



## Submittal Data Sheet

Indoor Unit Model#: ACiQ-60-AHD

Outdoor Unit Model#: ACiQ-60-HPD

### Air Handler Heat Pump System

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



### INDOOR UNIT SPECIFICATION

|                                           |      |                                         |
|-------------------------------------------|------|-----------------------------------------|
| ESP (in.W.G)                              |      | 0-0.8                                   |
| Indoor Air Flow (Turbo/H/M/L/Si) (CFM)    |      | 1807.0 / 1583.3 / 1359.7 / 1136.0 / N/A |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) |      | 54.5 / 52 / 49.5 / 34.5 / N/A           |
| Dimension (W×D×H)                         | inch | 24.49 x 21.02 x 52.99                   |
|                                           | mm   | 622.0 x 534.0 x 1346.0                  |
| Package (W×D×H)                           | inch | 27.95 x 26.77 x 56.50                   |
|                                           | mm   | 710 x 680 x 1435                        |
| Net/Gross Weight                          | lbs  | 162.92 / 190.92                         |
|                                           | kg   | 73.9 / 86.6                             |

### OUTDOOR UNIT SPECIFICATION

|                              |      |                        |
|------------------------------|------|------------------------|
| Compressor Type              |      | TWIN-ROTARY            |
| Compressor Model             |      | ETPQ480D66UMU1         |
| Refrigerant                  |      | R454B                  |
| Refrigerant Oil Charge (mL)  |      | 1300                   |
| Refrigerant Oil              |      | VG75                   |
| Outdoor Air Flow (Max) (CFM) |      | 2648.6                 |
| Outdoor Noise Level (dBA)    |      | 65                     |
| Dimension (W×D×H)            | inch | 37.48 x 16.34 x 52.48  |
|                              | mm   | 952.0 x 415.0 x 1333.0 |
| Package (W×D×H)              | inch | 43.11 x 19.49 x 58.27  |
|                              | mm   | 1095 x 495 x 1480      |
| Net/Gross Weight             | lbs  | 242.95 / 275.13        |
|                              | kg   | 110.2 / 124.8          |

### EFFICIENCY RATINGS

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 16.0 | HSPF2-4 | 9.0  |
| EER2    | 10.0 | COP     | 3.10 |

### COOLING PERFORMANCE

| Cooling (Btu/hr)                 |                                                     |
|----------------------------------|-----------------------------------------------------|
| Rated Capacity                   | 54000                                               |
| Min/Max Capacity                 | 11400~56300                                         |
| Moisture Removal (L/h)           | 5.87                                                |
| 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 |

