

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Advanced Heat AHU Series  
Model Number: MAAHE-H60B-CA/MO1BE-H48B-2A

## Air Handler Heat Pump System

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



## INDOOR SPECIFICATION

|                   |      |                          |
|-------------------|------|--------------------------|
| Dimension (W×D×H) | inch | 21-5/8 x 21-1/2 x 27-3/4 |
|                   | mm   | 549 x 546 x 706          |
| Package (W×D×H)   | inch | 31-1/8 x 25 x 25-5/8     |
|                   | mm   | 790 x 635 x 650          |
| Net/Gross Weight  | lbs  | 97 / 115                 |
|                   | kg   | 43.9 / 52.2              |

## OUTDOOR SPECIFICATION

|                              |      |                             |
|------------------------------|------|-----------------------------|
| Compressor Type              |      | ROTARY                      |
| Compressor Model             |      | MTH550UKPC8FU               |
| Refrigerant                  |      | R454B                       |
| Refrigerant Oil Charge(mL)   |      | 1,800                       |
| Refrigerant Oil              |      | HAF68D1C                    |
| Outdoor Air Flow (Max) (CFM) |      | 3,037                       |
| Outdoor Noise Level (dBA)    |      | 65                          |
| Dimension (W×D×H)            | inch | 38-9/16 x 16-3/8 x 38-3/8   |
|                              | mm   | 980 x 415 x 975             |
| Package (W×D×H)              | inch | 45-1/16 x 19-11/16 x 42-1/2 |
|                              | mm   | 1145 x 500 x 1080           |
| Net/Gross Weight             | lbs  | 193 / 224                   |
|                              | kg   | 87.5 / 101.7                |

## EFFICIENCY

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 15.2 | HSPF2-4 | 9.0  |
| EER2    | 10.0 | COP     | 3.00 |

## PERFORMANCE of Cooling

| Cooling (Btu/hr)                |                     |
|---------------------------------|---------------------|
| Rated Capacity                  | 45,000              |
| Min/Max Capacity                | 15,900~49,000       |
| Moisture Removal(L/h)           | 4                   |
| Standard Operating Range(*F/*C) | -13~122 ( -25 ~ 50) |
| Rated Cooling Conditions:       |                     |
| Indoor: 80°F DB/67°F WB         |                     |
| Outdoor: 95°F DB/75°F WB        |                     |

## PERFORMANCE of Heating

| Heating (Btu/hr)                                              |                    |
|---------------------------------------------------------------|--------------------|
| 1. @ 47°F Rated                                               | 47,000             |
| 2. @ 47°F Min/Max Capacity                                    | 14,800~50,000      |
| 3. @ 17°F Rated                                               | 33,000             |
| 4. @ 5°F Rated: Capacity / COP                                | 40,000/1.85        |
| 5. @ 5°F Max: Capacity                                        | 40,000             |
| Standard Operating Range(*F/*C)                               | -13~75 ( -25 ~ 24) |
| 1. Rated Heating Conditions:                                  |                    |
| Indoor: 70°F DB/60°F WB                                       |                    |
| Outdoor: 47°F DB/43°F WB                                      |                    |
| 2. Rated Heating Conditions:                                  |                    |
| Indoor: 70°F DB/60°F WB                                       |                    |
| Outdoor: 17°F DB/15°F WB                                      |                    |
| 3. Heating Conditions, Compressor Operating at Max. Frequency |                    |
| Indoor: 70°F DB/60°F WB                                       |                    |
| Outdoor: 5°F DB/5°F WB                                        |                    |

