

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Advanced Heat Pancake Series  
Model Number: MAPHE-H36B-2A/MO1BE-H36B-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)    |      | 1,189 / 1,083 / 971 / 865 / 865 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) |      | 59.5 / 59.5 / 57 / 49 / 49      |
| Dimension<br>(W×D×H)                      | inch | 62-1/8 x 23-3/8 x 10-15/16      |
|                                           | mm   | 1578 × 593 × 278                |
| Package<br>(W×D×H)                        | inch | 66-1/8 x 26-3/4 x 13-5/8        |
|                                           | mm   | 1680 × 680 × 345                |
| Net/Gross Weight                          | lbs  | 143.3/156.75                    |
|                                           | kg   | 64.8/71.1                       |

## OUTDOOR SPECIFICATION

|                              |      |                          |
|------------------------------|------|--------------------------|
| Compressor Type              |      | ROTARY                   |
| Compressor Model             |      | KTF310D43UMT             |
| Refrigerant                  |      | R454B                    |
| Refrigerant Oil Charge(mL)   |      | 1000                     |
| Refrigerant Oil              |      | VG74                     |
| Outdoor Air Flow (Max) (CFM) |      | 3,002                    |
| Outdoor Noise Level (dBA)    |      | 62                       |
| Dimension<br>(W×D×H)         | inch | 37-1/4 x 16-1/8 x 31-7/8 |
|                              | mm   | 946 × 410 × 810          |
| Package<br>(W×D×H)           | inch | 42-7/8 x 19-5/8 x 34-7/8 |
|                              | mm   | 1090 × 500 × 885         |
| Net/Gross Weight             | lbs  | 153 /164                 |
|                              | kg   | 69.5 / 74.2              |

## EFFICIENCY

| Cooling |      | Heating |     |
|---------|------|---------|-----|
| SEER2   | 15.4 | HSPF2-4 | 8.7 |
| EER2    | 9.2  | COP     | 3.2 |

## PERFORMANCE of Cooling

| Cooling (Btu/hr)               |                                                     |
|--------------------------------|-----------------------------------------------------|
| Rated Capacity                 | 36,000                                              |
| Min/Max Capacity               | 11,100~38,000                                       |
| Moisture Removal(L/h)          | 3.27                                                |
| Standard Operating Range(*F/C) | -13~122(-25 ~ 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                                               | 37,000                                              |
| 2. @ 47°F Min/Max Capacity                                    | 7,900~39,000                                        |
| 3. @ 17°F Rated                                               | 24,600                                              |
| 4. @ 5°F Rated: Capacity / COP                                | 28,400/1.86                                         |
| 5. @ 5°F Max: Capacity                                        | 28,400                                              |
| Standard Operating Range(*F/C)                                | -13~75(-25 ~ 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   |

