

**Air Handler Heat Pump System**

|               |               |
|---------------|---------------|
| Location:     | Approval:     |
| Engineer:     | Date:         |
| Submitted to: | Construction: |
| Submitted by: | Unit #:       |
| Reference:    | Drawing #:    |


**INDOOR SPECIFICATION**

|                                           |                                         |
|-------------------------------------------|-----------------------------------------|
| ESP(in.W.G)                               | O-0.8                                   |
| Indoor Air Flow (Turbo/H/M/L/Si) (CFM)    | 1189.0 / 1083.0 / 971.2 / 865.2 / 865.2 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) | 52/52/48.5/36.5/36.5                    |
| Dimension (WxDxH)                         | inch 22.01 x 19.02 x 40.04              |
|                                           | mm 559x483x1017                         |
| Package (WxDxH)                           | inch 24.61 x 22.83 x 46.97              |
|                                           | mm 625x580x1193                         |
| Net/Gross Weight                          | lbs 109.57/130.73                       |
|                                           | kg 49.7/59.3                            |

**OUTDOOR SPECIFICATION**

|                              |                            |
|------------------------------|----------------------------|
| Compressor Type              | TWIN-ROTARY                |
| Compressor Model             | EKPQ420D1UMUA              |
| Refrigerant                  | R454B                      |
| Refrigerant Oil Charge(mL)   | 1460                       |
| Refrigerant Oil              | VG74                       |
| Outdoor Air Flow (Max) (CFM) | 3001.9                     |
| Outdoor Noise Level (dBA)    | 64                         |
| Dimension (WxDxH)            | inch 38.58 x 16.34 x 38.39 |
|                              | mm 980x415x975             |
| Package (WxDxH)              | inch 45.08 x 19.69 x 42.52 |
|                              | mm 1145x500x1080           |
| Net/Gross Weight             | lbs 204.15/235.23          |
|                              | kg 92.6/106.7              |

**EFFICIENCY**

| Cooling |      | Heating |     |
|---------|------|---------|-----|
| SEER2   | 16.8 | HSPF2-4 | 9.6 |
| EER2    | 11.2 | COP     | 3.4 |

**PERFORMANCE of Cooling**

| Cooling (Btu/hr)                |                                                     |
|---------------------------------|-----------------------------------------------------|
| Rated Capacity                  | 36000                                               |
| Min/Max Capacity                | 13700~41500                                         |
| Moisture Removal(L/h)           | 3.47                                                |
| Standard Operating Range(°F/°C) | -22~122(-30~50)                                     |
| Rated Cooling Conditions:       | Indoor: 80°F DB/67°F WB<br>Outdoor: 95°F DB/75°F WB |

**PERFORMANCE of Heating**

| Heating (Btu/hr)                                              |                                                     |
|---------------------------------------------------------------|-----------------------------------------------------|
| 1. @ 47°F Rated                                               | 37000                                               |
| 2. @ 47°F Min/Max Capacity                                    | 10100~48500                                         |
| 3. @ 17°F Rated                                               | 30200                                               |
| 4. @ 5°F Rated: Capacity / COP                                | 34600/1.8                                           |
| 5. @ 5°F Max: Capacity                                        | 34600                                               |
| Standard Operating Range(°F/°C)                               | -22~75(-30~24)                                      |
| 1. Rated Heating Conditions:                                  | Indoor: 70°F DB/60°F WB<br>Outdoor: 47°F DB/43°F WB |
| 2. Rated Heating Conditions:                                  | Indoor: 70°F DB/60°F WB<br>Outdoor: 17°F DB/15°F WB |
| 3. Heating Conditions, Compressor Operating at Max. Frequency | Indoor: 70°F DB/60°F WB<br>Outdoor: 5°F DB/5°F WB   |

