	2.5	3.9	2.5
	46.0	3.1	2.3	3.3	2.4	3.5	2.4	3.7	2.5
40 (4.5)	20.0	4.5	3.2	4.7	3.4	5.0	3.3	5.3	3.4
	22.5	4.4	3.2	4.6	3.3	5.0	3.3	5.2	3.4
	25.0	4.3	3.2	4.6	3.3	4.9	3.3	5.2	3.4
	27.5	4.3	3.1	4.6	3.3	4.9	3.3	5.1	3.4
	30.0	4.2	3.1	4.5	3.3	4.8	3.2	5.1	3.3
	32.5	4.2	3.1	4.4	3.2	4.7	3.2	5.0	3.3
	35.0	4.1	3.1	4.4	3.2	4.7	3.2	5.0	3.3
	37.5	4.1	3.0	4.3	3.2	4.6	3.2	4.9	3.3
	40.0	4.0	3.0	4.3	3.2	4.5	3.1	4.8	3.2
	46.0	3.8	2.9	4.1	3.1	4.3	3.0	4.6	3.2
50 (5.6)	20.0	5.5	4.0	5.8	4.1	6.2	4.1	6.6	4.2
	22.5	5.5	3.9	5.8	4.1	6.2	4.1	6.5	4.2
	25.0	5.4	3.9	5.7	4.1	6.1	4.1	6.4	4.2
	27.5	5.3	3.9	5.7	4.1	6.0	4.0	6.4	4.1
	30.0	5.3	3.8	5.6	4.0	5.9	4.0	6.3	4.1
	32.5	5.2	3.8	5.5	4.0	5.9	3.9	6.2	4.1
	35.0	5.1	3.7	5.5	3.9	5.8	3.9	6.2	4.0
	37.5	5.0	3.7	5.4	3.9	5.7	3.9	6.1	4.0
	40.0	5.0	3.7	5.3	3.9	5.6	3.8	6.0	4.0
	46.0	4.8	3.6	5.1	3.8	5.4	3.7	5.8	3.9
63 (7.1)	20.0	7.0	5.1	7.4	5.3	7.9	5.3	8.3	5.4
	22.5	6.9	5.0	7.3	5.2	7.8	5.2	8.2	5.4
	25.0	6.9	5.0	7.3	5.2	7.7	5.2	8.2	5.3
	27.5	6.8	4.9	7.2	5.2	7.7	5.1	8.1	5.3
	30.0	6.7	4.9	7.1	5.1	7.5	5.1	8.0	5.3
	32.5	6.6	4.8	7.0	5.1	7.5	5.1	7.9	5.2
	35.0	6.5	4.8	6.9	5.0	7.3	5.0	7.8	5.2
	37.5	6.4	4.7	6.8	5.0	7.2	5.0	7.7	5.1
	40.0	6.3	4.7	6.7	5.0	7.2	4.9	7.6	5.1
	46.0	6.1	4.6	6.5	4.8	6.9	4.8	7.3	5.0

**PLFY-P-VLMD-A**

## Cooling Capacity (In combination with PUMY-125YM(A))

### PLFY-P-VLMD-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
80 (9.0)	20.0	8.9	6.3	9.4	6.6	10.0	6.6	10.6	6.7
	22.5	8.8	6.3	9.3	6.6	9.9	6.5	10.4	6.7
	25.0	8.7	6.2	9.2	6.5	9.8	6.5	10.4	6.7
	27.5	8.6	6.2	9.1	6.5	9.7	6.4	10.3	6.6
	30.0	8.5	6.1	9.0	6.4	9.5	6.4	10.2	6.6
	32.5	8.3	6.0	8.9	6.4	9.5	6.3	10.0	6.5
	35.0	8.2	6.0	8.8	6.3	9.3	6.2	9.9	6.5
	37.5	8.1	5.9	8.6	6.2	9.2	6.2	9.8	6.4
	40.0	8.0	5.9	8.6	6.2	9.1	6.1	9.6	6.3
	46.0	7.7	5.7	8.2	6.0	8.7	6.0	9.3	6.2
100 (11.2)	20.0	11.1	8.3	11.6	8.6	12.5	8.6	13.1	8.8
	22.5	10.9	8.2	11.5	8.6	12.3	8.5	13.0	8.8
	25.0	10.8	8.1	11.5	8.5	12.2	8.5	12.9	8.7
	27.5	10.7	8.1	11.3	8.5	12.1	8.4	12.8	8.7
	30.0	10.5	8.0	11.2	8.4	11.9	8.3	12.6	8.6
	32.5	10.4	7.9	11.1	8.3	11.8	8.3	12.5	8.5
	35.0	10.2	7.8	10.9	8.3	11.6	8.2	12.3	8.5
	37.5	10.1	7.8	10.8	8.2	11.4	8.1	12.2	8.4
	40.0	10.0	7.7	10.6	8.1	11.3	8.1	12.0	8.3
	46.0	9.6	7.5	10.2	7.9	10.8	7.8	11.5	8.1
125 (14.0)	20.0	13.9	10.1	14.6	10.5	15.6	10.5	16.4	10.8
	22.5	13.7	10.0	14.4	10.5	15.4	10.4	16.2	10.7
	25.0	13.5	10.0	14.3	10.4	15.3	10.3	16.1	10.6
	27.5	13.4	9.9	14.2	10.3	15.1	10.3	16.0	10.6
	30.0	13.2	9.8	14.0	10.3	14.9	10.2	15.8	10.5
	32.5	13.0	9.7	13.8	10.2	14.7	10.1	15.6	10.4
	35.0	12.8	9.6	13.7	10.1	14.5	10.0	15.4	10.3
	37.5	12.6	9.5	13.4	10.0	14.3	9.9	15.2	10.3
	40.0	12.5	9.4	13.3	9.9	14.1	9.8	15.0	10.2
	46.0	12.0	9.2	12.8	9.7	13.5	9.6	14.4	9.9

## 2-2.Heating Capacity (In combination with PUMY-125YM(A))

**PLFY-P-VLMD-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB		
		15.0	20.0	25.0
	°CWB	SHC	SHC	SHC
20	-12.0	1.6	1.6	1.5
	-10.0	1.7	1.6	1.6
	-5.0	1.9	1.9	1.9
	0.0	2.2	2.1	2.1
	2.5	2.3	2.3	2.3
	6.0	2.5	2.5	2.5
	7.5	2.6	2.6	2.5
	10.0	2.8	2.7	2.5
	12.5	2.9	2.8	2.5
	15.5	3.1	2.8	2.5
25	-12.0	2.0	2.0	2.0
	-10.0	2.1	2.1	2.1
	-5.0	2.4	2.4	2.4
	0.0	2.8	2.8	2.7
	2.5	3.0	2.9	2.9
	6.0	3.2	3.2	3.2
	7.5	3.3	3.3	3.2
	10.0	3.5	3.5	3.2
	12.5	3.7	3.5	3.2
	15.5	3.9	3.5	3.2
32	-12.0	2.5	2.5	2.5
	-10.0	2.7	2.6	2.6
	-5.0	3.1	3.0	3.0
	0.0	3.5	3.4	3.4
	2.5	3.7	3.7	3.6
	6.0	4.0	4.0	3.9
	7.5	4.2	4.1	4.0
	10.0	4.4	4.4	4.0
	12.5	4.7	4.4	4.0
	15.5	4.9	4.4	4.0
40	-12.0	3.2	3.1	3.1
	-10.0	3.4	3.3	3.2
	-5.0	3.8	3.8	3.7
	0.0	4.3	4.3	4.2
	2.5	4.6	4.6	4.5
	6.0	5.0	5.0	4.9
	7.5	5.2	5.2	5.0
	10.0	5.5	5.5	5.0
	12.5	5.9	5.5	5.0
	15.5	6.2	5.5	5.0
50	-12.0	4.0	3.9	3.9
	-10.0	4.2	4.2	4.1
	-5.0	4.8	4.8	4.7
	0.0	5.5	5.4	5.3
	2.5	5.8	5.8	5.7
	6.0	6.3	6.3	6.2
	7.5	6.6	6.5	6.2
	10.0	7.0	6.9	6.2
	12.5	7.4	7.0	6.2
	15.5	7.7	7.0	6.2

Unit size	Outdoor air temp.	Indoor air temp.:°CDB		
		15.0	20.0	25.0
	°CWB	SHC	SHC	SHC
63	-12.0	5.1	5.0	4.9
	-10.0	5.4	5.3	5.2
	-5.0	6.1	6.0	5.9
	0.0	6.9	6.9	6.8
	2.5	7.4	7.3	7.2
	6.0	8.0	8.0	7.9
	7.5	8.3	8.3	7.9
	10.0	8.8	8.8	7.9
	12.5	9.4	8.8	7.9
	15.5	9.8	8.8	7.9
80	-12.0	6.4	6.2	6.1
	-10.0	6.7	6.6	6.5
	-5.0	7.6	7.5	7.4
	0.0	8.7	8.6	8.5
	2.5	9.2	9.2	9.0
	6.0	10.1	10.0	9.9
	7.5	10.4	10.4	9.9
	10.0	11.1	11.0	9.9
	12.5	11.7	11.0	9.9
	15.5	12.3	11.0	9.9
100	-12.0	8.0	7.8	7.7
	-10.0	8.4	8.2	8.1
	-5.0	9.6	9.4	9.3
	0.0	10.9	10.7	10.6
	2.5	11.5	11.4	11.3
	6.0	12.6	12.5	12.3
	7.5	13.0	12.9	12.4
	10.0	13.8	13.7	12.4
	12.5	14.6	13.8	12.4
	15.5	15.4	13.8	12.4
125	-12.0	10.2	10.0	9.8
	-10.0	10.7	10.6	10.4
	-5.0	12.2	12.1	11.9
	0.0	13.9	13.8	13.6
	2.5	14.8	14.7	14.5
	6.0	16.1	16.0	15.8
	7.5	16.7	16.6	15.8
	10.0	17.7	17.6	15.8
	12.5	18.7	17.7	15.8
	15.5	19.7	17.7	15.8

**PLFY-P-VLMD-A**

## 2-3.Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

### PLFY-P-VLMD-A

CA:Capacity(kW)

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB			
		'CDB	CA	SHC	CA	SHC									
20 (2.2)	20.0	2.2	1.8	2.2	1.8	2.3	1.8	2.3	1.8	2.4	1.9	2.5	1.8	2.6	1.8
	22.5	2.1	1.7	2.2	1.8	2.3	1.8	2.3	1.8	2.4	1.8	2.4	1.8	2.5	1.8
	25.0	2.1	1.7	2.2	1.8	2.2	1.7	2.3	1.8	2.3	1.8	2.4	1.8	2.5	1.8
	27.5	2.1	1.7	2.1	1.8	2.2	1.7	2.3	1.8	2.3	1.8	2.4	1.8	2.5	1.7
	30.0	2.1	1.7	2.1	1.8	2.2	1.7	2.2	1.8	2.3	1.8	2.4	1.8	2.5	1.7
	32.5	2.0	1.7	2.1	1.8	2.2	1.7	2.2	1.7	2.3	1.8	2.4	1.8	2.4	1.7
	35.0	2.0	1.7	2.1	1.7	2.2	1.7	2.2	1.7	2.2	1.8	2.3	1.8	2.4	1.7
	37.5	2.0	1.7	2.0	1.7	2.1	1.7	2.2	1.7	2.2	1.8	2.3	1.8	2.4	1.7
	40.0	2.0	1.7	2.0	1.7	2.1	1.7	2.2	1.7	2.2	1.8	2.3	1.7	2.4	1.7
	43.0	2.0	1.7	2.0	1.7	2.1	1.7	2.1	1.7	2.2	1.8	2.3	1.7	2.3	1.7
25 (2.8)	20.0	2.7	2.0	2.8	2.1	2.9	2.0	3.0	2.1	3.0	2.1	3.1	2.1	3.2	2.0
	22.5	2.7	2.0	2.8	2.1	2.9	2.0	2.9	2.0	3.0	2.1	3.1	2.0	3.2	2.0
	25.0	2.7	2.0	2.7	2.1	2.9	2.0	2.9	2.0	3.0	2.1	3.1	2.0	3.2	2.0
	27.5	2.7	2.0	2.7	2.0	2.8	2.0	2.9	2.0	2.9	2.1	3.1	2.0	3.2	2.0
	30.0	2.6	2.0	2.7	2.0	2.8	2.0	2.9	2.0	2.9	2.1	3.0	2.0	3.1	2.0
	32.5	2.6	2.0	2.7	2.0	2.8	2.0	2.8	2.0	2.9	2.1	3.0	2.0	3.1	2.0
	35.0	2.6	2.0	2.6	2.0	2.7	2.0	2.8	2.0	2.9	2.0	3.0	2.0	3.1	1.9
	37.5	2.5	1.9	2.6	2.0	2.7	1.9	2.8	2.0	2.8	2.0	2.9	2.0	3.1	1.9
	40.0	2.5	1.9	2.6	2.0	2.7	1.9	2.7	2.0	2.8	2.0	2.9	2.0	3.0	1.9
	43.0	2.5	1.9	2.5	2.0	2.7	1.9	2.7	1.9	2.8	2.0	2.9	2.0	3.0	1.9
32 (3.6)	20.0	3.5	2.5	3.6	2.6	3.7	2.5	3.8	2.5	3.9	2.6	4.0	2.5	4.2	2.4
	22.5	3.5	2.5	3.6	2.5	3.7	2.5	3.8	2.5	3.9	2.6	4.0	2.5	4.1	2.4
	25.0	3.5	2.5	3.5	2.5	3.7	2.5	3.7	2.5	3.8	2.6	4.0	2.5	4.1	2.4
	27.5	3.4	2.5	3.5	2.5	3.6	2.5	3.7	2.5	3.8	2.5	3.9	2.5	4.1	2.4
	30.0	3.4	2.4	3.5	2.5	3.6	2.4	3.7	2.5	3.7	2.5	3.9	2.5	4.0	2.4
	32.5	3.3	2.4	3.4	2.5	3.6	2.4	3.6	2.4	3.7	2.5	3.9	2.4	4.0	2.4
	35.0	3.3	2.4	3.4	2.5	3.5	2.4	3.6	2.4	3.7	2.5	3.8	2.4	4.0	2.4
	37.5	3.3	2.4	3.3	2.4	3.5	2.4	3.6	2.4	3.6	2.5	3.8	2.4	3.9	2.4
	40.0	3.2	2.4	3.3	2.4	3.5	2.4	3.5	2.4	3.6	2.5	3.7	2.4	3.9	2.3
	43.0	3.2	2.4	3.3	2.4	3.4	2.4	3.5	2.4	3.6	2.4	3.7	2.4	3.8	2.3
40 (4.5)	20.0	4.4	3.2	4.5	3.3	4.7	3.2	4.8	3.2	4.9	3.3	5.0	3.2	5.2	3.1
	22.5	4.4	3.2	4.5	3.2	4.6	3.2	4.7	3.2	4.8	3.3	5.0	3.2	5.2	3.1
	25.0	4.3	3.2	4.4	3.2	4.6	3.2	4.7	3.2	4.8	3.3	5.0	3.2	5.1	3.1
	27.5	4.3	3.1	4.4	3.2	4.5	3.1	4.6	3.2	4.7	3.3	4.9	3.2	5.1	3.1
	30.0	4.2	3.1	4.3	3.2	4.5	3.1	4.6	3.1	4.7	3.2	4.9	3.2	5.0	3.1
	32.5	4.2	3.1	4.3	3.2	4.5	3.1	4.5	3.1	4.6	3.2	4.8	3.1	5.0	3.0
	35.0	4.1	3.1	4.2	3.1	4.4	3.1	4.5	3.1	4.6	3.2	4.8	3.1	5.0	3.0
	37.5	4.1	3.0	4.2	3.1	4.4	3.1	4.5	3.1	4.5	3.2	4.7	3.1	4.9	3.0
	40.0	4.1	3.0	4.1	3.1	4.3	3.0	4.4	3.1	4.5	3.2	4.7	3.1	4.9	3.0
	43.0	4.0	3.0	4.1	3.1	4.3	3.0	4.4	3.0	4.4	3.1	4.6	3.1	4.8	3.0
50 (5.6)	20.0	5.5	3.9	5.6	4.0	5.8	3.9	5.9	3.9	6.0	4.1	6.3	3.9	6.5	3.8
	22.5	5.4	3.9	5.5	4.0	5.8	3.9	5.9	3.9	6.0	4.0	6.2	3.9	6.4	3.8
	25.0	5.4	3.9	5.5	4.0	5.7	3.9	5.8	3.9	5.9	4.0	6.2	3.9	6.4	3.8
	27.5	5.3	3.9	5.4	3.9	5.7	3.8	5.8	3.9	5.9	4.0	6.1	3.9	6.3	3.8
	30.0	5.3	3.8	5.4	3.9	5.6	3.8	5.7	3.8	5.8	4.0	6.0	3.9	6.3	3.7
	32.5	5.2	3.8	5.3	3.9	5.5	3.8	5.7	3.8	5.8	3.9	6.0	3.8	6.2	3.7
	35.0	5.2	3.8	5.3	3.9	5.5	3.8	5.6	3.8	5.7	3.9	5.9	3.8	6.2	3.7
	37.5	5.1	3.7	5.2	3.8	5.4	3.7	5.5	3.8	5.7	3.9	5.9	3.8	6.1	3.7
	40.0	5.0	3.7	5.2	3.8	5.4	3.7	5.5	3.7	5.6	3.9	5.8	3.8	6.0	3.7
	43.0	5.0	3.7	5.1	3.8	5.3	3.7	5.4	3.7	5.5	3.8	5.8	3.7	6.0	3.6
63 (7.1)	20.0	7.0	5.0	7.1	5.1	7.4	5.0	7.5	5.0	7.7	5.2	8.0	5.1	8.2	4.9
	22.5	6.9	5.0	7.0	5.1	7.3	5.0	7.5	5.0	7.6	5.2	7.9	5.0	8.2	4.9
	25.0	6.8	5.0	7.0	5.1	7.2	5.0	7.4	5.0	7.5	5.1	7.8	5.0	8.1	4.9
	27.5	6.7	4.9	6.9	5.0	7.2	4.9	7.3	5.0	7.5	5.1	7.7	5.0	8.0	4.8
	30.0	6.7	4.9	6.8	5.0	7.1	4.9	7.2	4.9	7.4	5.1	7.7	4.9	8.0	4.8
	32.5	6.6	4.9	6.7	5.0	7.0	4.9	7.2	4.9	7.3	5.0	7.6	4.9	7.9	4.8
	35.0	6.5	4.8	6.7	4.9	7.0	4.8	7.1	4.9	7.2	5.0	7.5	4.9	7.8	4.8
	37.5	6.5	4.8	6.6	4.9	6.9	4.8	7.0	4.8	7.2	5.0	7.5	4.9	7.7	4.7
	40.0	6.4	4.7	6.5	4.9	6.8	4.8	7.0	4.8	7.1	5.0	7.4	4.8	7.7	4.7
	43.0	6.3	4.7	6.4	4.8	6.7	4.7	6.9	4.8	7.0	4.9	7.3	4.8	7.6	4.7

**Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)****PLFY-P-VLMD-A**

CA:Capacity(kW)

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA										
80 (9.0)	20.0	8.8	6.3	9.0	6.4	9.4	6.3	9.5	6.3	9.7	6.5	10.1	6.3	10.4	6.1
	22.5	8.7	6.3	8.9	6.4	9.3	6.2	9.5	6.3	9.6	6.4	10.0	6.3	10.4	6.1
	25.0	8.6	6.2	8.8	6.3	9.2	6.2	9.4	6.2	9.5	6.4	9.9	6.2	10.3	6.0
	27.5	8.6	6.2	8.7	6.3	9.1	6.1	9.3	6.2	9.5	6.4	9.8	6.2	10.2	6.0
	30.0	8.5	6.1	8.6	6.2	9.0	6.1	9.2	6.1	9.4	6.3	9.7	6.2	10.1	6.0
	32.5	8.4	6.1	8.6	6.2	8.9	6.1	9.1	6.1	9.3	6.3	9.6	6.1	10.0	5.9
	35.0	8.3	6.0	8.5	6.2	8.8	6.0	9.0	6.1	9.2	6.2	9.5	6.1	9.9	5.9
	37.5	8.2	6.0	8.4	6.1	8.7	6.0	8.9	6.0	9.1	6.2	9.5	6.1	9.8	5.9
	40.0	8.1	5.9	8.3	6.1	8.6	5.9	8.8	6.0	9.0	6.2	9.4	6.0	9.7	5.9
	43.0	8.0	5.9	8.2	6.0	8.5	5.9	8.7	5.9	8.9	6.1	9.3	6.0	9.6	5.8
100 (11.2)	20.0	11.0	8.2	11.2	8.4	11.6	8.2	11.9	8.3	12.1	8.5	12.5	8.3	13.0	8.1
	22.5	10.9	8.2	11.1	8.3	11.5	8.2	11.8	8.2	12.0	8.5	12.4	8.3	12.9	8.1
	25.0	10.8	8.1	11.0	8.3	11.4	8.1	11.6	8.2	11.9	8.5	12.3	8.2	12.8	8.0
	27.5	10.6	8.0	10.9	8.2	11.3	8.1	11.5	8.1	11.8	8.4	12.2	8.2	12.7	8.0
	30.0	10.5	8.0	10.8	8.2	11.2	8.0	11.4	8.1	11.6	8.4	12.1	8.2	12.5	7.9
	32.5	10.4	7.9	10.6	8.1	11.1	8.0	11.3	8.0	11.5	8.3	12.0	8.1	12.4	7.9
	35.0	10.3	7.9	10.5	8.1	11.0	7.9	11.2	8.0	11.4	8.3	11.9	8.1	12.3	7.9
	37.5	10.2	7.8	10.4	8.0	10.9	7.9	11.1	8.0	11.3	8.2	11.8	8.0	12.2	7.8
	40.0	10.1	7.8	10.3	8.0	10.8	7.8	11.0	7.9	11.2	8.2	11.6	8.0	12.1	7.8
	43.0	9.9	7.7	10.2	7.9	10.6	7.8	10.8	7.9	11.1	8.1	11.5	7.9	12.0	7.7
125 (14.0)	20.0	13.7	10.1	14.0	10.3	14.6	10.0	14.8	10.1	15.1	10.4	15.7	10.1	16.2	9.8
	22.5	13.6	10.0	13.9	10.2	14.4	10.0	14.7	10.0	15.0	10.3	15.5	10.1	16.1	9.8
	25.0	13.4	9.9	13.7	10.1	14.3	9.9	14.6	10.0	14.8	10.3	15.4	10.0	16.0	9.7
	27.5	13.3	9.8	13.6	10.1	14.1	9.8	14.4	9.9	14.7	10.2	15.3	10.0	15.8	9.7
	30.0	13.2	9.8	13.4	10.0	14.0	9.8	14.3	9.9	14.6	10.2	15.1	9.9	15.7	9.6
	32.5	13.0	9.7	13.3	9.9	13.9	9.7	14.1	9.8	14.4	10.1	15.0	9.9	15.5	9.6
	35.0	12.9	9.6	13.2	9.9	13.7	9.7	14.0	9.7	14.3	10.1	14.8	9.8	15.4	9.5
	37.5	12.7	9.6	13.0	9.8	13.6	9.6	13.9	9.7	14.1	10.0	14.7	9.8	15.3	9.5
	40.0	12.6	9.5	12.9	9.7	13.4	9.5	13.7	9.6	14.0	9.9	14.6	9.7	15.1	9.4
	43.0	12.4	9.4	12.7	9.6	13.3	9.5	13.6	9.6	13.8	9.9	14.4	9.6	15.0	9.4

PLFY-P-VLMD-A

## 2-4.Heating Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

### PLFY-P-VLMD-A

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC	SHC	SHC	SHC
20	-15.0	1.7	1.6	1.6	1.6
	-10.0	1.9	1.9	1.9	1.7
	-5.0	2.1	2.1	2.0	1.7
	0.0	2.4	2.4	2.0	1.7
	2.5	2.5	2.5	2.0	1.7
	6.0	2.5	2.5	2.0	1.7
	7.5	2.6	2.5	2.0	1.7
	10.0	2.8	2.5	2.0	1.7
	12.5	3.0	2.5	2.0	1.7
	15.5	3.0	2.5	2.0	1.7
25	-15.0	2.1	2.1	2.1	2.1
	-10.0	2.4	2.4	2.4	2.2
	-5.0	2.7	2.7	2.5	2.2
	0.0	3.1	3.0	2.5	2.2
	2.5	3.2	3.2	2.5	2.2
	6.0	3.2	3.2	2.5	2.2
	7.5	3.4	3.2	2.5	2.2
	10.0	3.6	3.2	2.5	2.2
	12.5	3.8	3.2	2.5	2.2
	15.5	3.9	3.2	2.5	2.2
32	-15.0	2.7	2.6	2.6	2.6
	-10.0	3.1	3.0	3.0	2.8
	-5.0	3.4	3.4	3.1	2.8
	0.0	3.8	3.8	3.1	2.8
	2.5	4.0	4.0	3.1	2.8
	6.0	4.0	4.0	3.1	2.8
	7.5	4.2	4.0	3.1	2.8
	10.0	4.5	4.0	3.1	2.8
	12.5	4.8	4.0	3.1	2.8
	15.5	4.8	4.0	3.1	2.8
40	-15.0	3.3	3.3	3.3	3.3
	-10.0	3.8	3.8	3.7	3.5
	-5.0	4.3	4.2	3.9	3.5
	0.0	4.8	4.7	3.9	3.5
	2.5	5.0	5.0	3.9	3.5
	6.0	5.1	5.0	3.9	3.5
	7.5	5.3	5.0	3.9	3.5
	10.0	5.6	5.0	3.9	3.5
	12.5	6.0	5.0	3.9	3.5
	15.5	6.1	5.0	3.9	3.5
50	-15.0	4.2	4.2	4.1	4.1
	-10.0	4.8	4.8	4.7	4.3
	-5.0	5.4	5.3	4.9	4.3
	0.0	6.0	5.9	4.9	4.3
	2.5	6.3	6.2	4.9	4.3
	6.0	6.4	6.3	4.9	4.3
	7.5	6.6	6.3	4.9	4.3
	10.0	7.1	6.3	4.9	4.3
	12.5	7.5	6.3	4.9	4.3
	15.5	7.6	6.3	4.9	4.3

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC	SHC	SHC	SHC
63	-15.0	5.4	5.3	5.2	5.2
	-10.0	6.1	6.0	6.0	5.5
	-5.0	6.9	6.8	6.2	5.5
	0.0	7.6	7.5	6.2	5.5
	2.5	8.0	7.9	6.2	5.5
	6.0	8.1	8.0	6.2	5.5
	7.5	8.4	8.0	6.2	5.5
	10.0	9.0	8.0	6.2	5.5
	12.5	9.6	8.0	6.2	5.5
	15.5	9.7	8.0	6.2	5.5
80	-15.0	6.7	6.6	6.5	6.5
	-10.0	7.6	7.5	7.4	6.9
	-5.0	8.6	8.5	7.8	6.9
	0.0	9.5	9.4	7.8	6.9
	2.5	10.0	9.9	7.8	6.9
	6.0	10.1	10.0	7.8	6.9
	7.5	10.5	10.0	7.8	6.9
	10.0	11.2	10.0	7.8	6.9
	12.5	12.0	10.0	7.8	6.9
	15.5	12.1	10.0	7.8	6.9
100	-15.0	8.4	8.2	8.2	8.1
	-10.0	9.6	9.4	9.3	8.6
	-5.0	10.7	10.6	9.8	8.6
	0.0	11.9	11.8	9.8	8.6
	2.5	12.5	12.4	9.8	8.6
	6.0	12.6	12.5	9.8	8.6
	7.5	13.2	12.5	9.8	8.6
	10.0	14.1	12.5	9.8	8.6
	12.5	15.0	12.5	9.8	8.6
	15.5	15.1	12.5	9.8	8.6
125	-15.0	10.7	10.6	10.5	10.4
	-10.0	12.2	12.1	11.9	11.0
	-5.0	13.7	13.6	12.5	11.0
	0.0	15.3	15.1	12.5	11.0
	2.5	16.0	15.8	12.5	11.0
	6.0	16.2	16.0	12.5	11.0
	7.5	16.8	16.0	12.5	11.0
	10.0	18.0	16.0	12.5	11.0
	12.5	19.1	16.0	12.5	11.0
	15.5	19.4	16.0	12.5	11.0

**2-5.Cooling Capacity  
(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)**

**PLFY-P-VLMD-A**

CA:Capacity(kcal/h)

SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
	°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC
20	20.0	1813	1488	1901	1554	2049	1552	2157	1601	2192	1653	2320	1630	2459	1606
	22.5	1813	1488	1894	1550	2031	1544	2131	1590	2164	1642	2290	1619	2424	1595
	25.0	1799	1482	1876	1542	2008	1534	2105	1580	2137	1631	2259	1608	2389	1583
	27.5	1784	1475	1857	1534	1985	1525	2079	1569	2110	1621	2229	1597	2354	1571
	30.0	1770	1468	1839	1526	1962	1515	2052	1559	2083	1610	2198	1586	2319	1560
	32.5	1755	1462	1821	1517	1939	1505	2026	1548	2055	1599	2167	1575	2285	1548
	35.0	1741	1455	1802	1509	1916	1496	2000	1538	2028	1589	2137	1564	2250	1537
	37.5	1726	1448	1784	1501	1893	1486	1974	1528	2001	1578	2106	1553	2215	1525
	40.0	1712	1442	1766	1493	1870	1477	1948	1517	1974	1568	2076	1542	2180	1514
	43.0	1695	1434	1744	1483	1843	1465	1916	1505	1941	1555	2039	1529	2139	1500
25	20.0	2266	1705	2377	1775	2561	1775	2697	1825	2740	1877	2900	1850	3073	1821
	22.5	2266	1705	2367	1771	2539	1765	2664	1811	2705	1862	2862	1835	3030	1805
	25.0	2248	1697	2345	1760	2510	1753	2631	1797	2671	1848	2824	1820	2986	1790
	27.5	2230	1688	2322	1749	2482	1740	2598	1783	2637	1834	2786	1805	2943	1774
	30.0	2212	1679	2299	1738	2453	1727	2566	1769	2603	1820	2748	1791	2899	1759
	32.5	2194	1670	2276	1727	2424	1714	2533	1755	2569	1805	2709	1776	2856	1744
	35.0	2176	1661	2253	1716	2395	1701	2500	1741	2535	1791	2671	1761	2812	1728
	37.5	2158	1653	2230	1705	2367	1689	2467	1728	2501	1777	2633	1747	2769	1713
	40.0	2140	1644	2207	1695	2338	1676	2434	1714	2467	1763	2595	1732	2725	1698
	43.0	2118	1633	2180	1682	2304	1661	2395	1698	2426	1747	2549	1715	2673	1680
32	20.0	2855	2075	2995	2158	3227	2160	3398	2216	3452	2275	3654	2242	3872	2206
	22.5	2855	2075	2983	2152	3199	2147	3357	2198	3409	2256	3606	2222	3817	2185
	25.0	2833	2064	2954	2138	3163	2130	3315	2179	3366	2237	3558	2203	3763	2165
	27.5	2810	2053	2925	2124	3127	2113	3274	2161	3323	2219	3510	2183	3708	2145
	30.0	2787	2041	2896	2109	3091	2096	3233	2143	3280	2200	3462	2164	3653	2125
	32.5	2765	2030	2868	2095	3055	2080	3191	2125	3237	2182	3414	2145	3598	2104
	35.0	2742	2018	2839	2081	3018	2063	3150	2107	3194	2164	3366	2126	3544	2085
	37.5	2719	2007	2810	2067	2982	2047	3109	2089	3151	2145	3318	2107	3489	2065
	40.0	2696	1995	2781	2053	2946	2030	3067	2072	3109	2127	3270	2088	3434	2045
	43.0	2669	1982	2746	2036	2902	2011	3018	2050	3057	2105	3212	2066	3368	2021
40	20.0	3625	2672	3803	2779	4098	2781	4315	2855	4383	2933	4640	2891	4917	2846
	22.5	3625	2672	3788	2772	4063	2765	4262	2832	4329	2910	4579	2866	4848	2820
	25.0	3597	2658	3751	2754	4017	2744	4210	2809	4274	2886	4518	2842	4778	2794
	27.5	3568	2643	3715	2736	3971	2723	4157	2787	4220	2863	4457	2818	4708	2769
	30.0	3539	2629	3678	2718	3925	2702	4105	2764	4165	2840	4396	2794	4639	2744
	32.5	3511	2614	3641	2701	3879	2681	4052	2742	4111	2817	4335	2770	4569	2719
	35.0	3482	2600	3605	2683	3833	2660	4000	2719	4056	2794	4274	2746	4500	2694
	37.5	3453	2586	3568	2665	3787	2639	3948	2697	4002	2771	4213	2723	4430	2669
	40.0	3424	2572	3531	2648	3741	2619	3895	2674	3947	2748	4152	2699	4361	2644
	43.0	3389	2555	3487	2627	3686	2594	3832	2648	3882	2721	4078	2671	4277	2614
50	20.0	4532	3293	4753	3424	5123	3427	5393	3516	5479	3609	5800	3557	6146	3500
	22.5	4532	3293	4735	3415	5078	3406	5328	3487	5411	3580	5724	3526	6059	3467
	25.0	4496	3275	4689	3392	5021	3380	5262	3458	5343	3550	5648	3495	5972	3435
	27.5	4460	3257	4643	3370	4963	3353	5197	3429	5275	3521	5571	3464	5886	3403
	30.0	4424	3239	4597	3347	4906	3327	5131	3401	5207	3491	5495	3434	5799	3371
	32.5	4388	3221	4552	3325	4848	3300	5066	3372	5139	3462	5419	3403	5712	3339
	35.0	4352	3202	4506	3302	4791	3274	5000	3344	5070	3433	5342	3373	5625	3307
	37.5	4316	3184	4460	3280	4734	3248	4934	3315	5002	3404	5266	3343	5538	3276
	40.0	4280	3166	4414	3258	4676	3222	4869	3287	4934	3375	5190	3313	5451	3244
	43.0	4237	3145	4359	3231	4607	3190	4790	3253	4852	3341	5098	3278	5347	3207
63	20.0	5710	4192	5989	4360	6455	4363	6796	4479	6904	4600	7309	4534	7744	4462
	22.5	5710	4192	5966	4349	6399	4337	6713	4443	6818	4563	7212	4495	7635	4422
	25.0	5665	4170	5908	4321	6326	4304	6630	4407	6732	4526	7116	4457	7525	4381
	27.5	5620	4147	5851	4293	6254	4271	6548	4371	6646	4490	7020	4419	7416	4341
	30.0	5574	4124	5793	4264	6181	4238	6465	4335	6560	4453	6924	4381	7306	4301
	32.5	5529	4102	5735	4236	6109	4205	6383	4299	6475	4417	6828	4343	7197	4262
	35.0	5484	4079	5677	4208	6037	4172	6300	4264	6389	4380	6731	4305	7087	4222
	37.5	5438	4056	5620	4181	5964	4140	6217	4229	6303	4344	6635	4268	6978	4183
	40.0	5393	4034	5562	4153	5892	4107	6135	4193	6217	4308	6539	4230	6868	4144
	43.0	5338	4007	5493	4120	5805	4068	6036	4151	6114	4265	6424	4186	6737	4097

PLFY-P-VLMD-A

**Cooling Capacity**  
**(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)**

**PLFY-P-VLMD-A**

CA:Capacity(kcal/h)

SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
80	20.0	7251	5247	7605	5454	8196	5460	8629	5601	8767	5748	9281	5664	9834	5573
	22.5	7251	5247	7576	5440	8125	5427	8525	5554	8658	5700	9159	5614	9695	5521
	25.0	7194	5218	7503	5403	8033	5384	8420	5507	8549	5652	9036	5564	9556	5469
	27.5	7136	5189	7429	5367	7941	5341	8315	5461	8440	5605	8914	5515	9417	5417
	30.0	7079	5159	7356	5331	7849	5298	8210	5415	8331	5557	8792	5466	9278	5365
	32.5	7021	5130	7283	5294	7758	5256	8105	5369	8222	5510	8670	5417	9139	5314
	35.0	6963	5101	7209	5258	7666	5214	8000	5323	8113	5464	8548	5369	9000	5263
	37.5	6906	5072	7136	5222	7574	5171	7895	5277	8004	5417	8426	5320	8861	5212
	40.0	6848	5043	7063	5187	7482	5130	7790	5232	7895	5371	8304	5272	8722	5162
	43.0	6779	5008	6975	5144	7371	5079	7664	5178	7764	5315	8157	5215	8555	5102
100	20.0	9063	6879	9507	7163	10245	7162	10787	7364	10958	7577	11601	7469	12293	7353
	22.5	9063	6879	9470	7146	10157	7122	10656	7308	10822	7520	11448	7410	12119	7291
	25.0	8993	6844	9378	7102	10042	7071	10525	7253	10686	7464	11296	7351	11945	7229
	27.5	8920	6809	9287	7058	9927	7020	10393	7198	10550	7407	11143	7292	11771	7167
	30.0	8848	6774	9195	7015	9812	6969	10262	7143	10413	7351	10990	7234	11597	7106
	32.5	8776	6739	9103	6972	9697	6918	10131	7088	10277	7295	10837	7175	11423	7045
	35.0	8704	6704	9012	6929	9582	6868	10000	7033	10141	7239	10685	7117	11250	6984
	37.5	8632	6669	8920	6886	9467	6818	9869	6978	10005	7183	10532	7060	11076	6923
	40.0	8560	6634	8828	6843	9352	6767	9738	6924	9868	7128	10379	7002	10902	6863
	43.0	8474	6592	8718	6792	9214	6707	9580	6859	9705	7062	10196	6934	10693	6791
125	20.0	11329	8412	11883	8753	12807	8756	13484	8994	13698	9243	14501	9109	15366	8966
	22.5	11329	8412	11837	8731	12696	8705	13320	8923	13527	9171	14310	9034	15149	8887
	25.0	11241	8368	11723	8675	12552	8640	13156	8852	13357	9098	14119	8959	14931	8808
	27.5	11151	8323	11608	8620	12408	8575	12992	8781	13187	9026	13929	8884	14714	8729
	30.0	11060	8279	11494	8565	12265	8510	12828	8711	13017	8955	13738	8809	14497	8651
	32.5	10970	8234	11379	8510	12121	8446	12664	8641	12846	8883	13547	8735	14279	8573
	35.0	10880	8189	11265	8455	11977	8381	12500	8572	12676	8812	13356	8661	14062	8495
	37.5	10790	8145	11150	8400	11834	8317	12336	8502	12506	8741	13165	8588	13845	8418
	40.0	10700	8101	11035	8346	11690	8253	12172	8433	12335	8671	12974	8515	13627	8342
	43.0	10592	8048	10898	8280	11518	8177	11975	8350	12131	8586	12745	8427	13367	8250

**2-6.Heating Capacity**  
**(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)**

**PLFY-P-VLMD-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051
80	-15.0	6221	6128	6036	5998
	-10.0	7098	7005	6912	6402
	-5.0	7975	7882	7237	6402
	0.0	8852	8759	7237	6402
	2.5	9290	9000	7237	6402
	6.0	9371	9000	7237	6402
	7.5	9765	9000	7237	6402
	10.0	10421	9000	7237	6402
	12.5	11078	9000	7237	6402
	15.5	11227	9000	7237	6402
100	-15.0	7742	7626	7511	7465
	-10.0	8833	8718	8602	7967
	-5.0	9924	9809	9006	7967
	0.0	11015	10900	9006	7967
	2.5	11561	11200	9006	7967
	6.0	11662	11200	9006	7967
	7.5	12152	11200	9006	7967
	10.0	12969	11200	9006	7967
	12.5	13786	11200	9006	7967
	15.5	13971	11200	9006	7967
125	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959
	-5.0	12405	12261	11258	9959
	0.0	13769	13625	11258	9959
	2.5	14451	14000	11258	9959
	6.0	14577	14000	11258	9959
	7.5	15190	14000	11258	9959
	10.0	16211	14000	11258	9959
	12.5	17232	14000	11258	9959
	15.5	17464	14000	11258	9959

**PLFY-P-VLMD-A**

## 2-7.Cooling Capacity (In combination with PQRY-P200-250YMF-C)

**PLFY-P-VLMD-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°C	CA	SHC	CA										
20	10	2.1	1.7	2.2	1.8	2.4	1.8	2.4	1.8	2.5	1.9	2.6	1.9	2.8	1.8
	20	2.1	1.7	2.1	1.8	2.3	1.8	2.3	1.8	2.4	1.9	2.5	1.8	2.7	1.8
	30	2.0	1.7	2.0	1.7	2.1	1.7	2.2	1.7	2.3	1.8	2.4	1.8	2.5	1.8
	40	1.7	1.5	1.8	1.6	1.9	1.6	1.9	1.6	2.0	1.7	2.1	1.7	2.2	1.7
	45	1.6	1.5	1.7	1.6	1.8	1.5	1.8	1.6	1.9	1.7	2.0	1.6	2.1	1.6
25	10	2.7	2.0	2.8	2.1	3.0	2.1	3.1	2.1	3.2	2.2	3.3	2.1	3.5	2.1
	20	2.6	2.0	2.7	2.0	2.9	2.0	3.0	2.1	3.1	2.1	3.2	2.1	3.4	2.1
	30	2.5	1.9	2.6	2.0	2.7	2.0	2.8	2.0	2.9	2.1	3.0	2.0	3.2	2.0
	40	2.2	1.8	2.2	1.8	2.4	1.8	2.4	1.8	2.5	1.9	2.6	1.9	2.8	1.8
	45	2.0	1.7	2.1	1.8	2.2	1.7	2.3	1.8	2.4	1.9	2.5	1.8	2.6	1.8
32	10	3.5	2.5	3.6	2.6	3.9	2.6	4.0	2.6	4.1	2.7	4.3	2.6	4.5	2.6
	20	3.4	2.4	3.5	2.5	3.7	2.5	3.8	2.5	3.9	2.6	4.1	2.6	4.4	2.5
	30	3.2	2.4	3.3	2.4	3.5	2.4	3.6	2.4	3.7	2.5	3.9	2.5	4.1	2.4
	40	2.8	2.1	2.9	2.2	3.1	2.2	3.1	2.2	3.2	2.3	3.4	2.3	3.6	2.2
	45	2.6	2.1	2.7	2.1	2.9	2.1	3.0	2.2	3.0	2.2	3.2	2.2	3.4	2.2
40	10	4.4	3.2	4.5	3.3	4.8	3.3	5.0	3.3	5.1	3.4	5.4	3.4	5.7	3.3
	20	4.2	3.1	4.4	3.2	4.6	3.2	4.8	3.2	4.9	3.3	5.2	3.3	5.5	3.2
	30	4.0	3.0	4.1	3.1	4.4	3.1	4.5	3.1	4.6	3.2	4.9	3.2	5.2	3.1
	40	3.5	2.7	3.6	2.8	3.8	2.8	3.9	2.9	4.0	3.0	4.3	2.9	4.5	2.9
	45	3.3	2.7	3.4	2.7	3.6	2.7	3.7	2.8	3.8	2.9	4.0	2.8	4.2	2.8
50	10	5.5	3.9	5.6	4.0	6.0	4.0	6.2	4.0	6.3	4.2	6.7	4.1	7.1	4.0
	20	5.3	3.8	5.4	3.9	5.8	3.9	5.9	3.9	6.1	4.1	6.5	4.0	6.8	3.9
	30	5.0	3.7	5.1	3.8	5.5	3.8	5.6	3.8	5.8	3.9	6.1	3.9	6.4	3.8
	40	4.3	3.4	4.5	3.5	4.7	3.4	4.9	3.5	5.0	3.6	5.3	3.6	5.6	3.5
	45	4.1	3.2	4.2	3.4	4.5	3.3	4.6	3.4	4.7	3.5	5.0	3.5	5.3	3.4
63	10	6.9	5.0	7.2	5.2	7.6	5.1	7.8	5.2	8.0	5.4	8.5	5.3	9.0	5.2
	20	6.7	4.9	6.9	5.0	7.3	5.0	7.5	5.0	7.8	5.2	8.2	5.1	8.6	5.1
	30	6.3	4.7	6.5	4.9	6.9	4.8	7.1	4.9	7.3	5.0	7.7	5.0	8.1	4.9
	40	5.5	4.3	5.7	4.5	6.0	4.4	6.2	4.5	6.4	4.7	6.7	4.6	7.1	4.5
	45	5.2	4.2	5.3	4.3	5.7	4.3	5.8	4.3	6.0	4.5	6.3	4.4	6.7	4.4
80	10	8.8	6.3	9.1	6.5	9.6	6.4	9.9	6.5	10.2	6.7	10.8	6.6	11.4	6.5
	20	8.5	6.1	8.7	6.3	9.3	6.2	9.5	6.3	9.8	6.5	10.4	6.4	10.9	6.3
	30	8.0	5.9	8.3	6.1	8.8	6.0	9.0	6.1	9.3	6.3	9.8	6.2	10.3	6.1
	40	6.9	5.4	7.2	5.5	7.6	5.5	7.8	5.6	8.1	5.8	8.5	5.7	9.0	5.6
	45	6.5	5.2	6.8	5.3	7.2	5.3	7.4	5.4	7.6	5.6	8.0	5.5	8.5	5.4
100	10	10.9	8.2	11.3	8.4	12.0	8.4	12.3	8.5	12.7	8.8	13.4	8.7	14.1	8.5
	20	10.5	8.0	10.9	8.3	11.6	8.2	11.9	8.3	12.2	8.6	12.9	8.5	13.6	8.3
	30	9.9	7.7	10.3	8.0	10.9	7.9	11.2	8.0	11.5	8.3	12.2	8.2	12.8	8.0
	40	8.6	7.1	8.9	7.3	9.5	7.3	9.7	7.4	10.0	7.7	10.6	7.6	11.2	7.5
	45	8.1	6.9	8.4	7.1	8.9	7.1	9.2	7.2	9.5	7.5	10.0	7.4	10.5	7.3
125	10	13.7	10.0	14.1	10.3	15.0	10.2	15.4	10.3	15.9	10.7	16.7	10.5	17.7	10.4
	20	13.2	9.8	13.6	10.1	14.5	10.0	14.8	10.1	15.3	10.5	16.1	10.3	17.0	10.1
	30	12.4	9.4	12.8	9.7	13.6	9.6	14.0	9.7	14.4	10.1	15.2	10.0	16.1	9.8
	40	10.8	8.6	11.2	8.9	11.9	8.8	12.2	9.0	12.5	9.4	13.2	9.2	14.0	9.1
	45	10.2	8.3	10.5	8.6	11.2	8.6	11.5	8.7	11.8	9.1	12.5	8.9	13.2	8.8

## 2-8.Heatling Capacity (In combination with PQRY-P200-250YMF-C)

PLFY-P-VLMD-A

SHC:Sensible heat Capacity(kW)

Unit size	Water temp. °C	Indoor air temp.: °CDB				
		15 SHC(kW)	19 SHC(kW)	20 SHC(kW)	25 SHC(kW)	27 SHC(kW)
20	10	2.2	2.2	2.1	1.7	1.5
	20	2.6	2.6	2.5	2.0	1.8
	30	2.6	2.6	2.5	2.0	1.8
	40	2.7	2.7	2.6	2.1	1.9
	45	2.9	2.9	2.9	2.3	2.1
25	10	2.8	2.8	2.7	2.2	2.0
	20	3.3	3.3	3.2	2.6	2.3
	30	3.3	3.3	3.2	2.6	2.3
	40	3.4	3.4	3.3	2.7	2.4
	45	3.8	3.7	3.6	2.9	2.6
32	10	3.5	3.5	3.4	2.7	2.4
	20	4.1	4.1	4.0	3.2	2.9
	30	4.1	4.1	4.0	3.2	2.9
	40	4.3	4.2	4.2	3.3	3.0
	45	4.7	4.7	4.6	3.6	3.3
40	10	4.4	4.3	4.3	3.4	3.1
	20	5.2	5.1	5.0	4.0	3.6
	30	5.2	5.1	5.0	4.0	3.6
	40	5.4	5.3	5.2	4.2	3.7
	45	5.9	5.8	5.7	4.6	4.1
50	10	5.5	5.5	5.4	4.3	3.9
	20	6.5	6.4	6.3	5.0	4.5
	30	6.5	6.4	6.3	5.0	4.5
	40	6.7	6.7	6.6	5.2	4.7
	45	7.4	7.3	7.2	5.7	5.2
63	10	7.0	6.9	6.8	5.4	4.9
	20	8.2	8.2	8.0	6.4	5.8
	30	8.2	8.2	8.0	6.4	5.8
	40	8.6	8.5	8.3	6.7	6.0
	45	9.4	9.3	9.1	7.3	6.6
80	10	8.8	8.7	8.5	6.8	6.1
	20	10.3	10.2	10.0	8.0	7.2
	30	10.3	10.2	10.0	8.0	7.2
	40	10.7	10.6	10.4	8.3	7.5
	45	11.7	11.6	11.4	9.1	8.2
100	10	10.9	10.8	10.6	8.5	7.7
	20	12.9	12.8	12.5	10.0	9.0
	30	12.9	12.8	12.5	10.0	9.0
	40	13.4	13.3	13.0	10.4	9.4
	45	14.7	14.5	14.3	11.4	10.3
125	10	14.0	13.9	13.6	10.9	9.8
	20	16.5	16.3	16.0	12.8	11.5
	30	16.5	16.3	16.0	12.8	11.5
	40	17.1	17.0	16.6	13.3	12.0
	45	18.8	18.6	18.2	14.6	13.1

PLFY-P-VLMD-A

## 2-9.Cooling Capacity (In combination with PURY-P400-500YMF-C)

**PLFY-P-VLMD-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.												
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA								
20	20.0	2.0	1.7	2.1	1.8	2.3	1.8	2.4	1.9	2.6	1.9	2.7	1.8
	22.5	2.0	1.7	2.1	1.8	2.3	1.8	2.4	1.9	2.6	1.8	2.7	1.8
	25.0	2.0	1.7	2.1	1.8	2.2	1.7	2.4	1.9	2.5	1.8	2.7	1.8
	27.5	2.0	1.7	2.1	1.7	2.2	1.7	2.4	1.8	2.5	1.8	2.6	1.8
	30.0	2.0	1.7	2.1	1.7	2.2	1.7	2.3	1.8	2.5	1.8	2.6	1.8
	32.5	2.0	1.7	2.0	1.7	2.2	1.7	2.3	1.8	2.4	1.8	2.6	1.8
	35.0	1.9	1.7	2.0	1.7	2.1	1.7	2.3	1.8	2.4	1.8	2.5	1.8
	37.5	1.9	1.6	2.0	1.7	2.1	1.7	2.2	1.8	2.4	1.8	2.5	1.7
	40.0	1.9	1.6	2.0	1.7	2.1	1.7	2.2	1.8	2.3	1.8	2.4	1.7
	43.0	1.9	1.6	1.9	1.7	2.1	1.7	2.2	1.8	2.3	1.7	2.4	1.7
25	20.0	2.6	2.0	2.7	2.0	2.9	2.0	3.1	2.2	3.3	2.1	3.5	2.1
	22.5	2.6	2.0	2.7	2.0	2.9	2.0	3.1	2.1	3.3	2.1	3.4	2.1
	25.0	2.6	1.9	2.7	2.0	2.9	2.0	3.0	2.1	3.2	2.1	3.4	2.1
	27.5	2.5	1.9	2.6	2.0	2.8	2.0	3.0	2.1	3.2	2.1	3.3	2.0
	30.0	2.5	1.9	2.6	2.0	2.8	2.0	3.0	2.1	3.1	2.1	3.3	2.0
	32.5	2.5	1.9	2.6	2.0	2.8	2.0	2.9	2.1	3.1	2.0	3.2	2.0
	35.0	2.5	1.9	2.6	2.0	2.7	2.0	2.9	2.1	3.0	2.0	3.2	2.0
	37.5	2.5	1.9	2.5	2.0	2.7	1.9	2.8	2.0	3.0	2.0	3.1	2.0
	40.0	2.4	1.9	2.5	1.9	2.7	1.9	2.8	2.0	3.0	2.0	3.1	2.0
	43.0	2.4	1.9	2.5	1.9	2.6	1.9	2.8	2.0	2.9	2.0	3.0	1.9
32	20.0	3.3	2.4	3.5	2.5	3.7	2.5	4.0	2.6	4.2	2.6	4.5	2.6
	22.5	3.3	2.4	3.5	2.5	3.7	2.5	4.0	2.6	4.2	2.6	4.4	2.5
	25.0	3.3	2.4	3.4	2.5	3.7	2.5	3.9	2.6	4.1	2.6	4.4	2.5
	27.5	3.3	2.4	3.4	2.5	3.6	2.5	3.9	2.6	4.1	2.5	4.3	2.5
	30.0	3.2	2.4	3.4	2.5	3.6	2.4	3.8	2.6	4.0	2.5	4.2	2.5
	32.5	3.2	2.4	3.3	2.4	3.5	2.4	3.8	2.5	4.0	2.5	4.2	2.4
	35.0	3.2	2.3	3.3	2.4	3.5	2.4	3.7	2.5	3.9	2.5	4.1	2.4
	37.5	3.2	2.3	3.3	2.4	3.5	2.4	3.7	2.5	3.8	2.4	4.0	2.4
	40.0	3.1	2.3	3.2	2.4	3.4	2.4	3.6	2.5	3.8	2.4	4.0	2.4
	43.0	3.1	2.3	3.2	2.4	3.4	2.3	3.5	2.4	3.7	2.4	3.9	2.3
40	20.0	4.1	3.1	4.3	3.2	4.7	3.2	5.0	3.4	5.3	3.3	5.6	3.3
	22.5	4.1	3.1	4.3	3.2	4.6	3.2	4.9	3.3	5.2	3.3	5.5	3.2
	25.0	4.1	3.1	4.3	3.2	4.6	3.2	4.9	3.3	5.2	3.3	5.5	3.2
	27.5	4.1	3.0	4.2	3.1	4.5	3.1	4.8	3.3	5.1	3.2	5.4	3.2
	30.0	4.0	3.0	4.2	3.1	4.5	3.1	4.8	3.3	5.0	3.2	5.3	3.2
	32.5	4.0	3.0	4.2	3.1	4.4	3.1	4.7	3.2	5.0	3.2	5.2	3.1
	35.0	4.0	3.0	4.1	3.1	4.4	3.1	4.6	3.2	4.9	3.2	5.1	3.1
	37.5	3.9	3.0	4.1	3.1	4.3	3.0	4.6	3.2	4.8	3.1	5.1	3.1
	40.0	3.9	3.0	4.0	3.0	4.3	3.0	4.5	3.2	4.7	3.1	5.0	3.0
	43.0	3.9	2.9	4.0	3.0	4.2	3.0	4.4	3.1	4.7	3.1	4.9	3.0
50	20.0	5.2	3.8	5.4	3.9	5.8	3.9	6.2	4.1	6.6	4.1	7.0	4.0
	22.5	5.2	3.8	5.4	3.9	5.8	3.9	6.2	4.1	6.5	4.0	6.9	4.0
	25.0	5.1	3.8	5.3	3.9	5.7	3.9	6.1	4.1	6.4	4.0	6.8	3.9
	27.5	5.1	3.7	5.3	3.9	5.6	3.8	6.0	4.0	6.3	4.0	6.7	3.9
	30.0	5.0	3.7	5.2	3.8	5.6	3.8	5.9	4.0	6.2	3.9	6.6	3.9
	32.5	5.0	3.7	5.2	3.8	5.5	3.8	5.8	4.0	6.2	3.9	6.5	3.8
	35.0	4.9	3.7	5.1	3.8	5.4	3.8	5.8	3.9	6.1	3.9	6.4	3.8
	37.5	4.9	3.6	5.1	3.8	5.4	3.7	5.7	3.9	6.0	3.8	6.3	3.8
	40.0	4.9	3.6	5.0	3.7	5.3	3.7	5.6	3.9	5.9	3.8	6.2	3.7
	43.0	4.8	3.6	5.0	3.7	5.2	3.7	5.5	3.8	5.8	3.8	6.1	3.7
63	20.0	6.5	4.8	6.9	5.0	7.4	5.0	7.9	5.3	8.4	5.2	8.9	5.1
	22.5	6.5	4.8	6.8	5.0	7.3	5.0	7.8	5.3	8.3	5.2	8.7	5.1
	25.0	6.5	4.8	6.8	5.0	7.2	5.0	7.7	5.2	8.1	5.1	8.6	5.0
	27.5	6.4	4.8	6.7	4.9	7.2	4.9	7.6	5.2	8.0	5.1	8.5	5.0
	30.0	6.4	4.7	6.6	4.9	7.1	4.9	7.5	5.1	7.9	5.0	8.4	5.0
	32.5	6.3	4.7	6.6	4.9	7.0	4.8	7.4	5.1	7.8	5.0	8.2	4.9
	35.0	6.3	4.7	6.5	4.8	6.9	4.8	7.3	5.0	7.7	5.0	8.1	4.9
	37.5	6.2	4.7	6.4	4.8	6.8	4.8	7.2	5.0	7.6	4.9	8.0	4.8
	40.0	6.2	4.6	6.4	4.8	6.7	4.7	7.1	5.0	7.5	4.9	7.9	4.8
	43.0	6.1	4.6	6.3	4.7	6.6	4.7	7.0	4.9	7.3	4.8	7.7	4.7
80	20.0	8.3	6.0	8.7	6.3	9.4	6.3	10.0	6.6	10.6	6.5	11.2	6.4
	22.5	8.3	6.0	8.7	6.3	9.3	6.2	9.9	6.6	10.5	6.5	11.1	6.3
	25.0	8.2	6.0	8.6	6.2	9.2	6.2	9.8	6.5	10.3	6.4	10.9	6.3
	27.5	8.1	6.0	8.5	6.2	9.1	6.1	9.6	6.4	10.2	6.3	10.8	6.2
	30.0	8.1	5.9	8.4	6.1	9.0	6.1	9.5	6.4	10.0	6.3	10.6	6.2
	32.5	8.0	5.9	8.3	6.1	8.9	6.0	9.4	6.3	9.9	6.2	10.4	6.1
	35.0	8.0	5.9	8.2	6.0	8.8	6.0	9.3	6.3	9.8	6.2	10.3	6.1
	37.5	7.9	5.8	8.1	6.0	8.6	5.9	9.1	6.2	9.6	6.1	10.1	6.0
	40.0	7.8	5.8	8.1	6.0	8.5	5.9	9.0	6.2	9.5	6.1	10.0	5.9
	43.0	7.7	5.8	8.0	5.9	8.4	5.8	8.9	6.1	9.3	6.0	9.8	5.9
100	20.0	10.3	7.9	10.8	8.2	11.6	8.2	12.5	8.7	13.2	8.6	14.0	8.4
	22.5	10.3	7.9	10.8	8.2	11.5	8.2	12.3	8.6	13.0	8.5	13.8	8.4
	25.0	10.2	7.8	10.7	8.1	11.4	8.1	12.1	8.6	12.8	8.4	13.6	8.3
	27.5	10.1	7.8	10.6	8.1	11.3	8.1	12.0	8.5	12.7	8.4	13.4	8.2
	30.0	10.1	7.8	10.5	8.0	11.2	8.0	11.8	8.4	12.5	8.3	13.2	8.2
	32.5	10.0	7.7	10.3	8.0	11.0	7.9	11.7	8.4	12.3	8.2	13.0	8.1
	35.0	9.9	7.7	10.2	8.0	10.9	7.9	11.5	8.3	12.1	8.2	12.8	8.0
	37.5	9.8	7.7	10.1	7.9	10.8	7.8	11.4	8.3	12.0	8.1	12.6	8.0
	40.0	9.7	7.6	10.0	7.9	10.6	7.8	11.2	8.2	11.8	8.0	12.4	7.9
	43.0	9.6	7.6	9.9	7.8	10.5	7.7	11.0	8.1	11.6	8.0	12.2	7.8

## Cooling Capacity (In combination with PURY-P400-500YMF-C)

### PLFY-P-VLMD-A

Unit size	Outdoor air temp.	CA:Capacity(kW) SHC:Sensible heat Capacity(kW)											
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
125	20.0	12.9	9.6	13.5	10.0	14.6	10.0	15.6	10.6	16.5	10.4	17.5	10.3
	22.5	12.9	9.6	13.5	10.0	14.4	10.0	15.4	10.5	16.3	10.4	17.2	10.2
	25.0	12.8	9.6	13.3	9.9	14.3	9.9	15.2	10.4	16.1	10.3	17.0	10.1
	27.5	12.7	9.5	13.2	9.9	14.1	9.8	15.0	10.4	15.8	10.2	16.7	10.0
	30.0	12.6	9.5	13.1	9.8	13.9	9.8	14.8	10.3	15.6	10.1	16.5	9.9
	32.5	12.5	9.4	12.9	9.8	13.8	9.7	14.6	10.2	15.4	10.0	16.2	9.8
	35.0	12.4	9.4	12.8	9.7	13.6	9.6	14.4	10.1	15.2	9.9	16.0	9.8
	37.5	12.3	9.3	12.7	9.6	13.5	9.5	14.2	10.0	15.0	9.9	15.7	9.7
	40.0	12.2	9.3	12.5	9.6	13.3	9.5	14.0	10.0	14.8	9.8	15.5	9.6
	43.0	12.0	9.2	12.4	9.5	13.1	9.4	13.8	9.9	14.5	9.7	15.2	9.5

## 2-10.Heating Capacity (In combination with PURY-P400-500YMF-C)

### PLFY-P-VLMD-A

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0		20.0	
		°CWB	SHC(kW)	SHC(kW)	SHC(kW)
20	-15.0	1.6	1.5	1.5	1.5
	-10.0	1.8	1.8	1.7	1.7
	-5.0	2.0	2.0	2.0	1.9
	0.0	2.2	2.2	2.1	1.9
	2.5	2.4	2.3	2.1	1.9
	6.0	2.5	2.5	2.1	1.9
	7.5	2.6	2.5	2.1	1.9
	10.0	2.7	2.5	2.1	1.9
	12.5	2.9	2.5	2.1	1.9
	15.5	2.9	2.5	2.1	1.9
25	-15.0	2.0	2.0	1.9	1.9
	-10.0	2.3	2.2	2.2	2.2
	-5.0	2.6	2.5	2.5	2.5
	0.0	2.9	2.8	2.7	2.5
	2.5	3.0	3.0	2.7	2.5
	6.0	3.2	3.2	2.7	2.5
	7.5	3.3	3.2	2.7	2.5
	10.0	3.5	3.2	2.7	2.5
	12.5	3.7	3.2	2.7	2.5
	15.5	3.7	3.2	2.7	2.5
32	-15.0	2.5	2.5	2.4	2.4
	-10.0	2.8	2.8	2.8	2.7
	-5.0	3.2	3.2	3.1	3.1
	0.0	3.6	3.5	3.4	3.1
	2.5	3.8	3.7	3.4	3.1
	6.0	4.0	4.0	3.4	3.1
	7.5	4.2	4.0	3.4	3.1
	10.0	4.4	4.0	3.4	3.1
	12.5	4.6	4.0	3.4	3.1
	15.5	4.6	4.0	3.4	3.1
40	-15.0	3.1	3.1	3.0	3.0
	-10.0	3.6	3.5	3.5	3.4
	-5.0	4.0	4.0	3.9	3.9
	0.0	4.5	4.4	4.3	3.9
	2.5	4.7	4.7	4.3	3.9
	6.0	5.0	5.0	4.3	3.9
	7.5	5.2	5.0	4.3	3.9
	10.0	5.4	5.0	4.3	3.9
	12.5	5.7	5.0	4.3	3.9
	15.5	5.8	5.0	4.3	3.9
50	-15.0	3.9	3.9	3.8	3.7
	-10.0	4.5	4.4	4.3	4.3
	-5.0	5.0	5.0	4.9	4.9
	0.0	5.6	5.6	5.4	4.9
	2.5	5.9	5.9	5.4	4.9
	6.0	6.4	6.3	5.4	4.9
	7.5	6.6	6.3	5.4	4.9
	10.0	6.9	6.3	5.4	4.9
	12.5	7.2	6.3	5.4	4.9
	15.5	7.2	6.3	5.4	4.9

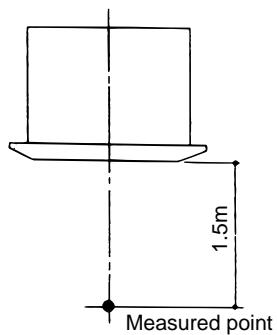
Unit size	Outdoor air temp.	SHC:Sensible heat Capacity(kW)			
		Indoor air temp.: °CDB		SHC(kW)	
		15.0	20.0	25.0	27.0
63	-15.0	5.0	4.9	4.8	4.7
	-10.0	5.7	5.6	5.5	5.4
	-5.0	6.4	6.3	6.2	6.2
	0.0	7.2	7.1	6.8	6.2
	2.5	7.5	7.5	6.8	6.2
	6.0	8.1	8.0	6.8	6.2
	7.5	8.3	8.0	6.8	6.2
	10.0	8.7	8.0	6.8	6.2
	12.5	9.1	8.0	6.8	6.2
	15.5	9.2	8.0	6.8	6.2
80	-15.0	6.2	6.1	6.0	5.9
	-10.0	7.1	7.0	6.9	6.8
	-5.0	8.0	7.9	7.8	7.7
	0.0	8.9	8.8	8.5	7.7
	2.5	9.4	9.3	8.5	7.7
	6.0	10.1	10.0	8.5	7.7
	7.5	10.4	10.0	8.5	7.7
	10.0	10.9	10.0	8.5	7.7
	12.5	11.4	10.0	8.5	7.7
	15.5	11.5	10.0	8.5	7.7
100	-15.0	7.8	7.7	7.5	7.4
	-10.0	8.9	8.8	8.6	8.5
	-5.0	10.0	9.9	9.8	9.6
	0.0	11.2	11.0	10.6	9.6
	2.5	11.8	11.6	10.6	9.6
	6.0	12.6	12.5	10.6	9.6
	7.5	13.0	12.5	10.6	9.6
	10.0	13.6	12.5	10.6	9.6
	12.5	14.3	12.5	10.6	9.6
	15.5	14.4	12.5	10.6	9.6
125	-15.0	10.0	9.8	9.6	9.5
	-10.0	11.4	11.2	11.0	10.9
	-5.0	12.8	12.6	12.5	12.3
	0.0	14.3	14.1	13.6	12.3
	2.5	15.1	14.9	13.6	12.3
	6.0	16.2	16.0	13.6	12.3
	7.5	16.6	16.0	13.6	12.3
	10.0	17.4	16.0	13.6	12.3
	12.5	18.3	16.0	13.6	12.3
	15.5	18.4	16.0	13.6	12.3

PLFY-P-VLMD-A

### 3. Sound Levels

#### 3-1. Noise level

Cassette ceiling (VLMD-A series)

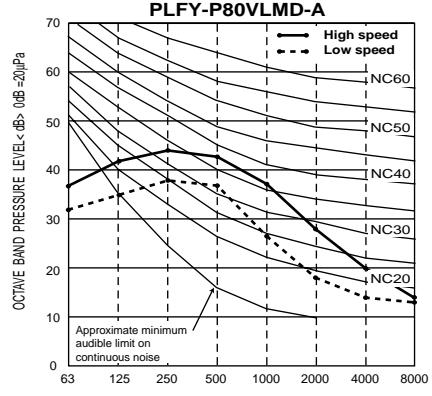
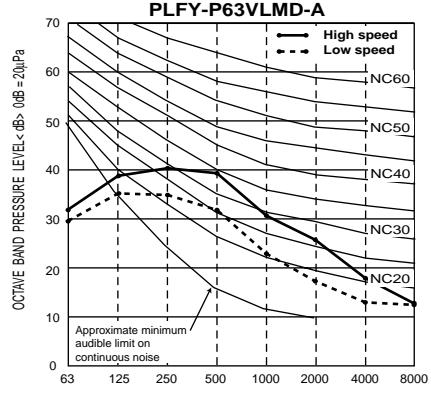
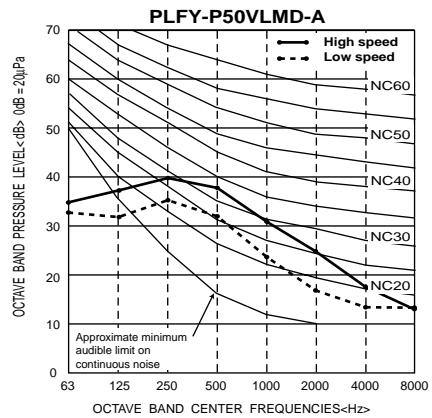
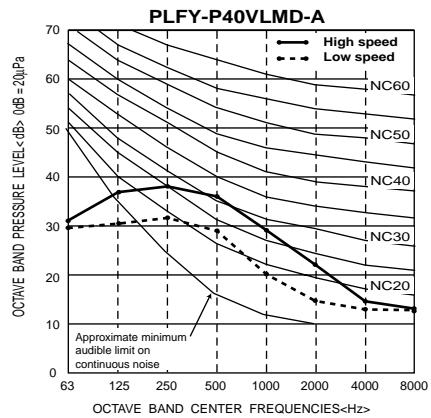
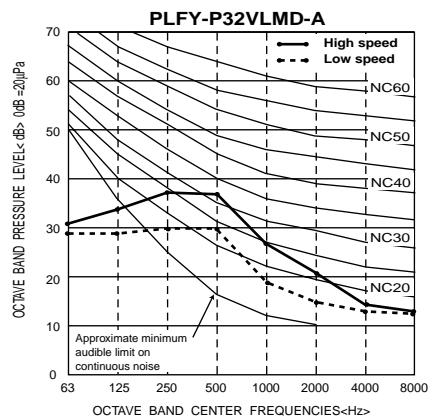
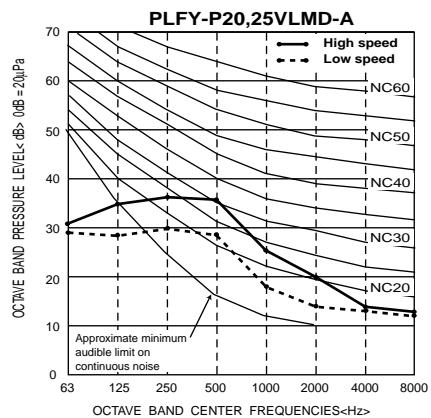


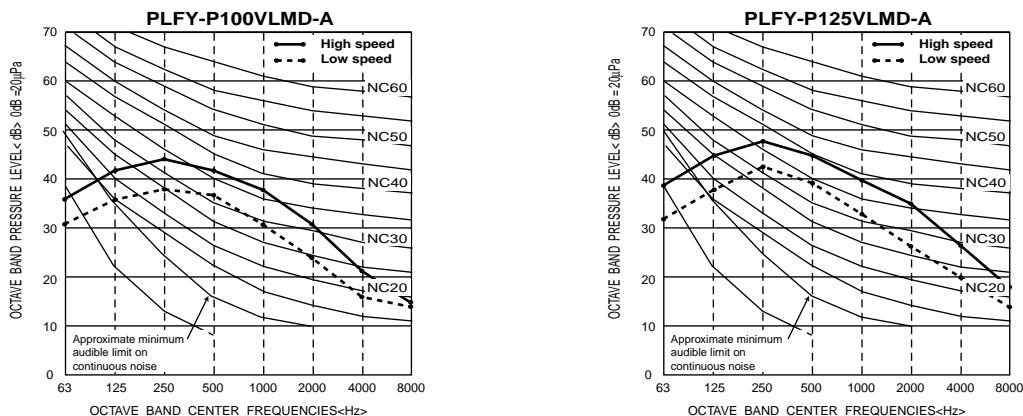
Noise level at anechoic room  
(Low-Middle2-Middle1-High)

Unit : dB(A)

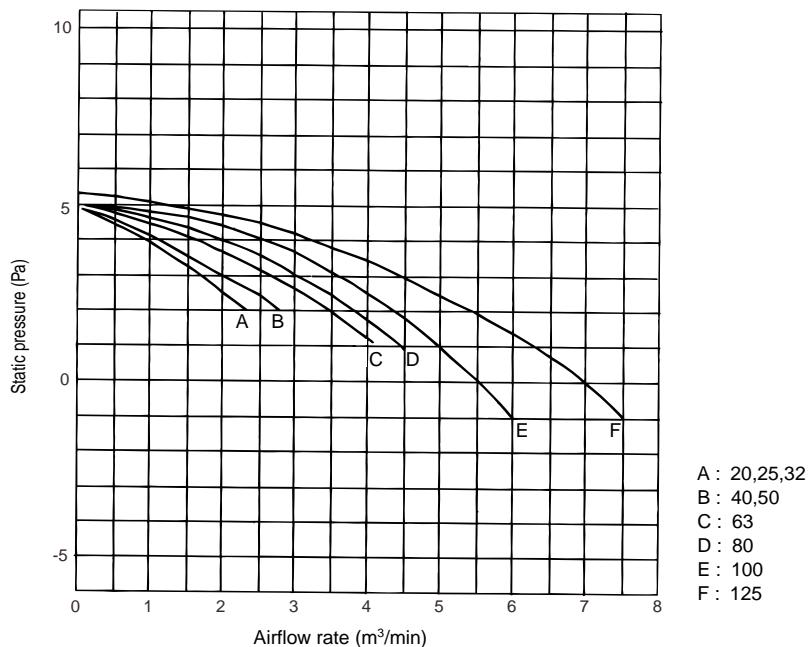
Model	Noise level (A weighted)
PLFY-P20VLMD-A	28-30-33-35
PLFY-P25VLMD-A	29-31-34-36
PLFY-P32VLMD-A	29-32-34-36
PLFY-P40VLMD-A	32-34-36-38
PLFY-P63VLMD-A	32-34-37-39
PLFY-P80VLMD-A	36-38-41-43
PLFY-P100VLMD-A	37-39-41-43
PLFY-P125VLMD-A	40-42-44-46

#### 3-2. NC curves

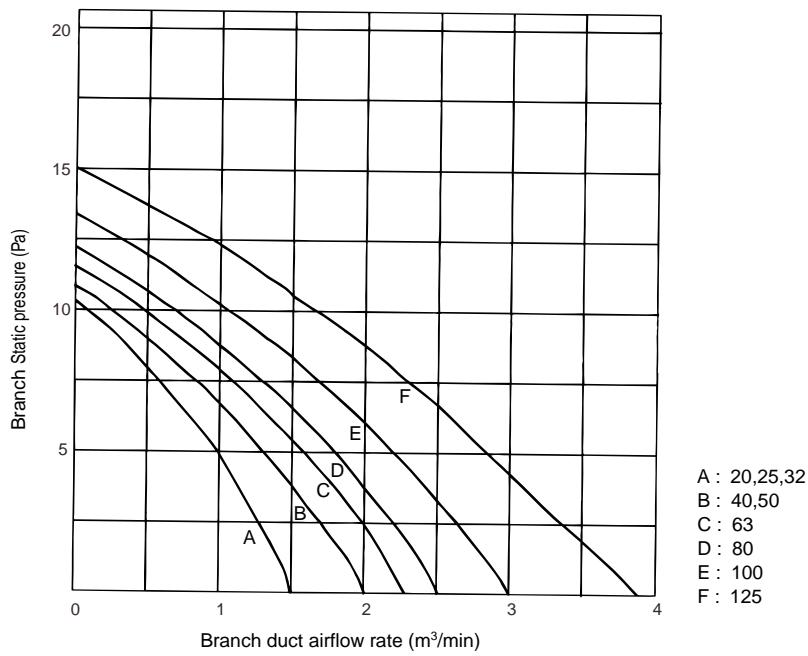




### 3-3. OA Intake-static pressure curve



### 3-4. Branch duct Intake-static pressure curve

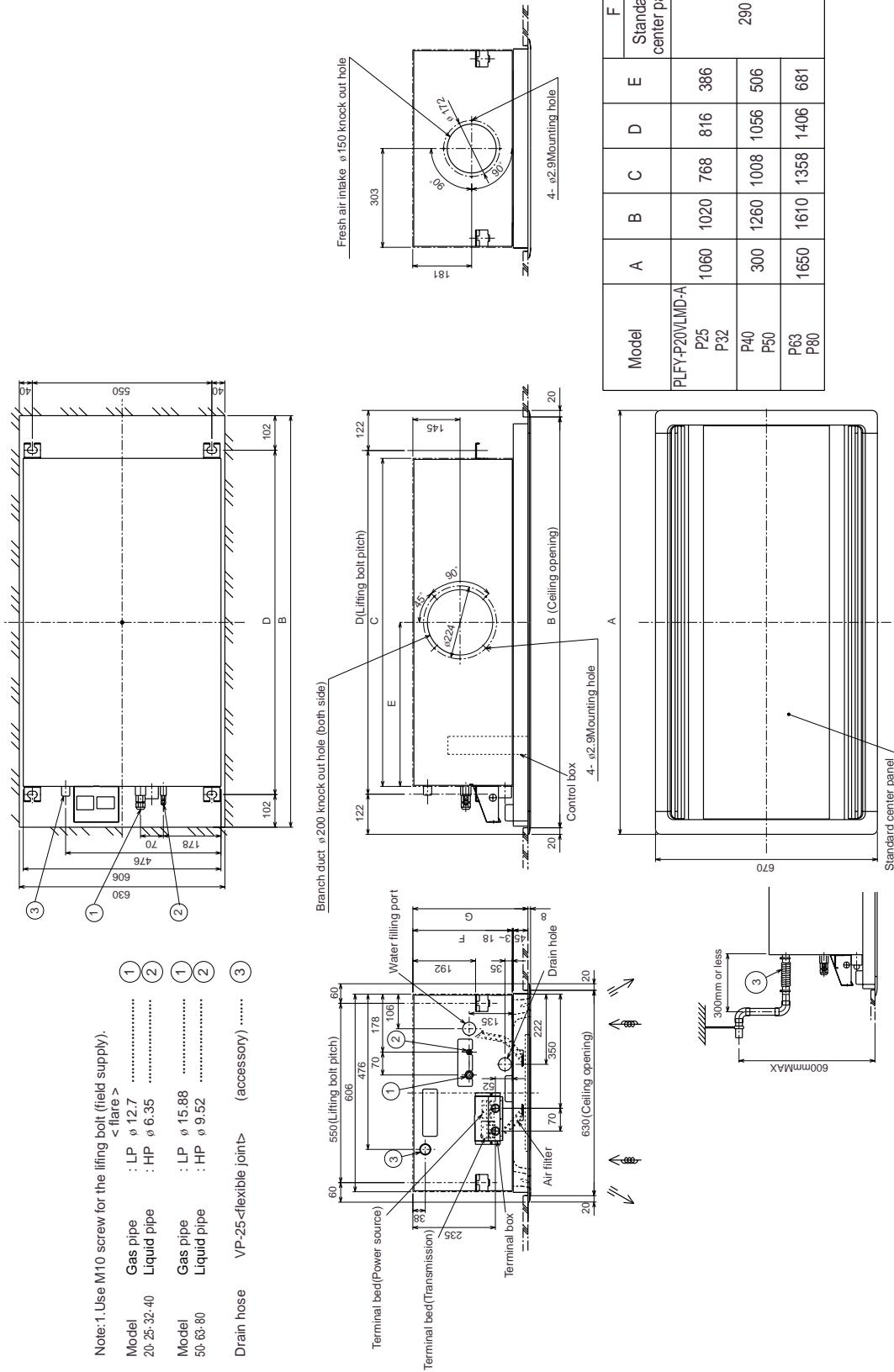


PLFY-P-VLMD-A

## 4. External Dimensions

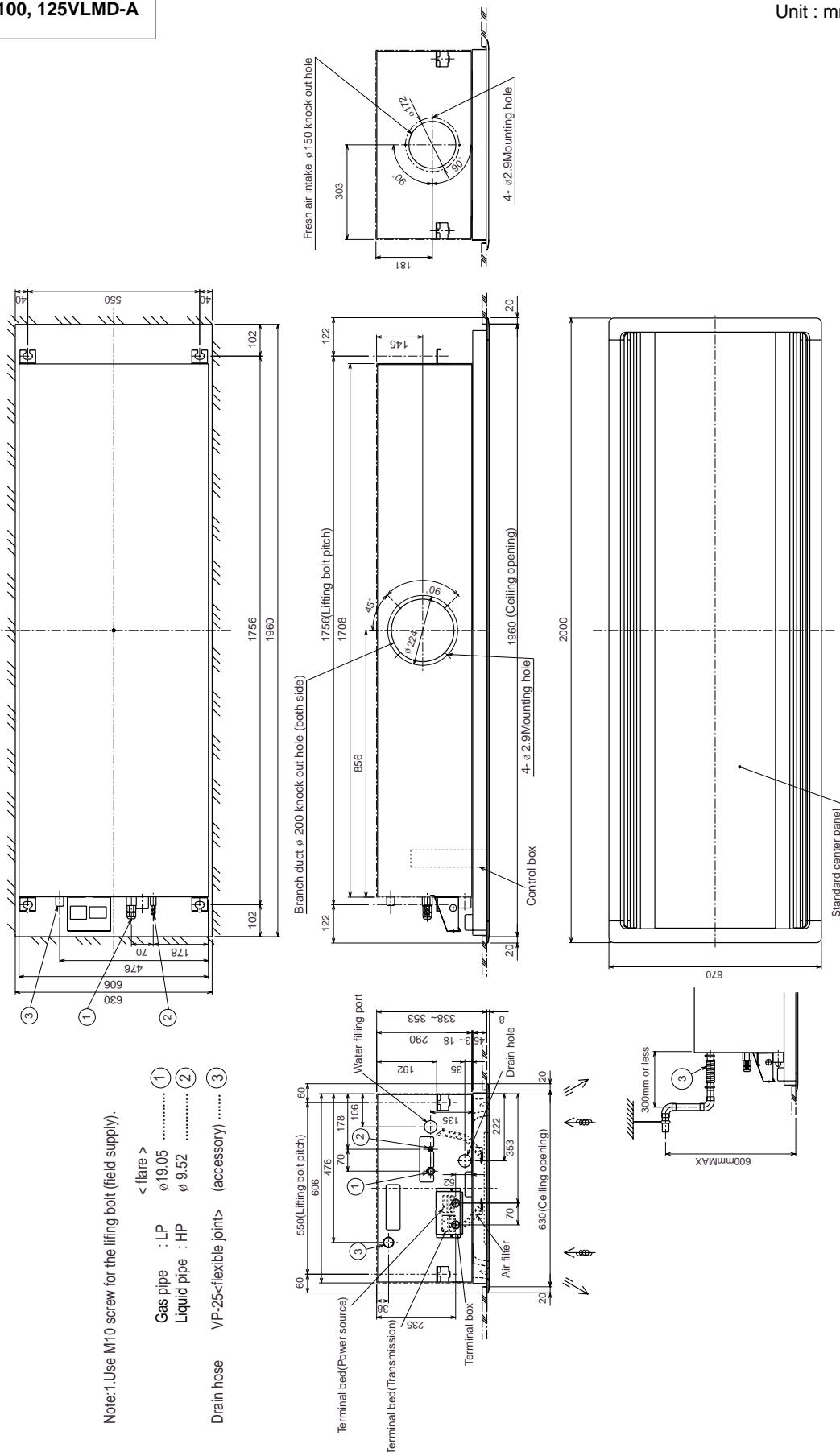
**PLFY-P20, 25, 32, 40, 50,  
63, 80VLMD-A**

Unit : mm

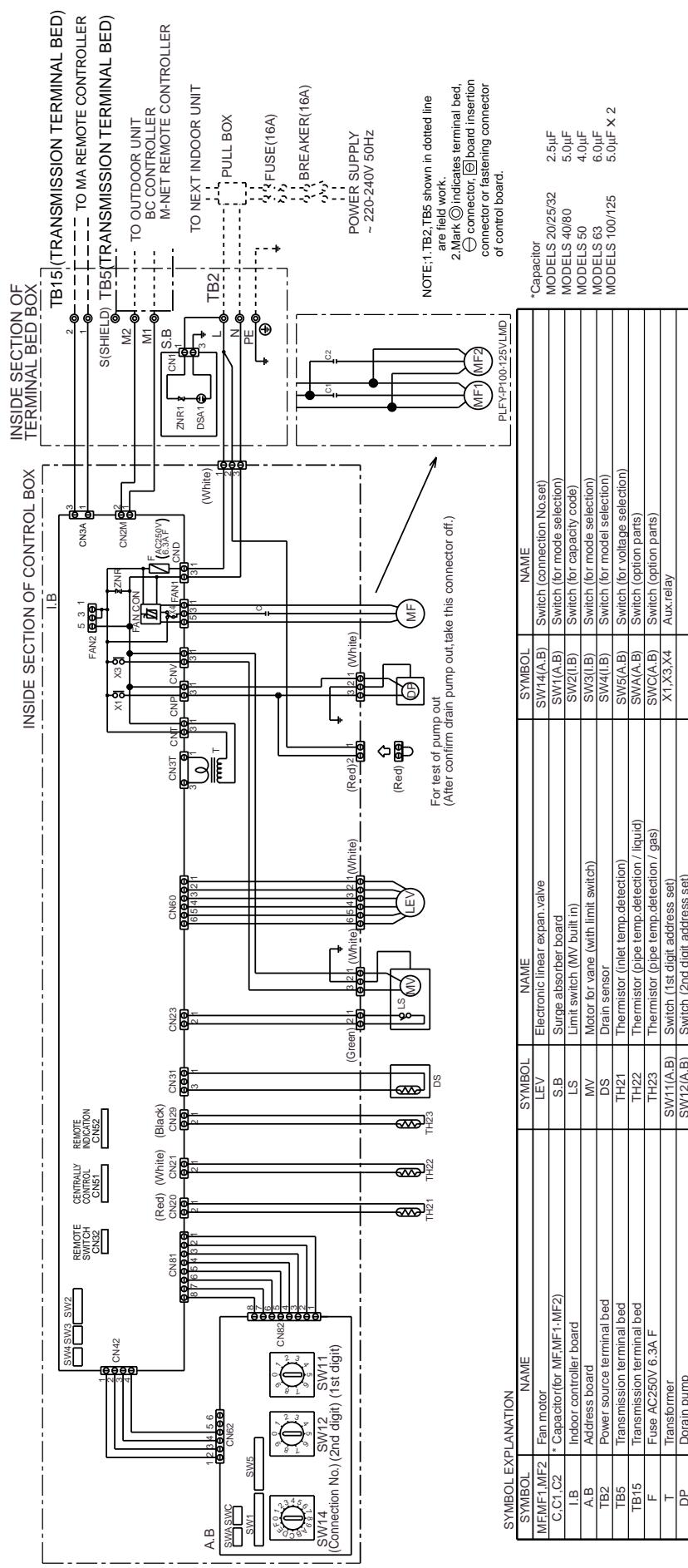


PLFY-P100, 125VLMD-A

Unit : mm



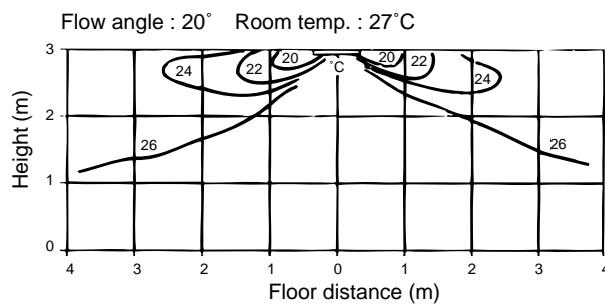
## 5. Electrical Wiring Diagram



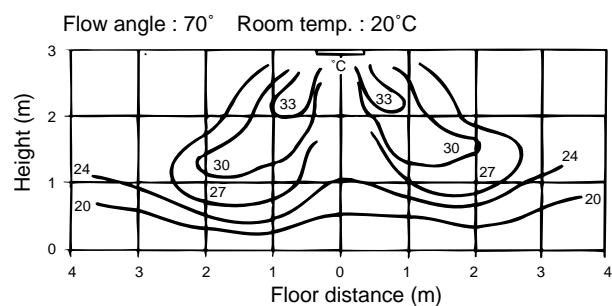
## 6. Temperature/Airflow distribution

### ● Temperature distribution

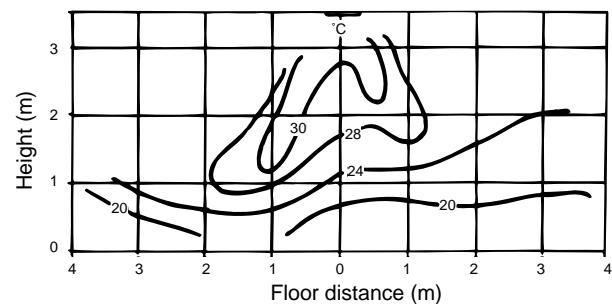
#### <Cooling mode>



#### <Heating mode>

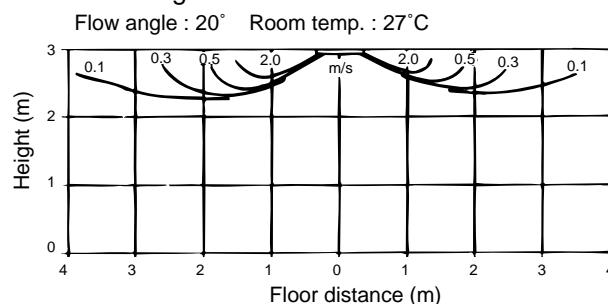


Airflow rate : Low Flow angle : 70° Room temp. : 21°C

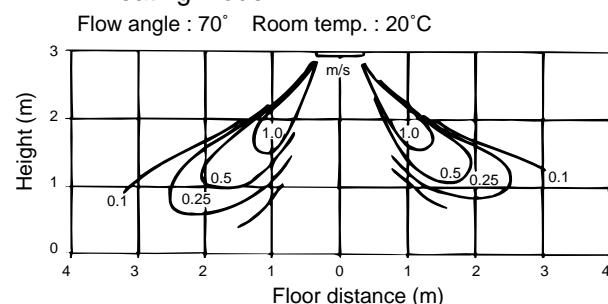


### ● Airflow distribution

#### <Cooling mode>



#### <Heating mode>



PLFY-P-VLMD-A

## 7. Options

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Description	Model	Applicable capacity
Decoration panel	CMP-32LW-F	P20/P25/P32
	CMP-40LW-F	P40/P50
	CMP-63LW-F	P63/P80
	CMP-125LW-F	P100/P125

**Cassette ceiling(4-way flow)**

**PLFY-P-VKM-A**  
**PLFY-P-VAM-A**

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PLFY-P.  
V  
VKM-A/VAM-A

# 1. Specifications

			PLFY-P32VKM-A	PLFY-P40VKM-A	PLFY-P50VKM-A	PLFY-P63VKM-A		
Power source			~ 220-240V 50Hz / ~ 220V 60Hz					
Cooling capacity	※ 1 kW		3.6	4.5	5.6	7.1		
	※ 2 kcal/h		3,150	4,000	5,000	6,300		
Heating capacity	※ 1 kW		4.0	5.0	6.3	8.0		
Power consumption	Cooling kW		0.13		0.14	0.15		
	Heating kW		0.13		0.14	0.15		
Current	Cooling A		0.60		0.64	0.68		
	Heating A		0.60		0.64	0.68		
External finish(Munsel No.)			Panel : 0.70Y 8.59/0.97					
Dimension ※ 3	Height mm		298(30)					
	Width mm		660(760)					
	Depth mm		660(760)					
Net weight ※ 3	kg		19(3.7)		20(3.7)			
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
Fan	Type		Turbo fan					
	Airflow rate ※ 3 (Low-Mid2-Mid1-High) m³/min		13-14-14.5-15		13-14-15-16			
	External static pressure Pa		0					
Motor	Type		Single phase induction motor					
	Output kW		0.030					
Air filter			PP Honeycomb					
Refrigerant pipe dimension	Gas (Flare) mm		ø 12.7		ø 15.88			
	Liquid (Flare) mm		ø 6.35		ø 9.52			
Drain pipe dimension			VP-25					
Noise level (Lo-Mid2-Mid1-Hi) ※3 ※4		dB(A)	31-32.5-34-35		32-34-35.5-37	35-36.5-38-39		

			PLFY-P80VAM-A	PLFY-P100VAM-A	PLFY-P125VAM-A			
Power source			~ 220-240V 50Hz / ~ 220V 60Hz					
Cooling capacity	※ 1 kW		9.0	11.2	14.0			
	※ 2 kcal/h		8,000	10,000	12,500			
Heating capacity	※ 1 kW		10.0	12.5	16.0			
Power consumption	Cooling kW		0.18	0.30	0.34			
	Heating kW		0.18	0.30	0.34			
Current	Cooling A		0.86	1.43	1.64			
	Heating A		0.86	1.43	1.64			
External finish(Munsel No.)			Panel : 0.70Y 8.59/0.97					
Dimension ※ 3	Height mm		258(30)		298(30)			
	Width mm		840(950)					
	Depth mm		840(950)					
Net weight ※ 3	kg		24(5)	30(5)	30(5)			
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
Fan	Type		Turbo fan					
	Airflow rate ※ 3 (Low-Mid2-Mid1-High) m³/min		16-18-20-22		20-23-26-28			
	External static pressure Pa		0					
Motor	Type		Single phase induction motor					
	Output kW		0.070		0.120			
Air filter			PP Honeycomb					
Refrigerant pipe dimension	Gas (Flare) mm		ø 15.88		ø 19.05			
	Liquid (Flare) mm		ø 9.52					
Drain pipe dimension			VP-25					
Noise level (Lo-Mid2-Mid1-Hi) ※3 ※4		dB(A)	30-32-35-37	33-36-39-41	35-38-41-43			

Note: ① Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB

Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

② Cooling capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

③ External dimension/ net weight are shown in (unit/panel), and airflow rate/noise level are in (low-middle2-middle1-high).

④ It is measured in anechoic room.