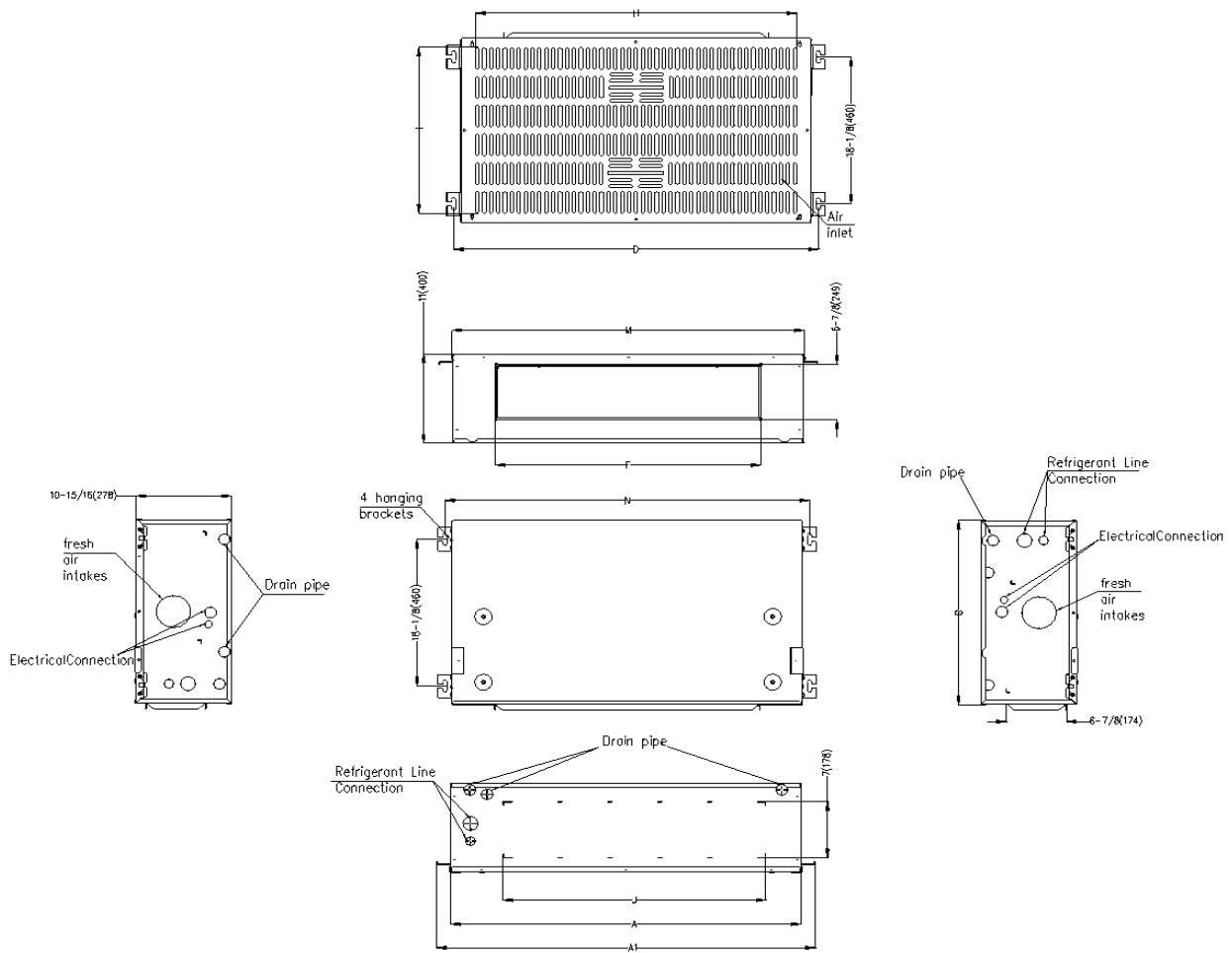
## ELECTRICAL

|                                  |                                        |
|----------------------------------|----------------------------------------|
| Indoor Power Supply              | 115/208/230,60Hz,1Ph                   |
| Indoor MCA 115V/(208/230V)       | 115V:8A; 208/230V:6A                   |
| Indoor MOP                       | 15.0                                   |
| Outdoor Power Supply             | 208/230,60Hz,1Ph                       |
| Outdoor MCA                      | 24.0                                   |
| Outdoor MOP                      | 30.0                                   |
| Communication Wiring             | AWG 20/2                               |
| Compressor RLA                   | 17.5                                   |
| Outdoor Fan Motor RLA            | 1.5                                    |
| Outdoor Fan Motor W              | 120                                    |
| Indoor Fan Motor RLA             | 115V:6.4A 208/230V:4.5A                |
| Indoor Fan Motor W               | 375                                    |
| System Power Input @ Cooling (W) | 3,913(790 ~ 4,050)                     |
| System Power Input @ Heating (W) | 3,389(570 ~ 3,770)                     |
| 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(30)        |
| Max. Pre-charged Length(ft/m)                  | 25(7.5)       |
| Refrigerant Pre-charged Amount(oz/kg)          | 116(3.3)      |
| Additional Charge of Refrigerant((oz/ft)/(g/m) | 0.7(65)       |
| Connection Method                              | Flared        |