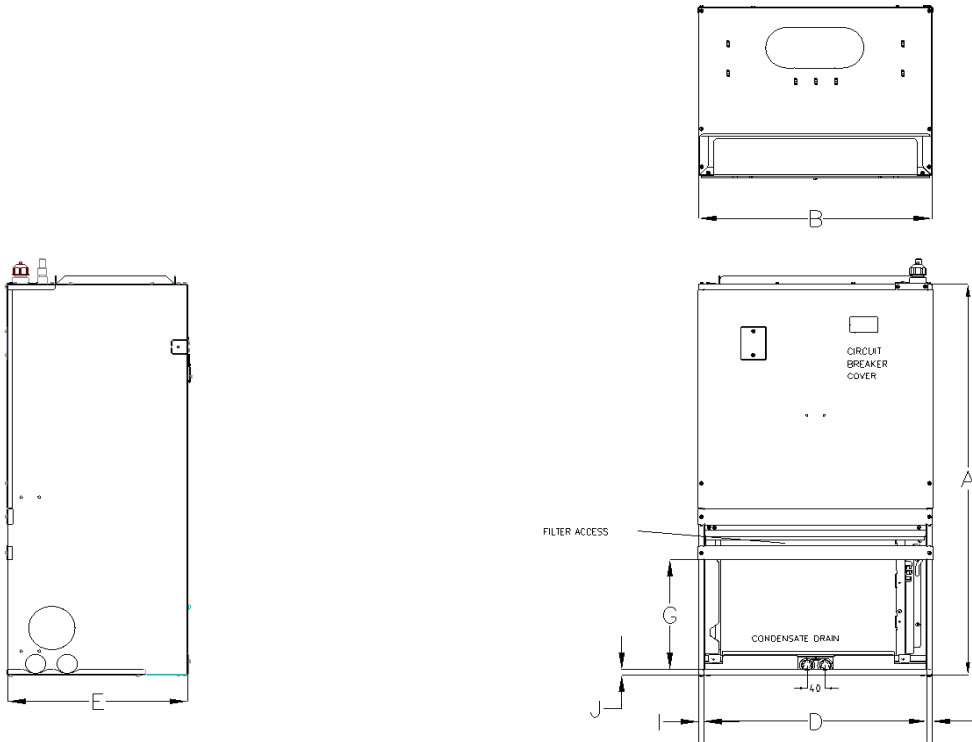
**ELECTRICAL**

|                                  |                                        |
|----------------------------------|----------------------------------------|
| Indoor Power Supply              | 115V/208/230V,60Hz,1Ph                 |
| Indoor MCA 115V/(208/230V)       | 6.5                                    |
| Indoor MOP                       | 15                                     |
| Outdoor Power Supply             | 208/230V,60Hz,1Ph                      |
| Outdoor MCA                      | 29                                     |
| Outdoor MOP                      | 30                                     |
| Communication Wiring             | AWG 20-2                               |
| Compressor RLA                   | 20.5                                   |
| Outdoor Fan Motor RLA            | 2.4                                    |
| Outdoor Fan Motor W              | /                                      |
| Indoor Fan Motor RLA             | 5                                      |
| Indoor Fan Motor W               | 375                                    |
| System Power Input @ Cooling (W) | 3214(1170 ~ 4400)                      |
| System Power Input @ Heating (W) | 3189(725 ~ 4420)                       |
| MCA: Min. circuit amps (A)       | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)          |