## 2. Capacity Tables

### 2-1.Cooling Capacity (In combination with PUMY-(P)125YM(A))

PLFY-P-VKM-A/VAM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
32 (3.6)	20.0	3.6	2.7	3.7	2.8	4.0	2.8	4.2	2.9
	22.5	3.5	2.7	3.7	2.8	4.0	2.8	4.2	2.9
	25.0	3.5	2.7	3.7	2.8	3.9	2.8	4.1	2.8
	27.5	3.4	2.6	3.6	2.8	3.9	2.7	4.1	2.8
	30.0	3.4	2.6	3.6	2.7	3.8	2.7	4.1	2.8
	32.5	3.3	2.6	3.6	2.7	3.8	2.7	4.0	2.8
	35.0	3.3	2.6	3.5	2.7	3.7	2.7	4.0	2.8
	37.5	3.2	2.5	3.5	2.7	3.7	2.6	3.9	2.7
	40.0	3.2	2.5	3.4	2.7	3.6	2.6	3.9	2.7
	46.0	3.1	2.5	3.3	2.6	3.5	2.6	3.7	2.7
40 (4.5)	20.0	4.5	3.4	4.7	3.5	5.0	3.5	5.3	3.6
	22.5	4.4	3.4	4.6	3.5	5.0	3.5	5.2	3.6
	25.0	4.3	3.3	4.6	3.5	4.9	3.5	5.2	3.6
	27.5	4.3	3.3	4.6	3.5	4.9	3.5	5.1	3.6
	30.0	4.2	3.3	4.5	3.5	4.8	3.4	5.1	3.5
	32.5	4.2	3.3	4.4	3.4	4.7	3.4	5.0	3.5
	35.0	4.1	3.2	4.4	3.4	4.7	3.4	5.0	3.5
	37.5	4.1	3.2	4.3	3.4	4.6	3.3	4.9	3.5
	40.0	4.0	3.2	4.3	3.4	4.5	3.3	4.8	3.4
	46.0	3.8	3.1	4.1	3.3	4.3	3.2	4.6	3.4
50 (5.6)	20.0	5.5	4.0	5.8	4.2	6.2	4.1	6.6	4.3
	22.5	5.5	4.0	5.8	4.1	6.2	4.1	6.5	4.2
	25.0	5.4	3.9	5.7	4.1	6.1	4.1	6.4	4.2
	27.5	5.3	3.9	5.7	4.1	6.0	4.1	6.4	4.2
	30.0	5.3	3.9	5.6	4.1	5.9	4.0	6.3	4.1
	32.5	5.2	3.8	5.5	4.0	5.9	4.0	6.2	4.1
	35.0	5.1	3.8	5.5	4.0	5.8	3.9	6.2	4.1
	37.5	5.0	3.7	5.4	3.9	5.7	3.9	6.1	4.0
	40.0	5.0	3.7	5.3	3.9	5.6	3.9	6.0	4.0
	46.0	4.8	3.6	5.1	3.8	5.4	3.8	5.8	3.9
63 (7.1)	20.0	7.0	4.9	7.4	5.1	7.9	5.1	8.3	5.2
	22.5	6.9	4.9	7.3	5.1	7.8	5.1	8.2	5.2
	25.0	6.9	4.8	7.3	5.1	7.7	5.0	8.2	5.2
	27.5	6.8	4.8	7.2	5.0	7.7	5.0	8.1	5.1
	30.0	6.7	4.7	7.1	5.0	7.5	4.9	8.0	5.1
	32.5	6.6	4.7	7.0	4.9	7.5	4.9	7.9	5.0
	35.0	6.5	4.6	6.9	4.9	7.3	4.8	7.8	5.0
	37.5	6.4	4.6	6.8	4.8	7.2	4.8	7.7	5.0
	40.0	6.3	4.6	6.7	4.8	7.2	4.7	7.6	4.9
	46.0	6.1	4.4	6.5	4.7	6.9	4.6	7.3	4.8
80 (9.0)	20.0	8.9	6.4	9.4	6.7	10.0	6.7	10.6	6.9
	22.5	8.8	6.4	9.3	6.7	9.9	6.6	10.4	6.8
	25.0	8.7	6.3	9.2	6.6	9.8	6.6	10.4	6.8
	27.5	8.6	6.3	9.1	6.6	9.7	6.5	10.3	6.7
	30.0	8.5	6.2	9.0	6.5	9.5	6.5	10.2	6.7
	32.5	8.3	6.1	8.9	6.5	9.5	6.4	10.0	6.6
	35.0	8.2	6.1	8.8	6.4	9.3	6.4	9.9	6.6
	37.5	8.1	6.0	8.6	6.4	9.2	6.3	9.8	6.5
	40.0	8.0	6.0	8.6	6.3	9.1	6.2	9.6	6.5
	46.0	7.7	5.8	8.2	6.2	8.7	6.1	9.3	6.3
100 (11.2)	20.0	11.1	8.1	11.6	8.4	12.5	8.4	13.1	8.6
	22.5	10.9	8.0	11.5	8.4	12.3	8.3	13.0	8.6
	25.0	10.8	8.0	11.5	8.3	12.2	8.3	12.9	8.5
	27.5	10.7	7.9	11.3	8.3	12.1	8.2	12.8	8.5
	30.0	10.5	7.8	11.2	8.2	11.9	8.1	12.6	8.4
	32.5	10.4	7.7	11.1	8.2	11.8	8.1	12.5	8.4
	35.0	10.2	7.7	10.9	8.1	11.6	8.0	12.3	8.3
	37.5	10.1	7.6	10.8	8.0	11.4	7.9	12.2	8.2
	40.0	10.0	7.5	10.6	7.9	11.3	7.9	12.0	8.1
	46.0	9.6	7.4	10.2	7.8	10.8	7.7	11.5	7.9
125 (14.0)	20.0	13.9	9.7	14.6	10.1	15.6	10.1	16.4	10.3
	22.5	13.7	9.6	14.4	10.0	15.4	10.0	16.2	10.2
	25.0	13.5	9.5	14.3	10.0	15.3	9.9	16.1	10.2
	27.5	13.4	9.4	14.2	9.9	15.1	9.8	16.0	10.1
	30.0	13.2	9.3	14.0	9.8	14.9	9.7	15.8	10.0
	32.5	13.0	9.2	13.8	9.7	14.7	9.6	15.6	9.9
	35.0	12.8	9.1	13.7	9.6	14.5	9.5	15.4	9.8
	37.5	12.6	9.0	13.4	9.5	14.3	9.4	15.2	9.8
	40.0	12.5	9.0	13.3	9.4	14.1	9.4	15.0	9.7
	46.0	12.0	8.7	12.8	9.2	13.5	9.1	14.4	9.4

## 2-2.Heating Capacity (In combination with PUMY-(P)125YM(A))

**PLFY-P-VKM-A,VAM-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB		
		15.0 °CWB	20.0 SHC	25.0 SHC
32	-12.0	2.5	2.5	2.5
	-10.0	2.7	2.6	2.6
	-5.0	3.1	3.0	3.0
	0.0	3.5	3.4	3.4
	2.5	3.7	3.7	3.6
	6.0	4.0	4.0	3.9
	7.5	4.2	4.1	4.0
	10.0	4.4	4.4	4.0
	12.5	4.7	4.4	4.0
	15.5	4.9	4.4	4.0
40	-12.0	3.2	3.1	3.1
	-10.0	3.4	3.3	3.2
	-5.0	3.8	3.8	3.7
	0.0	4.3	4.3	4.2
	2.5	4.6	4.6	4.5
	6.0	5.0	5.0	4.9
	7.5	5.2	5.2	5.0
	10.0	5.5	5.5	5.0
	12.5	5.9	5.5	5.0
	15.5	6.2	5.5	5.0
50	-12.0	4.0	3.9	3.9
	-10.0	4.2	4.2	4.1
	-5.0	4.8	4.8	4.7
	0.0	5.5	5.4	5.3
	2.5	5.8	5.8	5.7
	6.0	6.3	6.3	6.2
	7.5	6.6	6.5	6.2
	10.0	7.0	6.9	6.2
	12.5	7.4	7.0	6.2
	15.5	7.7	7.0	6.2
63	-12.0	5.1	5.0	4.9
	-10.0	5.4	5.3	5.2
	-5.0	6.1	6.0	5.9
	0.0	6.9	6.9	6.8
	2.5	7.4	7.3	7.2
	6.0	8.0	8.0	7.9
	7.5	8.3	8.3	7.9
	10.0	8.8	8.8	7.9
	12.5	9.4	8.8	7.9
	15.5	9.8	8.8	7.9

Unit size	Outdoor air temp.	SHC:Sensible heat Capacity(kW)		
		15.0 °CWB	20.0 SHC	25.0 SHC
80	-12.0	6.4	6.2	6.1
	-10.0	6.7	6.6	6.5
	-5.0	7.6	7.5	7.4
	0.0	8.7	8.6	8.5
	2.5	9.2	9.2	9.0
	6.0	10.1	10.0	9.9
	7.5	10.4	10.4	9.9
	10.0	11.1	11.0	9.9
	12.5	11.7	11.0	9.9
	15.5	12.3	11.0	9.9
100	-12.0	8.0	7.8	7.7
	-10.0	8.4	8.2	8.1
	-5.0	9.6	9.4	9.3
	0.0	10.9	10.7	10.6
	2.5	11.5	11.4	11.3
	6.0	12.6	12.5	12.3
	7.5	13.0	12.9	12.4
	10.0	13.8	13.7	12.4
	12.5	14.6	13.8	12.4
	15.5	15.4	13.8	12.4
125	-12.0	10.2	10.0	9.8
	-10.0	10.7	10.6	10.4
	-5.0	12.2	12.1	11.9
	0.0	13.9	13.8	13.6
	2.5	14.8	14.7	14.5
	6.0	16.1	16.0	15.8
	7.5	16.7	16.6	15.8
	10.0	17.7	17.6	15.8
	12.5	18.7	17.7	15.8
	15.5	19.7	17.7	15.8

### 2-3.Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

PLFY-P-VKM-A,VAM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA										
32 (3.6)	20.0	3.5	2.7	3.6	2.7	3.7	2.7	3.8	2.7	3.9	2.8	4.0	2.7	4.2	2.6
	22.5	3.5	2.7	3.6	2.7	3.7	2.7	3.8	2.7	3.9	2.8	4.0	2.7	4.1	2.6
	25.0	3.5	2.6	3.5	2.7	3.7	2.6	3.7	2.7	3.8	2.8	4.0	2.7	4.1	2.6
	27.5	3.4	2.6	3.5	2.7	3.6	2.6	3.7	2.7	3.8	2.7	3.9	2.7	4.1	2.6
	30.0	3.4	2.6	3.5	2.7	3.6	2.6	3.7	2.6	3.7	2.7	3.9	2.7	4.0	2.6
	32.5	3.3	2.6	3.4	2.7	3.6	2.6	3.6	2.6	3.7	2.7	3.9	2.7	4.0	2.6
	35.0	3.3	2.6	3.4	2.6	3.5	2.6	3.6	2.6	3.7	2.7	3.8	2.6	4.0	2.6
	37.5	3.3	2.6	3.3	2.6	3.5	2.6	3.6	2.6	3.6	2.7	3.8	2.6	3.9	2.6
	40.0	3.2	2.5	3.3	2.6	3.5	2.6	3.5	2.6	3.6	2.7	3.7	2.6	3.9	2.5
	43.0	3.2	2.5	3.3	2.6	3.4	2.5	3.5	2.6	3.6	2.7	3.7	2.6	3.8	2.5
40 (4.5)	20.0	4.4	3.4	4.5	3.5	4.7	3.4	4.8	3.4	4.9	3.5	5.0	3.4	5.2	3.3
	22.5	4.4	3.4	4.5	3.4	4.6	3.4	4.7	3.4	4.8	3.5	5.0	3.4	5.2	3.3
	25.0	4.3	3.3	4.4	3.4	4.6	3.3	4.7	3.4	4.8	3.5	5.0	3.4	5.1	3.3
	27.5	4.3	3.3	4.4	3.4	4.5	3.3	4.6	3.4	4.7	3.5	4.9	3.4	5.1	3.3
	30.0	4.2	3.3	4.3	3.4	4.5	3.3	4.6	3.3	4.7	3.5	4.9	3.4	5.0	3.3
	32.5	4.2	3.3	4.3	3.4	4.5	3.3	4.5	3.3	4.6	3.4	4.8	3.4	5.0	3.3
	35.0	4.1	3.2	4.2	3.3	4.4	3.3	4.5	3.3	4.6	3.4	4.8	3.3	5.0	3.3
	37.5	4.1	3.2	4.2	3.3	4.4	3.2	4.5	3.3	4.5	3.4	4.7	3.3	4.9	3.2
	40.0	4.1	3.2	4.1	3.3	4.3	3.2	4.4	3.3	4.5	3.4	4.7	3.3	4.9	3.2
	43.0	4.0	3.2	4.1	3.3	4.3	3.2	4.4	3.2	4.4	3.4	4.6	3.3	4.8	3.2
50 (5.6)	20.0	5.5	4.0	5.6	4.1	5.8	4.0	5.9	4.0	6.0	4.1	6.3	4.0	6.5	3.9
	22.5	5.4	3.9	5.5	4.0	5.8	3.9	5.9	4.0	6.0	4.1	6.2	4.0	6.4	3.9
	25.0	5.4	3.9	5.5	4.0	5.7	3.9	5.8	3.9	5.9	4.1	6.2	3.9	6.4	3.8
	27.5	5.3	3.9	5.4	4.0	5.7	3.9	5.8	3.9	5.9	4.0	6.1	3.9	6.3	3.8
	30.0	5.3	3.9	5.4	3.9	5.6	3.9	5.7	3.9	5.8	4.0	6.0	3.9	6.3	3.8
	32.5	5.2	3.8	5.3	3.9	5.5	3.8	5.7	3.9	5.8	4.0	6.0	3.9	6.2	3.8
	35.0	5.2	3.8	5.3	3.9	5.5	3.8	5.6	3.8	5.7	4.0	5.9	3.9	6.2	3.8
	37.5	5.1	3.8	5.2	3.9	5.4	3.8	5.5	3.8	5.7	3.9	5.9	3.8	6.1	3.7
	40.0	5.0	3.7	5.2	3.8	5.4	3.8	5.5	3.8	5.6	3.9	5.8	3.8	6.0	3.7
	43.0	5.0	3.7	5.1	3.8	5.3	3.7	5.4	3.8	5.5	3.9	5.8	3.8	6.0	3.7
63 (7.1)	20.0	7.0	4.9	7.1	5.0	7.4	4.9	7.5	4.9	7.7	5.0	8.0	4.9	8.2	4.7
	22.5	6.9	4.9	7.0	4.9	7.3	4.8	7.5	4.8	7.6	5.0	7.9	4.8	8.2	4.7
	25.0	6.8	4.8	7.0	4.9	7.2	4.8	7.4	4.8	7.5	4.9	7.8	4.8	8.1	4.7
	27.5	6.7	4.8	6.9	4.9	7.2	4.8	7.3	4.8	7.5	4.9	7.7	4.8	8.0	4.6
	30.0	6.7	4.7	6.8	4.8	7.1	4.7	7.2	4.7	7.4	4.9	7.7	4.7	8.0	4.6
	32.5	6.6	4.7	6.7	4.8	7.0	4.7	7.2	4.7	7.3	4.8	7.6	4.7	7.9	4.6
	35.0	6.5	4.7	6.7	4.8	7.0	4.7	7.1	4.7	7.2	4.8	7.5	4.7	7.8	4.6
	37.5	6.5	4.6	6.6	4.7	6.9	4.6	7.0	4.6	7.2	4.8	7.5	4.7	7.7	4.5
	40.0	6.4	4.6	6.5	4.7	6.8	4.6	7.0	4.6	7.1	4.8	7.4	4.6	7.7	4.5
	43.0	6.3	4.6	6.4	4.6	6.7	4.6	6.9	4.6	7.0	4.7	7.3	4.6	7.6	4.5
80 (9.0)	20.0	8.8	6.4	9.0	6.5	9.4	6.4	9.5	6.4	9.7	6.6	10.1	6.4	10.4	6.2
	22.5	8.7	6.4	8.9	6.5	9.3	6.3	9.5	6.4	9.6	6.6	10.0	6.4	10.4	6.2
	25.0	8.6	6.3	8.8	6.4	9.2	6.3	9.4	6.3	9.5	6.5	9.9	6.4	10.3	6.2
	27.5	8.6	6.3	8.7	6.4	9.1	6.3	9.3	6.3	9.5	6.5	9.8	6.3	10.2	6.1
	30.0	8.5	6.2	8.6	6.4	9.0	6.2	9.2	6.3	9.4	6.5	9.7	6.3	10.1	6.1
	32.5	8.4	6.2	8.6	6.3	8.9	6.2	9.1	6.2	9.3	6.4	9.6	6.3	10.0	6.1
	35.0	8.3	6.1	8.5	6.3	8.8	6.1	9.0	6.2	9.2	6.4	9.5	6.2	9.9	6.0
	37.5	8.2	6.1	8.4	6.2	8.7	6.1	8.9	6.1	9.1	6.3	9.5	6.2	9.8	6.0
	40.0	8.1	6.0	8.3	6.2	8.6	6.1	8.8	6.1	9.0	6.3	9.4	6.1	9.7	6.0
	43.0	8.0	6.0	8.2	6.1	8.5	6.0	8.7	6.1	8.9	6.3	9.3	6.1	9.6	5.9
100 (11.2)	20.0	11.0	8.0	11.2	8.2	11.6	8.0	11.9	8.1	12.1	8.3	12.5	8.1	13.0	7.9
	22.5	10.9	8.0	11.1	8.2	11.5	8.0	11.8	8.0	12.0	8.3	12.4	8.1	12.9	7.8
	25.0	10.8	7.9	11.0	8.1	11.4	7.9	11.6	8.0	11.9	8.2	12.3	8.0	12.8	7.8
	27.5	10.6	7.9	10.9	8.1	11.3	7.9	11.5	7.9	11.8	8.2	12.2	8.0	12.7	7.8
	30.0	10.5	7.8	10.8	8.0	11.2	7.8	11.4	7.9	11.6	8.1	12.1	7.9	12.5	7.7
	32.5	10.4	7.8	10.6	7.9	11.1	7.8	11.3	7.8	11.5	8.1	12.0	7.9	12.4	7.7
	35.0	10.3	7.7	10.5	7.9	11.0	7.7	11.2	7.8	11.4	8.1	11.9	7.9	12.3	7.6
	37.5	10.2	7.7	10.4	7.8	10.9	7.7	11.1	7.8	11.3	8.0	11.8	7.8	12.2	7.6
	40.0	10.1	7.6	10.3	7.8	10.8	7.6	11.0	7.7	11.2	8.0	11.6	7.8	12.1	7.6
	43.0	9.9	7.5	10.2	7.7	10.6	7.6	10.8	7.6	11.1	7.9	11.5	7.7	12.0	7.5
125 (14.0)	20.0	13.7	9.6	14.0	9.8	14.6	9.6	14.8	9.6	15.1	9.9	15.7	9.6	16.2	9.3
	22.5	13.6	9.6	13.9	9.7	14.4	9.5	14.7	9.5	15.0	9.8	15.5	9.5	16.1	9.2
	25.0	13.4	9.5	13.7	9.7	14.3	9.4	14.6	9.5	14.8	9.7	15.4	9.5	16.0	9.2
	27.5	13.3	9.4	13.6	9.6	14.1	9.4	14.4	9.4	14.7	9.7	15.3	9.4	15.8	9.1
	30.0	13.2	9.3	13.4	9.5	14.0	9.3	14.3	9.3	14.6	9.6	15.1	9.3	15.7	9.1
	32.5	13.0	9.3	13.3	9.4	13.9	9.2	14.1	9.3	14.4	9.5	15.0	9.3	15.5	9.0
	35.0	12.9	9.2	13.2	9.4	13.7	9.2	14.0	9.2	14.3	9.5	14.8	9.2	15.4	9.0
	37.5	12.7	9.1	13.0	9.3	13.6	9.1	13.9	9.1	14.1	9.4	14.7	9.2	15.3	8.9
	40.0	12.6	9.0	12.9	9.2	13.4	9.0	13.7	9.1	14.0	9.4	14.6	9.1	15.1	8.9
	43.0	12.4	9.0	12.7	9.1	13.3	9.0	13.6	9.0	13.8	9.3	14.4	9.1	15.0	8.8

PLFY-P  
VKM-A/VAM-A

## 2-4.Heating Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

**PLFY-P-VKM-A,VAM-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC	SHC	SHC	SHC
32	-15.0	2.7	2.6	2.6	2.6
	-10.0	3.1	3.0	2.8	
	-5.0	3.4	3.4	3.1	2.8
	0.0	3.8	3.8	3.1	2.8
	2.5	4.0	4.0	3.1	2.8
	6.0	4.0	4.0	3.1	2.8
	7.5	4.2	4.0	3.1	2.8
	10.0	4.5	4.0	3.1	2.8
	12.5	4.8	4.0	3.1	2.8
	15.5	4.8	4.0	3.1	2.8
40	-15.0	3.3	3.3	3.3	3.3
	-10.0	3.8	3.8	3.7	3.5
	-5.0	4.3	4.2	3.9	3.5
	0.0	4.8	4.7	3.9	3.5
	2.5	5.0	5.0	3.9	3.5
	6.0	5.1	5.0	3.9	3.5
	7.5	5.3	5.0	3.9	3.5
	10.0	5.6	5.0	3.9	3.5
	12.5	6.0	5.0	3.9	3.5
	15.5	6.1	5.0	3.9	3.5
50	-15.0	4.2	4.2	4.1	4.1
	-10.0	4.8	4.8	4.7	4.3
	-5.0	5.4	5.3	4.9	4.3
	0.0	6.0	5.9	4.9	4.3
	2.5	6.3	6.2	4.9	4.3
	6.0	6.4	6.3	4.9	4.3
	7.5	6.6	6.3	4.9	4.3
	10.0	7.1	6.3	4.9	4.3
	12.5	7.5	6.3	4.9	4.3
	15.5	7.6	6.3	4.9	4.3
63	-15.0	5.4	5.3	5.2	5.2
	-10.0	6.1	6.0	6.0	5.5
	-5.0	6.9	6.8	6.2	5.5
	0.0	7.6	7.5	6.2	5.5
	2.5	8.0	7.9	6.2	5.5
	6.0	8.1	8.0	6.2	5.5
	7.5	8.4	8.0	6.2	5.5
	10.0	9.0	8.0	6.2	5.5
	12.5	9.6	8.0	6.2	5.5
	15.5	9.7	8.0	6.2	5.5

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC	SHC	SHC	SHC
80	-15.0	6.7	6.6	6.5	6.5
	-10.0	7.6	7.5	7.4	6.9
	-5.0	8.6	8.5	7.8	6.9
	0.0	9.5	9.4	7.8	6.9
	2.5	10.0	9.9	7.8	6.9
	6.0	10.1	10.0	7.8	6.9
	7.5	10.5	10.0	7.8	6.9
	10.0	11.2	10.0	7.8	6.9
	12.5	12.0	10.0	7.8	6.9
	15.5	12.1	10.0	7.8	6.9
100	-15.0	8.4	8.2	8.2	8.1
	-10.0	9.6	9.4	9.3	8.6
	-5.0	10.7	10.6	9.8	8.6
	0.0	11.9	11.8	9.8	8.6
	2.5	12.5	12.4	9.8	8.6
	6.0	12.6	12.5	9.8	8.6
	7.5	13.2	12.5	9.8	8.6
	10.0	14.1	12.5	9.8	8.6
	12.5	15.0	12.5	9.8	8.6
	15.5	15.1	12.5	9.8	8.6
125	-15.0	10.7	10.6	10.5	10.4
	-10.0	12.2	12.1	11.9	11.0
	-5.0	13.7	13.6	12.5	11.0
	0.0	15.3	15.1	12.5	11.0
	2.5	16.0	15.8	12.5	11.0
	6.0	16.2	16.0	12.5	11.0
	7.5	16.8	16.0	12.5	11.0
	10.0	18.0	16.0	12.5	11.0
	12.5	19.1	16.0	12.5	11.0
	15.5	19.4	16.0	12.5	11.0

**2-5.Cooling Capacity**

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

**PLFY-P-VKM-A,VAM-A**CA:Capacity(kcal/h)  
SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB			
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	
32	20.0	2855	2215	2995	2308	3227	2307	3398	2374	3452	2445	3654	2411	3872	2374
	22.5	2855	2215	2983	2302	3199	2295	3357	2357	3409	2427	3606	2393	3817	2355
	25.0	2833	2204	2954	2289	3163	2279	3315	2340	3366	2410	3558	2374	3763	2336
	27.5	2810	2193	2925	2275	3127	2263	3274	2323	3323	2392	3510	2356	3708	2317
	30.0	2787	2182	2896	2262	3091	2247	3233	2306	3280	2375	3462	2338	3653	2298
	32.5	2765	2172	2868	2249	3055	2232	3191	2289	3237	2358	3414	2320	3598	2279
	35.0	2742	2161	2839	2235	3018	2216	3150	2272	3194	2340	3366	2302	3544	2260
	37.5	2719	2150	2810	2222	2982	2201	3109	2255	3151	2323	3318	2285	3489	2242
	40.0	2696	2139	2781	2209	2946	2185	3067	2238	3109	2306	3270	2267	3434	2223
	43.0	2669	2126	2746	2193	2902	2166	3018	2218	3057	2285	3212	2246	3368	2201
40	20.0	3625	2821	3803	2940	4098	2939	4315	3025	4383	3116	4640	3072	4917	3026
	22.5	3625	2821	3788	2933	4063	2923	4262	3003	4329	3094	4579	3049	4848	3001
	25.0	3597	2808	3751	2916	4017	2903	4210	2981	4274	3071	4518	3026	4778	2977
	27.5	3568	2794	3715	2899	3971	2883	4157	2960	4220	3049	4457	3003	4708	2953
	30.0	3539	2780	3678	2882	3925	2863	4105	2938	4165	3027	4396	2980	4639	2929
	32.5	3511	2766	3641	2865	3879	2843	4052	2917	4111	3005	4335	2957	4569	2905
	35.0	3482	2753	3605	2848	3833	2823	4000	2895	4056	2983	4274	2935	4500	2881
	37.5	3453	2739	3568	2831	3787	2804	3948	2874	4002	2961	4213	2912	4430	2857
	40.0	3424	2725	3531	2815	3741	2784	3895	2852	3947	2940	4152	2889	4361	2834
	43.0	3389	2709	3487	2794	3686	2760	3832	2827	3882	2914	4078	2863	4277	2806
50	20.0	4532	3322	4753	3454	5123	3457	5393	3548	5479	3644	5800	3591	6146	3535
	22.5	4532	3322	4735	3445	5078	3436	5328	3520	5411	3614	5724	3561	6059	3503
	25.0	4496	3304	4689	3423	5021	3410	5262	3491	5343	3585	5648	3530	5972	3471
	27.5	4460	3286	4643	3400	4963	3384	5197	3462	5275	3556	5571	3500	5886	3439
	30.0	4424	3268	4597	3378	4906	3357	5131	3434	5207	3527	5495	3470	5799	3407
	32.5	4388	3249	4552	3356	4848	3331	5066	3405	5139	3498	5419	3439	5712	3375
	35.0	4352	3231	4506	3333	4791	3305	5000	3377	5070	3469	5342	3410	5625	3344
	37.5	4316	3214	4460	3311	4734	3279	4934	3349	5002	3440	5266	3380	5538	3313
	40.0	4280	3196	4414	3289	4676	3253	4869	3321	4934	3412	5190	3350	5451	3282
	43.0	4237	3174	4359	3263	4607	3222	4790	3288	4852	3377	5098	3315	5347	3244
63	20.0	5710	4063	5989	4220	6455	4227	6796	4332	6904	4441	7309	4376	7744	4306
	22.5	5710	4063	5966	4209	6399	4200	6713	4295	6818	4402	7212	4336	7635	4264
	25.0	5665	4040	5908	4179	6326	4166	6630	4257	6732	4364	7116	4296	7525	4222
	27.5	5620	4016	5851	4150	6254	4131	6548	4220	6646	4326	7020	4256	7416	4180
	30.0	5574	3992	5793	4121	6181	4097	6465	4182	6560	4288	6924	4217	7306	4138
	32.5	5529	3969	5735	4092	6109	4063	6383	4145	6475	4250	6828	4177	7197	4097
	35.0	5484	3945	5677	4063	6037	4029	6300	4109	6389	4212	6731	4138	7087	4056
	37.5	5438	3922	5620	4034	5964	3995	6217	4072	6303	4175	6635	4099	6978	4015
	40.0	5393	3899	5562	4005	5892	3961	6135	4035	6217	4137	6539	4060	6868	3974
	43.0	5338	3871	5493	3971	5805	3921	6036	3992	6114	4093	6424	4014	6737	3926
80	20.0	7251	5334	7605	5548	8196	5551	8629	5699	8767	5854	9281	5769	9834	5678
	22.5	7251	5334	7576	5533	8125	5518	8525	5653	8658	5807	9159	5720	9695	5627
	25.0	7194	5305	7503	5497	8033	5476	8420	5607	8549	5760	9036	5672	9556	5575
	27.5	7136	5276	7429	5462	7941	5434	8315	5562	8440	5714	8914	5623	9417	5525
	30.0	7079	5247	7356	5426	7849	5392	8210	5516	8331	5667	8792	5575	9278	5474
	32.5	7021	5219	7283	5391	7758	5350	8105	5471	8222	5621	8670	5527	9139	5424
	35.0	6963	5190	7209	5355	7666	5309	8000	5426	8113	5575	8548	5479	9000	5374
	37.5	6906	5161	7136	5320	7574	5268	7895	5381	8004	5529	8426	5432	8861	5324
	40.0	6848	5133	7063	5285	7482	5226	7790	5337	7895	5484	8304	5385	8722	5274
	43.0	6779	5098	6975	5243	7371	5177	7664	5283	7764	5429	8157	5328	8555	5215
100	20.0	9063	6734	9507	7007	10245	7009	10787	7200	10958	7400	11601	7293	12293	7179
	22.5	9063	6734	9470	6989	10157	6969	10656	7143	10822	7342	11448	7233	12119	7115
	25.0	8993	6699	9378	6945	10042	6917	10525	7087	10686	7284	11296	7173	11945	7052
	27.5	8920	6663	9287	6901	9927	6865	10393	7030	10550	7227	11143	7113	11771	6989
	30.0	8848	6627	9195	6857	9812	6813	10262	6974	10413	7169	10990	7053	11597	6926
	32.5	8776	6592	9103	6813	9697	6761	10131	6918	10277	7112	10837	6994	11423	6864
	35.0	8704	6556	9012	6769	9582	6710	10000	6863	10141	7055	10685	6935	11250	6802
	37.5	8632	6521	8920	6725	9467	6659	9869	6807	10005	6999	10532	6876	11076	6741
	40.0	8560	6485	8828	6681	9352	6608	9738	6752	9868	6942	10379	6818	10902	6679
	43.0	8474	6443	8718	6629	9214	6547	9580	6686	9705	6875	10196	6748	10693	6606
125	20.0	11329	8037	11883	8348	12807	8362	13484	8569	13698	8782	14501	8653	15366	8513
	22.5	11329	8037	11837	8325	12696	8309	13320	8494	13527	8705	14310	8573	15149	8429
	25.0	11241	7991	11723	8287	12552	8240	13156	8419	13357	8629	14119	8493	14931	8345
	27.5	11151	7944	11608	8208	12408	8171	12992	8344	13187	8553	13929	8414	14714	8262
	30.0	11060	7897	11494	8150	12265	8103	12828	8270	13017	8477	13738	8335	14497	8179
	32.5	10970	7850	11379	8092	12121	8035	12664	8197	12846	8402	13547	8257	14279	8097
	35.0	10880	7804	11265	8035	11977	7967	12500	8123	12676					

## 2-6.Heating Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

**PLFY-P-VKM-A,VAM-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
80	-15.0	6221	6128	6036	5998
	-10.0	7098	7005	6912	6402
	-5.0	7975	7882	7237	6402
	0.0	8852	8759	7237	6402
	2.5	9290	9000	7237	6402
	6.0	9371	9000	7237	6402
	7.5	9765	9000	7237	6402
	10.0	10421	9000	7237	6402
	12.5	11078	9000	7237	6402
	15.5	11227	9000	7237	6402
100	-15.0	7742	7626	7511	7465
	-10.0	8833	8718	8602	7967
	-5.0	9924	9809	9006	7967
	0.0	11015	10900	9006	7967
	2.5	11561	11200	9006	7967
	6.0	11662	11200	9006	7967
	7.5	12152	11200	9006	7967
	10.0	12969	11200	9006	7967
	12.5	13786	11200	9006	7967
	15.5	13971	11200	9006	7967
125	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959
	-5.0	12405	12261	11258	9959
	0.0	13769	13625	11258	9959
	2.5	14451	14000	11258	9959
	6.0	14577	14000	11258	9959
	7.5	15190	14000	11258	9959
	10.0	16211	14000	11258	9959
	12.5	17232	14000	11258	9959
	15.5	17464	14000	11258	9959

## 2-7.Cooling Capacity (In combination with PQRY-P200-250YMF-C)

**PLFY-P-VKM-A,VAM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°C	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
32	10	3.5	2.7	3.6	2.8	3.9	2.7	4.0	2.8	4.1	2.9	4.3	2.8	4.5	2.8
	20	3.4	2.6	3.5	2.7	3.7	2.7	3.8	2.7	3.9	2.8	4.1	2.8	4.4	2.7
	30	3.2	2.5	3.3	2.6	3.5	2.6	3.6	2.6	3.7	2.7	3.9	2.7	4.1	2.6
	40	2.8	2.3	2.9	2.4	3.1	2.4	3.1	2.4	3.2	2.5	3.4	2.5	3.6	2.5
	45	2.6	2.2	2.7	2.3	2.9	2.3	3.0	2.4	3.0	2.5	3.2	2.4	3.4	2.4
40	10	4.4	3.4	4.5	3.5	4.8	3.4	5.0	3.5	5.1	3.6	5.4	3.6	5.7	3.5
	20	4.2	3.3	4.4	3.4	4.6	3.4	4.8	3.4	4.9	3.5	5.2	3.5	5.5	3.4
	30	4.0	3.2	4.1	3.3	4.4	3.3	4.5	3.3	4.6	3.4	4.9	3.4	5.2	3.3
	40	3.5	2.9	3.6	3.0	3.8	3.0	3.9	3.1	4.0	3.2	4.3	3.2	4.5	3.1
	45	3.3	2.8	3.4	2.9	3.6	2.9	3.7	3.0	3.8	3.1	4.0	3.1	4.2	3.0
50	10	5.5	4.0	5.6	4.1	6.0	4.0	6.2	4.1	6.3	4.2	6.7	4.2	7.1	4.1
	20	5.3	3.9	5.4	4.0	5.8	3.9	5.9	4.0	6.1	4.1	6.5	4.1	6.8	4.0
	30	5.0	3.7	5.1	3.8	5.5	3.8	5.6	3.8	5.8	4.0	6.1	3.9	6.4	3.8
	40	4.3	3.4	4.5	3.5	4.7	3.5	4.9	3.5	5.0	3.7	5.3	3.6	5.6	3.6
	45	4.1	3.3	4.2	3.4	4.5	3.4	4.6	3.4	4.7	3.6	5.0	3.5	5.3	3.4
63	10	6.9	4.9	7.2	5.0	7.6	5.0	7.8	5.0	8.0	5.2	8.5	5.1	9.0	5.0
	20	6.7	4.7	6.9	4.9	7.3	4.8	7.5	4.9	7.8	5.0	8.2	5.0	8.6	4.9
	30	6.3	4.5	6.5	4.7	6.9	4.6	7.1	4.7	7.3	4.9	7.7	4.8	8.1	4.7
	40	5.5	4.1	5.7	4.3	6.0	4.2	6.2	4.3	6.4	4.4	6.7	4.4	7.1	4.3
	45	5.2	4.0	5.3	4.1	5.7	4.1	5.8	4.1	6.0	4.3	6.3	4.2	6.7	4.2
80	10	8.8	6.4	9.1	6.6	9.6	6.5	9.9	6.6	10.2	6.8	10.8	6.7	11.4	6.6
	20	8.5	6.2	8.7	6.4	9.3	6.3	9.5	6.4	9.8	6.7	10.4	6.5	10.9	6.4
	30	8.0	6.0	8.3	6.2	8.8	6.1	9.0	6.2	9.3	6.4	9.8	6.3	10.3	6.2
	40	6.9	5.5	7.2	5.7	7.6	5.6	7.8	5.7	8.1	5.9	8.5	5.8	9.0	5.7
	45	6.5	5.3	6.8	5.5	7.2	5.4	7.4	5.5	7.6	5.7	8.0	5.6	8.5	5.6
100	10	10.9	8.0	11.3	8.3	12.0	8.2	12.3	8.3	12.7	8.6	13.4	8.4	14.1	8.3
	20	10.5	7.8	10.9	8.1	11.6	8.0	11.9	8.1	12.2	8.4	12.9	8.3	13.6	8.1
	30	9.9	7.5	10.3	7.8	10.9	7.7	11.2	7.8	11.5	8.1	12.2	8.0	12.8	7.8
	40	8.6	6.9	8.9	7.2	9.5	7.1	9.7	7.2	10.0	7.5	10.6	7.4	11.2	7.3
	45	8.1	6.7	8.4	6.9	8.9	6.9	9.2	7.0	9.5	7.3	10.0	7.2	10.5	7.0
125	10	13.7	9.6	14.1	9.9	15.0	9.8	15.4	9.8	15.9	10.2	16.7	10.0	17.7	9.8
	20	13.2	9.3	13.6	9.6	14.5	9.5	14.8	9.6	15.3	9.9	16.1	9.8	17.0	9.6
	30	12.4	9.0	12.8	9.2	13.6	9.1	14.0	9.2	14.4	9.5	15.2	9.4	16.1	9.2
	40	10.8	8.1	11.2	8.4	11.9	8.3	12.2	8.4	12.5	8.7	13.2	8.6	14.0	8.5
	45	10.2	7.8	10.5	8.1	11.2	8.0	11.5	8.1	11.8	8.5	12.5	8.3	13.2	8.2

## 2-8.Heatling Capacity (In combination with PQRY-P200-250YMF-C)

**PLFY-P-VKM-A,VAM-A**

SHC:Sensible heat Capacity(kW)

Unit size	Water temp. °C	Indoor air temp.:°CDB				
		15	19	20	25	27
32	10	3.5	3.5	3.4	2.7	2.4
	20	4.1	4.1	4.0	3.2	2.9
	30	4.1	4.1	4.0	3.2	2.9
	40	4.3	4.2	4.2	3.3	3.0
	45	4.7	4.7	4.6	3.6	3.3
40	10	4.4	4.3	4.3	3.4	3.1
	20	5.2	5.1	5.0	4.0	3.6
	30	5.2	5.1	5.0	4.0	3.6
	40	5.4	5.3	5.2	4.2	3.7
	45	5.9	5.8	5.7	4.6	4.1
50	10	5.5	5.5	5.4	4.3	3.9
	20	6.5	6.4	6.3	5.0	4.5
	30	6.5	6.4	6.3	5.0	4.5
	40	6.7	6.7	6.6	5.2	4.7
	45	7.4	7.3	7.2	5.7	5.2
63	10	7.0	6.9	6.8	5.4	4.9
	20	8.2	8.2	8.0	6.4	5.8
	30	8.2	8.2	8.0	6.4	5.8
	40	8.6	8.5	8.3	6.7	6.0
	45	9.4	9.3	9.1	7.3	6.6
80	10	8.8	8.7	8.5	6.8	6.1
	20	10.3	10.2	10.0	8.0	7.2
	30	10.3	10.2	10.0	8.0	7.2
	40	10.7	10.6	10.4	8.3	7.5
	45	11.7	11.6	11.4	9.1	8.2
100	10	10.9	10.8	10.6	8.5	7.7
	20	12.9	12.8	12.5	10.0	9.0
	30	12.9	12.8	12.5	10.0	9.0
	40	13.4	13.3	13.0	10.4	9.4
	45	14.7	14.5	14.3	11.4	10.3
125	10	14.0	13.9	13.6	10.9	9.8
	20	16.5	16.3	16.0	12.8	11.5
	30	16.5	16.3	16.0	12.8	11.5
	40	17.1	17.0	16.6	13.3	12.0
	45	18.8	18.6	18.2	14.6	13.1

## 2-9.Cooling Capacity (In combination with PURY-P400-500YMF-C)

PLFY-P-VKM-A,VAM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	CA:Capacity(kW)												
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB		
°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC
32	20.0	3.3	2.6	3.5	2.7	3.7	2.7	4.0	2.8	4.2	2.8	4.5	2.8	
	22.5	3.3	2.6	3.5	2.7	3.7	2.7	4.0	2.8	4.2	2.8	4.4	2.7	
	25.0	3.3	2.6	3.4	2.7	3.7	2.6	3.9	2.8	4.1	2.8	4.4	2.7	
	27.5	3.3	2.5	3.4	2.6	3.6	2.6	3.9	2.8	4.1	2.7	4.3	2.7	
	30.0	3.2	2.5	3.4	2.6	3.6	2.6	3.8	2.8	4.0	2.7	4.2	2.7	
	32.5	3.2	2.5	3.3	2.6	3.5	2.6	3.8	2.7	4.0	2.7	4.2	2.6	
	35.0	3.2	2.5	3.3	2.6	3.5	2.6	3.7	2.7	3.9	2.7	4.1	2.6	
	37.5	3.2	2.5	3.3	2.6	3.5	2.6	3.7	2.7	3.8	2.7	4.0	2.6	
	40.0	3.1	2.5	3.2	2.6	3.4	2.5	3.6	2.7	3.8	2.6	4.0	2.6	
	43.0	3.1	2.5	3.2	2.5	3.4	2.5	3.5	2.7	3.7	2.6	3.9	2.6	
40	20.0	4.1	3.2	4.3	3.4	4.7	3.4	5.0	3.6	5.3	3.5	5.6	3.5	
	22.5	4.1	3.2	4.3	3.4	4.6	3.4	4.9	3.6	5.2	3.5	5.5	3.5	
	25.0	4.1	3.2	4.3	3.4	4.6	3.3	4.9	3.5	5.2	3.5	5.5	3.4	
	27.5	4.1	3.2	4.2	3.3	4.5	3.3	4.8	3.5	5.1	3.5	5.4	3.4	
	30.0	4.0	3.2	4.2	3.3	4.5	3.3	4.8	3.5	5.0	3.4	5.3	3.4	
	32.5	4.0	3.2	4.2	3.3	4.4	3.3	4.7	3.5	5.0	3.4	5.2	3.3	
	35.0	4.0	3.2	4.1	3.3	4.4	3.3	4.6	3.4	4.9	3.4	5.1	3.3	
	37.5	3.9	3.2	4.1	3.3	4.3	3.2	4.6	3.4	4.8	3.4	5.1	3.3	
	40.0	3.9	3.1	4.0	3.2	4.3	3.2	4.5	3.4	4.7	3.3	5.0	3.3	
	43.0	3.9	3.1	4.0	3.2	4.2	3.2	4.4	3.4	4.7	3.3	4.9	3.2	
50	20.0	5.2	3.8	5.4	4.0	5.8	4.0	6.2	4.2	6.6	4.1	7.0	4.1	
	22.5	5.2	3.8	5.4	3.9	5.8	3.9	6.2	4.1	6.5	4.1	6.9	4.0	
	25.0	5.1	3.8	5.3	3.9	5.7	3.9	6.1	4.1	6.4	4.0	6.8	4.0	
	27.5	5.1	3.8	5.3	3.9	5.6	3.9	6.0	4.1	6.3	4.0	6.7	3.9	
	30.0	5.0	3.7	5.2	3.9	5.6	3.8	5.9	4.0	6.2	4.0	6.6	3.9	
	32.5	5.0	3.7	5.2	3.8	5.5	3.8	5.8	4.0	6.2	3.9	6.5	3.9	
	35.0	4.9	3.7	5.1	3.8	5.4	3.8	5.8	4.0	6.1	3.9	6.4	3.8	
	37.5	4.9	3.7	5.1	3.8	5.4	3.8	5.7	3.9	6.0	3.9	6.3	3.8	
	40.0	4.9	3.7	5.0	3.8	5.3	3.7	5.6	3.9	5.9	3.8	6.2	3.8	
	43.0	4.8	3.6	5.0	3.7	5.2	3.7	5.5	3.9	5.8	3.8	6.1	3.7	
63	20.0	6.5	4.7	6.9	4.9	7.4	4.9	7.9	5.1	8.4	5.0	8.9	5.0	
	22.5	6.5	4.7	6.8	4.8	7.3	4.8	7.8	5.1	8.3	5.0	8.7	4.9	
	25.0	6.5	4.6	6.8	4.8	7.2	4.8	7.7	5.0	8.1	4.9	8.6	4.9	
	27.5	6.4	4.6	6.7	4.8	7.2	4.8	7.6	5.0	8.0	4.9	8.5	4.8	
	30.0	6.4	4.6	6.6	4.7	7.1	4.7	7.5	4.9	7.9	4.9	8.4	4.8	
	32.5	6.3	4.6	6.6	4.7	7.0	4.7	7.4	4.9	7.8	4.8	8.2	4.7	
	35.0	6.3	4.5	6.5	4.7	6.9	4.6	7.3	4.8	7.7	4.8	8.1	4.7	
	37.5	6.2	4.5	6.4	4.6	6.8	4.6	7.2	4.8	7.6	4.7	8.0	4.6	
	40.0	6.2	4.5	6.4	4.6	6.7	4.6	7.1	4.8	7.5	4.7	7.9	4.6	
	43.0	6.1	4.5	6.3	4.6	6.6	4.5	7.0	4.7	7.3	4.6	7.7	4.5	
80	20.0	8.3	6.1	8.7	6.4	9.4	6.4	10.0	6.7	10.6	6.6	11.2	6.5	
	22.5	8.3	6.1	8.7	6.4	9.3	6.3	9.9	6.7	10.5	6.6	11.1	6.5	
	25.0	8.2	6.1	8.6	6.3	9.2	6.3	9.8	6.6	10.3	6.5	10.9	6.4	
	27.5	8.1	6.1	8.5	6.3	9.1	6.2	9.6	6.6	10.2	6.5	10.8	6.4	
	30.0	8.1	6.0	8.4	6.2	9.0	6.2	9.5	6.5	10.0	6.4	10.6	6.3	
	32.5	8.0	6.0	8.3	6.2	8.9	6.2	9.4	6.5	9.9	6.4	10.4	6.2	
	35.0	8.0	6.0	8.2	6.2	8.8	6.1	9.3	6.4	9.8	6.3	10.3	6.2	
	37.5	7.9	5.9	8.1	6.1	8.6	6.1	9.1	6.4	9.6	6.3	10.1	6.1	
	40.0	7.8	5.9	8.1	6.1	8.5	6.0	9.0	6.3	9.5	6.2	10.0	6.1	
	43.0	7.7	5.9	8.0	6.0	8.4	6.0	8.9	6.2	9.3	6.1	9.8	6.0	
100	20.0	10.3	7.7	10.8	8.0	11.6	8.0	12.5	8.5	13.2	8.4	14.0	8.2	
	22.5	10.3	7.7	10.8	8.0	11.5	8.0	12.3	8.4	13.0	8.3	13.8	8.2	
	25.0	10.2	7.7	10.7	8.0	11.4	7.9	12.1	8.4	12.8	8.2	13.6	8.1	
	27.5	10.1	7.6	10.6	7.9	11.3	7.9	12.0	8.3	12.7	8.2	13.4	8.0	
	30.0	10.1	7.6	10.5	7.9	11.2	7.8	11.8	8.2	12.5	8.1	13.2	7.9	
	32.5	10.0	7.6	10.3	7.8	11.0	7.8	11.7	8.2	12.3	8.0	13.0	7.9	
	35.0	9.9	7.5	10.2	7.8	10.9	7.7	11.5	8.1	12.1	8.0	12.8	7.8	
	37.5	9.8	7.5	10.1	7.7	10.8	7.6	11.4	8.0	12.0	7.9	12.6	7.7	
	40.0	9.7	7.4	10.0	7.7	10.6	7.6	11.2	8.0	11.8	7.8	12.4	7.7	
	43.0	9.6	7.4	9.9	7.6	10.5	7.5	11.0	7.9	11.6	7.7	12.2	7.6	
125	20.0	12.9	9.2	13.5	9.6	14.6	9.6	15.6	10.1	16.5	9.9	17.5	9.7	
	22.5	12.9	9.2	13.5	9.5	14.4	9.5	15.4	10.0	16.3	9.8	17.2	9.7	
	25.0	12.8	9.1	13.3	9.5	14.3	9.4	15.2	9.9	16.1	9.7	17.0	9.6	
	27.5	12.7	9.1	13.2	9.4	14.1	9.4	15.0	9.8	15.8	9.6	16.7	9.5	
	30.0	12.6	9.0	13.1	9.3	13.9	9.3	14.8	9.7	15.6	9.6	16.5	9.4	
	32.5	12.5	9.0	12.9	9.3	13.8	9.2	14.6	9.6	15.4	9.5	16.2	9.3	
	35.0	12.4	8.9	12.8	9.2	13.6	9.1	14.4	9.5	15.2	9.4	16.0	9.2	
	37.5	12.3	8.9	12.7	9.1	13.5	9.0	14.2	9.5	15.0	9.3	15.7	9.1	
	40.0	12.2	8.8	12.5	9.1	13.3	9.0	14.0	9.4	14.8	9.2	15.5	9.0	
	43.0	12.0	8.8	12.4	9.0	13.1	8.9	13.8	9.3	14.5	9.1	15.2	8.9	

## 2-10.Heating Capacity (In combination with PURY-P400-500YMF-C)

**PLFY-P-VKM-A,VAM-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0	20.0	25.0	27.0
°CWB	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
32	-15.0	2.5	2.5	2.4	2.4
	-10.0	2.8	2.8	2.8	2.7
	-5.0	3.2	3.2	3.1	3.1
	0.0	3.6	3.5	3.4	3.1
	2.5	3.8	3.7	3.4	3.1
	6.0	4.0	4.0	3.4	3.1
	7.5	4.2	4.0	3.4	3.1
	10.0	4.4	4.0	3.4	3.1
	12.5	4.6	4.0	3.4	3.1
	15.5	4.6	4.0	3.4	3.1
	40	3.1	3.1	3.0	3.0
	-10.0	3.6	3.5	3.5	3.4
50	-5.0	4.0	4.0	3.9	3.9
	0.0	4.5	4.4	4.3	3.9
	2.5	4.7	4.7	4.3	3.9
	6.0	5.0	5.0	4.3	3.9
	7.5	5.2	5.0	4.3	3.9
	10.0	5.4	5.0	4.3	3.9
	12.5	5.7	5.0	4.3	3.9
	15.5	5.8	5.0	4.3	3.9
	63	3.9	3.9	3.8	3.7
	-10.0	4.5	4.4	4.3	4.3
	-5.0	5.0	5.0	4.9	4.9
	0.0	5.6	5.6	5.4	4.9
80	2.5	5.9	5.9	5.4	4.9
	6.0	6.4	6.3	5.4	4.9
	7.5	6.6	6.3	5.4	4.9
	10.0	6.9	6.3	5.4	4.9
	12.5	7.2	6.3	5.4	4.9
	15.5	7.2	6.3	5.4	4.9
	100	10.0	7.8	7.7	7.5
	-10.0	8.9	8.8	8.6	8.5
	-5.0	10.0	9.9	9.8	9.6
	0.0	11.2	11.0	10.6	9.6
	2.5	11.8	11.6	10.6	9.6
	6.0	12.6	12.5	10.6	9.6
125	7.5	13.0	12.5	10.6	9.6
	10.0	13.6	12.5	10.6	9.6
	12.5	14.3	12.5	10.6	9.6
	15.5	14.4	12.5	10.6	9.6
	10.0	10.0	9.8	9.6	9.5
	-10.0	11.4	11.2	11.0	10.9
	-5.0	12.8	12.6	12.5	12.3
	0.0	14.3	14.1	13.6	12.3
	2.5	15.1	14.9	13.6	12.3
	6.0	16.2	16.0	13.6	12.3
	7.5	16.6	16.0	13.6	12.3
	10.0	17.4	16.0	13.6	12.3
	12.5	18.3	16.0	13.6	12.3
	15.5	18.4	16.0	13.6	12.3

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0	20.0	25.0	27.0
°CWB	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
80	-15.0	6.2	6.1	6.0	5.9
	-10.0	7.1	7.0	6.9	6.8
	-5.0	8.0	7.9	7.8	7.7
	0.0	8.9	8.8	8.5	7.7
	2.5	9.4	9.3	8.5	7.7
	6.0	10.1	10.0	8.5	7.7
	7.5	10.4	10.0	8.5	7.7
	10.0	10.9	10.0	8.5	7.7
	12.5	11.4	10.0	8.5	7.7
	15.5	11.5	10.0	8.5	7.7
	100	7.8	7.7	7.5	7.4
	-10.0	8.9	8.8	8.6	8.5
125	-5.0	10.0	9.9	9.8	9.6
	0.0	11.2	11.0	10.6	9.6
	2.5	11.8	11.6	10.6	9.6
	6.0	12.6	12.5	10.6	9.6
	7.5	13.0	12.5	10.6	9.6
	10.0	13.6	12.5	10.6	9.6
	12.5	14.3	12.5	10.6	9.6
	15.5	14.4	12.5	10.6	9.6
	10.0	10.0	9.8	9.6	9.5
	-10.0	11.4	11.2	11.0	10.9
	-5.0	12.8	12.6	12.5	12.3
	0.0	14.3	14.1	13.6	12.3
	2.5	15.1	14.9	13.6	12.3
	6.0	16.2	16.0	13.6	12.3
	7.5	16.6	16.0	13.6	12.3
	10.0	17.4	16.0	13.6	12.3
	12.5	18.3	16.0	13.6	12.3
	15.5	18.4	16.0	13.6	12.3

## 2-11.Cooling Capacity (In combination with PU(H)Y-200-250TM-C)

PLFY-P-VKM-A,VAM-A

CA:Capacity(kcal/h)  
SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.05°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
32	20.0	2945	2260	3054	2337	3271	2327	3434	2390	3488	2461	3706	2431	3923	2393
	22.5	2945	2260	3054	2337	3271	2327	3434	2390	3477	2456	3670	2418	3860	2371
	25.0	2935	2255	3034	2327	3229	2309	3385	2370	3419	2432	3610	2395	3798	2349
	27.5	2886	2231	2985	2304	3177	2286	3327	2346	3361	2409	3550	2372	3736	2328
	30.0	2836	2207	2935	2281	3124	2263	3268	2321	3303	2385	3490	2349	3673	2306
	32.5	2787	2183	2886	2258	3072	2240	3209	2297	3245	2361	3430	2327	3611	2284
	35.0	2737	2160	2836	2235	3020	2218	3150	2273	3187	2338	3370	2305	3548	2263
	37.5	2687	2136	2787	2212	2967	2195	3091	2249	3129	2315	3310	2282	3486	2242
	40.0	2638	2113	2738	2190	2915	2173	3032	2225	3071	2292	3250	2260	3424	2220
	43.0	2578	2085	2678	2163	2852	2146	2962	2196	3001	2264	3178	2234	3349	2195
40	20.0	3740	2878	3878	2977	4154	2964	4361	3046	4430	3136	4705	3098	4981	3049
	22.5	3740	2878	3878	2977	4154	2964	4361	3046	4415	3130	4660	3081	4902	3021
	25.0	3727	2872	3853	2965	4100	2941	4299	3020	4341	3100	4584	3052	4823	2994
	27.5	3664	2842	3790	2936	4034	2912	4224	2989	4268	3070	4507	3023	4744	2966
	30.0	3601	2811	3727	2906	3967	2883	4150	2958	4194	3040	4431	2994	4664	2939
	32.5	3538	2781	3664	2877	3901	2854	4075	2927	4120	3010	4355	2966	4585	2911
	35.0	3476	2751	3602	2848	3834	2825	4000	2896	4047	2981	4279	2938	4506	2884
	37.5	3413	2721	3539	2819	3768	2797	3925	2866	3973	2951	4203	2909	4427	2857
	40.0	3350	2691	3476	2791	3701	2768	3850	2836	3899	2922	4127	2881	4347	2830
	43.0	3274	2656	3401	2756	3622	2734	2799	3811	2887	4035	2848	4252	2798	
50	20.0	4675	3396	4847	3502	5192	3491	5451	3575	5537	3671	5882	3626	6227	3566
	22.5	4675	3396	4847	3502	5192	3491	5451	3575	5519	3663	5825	3603	6128	3529
	25.0	4659	3388	4816	3487	5126	3460	5374	3541	5426	3623	5729	3564	6028	3493
	27.5	4580	3348	4737	3448	5042	3421	5280	3500	5334	3583	5634	3526	5929	3456
	30.0	4502	3308	4659	3410	4959	3383	5187	3460	5242	3544	5539	3489	5830	3420
	32.5	4423	3269	4581	3371	4876	3345	5093	3419	5150	3504	5444	3451	5731	3384
	35.0	4344	3229	4502	3333	4793	3308	5000	3379	5058	3465	5349	3414	5632	3348
	37.5	4266	3190	4424	3295	4710	3270	4907	3339	4966	3427	5254	3376	5533	3312
	40.0	4187	3151	4345	3258	4627	3233	4813	3299	4874	3388	5159	3339	5434	3277
	43.0	4093	3105	4251	3213	4527	3188	4701	3252	4764	3342	5044	3295	5315	3234
63	20.0	5890	4160	6108	4283	6542	4271	6868	4367	6977	4477	7411	4421	7846	4347
	22.5	5890	4160	6108	4283	6542	4271	6868	4367	6953	4466	7339	4391	7721	4299
	25.0	5871	4150	6068	4263	6458	4231	6771	4323	6837	4414	7219	4341	7596	4251
	27.5	5771	4097	5969	4212	6354	4181	6653	4269	6721	4362	7099	4291	7471	4203
	30.0	5672	4045	5870	4162	6249	4131	6535	4216	6605	4310	6979	4242	7346	4155
	32.5	5573	3994	5772	4112	6144	4081	6418	4163	6489	4259	6859	4192	7221	4108
	35.0	5474	3943	5673	4063	6039	4032	6300	4110	6373	4208	6740	4143	7097	4061
	37.5	5375	3892	5574	4013	5935	3983	6182	4058	6257	4157	6620	4095	6972	4014
	40.0	5276	3841	5475	3964	5830	3935	6065	4006	6141	4107	6500	4047	6847	3968
	43.0	5157	3781	5357	3906	5704	3877	5923	3945	6002	4047	6356	3989	6697	3913
80	20.0	7480	5452	7756	5625	8307	5605	8721	5742	8859	5897	9411	5824	9963	5728
	22.5	7480	5452	7756	5625	8307	5605	8721	5742	8830	5885	9319	5787	9804	5669
	25.0	7455	5440	7705	5600	8201	5556	8598	5688	8682	5821	9167	5726	9646	5611
	27.5	7329	5376	7580	5538	8068	5494	8449	5623	8535	5758	9015	5666	9487	5552
	30.0	7203	5312	7454	5477	7935	5434	8299	5558	8388	5695	8863	5605	9329	5494
	32.5	7077	5249	7329	5416	7802	5373	8150	5494	8240	5632	8710	5545	9170	5437
	35.0	6951	5187	7204	5355	7669	5313	8000	5429	8093	5570	8558	5486	9012	5380
	37.5	6825	5124	7078	5295	7536	5253	7850	5365	7946	5508	8406	5427	8853	5323
	40.0	6699	5062	6953	5234	7403	5193	7701	5302	7798	5447	8254	5368	8695	5266
	43.0	6548	4988	6802	5163	7243	5122	7522	5226	7622	5373	8071	5298	8504	5199
100	20.0	9350	6881	9695	7103	10384	7076	10901	7254	11074	7454	11764	7361	12453	7240
	22.5	9350	6881	9695	7103	10384	7076	10901	7254	11037	7438	11649	7316	12255	7168
	25.0	9318	6866	9632	7072	10251	7015	10748	7187	10853	7359	11459	7240	12057	7095
	27.5	9161	6787	9475	6995	10085	6940	10561	7106	10669	7281	11269	7165	11859	7023
	30.0	9004	6708	9318	6919	9919	6864	10374	7026	10485	7203	11078	7091	11661	6952
	32.5	8846	6630	9161	6844	9752	6789	10187	6946	10301	7126	10888	7017	11463	6881
	35.0	8689	6552	9004	6769	9586	6715	10000	6866	10116	7049	10698	6943	11265	6810
	37.5	8531	6475	8848	6694	9420	6641	9813	6787	9932	6972	10507	6870	11066	6740
	40.0	8374	6398	8691	6619	9254	6567	9626	6709	9748	6896	10317	6797	10868	6670
	43.0	8185	6306	8502	6530	9054	6479	9402	6615	9527	6805	10089	6710	10631	6586
125	20.0	11687	8231	12118	8474	12980	8450	13627	8639	13842	8854	14704	8744	15567	8596
	22.5	11687	8231	12118	8474	12980	8450	13627	8639	13796	8833	14562	8683	15319	8499
	25.0	11648	8210	12040	8433	12814	8370	13435	8550	13566	8729	14324	8583	15071	8403
	27.5	11451	8106	11844	8333	12606	8270	13201	8443	13336	8625	14086	8484	14824	8308
	30.0	11254	8003	11648	8233	12398	8171	12967	8337	13106	8522	13848	8385	14576	8213
	32.5	11058	7900	11452	8133	12191	8072	12734	8231	12876	8420	13610	8287	14328	8119
	35.0	10861	7798	11255	8035	11983	7974	12500	8127	1264					

## 2-12.Heating Capacity (In combination with PUHY-200-250TM-C)

**PLFY-P-VKM-A,VAM-A**

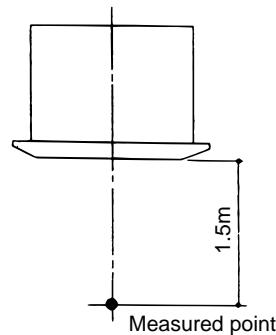
Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
°CWB	SHC	SHC	SHC	SHC	SHC
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
°CWB	SHC	SHC	SHC	SHC	SHC
80	-15.0	6221	6128	6036	5998
	-10.0	7098	7005	6912	6402
	-5.0	7975	7882	7237	6402
	0.0	8852	8759	7237	6402
	2.5	9290	9000	7237	6402
	6.0	9371	9000	7237	6402
	7.5	9765	9000	7237	6402
	10.0	10421	9000	7237	6402
	12.5	11078	9000	7237	6402
	15.5	11227	9000	7237	6402
100	-15.0	7742	7626	7511	7465
	-10.0	8833	8718	8602	7967
	-5.0	9924	9809	9006	7967
	0.0	11015	10900	9006	7967
	2.5	11561	11200	9006	7967
	6.0	11662	11200	9006	7967
	7.5	12152	11200	9006	7967
	10.0	12969	11200	9006	7967
	12.5	13786	11200	9006	7967
	15.5	13971	11200	9006	7967
125	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959
	-5.0	12405	12261	11258	9959
	0.0	13769	13625	11258	9959
	2.5	14451	14000	11258	9959
	6.0	14577	14000	11258	9959
	7.5	15190	14000	11258	9959
	10.0	16211	14000	11258	9959
	12.5	17232	14000	11258	9959
	15.5	17464	14000	11258	9959

### 3. Sound Levels

#### 3-1. Noise level

Cassette ceiling (VKM-A/VAM-A series)

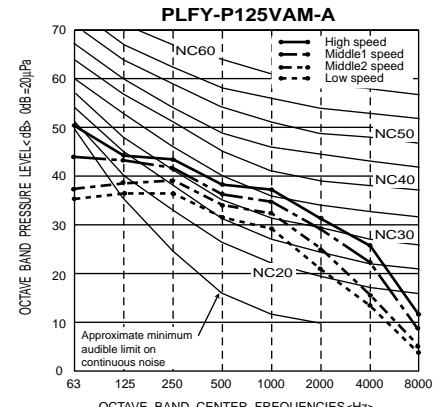
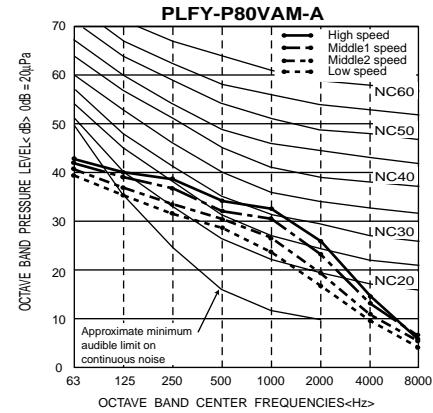
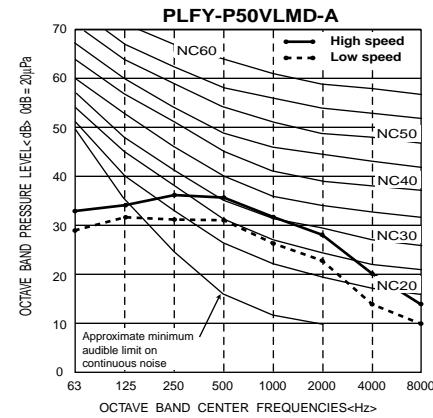
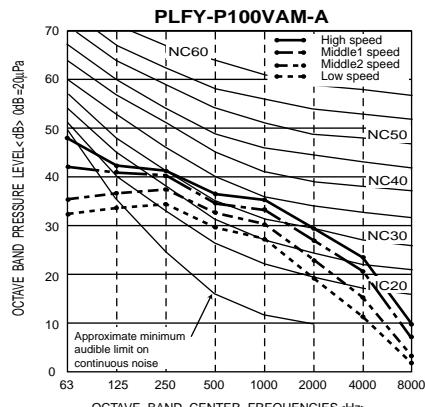
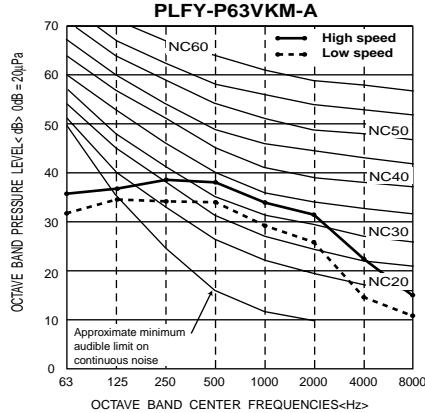
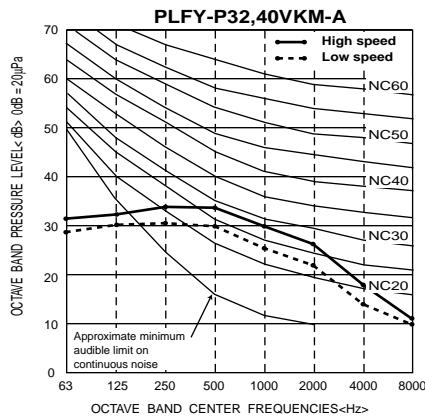


Noise level at anechoic room  
(Low-Middle2-Middle1-High)

Unit : dB(A)

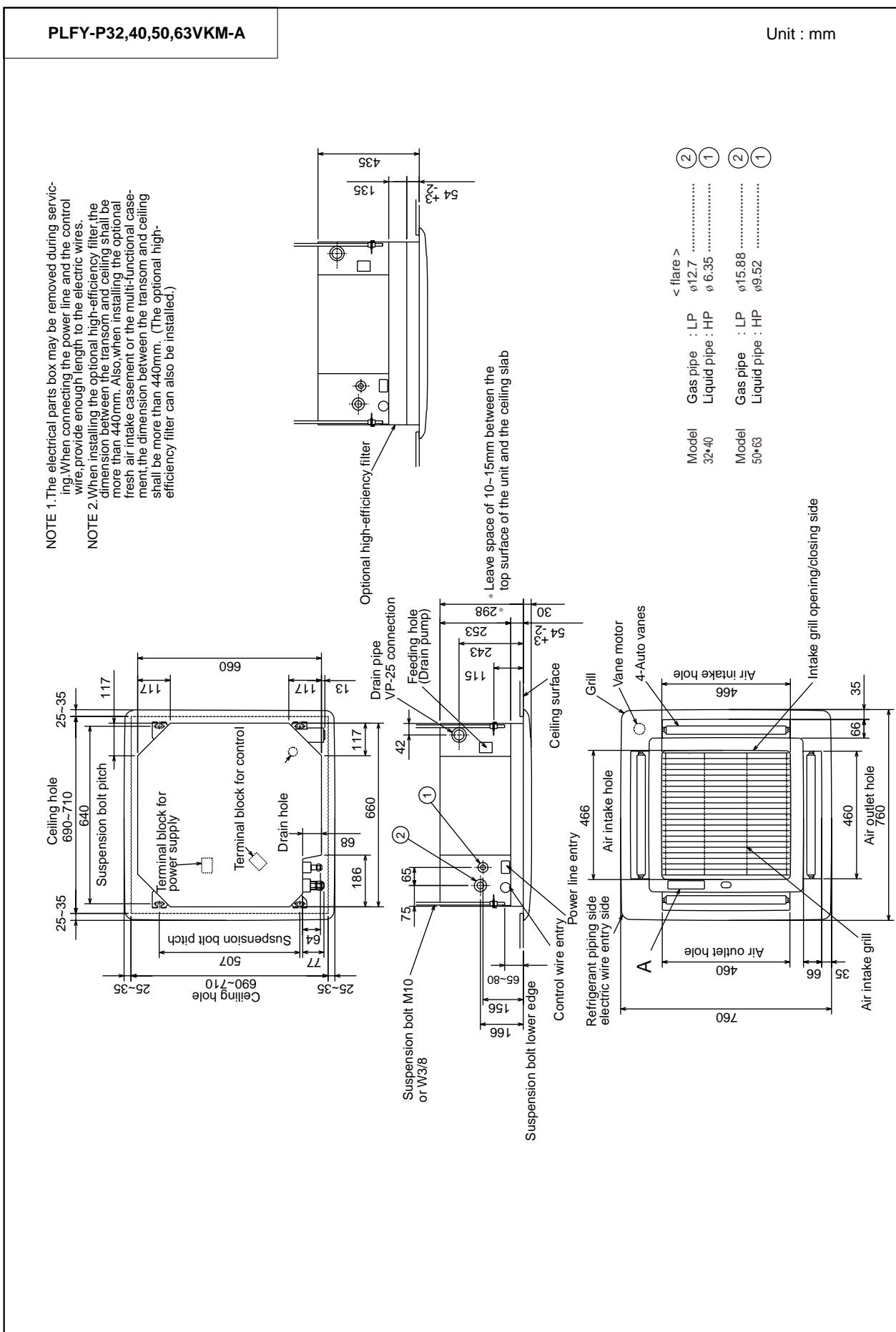
Model	Noise level (A weighted)
PLFY-P32VKM-A	31-32.5-34-35
PLFY-P40VKM-A	32-34-35.5-37
PLFY-P50VKM-A	35-36.5-38-39
PLFY-P80VAM-A	30-32-35-37
PLFY-P100VAM-A	33-36-39-41
PLFY-P125VAM-A	35-38-41-43

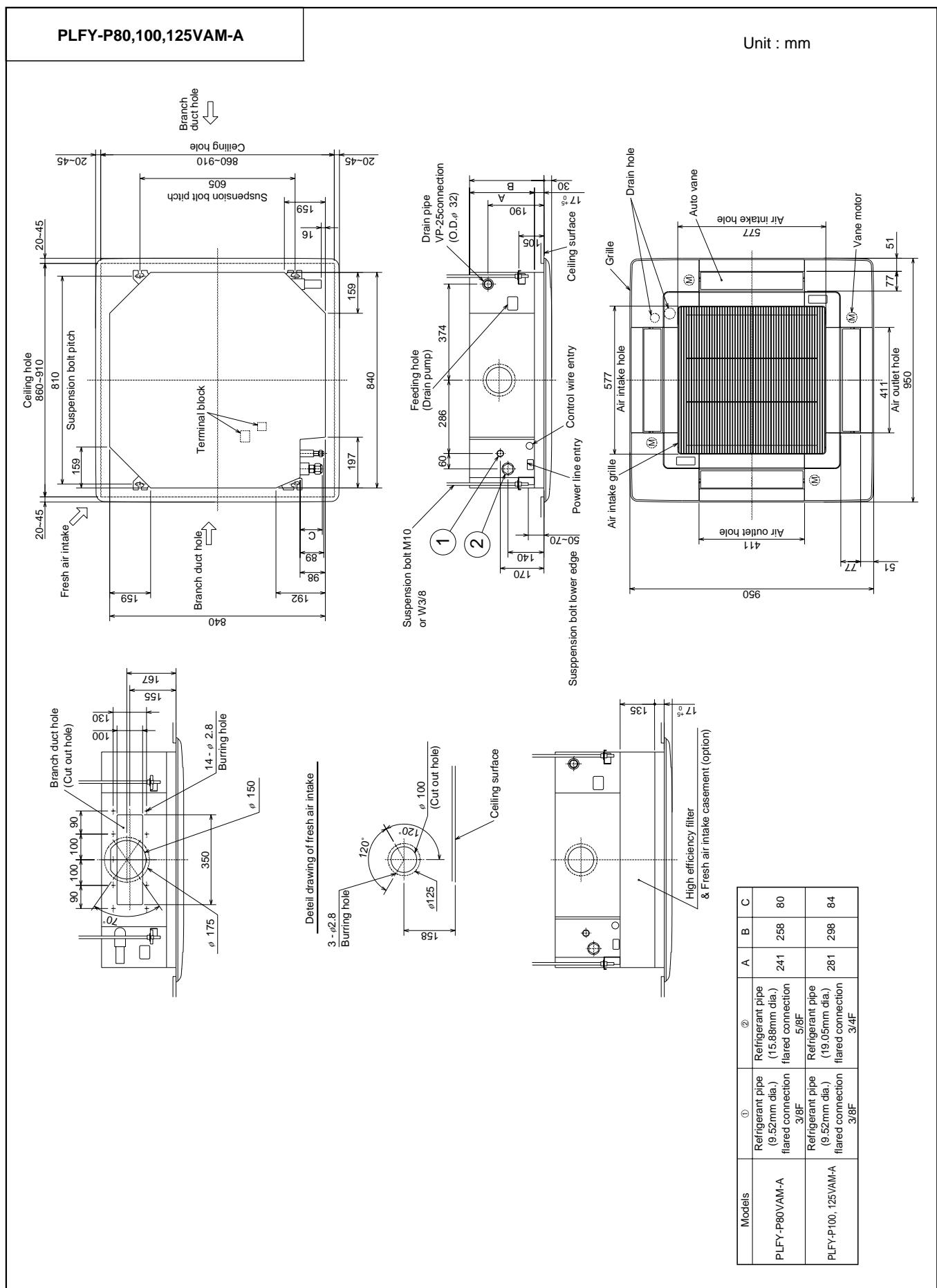
#### 3-2. NC curves



VKM-A/VAM-A  
PLFY-P

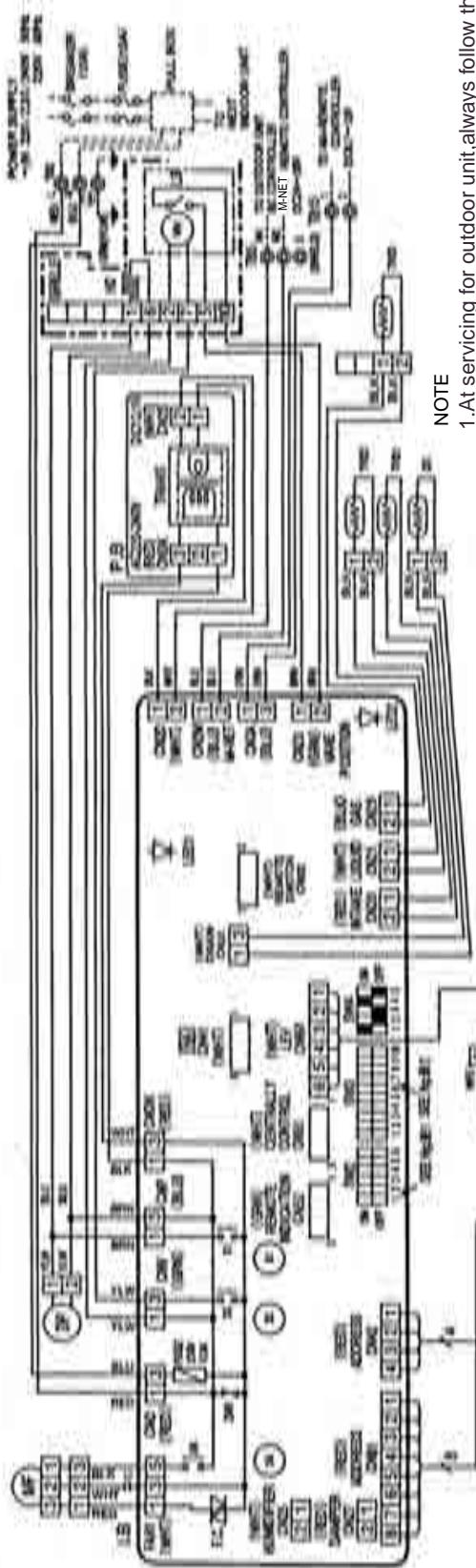
## 4. External Dimensions





# 5. Electrical Wiring Diagrams

## ● PLFY-P32 ~ 63VKM-A



- NOTE**
- At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
  - In case of using MA-Remote controller, please connect to TB15.
  - In case of using M-NET, please connect to TB5. (Transmission line is non-polar.)
  - Symbol [S] of TB5 is the shield wire connection.
  - Symbols used in wiring diagram above are,  
◎:Terminal block, □:Connector.
  - The setting of the SW2 dip switches differs in the capacity. For the detail refer to the fig: \*1.
  - Please set the switch SW5 according to the power supply voltage.  
Set SW5 to 240V side when the power supply is 230 and 240 volts.  
When the power supply is 220 volts, set SW5 to 220V side.

<fig.\*1>

MODELS	SW2	MODELS	SW2
P32	ON OFF 1 2 3 4 5 6	P50	ON OFF 1 2 3 4 5 6
P40	ON OFF 1 2 3 4 5 6	P63	ON OFF 1 2 3 4 5 6

<fig.\*2>

MODELS	SW3
P32,P40	ON OFF 1 2 3 4 5 6 7 8 9 10
P50,P63	ON OFF 1 2 3 4 5 6 7 8 9 10

Led on indoor board for service

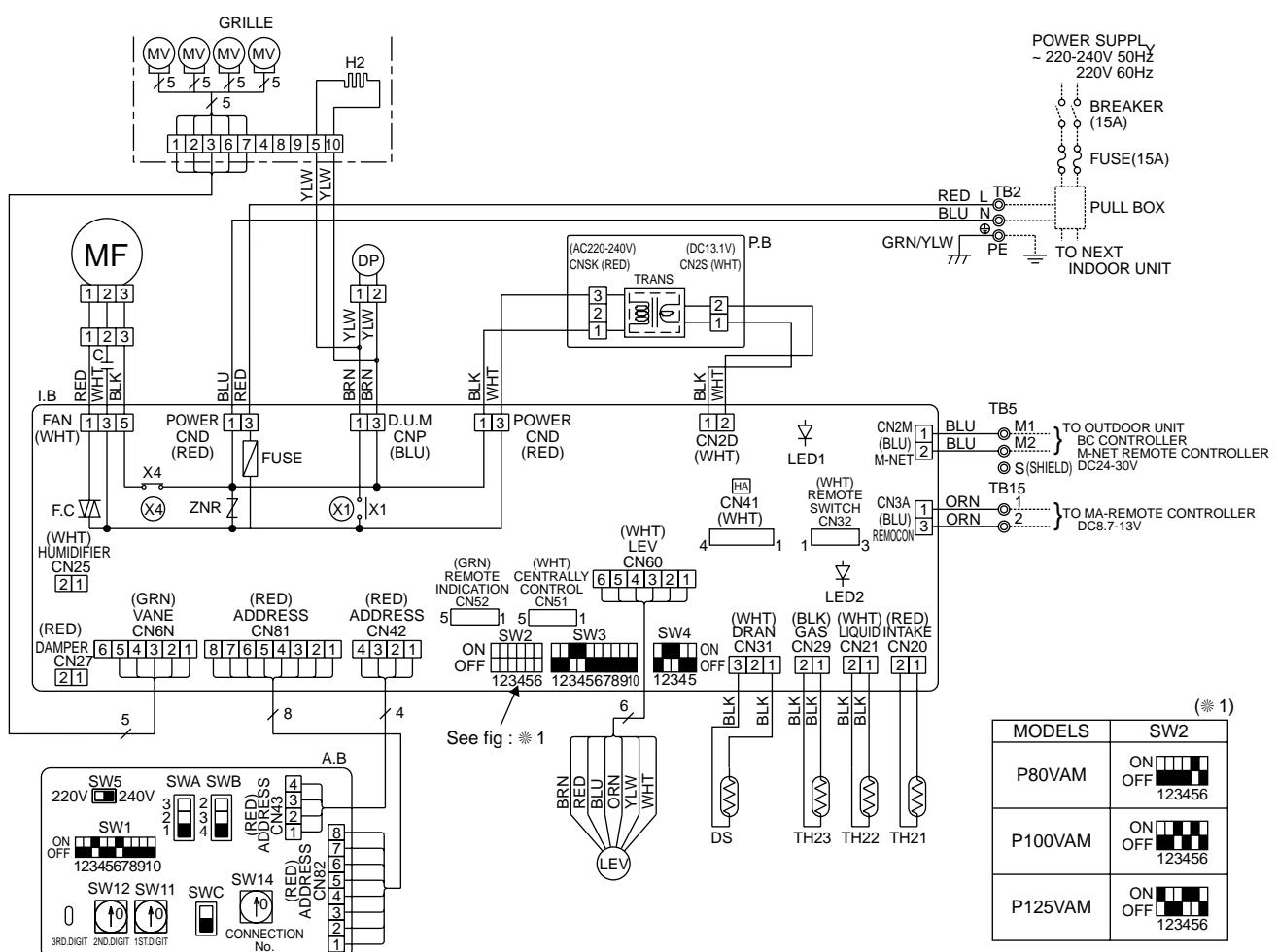


Mark	Meaning	Function
LED1	Main power supply	Main power supply (indoor unit 220-240V) Power on → lamp is lit
LED2	Power supply for MA-Remote controller	Power supply for MA-Remote controller on → lamp is lit

## ● PLFY-P80 ~ 125VAM-A

### <SYMBOL EXPLANATION>

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	C	CAPACITOR(FAN MOTOR)	TH23	THERMISTOR
I.B	INDOOR CONTROLLER BOARD	MF	FAN MOTOR(WITH INNER THERMO)		PIPE TEMPERATURE DETECTION / GAS (0°C/15kΩ, 25°C/5.4kΩ)
CN25	CONNECTOR	HUMIDIFIER	MV	VANE MOTOR	
CN32		REMOTE SWITCH	DP	DRAIN WATER LIFTING-UP MACH	
CN41		HA TERMINAL-A	DS	DRAIN SENSOR	
CN51		CENTRALLY CONTROL	H2	DEW PREVENTION HEATER	
CN52		REMOTE INDICATION	TB2	TERMINAL	POWER SUPPLY
SW2	SWITCH	CAPACITY CODE	TB5	BLOCK	TRANSMISSION
SW3		MODE SELECTION	TB15		TRANSMISSION
SW4		MODEL SELECTION	LEV		LINEAR EXPANSION VALVE
ZNR	VARISTOR		TH21	THERMISTOR	ROOM TEMPERATURE DETECTION (0°C/15kΩ, 25°C/5.4kΩ)
FUSE	FUSE (6.3A/250V)				PIPE TEMPERATURE DETECTION / LIQUID (0°C/15kΩ, 25°C/5.4kΩ)
F.C	FAN PHASE CONTROL		TH22		
X1	AUX.RELAY	DRAIN PUMP			
X4		FAN MOTOR			
LED1	POWER SUPPLY(I.B)				
LED2	POWER SUPPLY(I.B)				



### NOTE

- At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
- Symbol(S) of TB5 is the shield wire connection.
- Symbols used in wiring diagram above are, ○: Terminal block, □□□: Connector.
- The setting of the SW2 dip switches differs in the capacity for the detail, see the table below.
- Please set the switch SW5 according to the power supply voltage.

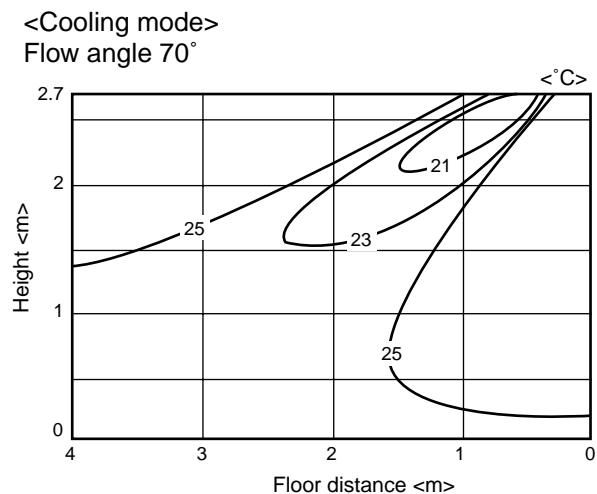
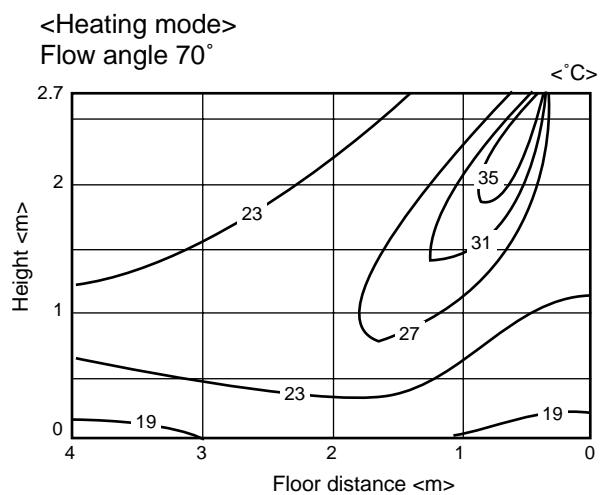
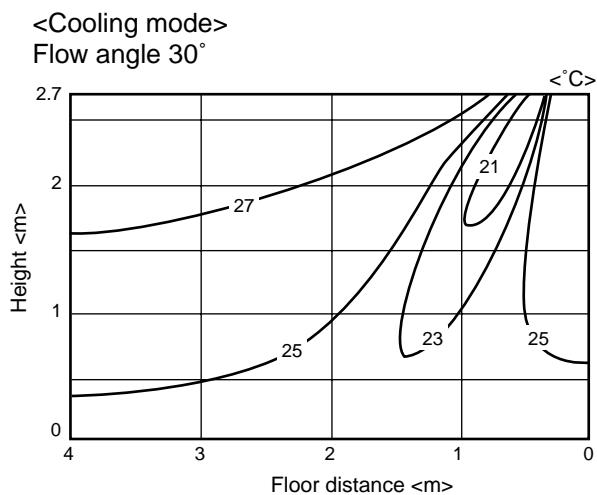
Set SW5 to 240V side when the power supply is 230 and 240 volts.

When the power supply is 220 volts, set SW5 to 220V side.

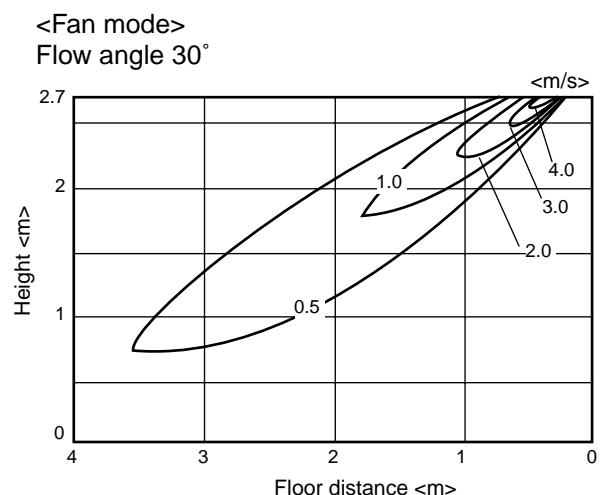
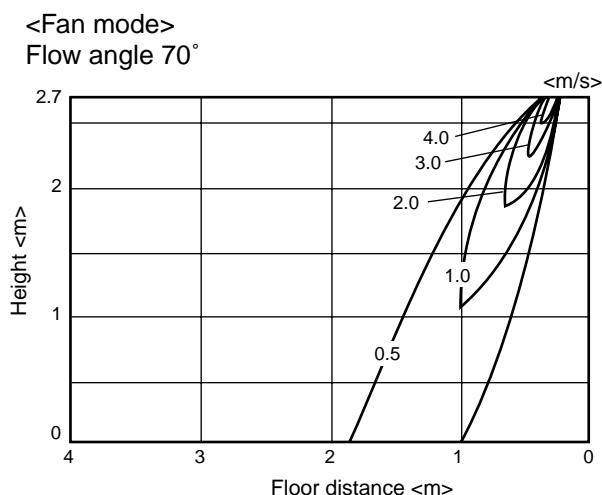
VKM-A/VAM-A  
PLFY-P

## 6. Temperature/Airflow distribution

### ● Temperature distribution



### ● Airflow distribution



## 7. Options

### ● PLFY-P32/P40/P50/P63VKM-A

Description	Model
Decoration panel	PLP-25KB
Space panel	PAC-SE01AS-E
Wide panel	PAC-SE06WP-E
Air outlet shutter plate	PAC-SE14SP-E
High efficiency filter element (PAC-SE21TM-E is necessary to use this filter)	PAC-SE13KF-E (PAC-SE21TM-E is necessary to use this filter)
Multi-function casement ( High efficiency filter casement ) Flesh air intake casement	PAC-SE21TM-E

### ● PLFY-P80/P100/P125VAM-A

Description	Model
Air outlet shutter plate	PAC-SG06SP-E
High efficiency filter casement	PAC-SG01KF
Multi-function casement	PAC-SG03TM-E

PLFY-P.  
VKM-A/VAM-A

PLFY-P.  
VKM-A/VAM-A

Wall mounted

PKFY-P-VAM-A

PKFY-P-VGM-A

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# 1. Specifications

			PKFY-P20VAM-A	PKFY-P25VAM-A	PKFY-P32VGM-A	PKFY-P40VGM-A	PKFY-P50VGM-A	
Power source			~ 220-240V 50Hz ~ 220V 60Hz					
Cooling capacity	※1	kW	2.2	2.8	3.6	4.5	5.6	
	※2	kcal/h	2,000	2,500	3,150	4,000	5,000	
Heating capacity	※1	kW	2.5	3.2	4.0	5.0	6.3	
Power consumption	Cooling	kW	0.04			0.07		
	Heating	kW	0.04			0.07		
Current	Cooling	A	0.20			0.32		
	Heating	A	0.20			0.32		
External finish(Munsel No.)			Plastic 2.60Y 8.66/0.69		Plastic <PS,ABS> white 0.70Y 8.59/0.97			
Dimension	Height	mm	295			340		
	Width	mm	815			990		
	Depth	mm	158			235		
Net weight		kg	8.5			16		
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)					
Fan	Type		Line flow fan X 1					
	Airflow rate ※3 (Lo-Mid2-Mid1-Hi)	m³/min	4.9-5.2-5.6-5.9		8-9.5-10.5-11.5		9-10-11-12	
	External static pressure	Pa	0					
Motor	Type		Single phase induction motor					
	Output	kW	0.017		0.030			
Air filter			PP Honeycomb (long life)					
Refrigerant pipe dimension	Gas (Flare)	mm	ø 12.7				ø 15.88	
	Liquid (Flare)	mm	ø 6.35				ø 9.52	
Drain pipe dimension			ø 28,VP-16		VP-20			
Noise level (Lo-Mid2-Mid1-Hi) ※3 ※4			32-33-35-36		33-36-38-41		34-37-40-43	

Note: ※1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB

Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

※2 Cooling capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

※3 Airflow rate/noise level are in (low-middle2-middle1-high).

※4 It is measured in anechoic room.

## 2. Capacity Tables

### 2-1.Cooling Capacity (In combination with PUMY-(P)125YM(A))

PKFY-P-VAM-A/VGM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
20 (2.2)	20.0	2.2	1.5	2.3	1.6	2.4	1.6	2.6	1.6
	22.5	2.1	1.5	2.3	1.6	2.4	1.6	2.6	1.6
	25.0	2.1	1.5	2.3	1.6	2.4	1.6	2.5	1.6
	27.5	2.1	1.5	2.2	1.6	2.4	1.6	2.5	1.6
	30.0	2.1	1.5	2.2	1.5	2.3	1.5	2.5	1.6
	32.5	2.0	1.5	2.2	1.5	2.3	1.5	2.5	1.6
	35.0	2.0	1.4	2.1	1.5	2.3	1.5	2.4	1.6
	37.5	2.0	1.4	2.1	1.5	2.2	1.5	2.4	1.5
	40.0	2.0	1.4	2.1	1.5	2.2	1.5	2.4	1.5
	46.0	1.9	1.4	2.0	1.5	2.1	1.4	2.3	1.5
25 (2.8)	20.0	2.8	1.9	2.9	2.0	3.1	2.0	3.3	2.0
	22.5	2.7	1.9	2.9	2.0	3.1	2.0	3.2	2.0
	25.0	2.7	1.9	2.9	2.0	3.1	2.0	3.2	2.0
	27.5	2.7	1.9	2.8	2.0	3.0	1.9	3.2	2.0
	30.0	2.6	1.8	2.8	1.9	3.0	1.9	3.2	2.0
	32.5	2.6	1.8	2.8	1.9	2.9	1.9	3.1	2.0
	35.0	2.6	1.8	2.7	1.9	2.9	1.9	3.1	1.9
	37.5	2.5	1.8	2.7	1.9	2.9	1.9	3.0	1.9
	40.0	2.5	1.8	2.7	1.9	2.8	1.8	3.0	1.9
	46.0	2.4	1.7	2.6	1.8	2.7	1.8	2.9	1.9
32 (3.6)	20.0	3.6	2.8	3.7	3.0	4.0	3.0	4.2	3.1
	22.5	3.5	2.8	3.7	3.0	4.0	2.9	4.2	3.0
	25.0	3.5	2.8	3.7	2.9	3.9	2.9	4.1	3.0
	27.5	3.4	2.8	3.6	2.9	3.9	2.9	4.1	3.0
	30.0	3.4	2.8	3.6	2.9	3.8	2.9	4.1	3.0
	32.5	3.3	2.7	3.6	2.9	3.8	2.9	4.0	3.0
	35.0	3.3	2.7	3.5	2.9	3.7	2.8	4.0	2.9
	37.5	3.2	2.7	3.5	2.8	3.7	2.8	3.9	2.9
	40.0	3.2	2.7	3.4	2.8	3.6	2.8	3.9	2.9
	46.0	3.1	2.6	3.3	2.8	3.5	2.7	3.7	2.8
40 (4.5)	20.0	4.5	3.3	4.7	3.4	5.0	3.4	5.3	3.5
	22.5	4.4	3.2	4.6	3.4	5.0	3.4	5.2	3.4
	25.0	4.3	3.2	4.6	3.4	4.9	3.3	5.2	3.4
	27.5	4.3	3.2	4.6	3.3	4.9	3.3	5.1	3.4
	30.0	4.2	3.1	4.5	3.3	4.8	3.3	5.1	3.4
	32.5	4.2	3.1	4.4	3.3	4.7	3.2	5.0	3.4
	35.0	4.1	3.1	4.4	3.2	4.7	3.2	5.0	3.3
	37.5	4.1	3.1	4.3	3.2	4.6	3.2	4.9	3.3
	40.0	4.0	3.0	4.3	3.2	4.5	3.2	4.8	3.3
	46.0	3.8	3.0	4.1	3.1	4.3	3.1	4.6	3.2
50 (5.6)	20.0	5.5	3.8	5.8	4.0	6.2	4.0	6.6	4.1
	22.5	5.5	3.8	5.8	3.9	6.2	3.9	6.5	4.0
	25.0	5.4	3.8	5.7	3.9	6.1	3.9	6.4	4.0
	27.5	5.3	3.7	5.7	3.9	6.0	3.9	6.4	4.0
	30.0	5.3	3.7	5.6	3.9	5.9	3.8	6.3	3.9
	32.5	5.2	3.6	5.5	3.8	5.9	3.8	6.2	3.9
	35.0	5.1	3.6	5.5	3.8	5.8	3.7	6.2	3.9
	37.5	5.0	3.6	5.4	3.7	5.7	3.7	6.1	3.8
	40.0	5.0	3.5	5.3	3.7	5.6	3.7	6.0	3.8
	46.0	4.8	3.4	5.1	3.6	5.4	3.6	5.8	3.7

PKFY-P-VAM-A/VGM-A

## 2-2.Heating Capacity (In combination with PUMY-(P)125YM(A))

**PKFY-P-VAM-A,VGM-A**

Unit size	Outdoor air temp. °CWB	Indoor air temp.: °CDB		
		15.0	20.0	25.0
		SHC	SHC	SHC
20	-12.0	1.6	1.6	1.5
	-10.0	1.7	1.6	1.6
	-5.0	1.9	1.9	1.9
	0.0	2.2	2.1	2.1
	2.5	2.3	2.3	2.3
	6.0	2.5	2.5	2.5
	7.5	2.6	2.6	2.5
	10.0	2.8	2.7	2.5
	12.5	2.9	2.8	2.5
	15.5	3.1	2.8	2.5
25	-12.0	2.0	2.0	2.0
	-10.0	2.1	2.1	2.1
	-5.0	2.4	2.4	2.4
	0.0	2.8	2.8	2.7
	2.5	3.0	2.9	2.9
	6.0	3.2	3.2	3.2
	7.5	3.3	3.3	3.2
	10.0	3.5	3.5	3.2
	12.5	3.7	3.5	3.2
	15.5	3.9	3.5	3.2

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp. °CWB	Indoor air temp.: °CDB		
		15.0	20.0	25.0
		SHC	SHC	SHC
32	-12.0	2.5	2.5	2.5
	-10.0	2.7	2.6	2.6
	-5.0	3.1	3.0	3.0
	0.0	3.5	3.4	3.4
	2.5	3.7	3.7	3.6
	6.0	4.0	4.0	3.9
	7.5	4.2	4.1	4.0
	10.0	4.4	4.4	4.0
	12.5	4.7	4.4	4.0
	15.5	4.9	4.4	4.0
40	-12.0	3.2	3.1	3.1
	-10.0	3.4	3.3	3.2
	-5.0	3.8	3.8	3.7
	0.0	4.3	4.3	4.2
	2.5	4.6	4.6	4.5
	6.0	5.0	5.0	4.9
	7.5	5.2	5.2	5.0
	10.0	5.5	5.5	5.0
	12.5	5.9	5.5	5.0
	15.5	6.2	5.5	5.0
50	-12.0	4.0	3.9	3.9
	-10.0	4.2	4.2	4.1
	-5.0	4.8	4.8	4.7
	0.0	5.5	5.4	5.3
	2.5	5.8	5.8	5.7
	6.0	6.3	6.3	6.2
	7.5	6.6	6.5	6.2
	10.0	7.0	6.9	6.2
	12.5	7.4	7.0	6.2
	15.5	7.7	7.0	6.2

### 2-3.Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

**PKFY-P-VAM-A,VGM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA										
20 (2.2)	20.0	2.2	1.5	2.2	1.5	2.3	1.5	2.3	1.5	2.4	1.6	2.5	1.5	2.6	1.5
	22.5	2.1	1.5	2.2	1.5	2.3	1.5	2.3	1.5	2.4	1.5	2.4	1.5	2.5	1.5
	25.0	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.5	2.3	1.5	2.4	1.5	2.5	1.5
	27.5	2.1	1.5	2.1	1.5	2.2	1.5	2.3	1.5	2.3	1.5	2.4	1.5	2.5	1.4
	30.0	2.1	1.5	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.5	2.4	1.5	2.5	1.4
	32.5	2.0	1.5	2.1	1.5	2.2	1.5	2.2	1.5	2.3	1.5	2.4	1.5	2.4	1.4
	35.0	2.0	1.5	2.1	1.5	2.2	1.5	2.2	1.5	2.2	1.5	2.3	1.5	2.4	1.4
	37.5	2.0	1.4	2.0	1.5	2.1	1.4	2.2	1.4	2.2	1.5	2.3	1.5	2.4	1.4
	40.0	2.0	1.4	2.0	1.5	2.1	1.4	2.2	1.4	2.2	1.5	2.3	1.4	2.4	1.4
	43.0	2.0	1.4	2.0	1.4	2.1	1.4	2.1	1.4	2.2	1.5	2.3	1.4	2.3	1.4
25 (2.8)	20.0	2.7	1.9	2.8	1.9	2.9	1.9	3.0	1.9	3.0	1.9	3.1	1.9	3.2	1.8
	22.5	2.7	1.9	2.8	1.9	2.9	1.9	2.9	1.9	3.0	1.9	3.1	1.9	3.2	1.8
	25.0	2.7	1.9	2.7	1.9	2.9	1.9	2.9	1.9	3.0	1.9	3.1	1.9	3.2	1.8
	27.5	2.7	1.9	2.7	1.9	2.8	1.8	2.9	1.9	2.9	1.9	3.1	1.9	3.2	1.8
	30.0	2.6	1.8	2.7	1.9	2.8	1.8	2.9	1.8	2.9	1.9	3.0	1.8	3.1	1.8
	32.5	2.6	1.8	2.7	1.9	2.8	1.8	2.8	1.8	2.9	1.9	3.0	1.8	3.1	1.8
	35.0	2.6	1.8	2.6	1.9	2.7	1.8	2.8	1.8	2.9	1.9	3.0	1.8	3.1	1.8
	37.5	2.5	1.8	2.6	1.8	2.7	1.8	2.8	1.8	2.8	1.9	2.9	1.8	3.1	1.8
	40.0	2.5	1.8	2.6	1.8	2.7	1.8	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.7
	43.0	2.5	1.8	2.5	1.8	2.7	1.8	2.7	1.8	2.8	1.8	2.9	1.8	3.0	1.7
32 (3.6)	20.0	3.5	2.8	3.6	2.9	3.7	2.8	3.8	2.9	3.9	3.0	4.0	2.9	4.2	2.8
	22.5	3.5	2.8	3.6	2.9	3.7	2.8	3.8	2.9	3.9	3.0	4.0	2.9	4.1	2.8
	25.0	3.5	2.8	3.5	2.9	3.7	2.8	3.7	2.9	3.8	3.0	4.0	2.9	4.1	2.8
	27.5	3.4	2.8	3.5	2.9	3.6	2.8	3.7	2.8	3.8	2.9	3.9	2.9	4.1	2.8
	30.0	3.4	2.8	3.5	2.8	3.6	2.8	3.7	2.8	3.7	2.9	3.9	2.9	4.0	2.8
	32.5	3.3	2.7	3.4	2.8	3.6	2.8	3.6	2.8	3.7	2.9	3.9	2.9	4.0	2.8
	35.0	3.3	2.7	3.4	2.8	3.5	2.8	3.6	2.8	3.7	2.9	3.8	2.8	4.0	2.8
	37.5	3.3	2.7	3.3	2.8	3.5	2.7	3.6	2.8	3.6	2.9	3.8	2.8	3.9	2.8
	40.0	3.2	2.7	3.3	2.8	3.5	2.7	3.5	2.8	3.6	2.9	3.7	2.8	3.9	2.7
	43.0	3.2	2.7	3.3	2.8	3.4	2.7	3.5	2.8	3.6	2.9	3.7	2.8	3.8	2.7
40 (4.5)	20.0	4.4	3.2	4.5	3.3	4.7	3.2	4.8	3.2	4.9	3.3	5.0	3.3	5.2	3.2
	22.5	4.4	3.2	4.5	3.3	4.6	3.2	4.7	3.2	4.8	3.3	5.0	3.2	5.2	3.2
	25.0	4.3	3.2	4.4	3.3	4.6	3.2	4.7	3.2	4.8	3.3	5.0	3.2	5.1	3.1
	27.5	4.3	3.2	4.4	3.2	4.5	3.2	4.6	3.2	4.7	3.3	4.9	3.2	5.1	3.1
	30.0	4.2	3.1	4.3	3.2	4.5	3.1	4.6	3.2	4.7	3.3	4.9	3.2	5.0	3.1
	32.5	4.2	3.1	4.3	3.2	4.5	3.1	4.5	3.2	4.6	3.3	4.8	3.2	5.0	3.1
	35.0	4.1	3.1	4.2	3.2	4.4	3.1	4.5	3.1	4.6	3.2	4.8	3.2	5.0	3.1
	37.5	4.1	3.1	4.2	3.2	4.4	3.1	4.5	3.1	4.5	3.2	4.7	3.1	4.9	3.1
	40.0	4.1	3.1	4.1	3.1	4.3	3.1	4.4	3.1	4.5	3.2	4.7	3.1	4.9	3.0
	43.0	4.0	3.0	4.1	3.1	4.3	3.0	4.4	3.1	4.4	3.2	4.6	3.1	4.8	3.0
50 (5.6)	20.0	5.5	3.8	5.6	3.9	5.8	3.8	5.9	3.8	6.0	3.9	6.3	3.7	6.5	3.6
	22.5	5.4	3.8	5.5	3.8	5.8	3.7	5.9	3.7	6.0	3.8	6.2	3.7	6.4	3.6
	25.0	5.4	3.7	5.5	3.8	5.7	3.7	5.8	3.7	5.9	3.8	6.2	3.7	6.4	3.6
	27.5	5.3	3.7	5.4	3.8	5.7	3.7	5.8	3.7	5.9	3.8	6.1	3.7	6.3	3.6
	30.0	5.3	3.7	5.4	3.7	5.6	3.7	5.7	3.7	5.8	3.8	6.0	3.7	6.3	3.5
	32.5	5.2	3.6	5.3	3.7	5.5	3.6	5.7	3.6	5.8	3.7	6.0	3.6	6.2	3.5
	35.0	5.2	3.6	5.3	3.7	5.5	3.6	5.6	3.6	5.7	3.7	5.9	3.6	6.2	3.5
	37.5	5.1	3.6	5.2	3.7	5.4	3.6	5.5	3.6	5.7	3.7	5.9	3.6	6.1	3.5
	40.0	5.0	3.6	5.2	3.6	5.4	3.5	5.5	3.6	5.6	3.7	5.8	3.6	6.0	3.5
	43.0	5.0	3.5	5.1	3.6	5.3	3.5	5.4	3.5	5.5	3.6	5.8	3.5	6.0	3.4

## 2-4.Heating Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

**PKFY-P-VAM-A,VGM-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC	SHC	SHC	SHC
20	-15.0	1.7	1.6	1.6	1.6
	-10.0	1.9	1.9	1.9	1.7
	-5.0	2.1	2.1	2.0	1.7
	0.0	2.4	2.4	2.0	1.7
	2.5	2.5	2.5	2.0	1.7
	6.0	2.5	2.5	2.0	1.7
	7.5	2.6	2.5	2.0	1.7
	10.0	2.8	2.5	2.0	1.7
	12.5	3.0	2.5	2.0	1.7
	15.5	3.0	2.5	2.0	1.7
25	-15.0	2.1	2.1	2.1	2.1
	-10.0	2.4	2.4	2.4	2.2
	-5.0	2.7	2.7	2.5	2.2
	0.0	3.1	3.0	2.5	2.2
	2.5	3.2	3.2	2.5	2.2
	6.0	3.2	3.2	2.5	2.2
	7.5	3.4	3.2	2.5	2.2
	10.0	3.6	3.2	2.5	2.2
	12.5	3.8	3.2	2.5	2.2
	15.5	3.9	3.2	2.5	2.2

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC	SHC	SHC	SHC
32	-15.0	2.7	2.6	2.6	2.6
	-10.0	3.1	3.0	3.0	2.8
	-5.0	3.4	3.4	3.1	2.8
	0.0	3.8	3.8	3.1	2.8
	2.5	4.0	4.0	3.1	2.8
	6.0	4.0	4.0	3.1	2.8
	7.5	4.2	4.0	3.1	2.8
	10.0	4.5	4.0	3.1	2.8
	12.5	4.8	4.0	3.1	2.8
	15.5	4.8	4.0	3.1	2.8
40	-15.0	3.3	3.3	3.3	3.3
	-10.0	3.8	3.8	3.7	3.5
	-5.0	4.3	4.2	3.9	3.5
	0.0	4.8	4.7	3.9	3.5
	2.5	5.0	5.0	3.9	3.5
	6.0	5.1	5.0	3.9	3.5
	7.5	5.3	5.0	3.9	3.5
	10.0	5.6	5.0	3.9	3.5
	12.5	6.0	5.0	3.9	3.5
	15.5	6.1	5.0	3.9	3.5
50	-15.0	4.2	4.2	4.1	4.1
	-10.0	4.8	4.8	4.7	4.3
	-5.0	5.4	5.3	4.9	4.3
	0.0	6.0	5.9	4.9	4.3
	2.5	6.3	6.2	4.9	4.3
	6.0	6.4	6.3	4.9	4.3
	7.5	6.6	6.3	4.9	4.3
	10.0	7.1	6.3	4.9	4.3
	12.5	7.5	6.3	4.9	4.3
	15.5	7.6	6.3	4.9	4.3

