

Job Name/Location:

Tag #:

Date: \_\_\_\_\_ For:  File  Resubmit  
 PO No.: \_\_\_\_\_  Approval  Other \_\_\_\_\_  
 Architect: \_\_\_\_\_ GC: \_\_\_\_\_  
 Engr: \_\_\_\_\_ Mech: \_\_\_\_\_  
 Rep: \_\_\_\_\_  
 (Company) (Project Manager)



**ARWN480DAS4** (a) ARWN144DAS4  
 Multi V™ Water IV Heat Pump (b) ARWN144DAS4  
 40.0 Ton Water Source Unit (c) ARWN192DAS4

**Performance:**

Cooling Mode:

|                          |         |
|--------------------------|---------|
| Nominal Capacity (Btu/h) | 480,000 |
|--------------------------|---------|

Heating Mode:

|                          |         |
|--------------------------|---------|
| Nominal Capacity (Btu/h) | 540,000 |
|--------------------------|---------|

Nominal capacities are outside the scope of AHRI Standard 1230 and based on the following conditions -

|                                  |                                  |
|----------------------------------|----------------------------------|
| Cooling Nominal Test Conditions: | Heating Nominal Test Conditions: |
| Indoor: 80°F DB / 67°F WB        | Indoor: 68°F DB                  |
| Water Inlet Temp: 86°F           | Water Inlet Temp: 68°F           |

**Electrical:** (a) ARWN144DAS4 (b) ARWN144DAS (c) ARWN192DAS4

|                            |          |          |          |
|----------------------------|----------|----------|----------|
| Power Supply (V/Hz/Ø)      | 460/60/3 | 460/60/3 | 460/60/3 |
| MOP (A)                    | 45       | 45       | 50       |
| MCA (A)                    | 25.7     | 25.7     | 28.0     |
| Rated Amps (A)             | 20.6     | 20.6     | 22.4     |
| Recommended Fuse Amps (A): | 35       | 35       | 35       |

**Piping:**

Refrigerant: (a) ARWN144DAS4 (b) ARWN144DAS4 (c) ARWN192DAS4

|                                   |       |       |       |
|-----------------------------------|-------|-------|-------|
| Refrigerant Charge (lbs)          | 6.6   | 6.6   | 6.6   |
| Liquid Line <sup>1</sup> (in, OD) | 1/2   | 1/2   | 1/2   |
| Vapor Line <sup>1</sup> (in, OD)  | 1-1/8 | 1-1/8 | 1-1/8 |

Water: (a) ARWN144DAS4 (b) ARWN144DAS4 (c) ARWN192DAS4

|                         |       |       |       |
|-------------------------|-------|-------|-------|
| Water Inlet/Outlet (in) | 1-1/2 | 1-1/2 | 1-1/2 |
|-------------------------|-------|-------|-------|

Condensate: (a) ARWN144DAS4 (b) ARWN144DAS4 (c) ARWN192DAS4

|                      |     |     |     |
|----------------------|-----|-----|-----|
| Condensate Line (in) | 3/4 | 3/4 | 3/4 |
|----------------------|-----|-----|-----|

**Standard Features:**

- Fault Detection and Diagnosis
- HiPDR (High Pressure Oil Return)
- Smart Oil Control

**Required Accessories**

- ARCNN21 (frame connector Y-branch)
- ARCNN31 (frame connector Y-branch)

**Optional Accessories:**

- Variable Water Flow Valve Control Kit - PWFCKN000

**Water Operating Range<sup>1</sup>:**

|   |        |
|---|--------|
| CLG Mode Entering Water Range (°F)              | 23-113 |
| HTG Mode Entering Water Range (°F) <sup>2</sup> | 14-113 |

**Unit Data:**

|  |                       |
|--|-----------------------|
| Refrigerant Type                             | R410A                 |
| Refrigerant Control                          | EEV                   |
| Max Number of Indoor Units <sup>3</sup>      | 64                    |
| Sound Pressure <sup>4</sup> (CLG/HTG) dB(A)  | 60/62                 |
| Net Unit Weight (a) + (b) + (c)              | 309 + 309 + 309       |
| Shipping Weight (a) + (b) + (c)              | 331 + 331 + 331       |
| Communication Cable <sup>5</sup> (No. x AWG) | 2 x 18                |
| Heat Exchanger Type                          | Stainless Steel Plate |
| Heat Rejected to Equip Rm (Btu/h)            | 7,275                 |

**Compressor:**

|          |                 |
|----------|-----------------|
| Type     | Hermetic Scroll |
| Drive    | Inverter        |
| Quantity | 3               |
| Oil/Type | PVE/FVC68D      |

**Condenser Water:**

|                                       |                    |
|---------------------------------------|--------------------|
| Flow Rate (a) + (b) + (c) (GPM)       | 35.5 + 35.5 + 50.7 |
| Pressure Drop (a) + (b) + (c) (ft wg) | 5.3 + 5.3 + 9.7    |

**Notes:**

1. When entering water temperature is lower than 59°F, variable water flow control kit PWFCKN000 is required.
2. When entering water temperature is lower than 23°F, water solution must be minimum 45% antifreeze.
3. The combination ratio must be between 50-130%.
4. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
5. All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable local and national code.
6. For AHRI ratings, refer to the AHRI website <http://www.ahridirectory.org>.
7. Nominal data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95 – 105%.
8. Power wiring cable size must comply with the applicable local and national code.
9. The voltage tolerance is 414-528V.



