

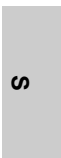
# 1. SPECIFICATIONS

G10 2nd

Model		PUMY-P112YKM(-BS)		PUMY-P125YKM(-BS)		
Power source		3-phase 380-415V 50Hz		3-phase 380-415V 50Hz		
Cooling capacity (Nominal)	*1 kW	12.5		14.0		
	*1 kcal/h					
	*1 BTU/h	42,700		47,800		
	Power input kW	2.79		3.46		
	Current input A	4.46-4.24-4.09		5.53-5.26-5.07		
	EER kW/kW	4.48		4.05		
Temp. range of cooling	Indoor W.B.	15.0~24.0°C(59~75°F)		15.0~24.0°C(59~75°F)		
	Outdoor D.B.	-5.0~46.0°C(23~115°F)		-5.0~46.0°C(23~115°F)		
Heating capacity (Nominal)	*2 kW	14.0		16.0		
	*2 kcal/h					
	*2 BTU/h	47,800		54,600		
	Power input kW	3.04		3.74		
	Current input A	4.86-4.62-4.45		5.98-5.68-5.48		
	COP kW/kW	4.61		4.28		
Temp. range of heating	Indoor D.B.	15.0~27.0°C(59~81°F)		15.0~27.0°C(59~81°F)		
	Outdoor W.B.	-20.0~15.5°C(-4~60°F)		-20.0~15.5°C(-4~60°F)		
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity		50~130 % of outdoor unit capacity		
	Model/Quantity	P15~P140/9		P15~P140/10		
Sound pressure level (measured in anechoic room) dB <A>		49/51		50/52		
Refrigerant piping diameter	Liquid pipe mm(in.)	9.52(3/8) Flare		9.52(3/8) Flare		
	Gas pipe mm(in.)	15.88(5/8) Flare		15.88(5/8) Flare		
FAN	Type x Quantity		Propeller fan x 2		Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	110		110	
		L/s	1,833		1,833	
		cfm	3,884		3,884	
	Control, Driving mechanism		DC control		DC control	
	Motor output kW	0.06 + 0.06		0.06 + 0.06		
	External static press.		0 Pa (0 mmH <sub>2</sub> O)		0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity		Scroll hermetic compressor x 1		Scroll hermetic compressor x 1	
	Manufacture		MITSUBISHI ELECTRIC CORPORATION		MITSUBISHI ELECTRIC CORPORATION	
	Starting method		Inverter		Inverter	
	Motor output kW	2.9		3.5		
	Case heater kW	0		0		
	Lubricant		FV50S (2.3litter)		FV50S (2.3litter)	
External finish		Galvanized Steel Sheets Munsell No. 3Y 7.8/1.1		Galvanized Steel Sheets Munsell No. 3Y 7.8/1.1		
External dimension HxWxD	mm	1,338 x 1,050 x 330 (+30)		1,338 x 1,050 x 330 (+30)		
	in.	52-11/16 x 41-3/8 x 13 (+1-3/16)		52-11/16 x 41-3/8 x 13 (+1-3/16)		
Protection devices	High pressure protection		High pressure switch		High pressure switch	
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heatsink thermistor)		Overcurrent detection, Overheat detection (Heatsink thermistor)	
	Compressor		Compressor thermistor, Over current detection		Compressor thermistor, Over current detection	
	Fan motor		Overheating, Voltage protection		Overheating, Voltage protection	
Refrigerant	Type x original charge		R410A x 4.8kg		R410A x 4.8kg	
	Control		Linear Expansion Valve		Linear Expansion Valve	
Net weight kg(lbs)	125(276)		125(276)			
Heat exchanger		Cross Fin and Copper tube		Cross Fin and Copper tube		
HIC circuit (HIC: Heat Inter-Changer)		HIC circuit		HIC circuit		
Defrosting method		Reversed refrigerant circuit		Reversed refrigerant circuit		
Drawing	External	BK01N339		BK01N339		
	Wiring	BH78B814		BH78B814		
Standard attachment	Document	Installation Manual		Installation Manual		
	Accessory	Grounded lead wire x 2		Grounded lead wire x 2		
Optional parts		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E		Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E		
Remarks		* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. * Due to continuing improvement, above specifications may be subject to change without notice.				

Notes:	Unit converter
*1.Nominal cooling conditions (subject to JIS B8615-1) Indoor: 27degCDB/19degCWB (81degFDB/66degFWB), Outdoor: 35degCDB (95degFDB) Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)	kcal/h =kW x 860 BTU/h =kW x 3,412
*2.Nominal heating conditions (subject to JIS B8615-1) Indoor: 20degCDB (68degFDB), Outdoor: 7degCDB/6degCWB (45degFDB/43degFWB) Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)	cfm =m <sup>3</sup> /min x 35.31 lbs =kg/0.4536
	*Above specification data is subject to rounding variation.

# 1. SPECIFICATIONS



Model			PUMY-P140YKM(-BS)	
Power source			3-phase 380-415V 50Hz	
Cooling capacity (Nominal)	*1	kW	15.5	
	*1	kcal/h		
	*1	BTU/h	52,900	
		Power input	kW	4.52
		Current input	A	7.23-6.87-6.62
		EER	kW/kW	3.43
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	
	Outdoor	D.B.	-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2	kW	18.0	
	*2	kcal/h		
	*2	BTU/h	61,400	
		Power input	kW	4.47
		Current input	A	7.15-6.79-6.55
		COP	kW/kW	4.03
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	
	Outdoor	W.B.	-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	Total capacity		50~130 % of outdoor unit capacity	
	Model/Quantity		P15~P140/12	
Sound pressure level (measured in anechoic room)			dB <A> 51/53	
Refrigerant piping diameter	Liquid pipe	mm(in.)	9.52(3/8) Flare	
	Gas pipe	mm(in.)	15.88(5/8) Flare	
FAN	Type x Quantity		Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	110	
		L/s	1,833	
		cfm	3,884	
	Control, Driving mechanism		DC control	
	Motor output	kW	0.06 + 0.06	
	External static press.		0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity		Scroll hermetic compressor x 1	
	Manufacture		MITSUBISHI ELECTRIC CORPORATION	
	Starting method		Inverter	
	Motor output	kW	3.9	
	Case heater	kW	0	
Lubricant		FV50S (2.3liter)		
External finish			Galvanized Steel Sheets Munsell No. 3Y 7.8/1.1	
External dimension HxWxD	mm		1,338 x 1,050 x 330 (+30)	
	in.		52-11/16 x 41-3/8 x 13 (+1-3/16)	
Protection devices	High pressure protection		High pressure switch	
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heatsink thermistor)	
	Compressor		Compressor thermistor, Over current detection	
	Fan motor		Overheating, Voltage protection	
Refrigerant	Type x original charge		R410A x 4.8kg	
	Control		Linear Expansion Valve	
Net weight		kg(lbs)	125(276)	
Heat exchanger			Cross Fin and Copper tube	
HIC circuit (HIC: Heat Inter-Changer)			HIC circuit	
Defrosting method			Reversed refrigerant circuit	
Drawing	External		BK01N339	
	Wiring		BH78B814	
Standard attachment	Document		Installation Manual	
	Accessory		Grounded lead wire x 2	
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	
Remarks			* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. * Due to continuing improvement, above specifications may be subject to change without notice.	

Notes:	Unit converter
*1.Nominal cooling conditions (subject to JIS B8615-1) Indoor: 27degCDB/19degCWB (81degFDB/66degFWB), Outdoor: 35degCDB (95degFDB) Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)	kcal/h =kW x 860 BTU/h =kW x 3,412 cfm =m <sup>3</sup> /min x 35.31
*2.Nominal heating conditions (subject to JIS B8615-1) Indoor: 20degCDB (68degFDB), Outdoor: 7degCDB/6degCWB (45degFDB/43degFWB) Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)	lbs =kg/0.4536
	*Above specification data is subject to rounding variation.

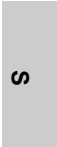
# 1. SPECIFICATIONS

G10 2nd

Model			PUMY-P112VKM(-BS)	PUMY-P125VKM(-BS)
Power source			1-phase 220-240V 50Hz	
Cooling capacity (Nominal)	*1	kW	12.5	
	*1	kcal/h	14.0	
	*1	BTU/h	42,700	
		Power input	47,800	
		kW	2.79	
		Current input	12.87-12.32-11.80	
	EER	4.48		
	kW/kW	4.05		
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)	
	Outdoor	D.B.	-5.0~46.0°C(23~115°F)	
Heating capacity (Nominal)	*2	kW	14.0	
	*2	kcal/h	16.0	
	*2	BTU/h	47,800	
		Power input	54,600	
		kW	3.04	
		Current input	14.03-13.42-12.86	
	COP	4.61		
	kW/kW	4.28		
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)	
	Outdoor	W.B.	-20.0~15.5°C(-4~60°F)	
Indoor unit connectable	Total capacity	50~130 % of outdoor unit capacity		
	Model/Quantity	P15~P140/9		P15~P140/10
Sound pressure level (measured in anechoic room)		dB <A>	49/51	
Refrigerant piping diameter	Liquid pipe	mm(in.)	9.52(3/8) Flare	
	Gas pipe	mm(in.)	15.88(5/8) Flare	
FAN	Type x Quantity		Propeller fan x 2	
	Air flow rate	m <sup>3</sup> /min	110	
		L/s	1,833	
		cfm	3,884	
	Control, Driving mechanism		DC control	
	Motor output	kW	0.06 + 0.06	
	External static press.		0 Pa (0 mmH <sub>2</sub> O)	
Compressor	Type x Quantity		Scroll hermetic compressor x 1	
	Manufacture		MITSUBISHI ELECTRIC CORPORATION	
	Starting method		Inverter	
	Motor output	kW	2.9	
	Case heater	kW	0	
	Lubricant		FV50S (2.3litter)	
External finish			Galvanized Steel Sheets	
			Munsell No. 3Y 7.8/1.1	
External dimension HxWxD	mm		1,338 x 1,050 x 330 (+30)	
	in.		52-11/16 x 41-3/8 x 13 (+1-3/16)	
Protection devices	High pressure protection		High pressure switch	
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heatsink thermistor)	
	Compressor		Compressor thermistor, Over current detection	
	Fan motor		Overheating, Voltage protection	
Refrigerant	Type x original charge		R410A x 4.8kg	
	Control		Linear Expansion Valve	
Net weight		kg(lbs)	123(272)	
Heat exchanger			Cross Fin and Copper tube	
HIC circuit (HIC: Heat Inter-Changer)			HIC circuit	
Defrosting method			Reversed refrigerant circuit	
Drawing	External		BK01N346	
	Wiring		BH78B813	
Standard attachment	Document		Installation Manual	
	Accessory		Grounded lead wire x 2	
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E	
Remarks			<p>* In case of connecting Fresh air intake type indoor unit PEFY-P-VHM-E-F, only one indoor unit can be connected with one PUMY.</p> <p>* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.</p> <p>* Due to continuing improvement, above specifications may be subject to change without notice.</p>	

Notes:	Unit converter
*1.Nominal cooling conditions (subject to JIS B8615-1) Indoor: 27degCDB/19degCWB (81degFDB/66degFWB), Outdoor: 35degCDB (95degFDB) Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)	kcal/h =kW x 860 BTU/h =kW x 3,412
*2.Nominal heating conditions (subject to JIS B8615-1) Indoor: 20degCDB (68degFDB), Outdoor: 7degCDB/6degCWB (45degFDB/43degFWB) Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)	cfm =m <sup>3</sup> /min x 35.31 lbs =kg/0.4536
	*Above specification data is subject to rounding variation.