## 2-5.Cooling Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

## PKFY-P-VAM-A,VGM-A

CA:Capacity(kcal/h)  
SHC:Sensible heat Capacity(kcal/h)PKFY-P  
VAM-A/VGM-A

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB			
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	
20	20.0	1813	1287	1901	1337	2049	1340	2157	1373	2192	1407	2320	1386	2459	1364
	22.5	1813	1287	1894	1334	2031	1331	2131	1361	2164	1395	2290	1374	2424	1351
	25.0	1799	1280	1876	1324	2008	1320	2105	1349	2137	1382	2259	1361	2389	1338
	27.5	1784	1273	1857	1315	1985	1309	2079	1337	2110	1370	2229	1348	2354	1324
	30.0	1770	1265	1839	1306	1962	1298	2052	1325	2083	1358	2198	1336	2319	1311
	32.5	1755	1258	1821	1296	1939	1287	2026	1313	2055	1346	2167	1323	2285	1298
	35.0	1741	1250	1802	1287	1916	1277	2000	1302	2028	1334	2137	1311	2250	1285
	37.5	1726	1243	1784	1278	1893	1266	1974	1290	2001	1322	2106	1298	2215	1272
	40.0	1712	1235	1766	1269	1870	1255	1948	1278	1974	1310	2076	1286	2180	1259
	43.0	1695	1226	1744	1258	1843	1242	1916	1264	1941	1296	2039	1271	2139	1243
25	20.0	2266	1589	2377	1649	2561	1653	2697	1693	2740	1733	2900	1708	3073	1680
	22.5	2266	1589	2367	1645	2539	1642	2664	1677	2705	1718	2862	1691	3030	1663
	25.0	2248	1579	2345	1633	2510	1628	2631	1662	2671	1702	2824	1675	2986	1646
	27.5	2230	1570	2322	1621	2482	1614	2598	1647	2637	1687	2786	1659	2943	1629
	30.0	2212	1560	2299	1609	2453	1600	2566	1632	2603	1671	2748	1643	2899	1612
	32.5	2194	1551	2276	1597	2424	1586	2533	1617	2569	1656	2709	1627	2856	1595
	35.0	2176	1541	2253	1586	2395	1573	2500	1602	2535	1640	2671	1611	2812	1578
	37.5	2158	1532	2230	1574	2367	1559	2467	1587	2501	1625	2633	1595	2769	1562
	40.0	2140	1522	2207	1562	2338	1545	2434	1572	2467	1610	2595	1580	2725	1545
	43.0	2118	1511	2180	1548	2304	1529	2395	1555	2426	1592	2549	1561	2673	1526
32	20.0	2855	2352	2995	2455	3227	2452	3398	2530	3452	2613	3654	2577	3872	2539
	22.5	2855	2352	2983	2450	3199	2440	3357	2513	3409	2596	3606	2559	3817	2520
	25.0	2833	2341	2954	2437	3163	2425	3315	2497	3366	2579	3558	2542	3763	2502
	27.5	2810	2331	2925	2424	3127	2409	3274	2480	3323	2562	3510	2524	3708	2484
	30.0	2787	2320	2896	2411	3091	2394	3233	2464	3280	2545	3462	2507	3653	2465
	32.5	2765	2310	2868	2398	3055	2379	3191	2447	3237	2529	3414	2490	3598	2447
	35.0	2742	2299	2839	2385	3018	2364	3150	2431	3194	2512	3366	2472	3544	2429
	37.5	2719	2289	2810	2372	2982	2349	3109	2415	3151	2495	3318	2455	3489	2411
	40.0	2696	2278	2781	2360	2946	2334	3067	2399	3109	2479	3270	2438	3434	2393
	43.0	2669	2266	2746	2344	2902	2316	3018	2379	3057	2459	3212	2417	3368	2372
40	20.0	3625	2699	3803	2809	4098	2810	4315	2886	4383	2967	4640	2924	4917	2878
	22.5	3625	2699	3788	2802	4063	2793	4262	2864	4329	2943	4579	2900	4848	2853
	25.0	3597	2685	3751	2784	4017	2773	4210	2841	4274	2920	4518	2876	4778	2827
	27.5	3568	2671	3715	2766	3971	2752	4157	2818	4220	2897	4457	2852	4708	2802
	30.0	3539	2656	3678	2749	3925	2731	4105	2796	4165	2874	4396	2828	4639	2777
	32.5	3511	2642	3641	2731	3879	2710	4052	2774	4111	2852	4335	2804	4569	2753
	35.0	3482	2628	3605	2714	3833	2690	4000	2751	4056	2829	4274	2781	4500	2728
	37.5	3453	2614	3568	2696	3787	2669	3948	2729	4002	2806	4213	2757	4430	2703
	40.0	3424	2600	3531	2679	3741	2649	3895	2707	3947	2784	4152	2734	4361	2679
	43.0	3389	2583	3487	2658	3686	2625	3832	2681	3882	2757	4078	2706	4277	2649
50	20.0	4532	3162	4753	3282	5123	3290	5393	3368	5479	3448	5800	3397	6146	3342
	22.5	4532	3162	4735	3273	5078	3268	5328	3337	5411	3416	5724	3364	6059	3307
	25.0	4496	3143	4689	3249	5021	3240	5262	3306	5343	3385	5648	3331	5972	3273
	27.5	4460	3124	4643	3225	4963	3212	5197	3276	5275	3353	5571	3299	5886	3238
	30.0	4424	3105	4597	3201	4906	3184	5131	3245	5207	3322	5495	3266	5799	3204
	32.5	4388	3086	4552	3177	4848	3156	5066	3215	5139	3291	5419	3234	5712	3171
	35.0	4352	3066	4506	3154	4791	3128	5000	3185	5070	3261	5342	3202	5625	3137
	37.5	4316	3047	4460	3130	4734	3100	4934	3155	5002	3230	5266	3170	5538	3103
	40.0	4280	3028	4414	3107	4676	3073	4869	3125	4934	3199	5190	3139	5451	3070
	43.0	4237	3006	4359	3079	4607	3040	4790	3090	4852	3163	5098	3101	5347	3031

## 2-6.Heating Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

**PKFY-P-VAM-A,VGM-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15	21	25	27
°CWB	SHC	SHC	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15	21	25	27
°CWB	SHC	SHC	SHC	SHC	SHC
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984

**PKFY-P  
VAM-A/VGM-A**

## 2-7.Cooling Capacity (In combination with PQRY-P200-250YMF-C)

**PKFY-P-VAM-A,VGM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°C	CA	SHC	CA										
20	10	2.1	1.5	2.2	1.6	2.4	1.5	2.4	1.6	2.5	1.6	2.6	1.6	2.8	1.6
	20	2.1	1.5	2.1	1.5	2.3	1.5	2.3	1.5	2.4	1.6	2.5	1.5	2.7	1.5
	30	2.0	1.4	2.0	1.5	2.1	1.4	2.2	1.5	2.3	1.5	2.4	1.5	2.5	1.5
	40	1.7	1.3	1.8	1.3	1.9	1.3	1.9	1.3	2.0	1.4	2.1	1.4	2.2	1.3
	45	1.6	1.2	1.7	1.3	1.8	1.3	1.8	1.3	1.9	1.3	2.0	1.3	2.1	1.3
25	10	2.7	1.9	2.8	2.0	3.0	1.9	3.1	1.9	3.2	2.0	3.3	2.0	3.5	1.9
	20	2.6	1.8	2.7	1.9	2.9	1.9	3.0	1.9	3.1	2.0	3.2	1.9	3.4	1.9
	30	2.5	1.8	2.6	1.8	2.7	1.8	2.8	1.8	2.9	1.9	3.0	1.8	3.2	1.8
	40	2.2	1.6	2.2	1.7	2.4	1.6	2.4	1.7	2.5	1.7	2.6	1.7	2.8	1.7
	45	2.0	1.5	2.1	1.6	2.2	1.6	2.3	1.6	2.4	1.7	2.5	1.6	2.6	1.6
32	10	3.5	2.8	3.6	2.9	3.9	2.9	4.0	2.9	4.1	3.1	4.3	3.0	4.5	3.0
	20	3.4	2.8	3.5	2.9	3.7	2.8	3.8	2.9	3.9	3.0	4.1	3.0	4.4	2.9
	30	3.2	2.7	3.3	2.8	3.5	2.7	3.6	2.8	3.7	2.9	3.9	2.9	4.1	2.8
	40	2.8	2.5	2.9	2.6	3.1	2.6	3.1	2.6	3.2	2.7	3.4	2.7	3.6	2.7
	45	2.6	2.4	2.7	2.5	2.9	2.5	3.0	2.6	3.0	2.7	3.2	2.6	3.4	2.6
40	10	4.4	3.2	4.5	3.3	4.8	3.3	5.0	3.3	5.1	3.5	5.4	3.4	5.7	3.3
	20	4.2	3.1	4.4	3.2	4.6	3.2	4.8	3.3	4.9	3.4	5.2	3.3	5.5	3.3
	30	4.0	3.0	4.1	3.1	4.4	3.1	4.5	3.1	4.6	3.3	4.9	3.2	5.2	3.1
	40	3.5	2.8	3.6	2.9	3.8	2.8	3.9	2.9	4.0	3.0	4.3	3.0	4.5	2.9
	45	3.3	2.7	3.4	2.8	3.6	2.8	3.7	2.8	3.8	2.9	4.0	2.9	4.2	2.8
50	10	5.5	3.8	5.6	3.9	6.0	3.8	6.2	3.9	6.3	4.0	6.7	3.9	7.1	3.9
	20	5.3	3.7	5.4	3.8	5.8	3.7	5.9	3.8	6.1	3.9	6.5	3.8	6.8	3.8
	30	5.0	3.5	5.1	3.6	5.5	3.6	5.6	3.6	5.8	3.7	6.1	3.7	6.4	3.6
	40	4.3	3.2	4.5	3.3	4.7	3.3	4.9	3.3	5.0	3.4	5.3	3.4	5.6	3.3
	45	4.1	3.1	4.2	3.2	4.5	3.1	4.6	3.2	4.7	3.3	5.0	3.2	5.3	3.2

## 2-8.Heating Capacity (In combination with PQRY-P200-250YMF-C)

**PKFY-P-VAM-A,VGM-A**

SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.:°CDB					
		15		19		20	25
		°C	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
20	10	2.2	2.2	2.1	1.7	1.5	
	20	2.6	2.6	2.5	2.0	1.8	
	30	2.6	2.6	2.5	2.0	1.8	
	40	2.7	2.7	2.6	2.1	1.9	
	45	2.9	2.9	2.9	2.3	2.1	
25	10	2.8	2.8	2.7	2.2	2.0	2.0
	20	3.3	3.3	3.2	2.6	2.3	
	30	3.3	3.3	3.2	2.6	2.3	
	40	3.4	3.4	3.3	2.7	2.4	
	45	3.8	3.7	3.6	2.9	2.6	
32	10	3.5	3.5	3.4	2.7	2.7	2.4
	20	4.1	4.1	4.0	3.2	2.9	
	30	4.1	4.1	4.0	3.2	2.9	
	40	4.3	4.2	4.2	3.3	3.0	
	45	4.7	4.7	4.6	3.6	3.3	
40	10	4.4	4.3	4.3	3.4	3.4	3.1
	20	5.2	5.1	5.0	4.0	3.6	
	30	5.2	5.1	5.0	4.0	3.6	
	40	5.4	5.3	5.2	4.2	3.7	
	45	5.9	5.8	5.7	4.6	4.1	
50	10	5.5	5.5	5.4	4.3	3.9	
	20	6.5	6.4	6.3	5.0	4.5	
	30	6.5	6.4	6.3	5.0	4.5	
	40	6.7	6.7	6.6	5.2	4.7	
	45	7.4	7.3	7.2	5.7	5.2	

## 2-9.Cooling Capacity (In combination with PURY-P400-500YMF-C)

**PKFY-P-VAM-A,VGM-A**

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA								
20	20.0	2.0	1.5	2.1	1.5	2.3	1.5	2.4	1.6	2.6	1.6	2.7	1.5
	22.5	2.0	1.5	2.1	1.5	2.3	1.5	2.4	1.6	2.6	1.6	2.7	1.5
	25.0	2.0	1.4	2.1	1.5	2.2	1.5	2.4	1.6	2.5	1.5	2.7	1.5
	27.5	2.0	1.4	2.1	1.5	2.2	1.5	2.4	1.6	2.5	1.5	2.6	1.5
	30.0	2.0	1.4	2.1	1.5	2.2	1.5	2.3	1.5	2.5	1.5	2.6	1.5
	32.5	2.0	1.4	2.0	1.5	2.2	1.5	2.3	1.5	2.4	1.5	2.6	1.5
	35.0	1.9	1.4	2.0	1.5	2.1	1.4	2.3	1.5	2.4	1.5	2.5	1.5
	37.5	1.9	1.4	2.0	1.4	2.1	1.4	2.2	1.5	2.4	1.5	2.5	1.4
	40.0	1.9	1.4	2.0	1.4	2.1	1.4	2.2	1.5	2.3	1.5	2.4	1.4
	43.0	1.9	1.4	1.9	1.4	2.1	1.4	2.2	1.5	2.3	1.4	2.4	1.4
25	20.0	2.6	1.8	2.7	1.9	2.9	1.9	3.1	2.0	3.3	2.0	3.5	1.9
	22.5	2.6	1.8	2.7	1.9	2.9	1.9	3.1	2.0	3.3	1.9	3.4	1.9
	25.0	2.6	1.8	2.7	1.9	2.9	1.9	3.0	1.9	3.2	1.9	3.4	1.9
	27.5	2.5	1.8	2.6	1.9	2.8	1.8	3.0	1.9	3.2	1.9	3.3	1.9
	30.0	2.5	1.8	2.6	1.8	2.8	1.8	3.0	1.9	3.1	1.9	3.3	1.8
	32.5	2.5	1.8	2.6	1.8	2.8	1.8	2.9	1.9	3.1	1.9	3.2	1.8
	35.0	2.5	1.8	2.6	1.8	2.7	1.8	2.9	1.9	3.0	1.8	3.2	1.8
	37.5	2.5	1.8	2.5	1.8	2.7	1.8	2.8	1.9	3.0	1.8	3.1	1.8
	40.0	2.4	1.7	2.5	1.8	2.7	1.8	2.8	1.8	3.0	1.8	3.1	1.8
	43.0	2.4	1.7	2.5	1.8	2.6	1.8	2.8	1.8	2.9	1.8	3.0	1.7
32	20.0	3.3	2.7	3.5	2.9	3.7	2.8	4.0	3.0	4.2	3.0	4.5	2.9
	22.5	3.3	2.7	3.5	2.8	3.7	2.8	4.0	3.0	4.2	3.0	4.4	2.9
	25.0	3.3	2.7	3.4	2.8	3.7	2.8	3.9	3.0	4.1	3.0	4.4	2.9
	27.5	3.3	2.7	3.4	2.8	3.6	2.8	3.9	3.0	4.1	2.9	4.3	2.9
	30.0	3.2	2.7	3.4	2.8	3.6	2.8	3.8	3.0	4.0	2.9	4.2	2.9
	32.5	3.2	2.7	3.3	2.8	3.5	2.8	3.8	2.9	4.0	2.9	4.2	2.8
	35.0	3.2	2.7	3.3	2.8	3.5	2.7	3.7	2.9	3.9	2.9	4.1	2.8
	37.5	3.2	2.7	3.3	2.8	3.5	2.7	3.7	2.9	3.8	2.9	4.0	2.8
	40.0	3.1	2.6	3.2	2.7	3.4	2.7	3.6	2.9	3.8	2.8	4.0	2.8
	43.0	3.1	2.6	3.2	2.7	3.4	2.7	3.5	2.9	3.7	2.8	3.9	2.8
40	20.0	4.1	3.1	4.3	3.2	4.7	3.2	5.0	3.4	5.3	3.4	5.6	3.3
	22.5	4.1	3.1	4.3	3.2	4.6	3.2	4.9	3.4	5.2	3.3	5.5	3.3
	25.0	4.1	3.1	4.3	3.2	4.6	3.2	4.9	3.4	5.2	3.3	5.5	3.3
	27.5	4.1	3.1	4.2	3.2	4.5	3.2	4.8	3.3	5.1	3.3	5.4	3.2
	30.0	4.0	3.1	4.2	3.2	4.5	3.1	4.8	3.3	5.0	3.3	5.3	3.2
	32.5	4.0	3.0	4.2	3.1	4.4	3.1	4.7	3.3	5.0	3.2	5.2	3.2
	35.0	4.0	3.0	4.1	3.1	4.4	3.1	4.6	3.3	4.9	3.2	5.1	3.1
	37.5	3.9	3.0	4.1	3.1	4.3	3.1	4.6	3.2	4.8	3.2	5.1	3.1
	40.0	3.9	3.0	4.0	3.1	4.3	3.0	4.5	3.2	4.7	3.1	5.0	3.1
	43.0	3.9	3.0	4.0	3.1	4.2	3.0	4.4	3.2	4.7	3.1	4.9	3.1
50	20.0	5.2	3.6	5.4	3.8	5.8	3.8	6.2	3.9	6.6	3.9	7.0	3.8
	22.5	5.2	3.6	5.4	3.7	5.8	3.7	6.2	3.9	6.5	3.9	6.9	3.8
	25.0	5.1	3.6	5.3	3.7	5.7	3.7	6.1	3.9	6.4	3.8	6.8	3.7
	27.5	5.1	3.6	5.3	3.7	5.6	3.7	6.0	3.8	6.3	3.8	6.7	3.7
	30.0	5.0	3.6	5.2	3.7	5.6	3.6	5.9	3.8	6.2	3.7	6.6	3.7
	32.5	5.0	3.5	5.2	3.6	5.5	3.6	5.8	3.8	6.2	3.7	6.5	3.6
	35.0	4.9	3.5	5.1	3.6	5.4	3.6	5.8	3.7	6.1	3.7	6.4	3.6
	37.5	4.9	3.5	5.1	3.6	5.4	3.5	5.7	3.7	6.0	3.6	6.3	3.6
	40.0	4.9	3.5	5.0	3.6	5.3	3.5	5.6	3.7	5.9	3.6	6.2	3.5
	43.0	4.8	3.4	5.0	3.5	5.2	3.5	5.5	3.6	5.8	3.6	6.1	3.5

## 2-10.Heating Capacity (In combination with PURY-P400-500YMF-C)

**PKFY-P-VAM-A,VGM-A**

Unit size	Outdoor air temp.	Indoor air temp.: °CDB			
		15.0 °CWB	20.0 SHC(kW)	25.0 SHC(kW)	27.0 SHC(kW)
20	-15.0	1.6	1.5	1.5	1.5
	-10.0	1.8	1.8	1.7	1.7
	-5.0	2.0	2.0	2.0	1.9
	0.0	2.2	2.2	2.1	1.9
	2.5	2.4	2.3	2.1	1.9
	6.0	2.5	2.5	2.1	1.9
	7.5	2.6	2.5	2.1	1.9
	10.0	2.7	2.5	2.1	1.9
	12.5	2.9	2.5	2.1	1.9
	15.5	2.9	2.5	2.1	1.9
25	-15.0	2.0	2.0	1.9	1.9
	-10.0	2.3	2.2	2.2	2.2
	-5.0	2.6	2.5	2.5	2.5
	0.0	2.9	2.8	2.7	2.5
	2.5	3.0	3.0	2.7	2.5
	6.0	3.2	3.2	2.7	2.5
	7.5	3.3	3.2	2.7	2.5
	10.0	3.5	3.2	2.7	2.5
	12.5	3.7	3.2	2.7	2.5
	15.5	3.7	3.2	2.7	2.5
32	-15.0	2.5	2.5	2.4	2.4
	-10.0	2.8	2.8	2.8	2.7
	-5.0	3.2	3.2	3.1	3.1
	0.0	3.6	3.5	3.4	3.1
	2.5	3.8	3.7	3.4	3.1
	6.0	4.0	4.0	3.4	3.1
	7.5	4.2	4.0	3.4	3.1
	10.0	4.4	4.0	3.4	3.1
	12.5	4.6	4.0	3.4	3.1
	15.5	4.6	4.0	3.4	3.1

Unit size	Outdoor air temp.	SHC:Sensible heat Capacity(kW)			
		15.0 °CWB	20.0 SHC(kW)	25.0 SHC(kW)	27.0 SHC(kW)
40	-15.0	3.1	3.1	3.0	3.0
	-10.0	3.6	3.5	3.5	3.4
	-5.0	4.0	4.0	3.9	3.9
	0.0	4.5	4.4	4.3	3.9
	2.5	4.7	4.7	4.3	3.9
	6.0	5.0	5.0	4.3	3.9
	7.5	5.2	5.0	4.3	3.9
	10.0	5.4	5.0	4.3	3.9
	12.5	5.7	5.0	4.3	3.9
	15.5	5.8	5.0	4.3	3.9
50	-15.0	3.9	3.9	3.8	3.7
	-10.0	4.5	4.4	4.3	4.3
	-5.0	5.0	5.0	4.9	4.9
	0.0	5.6	5.6	5.4	4.9
	2.5	5.9	5.9	5.4	4.9
	6.0	6.4	6.3	5.4	4.9
	7.5	6.6	6.3	5.4	4.9
	10.0	6.9	6.3	5.4	4.9
	12.5	7.2	6.3	5.4	4.9
	15.5	7.2	6.3	5.4	4.9

## 2-11.Cooling Capacity (In combination with PU(H)Y-200-250TM-C)

CA:Capacity(kcal/h)  
SHC:Sensible heat Capacity(kcal/h)

### PKFY-P-VAM-A,VGM-A

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.05°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
20	20.0	1870	1318	1939	1357	2077	1354	2180	1384	2215	1418	2353	1401	2491	1378
	22.5	1870	1318	1939	1357	2077	1354	2180	1384	2207	1415	2330	1391	2451	1362
	25.0	1864	1315	1926	1351	2050	1341	2150	1370	2171	1398	2292	1375	2411	1347
	27.5	1832	1298	1895	1335	2017	1325	2112	1353	2134	1382	2254	1359	2372	1331
	30.0	1801	1282	1864	1319	1984	1309	2075	1336	2097	1365	2216	1344	2332	1316
	32.5	1769	1266	1832	1303	1950	1293	2037	1319	2060	1349	2178	1328	2293	1301
	35.0	1738	1249	1801	1287	1917	1278	2000	1302	2023	1333	2140	1312	2253	1286
	37.5	1706	1233	1770	1271	1884	1262	1963	1285	1986	1317	2101	1297	2213	1271
	40.0	1675	1217	1738	1256	1851	1246	1925	1269	1950	1301	2063	1282	2174	1257
	43.0	1637	1198	1700	1237	1811	1228	1880	1249	1905	1282	2018	1263	2126	1239
25	20.0	2337	1628	2424	1675	2596	1671	2725	1707	2768	1747	2941	1726	3113	1697
	22.5	2337	1628	2424	1675	2596	1671	2725	1707	2759	1743	2912	1714	3064	1677
	25.0	2330	1624	2408	1667	2563	1654	2687	1689	2713	1722	2865	1694	3014	1658
	27.5	2290	1603	2369	1646	2521	1634	2640	1667	2667	1701	2817	1673	2965	1638
	30.0	2251	1582	2330	1626	2480	1614	2593	1645	2621	1680	2770	1653	2915	1619
	32.5	2212	1561	2290	1606	2438	1594	2547	1624	2575	1660	2722	1633	2866	1600
	35.0	2172	1540	2251	1586	2397	1574	2500	1603	2529	1639	2674	1613	2816	1581
	37.5	2133	1519	2212	1566	2355	1554	2453	1581	2483	1618	2627	1594	2767	1562
	40.0	2094	1499	2173	1546	2313	1534	2407	1560	2437	1598	2579	1574	2717	1543
	43.0	2046	1475	2126	1522	2264	1511	2350	1535	2382	1574	2522	1551	2658	1521
32	20.0	2945	2395	3054	2483	3271	2471	3434	2545	3488	2628	3706	2596	3923	2557
	22.5	2945	2395	3054	2483	3271	2471	3434	2545	3477	2623	3670	2583	3860	2536
	25.0	2935	2390	3034	2474	3229	2454	3385	2526	3419	2601	3610	2561	3798	2515
	27.5	2886	2367	2985	2452	3177	2431	3327	2502	3361	2578	3550	2540	3736	2494
	30.0	2836	2344	2935	2430	3124	2409	3268	2479	3303	2555	3490	2518	3673	2473
	32.5	2787	2321	2886	2407	3072	2387	3209	2455	3245	2532	3430	2496	3611	2452
	35.0	2737	2298	2836	2385	3020	2366	3150	2432	3187	2510	3370	2475	3548	2431
	37.5	2687	2275	2787	2363	2967	2344	3091	2409	3129	2487	3310	2453	3486	2411
	40.0	2638	2252	2738	2341	2915	2322	3032	2386	3071	2465	3250	2432	3424	2390
	43.0	2578	2225	2678	2315	2852	2296	2962	2358	3001	2438	3178	2406	3349	2366
40	20.0	3740	2758	3878	2847	4154	2836	4361	2908	4430	2988	4705	2951	4981	2903
	22.5	3740	2758	3878	2847	4154	2836	4361	2908	4415	2982	4660	2933	4902	2874
	25.0	3727	2752	3853	2834	4100	2812	4299	2881	4341	2950	4584	2903	4823	2845
	27.5	3664	2720	3790	2804	4034	2782	4224	2849	4268	2919	4507	2873	4744	2816
	30.0	3601	2689	3727	2774	3967	2752	4150	2817	4194	2888	4431	2843	4664	2787
	32.5	3538	2657	3664	2743	3901	2722	4075	2785	4120	2857	4355	2813	4585	2759
	35.0	3476	2626	3602	2713	3834	2692	4000	2753	4047	2826	4279	2784	4506	2731
	37.5	3413	2596	3539	2684	3768	2662	3925	2721	3973	2796	4203	2755	4427	2703
	40.0	3350	2565	3476	2654	3701	2633	3850	2690	3899	2765	4127	2726	4347	2675
	43.0	3274	2528	3401	2618	3622	2598	3761	2652	3811	2729	4035	2691	4252	2642
50	20.0	4675	3242	4847	3334	5192	3326	5451	3397	5537	3476	5882	3434	6227	3376
	22.5	4675	3242	4847	3334	5192	3326	5451	3397	5519	3468	5825	3410	6128	3336
	25.0	4659	3233	4816	3317	5126	3293	5374	3360	5426	3425	5729	3368	6028	3297
	27.5	4580	3190	4737	3276	5042	3252	5280	3316	5334	3382	5634	3328	5929	3257
	30.0	4502	3148	4659	3235	4959	3211	5187	3273	5242	3340	5539	3287	5830	3218
	32.5	4423	3106	4581	3194	4876	3171	5093	3229	5150	3299	5444	3247	5731	3180
	35.0	4344	3064	4502	3154	4793	3131	5000	3186	5058	3257	5349	3207	5632	3141
	37.5	4266	3023	4424	3113	4710	3091	4907	3144	4966	3216	5254	3167	5533	3103
	40.0	4187	2981	4345	3073	4627	3051	4813	3101	4874	3175	5159	3128	5434	3065
	43.0	4093	2932	4251	3026	4527	3004	4701	3051	4764	3126	5044	3081	5315	3020

## 2-12.Heating Capacity (In combination with PUHY-200-250TM-C)

**PKFY-P-VAM-A,VGM-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
°CWB	SHC	SHC	SHC	SHC	SHC
20	-15.0	1555	1532	1509	1500
	-10.0	1774	1751	1728	1601
	-5.0	1994	1970	1809	1601
	0.0	2213	2190	1809	1601
	2.5	2322	2250	1809	1601
	6.0	2343	2250	1809	1601
	7.5	2441	2250	1809	1601
	10.0	2605	2250	1809	1601
	12.5	2769	2250	1809	1601
	15.5	2807	2250	1809	1601
25	-15.0	1935	1907	1878	1866
	-10.0	2208	2179	2151	1992
	-5.0	2481	2452	2252	1992
	0.0	2754	2725	2252	1992
	2.5	2890	2800	2252	1992
	6.0	2915	2800	2252	1992
	7.5	3038	2800	2252	1992
	10.0	3242	2800	2252	1992
	12.5	3446	2800	2252	1992
	15.5	3493	2800	2252	1992

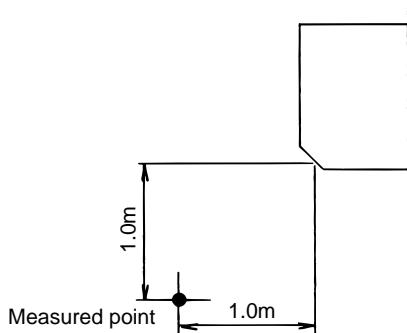
Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
°CWB	SHC	SHC	SHC	SHC	SHC
32	-15.0	2454	2417	2381	2366
	-10.0	2800	2763	2727	2525
	-5.0	3146	3109	2855	2525
	0.0	3491	3455	2855	2525
	2.5	3664	3550	2855	2525
	6.0	3696	3550	2855	2525
	7.5	3852	3550	2855	2525
	10.0	4111	3550	2855	2525
	12.5	4370	3550	2855	2525
	15.5	4428	3550	2855	2525
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
50	-15.0	3871	3813	3755	3732
	-10.0	4416	4359	4301	3984
	-5.0	4962	4904	4503	3984
	0.0	5508	5450	4503	3984
	2.5	5780	5600	4503	3984
	6.0	5831	5600	4503	3984
	7.5	6076	5600	4503	3984
	10.0	6484	5600	4503	3984
	12.5	6893	5600	4503	3984
	15.5	6986	5600	4503	3984

**PKFY-P-VAM-A/VGM-A**

### 3. Sound Levels

#### 3-1. Noise level

Wall mounted

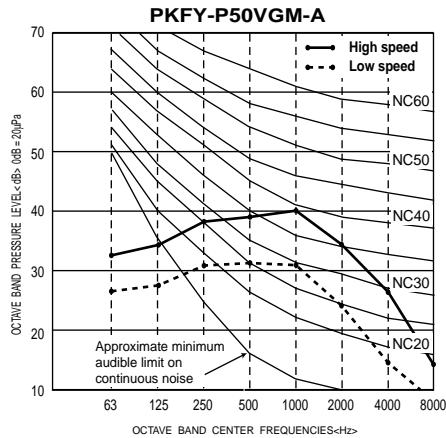
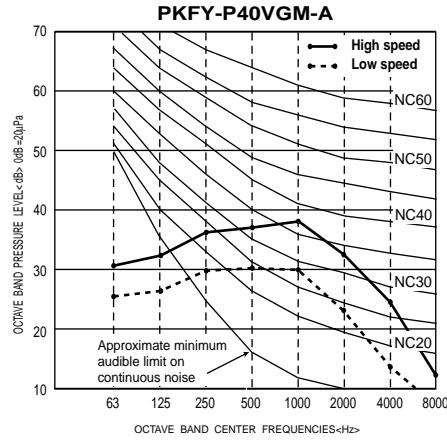
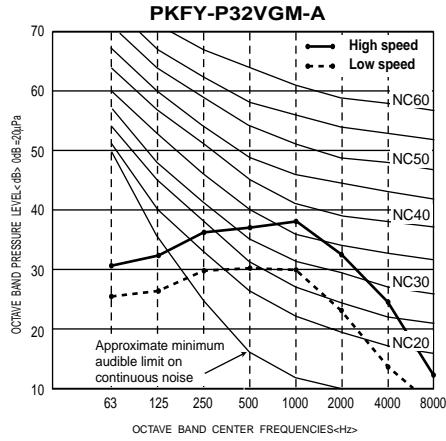
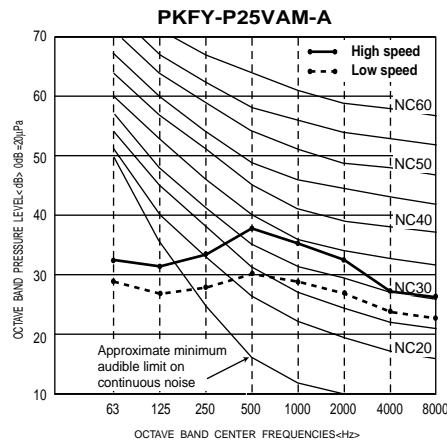
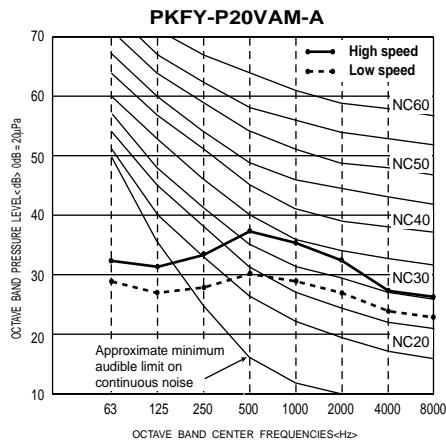


Noise level at anechoic room  
(Low-Middle2-Middle1-High)

Unit : dB(A)

Model	Noise level (A weighted)
PKFY-P20VAM-A PKFY-P25VAM-A	32-33-35-36
PKFY-P32VGM-A PKFY-P40VGM-A	33-36-38-41
PKFY-P50VGM-A	34-37-40-43

#### 3-2. NC curves



## 4. External Dimensions

PKFY-P20, 25VAM-A

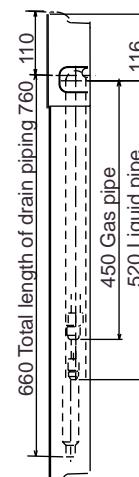
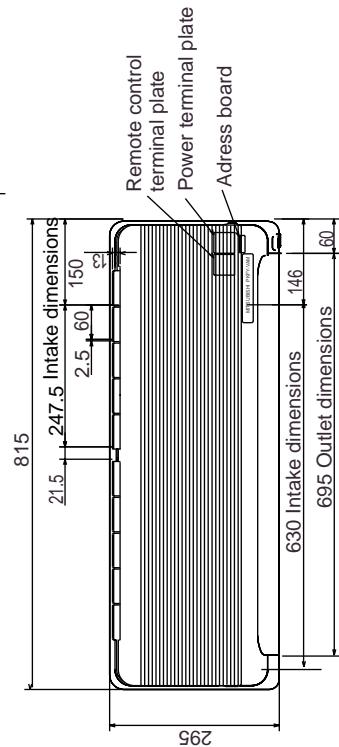
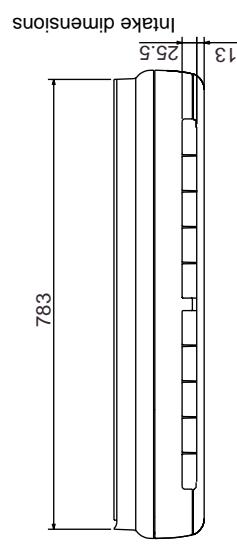
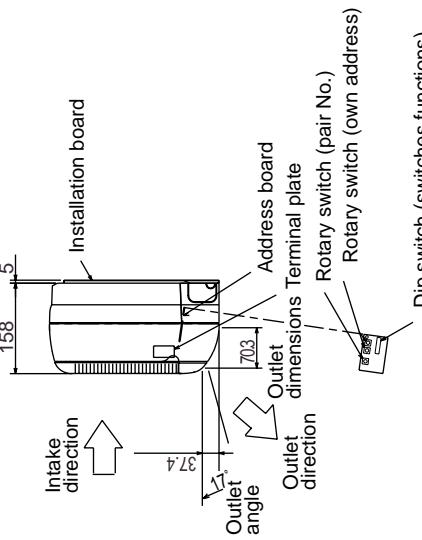
Unit : mm

PKFY-P  
VAM-A/VGM-A

Liquid pipe	$\phi 6.35$
Gas pipe	$\phi 12.7$

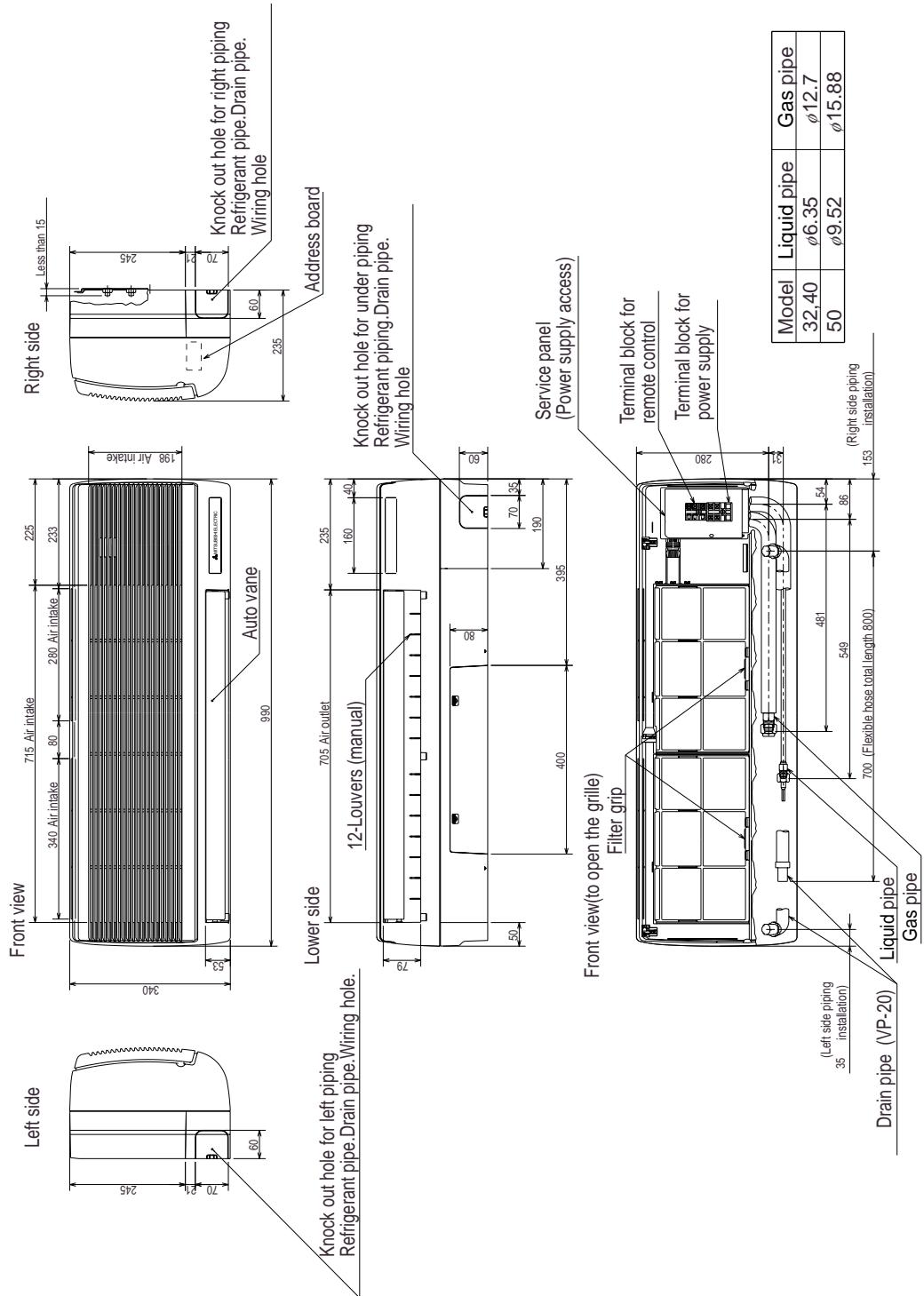
The address board is protected by a plastic cover.

Remove the cover with a screwdriver (one screw) to set the board.



PKFY-P32,40,50VGM-A

Unit : mm



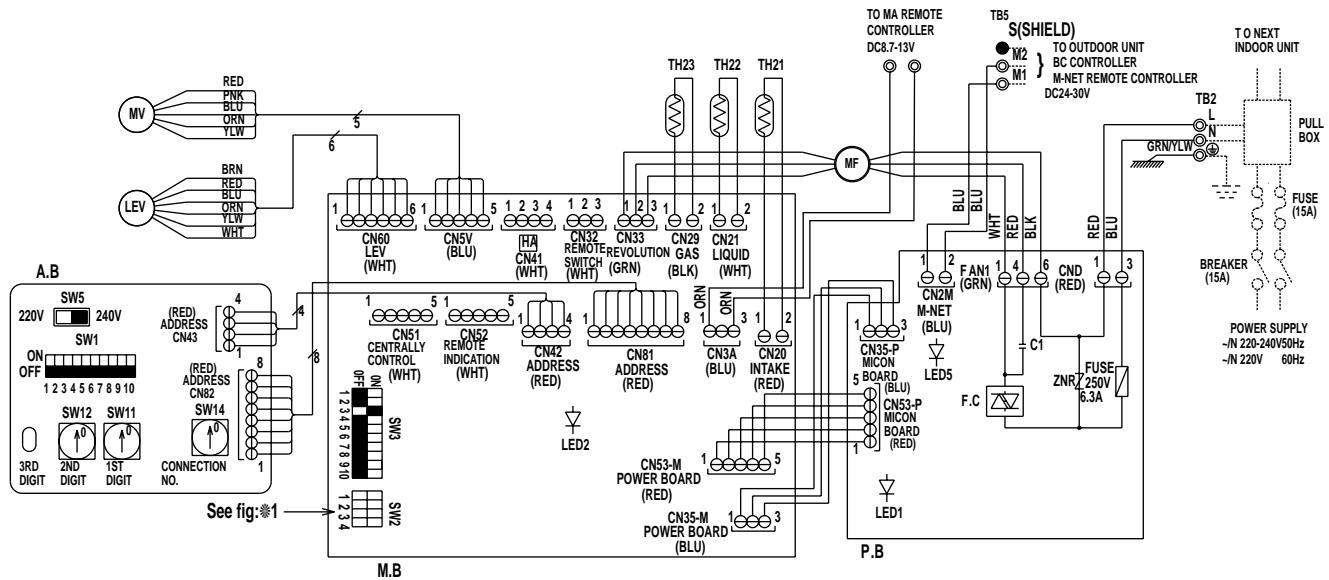
# 5. Electrical Wiring Diagrams

## 5-1 PKFY-P-VAM-A

PKFY-P  
VAM-A/VGM-A

### <SYMBOL EXPLANATION>

Symbol	Name		Symbol	Name		Symbol	Name	
M.B	Indoor controller board		TH23	Thermistor	Pipe temp. detection/Gas (0°C / 15kΩ, 25°C / 5.4kΩ)	TB2	Terminal block	Power supply
CN32	Connector	Remote switch		P.B	Indoor power board	TB5		MA-Remote controller
CN41		HA terminal - A	P.B	Varistor	A.B		Circuit board	Address
CN51		Centrally control	ZNR				Switch	Mode selection
CN52		Remote indication	FUSE	Fuse (6.3A)	SW1 <A.B>	SW5 <A.B>		Voltage selection
SW2	Switch	Capacity code	F.C	Fan phase control	SW11 <A.B>		Switch	Address setting 1st digit
SW3		Mode selection	MF	Fan motor	SW12 <A.B>			Address setting 2nd digit
TH21	Thermistor	Room temp. detection (0°C / 15kΩ, 25°C / 5.4kΩ)	C1	Capacity (fan motor)	SW14 <A.B>			Connection No.
			MV	Vane motor				
TH22		Pipe temp. detection/liquid (0°C / 15kΩ, 25°C / 5.4kΩ)	LEV	Linear expansion valve				



### Note

1. At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
2. In case of using MA-Remote controller, please connect to TB15.(Remote controller wire is non-polar.)
3. In case of using M-NET, please connect to the wire.(BLU, two wire) <M1, M2>of CN2M (Transmission line is non-polar.)
4. Symbols used in wiring diagram above are, ◎ : terminal block, ⊖ : connector, ● : direct wire connection.
5. The setting of the SW2 dip switches differs in the capacity for the detail, refer to the fig: \*1.
6. Please set the switch SW5 according to the power supply voltage.  
SW5 to 240V side when the power supply is 230 and 240 volts.  
When the power supply is 220 volts, set SW5 to 220V side.

Led on indoor board for service

Mark	Meaning	Function
LED1	Main power supply	Main power supply (indoor unit:220-240V) power on → lamp is lit
LED2	Power supply for MA-Remote controller	Power supply for MA-Remote controller on → lamp is lit

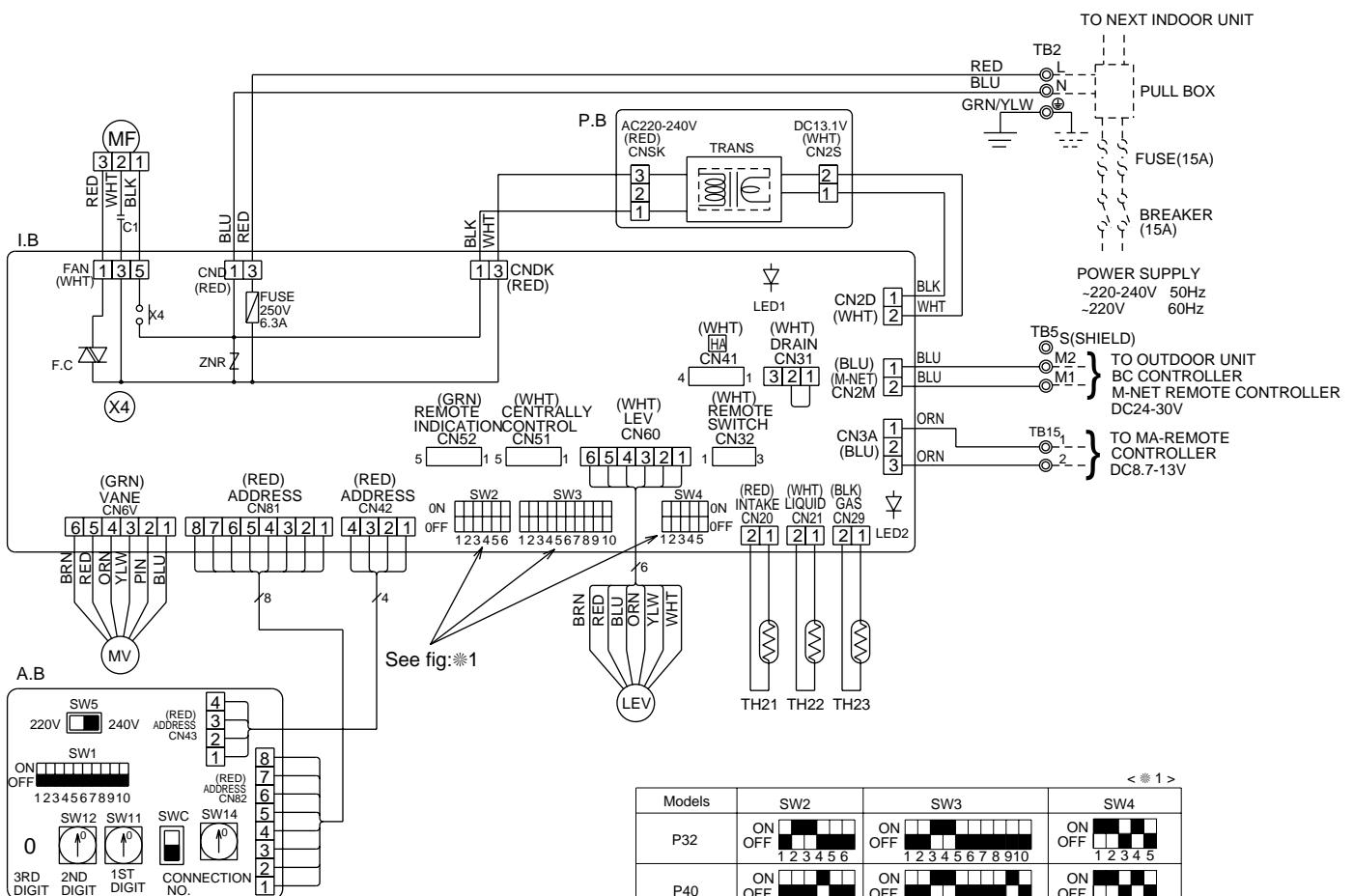
<\* 1>

MODELS	SW2	MODELS	SW2
PKFY-P20VAM	ON OFF 1 2 3 4	PKFY-P25VAM	ON OFF 1 2 3 4

5-2 PKFY-P-VGM-A

## <SYMBOL EXPLANATION>

Symbol	Name		Symbol	Name		Symbol	Name					
I.B	Indoor controller board		TH21 TH22 TH23	Thermistor	Room temp. detection (0°C/15kΩ,25°C/5.4kΩ)		A.B SW1 SW5 SW11 SW12 SW14 SWC	Circuit board				
CN32	Connector	Remote switch			Pipe temp. detection/liquid (0°C/15kΩ,25°C/5.4kΩ)			Switch Mode selection Voltage selection Address setting 1st digit Address setting 2nd digit				
CN41		HA terminal-A			Centrally control							
CN51		Centrally control			Remote indication							
CN52		Remote indication			Pipe temp. detection/Gas (0°C/15kΩ,25°C/5.4kΩ)							
SW2	Switch	Capacity code			Fan motor (with inner thermostat)			Connection No. Option selector				
SW3		Mode selection			Fan motor (with inner thermostat)							
SW4		Model selection			Capacitor (fan motor)							
ZNR		Varistor			Vane motor							
X4	Aux.Relay (Fan motor)		TB2	Terminal block	Power supply		P.B	Indoor power board				
FUSE	Fuse (6.3A)		TB5		Transmission							
F.C	Fan phase control		TB15		MA-Remote controller							
			LEV	Linear expansion valve								



## NOTE

1. At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
  2. In case of using MA-Remote controller, please connect to TB15.  
(Remote controller wire is non-polar.)
  3. In case of using M-NET, please connect to TB5.(Transmission line is non-polar.)
  4. Symbol[S] of TB5 is the shield wire connection.
  5. Symbols used in wiring diagram above are,  
①: Terminal block, ②: Connector.
  6. The setting of the SW2 dip switches differs in the capacity. For the detail, refer to the fig: ①.
  7. Please set the switch SW5 according to the power supply voltage.  
Set SW5 to 240V side when the power supply is 230 and 240 volts.  
When the power supply is 220 volts, set SW5 to 220V side.

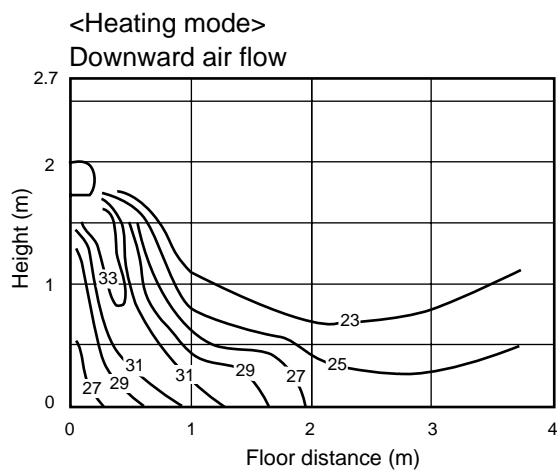
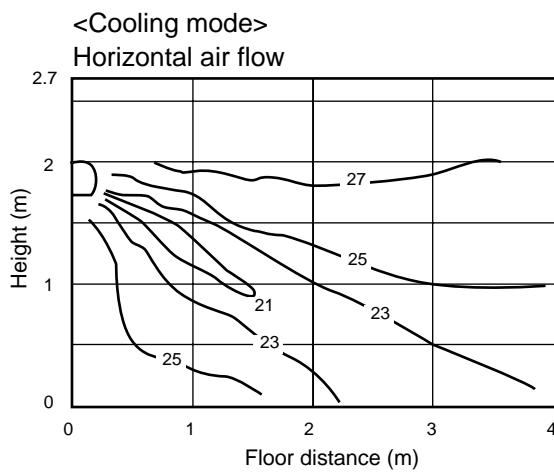
Led on indoor board for service

Mark	Meaning	Function
LED1	Main power supply	Main power supply (indoor unit:220-240V) power on → lamp is lit
LED2	Power supply for MA-Remote controller	Power supply for MA-Remote controller on → lamp is lit

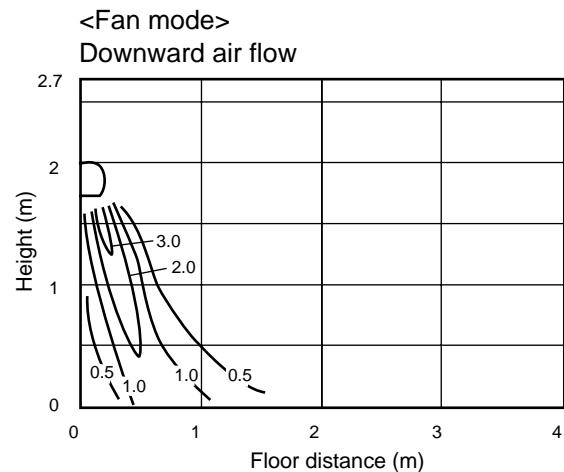
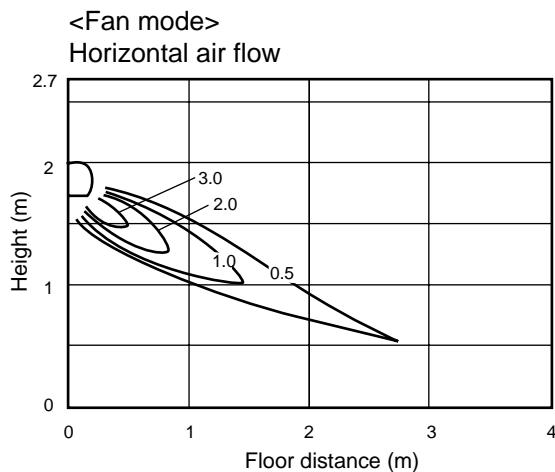
## 6. Temperature/Airflow distribution

### 6-1 PKFY-P-VAM-A

#### ● Temperature distribution



#### ● Airflow distribution



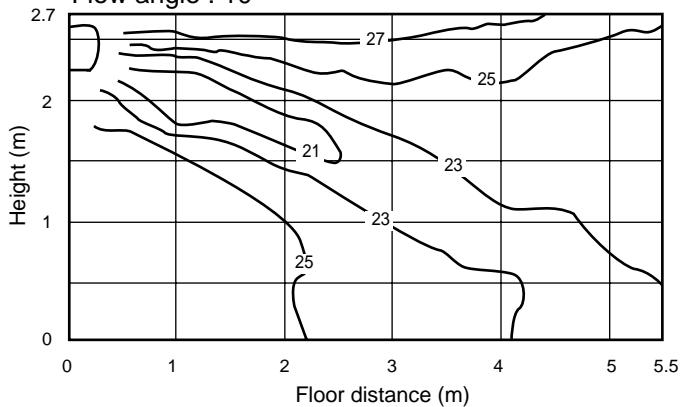
VAM-A/VGM-A  
PKFY-P

## 6-2 PKFY-P-VGM-A

### ● Temperature distribution

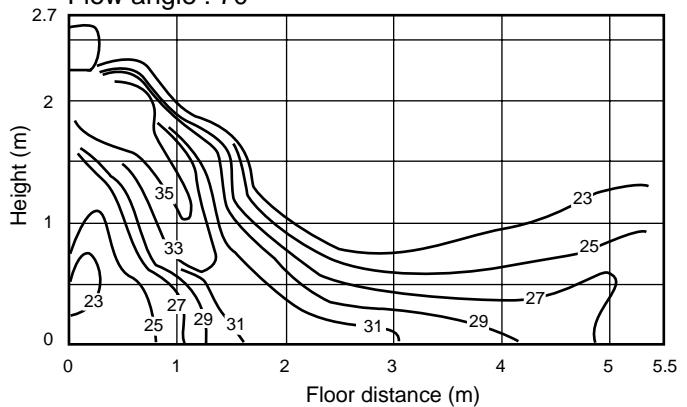
<Cooling mode>

Flow angle : 10°



<Heating mode>

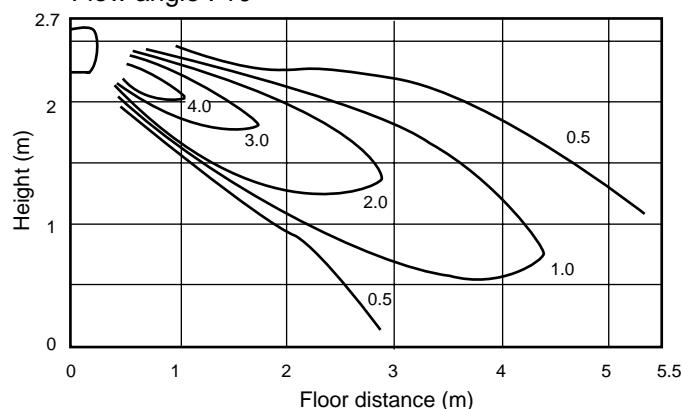
Flow angle : 70°



### ● Airflow distribution

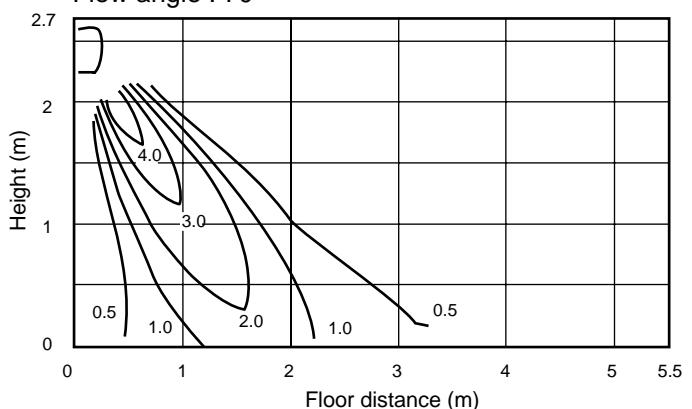
<Fan mode>

Flow angle : 10°



<Fan mode>

Flow angle : 70°



Ceiling suspended

PCFY-P-VGM-A

PCFY-P-VGM-A

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# 1. Specifications

			PCFY-P40VGM-A	PCFY-P63VGM-A	PCFY-P100VGM-A	PCFY-P125VGM-A	
Power source			~ 220-240V 50Hz / ~220V 60Hz				
Cooling capacity	※ 1	kW	4.5	7.1	11.2	14.0	
	※ 2	kcal/h	4,000	6,300	10,000	12,500	
Heating capacity	※ 1	kW	5.0	8.0	12.5	16.0	
Power consumption	Cooling	kW	0.10	0.13	0.16	0.24	
	Heating	kW	0.10	0.13	0.16	0.24	
Current	Cooling	A	0.46	0.60	0.73	1.10	
	Heating	A	0.46	0.60	0.73	1.10	
External finish(Munsel No.)			0.70Y 8.59/0.97				
Dimension ※ 3	Height	mm	210		270		
	Width	mm	1,000		1,310		
	Depth	mm	680				
Net weight ※ 3		kg	27	34	37	43	
Heat exchanger			Cross fin (Aluminum plate fin and copper tube)				
Fan	Type		Sirocco fanX 2	Sirocco fanX 3		Sirocco fanX 4	
	Airflow rate ※ 3 (Lo-Mid2-Mid1-Hi)	m³/min	8-10-11-12	12-14-16-18	18-20-23-25	26-28-32-35	
	External static pressure	Pa	0				
Motor	Type		Single phase induction motor				
	Output	kW	0.054	0.070	0.090	0.150	
Air filter			PP Honeycomb (long life)				
Refrigerant pipe dimension	Gas (Flare)	mm	ø 12.7	ø 15.88	ø 19.05		
	Liquid (Flare)	mm	ø 6.35	ø 9.52			
Drain pipe dimension			VP-25				
Noise level (Lo-Mid2-Mid1-Hi) ※3 ※4		dB(A)	29-33-36-38	32-34-37-39	36-38-41-43	37-39-42-44	

Note: ① Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19°CWB, Outdoor 35°CDB

Heating : Indoor 20°CDB, Outdoor 7°CDB/6°CWB

② Cooling capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor 27°CDB/19.5°CWB, Outdoor 35°CDB (WR2: water 30°C)

③ External dimension/net weight are shown in (unit/panel), and airflow rate/noise level are in (low-middle 2-middle 1-high).

④ It is measured in anechoic room.

## 2. Capacity Tables

### 2-1.Cooling Capacity (In combination with PUMY-(P)125YM(A))

PCFY-P-VGM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.							
		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA
40 (4.5)	20.0	4.5	3.1	4.7	3.2	5.0	3.2	5.3	3.3
	22.5	4.4	3.1	4.6	3.2	5.0	3.2	5.2	3.3
	25.0	4.3	3.1	4.6	3.2	4.9	3.2	5.2	3.3
	27.5	4.3	3.0	4.6	3.2	4.9	3.2	5.1	3.2
	30.0	4.2	3.0	4.5	3.2	4.8	3.1	5.1	3.2
	32.5	4.2	3.0	4.4	3.1	4.7	3.1	5.0	3.2
	35.0	4.1	2.9	4.4	3.1	4.7	3.1	5.0	3.2
	37.5	4.1	2.9	4.3	3.1	4.6	3.0	4.9	3.1
	40.0	4.0	2.9	4.3	3.0	4.5	3.0	4.8	3.1
	46.0	3.8	2.8	4.1	3.0	4.3	2.9	4.6	3.0
63 (7.1)	20.0	7.0	5.0	7.4	5.1	7.9	5.1	8.3	5.3
	22.5	6.9	4.9	7.3	5.1	7.8	5.1	8.2	5.2
	25.0	6.9	4.9	7.3	5.1	7.7	5.1	8.2	5.2
	27.5	6.8	4.8	7.2	5.0	7.7	5.0	8.1	5.2
	30.0	6.7	4.8	7.1	5.0	7.5	5.0	8.0	5.1
	32.5	6.6	4.7	7.0	5.0	7.5	4.9	7.9	5.1
	35.0	6.5	4.7	6.9	4.9	7.3	4.9	7.8	5.0
	37.5	6.4	4.6	6.8	4.9	7.2	4.8	7.7	5.0
	40.0	6.3	4.6	6.7	4.8	7.2	4.8	7.6	4.9
	46.0	6.1	4.5	6.5	4.7	6.9	4.6	7.3	4.8
100 (11.2)	20.0	11.1	7.8	11.6	8.1	12.5	8.1	13.1	8.3
	22.5	10.9	7.8	11.5	8.1	12.3	8.0	13.0	8.3
	25.0	10.8	7.7	11.5	8.0	12.2	8.0	12.9	8.2
	27.5	10.7	7.6	11.3	8.0	12.1	7.9	12.8	8.2
	30.0	10.5	7.5	11.2	7.9	11.9	7.8	12.6	8.1
	32.5	10.4	7.5	11.1	7.8	11.8	7.8	12.5	8.0
	35.0	10.2	7.4	10.9	7.8	11.6	7.7	12.3	7.9
	37.5	10.1	7.3	10.8	7.7	11.4	7.6	12.2	7.9
	40.0	10.0	7.3	10.6	7.6	11.3	7.6	12.0	7.8
	46.0	9.6	7.1	10.2	7.4	10.8	7.3	11.5	7.6
125 (14.0)	20.0	13.9	9.9	14.6	10.3	15.6	10.2	16.4	10.5
	22.5	13.7	9.8	14.4	10.2	15.4	10.1	16.2	10.4
	25.0	13.5	9.7	14.3	10.1	15.3	10.1	16.1	10.3
	27.5	13.4	9.6	14.2	10.1	15.1	10.0	16.0	10.3
	30.0	13.2	9.5	14.0	10.0	14.9	9.9	15.8	10.2
	32.5	13.0	9.4	13.8	9.9	14.7	9.8	15.6	10.1
	35.0	12.8	9.3	13.7	9.8	14.5	9.7	15.4	10.0
	37.5	12.6	9.2	13.4	9.7	14.3	9.6	15.2	9.9
	40.0	12.5	9.1	13.3	9.6	14.1	9.5	15.0	9.8
	46.0	12.0	8.9	12.8	9.4	13.5	9.2	14.4	9.6

### 2-2.Heating Capacity (In combination with PUMY-(P)125YM(A))

PCFY-P-VGM-A

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.:°CDB		
		15.0	20.0	25.0
		CWB	SHC	SHC
40	-12.0	3.2	3.1	3.1
	-10.0	3.4	3.3	3.2
	-5.0	3.8	3.8	3.7
	0.0	4.3	4.3	4.2
	2.5	4.6	4.6	4.5
	6.0	5.0	5.0	4.9
	7.5	5.2	5.2	5.0
	10.0	5.5	5.5	5.0
	12.5	5.9	5.5	5.0
	15.5	6.2	5.5	5.0
63	-12.0	5.1	5.0	4.9
	-10.0	5.4	5.3	5.2
	-5.0	6.1	6.0	5.9
	0.0	6.9	6.9	6.8
	2.5	7.4	7.3	7.2
	6.0	8.0	8.0	7.9
	7.5	8.3	8.3	7.9
	10.0	8.8	8.8	7.9
	12.5	9.4	8.8	7.9
	15.5	9.8	8.8	7.9

Unit size	Outdoor air temp.	Indoor air temp.:°CDB		
		15.0	20.0	25.0
		CWB	SHC	SHC
100	-12.0	8.0	7.8	7.7
	-10.0	8.4	8.2	8.1
	-5.0	9.6	9.4	9.3
	0.0	10.9	10.7	10.6
	2.5	11.5	11.4	11.3
	6.0	12.6	12.5	12.3
	7.5	13.0	12.9	12.4
	10.0	13.8	13.7	12.4
	12.5	14.6	13.8	12.4
	15.5	15.4	13.8	12.4
125	-12.0	10.2	10.0	9.8
	-10.0	10.7	10.6	10.4
	-5.0	12.2	12.1	11.9
	0.0	13.9	13.8	13.6
	2.5	14.8	14.7	14.5
	6.0	16.1	16.0	15.8
	7.5	16.7	16.6	15.8
	10.0	17.7	17.6	15.8
	12.5	18.7	17.7	15.8
	15.5	19.7	17.7	15.8

PCFY-P-VGM-A

## 2-3.Cooling Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

PCFY-P-VGM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	
40 (4.5)	20.0	4.4	3.1	4.5	3.2	4.7	3.1	4.8	3.1	4.9	3.2	5.0	3.1	5.2	3.0
	22.5	4.4	3.1	4.5	3.1	4.6	3.1	4.7	3.1	4.8	3.1	5.0	3.1	5.2	3.0
	25.0	4.3	3.1	4.4	3.1	4.6	3.0	4.7	3.0	4.8	3.1	5.0	3.0	5.1	3.0
	27.5	4.3	3.0	4.4	3.1	4.5	3.0	4.6	3.0	4.7	3.1	4.9	3.0	5.1	2.9
	30.0	4.2	3.0	4.3	3.1	4.5	3.0	4.6	3.0	4.7	3.1	4.9	3.0	5.0	2.9
	32.5	4.2	3.0	4.3	3.0	4.5	3.0	4.5	3.0	4.6	3.1	4.8	3.0	5.0	2.9
	35.0	4.1	3.0	4.2	3.0	4.4	2.9	4.5	3.0	4.6	3.0	4.8	3.0	5.0	2.9
	37.5	4.1	2.9	4.2	3.0	4.4	2.9	4.5	2.9	4.5	3.0	4.7	3.0	4.9	2.9
	40.0	4.1	2.9	4.1	3.0	4.3	2.9	4.4	2.9	4.5	3.0	4.7	2.9	4.9	2.9
	43.0	4.0	2.9	4.1	2.9	4.3	2.9	4.4	2.9	4.4	3.0	4.6	2.9	4.8	2.8
63 (7.1)	20.0	7.0	4.9	7.1	5.0	7.4	4.9	7.5	4.9	7.7	5.0	8.0	4.9	8.2	4.7
	22.5	6.9	4.9	7.0	5.0	7.3	4.8	7.5	4.9	7.6	5.0	7.9	4.9	8.2	4.7
	25.0	6.8	4.8	7.0	4.9	7.2	4.8	7.4	4.8	7.5	5.0	7.8	4.8	8.1	4.7
	27.5	6.7	4.8	6.9	4.9	7.2	4.8	7.3	4.8	7.5	4.9	7.7	4.8	8.0	4.7
	30.0	6.7	4.8	6.8	4.9	7.1	4.7	7.2	4.8	7.4	4.9	7.7	4.8	8.0	4.6
	32.5	6.6	4.7	6.7	4.8	7.0	4.7	7.2	4.7	7.3	4.9	7.6	4.7	7.9	4.6
	35.0	6.5	4.7	6.7	4.8	7.0	4.7	7.1	4.7	7.2	4.8	7.5	4.7	7.8	4.6
	37.5	6.5	4.7	6.6	4.7	6.9	4.6	7.0	4.7	7.2	4.8	7.5	4.7	7.7	4.6
	40.0	6.4	4.6	6.5	4.7	6.8	4.6	7.0	4.6	7.1	4.8	7.4	4.7	7.7	4.5
	43.0	6.3	4.6	6.4	4.7	6.7	4.6	6.9	4.6	7.0	4.7	7.3	4.6	7.6	4.5
100 (11.2)	20.0	11.0	7.8	11.2	7.9	11.6	7.7	11.9	7.7	12.1	8.0	12.5	7.7	13.0	7.5
	22.5	10.9	7.7	11.1	7.9	11.5	7.7	11.8	7.7	12.0	7.9	12.4	7.7	12.9	7.5
	25.0	10.8	7.7	11.0	7.8	11.4	7.6	11.6	7.7	11.9	7.9	12.3	7.7	12.8	7.4
	27.5	10.6	7.6	10.9	7.7	11.3	7.6	11.5	7.6	11.8	7.8	12.2	7.6	12.7	7.4
	30.0	10.5	7.5	10.8	7.7	11.2	7.5	11.4	7.6	11.6	7.8	12.1	7.6	12.5	7.3
	32.5	10.4	7.5	10.6	7.6	11.1	7.5	11.3	7.5	11.5	7.7	12.0	7.5	12.4	7.3
	35.0	10.3	7.4	10.5	7.6	11.0	7.4	11.2	7.5	11.4	7.7	11.9	7.5	12.3	7.3
	37.5	10.2	7.4	10.4	7.5	10.9	7.4	11.1	7.4	11.3	7.6	11.8	7.4	12.2	7.2
	40.0	10.1	7.3	10.3	7.5	10.8	7.3	11.0	7.4	11.2	7.6	11.6	7.4	12.1	7.2
	43.0	9.9	7.2	10.2	7.4	10.6	7.2	10.8	7.3	11.1	7.5	11.5	7.3	12.0	7.1
125 (14.0)	20.0	13.7	9.8	14.0	10.0	14.6	9.7	14.8	9.8	15.1	10.1	15.7	9.8	16.2	9.5
	22.5	13.6	9.7	13.9	9.9	14.4	9.7	14.7	9.7	15.0	10.0	15.5	9.7	16.1	9.4
	25.0	13.4	9.6	13.7	9.8	14.3	9.6	14.6	9.6	14.8	9.9	15.4	9.7	16.0	9.4
	27.5	13.3	9.6	13.6	9.8	14.1	9.5	14.4	9.6	14.7	9.9	15.3	9.6	15.8	9.3
	30.0	13.2	9.5	13.4	9.7	14.0	9.5	14.3	9.5	14.6	9.8	15.1	9.6	15.7	9.3
	32.5	13.0	9.4	13.3	9.6	13.9	9.4	14.1	9.5	14.4	9.8	15.0	9.5	15.5	9.2
	35.0	12.9	9.4	13.2	9.6	13.7	9.3	14.0	9.4	14.3	9.7	14.8	9.4	15.4	9.2
	37.5	12.7	9.3	13.0	9.5	13.6	9.3	13.9	9.3	14.1	9.6	14.7	9.4	15.3	9.1
	40.0	12.6	9.2	12.9	9.4	13.4	9.2	13.7	9.3	14.0	9.6	14.6	9.3	15.1	9.1
	43.0	12.4	9.1	12.7	9.3	13.3	9.1	13.6	9.2	13.8	9.5	14.4	9.3	15.0	9.0

## 2-4.Heating Capacity (In combination with PU(H)Y,PURY-(P)200-250YMF-C)

PCFY-P-VGM-A

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.:°CDB		
		15.0	20.0	25.0
°CWB	SHC	SHC	SHC	SHC
40	-15.0	3.3	3.3	3.3
	-10.0	3.8	3.8	3.5
	-5.0	4.3	4.2	3.5
	0.0	4.8	4.7	3.5
	2.5	5.0	5.0	3.5
	6.0	5.1	5.0	3.5
	7.5	5.3	5.0	3.5
	10.0	5.6	5.0	3.5
	12.5	6.0	5.0	3.5
	15.5	6.1	5.0	3.5
63	-15.0	5.4	5.3	5.2
	-10.0	6.1	6.0	5.5
	-5.0	6.9	6.8	5.5
	0.0	7.6	7.5	5.5
	2.5	8.0	7.9	5.5
	6.0	8.1	8.0	5.5
	7.5	8.4	8.0	5.5
	10.0	9.0	8.0	5.5
	12.5	9.6	8.0	5.5
	15.5	9.7	8.0	5.5
100	-15.0	8.4	8.2	8.1
	-10.0	9.6	9.4	8.6
	-5.0	10.7	10.6	8.6
	0.0	11.9	11.8	8.6
	2.5	12.5	12.4	8.6
	6.0	12.6	12.5	8.6
	7.5	13.2	12.5	8.6
	10.0	14.1	12.5	8.6
	12.5	15.0	12.5	8.6
	15.5	15.1	12.5	8.6
125	-15.0	10.7	10.6	10.4
	-10.0	12.2	12.1	11.0
	-5.0	13.7	13.6	11.0
	0.0	15.3	15.1	11.0
	2.5	16.0	15.8	11.0
	6.0	16.2	16.0	11.0
	7.5	16.8	16.0	11.0
	10.0	18.0	16.0	11.0
	12.5	19.1	16.0	11.0
	15.5	19.4	16.0	11.0

**2-5.Cooling Capacity****(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)****PCFY-P-VGM-A**CA:Capacity(kcal/h)  
SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.5°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA
40	20.0	3625	2577	3803	2676	4098	2681	4315	2747	4383	2816	4640	2775	4917	2731
	22.5	3625	2577	3788	2669	4063	2664	4262	2723	4329	2791	4579	2749	4848	2704
	25.0	3597	2562	3751	2650	4017	2642	4210	2699	4274	2767	4518	2724	4778	2677
	27.5	3568	2547	3715	2631	3971	2620	4157	2676	4220	2742	4457	2699	4708	2650
	30.0	3539	2532	3678	2613	3925	2598	4105	2652	4165	2718	4396	2673	4639	2624
	32.5	3511	2517	3641	2594	3879	2576	4052	2628	4111	2694	4335	2648	4569	2598
	35.0	3482	2502	3605	2576	3833	2555	4000	2605	4056	2670	4274	2624	4500	2572
	37.5	3453	2487	3568	2558	3787	2533	3948	2582	4002	2646	4213	2599	4430	2546
	40.0	3424	2472	3531	2539	3741	2512	3895	2558	3947	2623	4152	2574	4361	2520
	43.0	3389	2454	3487	2518	3686	2486	3832	2531	3882	2594	4078	2545	4277	2489
63	20.0	5710	4082	5989	4241	6455	4247	6796	4354	6904	4464	7309	4399	7744	4329
	22.5	5710	4082	5966	4229	6399	4220	6713	4316	6818	4426	7212	4359	7635	4287
	25.0	5665	4058	5908	4200	6326	4186	6630	4279	6732	4387	7116	4319	7525	4245
	27.5	5620	4035	5851	4171	6254	4152	6548	4242	6646	4349	7020	4280	7416	4204
	30.0	5574	4012	5793	4142	6181	4118	6465	4205	6560	4312	6924	4241	7306	4162
	32.5	5529	3988	5735	4113	6109	4084	6383	4168	6475	4274	6828	4201	7197	4121
	35.0	5484	3965	5677	4084	6037	4050	6300	4131	6389	4237	6731	4163	7087	4080
	37.5	5438	3942	5620	4055	5964	4016	6217	4095	6303	4199	6635	4124	6978	4040
	40.0	5393	3918	5562	4027	5892	3983	6135	4059	6217	4162	6539	4085	6868	3999
	43.0	5338	3891	5493	3993	5805	3943	6036	4015	6114	4118	6424	4040	6737	3951
100	20.0	9063	6490	9507	6744	10245	6753	10787	6924	10958	7100	11601	6996	12293	6884
	22.5	9063	6490	9470	6726	10157	6711	10656	6864	10822	7040	11448	6933	12119	6817
	25.0	8993	6454	9378	6679	10042	6657	10525	6805	10686	6979	11296	6870	11945	6751
	27.5	8920	6417	9287	6633	9927	6602	10393	6746	10550	6919	11143	6808	11771	6686
	30.0	8848	6380	9195	6588	9812	6549	10262	6688	10413	6860	10990	6746	11597	6620
	32.5	8776	6343	9103	6542	9697	6495	10131	6630	10277	6800	10837	6684	11423	6555
	35.0	8704	6306	9012	6496	9582	6441	10000	6572	10141	6741	10685	6622	11250	6491
	37.5	8632	6269	8920	6451	9467	6388	9869	6514	10005	6682	10532	6561	11076	6427
	40.0	8560	6232	8828	6406	9352	6335	9738	6457	9868	6623	10379	6500	10902	6363
	43.0	8474	6188	8718	6351	9214	6272	9580	6388	9705	6553	10196	6428	10693	6286
125	20.0	11329	8173	11883	8495	12807	8505	13484	8723	13698	8949	14501	8819	15366	8679
	22.5	11329	8173	11837	8472	12696	8453	13320	8650	13527	8874	14310	8741	15149	8597
	25.0	11241	8128	11723	8415	12552	8385	13156	8576	13357	8800	14119	8663	14931	8515
	27.5	11151	8082	11608	8358	12408	8318	12992	8504	13187	8725	13929	8586	14714	8434
	30.0	11060	8036	11494	8301	12265	8252	12828	8431	13017	8651	13738	8509	14497	8353
	32.5	10970	7990	11379	8244	12121	8185	12664	8359	12846	8577	13547	8432	14279	8272
	35.0	10880	7944	11265	8188	11977	8119	12500	8287	12676	8504	13356	8356	14062	8192
	37.5	10790	7899	11150	8132	11834	8053	12336	8216	12506	8431	13165	8280	13845	8113
	40.0	10700	7853	11035	8076	11690	7987	12172	8145	12335	8358	12974	8205	13627	8034
	43.0	10592	7799	10898	8008	11518	7908	11975	8060	12131	8272	12745	8115	13367	7939

**PCFY-P-VGM-A**

## 2-6.Heating Capacity

(In combination with PUHY-(P)315-400-500-600-650-700-750Y(S)MF-B,Y(S)MC)

**PCFY-P-VGM-A**

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
63	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15	21	25	27
		°CWB	SHC	SHC	SHC
100	-15.0	7742	7626	7511	7465
	-10.0	8833	8718	8602	7967
	-5.0	9924	9809	9006	7967
	0.0	11015	10900	9006	7967
	2.5	11561	11200	9006	7967
	6.0	11662	11200	9006	7967
	7.5	12152	11200	9006	7967
	10.0	12969	11200	9006	7967
	12.5	13786	11200	9006	7967
	15.5	13971	11200	9006	7967
125	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959
	-5.0	12405	12261	11258	9959
	0.0	13769	13625	11258	9959
	2.5	14451	14000	11258	9959
	6.0	14577	14000	11258	9959
	7.5	15190	14000	11258	9959
	10.0	16211	14000	11258	9959
	12.5	17232	14000	11258	9959
	15.5	17464	14000	11258	9959

## 2-7.Cooling Capacity (In combination with PQRY-P200-250YMF-C)

PCFY-P-VGM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.														
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB		
°C	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC
40	10	4.4	3.1	4.5	3.2	4.8	3.1	5.0	3.2	5.1	3.3	5.4	3.2	5.7	3.2	
	20	4.2	3.0	4.4	3.1	4.6	3.1	4.8	3.1	4.9	3.2	5.2	3.1	5.5	3.1	
	30	4.0	2.9	4.1	3.0	4.4	2.9	4.5	3.0	4.6	3.1	4.9	3.0	5.2	3.0	
	40	3.5	2.6	3.6	2.7	3.8	2.7	3.9	2.7	4.0	2.8	4.3	2.8	4.5	2.7	
	45	3.3	2.5	3.4	2.6	3.6	2.6	3.7	2.6	3.8	2.7	4.0	2.7	4.2	2.6	
63	10	6.9	4.9	7.2	5.0	7.6	5.0	7.8	5.0	8.0	5.2	8.5	5.1	9.0	5.0	
	20	6.7	4.8	6.9	4.9	7.3	4.9	7.5	4.9	7.8	5.1	8.2	5.0	8.6	4.9	
	30	6.3	4.6	6.5	4.7	6.9	4.7	7.1	4.7	7.3	4.9	7.7	4.8	8.1	4.7	
	40	5.5	4.2	5.7	4.3	6.0	4.3	6.2	4.3	6.4	4.5	6.7	4.4	7.1	4.3	
	45	5.2	4.0	5.3	4.1	5.7	4.1	5.8	4.2	6.0	4.3	6.3	4.3	6.7	4.2	
100	10	10.9	7.8	11.3	8.0	12.0	7.9	12.3	8.0	12.7	8.2	13.4	8.1	14.1	7.9	
	20	10.5	7.5	10.9	7.8	11.6	7.7	11.9	7.8	12.2	8.0	12.9	7.9	13.6	7.8	
	30	9.9	7.2	10.3	7.5	10.9	7.4	11.2	7.5	11.5	7.7	12.2	7.6	12.8	7.5	
	40	8.6	6.6	8.9	6.8	9.5	6.7	9.7	6.8	10.0	7.1	10.6	7.0	11.2	6.9	
	45	8.1	6.4	8.4	6.6	8.9	6.5	9.2	6.6	9.5	6.9	10.0	6.8	10.5	6.6	
125	10	13.7	9.8	14.1	10.0	15.0	9.9	15.4	10.0	15.9	10.4	16.7	10.2	17.7	10.0	
	20	13.2	9.5	13.6	9.8	14.5	9.7	14.8	9.8	15.3	10.1	16.1	10.0	17.0	9.8	
	30	12.4	9.1	12.8	9.4	13.6	9.3	14.0	9.4	14.4	9.8	15.2	9.6	16.1	9.4	
	40	10.8	8.3	11.2	8.6	11.9	8.5	12.2	8.6	12.5	9.0	13.2	8.8	14.0	8.7	
	45	10.2	8.0	10.5	8.3	11.2	8.2	11.5	8.4	11.8	8.7	12.5	8.5	13.2	8.4	

## 2-8.Heating Capacity (In combination with PQRY-P200-250YMF-C)

PCFY-P-VGM-A

SHC:Sensible heat Capacity(kW)

Unit size	Water temp.	Indoor air temp.:°CDB					
		15	19	20	25	27	SHC(kW)
°C	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
40	10	4.4	4.3	4.3	3.4	3.4	3.1
	20	5.2	5.1	5.0	4.0	4.0	3.6
	30	5.2	5.1	5.0	4.0	4.0	3.6
	40	5.4	5.3	5.2	4.2	4.2	3.7
	45	5.9	5.8	5.7	4.6	4.6	4.1
63	10	7.0	6.9	6.8	5.4	5.4	4.9
	20	8.2	8.2	8.0	6.4	6.4	5.8
	30	8.2	8.2	8.0	6.4	6.4	5.8
	40	8.6	8.5	8.3	6.7	6.7	6.0
	45	9.4	9.3	9.1	7.3	7.3	6.6
100	10	10.9	10.8	10.6	8.5	8.5	7.7
	20	12.9	12.8	12.5	10.0	10.0	9.0
	30	12.9	12.8	12.5	10.0	10.0	9.0
	40	13.4	13.3	13.0	10.4	10.4	9.4
	45	14.7	14.5	14.3	11.4	11.4	10.3
125	10	14.0	13.9	13.6	10.9	10.9	9.8
	20	16.5	16.3	16.0	12.8	12.8	11.5
	30	16.5	16.3	16.0	12.8	12.8	11.5
	40	17.1	17.0	16.6	13.3	13.3	12.0
	45	18.8	18.6	18.2	14.6	14.6	13.1

PCFY-P-VGM-A

## 2-9.Cooling Capacity (In combination with PURY-P400-500YMF-C)

PCFY-P-VGM-A

CA:Capacity(kW)  
SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	CA:Capacity(kW)												
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB		
°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC
40	20.0	4.1	3.0	4.3	3.1	4.7	3.1	5.0	3.2	5.3	3.2	5.6	3.1	
	22.5	4.1	3.0	4.3	3.1	4.6	3.1	4.9	3.2	5.2	3.2	5.5	3.1	
	25.0	4.1	2.9	4.3	3.0	4.6	3.0	4.9	3.2	5.2	3.1	5.5	3.1	
	27.5	4.1	2.9	4.2	3.0	4.5	3.0	4.8	3.2	5.1	3.1	5.4	3.0	
	30.0	4.0	2.9	4.2	3.0	4.5	3.0	4.8	3.1	5.0	3.1	5.3	3.0	
	32.5	4.0	2.9	4.2	3.0	4.4	3.0	4.7	3.1	5.0	3.0	5.2	3.0	
	35.0	4.0	2.9	4.1	3.0	4.4	2.9	4.6	3.1	4.9	3.0	5.1	3.0	
	37.5	3.9	2.9	4.1	2.9	4.3	2.9	4.6	3.0	4.8	3.0	5.1	2.9	
	40.0	3.9	2.8	4.0	2.9	4.3	2.9	4.5	3.0	4.7	3.0	5.0	2.9	
	43.0	3.9	2.8	4.0	2.9	4.2	2.9	4.4	3.0	4.7	2.9	4.9	2.9	
63	20.0	6.5	4.7	6.9	4.9	7.4	4.9	7.9	5.1	8.4	5.1	8.9	5.0	
	22.5	6.5	4.7	6.8	4.9	7.3	4.9	7.8	5.1	8.3	5.0	8.7	4.9	
	25.0	6.5	4.7	6.8	4.8	7.2	4.8	7.7	5.0	8.1	5.0	8.6	4.9	
	27.5	6.4	4.6	6.7	4.8	7.2	4.8	7.6	5.0	8.0	4.9	8.5	4.8	
	30.0	6.4	4.6	6.6	4.8	7.1	4.7	7.5	5.0	7.9	4.9	8.4	4.8	
	32.5	6.3	4.6	6.6	4.7	7.0	4.7	7.4	4.9	7.8	4.8	8.2	4.7	
	35.0	6.3	4.6	6.5	4.7	6.9	4.7	7.3	4.9	7.7	4.8	8.1	4.7	
	37.5	6.2	4.5	6.4	4.7	6.8	4.6	7.2	4.8	7.6	4.7	8.0	4.7	
	40.0	6.2	4.5	6.4	4.6	6.7	4.6	7.1	4.8	7.5	4.7	7.9	4.6	
	43.0	6.1	4.5	6.3	4.6	6.6	4.5	7.0	4.7	7.3	4.7	7.7	4.5	
100	20.0	10.3	7.4	10.8	7.7	11.6	7.7	12.5	8.1	13.2	8.0	14.0	7.9	
	22.5	10.3	7.4	10.8	7.7	11.5	7.7	12.3	8.1	13.0	7.9	13.8	7.8	
	25.0	10.2	7.4	10.7	7.6	11.4	7.6	12.1	8.0	12.8	7.9	13.6	7.7	
	27.5	10.1	7.3	10.6	7.6	11.3	7.6	12.0	7.9	12.7	7.8	13.4	7.7	
	30.0	10.1	7.3	10.5	7.5	11.2	7.5	11.8	7.9	12.5	7.7	13.2	7.6	
	32.5	10.0	7.3	10.3	7.5	11.0	7.4	11.7	7.8	12.3	7.7	13.0	7.5	
	35.0	9.9	7.2	10.2	7.4	10.9	7.4	11.5	7.7	12.1	7.6	12.8	7.4	
	37.5	9.8	7.2	10.1	7.4	10.8	7.3	11.4	7.7	12.0	7.5	12.6	7.4	
	40.0	9.7	7.1	10.0	7.3	10.6	7.3	11.2	7.6	11.8	7.5	12.4	7.3	
	43.0	9.6	7.1	9.9	7.3	10.5	7.2	11.0	7.5	11.6	7.4	12.2	7.2	
125	20.0	12.9	9.4	13.5	9.7	14.6	9.7	15.6	10.3	16.5	10.1	17.5	9.9	
	22.5	12.9	9.4	13.5	9.7	14.4	9.7	15.4	10.2	16.3	10.0	17.2	9.9	
	25.0	12.8	9.3	13.3	9.6	14.3	9.6	15.2	10.1	16.1	9.9	17.0	9.8	
	27.5	12.7	9.3	13.2	9.6	14.1	9.5	15.0	10.0	15.8	9.8	16.7	9.7	
	30.0	12.6	9.2	13.1	9.5	13.9	9.5	14.8	9.9	15.6	9.8	16.5	9.6	
	32.5	12.5	9.2	12.9	9.4	13.8	9.4	14.6	9.8	15.4	9.7	16.2	9.5	
	35.0	12.4	9.1	12.8	9.4	13.6	9.3	14.4	9.8	15.2	9.6	16.0	9.4	
	37.5	12.3	9.0	12.7	9.3	13.5	9.2	14.2	9.7	15.0	9.5	15.7	9.3	
	40.0	12.2	9.0	12.5	9.3	13.3	9.2	14.0	9.6	14.8	9.4	15.5	9.2	
	43.0	12.0	8.9	12.4	9.2	13.1	9.1	13.8	9.5	14.5	9.3	15.2	9.1	

## 2-10.Heating Capacity (In combination with PURY-P400-500YMF-C)

PCFY-P-VGM-A

SHC:Sensible heat Capacity(kW)

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15.0	20.0	25.0	27.0
	°CWB	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
40	-15.0	3.1	3.1	3.0	3.0
	-10.0	3.6	3.5	3.5	3.4
	-5.0	4.0	4.0	3.9	3.9
	0.0	4.5	4.4	4.3	3.9
	2.5	4.7	4.7	4.3	3.9
	6.0	5.0	5.0	4.3	3.9
	7.5	5.2	5.0	4.3	3.9
	10.0	5.4	5.0	4.3	3.9
	12.5	5.7	5.0	4.3	3.9
	15.5	5.8	5.0	4.3	3.9
63	-15.0	5.0	4.9	4.8	4.7
	-10.0	5.7	5.6	5.5	5.4
	-5.0	6.4	6.3	6.2	6.2
	0.0	7.2	7.1	6.8	6.2
	2.5	7.5	7.5	6.8	6.2
	6.0	8.1	8.0	6.8	6.2
	7.5	8.3	8.0	6.8	6.2
	10.0	8.7	8.0	6.8	6.2
	12.5	9.1	8.0	6.8	6.2
	15.5	9.2	8.0	6.8	6.2
Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
	°CWB	SHC(kW)	SHC(kW)	SHC(kW)	SHC(kW)
100	-15.0	7.8	7.7	7.5	7.4
	-10.0	8.9	8.8	8.6	8.5
	-5.0	10.0	9.9	9.8	9.6
	0.0	11.2	11.0	10.6	9.6
	2.5	11.8	11.6	10.6	9.6
	6.0	12.6	12.5	10.6	9.6
	7.5	13.0	12.5	10.6	9.6
	10.0	13.6	12.5	10.6	9.6
	12.5	14.3	12.5	10.6	9.6
	15.5	14.4	12.5	10.6	9.6
125	-15.0	10.0	9.8	9.6	9.5
	-10.0	11.4	11.2	11.0	10.9
	-5.0	12.8	12.6	12.5	12.3
	0.0	14.3	14.1	13.6	12.3
	2.5	15.1	14.9	13.6	12.3
	6.0	16.2	16.0	13.6	12.3
	7.5	16.6	16.0	13.6	12.3
	10.0	17.4	16.0	13.6	12.3
	12.5	18.3	16.0	13.6	12.3
	15.5	18.4	16.0	13.6	12.3

## 2-11.Cooling Capacity (In combination with PU(H)Y-200-250TM-C)

PCFY-P-VGM-A

CA:Capacity(kcal/h)

SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.													
		21.5°CDB 15°CWB		23°CDB 16°CWB		25°CDB 18°CWB		27°CDB 19.05°CWB		28°CDB 20°CWB		30°CDB 22°CWB		32°CDB 24°CWB	
		°CDB	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	CA	SHC	
40	20.0	3740	2638	3878	2716	4154	2709	4361	2770	4430	2839	4705	2804	4981	2757
	22.5	3740	2638	3878	2716	4154	2709	4361	2770	4415	2832	4660	2785	4902	2726
	25.0	3727	2632	3853	2703	4100	2683	4299	2741	4341	2799	4584	2753	4823	2696
	27.5	3664	2599	3790	2671	4034	2651	4224	2707	4268	2766	4507	2721	4744	2665
	30.0	3601	2566	3727	2639	3967	2620	4150	2673	4194	2733	4431	2689	4664	2635
	32.5	3538	2533	3664	2607	3901	2588	4075	2640	4120	2700	4355	2658	4585	2605
	35.0	3476	2500	3602	2576	3834	2557	4000	2606	4047	2668	4279	2627	4506	2575
	37.5	3413	2468	3539	2545	3768	2526	3925	2573	3973	2635	4203	2596	4427	2545
	40.0	3350	2436	3476	2513	3701	2495	3850	2540	3899	2603	4127	2565	4347	2516
	43.0	3274	2397	3401	2476	3622	2458	3761	2501	3811	2565	4035	2529	4252	2481
63	20.0	5890	4178	6108	4303	6542	4291	6868	4388	6977	4499	7411	4444	7846	4370
	22.5	5890	4178	6108	4303	6542	4291	6868	4388	6953	4489	7339	4414	7721	4322
	25.0	5871	4168	6068	4283	6458	4251	6771	4344	6837	4437	7219	4364	7596	4274
	27.5	5771	4116	5969	4233	6354	4201	6653	4291	6721	4385	7099	4315	7471	4226
	30.0	5672	4064	5870	4183	6249	4151	6535	4238	6605	4334	6979	4265	7346	4179
	32.5	5573	4013	5772	4133	6144	4102	6418	4185	6489	4283	6859	4216	7221	4132
	35.0	5474	3962	5673	4084	6039	4053	6300	4133	6373	4232	6740	4168	7097	4085
	37.5	5375	3911	5574	4035	5935	4004	6182	4081	6257	4182	6620	4120	6972	4039
	40.0	5276	3861	5475	3986	5830	3956	6065	4030	6141	4132	6500	4072	6847	3993
	43.0	5157	3801	5357	3928	5704	3898	5923	3969	6002	4072	6356	4015	6697	3938
100	20.0	9350	6644	9695	6843	10384	6823	10901	6979	11074	7157	11764	7068	12453	6949
	22.5	9350	6644	9695	6843	10384	6823	10901	6979	11037	7140	11649	7020	12255	6873
	25.0	9318	6627	9632	6811	10251	6759	10748	6909	10853	7058	11459	6941	12057	6797
	27.5	9161	6545	9475	6732	10085	6680	10561	6824	10669	6976	11269	6863	11859	6722
	30.0	9004	6463	9318	6653	9919	6602	10374	6741	10485	6895	11078	6785	11661	6647
	32.5	8846	6382	9161	6574	9752	6524	10187	6657	10301	6814	10888	6708	11463	6573
	35.0	8689	6301	9004	6496	9586	6446	10000	6574	10116	6734	10698	6631	11265	6499
	37.5	8531	6221	8848	6418	9420	6369	9813	6492	9932	6655	10507	6554	11066	6426
	40.0	8374	6141	8691	6341	9254	6293	9626	6412	9748	6575	10317	6479	10868	6353
	43.0	8185	6046	8502	6249	9054	6201	9402	6314	9527	6481	10089	6388	10631	6266
125	20.0	11687	8363	12118	8618	12980	8591	13627	8791	13842	9019	14704	8908	15567	8759
	22.5	11687	8363	12118	8618	12980	8591	13627	8791	13796	8999	14562	8849	15319	8665
	25.0	11648	8343	12040	8578	12814	8513	13435	8705	13566	8897	14324	8751	15071	8571
	27.5	11451	8241	11844	8480	12606	8415	13201	8600	13336	8796	14086	8654	14824	8478
	30.0	11254	8140	11648	8382	12398	8318	12967	8496	13106	8695	13848	8558	14576	8386
	32.5	11058	8039	11452	8284	12191	8221	12734	8393	12876	8595	13610	8462	14328	8294
	35.0	10861	7939	11255	8188	11983	8125	12500	8291	12645	8496	13372	8367	14081	8202
	37.5	10664	7840	11059	8091	11775	8029	12266	8190	12415	8397	13134	8272	13833	8111
	40.0	10468	7741	10863	7996	11567	7934	12033	8089	12185	8299	12896	8178	13585	8021
	43.0	10232	7623	10628	7881	11318	7821	11752	7968	11909	8182	12611	8066	13288	7914

## 2-12.Heating Capacity (In combination with PUHY-200-250TM-C)

PCFY-P-VGM-A

SHC:Sensible heat Capacity(kcal/h)

Unit size	Outdoor air temp.	Indoor air temp.:°CDB			
		15		21	
		°CWB	SHC	SHC	SHC
40	-15.0	3111	3064	3018	2999
	-10.0	3549	3503	3456	3201
	-5.0	3987	3941	3619	3201
	0.0	4426	4379	3619	3201
	2.5	4645	4500	3619	3201
	6.0	4686	4500	3619	3201
	7.5	4883	4500	3619	3201
	10.0	5211	4500	3619	3201
	12.5	5539	4500	3619	3201
	15.5	5613	4500	3619	3201
	-15.0	4908	4835	4761	4732
	-10.0	5599	5526	5453	5051
63	-5.0	6291	6218	5709	5051
	0.0	6983	6910	5709	5051
	2.5	7329	7100	5709	5051
	6.0	7393	7100	5709	5051
	7.5	7704	7100	5709	5051
	10.0	8221	7100	5709	5051
	12.5	8739	7100	5709	5051
	15.5	8857	7100	5709	5051
	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959
	-5.0	12405	12261	11258	9959
	0.0	13769	13625	11258	9959
100	2.5	14451	14000	11258	9959
	6.0	14577	14000	11258	9959
	7.5	15190	14000	11258	9959
	10.0	16211	14000	11258	9959
	12.5	17232	14000	11258	9959
	15.5	17464	14000	11258	9959
125	-15.0	9742	7626	7511	7465
	-10.0	8833	8718	8602	7967
	-5.0	9924	9809	9006	7967
	0.0	11015	10900	9006	7967
	2.5	11561	11200	9006	7967
	6.0	11662	11200	9006	7967
125	7.5	12152	11200	9006	7967
	10.0	12969	11200	9006	7967
	12.5	13786	11200	9006	7967
	15.5	13971	11200	9006	7967
	-15.0	9677	9533	9389	9331
	-10.0	11041	10897	10753	9959

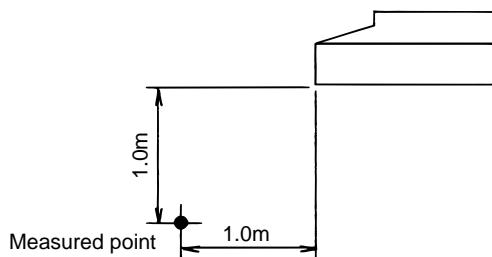
PCFY-P-VGM-A

### 3. Sound Levels

#### 3-1. Noise level

PCFY-P.VGM-A

Ceiling suspended

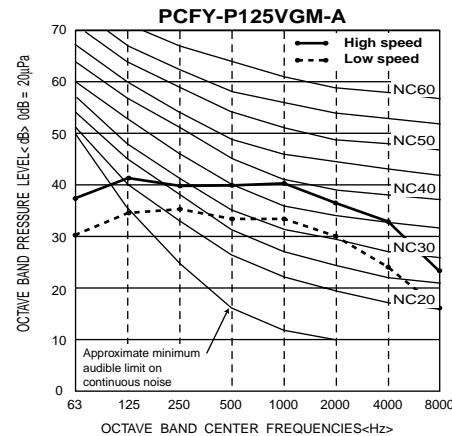
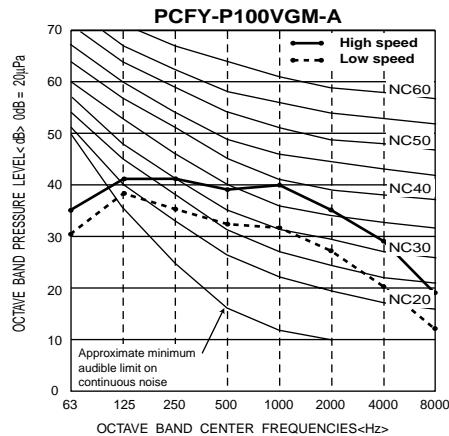
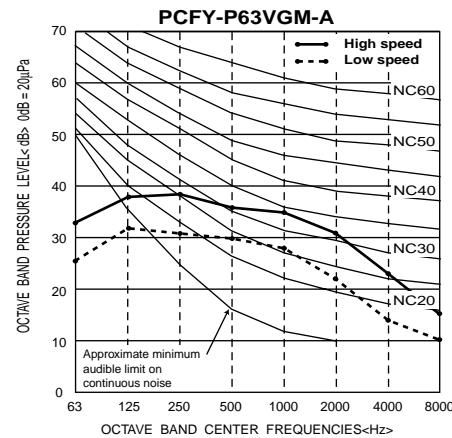
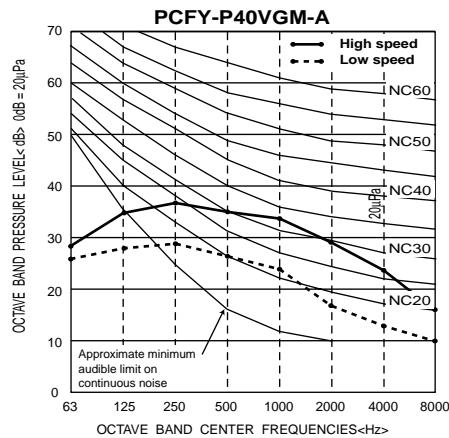


Noise level at anechoic room  
(Low-Middle2-Middle1-High)

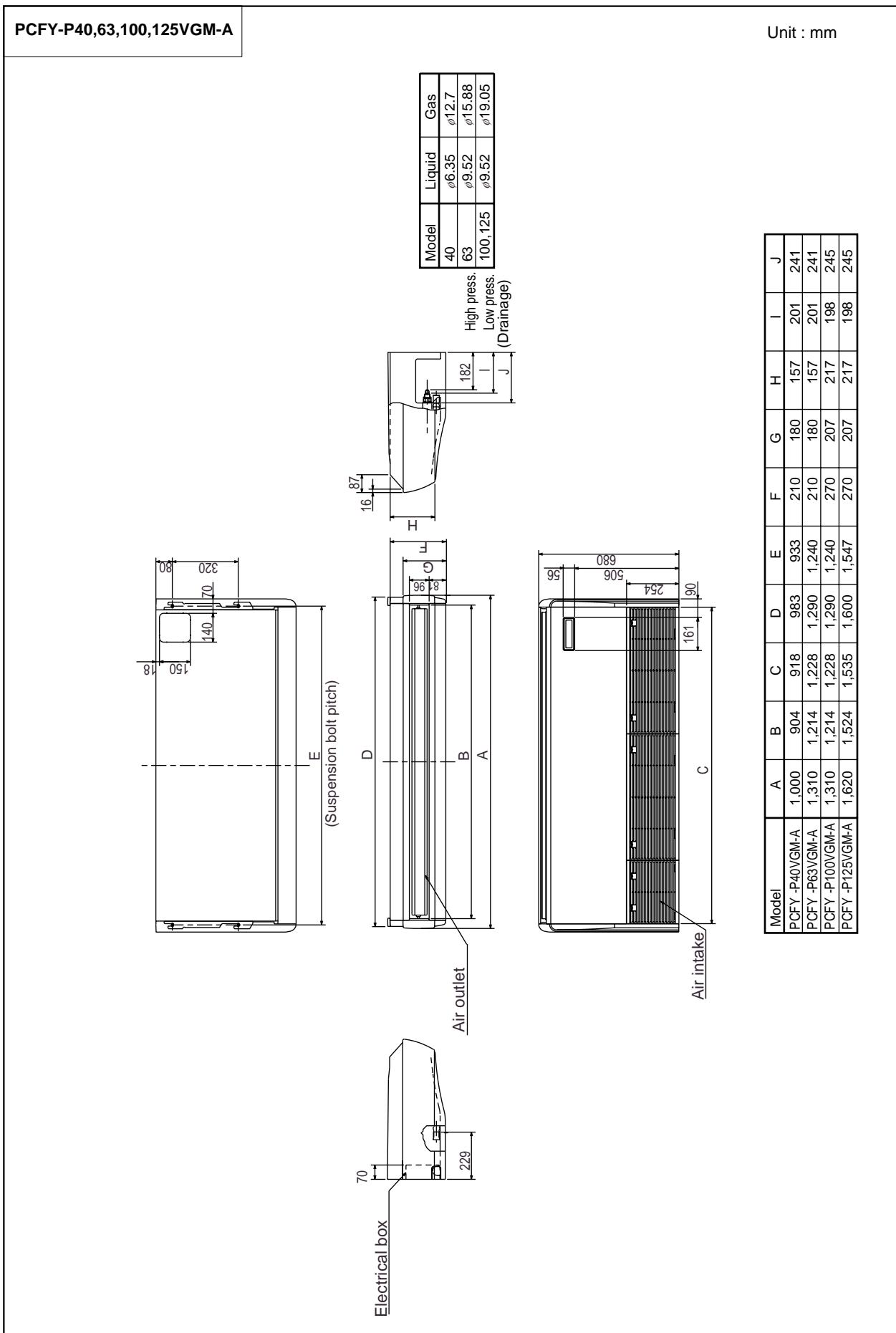
Unit : dB(A)

Model	Noise level (A weighted)
PCFY-P40VGM-A	29-33-36-38
PCFY-P63VGM-A	32-34-37-39
PCFY-P100VGM-A	36-38-41-43
PCFY-P125VGM-A	37-39-42-44

#### 3-2. NC curves



## 4. External Dimension

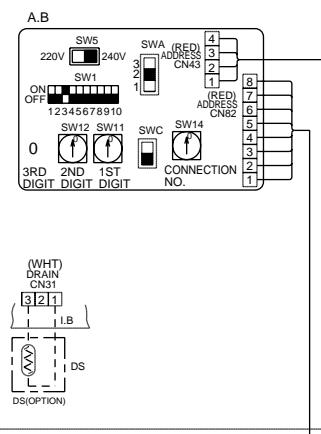
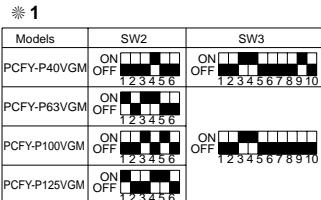
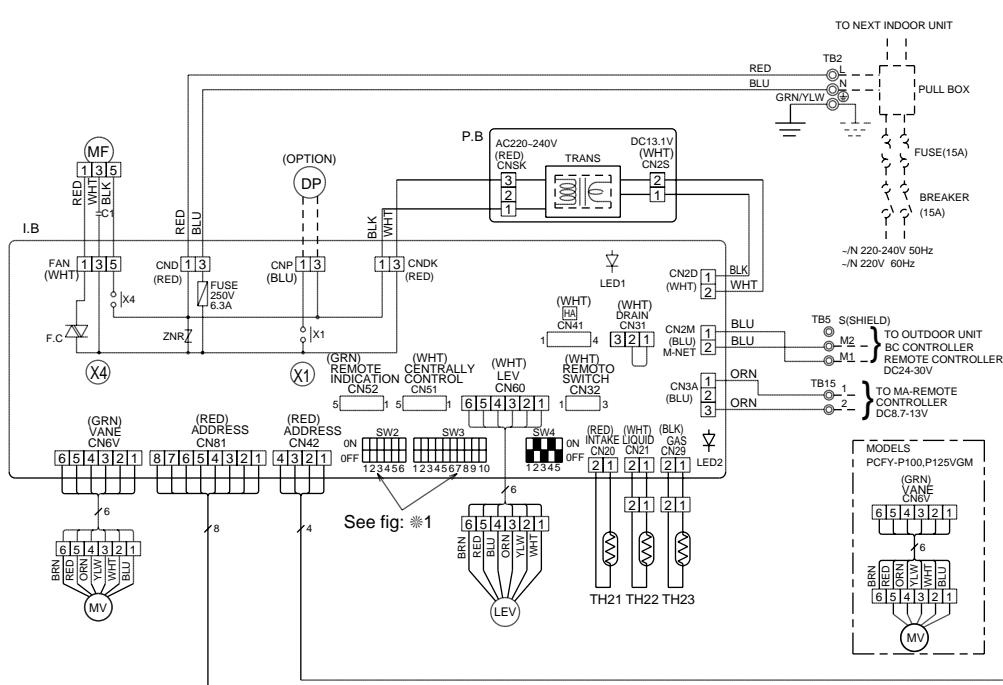


PCFY-P/VGM-A

## 5. Electrical Wiring Diagram

### <SYMBOL EXPLANATION>

Symbol	Name		Symbol	Name		Symbol	Name			
I.B	Indoor controller board		C1	Capacitor(fan motor)		A.B	Circuit board	Address		
CN32	Connector	Remote switch	LEV	Linear expansion valve		SW1	Switch	Mode selection		
CN51		Centrally control	MF	Fan motor(with inner thermo)			SW5	Voltage selection		
CN52		Remote indication	MV	Vane motor			SW11	Address setting 1st digit		
CNP		Drain-up machine	TH21	Thermistor	Room temp. detection (0°C/15kΩ,25°C/5.4kΩ)		SW12	Address setting 2nd digit		
F.C	Fan phase control				Pipe temp. detection / Liquid (0°C/15kΩ,25°C/5.4kΩ)		SW14	Connection No.		
FUSE	Fuse (6.3A)		TH22		Pipe temp. detection / Gas (0°C/15kΩ,25°C/5.4kΩ)		SWA	Ceiling heigh selector		
SW2	Switch	Capacity code	TH23		Led on indoor board for sevice		SWC	Option selector		
SW3		Mode selection								
SW4		Model selection								
X1	Aux.Relay	Drain-up machine	TB2	Terminal block	Power supply		Mark	Meaning		
X4		Fan motor	TB5		Transmission		LED1	Main power supply Main power supply (indoor unit:220-240V) power on  lamp is lit		
ZNR	Varistor		TB15		MA-remote controller		LED2	Power supply for MA-Remote controller Power supply for MA-Remote controller on  lamp is lit		
P.B	Indoor power board		DP	Drain-up machine (OPTION)						
			DS	Drain sensor (OPTION)						



## Note

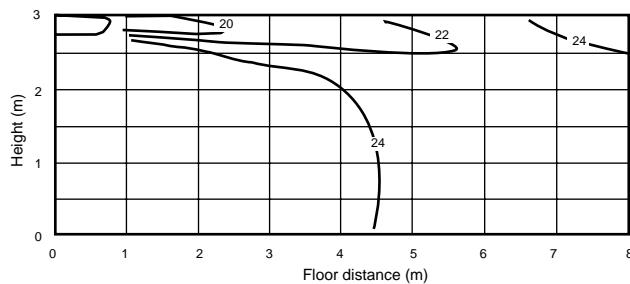
- At servicing for outdoor unit,always follow the wiring diagram of outdoor unit.
  - In case of using MA-Remote controller, please connect to TB15.  
(Remote controller wire is non-polar.)
  - In case of using M-NET, please connect to TB5.(Transmission line is non-polar.)
  - Symbol[S] of TB5 is the shield wire connection.
  - Symbols used in wiring diagram above are,  
◎:Terminal block, □□□:Connector.
  - The setting of the SW2 dip switches differs in the capacity. For the detail, refer to the fig:※1.
  - Please set the switch SW5 according to the power supply voltage.  
Set SW5 to 240V side when the power supply is 230 and 240 volts.  
When the power supply is 220 volts, set SW5 to 220V side.
  - Fasten terminal of the terminal board "TB5" equips lock system.  
To remove the fasten terminal,pull it while pressing the protruding portion (locking lever)of the terminal.  
Connection of the fasten terminal,protruding portion should face upward.

