

SUBMITTAL DATA SHEET

16 RT (H,Y)VAHP192B41S (Consists of two (H,Y)VAHP096B41S modules.)

| | | | | | |
|--------------------------|--|-------------|----------------------|------------------|-------------------|
| Job Name: | | | Location: | | |
| Purchaser: | | | Order No.: | | |
| Engineer: | | | | | |
| Submitted To: | | For: | Ref: | Approval: | |
| Submitted By: | | | Date: | | |
| Unit Designation: | | | Schedule No.: | | Model No.: |

FEATURES:

- Two-pipe system for ductless and ducted applications
- Inverter-driven scroll compressor
- Long refrigerant piping lengths – up to 3,280 feet total pipe run

ACCESSORIES:

- Piping Kit: for details see Pipe Accessories Submittal
- Hail/Snow Protection Hood: for details see Snow/Hail Guards Kit Submittal

NOTES:

1. Rating Conditions are shown as below with piping length 24 feet 7-3/16 inch, piping height 0 feet.
 - Cooling
Indoor Air Inlet Temperature: 80 DB, 67F WB
Outdoor Air Inlet Temperature: 95F DB
 - Heating
Indoor Air Inlet Temperature: 70 F DB
Outdoor Air Inlet Temperature: 47F DB, 43F WB
2. Rating Conditions are based on the AHRI 1230 test standard.
3. For more details, please refer to Engineering manual "Operation range" section.
4. For more details, please refer to Engineering manual "Operation range" section.
5. External static pressure can be changed via DSW setting 0.24 in.W.G. (60Pa).