# 1. SPECIFICATIONS

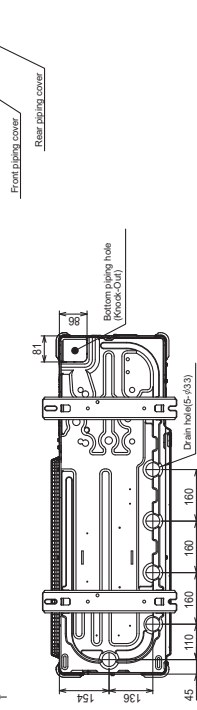
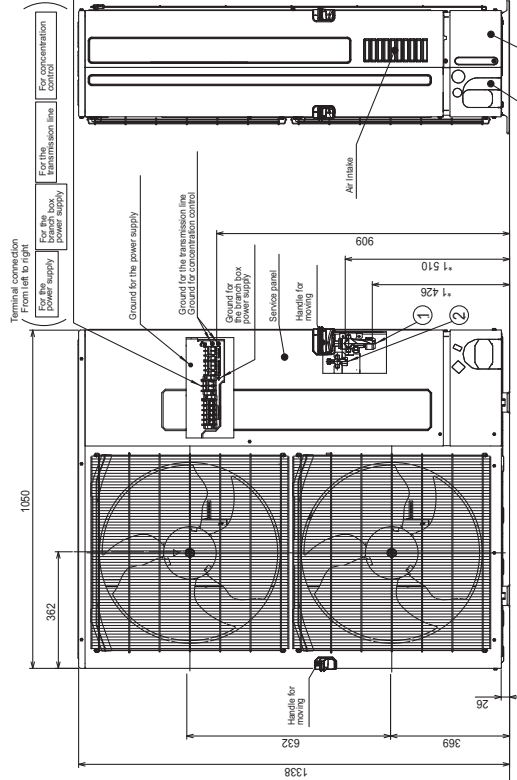
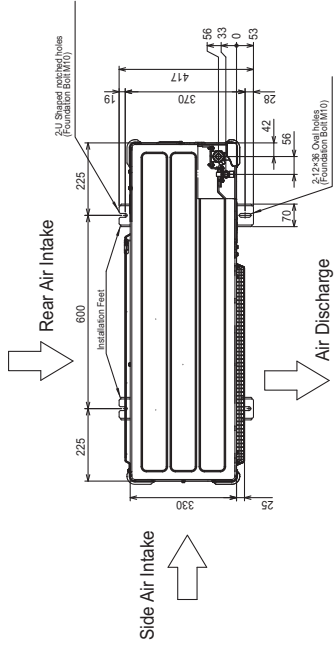


Model			PUMY-P140VKM(-BS)			
Power source			1-phase 220-240V 50Hz			
Cooling capacity (Nominal)	*1	kW	15.5			
	*1	kcal/h				
	*1	BTU/h	52,900			
		Power input	kW	4.52		
		Current input	A	20.86-19.95-19.12		
		EER	kW/kW			
			3.43			
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C(59~75°F)			
	Outdoor	D.B.	-5.0~46.0°C(23~115°F)			
Heating capacity (Nominal)	*2	kW	18.0			
	*2	kcal/h				
	*2	BTU/h	61,400			
		Power input	kW	4.47		
		Current input	A	20.63-19.73-18.91		
		COP	kW/kW			
			4.03			
Temp. range of heating	Indoor	D.B.	15.0~27.0°C(59~81°F)			
	Outdoor	W.B.	-20.0~15.5°C(-4~60°F)			
Indoor unit connectable	Total capacity		50~130 % of outdoor unit capacity			
	Model/Quantity		P15~P140/12			
Sound pressure level (measured in anechoic room)			dB <A>			
			51/53			
Refrigerant piping diameter	Liquid pipe	mm(in.)	9.52(3/8) Flare			
	Gas pipe	mm(in.)	15.88(5/8) Flare			
FAN	Type x Quantity		Propeller fan x 2			
	Air flow rate	m <sup>3</sup> /min	110			
		L/s	1,833			
		cfm	3,884			
	Control, Driving mechanism		DC control			
	Motor output	kW	0.06 + 0.06			
	External static press.		0 Pa (0 mmH <sub>2</sub> O)			
Compressor	Type x Quantity		Scroll hermetic compressor x 1			
	Manufacture		MITSUBISHI ELECTRIC CORPORATION			
	Starting method		Inverter			
	Motor output	kW	4.0			
	Case heater	kW	0			
	Lubricant		FV50S (2.3liter)			
External finish			Galvanized Steel Sheets Munsell No. 3Y 7.8/1.1			
External dimension HxWxD	mm		1,338 x 1,050 x 330 (+30)			
	in.		52-11/16 x 41-3/8 x 13 (+1-3/16)			
Protection devices	High pressure protection		High pressure switch			
	Inverter circuit (COMP./FAN)		Overcurrent detection, Overheat detection (Heatsink thermistor)			
	Compressor		Compressor thermistor, Over current detection			
	Fan motor		Overheating, Voltage protection			
Refrigerant	Type x original charge		R410A x 4.8kg			
	Control		Linear Expansion Valve			
Net weight		kg(lbs)	123(272)			
Heat exchanger			Cross Fin and Copper tube			
HIC circuit (HIC: Heat Inter-Changer)			HIC circuit			
Defrosting method			Reversed refrigerant circuit			
Drawing	External		BK01N346			
	Wiring		BH78B813			
Standard attachment	Document		Installation Manual			
	Accessory		Grounded lead wire x 2			
Optional parts			Joint: CMY-Y62-G-E Header: CMY-Y64/68-G-E			
Remarks			<p>* In case of connecting Fresh air intake type indoor unit PEFY-P-VHM-E-F, only one indoor unit can be connected with one PUMY.</p> <p>* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual.</p> <p>* Due to continuing improvement, above specifications may be subject to change without notice.</p>			

Notes:	Unit converter
*1.Nominal cooling conditions (subject to JIS B8615-1) Indoor: 27degCDB/19degCWB (81degFDB/66degFWB), Outdoor: 35degCDB (95degFDB) Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)	kcal/h =kW x 860 BTU/h =kW x 3,412
*2.Nominal heating conditions (subject to JIS B8615-1) Indoor: 20degCDB (68degFDB), Outdoor: 7degCDB/6degCWB (45degFDB/43degFWB) Pipe length: 7.5m (24-9/16ft.), Level difference: 0m (0ft.)	cfm =m <sup>3</sup> /min x 35.31 lbs =kg/0.4536
	*Above specification data is subject to rounding variation.

PUMY-P112,125,140YKM(-BS)

Unit : mm

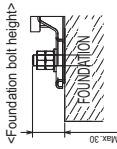


4 PIPING-WIRING DIRECTIONS

Piping and wiring connections can be made from 4 directions: FRONT, Right, Rear and Below.

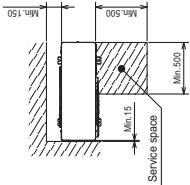
3 FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10-φV3/8) bolts. (Bolts and washers must be purchased locally)



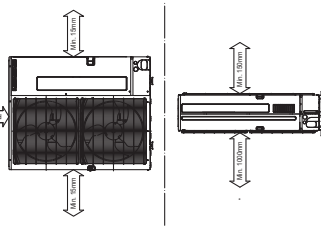
2 SERVICE SPACE

Dimensions of space needed for service access are shown in the below diagram.



1 FREE SPACE (Around the unit)

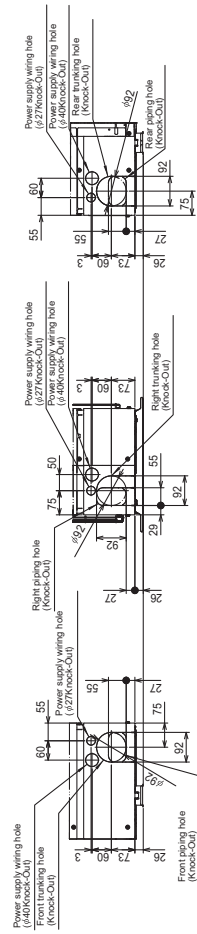
The diagram below shows a basic example. Explanation of particular details are given in the installation manuals etc.



Example of Notes

- ① ... Refrigerant GAS pipe connection (FLARE) φ15.88 (0.625)
- ② ... Refrigerant LIQUID pipe connection (FLARE) φ9.52 (3/8F)
- \* ... Indication of STOP VALVE connection location.

Piping Knock-Out Hole Details



PUMY-P112,125,140VKM(-BS)

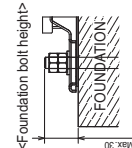
Unit : mm

4 PIPING-WIRING DIRECTIONS

Piping and wiring connections can be made from 4 directions: FRONT, Right, Rear and Below.

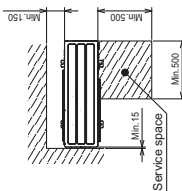
3 FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10-4/3/8-) bolts. (Bolts and washers must be purchased locally.)



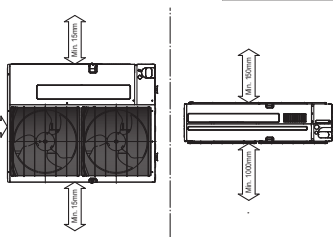
2 SERVICE SPACE

Dimensions of space needed for service access are shown in the below diagram.



1 FREE SPACE (Around the unit)

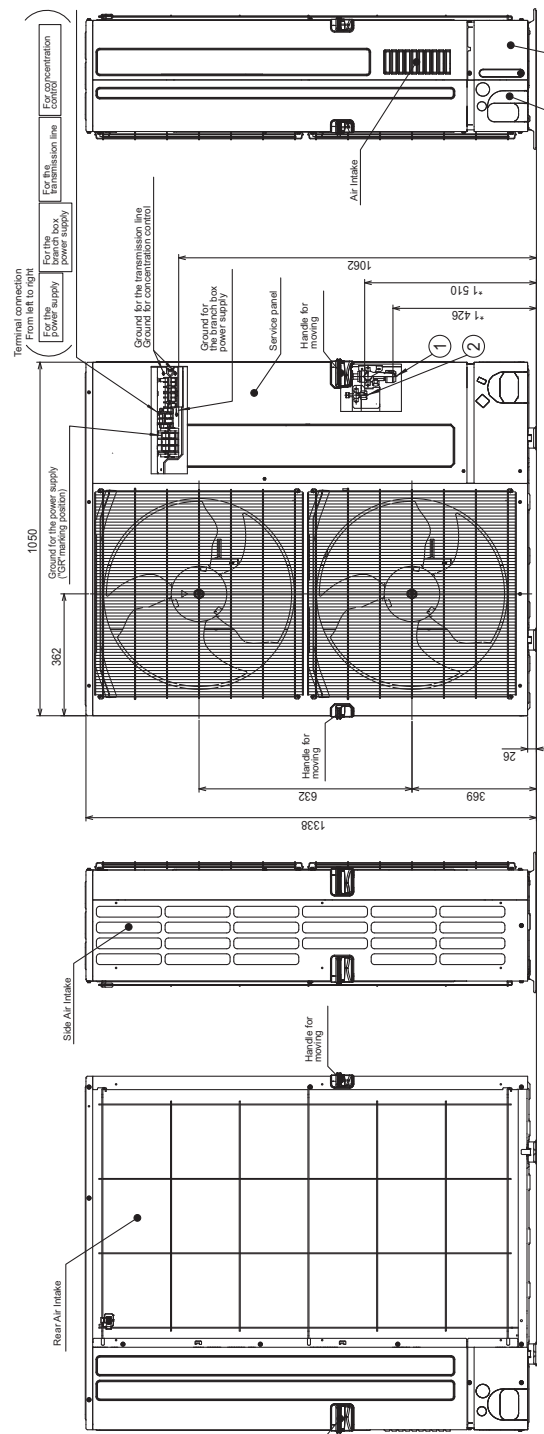
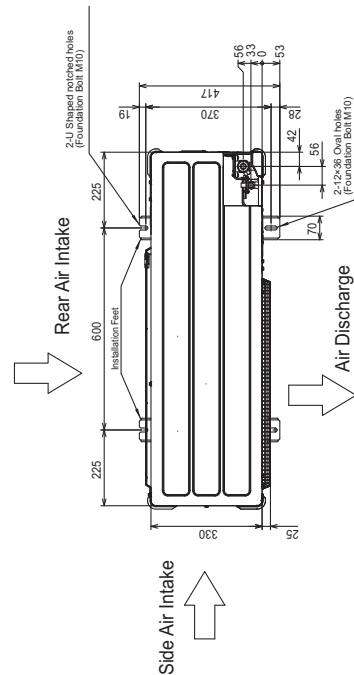
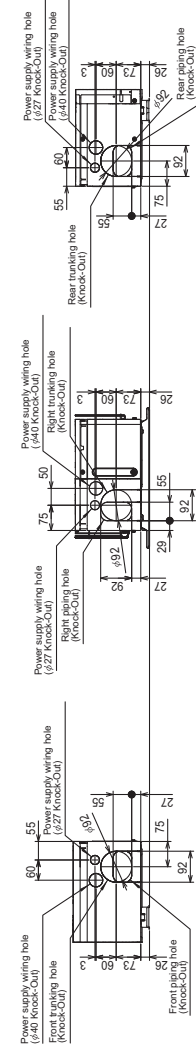
The diagram below shows a basic example. Explanation of particular details are given in the installation manuals etc.



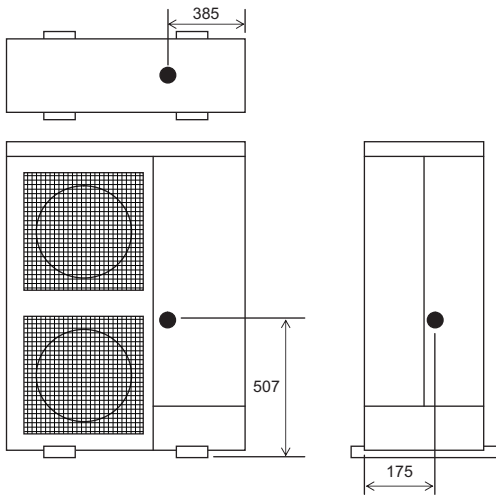
Example of Notes

- ① ...Refrigerant GAS pipe connection (FLARE) φ15.88 (5/8F)
- ② ...Refrigerant LIQUID pipe connection (FLARE) φ9.52 (3/8F)
- \* ...Indication of STOP VALVE connection location.