## 6. Temperature/Airflow distribution

### ● Temperature distribution

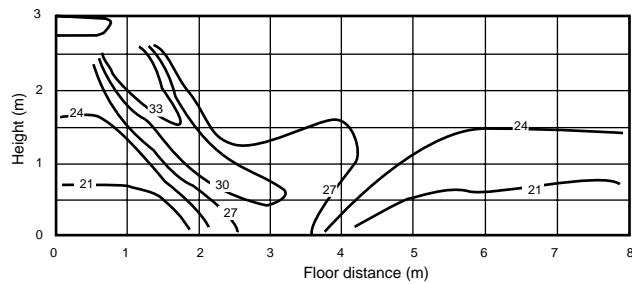
<Cooling mode>

Flow angle : 0°



<Heating mode>

Flow angle : 60°

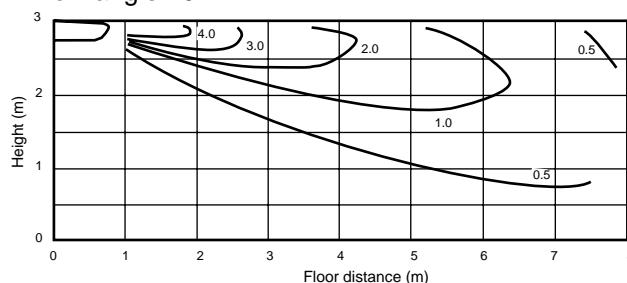


**PCFY-P-VGM-A**

### ● Airflow distribution

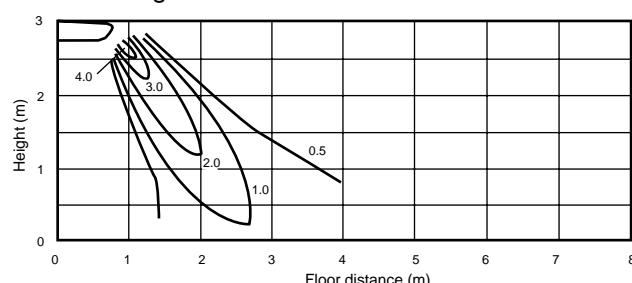
<Fan mode>

Flow angle : 0°



<Fan mode>

Flow angle : 60°





OA Processing unit

GUF-RD, GUF-RDH

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# 1. Specifications

Item	Model	GUF-50RDH	GUF-100RDH	GUF-50RD	GUF-100RD
Power supply		Single phase 220-240V ~50Hz			
Current	A	1.48	2.79	1.48	2.79
Input	W	310-340	600-650	310-340	600-650
Cooling capacity	R407C	kW	5.18<1.82>	10.36<3.58>	5.18<1.82>
	R22	kW	5.45<1.82>	10.90<3.58>	5.45<1.82>
Heating capacity	R407C	kW	5.84<1.98>	11.59<3.90>	5.84<1.98>
	R22	kW	6.15<1.98>	12.20<3.90>	6.15<1.98>
Fan	Type X No.		Supply air : Centrifugal fan [Sirocco fan] X1	Exhaust air : Centrifugal fan [Sirocco fan] X1	
	Air volume	m³/h	500	1000	500
		L/S	139	278	139
	External static pressure	Pa	137	137	137
Noise level (Low-High) *	dB(A)	34-35	39-40	34-35	39-40
Humidifying capacity	R407C	kg/h	2.54	5.08	-
	R22	kg/h	2.7	5.4	-
Cladding			Galvanized steel plate		
Dimensions	Height	mm	398	398	398
	Width	mm	1050	1327	1050
	Depth	mm	1560	1714	1560
Weight (drying)	kg	85	135	82	130
Motor	-	Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2 units			
Air filter	Supply air		Non-woven fabrics filter : Gravitational method 82%+High efficiency filter : Colormetric method 65%		
	Exhaust air		Non-woven fabrics filter : Gravitational method 82%		
Total heat exchanger (Lossnay element)			Partition, spacing plate-special treated paper		
Direct expansion heat exchanger coil			Aluminum plate fins and copper tubes		
Humidifying			Permeable film humidifier	-	
Refrigerant pipe dimension	Gas	ømm	12.7	15.88	12.7
	Liquid	ømm	6.35	9.52	6.35
Drain pipe dimension			VP25		
Capacity equivalent to the indoor unit			P32	P63	P32
					P63

Note: 1 The figures in < > indicates the heat recovery at Lossnay element.

2 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

Cooling : Indoor : 27°C DB/19.5°C WB      Outdoor : 35°C DB/24°C WB

Heating : Indoor : 21°C DB/14.6°C WB      Outdoor : 7°C DB/6°C WB

3 The values given in the table for the noise level reflect the levels measured at a position 1.5 meters immediately below the unit in anechoic chamber.

4 The noise at the air outlets (at a 45° angle, 1.5 meters in front) is about 5-6 dB(A) higher than the values given in the table.

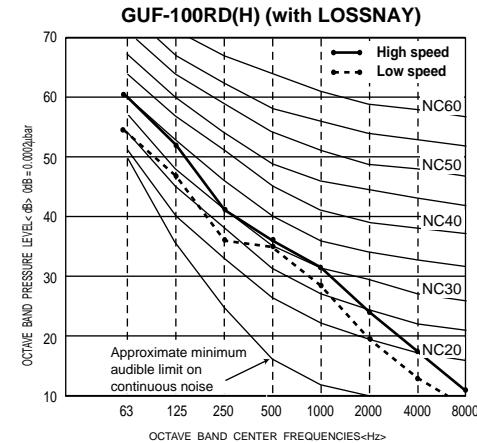
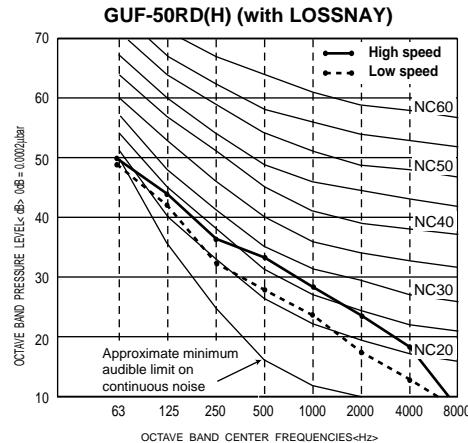
5 The above values apply during Lossnay ventilation when the fan speed is set to high speed.

6 Specification may be subject to change without notice.

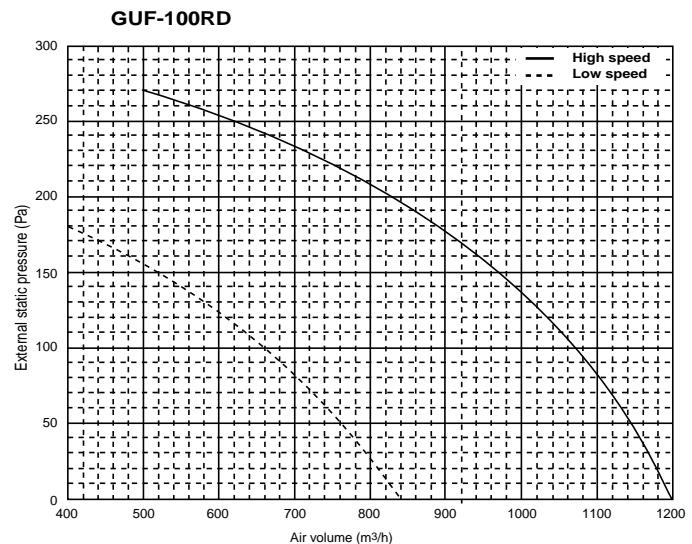
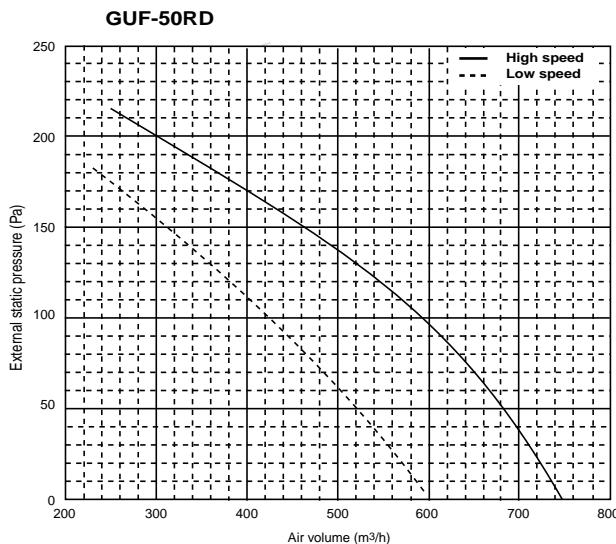
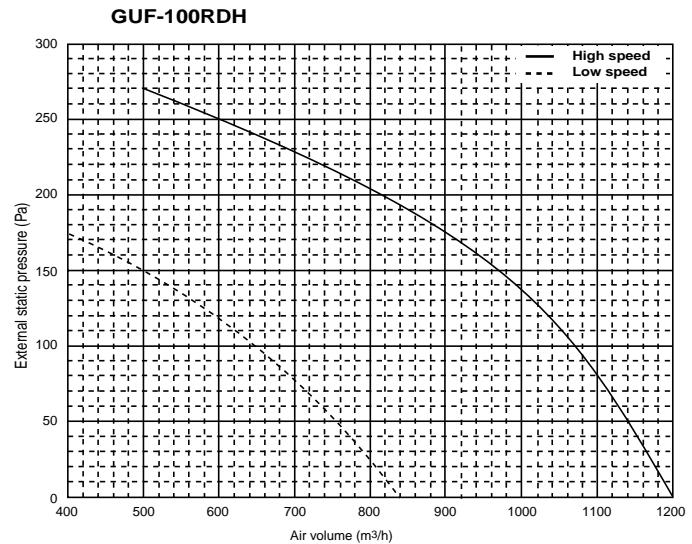
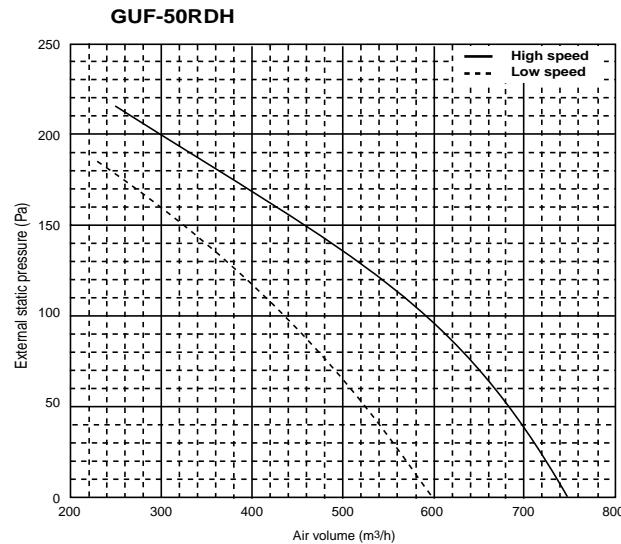
\* It is measured in anechoic room.

## 2. Sound Levels

### 2-1. NC curves



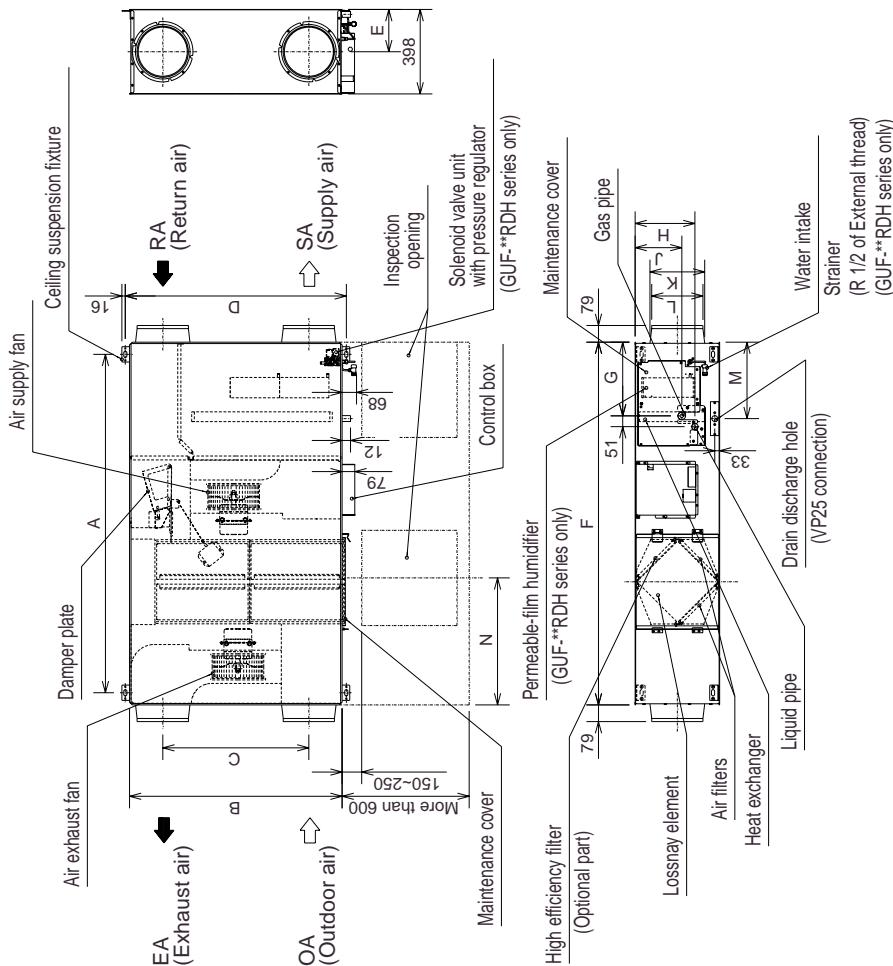
### 2-2. Fan characteristics curves



### 3. External Dimension

GUF-50, 100RD(H)

Unit : mm



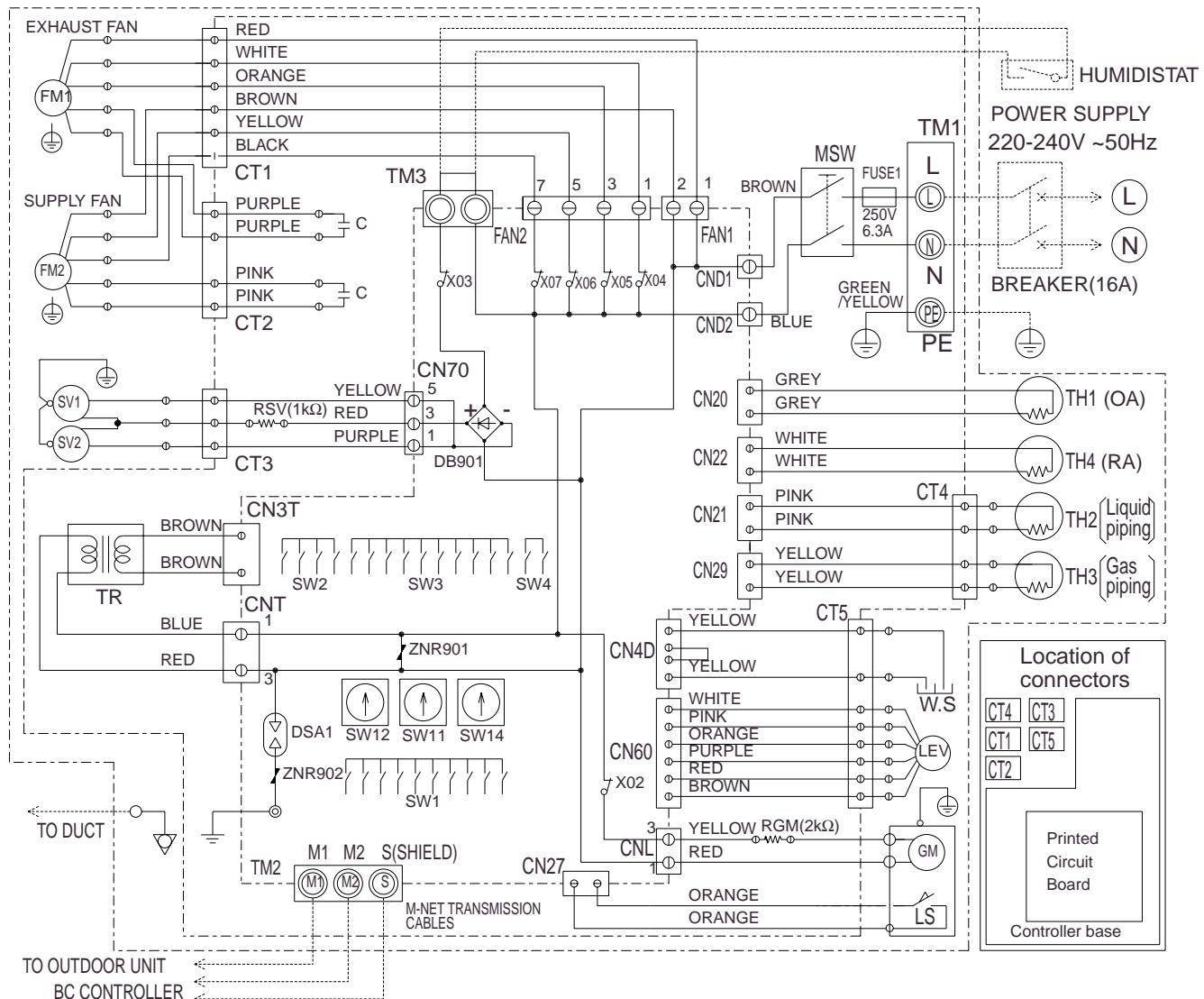
## Refrigerant pipe specifications

Model	Liquid pipe	Gas pipe
GUF-50RD(H)	Flare ø6.35	Flare ø12.7
GUF-100RD(H)	Flare ø9.52	Flare ø15.88

Model	A	B	C	D	E	F	G	H	J	K	L	M	N
GUF-50RD(H)	1470	954	690	993	194	1560	362	282	220	ø208	ø192	365	450
GUF-100RD(H)	1600	1231	920	1271	199	1714	347	283	221	ø258	ø242	365	600

## 4. Wiring Diagrams

### GUF-RDH



● NOTE 1.TM1,TM2,TM3 shown in dotted lines are field work.

2.Be sure to connect the grounding wire.

3.MARK :indicates terminal block, :connector

:board insertion connector or fastening connector of control board.

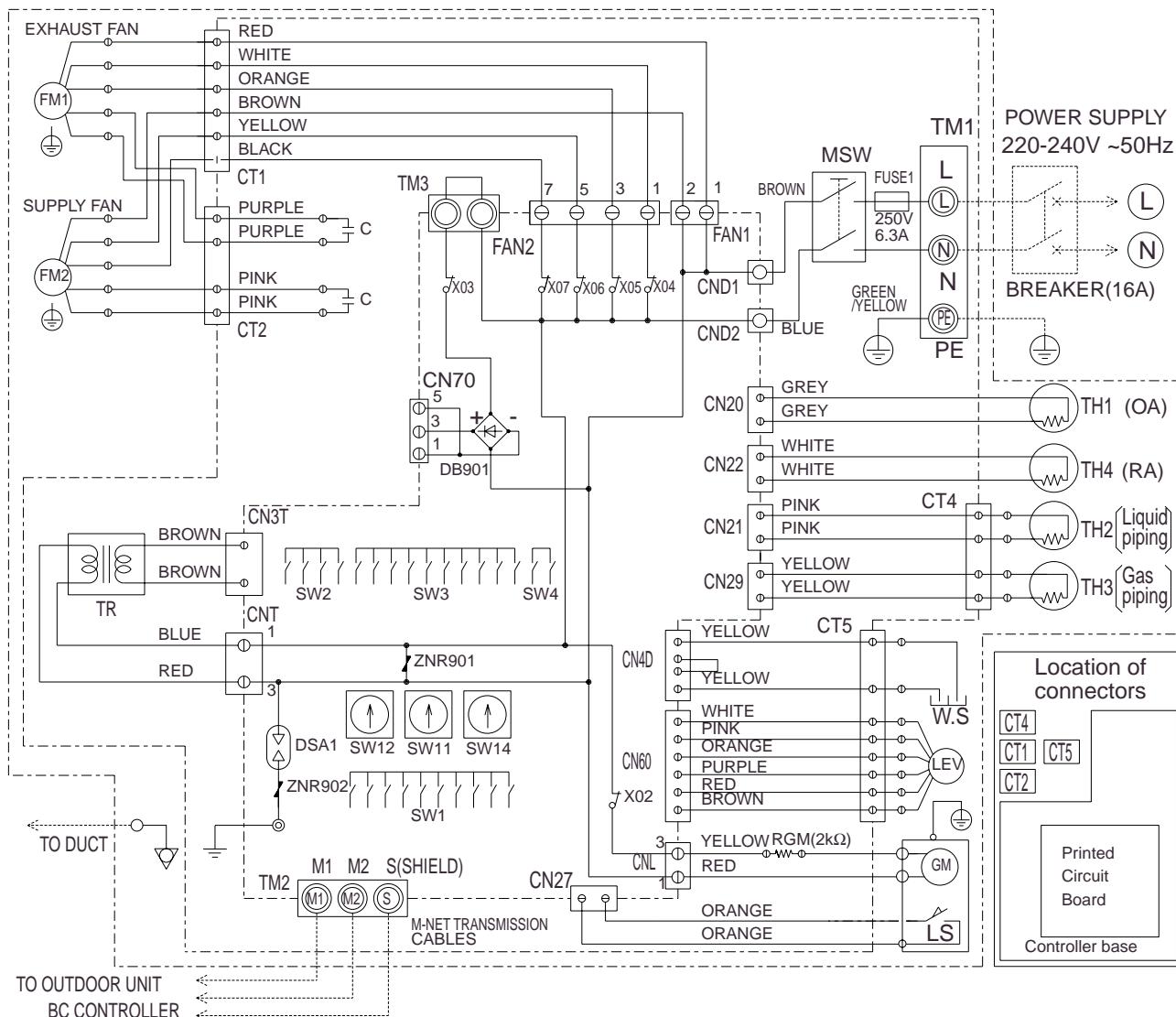
#### ● SYMBOL EXPLANATION

Symbol	Name	Symbol	Name	Symbol	Name
FM1	Fan motor(exhaust)	TM1	Terminal block(power supply)	MSW	Maintenance power switch
FM2	Fan motor(supply)	TM2	Terminal block(transmission)	M1,M2,S	M-NET transmission terminal
C	Capacitor	TM3	Terminal block(humidistat)	CND1,CND2	Connector(power supply)
W.S	Water sensor	TR	Transformer	CT1	Connector(fan motor)
SV1	Solenoid valve(pressure regulator)	LEV	Electronic linear expansion valve	CT2	Connector(capacitor)
SV2	Solenoid valve(exhaust)	SW1	Switch(function selection)	CT3	Connector(solenoid valve)
GM	Damper motor	SW2	Switch(capacity code setting)	CT4	Connector(thermistor)
LS	Limit switch	SW3	Switch(function selection)	CT5	Connector(LEV)
TH1	Thermistor(outdoor air temp.detection)	SW4	Switch(mode selection)	RSV	Resistance(solenoid valve)
TH2	Thermistor(piping temp.detection/liquid)	SW11	Switch(1st digit address set)	RGM	Resistance(damper motor)
TH3	Thermistor(piping temp.detection/gas)	SW12	Switch(2nd digit address set)	X02-X07	Aux.relay
TH4	Thermistor(room air temp.detection)	SW14	Switch(branch NO.set)		

●WARNING:Before obtaining access to terminal devices,all supply circuits must be disconnected.

## GUF-RD

OA Processing unit



REMOTE CONTROLLER

● NOTE 1.TM1,TM2 shown in dotted lines are field work.

2.Be sure to connect the grounding wire.

3.MARK ○:indicates terminal block, ⊖:connector

⊖:board insertion connector or fastening connector of control board.

### ●SYMBOL EXPLANATION

Symbol	Name	Symbol	Name	Symbol	Name
FM1	Fan motor(exhaust)	TM1	Terminal block(power supply)	MSW	Maintain power switch
FM2	Fan motor(supply)	TM2	Terminal block(transmission)	M1,M2,S	M-NET transmission terminal
C	Capacitor	TR	Transformer	CND1,CND2	Connector(power supply)
W.S	Water sensor	LEV	Electronic linear expansion valve	CT1	Connector(fan motor)
GM	Damper motor	SW1	Switch(function selection)	CT2	Connector(capacitor)
LS	Limit switch	SW2	Switch(capacity code setting)	CT4	Connector(thermistor)
TH1	Thermistor(outdoor air temp.detection)	SW3	Switch(function selection)	CT5	Connector(LEV)
TH2	Thermistor(piping temp.detection/liquid)	SW4	Switch(mode selection)	RGM	Resistance(damper motor)
TH3	Thermistor(piping temp.detection/gas)	SW11	Switch(1st digit address set)	X02-X07	Aux.relay
TH4	Thermistor(room air temp.detection)	SW12	Switch(2nd digit address set)		
		SW14	Switch(branch NO.set)		

●WARNING:Before obtaining access to terminal devices,all supply circuits must be disconnected.

LOSSNAY unit

LGH-RS2-E2

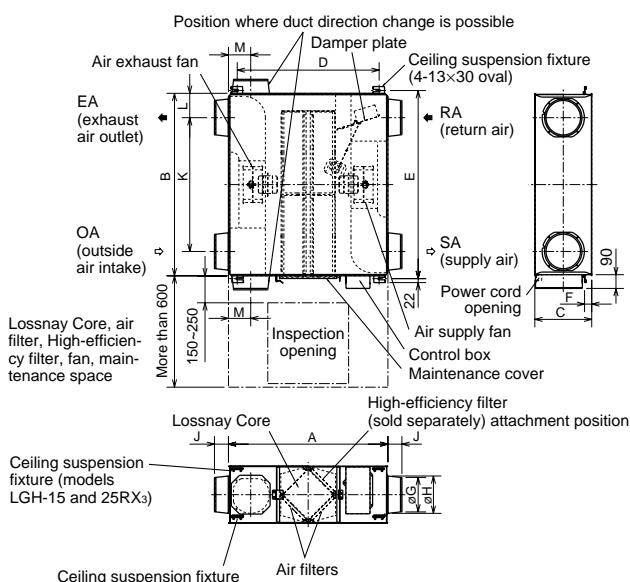
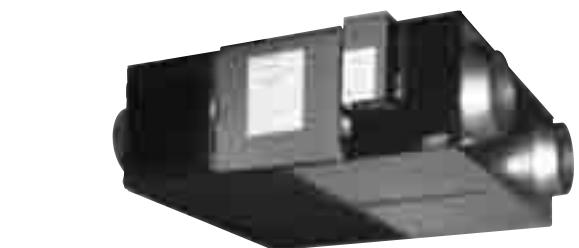
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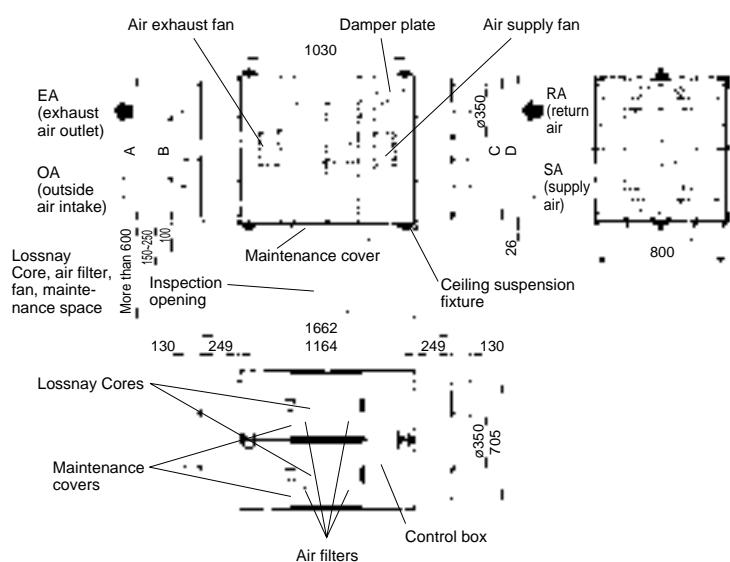
LOSSNAY

# 1. Dimensions

## LGH-15RX<sub>3</sub> to LGH-25RX<sub>3</sub>



## LGH-150RX<sub>3</sub> and LGH-200RX<sub>3</sub>



### Accessory parts

- Mounting screws.....x18
- Duct connecting flanges.....x4  
(double flanges at SA and EA sides)
- Protective cover.....x1  
<for installing upside down>
- Slim-Lossnay connection cable (gray: two wires)....x1

### Accessory parts

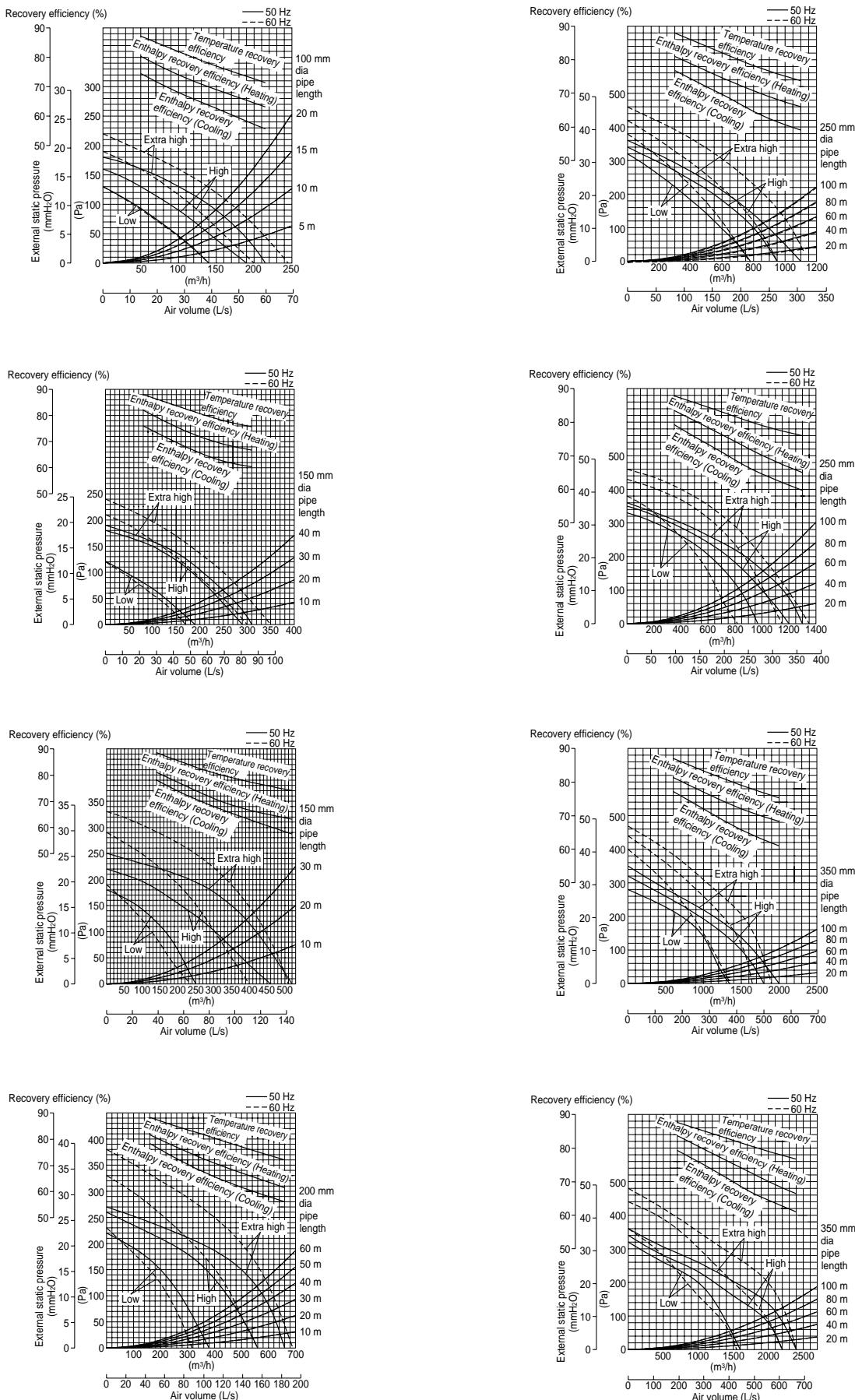
- Duct connecting flanges.....x4
- Mounting screws.....x34
- Washers.....x32
- Protective cover.....x1  
<for installing upside down>
- Slim-Lossnay connection cable (gray: two wires)....x1

Model	Dimensions			Ceiling suspension fixture pitch			Nominal diameter	Duct connecting flange			Duct pitch			Weight (kg)
	A	B	C	D	E	F		G	H	J	K	L	M	
LGH-15RX <sub>3</sub>	780	610	275	700	641	10*	ø100	97.5	110	54	450	80	119	17
LGH-25RX <sub>3</sub>	780	735	275	700	765	10*	ø150	142	160	63	530	102.5	102	21
LGH-35RX <sub>3</sub>	888	874	317	790	906	40	ø150	142	160	63	650	112	124	30
LGH-50RX <sub>3</sub>	888	1,016	317	790	1,048	40	ø200	192	208	79	745	135.5	124	33
LGH-80RX <sub>3</sub>	1,164	1,004	398	1,030	1,036	10	ø250	242	258	79	690	157	149	61
LGH-100RX <sub>3</sub>	1,164	1,231	398	1,030	1,263	10	ø250	242	258	79	920	155.5	149	72

\*Shows the distance from the ceiling.

Model	A	B	C	D	Unit (mm)	
					Weight (kg)	
LGH-150RX <sub>3</sub>	1,004	510	964	1,046	154	
LGH-200RX <sub>3</sub>	1,231	740	1,194	1,273	179	

## 2. Performance



LOSSNAY

### 3. Specifications

LOSSNAY

Model		LGH-15RX3					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Speed		Extra high	High	Low	Extra high	High	Low
Current (A)		0.48-0.52/0.57	0.34-0.35/0.39	0.24-0.25/0.27	0.48-0.52/0.58	0.34-0.36/0.40	0.24-0.25/0.27
Input (W)		104-122/119	74-83/85	52-59/58	104-123/120	74-85/85	52-59/58
Air volume	(m³/h)	150/150	150/150	120/110	150/150	150/150	120/110
	(L/s)	42/42	42/42	33/31	42/42	42/42	33/31
External static pressure	(mmH <sub>2</sub> O)	9.2/12.2	4.1/6.1	2.6/3.6	9.2/12.2	4.1/6.1	2.6/3.6
	(Pa)	90/120	40/60	25/35	90/120	40/60	25/35
Temperature recovery efficiency (%)		77/77	77/77	80/81	—	—	—
Enthalpy recovery efficiency (%)	Heating	69/69	69/69	72/73	—	—	—
	Cooling	62.5/62.5	62.5/62.5	66/67	—	—	—
Noise (dB)	(Measured at 1.5m under the center of the unit)	26-27/28	24-25/25	21-22/22	26-27/28	24-25/25.5	21-22/22
Weight (kg)		17					
Starting current		Under 0.8/0.7A or less					

Model		LGH-25RX3					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Speed		Extra high	High	Low	Extra high	High	Low
Current (A)		0.51-0.54/0.63	0.42-0.44/0.49	0.25-0.27/0.28	0.52-0.55/0.63	0.42-0.45/0.50	0.25-0.27/0.27
Input (W)		111-128/131	91-104/106	54-64/60	112-130/132	91-105/107	54-64/58
Air volume	(m³/h)	250/250	250/250	165/150	250/250	250/250	165/150
	(L/s)	69/69	69/69	46/42	69/69	69/69	46/42
External static pressure	(mmH <sub>2</sub> O)	6.6/10.2	4.1/5.1	2.0/2.0	6.6/10.2	4.1/5.1	2.0/2.0
	(Pa)	65/100	40/50	20/20	65/100	40/50	20/20
Temperature recovery efficiency (%)		78/78	78/78	83/84	—	—	—
Enthalpy recovery efficiency (%)	Heating	69/69	69/69	74/75	—	—	—
	Cooling	62.5/62.5	62.5/62.5	68/70	—	—	—
Noise (dB)	(Measured at 1.5m under the center of the unit)	26.5-27.5/28.5	25-26/25.5	21-22/21	27-28/29	25.5-26.5/26	21-22/21
Weight (kg)		21					
Starting current		Under 0.8/0.7A or less					

Model		LGH-35RX3					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Speed		Extra high	High	Low	Extra high	High	Low
Current (A)		0.78-0.79/0.99	0.71-0.71/0.83	0.46-0.48/0.46	0.81-0.82/1.00	0.72-0.73/0.83	0.46-0.49/0.46
Input (W)		169-187/215	154-167/180	97-110/97	176-192/217	156-172/180	97-111/97
Air volume	(m³/h)	350/350	350/350	230/210	350/350	350/320	230/210
	(L/s)	97/97	97/97	64/58	97/97	97/89	64/58
External static pressure	(mmH <sub>2</sub> O)	15.3/19.4	7.1/5.1	2.6/2.0	15.3/19.4	7.1/5.1	2.7/2.0
	(Pa)	150/190	70/50	25/20	150/190	70/50	26/20
Temperature recovery efficiency (%)		79/79	79/79	84/85	—	—	—
Enthalpy recovery efficiency (%)	Heating	68.5/68.5	68.5/68.5	75.5/76.5	—	—	—
	Cooling	65.5/65.5	65.5/65.5	72/73	—	—	—
Noise (dB)	(Measured at 1.5m under the center of the unit)	31-32/32.5	28-30/27	23-24/21	31.5-32.5/33.5	28-30/28	23-24/21
Weight (kg)		30					
Starting current		Under 1.6/1.5A or less					

Model		LGH-50RX3					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Speed		Extra high	High	Low	Extra high	High	Low
Current (A)		0.94-0.95/1.21	0.89-0.90/1.05	0.57-0.60/0.60	0.95-0.96/1.22	0.90-0.93/1.05	0.58-0.60/0.60
Input (W)		204-225/262	193-214/231	123-142/130	206-228/263	196-221/228	125-142/130
Air volume	(m³/h)	500/500	500/500	350/300	500/500	500/500	350/300
	(L/s)	139/139	139/139	97/83	139/139	139/139	97/83
External static pressure	(mmH <sub>2</sub> O)	15.3/20.4	6.1/6.1	3.1/2.0	15.3/20.4	6.1/6.1	3.1/2.0
	(Pa)	150/200	60/60	30/20	150/200	60/60	30/20
Temperature recovery efficiency (%)		77/77	77/77	82/83.5	—	—	—
Enthalpy recovery efficiency (%)	Heating	67/67	67/67	73/75	—	—	—
	Cooling	61.5/61.5	61.5/61.5	68/70	—	—	—
Noise (dB)	(Measured at 1.5m under the center of the unit)	32.5-33.5/32.5	30-31/28.5	23.5-24.5/23	33.5-34.5/33.5	30.5-31.5/29.5	23.5-24.5/23
Weight (kg)		33					
Starting current		Under 1.9/1.7A or less					

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Model		LGH-80RX3					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Speed		Extra high	High	Low	Extra high	High	Low
Current (A)		1.8-1.8/2.1	1.7-1.7/1.9	1.4-1.4/1.5	1.7-1.7/2.0	1.6-1.6/1.8	1.4-1.4/1.4
Input (W)		392-418/455	368-396/405	304-332/315	370-394/425	348-374/390	298-330/305
Air volume	(m³/h)	800/800	800/800	670/660	800/800	800/800	670/660
	(L/s)	222/222	222/222	186/183	222/222	222/222	186/183
External static pressure	(mmH <sub>2</sub> O)	14.3/23.5	10.2/12.2	7.1/8.2	14.3/23.5	10.2/12.2	7.1/8.2
	(Pa)	140/230	100/120	70/80	140/230	100/120	70/80
Temperature recovery efficiency (%)		78/78	78/78	80.5/81	—	—	—
Enthalpy recovery efficiency (%)	Heating	71/71	71/71	73/73.5	—	—	—
	Cooling	64.5/64.5	64.5/64.5	68/68.5	—	—	—
Noise (dB)	(Measured at 1.5m under the center of the unit)	33.5-34.5/35	32-33/31	30-31/29	34.5-35.5/36	33-34/32	30.5-31.5/29.5
Weight (kg)		61					
Starting current		Under 3.8/3.1A or less					

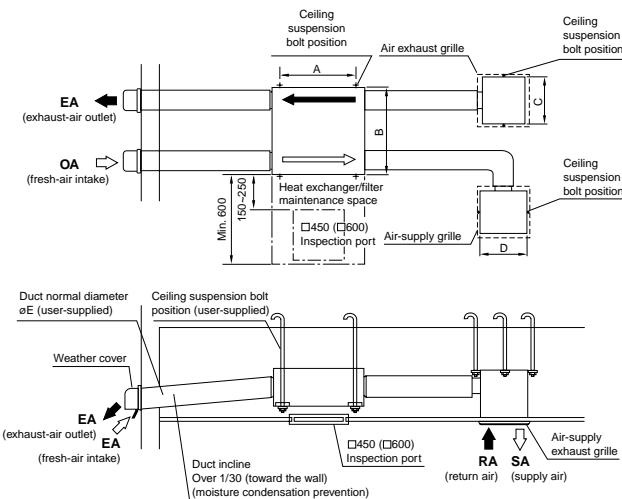
Model		LGH-100RX3					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Speed		Extra high	High	Low	Extra high	High	Low
Current (A)		2.3-2.3/2.8	2.3-2.3/2.6	2.2-2.2/1.7	2.3-2.3/2.8	2.3-2.2/2.6	2.1-2.1/1.7
Input (W)		500-525/600	495-515/555	465-475/365	505-525/595	500-515/550	455-485/365
Air volume	(m³/h)	1000/1000	1000/1000	870/720	1000/1000	1000/1000	870/720
	(L/s)	278/278	278/278	242/200	278/278	278/278	242/200
External static pressure	(mmH <sub>2</sub> O)	16.3/20.4	10.2/11.2	8.2/6.1	16.3/20.4	10.2/11.2	8.2/6.1
	(Pa)	160/200	100/110	80/60	160/200	100/110	80/60
Temperature recovery efficiency (%)		79/79	79/79	81/83	—	—	—
Enthalpy recovery efficiency (%)	Heating	70/70	70/70	73/76	—	—	—
	Cooling	64.5/64.5	64.5/64.5	67/71	—	—	—
Noise (dB)	(Measured at 1.5m under the center of the unit)	36-37/36	34-35/34	31.5-32.5/30	37-38/37	35-36/35	33-34/31
Weight (kg)		72					
Starting current		Under 5.7/5.0A or less					

Model		LGH-150RX3					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Speed		Extra high	High	Low	Extra high	High	Low
Current (A)		3.3-3.3/4.2	3.1-3.1/3.7	2.7-2.8/2.9	3.2-3.2/4.2	3.0-3.0/3.7	2.6-2.6/2.9
Input (W)		720-785/915	670-730/805	585-660/630	695-760/905	650-705/800	565-615/630
Air volume	(m³/h)	1500/1500	1500/1500	1200/1200	1500/1500	1500/1500	1200/1200
	(L/s)	417/417	417/417	333/333	417/417	417/417	333/333
External static pressure	(mmH <sub>2</sub> O)	14.0/21.0	10.2/12.0	5.1/7.0	14.0/21.0	10.2/12.0	5.1/7.0
	(Pa)	137/206	100/118	50/69	137/206	100/118	50/69
Temperature recovery efficiency (%)		79/79	79/79	81/81	—	—	—
Enthalpy recovery efficiency (%)	Heating	72/72	72/72	75/75	—	—	—
	Cooling	65.5/65.5	65.5/65.5	69/69	—	—	—
Noise (dB)	(Measured at 1.5m under the center of the unit)	36.5-37.5/37	35.5-36.5/36	32.5-33.5/33	36.5-37.5/37	35.5-36.5/36	32.5-33.5/33
Weight (kg)		154					
Starting current		Under 6.8/5.9A or less					

Model		LGH-200RX3					
Power source		Single phase 220-240V ~50Hz/220V ~60Hz					
Ventilation mode		Lossnay ventilation			Bypass ventilation		
Speed		Extra high	High	Low	Extra high	High	Low
Current (A)		4.6-4.3/5.4	4.6-4.3/5.2	4.1-3.8/3.3	4.4-4.2/5.3	4.4-4.1/5.0	4.1-3.8/3.3
Input (W)		1000-1020/1175	995-1020/1130	900-905/735	960-995/1155	955-975/1090	885-900/720
Air volume	(m³/h)	2000/2000	2000/2000	1400/1400	2000/2000	2000/2000	1400/1400
	(L/s)	556/556	556/556	389/389	556/556	556/556	389/389
External static pressure	(mmH <sub>2</sub> O)	14.0/20.0	8.2/9.0	8.5/7.0	14.0/20.0	8.2/9.0	8.5/7.0
	(Pa)	137/196	80/88	83/69	137/196	80/88	83/69
Temperature recovery efficiency (%)		79/79	79/79	83/83	—	—	—
Enthalpy recovery efficiency (%)	Heating	70/70	70/70	76/76	—	—	—
	Cooling	64.5/64.5	64.5/64.5	71/71	—	—	—
Noise (dB)	(Measured at 1.5m under the center of the unit)	39-40/38.5	37-38/36.5	35.5-36.5/34.5	39.5-40.5/38.5	37.5-38.5/36.5	36-37/34.5
Weight (kg)		179					
Starting current		Under 13.0/9.7A or less					

## 4. Sample Installations

### LGH-15RX3 to 100RX3



- An inspection port (□450 or □600) must be installed on the filter and Lossnay Core removing side.
- Provide heat insulation to prevent moisture condensation along the two outside ducts (fresh-air intake and exhaust-air outlet).
- Ceiling installation hardware can be attached to the top of the unit. (models LGH-35 to 100RX3)
- Do not use vent caps or round hoods in places directly exposed to rain.

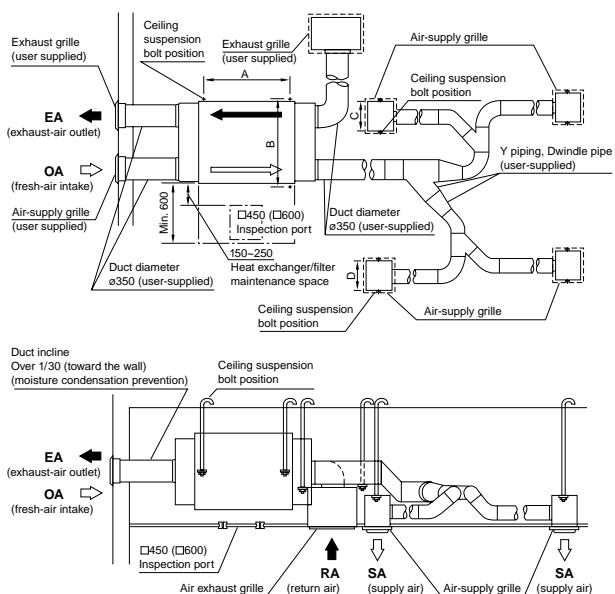
(Unit: mm)

	A	B	C	D
LGH-15RX3	700	641	334	334
LGH-25RX3	700	765	334	334
LGH-35RX3	790	906	334	334
LGH-50RX3	790	1,048	414	414
LGH-80RX3	1,030	1,036	414	414
LGH-100RX3	1,030	1,263	414	414

#### Installation conditions:

- Ambient conditions: Temperature -10°C to +40°C, relative humidity less than 80%. When condensation is expected to form, heat up the outside air using a duct heater, etc.
- Outside air intake conditions: Temperature -15°C to +40°C, relative humidity less than 80%.

### LGH-150RX3 and 200RX3



- An inspection port (□450 or □600) must be installed on the filter and Lossnay Core removing side.

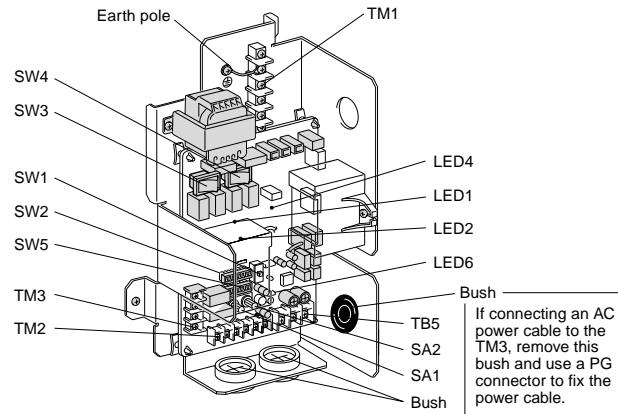
- Provide heat insulation to prevent moisture condensation along the two outside ducts (fresh-air intake and exhaust-air outlet).
- Where rain falls directly on the machinery, use the weather cover to prevent entry of rainwater.

(Unit: mm)

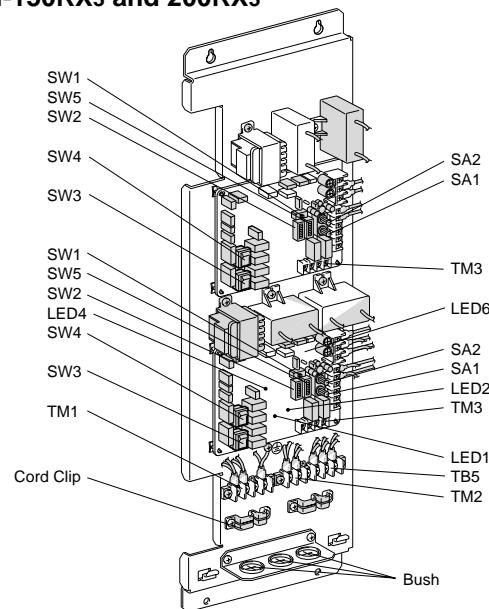
	A	B	C	D
LGH-150RX3	1,030	1,046	414	414
LGH-200RX3	1,030	1,273	414	414

## 5. Electrical Installations

LGH-15RX3 to 100RX3



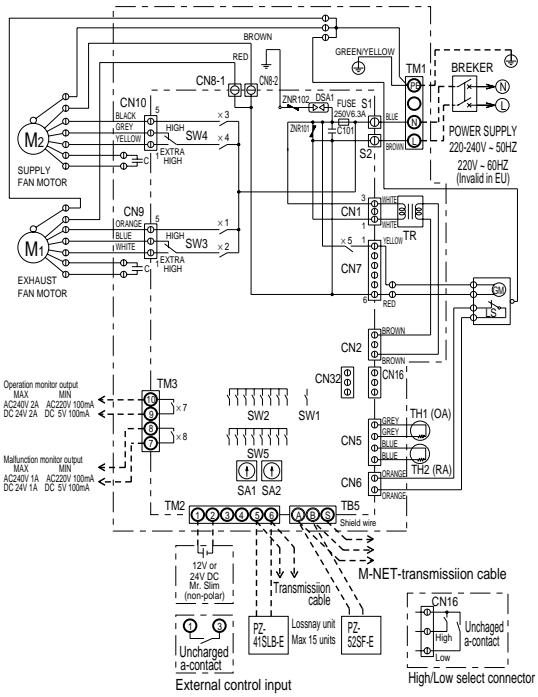
LGH-150RX3 and 200RX3



LOSSNAY

# 6. Wiring Diagrams

## LGH-15RX3 to 100RX3

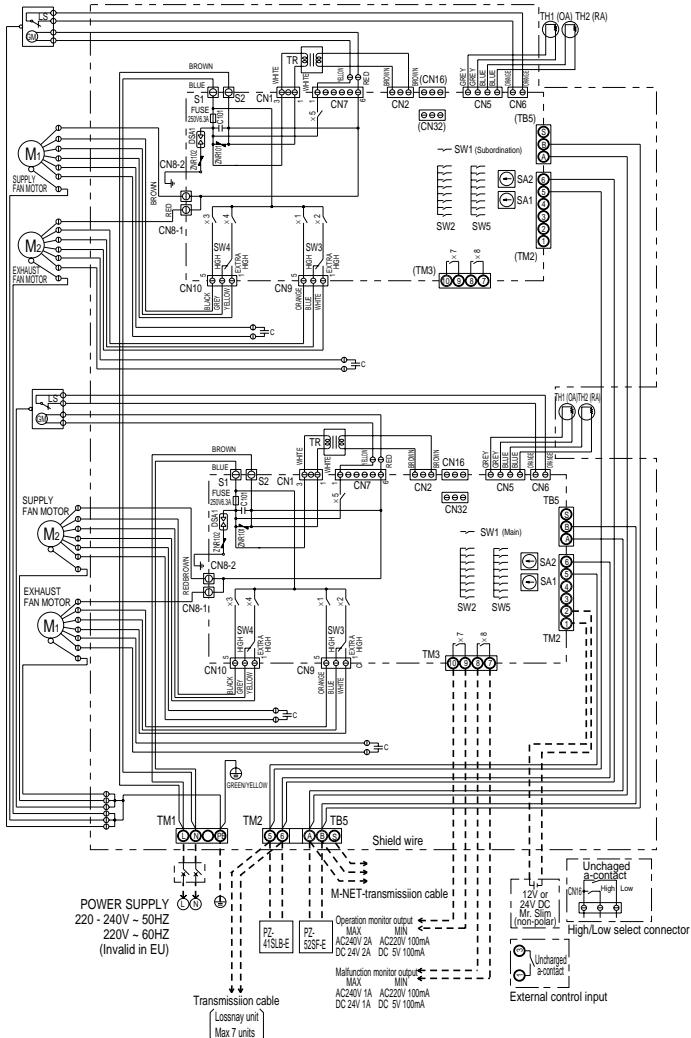


- Connect the wires shown as dotted lines.
- Be sure to connect the grounding wire.
- Breaker should be provided by the customer.

## Symbol explanation

M1:	Motor for exhaust fan
M2:	Motor for supply fan
C:	Capacitor
GM:	Motor for Bypass movement
LS:	Microswitch
TH1:	Thermistor for outside air
TH2:	Thermistor for return air
SW1:	Switch (Main/Sub change)
SW2, 5:	Switch (Function selection)
SW3:	High/E. High select switch (Exhaust fan)
SW4:	High/E. High select switch (Supply fan)
TM1:	Terminal block (Power supply)
TM2:	Terminal block (Transmission cable and external control input)
TM3:	Terminal block (Monitor output)
TB5:	Terminal block (M-NET Transmission cable)
S1, S2:	Connector (Power supply)
TR:	Control circuit transformer
X7:	Relay contact (for operation monitor output)
X8:	Relay contact (for malfunction monitor output)
CN1:	Connector (Transformer primary)
CN2:	Connector (Transformer secondary)
CN5:	Connector (Thermistor)
CN6:	Connector (Microswitch)
CN7:	Connector (Motor for bypass operation)
CN8-1:	Tab connector (Fan motor)
CN8-2:	Tab connector (Fan motor)
CN9:	Connector (Fan motor)
CN10:	Connector (Fan motor)
CN16:	Connector (High/Low switch)
CN32:	Connector (Remote control selection)
SA1:	Address setting rotary switch (10 digit)
SA2:	Address setting rotary switch (1 digit)
LED1:	Inspection indicator lamp
LED2:	Inspection indicator lamp
LED4:	Power supply indicator lamp
LED6:	M-NET indicator lamp
MARK	
○ :	Indicates terminal block
○ :	Connector
□ :	Board insertion connector or fastening connector of control board

## LGH-150RX3 and 200RX3



- PZ-41SLB-E and PZ-52SF-E cannot be used simultaneously.

**BC controller****CMB-P-V-F  
CMB-P-V-FA  
CMB-P-V-FB****CONTENTS**

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**BC controller**

# 1. Specifications

Model name		CMB-P104V-F	CMB-P105V-F	CMB-P106V-F	CMB-P108V-F	CMB-P1010V-F	CMB-P1013V-F	CMB-P1016V-F			
Number of branch		4	5	6	8	10	13	16			
Power source		~220/230/240V 50Hz/60Hz									
Power input	kW	0.068	0.083	0.098	0.128	0.158	0.203	0.248			
Current	A	0.31/0.30/0.28	0.38/0.36/0.35	0.45/0.43/0.41	0.58/0.56/0.53	0.72/0.69/0.66	0.92/0.88/0.85	1.13/1.08/1.03			
External finish		Galvanizing									
Indoor unit capacity connectable to 1 branch		Model 80 or smaller •Use optional joint pipe combining 2-branch when the total unit capacity exceeds 81. •Use the reducer (standard accessory) when the indoor unit Model 40 or smaller is connected.									
Height	mm	284									
Width	mm	362 + 70 (control box)									
Depth	mm	648					1098				
Refrigerant piping diameter	To outdoor unit	High pressure pipe	$\phi 19.05$ Brazed								
	To indoor unit	Low pressure pipe	200type : $\phi 25.4$ Brazed 250type : $\phi 28.58$ Brazed								
		Liquid pipe	$\phi 9.52$ Flare ( $\phi 6.35$ with attached reducer used, $\phi 12.7$ with optional joint pipe used)								
		Gas pipe	$\phi 15.88$ Flare ( $\phi 12.7$ with attached reducer used, $\phi 19.05$ with optional joint pipe used)								
Drain pipe		VP-25									
Net weight	kg	24	27	29	34	39	47	54			
Accessories		•Drain connection pipe (with flexible hose and insulation) •Reducer									

Note: 1. Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

Model name		CMB-P108V-FA	CMB-P1010V-FA	CMB-P1013V-FA	CMB-P1016V-FA	CMB-P108V-FB
Number of branch		8	10	13	16	8
Power source		~220/230/240V 50Hz/60Hz				
Power input	kW	0.138	0.168	0.213	0.258	0.128
Current	A	0.63/0.60/0.58	0.76/0.73/0.70	0.97/0.93/0.89	1.17/1.12/1.08	0.58/0.56/0.53
External finish		Galvanizing				
Indoor unit capacity connectable to 1 branch		Model 80 or smaller •Use optional joint pipe combining 2-branch when the total unit capacity exceeds 81. •Use the reducer (standard accessory) when the indoor unit Model 40 or smaller is connected.				
Height	mm	289				284
Width	mm	450 + 70 (control box)				362 + 70 (control box)
Depth	mm	1110				648
Refrigerant piping diameter	To outdoor unit	High pressure pipe	$\phi$ 25.4 Brazed			
		Low pressure pipe	$\phi$ 34.93 Brazed			
	To indoor unit	Liquid pipe	$\phi$ 9.52 Flare ( $\phi$ 6.35 with attached reducer used, $\phi$ 12.7 with optional joint pipe used)			
		Gas pipe	$\phi$ 15.88 Flare ( $\phi$ 12.7 with attached reducer used, $\phi$ 19.05 with optional joint pipe used)			
	To another BC controller	Low press gas pipe	$\phi$ 28.58 Brazed			
		High press gas pipe	$\phi$ 19.05 Brazed			
		Liquid pipe	$\phi$ 12.7 Brazed			
Drain pipe		VP-25				
Net weight	kg	44	49	57	64	32
Accessories		•Drain connection pipe (with flexible hose and insulation) •Reducer				

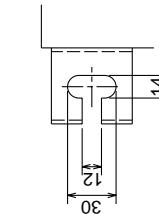
Note: 1.Works not included : Installation/foundation work, electrical connection work, duct work, insulation work, power source switch and other items not specified in this specification.

## 2. External Dimension

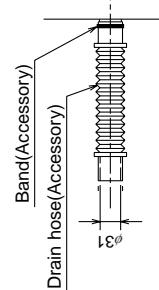
**CMB-P104,105,106,108,1010,  
1013,1016V-F**

Unit : mm

- <Accessories>
- Refrigerant<Low pressure> conn. pipe.....1pc.
  - Reducer(Large,Small).....Quantity for all connections
  - Drain hose(VP-25 connection).....1pc.
  - Pipe cover for drain hose.....1pc.
  - Hose band.....1pc.
  - Tie band.....2pcs.
  - Note! Suspension bolt( $\phi 10$ ), washer(M10), and nut(M10)
- 2.Take notice of service space as follows.  
(Please give attention not to occupy service space by letting ducts and pipes through.)



Detail of Y section



Detail of X section

Connection pipe of  
outdoor unit  
(High pressure)

$\phi 19.05$ <Flare>

Drain piping  
VP-25 connection

$224\phi 25.4$ <Flare>

$280\phi 28.58$ -Brazed

Connection pipe of  
outdoor unit  
(Low pressure)

$103\phi 24$ -Brazed

$130\phi 24$ -Brazed

$181\phi 24$ -Brazed

$64\phi 24$ -Brazed

$103\phi 24$ -Brazed

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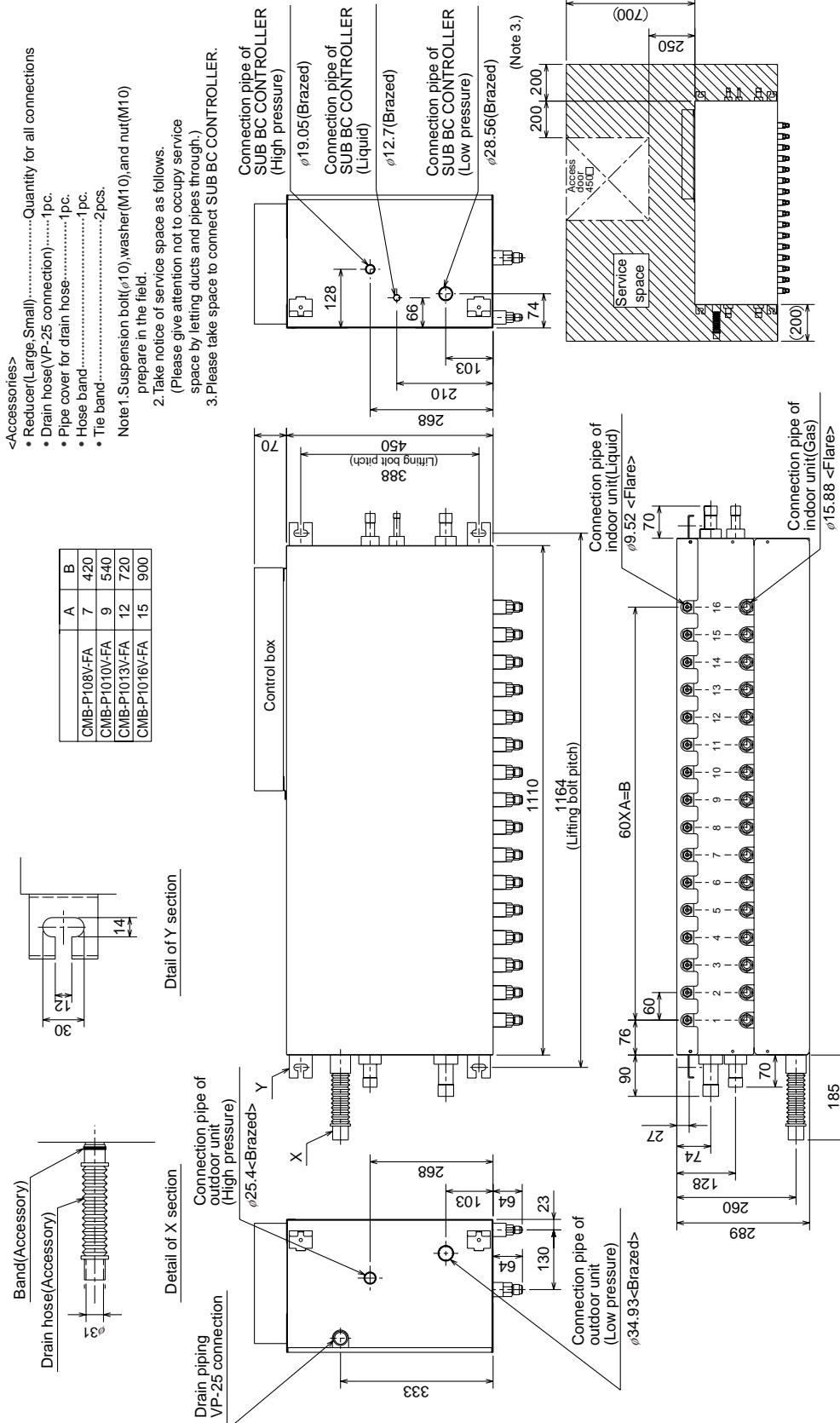
$103\phi 24$ -Brazed

$248\phi 24$ -Brazed

$13$

CMB-P108,1010,1013,1016V-FA

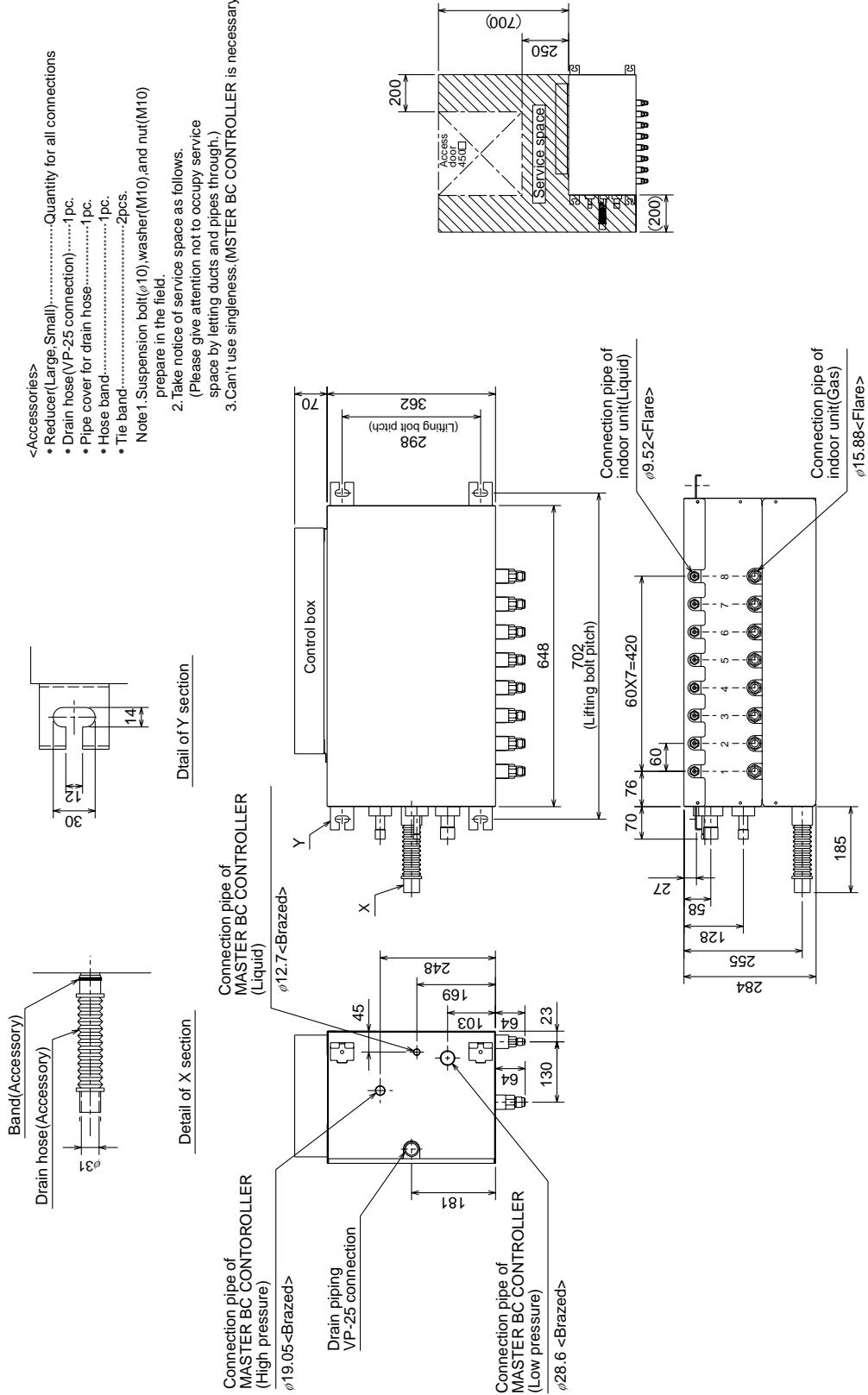
Unit : mm



BC controller

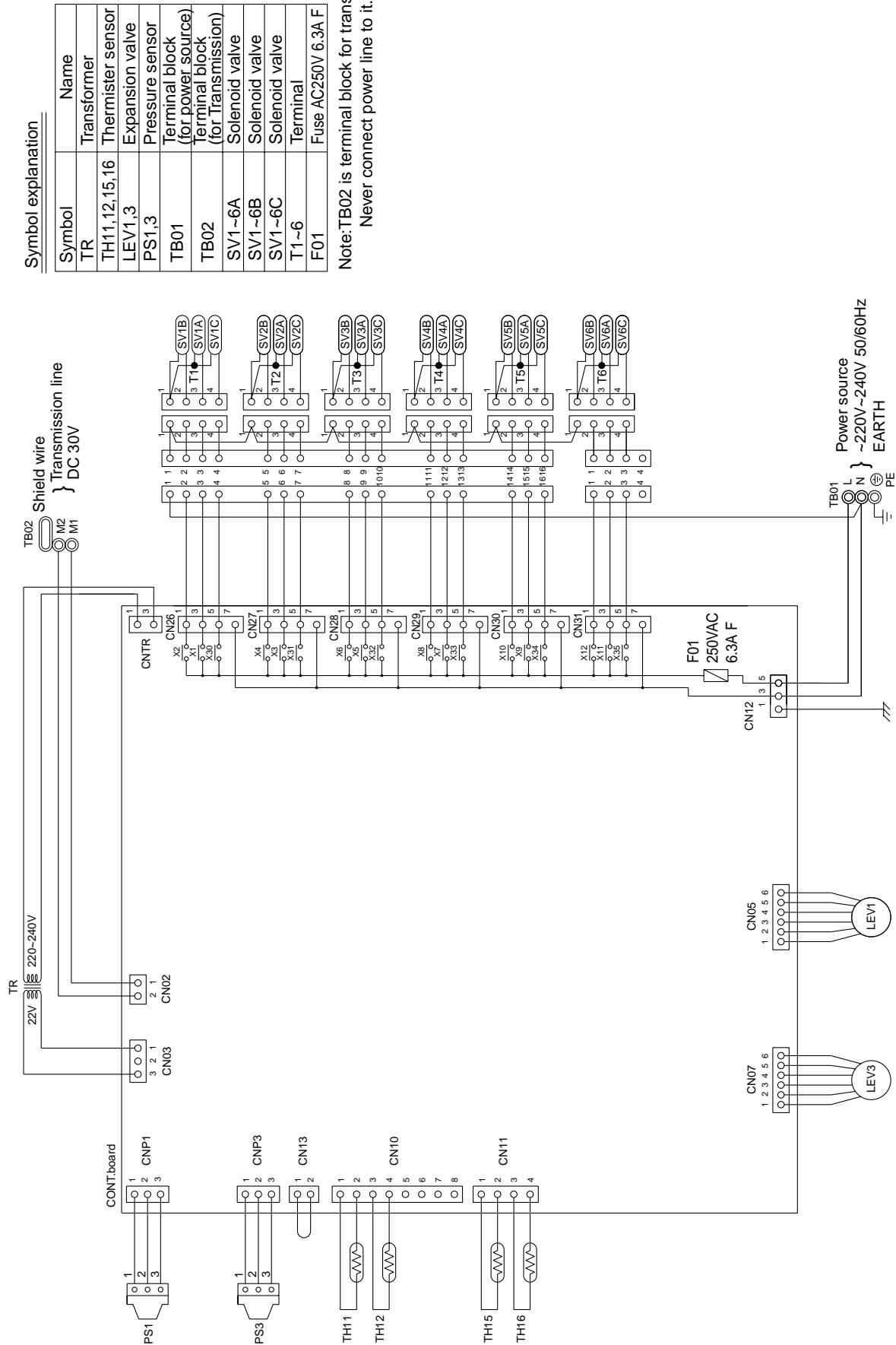
CMB-P108V-FB

Unit : mm



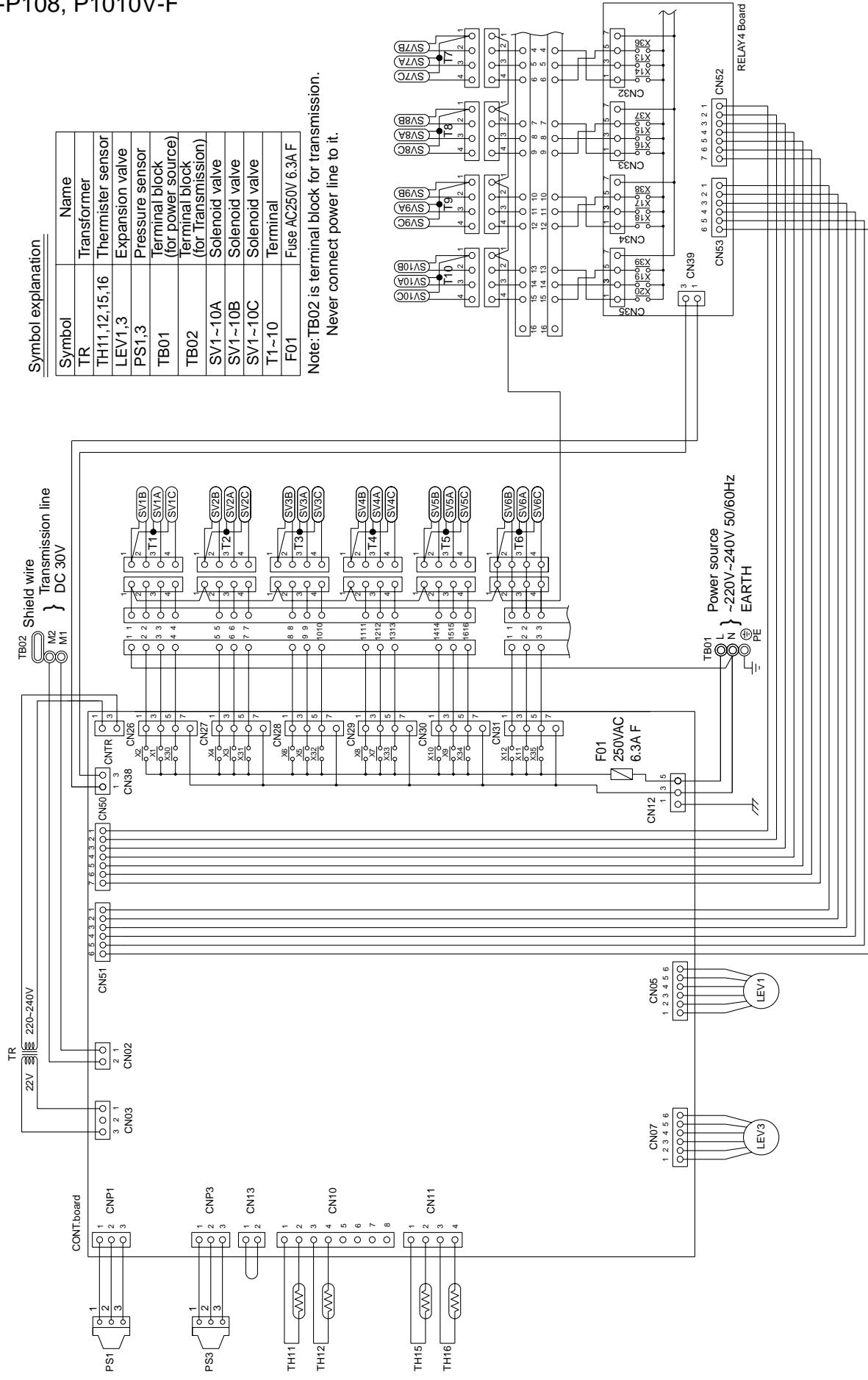
### 3. Wiring Diagrams

CMB-P104, P105, P106V-F

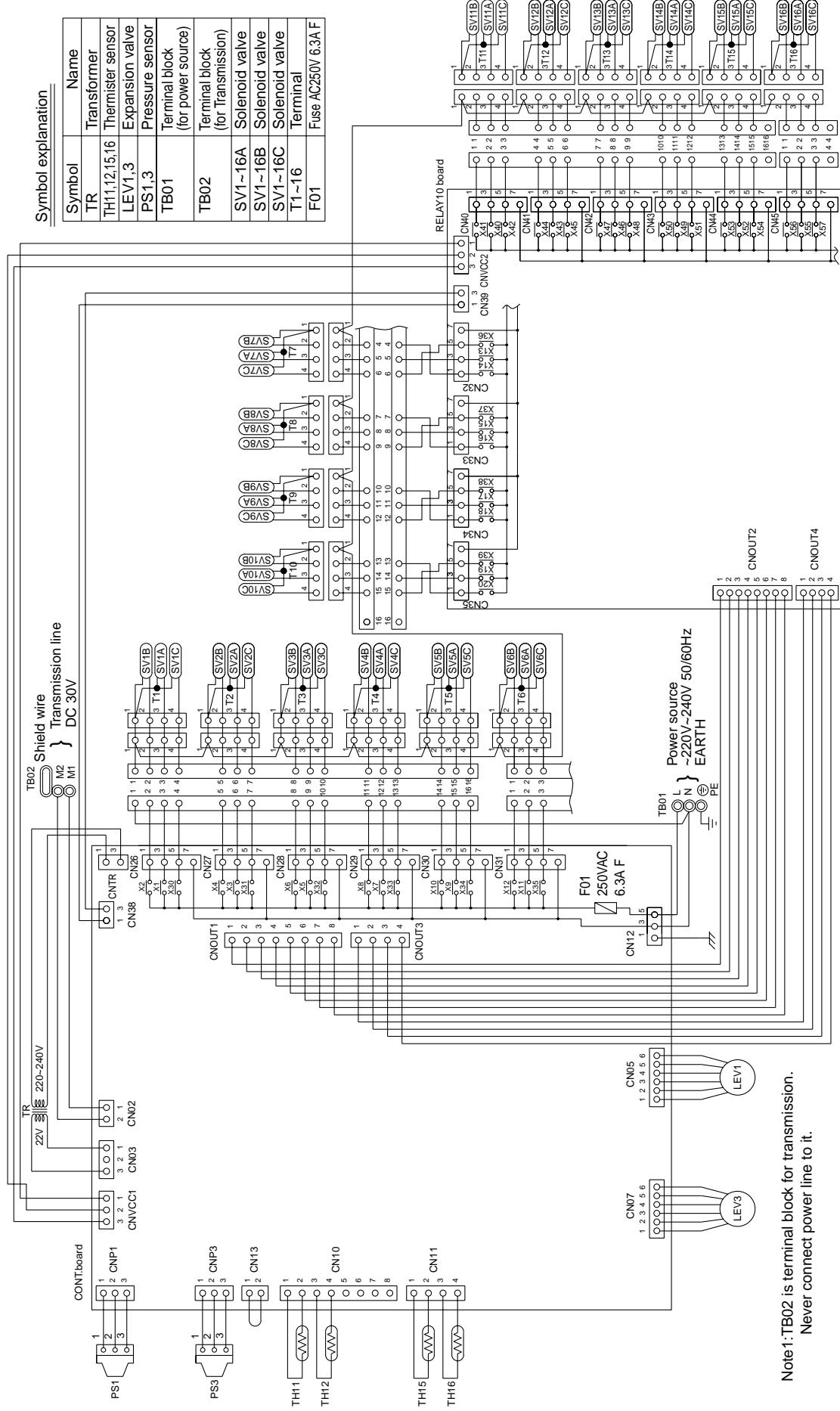


## BC controller

### CMB-P108, P1010V-F



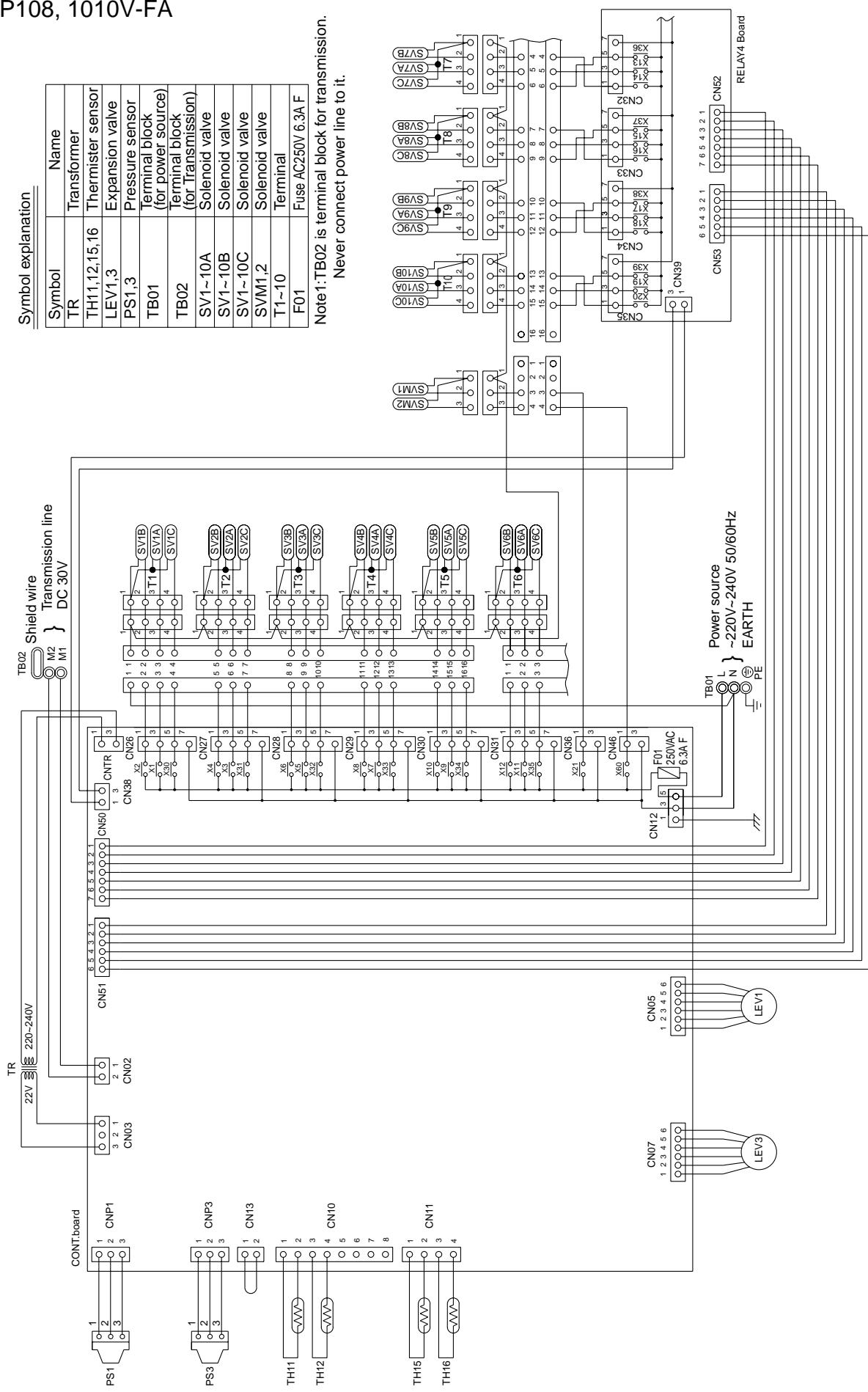
CMB-P1013, P1016V-F



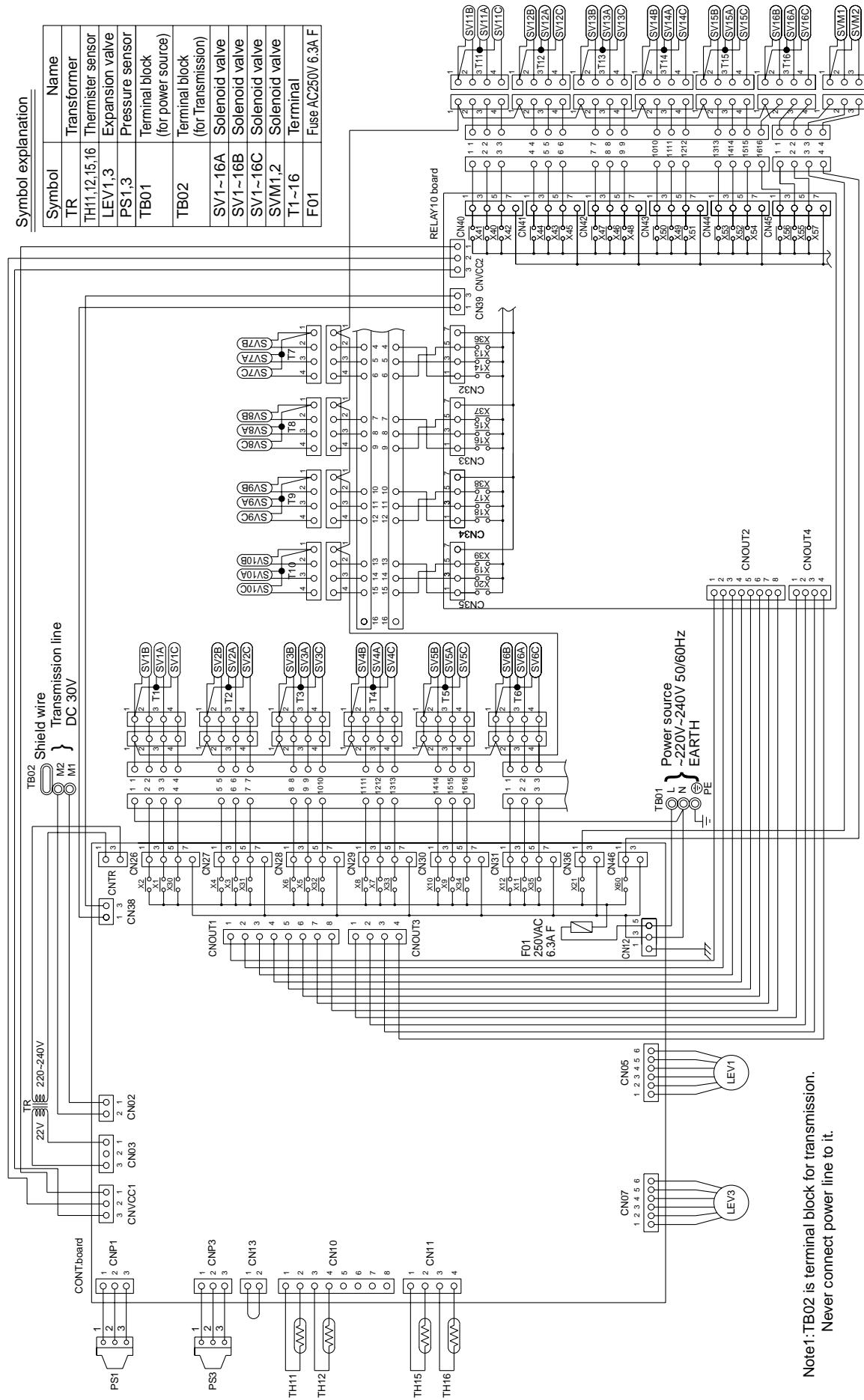
Note 1: TB02 is terminal block for transmission.  
Never connect power line to it.

BC controller

P108, 1010V-FA

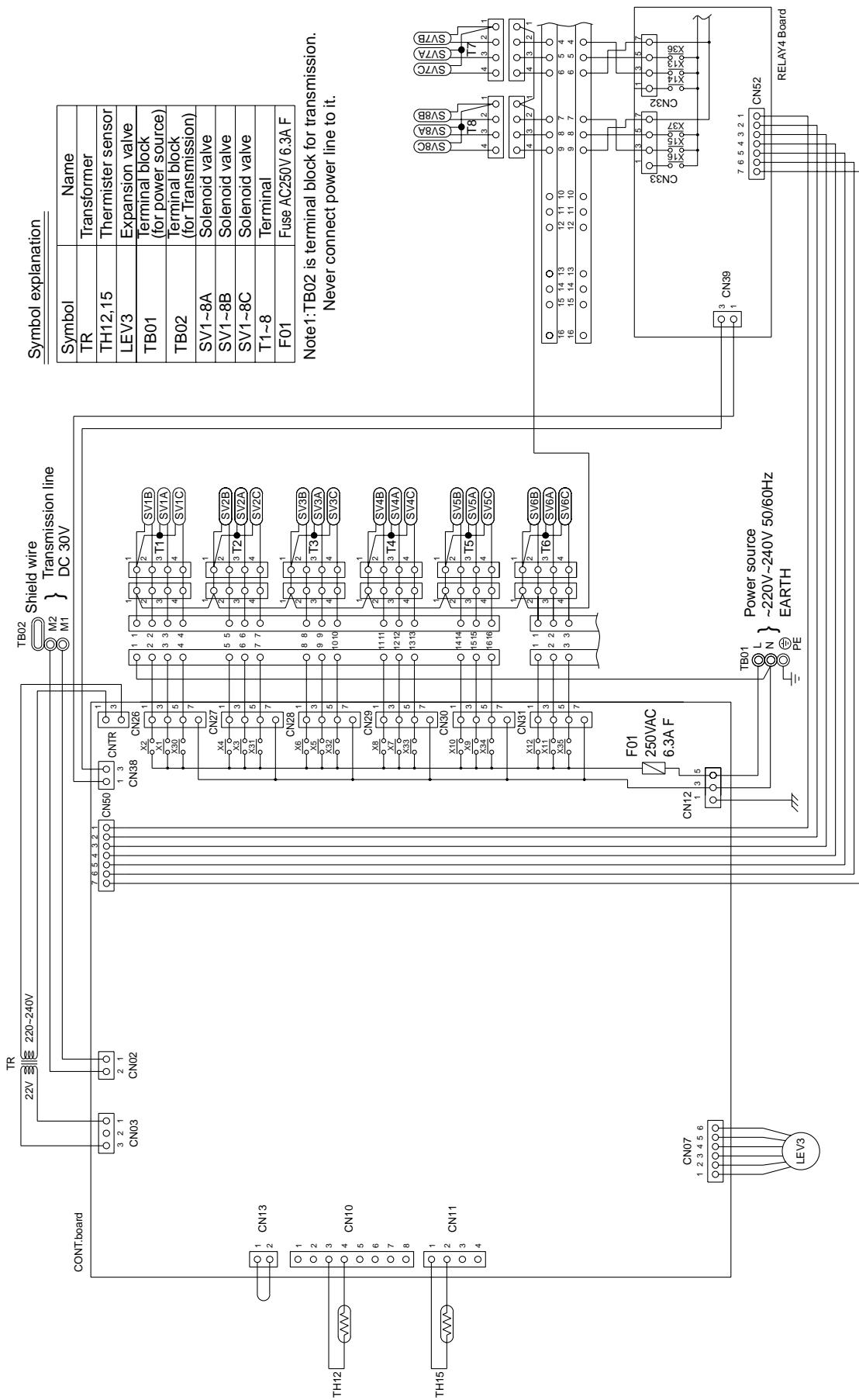


## CMB-P1013, P1016V-FA



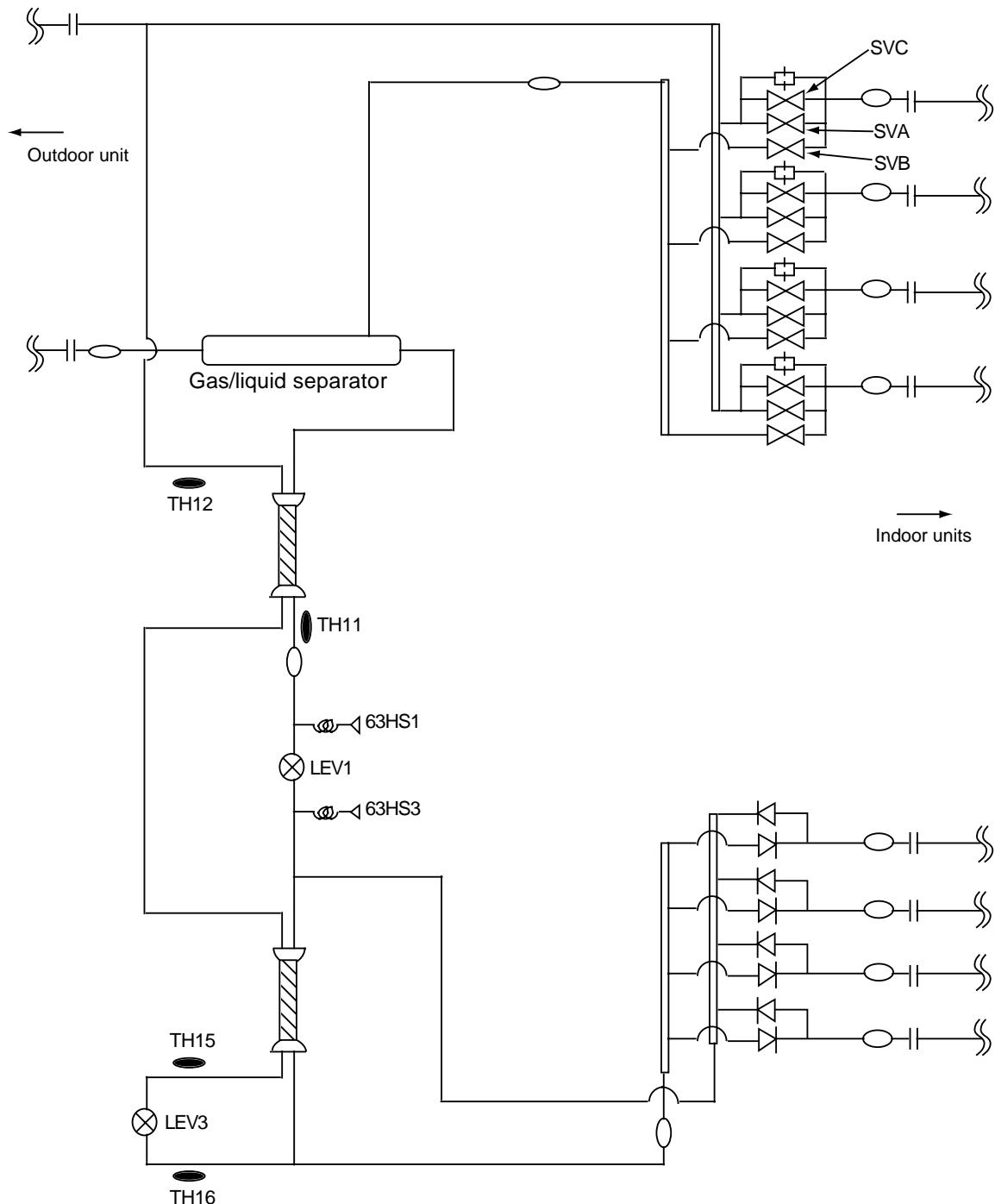
# BC Controller

## CMB-P108V-FB



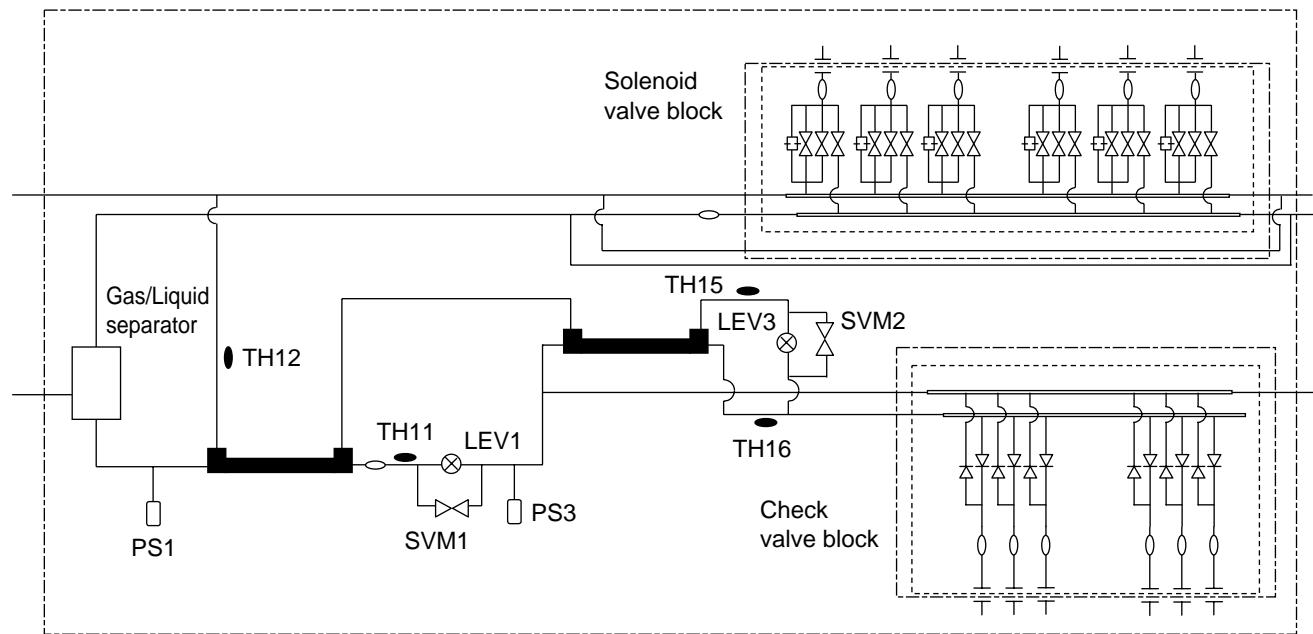
## 4. Refrigerant Circuit

CMB-P104, P105, P106, P108, P1010, P1013, P1016V-F



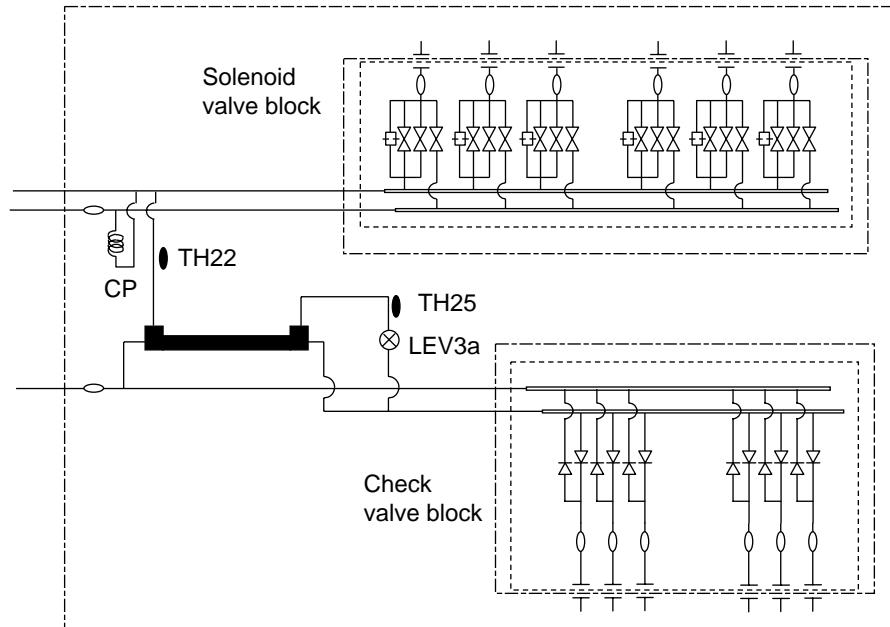
**BC controller**

## CMB-P108, P1010, P1013, P1016V-FA



BC controller

## CMB-P108V-FB



## CITY MULTI Controller

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3-6 Transmission booster unit	PAC-SF46EPA ..... 379
4. System component .....	380

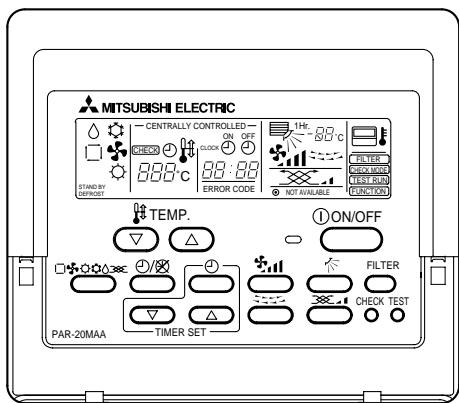
# 1. Function table of controllers

Model	Local remote controller						MELANS series (Man-machine type)					Interface type Air conditioner interface	
	Remote controller		Simple remote controller	Wireless remote controller	Programme timer	Group remote controller	System remote controller	Centralized controller					
	PAR-20MAA	PAR-F27MEA	PAC-SE51CRA	PAR-FL31MA	PAC-YT32PTA	PAC-SC30GRA	PAC-SF41SCA	MJ-103MTRA	G-50A	MJ-310E	LMAP02-E		
No. of units controllable (Groups (G) / units)	1G/16units	1G/16units	1G/16units	1G/16units	1units	8G/16units	32G/50units	50G/50units	50G/50units	1000G/1000units	50G/50units		
Operation	Start / Stop	○	○	○	○	×	○	○	○	○	○	□	
	Operation mode	○	○	×	○	×	○	○	○	○	○	□	
	Temperature setting	○	○	○	○	×	○	○	○	○	○	□	
	Permit / Prohibit direction	×	×	×	×	×	×	○	○	○	○	△	
	Fan speed	○	○	○	○	×	○	×	○	○	○	□	
	Air flow direction	○	○	×	○	×	○	×	○	○	○	×	
Monitoring	Status	○	○	○	○	×	○	○	○	○	○	□	
	Error flashing	○	○	○	○	×	○	○	○	○	×	○	
	Error content	○	○	○	×	×	○	○	○	○	○	×	
	Filter sign	○	○	×	×	×	○	○	○	○	○	△	
	Operating hour	×	×	×	×	×	×	×	×	×	○	△	
	Operation mode	○	○	○	○	×	○	○	○	○	○	□	
	Setting temperature	○	○	○	○	×	○	○	○	○	○	□	
	Indoor temperature (intake)	○	○	×	×	×	○	×	○	○	○	□	
	Permit / Prohibit	○	○	○	○	×	○	○	○	○	○	△	
	Fan speed	○	○	○	○	×	○	×	○	○	○	□	
Scheduling	Air flow direction	○	○	×	○	×	○	×	○	○	○	×	
	Weekly	×/○ <sup>*1</sup>	×/○ <sup>*1</sup>	×	×	○	×/○ <sup>*1</sup>	×/○ <sup>*1</sup>	○	○	×	○	
	Annual (Designated day setting)	×	×	×	×	×	×	×	×	×	○	□	
	One day	×	×	×	×	×	×	×	×	×	○	□	
	Times of stops / Starts per day	1/1 / 48 <sup>*1</sup>	1/1 <sup>*2</sup> 48 <sup>*1</sup>	×	1/1	48	×/48 <sup>*1</sup>	×/48 <sup>*1</sup>	3/3	3/3	×	10	
	Times of stops / Starts per week	×	×	×	×	336	×/336 <sup>*1</sup>	×/336 <sup>*1</sup>	21/21	21/21	×	70	
	Auto off timer	×	○	×	×	×	×	×	×	×	×	□	
Recording	Minimum setting unit (minutes)	10/30 <sup>*1</sup>	10/30 <sup>*1</sup>	×	10	30	×/30 <sup>*1</sup>	×/30 <sup>*1</sup>	10	10	×	1	
	Error history	×	×	×	×	×	○	×	○	○	○	□	
	Daily / Monthly reports	×	×	×	×	×	×	×	×	×	○	□	
	Electricity charges	×	×	×	×	×	×	×	×	×	○	□	
	Set temperature range limite	×	○	×	×	×	×	×	×	×	×	□	
Others	Auto lock	×	○	×	×	×	×	×	×	×	×	□	
	Ventilation (group / interlocked)	×/○	×/○	×	×	×	×/○	○/○	○	○	×	○/▲	
	Group setting	× <sup>*3</sup>	○	×	×	×	○	○	○	○	×	○	
	Block setting	×	×	×	×	×	×	×	×	×	○	□	
	Revision of electricity charges	×	×	×	×	×	×	×	×	×	■	□	
Operation	Ventilation (group / interlocked)	-/○	-/○	-/○	-/○	×	-/○	○/○	○/○	○/○	○/○	□	
	Fan speed	-/○	-/○	-/×	-/×	×	-/○	-/×	○/○	○/○	○/○	□	
	Ventilation mode	-/×	-/×	-/×	-/×	×	-/×	○/×	○/×	○/×	○/×	△	
Monitoring	Ventilation (group / interlocked)	-/○	-/○	-/×	-/×	×	-/○	○/×	○/○	○/○	○/○	□	
	Status	-/○	-/○	-/×	-/×	×	-/○	○/×	○/○	○/○	○/○	□	
	Fan speed	-/○	-/○	-/×	-/×	×	-/○	-/×	○/○	○/○	○/○	□	
Ventilation (group / interlocked)	Ventilation mode	-/×	-/×	-/×	-/×	×	-/×	○/×	○/×	○/×	○/×	△	
	Each group / Batched	○	○	○	○	○	○	○	○	○	○		
	Depend on the Building management system	□	□	□	□	□	□	□	□	□	□		
▲ : Set up by a local remote controller    △ : Please inquire    X : Not available    - : Not used													
*1: When PAC-YT32PTA is connected.    *2: daily timer availability    *3: For group operation, cross-over wiring is required between indoor unit. *4: Contact the retailer for questions relating to the browser.													