### HEATING PERFORMANCE

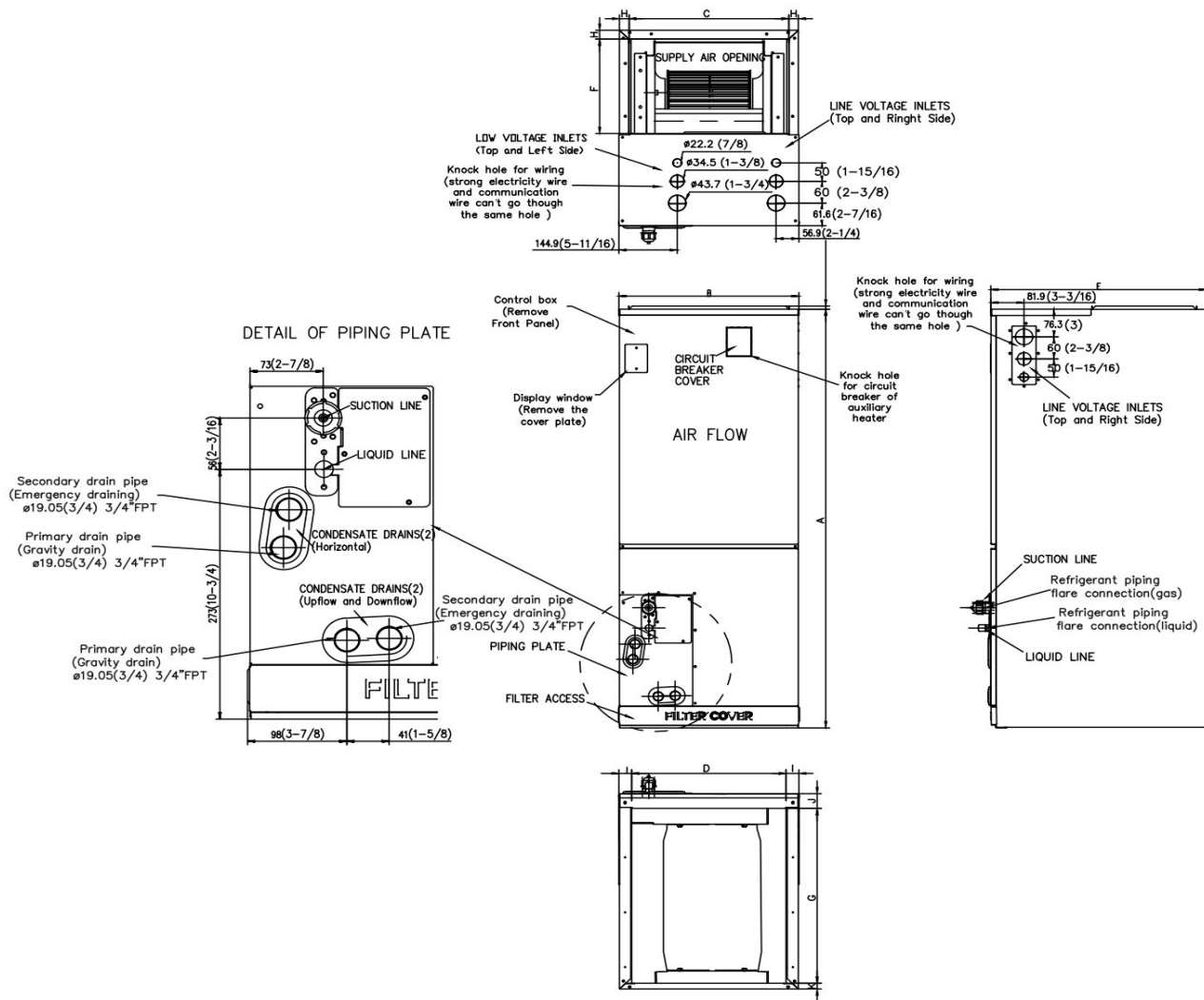
| Heating (Btu/hr)                                              |                                                     |
|---------------------------------------------------------------|-----------------------------------------------------|
| 1. @ 47°F Rated                                               | 56000                                               |
| 1. @ 47°F Min/Max Capacity                                    | 8100~64500                                          |
| 2. @ 17°F Rated                                               | 45000                                               |
| 3. @ 5°F Rated: Capacity / COP                                | 52000/1.8                                           |
| 3. @ 5°F Max: Capacity                                        | 52000                                               |
| 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 SPECIFICATIONS

|                                  |                                        |
|----------------------------------|----------------------------------------|
| Indoor Power Supply              | 115/208/230V, 60Hz, 1Ph                |
| Indoor MCA 115V/(208/230V)       | 14.5 / 11.0                            |
| Indoor MOP                       | 15                                     |
| Outdoor Power Supply             | 208/230V, 60Hz, 1Ph                    |
| Outdoor MCA                      | 40                                     |
| Outdoor MOP                      | 40                                     |
| Communication Wiring             | AWG 20-2                               |
| Compressor RLA                   | 31                                     |
| Outdoor Fan Motor RLA            | 1.2                                    |
| Outdoor Fan Motor W              | 85                                     |
| Indoor Fan Motor RLA             | 8.3                                    |
| Indoor Fan Motor W               | 750                                    |
| System Power Input @ Cooling (W) | 5400 (1540 ~ 6430)                     |
| System Power Input @ Heating (W) | 5300 (725 ~5970)                       |
| MCA: Min. circuit amps (A)       | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)          |

