

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Extreme Heat AHU Series  
Model Number: MAUSE-H18B-2A/MO1HE-H18B-2A

## Air Handler Heat Pump System

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



## INDOOR SPECIFICATION

|                                           |      |                             |
|-------------------------------------------|------|-----------------------------|
| ESP (inWG)                                |      | 0~1.0                       |
| Indoor Air Flow (Turbo/H/M/L/Si) (CFM)    |      | 618 / 577 / 530 / 488 / 488 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) |      | 42.5/ 42.5 / 40.5 / 37 / 37 |
| Dimension (W×D×H)                         | inch | 14-1/2 x 21-1/2 x 53-7/8    |
|                                           | mm   | 368 x 546 x 1368            |
| Package (W×D×H)                           | inch | 17-1/2 x 31-1/8 x 58-1/4    |
|                                           | mm   | 445 x 790 x 1480            |
| Net/Gross Weight                          | lbs  | 123 / 155                   |
|                                           | kg   | 55.8 / 70.2                 |

## OUTDOOR SPECIFICATION

|                              |      |                          |
|------------------------------|------|--------------------------|
| Compressor Type              |      | ROTARY                   |
| Compressor Model             |      | KTM240D46UKT2            |
| Refrigerant                  |      | R454B                    |
| Refrigerant Oil Charge (mL)  |      | 620                      |
| Refrigerant Oil              |      | VG74                     |
| Outdoor Air Flow (Max) (CFM) |      | 1,766                    |
| Outdoor Noise Level (dBA)    |      | 56.5                     |
| Dimension<br>(W×D×H)         | inch | 35 x 13-1/2 x 26-1/2     |
|                              | mm   | 890 x 342 x 673          |
| Package<br>(W×D×H)           | inch | 39-1/8 x 15-5/8 x 29-1/8 |
|                              | mm   | 995 x 398 x 740          |
| Net/Gross Weight             | lbs  | 101 / 109                |
|                              | kg   | 46 / 49.5                |

## EFFICIENCY

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 19.0 | HSPF2-4 | 10.1 |
| EER2    | 12.5 | COP     | 3.59 |

## PERFORMANCE of Cooling

| Cooling (Btu/hr)                 |                                                     |
|----------------------------------|-----------------------------------------------------|
| Rated Capacity                   | 18,000                                              |
| Min/Max Capacity                 | 4,600 ~ 2,3200                                      |
| Moisture Removal (L/h)           | 1.76                                                |
| 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 |

## PERFORMANCE of Heating

| Heating (Btu/hr)                                              |                                                     |
|---------------------------------------------------------------|-----------------------------------------------------|
| 1. @ 47°F Rated                                               | 18,000                                              |
| 1. @ 47°F Min/Max Capacity                                    | 5,600 ~ 23,200                                      |
| 2. @ 17°F Rated                                               | 14,700                                              |
| 3. @ 5°F Rated: Capacity / COP                                | 18,600 / 2.12                                       |
| 3. @ 5°F Max: Capacity                                        | 18,600                                              |
| 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