## 2. Local remote controller

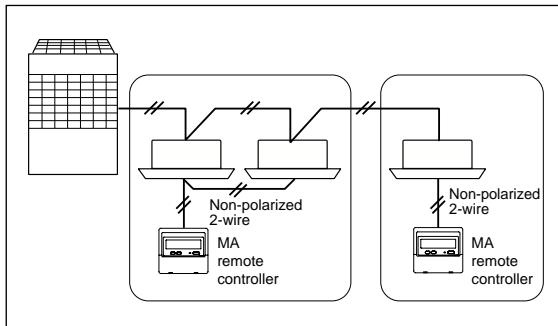
### 2-1 Wired remote controller

#### 2-1-1 PAR-20MAA

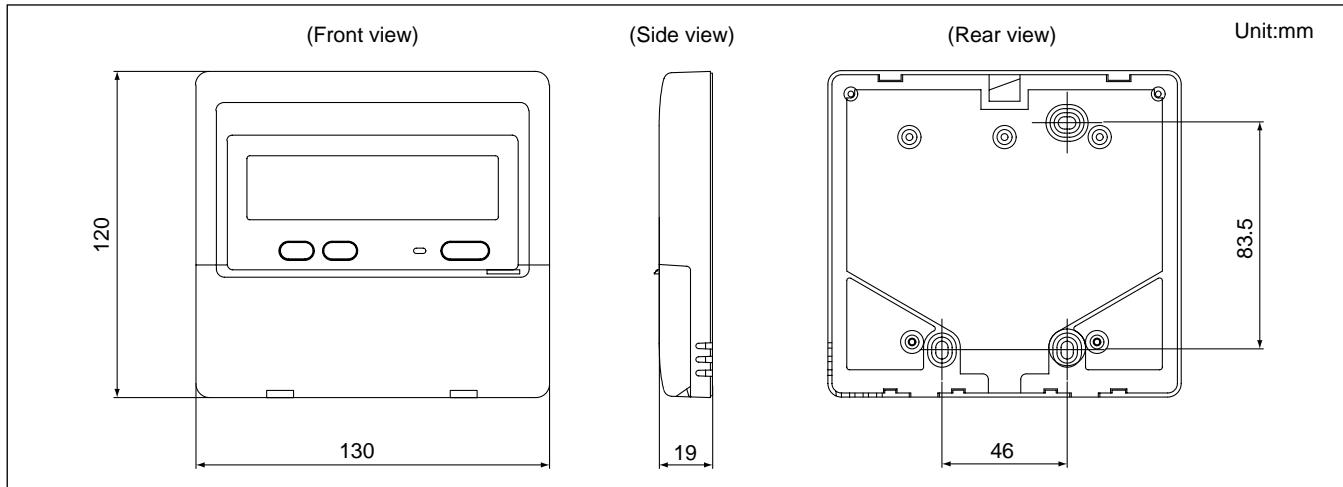


- Group operation is possible without requiring address setting.
  - Usable as the local remote controller for System Controller (MELANS).
  - Remote controller automatically judges the function required for indoor unit such as vane/louver selection.
- (\*) For group operation, cross-over wiring is required between indoor units.  
(\*) Combined use with M-NET remote controller (F27MEA, Simple R/C, LOSSNAY R/C) can not be conducted inside a group.

#### ■ System example

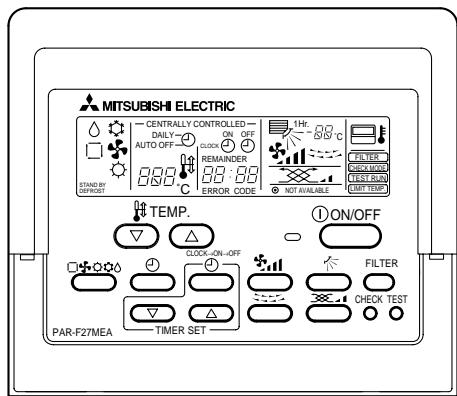


#### ■ External dimension



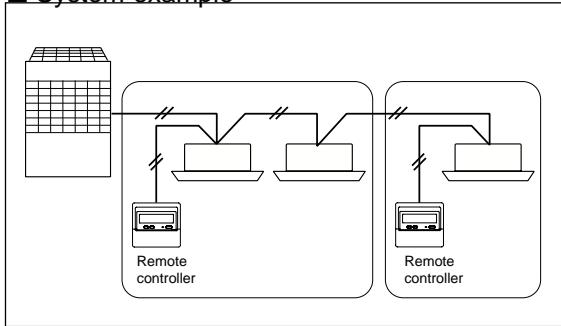
**PAR-20MAA**

## 2-1-2 PAR-F27MEA

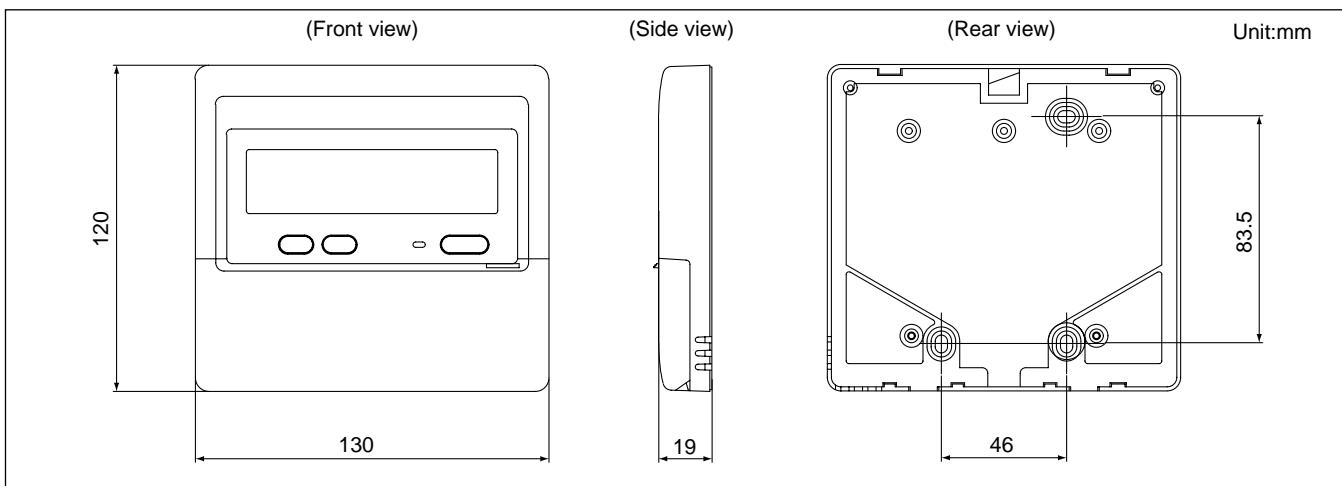


- Three timer modes are prepared by enriching the timer function. The timer mode can selectively be used depending on the application configuration.
- The range of room temperature setting can be limited by the initial setting. By setting the room temperature range narrower than usual setting, cooling/heating operation with excessive temperature can be prevented thus saving energy easily.
- Equipped with simplified button locking function.

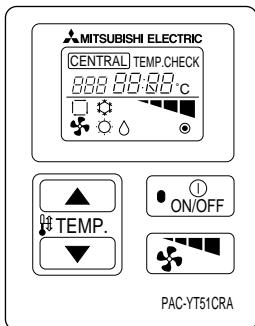
### ■ System example



### ■ External dimension



## 2-2 Simple MA controller (PAC-YT51CRA)



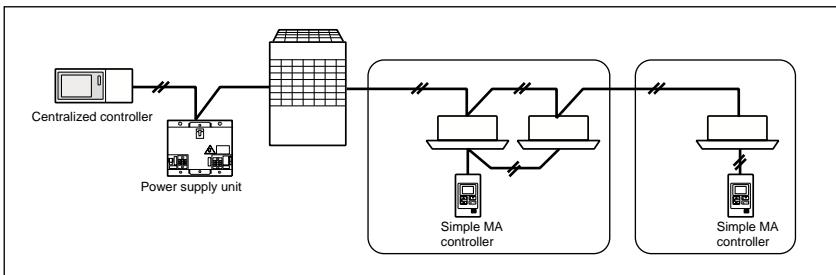
- To simplify operation of the system, the range of controls has been limited to Start/Stop, room temperature and fan speed.
- The only wiring required is cross-over wiring based on two-wire signal lines.
- Room temperature sensor is built-in to the unit. The indoor unit can be replaced this with the body thermostat.
- ※: This equipment does not have functions such as operation mode switching, test run mode, self checking ability and settings for interlocking. Therefore, always use this equipment together with a PAR-20MAA or other system controller.
- ※: Combined use with M-NET remote controller (PAR-F27MEA) can not be conducted inside a group.

### ■ Functions

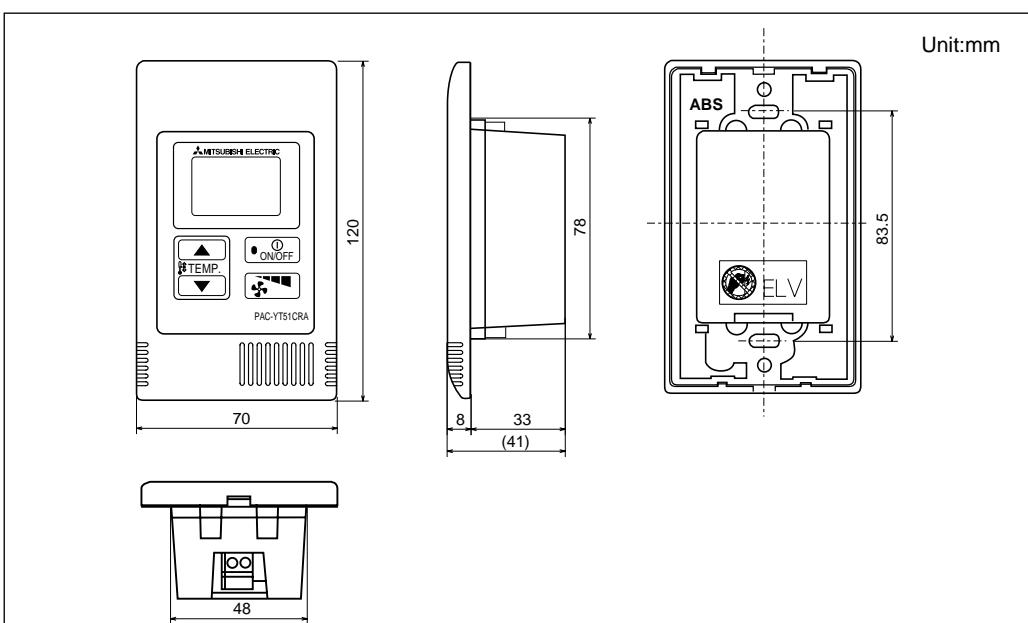
□:Each unit ○:Each group ●:Each block  
△:Each floor ◎:Collective X:Not available

Item	Description	Operations	Display
ON/OFF	Run and stop operation for a single group	○	○
Operation mode switching	Switches between Cool / Dry / Auto / Fan / Heat. Operation modes vary depending on the air conditioner unit. Auto mode is the City Multi R2 and WR2 series only.	X	○
Temperature setting	Sets the temperature for a single group Range of temperature setting Cool/Dry : 19°C - 30°C Heat : 17°C - 28°C Auto : 19°C - 28°C	○	○
Fan speed setting	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings: Hi/Mid/Low Models with 2 air flow speed settings: Hi/Low	○	○
Air flow direction setting	Air flow direction angles 100% - 80% - 60% - 40%, Swing, Louver ON/OFF Air flow direction settings vary depending on the model.	X	X
Timer operation	Not available	X	X
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Set temperature). *1: When the local remote controller inactivation command is received from the master system controller, "- CENTRALLY CONTROLLED -" is displayed.	X	*1 ○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	X	X
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	X	□
Test run	This operates air conditioner units in test run mode. *2: The display for test run mode will be the same as for normal start/stop (no display "test run").	X	*2 ○
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one Lossnay.	X	X
External input/output	By connecting the Programme timer, allocate A/B2 mode for a week and control a week's schedule. External start/stop control and emergency stop is not supported.	X	X

### ■ System example



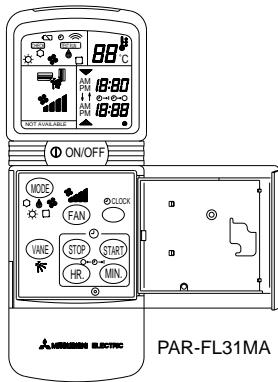
### ■ External dimension



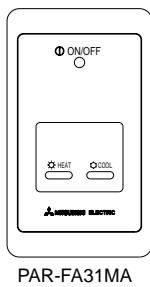
## 2-3 Wireless remote controller

### Controller :PAR-FL31MA

### Signal receiving unit :PAR-FA31MA



PAR-FL31MA



PAR-FA31MA

- It can operate in a group system without requiring address settings.
  - When operating, it displays LED lamps. When errors occur, the error code can be shown by the LED flash count.
  - ※ If an indoor unit with different functionality is operating inside the same group, please note there may be cases when functionality is partially disabled for batch control.
  - ※ Wireless remote controllers can only be used for a single refrigerant system.
  - ※ If you use a system controller to centrally control a group, you will need cross-wiring between indoor units when using a wireless remote controller.
- Also ensure there is no difference between the group setting of the master system controller and the cross wiring across indoor units when wiring and setting cross wires.

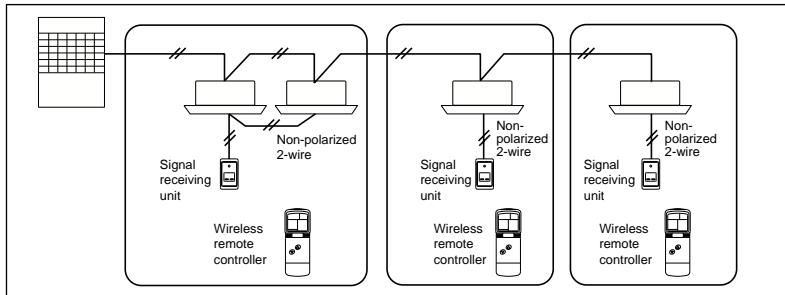
### ■ Functions

□:Each unit ○:Each group ●:Each block  
 △:Each floor ◎:Collective X:Not available

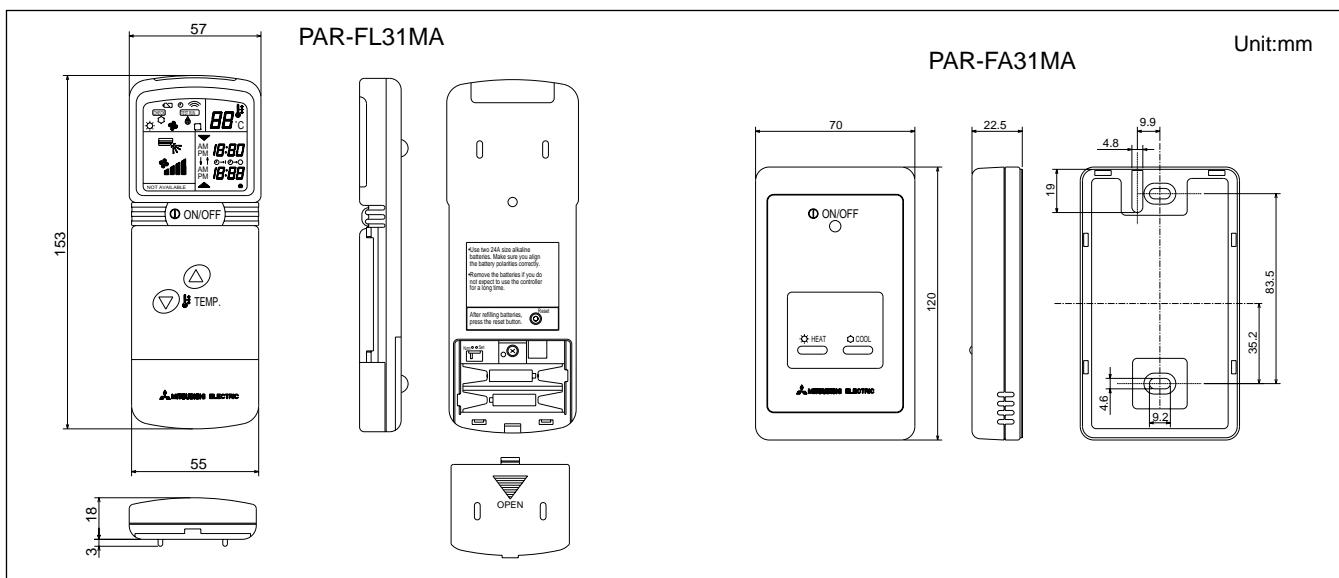
Item	Description	Operations	Display
ON/OFF	Run and stop operation for a single group	○	○
Operation mode switching	Switches between Cool / Dry / Fan / Heat / Auto. Operation modes vary depending on the air conditioner unit. Auto mode is the City Multi R2 and WR2 series only.	○	○
Temperature setting	Sets the temperature for a single group Range of temperature setting Cool/Dry : 19°C - 30°C Heat : 17°C - 28°C Auto : 19°C - 28°C	○	○
Fan speed setting	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 2 air flow speed settings: Hi/Low	※	※
Air flow direction setting	Air flow direction angles 100% - 80% - 60% - 40%. Swing. Air flow direction settings vary depending on the model.	※	※
Timer operation	One ON/OFF setting can be set for one day.	○	○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Change operation mode, Set temperature, Reset filter). *1: If operation is performed when the local remote controller inactivation command is received from the master system controller, a buzzer will ring and an LED will flash.	X	*1 ○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit when the indoor unit is operating.	X	X
Error	When an error occurs on the air conditioner unit, the operation lamp on the signal receiving unit will flash.	X	○
Test run	This operates air conditioner units in test run mode.	○	○
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one Lossnay.	X	X
External input/output	By connecting the Programme timer, allocate A/B2 mode for a week and control a week's schedule.	X	X

※ Some models will have different display for the air flow direction and fan speed.  
Set the air flow direction and fan speed when performing initial setting.

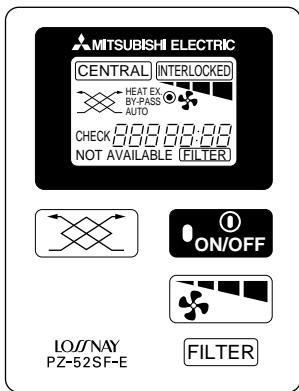
### ■ System example



### ■ External dimension



## 2-4 LOSSNAY remote controller (PZ-52SF-E)



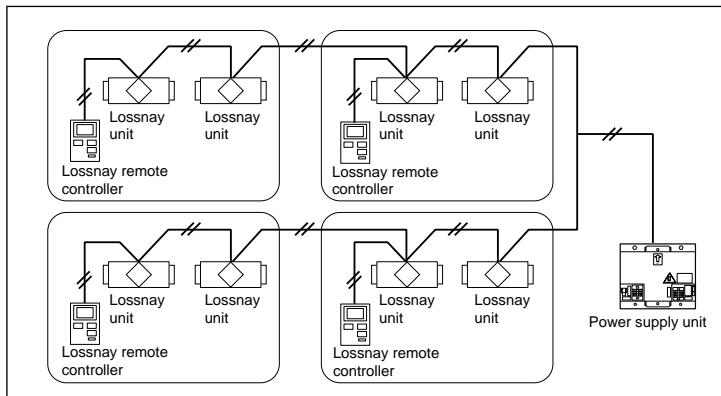
- Stand-alone Lossnay operation is possible by commands from a centralized controller or Lossnay remote controller. (MJ-103 is a centralized controller that supports Lossnay operation.)
  - The Lossnay remote controller is capable of changing the air flow and vent modes.
  - All the wiring is cross-wiring that uses non-polar two wire system signal cables.
- \* : When setting up a Lossnay stand-alone system or when setting up a Lossnay and centralized controller system, connect a power supply unit for the signal cables.  
\* : It is impossible to use a Lossnay remote controller for Lossnay unit that is interlocked other indoor unit (except for some models).

### ■ Functions

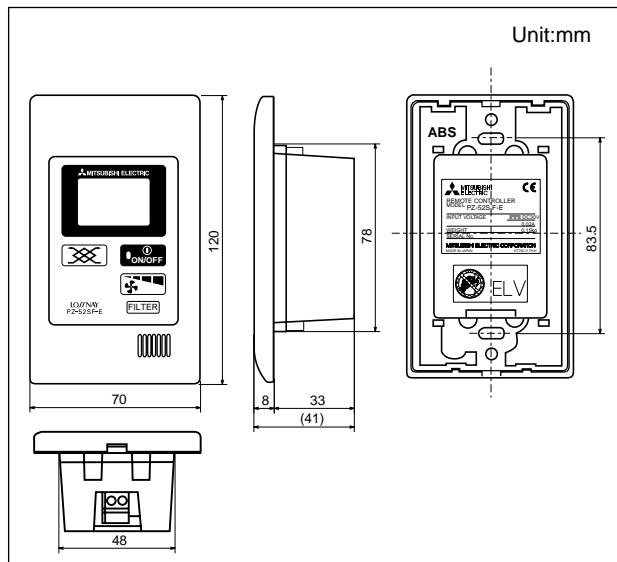
□:Each unit ○:Each group ●:Each block  
△:Each floor ◎:Collective ×:Not available

Item	Description	Operations	Display
ON/OFF	Run and stop operation for a Lossnay unit	○	○
Operation mode switching	Switches between automatic ventilation/ vent - heat interchange/ normal ventilation Note: Operation modes vary depending on the model. When connecting to only models without a damper, these models cannot be used. ("NOT AVAILABLE" will appear in the display.)	○	○
Temperature setting	Not available	X	X
Fan speed setting	Models with 2 air flow speed settings: Hi/Low When only connected to single notch models, this function is disabled.	○	○
Air flow direction setting	Not available	X	X
Timer operation	Not available	X	X
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Reset filter). *1: When the local remote controller inactivation command is received from a master system controller, "CENTRAL" is displayed.	X	*1 ○
Indoor unit intake temperature	Not available	X	X
Error	When an error occurs on the air conditioner unit, the operation lamp on the signal receiving unit will flash.	X	□
Test run	There is no test run switch for Lossnay remote controllers. Set test run on a Lossnay by using the test run switch on the Lossnay unit. *2: Cancel by operating the start/stop switch after switching off the Lossnay unit test run switch.	*2 X	○
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one Lossnay.	○	○
Interlocked operation	This is displayed to indicate it is being operated by an operation control unit's external control terminal for an interlocked system that contains Lossnay units and indoor units.	X	○
External input/output	The programme timer (PAC-YT30ST) cannot be connected. When external ON/OFF is required, use the Lossnay unit's external control input.	X	X

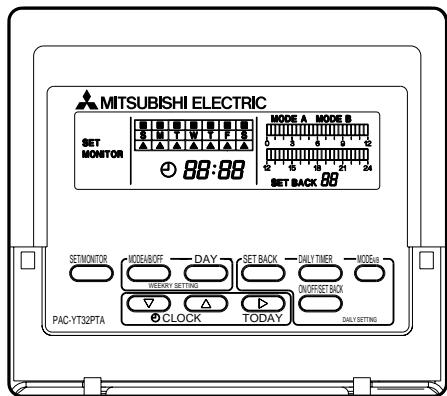
### ■ System example



### ■ External dimension

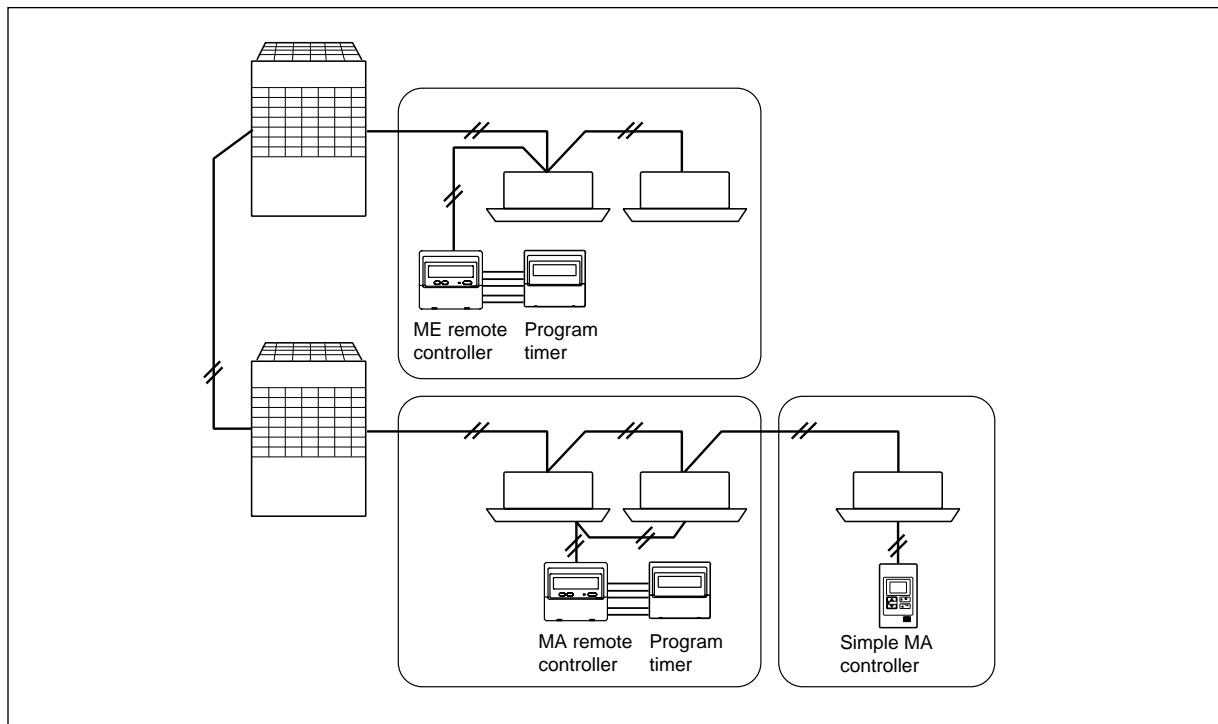


## 2-5 Program timer (PAC-YT32PTA)



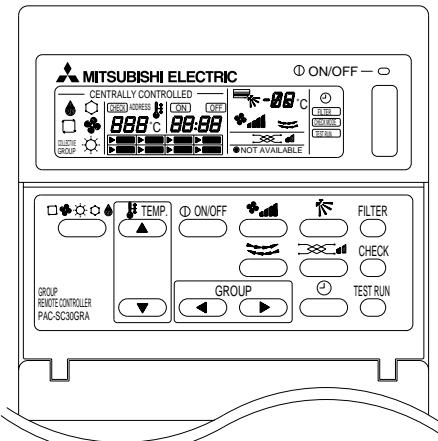
- To be set the ON/OFF schedule each 30 minutes. (2 pattern)
- To be set the effective/ineffective of schedule in each individual days.
- To be set the set-back temperature. (0, 1, 2, 6, 8 deg.)

### ■ System example



### 3. System controller

#### 3-1 Group remote controller (PAC-SC30GRA)



- Up to 8 groups can be operated (maximum of 16 units). Just by pressing switches, groups can be started and stopped individually, or all groups can be started and stopped as a batch.
- Detailed settings and operations can also be made for each individual group.
- All the wiring is simply done with non-polarized two wire signal lines. The connection is the same as the connection to the master system controller.
- It supports operation of groups that can extend beyond one refrigerant system. Furthermore, it is possible to drive interlocked systems that use ventilator equipment or drive ventilator equipment in a stand-alone situation.
- ※: With the group remote controller, you cannot control groups that only contain the Lossnay remote controller.
- ※: It is impossible to use the group remote controller to control K control units.
- ※: When connecting to signal cables for central control, it must use a power supply unit for the signal cables.

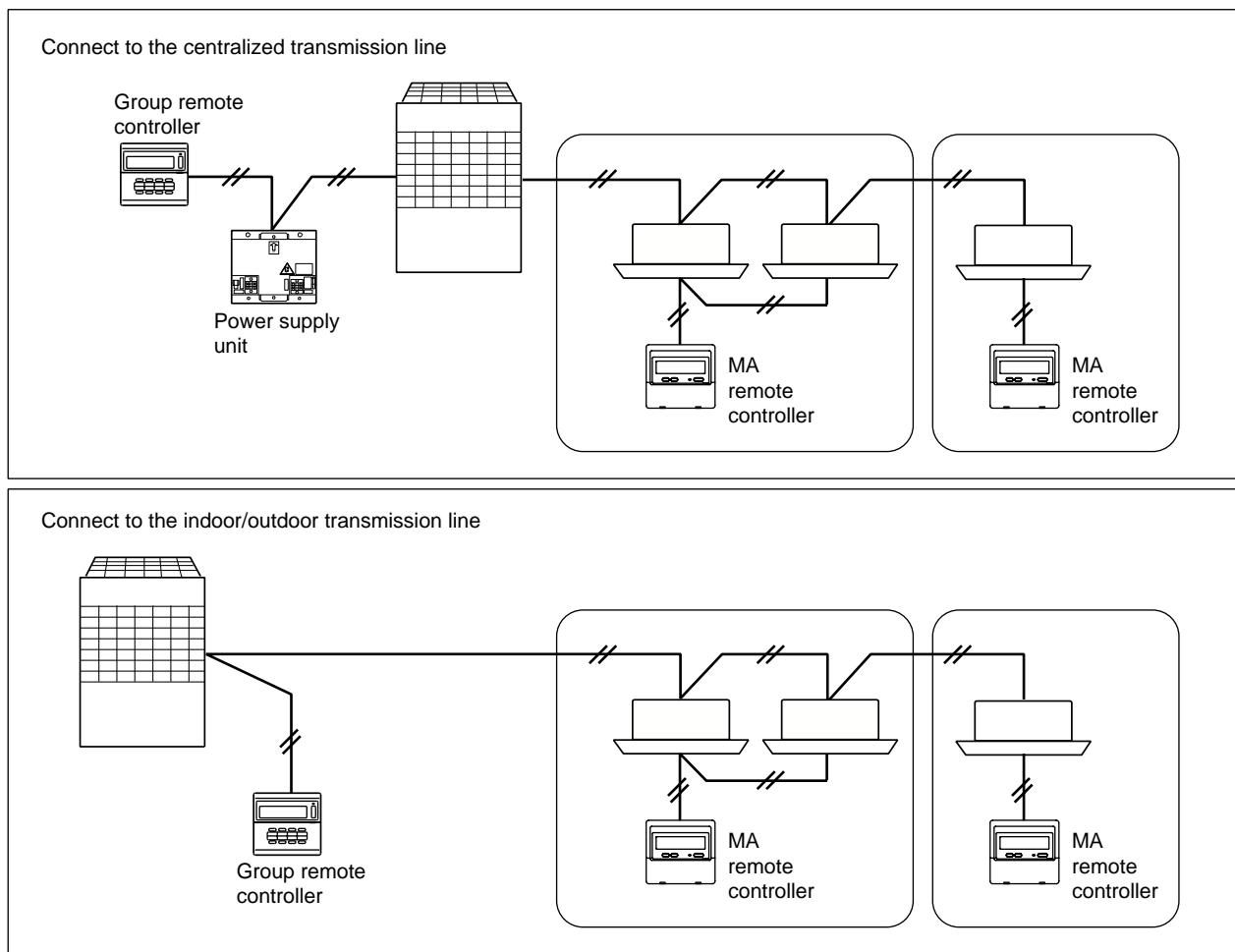
#### ■ Functions

□:Each unit ○:Each group ●:Each block  
△:Each floor ◻:Collective ✕:Not available

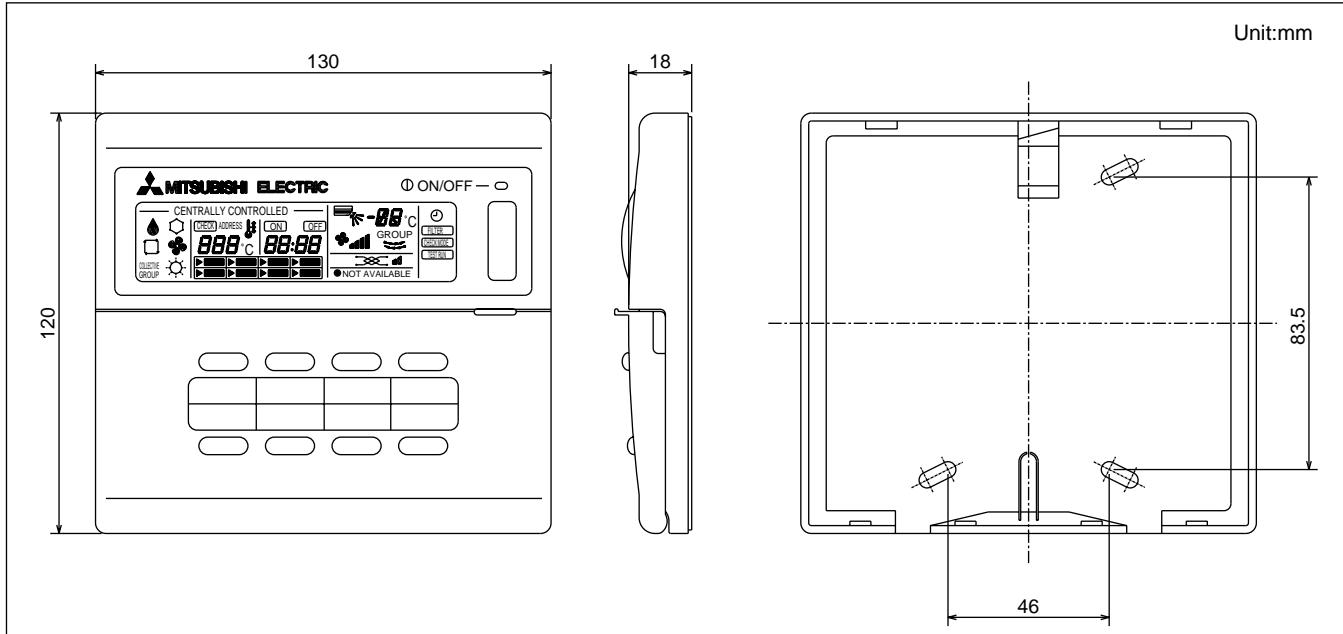
Item	Description	Operations	Display
ON/OFF	Run and stop operation for the air conditioner units *1: Even when only a single indoor unit connected to the group remote controller is operated, the collective ON/OFF lamp will light up.	○ ◻	* <sup>1</sup> ○ ◻
Operation mode switching	Switches between Cool / Dry / Auto / Fan / Heat. *2: When collective operation is set, the display will show "COLLECTIVE" in the bottom left of the LCD screen. Operation modes vary depending on the air conditioner unit. Auto mode is the City Multi R2 and WR2 series only.	○ ◻	* <sup>2</sup> ◻
Temperature setting	Sets the temperature for a single group Range of temperature setting Cool/Dry : 19°C - 30°C Heat : 17°C - 28°C Auto : 19°C - 28°C *3: When collective operation is set, the display will show "COLLECTIVE" in the bottom left of the LCD screen.	○ ◻	* <sup>3</sup> ◻
Fan speed setting	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 2 air flow speed settings: Hi/Low *4: When collective operation is set, the display will show "COLLECTIVE" in the bottom left of the LCD screen.	○ ◻	* <sup>4</sup> ◻
Air flow direction setting	Air flow direction angles 100% - 80% - 60% - 40%, Swing, Louver ON/OFF Air flow direction settings vary depending on the model. *5: When collective operation is set, the display will show "COLLECTIVE" in the bottom left of the LCD screen.	○ ◻	* <sup>5</sup> ◻
Timer operation	It is impossible to set schedules by only using this group remote controller. By connecting a program timer, set 48 ON/OFF settings every 30 minutes. By loading only one pattern, it can operate as a weekly schedule. *6: If the Programme timer is connected, you can enable/disable timer operation for each group.	* <sup>6</sup> ○ ◻	◻
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Change operation mode, Set temperature, Reset filter). *7: When the local remote controller inactivation command is received from a master system controller, "- CENTRALLY CONTROLLED -" is displayed.	X	* <sup>7</sup> ◻
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	X	◻
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. *8: This is indicated by the batch operation lamp.	X	* <sup>8</sup> □ ◻
Test run	This operates air conditioner units in test run mode.	○	◻
Ventilation equipment	Up to 16 indoor units can be connected to an interlocked system that has one Lossnay. Lossnay items that can be set are "Hi" "Low" "Stop". Ventilation mode switching is not possible. *9: When collective operation is set, the display will show "COLLECTIVE" in the bottom left of the LCD screen.	○ ◻	* <sup>9</sup> ◻
External input/output	By connecting the Programme timer "PAC-YT32PTA", a weekly schedule can be controlled. External start/stop control and emergency stop is not supported.	○ ◻	◻

PAC-SC30GRA

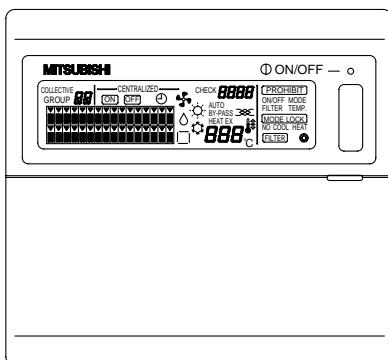
## ■ System example



## ■ External dimension



### 3-2 System remote controller (PAC-SF41SCA)



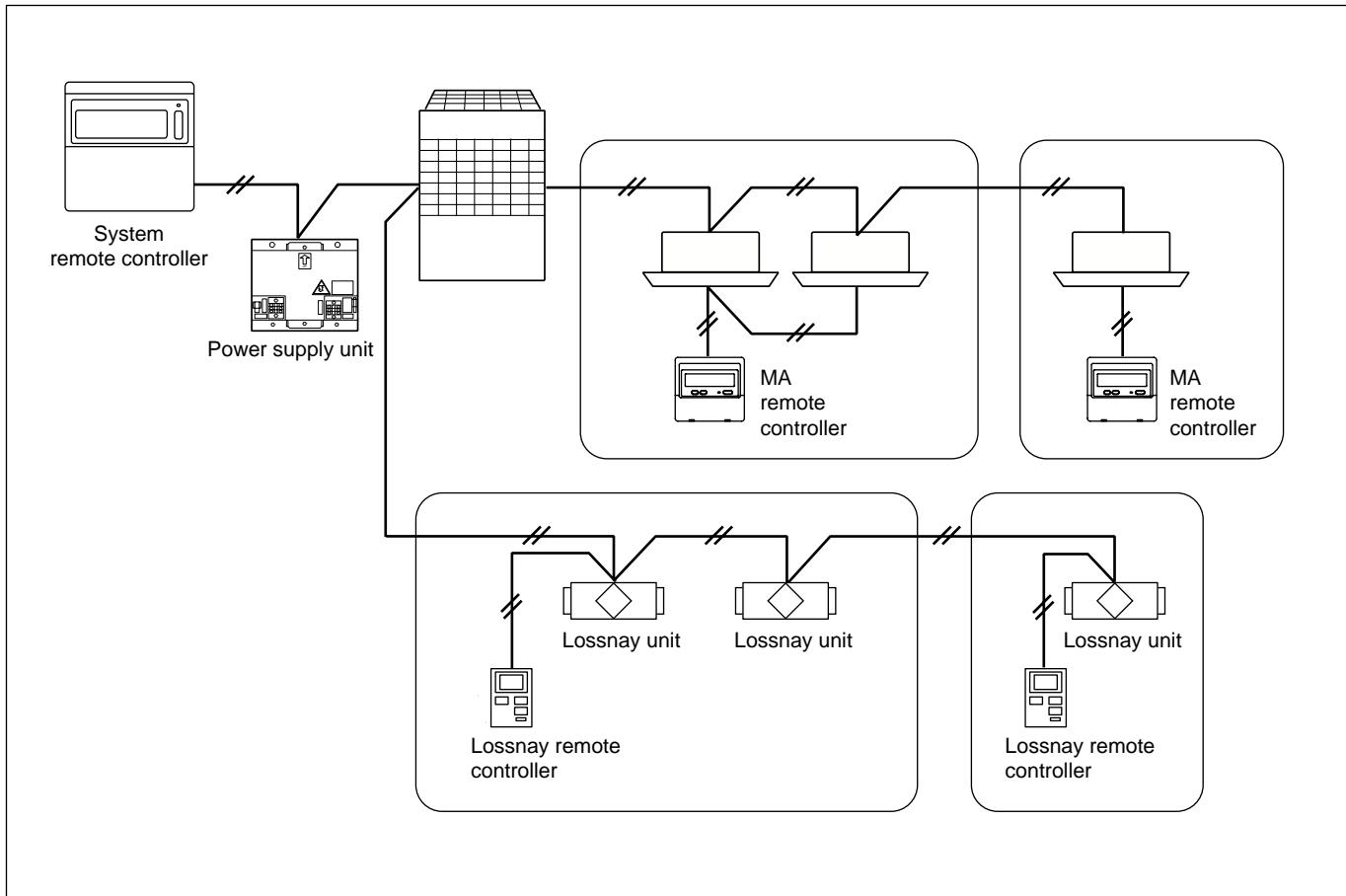
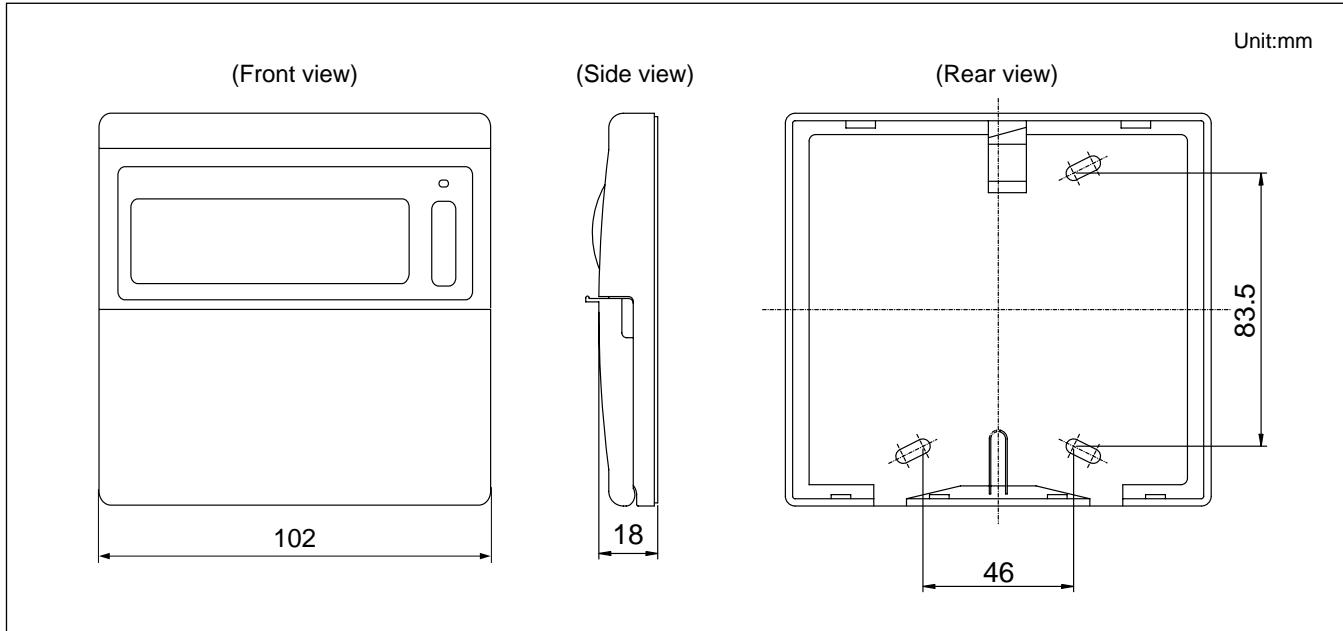
- Air conditioners of 32 groups / 50 sets can be controlled.
  - Air conditioners of 32 groups / 50 sets can be controlled with one remote controller successfully.
- The operating status can be judged at a glance through the liquid crystal screen.
  - Which group is currently running can be seen in a glance by viewing the operation status display for each group.
- Simple remote controller that limits the basic manipulation.
  - The manipulation for air conditioning equipment is limited to [Start/Stop], [Operating mode selection], [Temperature setting] and [Local control prohibition] thus assuring easy handling.
- The operation of local remote controller can be prohibited as required.
  - Using [Emergency stop input cable] provided with the controller in a same package enables the interlocking with a fire detector or to conduct emergency stop.
  - (\*) When emergency stopping function is applied, Program timer can not be used.
- Scheduled operation can be employed.
  - Scheduled operation can be performed per group by connecting Program timer.
  - (\*) Emergency stopping function can not be applied at the use of Program timer.
- Independent operation of LOSSNAY is possible.
  - The grouping of LOSSNAY only can be performed. In addition, [Auto ventilation], [By-pass ventilation] or [Heat exchanger ventilation] can be selected.
- The operation modes can be limited depending on the season.
  - The operation modes for which the manipulation from local remote controller is not desired can be controlled and managed collectively from the system remote controller side.(Prohibition/permission of specified mode)
  - The selection of operation modes of Unit and local remote controller will be limited by setting from Unit.
- Can be connected with the indoor/outdoor transmission line of indoor units without Power supply unit. This saves writing work and installation work.
  - (\*) For the connection with the indoor/outdoor transmission line, the number of connectable set of indoor units and remote controllers is limited.

#### ■ Functions

□:Each unit ○:Each group ●:Each block  
△:Each floor ◎:Collective ×:Not available

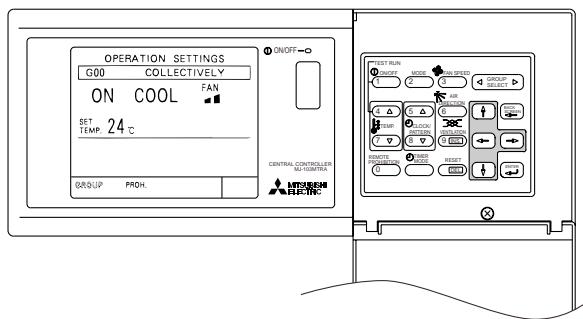
Item	Description	Operations	Display
ON/OFF	Run and stop operation for the air conditioner units *1: Even when only a single indoor unit connected to the group remote controller is operated, the collective ON/OFF lamp will light up.	○◎ *1	○◎ *1
Operation mode switching	Switches between Cool / Dry / Auto / Fan / Heat. *2: When collective operation is set, the display will show "COLLECTIVE" in the bottom left of the LCD screen. Operation modes vary depending on the air conditioner unit. Auto mode is the City Multi R2 and WR2 series only.	○◎	○ *2
Temperature setting	Sets the temperature for a single group Range of temperature setting Cool/Dry : 19°C - 30°C Heat : 17°C - 28°C Auto : 19°C - 28°C *3: When collective operation is set, the display will show "COLLECTIVE" in the bottom left of the LCD screen.	○◎	○ *3
Fan speed setting	Not available	X	X
Air flow direction setting	Not available	X	X
Timer operation	It is impossible to set schedules by only using this group remote controller. By connecting a program timer, set 48 ON/OFF settings every 30 minutes. By loading only one pattern, it can operate as a weekly schedule. *4: If the Programme timer is connected, you can enable/disable timer operation for each group.	○◎ *4	○
Permit / Prohibit local operation	It can set individually prohibit operation of each local remote control function when it is set the master controller (Start/Stop, Change operation mode, Set temperature, Reset filter). *5: When the local remote controller inactivation command is received from the master system controller, "- CENTRALLY CONTROLLED -" is displayed.	○◎	○◎ *5
Prohibition/permission of specified mode (Cooling prohibited /heating prohibited /cooling/heating prohibited)	It can prohibit the operation for the following modes is prohibited. At cooling prohibited : Cool, Dry, Auto, At heating prohibited : Heat, Auto, At cooling/heating prohibited : Cool, Heat, Dry, Auto	◎	◎
Indoor unit intake temperature	Not available	X	X
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed.	X	□○
Timer operation	It is impossible to set schedules by only using this group remote controller. By connecting a program timer, set 48 ON/OFF settings every 30 minutes. By loading only one pattern, it can operate as a weekly schedule. *6: If the Programme timer is connected, you can enable/disable timer operation for each group.	○◎ *6	○
Test run	This operates air conditioner units in test run mode.	X	○
Ventilation equipment operation (individual)	The grouping of LOSSNAY only can be performed. *The operation mode includes [Auto ventilation], [By-pass ventilation] and [Heat exchanger ventilation].	○◎	○
Ventilation equipment operation (interlocking)	LOSSNAY operates interlocked with the operation of indoor unit. *Can not operate for the air volume/mode. LED only lights at the individual operation of interlocked unit.	○	○
External input/output	Emergency stopping function / Programme timer.	◎	◎
Position to allow connection	Indoor/outdoor transmission line : Allowed Centralized system (indoor/outdoor, etc.) transmission line : Allowed (requiring Power supply unit)	—	—

PAC-SF41SCA

**■ System example****■ External dimension**

### 3-3 Centralized controller

#### 3-3-1 MJ-103MTRA



● This unit has five basic controls; "start/stop", "switch operation mode", "set air flow speed (※)", "set air flow direction", and "set temperature". The unit is built-in with an exposed part of only about 22mm. The operation settings not only can be performed individually for groups, they can also be performed for all groups in a batch.

(※) The setting values for air flow speed settings vary depending on the model.

● To cater for the circumstances, operation of local remote control by tenant can be disabled.

It is possible to disable local remote control operation of the tenant side for each of the five basic controls.

You can also nominate times for inactivating local remote control on the schedule screen. (※) This function prevents excessive cooling over summer and is useful for low energy operation etc.

(※) Inactivation set in the schedule will be for a batch of operations that includes "start/stop", "switch operation mode", "set temperature" and "filter reset".

● It is possible to manage an air conditioning schedule for tenants.

Create a week schedule for your tenants by compiling their work start and finish times. You can also set an OFF time to prevent tenants forgetting to turn off the air conditioning when air conditioning time is extended because of overtime work. The schedule allows 3 patterns for each group to meet different weekday requirements.

● It is possible to monitor operation from a screen

You can monitor the operation state of indoor units from the centralized controller's screen. Also, when an error occurs, you can find out the location and detail of the error and you can even call up a log of past errors.

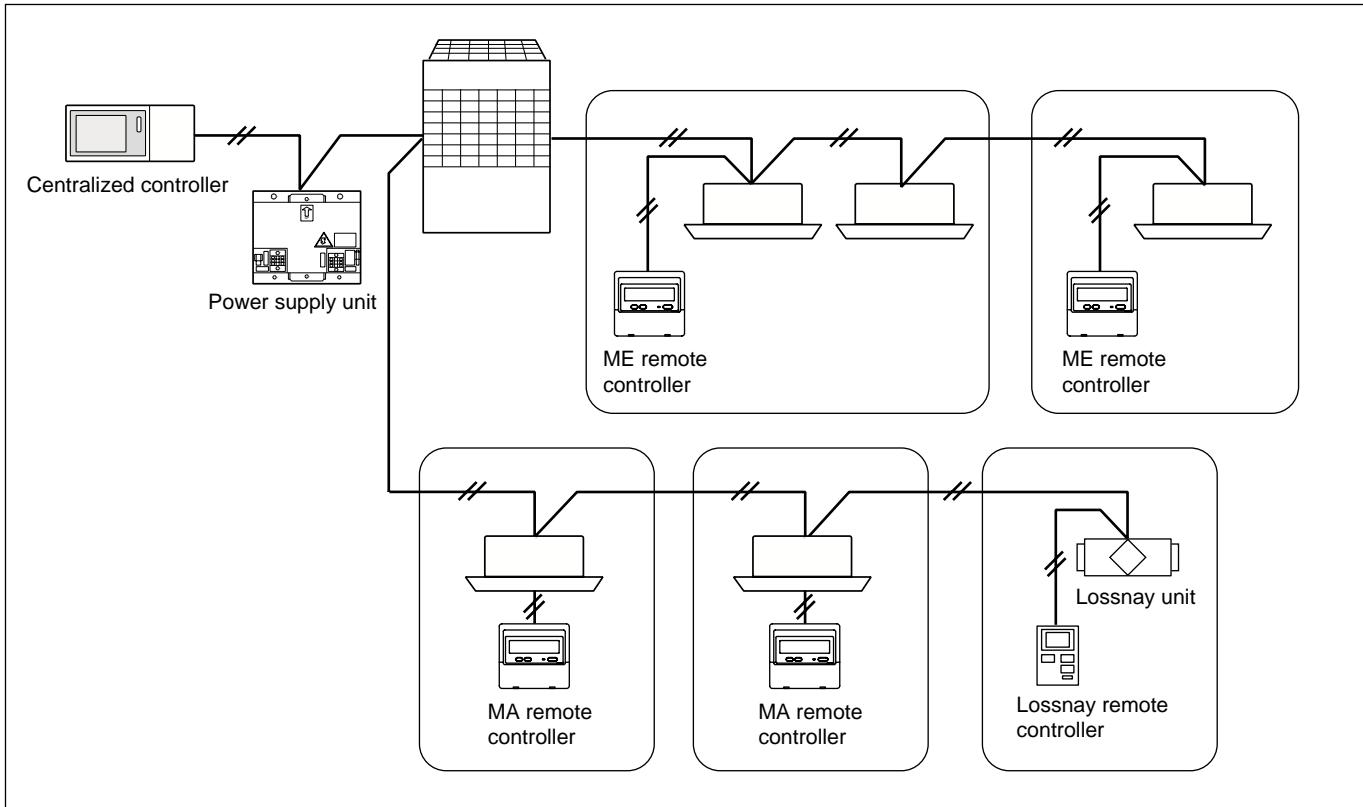
#### ■ Functions

□:Each unit ○:Each group ●:Each block  
△:Each floor ◎:Collective X:Not available

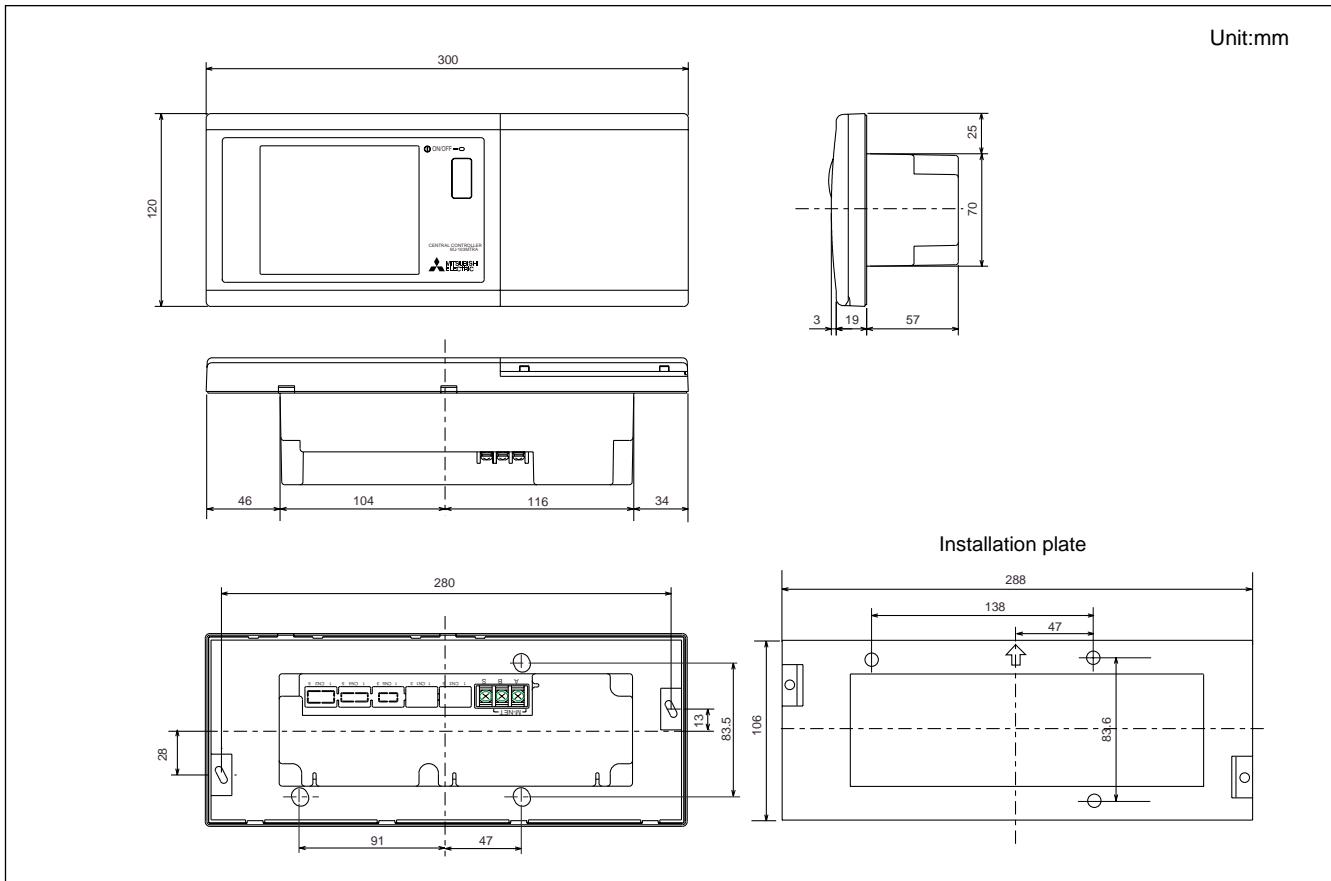
Item	Description	Operations	Display
ON/OFF	Run and stop operation for the air conditioner units *1: Even when only a single indoor unit connected to the group remote controller is operated, the collective ON/OFF lamp will light up.	○ ○	*1 ○ ○
Operation mode switching	Switches between Cool / Dry / Auto / Fan / Heat. (Group of Losnay unit : automatic ventilation/ vent - heat interchange/ normal ventilation) Operation modes vary depending on the air conditioner unit. Auto mode is the City Multi R2 and WR2 series only.	○ ○	○
Temperature setting	Range of temperature setting Cool/Dry : 19°C - 30°C Heat : 17°C - 28°C Auto : 19°C - 28°C	○ ○	○
Fan speed setting	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings: Hi/Mid/Low Models with 2 air flow speed settings: Hi/Low	○ ○	○
Air flow direction setting	Air flow direction angles 100% - 80% - 60% - 40%, Swing, *2: Louver cannot be set. Air flow direction settings vary depending on the model.	*2 ○ ○	○
Timer operation	For one day, you can set start/stop three times and you can set enable/disable three times. For a week's schedule, you can store three start/stop patterns and one enable/disable pattern. *3: When the timer is set, "Timer enabled" is shown on the operation setting screen of the LCD.	○ ○	*3 ○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Change operation mode, Set temperature, Reset filter). *4: When the local remote controller inactivation command is received from the master system controller, "Disabled" appears in inverted display on the operation setting screen.	○ ○	*4 ○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	X	○
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. *5: When an error occurs, the LED flashes. The operation monitor screen shows the abnormal unit by flashing it. The error monitor screen shows the abnormal unit address, error code and source of detection. The error log monitor screen shows the time and date, the abnormal unit address, error code and source of detection.	X	*5 □ ○
Test run	This operates air conditioner units in test run mode.	○	○
Ventilation equipment	The interlocked system settings can be performed by the master system controller. When setting the interlocked system, you can use the ventilation switch to switch the free plan Losnay settings between "Hi", "Low" and "Stop". When setting a group of only free plan Losnay units, you can switch between "Normal ventilation", "Interchange ventilation" and "Automatic ventilation".	○	○
External input/output	By using accessory cables you can set and monitor the following. Input By level signal: "Batch start/stop", "Batch emergency stop" By pulse signal: "Batch start/stop", "Enable/disable local remote controller" Output "Start/stop", "Error/Normal"	○	○

MJ-103MTRA

## ■ System example



## ■ External dimension



## ■ External input/output usage method

### 1 .External signal input function

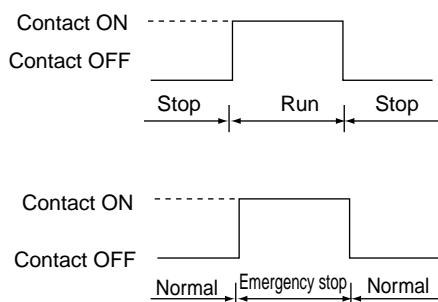
#### (1) External input

Emergency stop/normal, run/stop and prohibit/enable of local remote controller operation can be controlled for all air conditioners being controlled by using the no-voltage contact signal from an external source. (Select with the DIP switch settings)

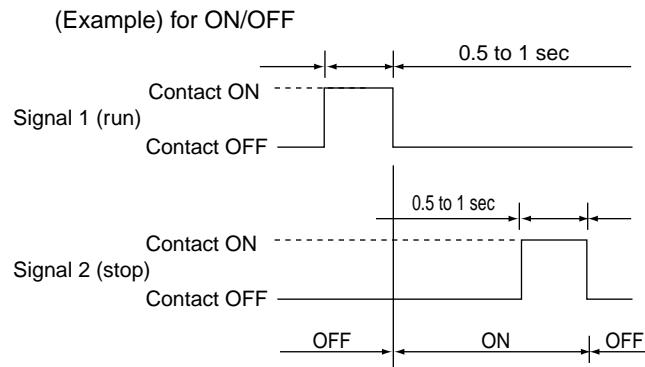
No.	External signal input function	DIP switch		Remarks
		No.6	No.7	
1	Do not use external input signal (factory setting)	OFF	OFF	
2	Execute emergency stop/normal with level signal	OFF	ON	The local remote controller ON/OFF operations, and the controller ON/OFF operation and prohibit / enable change operations will be prohibited during emergency stop.
3	Perform ON/OFF with level signal	ON	OFF	The local remote controller ON/OFF operations, and the controller ON/OFF operations and prohibit/enable change operations will be prohibited.
4	Perform ON/OFF, prohibit/enable with pulse signals.	ON	ON	Set the pulse width while the contact is ON to 0.5 to 1sec.

#### (2) Level signal and pulse signal

##### (A) Level signal



##### (B) Pulse signal



\* The prohibit/enable input is the same.

#### (3)External input specifications

CN3	Lead wire	Emergency stop/normal level signal	ON/OFF level signal	ON/OFF, prohibit/enable pulse signal
No.1	Orange	Emergency stop/normal input	ON/OFF input	ON input
No.2	Yellow	Not used	Not used	OFF input
No.3	Blue	Not used	Not used	Local remote controller operation prohibit input
No.4	Violet	Not used	Not used	Local remote controller operation enable input
No.5	Green	Common (0V)		

##### (A) For level signal

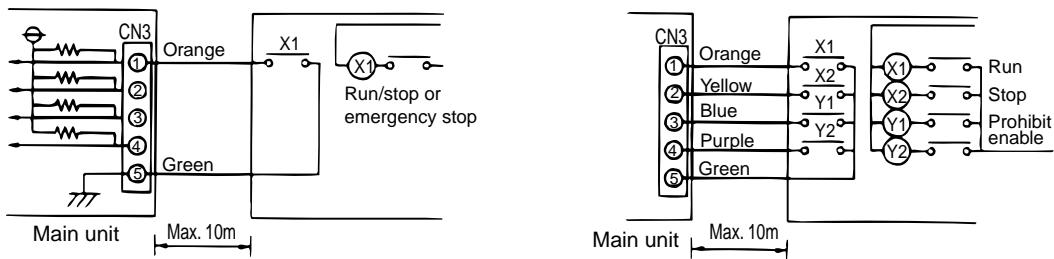
- ① When the emergency stop/normal signal is selected, the status will change from normal to emergency stop when the external input signal contact changes from OFF to ON, and will change from emergency stop to normal when the contact changes from ON to OFF.
- ② When the ON/OFF signal is selected, the status will change from OFF to ON when the external input signal contact changes from OFF to ON, and will change from ON to OFF when the contact changes from ON to OFF.

##### (B) For pulse signal

- ① Even if the ON signal is input during ON, the status will remain at ON state.
- ② If the local remote controller is prohibited, the ON/OFF operation mode and temperature setting operations by the local remote controller will be prohibited.
- ③ Set the pulse width (contact ON time) to 0.5 to 1 sec.

## (4) Recommended circuit example

## (A) For level signal



- ① The no-voltage contact and extension cable, etc., must be prepared separately at the site.
- ② The connection cable can be extended up to 10m. (Use a 0.3mm<sup>2</sup> or larger wire.)
- ③ Cut the extra cable near the connector, and securely insulate the cut section with tape, etc.

## 2. External signal output function

## (1) External output

When one or more air conditioners are running, the "ON" signal will be output, and if a malfunction occurs in one or more air conditioners, the "Malfunction" signal will be output.

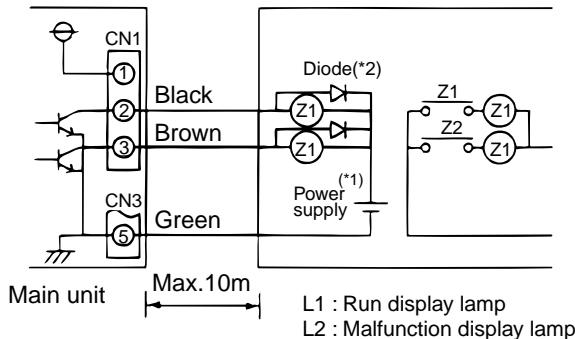
## (2) External output specifications

CN1	Lead wire	Details of each terminal
No.1	Red	Common (DC5V)
No.2	Black	ON/OFF
No.3	Brown	Malfunction/normal

- ① "ON" signal and "Malfunction" signal will both be output.

## (3) Recommended circuit example

## To drive a relay



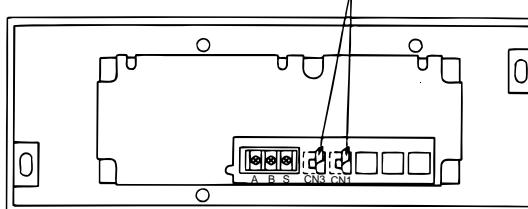
Use Z1 and Z2 relays having the following specifications.  
Operation coil  
Rated voltage : DC 12V, DC24V  
Power Consumption : 0.9W or less  
(\*) Prepare a power supply separately according to the relay being used.(DC 12V or DC24V)  
(\*\*) Always insert a diode on both ends of the relay coil.

- ① Each element will turn on while ON operation and when a malfunction.
- ② The connection cable can be extended up to 10m.
- ③ The relays, lamps, diodes and extension cables, etc., must be prepared separately at the site.

**CAUTION**

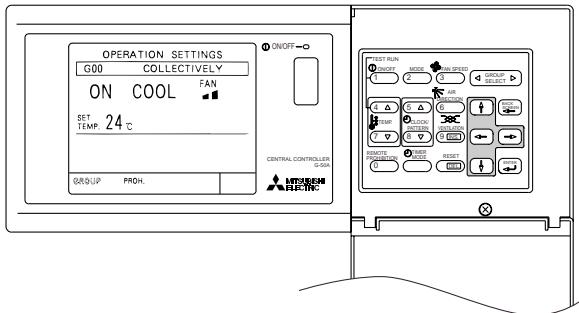
When connecting the external input/output cables to connector CN3 and CN1 on the controller, Peel off the label on the controller connector section.

Peel off the label



□:Each unit ○:Each group ●:Each block  
 △:Each floor ◻:Collective ×:Not available

### 3-3-2 G-50A



- Adds a web server function (optional) to the conventional central controller, thus allowing central monitoring of air-conditioners using browser software\* on a PC.  
Use of a public telephone line allows long-distance monitoring and operation, as well as central control of air-conditioners in two or more buildings.  
(\*) Internet Explorer Ver.5 or later. Microsoft® Internet Explorer is a registered trademark of Microsoft Corporation US in the United States of America and other countries.
- Incorporation of system expansion software (eg 'Proportional Power Distribution', 'Energy-saving Operation', and 'Yearly Schedule Setting')\*1 allows addition of a variety of functions required for control of building air-conditioning.
- A maximum of 50 indoor units may be monitored and operated from one G50, and the incorporation of multiple central controllers in a system network allows a maximum of 2000 indoor units to be operated and managed from a PC.
- The use of 'Energy-saving Operation' software (\*1) (optional) allows the temperature setting to be changed automatically (\*2) in consideration of the temperature in the vicinity of the air-conditioner, thus allowing energy-saving air-conditioning without loss of comfort.  
Energy-saving operation is also possible using rotating ventilation and air-conditioning performance saving operation.
- If a fault occurs in the air-conditioner, fault details are sent to a specified email address (\*3) (optional).  
This ensures security of operation while no operator is present (eg holidays, night-time).

### ■ Functions

Item	Description	Operations	Display
ON/OFF	Run and stop operation for the air conditioner units	○ ◻	○ ◻
Operation mode switching	Switches between Cool / Dry / Auto / Fan / Heat. (Group of Losnay unit : automatic ventilation/ vent - heat interchange/ normal ventilation) Operation modes vary depending on the air conditioner unit. Auto mode is the City Multi R2 and WR2 series only.	○ ◻	○
Temperature setting	Range of temperature setting Cool/Dry : 19°C - 30°C Heat : 17°C - 28°C Auto : 19°C - 28°C	○ ◻	○
Fan speed setting	Models with 4 air flow speed settings: Hi/Mid-2/Mid-1/Low Models with 3 air flow speed settings: Hi/Mid/Low Models with 2 air flow speed settings: Hi/Low	○ ◻	○
Air flow direction setting	Air flow direction angles 100% - 80% - 60% - 40%, Swing, *1: Louver cannot be set. Air flow direction settings vary depending on the model.	*1 ○ ◻	○
Timer operation	For one day, you can set start/stop three times and you can set enable/disable three times. For a week's schedule, you can store three start/stop patterns and one enable/disable pattern. *2: When the timer is set, "Timer enabled" is shown on the operation setting screen of the LCD.	○ ◻	*2 ○
Permit / Prohibit local operation	Individually prohibit operation of each local remote control function (Start/Stop, Change operation mode, Set temperature, Reset filter). *3: When the local remote controller inactivation command is received from the master system controller, "Disabled" appears in inverted display on the operation setting screen.	○ ◻	*3 ○
Indoor unit intake temperature	Measures the intake temperature of the indoor unit only when the indoor unit is operating.	X	○
Error	When an error is currently occurring on an air conditioner unit, the afflicted unit and the error code are displayed. *4: When an error occurs, the LED flashes. The operation monitor screen shows the abnormal unit by flashing it. The error monitor screen shows the abnormal unit address, error code and source of detection. The error log monitor screen shows the time and date, the abnormal unit address, error code and source of detection.	X	*4 □ ◻
Test run	This operates air conditioner units in test run mode.	○	○
Ventilation equipment	The interlocked system settings can be performed by the master system controller. When setting the interlocked system, you can use the ventilation switch to switch the free plan Losnay settings between "Hi", "Low" and "Stop". When setting a group of only free plan Losnay units, you can switch between "Normal ventilation", "Interchange ventilation" and "Automatic ventilation".	○	○
External input/output	By using accessory cables you can set and monitor the following. Input By level signal: "Batch start/stop", "Batch emergency stop" By pulse signal: "Batch start/stop", "Enable/disable local remote controller" Output "Start/stop", "Error/Normal" *5: Requires the external I/O cable (PAC-YG10HA-E) sold separately.	◎	◎

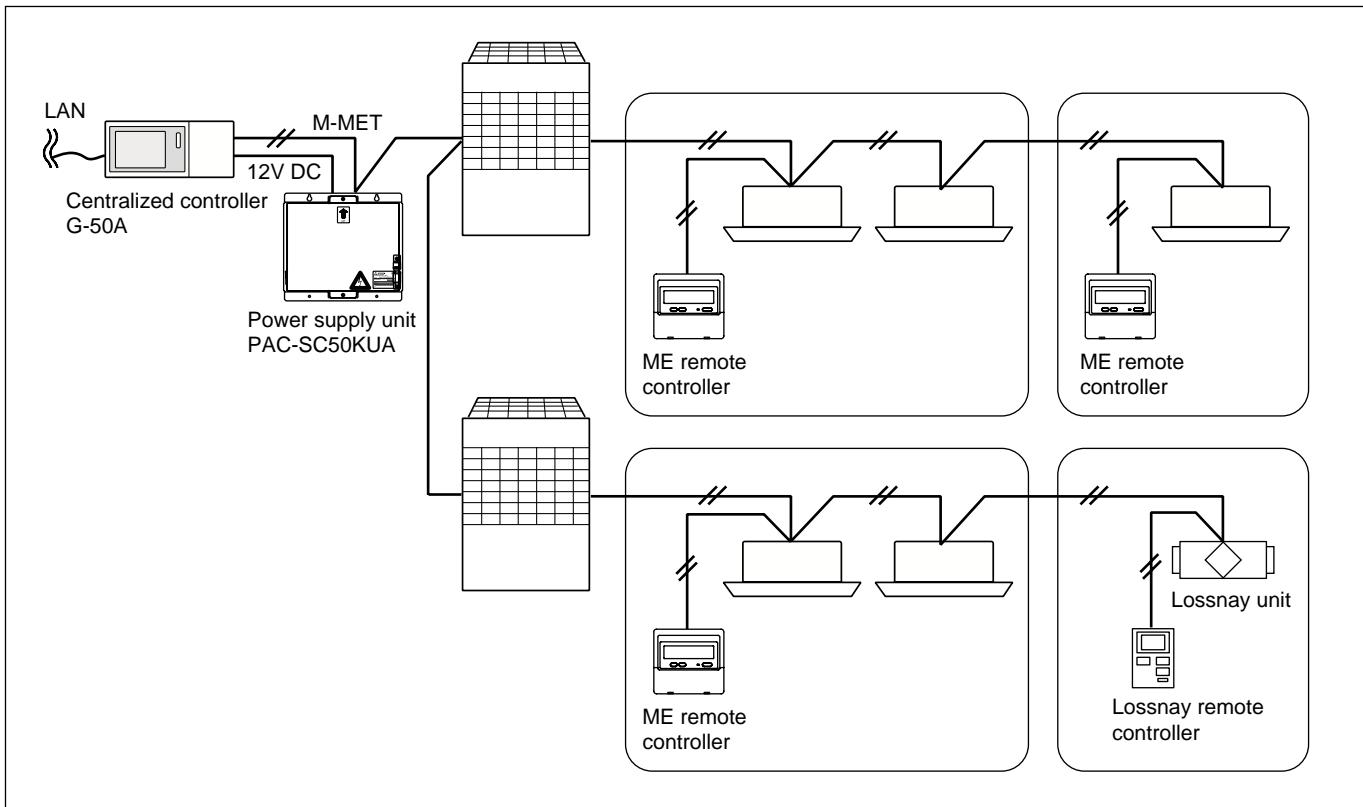
G-50A

\*1 ('Proportional Power Distribution', 'Energy-saving Operation', and 'Yearly Schedule Setting') expansion software scheduled for release.

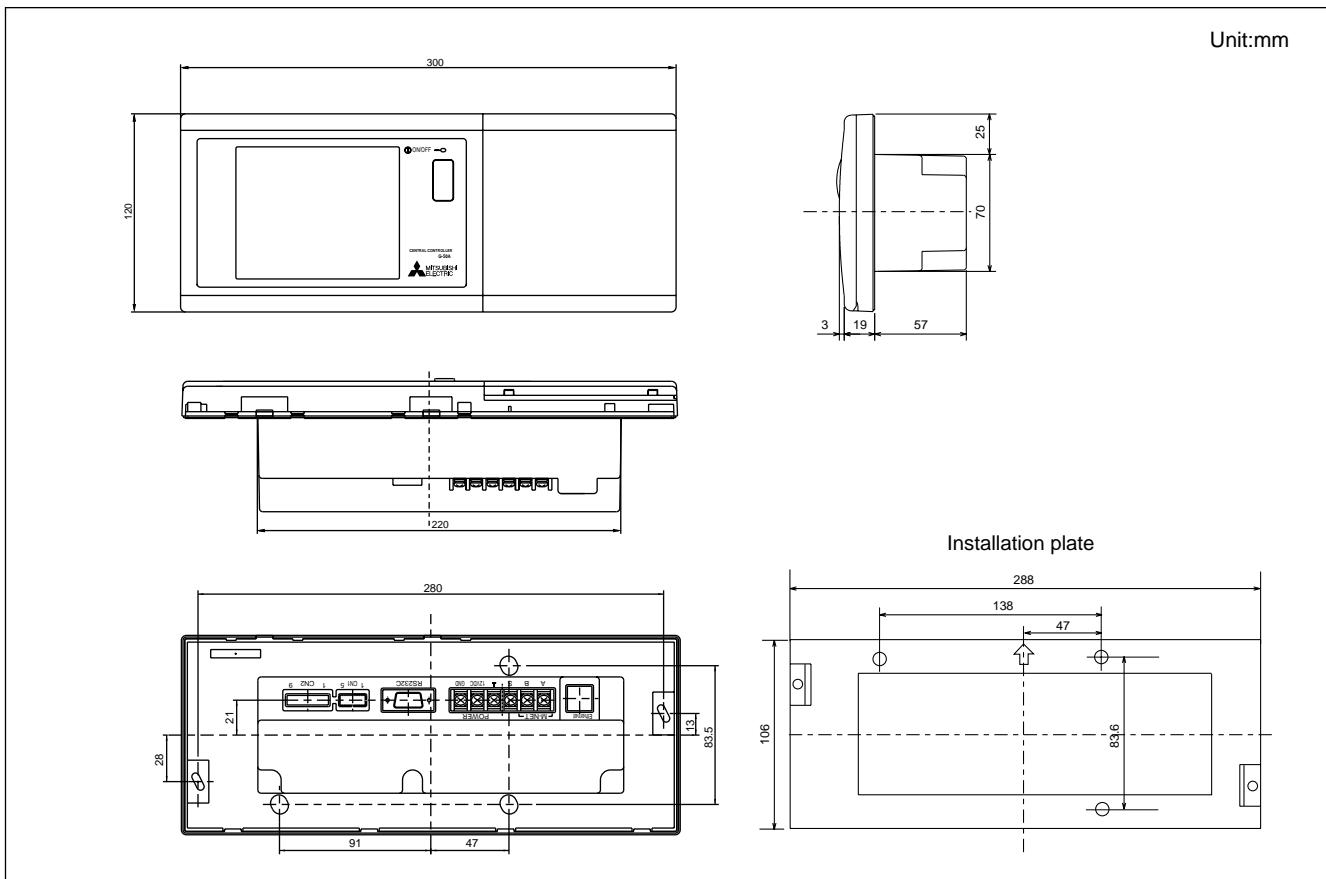
\*2 The system considers the intake temperature and temperature setting at pre-set intervals in order to set the temperature slightly high when cooling and slightly low when heating.

\*3 Notification may be delayed in some cases (eg out of transmission range, service provider problems).

■ System example



■ External dimension



## ■ External input/output usage method

### 1. External signal input function

\* External signal input requires the external I/O adapter (Model: PAC-YG10HA-E) sold separately.

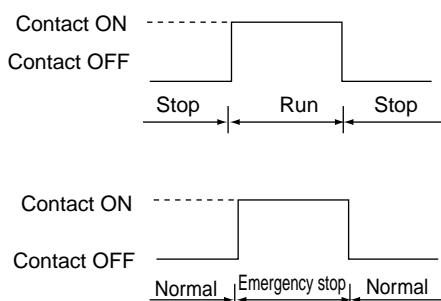
#### (1) External input

Emergency stop/normal, run/stop and prohibit/enable of local remote controller operation can be controlled for all air conditioners being controlled by using a voltage (DC12V or DC24V) contact signal from an external source.  
(Select with the function select setting)

No	External signal input function	Function		Remarks
		No.6	No.7	
1	Do not use external input signal (factory setting)	OFF	OFF	
2	Execute emergency stop/normal with level signal	OFF	ON	The local remote controller ON/OFF operations, and the controller ON/OFF operation and prohibit/enable change operations will be prohibited during emergency stop.
3	Perform ON/OFF with level signal	ON	OFF	The local remote controller ON/OFF operations, and the controller ON/OFF operations and prohibit/enable change operations will be prohibited.
4	Perform ON/OFF, prohibit/enable with pulse signals.	ON	ON	Set the pulse width while the contact is ON to 0.5 to 1 sec.

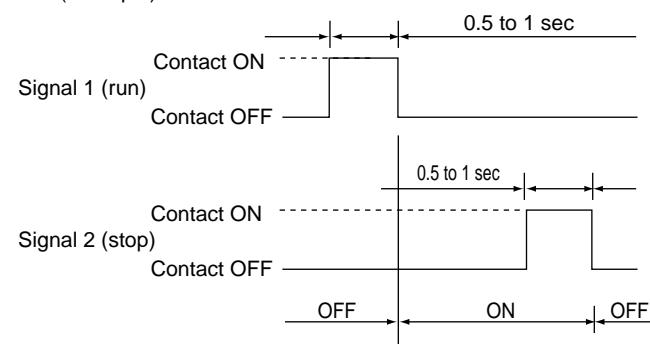
#### (2) Level signal and pulse signal (DC12V or DC24V)

(A) Level signal



(B) Pulse signal

(Example) for ON/OFF



\* The prohibit/enable input is the same.

#### (3) External input specifications

CN2	Lead wire	Emergency stop/normal level signal	ON/OFF, level signal	ON/OFF, prohibit/enable pulse signal
No.5	Orange	Emergency stop/normal input	ON/OFF input	ON input
No.6	Yellow	Not used	Not used	OFF input
No.7	Blue	Not used	Not used	Local remote controller operation prohibit input
No.8	Gray	Not used	Not used	Local remote controller operation enable input
No.9	Red	External DC source “+”		

##### (A) For level signal

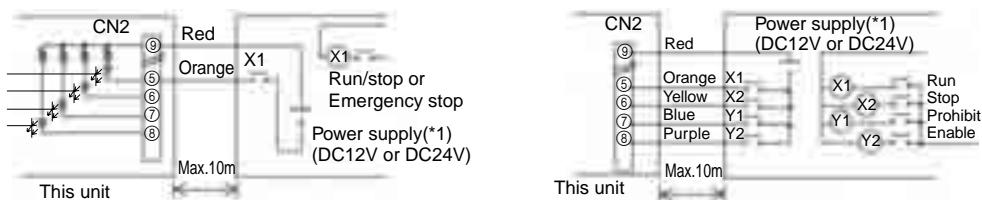
- ① When the emergency stop/normal signal is selected, the status will change from normal to emergency stop when the external input signal contact changes from OFF to ON, and will change from emergency stop to normal when the contact changes from ON to OFF.
- ② When the ON/OFF signal is selected, the status will change from OFF to ON when the external input signal contact changes from OFF to ON, and will change from ON to OFF when the contact changes from ON to OFF.

##### (B) For pulse signal

- ① Even if the ON signal is input during ON, the status will remain ON.
- ② If the local remote controller is prohibited, the ON/OFF operation mode and temperature setting operations by the local remote controller will be prohibited.
- ③ Set the pulse width (contact ON time) to 0.5 to 1 sec.

#### (4)Recommended circuit example

##### (A) For level signal



- ① The contact relay, DC power source, extension cable, etc., must be prepared separately at the site.
- ② The connection cable can be extended up to 10m. (Use a 0.3mm<sup>2</sup> or larger wire.)
- ③ Strip the extra cable near the connector, and securely insulate the exposed section with tape, etc.

## 2. External signal output function

\* External signal output requires the external I/o adapter (Model: PAC-YG10HA-E) sold separately.

### (1) External output

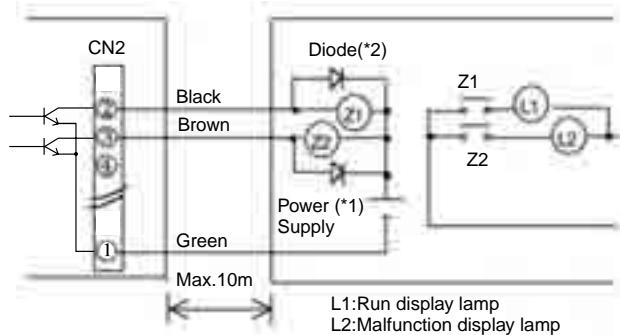
When one or more air conditioners are running, the "ON" signal will be output and if a malfunction occurs in one or more air conditioners, the "Malfunction" signal will be shown.

### (2) External output specifications

CN 2	Lead wire	Details of each terminal
No.1	Green	Common (External ground)
No.2	Black	ON/OFF
No.3	Brown	Malfunction/normal
No.9	Red	Common (External power supply) (*1)

- ① "ON" signal and "Malfunction" signal will both be output.

#### (3) Recommended circuit example



Use Z1 and Z2 relays having the following specifications.

Operation coil

Rated voltage :DC12V,DC24V

Power Consumption : 0.9W or less

(\*1) Prepare a power supply separately according to the relay being used. (DC12V or DC24V)

(\*2) Always insert a diode on both ends of the relay coil.

- ① Each element will turn on while ON operation or a malfunction occurs.

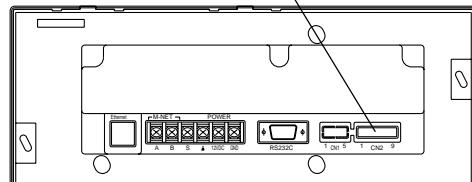
- ② The connection cable can be extended up to 10m.

- ③ The relays, lamps, diodes and extension cables, etc, must be prepared separately at the site.

#### CAUTION

When connecting the external input/output cables to connector CN2 on the controller, Peel off the label on the controller connector section.

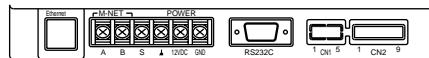
Peel off the label



### 3. LAN connection function

When using the LAN connection function, connect the LAN cable to the Ethernet connector of this device.

- \* Procure the LAN cable at the site, and use an enhanced category 5UTP cable.
- \* For a description of the IP address setting method, refer to Installation Manual.
- \* LAN is 10 BASE-T Specification.



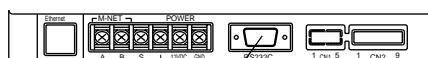
#### NOTE

- \* Perform the LAN wiring before installation, and wire up to the body by the same method as wiring the M-NET transmission line.
- \* When a LAN is already connected, decide the IP address by consultation with the system administrator and connect to the LAN body after changing the IP address.
- \* When connecting an LAN connector, space for the connector and wiring is required. Provide this space at this unit and the rear of the electric box. Refer to Installation Manual.
- \* When the G-50A cover is opened, the LAN status lamp and LAN changeover switch are accessed. For detailed information, refer to sections 3-2 and 5-9 of the Instruction Book.

### 4. RS232C connection function

When using an RS232C port, connect the cable to the RS232C connector of this device.

- \* The RS232C cable is procured at the site, and the connector of the cable that connects to this device is a D-Sub9pin (female). RS-232C cable is maximum 15m.
- \* When using an RS-232C cable, to suppress the noise radiated from the RS-232C communication line, always procure the option Model PAC-YG11FC-E and install it so that the RS-232C communication line is inserted near the D-sub connector of the G-50A.

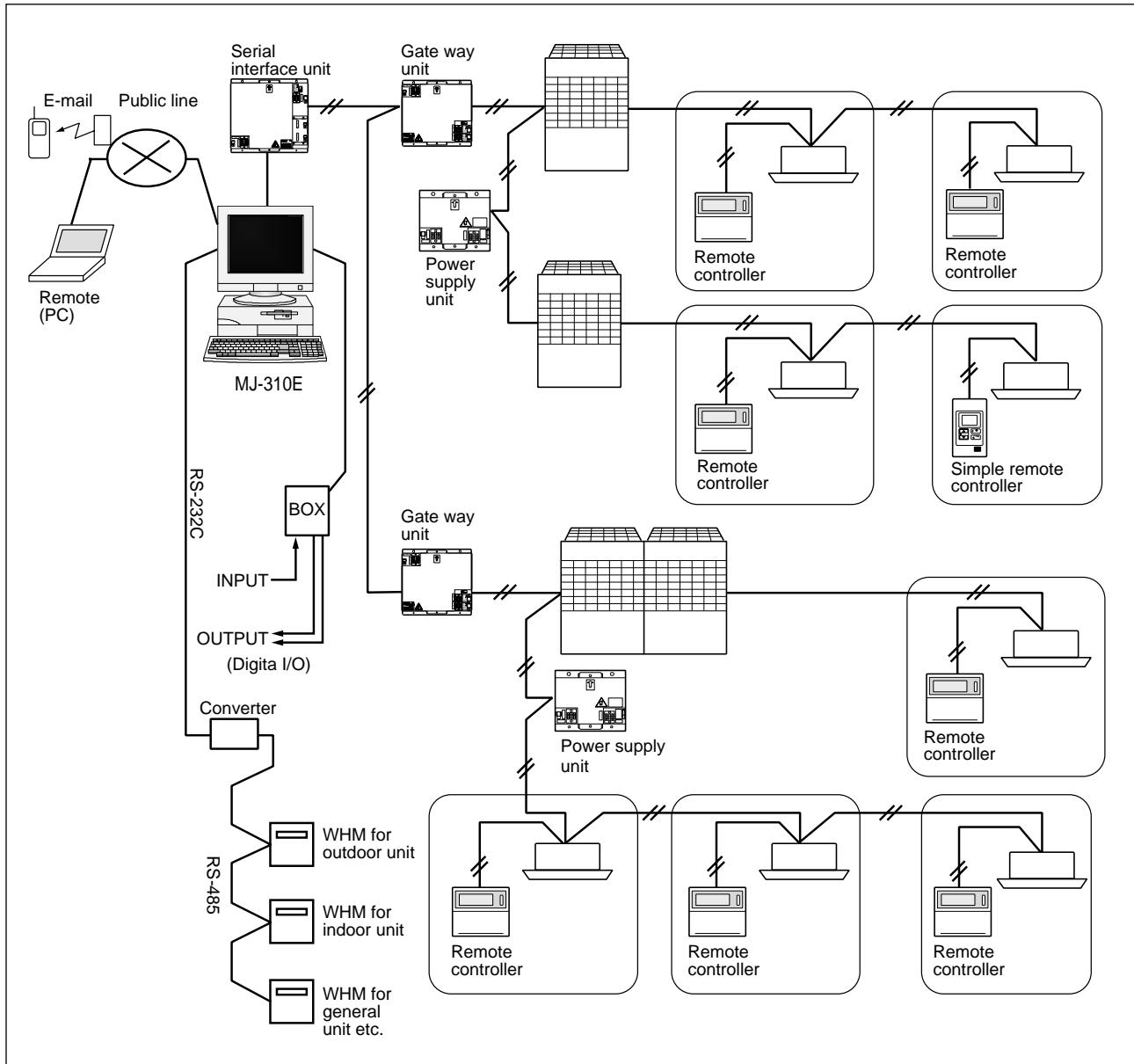


#### NOTE

- \* When installing G-50A to the electric box, the D-sub connector does not pass through the conduit. In this case, use a type that can be separated from the D-sub connector cable. Remove the D-sub connector from the cable, pass the cable through the conduit, connect the cable to the D-sub connector using solder, etc., and then connect the D-sub connector to this unit.
- \* When connecting the RS-232C connector, a connector and wiring space is required. Provide this space at this unit and the rear of the electric box. Refer to Installation Manual.
- \* Wire the RS-232C before installation, and wire up to the body by the same method as wiring the M-NET transmission line.

## 3-3-3 MJ-310E/MB-300

## Example



- The air conditioning equipment of a large scale building is operated / set / monitored through the floor indication on the displays and the manipulation of the mouse.
- The air conditioning charge can be calculated and the maintenance timing can be estimated.
- The ON/OFF setting in a unit of one minute can be performed and a different setting can be adapted to each calendar day, thus allowing to set weekly schedules. In addition, as an individual holiday and any specific day can be set, the annual schedule control per tenant can be prepared.
- As the prohibited items of Local remote controller operation for each air conditioning unit can be divided by the most significant man-machine, the integrated control of each room can be performed from the building administration room or the like.
- Operating status can be monitored and starting / stopping operation can be controlled remotely. Error if happened can be informed through electronic mail.

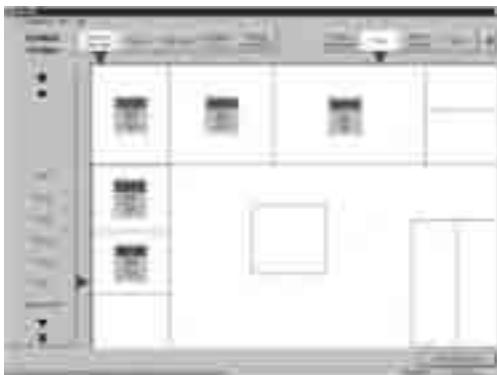
## 1. MJ-310E

### (1) Recommended equipment for use

Item	Specifications		Remarks
PC	CPU	PentiumⅢ 500MHz or more	Recommended
	Memory	128MB or more	Designated
	HDD capacity	6GB or more	Recommended
	Extended board	PCI 1slot or more	At use of input/output
	Serial port	2ports or more	At connection with WHM (At no connection with WHM : 1port or more)
	Modem	2 internal or external modems	At use of the remote access and alarm notice functions
	OS	Windows2000 Professional Service Pack2 English Version	Designated
Monitor	Resolution	1024 X 768 or more	Designated
	Color display	65536 colors display possible	Designated

MJ-310E  
MB-300

### (2) Screen composition



← Control screen

Display in a unit of group, floor, block and building can be provided. Operation manipulation, schedule setting, operating hour display, filter sign display, and air conditioning charge display are also possible.



← Initial screen  
Screen to set system composition →



↑ Remote controller operation screen



← Air conditioning charge display screen

With this screen, the function to be used or not to be used can be determined and systems can be set. This includes the setting of system composition, charging system, time setting, and maintenance of charge data for example.