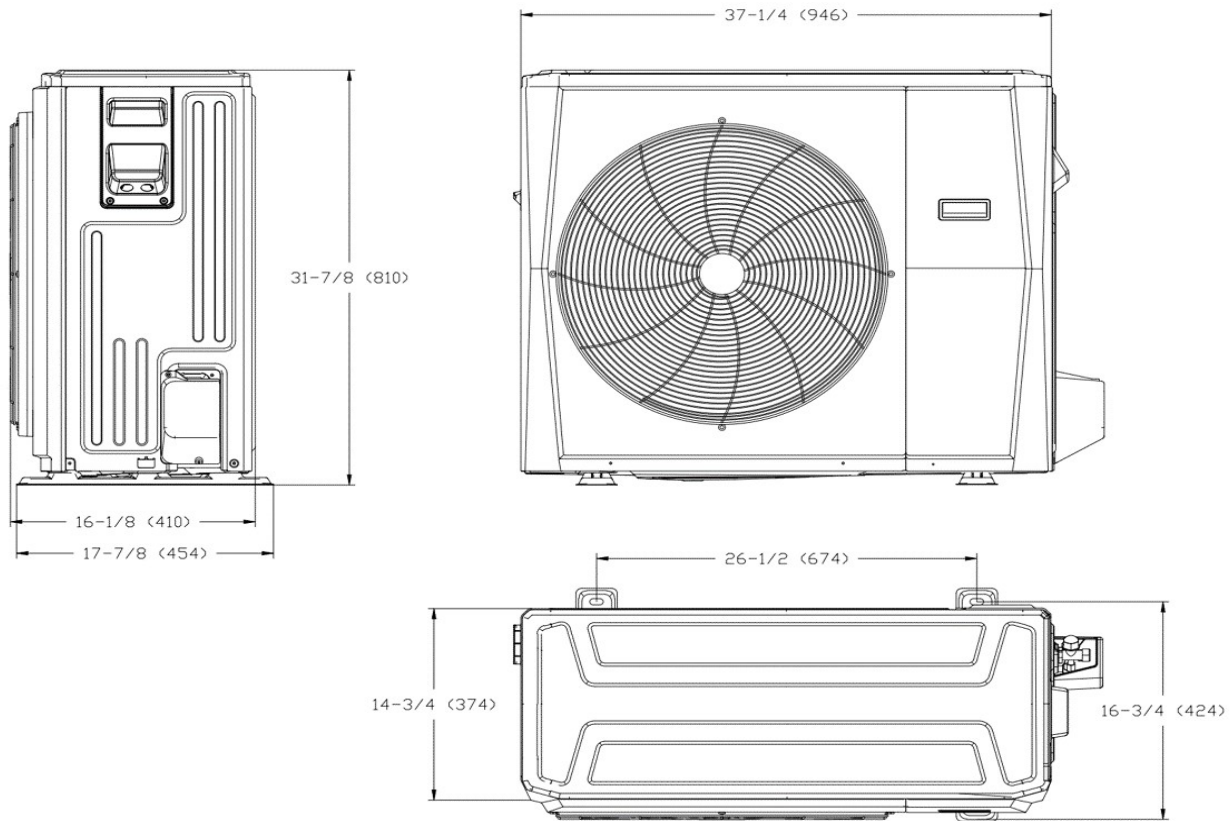
# Indoor Unit Dimension



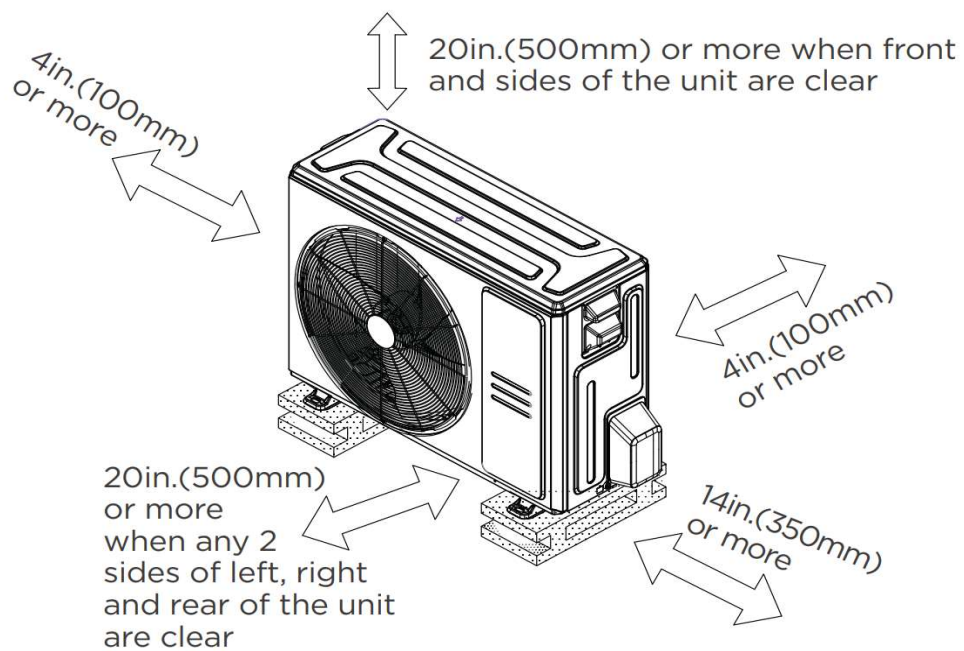
|    | 18K      |      | 24K     |      | 30K      |      | 36K      |      |
|----|----------|------|---------|------|----------|------|----------|------|
|    | inch     | mm   | inch    | mm   | inch     | mm   | inch     | mm   |
| A  | 39-15/16 | 1015 | 45-7/8  | 1165 | 51-15/16 | 1320 | 58-7/8   | 1495 |
| A1 | 43-1/4   | 1098 | 49-1/8  | 1248 | 55-1/4   | 1403 | 62-1/8   | 1578 |
| J  | 30       | 761  | 35-7/8  | 911  | 41-15/16 | 1066 | 48-7/8   | 1241 |
| D  | 41-5/8   | 1057 | 47-1/2  | 1207 | 53-5/8   | 1362 | 60-1/2   | 1537 |
| F  | 30-1/4   | 769  | 36-3/16 | 919  | 42-5/16  | 1074 | 49-3/16  | 1249 |
