

Job Name:

Schedule Reference:

Date:



OUTDOOR VRF HEAT PUMP SYSTEM

### ACCESSORIES

- T-Branch Joint ( $\leq 72,000$  Btu/h) ..... CMY-Y102SS-G2
- T-Branch Joint (73,000 - 144,000 Btu/h) ..... CMY-Y102LS-G2
- T-Branch Joint (145,000 - 234,000 Btu/h) ..... CMY-Y202S-G2
- Header - 4 Branch (Capacity:  $\leq 72,000$  Btu/h) ..... CMY-Y104C-G
- Header - 8 Branch (Capacity:  $\leq 144,000$  Btu/h) ..... CMY-Y108C-G
- Header - 10 Branch (Capacity:  $\leq 234,000$  Btu/h) ..... CMY-Y1010C-G

### UNIT OPTION

- Standard Model.....PQHY-P162TLMU-A1

\* All electrical work shall comply with National (NEC) and local codes and regulations.

Specifications		Model Name
Unit Type		PQHY-P168TLMU-A1
Nominal Cooling Capacity	Btu/h	168,000
Nominal Heating Capacity	Btu/h	188,000
External Dimensions (H x W x D)	In. / mm	57-1/8 x 34-11/16 x 21-11/16 / 1,450 x 880 x 550
Net Weight	Lbs. / kg	481/(218)
Electrical Power Requirements	Voltage, Phase, Hertz	208/230V, 3-phase, 60Hz
Cooling Power Input	kW	12.05
Heating Power Input	kW	9.86
Cooling Current (208/230V)	A	37.1 / 33.6
Heating Current (208/230V)	A	30.4 / 27.5
Minimum Circuit Ampacity (MCA) *	A	44/39
Maximum Fuse Size	A	70/70
<i>Circulating Water (quality must meet regulations)</i>		
Flow Rate	GPM / L/s	31.7 / 2
Pressure Drop	psi	6.38
Operation Volume Range	GPM / L/s	19.8/50.9/ 1.3 - 3.2
Maximum Water Pressure	MPa / psi	2 / 290
Water-source Connection	In.	NPT1-1/2 Screw (Install strainer (more than 50 meshes) at water inlet piping of the unit)
Piping Diameter (Brazed) (In. / mm)	Liquid (High Pressure)	5/8(15.88)
	Gas (Low Pressure)	1-1/8(28.58)
Indoor Unit	Total Capacity	50 to 130% of Water-source Unit Capacity
	Model / Quantity	P06 to P96 / 1 to 36
Sound Pressure Levels	dB(A)	56
Compressor Operating Range		16 - 100%
Compressor Type x Quantity		Inverter-driven Scroll Hermetic x 1
Compressor Motor Output	kW	11
Compressor Crankcase Heater	kW	-
Refrigerant		R410A x 13lbs + 4 oz(6.0 kg)
Lubricant		MEL32
High-pressure Protection Device		601 psi / 4.15 MPa
Compressor / Fan Protection Device		Overheat Protection
Inverter Protection Device		Overheat / Overcurrent Protection

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.

Notes:

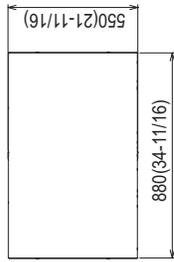
Note: Mitsubishi Electric (MESCA) supports the use of only MESCA supplied and approved accessories for proper functioning of the unit(s). Use of non-MESCA supported accessories will affect warranty coverage.



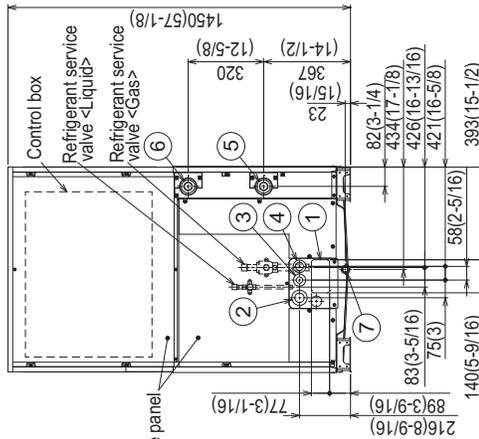
# Module: PQHY-P168TLMU-A1 - DIMENSIONS

Unit: mm(in)

- Refrigerant (Liquid) conn. pipe.....1pc.  
(P144/P168/P192; Packaged in the accessory kit)
- Refrigerant (Gas) conn. elbow.....1pc.  
(P144/P168/P192; Packaged in the accessory kit)
- Water stopper (Liquid, Gas).....1pc. each  
(P144/P168/P192; Packaged in the accessory kit)
- Sealing material for water stopper (Liquid, Gas).....1pc. each  
(P144/P168/P192; Packaged in the accessory kit)
- Sealing material for field piping (Liquid, Gas).....1pc. each  
(P144/P168/P192; Packaged in the accessory kit)
- Sealing material for drain socket.....1pc.  
(P144/P168/P192; Packaged in the accessory kit)
- Pipe cover for gas.....1pc.  
(P144/P168/P192; Packaged in the accessory kit)
- Sealing material for base leg (two types).....4pc. each  
(P144/P168/P192; Packaged in the accessory kit)
- Sealing material for panel.....1pc.  
(P144/P168/P192; Packaged in the accessory kit)