**(3)Standard function**

Function	MJ-310E	Remarks
Number of set to control	Indoor unit, LOSSNAY Max 1000 sets including indoor unit, LOSSNAY, OA Processing unit. Max. 20 sets for connection with G/W.	
	Number of indoor unit in a group 1 ~ 16 sets (not including interlocked equipment). However, indoor unit, LOSSNAY, K-control indoor unit can not be contained in a same group.	
	Number of remote controller in a group 0 ~ 2 sets	
	Number of system controller in a group 0 ~ 4 sets( including the number of remote controller)	
Display screen	Connectable equipment Free Plan direct expansion type air conditioning unit, LOSSNAY (connectable with adapter), OA Processing Unit A-control Mr.SLIM (connectable with M-NET adapter or M-NET outdoor unit), K-control air conditioning unit (Connectable with K-transmission converter, not connectable if upper class exists).	
	Screen composition For easier operation, there are separate windows provided for normal operation and for maintenance. For operational reliability password input is needed to prevent mis-operation.	
	Control screen Freely operable without password. This screen is used for normal operation : monitoring, and control of calendar function, scheduled ON/OFF control, operating time accumulation, abnormality history, daily and monthly reports, air-conditioning energy monitor.	
Operation & setting	Initial screen Requiring a fixed password. This screen is used for maintenance to control plane image setting, group/block, printer setting, energy monitor setting, etc.	
	ON/OFF Displays some floors in the window to monitor operation status by group on each floor. Displays each floor to monitor and turn ON/OFF by group.	
	Operation mode Displays each floor to select operation mode (AUTO, COOL, HEAT, FAN, and DRY) and monitor the set status by group.	*1
	Set temperature Displays each floor to set desired temperature and monitor the set status by group. Set temperature range (in 1 °C unit) COOL/DRY 19°C - 30°C HEAT 17°C - 28°C AUTO 19°C - 28°C (It can set between 19°C - 28°C when plural group setting)	*1
	Air speed Displays each floor to select and monitor the air speed HIGH / LOW, etc.	*1
Monitoring	Remote controller prohibit / permit Displays each floor to select and monitor the prohibit/permit status of remote controller operation. Then prohibited, the remote controllers will not work, and only the main controller can control operation. It is possible to individually disable/enable operation functions (ON/OFF, operation mode, temperature, filter reset) of the local remote controller.	*2
	Abnormality monitor Displays message when an abnormality has occurred. Displays some floors to monitor abnormality status by group on each floor. (whole building display) Displays each floor to monitor abnormality status and check code by unit. (Refer to the column of abnormality history.)	
Control	Room temperature monitor Displays each floor to monitor room temperatures measured by operating indoor units (at typical point in each group). Room temperature indication becomes invalid while the indoor unit is not operating.	
	Calendar function (Yearly schedule) Holidays and particular days (up to 20 days) can be set freely. Selects the date to search for scheduled ON/OFF operation.	
	Scheduled ON/OFF control (Weekly schedule) ON/OFF schedule can be set by group, by floor, or for the whole building, and a schedule pattern can be copied to another group. In the daily ON/OFF schedule, operation ON/OFF can be set in 1 minute units for up to 10 times. In the weekly ON/OFF schedule, a pattern can be set for each day of the week. Weekly schedule is valid for every week in a year, excepting the particular days and holidays. For particular days, special schedule can be set, independent of weekly schedule.	

\*1 When the function can not be operated or set due to restriction of the unit to be controlled, the function is not displayed on the window.

\*2 The operation may not be prohibited depending on models.

**MJ-310E  
MB-300**

Functions of main controller  
<Standard functions>

Function		MJ-310E	Remarks
Measurement	Operation time accumulation	Records cumulative operation time (in 1 hour units) of typical unit in each group. When the cumulative time exceeds 16,666,666, it will reset to 0. Cumulative time can be cleared freely. Note: Operation time is counted based on unit ON/OFF switching. This is independent of thermostat ON/OFF.	
Record	Abnormality history	Displays contents of abnormalities from the newest one, and records the date and time of occurrence and recovery. Memorizes max. 10,000 cases and deletes the data from the oldest one when the number of cases has exceeded 10,000. Data can be searched and printed by operation by operator.	
	Operation history	Displays contents of operations from the newest one, and records the date and time of occurrence. Memorizes max. 10,000 cases and deletes the data from the oldest one when the number of cases has exceeded 10,000. Data can be searched and printed by operation by operator.	
	Daily and monthly reports	Prints daily or monthly report when designated on abnormality history window or operation history window. (without rule printing)	
Control	Grouping	Designates and registers a group the unit belongs to, and displays the unit organization registered in the group.	Must be set on system setting window.
Application	Plane image setting (CRT display)	Floor plane image and machine control image can be arranged with easy drafting function. Then the control image (icon) for a floor is large, it can be divided to several windows. Note: The windows other than the floor window (such as whole building display) are automatically prepared or displayed in fixed format, and not provided with the above function.	
	Input operation	Mouse is used for most of input. Key board and ten keys are used for only limited input such as name input.	
	Summer time	Changes clock automatically by switching summer time ON/OFF.	

<Optional functions>

Function		MJ-310E	Remarks
Air conditioning charge	The proportional electric power consumption per block and the power charge calculated in a unit of month are displayed. A-control, K-control, LOSSNAY and OA processing units will be charged with the unit of a watt-hour meter. The air conditioning charge per block does not include the charge of the equipment calculated in a unit of a watt-hour meter.		*1, *2
Remote monitoring/Control	Allows remote monitoring, operational control, demand control of the air conditioning equipment.		*1
Error information	Informs via email when an error (which has been set) occurs or is recovered from.		*1
Energy-saving	In order to reduce the amount of power consumed, the indoor unit can be stopped (or the thermostat turned off) either by a demand signal or self-diagnosis.		*1
Trend	Able to collect the indoor unit inlet temperature, power consumption and integrated WHM value as trend data and submit it as a file.		*1, *3

\*1 : Must be set on system setting screens.

\*2 : There is also ratio of use charging for when a WHM is not connected.

\*3 : Depending on the optional functions being used, some items can not be collected.

These specifications are subject to change without notice.

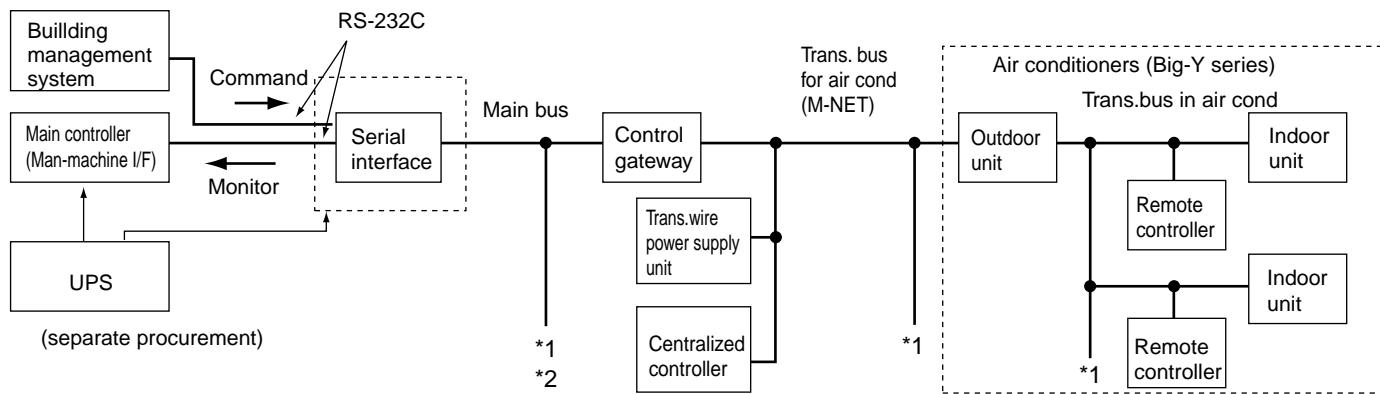
## 2. MB-300

### ■ Functions

Functions of main controller  
<Standard functions>

Function		MB-300	Remarks
Separation of operating window Password for maintenance window		The exact nature of operation depends on the specification of the building management system.	
Monitoring Operation & setting	ON/OFF	The building management system is capable of performing ON/OFF operation by group unit. The building management system is also capable of monitoring ON/OFF status.	
	Operation mode	The building management system is able to switch and monitor operation modes (cool, heat, fan, dry) by group unit.	
	Set temperature	The building management system is able to set and monitor the temperature by group unit. Set temperature range (in 1°C unit) COOL/DRY 19°C - 30°C HEAT 17°C - 28°C	
	Air speed	Operation cannot be performed by the building management system.	
	Remote controller prohibit / permit	The building management system is capable of setting and monitoring the inactivation/activation of local remote controller operation by group unit. When an inactivation has been set, operation by the local remote controller is disabled and only operation by the building management system is possible. It is possible to individually disable/enable operation functions (ON/OFF, operation mode, temperature) of the local remote controller.	
	Abnormality monitor	The building management system keeps track of error occurrence. It keeps track of the error code and the unit address of the unit from where there error is occurring.	
	Room temperature monitor	The room temperature is monitored by monitoring requests from the building management system.	
Control	Calendar function	The calendar and schedule function vary depending on the specification of the building management system.	
	Scheduled ON/OFF control		
Measurement	Operation time accumulation	The power save amount is totaled for each unit by request from the building management system. The total count is calculated at the 15 and 45 minute mark every hour. The total count will increase until 999999 and when the count exceeds this number, it will loop and start at 0. This counter can also be freely preset by the building management system.	
Record	Abnormality history	Recording varies depending on the specification of the building management system.	
	Operation history		
	Daily and monthly reports		
Control	Grouping	The monitor display and the operation method varies depending on the specification of the building management system.	
Application	Plane image setting (CRT display)		
	Input operation		
	Summer time	Daylight savings varies depending on the building management system clock function.	

### 3. Basic configuration

MJ-310E  
MB-300

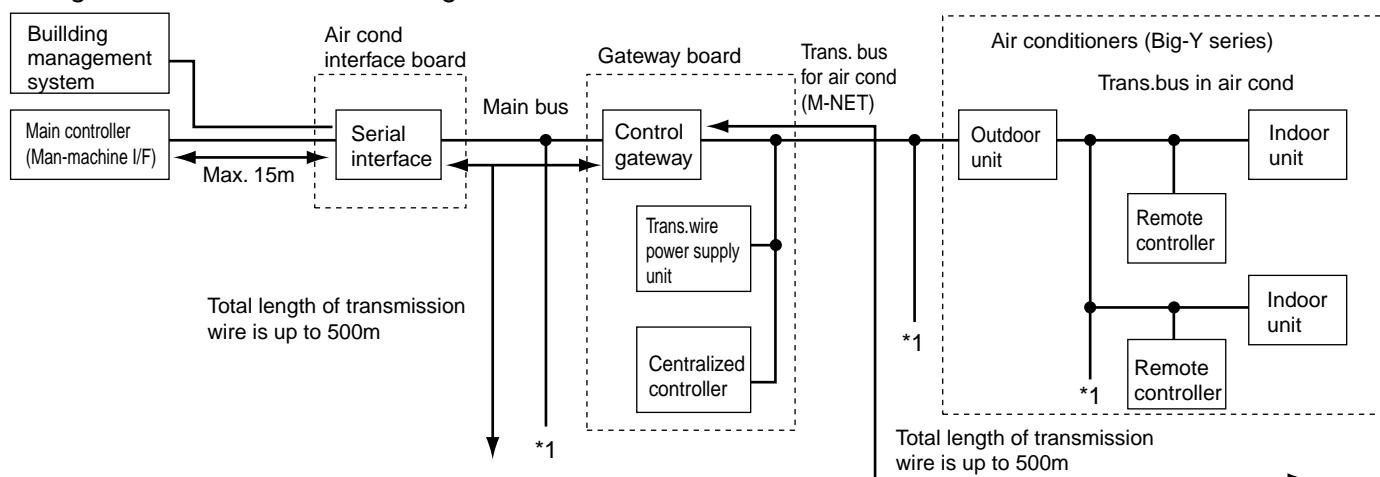
Deliverable equipment list

Description	Function
Main controller	Man-machine device to monitor, operate, and record air conditioners
Serial I/F	Interface for host system to exchange comm. data with MELANS main bus
Control gateway	Exchanges comm. data between MELANS main bus and air-cond. transmission bus
Centralized controller	Centrally controls each group for backup when host system cannot control M-NET units due to trouble
Trans. wire power supply unit	Provides DC power to air-conditioner transmission bus to communicate each unit connected to air-conditioner transmission bus
Remote controller	Operates and monitors the Y, R2, Super-Y series air conditioners

Notes \*1 Continued to similar organization (omitted)

\*2 Adding gateway board enables extension of air conditioners. G/W = max.20 units

Figure 1.2 Restriction on wiring



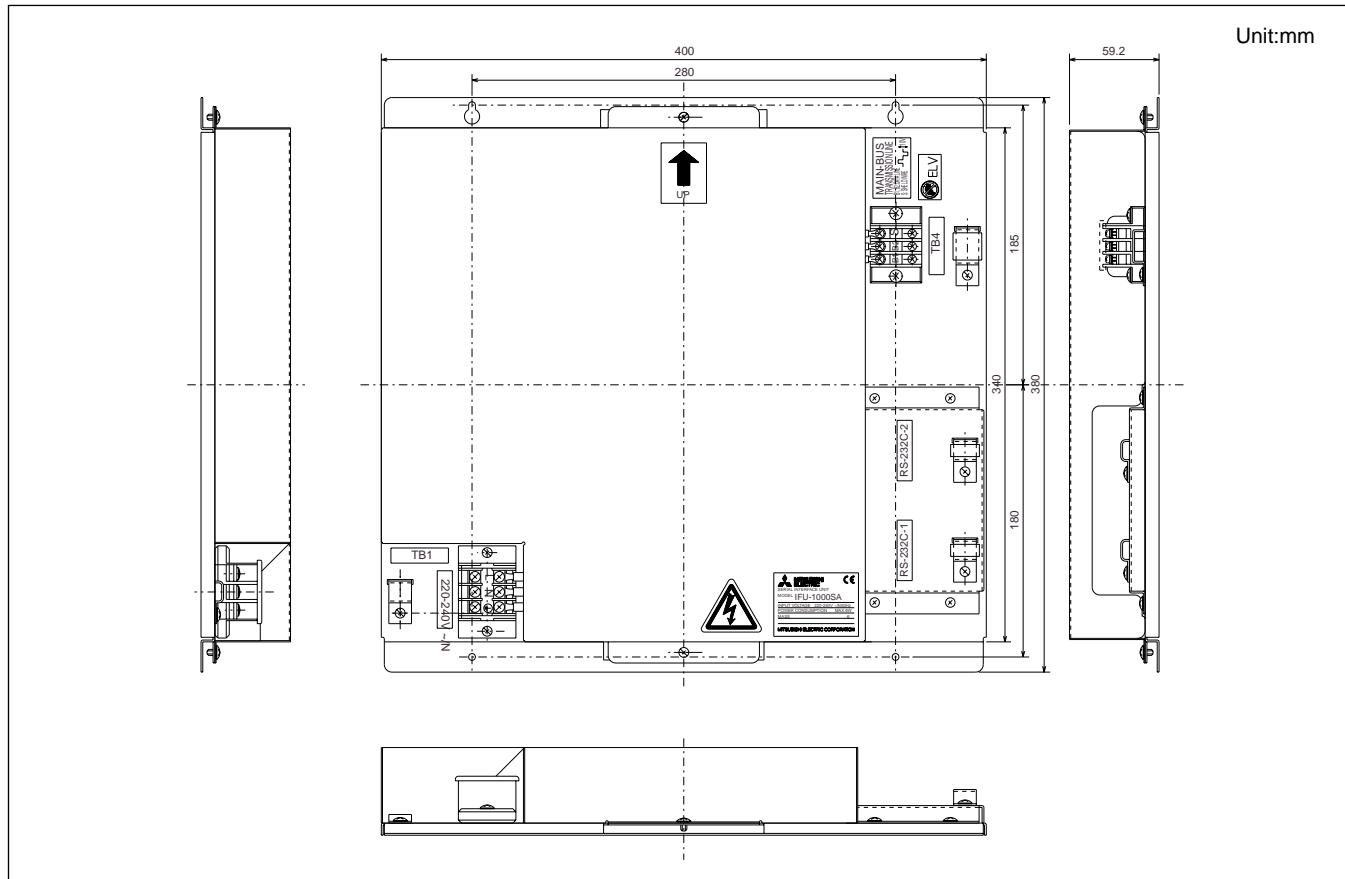
Notes \*1 Continued to similar organization (omitted)

## 4. Serial Interface unit (IFU-1000SA)

### ■ Specification

Source power	Input voltage Single-phase	AC220V~AC240V, 0.1A(Maximum loading) / 50Hz,
	Fuse:	2.0A Time-delay type (IEC-127-2 S.S.3)
Interface condition for transmission line	MAIN-BUS transmission line ; AMI signal RS-232C transmission line ; V.24/V.28 Pin Arrangement 1: FG, 2: SD, 3: RD, 4: RS, 5: CS, 6: DR, 7: SG, 8: CD, 20: ER	
Environmental condition	Temperature Non operating	0~40°C 0~70°C
	Humidity	30~90%RH(No condensation)
Dimensions	380(High) X 400(Width) X 59.2(Depth)	
Weight	3.6kg	

### ■ External dimension



## ■ Parts prepared at site

Please prepare the following parts before installation of the unit.

Preparation parts	Specification
Unit fixing screw	M4 screw X 4 pcs
Power cable Protective earth cable	Please prepare the power cable complied with your applicable technical standard in consider with power requirement of the unit. *Recommend type; $\phi 1.5\text{mm} \sim \phi 2.0\text{mm}$ (H03VV-F, H03VVH2-F, H05VV-F, H05VVH2-F2)
Main power switch (Circuit breaker)	Qty. : 1 pc Type : 250VAC Single-phase 50Hz 3A *Recommend type; CP30-BA series (MITSUBISHI ELECTRIC) or equivalent.
Transmission cable	<p>1. MAIN-BUS transmission line: Sheathed vinyl cords or cable which comply with the following specification or equivalent.</p> <p>CPEVS <math>\phi 1.2\text{mm} \sim \phi 1.6\text{mm}</math> CVVS <math>1.25\text{mm}^2 \sim 2\text{mm}^2</math></p> <p>*CPEV; PE insulated, PCV jacketed shielded communication cable *CVVS; PVC insulated, PVC jacketed shielded control cable</p> <p>2. RS-232C transmission line: Please prepare the RS-232C cable which comply with the pin arrangement in "Specification".</p> <p>NOTE Cable length; There is a limitation for the transmission line. Please refer to section "System limitation".</p>

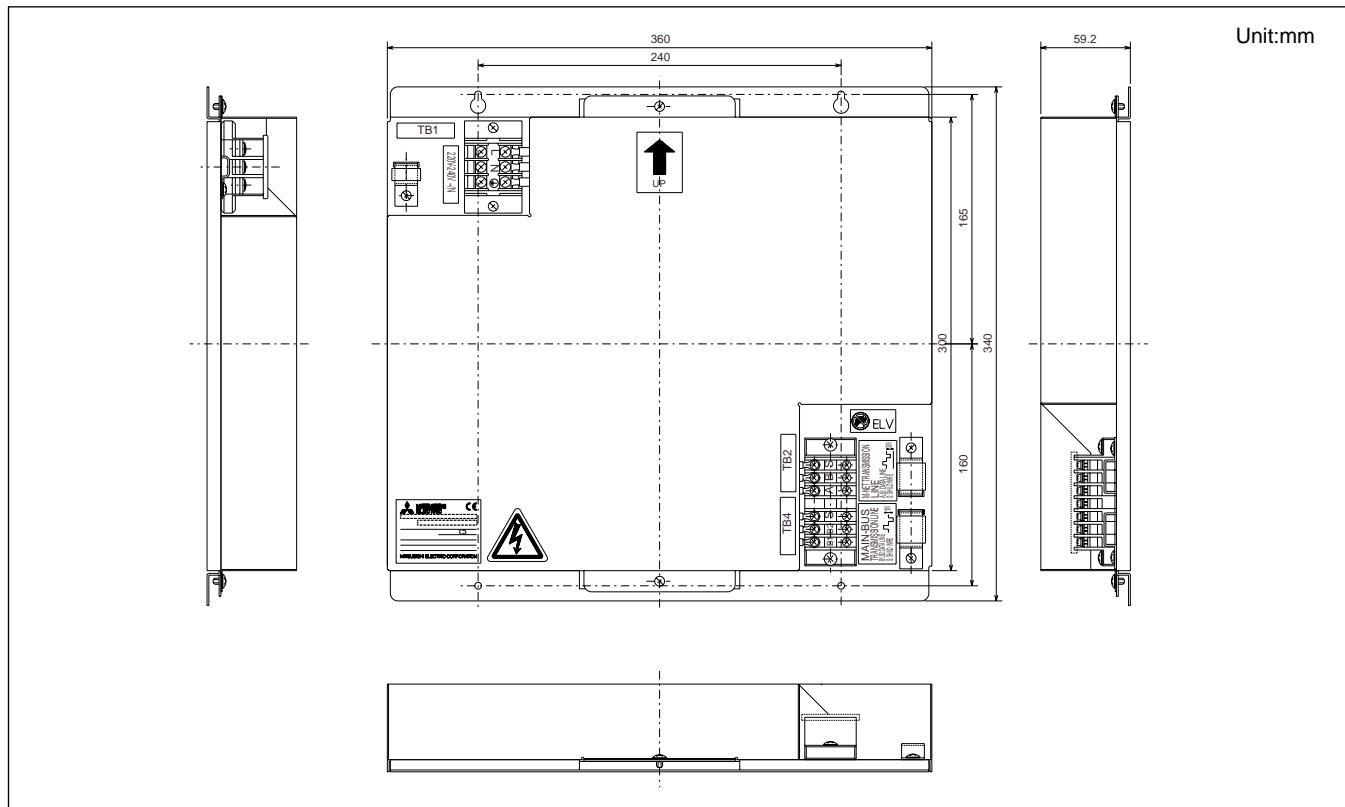
**MJ-310E  
MB-300**

## 5. Gateway unit (GW-50A)

### ■ Specification

Source power requirement	Input voltage	AC220V~AC240V; 0.1A/50Hz Single-phase
	Fuse:	2.0A Time-delay type (IEC-127-2 S.S.3)
Interface condition for transmission line	MAIN-BUS transmission line; AMI signal M-NET transmission line ; DC30V+AMI signal	
Environmental condition	Temperature	Operating 0~40°C Non operating 0~70°C
	Humidity	30~90%RH(No condensation)
Dimensions	340(High) X 360(Width) X 59.2(Depth)	
Weight	3.2kg	

### ■ External dimension



### 3-4 Air conditioner interface (LMAP02-E)

- Achieve an open network by using LONWORKS.

The demand is growing for open network systems that cater for demands such as the ability to freely select the facility equipment that will connect to the building management system regardless of maker or demands to cut back on the interface kit or gateway that links the building management system with the facility equipment. By using LONWORKS, Mitsubishi Electric has achieved an open network for operation information at the remote controller level for the multiple air conditioner units used in a building.

- This has created the potential for system architectures that require simpler design and reduced labor cost.

By first making the functional profile (protocol specification) open, the onsite system integrators can enjoy design freedom. Furthermore, because LONWORKS provides a means for each facility equipment to connect to a single network, you can cut back on the wiring labor cost as your system will require less wiring.

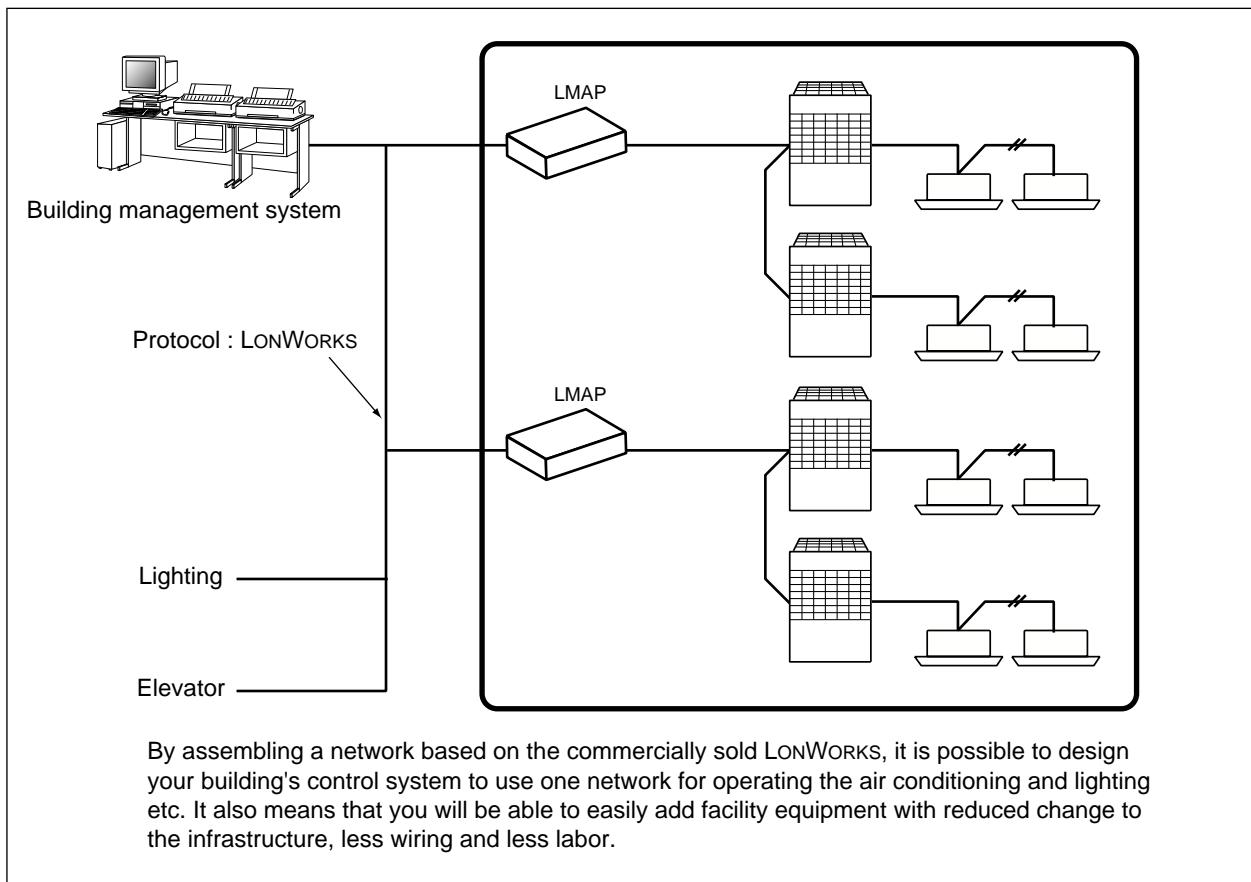
- One LM ADAPTER unit can connect up to 50 indoor units.

Using a single LONWORKS adapter (LM ADAPTER), you can connect up to a maximum of 50 indoor units.

	Item
Operation	Request On/Off
	Request Mode
	Setpoint from network(Both cool and heat)
	Request Fanspeed
	Request Local Prohibit On/Off
	Request Local Prohibit mode
	Request Local Prohibit SetPoint
	Request All Off
Monitor	On/Off run state
	Mode state
	Setpoint state(both cool and heat)
	FanSpeed state
	Thermo On/Off state
	Temperature state of indoor
	Alarm state
	Local Prohibit On/Off state
	Local Prohibit mode state
	Local Prohibit SetPoint state

LMAP02-E

#### ■ System example



## ■ Environment specification

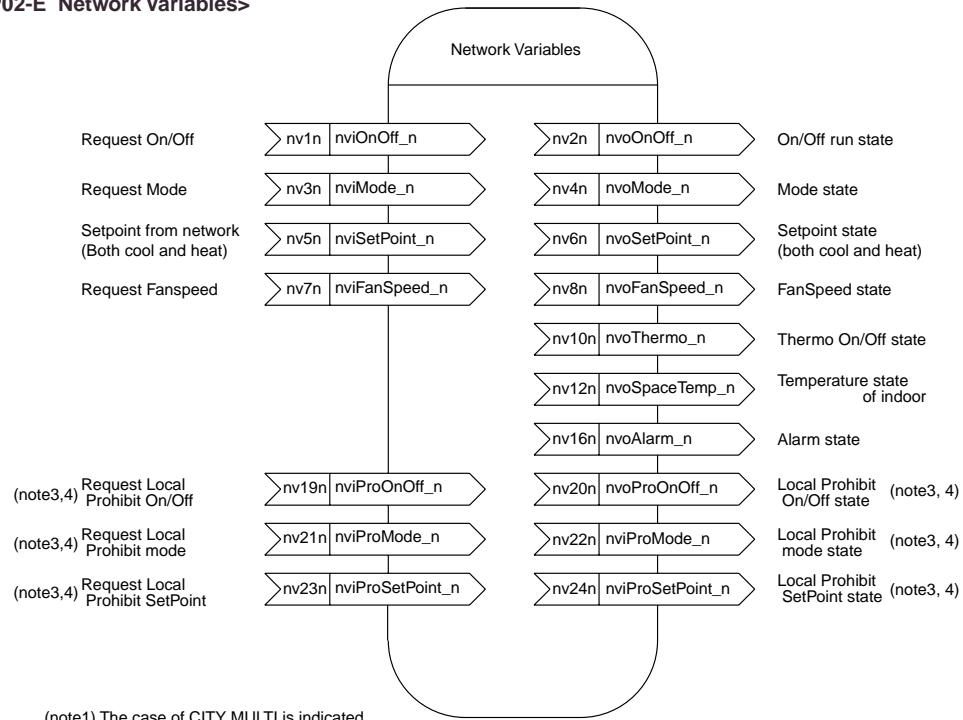
Item	Description		
Connected Equipment	MITSUBISHI ELECTRIC	Multiple split type air conditioners Split-type air conditioners Heat recovery ventilators	CITY MULTI Mr.SLIM LOSSNAY (*For details of the connected models,please contact the dealer.)
Number of Units	LM-AP can control 50 indoor units (including LOSSNAY)		
Neuron CHIP	TMPN3150 (10MHz)		
Network Transceiver	FTT-10A (Free Topology 78kbps)		
Performance	Average communication capacity	2.5 inputs/second	
	Peak communication capacity	50 inputs/second (for one second)	

\* The proper communication is not obtainable when communication intervals exceed its performance, assure sufficient intervals.

\* ACK Service is recommended for the network service.

\* Detailed specifications for the LONWORKS network can be found in " FTT-10A Free Topology Transceiver User's Guide " by Echelon Corporation.

### <LMAP02-E Network Variables>



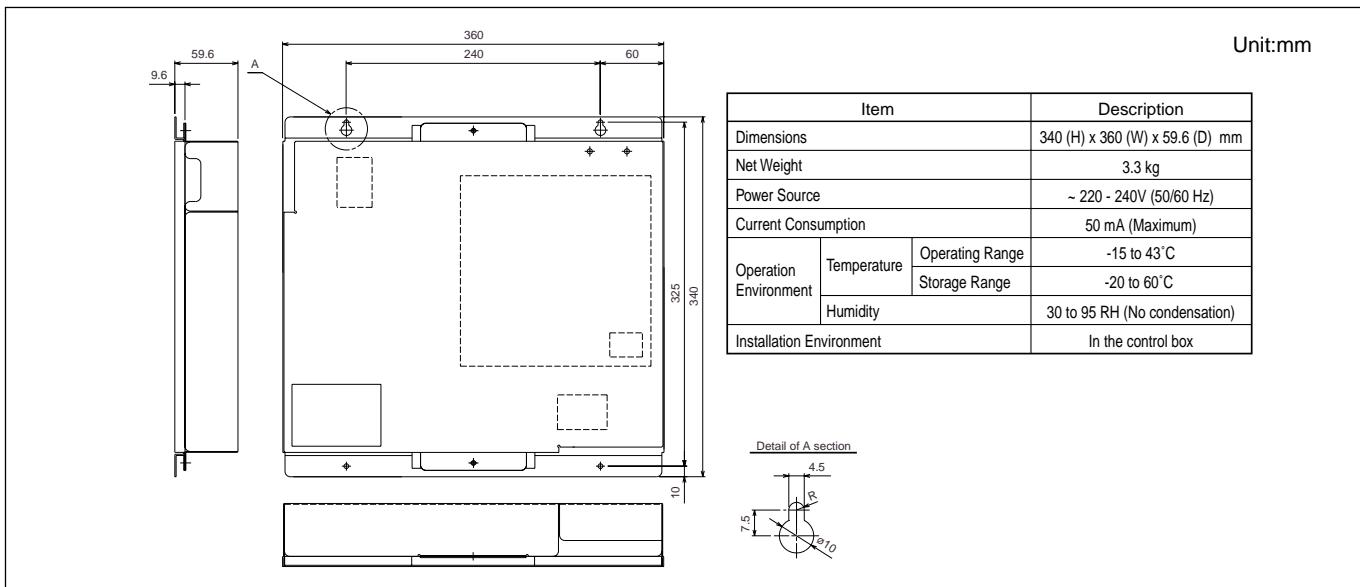
(note1) The case of CITY MULTI is indicated.

(note2) There is a case which cannot be used with the system configuration of the air conditioners units.

(note3) "n" of the network variable shows indoor unit address (M-NET).

(note4) It is possible to use when the "MA" remote controller.

## ■ External dimension

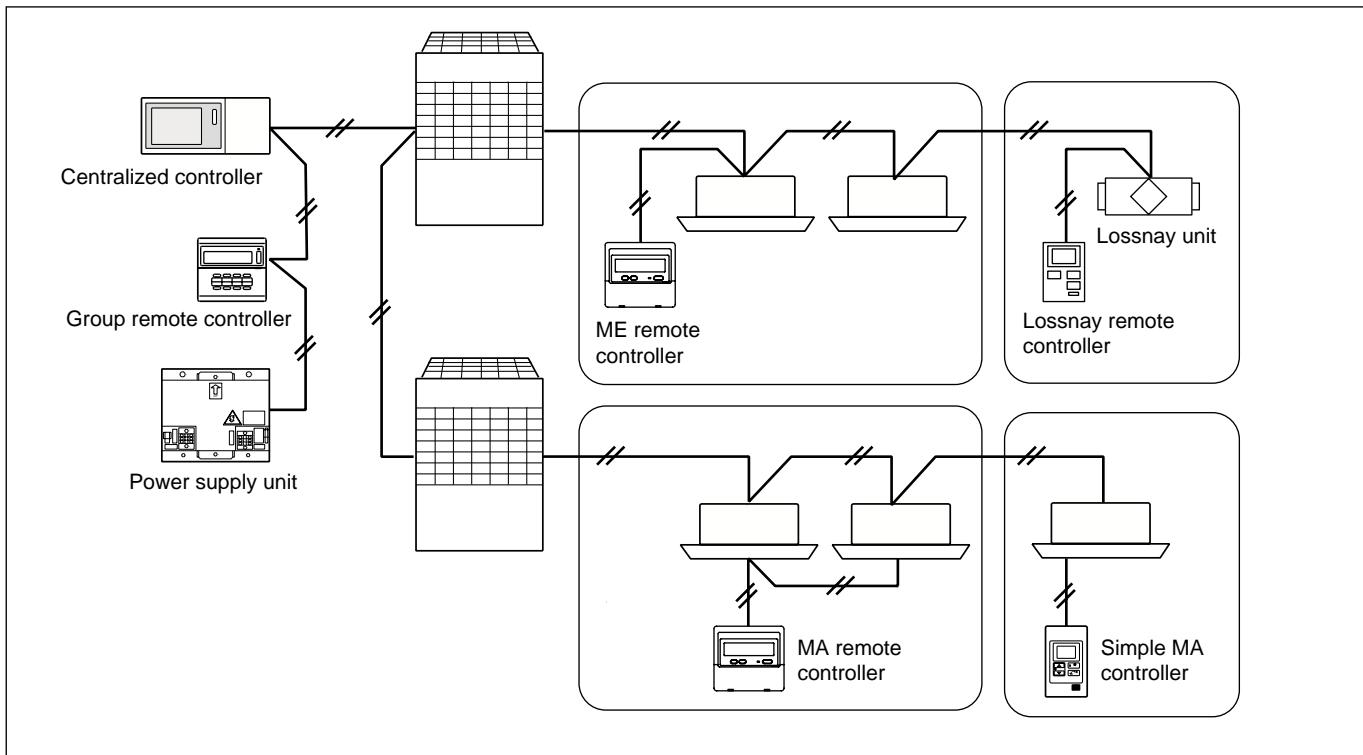


### 3-5 Power supply unit

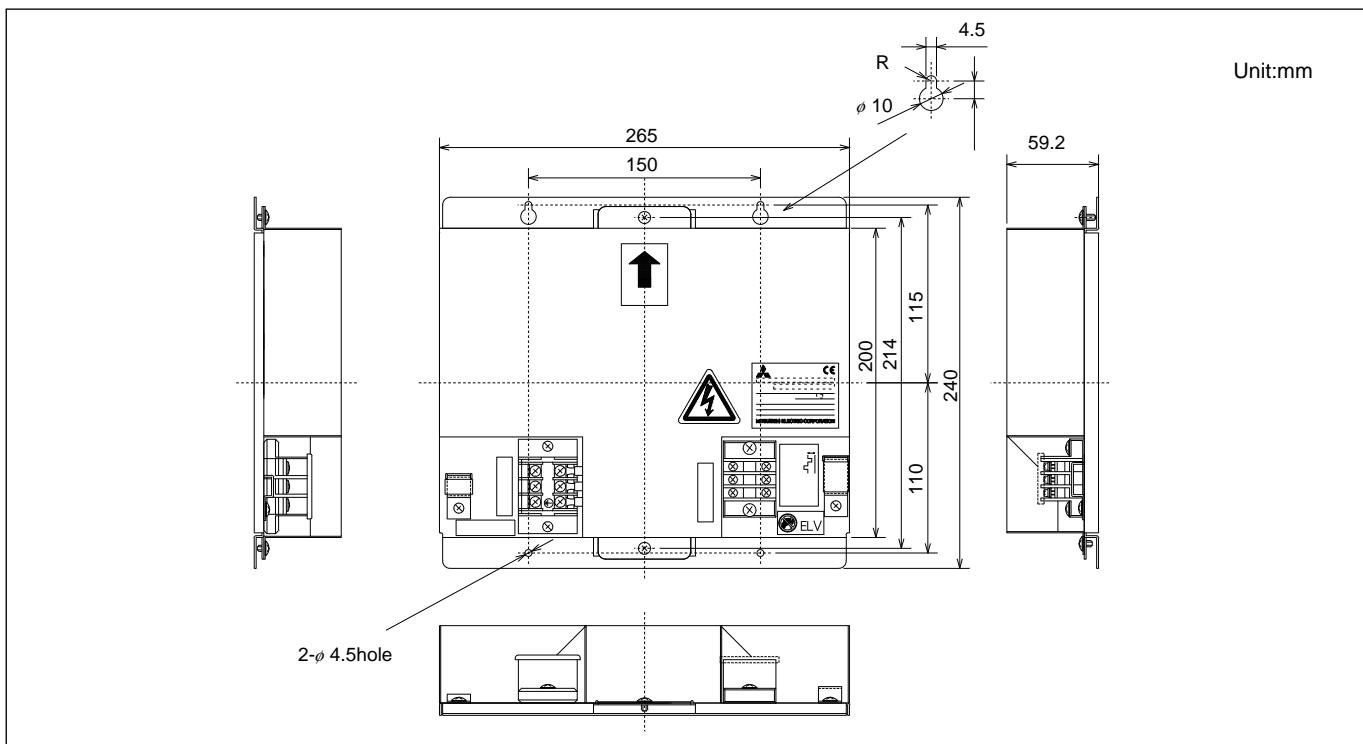
#### 3-5-1 PAC-SC34KUA

- This unit is recommended when the air conditioner system has up to two system controller units (MJ-103MTRA).
- This unit is designed to supply power to MELANS controllers and remote controllers. When your local remote controllers are not powered from the outside unit, always use it for local remoter controllers as well.

##### ■ System example



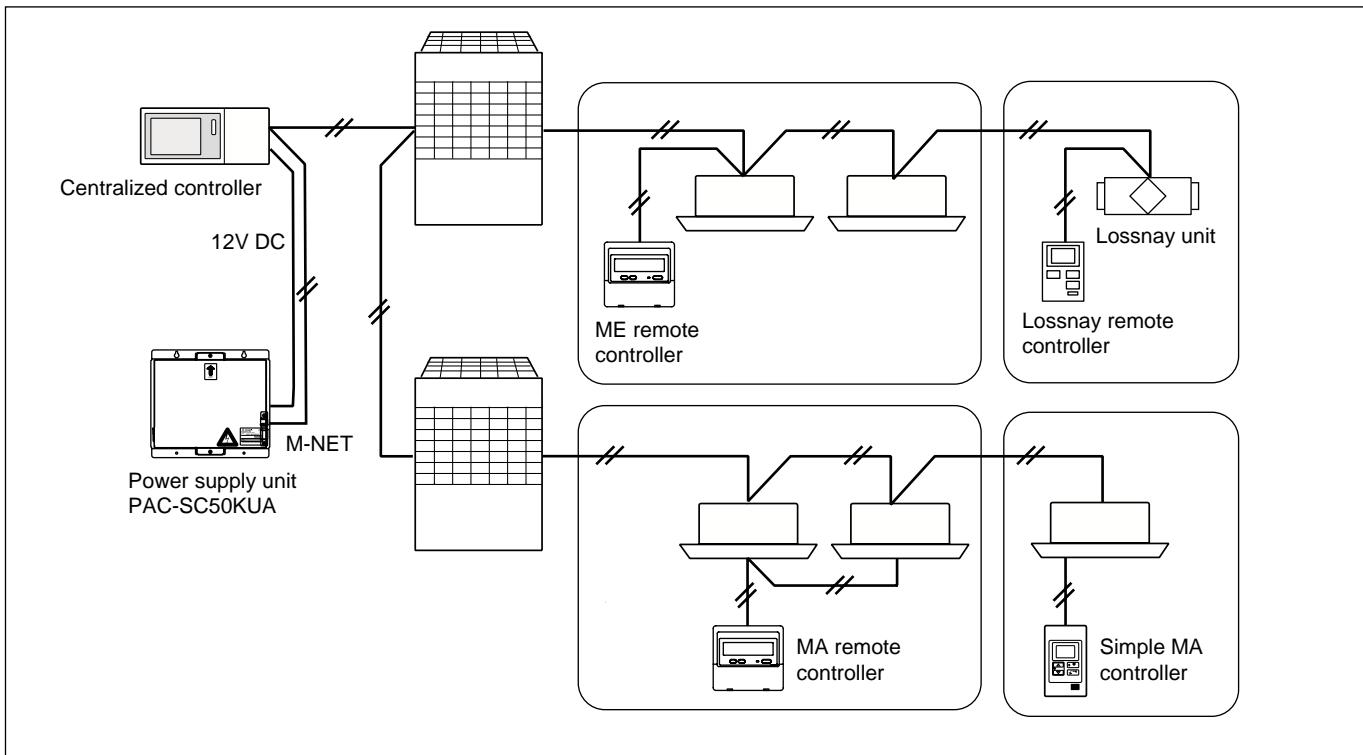
##### ■ External dimension



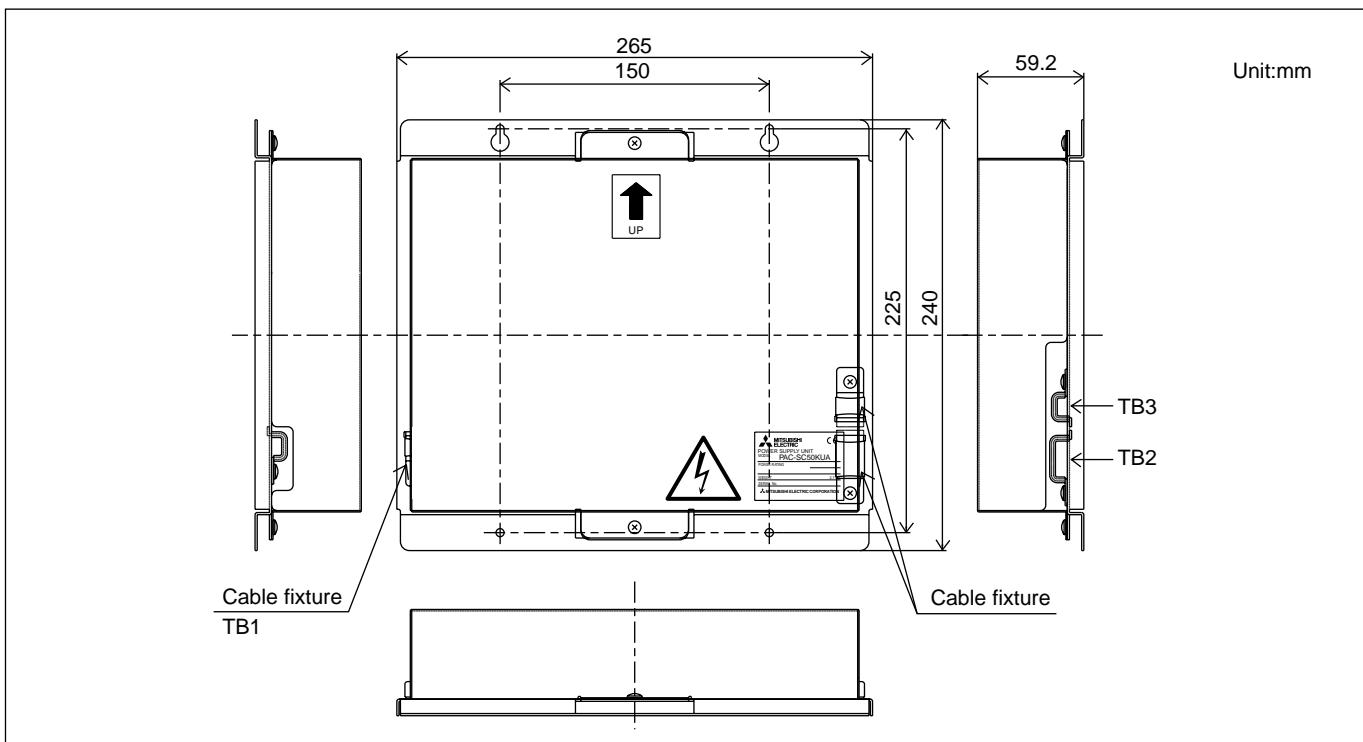
### 3-5-2 PAC-SC50KUA

- This unit supplies DC power to the central controller G-50A by means of the central controller system M-NET transmission line and DC power line.
- Number of the loading unit: G-50A Central Controller 1 unit

#### ■ System example



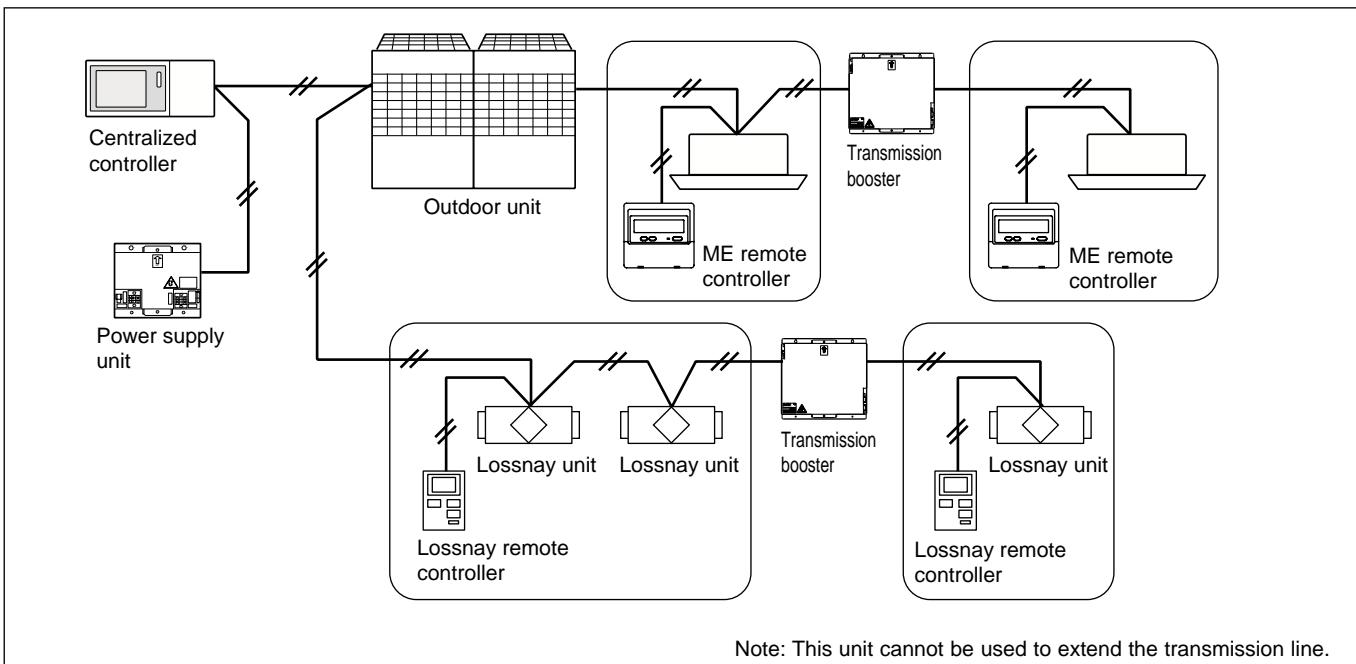
#### ■ External dimension



### 3-6 Transmission booster unit (PAC-SF46EPA)

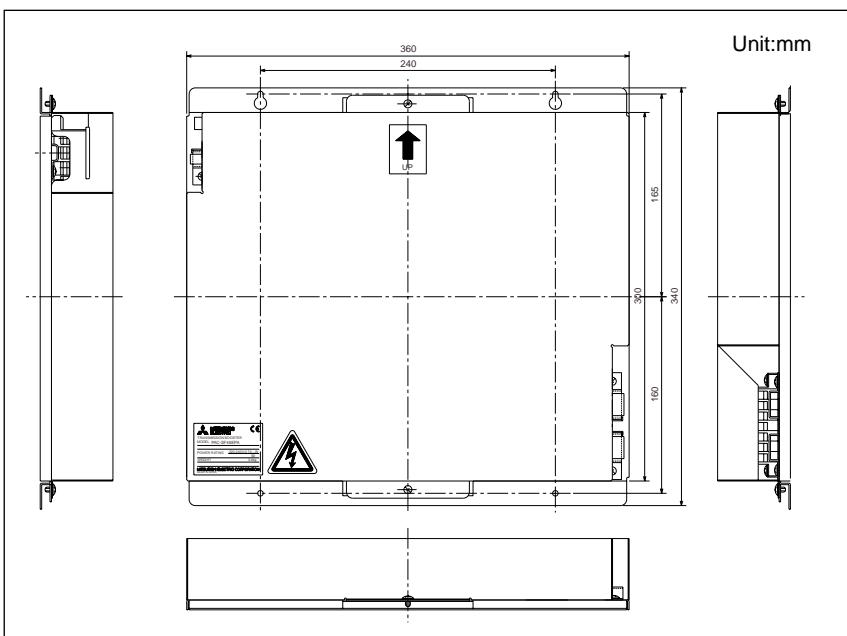
- Use this unit when adding more Y (16HP, 20HP) or SUPER Y indoor units or local remote controllers. Requirement depends on the number of indoor units connected to the same refrigerant system.
- See the Y (16HP, 20HP) or SUPER Y installation documentation for more information.
- This unit is also suitable when adding more Lossnay remote controllers.
- Requirement depends on the performance of the unit supplying power to the signal cables and on the number of Lossnay remote controllers (PZ-52SF and PZ-52SKF2) that are connected. In this case, a power supply expansion unit for signal cables can provide power for up to 50 Lossnay remote controllers. Please use the power supply expansion unit for the signal cable if the power supply exceeds the amount prescribed in the following table.

#### ■ System example



PAC-SF46EPA

#### ■ External dimension



#### ■ Restriction of connecting, Lossnay remote controller

Use the transmission booster, when the value of power supply to the remote controllers from the power supply unit over the one of the under table.

Power supply unit PAC-SC34KUA	Lossnay Remote controller
Centralized controller Multi panel	
0	30
1	26
2	22
3	18
4	14

## 4. System component

In a multi air conditioner system that is a free plan direct-expansion type, a connector for inputting and outputting signals to/from the outside is fitted as standard on the control board of the indoor and outdoor units. Use this when you want each unit to input/output signals individually. (Note: When there are many control units it is recommended that you use MELANS. This would enable you to save on labor.) In order to have an input output signal from each connector, you must have a dedicated adapter (sold separately) and a relay circuit (onsite arrangements).

Note : See next page for actual examples of use.

- Types of control that uses connectors for the outdoor unit input output signal (connection for each type of option).

Category	Application	Function	Connector		
			Y, Super Y	R2,Big R2	WR2
Input	Method of disabling cool and heat operation (thermo off) by input from the outside to the outdoor unit.	Comp ON/OFF	CN3S	CN3D	—
	The low noise operation of the indoor unit can be commenced by the external input to the outdoor unit.(The night mode can be adapted only under the outdoor temperature condition of 30°C or less for cooling and 3°C or more for heating)	Night mode	CN3D	CN3D	—
	You can switch the operation mode between cooling and heating by input from the outside to the outdoor unit.	Autochangeover		—	—
Output	Method of receiving a signal from the outdoor unit to the outside. * Can be used as a device that displays the operation state. * Can be used as an interlocked control with external equipment.	Compressor is run state	CN51	CN51	CN51
		Error state			

- Types of control that uses connectors for the indoor unit input output signal (connection for each type of option)

Category	Application	Function	Connector
Input (Note 2,3)	Method of ON/OFF control by turning on and off switches or contacts from an outside to each indoor unit group. Can be used as a timer adapter (Note 1) Can be used as a "forget to switch off prevention" or "forced stop".	Distant/local switching (note 1)	CN32
		ON/OFF (level)	
		ON/OFF (pulse)	CN51
Output	Method of ON/OFF control by inverting start/stop using external pulse (a-contact) for each indoor unit group.  Method of sending signals to outside for each indoor unit group. It can be used as a device to display operation states. It can be used as an interlocked control with the external equipment.	Operation state	CN51
		Error state	
		Operation mode (heat) state	CN52
		Operation mode (cool, dry) state	
		Thermo ON (fan) state	

Note 1: Connect the signal input only to the principal unit in a group.

(However, the demand input is required to enter into indoor units individually.)

Note 2: When using start/stop input at group operation, Local remote controller is necessary.

(MA remote controller or M-NET remote controller)

Note 3: When setting to Remote, operation can not be performed from Local remote controller.

The remote controller displays [CENTRALLY CONTROLLED].

Note 4: When using start/stop input at group operation, [Automatic address start-up] can not be performed.

Note 5: When CN51 or CN52 is commonly used as an output signal, be sure to use the remote display kit.

Note 6: The remote display kit can be used for the input signal of CN51 and CN52.

Note 7: Connect to the principal unit only when using [Operating status] or [Operation mode (Heating/Cooling-Dry) of signal output. Connect to indoor units individually when using [Error status] or [Thermostat ON (or fan) status]

It is possible to have ON/OFF control by turning the indoor unit power on and off. You can select functions by setting the DipSW1-9 and 1-10 on the indoor unit.

#### ■ Types of ON/OFF control (indoor unit settings)

It is possible to have ON/OFF control for each indoor unit (or group) by dip switches 9 and 10 (SW1-9, SW1-10) of the indoor unit.

Function	Operation when indoor unit recovers	Setting SW2 (note 1)	
		9	10
All auto restart	All indoor units will always restart regardless of the state that was before the power was turned off (POWER OFF) (after 5 minutes).	—	ON
Auto recovery	Indoor units which are operated before the power was turned off (POWER OFF) will restart (after 5 minutes).	ON	OFF
All OFF	Operation stays stopped regardless of the state that was before the power was turned off.	OFF	OFF

Note 1. The dip switch setting for all units in the indoor unit group is required.

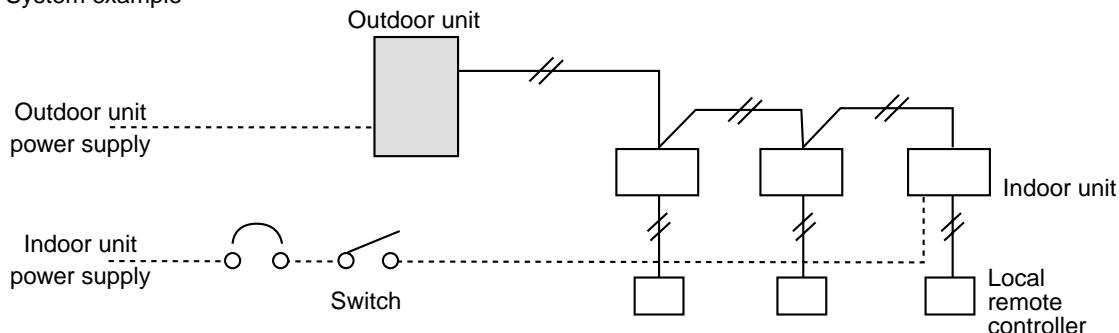
Note 2. Do not cut-off the power to the outdoor unit. If you do, it will disconnect the power to the crankcase heater of the outdoor unit and that could cause damage to the compressor.

Note 3. This cannot be applied to the power ON/OFF of the drain pump and humidifier equipment.

#### ■ Description of when using distant/local switching (CN32)

SW1 Local switching	SW2 ON/OFF	State	Remote controller display/operation
OFF	OFF	Local / Permit	The operation permit
ON	OFF	Distant / Stop	It displays "CENTRALLY CONTROLLED", while the state is distant. It prohibits ON/OFF operation of remote controller.
ON	ON	Distant / Operate	

#### ■ System example



When the power to the outdoor unit is cut-off for a long time, the crankcase heater for the compressor also stops. If the compressor is started soon after the power is restored, there is a chance that a fault will occur in the compressor. When using the above function, make sure the power to the outdoor units will not be cut-off.

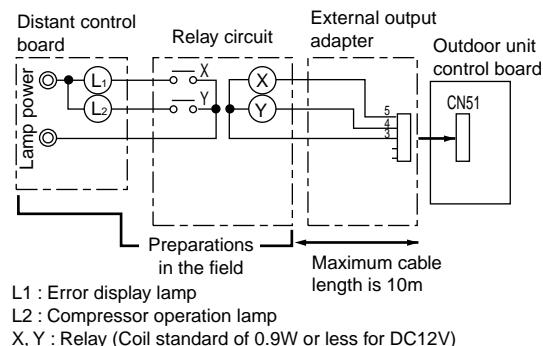
#### ■ Limitations to combining system controls

	Description	Control combining distant/local	Pulse ON/OFF	Power ON/OFF	Automatic recover
1	Control combining distant/local	CN32	—	X*1	X*1
2	Pulse ON/OFF	CN51	—	○	○
3	HA ON/OFF (JEMA)	CN51		○	○
4	Power ON/OFF	-		—	X
5	Automatic recover	-			—

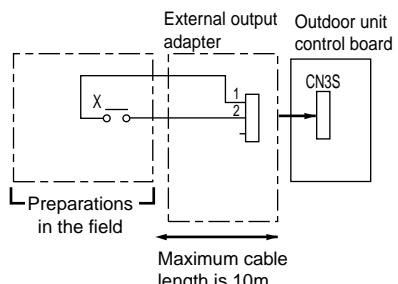
\*1: Pulse ON/OFF, Power ON/OFF and automatic recover can only be used when the distant/local setting (CN32) is set to local. Therefore, always avoid this function when combining control.

## ■ Outdoor unit input/output connector

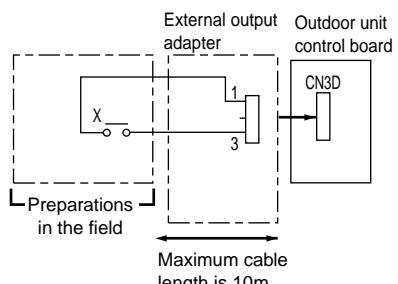
- State (CN51)



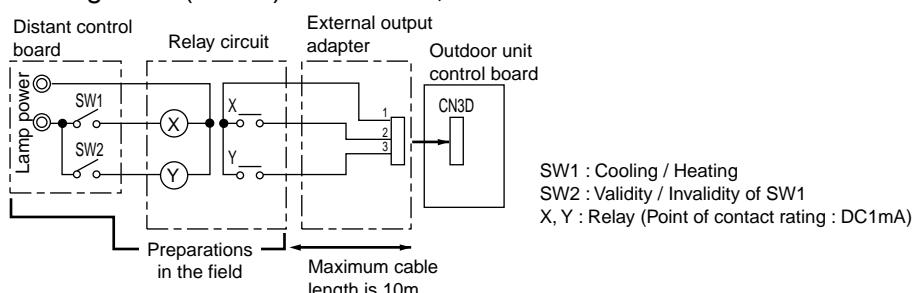
- Comp ON/OFF (CN3S) on PUMY-P, PUHY



- Comp ON/OFF (CN3D) on PUMY, PURY, PQRY

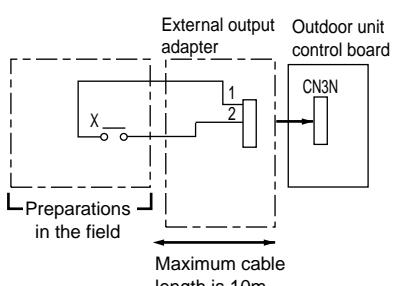


- Autochangeover (CN3D) on PUMY-P, PUHY

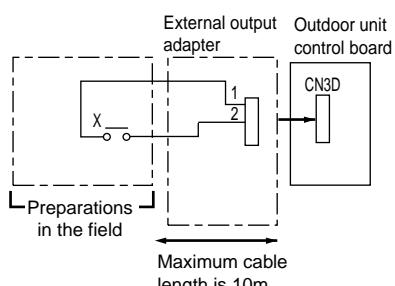


- Night mode on YMFC-C

<Y> ~CN3N~



<R2> ~CN3D~



Night mode : The noise level is reduced by controlling the maximum fan frequency to be lower under the flowing condition.

Cooling mode : ambient temp. (TH6) < 30°C

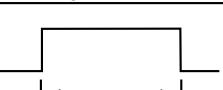
Heating mode : ambient temp. (TH6) > 3°C

-Note-

The noise level can not be reduced. When the fan frequency is not maximum.

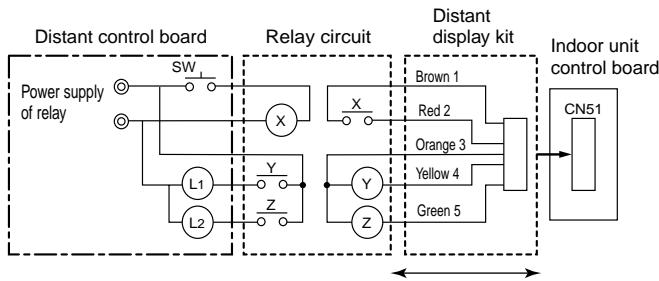
## ■ Indoor unit input/output connector

### ● ON/OFF (Pulse) input specification

Item	Description
Input signal	Pulse sign (a connect)
Standard of pulse	 200msec or more

### ● Input only

**CN51**



SW : Distant ON/OFF switch

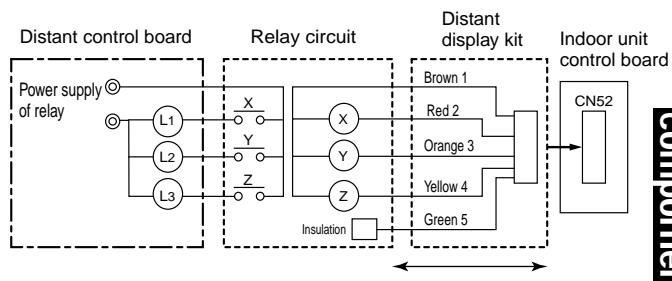
L1 : Status lamp

L2 : Error lamp

X, Y, Z : Relay (a point of contact, fixed DC1mA)

Y, Z : Relay (Coil with fixed DC12V, a power consumption of 0.9 or less)

**CN52**



L1 : Status lamp

Fan motor output (SW1-5 OFF)

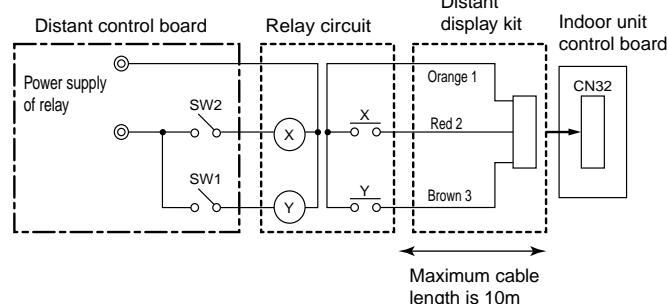
Thermostat ON (SW1-5 ON)

L2 : Cooling/Dry status lamp

L3 : Heating status lamp

X, Y, Z : Relay (Coil with fixed DC12V, a power consumption of 0.9 or less)

**CN32**



SW1 : Distant/Local switching

SW2 : ON/OFF switch

X, Y : Relay (a point of contact, fixed DC1mA)

※ SW2 is available when SW1 is ON.



## **CITY MULTI SYSTEM DESIGN**

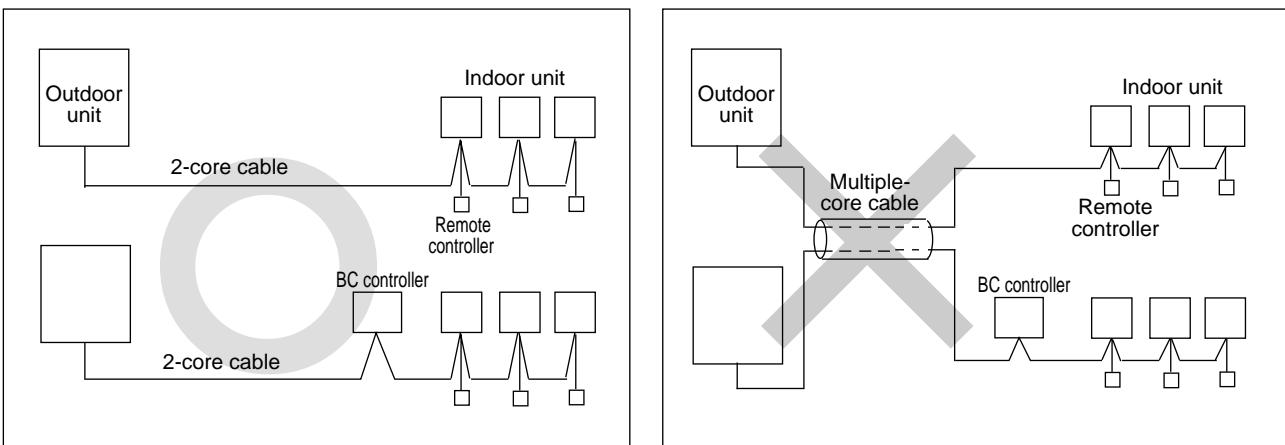
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# 1. Electrical Work & M-NET control

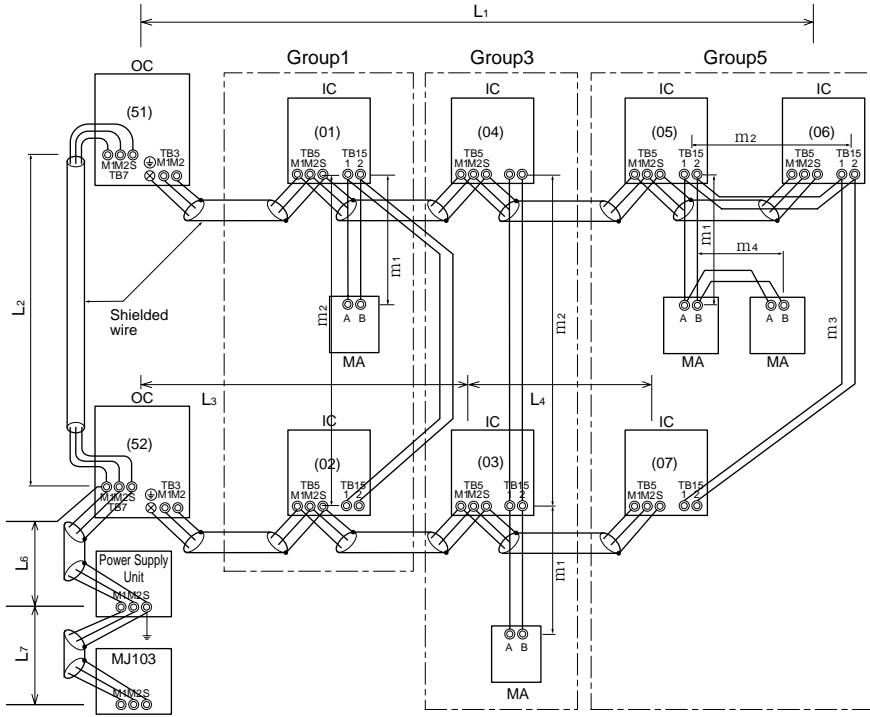
## 1-1 Attention

- ① Follow ordinance of your governmental organization for technical standard related to electrical equipment, wiring regulations, and guidance of each electric power company.
- ② Wiring for control (hereinafter referred to as transmission line) shall be (5cm or more) apart from power source wiring so that it is not influenced by electric noise from power source wiring. (Do not insert transmission line and power source wire in the same conduit.)
- ③ Be sure to provide designated grounding work to outdoor unit.
- ④ Give some allowance to wiring for electrical part box of indoor and outdoor units, because the box is sometimes removed at the time of service work.
- ⑤ Never connect 380~415V(220~240V )power source to terminal block of transmission line.If connected,electrical parts will be burnt out
- ⑥ Use 2-core shield cable for transmission line. If transmission lines of different systems are wired with the same multiple-core cable, the resultant poor transmitting and receiving will cause erroneous operations.



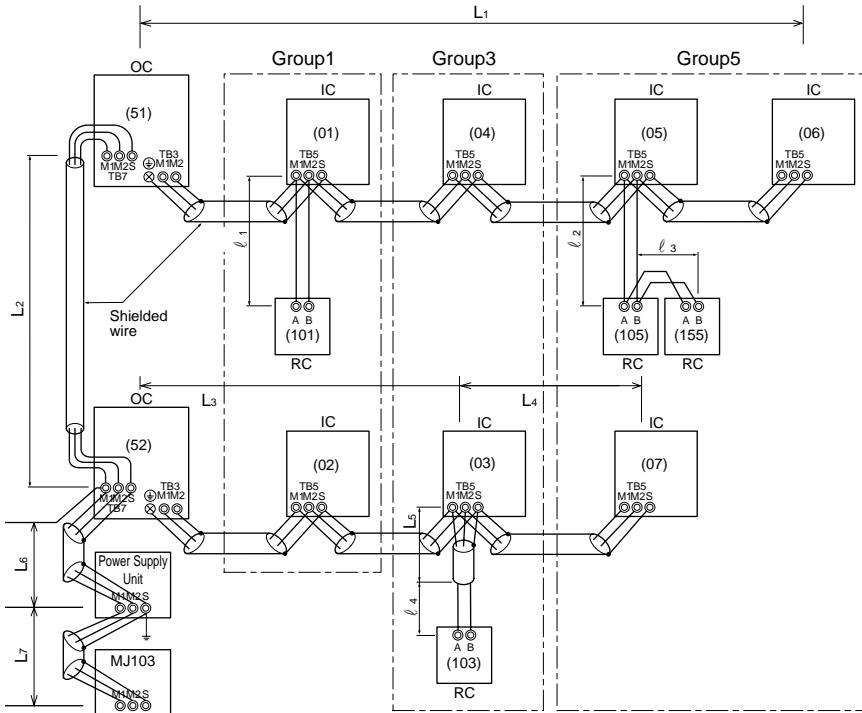
## 1-2 Allowable length of transmission line

- ① PUHY, PUY, PUMY  
MA Remote controller



- Max length via outdoor unit (M-NET cable) :  $L_1+L_2+L_3+L_4$  and  $L_1+L_2+L_6+L_7 \leq 500$  m ( $1.25 \text{ mm}^2$  or more)
- Max transmission cable length (M-NET cable) :  $L_1$  and  $L_3+L_4$  and  $L_6$  and  $L_2+L_6$  and  $L_7 \leq 200$  m ( $1.25 \text{ mm}^2$  or more)
- Remote controller cable length :  $m_1+m_2$  and  $m_1+m_2+m_3+m_4 \leq 200$  m ( $0.75$  to  $1.25 \text{ mm}^2$ )

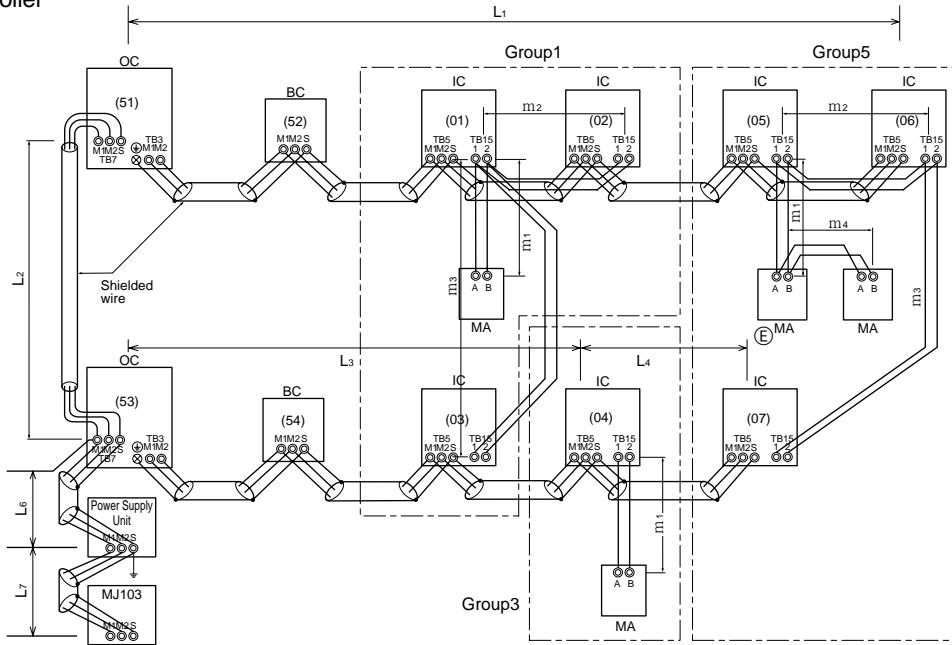
### M-NET Remote controller



- Max length via outdoor units :  $L_1+L_2+L_3+L_4$  and  $L_1+L_2+L_3+L_5$  and  $L_1+L_2+L_6+L_7 \leq 500$  m ( $1.25 \text{ mm}^2$  or more)
- Max transmission cable length :  $L_1$  and  $L_3+L_4$  and  $L_3+L_5$  and  $L_6$  and  $L_2+L_6$  and  $L_7 \leq 200$  m ( $1.25 \text{ mm}^2$  or more)
- Remote controller cable length :  $\ell_1$ ,  $\ell_2$ ,  $\ell_3$ ,  $\ell_4 \leq 10$  m ( $0.75$  to  $1.25 \text{ mm}^2$ )  
If the length exceeds 10 m, use a  $1.25 \text{ mm}^2$  shielded wire. The length of this section ( $L_8$ ) should be included in the calculation of the maximum length and overall length.

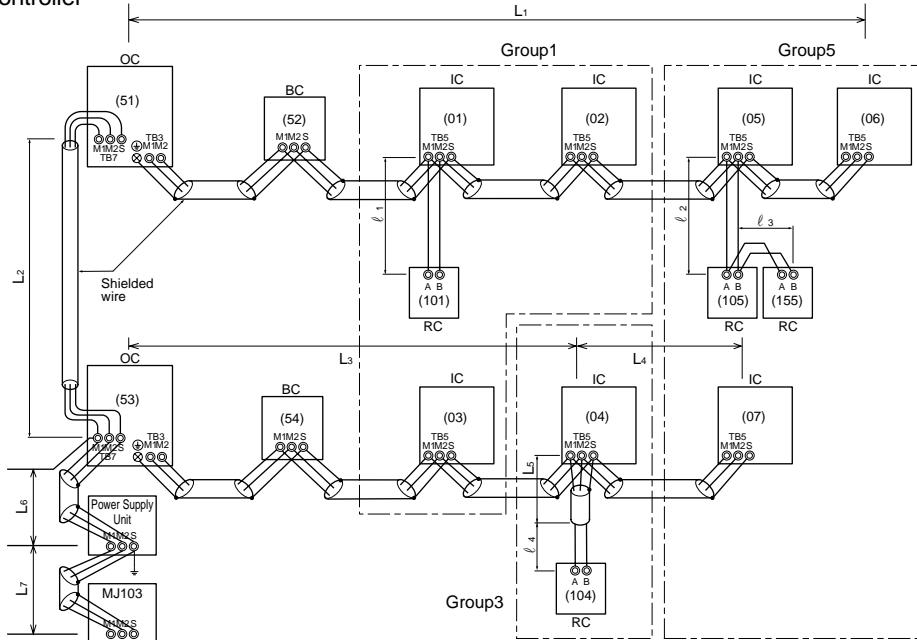
## ② PURY, PQRY <In case of 1 BC controller system>

MA Remote controller



- Max length via outdoor unit (M-NET cable) :  $L_1 + L_2 + L_3 + L_4$  and  $L_1 + L_2 + L_6 + L_7 \leq 500$  m ( $1.25 \text{ mm}^2$  or more)
- Max transmission cable length (M-NET cable) :  $L_1$  and  $L_3 + L_4$  and  $L_6$  and  $L_2 + L_6$  and  $L_7 \leq 200$  m ( $1.25 \text{ mm}^2$  or more)
- Remote controller cable length :  $m_1 + m_2$  and  $m_1 + m_2 + m_3 + m_4 \leq 200$  m ( $0.75$  to  $1.25 \text{ mm}^2$ )

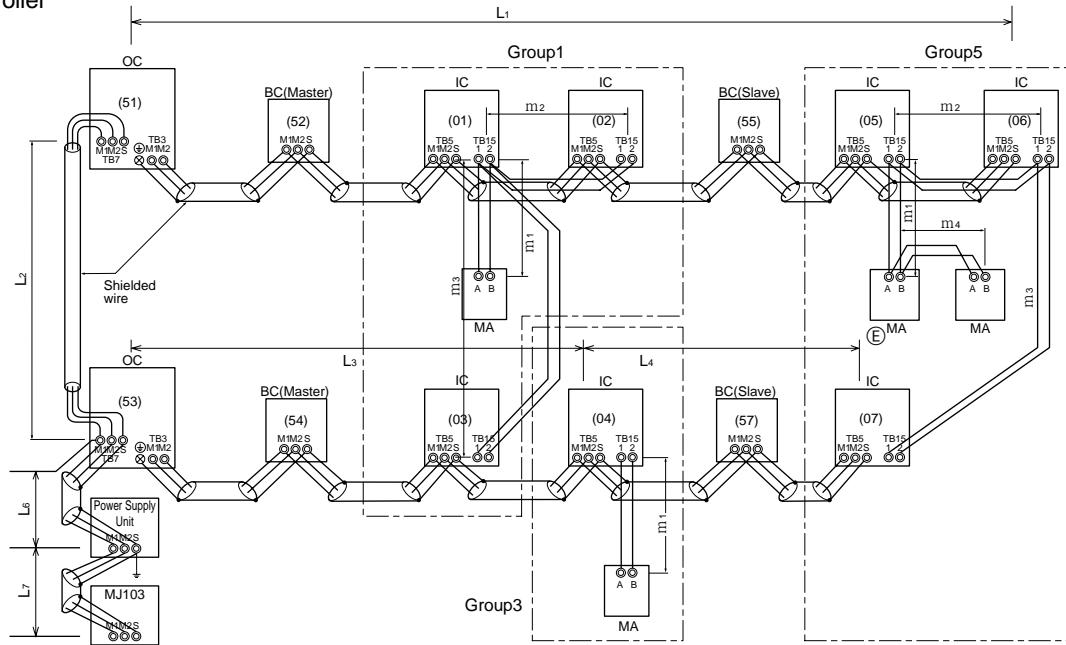
M-NET Remote controller



- Max length via outdoor units :  $L_1 + L_2 + L_3 + L_4$  and  $L_1 + L_2 + L_5$  and  $L_1 + L_2 + L_6 + L_7 \leq 500$  m ( $1.25 \text{ mm}^2$  or more)
- Max transmission cable length :  $L_1$  and  $L_3 + L_4$  and  $L_5$  and  $L_6$  and  $L_2 + L_6$  and  $L_7 \leq 200$  m ( $1.25 \text{ mm}^2$  or more)
- Remote controller cable length :  $\ell_1, \ell_2, \ell_3, \ell_4 \leq 10$  m ( $0.75$  to  $1.25 \text{ mm}^2$ )  
If the length exceeds 10 m, use a  $1.25 \text{ mm}^2$  shielded wire. The length of this section ( $L_8$ ) should be included in the calculation of the maximum length and overall length.

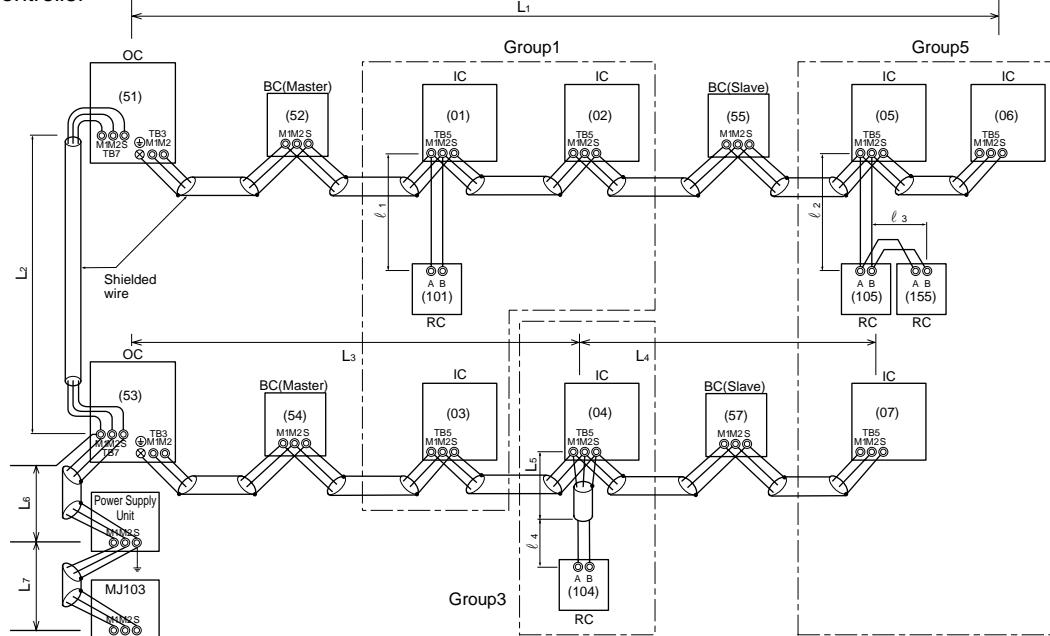
## ③ PURY-P400-500 &lt;In case of 2 BC controllers system&gt;

MA Remote controller



- Max length via outdoor unit (M-NET cable) :  $L_1 + L_2 + L_3 + L_4$  and  $L_1 + L_2 + L_6 + L_7 \leq 500$  m (1.25 mm<sup>2</sup> or more)
- Max transmission cable length (M-NET cable) :  $L_1$  and  $L_3 + L_4$  and  $L_6$  and  $L_2 + L_6$  and  $L_7 \leq 200$  m (1.25 mm<sup>2</sup> or more)
- Remote controller cable length :  $m_1 + m_2$  and  $m_1 + m_2 + m_3 + m_4 \leq 200$  m (0.75 to 1.25 mm<sup>2</sup>)

M-NET Remote controller



- Max length via outdoor units :  $L_1 + L_2 + L_3 + L_4$  and  $L_1 + L_2 + L_5$  and  $L_1 + L_2 + L_6 + L_7 \leq 500$  m (1.25 mm<sup>2</sup> or more)
- Max transmission cable length :  $L_1$  and  $L_3 + L_4$  and  $L_5 + L_6$  and  $L_6$  and  $L_2 + L_6$  and  $L_7 \leq 200$  m (1.25 mm<sup>2</sup> or more)
- Remote controller cable length :  $\ell_1, \ell_2, \ell_3, \ell_4 \leq 10$  m (0.75 to 1.25 mm<sup>2</sup>)  
If the length exceeds 10 m, use a 1.25 mm<sup>2</sup> shielded wire. The length of this section ( $L_8$ ) should be included in the calculation of the maximum length and overall length.

City Multi is a systemized product of which components are [outdoor unit], [BC controller], [indoor unit], and [remote controller]. Each system part has its own microcomputer, and operated by no-polarity two wires multiple transmission system. Therefore, in order for several microcomputers connected to the common two wires to identify transmitter, identification No. (address) must be set for each microcomputer.

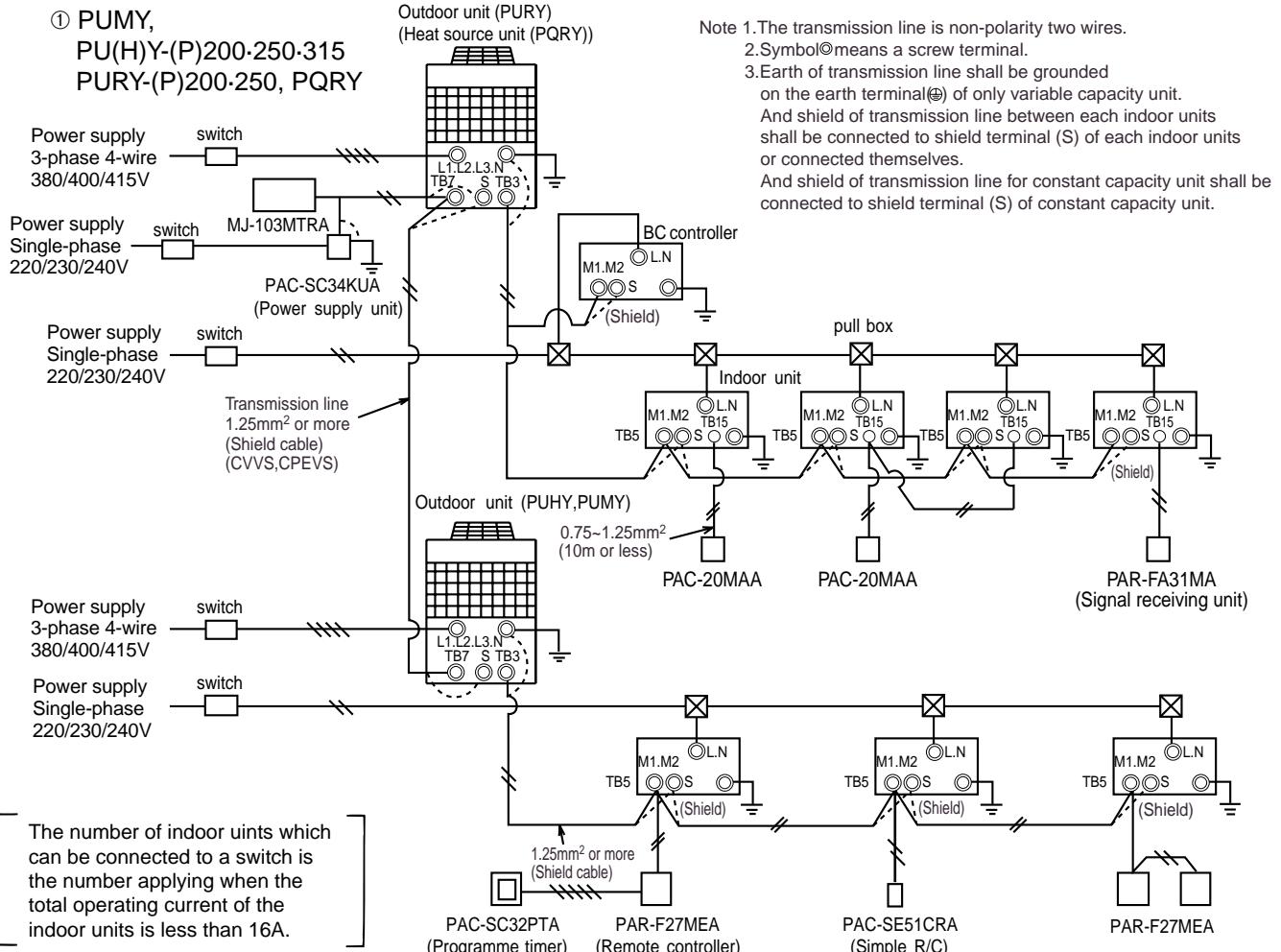
Be sure to set address numbers at the time of installation work by using switches for setting addresses for [outdoor unit], [BC controller], [indoor unit], and [remote controller].

When signal receiving unit is used, connect the accessory cable (polarity 2 lines) to the specified connector (CN3A) on the printed circuit board.

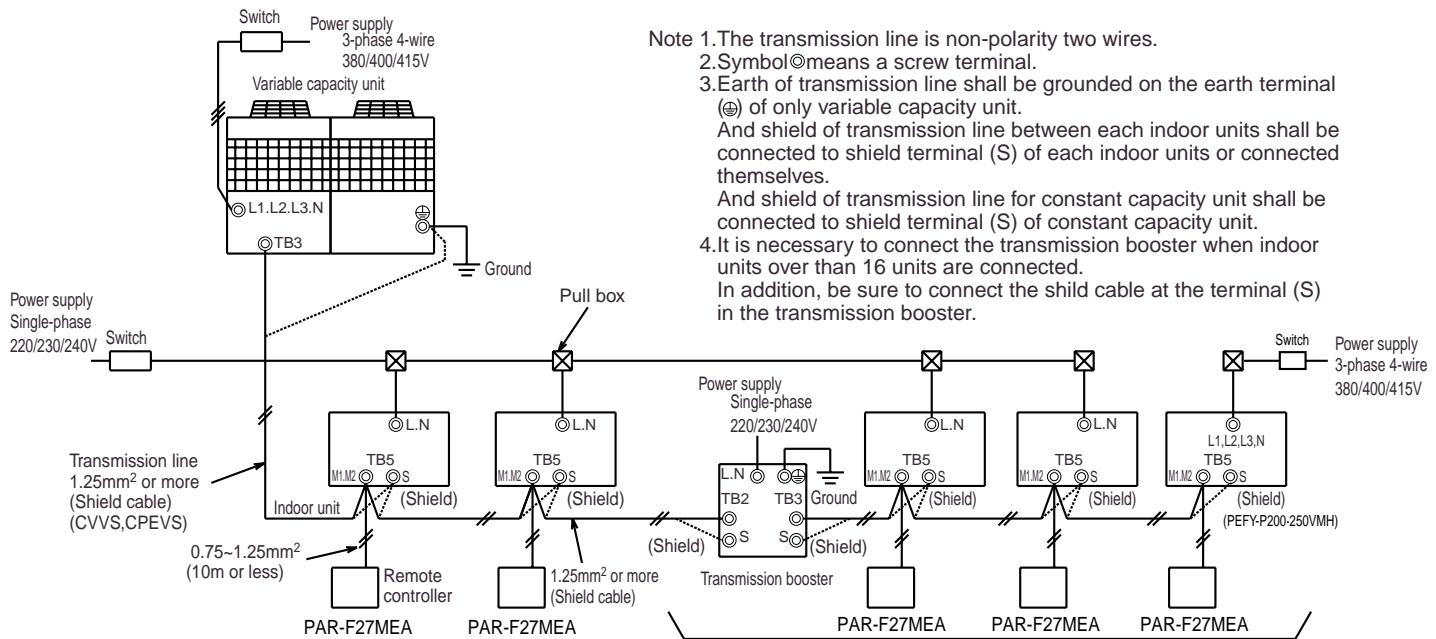
## 1-3 Electrical work

### (1) Main power supply connections and equipment capacities

The selection of capacities should be determined in accordance with the relevant standards.

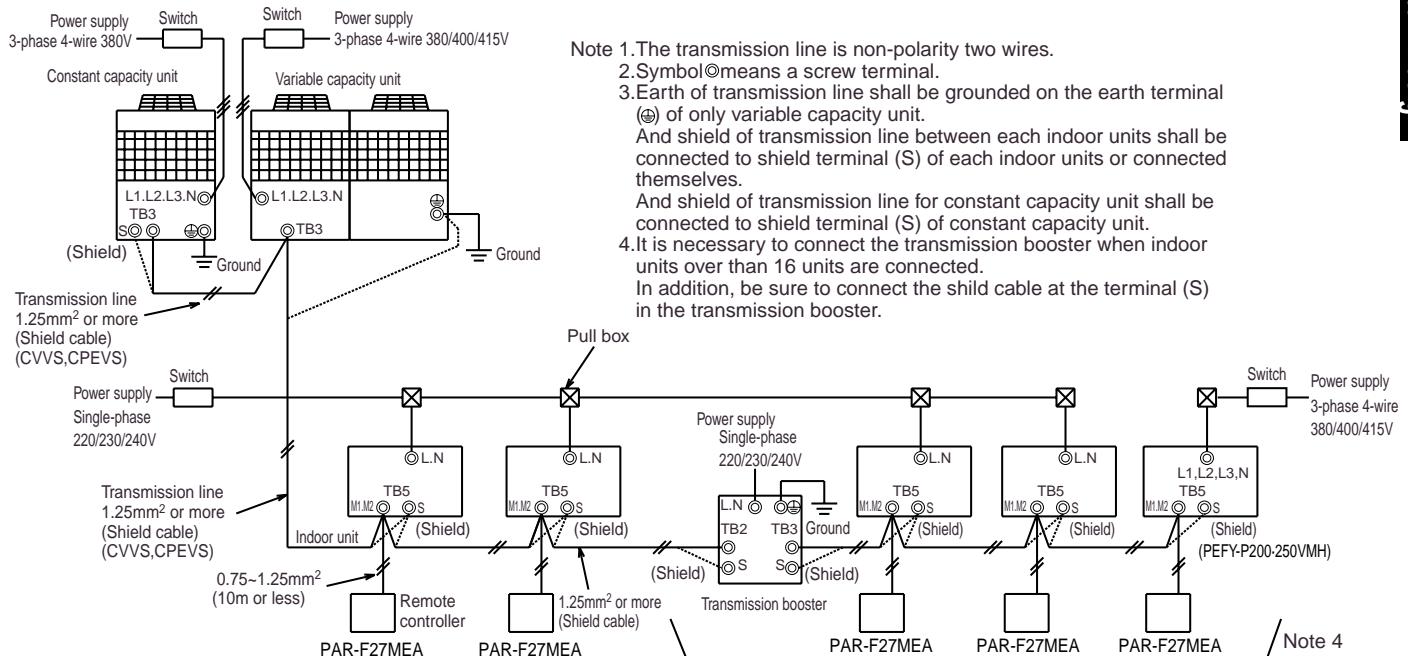


### ② PUHY-(P)400-500

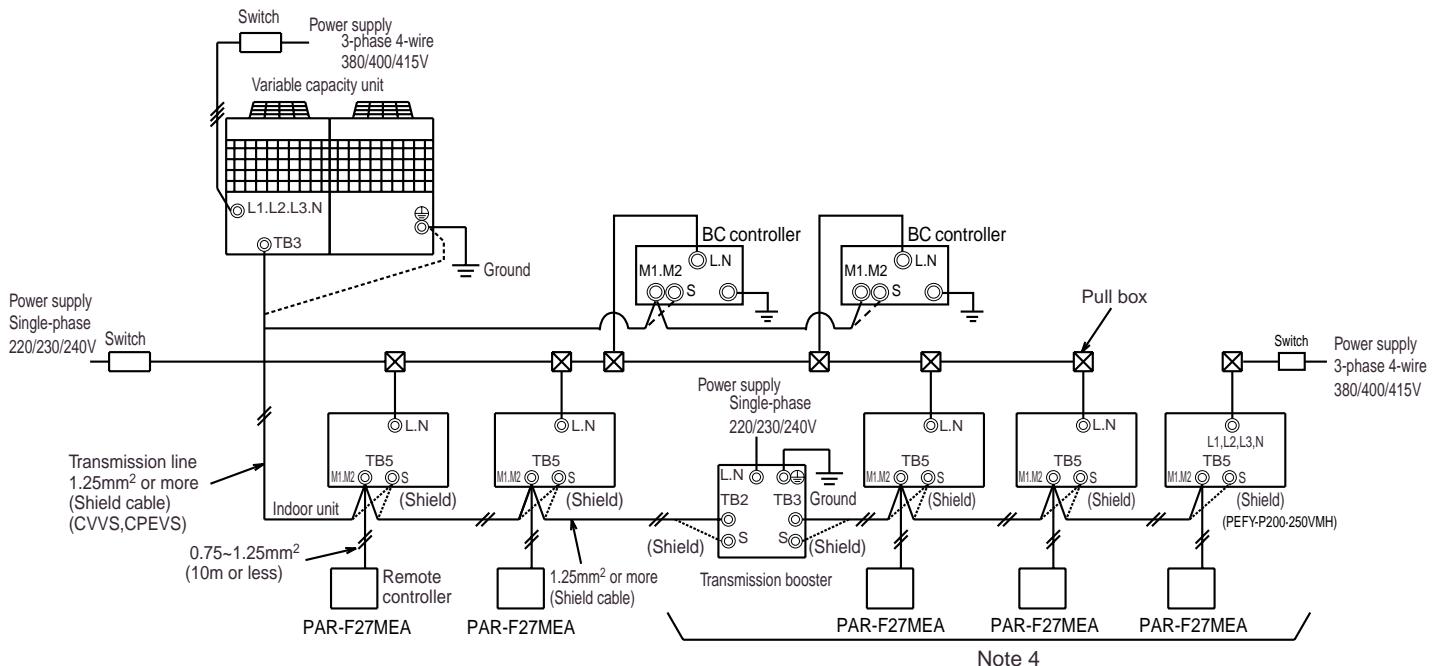


Note 4

## ③ PUHY-(P)600-650-700-750



## ④ PURY-P400-500



**Note 1.** The transmission line is non-polarity two wires.

**2.** Symbol means a screw terminal.

**3.** Earth of transmission line shall be grounded on the earth terminal of only variable capacity unit.

And shield of transmission line between each indoor units shall be connected to shield terminal (S) of each indoor units or connected themselves.

And shield of transmission line for constant capacity unit shall be connected to shield terminal (S) of constant capacity unit.

**4.** It is necessary to connect the transmission booster when indoor units over than 16 units are connected.

In addition, be sure to connect the shild cable at the terminal (S) in the transmission booster.

Specific wiring requirements should adhere to the wiring regulations of the region.

Model		Minimum Wire Thickness (mm <sup>2</sup> )			Switch(A)		Breaker for Wiring (NFB)	Breaker for Current Leakage
		Main Cable	Branch	Ground	Capacity	Fuse		
Outdoor unit	200	4.0	-	4.0	32	32	40A	30A 100mA 0.1sec. or less
	250	6.0	-	6.0	40	40	40A	40A 100mA 0.1sec. or less
	315	10.0	-	10.0	50	50	50A	50A 100mA 0.1sec. or less
	400	10.0	-	10.0	63	63	75A	75A 100mA 0.1sec. or less
	500	16.0	-	16.0				
	600	400	10.0	-	10.0	63	75A	75A 100mA 0.1sec. or less
	600	200	4.0	-	4.0	32	40A	30A 100mA 0.1sec. or less
	650	400	10.0	-	10.0	63	75A	75A 100mA 0.1sec. or less
	650	250	6.0	-	6.0	40	40A	40A 100mA 0.1sec. or less
	700	500	16.0	-	16.0	63	75A	75A 100mA 0.1sec. or less
	700	200	4.0	-	4.0	32	40A	30A 100mA 0.1sec. or less
	750	500	16.0	-	16.0	63	75A	75A 100mA 0.1sec. or less
	750	250	6.0	-	6.0	40	40A	40A 100mA 0.1sec. or less

Model		Wire Thickness (mm <sup>2</sup> )			Switch(A)		Breaker for Wiring	Breaker for Current Leakage
		Main Cable	Branch	Ground	Capacity	Fuse		
Total operating current of the indoor units <sup>※1</sup>	16A or less	1.5	1.5	1.5	16	16	20A	20A 30mA 0.1sec. or less
	25A or less	2.5	2.5	2.5	25	25	30A	30A 30mA 0.1sec. or less
	32A or less	4.0	4.0	4.0	32	32	40A	40A 30mA 0.1sec. or less

※1 The total operating current of the indoor units may fluctuate depending on the operating status of the indoor units. In order to prevent malfunctions, use a circuit breaker with a current of about 20% more than that listed in the specifications.

## (2) Types of control cables

		Transmission cables	M-NET Remote controller cables	MA Remote controller cables
Type of cable	Shielding wire (2-core) CVVS or CPEVS	Sheathed 2-core cable (unshielded) CVV		
Cable diameter	More than 1.25mm <sup>2</sup>	0.5 ~ 1.25mm <sup>2</sup> (recommended over 0.75mm <sup>2</sup> ) (0.75 ~ 1.25mm <sup>2</sup> ) <sup>※1</sup>		0.3 ~ 1.25mm <sup>2</sup> (recommended over 0.75mm <sup>2</sup> ) (0.75 ~ 1.25mm <sup>2</sup> ) <sup>※1</sup>
Remarks	—	When 10m is exceeded, use cables with the same specification as transmission cables.		Max length : 200m

※1 Connected with simple remote controller.

