

## 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)    | 600 / 565 / 530 / 489 / 489 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) | 55.5/55.5/52.5/50.5/50.5    |
| Dimension (WxDxH)                         | inch 43.23 x 23.33 x 10.93  |
|   | mm 1098x592.7x277.6         |
| Package (WxDxH)                           | inch 47.24 x 680 x 13.58    |
|   | mm 1200x680x345             |
| Net/Gross Weight                          | lbs 54/58                   |
|   | kg 53.5/58                  |

## 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)    | 59                         |
| Dimension (WxDxH)            | inch 35.04 x 13.46 x 26.5  |
|                              | mm 890x342x673             |
| Package (WxDxH)              | inch 39.17 x 15.67 x 29.13 |
|                              | mm 995x398x740             |
| Net/Gross Weight             | lbs 101.41/109.13          |
|                              | kg 46/49.5                 |

## EFFICIENCY

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 16.8 | HSPF2-4 | 10.5 |
| EER2    | 12   | COP     | 3.5  |

## PERFORMANCE of Cooling

| Cooling (Btu/hr)                |   |
|---------------------------------|---|
| Rated Capacity                  | 18,000  |
| Min/Max Capacity                | 6,000~20,000  |
| Moisture Removal(L/h)           | 1.46  |
| 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   | 19,000  |
| 1. @ 47°F Min/Max Capacity                                    | 6,600~22,800  |
| 2. @ 17°F Rated   | 15,000  |
| 3. @ 5°F Rated: Capacity / COP                                | 19,000/1.8  |
| 3. @ 5°F Max: Capacity  | 19,000  |
| Standard Operating Range(°F/°C)                               | -22~75(-30~24)                                      |
| 1. Rated Heating Conditions:                                  | Indoor: 70°F DB/43°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   |