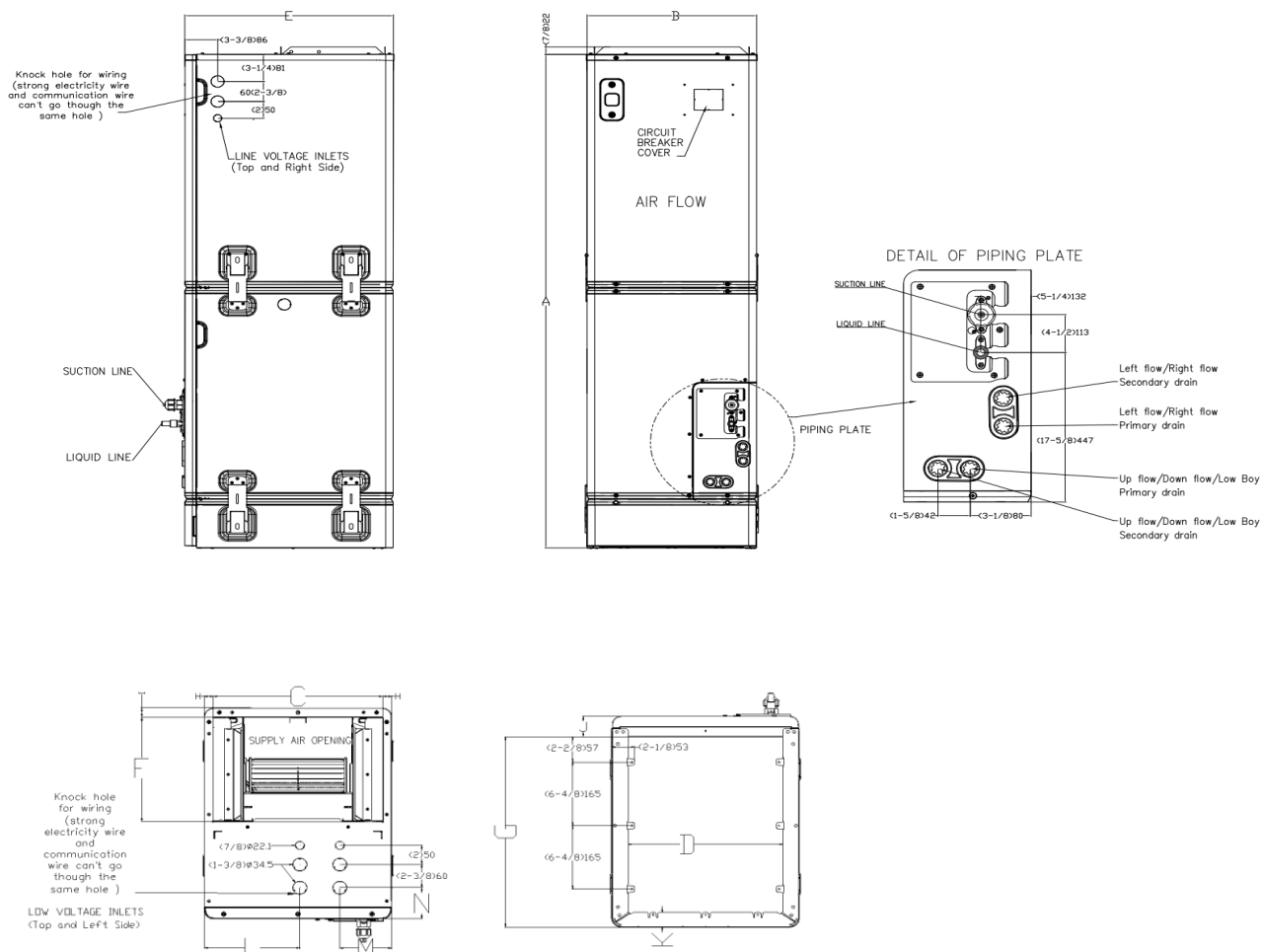
|                                  |                                        |
|----------------------------------|----------------------------------------|
| Indoor Power Supply              | 115/208/230V,60Hz,1Ph                  |
| Indoor MCA 115V/ (208/230V)      | 5.5/3.5                                |
| Indoor MOP                       | 15.0                                   |
| Outdoor Power Supply             | 208/230V,60Hz,1Ph                      |
| Outdoor MCA                      | 16.0                                   |
| Outdoor MOP                      | 20.0                                   |
| Communication Wiring             | AWG 20/2                               |
| Compressor RLA                   | 10.5                                   |
| Outdoor Fan Motor RLA            | 0.9                                    |
| Outdoor Fan Motor W              | 80                                     |
| Indoor Fan Motor RLA             | 2.0                                    |
| Indoor Fan Motor W               | 600                                    |
| System Power Input @ Cooling (W) | 1,440 (530 ~ 2,020)                    |
| System Power Input @ Heating (W) | 1,470 (410 ~ 1,900)                    |
| 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)                      | 164 (50)      |
| Max. Height Difference(ft/m)                  | 82 (25)       |
| Max. Pre-charged Length(ft/m)                 | 25 (7.5)      |
| Refrigerant Pre-charged Amount(oz/kg)         | 74 (2.1)      |
| Additional Charge of Refrigerant(oz/ft)/(g/m) | 0.7 (65)      |
| Connection Method                             | Flared        |

