

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Regular Heat AHU Series  
Model Number: MAAHE-H60B-DA/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 | 24-1/2 x 21 x 28         |
|                   | mm   | 622 x 533 x 711          |
| Package (W×D×H)   | inch | 27-3/4 x 26-1/8 x 30-3/8 |
|                   | mm   | 705 x 665 x 770          |
| Net/Gross Weight  | lbs  | 81 / 92                  |
|                   | kg   | 36.8 / 41.9              |

## 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   | 14.7 | HSPF2-4 | 7.5  |
| EER2    | 9.5  | COP     | 2.75 |

## PERFORMANCE of Cooling

| Cooling (Btu/hr)                |                     |
|---------------------------------|---------------------|
| Rated Capacity                  | 45,000              |
| Min/Max Capacity                | 15,500~47,000       |
| 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

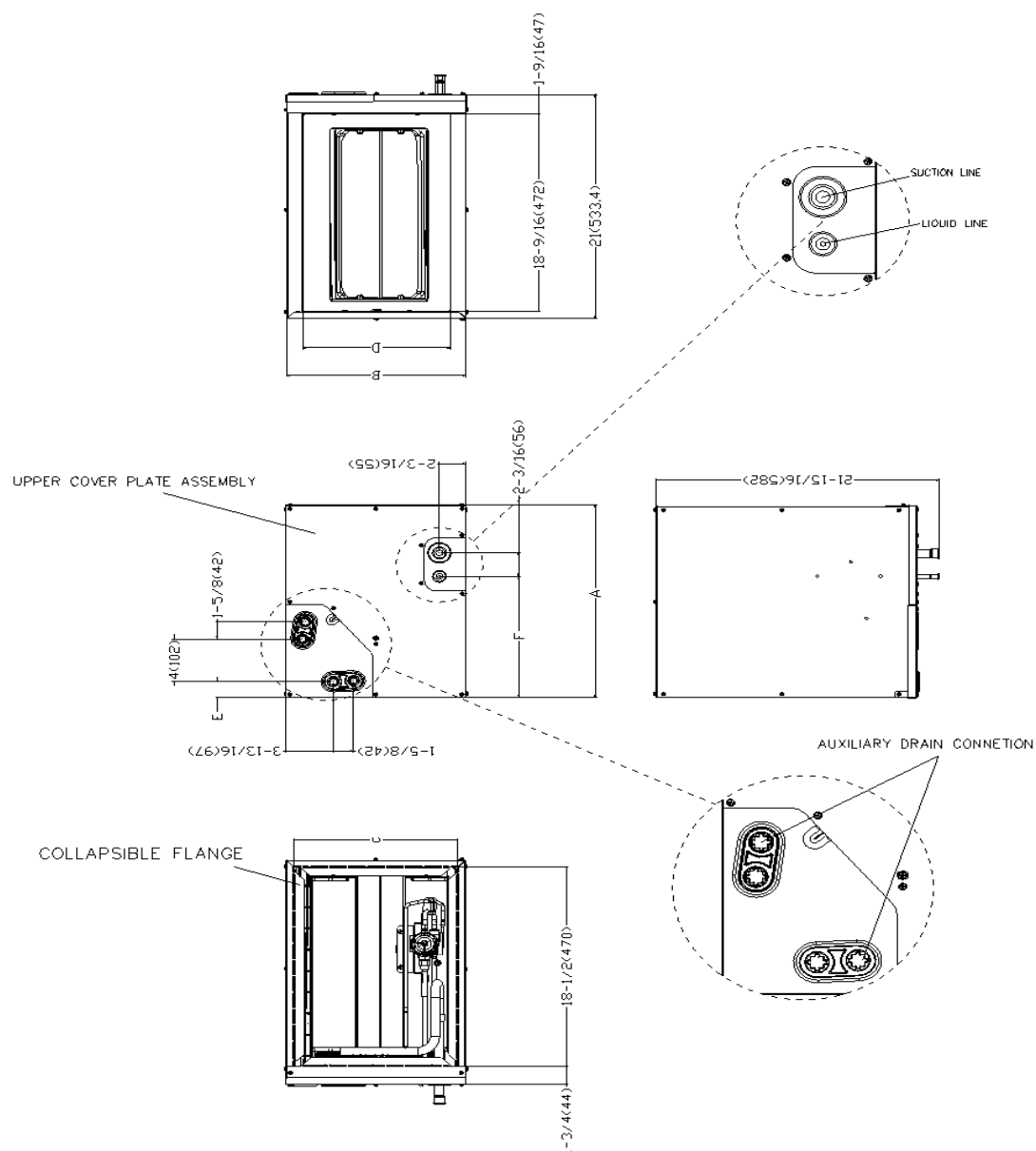
| Heating (Btu/hr)                                              |                    |
|---------------------------------------------------------------|--------------------|
| 1. @ 47°F Rated                                               | 46,000             |
| 2. @ 47°F Min/Max Capacity                                    | 10,600~47,000      |
| 3. @ 17°F Rated                                               | 28,000             |
| 4. @ 5°F Rated: Capacity / COP                                | 42,000/1.75        |
| 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) | 4,736 ( 1,430~5,050)                   |
| System Power Input @ Heating (W) | 4,910 ( 1,400~5,010)                   |
| MCA: Min. circuit amps (A)       | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)          |

