

Job Name:	
System Reference:	Date:

FEATURES

- INVERTER-driven compressor
- Air-source, heat pump system
- Long line lengths - for details see Engineering Manual
- Connects to CITY MULTI® indoor units
- Controlled via CITY MULTI® Controls Network

UNIT OPTION

- Standard Model (PUHY-P950TSKA)
- Sea Coast <BS> Model (PUHY-P950TSKA-BS)

ACCESSORIES

- Twinning Kit (required) (CMY-Y200VBK2)
- Joint Kit (for details see Pipe Accessories Submittal)
- Header Kit (for details see Pipe Accessories Submittal)
- Low Ambient Kit (for details see Low Ambient Kit Submittal)
- Snow/Hail Guards (for details see Snow/Hail Guards Submittal)
- Base Pan Heater Kit (for details see Base Pan Heater Kit Submittal)

SPECIFICATIONS: PUHY-P950TSKA (-BS)

Model			SYSTEM
Model			PUHY-P950TSKA (-BS)
Power source			3-phase 3-wire 208-220-230 V 50/60 Hz
Cooling capacity			
*1		kW	103
(Nominal)		kcal/h	92,100
*1		Btu/h	351,400
Power input			kW 34.21
Current input			A 105.5-99.7-95.4
EER			kW/kW 3.01
Temp. range of cooling	Indoor	W.B.	15.0~24.0°C (59~75°F)
	Outdoor	D.B.	-5.0~52.0°C (23~126°F)
Heating capacity			
*2		kW	103
(Nominal)		kcal/h	92,100
*2		Btu/h	351,400
Power input			kW 30.56
Current input			A 94.2-89.1-85.2
COP			kW/kW 3.37
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)
MCA			A 59.2 for 450TKA; 63.9 for 500TKA
Indoor unit connectable		Total capacity	50~130% of outdoor unit capacity
		Model/Quantity	P15~P250/2~50
Sound pressure level (measured in anechoic room)			dB <A> 67.5
Refrigerant piping diameter		Liquid pipe	mm (in.) 19.05 (3/4) Brazed
		Gas pipe	mm (in.) 41.28 (1-5/8) Brazed
Max. Total Refrigerant Line Length			Ft. 3280
Max. Refrigerant Line Length (Between ODU & IDU)			Ft. 541
Max. Control Wiring Length			Ft. 1640

Refer to Module Data ¹

Specifications			Module 1 ¹	Module 2 ¹
Model			PUHY-P450TKA (-BS)	PUHY-P500TKA (-BS)
Pipe between unit and distributor	Liquid pipe	mm (in.)	15.88 (5/8) Brazed	15.88 (5/8) Brazed
	Gas pipe	mm (in.)	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
FAN*3	Type x Quantity		Propeller fan x 1	Propeller fan x 2

SPECIFICATIONS: PUHY-P950TSKA (-BS)