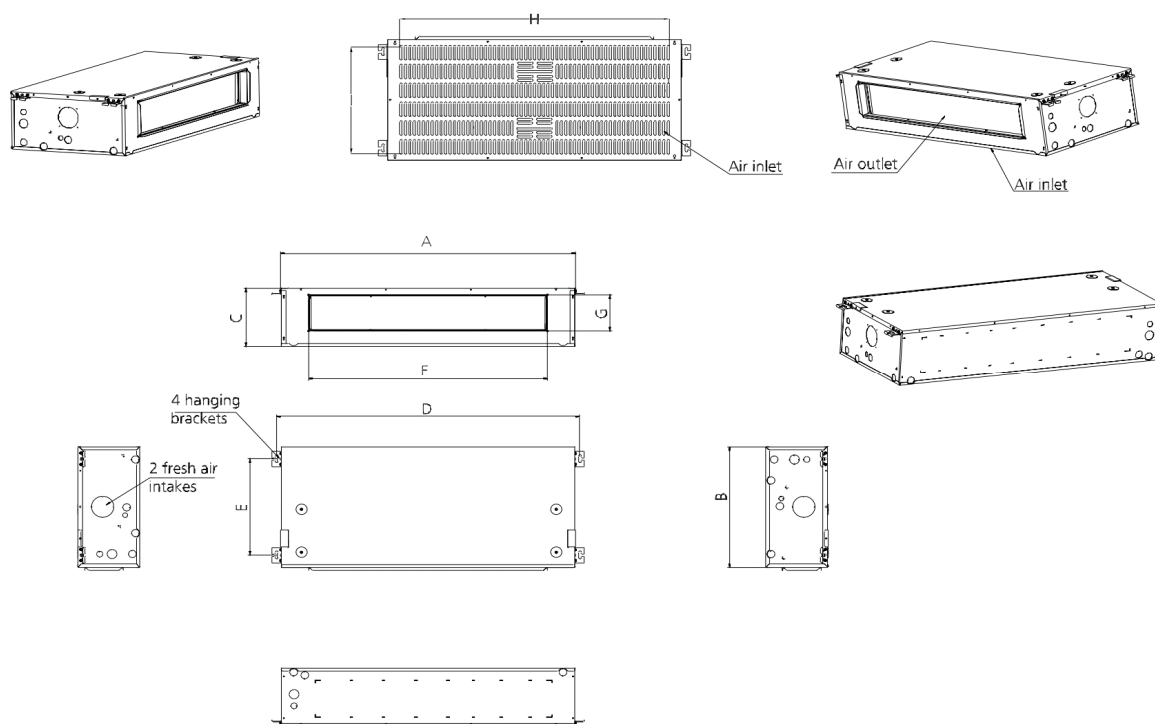
## ELECTRICAL

|                                  |  |
|----------------------------------|--|
| Indoor Power Supply              | 115/208/230,60Hz,1Ph                   |
| Indoor MCA 115V/(208/230V)       | 115V:6;208/230V:5                      |
| Indoor MOP                       | 15                                     |
| Outdoor Power Supply             | 115/208/230,60Hz,1Ph                   |
| Outdoor MCA                      | 16                                     |
| Outdoor MOP                      | 20                                     |
| Communication Wiring             | AWG 20/2                               |
| Compressor RLA                   | 10.5                                   |
| Outdoor Fan Motor RLA            | 0.9                                    |
| Outdoor Fan Motor W              | 80                                     |
| Indoor Fan Motor RLA             | 115V:4;208/230V:3.5                    |
| Indoor Fan Motor W               | 250                                    |