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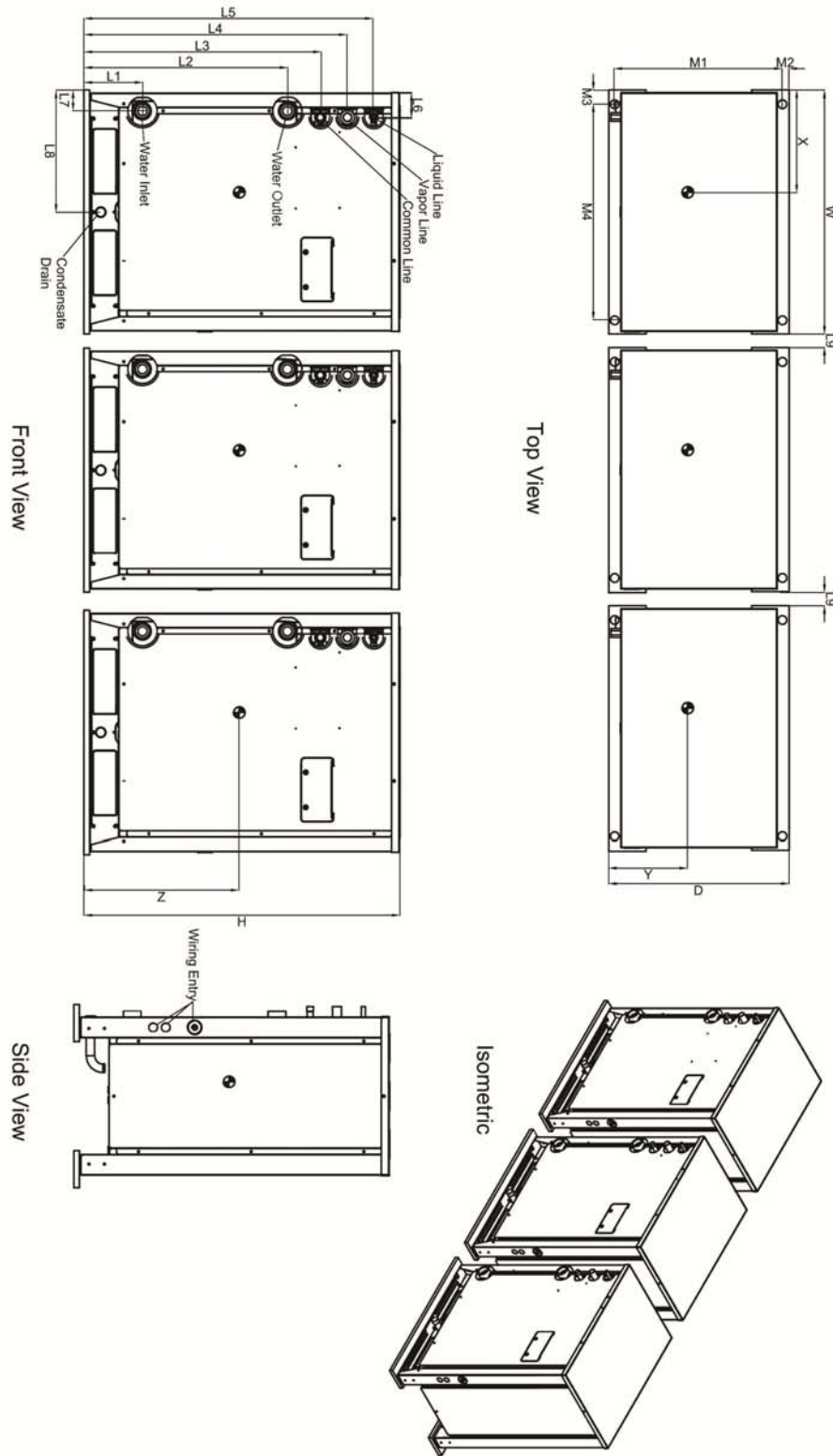
**ARWN480DAS4**  
 Multi V™ Water IV Heat Pump  
 40.0 Ton Water Source Unit

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|    |           |
|----|-----------|
| X  | 13-1/2"   |
| Y  | 9-13/16"  |
| Z  | 16-1/2"   |
| W  | 29-3/4"   |
| D  | 19-3/4"   |
| H  | 39-1/4"   |
| L1 | 6-5/8"    |
| L2 | 25"       |
| L3 | 29-1/4"   |
| L4 | 32-1/2"   |
| L5 | 35-15/16" |
| L6 | 3-1/8"    |
| L7 | 2-1/4"    |
| L8 | 14-3/4"   |
| L9 | 4"        |
| M1 | 18-1/4"   |
| M2 | 3/4"      |
| M3 | 2-7/16"   |
| M4 | 24-13/16" |