## ELECTRICAL

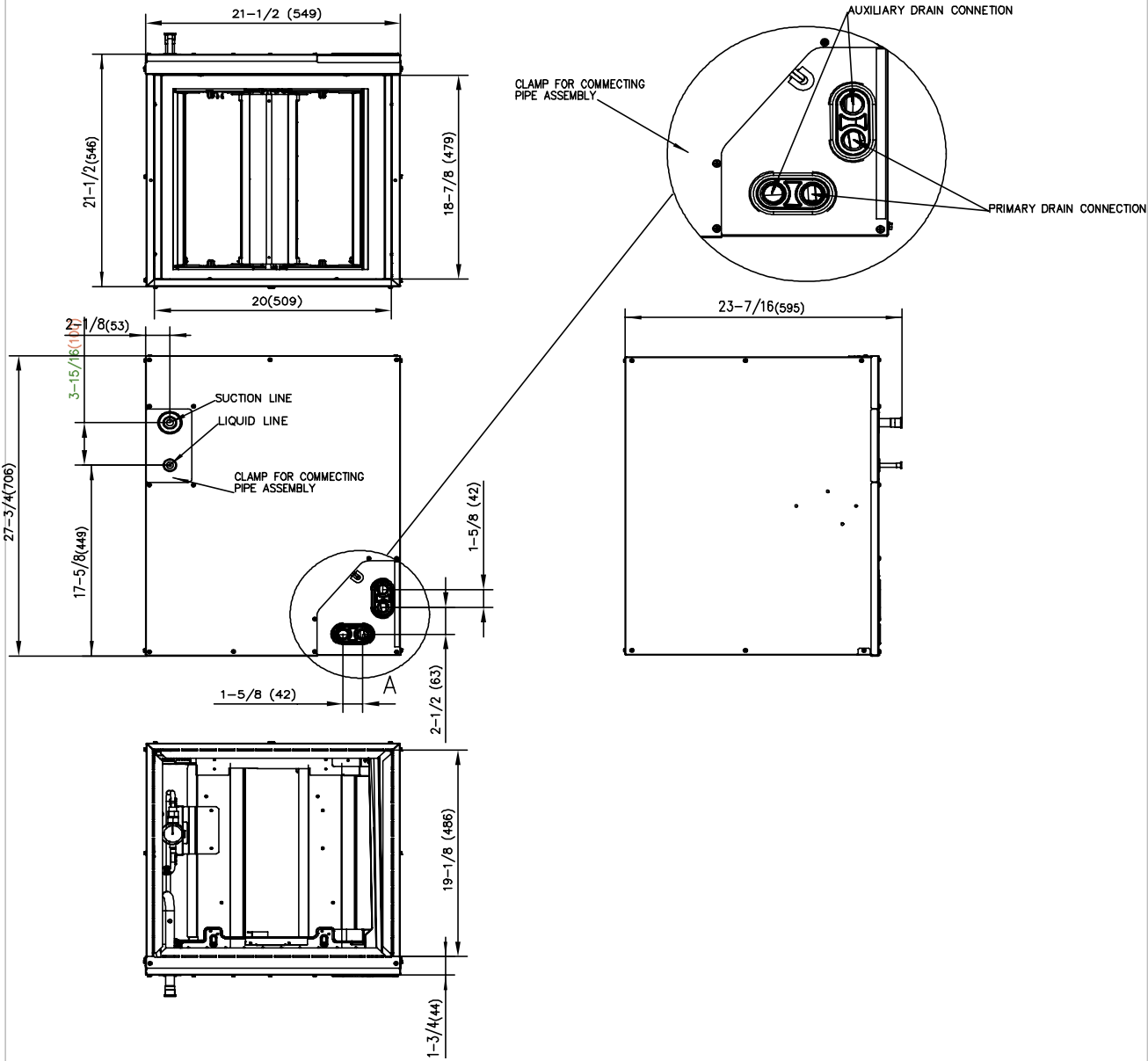
|                                  |                                        |
|----------------------------------|----------------------------------------|
| Indoor Power Supply              | 24V,60Hz,1Ph                           |
| Indoor MCA 115V/(208/230V)       | /                                      |
| Indoor MOP                       | /                                      |
| Outdoor Power Supply             | 208/230,60Hz,1Ph                       |
| Outdoor MCA                      | 36.0                                   |
| Outdoor MOP                      | 40.0                                   |
| Communication Wiring             | AWG 20-2                               |
| Compressor RLA                   | 27                                     |
| Outdoor Fan Motor RLA            | 2                                      |
| Outdoor Fan Motor W              | 250                                    |
| Indoor Fan Motor RLA             | /                                      |
| Indoor Fan Motor W               | /                                      |
| System Power Input @ Cooling (W) | 4,500 ( 1,390~5,080)                   |
| System Power Input @ Heating (W) | 4,590 ( 860~4,850)                     |
| 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)                         | TXV           |
| Throttle type(Outdoor)                        | EXV           |
| Liquid Size                                   | 3/8" (9.52mm) |
| Gas Size                                      | 3/4" (19mm)   |
| Max. Piping Length(ft/m)                      | 246 ( 75)     |
| Max. Height Difference(ft/m)                  | 98.4 ( 30)    |
| Max. Pre-charged Length(ft/m)                 | 25 (7.5)      |
| Refrigerant Pre-charged Amount(oz/kg)         | 134 ( 3.8)    |
| Additional Charge of Refrigerant(oz/ft)/(g/m) | 0.7 ( 65)     |
| Connection Method                             | Flared        |

