



| SAK-48-QZ/220V Quint-Zone Heat Pump System |               |
|--------------------------------------------|---------------|
| Location:                                  | Approval:     |
| Engineer:                                  | Date:         |
| Submitted to:                              | Construction: |
| Submitted by:                              | Unit #:       |
| Reference:                                 | Drawing #:    |



| OUTDOOR SPECIFICATION        |             |                       |
|------------------------------|-------------|-----------------------|
| Compressor Type              | ROTARY      |                       |
| Compressor Model             | KTQ420D1UMU |                       |
| Refrigerant                  | R454B       |                       |
| Refrigerant Oil Charge(mL)   | 1400        |                       |
| Refrigerant Oil              | V74         |                       |
| 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         | 222.00/254.19         |
|                              | kg          | 100.7/115.3           |

| ELECTRICAL                       |                                        |
|----------------------------------|----------------------------------------|
| Power Supply                     | 208/230V,60Hz,1Ph                      |
| System MCA                       | 40                                     |
| Connection Wiring                | AWG 14-4                               |
| System MOCP                      | 45                                     |
| Compressor RLA                   | 24                                     |
| Outdoor Fan Motor RLA            | 2.5                                    |
| Outdoor Fan Motor W              | 85                                     |
| Indoor Fan Motor RLA             | /                                      |
| Indoor Fan Motor W               | /                                      |
| System Power Input @ Cooling (W) | 3850/(800 ~ 5900)                      |
| System Power Input @ Heating (W) | 3908/(800 ~5200)                       |
| MCA: Min. circuit amps (A)       | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)          |

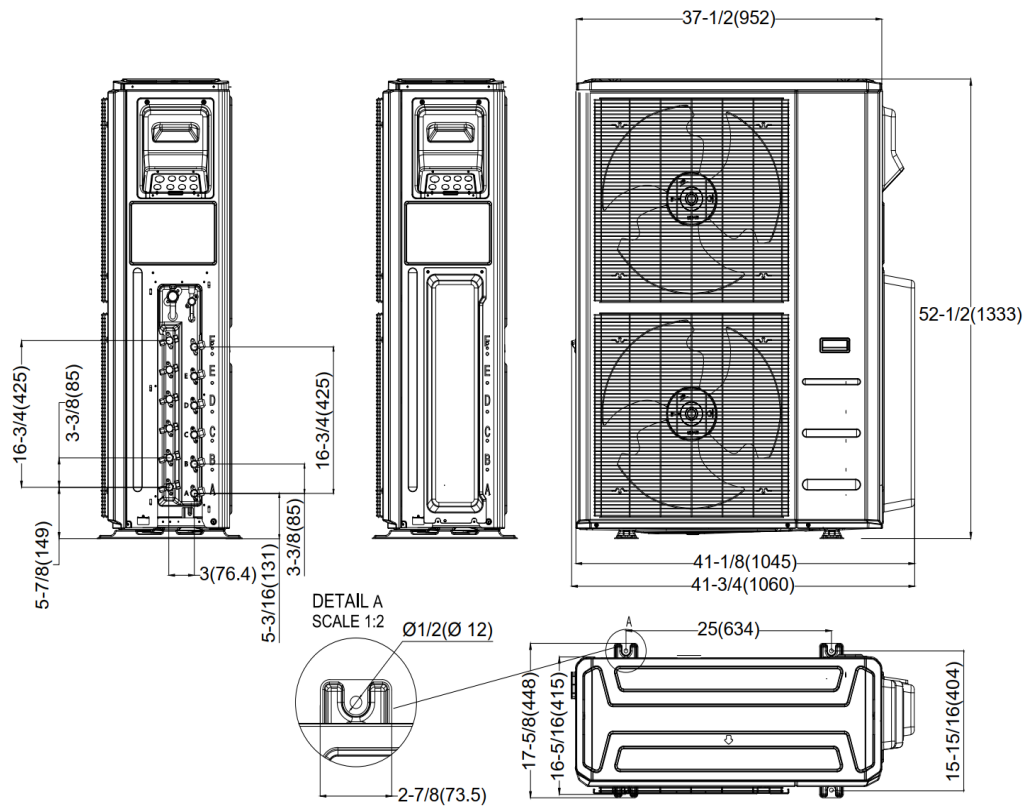
| EFFICIENCY |      |         |      |
|------------|------|---------|------|
| Cooling    |      | Heating |      |
| SEER2      | 21.3 | HSPF2-4 | 10.0 |
| EER2       | 11.7 | COP     | 3.6  |

| PERFORMANCE of Cooling          |                                                     |
|---------------------------------|-----------------------------------------------------|
| Cooling (Btu/hr)                |                                                     |
| Rated Capacity                  | 45000                                               |
| Min/Max Capacity                | 12000~49000                                         |
| Moisture Removal(L/h)           | 3.5                                                 |
| Standard Operating Range(°F/°C) | -13~122/(-25~50)                                    |
| 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                     | 48000                                               |
| 1. @ 47°F Min/Max Capacity          | 13000~55000                                         |
| 2. @ 17°F Rated(H32)                | 34000                                               |
| 3. @ 5°F Rated: Capacity / COP(H42) | 36000/2.1                                           |
| 3. @ 5°F Max: Capacity              | 36000                                               |
| Standard Operating Range(°F/°C)     | -13~75/(-25~24)                                     |
| 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   |

| 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)                                       | 148.15/(4.2)                           |
| 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

