

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Extreme Heat AHU Series  
Model Number: MACHU-H36B-2A/MO1HS-H33B-2A

### Air Handler Heat Pump System

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



### INDOOR SPEINDOOR SPECIFICATIONCIFICATION

|   |                               |                          |
|---|-------------------------------|--------------------------|
| Indoor Air Flow (Turbo/H/M/L/Si) (CFM)    | 1189 / 1083 / 971 / 865 / 865 |                          |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) | 48 / 48 / 44 / 35 / 35        |                          |
| Dimension (WxDxH)                         | inch                          | 21 x 21 x 49             |
|   | mm                            | 534 x 534 x 1245         |
| Package (WxDxH)                           | inch                          | 26-5/8 x 24-3/8 x 52-1/2 |
|   | mm                            | 675 x 620 x 1335         |
| Net/Gross Weight                          | lbs                           | 128 / 154                |
|   | kg                            | 58 / 69.9                |

### OUTDOOR SPECIFICATION

|                              |              |                          |
|------------------------------|--------------|--------------------------|
| Compressor Type              | TWIN-ROTARY  |                          |
| Compressor Model             | KTF420D62UNT |                          |
| Refrigerant                  | R454B        |                          |
| Refrigerant Oil Charge(mL)   | 1,000        |                          |
| Refrigerant Oil              | VG74         |                          |
| Outdoor Air Flow (Max) (CFM) | 2,237        |                          |
| Outdoor Noise Level (dBA)    | 62.5         |                          |
| Dimension (WxDxH)            | inch         | 37-1/4 x 16-1/8 x 31-7/8 |
|                              | mm           | 946 x 410 x 810          |
| Package (WxDxH)              | inch         | 42-7/8 x 19-5/8 x 34-7/8 |
|                              | mm           | 1090 x 500 x 885         |
| Net/Gross Weight             | lbs          | 157 / 168                |
|                              | kg           | 71.2 / 76.2              |

### EFFICIENCY

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 16.5 | HSPF2-4 | 10.0 |
| EER2    | 11.7 | COP     | 3.7  |

### PERFORMANCE of Cooling

| Cooling (Btu/hr)                |   |
|---------------------------------|---|
| Rated Capacity                  | 33,000  |
| Min/Max Capacity                | 15,000 ~ 39,000                                     |
| Moisture Removal(L/h)           | 3.18  |
| Standard Operating Range(*F/*C) | -22~122 (-30 ~ 50)                                  |
| 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                 | 35,000  |
| 1. @ 47°F Min/Max Capacity      | 15,000 ~ 41,500                                     |
| 2. @ 17°F Rated                 | 27,400  |
| 3. @ 5°F Rated: Capacity / COP  | 34,000 / 2  |
| 3. @ 5°F Max: Capacity          | 34,000  |
| 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   |