# Indoor Unit Dimension

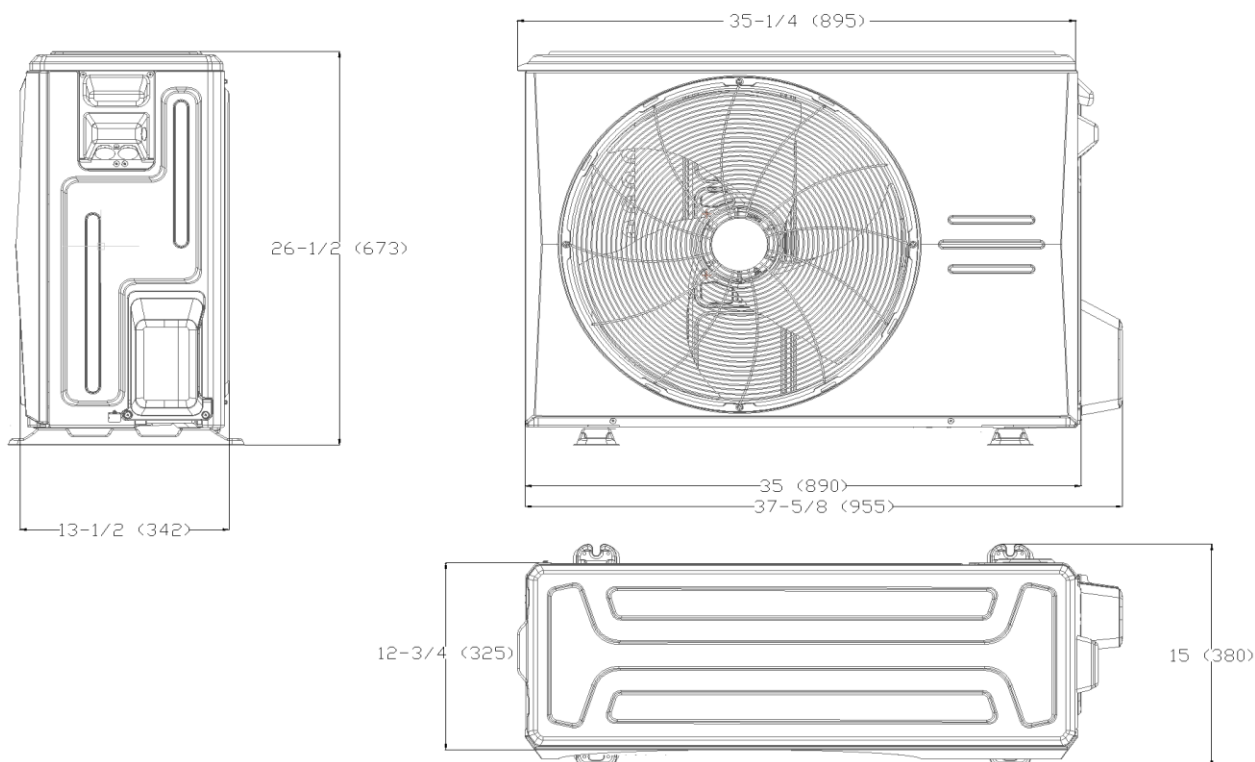
Unit: inch, mm



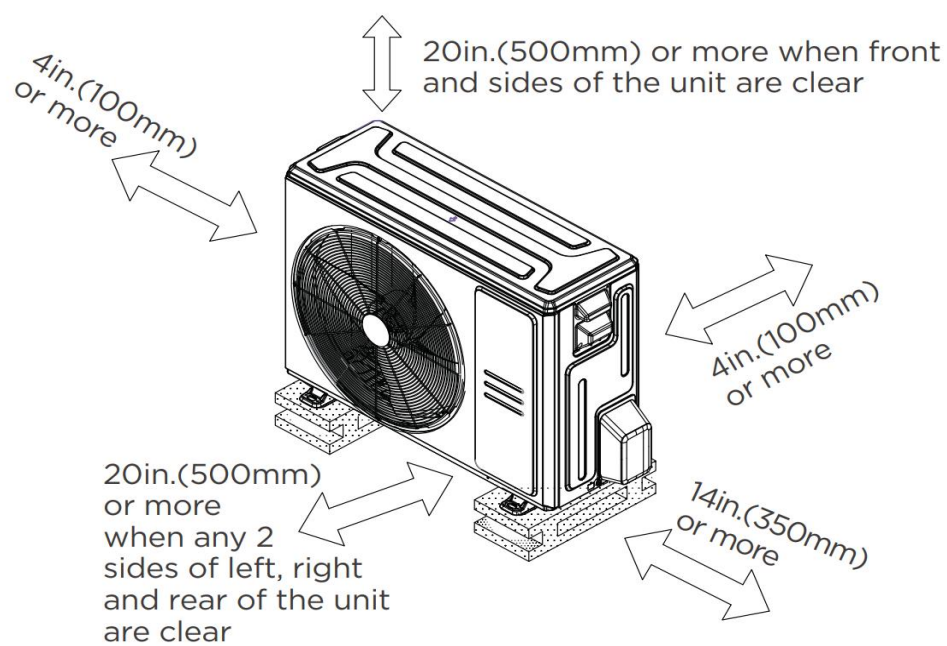
| Dimensions |                                    | Model(Btu/h) |  | 18K/24K |      | 30K/36K |      | 48K/54K |      |
|------------|------------------------------------|--------------|--|---------|------|---------|------|---------|------|
|            |                                    |              |  | inch    | mm   | inch    | mm   | inch    | mm   |
| A          | Model Height                       |              |  | 53-7/8  | 1368 | 58-1/8  | 1476 | 60-1/8  | 1526 |
| B          | Model Width                        |              |  | 14-4/8  | 368  | 17-4/8  | 445  | 21-4/8  | 546  |
| C          | Supply Air Opening Width           |              |  | 12-7/8  | 328  | 16      | 405  | 19-7/8  | 506  |
| D          | Return Air Opening Width           |              |  | 11-1/8  | 282  | 14-4/8  | 368  | 18-4/8  | 470  |
| E          | Model Depth                        |              |  | 21-1/2  | 546  | 21-1/2  | 546  | 21-1/2  | 546  |
| F          | Supply Air Opening Depth           |              |  | 10-5/8  | 271  | 10-5/8  | 271  | 10-5/8  | 271  |
| G          | Return Air Opening Depth           |              |  | 19      | 484  | 19      | 484  | 19      | 484  |
| H          | Supply Air Opening Clearance       |              |  | 7/8     | 22   | 7/8     | 22   | 7/8     | 22   |
| I          | Supply Air Opening Clearance       |              |  | 1       | 24   | 1       | 24   | 1       | 24   |
| J          | Return Air Opening Front Clearance |              |  | 2-4/8   | 62   | 2-4/8   | 62   | 2-4/8   | 62   |
| K          | Return Air Opening Back Clearance  |              |  | 1-4/8   | 37   | 1-4/8   | 37   | 1-4/8   | 37   |
| L          | Top cover knock hole               |              |  | /       | /    | 9       | 229  | 10-7/8  | 275  |
| M          | Top cover knock hole               |              |  | 4-1/2   | 113  | 4-7/8   | 124  | 5-1/8   | 131  |
| N          | Top cover knock hole               |              |  | 2       | 51   | 2       | 51   | 1-5/8   | 41   |