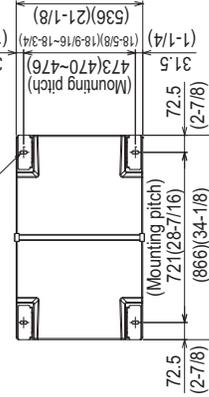


Top view

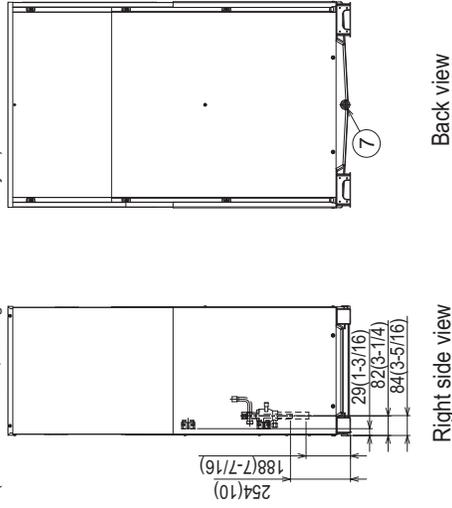


Front view

2x2-14(9/16)x3(1-1/4) Oval hole



Bottom view

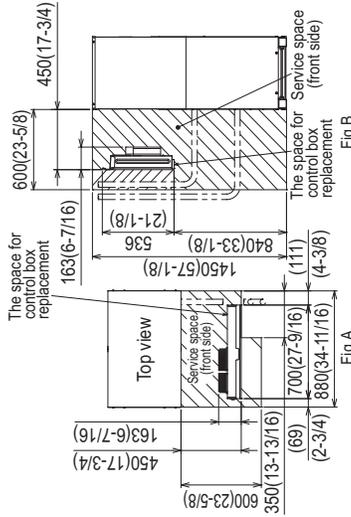


Right side view

Back view

NO.	Usage	Specifications
①	For pipes	Front through hole 140 x 77 Knockout hole (5-9/16) (3-1/16)
②	For wires	Front through hole ø62.7 or ø34.5 Knockout hole (2-1/2) (1-3/8)
③	For transmission cables	Front through hole ø43.7 or ø22.2 Knockout hole (1-3/4) (7/8)
④	For transmission cables	Front through hole ø34 Knockout hole (1-3/8)
⑤	Water pipe inlet	NPT1-1/2 Screw
⑥	Water pipe outlet	NPT1-1/2 Screw
⑦	Drain pipe	Rc3/4 Screw

- Note1 Close a hole of the water piping, the refrigerant piping, the power supply, and the control wiring and unseal knockout holes with the putty etc. so as not to infiltrate rain water etc. (field erection work)
- Note2 At the time of product shipment, the front side piping specification serves as the local drainage connection. When connecting on the rear side, please remove the rear side plug sealing corks, and attach a front side. Ensure there is no leak after the attachment has been fitted.
- Note3 Take notice of service space as Fig.A. (In case of single installation, 600mm(23-5/8) or more of back space as front space makes easier access when servicing the unit. From rear side, if water pipes or refrigerant pipes stretch upward, required space for service and maintenance due to replacement of control box is shown in Fig.B.
- Note5 Environmental condition for installation: -20~40°C(DB) (-4~104°F) as indoor installation.
- Note6 In case the temperature around the heat source unit has possibility to drop under 0°C(32°F), be careful for the following point to prevent the pipe burst by the water pipe freeze-up.
- Circulate the water all the time even if the heat source unit is not in operation.
  - Drain the water from inside of the heat source unit when the heat source unit will not operate for a long term.
- Note7 Ensure that the drain piping is downward with a pitch of more than 1/100.
- Note8 At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C(248°F).



Model	Refrigerant pipe		Service valve	
	Liquid	Gas	Liquid	Gas
PQHY-P144TLMU-A1	ø12.7 Brazed (1/2) *1 *2	ø28.58 Brazed (1-1/8) *1	ø15.88 (5/8)	ø28.58 (1-1/8)
PQHY-P168TLMU-A1	ø12.7 Brazed (1/2) *1 *2	ø28.58 Brazed (1-1/8) *1	ø15.88 (5/8) *1	ø28.58 (1-1/8)
PQHY-P192TLMU-A1	ø12.7 Brazed (1/2) *1 *2	ø28.58 Brazed (1-1/8) *1	ø15.88 (5/8) *1	ø28.58 (1-1/8)

- \*1 Connect by using the connecting pipes and elbow that are supplied.
- \*2 Use the pipe joint (field supply) and connect to the refrigerant service valve piping.



for a greener tomorrow