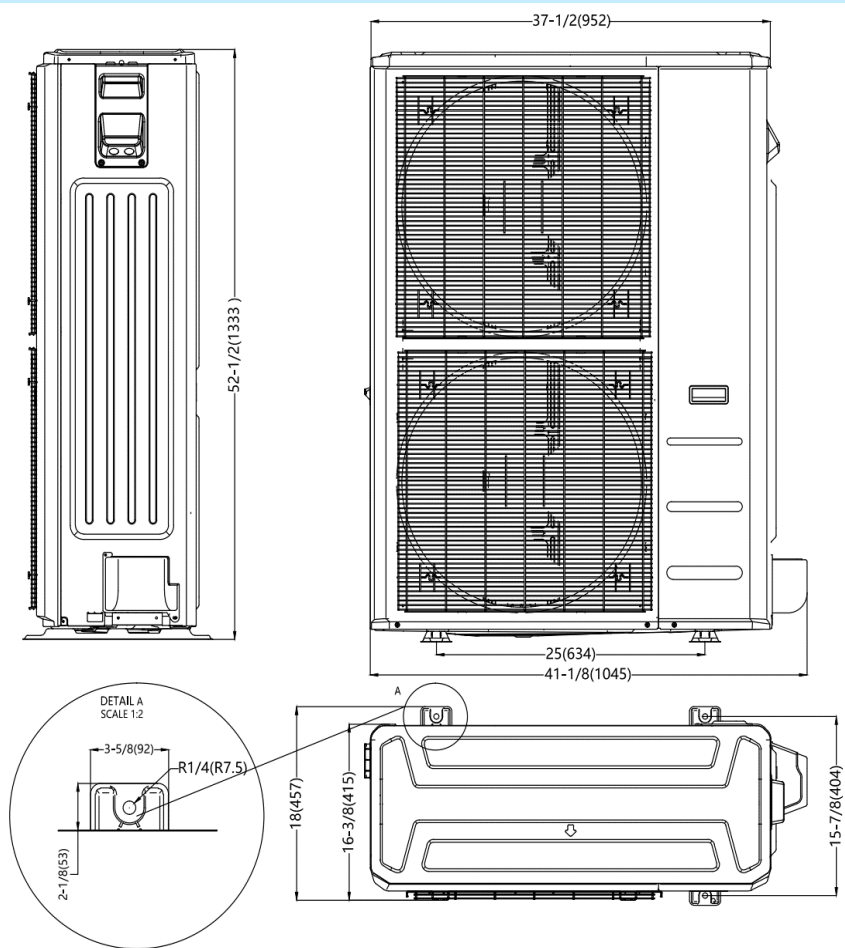
### REFRIGERANT PIPING SPECIFICATIONS

|                                               |                |
|-----------------------------------------------|----------------|
| 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)                 | 98.4 / 30      |
| Max. Pre-charged Length (ft/m)                | 24.6 / 7.5     |
| Refrigerant Pre-charged Amount (oz/kg)        | 183.42 / 5.2   |
| Additional Refrigerant Charge (oz/ft) / (g/m) | 0.7 / 65       |
| Connection Method                             | Flared         |