Piping Knock-Out Hole Details

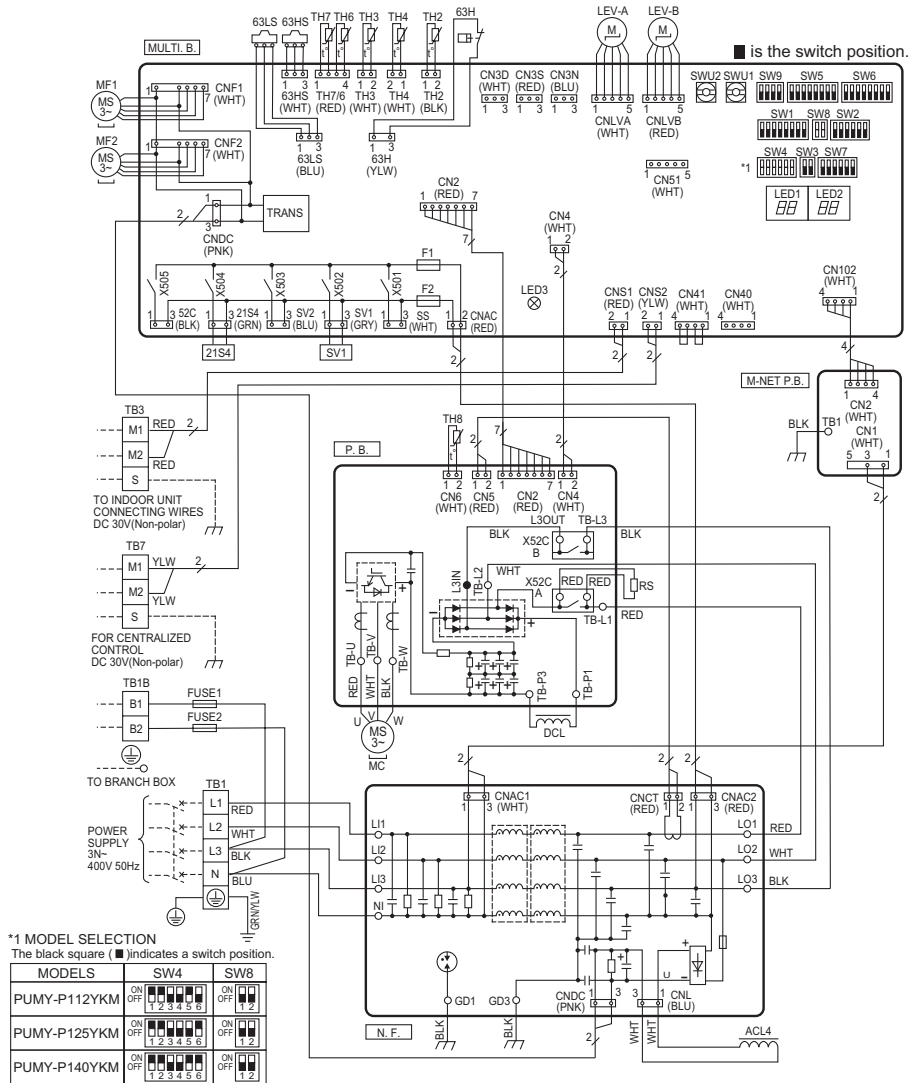


PUMY-P112,125,140YKM(-BS)  
PUMY-P112,125,140VKM(-BS)



9

PUMY-P112, 125, 140YKM(-BS)



\*1 MODEL SELECTION  
The black square (■) indicates a switch position.

MODELS	SW4	SW6
PUMY-P112YKM	ON OFF 1 2 3 4 5 6	ON OFF 1 2
PUMY-P125YKM	ON OFF 1 2 3 4 5 6	ON OFF 1 2
PUMY-P140YKM	ON OFF 1 2 3 4 5 6	ON OFF 1 2

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block <Power Supply>	LEV-A,LEV-B	Electronic Expansion Valve	SW7	Switch <Function Selection>
TB1B	Terminal Block <Branch Box>	ACL4	Reactor	SW8	Switch <Model Selection>
TB3	Terminal Block <Communication Line>	DCL	Reactor	SW9	Switch <Function Selection>
TB7	Terminal Block <Centralized Control Line>	P.B.	Power Circuit Board	SWU1	Switch <Unit Address Selection, 1st digit>
FUSE1,FUSE2	Fuse <T20AL250V>	TB-U/V/W	Connection Terminal <U/V/W-Phase>	SWU2	Switch <Unit Address Selection, 2nd digit>
MC	Motor For Compressor	TB-L1/L2/L3	Connection Terminal <L1/L2/L3-Power Supply>	CNS1	Connector <Indoor/Outdoor Transmission Line>
MF1,MF2	Fan Motor	TB-P1/P3	Connection Terminal	CNS2	Connector <Centralized Control Transmission Line>
21S4	Solenoid Valve <Four-Way Valve>	X52CA/B	52C Relay	SS	Connector <Connection For Option>
63H	High Pressure Switch	N.F.	Noise Filter Circuit Board	CN3D	Connector <Connection For Option>
63HS	High Pressure Sensor	LO1/LO2/LO3	Connection Terminal <L1/L2/L3-Power Supply>	CN3S	Connector <Connection For Option>
63LS	Low Pressure Sensor	LI1/LI2/LI3/NI	Connection Terminal <L1/L2/L3-Power Supply>	CN3N	Connector <Connection For Option>
SV1	Solenoid Valve <Bypass valve>	GD1, GD3	Connection Terminal <Ground>	CN51	Connector <Connection For Option>
TH2	Thermistor <HiC Pipe>	MULTI.B.	Controller Circuit Board	LED1,LED2	LED <Operation Inspection Display>
TH3	Thermistor <Outdoor Liquid Pipe>	SW1	Switch <Display Selection>	LED3	LED <Power Supply to Main Microcomputer>
TH4	Thermistor <Compressor>	SW2	Switch <Function Selection>	F1,F2	Fuse <T6.3AL250V>
TH6	Thermistor <Suction Pipe>	SW3	Switch <Test Run>	X501-505	Relay
TH7	Thermistor <Ambient>	SW4	Switch <Model Selection>	M-NET P.B.	M-NET Power Circuit Board
TH8	Thermistor <Heat Sink>	SW5	Switch <Function Selection>	TB1	Connection Terminal <Ground>
RS	Rush Current Protect Resistor	SW6	Switch <Function Selection>		

Cautions when Servicing

- ⚠️ **WARNING:** When the main supply is turned off, the voltage [570 V] in the main capacitor will drop to 20 V in approx. 5 minutes (input voltage: 400 V). When servicing, make sure that LED1, LED2 on the outdoor circuit board goes out, and then wait for at least 5 minute.
- Components other than the outdoor board may be faulty: Check and take corrective action, referring to the service manual. Do not replace the outdoor board without checking.

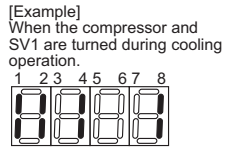
NOTES:

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

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

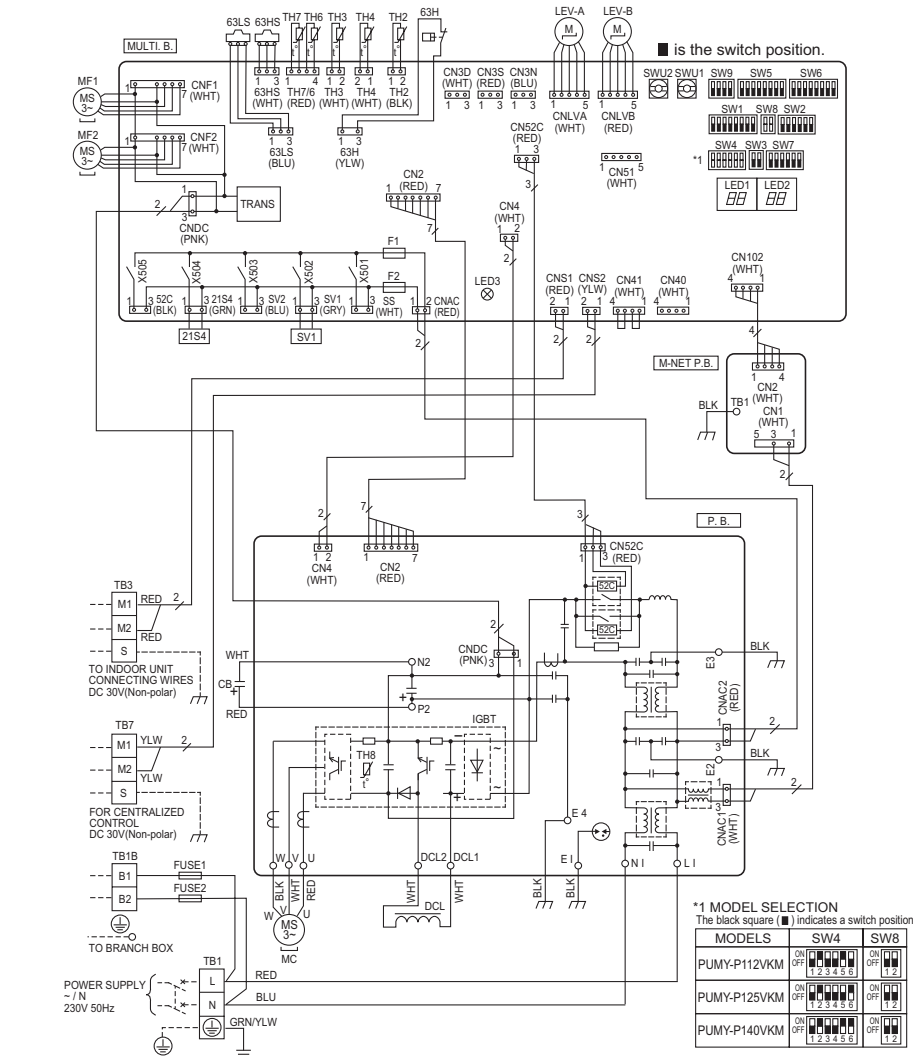
Bit	1	2	3	4	5	6	7	8
Indication	Compressor operated	52C	21S4	SV1	(SV2)	—	—	Always lit

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





PUMY-P112, 125, 140VKM(-BS)



SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
TB1	Terminal Block <Power Supply>	DCL	Reactor	SW8	Switch <Model Selection>
TB1B	Terminal Block <Branch Box>	CB	Main Smoothing Capacitor	SW9	Switch <Function Selection>
TB3	Terminal Block <Communication Line>	P.B.	Power Circuit Board	SWU1	Switch <Unit Address Selection, 1st digit>
TB7	Terminal Block <Centralized Control Line>	U/V/W	Connection Terminal <U/V/W-Phase>	SWU2	Switch <Unit Address Selection, 2nd digit>
FUSE1,FUSE2	Fuse <T20AL250V>	L1	Connection Terminal <L-Phase>	CNS1	Connector <Indoor/Outdoor Transmission Line>
MC	Motor For Compressor	N1	Connection Terminal <N-Phase>	CNS2	Connector <Centralized Control Transmission Line>
MF1,MF2	Fan Motor	N2	Connection Terminal <DC Voltage>	SS	Connector <Connection For Option>
21S4	Solenoid Valve <Four-Way Valve>	P2	Connection Terminal <DC Voltage>	CN3D	Connector <Connection For Option>
63H	High Pressure Switch	DCL1,DCL2	Connection Terminal <Reactor>	CN3S	Connector <Connection For Option>
63HS	High Pressure Sensor	IGBT	Power Module	CN3N	Connector <Connection For Option>
63LS	Low Pressure Sensor	E1,E2,E3,E4	Connection Terminal <Ground>	CN51	Connector <Connection For Option>
SV1	Solenoid Valve <Bypass valve>	MULTI.B.	Controller Circuit Board	LED1,LED2	LED <Operation Inspection Display>
TH2	Thermistor <Hi-C Pipe>	SW1	Switch <Display Selection>	LED3	LED <Power Supply to Main Microcomputer>
TH3	Thermistor <Outdoor Liquid Pipe>	SW2	Switch <Function Selection>	F1,F2	Fuse <T6.3AL250V>
TH4	Thermistor <Compressor>	SW3	Switch <Test Run>	X501-505	Relay
TH6	Thermistor <Suction Pipe>	SW4	Switch <Model Selection>	M-NET P.B.	M-NET Power Circuit Board
TH7	Thermistor <Ambient>	SW5	Switch <Function Selection>	TB1	Connection Terminal <Ground>
TH8	Thermistor <Heat Sink>	SW6	Switch <Function Selection>		
LEV-A,LEV-B	Electronic Expansion Valve	SW7	Switch <Function Selection>		

Cautions when Servicing

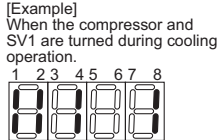
- ⚠ WARNING: When the main supply is turned off, the voltage [340 V] in the main capacitor will drop to 20 V in approx. 2 minutes (input voltage: 230 V). When servicing, make sure that LED1, LED2 on the outdoor circuit board goes out, and then wait for at least 1 minute.
- Components other than the outdoor board may be faulty: Check and take corrective action, referring to the service manual. Do not replace the outdoor board without checking.