**PIPING**

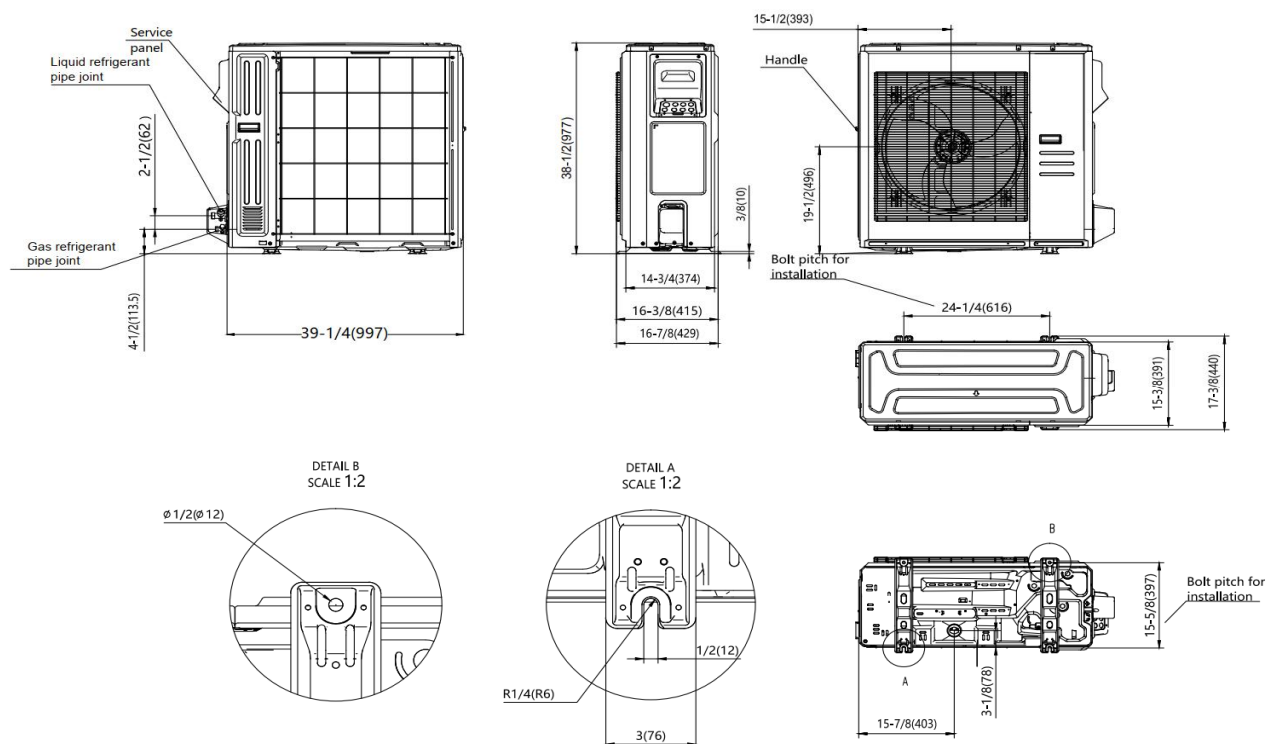
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|-------------------------------------------------|---------------|
| Throttle type(Indoor)                           | EXV           |
| Throttle type(Outdoor)                          | EXV           |
| Liquid Size                                     | 9.52mm(3/8in) |
| Gas Size                                        | 19mm(3/4in)   |
| Max. Piping Length(ft/m)                        | 246(75)       |
| Max. Height Difference(ft/m)                    | 98.40(30)     |
| Max. Pre-charged Length(ft/m)                   | 24.6(7.5)     |
| Refrigerant Pre-charged Amount(oz/kg)           | 126.99(3.6)   |
| Additional Charge of Refrigerant((oz/ft)/(g/m)) | 0.7(65)       |
| Connection Method                               | Flared        |