| System Power Input @ Cooling (W) | 2(600 ~ 2,000)                         |
| System Power Input @ Heating (W) | 1,590(500 ~ 1,950)                     |
| MCA: Min. circuit amps (A)       | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)          |

## PIPING

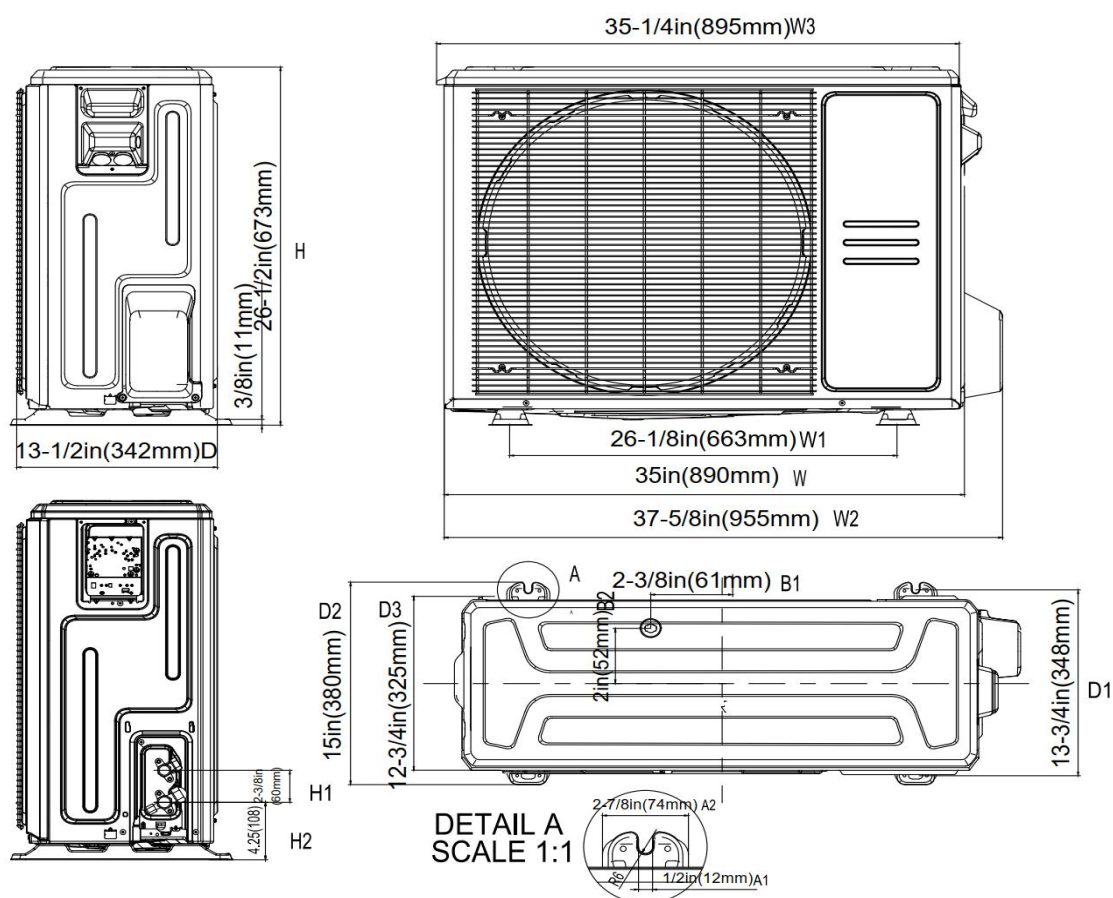
|   |               |
|---|---------------|
| Throttle type(Indoor)                           | EXV           |
| Throttle type(Outdoor)                          | EXV           |
| Liquid Size                                     | 9.52mm(3/8in) |
| Gas Size  | 19mm(3/4in)   |
| Max. Piping Length(ft/m)                        | 98(30)        |
| Max. Height Difference(ft/m)                    | 66(20)        |
| Max. Pre-charged Length(ft/m)                   | 24.6(7.5)     |
| Refrigerant Pre-charged Amount(oz/kg)           | 74.08(2.1)    |
| Additional Charge of Refrigerant((oz/ft)/(g/m)) | 0.7(65)       |
| Connection Method                               | Flared        |