NOTES:

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

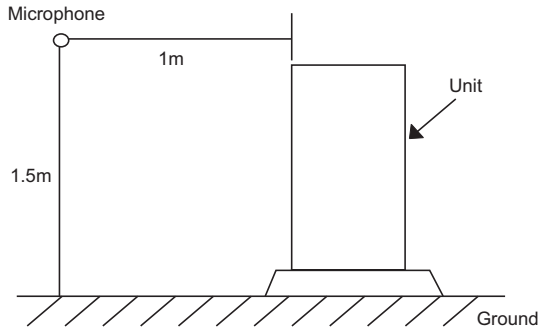
- During normal operation
- The LED indicates the drive state of the controller in the outdoor unit.

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

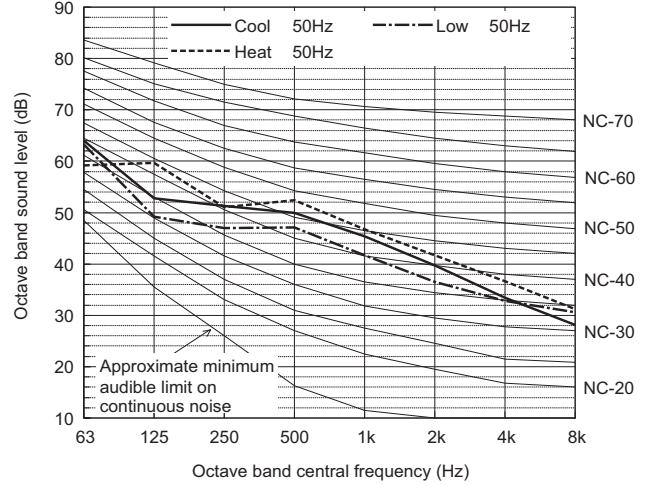


- When fault requiring inspection has occurred  
 The LED alternately indicates the inspection code and the location of the unit in which the fault has occurred.

**Measurement condition**  
**PUMY-P112, 125, 140YKM**  
**PUMY-P112, 125, 140YKM**



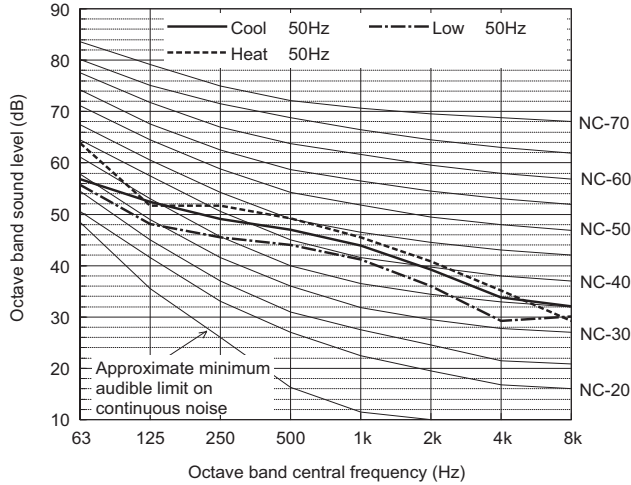
**Sound level of PUMY-P140YKM,VKM(-BS)**



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	50Hz	64.0	52.8	51.3	50.0	45.4	39.7	33.5	28.2	51.0
Standard Heating	50Hz	59.2	59.7	51.1	52.4	46.8	41.7	36.7	31.2	53.0
Low noise mode	50Hz	63.2	49.2	47.0	47.1	41.6	36.5	32.8	30.6	48.0

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

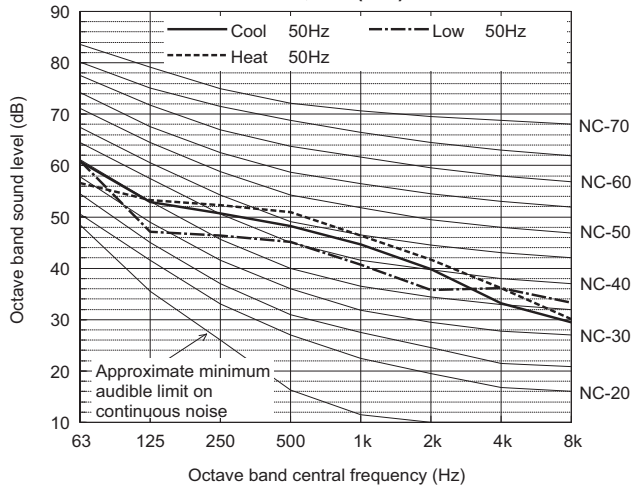
**Sound level of PUMY-P112YKM,VKM(-BS)**



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	50Hz	56.9	52.4	49.0	46.9	44.0	39.2	33.7	32.1	49.0
Standard Heating	50Hz	63.9	51.6	51.6	49.2	45.5	40.8	35.1	29.3	51.0
Low noise mode	50Hz	55.8	48.1	45.5	44.0	41.2	36.0	29.2	30.0	46.0

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

**Sound level of PUMY-P125YKM,VKM(-BS)**



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	50Hz	60.8	52.8	50.6	48.2	44.7	39.9	33.2	29.5	50.0
Standard Heating	50Hz	56.6	53.3	52.2	50.9	46.4	41.7	36.2	30.1	52.0
Low noise mode	50Hz	60.9	47.1	46.3	45.2	40.7	35.7	36.1	33.4	47.0

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





















# 6. CAPACITY TABLES

## 6-1-2. Heating capacity

PUMY-P112YKM/VKM TC:Total Capacity(kW), PI:Power Input(kW)

Combination (%)	Outdoor air temp. °C W.B.	Indoor air temp.							
		15°C D.B.		20°C D.B.		25°C D.B.		27°C D.B.	
		TC	PI	TC	PI	TC	PI	TC	PI
130	-20.0	7.16	1.58	7.10	1.74	6.95	1.91	7.29	1.97
	-17.5	7.74	1.66	7.61	1.82	7.47	1.98	7.82	2.05
	-15.0	8.34	1.74	8.17	1.90	8.02	2.06	8.38	2.13
	-12.5	8.97	1.82	8.76	1.98	8.62	2.14	8.98	2.21
	-10.0	9.62	1.91	9.40	2.07	9.25	2.23	9.61	2.30
	-7.5	10.30	2.00	10.07	2.16	9.92	2.32	10.28	2.39
	-5.0	11.01	2.09	10.78	2.25	10.64	2.42	10.99	2.48
	-2.5	11.74	2.19	11.53	2.35	11.38	2.51	11.73	2.58
	0.0	12.50	2.29	12.32	2.45	12.17	2.62	12.51	2.68
	2.5	13.28	2.40	13.14	2.56	13.00	2.72	13.32	2.78
	5.0	14.09	2.50	14.01	2.67	13.87	2.83	13.85	2.81
	6.0	14.42	2.55	14.42	2.72	14.22	2.88	13.85	2.77
	7.5	14.93	2.60	14.89	2.76	14.28	2.84	13.85	2.72
	10.0	15.79	2.69	15.72	2.86	14.28	2.75	13.85	2.61
	12.5	16.68	2.84	16.44	2.98	14.28	2.65	13.85	2.50
15.0	17.59	2.91	16.44	2.91	14.28	2.53	13.85	2.37	
120	-20.0	7.08	1.64	7.02	1.81	6.88	1.98	7.21	2.05
	-17.5	7.65	1.72	7.53	1.89	7.39	2.06	7.73	2.13
	-15.0	8.25	1.80	8.08	1.97	7.94	2.14	8.29	2.21
	-12.5	8.87	1.89	8.67	2.06	8.52	2.23	8.88	2.30
	-10.0	9.52	1.98	9.29	2.15	9.15	2.32	9.51	2.39
	-7.5	10.19	2.07	9.96	2.24	9.82	2.41	10.17	2.48
	-5.0	10.89	2.17	10.66	2.34	10.52	2.51	10.87	2.58
	-2.5	11.61	2.27	11.40	2.44	11.26	2.61	11.60	2.68
	0.0	12.36	2.38	12.18	2.55	12.04	2.72	12.37	2.79
	2.5	13.14	2.49	13.00	2.66	12.86	2.83	13.17	2.89
	5.0	13.94	2.60	13.86	2.77	13.71	2.94	13.69	2.92
	6.0	14.27	2.65	14.26	2.83	14.07	2.99	13.69	2.88
	7.5	14.77	2.70	14.72	2.87	14.12	2.95	13.69	2.82
	10.0	15.62	2.80	15.55	2.97	14.12	2.85	13.69	2.72
	12.5	16.49	2.95	16.26	3.09	14.12	2.75	13.69	2.60
15.0	17.39	3.02	16.26	3.02	14.12	2.63	13.69	2.46	
110	-20.0	7.00	1.70	6.94	1.88	6.80	2.06	7.13	2.13
	-17.5	7.56	1.79	7.44	1.96	7.30	2.14	7.64	2.21
	-15.0	8.15	1.87	7.99	2.05	7.85	2.22	8.19	2.30
	-12.5	8.77	1.96	8.57	2.14	8.43	2.31	8.78	2.39
	-10.0	9.41	2.06	9.19	2.23	9.05	2.41	9.40	2.48
	-7.5	10.08	2.15	9.84	2.33	9.70	2.50	10.05	2.58
	-5.0	10.77	2.25	10.54	2.43	10.40	2.61	10.74	2.68
	-2.5	11.48	2.36	11.27	2.54	11.13	2.71	11.47	2.78
	0.0	12.22	2.47	12.04	2.65	11.90	2.82	12.23	2.89
	2.5	12.99	2.58	12.85	2.76	12.71	2.94	13.02	3.00
	5.0	13.78	2.70	13.70	2.88	13.56	3.05	13.54	3.03
	6.0	14.10	2.75	14.10	2.93	13.91	3.10	13.54	2.99
	7.5	14.60	2.80	14.56	2.98	13.96	3.06	13.54	2.93
	10.0	15.44	2.90	15.37	3.08	13.96	2.96	13.54	2.82
	12.5	16.31	3.07	16.08	3.21	13.96	2.85	13.54	2.69
15.0	17.20	3.14	16.08	3.14	13.96	2.73	13.54	2.56	
100	-20.0	6.95	1.77	6.89	1.95	6.75	2.13	7.07	2.20
	-17.5	7.51	1.85	7.39	2.03	7.25	2.22	7.59	2.29
	-15.0	8.10	1.94	7.93	2.12	7.79	2.30	8.13	2.38
	-12.5	8.71	2.03	8.51	2.22	8.37	2.40	8.71	2.47
	-10.0	9.34	2.13	9.12	2.31	8.98	2.49	9.33	2.57
	-7.5	10.00	2.23	9.77	2.41	9.63	2.60	9.98	2.67
	-5.0	10.69	2.34	10.46	2.52	10.32	2.70	10.67	2.78
	-2.5	11.40	2.45	11.19	2.63	11.05	2.81	11.38	2.88
	0.0	12.13	2.56	11.96	2.74	11.82	2.92	12.14	3.00
	2.5	12.90	2.68	12.76	2.86	12.62	3.04	12.93	3.11
	5.0	13.68	2.80	13.60	2.98	13.46	3.16	13.44	3.14
	6.0	14.00	2.85	14.00	3.04	13.81	3.21	13.44	3.10
	7.5	14.49	2.91	14.45	3.09	13.86	3.17	13.44	3.04
	10.0	15.33	3.01	15.26	3.19	13.86	3.07	13.44	2.92
	12.5	16.19	3.18	15.96	3.33	13.86	2.96	13.44	2.79
15.0	17.07	3.25	15.96	3.25	13.86	2.83	13.44	2.65	
90	-20.0	6.28	1.56	6.22	1.72	6.10	1.88	6.39	1.94
	-17.5	6.78	1.63	6.68	1.79	6.55	1.96	6.85	2.02
	-15.0	7.31	1.71	7.16	1.87	7.04	2.03	7.35	2.10
	-12.5	7.87	1.79	7.68	1.96	7.56	2.12	7.87	2.18
	-10.0	8.44	1.88	8.24	2.04	8.11	2.20	8.43	2.27
	-7.5	9.04	1.97	8.83	2.13	8.70	2.29	9.02	2.36
	-5.0	9.66	2.06	9.45	2.22	9.33	2.38	9.63	2.45
	-2.5	10.30	2.16	10.11	2.32	9.98	2.48	10.28	2.55
	0.0	10.96	2.26	10.80	2.42	10.67	2.58	10.97	2.64
	2.5	11.65	2.36	11.53	2.52	11.40	2.69	11.68	2.75
	5.0	12.36	2.47	12.29	2.63	12.16	2.79	12.14	2.77
	6.0	12.65	2.52	12.65	2.68	12.47	2.84	12.14	2.74
	7.5	13.09	2.56	13.05	2.73	12.52	2.80	12.14	2.68
	10.0	13.85	2.66	13.79	2.82	12.52	2.71	12.14	2.58
	12.5	14.62	2.80	14.42	2.94	12.52	2.61	12.14	2.46
15.0	15.42	2.87	14.42	2.87	12.52	2.50	12.14	2.34	