## Indoor Unit Dimension

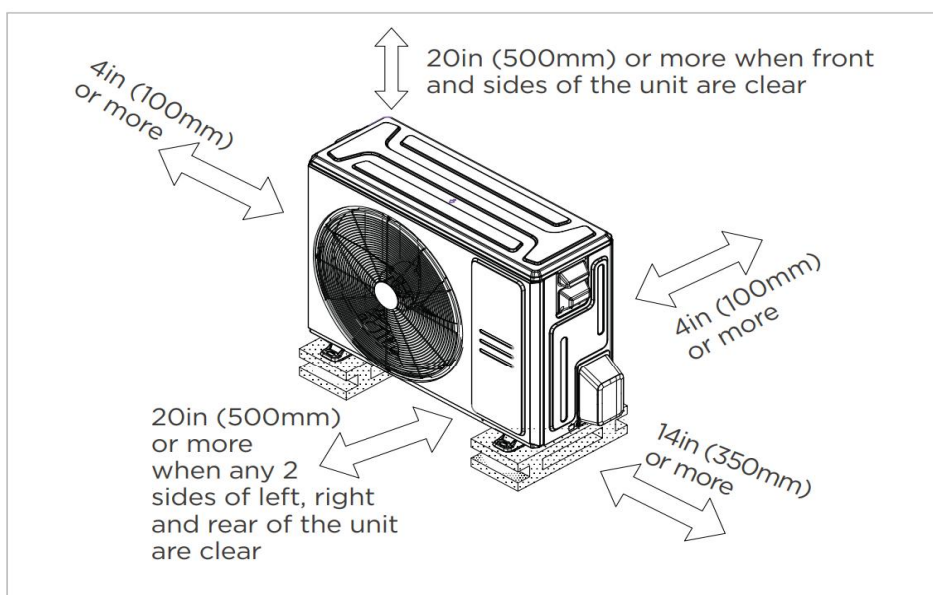


| Dimensions |                                    | Model(Btu/h) |  | 18K/24K |       | 30K/36K |       |
|------------|------------------------------------|--------------|--|---------|-------|---------|-------|
|            |                                    |              |  | inch    | mm    | inch    | mm    |
| A          | Model Height                       |              |  | 36.5    | 928   | 49      | 1017  |
| B          | Model Width                        |              |  | 20.3    | 515   | 21      | 559   |
| C          | Supply Air Opening Width           |              |  | 17.4    | 442   | 18.8    | 478.6 |
| D          | Return Air Opening Width           |              |  | 19.4    | 493.8 | 21.2    | 537.8 |
| E          | Model Depth                        |              |  | 15.7    | 399   | 21      | 483   |
| F          | Supply Air Opening Depth           |              |  | 10.4    | 265.2 | 9.3     | 235.4 |
| G          | Return Air Opening Depth           |              |  | 10.3    | 261   | 13.1    | 332.5 |
| H          | Supply Air Opening Clearance       |              |  | 1.1     | 29.1  | 1.6     | 41    |
| I          | Return Air Opening Side Clearance  |              |  | 0.42    | 10.6  | 0.42    | 10.6  |
| J          | Return Air Opening Front Clearance |              |  | 0.47    | 12    | 0.63    | 16    |

## Outdoor Unit Dimension



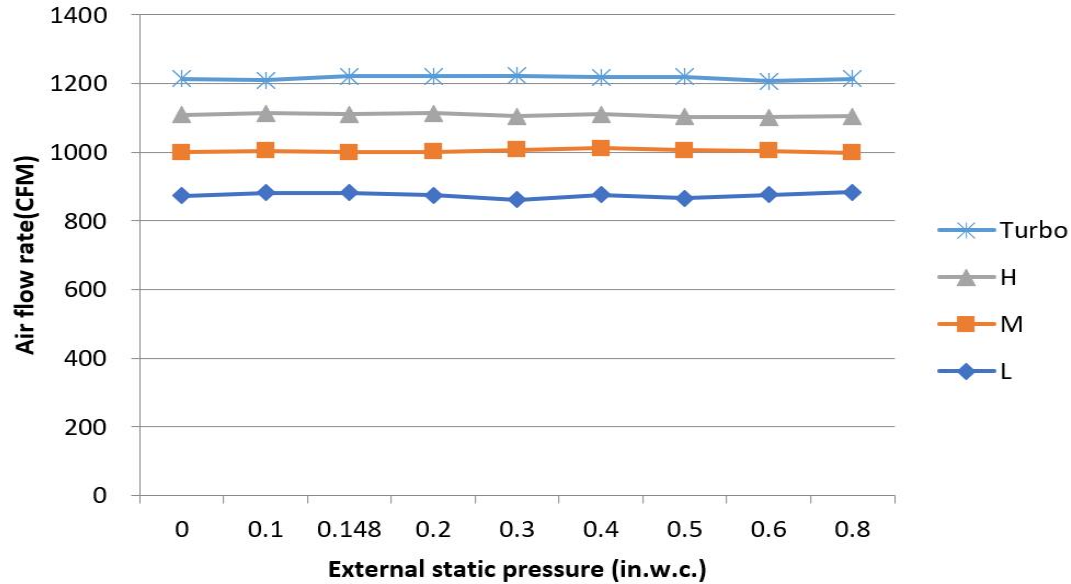
## Installation Instruction For Outdoor Unit



☒ Meets all spatial requirements shown in Installation Clearance Requirements above.

### Fan Performance For Indoor Unit

**36K**



### Features

- Multi-position of return air: front(factory standard) or bottom
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- Optional Auxiliary heat kit up to 10kW
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller:AWC-4
  - Two way communication wired controller with built-in WiFi:AWC-8P-LC-WIFI
  - Wireless remote controller
  - Third-Party 24V Thermostat
- High efficiency up to 19.3 SEER2, 12.1 EER2, 10.8 HSPF2
- Chassis heater and crankcase heater equipped as standard