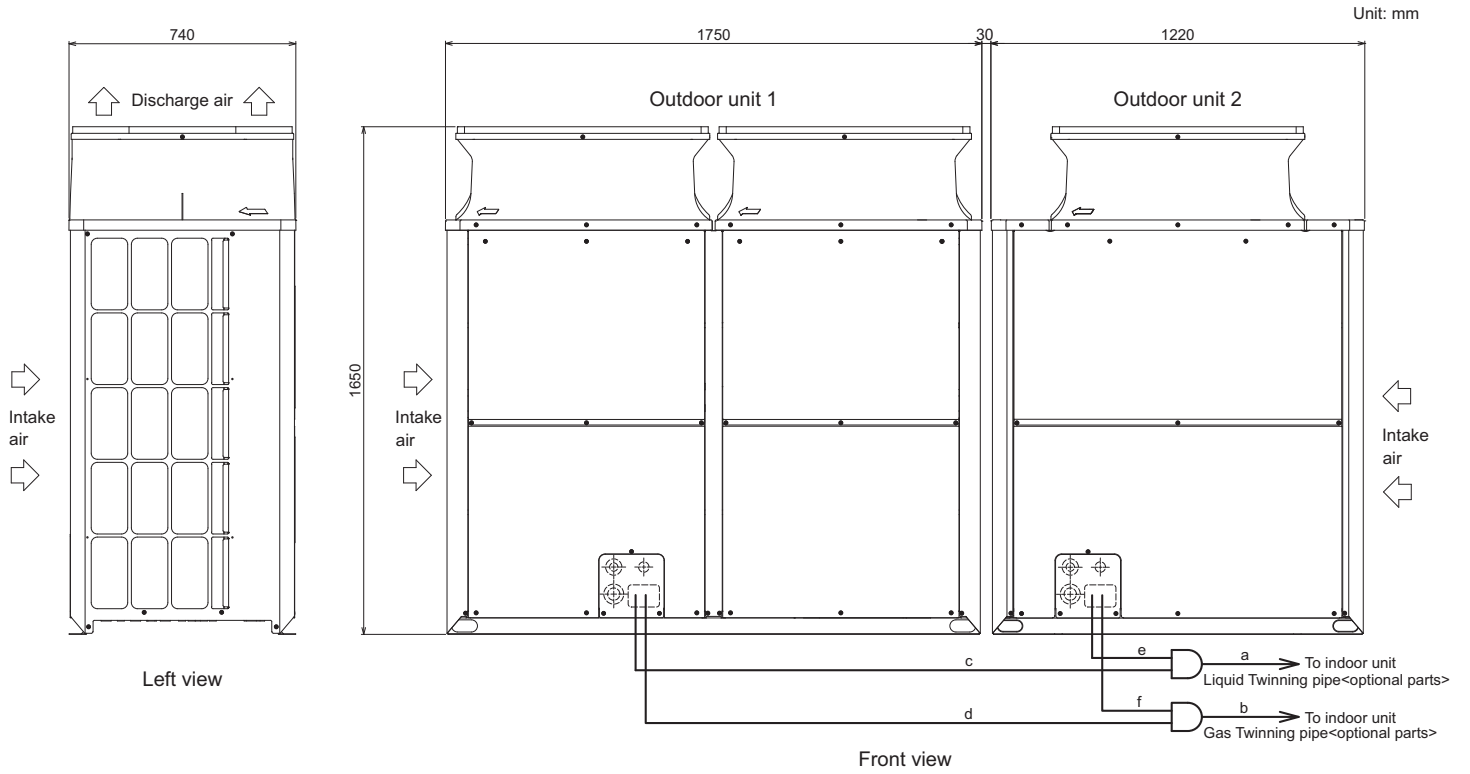
Specifications			Module 1 ¹	Module 2 ¹
Model			PUHY-P450TKA (-BS)	PUHY-P500TKA (-BS)
	Air flow rate	m ³ /min L/s cfm	210 3,500 7,415	360 6,000 12,712
	Control, Driving mechanism		Inverter-control, Direct-driven by motor	Inverter-control, Direct-driven by motor
	Motor output	kW	0.92 x 1	0.92 x 2
	External static press.	Pa (mmH ₂ O)	0 Pa (0 mmH ₂ O)	0 Pa (0 mmH ₂ O)
Compressor	Type		MITSUBISHI ELECTRIC Inverter scroll hermetic compressor	MITSUBISHI ELECTRIC Inverter scroll hermetic compressor
	Starting method		Inverter	Inverter
	Motor output	kW	12.4	13.3
	Case heater	kW	-	-
	Lubricant		MEL32	MEL32
External finish			Pre-coated galvanized steel sheets (+powder coating for -BS type)<MUNSELL 5Y 8/1 or similar>	Pre-coated galvanized steel sheets (+powder coating for -BS type)<MUNSELL 5Y 8/1 or similar>
External dimension H x W x D		mm in.	1,650 x 1,220 x 740 65 x 48-1/16 x 29-3/16	1,650 x 1,750 x 740 65 x 68-15/16 x 29-3/16
Protection devices	High pressure protection		High pressure sensor, High pressure switch at 4.15 MPa (601 psi)	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter circuit (COMP./FAN)		Over-heat protection, Over-current protection	Over-heat protection, Over-current protection
	Compressor		-	-
	Fan motor		-	-
Refrigerant	Type x original charge		R410A x 11.5 kg (26 lbs)	R410A x 11.8 kg (27 lbs)
	Control		LEV and HIC circuit	LEV and HIC circuit
Net weight		kg (lbs)	244 (538)	287 (633)
Heat exchanger			Salt-resistant cross fin & copper tube	Salt-resistant cross fin & copper tube
HIC circuit (HIC: Heat Inter-Changer)			Copper pipe, tube-in-tube structure	Copper pipe, tube-in-tube structure
Defrosting method			Auto-defrost mode (Reversed refrigerant cycle)	Auto-defrost mode (Reversed refrigerant cycle)

¹ Each individual module requires a separate electrical connection. Reference electrical data for each individual module.