### ELECTRICAL

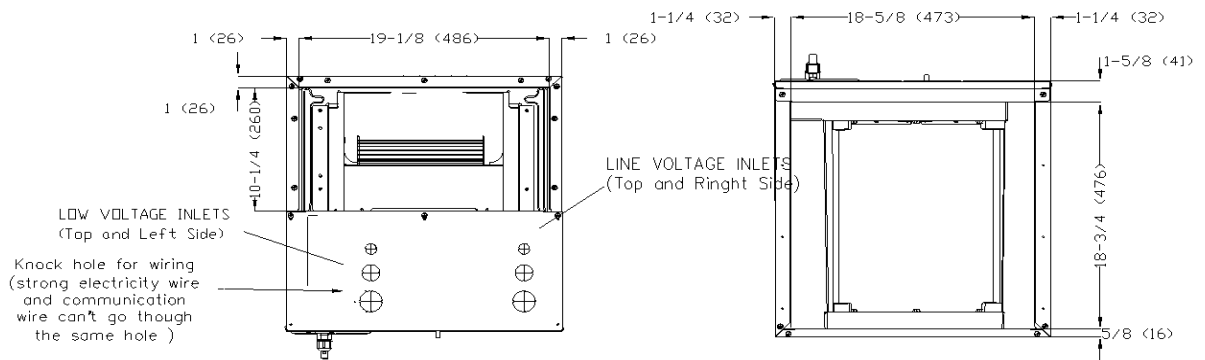
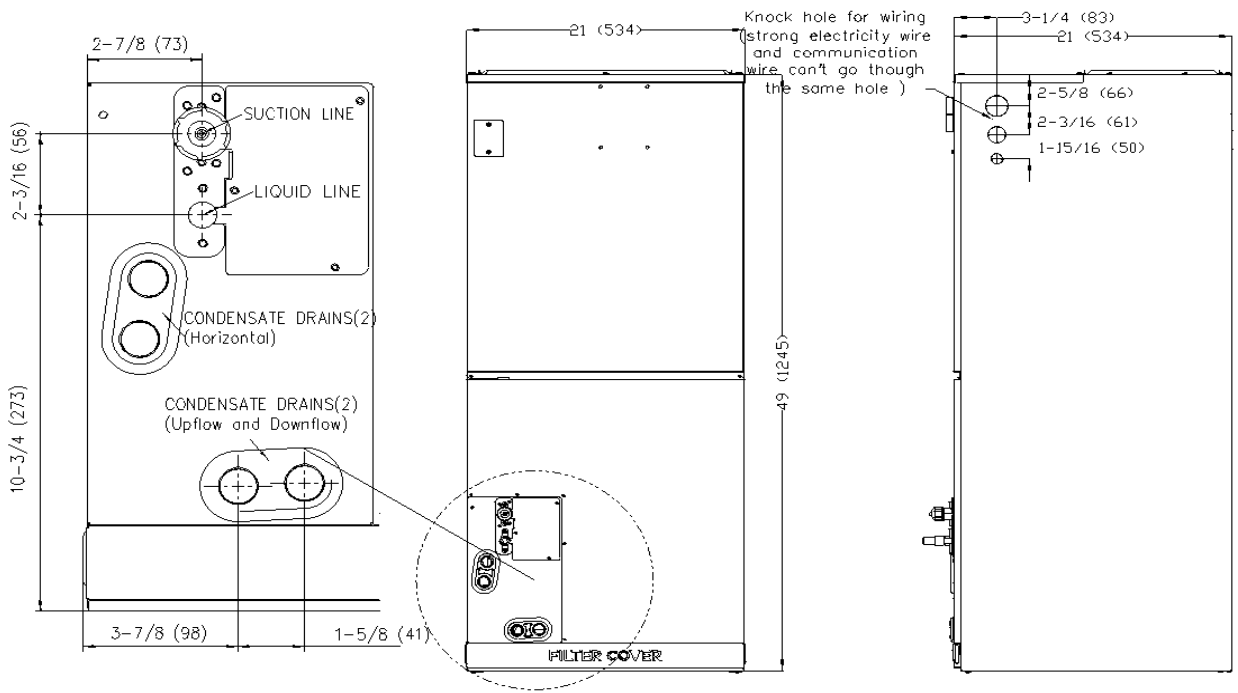
|                                  |  |
|----------------------------------|--|
| Power Supply                     | 208/230V,60Hz,1Ph                      |
| System MCA                       | 34.0                                   |
| Connection Wiring                | AWG 14/4                               |
| System MOCP                      | 35.0                                   |
| Compressor RLA                   | 24.5                                   |
| Outdoor Fan Motor RLA            | 1.5                                    |
| Outdoor Fan Motor W              | 230                                    |
| Indoor Fan Motor RLA             | 4.5                                    |
| Indoor Fan Motor W               | 375                                    |
| System Power Input @ Cooling (W) | 2,820 (540 ~ 3,828)                    |
| System Power Input @ Heating (W) | 2,800 (740 ~3750)                      |
| MCA: Min. circuit amps (A)       | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)          |

### PIPING

|  |               |
|--|---------------|
| Throttle type(Indoor)                          | N/A           |
| Throttle type(Outdoor)                         | EXV           |
| Liquid Size                                    | 3/8" (9.52mm) |
| Gas Size                                       | 3/4" (19.9mm) |
| Max. Piping Length(ft/m)                       | 164 (50)      |
| Max. Height Difference(ft/m)                   | 82 (25)       |
| Max. Pre-charged Length(ft/m)                  | 25 (7.5)      |
| Refrigerant Pre-charged Amount(oz/kg)          | 87 (2.47)     |
| Additional Charge of Refrigerant((oz/ft)/(g/m) | 0.32 (30)     |
| Connection Method                              | Flared        |

