| | |
|---|---|
| Job Name: | |
| System Reference: | Date: |



**MODULAR WATER-SOURCE VRF HEAT PUMP SYSTEM**

**ACCESSORIES**

Joint Kit ..... For details see Pipe Accessories Submittal
BC Controller ..... For details see BC Controller Submittal

| Specifications | | Model Name |
|---|---|---|
| Unit Type | | PQRY-P72TLMU-A |
| Nominal Cooling Capacity (208/230V) | Btu/h | 72,000 |
| Nominal Heating Capacity 208/230V) | Btu/h | 80,000 |
| Operating Temperature Range | Cooling (Indoor) | 59~75° F 15~24° C) WB |
| | Heating (Indoor) | 59~81° F (15~27° C) DB |
| Operating Water Temperature Range | Cooling* | 50~113° F (10~45° C) |
| | Heating* | 50~113° F (10~45° C) |
| External Dimensions (H x W x D) | In. (mm) | 43-5/16 x 34-11/16 x 21-11/16 (1100 x 880 x 550) |
| Net Weight | Lbs. (kg) | 380 (172) |
| External Finish | | Galvanized steel sheet |
| Electrical Power Requirements | Voltage, Phase, Hertz | 208 / 230V, 3-phase, 60Hz |
| Minimum Circuit Ampacity (MCA) | A | 13 / 12 |
| Maximum Overcurrent Protection (MOP) | A | 20 |
| *Circulating Water (quality must meet regulations)* | | |
| Flow Rate | GPM / L/s | 25.4 / 1.6 |
| Pressure Drop | FT / psi | 8.0 / 3.48 |
| Operation Volume Range | GPM / L/m | 13.2 - 31.7 / 50 - 120 |
| Maximum Water Pressure | MPa / psi | 2 / 290 |
| Water-source Connection for Inlet and Outlet | In. | 1-1/2 NPT |
| *Piping Diameter (Brazed)* (In. / mm) | High Pressure (Liquid) | 5/8 / 15.88 |
| | Low Pressure (Gas) | 3/4 / 19.1 |
| Max. Total Refrigerant Line Length | Ft. | 1,804 |
| Max. Refrigerant Line Length (Between ODU & IDU) | Ft. | 541 |
| Max. Control Wiring Length | Ft. | 1,640 |
| Indoor Unit | Total Capacity | 50~150 |
| | Model / Quantity | P6~P96/1~18 |
| Sound Pressure Levels | dB(A) | 46 |
| Compressor Operating Range | | 24% - 100% |
| Compressor Type x Quantity | | Inverter scroll hermetic compressor x 1 |
| Refrigerant | | R410A x 11 lbs. + 1 oz. (5.0 kg) |
| Protection Devices | High Pressure | High pressure sensor, High pressure switch at 4.15 MPa (601 psi) |
| | Inverter Circuit | Over-heat protection, Over-current protection |
| | Compressor | Over-heat protection |
| AHRI Ratings (Ducted/Non-Ducted) | EER | 16.7 / 20.1 |
| | IEER | 24.2 / 28.1 |
| | COP | 5.51 / 6.05 |
| | SCHE | 23.6 / 24.4 |