## Indoor Unit Dimension

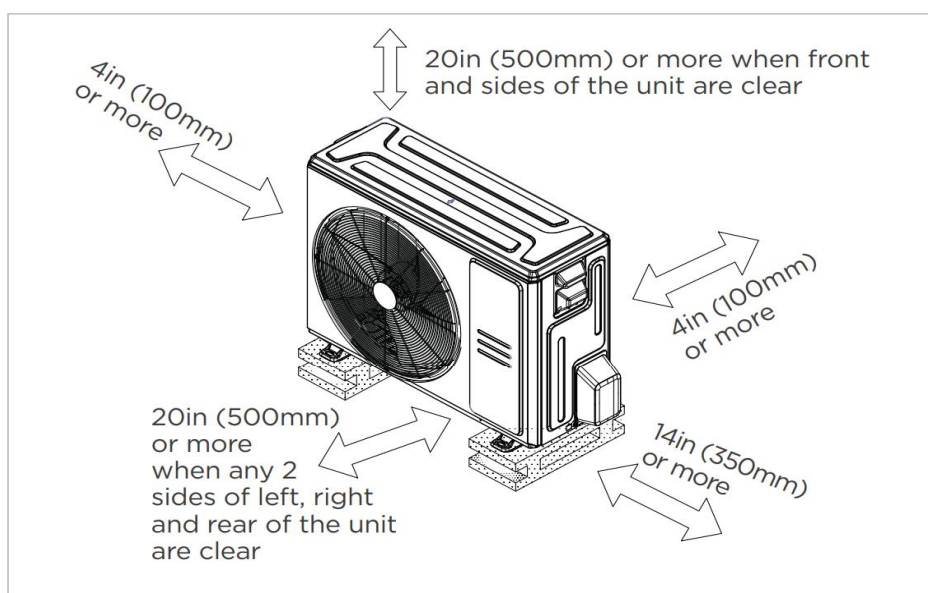


| Dimensions              |   | Model              | 18k             | 24k            | 30k/            | 36k            |
|-------------------------|---|--------------------|-----------------|----------------|-----------------|----------------|
|                         |   |                    | inch(mm)        | inch(mm)       | inch(mm)        | inch(mm)       |
| Outline Dimension       | A | Model Model        | 39-15/16 (1015) | 45-7/8 (1165)  | 51-15/16 (1320) | 58-7/8 (1495)  |
|                         | B | Model Width        | 23-5/16 (593)   | 23-5/16 (593)  | 23-5/16 (593)   | 23-5/16 (593)  |
|                         | C | Model Height       | 10-15/16 (278)  | 10-15/16 (278) | 10-15/16 (278)  | 10-15/16 (278) |
| Size Of Mounted Lug     | D | Mounted Lug Length | 41-5/8 (1057)   | 47-1/2 (1207)  | 53-5/8 (1362)   | 60-1/2 (1537)  |
|                         | E | Mounted Lug Width  | 18-1/8 (460)    | 18-1/8 (460)   | 18-1/8 (460)    | 18-1/8 (460)   |
| Air Outlet Opening Size | F | Air Outlet Length  | 30-5/16 (769)   | 36-3/16 (919)  | 42-5/16 (1074)  | 49-3/16 (1249) |
|                         | G | Air Outlet Width   | 6-7/8 (174)     | 6-7/8 (174)    | 6-7/8 (174)     | 6-7/8 (174)    |
| Air Return Opening Size | H | Air Return Length  | 38-3/8 (975)    | 44-5/16 (1125) | 50-3/8 (1280)   | 57-1/4 (1455)  |
|                         | I | Air Return Width   | 21-1/8 (536)    | 21-1/8 (536)   | 21-1/8 (536)    | 21-1/8 (536)   |

## Outdoor Unit Dimension



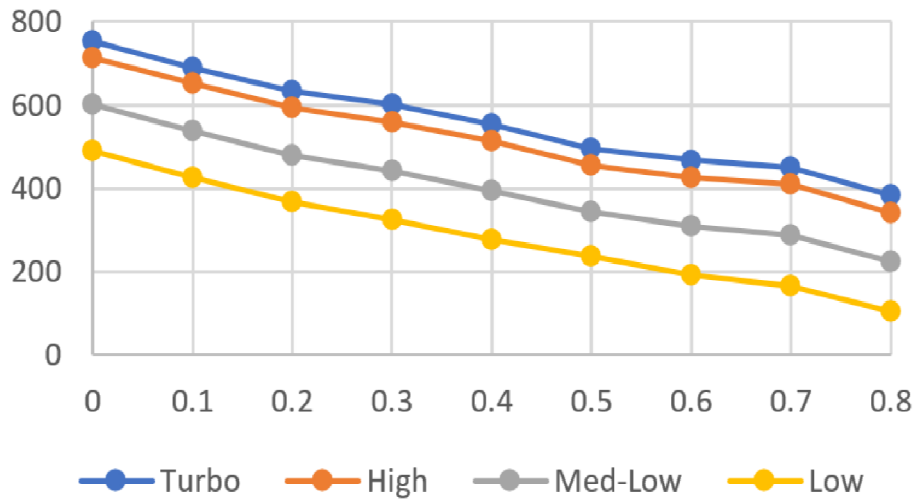
## Installation Instruction For Outdoor Unit



☒ Meets all spatial requirements shown in Installation Clearance Requirements above.

## Fan Performance For Indoor Unit

18K



## Features

- High efficiency up to 16.8 SEER2, 12 EER2, 10.5 HSPF2
- Aluminum Coil
- IDU compatible with 115V and 230V
- Constantly Air Flow system up to 0.80 In.W.G
- Optional Auxiliary heat kit up to 10kW
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller:AWC-4
  - Two way communication wired controller with built-in WiFi:AWC-8P-LC-WIFI
  - Wireless remote controller
  - Third-Party 24V Thermostat
- Adaptive Control wiring method on 24V and RS485
- Downward or Backward (optional) air inlet
- Chassis heater and crankcase heater equipped as standard