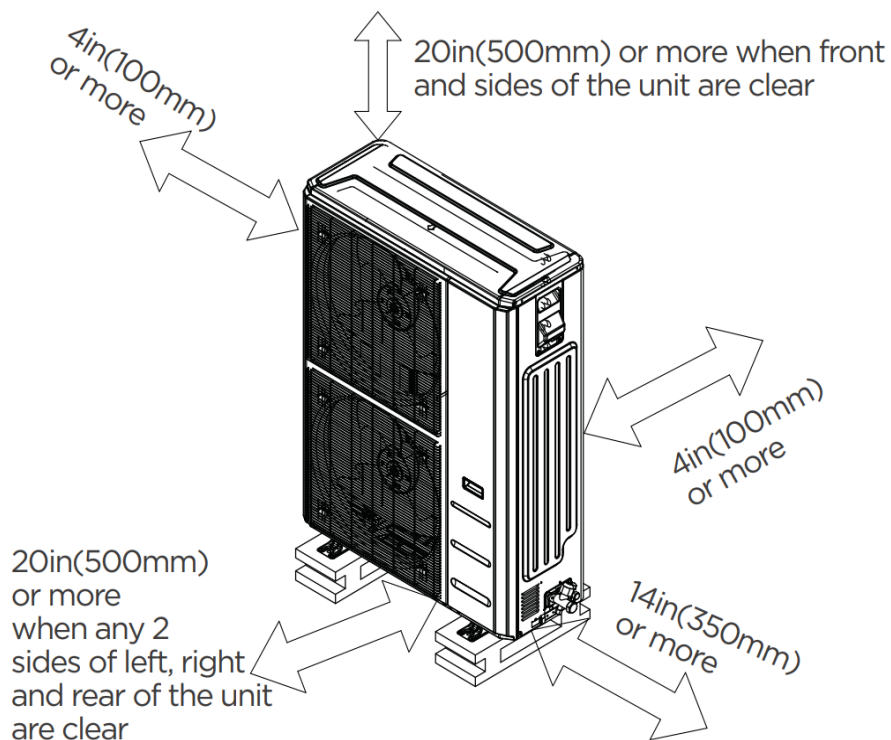


| Dimensions | Model                              | 18k/24k |      | 30k/36k |      | 42k/48k/60k |      |
|------------|------------------------------------|---------|------|---------|------|-------------|------|
|            |                                    | inch    | mm   | inch    | mm   | inch        | mm   |
| A          | Model Height                       | 45      | 1143 | 49      | 1245 | 53          | 1346 |
| B          | Model Width                        | 17-1/2  | 445  | 21      | 534  | 24-1/2      | 622  |
| C          | Supply Air Opening Width           | 15-5/8  | 397  | 19-1/8  | 486  | 22-5/8      | 575  |
| D          | Return Air Opening Width           | 15-1/8  | 384  | 18-5/8  | 473  | 22-1/8      | 562  |
| E          | Model Depth                        | 21      | 534  | 21      | 534  | 21          | 534  |
| F          | Supply Air Opening Depth           | 10-1/4  | 260  | 10-1/4  | 260  | 10-1/4      | 260  |
| G          | Return Air Opening Depth           | 18-3/4  | 476  | 18-3/4  | 476  | 18-3/4      | 476  |
| H          | Supply Air Opening Clearance       | 15/16   | 24   | 15/16   | 24   | 15/16       | 24   |
| I          | Return Air Opening Side Clearance  | 1-1/4   | 32   | 1-1/4   | 32   | 1-1/8       | 28   |
| J          | Return Air Opening Front Clearance | 1-1/2   | 38   | 1-5/8   | 41   | 1-5/8       | 41   |
| K          | Return Air Opening Back Clearance  | 5/8     | 16   | 5/8     | 16   | 3/4         | 19   |

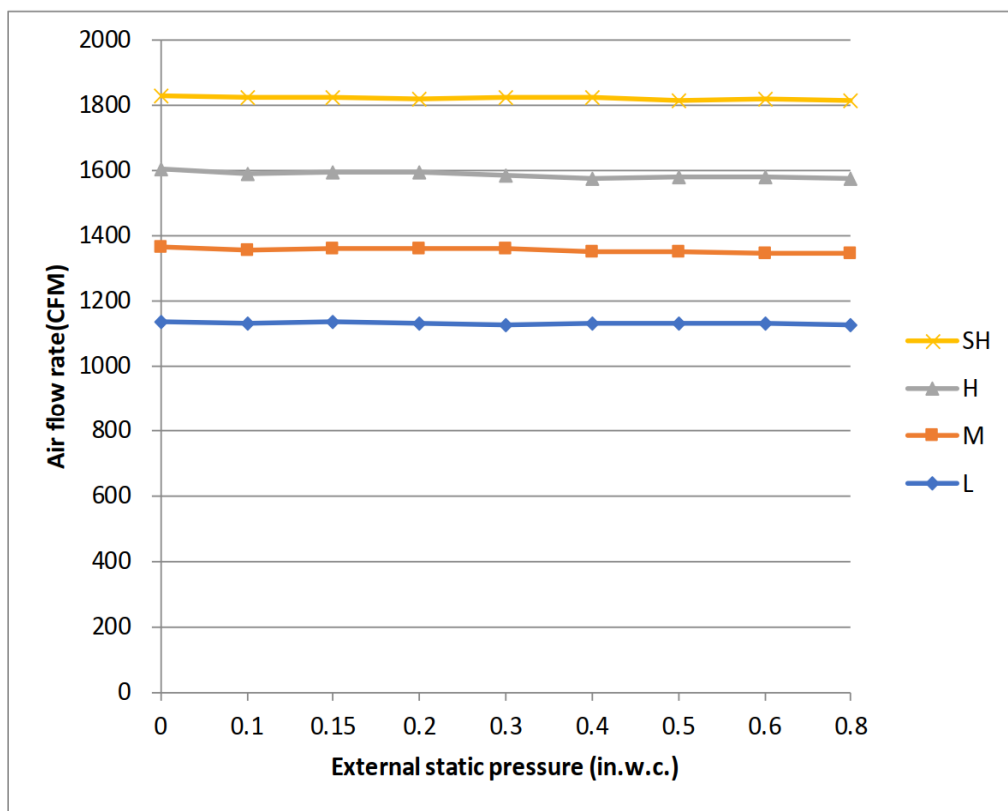
## Outdoor Unit Dimensions



## Installation Instructions For Outdoor Unit



## Fan Performance For Indoor Unit



## Features

- Multi-position installation: horizontal (left or right), vertical (up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency (optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller:120N(X6)
  - Two way communication wired controller with built-in WiFi:120N(X6W)
  - Wireless remote controller
  - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.3 HSPF2
- 100% heat output at -4F\*
- Chassis heater and crankcase heater equipped as standard

\* For 36K model, rated cooling capacity/heating capacity at -4F=100%