**NOTES:**

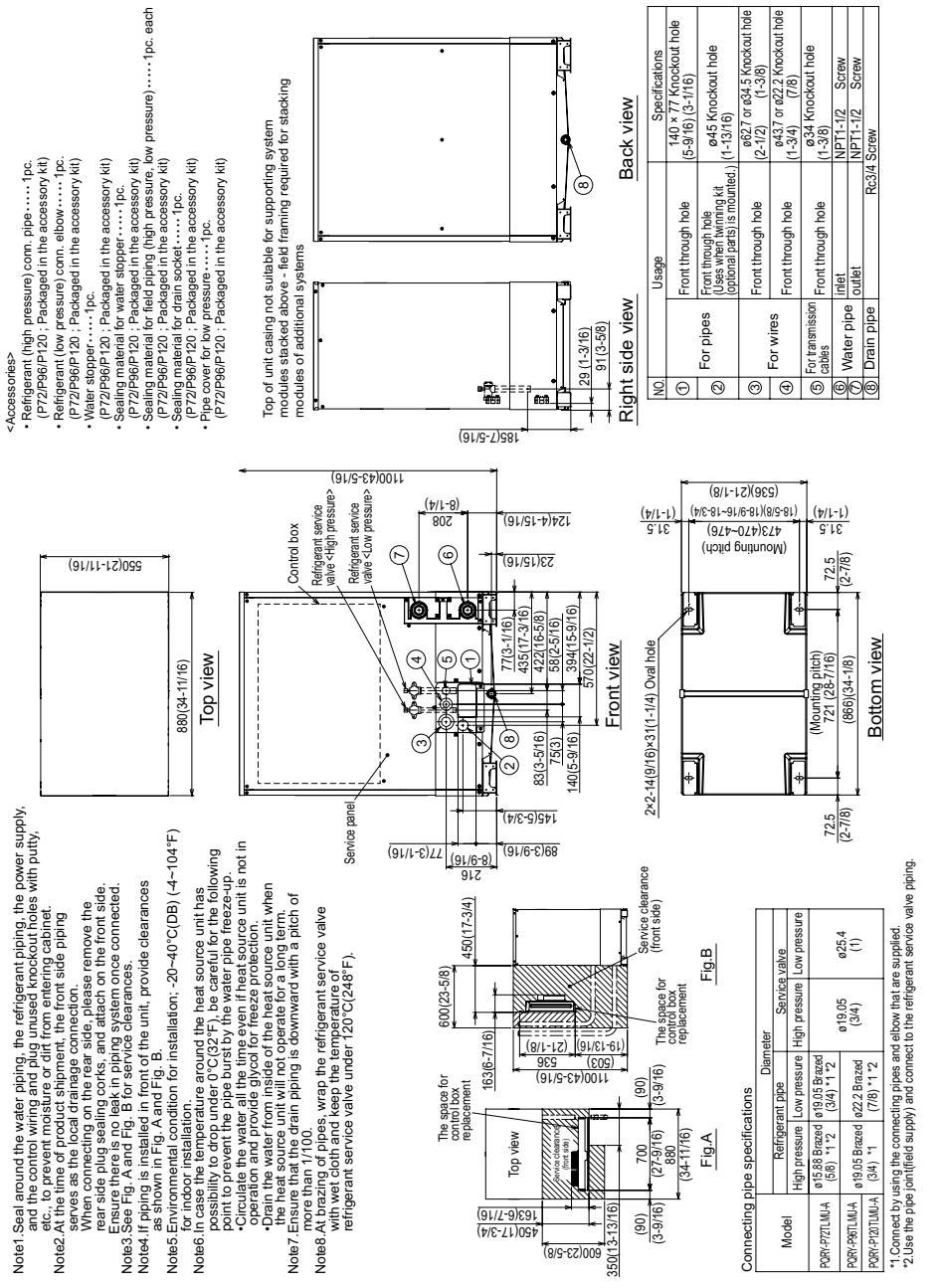
*If using circulating water temperatures between 23° and 50° F, Dip switch 3-9 must be turned on and glycol must be added to the water loop to prevent freezing down to 5° F.

Specifications are subject to change without notice.

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# Model: PQRY-P72TLMU-A- DIMENSIONS

Unit : mm(in)




Note1. Seal around the water piping, the refrigerant piping, the power supply, and the control wiring and plug unused knockout holes with putty, etc. to prevent moisture or dirt from entering cabinet.
Note2. At the time of product shipment, the front side piping serves as the local drainage connection.
When connecting on the rear side, please remove the rear side plug sealing corks, and attach on the front side.
Ensure there is no leak in piping system once connected.
Note3. See Fig. A and Fig. B for service clearances.
Note4. If piping is installed in front of the unit, provide clearances as shown in Fig. A and Fig. B.
Note5. Environmental condition for installation: -20~40°C(DB) (-4~104°F)
for 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 heat source unit is not in operation and provide glycol for freeze protection.
•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).

Connecting pipe specifications

| Model | Diameter | | | |
|---|---|---|---|---|
| | Refrigerant pipe | | Service valve | |
| | High pressure | Low pressure | High pressure | Low pressure |
| PQRY-P72TLMU-A | ø15.88 Brazed (5/8) *1 *2 | ø19.05 Brazed (3/4) *1 *2 | ø19.05 (3/4) | ø25.4 (1) |
| PQRY-P96TLMU-A | ø19.05 Brazed (3/4) *1 | ø22.2 Brazed (7/8) *1 *2 | | |
| PQRY-P120TLMU-A | | | | |

*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.

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FORM# PQRY-P72TLMU-A-20160224

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