kcal/h=kW x 860 , BTU/h = kW x 3,412

# 6. CAPACITY TABLES

**PUMY-P112YKM/VKM** TC:Total Capacity(kW), PI:Power Input(kW)

Combination (%)	Outdoor air temp. °C W.B.	Indoor air temp.							
		15°C D.B.		20°C D.B.		25°C D.B.		27°C D.B.	
		TC	PI	TC	PI	TC	PI	TC	PI
80	-20.0	5.58	1.40	5.53	1.55	5.42	1.69	5.68	1.75
	-17.5	6.03	1.47	5.94	1.61	5.82	1.76	6.09	1.82
	-15.0	6.50	1.54	6.37	1.69	6.26	1.83	6.53	1.89
	-12.5	6.99	1.61	6.83	1.76	6.72	1.90	7.00	1.96
	-10.0	7.51	1.69	7.33	1.84	7.21	1.98	7.50	2.04
	-7.5	8.04	1.77	7.85	1.92	7.74	2.06	8.02	2.12
	-5.0	8.59	1.86	8.41	2.00	8.29	2.15	8.57	2.20
	-2.5	9.16	1.94	8.99	2.09	8.88	2.23	9.15	2.29
	0.0	9.75	2.03	9.61	2.18	9.49	2.32	9.75	2.38
	2.5	10.36	2.13	10.25	2.27	10.14	2.42	10.39	2.47
	5.0	10.99	2.22	10.93	2.37	10.81	2.51	10.80	2.49
	6.0	11.25	2.26	11.25	2.41	11.09	2.55	10.80	2.46
	7.5	11.64	2.31	11.61	2.45	11.13	2.52	10.80	2.41
	10.0	12.31	2.39	12.26	2.53	11.13	2.44	10.80	2.32
	12.5	13.00	2.52	12.82	2.64	11.13	2.35	10.80	2.22
	15.0	13.72	2.58	12.82	2.58	11.13	2.25	10.80	2.10
70	-20.0	4.88	1.25	4.84	1.38	4.74	1.51	4.97	1.56
	-17.5	5.28	1.31	5.20	1.44	5.10	1.57	5.33	1.62
	-15.0	5.69	1.37	5.57	1.50	5.48	1.63	5.72	1.68
	-12.5	6.12	1.44	5.98	1.57	5.88	1.70	6.13	1.75
	-10.0	6.57	1.51	6.41	1.64	6.31	1.76	6.56	1.82
	-7.5	7.03	1.58	6.87	1.71	6.77	1.84	7.02	1.89
	-5.0	7.51	1.65	7.36	1.78	7.26	1.91	7.50	1.96
	-2.5	8.01	1.73	7.87	1.86	7.77	1.99	8.00	2.04
	0.0	8.53	1.81	8.40	1.94	8.31	2.07	8.53	2.12
	2.5	9.07	1.89	8.97	2.02	8.87	2.15	9.09	2.20
	5.0	9.62	1.98	9.56	2.11	9.46	2.24	9.45	2.22
	6.0	9.84	2.02	9.84	2.15	9.71	2.27	9.45	2.19
	7.5	10.19	2.06	10.16	2.18	9.74	2.24	9.45	2.15
	10.0	10.77	2.13	10.73	2.26	9.74	2.17	9.45	2.07
	12.5	11.38	2.25	11.22	2.35	9.74	2.09	9.45	1.97
	15.0	12.00	2.30	11.22	2.30	9.74	2.00	9.45	1.87
60	-20.0	4.18	1.10	4.15	1.21	4.06	1.33	4.26	1.37
	-17.5	4.52	1.15	4.45	1.27	4.37	1.38	4.57	1.42
	-15.0	4.88	1.21	4.78	1.32	4.69	1.43	4.90	1.48
	-12.5	5.24	1.27	5.12	1.38	5.04	1.49	5.25	1.54
	-10.0	5.63	1.33	5.49	1.44	5.41	1.55	5.62	1.60
	-7.5	6.02	1.39	5.89	1.50	5.80	1.62	6.01	1.66
	-5.0	6.44	1.45	6.30	1.57	6.22	1.68	6.42	1.73
	-2.5	6.87	1.52	6.74	1.64	6.66	1.75	6.86	1.79
	0.0	7.31	1.59	7.20	1.71	7.12	1.82	7.31	1.86
	2.5	7.77	1.67	7.68	1.78	7.60	1.89	7.79	1.94
	5.0	8.24	1.74	8.19	1.86	8.11	1.97	8.09	1.95
	6.0	8.43	1.77	8.43	1.89	8.31	2.00	8.09	1.93
	7.5	8.73	1.81	8.70	1.92	8.35	1.97	8.09	1.89
	10.0	9.23	1.87	9.19	1.99	8.35	1.91	8.09	1.82
	12.5	9.75	1.98	9.61	2.07	8.35	1.84	8.09	1.74
	15.0	10.28	2.02	9.61	2.02	8.35	1.76	8.09	1.65
50	-20.0	3.48	0.95	3.45	1.05	3.38	1.15	3.55	1.19
	-17.5	3.76	1.00	3.70	1.10	3.63	1.19	3.80	1.23
	-15.0	4.06	1.05	3.97	1.14	3.90	1.24	4.08	1.28
	-12.5	4.36	1.10	4.26	1.19	4.19	1.29	4.37	1.33
	-10.0	4.68	1.15	4.57	1.25	4.50	1.35	4.68	1.39
	-7.5	5.01	1.20	4.90	1.30	4.83	1.40	5.00	1.44
	-5.0	5.36	1.26	5.24	1.36	5.17	1.46	5.35	1.50
	-2.5	5.71	1.32	5.61	1.42	5.54	1.52	5.71	1.55
	0.0	6.08	1.38	5.99	1.48	5.92	1.58	6.08	1.62
	2.5	6.46	1.44	6.39	1.54	6.32	1.64	6.48	1.68
	5.0	6.86	1.51	6.82	1.61	6.75	1.71	6.74	1.69
	6.0	7.02	1.54	7.02	1.64	6.92	1.73	6.74	1.67
	7.5	7.26	1.57	7.24	1.66	6.95	1.71	6.74	1.64
	10.0	7.68	1.62	7.65	1.72	6.95	1.66	6.74	1.57
	12.5	8.11	1.71	8.00	1.79	6.95	1.59	6.74	1.51
	15.0	8.56	1.75	8.00	1.75	6.95	1.53	6.74	1.43

kcal/h=kW x 860 , BTU/h = kW x 3,412

# 6. CAPACITY TABLES

**PUMY-P125YKM/VKM** TC:Total Capacity(kW), PI:Power Input(kW)

Combination (%)	Outdoor air temp. °C W.B.	Indoor air temp.							
		15°C D.B.		20°C D.B.		25°C D.B.		27°C D.B.	
		TC	PI	TC	PI	TC	PI	TC	PI
130	-20.0	8.19	1.91	8.12	2.11	7.95	2.31	8.33	2.39
	-17.5	8.85	2.01	8.71	2.20	8.54	2.40	8.94	2.48
	-15.0	9.54	2.10	9.34	2.30	9.18	2.50	9.58	2.58
	-12.5	10.26	2.20	10.02	2.40	9.86	2.60	10.27	2.68
	-10.0	11.01	2.31	10.75	2.51	10.58	2.70	10.99	2.78
	-7.5	11.79	2.42	11.51	2.62	11.35	2.81	11.76	2.89
	-5.0	12.59	2.53	12.33	2.73	12.16	2.93	12.57	3.01
	-2.5	13.43	2.65	13.18	2.85	13.02	3.05	13.41	3.13
	0.0	14.30	2.77	14.09	2.97	13.92	3.17	14.30	3.25
	2.5	15.19	2.90	15.03	3.10	14.87	3.30	15.23	3.37
	5.0	16.12	3.03	16.02	3.23	15.86	3.43	15.83	3.40
	6.0	16.50	3.09	16.49	3.29	16.27	3.48	15.83	3.36
	7.5	17.07	3.15	17.03	3.35	16.33	3.44	15.83	3.29
	10.0	18.06	3.26	17.98	3.46	16.33	3.33	15.83	3.17
	12.5	19.07	3.44	18.80	3.61	16.33	3.21	15.83	3.03
15.0	20.11	3.53	18.80	3.53	16.33	3.07	15.83	2.87	
120	-20.0	8.10	2.00	8.03	2.21	7.87	2.41	8.25	2.49
	-17.5	8.76	2.10	8.62	2.30	8.45	2.51	8.85	2.59
	-15.0	9.44	2.20	9.25	2.40	9.08	2.61	9.48	2.69
	-12.5	10.15	2.30	9.92	2.51	9.76	2.71	10.16	2.80
	-10.0	10.89	2.41	10.64	2.62	10.47	2.82	10.88	2.91
	-7.5	11.66	2.53	11.40	2.73	11.23	2.94	11.64	3.02
	-5.0	12.46	2.65	12.20	2.85	12.04	3.06	12.44	3.14
	-2.5	13.29	2.77	13.05	2.98	12.89	3.18	13.28	3.26
	0.0	14.15	2.90	13.94	3.10	13.78	3.31	14.16	3.39
	2.5	15.04	3.03	14.88	3.24	14.72	3.44	15.08	3.52
	5.0	15.95	3.17	15.86	3.38	15.70	3.58	15.67	3.55
	6.0	16.33	3.23	16.33	3.44	16.10	3.64	15.67	3.51
	7.5	16.90	3.29	16.85	3.50	16.16	3.59	15.67	3.44
	10.0	17.87	3.41	17.80	3.61	16.16	3.48	15.67	3.31
	12.5	18.88	3.60	18.61	3.77	16.16	3.35	15.67	3.16
15.0	19.91	3.68	18.61	3.68	16.16	3.20	15.67	3.00	
110	-20.0	8.02	2.09	7.95	2.30	7.79	2.52	8.17	2.60
	-17.5	8.67	2.19	8.53	2.40	8.37	2.62	8.76	2.70
	-15.0	9.35	2.29	9.15	2.51	8.99	2.72	9.39	2.81
	-12.5	10.05	2.40	9.82	2.62	9.66	2.83	10.06	2.92
	-10.0	10.78	2.51	10.53	2.73	10.37	2.95	10.77	3.03
	-7.5	11.55	2.63	11.28	2.85	11.12	3.07	11.52	3.15
	-5.0	12.34	2.76	12.08	2.97	11.92	3.19	12.31	3.28
	-2.5	13.16	2.89	12.92	3.10	12.76	3.32	13.14	3.40
	0.0	14.01	3.02	13.80	3.24	13.64	3.45	14.01	3.54
	2.5	14.89	3.16	14.73	3.38	14.57	3.59	14.92	3.67
	5.0	15.79	3.31	15.70	3.52	15.54	3.74	15.51	3.71
	6.0	16.16	3.37	16.16	3.59	15.94	3.80	15.51	3.66
	7.5	16.73	3.43	16.68	3.65	16.00	3.74	15.51	3.59
	10.0	17.69	3.55	17.62	3.77	16.00	3.63	15.51	3.45
	12.5	18.69	3.75	18.42	3.93	16.00	3.49	15.51	3.30
15.0	19.71	3.84	18.42	3.84	16.00	3.34	15.51	3.13	
100	-20.0	7.94	2.17	7.87	2.40	7.71	2.62	8.09	2.71
	-17.5	8.58	2.28	8.45	2.50	8.29	2.73	8.67	2.82
	-15.0	9.25	2.39	9.06	2.61	8.90	2.84	9.29	2.93
	-12.5	9.95	2.50	9.72	2.73	9.56	2.95	9.96	3.04
	-10.0	10.68	2.62	10.42	2.84	10.26	3.07	10.66	3.16
	-7.5	11.43	2.74	11.17	2.97	11.01	3.19	11.41	3.29
	-5.0	12.22	2.87	11.96	3.10	11.80	3.32	12.19	3.41
	-2.5	13.03	3.01	12.79	3.23	12.63	3.46	13.01	3.55
	0.0	13.87	3.15	13.66	3.37	13.50	3.60	13.87	3.69
	2.5	14.74	3.29	14.58	3.52	14.42	3.74	14.77	3.83
	5.0	15.64	3.44	15.54	3.67	15.38	3.89	15.36	3.86
	6.0	16.00	3.51	16.00	3.74	15.78	3.96	15.36	3.81
	7.5	16.56	3.57	16.52	3.80	15.84	3.90	15.36	3.74
	10.0	17.52	3.70	17.44	3.93	15.84	3.78	15.36	3.59
	12.5	18.50	3.91	18.24	4.10	15.84	3.64	15.36	3.43
15.0	19.51	4.00	18.24	4.00	15.84	3.48	15.36	3.26	
90	-20.0	7.07	1.91	7.01	2.11	6.87	2.31	7.20	2.39
	-17.5	7.64	2.00	7.52	2.20	7.38	2.40	7.72	2.48
	-15.0	8.24	2.10	8.07	2.30	7.93	2.50	8.28	2.58
	-12.5	8.86	2.20	8.66	2.40	8.51	2.60	8.87	2.68
	-10.0	9.51	2.31	9.28	2.50	9.14	2.70	9.50	2.78
	-7.5	10.18	2.42	9.95	2.61	9.80	2.81	10.16	2.89
	-5.0	10.88	2.53	10.65	2.73	10.51	2.93	10.85	3.01
	-2.5	11.60	2.65	11.39	2.85	11.25	3.04	11.59	3.12
	0.0	12.35	2.77	12.17	2.97	12.03	3.17	12.35	3.24
	2.5	13.12	2.90	12.99	3.10	12.84	3.29	13.16	3.37
	5.0	13.92	3.03	13.84	3.23	13.70	3.43	13.68	3.40
	6.0	14.25	3.09	14.25	3.29	14.05	3.48	13.68	3.36
	7.5	14.75	3.15	14.71	3.34	14.11	3.43	13.68	3.29
	10.0	15.60	3.26	15.53	3.46	14.11	3.32	13.68	3.16
	12.5	16.47	3.44	16.24	3.60	14.11	3.20	13.68	3.02
15.0	17.38	3.52	16.24	3.52	14.11	3.06	13.68	2.87	

