

Submittal Data: PQHY-P120ZLMU-B

Job Name:		Location:	
Purchaser:		Submitted By:	
Submitted To:		Engineer:	
Date:		Application:	

☐ Reference
 ☐ Approval
 ☐ Construction



*Reference image

GENERAL FEATURE:

- Heat pump operation
- System changeover mode available
- Water flow rate control via DC 0-10V from control board

Outdoor Model	PQHY-P120ZLMU-B	
Power Source	3-phase 3-wire 575 V ±10% 60 Hz	
Cooling		
Cooling Capacity (Nominal)	120000	BTU/h
Cooling Capacity (Nominal)	35.2	kW
Power Input (Nominal)	7.51	kW
Current Input (Nominal)	8.3	A
Cooling Capacity (Rated)	115000	BTU/h
Cooling Capacity (Rated)	33.7	kW
Power Input (Rated) Non-Ducted/ Ducted	7.38/7.77	kW
Current Input (Rated) Non-Ducted/ Ducted	8.2/8.6	A
Guaranteed Operating Range (Indoor)	59.0°F~75.0°F W.B. (15.0°C~24.0°C)	
Guaranteed Operating Range (Outdoor)	50~113°F (10~45°C)	
Heating		
Heating Capacity (Nominal)	135000	BTU/h
Heating Capacity (Nominal)	39.6	kW
Power Input (Nominal)	7.09	kW
Current Input (Nominal)	7.9	A
Heating Capacity (Rated)	129000	BTU/h
Heating Capacity (Rated)	37.8	kW
Power Input (Rated) Non-Ducted/ Ducted	5.78/5.89	kW
Current Input (Rated) Non-Ducted/ Ducted	6.4/6.5	A
Operating Range (Indoor)	59.0°F~81.0°F D.B. (15.0°C~27.0°C)	
Operating Range (Outdoor)	50~113°F (10~45°C)	
Electrical		
Minimum Circuit Ampacity (MCA)	13	A
Maximum Overcurrent Protection (MOP)	20	A
Refrigerant Piping		
Liquid Pipe Diameter	3/8 (9.52) Brazed (1/2 (12.7) Brazed, total length >= 40 m)	in (mm)
Gas Pipe Diameter	7/8 (22.2) Brazed	in (mm)
Circulating Water		
Circulating water flowrate	25.4 (96)	G/min (L/min)
Circulating water Pressure drop	3.48 (24)	psi (kPa)
Circulating water flowrate/pressure operating range	13.2 ~ 31.7 (3.0~7.2)	G/min (m3/h)
Compressor		
Type × Quantity	Inverter scroll hermetic × 1	
Motor Output	7.7	kW
Starting Method	Inverter	
Case Heater	0.035	kW
Lubricant	MEL32	
Physical & Finish		
External finish	Galvanized steel sheets	
External Dimensions (H × W × D)	43-5/16 x 34-11/16 x 21-11/16	in
External Dimensions (H × W × D)	1,100 x 880 x 550	mm
Net Weight	400 (181)	lb (kg)
Sound Levels		
Sound Power Level (anechoic room)	71	dB<A>
Indoor Unit Connectable		
Total Capacity	50~130% of heat source unit capacity	
Model / Maximum Quantity	P04~P96/30	
Refrigerant		
Type × Original Charge	R410A x 11 lbs + 1 oz (5.0 kg)	

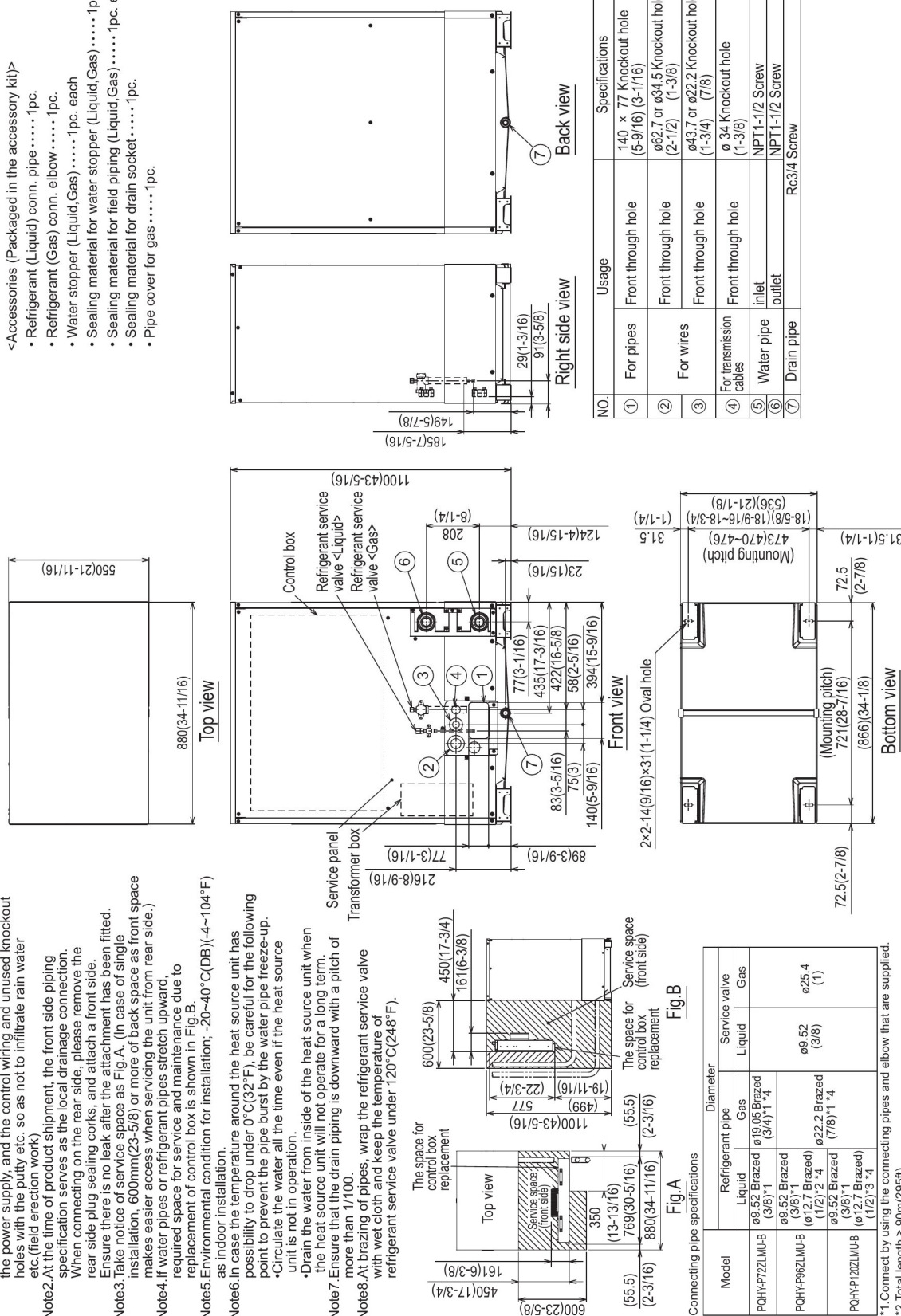
Notes:

- Nominal cooling conditions (Test conditions are based on AHRI 1230)
Indoor: 81°F D.B./66°F W.B. (27°C D.B./19°C W.B.), Inlet water temperature: 86°F (30°C)
- Nominal heating conditions (Test conditions are based on AHRI 1230)
Indoor: 68°F D.B. (20°C D.B.), Inlet water temperature: 68°F (20°C)
- The sound values are sound power level (PWL) based on ISO 3744:2010 (r=3.5m).
Test conditions: Indoor: 81°F D.B./66°F W.B. (27°C D.B./19°C W.B.), Inlet water temperature: 86°F (30°C)
- 23°F EWT (Entering water temperature) is possible via DipSwitch Setting. Antifreeze (glycol) must be added to the water loop to prevent freezing down to 5°F
- The ambient temperature of the Heat Source Unit is to be below 104°F D.B. (40°C D.B.)
- The ambient relative humidity of the Heat Source Unit is to be below 80%.
- The Heat Source Unit should not be installed at outdoor.
- Use a strainer (more than 50 meshes) at the water inlet piping of the unit.
- Provide interlocking for the unit operation and water circuit.
- Install the supplied insulation material to the unused drain-socket.
- When installing insulation material around both water and refrigerant piping, follow the installation manual.
- The water circuit must be a closed circuit (water is not exposed to the atmosphere).
- All electrical work shall comply with Nation (CEC) and local codes and regulations
- Should this document be altered or changed without MESCA's permission, it becomes null and void. MESCA assumes no responsibility for any consequences in such cases.
- Mitsubishi Electric (MESCA) supports the use of only MESCA supplied and approved accessories. Use of non-MESCA supported accessories will affect warranty coverage

Accessories	Model Numbers
Joint	CMY-Y102SS-G2, CMY-Y102LS-G2, CMY-Y202S-G2
Header	CMY-Y104, 108, 1010C-G

Unit: mm(in)

- Accessories (Packaged in the accessory kit) >
- Refrigerant (Liquid) conn. pipe 1pc.
- Refrigerant (Gas) conn. elbow 1pc.
- Water stopper (Liquid,Gas) 1pc. each
- Sealing material for water stopper (Liquid,Gas) 1pc. each
- Sealing material for field piping (Liquid,Gas) 1pc. each
- Sealing material for drain socket 1pc.
- Pipe cover for gas 1pc.



NO.	Usage	Specifications
①	For pipes	140 × 77 Knockout hole (5-9/16)
②	For wires	Front through hole
③		Front through hole
④		Front through hole
⑤	For transmission cables	Ø 34 Knockout hole (1-3/8)
⑥	Water pipe	inlet
⑦		outlet
⑧	Drain pipe	Rc3/4 Screw

Fig. B

Fig. A

Model	Diameter			
	Refrigerant pipe		Service valve	
	Liquid	Gas	Liquid	Gas
PQH-P72ZLMU-B	ø9.52 Braze (3/8)"1	ø19.05 Braze (3/4)"1 1/4		
PQH-P96ZLMU-B	ø9.52 Braze (ø12.7 Braze) (1 1/2)"2 1/4	ø22.2 Braze (7/8)"1 1/4	ø9.52 (3/8)	ø25.4 (1)
PQH-P120ZLMU-B	ø9.52 Braze (ø16 Braze) (1 1/2)"3			

1. Connect by using the connecting pipes and elbow that are supplied.
2. Total length $\geq 90\text{m}(295\text{ft})$
3. Total length $\geq 40\text{m}(131\text{ft})$
4. Use the pipe joint(field supply) and connect to the refrigerant service