## PIPING

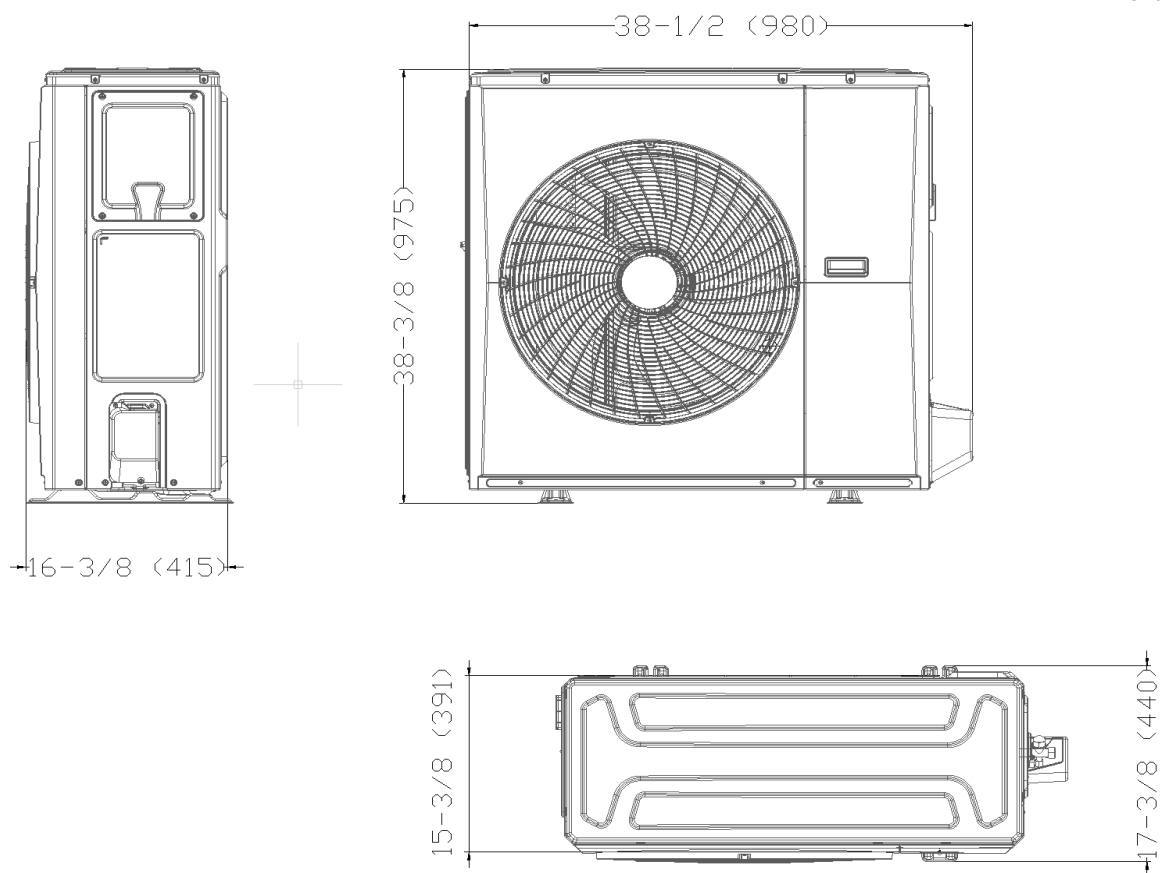
|                                                |               |
|------------------------------------------------|---------------|
| Throttle type(Indoor)                          | EXV           |
| Throttle type(Outdoor)                         | EXV           |
| Liquid Size                                    | 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        |



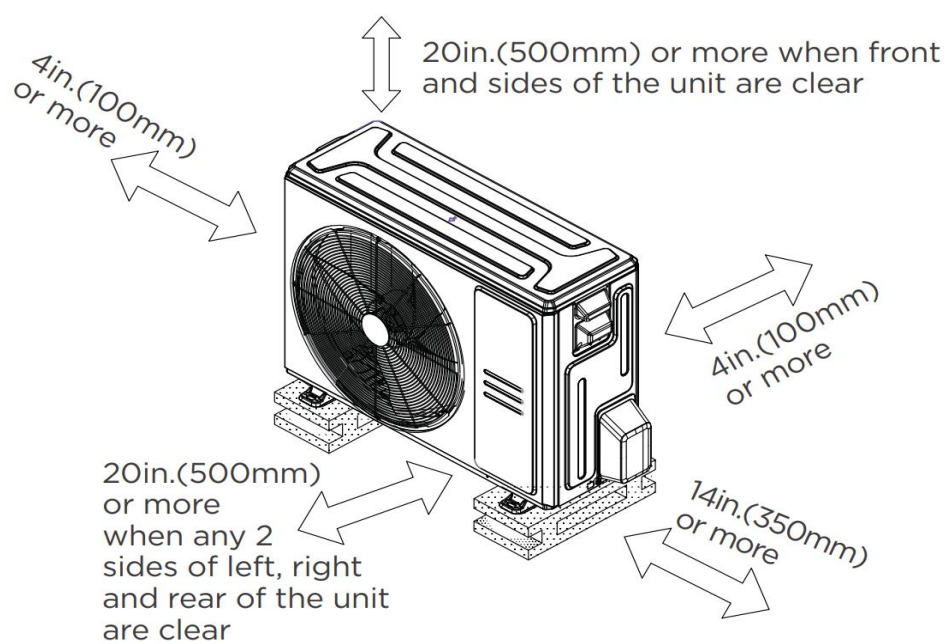
| Model      |                          | 60-D    |     |
|------------|--------------------------|---------|-----|
| Dimensions |                          | inch    | mm  |
| A          | Model Height             | 28      | 711 |
| B          | Model Width              | 24-1/2  | 622 |
| C          | Supply Air Opening Width | 23-1/4  | 591 |
| D          | Return Air Opening Width | 23-1/8  | 587 |
| E          | Condensate Drains Height | 2-3/16  | 55  |
| F          | Liquid Line Height       | 21-7/16 | 545 |

## 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 WiFi:120N(X6W)
  - Third-Party 24V Thermostat