CVVS : PVC insulated PVC jacketed shielded control cable

CPEVS : PE insulated PVC jacketed shielded communication cable

CVV : PV insulated PVC sheathed control cable

## 1-4 System configuration restrictions

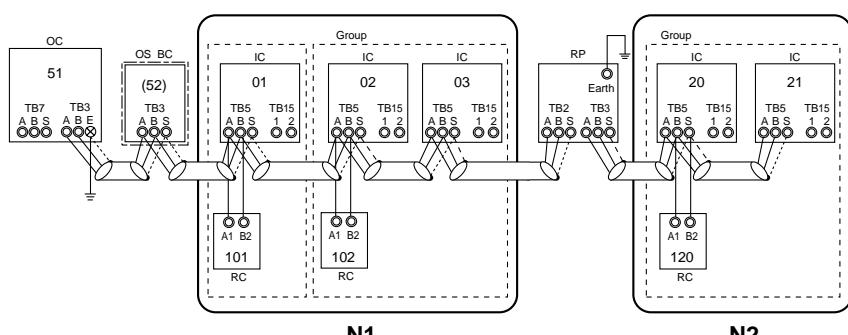
Item	Set-up	Automatic Address Set-up (Note 4)	Manual Address Set-up	Set-up With Connection to System Controller (Note 5)				
				Connection to Central Control Transmission Line (TB7)		Connection to Indoor/outdoor Transmission Line (TB3) (Note 10)		
				SC1	SC2	SC3		
Number of connected remote controller.				2 unit per group				
Number of indoor units connected per group.				1 to 16 units				
Number of OA processing units (GUF, LOSSNAY) connected to indoor unit.				1 unit per indoor unit				
Number of indoor units connected to OA processing unit (GUF, LOSSNAY).		All indoor units in same refrigerant system		1 to 16 units per OA processing unit (GUF, LOSSNAY) (Note 7)				
Number of connected OA processing units (GUF, LOSSNAY) in same refrigerant system (Note 1).		1 unit		-	-	-		
Number of system controllers connected when indoor/outdoor transmission line (TB3) connected.		-	-	-	-	-	Max. 3 units in same refrigerant system	
Total number of units connected in refrigerant system <MA Remote Controller> (Note 2).	All indoor units under Type 200.			Max. 32 units (excluding Lossnay)		Max. 30 units Above numbers exclusive of LOSSNAY (Note 11, 12)	Max. 28 units	Max. 26 units
	Type 200 or higher			Max. 26 units (Note 8)		Max. 24 units	Max. 22 units	Max. 20 units (Note 11,12)
Total number of units connected in same refrigerant system <M-NET Remote Controller> (Note 2, 3).	All indoor units under Type 200.			Max. 20 units (40 units) (Note 8,9)		Max. 18 units (38 units)	Max. 16 units (36 units)	Max. 14 units (34 units) (Note 9,11,12)
	Type 200 or higher			Max. 16 units (32 units) (Note 8,9)		Max. 14 units (30 units)	Max. 12 units (28 units)	Max. 10 units (26 units) (Note 9,11,12)

- Note 1 'Automatic Address Set-up' is not possible when more than 16 indoor units and OA processing units (GUF, LOSSNAY) are linked within the same refrigerant system, or when two or more OA processing units (GUF, LOSSNAY) are connected within the same refrigerant system.  
 \* Select 'Automatic Address Set-up' or 'Set-up With Connection to System Controller'.
- Note 2 Total number of units connected is the number of indoor units and OA processing units (GUF, LOSSNAY).
- Note 3 When MA and M-NET remote controllers are used together the restrictions on the number of units is in accordance with <With M-NET Remote Controller Connection Wiring>.
- Note 4 'Automatic Address Set-up' is not possible when Start/Stop input is used with group operation.
- Note 5 When MA and M-NET remote controllers are used together the system controller is connected and 'Set-up With Connection to System Controller' is used.
- Note 6 All indoor units within the refrigerant system are automatically linked and registered when OA processing units (GUF, LOSSNAY) are connected by 'Automatic Address Set-up'.
- Note 7 Linking and registration of indoor units and OA processing units (GUF, LOSSNAY) is necessary by manual which with other than 'Automatic Address Set-up'.
- Note 8 A transmission booster is required when the maximum number of units is exceeded.
- Note 9 Figures in brackets are the total number of indoor units and M-NET remote controllers.
- Note 10 The system controllers can be connected to indoor/outdoor transmission lines (TB3) are the MJ-103MTA, PAC-YT41AHRA, PAC-SF441SCA, and PAC-SC30GRA.  
 Note that the system controller cannot be connected to the indoor/outdoor transmission line (TB3) of the PUMY outdoor unit.  
**Operation from the system controller will be impossible if the outdoor unit power supply is shut off while the system controller is connected to the indoor/outdoor transmission line (TB3) .**
- Note 11 The number of indoor units which may be connected is reduced two for each system controller.  
 A maximum of three system controllers can be connected in same refrigerant system.
- Note 12 A transmission booster must not be used when the system controller is connected to the indoor/outdoor transmission line (TB3).  
 Connect the system controller to the 'Central Control Transmission Line' (TB7) when the maximum number of units is exceeded.

### Connecting the Transmission Booster

A transmission booster is required when the total number of units within the same refrigerant system exceeds the maximum number of units. Ensure that the number of indoor units (N1) between the outdoor unit and the transmission booster, and the number of indoor units (N2) after the transmission booster, are within the restrictions in the following table.

Type of remote controller	MA remote controller (Note 1)	M-NET remote controller
Number of indoor units (All indoor units under Type 200.)	32	20 (40)
Number of indoor units (Type 200 or higher)	26	16 (32)



Figures in brackets are the total number of indoor units and M-NET remote controllers.

Note 1 'MA remote controller' refers to the MA remote controller and wireless remote controller.

OS : Exists only with Super Y system.  
 BC : Exists only with R2/WR2 system.  
 IC : Indoor unit

RC : M-NET remote controller  
 OC : Outdoor unit  
 RP : Transmission booster

## 1-5 Address setting

### (1) Switch operation

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

#### ① Unit address No., group No. and branch No.

The unit address No. is determined by the address setting switch of the outdoor unit, indoor unit and remote controller.

Set the indoor unit branch No. switch to branch No. of the BC controller connecting the piping and that indoor unit.

When using two or more branches, set the lowest branch No.

The indoor unit capacity that can be connected per branch is P80 or less and the maximum number of connectable units is 3.

#### ② Caution for switch operations

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

#### ③ MA remote controller

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

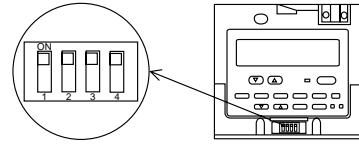
#### Setting the dip switches

The dip switches are at the bottom of the remote controller.

Remote controller Main/Sub and other function settings are performed using these switches.

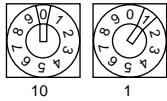
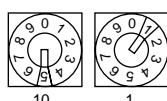
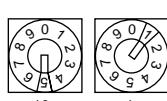
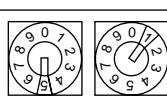
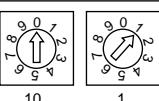
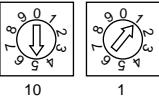
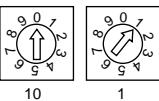
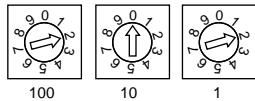
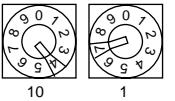
Ordinarily, only change the Main/Sub setting of SW1. (The factory settings are all "ON").

Rotary switch	
Branch No. setting	Unit address No. setting



SW No	SW contents Main	ON	OFF	Comment
1	Remote controller Main/Sub setting	Main	Sub	Set one of the two remote controllers at one group to "Main".
2	When remote controller power turned on	Normally on	Timer mode on	When you want to return to the timer mode when the power is restored after a power failure when a Program timer is connected, select "Timer mode".
3	Cooling/heating display in AUTO mode	Yes	No	When you do not want to display "Cooling" and "Heating" in the Auto mode, set to "No".
4	Intake temperature display	Yes	No	When you do not want to display the intake temperature, set to "No".

## (2) Rule of address setting

Unit	Address setting	Example	Note	
Indoor unit	01 ~ 50		Use the most recent address within the same group of indoor units. Make the indoor units address connected to the BC controller (Slave) larger than the indoor units address connected to the BC controller (Master).	
Outdoor unit Heat source unit	51 ~ 99, 100		The smallest address of indoor unit in same refrigerant system + 50 ※ The address automatically becomes "100" if it is set as "01~ 50"	
BC controller (Master)	51 ~ 99, 100		The address of outdoor unit + 1 ※ Please re-set another address between 01 and 50 when two addresses overlap. ※ The address automatically becomes "100" if it is set as "01~ 50"	
BC controller (Slave)	51 ~ 99, 100		Lowest address within the indoor units connected to the BC controller (Slave) plus 50.	
Remote controller	M-NET Remote controller (Main) PAC-F27MEA	101 ~ 150 1 Fixed		The smallest address of indoor unit in the group + 100 ※ The place of "100" is fixed to "1"
	M-NET Remote controller (Sub) PAC-F27MEA	151 ~ 199, 200 1 Fixed		The address of main remote controller + 50 ※ The address automatically becomes "200" if it is set as "00"
	MA Remote controller	-	-	
	Group remote controller	201 ~ 250 2 Fixed		The smallest group No. to be managed + 200
	Wireless remote controller	-	-	
	Programme timer	-	-	
Centralized controller	MJ-103	000, 201 ~ 250		
	MJ-180	-	-	
	MJ-310E	-	-	
	LMAP02-E	201 ~ 250 2 Fixed		
	Gate way	-	-	

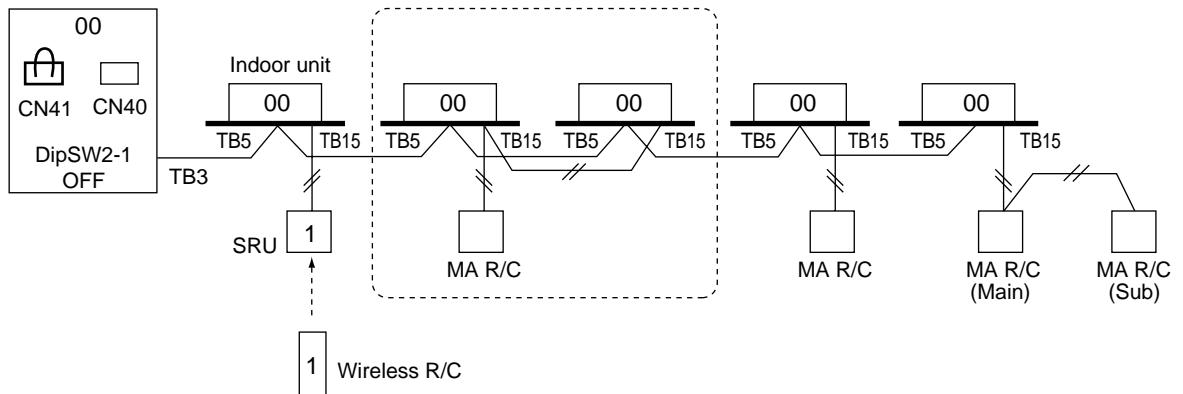
**(3) System example**

Setting of the switches when the units are shipped from the factory is as follows.

- Outdoor unit : Address : 00  
On CN41  
SW2-1: OFF
- Indoor unit : Address : 00
- Remote controller : Address : 100
- LMAP : Address : 247  
On CN41  
SW 1-2 : OFF

**Example 1**

Outdoor unit



MA R/C : PAR-20MAA

SRU(Signal receiving unit) : PAR-FA31MA

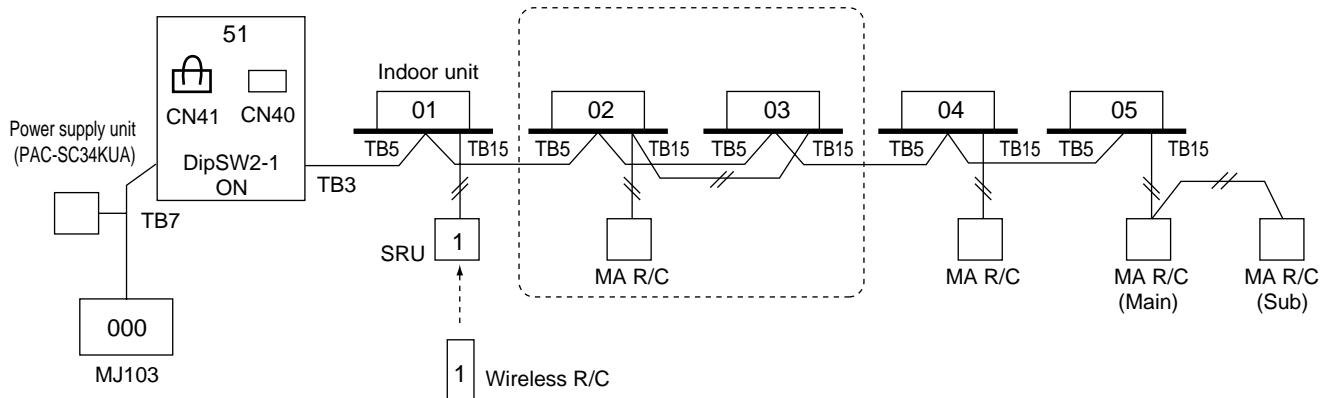
Wireless R/C : PAR-FL31MA

**NOTE**

- It is not necessary to set all of address.

**Example 2**

Outdoor unit



MA R/C : PAR-20MAA

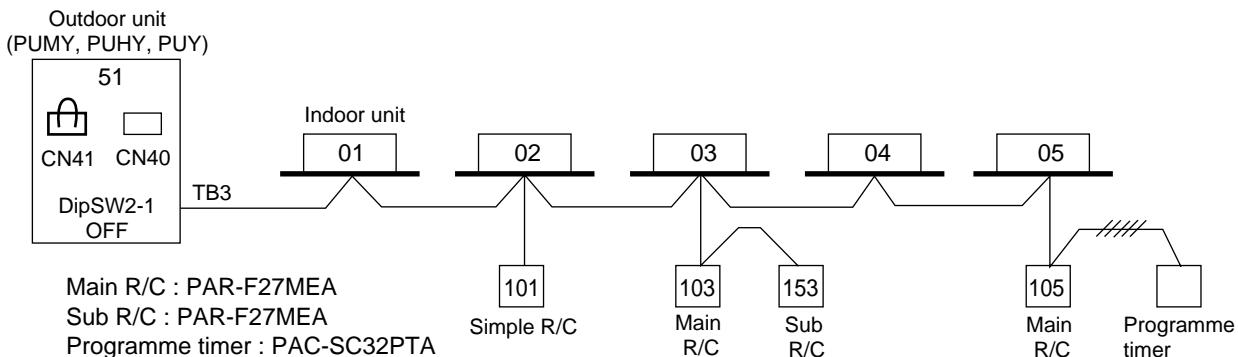
SRU(Signal receiving unit) : PAR-FA31MA

Wireless R/C : PAR-FL31MA

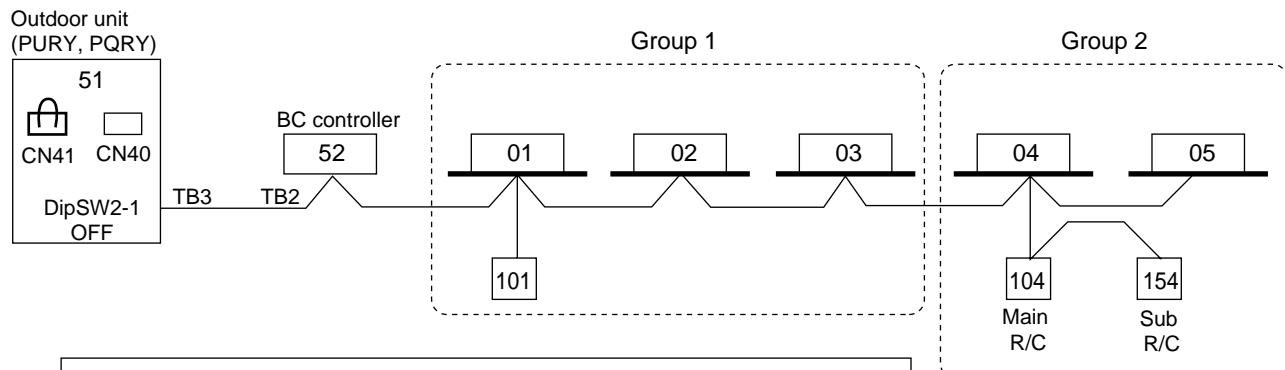
Programme timer : PAC-SC32PTA

**NOTE**

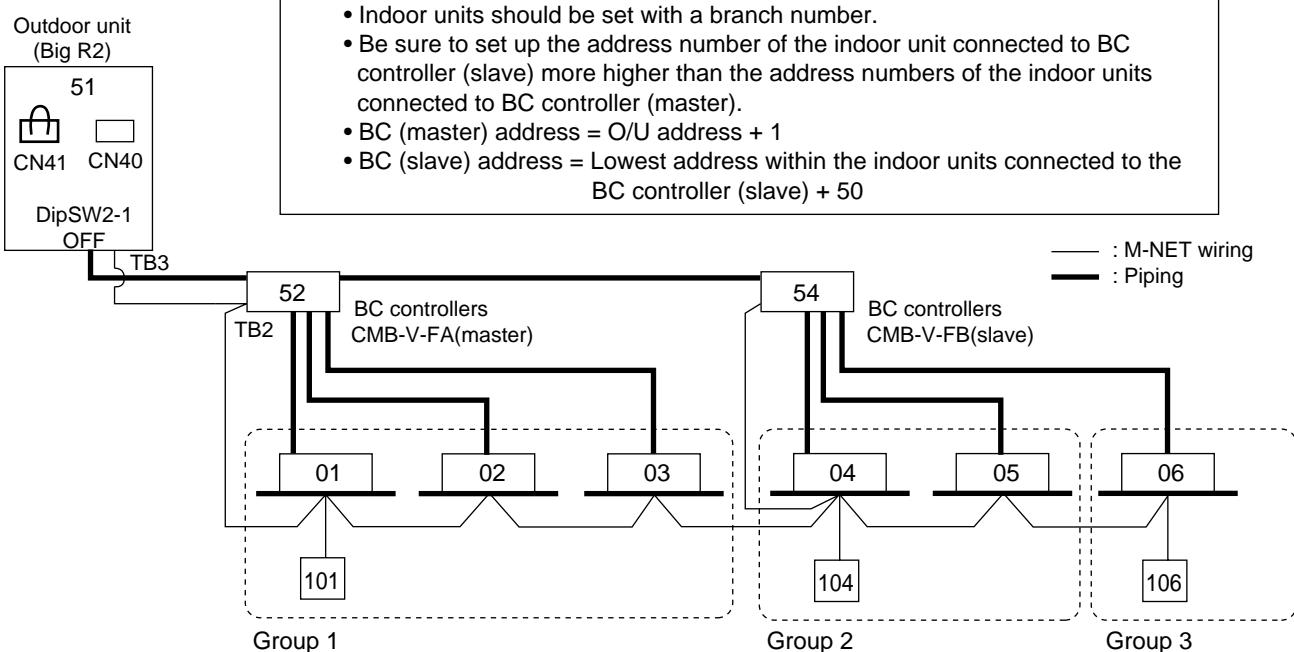
- It is necessary to set addresses indoor unit and outdoor unit with MJ103.

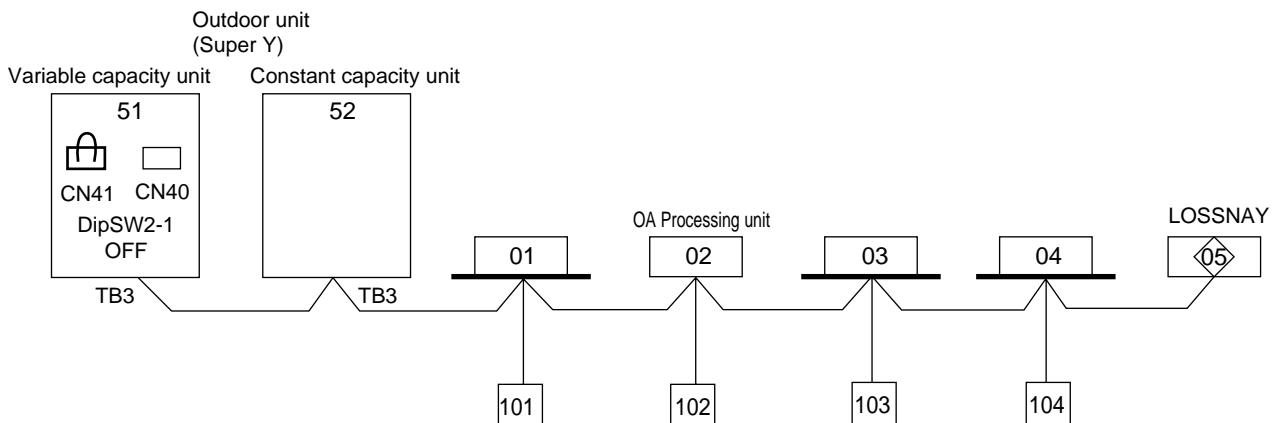
**Example 3****NOTE**

- It is necessary to install the other polarity wires when the wireless R/C is used.

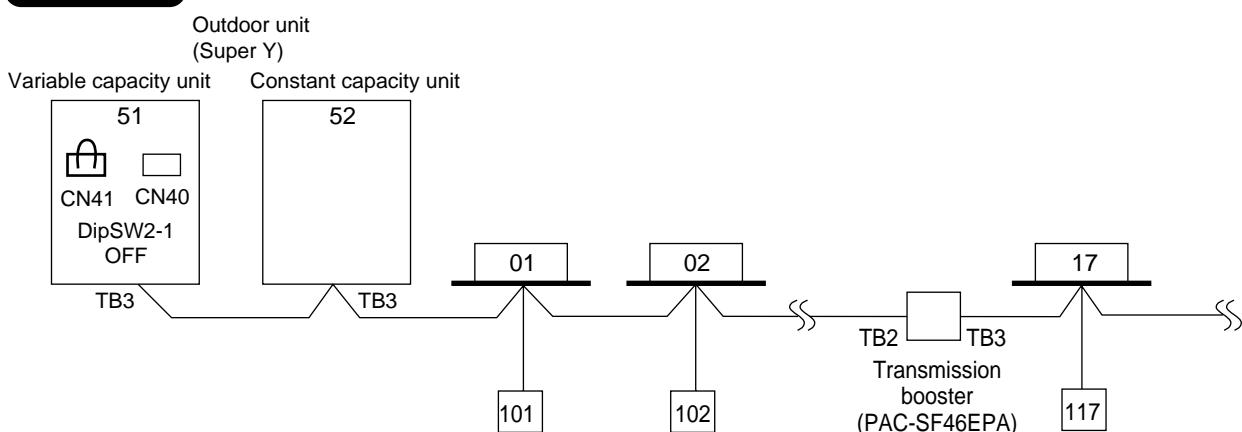
**Example 4****NOTE**

- BC address = O/U address + 1
- R/C address = the smallest address of indoor unit + 100 in same group
- Sub R/C address = Main R/C address + 50
- Indoor units should be set with a branch number.

**Example 5**

**Example 6****NOTE**

- Constant capacity unit address = Variable capacity unit address + 1

**Example 7****Notes**

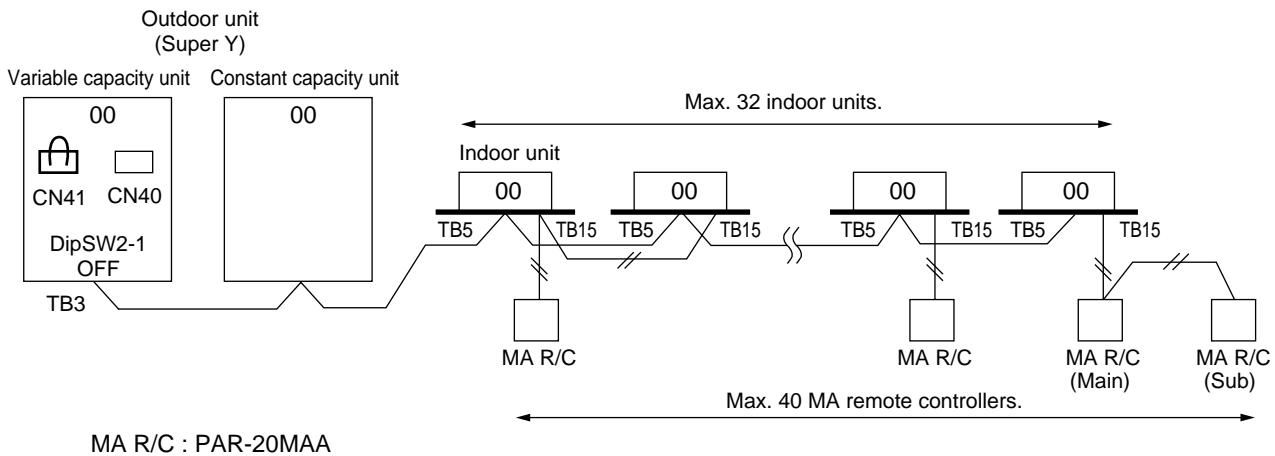
The transmission booster (RP) is required when the number of connected indoor unit models in cooling system exceeds the number of models specified in the chart below.

\* The maximum number of units that can be controlled is determined by the indoor unit model, M-NET remote controller (PAR-F27MEA) and their capabilities.

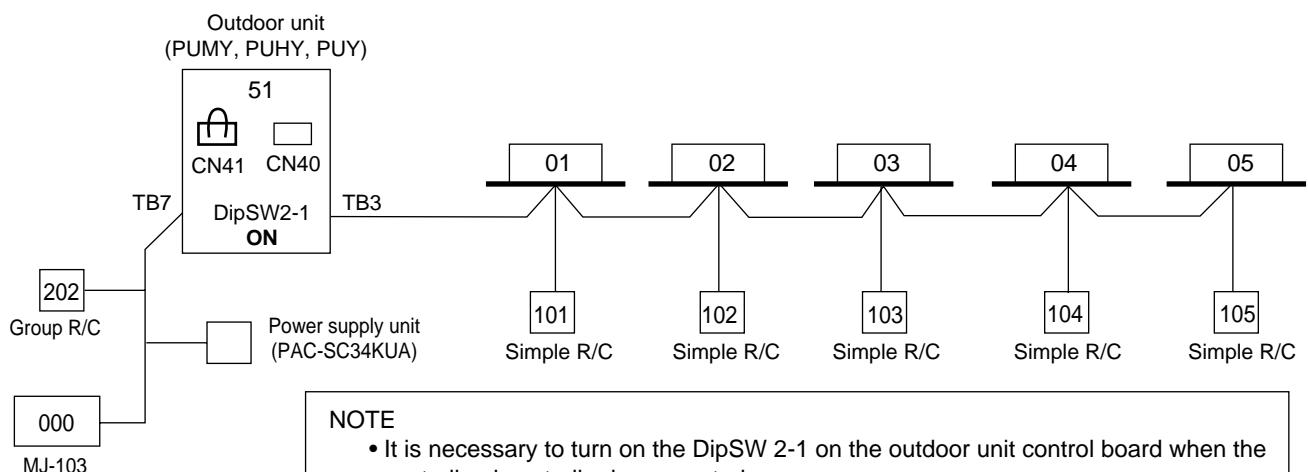
	Number of BC controllers		
	Zero	One	Two
(*1) Capability of the connected indoor units	F27MEA		
Under 200	20(40)	19(38)	18(36)
Over 200	16(32)	15(30)	14(28)

The number of indoor units and the total number of remote controllers is displayed within the parenthesis ( ).

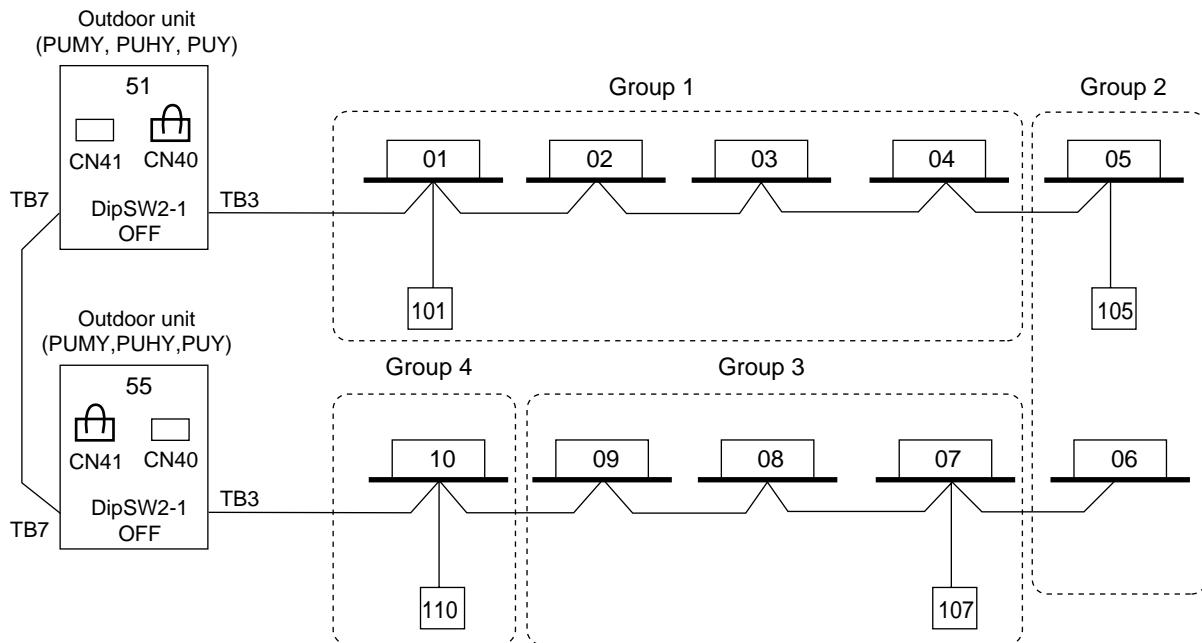
\*1 If even one unit that is higher than 200 exists in the cooling system, the maximum capacity will be over 200.

**Example 8****NOTE**

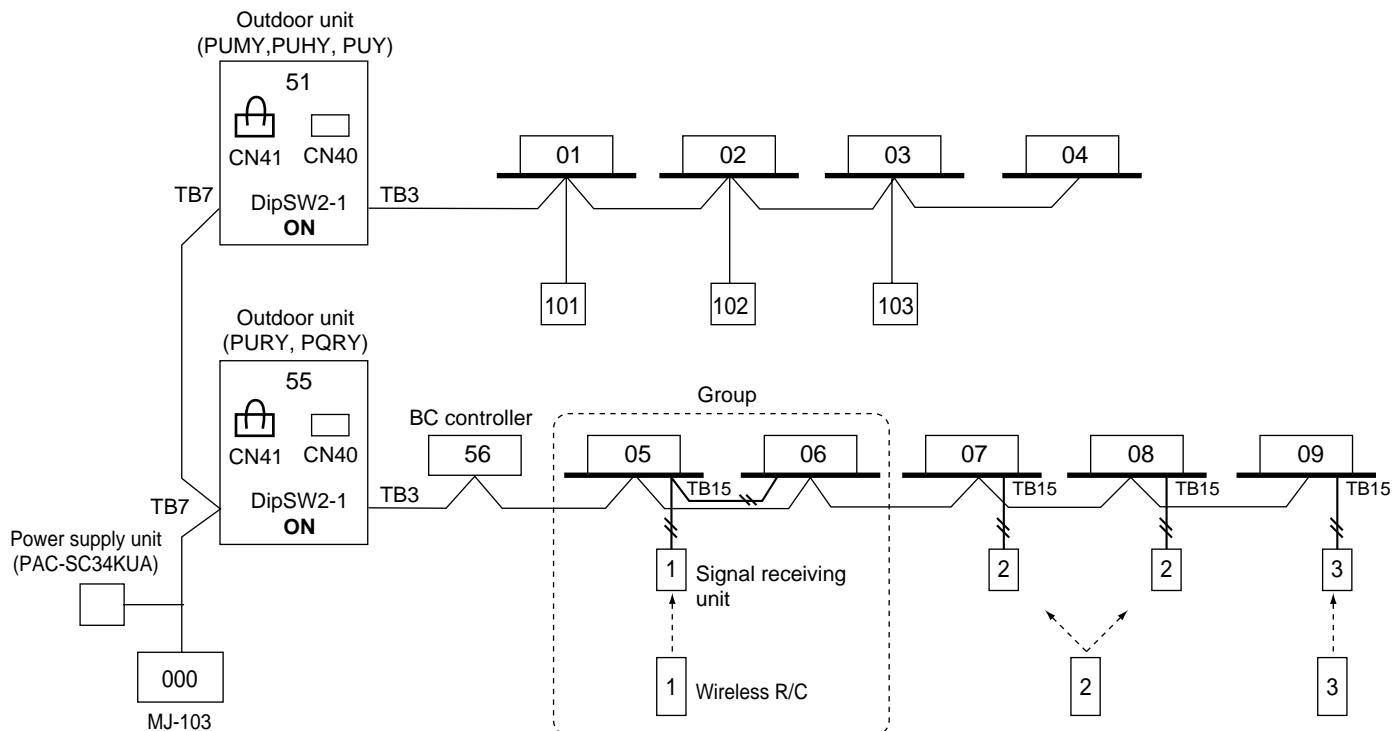
- It is not necessary to install the transmission booster on the MA remote controller system.

**Example 9****NOTE**

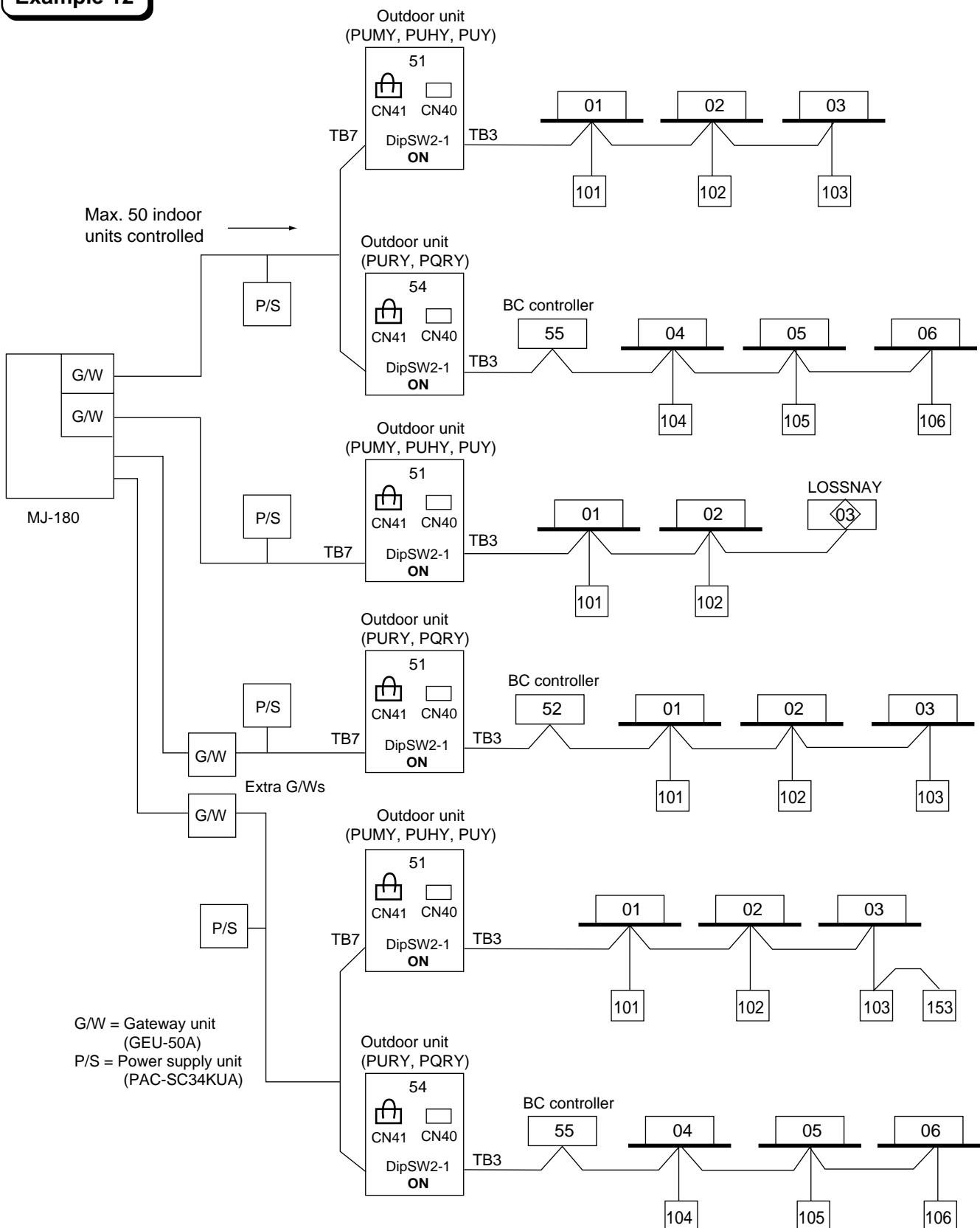
- It is necessary to turn on the DipSW 2-1 on the outdoor unit control board when the centralized controller is connected.
- Be sure to connect other controllers (Ex. MJ-103) when the simple R/C is used because the running mode can not be changed by simple R/C.

**Example 10****NOTE**

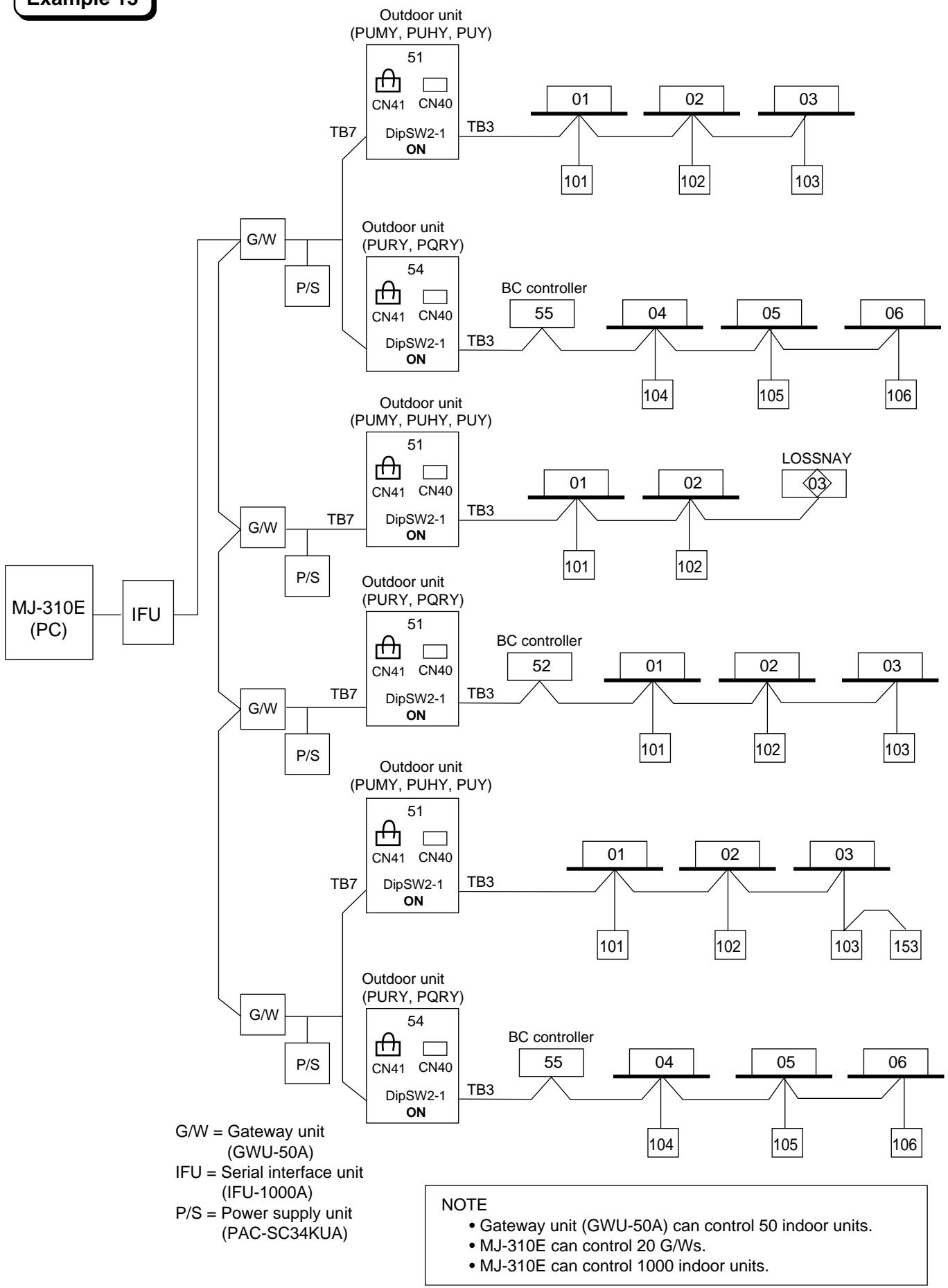
- It is necessary to change the connector to CN40 on the outdoor unit control board (only one outdoor unit) when the group is set between other refrigerant systems.
- It is necessary to set on the remote controller by manual when group sets on the different refrigerant system. Please refer to remote controller installation manual.

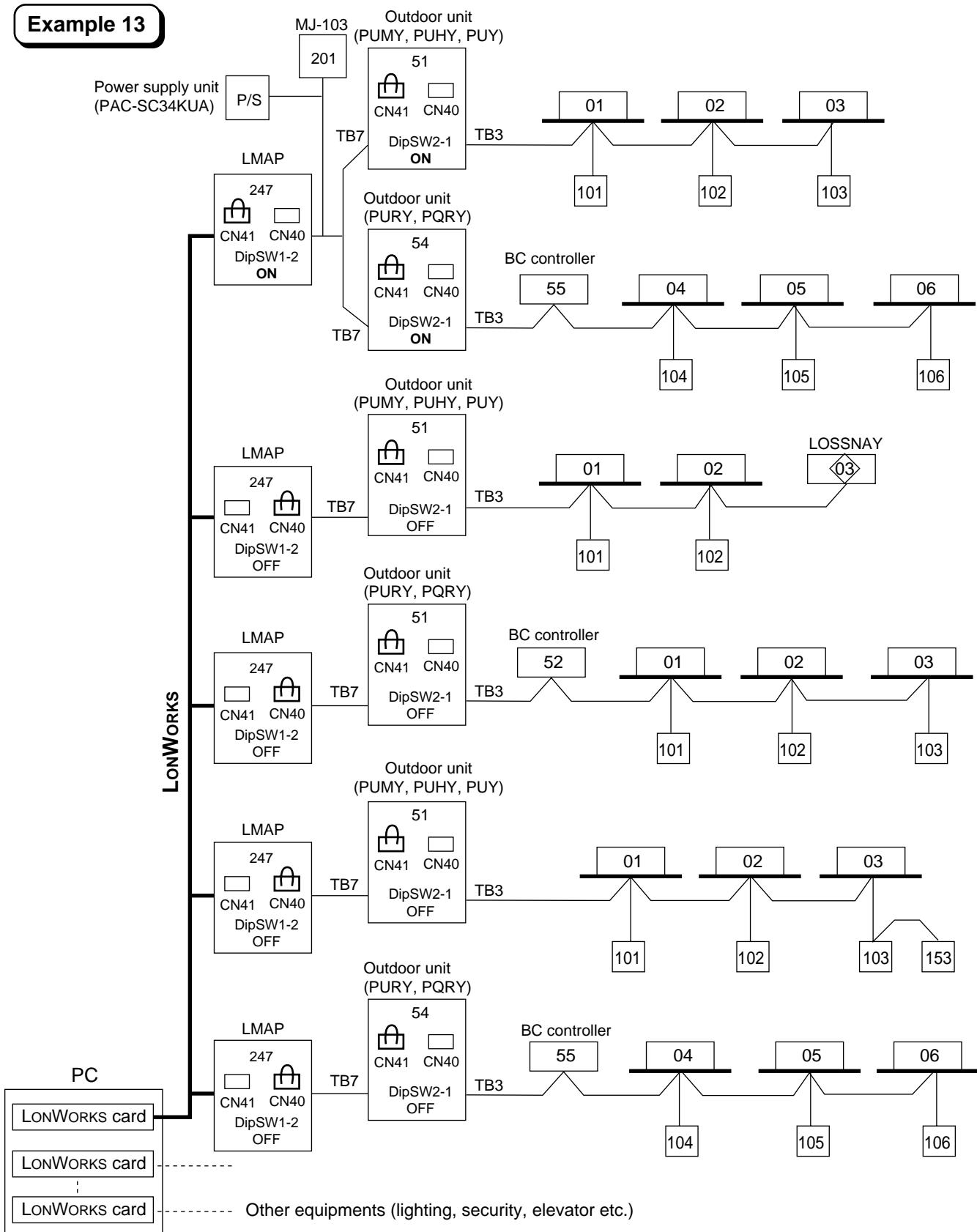
**Example 11**

## Example 12



## Example 13



**Example 13****NOTE**

- LMAP (LMAP02-E) can control 50 indoor units.
- LonWORKS card can control 5 LMAPs.
- It is necessary to turn on the DipSW1-2 on the LMAP control board and the DipSW2-1 on the outdoor unit control board with centralized controllers (Power supply unit).
- It is necessary to change the connector to CN40 on the LMAP control board without centralized controllers (Power supply unit).

## 2. Refrigerant & Piping

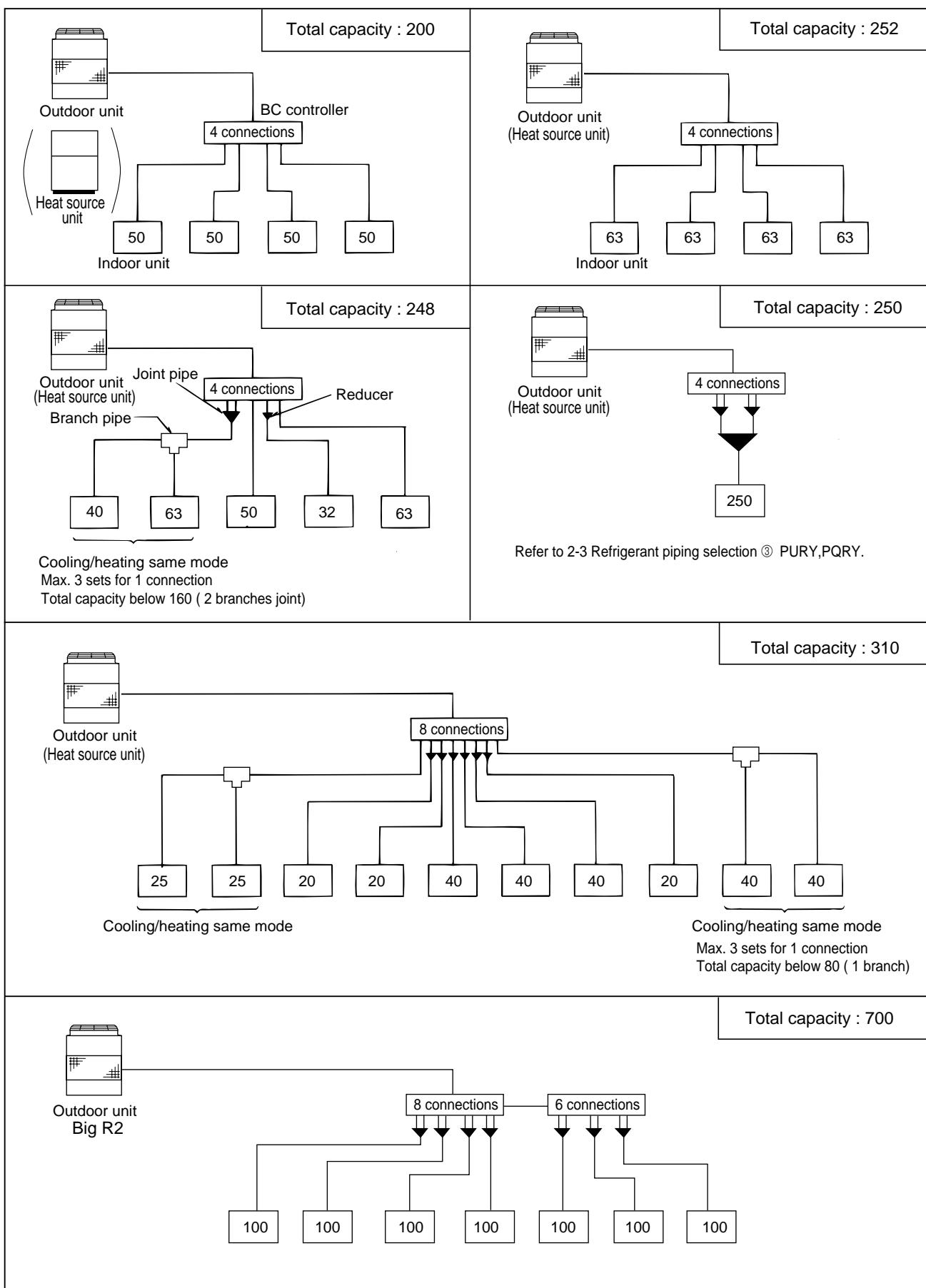
### 2-1 System examples

Using line branches, header branches and combinations of these branches, a "free piping system" involving minimal restrictions can be configured to give a free hand in indoor and outdoor unit refrigerant piping design.

#### ① PUMY, PUHY, PUY

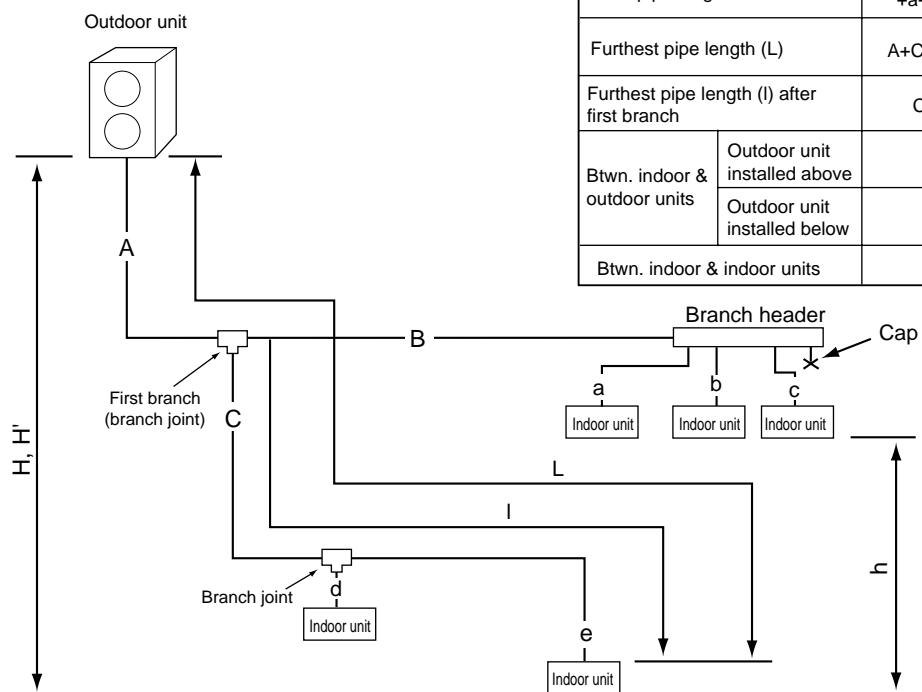
Multi-distribution system (PUMY only)	<p>Outdoor unit</p> <p>CMY-S65</p> <p>Indoor unit</p> <p>Remote controller</p> <p>Note: Cannot redistribute the pipe.</p>
Line branching system	<p>Outdoor unit</p> <p>Branch joint</p> <p>Indoor unit</p> <p>Remote controller</p>
Header branching system	<p>Outdoor unit</p> <p>Note: No further branching in the pipes is possible after the header branch.</p> <p>Branch header</p> <p>Indoor unit</p> <p>Remote controller</p>
Combined line / header branching system	<p>Outdoor unit</p> <p>Branch joint</p> <p>Branch header</p> <p>Indoor unit</p> <p>Remote controller</p> <p>Note: No further branching in the pipes is possible after the header branch.</p>

## ② PURY, PQRY

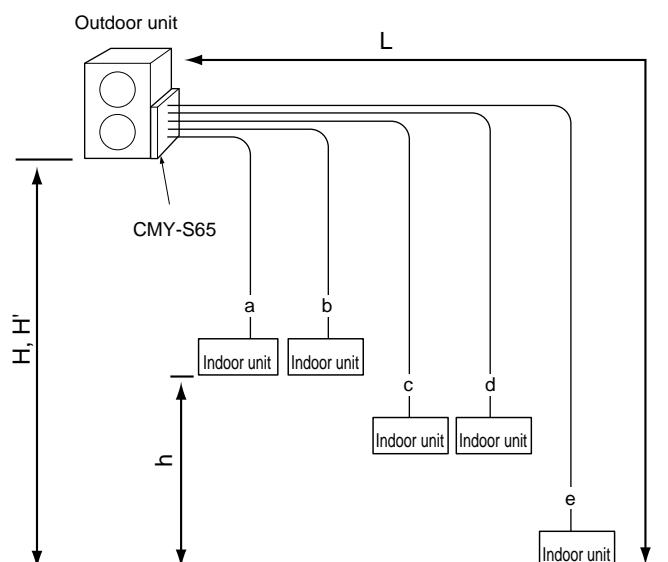


## 2-2 Restrictions on refrigerant piping lengths

① PUMY

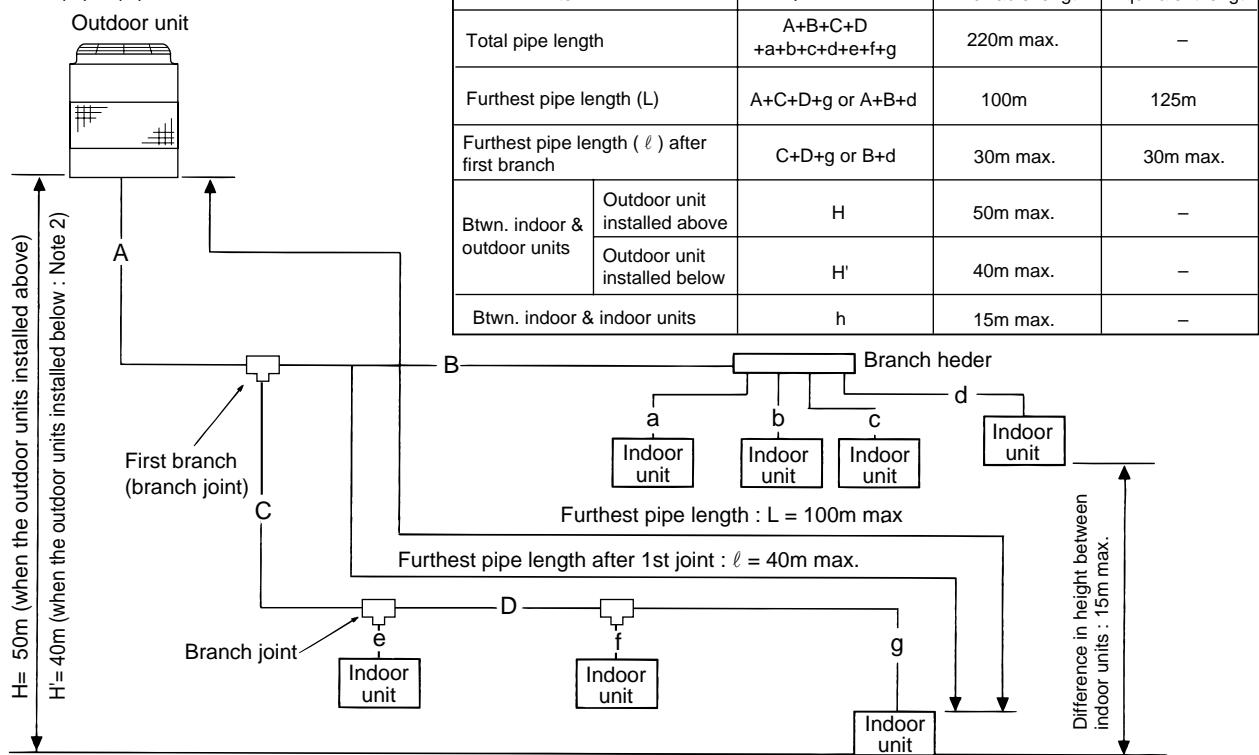


Item	Pipe section	Allowable length
Total pipe length	A+B+C +a+b+c+d+e	100m max.
Furthest pipe length (L)	A+C+e or A+B+c	70m max.
Furthest pipe length (l) after first branch	C+e or B+c	30m max.
Btwn. indoor & outdoor units	Outdoor unit installed above	H
	Outdoor unit installed below	H'
Btwn. indoor & indoor units	h	12m max.



Item	Pipe section	Allowable length
Total pipe length	a+b+c+d+e	100m max.
Furthest pipe length (L)	e	30m max.
Btwn. indoor & outdoor units	Outdoor unit installed above	H
	Outdoor unit installed below	H'
Btwn. indoor & indoor units	h	12m max.

## ② PU(H)Y-(P)200-250-315



Notes: 1. No further branching in the pipes is possible after the header branch.

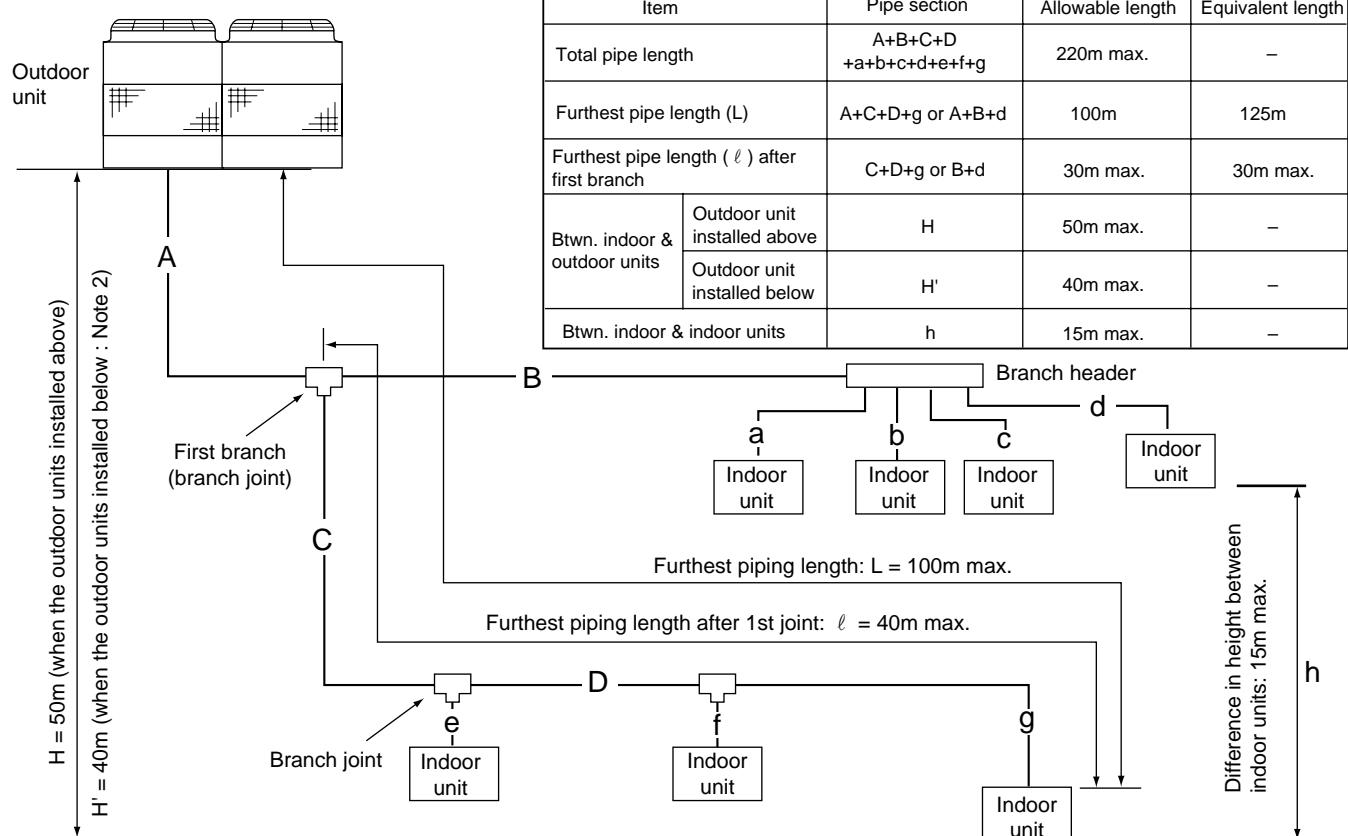
2. When cooling operation is performed when the outdoor temp. is 10°C or lower (PUHY-P200-250YMF-C : 0°C or lower) :  $H' = 4\text{m}$  or less.

model 200 : 0.47

3. Equivalent pipe length (m) : Actual pipe length + model 250 : 0.50 × number of bent.

model 315 : 0.70

## ③ PUHY-(P)400-500

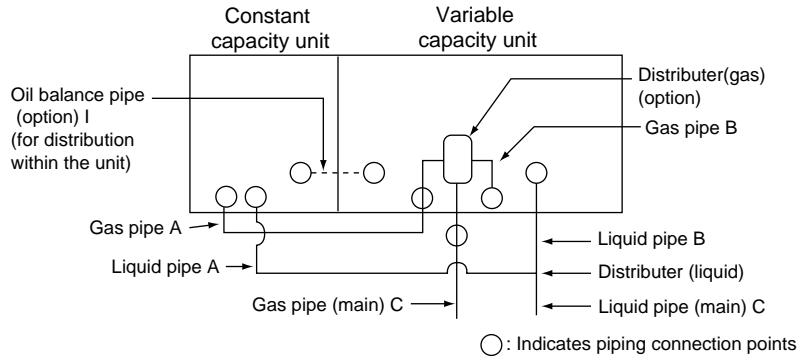
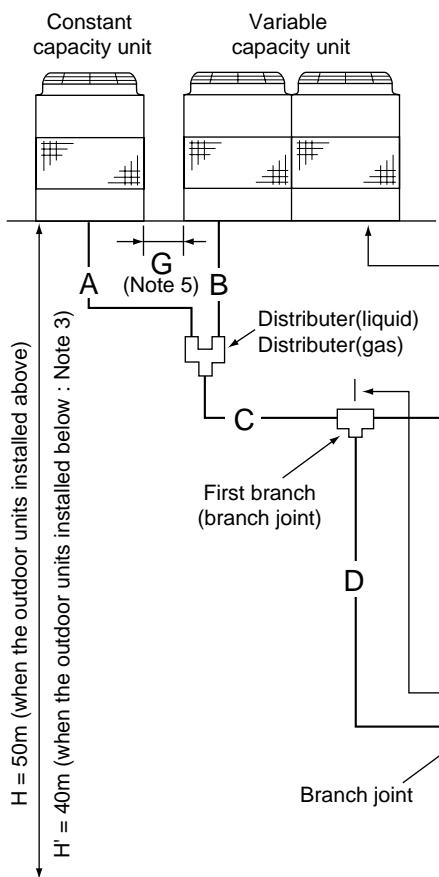


Notes: 1. No further branching in the pipes is possible after the header branch.

2. When cooling operation is performed when the outdoor temp. is 10°C or lower :  $H' = 4\text{m}$  or less.

3. Equivalent pipe length (m) : Actual pipe length + model 400 : 0.70  
model 500 : 0.80 × number of bent.

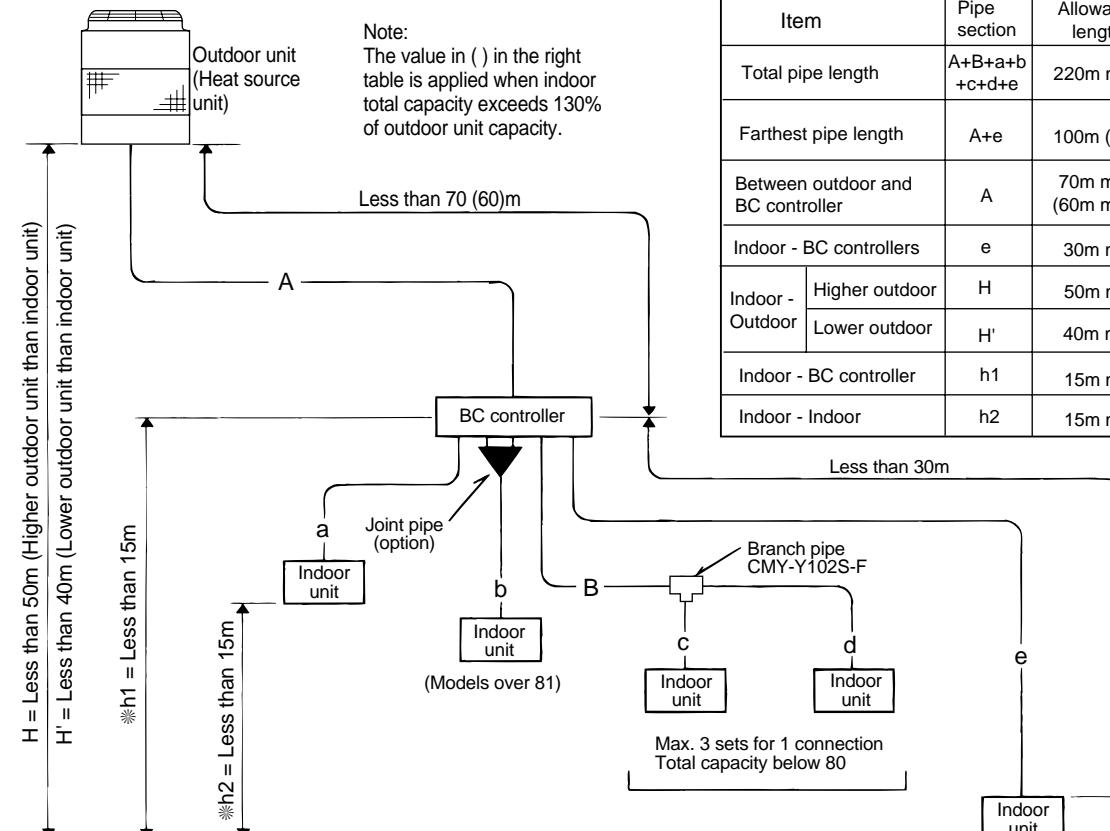
④ PUHY-(P)600-650-700-750



- Notes:**
1. Connect the variable capacity unit and constant capacity unit with CMC-30A in the field.
  2. Mount the constant capacity unit on the left and variable capacity unit on the right.  
(as seen from the front of the unit)
  3. When cooling operation is performed when the outdoor temp. is 10°C or lower :  $H' = 4\text{m}$  or less.
  4. Equivalent pipe length (m) : Actual pipe length +  $\begin{matrix} \text{model 600 : 0.80} \\ \text{model 650 : 0.95} \\ \text{model 700 : 0.95} \\ \text{model 750 : 0.95} \end{matrix} \times \text{number of bent.}$
  5. Set the constant capacity unit and variable capacity unit in accordance with the G dimension given in the figure above. ( $G = 0.01\text{m}$ )
  6. No further branching in the pipes is possible after the header branch.

Item	Pipe section	Allowable length	Equivalent length
Total pipe length	A+B+C+D+E+F +a+b+c+d+e+f	220m max.	-
Furthest pipe length (L)	A(B)+C+D+E+c	100m max	125m
Furthest pipe length ( $\ell$ ) after first branch	D+E+c	40m max.	-
Oil balance pipe	I	The oil balance pipe (CMC-30A : option) must be used. If any other piping is used, the length of the oil balance pipe must be no more than 3m (max. equivalent length 4m), and height from the bottom of the unit must be no more than 0.1m.	-
Btwn. distributor (liquid) & variable capacity unit, constantcapacity unit	A, B (Liquid line)	4m max.	5m
Btwn. distributor (gas) & constantcapacity unit	A (Gas line)	4m max.	5m
Btwn. indoor & outdoor units	Outdoor unit installed above	H	50m max.
	Outdoor unit installed below	H'	40m max.
Btwn. indoor & indoor units	h	15m max.	-
Btwn. variable capacity unit & constant capacity unit	-	Must be installed on same frame, and there must be no high/low difference.	-

## ⑤ PURY-(P)200-250, PQRY

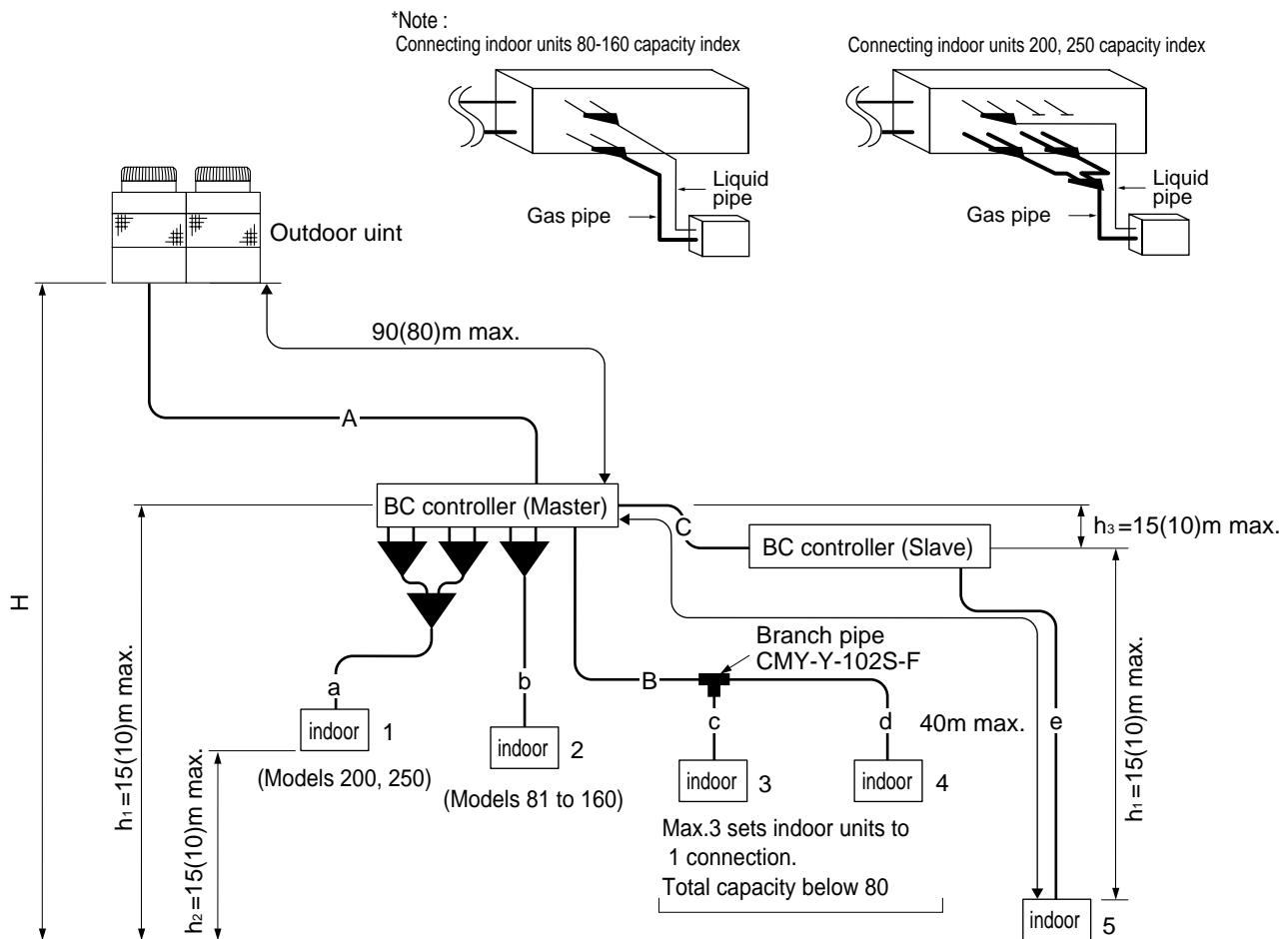


Item	Pipe section	Allowable length	Equivalent length
Total pipe length	A+B+a+b+c+d+e	220m max.	-
Farthest pipe length	A+e	100m (90m)	125m (115m)
Between outdoor and BC controller	A	70m max. (60m max.)	70m max. (60m max.)
Indoor - BC controllers	e	30m max.	30m max.
Indoor - Outdoor	Higher outdoor	50m max.	-
	Lower outdoor	40m max.	-
Indoor - BC controller	h1	15m max.	-
Indoor - Indoor	h2	15m max.	-

Equivalent pipe length (m) : Actual pipe length + model 200 : 0.47  
model 250 : 0.50 X number of bent.

\*When over 125 capacity index of indoor unit is connected, it is less than 10m not only between indoor to indoor but also indoor and BC controller.

## ⑥ PURY-P400-500



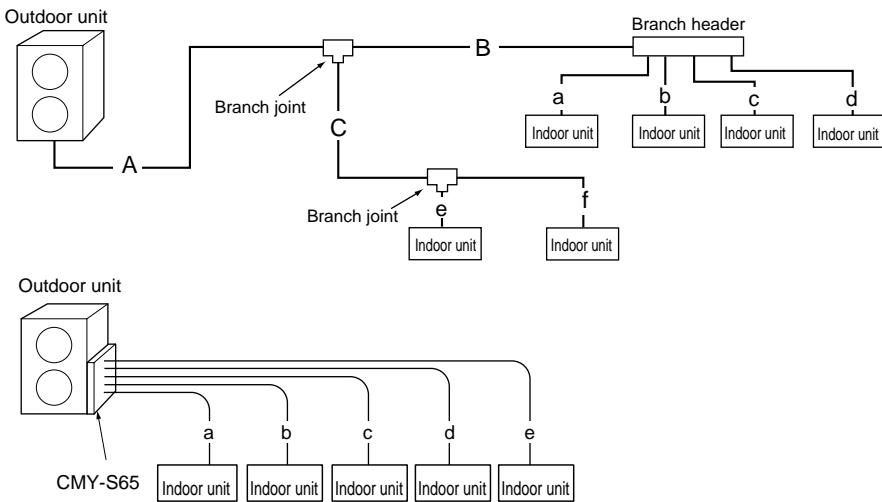
Item		Pipe section	Allowable length
Length	Total pipe length	A+B+C+a+b+c+d+e	250m max. (220m max. when Outdoor to BC (Master) is over 70m)
	Furthest pipe length	A+C+e	100m max. (90m max. when over 130% connection) *
	Outdoor-BC (Master)	A	90m max. (80m max. when over 130% connection)
	BC(Master or Slave)-Indoor	B+d or C+e	40m max.
Height difference	Indoor-Outdoor	H	50m max. (Lower position of outdoor than indoor)
	Indoor-BC (Master, Slave)	$h^1$	15m max. (10m max. on 125, 140 indoor)
	Indoor-Indoor	$h^2$	15m max. (10m max. on 125, 140 indoor)
	BC (Master)-BC (Slave)	$h^3$	15m max. (10m max. on 125, 140 indoor)

\* Equivalent length 125m max. (115m max. when over 130% connection)

Equivalent pipe length : Allowable pipe length + model 400 : 0.7 X number of bent model 500 : 0.8

## 2-3 Refrigerant piping selection

### ① PUMY



Note : • No further branching is possible after the header branch.  
• Model 100 and 125 of indoor unit can not be connected with CMY-Y68 and CMY-S65.

#### (1) Outdoor unit - 1st branch (Pipe A)

Outdoor unit model	Liquid pipe	Gas pipe
PUMY-125	ø 9.52 X 0.8t	ø 19.05 X 1.0t

#### (2) Branch joint / Header

Type of branch pipe	Branch number	Branch pipe model
Joint	-	CMY-Y62-C-E
Header	For 4 branches	CMY-Y64-C
	For 8 branches	CMY-Y68
Multi-distribution pipe	For 5 branches	CMY-S65

#### (3) Branch - Branch (Pipe B,C)

Total capacity of indoor units	Liquid pipe	Gas pipe
~ 80	ø 9.52 X 0.8t	ø 15.88 X 1.0t
81 ~	ø 9.52 X 0.8t	ø 19.05 X 1.0t

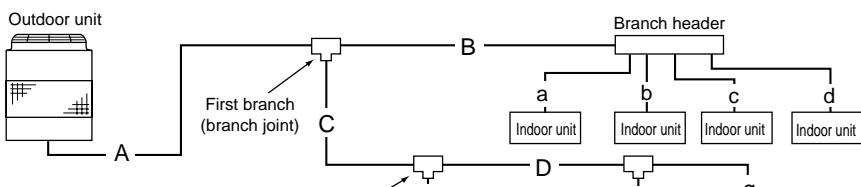
#### (4) Branch - Indoor unit (Pipe a, b, c, d, e, f)

Indoor unit model	Liquid pipe	Gas pipe
20,25,32,40	ø 6.35 X 0.8t	ø 12.7 X 0.8t
50,63,71,80	ø 9.52 X 0.8t	ø 15.88 X 1.0t
100,125	ø 9.52 X 0.8t	ø 19.05 X 1.0t

- Indoor unit capacities  
The capacity of an indoor unit is the same as the number used for its type identification.  
Examples:  
PEFY-P63VM → Capacity = 63

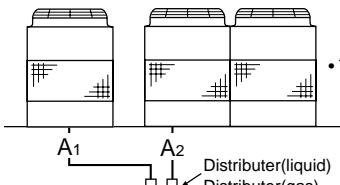
\* The thickness of pipe is Japanese Standard. Please choose the thickness according to your country standard referring to above chart.

② PUHY, PUY

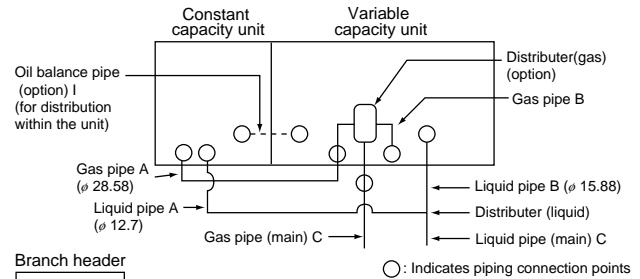
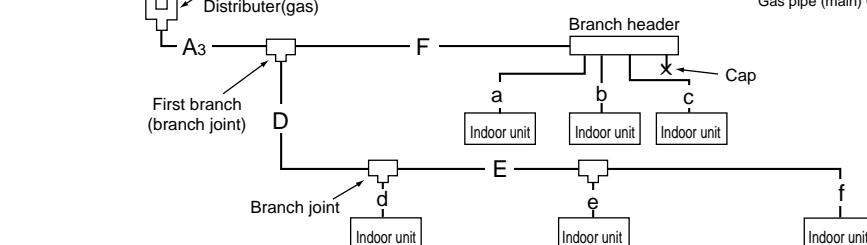


- Super Y

Constant capacity unit  
(PUHN-(P)200-250)      Variable capacity unit  
(PUHY-(P)400-500)



- This unit requires a CMC-30A (option).



○: Indicates piping connection points

Note : • No further branching is possible after the header branch.

- No further branching is possible after the header branch.
  - Arrange the total capacity of the indoor units less than 330, connected on the downstream side by the header branch. It over that, branch pipes on the upstream side using the branch joint.
  - Model 200 and 250 can not be connected with header branch.
  - Model 20 can not be connected with PUHY-(P) 315, 400, 500, 600, 650, 700, 750.
  - Always select CMY-202-F for the first branch of PUHY-(P) 400, 500.
  - Always select CMY-302-F for the first branch of PUHY-(P) 600, 650, 700, 750.

(1) Outdoor unit - 1st branch (Pipe A-A<sub>1</sub>-A<sub>2</sub>-A<sub>3</sub>)

Outdoor unit model	Liquid pipe	Gas pipe
PU(H)Y-(P)200	ø 12.7 X 0.8t	*ø 25.4 X 1.3t
PUHN-(P)200	ø 12.7 X 0.8t	ø 28.58 X 1.45t
PU(H)Y-(P)250	ø 12.7 X 0.8t	ø 28.58 X 1.45t
PUHN-(P)250	ø 12.7 X 0.8t	ø 28.58 X 1.45t
PUHY-315	ø 15.88 X 1.0t	ø 31.75 X 1.6t
PUHY-400YMC	ø 15.88 X 1.0t	ø 31.75 X 1.6t
PUHY-(P)400YMF-B	ø 15.88 X 1.0t	ø 34.93 X 1.75t
PUHY-500YMC	ø 15.88 X 1.0t	ø 38.1 X 1.9t
PUHY-(P)500YMF-B	ø 15.88 X 1.0t	ø 34.93 X 1.75t
PUHY-600YSMC	ø 19.05 X 1.0t	ø 38.1 X 1.9t
PUHY-(P)600YSMF-B	ø 19.05 X 1.0t	ø 34.93 X 1.75t
PUHY-(P)650	ø 19.05 X 1.0t	ø 41.28 X 2.1t
PUHY-(P)700	ø 19.05 X 1.0t	ø 41.28 X 2.1t
PUHY-(P)750	ø 19.05 X 1.0t	ø 41.28 X 2.1t

## (2) Branch joint / Header

(2) Branch joint / header		
Type of branch pipe	Total capacity of indoor units	Branch pipe model
Joint	~ 160	CMY-Y102S-F
	161 ~ 330	CMY-Y102L-F
	331 ~ 630	CMY-Y202-F
	The 1st branch of PUHY-(P)315, 400, 500, 600	
	631 or above	CMY-Y302-F
	The 1st branch of PUHY-(P)650, 700, 750	
Header	PUHY-(P)600, 650, 700, 750	CMC-30A
	For 4 branches	CMY-Y104-F
	For 7 branches	CMY-Y107-F
	For 10 branches	CMY-Y1010-F

\* The pipe of 28.58mm can be used for the gas p

Total capacity of indoor units	Liquid pipe	Gas pipe
~ 80	$\phi 9.52 \times 0.8t$	$\phi 15.88 \times 1.0t$
81 ~ 160	$\phi 12.7 \times 0.8t$	$\phi 19.05 \times 1.0t$
161 ~ 330	$\phi 12.7 \times 0.8t$	$**\phi 25.4 \times 1.3t$
331 ~ 480	$\phi 15.88 \times 1.0t$	$\phi 31.75 \times 1.6t$ or $\phi 34.93 \times 1.75t$
481 ~ 630	$\phi 15.88 \times 1.0t$	$\phi 38.1 \times 1.9t$ or $\phi 34.93 \times 1.75t$
631 ~	$\phi 19.05 \times 1.0t$	$\phi 41.28 \times 2.1t$

#### (4) Branch - Indoor unit (Pipe a, b, c, d, e, f, g)

Indoor unit model	Liquid pipe	Gas pipe
20,25,32,40	$\phi 6.35 \times 0.8t$	$\phi 12.7 \times 0.8t$
50,63,71,80	$\phi 9.52 \times 0.8t$	$\phi 15.88 \times 1.0t$
100,125,140	$\phi 9.52 \times 0.8t$	$\phi 19.05 \times 1.0t$
200	$\phi 12.7 \times 0.8t$	$\phi 25.4 \times 1.3t$
250	$\phi 12.7 \times 0.8t$	$\phi 28.58 \times 1.3t$

- Indoor unit capacities

The capacity of an indoor unit is the same as the number used for its type identification.

PEFY-P63VM → Capacity = 63

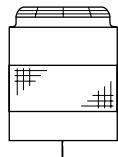
\*\* The pipe of 28.58mm can be used for the gas pipe of PUI(H)Y-(P)200

\* The thickness of pipe is Japanese Standard

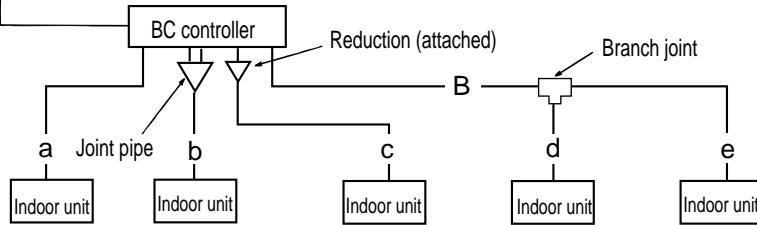
The thickness of pipe is Japanese Standard.  
Please choose the thickness according to your country  
standard referring to above chart.

## ③PURY, PQRY

Outdoor unit  
(Heat source unit)



A



## (1) Outdoor unit - BC controller (Pipe A)

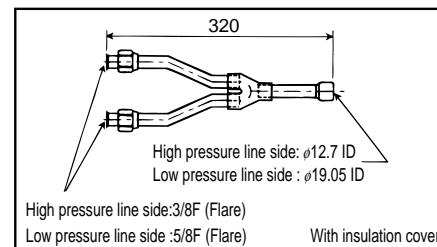
Outdoor unit model	High press. pipe	Low press. pipe
PURY-(P)200 PQRY-P200	$\phi 19.05 \times 1.0t$	* $\phi 25.4 \times 1.3t$
PURY-(P)250 PQRY-P250	$\phi 19.05 \times 1.0t$	$\phi 28.58 \times 1.45t$

\* The pipe of 28.58mm can be used for the gas pipe of (P)200.

## (2) Branch joint

• Joint pipe CMY-R160-H

Total capacity of indoor units	Branch joint
~ 80	CMY-Y102S-F
81 ~ 160	CMY-Y102L-F



## (3) BC controller - Branch (Pipe B)

Total capacity of indoor units	Liquid pipe	Gas pipe
~ 80	$\phi 9.52 \times 0.8t$	$\phi 15.88 \times 1.0t$
81 ~ 160	$\phi 9.52 \times 0.8t$	$\phi 19.05 \times 1.0t$

## (4) Branch or BC controller - Indoor unit (Pipe a,b,c,d,e,f,g)

Indoor unit model	Liquid pipe	Gas pipe
20,25,32,40	$\phi 6.35 \times 0.8t$	$\phi 12.7 \times 0.8t$
50,63,71,80	$\phi 9.52 \times 0.8t$	$\phi 15.88 \times 1.0t$
100,125,140	$\phi 9.52 \times 0.8t$	$\phi 19.05 \times 1.0t$

※ The thickness of pipe is Japanese Standard.  
Please choose the thickness according to your country standard referring to above chart.

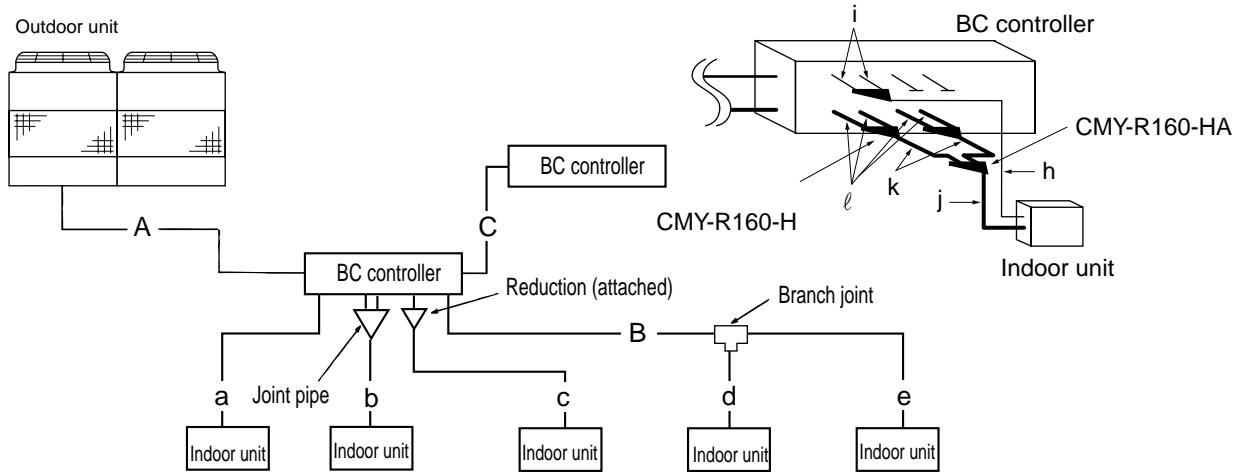
## • Indoor unit capacities

The capacity of an indoor unit is the same as the number used for its type identification.

Examples:PEFY-P63VM → Capacity = 63

Model number	Liquid pipe		Gas pipe		
	h	i	j	k	ℓ
200	$\phi 12.7$	$\phi 9.52$	$\phi 25.4$	$\phi 19.05$	$\phi 15.88$
250	$\phi 12.7$	$\phi 9.52$	$\phi 28.58$	$\phi 19.05$	$\phi 15.88$

## ④PURY-P400-500

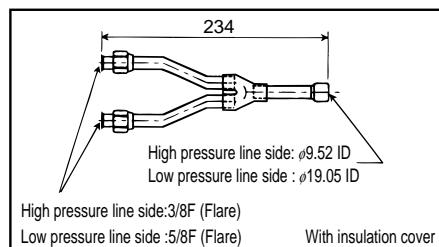


## (1) Outdoor unit - BC controller (Pipe A)

Outdoor unit model	High press. pipe	Low press. pipe
PURY-P400	* $\phi$ 25.4	$\phi$ 34.93
PURY-P500	* $\phi$ 25.4	$\phi$ 34.93

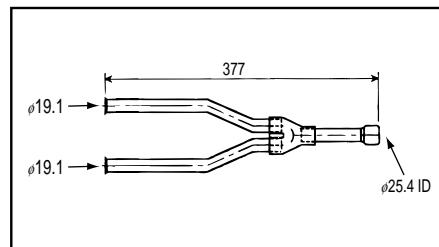
\* The pipe of  $\phi$  22.22 can be used for the high press pipe.

## • Joint pipe CMY-R160-H



## (2) Branch joint

Total capacity of indoor units	Branch joint
~ 80	CMY-Y102S-F
81 ~ 160	CMY-Y102L-F



## (3) BC controller - Branch (Pipe B)

Total capacity of indoor units	Liquid pipe	Gas pipe
~ 80	$\phi$ 9.52	$\phi$ 15.88
81 ~ 160	$\phi$ 9.52	$\phi$ 19.05

## (4) BC controller - BC controller (Pipe C)

High press gas pipe	Low press gas pipe	Liquid pipe
$\phi$ 19.05	$\phi$ 28.58	$\phi$ 12.7

## (5) Branch or BC controller - Indoor unit (Pipe a,b,c,d,e,f,g)

Indoor unit model	Liquid pipe	Gas pipe
20,25,32,40	$\phi$ 6.35	$\phi$ 12.7
50,63,71,80	$\phi$ 9.52	$\phi$ 15.88
100,125,140	$\phi$ 9.52	$\phi$ 19.05

\* The thickness of pipe is Japanese Standard. Please choose the thickness according to your country standard referring to above chart.

## • Indoor unit capacities

The capacity of an indoor unit is the same as the number used for its type identification.

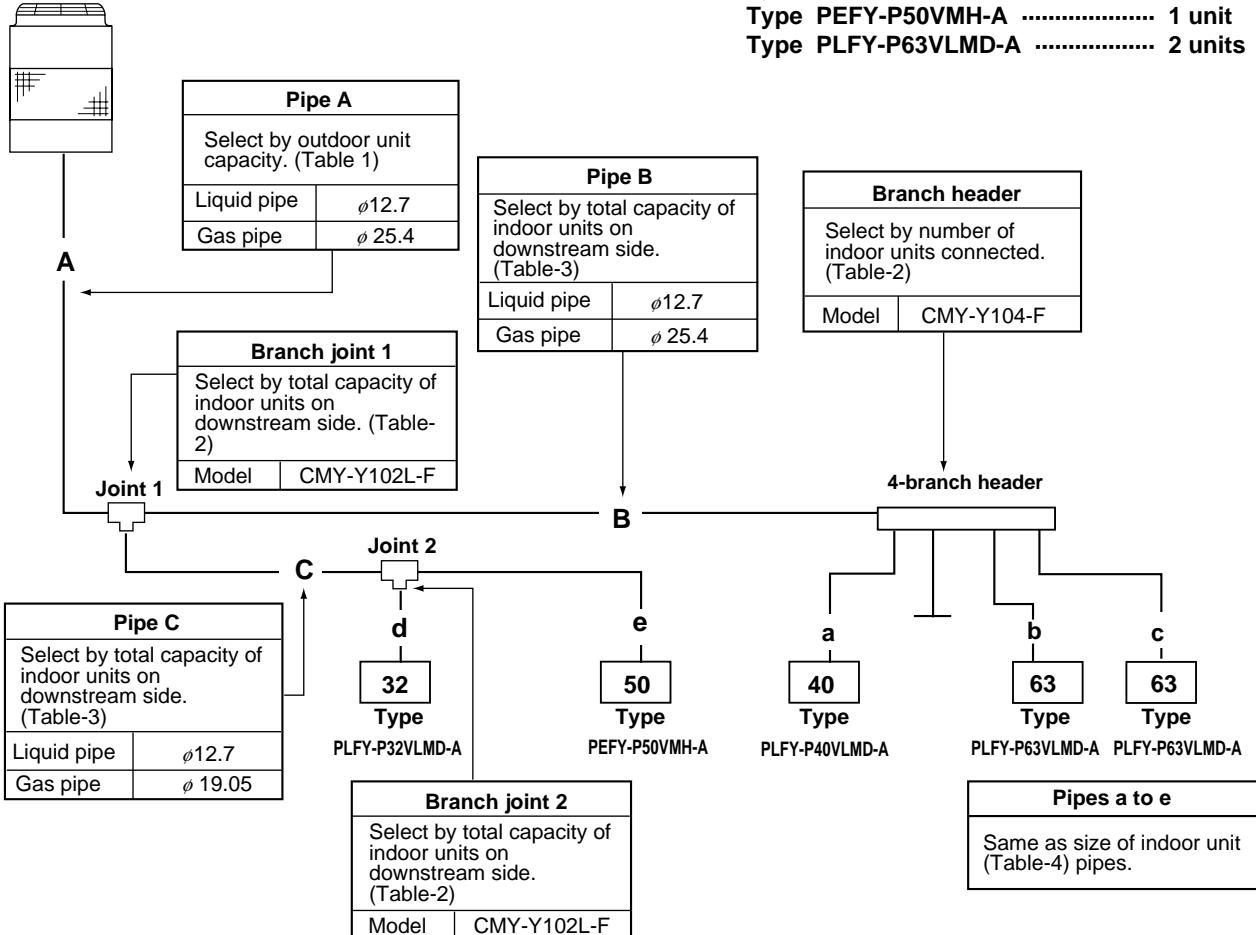
Examples:PEFY-P63VM → Capacity = 63

Model number	Liquid pipe		Gas pipe		
	h	i	j	k	l
200	$\phi$ 12.7	$\phi$ 9.52	$\phi$ 25.4	$\phi$ 19.05	$\phi$ 15.88
250	$\phi$ 12.7	$\phi$ 9.52	$\phi$ 28.58	$\phi$ 19.05	$\phi$ 15.88

## 2-4 Example of refrigerant piping selection

### ① Example 1

Outdoor unit : PUHY-200YMF-C



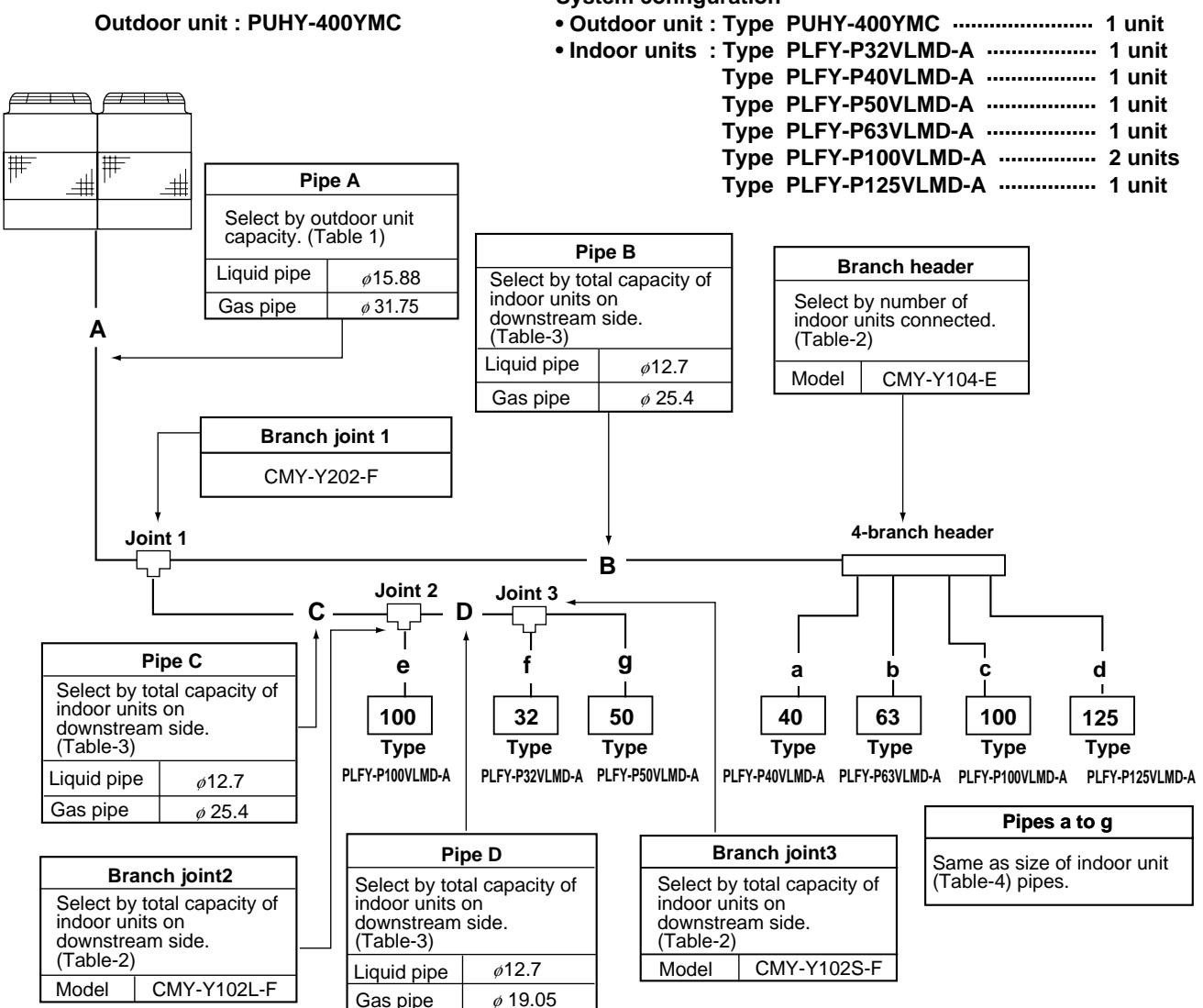
### (1) Selection of branch pipe kit

Branch area	Branch pipe kit selection method	Branch pipe kit model
Joint 1	$32 + 40 + 50 + 63 + 63 = 248$ (161 or above)	CMY-Y102L-F
Joint 2	$32 + 50 = 82$ (160 or below)	CMY-Y102S-F
Header	For 4 branches with 8 HP outdoor unit	CMY-Y104-F

### (2) Selection of pipe size

Pipe area	Refrigerant pipe selection method	Liquid pipe size	Gas pipe size
A	Same as size of outdoor unit's refrigerant pipe (PUHY-200YMF-C)	ø12.7	ø25.4
B	$40 + 63 + 63 = 166$ (160 or above)	ø12.7	"
C	$32 + 50 = 82$ (81 ~ 160)	"	ø19.05
a	Same as size of indoor unit's refrigerant pipe (PLFY-P40VLMD-A)	ø6.35	ø12.7
b	" (PLFY-P63VLMD-A)	ø9.52	ø15.88
c	" (PLFY-P63VLMD-A)	"	"
d	" (PLFY-P32VLMD-A)	ø6.35	ø12.7
e	" (PEFY-P50VMH-A)	ø9.52	ø15.88

## ② Example 2



## (1) Selection of branch pipe kit

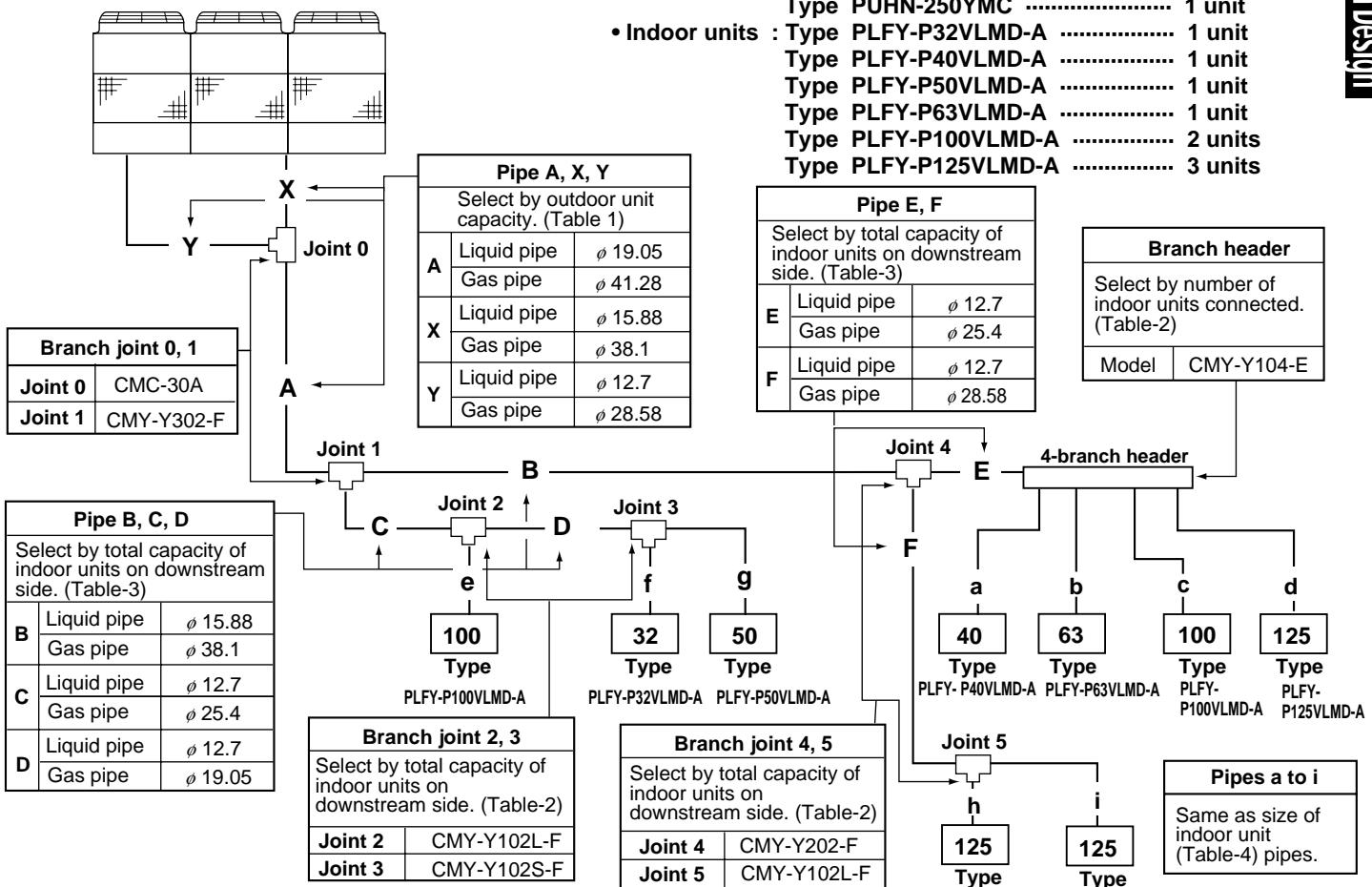
Branch area	Branch pipe kit selection method	Branch pipe kit model
Joint 1	-	CMY-Y202-F
Joint 2	$32 + 50 + 100 = 182$ (160 or above)	CMY-Y102L-F
Joint 3	$32 + 50 = 82$ (160 or below)	CMY-Y102S-F
Header	For 4 branches with 8 HP outdoor unit	CMY-Y104-E

## (2) Selection of pipe size

Pipe area	Refrigerant pipe selection method	Liquid pipe size	Gas pipe size
A	Same as size of outdoor unit's refrigerant pipe (PUHY-400YMC)	ø15.88	ø31.75
B	$40 + 63 + 100 + 125 = 328$ (161 ~ 330)	ø12.7	ø25.4
C	$32 + 50 + 100 = 182$ (161 ~ 330)	"	"
D	$32 + 50 + = 82$ (81 ~ 160)	"	ø19.05
a	Same as size of indoor unit's refrigerant pipe (PLFY-P40VLMD-A)	ø6.35	ø12.7
b	" (PLFY-P63VLMD-A)	ø9.52	ø15.88
c	" (PLFY-P100VLMD-A)	"	ø19.05
d	" (PLFY-P125VLMD-A)	"	"
e	" (PLFY-P100VLMD-A)	"	"
f	" (PLFY-P32VLMD-A)	ø6.35	ø12.7
g	" (PLFY-P50VLMD-A)	ø9.52	ø15.88

## ③ Example 3

Outdoor unit : PUHY-750YSMC



## (1) Selection of branch pipe kit

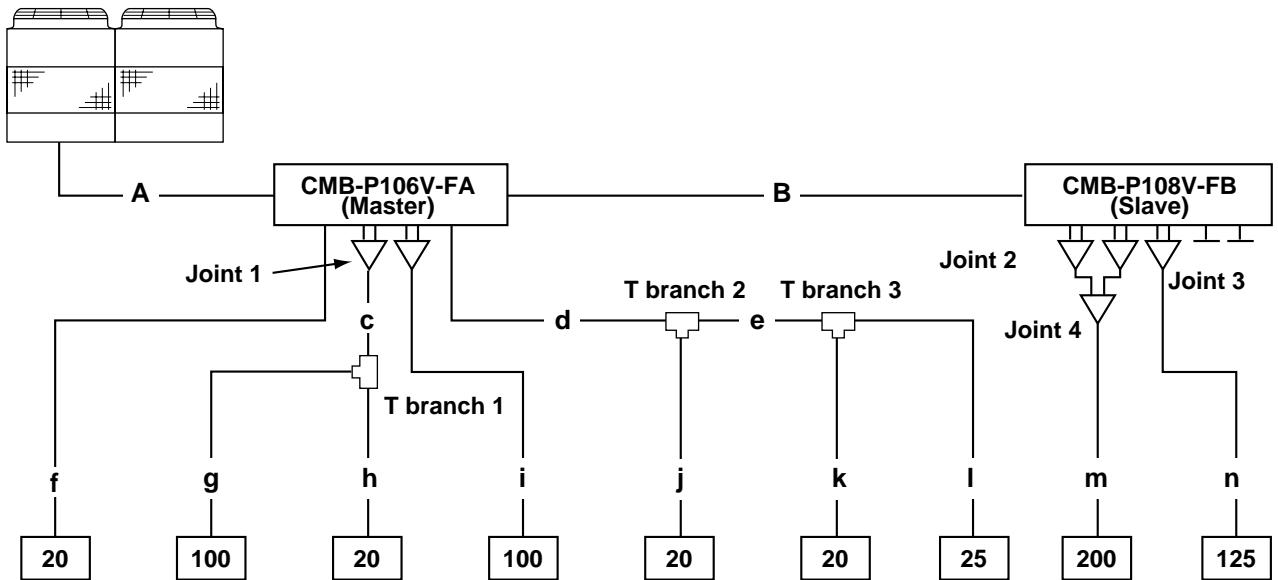
Branch area	Branch pipe kit selection method	Branch pipe kit model
Joint 0	-	CMC-30A
Joint 1	-	CMY-Y302-F
Joint 2	$32 + 50 + 100 = 182$ (161 ~ 330)	CMY-Y102L-F
Joint 3	$32 + 50 = 82$ (160 or below)	CMY-Y102S-F
Joint 4	$40 + 63 + 100 + 125 \times 3 = 578$ (331 ~ 630)	CMY-Y202-F
Joint 5	$125 \times 2 = 250$ (161 ~ 330)	CMY-Y102L-F
Header	For 4 branches with 8 HP outdoor unit	CMY-Y104-E

## (2) Selection of pipe size

Pipe area	Refrigerant pipe selection method	Liquid pipe size	Gas pipe size
X	Same as size of outdoor unit's refrigerant pipe (PUHY-500YMC)	$\phi$ 15.88	$\phi$ 38.1
Y	Same as size of outdoor unit's refrigerant pipe (PUHN-250YMC)	$\phi$ 12.7	$\phi$ 28.58
A	Same as size of outdoor unit's refrigerant pipe (PUHY-750YSMC)	$\phi$ 19.05	$\phi$ 41.28
B	$40 + 63 + 100 + 125 \times 3 = 578$ (331 ~ 630)	$\phi$ 15.88	$\phi$ 38.1
C	$32 + 50 + 100 = 182$ (161 ~ 330)	$\phi$ 12.7	$\phi$ 25.4
D	$32 + 50 = 82$ (81 ~ 160)	"	$\phi$ 19.05
E	$40 + 63 + 100 + 125 = 328$ (161 ~ 330)	"	$\phi$ 34.93
F	$125 \times 2 = 250$ (161 ~ 330)	"	$\phi$ 28.58
a	Same as size of outdoor unit's refrigerant pipe (PLFY-P40VLMD-A)	$\phi$ 6.35	$\phi$ 12.7
b	" (PLFY-P63VLMD-A)	$\phi$ 9.52	$\phi$ 15.88
c	" (PLFY-P100VLMD-A)	"	$\phi$ 19.05
d, h, i	" (PLFY-P125VLMD-A)	"	"
e	" (PLFY-P100VLMD-A)	"	"
f	" (PLFY-P32VLMD-A)	$\phi$ 6.35	$\phi$ 12.7
g	" (PLFY-P50VLMD-A)	$\phi$ 9.52	$\phi$ 15.88

## ④ Example 4

Outdoor unit : PURY-P500YMF-C



Max 3 indoors for 1 connection.