Notes:

- Nominal cooling conditions (subject to JIS B8615-2)
Indoor: 27°C.D.B./19°C.W.B. (81°F.D.B./66°F.W.B.),
Outdoor: 35°C.D.B. (95°F.D.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- Nominal heating conditions (subject to JIS B8615-2)
Indoor: 20°C.D.B. (68°F.D.B.),
Outdoor: 7°C.D.B./6°C.W.B. (45°F.D.B./43°F.W.B.)
Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)
- ESP option is available (30Pa, 60Pa/3.1mmH₂O, 6.1mmH₂O).

DIMENSIONS: PUHY-P950TSKA (-BS)



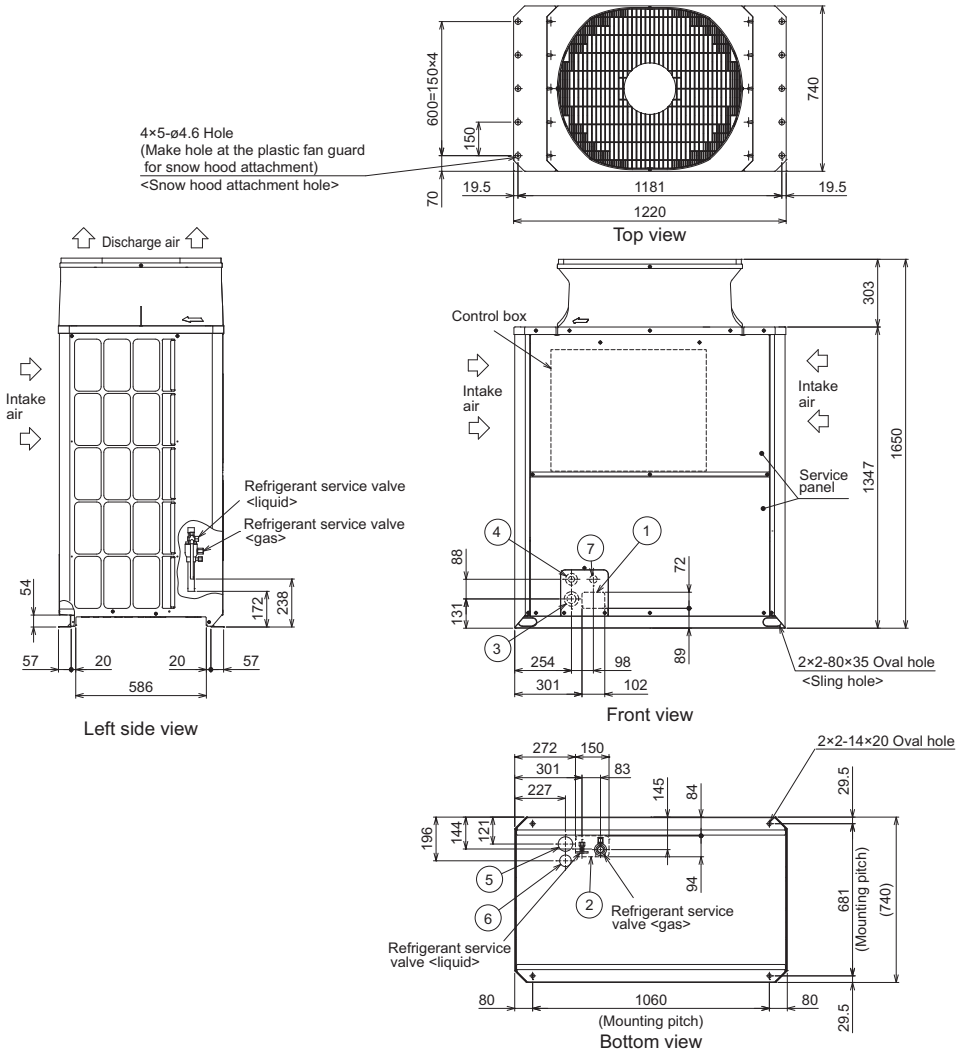
Twinning pipe connection size

Package unit name	PUHY-P950TSKA(-BS)	
Component unit name	Outdoor unit 1	PUHY-P500TKA(-BS)
	Outdoor unit 2	PUHY-P450TKA(-BS)
Outdoor Twinning Kit(optional parts)	CMY-Y200VBK2	
Indoor unit-Twinning pipe	Liquid a	ø19.05
	Gas b	ø41.28