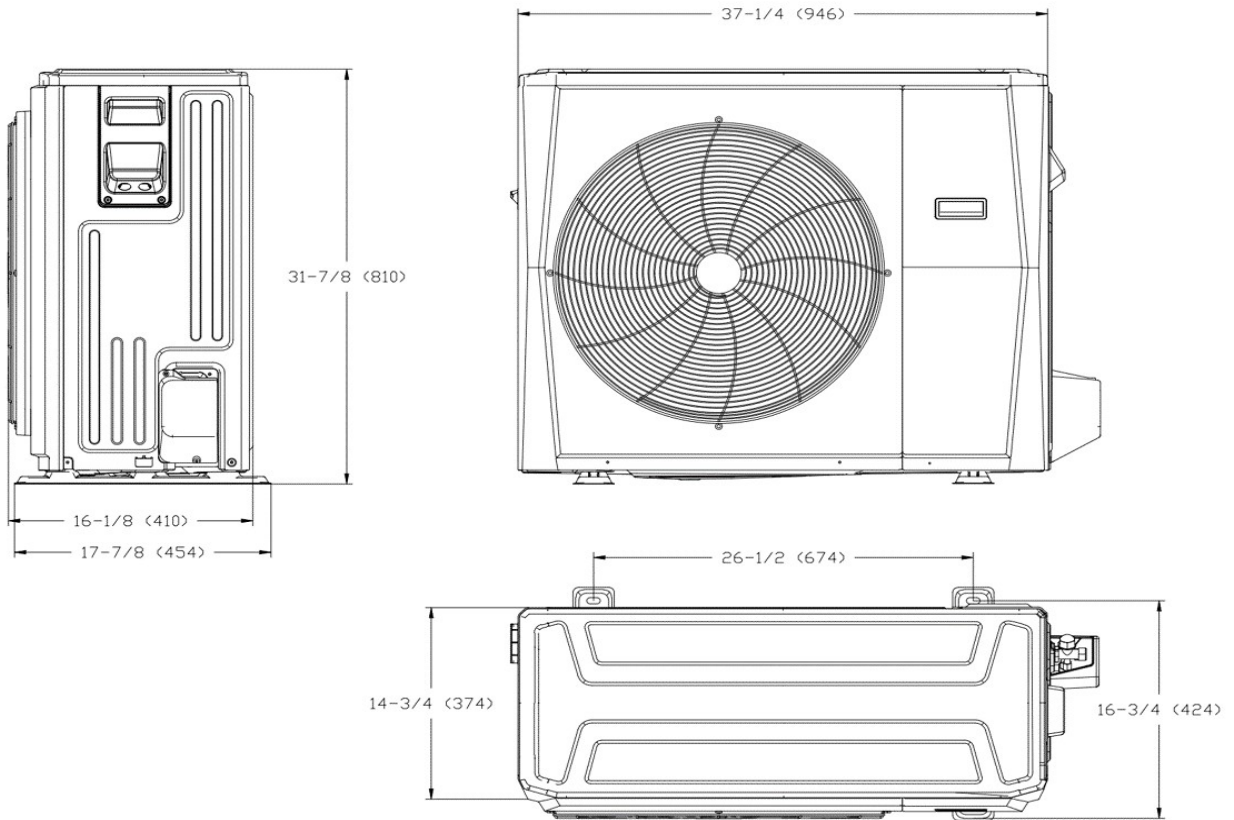
Indoor Unit Dimension

Unit:inch(mm)