kcal/h=kW x 860 , BTU/h = kW x 3,412

# 6. CAPACITY TABLES

G10 2nd

**PUMY-P125YKM/VKM** TC:Total Capacity(kW), PI:Power Input(kW)

Combination (%)	Outdoor air temp. °C W.B.	Indoor air temp.							
		15°C D.B.		20°C D.B.		25°C D.B.		27°C D.B.	
		TC	PI	TC	PI	TC	PI	TC	PI
80	-20.0	6.24	1.67	6.18	1.84	6.06	2.01	6.35	2.08
	-17.5	6.74	1.75	6.63	1.92	6.51	2.09	6.81	2.16
	-15.0	7.26	1.83	7.12	2.00	6.99	2.18	7.30	2.25
	-12.5	7.81	1.92	7.63	2.09	7.51	2.26	7.82	2.34
	-10.0	8.38	2.01	8.18	2.18	8.06	2.36	8.37	2.43
	-7.5	8.98	2.11	8.77	2.28	8.64	2.45	8.96	2.52
	-5.0	9.59	2.21	9.39	2.38	9.26	2.55	9.57	2.62
	-2.5	10.23	2.31	10.04	2.48	9.92	2.66	10.22	2.72
	0.0	10.89	2.42	10.73	2.59	10.60	2.76	10.89	2.83
	2.5	11.57	2.53	11.45	2.70	11.32	2.87	11.60	2.94
	5.0	12.28	2.65	12.20	2.82	12.08	2.99	12.06	2.97
	6.0	12.56	2.69	12.56	2.87	12.39	3.04	12.06	2.93
	7.5	13.00	2.74	12.97	2.92	12.44	2.99	12.06	2.87
	10.0	13.75	2.84	13.69	3.02	12.44	2.90	12.06	2.76
	12.5	14.53	3.00	14.32	3.14	12.44	2.79	12.06	2.64
	15.0	15.32	3.07	14.32	3.07	12.44	2.67	12.06	2.50
70	-20.0	5.43	1.44	5.39	1.59	5.28	1.74	5.53	1.80
	-17.5	5.87	1.51	5.78	1.66	5.67	1.81	5.93	1.87
	-15.0	6.33	1.58	6.20	1.73	6.09	1.88	6.36	1.94
	-12.5	6.81	1.66	6.65	1.81	6.54	1.96	6.81	2.02
	-10.0	7.31	1.74	7.13	1.89	7.02	2.04	7.30	2.10
	-7.5	7.82	1.82	7.64	1.97	7.53	2.12	7.80	2.18
	-5.0	8.36	1.91	8.18	2.05	8.07	2.20	8.34	2.26
	-2.5	8.91	2.00	8.75	2.14	8.64	2.29	8.90	2.35
	0.0	9.49	2.09	9.35	2.24	9.24	2.39	9.49	2.44
	2.5	10.08	2.18	9.98	2.33	9.87	2.48	10.11	2.54
	5.0	10.70	2.28	10.63	2.43	10.53	2.58	10.51	2.56
	6.0	10.95	2.32	10.95	2.48	10.80	2.62	10.51	2.53
	7.5	11.33	2.37	11.30	2.52	10.84	2.59	10.51	2.48
	10.0	11.98	2.46	11.93	2.60	10.84	2.50	10.51	2.38
	12.5	12.66	2.59	12.48	2.72	10.84	2.41	10.51	2.28
	15.0	13.35	2.65	12.48	2.65	10.84	2.31	10.51	2.16
60	-20.0	4.67	1.23	4.63	1.36	4.53	1.48	4.75	1.53
	-17.5	5.04	1.29	4.96	1.42	4.87	1.54	5.09	1.59
	-15.0	5.44	1.35	5.33	1.48	5.23	1.60	5.46	1.66
	-12.5	5.85	1.42	5.71	1.54	5.62	1.67	5.85	1.72
	-10.0	6.27	1.48	6.13	1.61	6.03	1.74	6.27	1.79
	-7.5	6.72	1.55	6.56	1.68	6.47	1.81	6.70	1.86
	-5.0	7.18	1.63	7.03	1.75	6.93	1.88	7.16	1.93
	-2.5	7.66	1.70	7.52	1.83	7.42	1.96	7.65	2.01
	0.0	8.15	1.78	8.03	1.91	7.94	2.04	8.15	2.09
	2.5	8.66	1.86	8.57	1.99	8.47	2.12	8.68	2.17
	5.0	9.19	1.95	9.13	2.08	9.04	2.20	9.03	2.19
	6.0	9.40	1.98	9.40	2.12	9.27	2.24	9.03	2.16
	7.5	9.73	2.02	9.70	2.15	9.31	2.21	9.03	2.11
	10.0	10.29	2.09	10.25	2.22	9.31	2.14	9.03	2.03
	12.5	10.87	2.21	10.72	2.32	9.31	2.06	9.03	1.94
	15.0	11.47	2.26	10.72	2.26	9.31	1.97	9.03	1.84
50	-20.0	3.93	1.03	3.90	1.14	3.82	1.25	4.01	1.29
	-17.5	4.25	1.08	4.18	1.19	4.10	1.30	4.29	1.34
	-15.0	4.58	1.14	4.49	1.24	4.41	1.35	4.60	1.39
	-12.5	4.93	1.19	4.82	1.30	4.74	1.40	4.93	1.45
	-10.0	5.29	1.25	5.16	1.35	5.08	1.46	5.28	1.50
	-7.5	5.66	1.31	5.53	1.41	5.45	1.52	5.65	1.56
	-5.0	6.05	1.37	5.92	1.48	5.84	1.58	6.04	1.63
	-2.5	6.45	1.43	6.34	1.54	6.26	1.65	6.45	1.69
	0.0	6.87	1.50	6.77	1.61	6.69	1.71	6.87	1.75
	2.5	7.30	1.57	7.22	1.68	7.14	1.78	7.32	1.82
	5.0	7.75	1.64	7.70	1.75	7.62	1.85	7.61	1.84
	6.0	7.93	1.67	7.93	1.78	7.82	1.88	7.61	1.82
	7.5	8.20	1.70	8.18	1.81	7.85	1.86	7.61	1.78
	10.0	8.68	1.76	8.64	1.87	7.85	1.80	7.61	1.71
	12.5	9.16	1.86	9.04	1.95	7.85	1.73	7.61	1.64
	15.0	9.67	1.91	9.04	1.91	7.85	1.66	7.61	1.55

kcal/h=kW x 860 , BTU/h = kW x 3,412

# 6. CAPACITY TABLES

**PUMY-P140YKM/VKM** TC:Total Capacity(kW), PI:Power Input(kW)

Combination (%)	Outdoor air temp. °C W.B.	Indoor air temp.							
		15°C D.B.		20°C D.B.		25°C D.B.		27°C D.B.	
		TC	PI	TC	PI	TC	PI	TC	PI
130	-20.0	9.19	2.27	9.11	2.50	8.92	2.74	9.35	2.83
	-17.5	9.93	2.38	9.77	2.61	9.59	2.85	10.03	2.94
	-15.0	10.70	2.49	10.48	2.73	10.30	2.96	10.75	3.06
	-12.5	11.51	2.61	11.25	2.85	11.06	3.08	11.52	3.18
	-10.0	12.35	2.74	12.06	2.97	11.88	3.21	12.34	3.30
	-7.5	13.23	2.87	12.92	3.10	12.74	3.34	13.20	3.43
	-5.0	14.13	3.00	13.83	3.24	13.65	3.47	14.10	3.57
	-2.5	15.07	3.14	14.80	3.38	14.61	3.61	15.05	3.71
	0.0	16.04	3.29	15.81	3.52	15.62	3.76	16.05	3.85
	2.5	17.05	3.44	16.87	3.68	16.69	3.91	17.09	4.00
	5.0	18.09	3.60	17.98	3.83	17.80	4.07	17.77	4.04
	6.0	18.51	3.66	18.51	3.91	18.26	4.13	17.77	3.98
	7.5	19.16	3.73	19.11	3.97	18.33	4.07	17.77	3.90
	10.0	20.27	3.87	20.18	4.10	18.33	3.95	17.77	3.75
	12.5	21.40	4.08	21.10	4.28	18.33	3.80	17.77	3.59
15.0	22.57	4.18	21.10	4.18	18.33	3.64	17.77	3.41	
120	-20.0	9.14	2.38	9.06	2.62	8.87	2.87	9.30	2.96
	-17.5	9.87	2.49	9.72	2.73	9.53	2.98	9.98	3.08
	-15.0	10.65	2.61	10.43	2.85	10.24	3.10	10.69	3.20
	-12.5	11.45	2.73	11.19	2.98	11.00	3.22	11.46	3.32
	-10.0	12.28	2.86	11.99	3.11	11.81	3.36	12.27	3.46
	-7.5	13.15	3.00	12.85	3.25	12.67	3.49	13.12	3.59
	-5.0	14.05	3.14	13.76	3.39	13.57	3.63	14.02	3.73
	-2.5	14.99	3.29	14.72	3.54	14.53	3.78	14.97	3.88
	0.0	15.96	3.44	15.72	3.69	15.54	3.93	15.96	4.03
	2.5	16.96	3.60	16.78	3.85	16.59	4.09	17.00	4.19
	5.0	17.99	3.77	17.88	4.01	17.70	4.26	17.67	4.22
	6.0	18.41	3.83	18.41	4.09	18.15	4.32	17.67	4.17
	7.5	19.06	3.91	19.00	4.15	18.22	4.26	17.67	4.08
	10.0	20.15	4.05	20.07	4.29	18.22	4.13	17.67	3.93
	12.5	21.28	4.27	20.99	4.48	18.22	3.98	17.67	3.75
15.0	22.45	4.37	20.99	4.37	18.22	3.81	17.67	3.56	
110	-20.0	9.05	2.48	8.97	2.74	8.79	3.00	9.22	3.10
	-17.5	9.78	2.60	9.63	2.86	9.44	3.11	9.88	3.22
	-15.0	10.55	2.73	10.33	2.98	10.15	3.24	10.59	3.34
	-12.5	11.34	2.86	11.08	3.11	10.90	3.37	11.35	3.48
	-10.0	12.17	2.99	11.88	3.25	11.70	3.51	12.15	3.61
	-7.5	13.03	3.14	12.73	3.39	12.55	3.65	13.00	3.75
	-5.0	13.92	3.28	13.63	3.54	13.45	3.80	13.89	3.90
	-2.5	14.85	3.44	14.58	3.70	14.40	3.95	14.83	4.05
	0.0	15.81	3.60	15.58	3.85	15.39	4.11	15.81	4.21
	2.5	16.80	3.76	16.62	4.02	16.44	4.28	16.84	4.37
	5.0	17.82	3.94	17.72	4.19	17.53	4.45	17.51	4.41
	6.0	18.24	4.01	18.24	4.27	17.99	4.52	17.51	4.36
	7.5	18.88	4.08	18.82	4.34	18.06	4.46	17.51	4.27
	10.0	19.97	4.23	19.88	4.49	18.06	4.32	17.51	4.11
	12.5	21.09	4.47	20.79	4.68	18.06	4.16	17.51	3.92
15.0	22.24	4.57	20.79	4.57	18.06	3.98	17.51	3.72	
100	-20.0	8.93	2.60	8.86	2.87	8.68	3.13	9.10	3.24
	-17.5	9.66	2.72	9.50	2.99	9.32	3.26	9.75	3.37
	-15.0	10.41	2.85	10.20	3.12	10.02	3.39	10.46	3.50
	-12.5	11.19	2.99	10.94	3.26	10.76	3.53	11.20	3.64
	-10.0	12.01	3.13	11.73	3.40	11.55	3.67	12.00	3.78
	-7.5	12.86	3.28	12.57	3.55	12.39	3.82	12.83	3.93
	-5.0	13.74	3.44	13.45	3.70	13.27	3.97	13.71	4.08
	-2.5	14.66	3.60	14.39	3.87	14.21	4.13	14.64	4.24
	0.0	15.60	3.76	15.37	4.03	15.19	4.30	15.61	4.41
	2.5	16.58	3.94	16.40	4.21	16.22	4.47	16.62	4.58
	5.0	17.59	4.12	17.49	4.39	17.31	4.65	17.28	4.62
	6.0	18.00	4.19	18.00	4.47	17.75	4.73	17.28	4.56
	7.5	18.63	4.27	18.58	4.54	17.82	4.66	17.28	4.47
	10.0	19.71	4.43	19.62	4.69	17.82	4.51	17.28	4.29
	12.5	20.81	4.67	20.52	4.89	17.82	4.35	17.28	4.10
15.0	21.95	4.78	20.52	4.78	17.82	4.16	17.28	3.90	
90	-20.0	8.00	2.34	7.93	2.58	7.77	2.82	8.15	2.91
	-17.5	8.65	2.45	8.51	2.69	8.35	2.93	8.74	3.03
	-15.0	9.32	2.57	9.13	2.81	8.97	3.05	9.37	3.15
	-12.5	10.03	2.69	9.80	2.93	9.63	3.17	10.03	3.27
	-10.0	10.76	2.82	10.50	3.06	10.34	3.30	10.74	3.40
	-7.5	11.52	2.95	11.25	3.19	11.09	3.43	11.49	3.53
	-5.0	12.31	3.09	12.05	3.33	11.89	3.57	12.28	3.67
	-2.5	13.13	3.24	12.89	3.48	12.73	3.72	13.11	3.82
	0.0	13.97	3.39	13.77	3.63	13.61	3.87	13.98	3.96
	2.5	14.85	3.54	14.69	3.78	14.53	4.03	14.89	4.12
	5.0	15.75	3.70	15.66	3.95	15.50	4.19	15.48	4.15
	6.0	16.12	3.77	16.12	4.02	15.90	4.25	15.48	4.10
	7.5	16.69	3.84	16.64	4.09	15.96	4.19	15.48	4.02
	10.0	17.65	3.98	17.57	4.22	15.96	4.06	15.48	3.86
	12.5	18.64	4.20	18.38	4.40	15.96	3.91	15.48	3.69
15.0	19.66	4.30	18.38	4.30	15.96	3.74	15.48	3.51	