## Outdoor Unit Dimension

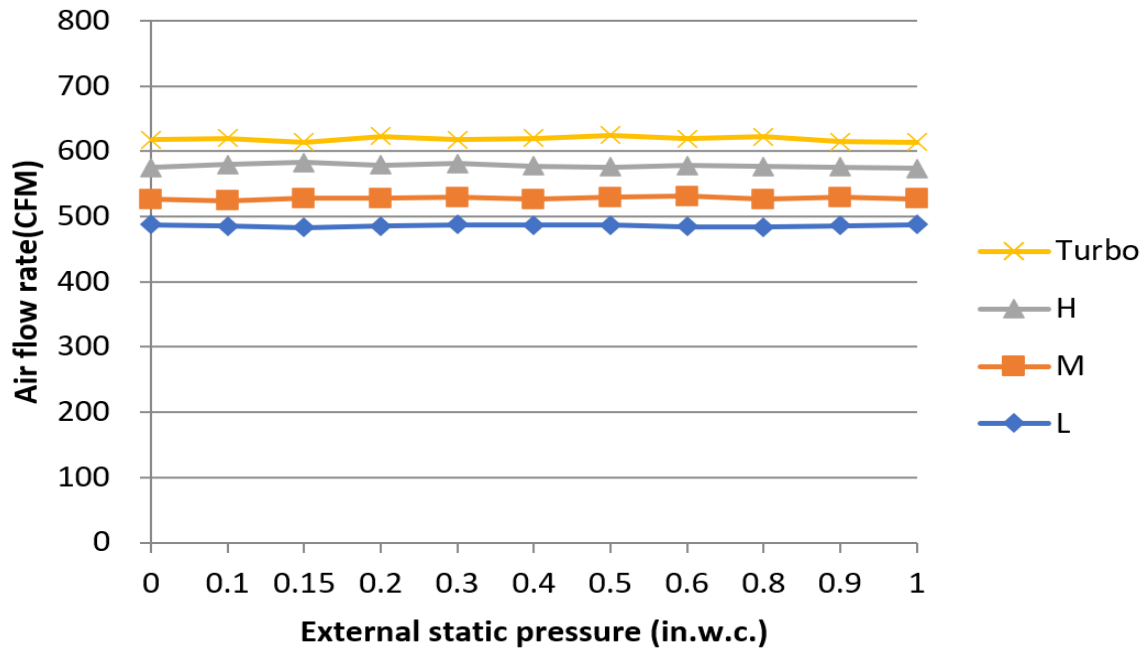
Unit: inch, mm



## Installation Instruction For Outdoor Unit



#### Fan Performance For Indoor Unit



#### Features

- Multi-position installation: horizontal(left or right), vertical( up or down)
- 115/230V voltage compatible for IDU
- Aluminum Coil
- Constantly Air Flow system up to 1.0 In.W.G
- 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, 10.8 HSPF2
- 100% heat output at -13F\*
- Chassis heater and crankcase heater equipped as standard

\* For MVBDM-36HWFN10-WB3-D pairing with MOX630-36HFN10-M3X, rated cooling capacity/heating capacity at -13F=100%