	Unit model	Liquid	Gas
		c or e	d or f
Twinning pipe-Outdoor unit	P450	ø15.88	ø28.58
	P500	ø15.88	ø28.58

- Note 1. Connect the pipes as shown in the figure above. Refer to the table above for the pipe size.
 2. Twinning pipes should not be tilted more than 15 degrees from the horizontal plane.
 Be sure to see the Installation Manual for details of Twinning pipe installation.
 3. The pipe section before the Twinning pipe (sections "a" and "b" in the figure) must have at least 500mm of straight section (including the straight pipe that is supplied with the Twinning pipe).
 4. Only use the Twinning pipe by Mitsubishi (optional parts).

DIMENSIONS: PUHY-P450TKA (-BS)



<Accessories>

- Unit: mm**
- Connecting pipe
 - <Gas> ·Elbow (ID28.58×OD28.58)···P350,P400,P450 1pc.
 - <Liquid> ·Pipe (ID15.88×OD15.88)···P350,P400,P450 1pc.
 - Pipe reducer (ID15.88×OD12.7)···P350,P400 1pc.

- Note1. Please refer to the next page for information regarding necessary spacing around the unit and foundation work.
2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C.

Connecting pipe specifications

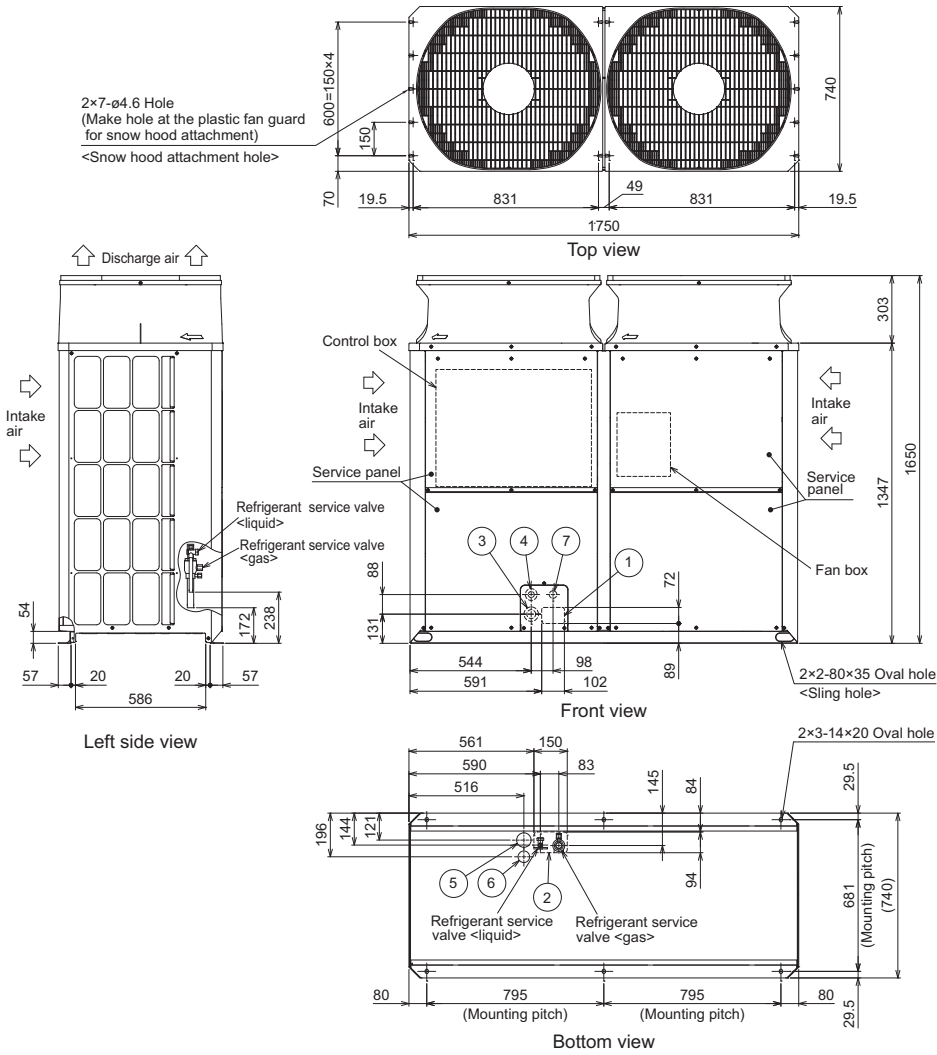
Model	Diameter			
	Refrigerant pipe *1		Service valve	
	Liquid	Gas	Liquid	Gas
PUHY-P350TKA(-BS)	ø12.7 Brazed	ø28.58 Brazed	ø15.88	ø28.58
PUHY-P400TKA(-BS)	ø12.7 Brazed (ø15.88 Brazed) *2			
PUHY-P450TKA(-BS)	ø15.88 Brazed			

*1 Connect by using the connecting pipes (for bottom piping and front piping) that are supplied.

