

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Extreme Heat WM AHU Series  
Model Number: MAWHE-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(in.W.G)                               |      | 0-0.8                       |
| Indoor Air Flow (Turbo/H/M/L/Si) (CFM)    |      | 618 / 577 / 530 / 489 / 489 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) |      | 48 / 47 / 45 / 39 / 39      |
| Dimension (W×D×H)                         | inch | 20-1/4 x 15-3/4 x 36-1/2    |
|                                           | mm   | 515 × 399 × 928             |
| Package (W×D×H)                           | inch | 22-7/8 x 19-1/2 x 42-7/8    |
|                                           | mm   | 580 × 495 × 1090            |
| Net/Gross Weight                          | lbs  | 91 / 111                    |
|                                           | kg   | 41.5 / 50.5                 |

## 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)    |      | 58.5                     |
| Dimension (W×D×H)            | inch | 35 x 13-1/2 x 26-1/2     |
|                              | mm   | 890 × 342 × 673          |
| Package (W×D×H)              | inch | 39-1/8 x 15-5/8 x 29-1/8 |
|                              | mm   | 995 × 398 × 740          |
| Net/Gross Weight             | lbs  | 101 / 109                |
|                              | kg   | 46 / 49.5                |

## EFFICIENCY

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 19.3 | HSPF2-4 | 10.8 |
| EER2    | 12.1 | COP     | 3.80 |

## PERFORMANCE of Cooling

| Cooling (Btu/hr)                |                     |
|---------------------------------|---------------------|
| Rated Capacity                  | 18,000              |
| Min/Max Capacity                | 6,600~21,900        |
| Moisture Removal(L/h)           | 1.73                |
| Standard Operating Range(*F/*C) | -22~122 ( -30 ~ 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                                               | 19,000             |
| 1. @ 47°F Min/Max Capacity                                    | 6,800~23,000       |
| 2. @ 17°F Rated                                               | 15,300             |
| 3. @ 5°F Rated: Capacity / COP                                | 19,600/2.1         |
| 3. @ 5°F Max: Capacity                                        | 19,600             |
| Standard Operating Range(*F/*C)                               | -22~75 ( -30 ~ 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                                        |                    |

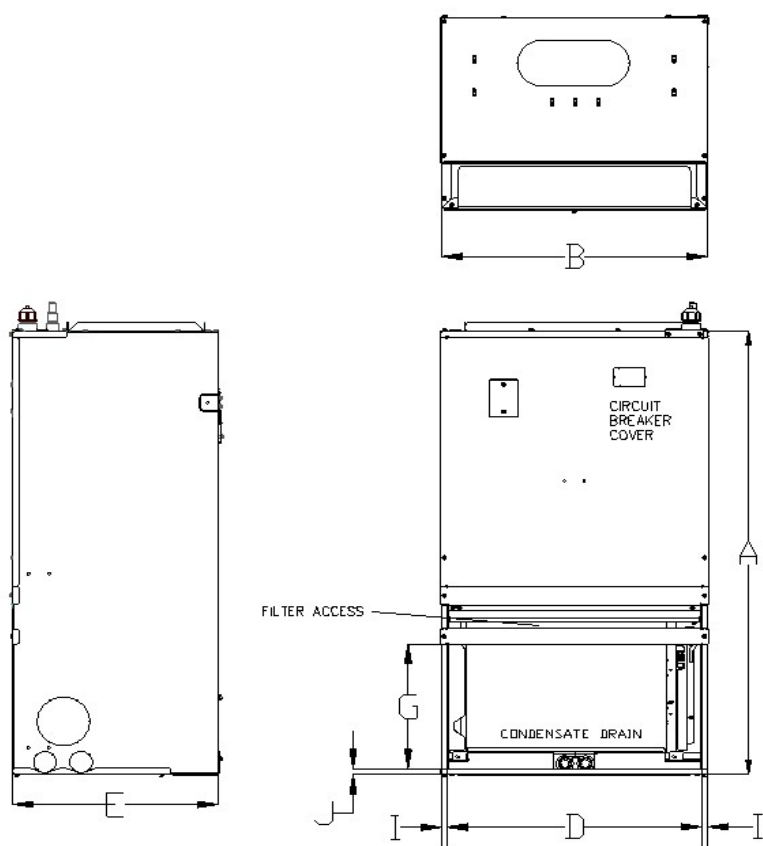
## ELECTRICAL

|                                  |                                        |
|----------------------------------|----------------------------------------|
| Indoor Power Supply              | 115V/208/230V,60Hz,1Ph                 |
| Indoor MCA 115V/(208/230V)       | 4                                      |
| 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              | /                                      |
| Indoor Fan Motor RLA             | 3                                      |
| Indoor Fan Motor W               | 250                                    |
| System Power Input @ Cooling (W) | 1,485 ( 880 ~ 1,960)                   |
| System Power Input @ Heating (W) | 1,465 ( 435 ~ 1,940)                   |
| 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)                      | 98 ( 30)      |
| Max. Height Difference(ft/m)                  | 66 ( 20)      |
| 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        |