kcal/h=kW x 860 , BTU/h = kW x 3,412



# 6. CAPACITY TABLES

**PUMY-P140YKM/VKM** TC:Total Capacity(kW), PI:Power Input(kW)

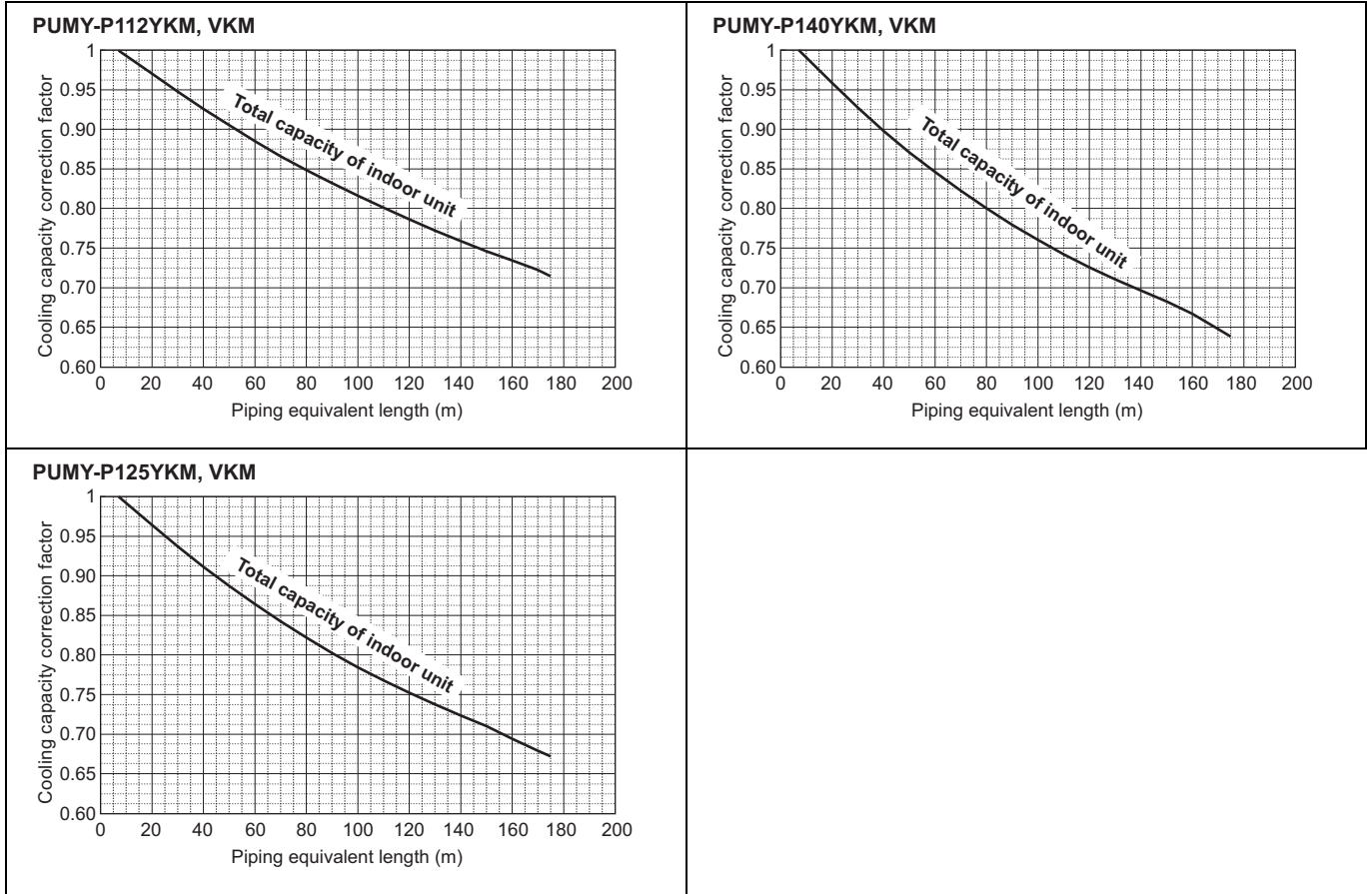
Combination (%)	Outdoor air temp. °C W.B.	Indoor air temp.							
		15°C D.B.		20°C D.B.		25°C D.B.		27°C D.B.	
		TC	PI	TC	PI	TC	PI	TC	PI
80	-20.0	7.04	2.07	6.98	2.28	6.84	2.50	7.17	2.58
	-17.5	7.61	2.17	7.49	2.38	7.35	2.60	7.69	2.68
	-15.0	8.21	2.27	8.04	2.49	7.90	2.70	8.24	2.79
	-12.5	8.83	2.38	8.62	2.60	8.48	2.81	8.83	2.90
	-10.0	9.47	2.50	9.25	2.71	9.10	2.92	9.46	3.01
	-7.5	10.14	2.62	9.91	2.83	9.76	3.04	10.12	3.13
	-5.0	10.83	2.74	10.61	2.95	10.46	3.17	10.81	3.25
	-2.5	11.55	2.87	11.34	3.08	11.20	3.29	11.54	3.38
	0.0	12.30	3.00	12.12	3.21	11.98	3.43	12.30	3.51
	2.5	13.07	3.14	12.93	3.35	12.79	3.57	13.10	3.65
	5.0	13.87	3.28	13.79	3.50	13.64	3.71	13.62	3.68
	6.0	14.19	3.34	14.19	3.56	13.99	3.77	13.62	3.63
	7.5	14.69	3.41	14.65	3.62	14.05	3.71	13.62	3.56
	10.0	15.54	3.53	15.47	3.74	14.05	3.60	13.62	3.42
	12.5	16.41	3.72	16.18	3.90	14.05	3.47	13.62	3.27
15.0	17.30	3.81	16.18	3.81	14.05	3.32	13.62	3.11	
70	-20.0	6.12	1.81	6.06	2.00	5.94	2.18	6.23	2.26
	-17.5	6.61	1.90	6.50	2.08	6.38	2.27	6.68	2.34
	-15.0	7.12	1.99	6.98	2.17	6.85	2.36	7.16	2.44
	-12.5	7.66	2.08	7.49	2.27	7.36	2.46	7.67	2.53
	-10.0	8.22	2.18	8.03	2.37	7.90	2.55	8.21	2.63
	-7.5	8.80	2.28	8.60	2.47	8.48	2.66	8.78	2.73
	-5.0	9.41	2.39	9.21	2.58	9.08	2.77	9.39	2.84
	-2.5	10.03	2.50	9.85	2.69	9.72	2.88	10.02	2.95
	0.0	10.68	2.62	10.52	2.81	10.40	2.99	10.68	3.07
	2.5	11.35	2.74	11.23	2.93	11.10	3.12	11.38	3.19
	5.0	12.04	2.87	11.97	3.05	11.84	3.24	11.83	3.22
	6.0	12.32	2.92	12.32	3.11	12.15	3.29	11.83	3.17
	7.5	12.75	2.98	12.72	3.16	12.20	3.25	11.83	3.11
	10.0	13.49	3.08	13.43	3.27	12.20	3.14	11.83	2.99
	12.5	14.24	3.25	14.04	3.41	12.20	3.03	11.83	2.86
15.0	15.02	3.33	14.04	3.33	12.20	2.90	11.83	2.71	
60	-20.0	5.22	1.55	5.17	1.71	5.07	1.87	5.31	1.94
	-17.5	5.64	1.63	5.55	1.79	5.44	1.95	5.70	2.01
	-15.0	6.08	1.70	5.95	1.87	5.85	2.03	6.11	2.09
	-12.5	6.54	1.79	6.39	1.95	6.28	2.11	6.54	2.17
	-10.0	7.01	1.87	6.85	2.03	6.74	2.19	7.00	2.26
	-7.5	7.51	1.96	7.34	2.12	7.23	2.28	7.49	2.35
	-5.0	8.02	2.05	7.85	2.21	7.75	2.37	8.01	2.44
	-2.5	8.56	2.15	8.40	2.31	8.30	2.47	8.55	2.53
	0.0	9.11	2.25	8.98	2.41	8.87	2.57	9.11	2.63
	2.5	9.68	2.35	9.58	2.51	9.47	2.67	9.70	2.73
	5.0	10.27	2.46	10.21	2.62	10.10	2.78	10.09	2.76
	6.0	10.51	2.50	10.51	2.67	10.36	2.83	10.09	2.72
	7.5	10.88	2.55	10.85	2.71	10.40	2.79	10.09	2.67
	10.0	11.51	2.64	11.46	2.81	10.40	2.70	10.09	2.57
	12.5	12.15	2.79	11.98	2.93	10.40	2.60	10.09	2.45
15.0	12.82	2.86	11.98	2.86	10.40	2.49	10.09	2.33	
50	-20.0	4.35	1.30	4.31	1.44	4.22	1.57	4.43	1.62
	-17.5	4.70	1.36	4.62	1.50	4.54	1.63	4.75	1.69
	-15.0	5.07	1.43	4.96	1.56	4.87	1.70	5.09	1.75
	-12.5	5.45	1.50	5.32	1.63	5.23	1.77	5.45	1.82
	-10.0	5.85	1.57	5.71	1.70	5.62	1.84	5.84	1.89
	-7.5	6.26	1.64	6.11	1.78	6.03	1.91	6.24	1.97
	-5.0	6.69	1.72	6.55	1.86	6.46	1.99	6.67	2.04
	-2.5	7.13	1.80	7.00	1.94	6.91	2.07	7.12	2.12
	0.0	7.59	1.89	7.48	2.02	7.39	2.15	7.60	2.21
	2.5	8.07	1.97	7.98	2.11	7.90	2.24	8.09	2.29
	5.0	8.56	2.06	8.51	2.20	8.42	2.33	8.41	2.31
	6.0	8.76	2.10	8.76	2.24	8.64	2.37	8.41	2.28
	7.5	9.07	2.14	9.04	2.27	8.67	2.33	8.41	2.24
	10.0	9.59	2.22	9.55	2.35	8.67	2.26	8.41	2.15
	12.5	10.13	2.34	9.99	2.45	8.67	2.18	8.41	2.06
15.0	10.68	2.40	9.99	2.40	8.67	2.08	8.41	1.95	

kcal/h=kW x 860 , BTU/h = kW x 3,412

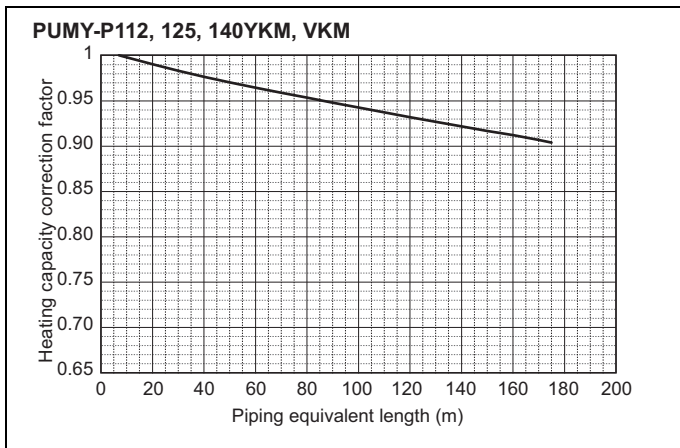
## 6-2. Correction by refrigerant piping length

CITY MULTI systems can have extended piping lengths if certain limitations are followed, but cooling/heating capacity could be reduced. Using following correction factor by equivalent piping length shown at 6-2-1 and 6-2-2, capacity can be found. 6-2-3 shows how to obtain the equivalent piping length.