Total capacity below 160 using Joint.  
(using 2 branches)

Max 3 indoors for 1 connection.

Total capacity below 80 for 1 branch.

## (1) Selection of branch pipe kit

Branch area	Branch pipe kit selection method	Branch pipe kit model
Joint 1,2,3	-	CMY-R160-H
Joint 4	-	CMY-R160-HA
T branch 1	Capacity Index = 100 + 20 = 120	CMY-Y102L-F
T branch 2	Capacity Index = 20 + 20 + 25= 65	CMY-Y102S-F
T branch 3	Capacity Index = 20 + 25 = 45	CMY-Y102S-F

## (2) Selection of pipe size

Pipe area	Refrigerant pipe selection method	High pressure	Low pressure
A	Outdoor unit pipe	ø25.4	ø34.93

Pipe area	Refrigerant pipe selection method	Low pressure gas	High pressure gas	Liquid
B	BC-BC pipe	ø28.58	ø19.05	ø12.7

Pipe area	Refrigerant pipe selection method	Liquid pipe size	Gas pipe size
c	Capacity Index = 120 (100 + 20)	ø12.7	ø19.05
d	Capacity Index = 65 (20 + 20 + 25)	ø9.52	ø15.88
e	Capacity Index = 45 (20 + 25)	ø9.52	ø15.88
f	Capacity Index = 20	ø6.35	ø12.7
g	Capacity Index = 100	ø9.52	ø19.05
h	Capacity Index = 20	ø6.35	ø12.7
i	Capacity Index = 100	ø9.52	ø19.05
j	Capacity Index = 20	ø6.35	ø12.7
k	Capacity Index = 20	ø6.35	ø12.7
l	Capacity Index = 25	ø6.35	ø12.7
m	Capacity Index = 200	ø12.7	ø25.4
n	Capacity Index = 125	ø9.52	ø15.88

## 2-5 Calculation of additional refrigerant charge

### ① PUMY-(P)125YM(A)

#### (1) Refrigerant charge

The following amount of refrigerant is being charged into the outdoor unit at factory shipment. Refrigerant of 3kg equivalent to 50-m total extended piping length is already included when the outdoor unit is shipped. Thus, if the total extended piping length is 50m or less, there is no need to change with additional refrigerant. If the total extended piping length exceeds 50m, calculate the required additional refrigerant charge using the procedure shown on the below. If the calculated additional refrigerant charge is a negative amount, do not charge with any refrigerant.

Outdoor unit	PUMY-(P)125YM(A)
Refrigerant charge	8.5kg

#### (2) Formula to obtain an amount of additional refrigerant charge

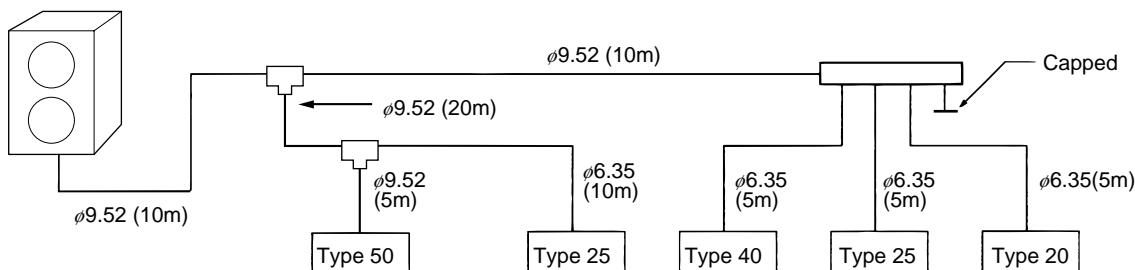
The additional amount of refrigerant to be added is calculated from the size of the extended liquid pipes and their length (in meters).

$$\text{Additional amount (kg)} = (0.06 \times L_1) + (0.024 \times L_2) - 3\text{kg}$$

Where     $L_1$  : Length of  $\phi 9.52$  liquid pipe (m)  
 $L_2$  : Length of  $\phi 6.35$  liquid pipe (m)

※1 : Any fractions below 0.01kg in the result of the calculation should be round up. (Examples : 10.52 → 10.6kg)

#### Example: PUMY-125YM



This calculation concerns only the liquid pipes.

$$\begin{aligned} \phi 9.52 &: 10\text{m} + 20\text{m} + 10\text{m} + 5\text{m} = 45\text{m} \\ \phi 6.35 &: 10\text{m} + 5\text{m} + 5\text{m} + 5\text{m} = 25\text{m} \end{aligned}$$

Calculation of additional amount :

$$\text{Additional amount (kg)} = (0.06 \times 45) + (0.024 \times 25) - 3.0 = 0.3 \text{ kg (rounded up)}$$

## ② PU(H)Y-(P)200,250

### (1) Refrigerant charge

The following amount of refrigerant is being charged into the outdoor unit at factory shipment. As the amount does not include that for extended piping, charge it additionally in the field.

Outdoor unit	PUHY-P200YMF-C PUY-P200YMF-C	PUHY-P250YMF-C PUY-P250YMF-C	PUHY-200YMF-C PUY-200YMF-C	PUHY-250YMF-C PUY-250YMF-C
Refrigerant charge	7.0kg	8.5kg	6.5kg	8.0kg

### (2) Formula to obtain an amount of additional refrigerant charge

The additional amount of refrigerant to be added is calculated from the size of the extended liquid pipes and their length (in meters).

$$\text{Additional amount (kg)} = (0.25 \times L_1) + (0.12 \times L_2) + (0.06 \times L_3) + (0.024 \times L_4) + A$$

Where  $L_1$  : Length of  $\phi 15.88$  liquid pipe (m)

$L_2$  : Length of  $\phi 12.7$  liquid pipe (m)

$L_3$  : Length of  $\phi 9.52$  liquid pipe (m)

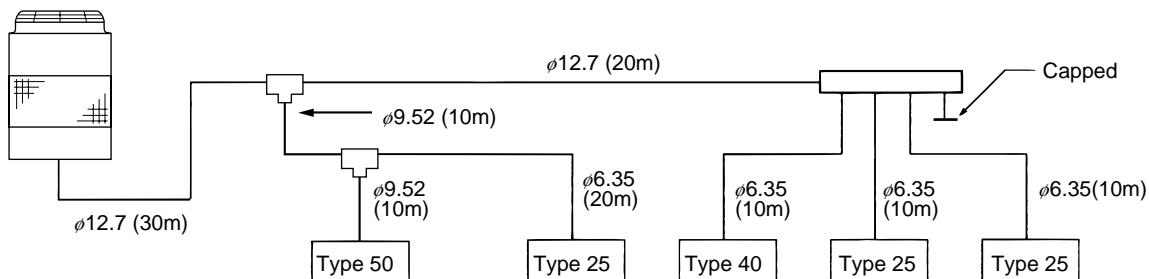
$L_4$  : Length of  $\phi 6.35$  liquid pipe (m)

A: Additional refrigerant charge by total capacity of indoor units connected.

Total capacity of indoor units connected	Additional refrigerant charge (A)
~ 160	1.5
161 ~ 330	2.0
331 ~ 480	2.5
481 ~ 630	3.0
631 ~	4.0

\*1 : Any fractions below 0.01kg in the result of the calculation should be round up. (Examples : 10.52 → 10.6kg)

Example: PUHY-200YMF-C



This calculation concerns only the liquid pipes.

$$\phi 12.7 : 30m + 20m = 50m$$

$$\phi 9.52 : 10m + 10m = 20m$$

$$\phi 6.35 : 20m + 10m + 10m + 10m = 50m$$

Total capacity of indoor units connected:

$$40 + 25 + 40 + 25 + 25 = 155$$

Calculation of additional amount :

$$\text{Additional amount (kg)} = (0.12 \times 50) + (0.06 \times 20) + (0.024 \times 50) + 1.5 = 9.90 \text{ kg}$$

The result of 9.90 kg is rounded up to one decimal place (0.1kg). Therefore,

$$\text{Additional amount} = 9.9 \text{ kg}$$

### ③ PURY, PQRY

#### (1) Refrigerant charge

The following amount of refrigerant is being charged into the outdoor unit at factory shipment. As the amount does not include that for extended piping, charge it additionally in the field.

Outdoor unit	PURY -P200YMF-C	PURY -P250YMF-C	PURY -200YMF-C	PURY -250YMF-C	PQRY -P200YMF-C	PQRY -P250YMF-C	PURY -P400YMF-C	PURY -P500YMF-C
Refrigerant charge	10.5kg	11.5kg	10.0kg	11.0kg	7.5kg	8.5kg	20.0kg	22.0kg

#### (2) Formula to obtain an amount of additional refrigerant charge

The calculation of additional refrigerant charge is based on the size and length of extended high pressure side piping.

$$\text{Additional amount (kg)} = (0.31 \times L_0) + (0.25 \times L_0') + (0.16 \times L_1) + (0.12 \times L_2) + (0.06 \times L_3) + (0.024 \times L_4) + A + B$$

Where  $L_0$  : Length of high pressure pipe  $\phi 25.4$  (m)

\* $L_0'$  : Length of high pressure pipe  $\phi 22.22$  (m)

$L_1$  : Length of high pressure pipe  $\phi 19.05$  (m)

$L_2$  : Length of liquid pipe  $\phi 12.7$  (m)

$L_3$  : Length of liquid pipe  $\phi 9.52$  (m)

$L_4$  : Length of liquid pipe  $\phi 6.35$  (m)

A: Additional refrigerant charge by total capacity of indoor units connected.

B: Additional refrigerant charge for BC controller. (Slave)

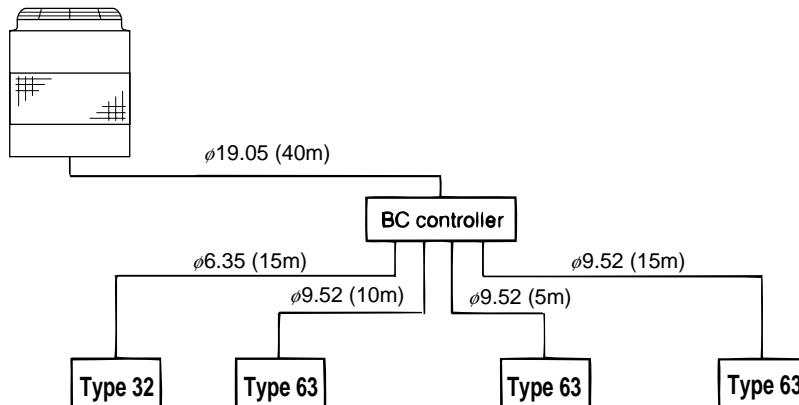
Total capacity of indoor units connected		Additional refrigerant charge
PURY-200YMF-C PURY-P200YMF-C PQRY-P200YMF-C	PURY-250YMF-C PURY-P250YMF-C PQRY-P250YMF-C	A
100 ~ 160	125 ~ 160	1.5
161 ~ 300	161 ~ 375	2.0

Total capacity of indoor units connected	Additional refrigerant charge	
PURY-P400, P500YMF-C	A	B
~ 330	2.0	
331 ~ 480	2.5	
481 ~ 630	3.0	3.0
631 ~	4.0	

Note: Raise a fraction of the calculation result less than 0.01kg to a unit. (Examples : 10.52 → 10.6kg)

\*  $\phi 22.22$  pipe can be used in place of  $\phi 25.4$  pipe.

#### Example: PURY-200YMF-C



This calculation concerns only the liquid (high press) pipes.

$\phi 19.05$  : 40m

$\phi 9.52$  : 10m + 15m = 25m

$\phi 6.35$  : 15m

Total capacity of indoor units connected:

$$32 + 63 + 63 + 63 = 221$$



Calculation of additional amount :

$$\text{Additional amount (kg)} = (0.16 \times 40) + (0.06 \times 30) + (0.024 \times 15) + 2 = 10.56 \text{ kg}$$

The result of 10.56 kg is rounded up to one decimal place (0.1kg). Therefore,

$$\text{Additional amount} = 10.6 \text{ kg}$$

#### ④ PUHY-(P)400-500

The amounts of refrigerant given in the table below are added in the outdoor units at the factory prior to shipment. However, they do not cover the requirements for piping extensions, and additional refrigerant must be added at the installation site.

Outdoor unit model	PUHY-(P)400	PUHY-(P)500
Amount of refrigerant being added at the factory prior to shipment	16kg	22kg

##### (1) Formula for calculation

The additional amount of refrigerant to be added is calculated from the size of the extended liquid pipes and their length (in meters).

$$\text{Additional amount (kg)} = (0.29 \times L_1) + (0.25 \times L_2) + (0.12 \times L_3) + (0.06 \times L_4) + (0.024 \times L_5) + A$$

Where  $L_1$  : Length of  $\phi 19.05$  liquid pipe (m)

$L_2$  : Length of  $\phi 15.88$  liquid pipe (m)

$L_3$  : Length of  $\phi 12.7$  liquid pipe (m)

$L_4$  : Length of  $\phi 9.52$  liquid pipe (m)

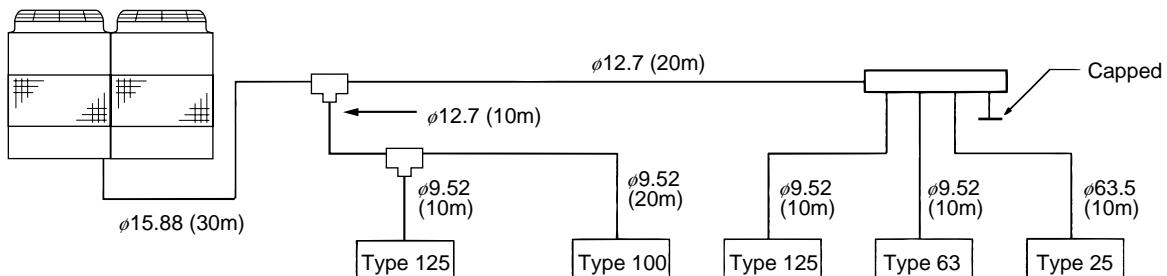
$L_5$  : Length of  $\phi 6.35$  liquid pipe (m)

A: Additional refrigerant charge by total capacity of indoor units connected.

Total capacity of indoor units connected	Additional refrigerant charge (A)
~ 160	1.5
161 ~ 330	2.0
331 ~ 480	2.5
481 ~ 630	3.0
631 ~	4.0

\*1 : Any fractions below 0.01kg in the result of the calculation should be round up. (Examples : 10.52 → 10.6kg)

##### (2) Example: PUHY-P500YMF-B



This calculation concerns only the liquid pipes.

$\phi 15.88$  : 30m

$\phi 12.7$  : 10m + 20m = 30m

$\phi 9.52$  : 10m + 20m + 10m + 10m = 50m

$\phi 6.35$  : 10m

Total capacity of indoor units connected:

$$125 + 100 + 125 + 63 + 25 = 438$$

Using the above formula:

$$\text{Additional amount (kg)} = (0.25 \times 30) + (0.12 \times 30) + (0.06 \times 50) + (0.024 \times 10) + 2.5 = 16.84 \text{ kg}$$

The result of 9.90 kg is rounded up to one decimal place (0.1kg). Therefore,

$$\text{Additional amount} = 1.69 \text{ kg}$$

## ⑤ PUHY-(P)600-650-700-750

The amounts of refrigerant given in the table below are added in the outdoor units at the factory prior to shipment. However, they do not cover the requirements for piping extensions, and additional refrigerant must be added at the installation site.

Outdoor unit model	PUHN-(P)200	PUHN-(P)250	PUHY-(P)400	PUHY-(P)500
Amount of refrigerant being added at the factory prior to shipment	6.5kg	8.5kg	16kg	22kg

### (1) Formula for calculation

The additional amount of refrigerant to be added is calculated from the size of the extended liquid pipes and their length (in meters).

$$\text{Additional amount (kg)} = (0.29 \times L_1) + (0.25 \times L_2) + (0.12 \times L_3) + (0.06 \times L_4) + (0.024 \times L_5) + A$$

Where    L<sub>1</sub> : Length of  $\phi 19.05$  liquid pipe (m)  
           L<sub>2</sub> : Length of  $\phi 15.88$  liquid pipe (m)  
           L<sub>3</sub> : Length of  $\phi 12.7$  liquid pipe (m)  
           L<sub>4</sub> : Length of  $\phi 9.52$  liquid pipe (m)  
           L<sub>5</sub> : Length of  $\phi 6.35$  liquid pipe (m)

A: Additional refrigerant charge  
by total capacity of indoor  
units connected.

Total capacity of indoor units connected	Additional refrigerant charge (A)
~ 160	1.5
161 ~ 330	2.0
331 ~ 480	2.5
481 ~ 630	3.0
631 ~	4.0

※1 : Any fractions below 0.01kg in the result of the calculation should be round up. (Examples : 10.52 → 10.6kg)

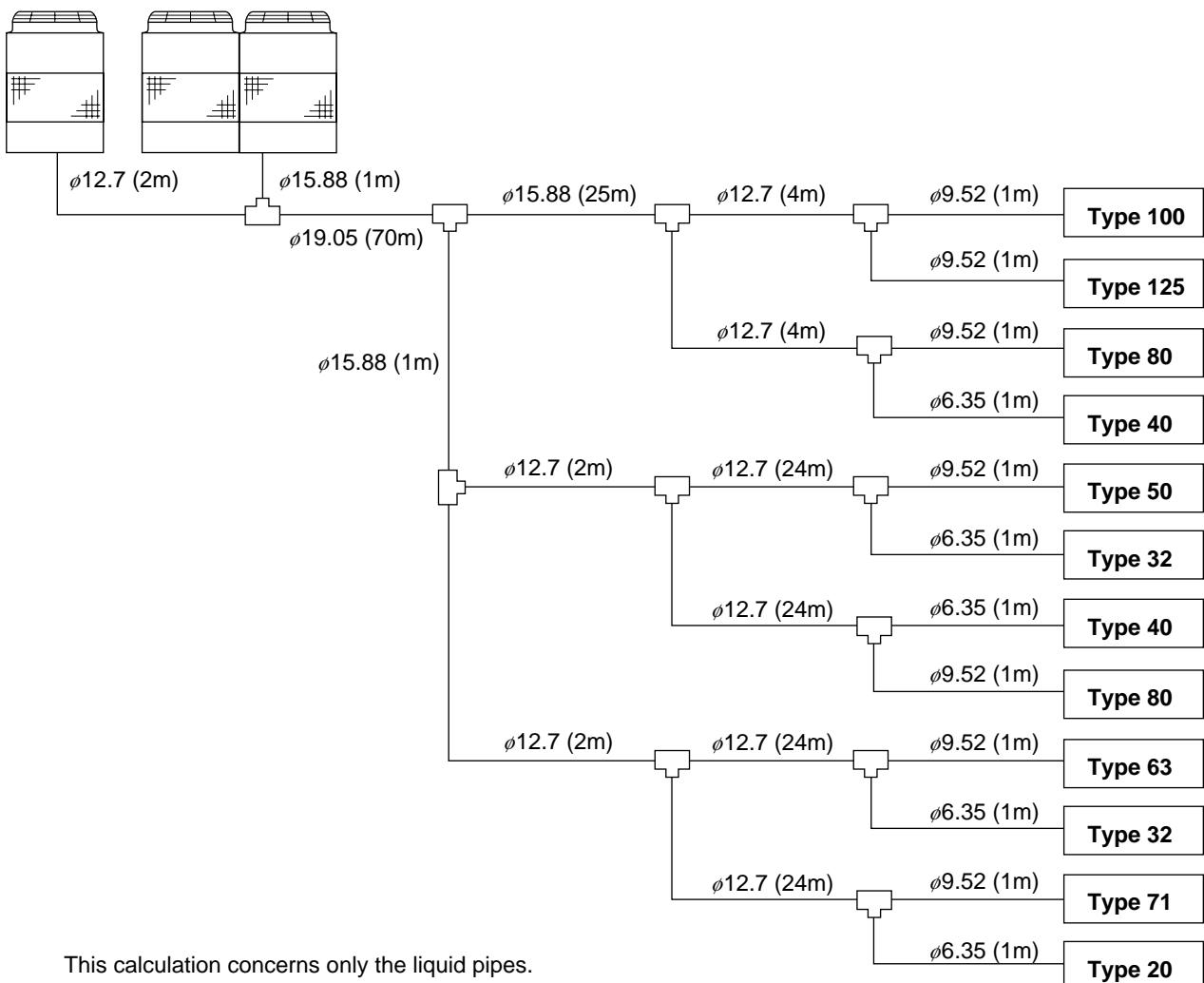
※2 : PUHY-(P)600/650/700/750

Additional amount (kg)  $\leq$  73kg - (Amount of refrigerant being added at the factory prior to shipment)

ex. PUHY-750YSMC

$$\begin{aligned} \text{Additional amount (kg)} &\leq 73\text{kg} - (22 + 8.5) \\ &\leq 42.5\text{kg} \end{aligned}$$

## (2) Example: PUHY-750YSMC



This calculation concerns only the liquid pipes.

$$\phi 19.05 : 70 + 1 = 71\text{m}$$

$$\phi 15.88 : 1 + 25 = 26\text{m}$$

$$\phi 12.7 : 2 + 4 + 4 + 2 + 24 + 24 + 2 + 24 + 24 = 110\text{m}$$

$$\phi 9.52 : 1 + 1 + 1 + 1 + 1 + 1 + 1 = 7\text{m}$$

$$\phi 6.35 : 1 + 1 + 1 + 1 + 1 = 5\text{m}$$

Total capacity of indoor units connected:

$$125 + 100 + 80 \times 2 + 71 + 63 + 50 + 40 \times 2 + 32 \times 2 + 20 = 733$$

Using the above formula:

$$\text{Additional amount (kg)} = (0.29 \times 71) + (0.25 \times 26) + (0.12 \times 110) + (0.06 \times 7) + (0.024 \times 5) + 4 = 44.83\text{kg}$$

Additional amount  $\leq 73\text{kg}$  - (Amount of refrigerant to be added). Therefore,

$$\text{Additional amount (kg)} = 73\text{kg} - (22 + 8.5) = 42.5\text{kg}$$

## 2-6 Electric characteristics

### (1) Indoor unit

Symbols: MCA : Max. Circuit Amps (=1.25×FLA)  
IFM : Indoor Fan Motor  
Output : Fan motor rated output

Model	Volts / Hz	Voltage range	Units		Power supply	IFM	
			MCA(A)	Output(kW)		FLA(A)	
PMFY-P-VBM-A	20	220-240V / 50Hz 220V / 60Hz	0.25	0.028	0.20		
	25-32		0.26	0.028	0.21		
	40		0.33	0.028	0.26		
	32-40		0.75	0.030	0.60		
	50		0.80	0.030	0.64		
	63		0.85	0.030	0.68		
	80		1.08	0.070	0.86		
	100		1.79	0.120	1.43		
	125		2.05	0.120	1.64		
	20-25		0.54	0.033	0.43		
	32		0.60	0.033	0.48		
	40		0.96	0.075	0.77		
PLFY-P-VKM-A	50		0.96	0.075	0.77		
	63		1.31	0.078	1.05		
	80		1.38	0.078	1.10		
	100		1.50	0.078x2	1.20		
	125		1.69	0.078x2	1.35		
	20-25		0.63	0.033	0.50		
	32		0.68	0.033	0.54		
	40		1.10	0.075	0.88		
	50		1.10	0.075	0.88		
	63		1.25	0.078	1.00		
	80		1.35	0.078	1.08		
	100		2.29	0.078x2	1.83		
PLFY-P-VLMD-A	125		2.35	0.078x2	1.85		
	20-25	220V / 60Hz	0.30/0.35	0.023	0.24/0.28		
	32		0.40/0.53	0.032	0.32/0.42		
	40-50		1.21/1.61	0.08	0.97/1.29		
	63		1.49/1.95	0.12	1.19/1.56		
	71		1.58/2.18	0.14	1.26/1.74		
	80		1.85/2.40	0.18	1.48/1.92		
	100-125		3.03/3.93	0.26	2.42/3.14		
	140		3.10/3.98	0.26	2.48/3.18		
	200	380-415V / 50Hz 380-415V / 60Hz	Max.: 456V	2.03/2.33	0.54	1.62/1.86	
	250		Min.: 342V	2.50/2.88	0.87	2.00/2.30	
PEFY-P-VMM-A	20-25	220-240V / 50Hz	Max.: 264V Min.: 198V	0.91	0.15	0.73	
	32			1.01	0.17	0.81	
	40			1.15	0.19	0.92	
	50			1.23	0.20	0.98	
	63			1.34	0.22	1.07	
	71-80			1.44	0.25	1.15	
	100			1.68	0.29	1.34	
	125			2.38	0.40	1.90	
	140			2.44	0.42	1.95	

Model		Units		Power supply	IFM	
		Volts / Hz	Voltage range	MCA(A)	Output(kW)	FLA(A)
PDFY-P-VM-A	20-25-32	220-240V / 50Hz 220V / 60Hz	Max.: 264V Min.: 198V	0.66/0.73	0.075	0.53/0.58
	40-50			0.75/0.89	0.075	0.60/0.71
	63			0.85/1.03	0.078	0.68/0.82
	71			0.90/1.10	0.078	0.72/0.88
	80			1.03/1.26	0.078	0.82/1.01
	100			1.60-1.68/1.70	0.140	1.28-1.34/1.36
	125			1.94-2.04/2.30	0.190	1.55-1.63/1.84
	PKFY-P-VAM-A			0.25	0.017	0.20
PKFY-P-VGM-A	32-40-50			0.40	0.030	0.32
	63			0.54	0.04	0.43
PKFY-P-VFM-A	100			0.65	0.07	0.52
	40			0.58	0.054	0.46
PCFY-P-VGM-A	63			0.75	0.070	0.60
	100			0.91	0.090	0.73
	125			1.38	0.150	1.10
	20-25			0.24 / 0.31	0.020	0.19 / 0.25
PFFY-P-VLEM-A	32			0.36 / 0.38	0.030	0.29 / 0.30
	40			0.40 / 0.41	0.035	0.32 / 0.33
	50			0.50 / 0.51	0.035	0.40 / 0.41
	63			0.58 / 0.59	0.045	0.46 / 0.47
	20-25			0.24 / 0.31	0.020	0.19 / 0.25
PFFY-P-VLRM-A	32			0.36 / 0.38	0.030	0.29 / 0.30
	40			0.40 / 0.41	0.035	0.32 / 0.33
	50			0.50 / 0.51	0.035	0.40 / 0.41
	63			0.58 / 0.59	0.045	0.46 / 0.47
GUF-RD(H)	50			1.85	0.081X2	1.48
	100			3.49	0.16X2	2.79

## (2) Outdoor unit (Cooling)

Refrigerant type : R407C

Symbols: MCA : Max.Circuit Amps ( $=1.25 \times$  max. RLA)  
SC : Starting Current RLA : Rated Load Amps

Model	Units			Power supply MCA(A)	Compressor		Fan Output(kW)	RLA(A)				
	Hz	Volts	Voltage range		Output(kW)	SC(A)						
PUMY-125YM(A)		380		12.00	3.5	8	0.06×2	9.6				
		400						9.1				
		415						8.8				
PUHY-P200YMF-C PUY-P200YMF-C		380		18.13	5.5	12	0.38	14.5				
		400						13.8				
		415						13.3				
PUHY-P250YMF-C PUY-P250YMF-C		380		22.88	7.5	12	0.38	18.3				
		400						17.4				
		415						16.8				
PUHY-P400YMF-B		380		35.25	4.5+7.5	103(50Hz) 96(60Hz)	0.35×2	28.2				
		400						26.8				
		415						25.8				
PUHY-P500YMF-B		380		43.88	7.5+7.5	138(50Hz) 125(60Hz)	0.35×2	35.1				
		400						33.4				
		415						32.2				
PUHY-P600YSMF-B		380		53.13	4.5+7.5+5.5	145(50Hz) 132(60Hz)	0.35×3	42.5				
		400						40.4				
		415						38.9				
PUHY-P650YMSF-B		380		57.25	4.5+7.5+7.5	150(50Hz) 137(60Hz)	0.35×3	45.8				
		400						43.5				
		415						41.9				
PUHY-P700YSMF-B	50 / 60	380		62.88	7.5+7.5+5.5	145(50Hz) 132(60Hz)	0.35×3	50.3				
		400						47.8				
		415						46.1				
PUHY-P750YMSF-B		380		66.88	7.5+7.5+7.5	150(50Hz) 137(60Hz)	0.35×3	53.5				
		400						50.8				
		415						48.9				
PURY-P200YMF-C		380		18.13	5.5	12	0.38	14.5				
		400						13.8				
		415						13.3				
PURY-P250YMF-C		380		22.88	7.5	12	0.38	18.3				
		400						17.4				
		415						16.8				
PURY-P400YMF-C		380		34.50	7.5+4.5	103(50Hz) 96(60Hz)	0.35×2	27.6				
		400						26.2				
		415						25.2				
PURY-P500YMF-C		380		43.25	7.5+7.5	138(50Hz) 125(60Hz)	0.35×2	34.6				
		400						32.8				
		415						31.7				
PQRY-P200YMF-C		380		16.00	5.5	12	-	12.8				
		400						12.1				
		415						11.7				
PQRY-P250YMF-C		380		20.38	7.5	12	-	16.3				
		400						15.5				
		415						14.9				

Refrigerant type : R22

Symbols: MCA : Max.Circuit Amps ( $=1.25 \times \text{max. RLA}$ )

SC : Starting Current

RLA : Rated Load Amps

Model	Units			Power supply MCA(A)	Compressor		Fan Output(kW)	RLA(A)
	Hz	Volts	Voltage range		Output(kW)	SC(A)		
PUMY-71VM	60	220	Max.: 242V Min.: 198V	23.00	2.6	15	0.04X2	18.1
PUMY-125VM				44.00	3.5	22	0.06X2	33.6
PUMY-125YM(A)		380		12.00	3.5	8	0.06X2	9.6
		400						9.1
		415						8.8
PUHY-200YMF-C PUY-200YMF-C		380		18.13	5.5	12	0.38	14.5
		400						13.8
		415						13.3
PUHY-250YMF-C PUY-250YMF-C		380		22.88	7.5	12	0.38	18.3
		400						17.4
		415						16.8
PUHY-315YMC		380		29.00	9.25	12	0.35	23.2
		400						22.1
		415						21.3
PUHY-400YMC PUHY-400YMF-B		380		36.13	7.5+4.5	103(50Hz) 96(60Hz)	0.35X2	28.9
		400						27.5
		415						26.5
PUHY-500YMC PUHY-500YMF-B		380		42.75	7.5+7.5	138(50Hz) 125(60Hz)	0.35X2	34.2
		400						32.5
		415						31.3
PUHY-600YSMC PUHY-600YSMF-B		380		52.38	7.5+4.5+5.5	145(50Hz) 132(60Hz)	0.35X3	41.1
		400						39.4
		415						37.9
PUHY-650YSMC PUHY-650YSMF-B		380		55.75	7.5+4.5+7.5	150(50Hz) 137(60Hz)	0.35X3	44.6
		400						42.4
		415						40.8
PUHY-700YSMC PUHY-700YSMF-B		380		60.38	7.5+7.5+5.5	145(50Hz) 132(60Hz)	0.35X3	48.3
		400						45.8
		415						44.2
PUHY-750YSMC PUHY-750YSMF-B		380		64.25	7.5+7.5+7.5	150(50Hz) 137(60Hz)	0.35X3	51.4
		400						48.8
		415						47.1
PURY-200YMF-C		380		18.13	5.5	12	0.38	14.5
		400						13.8
		415						13.3
PURY-250YMF-C		380		22.88	7.5	12	0.38	18.3
		400						17.4
		415						16.8

## (3) BC controller

Model	Units			Power supply		RLA(A)
	Hz	Volts	Voltage range	MCA(A)	MFA(A)	
CMB-P104V-F	50 / 60	220	Max.: 264V Min.: 198V	0.39	15	0.31
		230				0.30
		240				0.28
		220				0.38
CMB-P105V-F	50 / 60	230	Max.: 264V Min.: 198V	0.48	15	0.36
		240				0.35
		220				0.45
CMB-P106V-F	50 / 60	230	Max.: 264V Min.: 198V	0.57	15	0.43
		240				0.41
		220				0.58
CMB-P108V-F	50 / 60	230	Max.: 264V Min.: 198V	0.87	15	0.56
		240				0.53
		220				0.72
CMB-P1010V-F	50 / 60	230	Max.: 264V Min.: 198V	0.90	15	0.69
		240				0.66
		220				0.92
CMB-P1013V-F	50 / 60	230	Max.: 264V Min.: 198V	1.17	15	0.88
		240				0.85
		220				1.13
CMB-P1016V-F	50 / 60	230	Max.: 264V Min.: 198V	1.42	15	1.08
		240				1.03
		220				0.63
CMB-P108V-FA	50 / 60	230	Max.: 264V Min.: 198V	0.79	15	0.60
		240				0.58
		220				0.76
CMB-P1010V-FA	50 / 60	230	Max.: 264V Min.: 198V	0.95	15	0.73
		240				0.70
		220				0.97
CMB-P1013V-FA	50 / 60	230	Max.: 264V Min.: 198V	1.22	15	0.93
		240				0.89
		220				1.17
CMB-P1016V-FA	50 / 60	230	Max.: 264V Min.: 198V	1.47	15	1.12
		240				1.08
		220				0.58
CMB-P108V-FB	50 / 60	230	Max.: 264V Min.: 198V	0.73	15	0.56
		240				0.53

## Symbols

MCA : Max.Circuit Amps ( $=1.25 \times$  max. RLA)

MFA : Max. Fuse Amps

RLA : Rated Load Amps

## 2-7 Installation

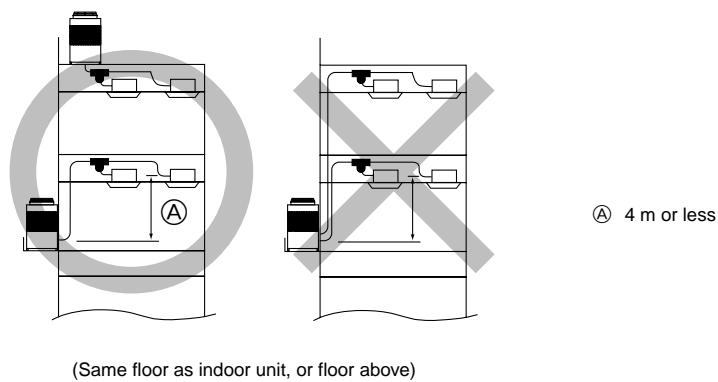
### 2-7-1 Selection of installation site

#### ① PUMY, PUHY, PUY

Select space for installing outdoor unit, which will meet the following conditions:

- no direct thermal radiation from other heat sources
- no possibility of annoying neighbors by noise from unit
- no exposition to strong wind
- with strength which bears weight of unit
- note that drain flows out of unit when heating
- with space for air passage and service work shown 2-7-2 Space required around unit  
Because of the possibility of fire, do not install unit to the space where generation, inflow, stagnation, and leak of combustible gas is expected.
- Avoid unit installation in a place where acidic solution and spray (sulfur) are often used.
- When having cooling operation at an outside air temperature of below 10°C, in order to obtain steady operation of unit, select an installation site not exposed directly to rain and snow, or install air outlet and inlet ducts. Install the outdoor unit at the same position on the same floor, or above, the indoor unit.
- Do not use unit in any special environment where oil, steam and sulfuric gas exist.

Installation restriction on outdoor unit when cooling operation is performed when the outdoor air temperature is 10°C or lower.



#### ② PURY

Select space for installing heat source unit, which will meet the following conditions:

- no direct thermal radiation from other heat sources
- no possibility of annoying neighbors by noise from unit
- with strength which bears weight of unit
- note that drain flows out of unit when heating
- with space and service work shown 2-7-2 Space required around unit  
Because of the possibility of fire, do not install unit to the space where generation, inflow, stagnation, and leak of combustible gas is expected.
- Avoid unit installation in a place where acidic solution and spray (sulfur) are often used.
- Do not use unit in any special environment where oil, steam and sulfuric gas exist.

#### ③ PQRY

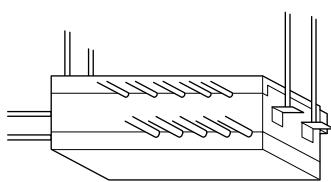
Select space for installing heat source unit, which will meet the following conditions:

- no direct thermal radiation from other heat sources
- no possibility of annoying neighbors by noise from unit
- with strength which bears weight of unit
- note that drain flows out of unit when heating
- with space and service work shown 2-7-2 Space required around unit  
Because of the possibility of fire, do not install unit to the space where generation, inflow, stagnation, and leak of combustible gas is expected.
- Avoid unit installation in a place where acidic solution and spray (sulfur) are often used.
- Do not use unit in any special environment where oil, steam and sulfuric gas exist.
- No exposure to rain or other moisture. (the heat source unit should only be used indoors)
- The declining gradient of the exhaust pipe should be higher than 1/100.

#### ④ BC controller

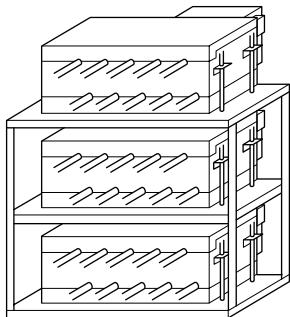
- Place not exposed to rain. (BC controller is a special machine for indoor use.)
- Place with large enough service space.
- Place in which refrigerant pipes can be provided within the limitations.
- Place not exposed to direct radiant heat from other heat sources.
- Do not install the unit in any oily steamy place or near any machine that generates high frequencies. Doing so may cause a risk of fire, erroneous operation or dew drop.
- Place with less noise effect generated from other units.
- Place in which water piping, refrigerant piping and electrical wiring can be done easily.
- Avoid places exposed to the generation, inflow, accumulation or leakage of flammable and sulfuric gases.
- Place in which a downward pitch of more than 1/100 can be taken for drain piping.

##### 1. For hanging from the ceiling



- Provide a inspection hole 450 mm square to the ceiling surface as shown in 2-7-2 Space required around unit.
- Above the ceiling of corridor, bath room, etc., where persons are not regularly there  
(Avoid installing at around center of the room.)
- Place with strength to the degree that hanging bolts can be mounted  
(that sustains a pull-out load of 60kg per bolt)
- Be sure to install BC controllers at level.

##### 2. For stacking on a rack



- Place in which sufficient space can be obtained around a rack
- Place with floor strength that sustains the entire weight

**Warning:**

Be sure to install the unit in a place that well sustains the entire weight.  
If there is a lack of strength, it may cause the unit to fall down,  
resulting in an injury.

**Caution:**

Be sure to install the unit at level.

## 2-7-2 Space required around unit

### ① PUMY

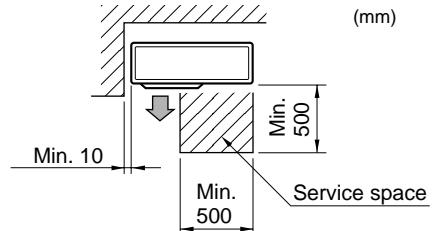
#### Service space around the outdoor unit

- If an optional air guide is needed, install it according to the manual or technical documents supplied with the air guide.
- In the case of an optional branch pipe kit, the service space specified in the manual supplied with the kit is required around the outdoor unit, so refer to the manual when installing it.

#### (1) When installing a single outdoor unit

##### ① Service space

Maintain an easily accessible service space in front of the unit as shown in the diagram.



##### ② Top obstacles

If there are no obstacles in front or at the left or right of the unit, obstacles above the unit are permitted as shown in the diagram.

- The front, right and left sides must be free of obstacles.

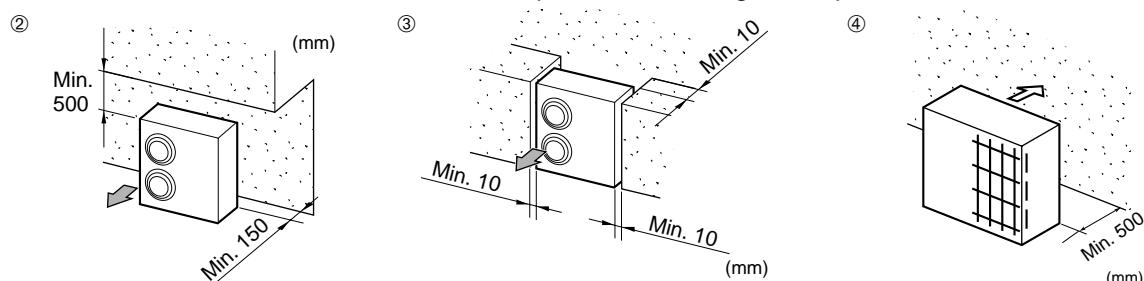
##### ③ Unobstructed front (blowing side)

If the size of the space reserved for the unit is as shown in the diagram, the unit can be installed so that obstacles are at the right, left and rear.

- The front and top must be unobstructed.
- The height of obstacles on either side must be the same or lower than that of the outdoor unit.

##### ④ Obstacles in the front (blowing side) only

If there are obstacles in front of the unit, keep the back, left/right, & top unobstructed.



##### ⑤ Obstacles at the front & rear only

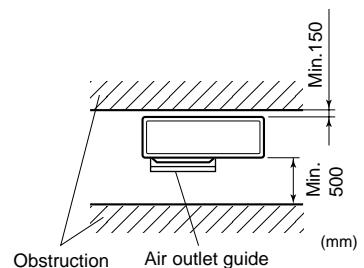
The outdoor unit cannot be used except if the following conditions are met:

An optional outdoor air outlet guide (left/right & top unobstructed) must be fitted.

Moreover, if there is no natural wind flowing between the obstacles, keep the height or width of the obstacles within the following range to prevent the risk of short cycling. (If either the front or rear satisfies the requirements, there is no special restriction on the remaining side).

Obstruction width: 1.5 times the width of outdoor unit or smaller

Obstruction height: Unit height or lower

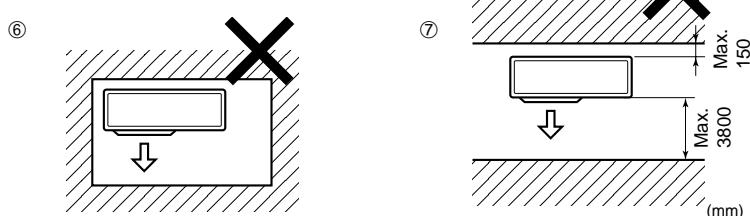


##### ⑥ Obstacles on 4 surrounding sides

The unit cannot be used if there are obstacles on all 4 surrounding sides, even if there is more than the prescribed amount of space around the outdoor unit and if the top is unobstructed.

##### ⑦ Obstacles at the front & rear

This unit cannot be used if the following conditions are met:

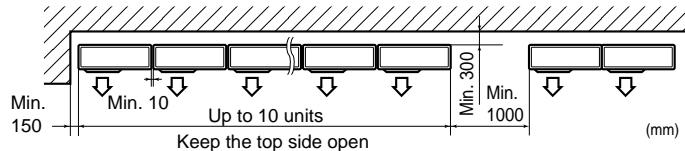


## (2) When installing many outdoor units

## ① Side-by-side arrangement

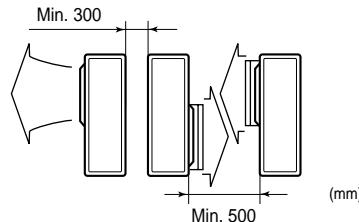
Remove the side screw on the pipe cover.  
Keep the top unobstructed.

- Refrigerant piping and electric wiring cannot be attached on the right side.

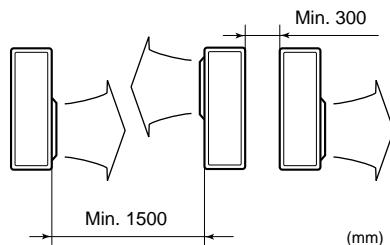


## ② Face-to-face arrangement (with air outlet guide)

Fit an optional outdoor air outlet guide on each unit and set them to "upward blow".

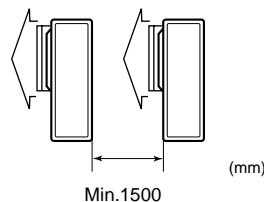


## ③ Face-to-face arrangement (without air outlet guides)

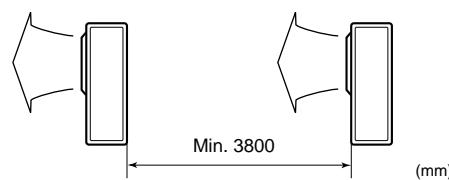


## ④ Parallel arrangement (with air outlet guides)

Fit an optional outdoor air outlet guide on each unit.



## ⑤ Parallel arrangement (without air outlet guides)



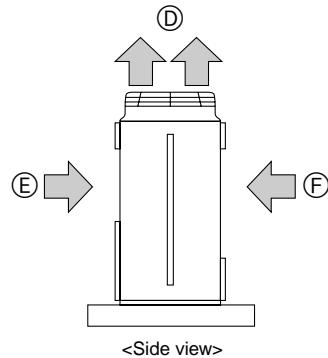
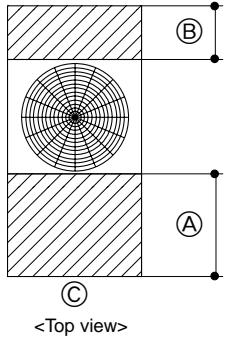
## ② PUHY, PUY

## (1) Individual installation

## Basic space required

A space of at least 250(450) mm is necessary at the back for inlet air. Taking servicing, etc. from the rear into account, a space of about 450 mm should be provided, the same as at the front.

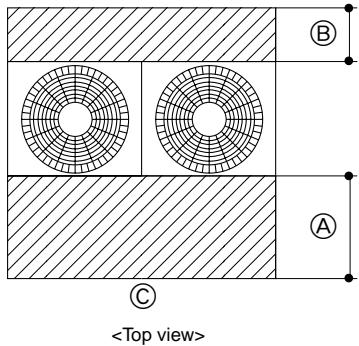
&lt; Model : 200-250-315&gt;



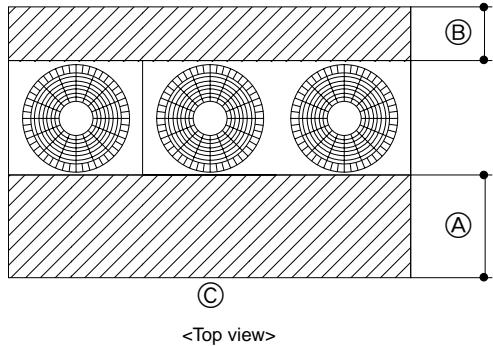
	L1	L2
PU(H)Y-P200-250	450mm	450mm
others	450mm	250mm

- (A) L<sub>1</sub> mm or more
- (B) L<sub>2</sub> mm or more
- (C) Front (outside of machine room)
- (D) Top discharge (open in principle)
- (E) Front inlet (open in principle)
- (F) Rear inlet (open in principle)

&lt; Model : 400-500&gt;

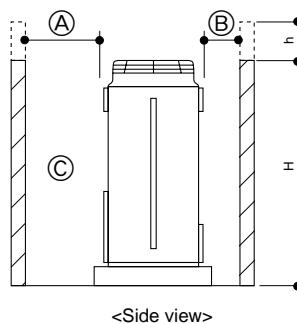
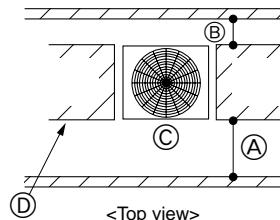


&lt; Model : 600-650-700-750&gt;



## When inlet air enters from right and left sides of unit

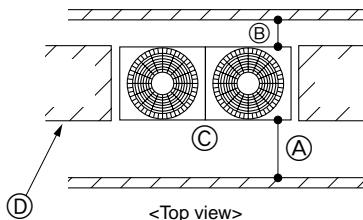
&lt; Model : 200-250-315&gt;



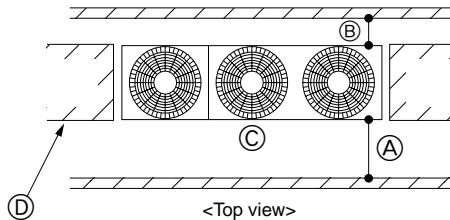
- (A) L<sub>1</sub> or more
- (B) L<sub>2</sub> or more
- (C) Front
- (D) No restrictions on wall height (left and right)

	L1	L2
PU(H)Y-P200-250	450mm	450mm
others	450mm	250mm

&lt; Model : 400-500&gt;



&lt; Model : 600-650-700-750&gt;

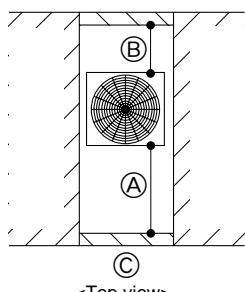


## Note:

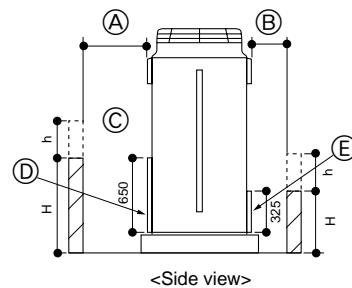
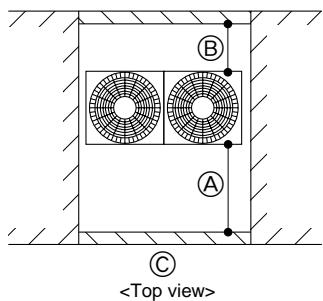
- Wall heights (H) of the front and the back sides shall be within overall height of unit.
- When the total height is exceeded, add the "h" dimension of the figure above to L<sub>1</sub> and L<sub>2</sub> in the table above.

**When unit is surrounded by walls**

&lt; Model : 200-250-315&gt;



&lt; Model : 400-500&gt;



- Ⓐ L<sub>1</sub> or more
- Ⓑ L<sub>2</sub> or more
- Ⓒ Front
- Ⓓ Front panel
- Ⓔ Rear panel

	L <sub>1</sub>	L <sub>2</sub>
PURY, PU(H)Y -P200-250	450mm	450mm
others	450mm	250mm

**Note:**

- Wall heights (H) of the front and the back sides shall be within height of front panel and rear panel.
- If the panel height is exceeded, add the "h" dimension of the figure above to L<sub>1</sub> and L<sub>2</sub> in the table above.

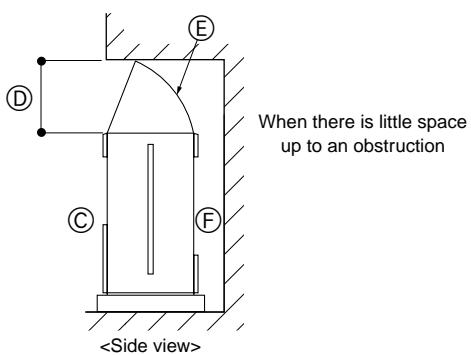
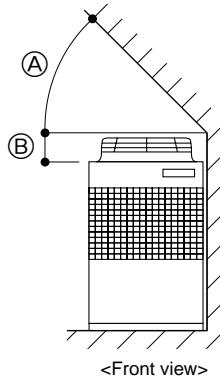
Example: When h is 100

The L<sub>1</sub> dimension becomes

$$450+100 = 550 \text{ mm.}$$

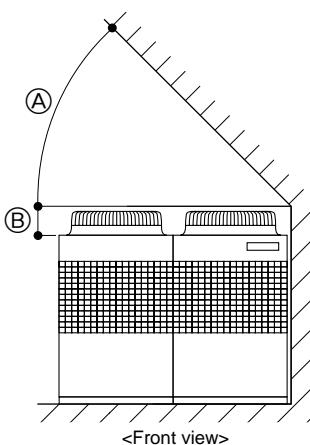
**When there is an obstruction above the unit**

&lt; Model : 200-250-315&gt;

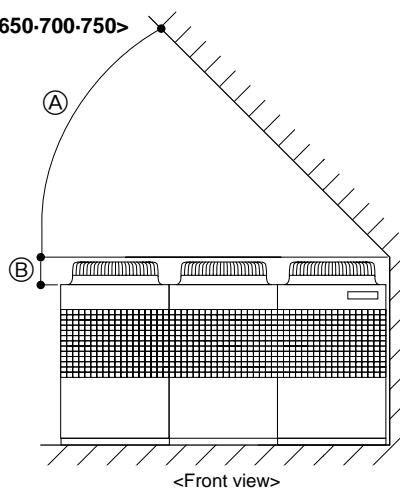


- Ⓐ 45° or more
- Ⓑ 300 mm or more
- Ⓒ Front
- Ⓓ 1000 mm or more
- Ⓔ Air outlet guide (procured at the site)
- Ⓕ Rear

&lt; Model : 400-500&gt;



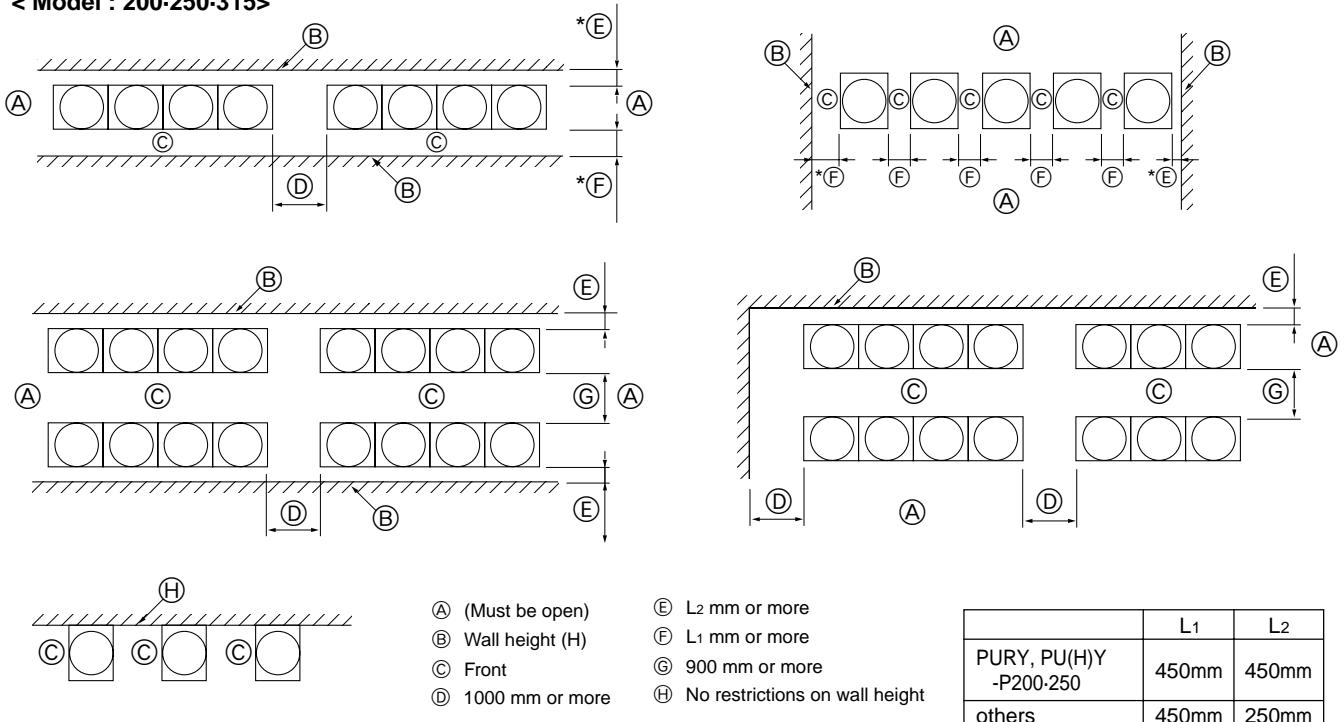
&lt; Model : 600-650-700-750&gt;



## (2) Collective installation and continuous installation

Space required for collective installation and continuous installation: When installing several units, leave the space between each block as shown below considering passage for air and people.

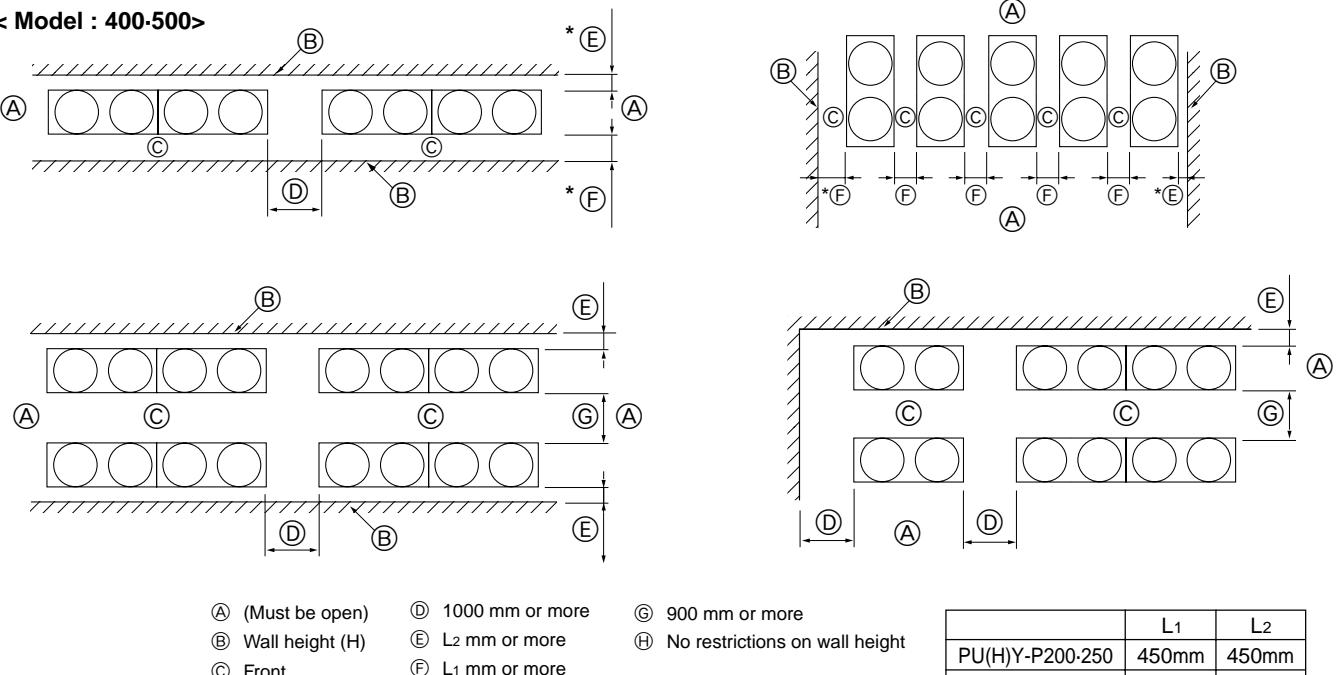
## &lt; Model : 200-250-315&gt;



## Note:

- Open in the two directions
- In case wall height (H) exceeds overall height of unit, add "h" dimension ( $h = \text{wall height } <\!H\!> - \text{overall height of unit}$ ) to \* marked dimension.
- 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.

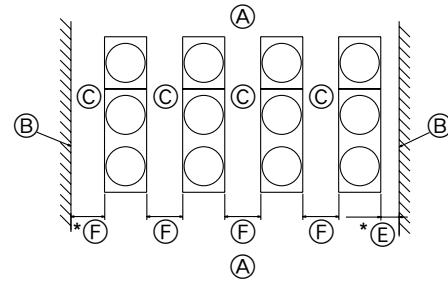
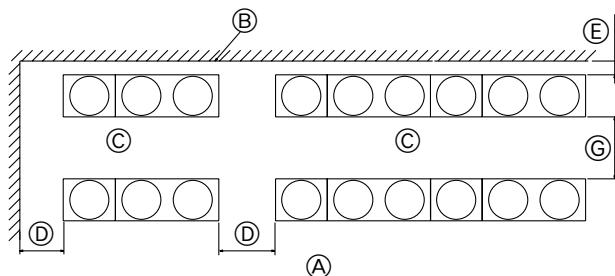
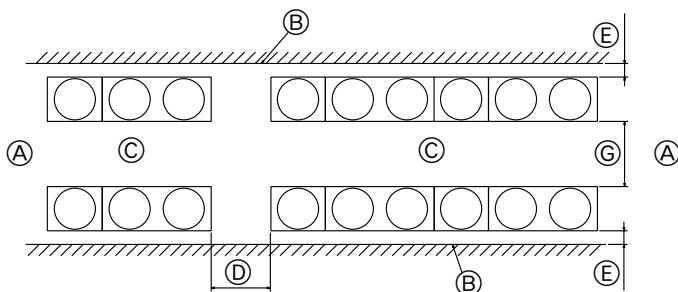
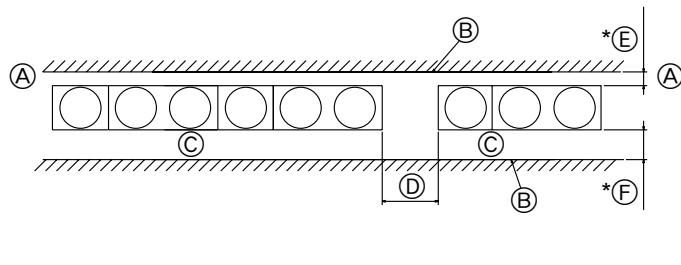
## &lt; Model : 400-500&gt;



## Note:

- Open in the two directions
- In case wall height (H) exceeds overall height of unit, add "h" dimension ( $h = \text{wall height } <\!H\!> - \text{overall height of unit}$ ) to \* marked dimension.
- 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.

&lt; Model : 600-650-700-750&gt;



- Ⓐ (Must be open)
- Ⓑ Wall height (H)
- Ⓒ Front
- Ⓓ 1000 mm or more
- Ⓔ L<sub>2</sub> mm or more
- Ⓕ L<sub>1</sub> mm or more
- Ⓖ 900 mm or more
- Ⓗ No restrictions on wall height

	L <sub>1</sub>	L <sub>2</sub>
PURY, PU(H)Y -P200-250	450mm	450mm
others	450mm	250mm

**Note:**

- Open in the two directions
- In case wall height (H) exceeds overall height of unit, add "h" dimension (h=wall height <H> - overall height of unit) to \*marked dimension.
- 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.

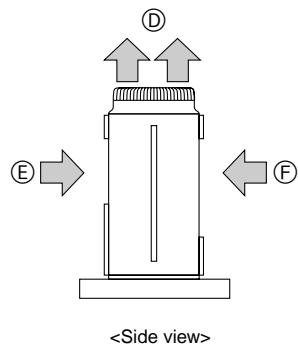
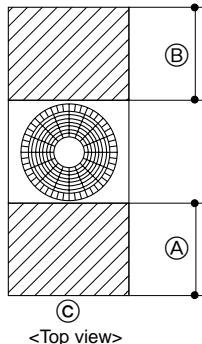
## ③ PURY

## (1) Individual installation

**Basic space required**

A space of at least 250 mm is necessary at the back for inlet air. Taking servicing, etc. from the rear into account, a space of about 450 mm should be provided, the same as at the front.

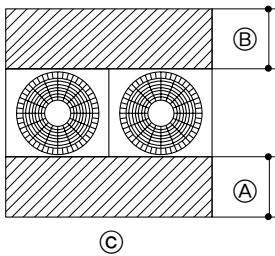
## &lt; Model : 200-250&gt;



&lt;Top view&gt;

&lt;Side view&gt;

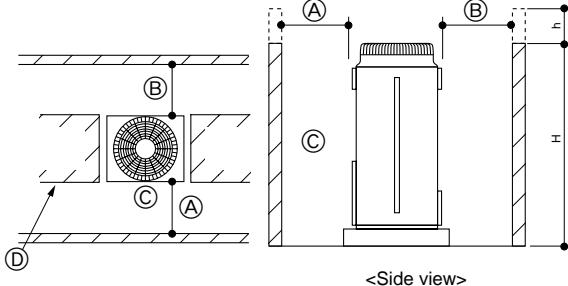
## &lt; Model : 400-500&gt;



- Ⓐ 450 mm or more
- Ⓑ 450 mm or more
- Ⓒ Front (outside of machine room)
- Ⓓ Top discharge (open in principle)
- Ⓔ Front inlet (open in principle)
- Ⓕ Rear inlet (open in principle)

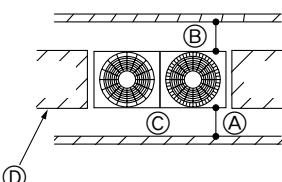
## When inlet air enters from right and left sides of unit

## &lt; Model : 200-250&gt;



&lt;Side view&gt;

## &lt; Model : 400-500&gt;



- Ⓐ L<sub>1</sub> or more
- Ⓑ L<sub>2</sub> or more
- Ⓒ Front
- Ⓓ No restrictions on wall height (left and right)

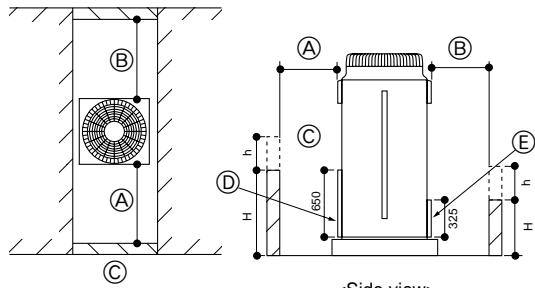
**Note:**

- Wall heights (H) of the front and the back sides shall be within overall height of unit.
- When the total height is exceeded, add the "h" dimension of the figure above to L<sub>1</sub> and L<sub>2</sub> in the table above.

L <sub>1</sub>	L <sub>2</sub>
450	450

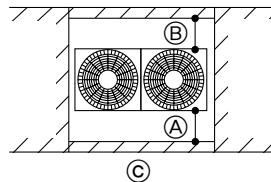
## When unit is surrounded by walls

## &lt; Model : 200-250&gt;



&lt;Side view&gt;

## &lt; Model : 400-500&gt;



- Ⓐ L<sub>1</sub> or more
- Ⓑ L<sub>2</sub> or more
- Ⓒ Front
- Ⓓ Front panel
- Ⓔ Rear panel

**Note:**

- Wall heights (H) of the front and the back sides shall be within height of front panel and rear panel.
- If the panel height is exceeded, add the "h" dimension of the figure above to L<sub>1</sub> and L<sub>2</sub> in the table above.

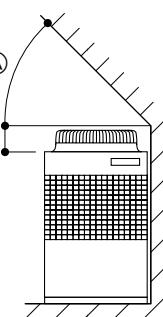
L <sub>1</sub>	L <sub>2</sub>
450	450

Example: When h is 100

The L dimension becomes  $450+100 = 550$  mm.

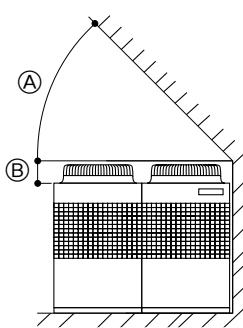
## When there is an obstruction above the unit

## &lt; Model : 200-250&gt;



When there is little space up to an obstruction

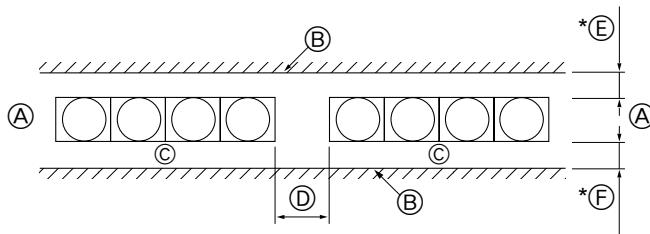
## &lt; Model : 400-500&gt;



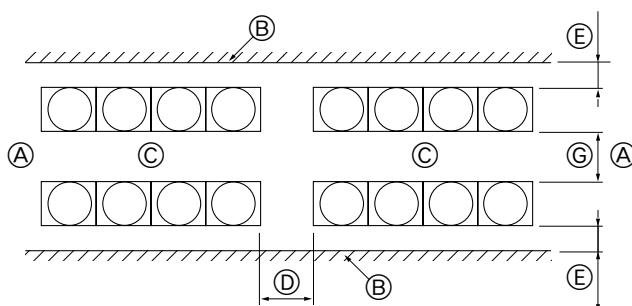
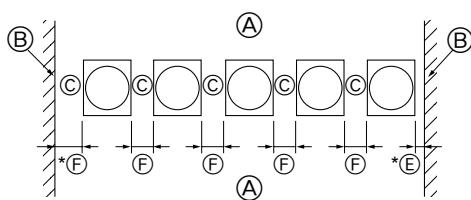
- Ⓐ 45° or more
- Ⓑ 300 mm or more
- Ⓒ 1000 mm or more
- Ⓓ Air outlet guide (Procured at the site)

## (2) Collective installation and continuous installation

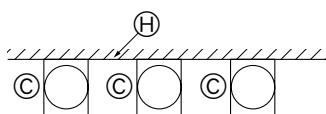
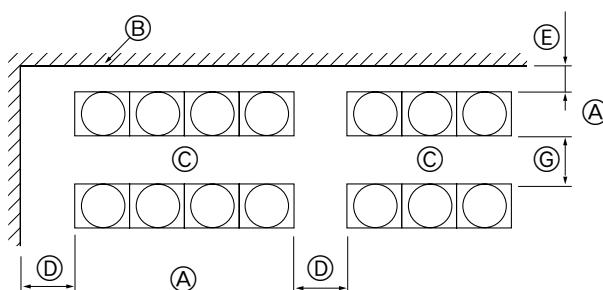
Space required for collective installation and continuous installation: When installing several units, leave the space between each block as shown below considering passage for air and people.



- Ⓐ (Must be open)
- Ⓑ Wall height (H)
- Ⓒ Front
- Ⓓ 1000 mm or more
- Ⓔ 450 mm or more
- Ⓕ 450 mm or more
- Ⓖ 900 mm or more
- Ⓗ No restrictions on wall height

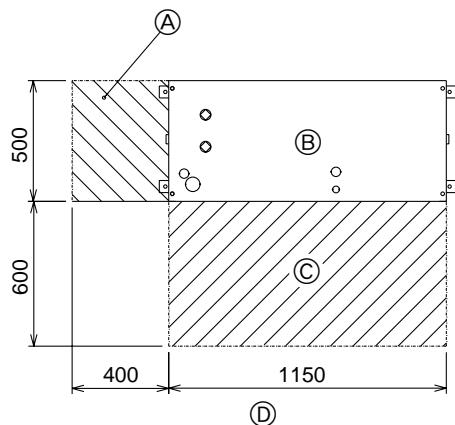
**Note:**

- Open in the two directions
- In case wall height (H) exceeds overall height of unit, add "h" dimension ( $h = \text{wall height } <\!H\!> - \text{overall height of unit}$ ) to \*marked dimension.
- 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.

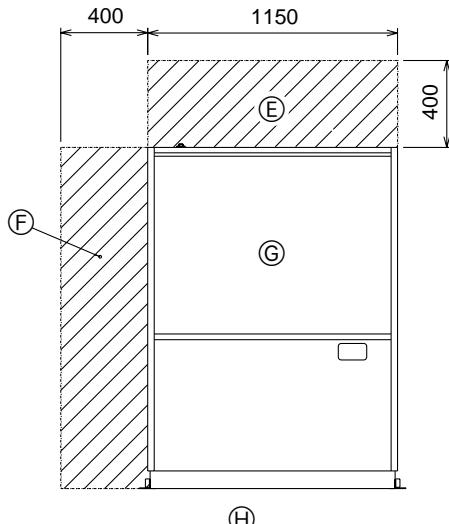


## ④ PQRY

- Please allow for the following service spaces after installation.  
(All servicing can be performed from the front of the unit)



(A) Piping space (for left piping)  
 (B) Heat source unit  
 (C) Service space (front side)  
 (D) (Top view)

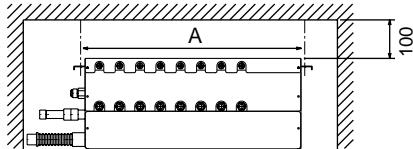


(E) Piping space (for top piping)  
 (F) Piping space (for left piping)  
 (G) Heat source unit  
 (H) (Front view)

## ⑤ BC controller

## 1. For hanging from the ceiling

<Front view> (when hanging to install)



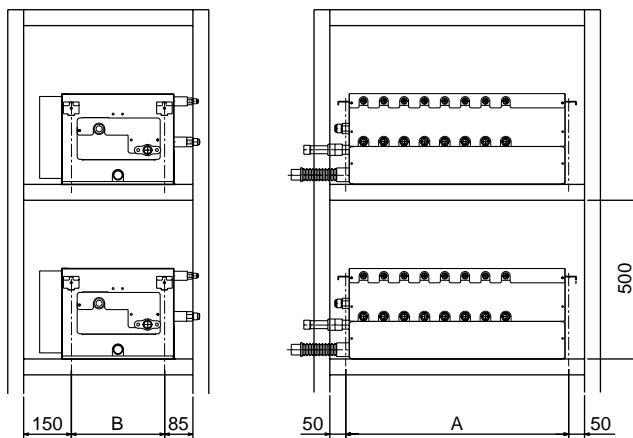
\*1 Dimensions with which pipe connection can be handled at site

Model name	A
CMB-P104V-F	702
CMB-P105V-F	702
CMB-P106V-F	702
CMB-P108V-F	702
CMB-P1010V-F	702
CMB-P1013V-F	1152
CMB-P1016V-F	1152

Model name	A
CMB-P108V-FA	1164
CMB-P1010V-FA	1164
CMB-P1013V-FA	1164
CMB-P1016V-FA	1164
CMB-P108V-FB	702

## 2. When stacking on a rack

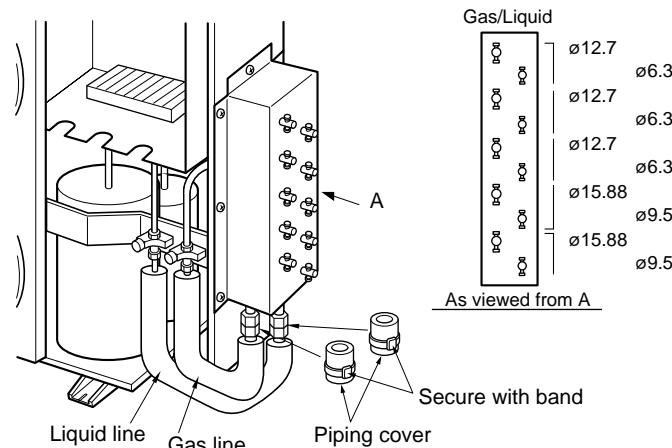
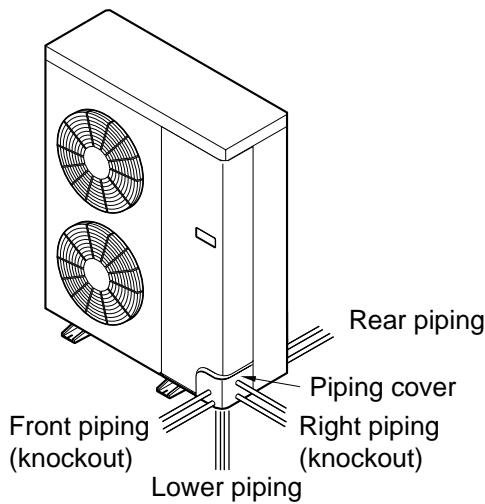
(This is a reference view showing the least installation space.)



Model name	B
CMB-P104V-F	298
CMB-P105V-F	298
CMB-P106V-F	298
CMB-P108V-F	298
CMB-P1010V-F	298
CMB-P1013V-F	298
CMB-P1016V-F	298
CMB-P108V-FA	388
CMB-P1010V-FA	388
CMB-P1013V-FA	388
CMB-P1016V-FA	388
CMB-P108V-FB	298

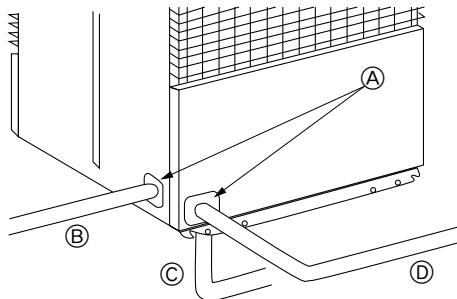
### 2-7-3 Connecting direction for refrigerant piping

① PUMY

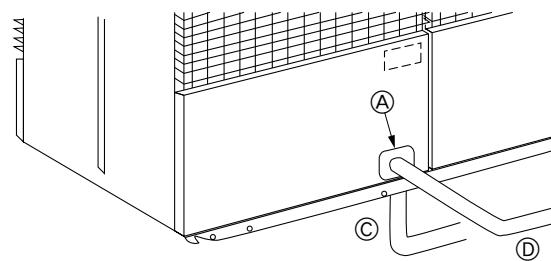


② PUHY, PURY

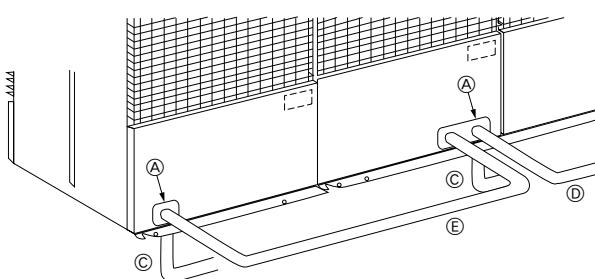
<Model : 200-250-315>



<Model : 400-500>



<Model : 600-650-700-750>

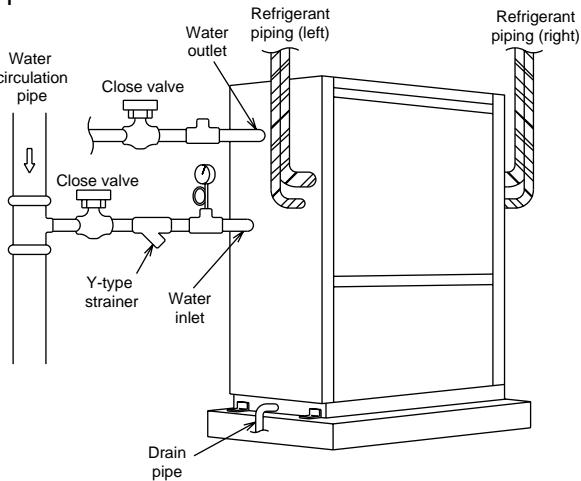


- Ⓐ Knock-out hole
- Ⓑ Left piping
- Ⓒ Bottom piping
- Ⓓ Front piping
- Ⓔ Connect piping (to constant capacity unit)

**Note:**

In the case of bottom piping, build a 100 mm or higher foundation so that piping will go through the bottom of the unit.

③ PQRY



## 2-7-4 Caution for snow and seasonal wind

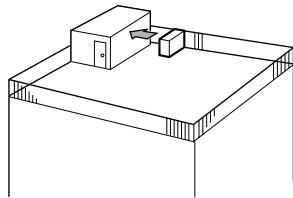
### ① PUMY

#### Precautions

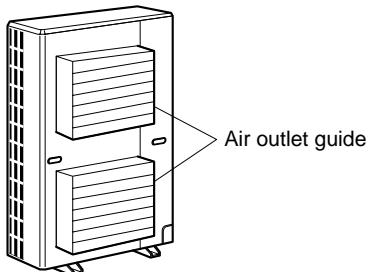
Installation on a rooftop or other windy places

When installing the unit on a rooftop or other location unprotected from the wind, situate the unit's air outlet so that it is not directly exposed to strong winds. Strong wind entering the air outlet may impede the normal airflow and cause malfunctions.

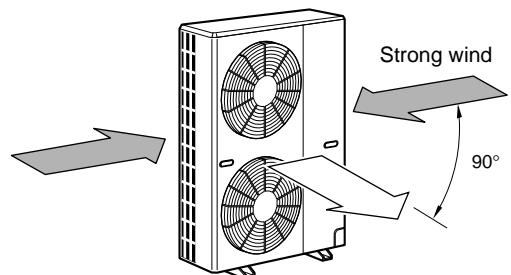
The following shows three examples of precautions against strong winds.



Face the outlet toward any available wall at least 50 cm away from the wall.



Install an optional air outlet guide and if the unit is installed at a place where the powerful blast of a typhoon, etc. comes directly into the air outlet.



Position the unit so that the air outlet blows perpendicularly to the seasonal wind direction, if possible.

## ② PU(H)Y, PURY

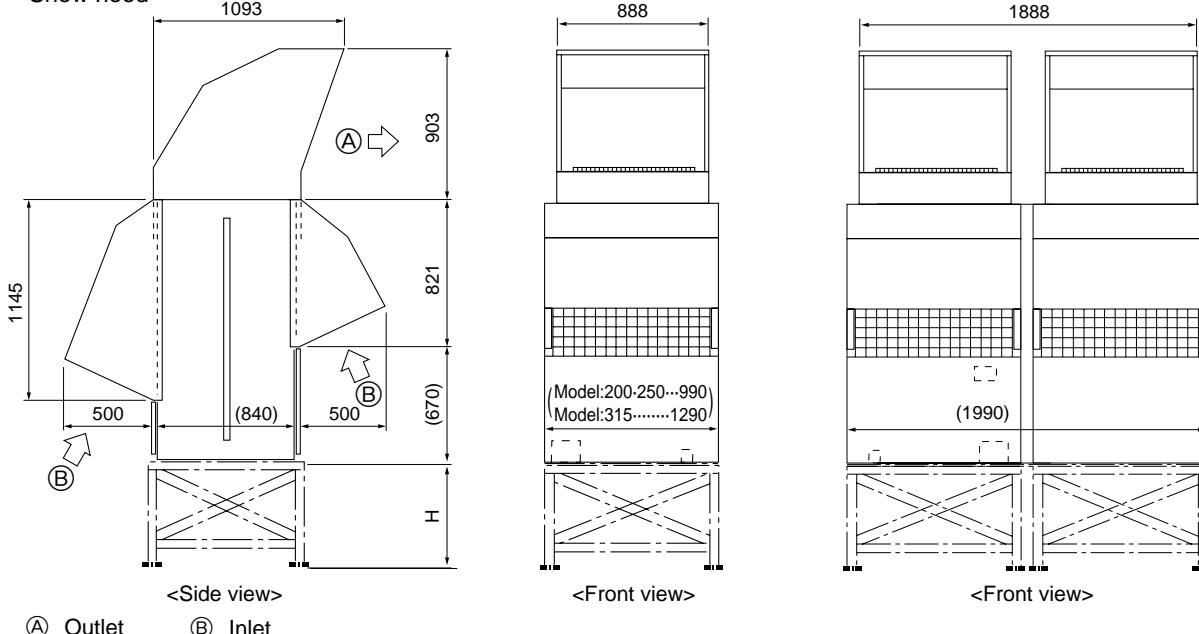
In cold and/or snowy areas, sufficient countermeasures to wind and snow damages should be taken for operating unit in normal and good condition in winter time. Even in the other areas, full consideration is required for installation of unit in order to prevent abnormal operations caused by wind or snow.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

### (1) Snow and wind

- Prevention of wind and snow damages in cold or snowy areas:

Refer to the figure of snow hood shown below:

- Snow hood



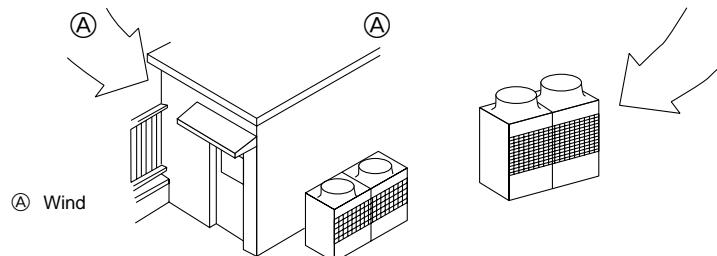
Ⓐ Outlet Ⓑ Inlet

#### Note:

- Height of frame base for snow damage prevention (H) shall be twice as high as expected snowfall. Width of frame base shall not exceed that of the unit. The frame base shall be made of angle steel, etc., and designed so that snow and wind slip through the structure. (If frame base is too wide, snow will be accumulated on it.)
- Install unit so that wind will not directly lash against openings of inlet and outlet ducts.
- Build frame base at customer referring to this figure.
- When the unit is used in a cold region and the heating operation is continuously performed for a long time when the outside air temperature is below freezing, install a heater to the unit base or take other appropriate measures to prevent water from freezing on the base.

### (2) Countermeasure to wind

Referring to the figure shown below, take appropriate measures which will suit the actual situation of the place for installation.



## 2-8 Joint / Header / Reduction

	Liquid side	Gas side
CMY-Y62C-E		
Reduction Use flare nut attached to BC controller		
CMY-R160-H		
CMY-R160-HA		
CMY-Y102S-F	<p>Deformed pipe (Accessory)</p> <p>φ12.7 (OD) φ9.52 (OD) φ6.35</p> <p>φ12.7 (OD) φ9.52 (OD)</p> <p>NOTE: Pipe diameter is indicated by inside diameter.</p>	<p>Deformed pipe (Accessory)</p> <p>φ19.05 φ15.88 φ12.7 φ19.05 φ15.88</p> <p>φ19.05 φ15.88 φ12.7 φ25.4 φ19.05 φ15.88</p> <p>φ19.05 φ15.88 φ28.6</p> <p>NOTE: Pipe diameter is indicated by inside diameter.</p>
CMY-Y102L-F	<p>Deformed pipe (Accessory)</p> <p>φ12.7 (OD) φ9.52 (OD) φ12.7</p> <p>φ12.7 (OD) φ9.52 (OD)</p> <p>NOTE: Pipe diameter is indicated by inside diameter.</p>	<p>Deformed pipe (Accessory)</p> <p>φ25.4 φ19.05 φ15.88 φ25.4 φ19.05 φ15.88</p> <p>φ25.4 φ19.05 φ15.88 φ25.4 φ19.05 φ15.88</p> <p>φ25.4 φ19.05 φ28.6</p> <p>NOTE: Pipe diameter is indicated by inside diameter.</p>
CMY-Y202-F	<p>Deformed pipe (Accessory)</p> <p>φ15.88 (OD) φ12.7 (OD) φ12.7 (OD) φ6.35</p> <p>φ12.7 (OD) φ9.52</p>	<p>Deformed pipe (Accessory)</p> <p>φ31.75 φ25.4 φ12.7 φ31.75 φ25.4 φ19.05 φ25.4 φ31.75 φ34.93 (2Pcs.) φ31.75 (OD) φ38.1 (2Pcs.)</p> <p>φ31.75 φ25.4 φ15.88 φ31.75 φ25.4 φ31.75 φ28.6 φ31.75 φ34.93 (2Pcs.) φ31.75 (OD) φ38.1 (2Pcs.)</p> <p>NOTE: Pipe diameter is indicated by inside diameter.</p>
CMY-Y302-F	<p>Deformed pipe (Accessory)</p> <p>φ19.05 φ15.88 φ19.05</p> <p>φ15.88 (OD) φ12.7 φ15.88 (OD) φ6.35</p> <p>φ15.88 (OD) φ9.52</p>	<p>Deformed pipe (Accessory)</p> <p>φ44.45 φ31.75 φ12.7 φ31.75 φ25.4 φ44.45 (OD) φ34.93 (2Pcs.) φ31.75 (OD) φ38.1 (2Pcs.) φ44.45 (OD) φ41.28 (2Pcs.)</p> <p>φ44.45 φ31.75 φ15.88 φ31.75 φ25.4 φ44.45 (OD) φ34.93 (2Pcs.) φ31.75 (OD) φ38.1 (2Pcs.)</p> <p>φ44.45 φ31.75 φ19.05 φ31.75 φ28.58 φ44.45 (OD) φ34.93 (2Pcs.) φ31.75 (OD) φ38.1 (2Pcs.)</p> <p>φ44.45 φ31.75 φ34.93 φ31.75 φ31.75 φ44.45 (OD) φ38.1 (2Pcs.) φ31.75 (OD) φ41.28 (2Pcs.)</p> <p>NOTE: Pipe diameter is indicated by inside diameter.</p>

	Liquid side	Gas side
CMY-Y64-C		
CMY-Y68		
CMY-Y104-F		
CMY-Y107-F		
CMY-Y1010-F		
CMC-30A		
CMY-S65 (PUMY only)		

OD:Outside Diameter

### 3. Caution For Refrigerant Leak

The installer and system specialist shall secure safety against leakage according to local regulations or standards. The following standards may be applicable if local regulations are not available.

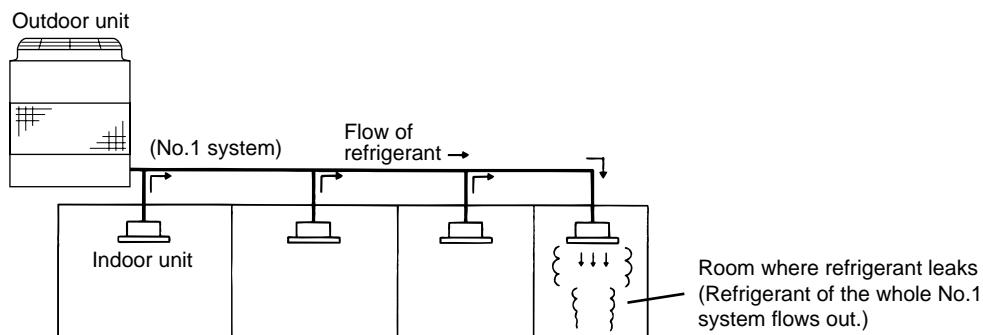
#### 3-1 Introduction

In addition to City Multi almost all air conditioners utilize R22 or R407C as refrigerant. Though the R22, R407C is harmless and incombustible in itself, the room to equip the air conditioner should be large to such an extent that the refrigerant gas will not exceed the limiting concentration even if the refrigerant gas leaks

##### • Limiting concentration

Limiting concentration is the limit of Freon gas concentration where immediate measures can be taken without hurting human body when refrigerant leaks in the air. The limiting concentration shall be described in the unit of kg/m<sup>3</sup> (Freon gas weight in /m<sup>3</sup> air) for facilitating calculation.

**Limiting concentration: 0.3kg/m<sup>3</sup>(R22), 0.31kg/m<sup>3</sup>(R407C)**      (ISO5149, EN378-1)



#### 3-2 Checking procedure of limiting concentration

Check limiting concentration following step ①~④, and take appropriate measure depending on the situation.

- ① Calculate amount of all the replenished refrigerant (kg) per each refrigerant system.

$$\begin{array}{rcl} \text{Amount of replenished refrigerant} & + & \text{Amount of additional} \\ \text{per one outdoor unit system} & & \text{replenished refrigerant} \\ \hline & & = \text{Total amount of replenished} \\ & & \text{refrigerant in refrigerant facility} \\ & & \text{(kg)} \end{array}$$

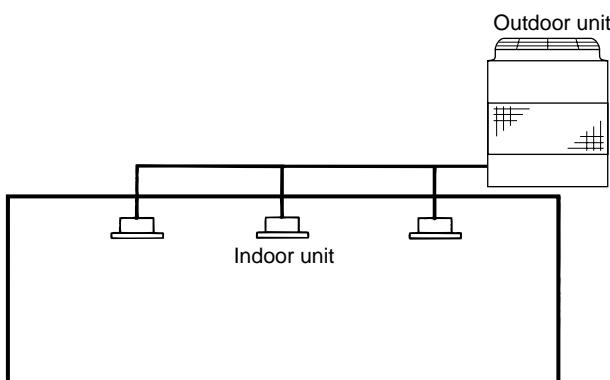
Amount of replenished refrigerant at factory shipment      Amount of additionally replenished refrigerant depending on piping length or piping diameter at customer

Note : In case one refrigerant facility is divided into 2 or more refrigerant systems and each system is independent, amount of replenished refrigerant of each system shall be adopted.

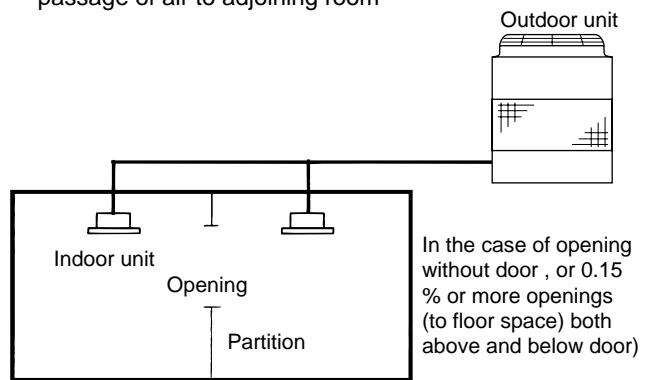
- ② Calculate minimum room capacity.

Calculate room capacity by regarding □ portion as one room or the smaller room.

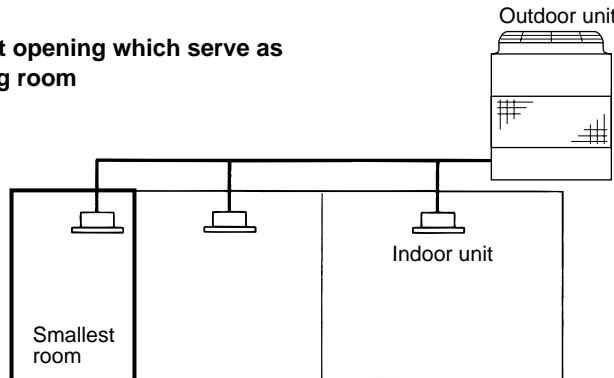
- (a) Without partition



- (b) With partition and with opening which serve as passage of air to adjoining room



(c) With partition and without opening which serve as passage of air to adjoining room



③ Calculate refrigerant concentration with the results of ① and ②

$$\frac{\text{Total amount of replenished refrigerant in refrigerant facility (kg)}}{\text{Capacity of smallest room where indoor unit is installed (m}^3\text{)}} = \text{Refrigerant concentration (kg/m}^3\text{)}$$

(R22 or R407C)

In case the result of calculation exceeds the limiting concentration, perform the same calculations by shifting to the second smallest, and the third smallest rooms until at last the result is below the limiting concentration.

#### ④ In case limiting concentration is exceed

When limiting concentration is exceeded, change original plan or take one of the countermeasures shown below:

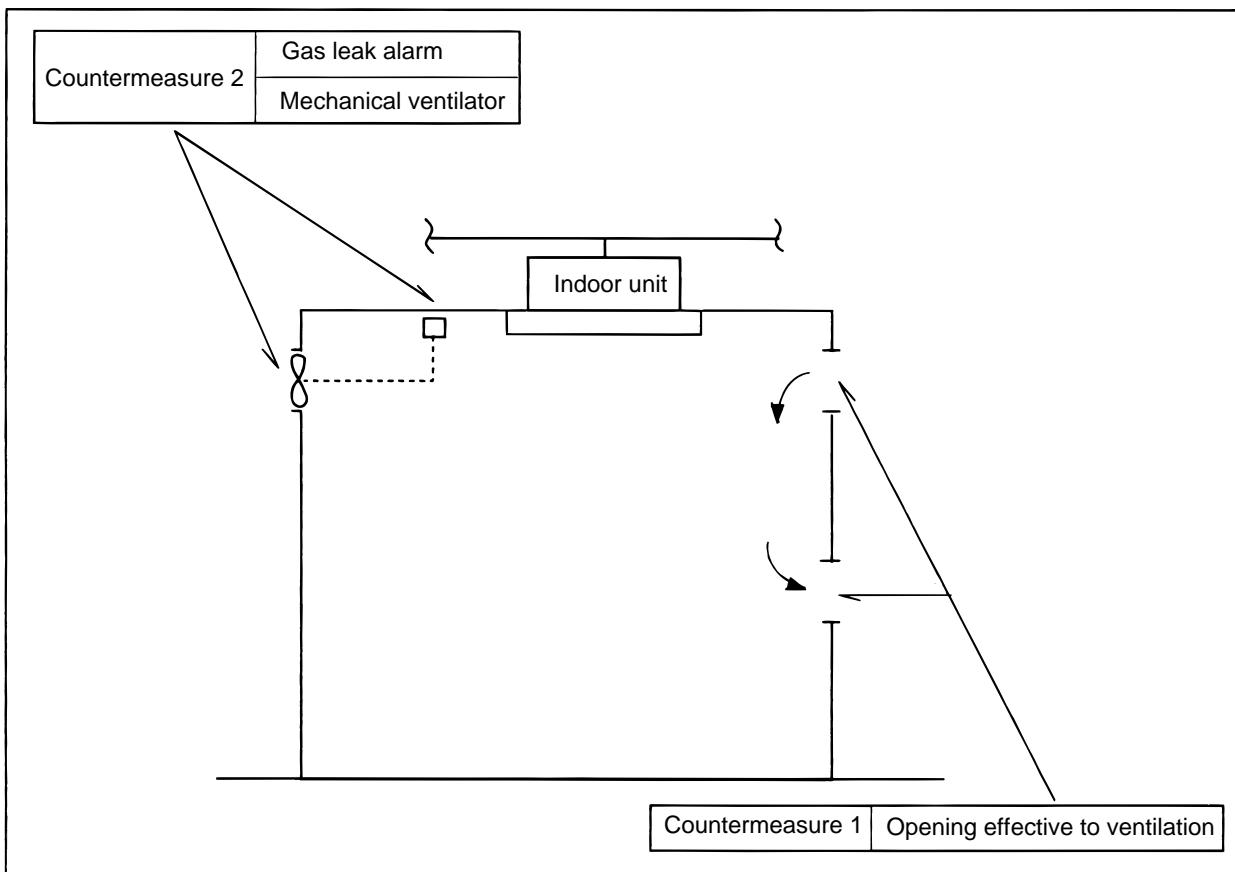
- Countermeasure 1

Provide opening for ventilation.

Provide 0.15% or more opening to floor space both above and below door, or provide opening without door.

- Countermeasure 2

Provide gas leak alarm linked with mechanical ventilator.



**Pay a special attention to the place, such as a basement, etc. where refrigerant can stay, since refrigerant is heavier than air.**