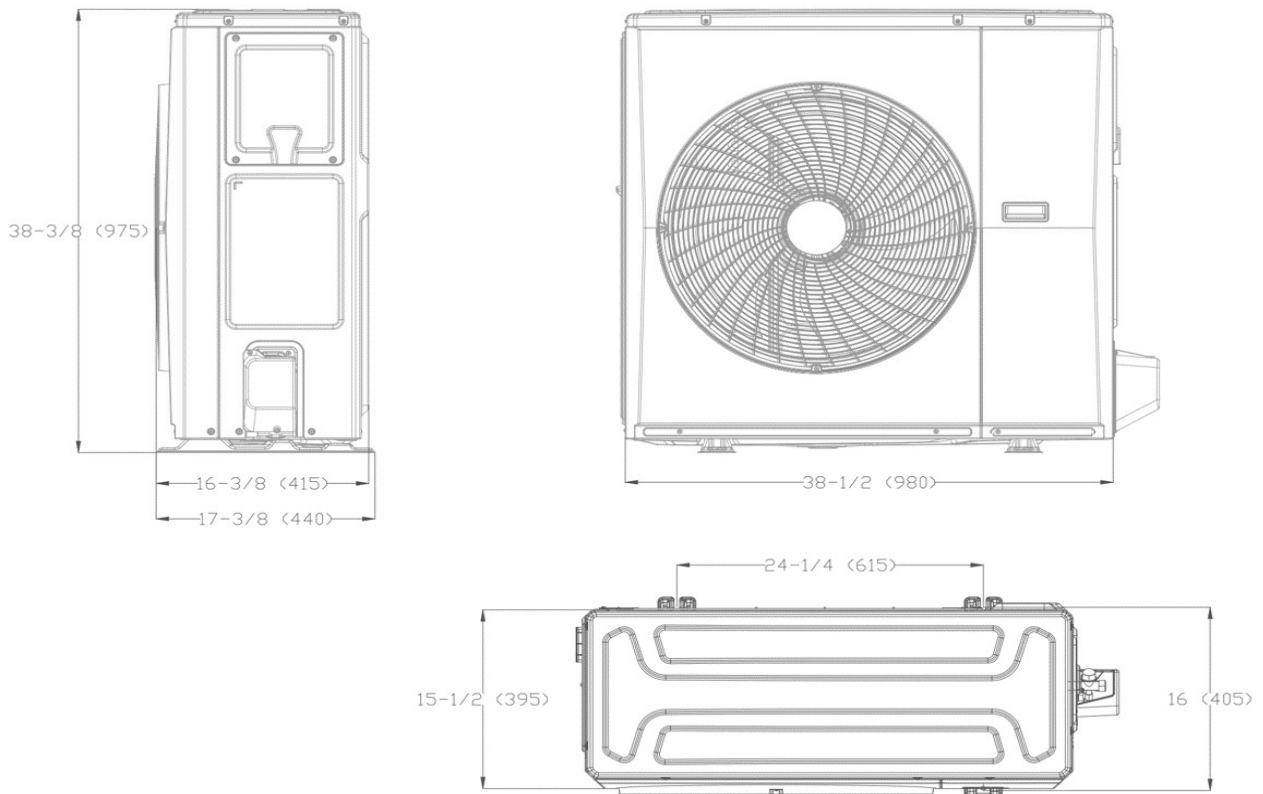
Indoor Unit Dimension

Unit:inch(mm)

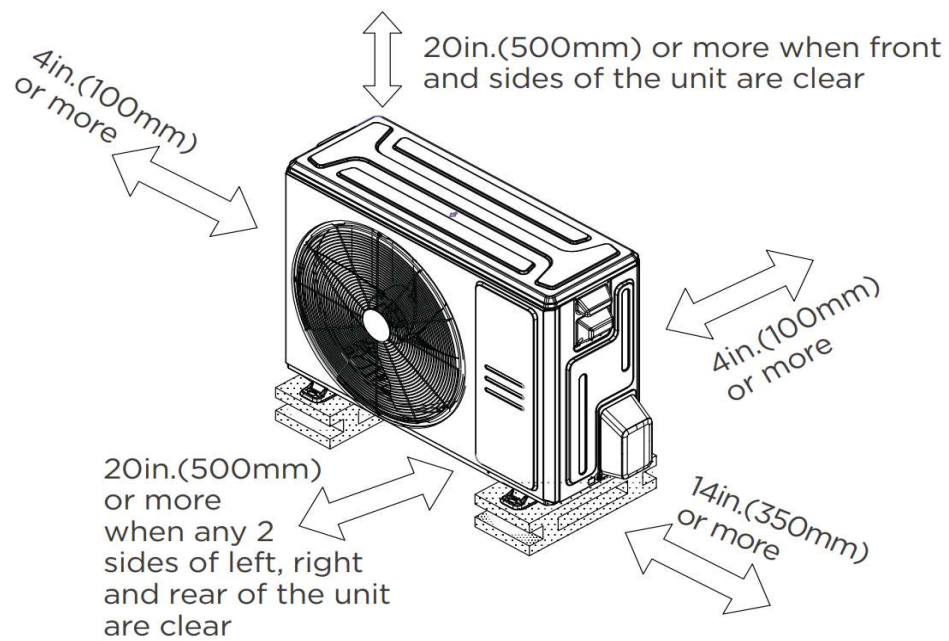


## Outdoor Unit Dimension

Unit:inch(mm)



## Installation Instruction For Outdoor Unit



#### Features

- Multi-position installation: horizontal(left or right), vertical( up or down)
- Aluminum Coil
- R454B refrigerant sensor
- Easy Maintenance
- Multiple control options available:
  - Two-way communication wired controller with built-in Wi-Fi: 120N (X6W)
  - Third-Party 24V Thermostat