### 6-2-1. Cooling capacity correction



### 6-2-2. Heating capacity correction



### 6-2-3. How to obtain the equivalent piping length

#### 1. PUMY-P112, 125, 140YKM, VKM

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

## 6-3. Correction at frost and defrost

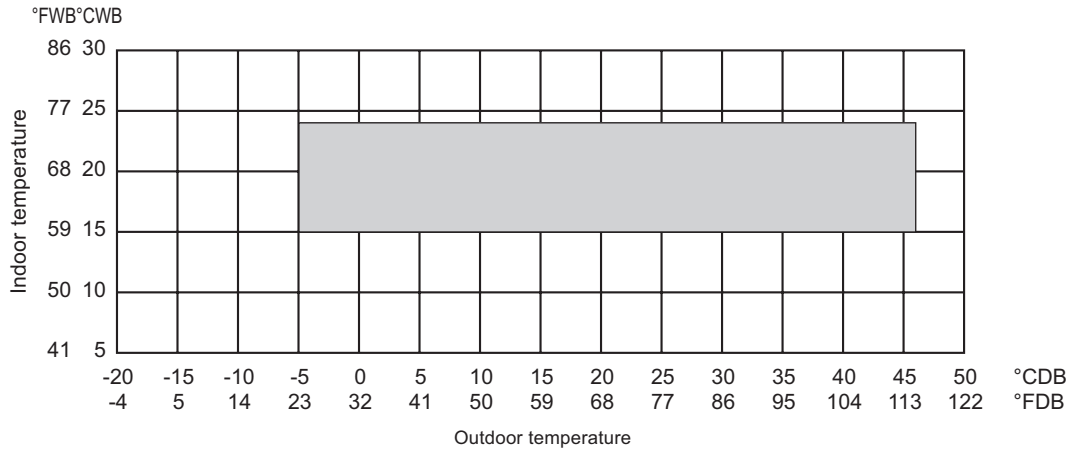
Due to frost at the outdoor heat exchanger and the automatical defrosting operation, the heating capacity of the outdoor unit should be considered by multiplying the correction factor which shown in the table below.

Table of correction factor at frosting and defrosting

Outdoor inlet air temp. °C	6	4	2	0	-2	-4	-6	-8	-10	-15	-20
Outdoor inlet air temp. °F	43	39	36	32	28	25	21	18	14	-5	-4
PUMY-P112, 125, 140YKM	1.0	0.98	0.89	0.88	0.89	0.90	0.95	0.95	0.95	0.95	0.95
PUMY-P112, 125, 140VKM	1.0	0.98	0.89	0.88	0.89	0.90	0.95	0.95	0.95	0.95	0.95

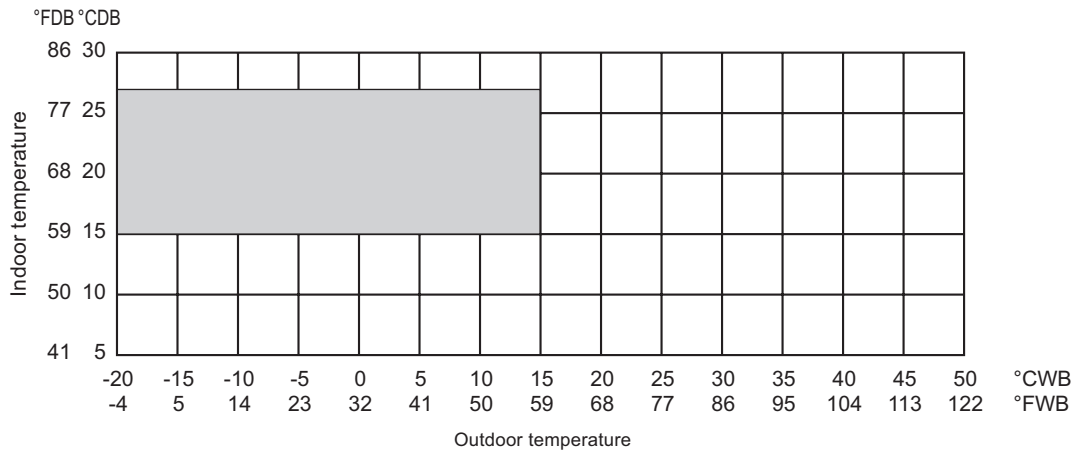
## 6-4. Operation temperature range

### • Cooling



\* 10 to 40°CDB (50 to 115°FDB): in case of connecting PKFY-P15/P20/P25VBM, PFFY-P20/P25/P32VKM, PFFY-P20/P25/P32VLE(R)M type indoor unit.

### • Heating



## 7-1. JOINT

CITY MULTI units can be easily connected by using Joint sets and Header sets provided by Mitsubishi Electric. One kind of Joint sets are available for use. Refer to section 3 in "System Design" or the Installation Manual that comes with the Joint set for how to install the Joint set.

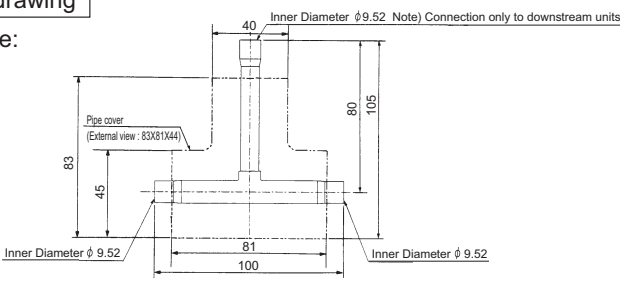
**CMY-Y62-G-E** mm

### 1. Specification

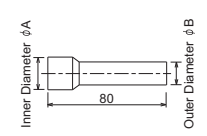
	Items	Details
Main	Number of ports	2 ports
	Number of branch joints	One for each liquid and gas pipe
	Pipe material	Phosphorus deoxidized copper C1220T-OL (JIS H3300)
Accessory	Insulation material	Foamed polyethylene (one for each liquid and gas pipe)
	Reducer	10 reducers of 7 types (Refer to the external drawing for details.)

### 2. External drawing

**For liquid pipe:**

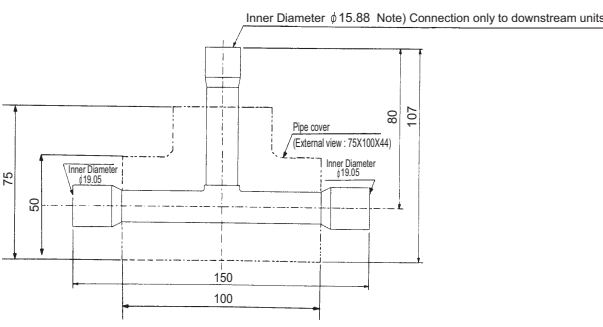


**Reducer (Accessory):**

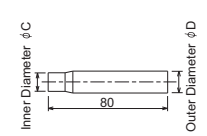


A (Inner Diameter)	B (Outer Diameter)	Number of reducers
φ 12.7	φ 9.52	2
φ 19.05	φ 15.88	1
φ 22.22	φ 19.05	1

**For gas pipe:**



**Reducer (Accessory):**



C (Inner Diameter)	D (Outer Diameter)	Number of reducers
φ 6.35	φ 9.52	2
φ 12.7	φ 15.88	1
φ 12.7	φ 19.05	1
φ 15.88	φ 19.05	2

7-2. HEADER

CITY MULTI units can be easily connected by using Joint sets and Header sets provided by Mitsubishi Electric. Two kinds of Header sets are available for use. Refer to section 3 in "System Design" or the Installation Manual that comes with the Header set for how to install the Header set.

CMY-Y64-G-E

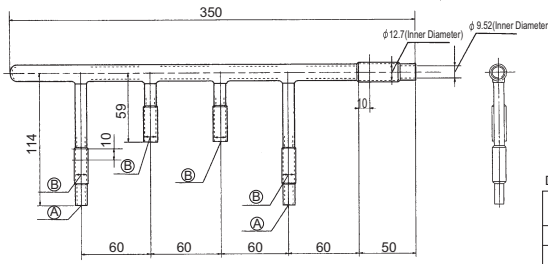
mm

1. Specification

	Items	Details
Main	Number of ports	3 ~ 4 ports
	Number of branch joints	One for each liquid and gas pipe
	Pipe material	Phosphorus deoxidized copper C1220T-OL (JIS H3300)
Accessory	Insulation material	Foamed polyethylene
	Reducer	7 reducers of 5 types
	Cap	2 caps of 2 different types for each liquid and gas pipe 4 caps in total

2. External drawing

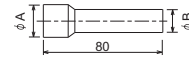
For liquid pipe:



Dimension table

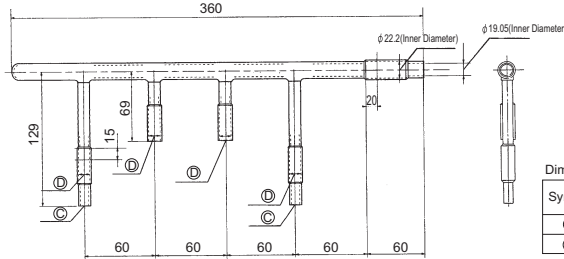
Symbol	Inner Diameter (mm)
(A)	φ 6.35
(B)	φ 9.52

Reducer (Accessory):



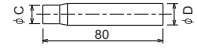
A (Inner Diameter)	B (Outer Diameter)	Number of reducers
φ 19.05	φ 15.88	1
φ 15.88	φ 12.7	2
φ 9.52	φ 6.35	2

For gas pipe:



Dimension table

Symbol	Inner Diameter (mm)
(C)	φ 12.7
(D)	φ 15.88



C (Inner Diameter)	D (Outer Diameter)	Number of reducers
φ 15.88	φ 19.05	1
φ 9.52	φ 12.7	1

CMY-Y68-G-E

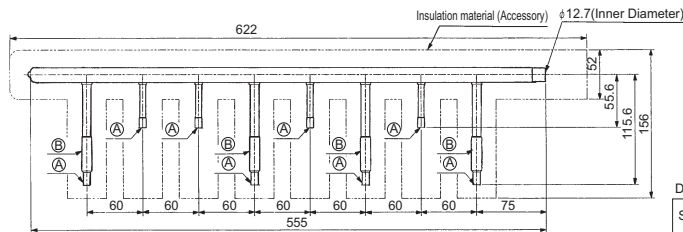
mm

1. Specification

	Items	Details
Main	Number of ports	5 ~ 8 ports
	Number of branch joints	One for each liquid and gas pipe
	Pipe material	Phosphorus deoxidized copper C1220T-OL (JIS H3300)
Accessory	Insulation material	Foamed polyethylene
	Reducer	3 reducers of 3 types
	Cap	3 caps for each liquid and gas pipe 6 in total

2. External drawing

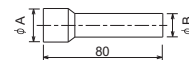
For liquid pipe:



Dimension table

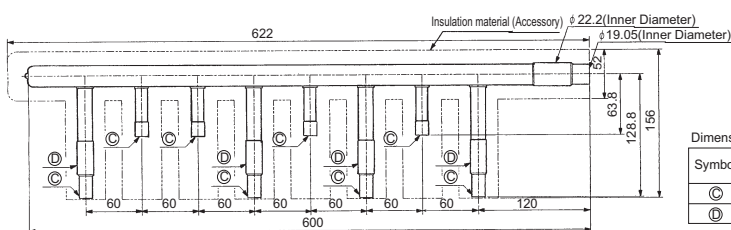
Symbol	Inner Diameter (mm)
(A)	φ 6.35
(B)	φ 9.52

Reducer (Accessory):



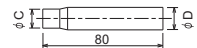
A (Inner Diameter)	B (Outer Diameter)	Number of reducers
φ 19.05	φ 15.88	1
φ 12.7	φ 9.52	1

For gas pipe:



Dimension table

Symbol	Inner Diameter (mm)
(C)	φ 12.7
(D)	φ 15.88



C (Inner Diameter)	D (Outer Diameter)	Number of reducers
φ 15.88	φ 19.05	1