*2 Indicates dimensions and connection specifications in the case the unit is used in combination with other outdoor units.

NO.	Usage	Specifications
①	For pipes	Front through hole 102 × 72 Knockout hole
②		Bottom through hole 150 × 94 Knockout hole
③	For wires	Front through hole ø65 or ø40 Knockout hole
④		Front through hole ø52 or ø27 Knockout hole
⑤		Bottom through hole ø65 Knockout hole
⑥		Bottom through hole ø52 Knockout hole
⑦	For transmission cables	Front through hole ø34 Knockout hole

DIMENSIONS: PUHY-P500TKA (-BS)



<Accessories>

- Connecting pipe
- <Gas> Elbow (ID28.58×OD28.58)···P500 1pc.
- <Liquid> Pipe (ID15.88×OD15.88)···P500 1pc.

Unit: mm

Note1. Please refer to the next page for information regarding necessary spacing around the unit and foundation work.

2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C.

Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe *1		Service valve	
	Liquid	Gas	Liquid	Gas
PUHY-P500TKA(-BS)	ø15.88 Brazed	ø28.58 Brazed	ø15.88	ø28.58

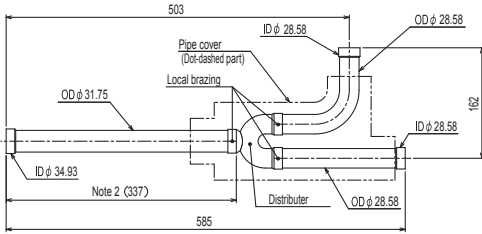
*1 Connect by using the connecting pipes (for bottom piping and front piping) that are supplied.

NO.	Usage	Specifications
①	For pipes	Front through hole 102 × 72 Knockout hole
②		Bottom through hole 150 × 94 Knockout hole
③	For wires	Front through hole ø65 or ø40 Knockout hole
④		Front through hole ø52 or ø27 Knockout hole
⑤		Bottom through hole ø65 Knockout hole
⑥		Bottom through hole ø52 Knockout hole
⑦		For transmission cables Front through hole ø34 Knockout hole

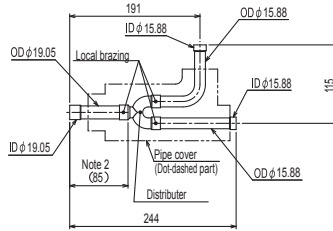
DIMENSIONS: CMY-Y200VBK2 (TWINNING KIT)

mm

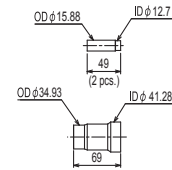
For Gas pipe:



For Liquid pipe:

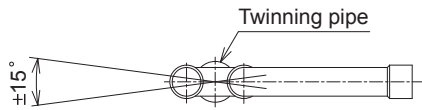


<Deformed pipe(Accessory)>



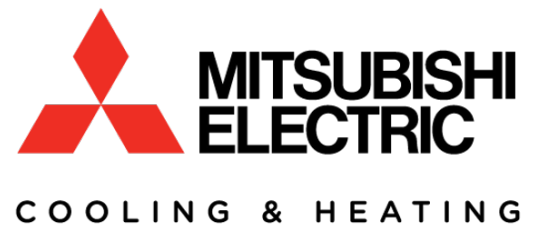
ID: Inner Diameter OD: Outer Diameter

Note 1. Refer to the figure below for the installation position of the twinning pipe.



Slope of the twinning pipes are at an angle within $\pm 15^\circ$ to the horizontal plane.

2. Use the attached pipe to braze the port-opening of the twinning pipe.
3. Pipe diameter is indicated by inside diameter.
4. Only use the twinning pipe by Mitsubishi (optional parts).



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FORM# PUHY-P950TSKA (-BS) - 201806

Specifications are subject to change without notice.

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