

**Multi Zone Heat Pump System**

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


**EFFICIENCY**

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 21.2 | HSPF2-4 | 10.2 |
| EER2    | 12   | COP     | 3.6  |

**PERFORMANCE of Cooling**

| Cooling (Btu/hr)                                                              |                  |
|-------------------------------------------------------------------------------|------------------|
| Rated Capacity                                                                | 45000            |
| Min/Max Capacity                                                              | 12000~55000      |
| Moisture Removal(L/h)                                                         | 3.6              |
| 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                     | 49000                                               |
| 1. @ 47°F Min/Max Capacity          | 13000~55000                                         |
| 2. @ 17°F Rated(H32)                | 40500                                               |
| 3. @ 5°F Rated: Capacity / COP(H42) | 48000/2                                             |
| 3. @ 5°F Max: Capacity              | 48000                                               |
| Standard Operating Range(°F/°C)     | -22~75/(-30~24)                                     |
| 1. Conditions:                      | Indoor: 70°F DB/60°F WB<br>Outdoor: 47°F DB/43°F WB |
| 2. Conditions:                      | Indoor: 70°F DB/60°F WB<br>Outdoor: 17°F DB/15°F WB |
| 3. Conditions                       | Indoor: 70°F DB/60°F WB<br>Outdoor: 5°F DB/5°F WB   |

**OUTDOOR SPECIFICATION**

|                              |               |                       |
|------------------------------|---------------|-----------------------|
| Compressor Type              | TWIN-ROTARY   |                       |
| Compressor Model             | ETPQ440D1UMUB |                       |
| Refrigerant                  | R454B         |                       |
| Refrigerant Oil Charge(mL)   | 1300          |                       |
| Refrigerant Oil              | VG75          |                       |
| Outdoor Air Flow (Max) (CFM) | 4503          |                       |
| Outdoor Noise Level (dBA)    | 65            |                       |
| Dimension (W×D×H)            | inch          | 37.48 x 16.34 x 52.48 |
|                              | mm            | 952×415×1333          |
| Package (W×D×H)              | inch          | 43.11 x 19.49 x 58.27 |
|                              | mm            | 1095×495×1480         |
| Net/Gross Weight             | lbs           | 246.47/276.68         |
|                              | kg            | 111.8/125.5           |

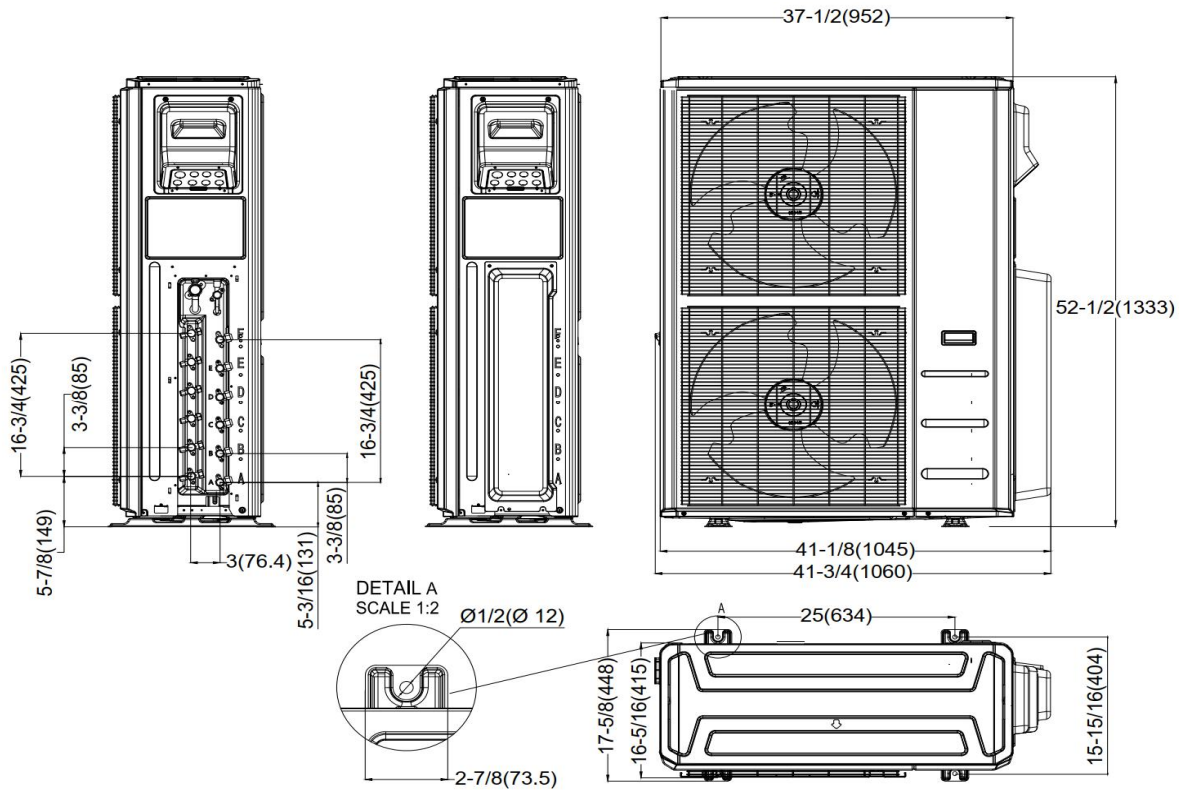
**ELECTRICAL**

|                                                                   |                   |
|-------------------------------------------------------------------|-------------------|
| Power Supply                                                      | 208/230V,60Hz,1Ph |
| System MCA                                                        | 43                |
| Connection Wiring                                                 | AWG 14-4          |
| System MOCP                                                       | 45                |
| Compressor RLA                                                    | 27                |
| Outdoor Fan Motor RLA                                             | 2.5               |
| Outdoor Fan Motor W                                               | 85                |
| Indoor Fan Motor RLA                                              | /                 |
| Indoor Fan Motor W                                                | /                 |
| System Power Input @ Cooling (W)                                  | 3750/(800 ~ 5600) |
| System Power Input @ Heating (W)                                  | 3989/(800 ~ 5200) |
| MCA: Min. circuit amps (A) MOCP: Max. over current protection (A) |                   |
| RLA: Rated load amps (A) W: Fan motor rated output (W)            |                   |

**PIPING**

|                                                                             |                                        |
|-----------------------------------------------------------------------------|----------------------------------------|
| Liquid Size                                                                 | 6x6.35mm(6x1/4in)                      |
| Gas Size                                                                    | 4x9.52mm+2x12.7mm<br>(4x3/8in+2x1/2in) |
| Max. Piping Length for all rooms(ft/m)                                      | 262.4/(80)                             |
| Max. Piping Length for one IDU(ft/m)                                        | 114.8/(35)                             |
| Max. Height Difference of IDU and ODU(ft/m)                                 | 49.2/(15)                              |
| Refrigerant Pre-charged Amount(oz/kg)                                       | 151.68/(4.3)                           |
| Refrigerant Precharge Length(ft/m)                                          | 24.6(7.5)x6                            |
| Additional Charge of Refrigerant (Φ6.35 (1/4") liquid pipe) ((oz/ft)/(g/m)) | 0.16/(15)                              |
| Additional Charge of Refrigerant (Φ9.52 (3/8") liquid pipe) ((oz/ft)/(g/m)) | 0.32(30)                               |
| Connection Method                                                           | Flared                                 |

## Outdoor Unit Dimension



## Installation Instruction