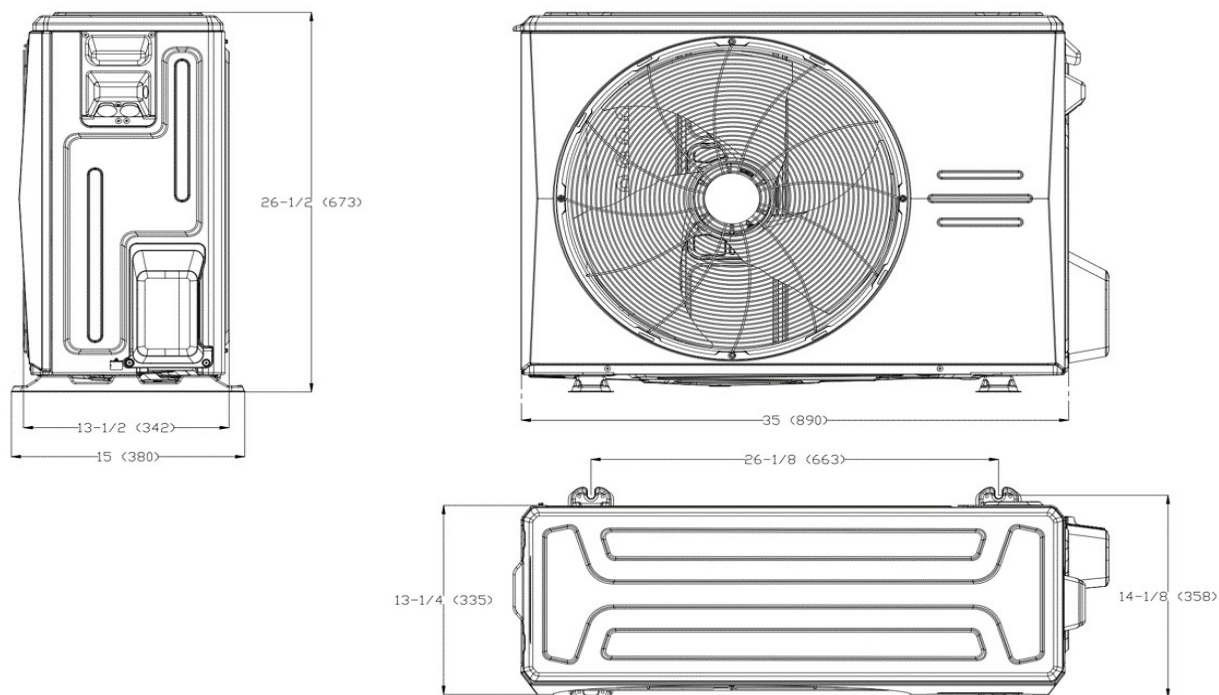
# Indoor Unit Dimension



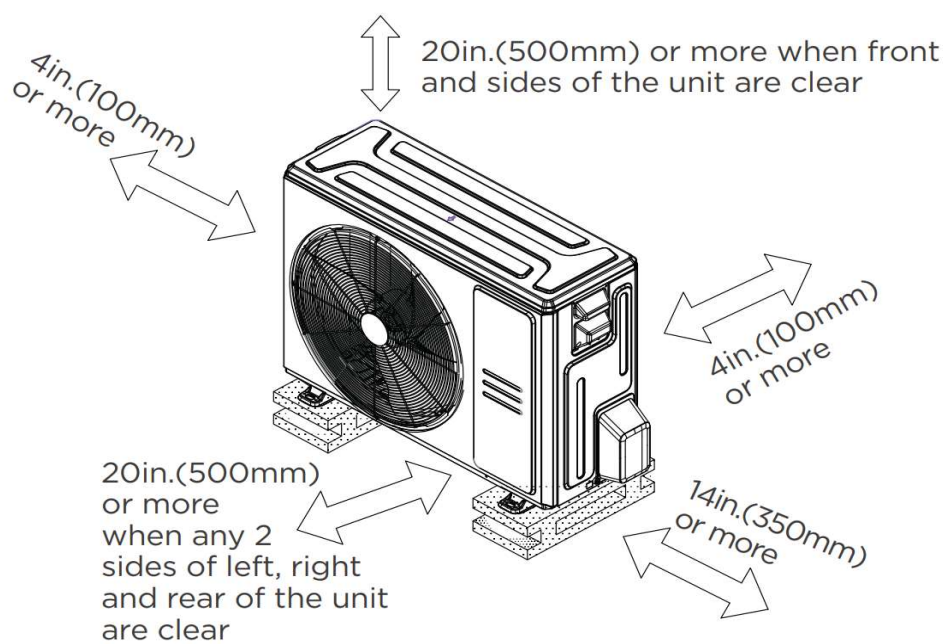
| Dimensions |                                    | Model(Btu/h) |  | 18K/24K  |       | 30K/36K  |       |
|------------|------------------------------------|--------------|--|----------|-------|----------|-------|
|            |                                    |              |  | inch     | mm    | inch     | mm    |
| A          | Model Height                       |              |  | 36-1/2   | 928   | 40       | 1017  |
| B          | Model Width                        |              |  | 20-1/4   | 515   | 22       | 559   |
| C          | Supply Air Opening Width           |              |  | 17-13/32 | 442   | 18-27/32 | 478.6 |
| D          | Return Air Opening Width           |              |  | 19-7/16  | 493.8 | 21-5/32  | 537.8 |
| E          | Model Depth                        |              |  | 15-3/4   | 399   | 19       | 483   |
| F          | Supply Air Opening Depth           |              |  | 10-7/16  | 265.2 | 9-9/32   | 235.4 |