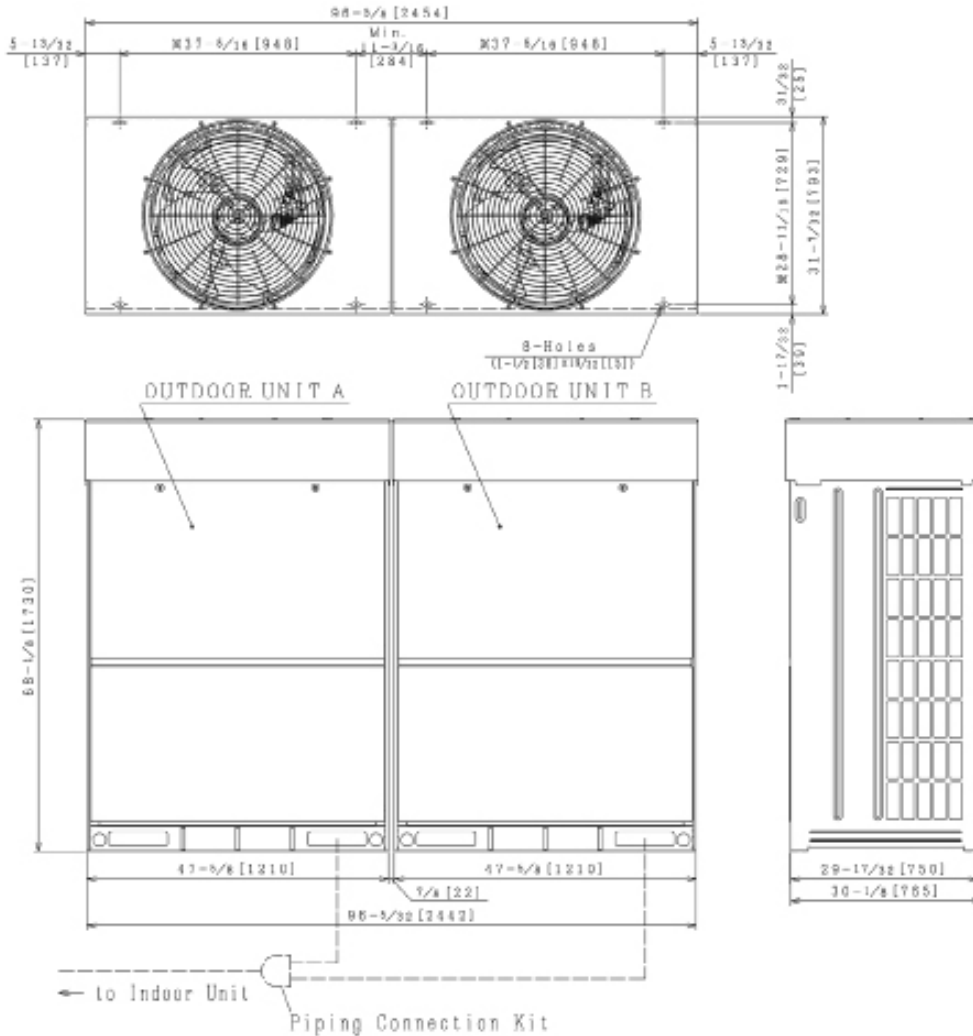
| Category | | Ton | | 16RT (8RT+8RT) | | |
|-------------------------------------|---|--------------------|-----------------------|---|------------------|-------|
| Model (combination) | | | | (H,Y)VAHP192B41S | | |
| Model (individual) | | Unit A | | | (H,Y)VAHP096B41S | |
| | | Unit B | | | (H,Y)VAHP096B41S | |
| | | Unit C | | | - | |
| | | Unit D | | | - | |
| Power Supply | | | | 460V/ 3PH 60Hz | | |
| Capacity (Nominal) ¹ | Cooling | Capacity (Nominal) | Btu/h | (kW) | 192,000 (56.3) | |
| | | Power input | kW | | | 15.22 |
| | | Current input | A | | | 21.2 |
| | Heating | Capacity (Nominal) | Btu/h | (kW) | 216,000 (63.3) | |
| | | Power input | kW | | | 14.66 |
| | | Current input | A | | | 22.2 |
| Efficiency Ratings ² | Cooling | Capacity (Rated) | Btu/h | (kW) | 182,000 (53.4) | |
| | | EER | Btu/Wh | (W/W) | 10.60 (3.11) | |
| | | IEER | Btu/Wh | (Wh/Wh) | 18.60 (5.46) | |
| | Heating High | Capacity (Rated) | Btu/h | (kW) | 204,000 (59.8) | |
| | | COP | W/W | | | 3.53 |
| | Heating Low | Capacity | Btu/h | (kW) | 150,000 (44.0) | |
| | | COP | W/W | | | 2.26 |
| Cooling Operating Range | Indoor | °F WB (°C WB) | | 59(15)~73(23) | | |
| | Outdoor ³ | °F DB (°C DB) | | 14(-10)~118(48) | | |
| Heating Operating Range | Indoor | °F DB (°C DB) | | 59(15)~80(27) | | |
| | Outdoor ⁴ | °F WB (°C WB) | | -4(-20)~59(15) | | |
| Cabinet Color (Munsell Code) | | | | 2.5Y 8/2 | | |
| Outer Dimensions (H x W x D) | | in | | (68-1/8 x 37-7/8 x 31-7/32) x 2 | | |
| Package Dimensions (H x W x D) | | in | | (74-1/4 x 40-5/8 x 34-1/32) x 2 | | |
| Weight | Net | lbs | (kg) | 1592 (722) | | |
| | Gross | lbs | (kg) | 1707 (774) | | |
| Connection Ratio | Total Indoor Unit Capacity | | % | | 135 - 65 | |
| | Max. (Recommendation) indoor units/system | | | | 43(32) | |
| Heat Exchanger | Type | | | Multi-Pass Cross-Finned Tube | | |
| | Material | | | Cu-Al (Anti-corrosion) | | |
| Compressor | Type | Inverter | | | DA65PHD×2 | |
| | | Fixed Speed | | | DA65PHC×2 | |
| | Motor Output (Pole) | kW (Pole) | | 4.8(6)+4.4(2) 4.8(6)+4.4(2) | | |
| | Start Method | | | inverter | | |
| | Operation Range | % | | 8~100 | | |
| | Refrigeration Oil Type | | | FVC68D | | |
| Crank Case Heater | | W×Qty | | 40.8(230V)×8 | | |
| Fan | Type | | | Propeller Fan | | |
| | Motor Output (Pole) | kW (Pole) | | 0.66(8)×2 | | |
| | Quantity | Qty | | 2 | | |
| | Air Flow Rate | cfm | (m ³ /min) | 6884+6884 (195+195) | | |
| | External static pressure ⁵ | in.WG | (Pa) | 0 (0) | | |
| | Drive | | | Direct-drive | | |
| Electrical | Min Circuit Amps | A | | - | | |
| | Recommended Fuse/Breaker Size | A | | - | | |
| | Maximum Fuse Size | A | | - | | |
| Sound Pressure Level | Cooling (Night-Shift) | dB(A) | | 65 (60) | | |
| | Heating | dB(A) | | 65 | | |
| Protection devices | Cycle | | | High pressure switch at 60.1psi (4.15MPa) | | |
| | Inverter | | | Over-current protection | | |
| | Compressor | | | Over-heat protection | | |
| | PCB | | | Over-current protection | | |
| Refrigerant | Type | | | R410A | | |
| | Charge amount | lbs | (kg) | 18.7+18.7 (8.5+8.5) | | |
| Refrigeration Oil | Charge amount | gal/Unit | (ℓ/Unit) | 2.1+2.1 (7.9+7.9) | | |
| Defrost Method | | | | Reversed Refrigerant cycle | | |
| Main Refrigerant Piping (Heat Pump) | High/Low Pressure Gas Line | in | (mm) | 1-3/8 (34.93) | | |
| | Liquid Line | in | (mm) | 3/4 (19.05) | | |

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System Dimensions

Heat Pump Type

Model: (H,Y)VAHP192B41S



NOTES:

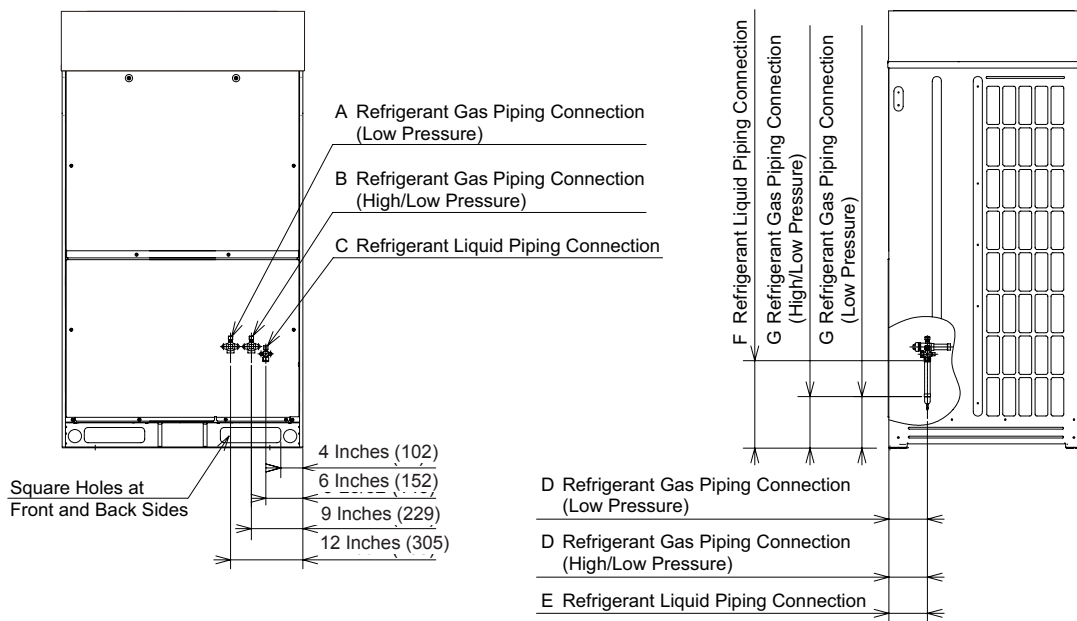
1. Make sure that the outdoor unit A is placed on the indoor unit side. Arrange the outdoor units according to the capacity, A&B.
2. Check "Installation Manual" for the piping connection kit and piping connection size.
3. This drawing shows that there is 1/8 inch (22mm) clearance between the base units. In case of the outdoor unit with "Snow Protection Hood (Optional Parts)" or "Air Outlet Duct (Field-Supplied)", the clearance between the base units of more than 1-31/32 inch (50mm) is required.
4. The dimensions marked with Φ indicates the mounting pitch dimension for anchor bolts.
5. The width of outer dimension and anchor bolt mounting position are changed by clearance between the base units.

| Outdoor Unit Model | Combination of Base Unit Models | |
|--------------------|---------------------------------|--------------------|
| | OUTDOOR UNIT A | OUTDOOR UNIT B |
| (H, Y) VAHP192B31S | (H, Y) VAHP096B31S | (H, Y) VAHP096B31S |
| (H, Y) VAHP192B41S | (H, Y) VAHP096B41S | (H, Y) VAHP096B41S |

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Piping Connection Dimensions

Unit: inch (mm)



| Model Type | Field Piping (*) | | | | | A | B | C | D | E | F | G |
|------------|----------------------|-----------------------|------------------|-----------------------|---------------|---------------|---------------|---------------|------------------|------------------|-------------------|-----------------|
| | Heat Recovery System | | Heat Pump System | | Liquid | | | | | | | |
| | Low Pressure Gas | High/Low Pressure Gas | Low Pressure Gas | High/Low Pressure Gas | | | | | | | | |
| 72 | 1-1/8 (28.58) | 7/8 (22.2) | - | 1-1/8 (28.58) | 1/2 (12.7) | 7/8 (22.2) | 7/8 (22.2) | 3/8 (9.52) | 5-29/32 (150) | 5-29/32 (150) | 13-3/8 (340) | 8-1/16 (205) |
| 96 | 1-1/8 (28.58) | 7/8 (22.2) | - | 1-1/8 (28.58) | 1/2 (12.7) | 1 (25.4) | 1 (25.4) | 1/2 (12.7) | 6-11/16 (170) | 6-11/16 (170) | 12-25/32 (325) | 7-7/8 (200) |
| 120 | 1-1/8 (28.58) | 7/8 (22.2) | - | 1-1/8 (28.58) | 1/2 (12.7) | 1 (25.4) | 1 (25.4) | 1/2 (12.7) | 6-11/16 (170) | 6-11/16 (170) | 12-25/32 (325) | 7-7/8 (200) |

*Using the accessory pipe (refer to Table 3.6 "Factory-Supplied Accessories"), combine the piping size.

Figure 6.2 Refrigerant Piping Connection

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