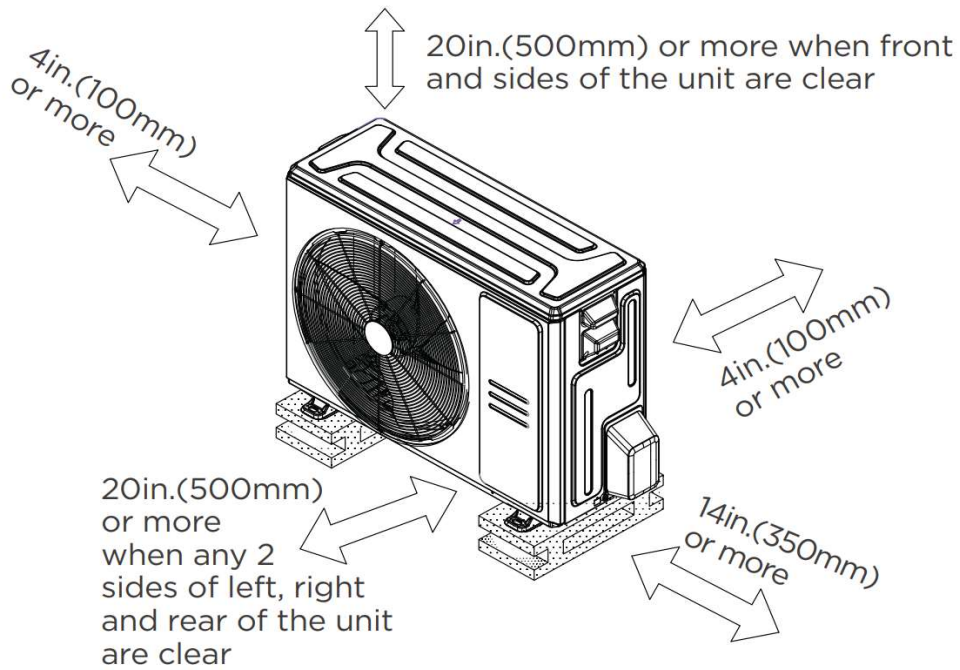


Outdoor Unit Dimension

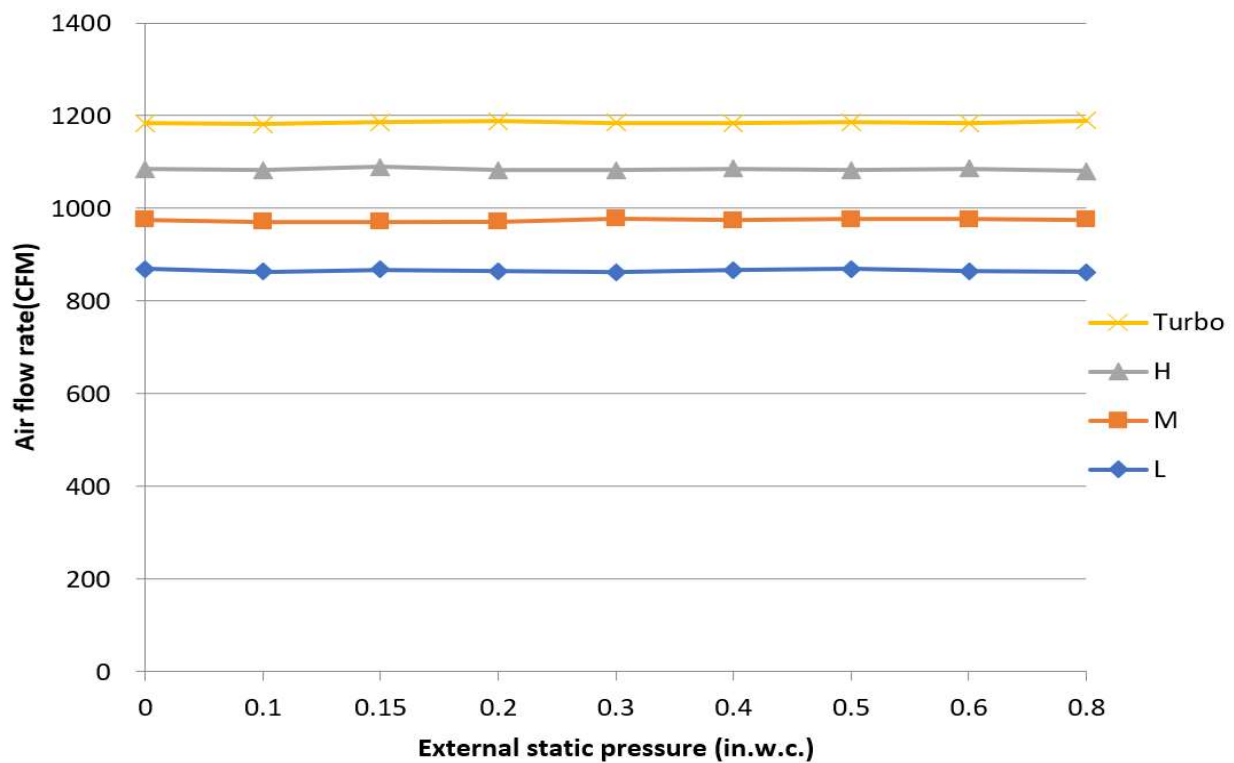
Unit:inch(mm)



Installation Instruction



### 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
- High efficiency up to 18.7 SEER2, 12 EER2, 10 HSPF2
- 100% heat output at 5F\*
- Energy Star and Cold Climate Energy Star certified
- Chassis heater and crankcase heater equipped as standard

\* Rated cooling capacity/heating capacity at 5F>=100%