| H  | 36-5/8   | 930  | 39-3/4  | 1010 | 47-5/8   | 1210 | 53-15/16 | 1370 |
| M  | 40-3/16  | 1020 | 46-1/16 | 1170 | 52-3/16  | 1325 | 59-1/16  | 1500 |
| N  | 41-5/8   | 1057 | 40-7/16 | 1027 | 53-5/8   | 1362 | 60 1/2   | 1537 |

## Outdoor Unit Dimension

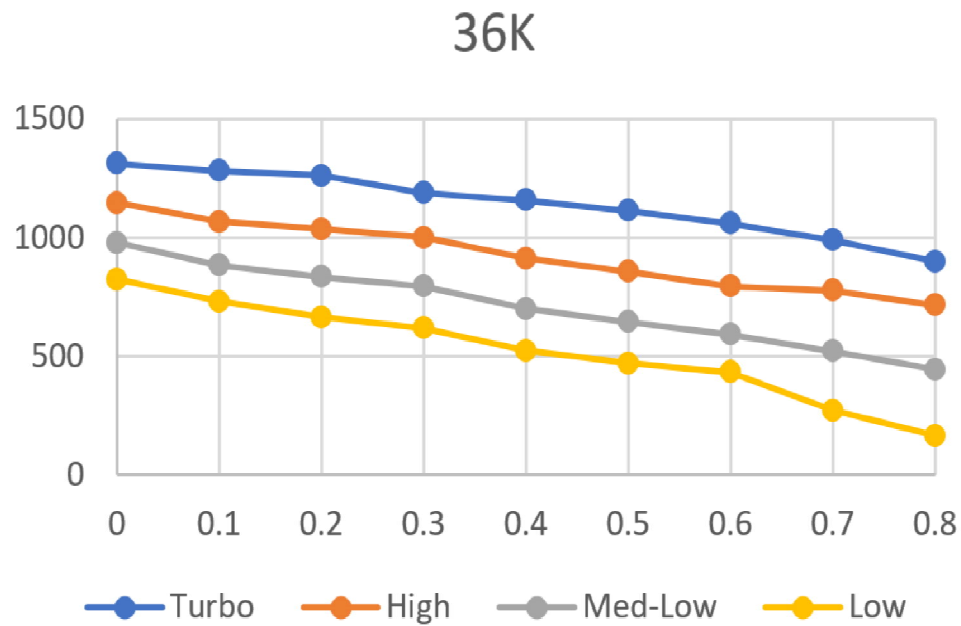
Unit:inch(mm)



## Installation Instruction For Outdoor Unit



## Fan Performance For Indoor Unit



## Features

- Downward or backward (optional) air inlet
- Aluminum Coil
- The IDU supports 115/230V voltage compatibility
- 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 controller
  - Third-Party 24V Thermostat
- Adaptive control systems with 24V and RS485 communication
- High efficiency up to 17.5 SEER2, 12 EER2, 10.5 HSPF2
- Base pan heater and crankcase heater are equipped as standard