| G          | Return Air Opening Depth           |              |  | 10-9/32  | 261   | 13-2/32  | 332.5 |
| H          | Supply Air Opening Clearance       |              |  | 1-5/32   | 29.1  | 1-5/8    | 41    |
| I          | Return Air Opening Side Clearance  |              |  | 13/32    | 10.6  | 13/32    | 10.6  |
| J          | Return Air Opening Front Clearance |              |  | 15/32    | 12    | 5/8      | 16    |

## Outdoor Unit Dimension

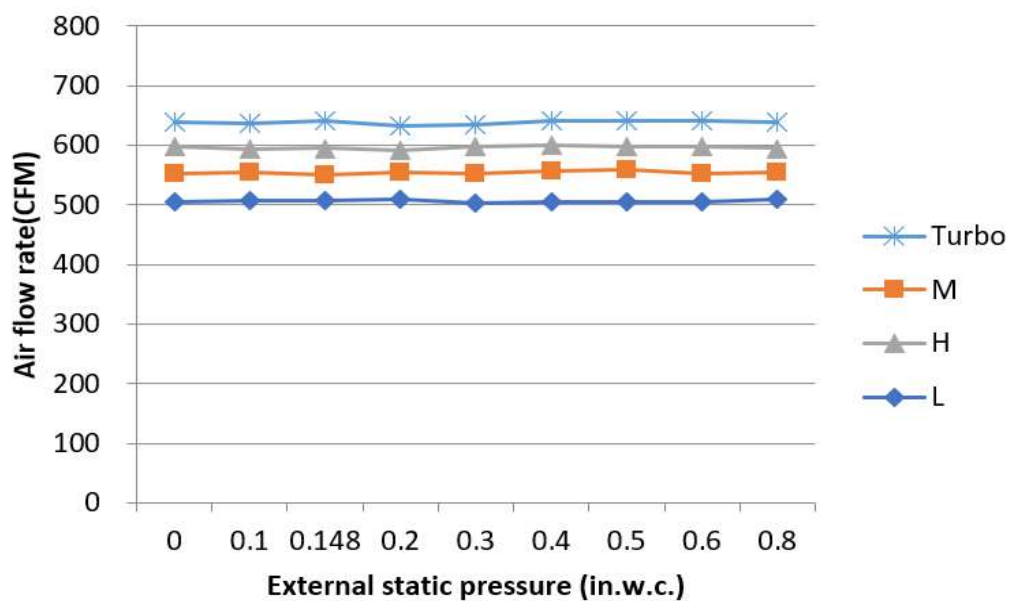
Unit:inch(mm)



## Installation Instruction For Outdoor Unit



## 18K



### Features

- Multi-position of return air: front(factory standard) or bottom
- Aluminum Coil
- Constant Air Flow system: Up to 0.80 In.W.C.
- Optional Auxiliary heat kit up to 10kW
- Easy Maintenance
- Multiple control options available:
  - Two-way communication wired controller with built-in Wi-Fi: 120N (X6W)
  - Wireless remote control
  - Third-Party 24V Thermostat
- High efficiency up to 19.3 SEER2, 12.1 EER2, 10.8 HSPF2
- Base pan heater and crankcase heater are equipped as standard