

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: EP Energy Star Series  
Model Number: MSEES-H09B-1A/MO1ES-H09B-1A

## High Wall Heat Pump System

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



## INDOOR SPECIFICATION

|                                           |                               |
|-------------------------------------------|-------------------------------|
| Indoor Air Flow (Turbo/H/M/L/Si) (CFM)    | 400 / 324 / 283 / 235 / 212   |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) | 44 / 37/ 33 / 21 / 18         |
| Dimension (W×D×H)                         | inch 31-3/8 x 8-7/8 x 11-5/8  |
|                                           | mm 795 x 225 x 295            |
| Package (W×D×H)                           | inch 36-1/4 x 12-1/4 x 14-5/8 |
|                                           | mm 920 x 310 x 370            |
| Net/Gross Weight                          | lbs 23 / 30                   |
|                                           | kg 10.5/13.4                  |

## OUTDOOR SPECIFICATION

|                              |                               |
|------------------------------|-------------------------------|
| Compressor Type              | ROTARY                        |
| Compressor Model             | KSK103D33UEZ3                 |
| Refrigerant                  | R454B                         |
| Refrigerant Oil Charge(mL)   | 310                           |
| Refrigerant Oil              | VG74                          |
| Outdoor Air Flow (Max) (CFM) | 1,235                         |
| Outdoor Noise Level (dBA)    | 52.5                          |
| Dimension (W×D×H)            | inch 30-1/8 x 11-7/8 x 21-7/8 |
|                              | mm 765 x 303 x 555            |
| Package (W×D×H)              | inch 34-7/8 x 13-1/4 x 24     |
|                              | mm 887 x 337 x 610            |
| Net/Gross Weight             | lbs 65 / 70                   |
|                              | kg 29.3 / 31.8                |

## EFFICIENCY

| Cooling    | Heating      |
|------------|--------------|
| SEER2 25.4 | HSPF2-4 10.0 |
| EER2 14.5  | COP 3.80     |

## PERFORMANCE of Cooling

| Cooling (Btu/hr)                |                                                     |
|---------------------------------|-----------------------------------------------------|
| Rated Capacity                  | 9,000                                               |
| Min/Max Capacity                | 2,600~13,000                                        |
| Moisture Removal(L/h)           | 1.1                                                 |
| Standard Operating Range(*F/*C) | -13~122 (-25 ~ 50)                                  |
| 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                 | 10,000                                              |
| 1. @ 47°F Min/Max Capacity      | 4,600~13,600                                        |
| 2. @ 17°F Rated                 | 8,500                                               |
| 3. @ 5°F Rated: Capacity / COP  | 7,200/2.23                                          |
| 3. @ 5°F Max: Capacity          | 7,200                                               |
| Standard Operating Range(*F/*C) | -13~75 (-25 ~ 24)                                   |
| 1. Conditions:                  | Indoor: 70°F DB/60°F WB<br>Outdoor: 47°F DB/43°F WB |
| 2. Conditions:                  | Indoor: 70°F DB/60°F WB<br>Outdoor: 17°F DB/15°F WB |
| 3. Conditions                   | Indoor: 70°F DB/60°F WB<br>Outdoor: 5°F DB/5°F WB   |

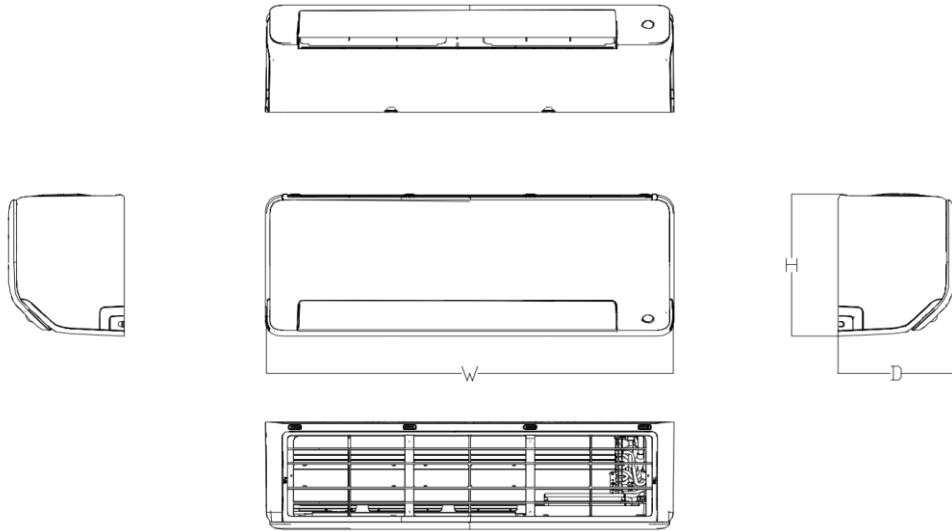
## ELECTRICAL

|                                  |                                        |
|----------------------------------|----------------------------------------|
| Power Supply                     | 115V,60Hz,1Ph                          |
| System MCA                       | 18.0                                   |
| Connection Wiring                | AWG 14/4                               |
| System MOCP                      | 20.0                                   |
| Compressor RLA                   | 14.0                                   |
| Outdoor Fan Motor RLA            | 0.6                                    |
| Outdoor Fan Motor W              | 34                                     |
| Indoor Fan Motor RLA             | 0.6                                    |
| Indoor Fan Motor W               | 20                                     |
| System Power Input @ Cooling (W) | 621 (180 ~ 1,080)                      |
| System Power Input @ Heating (W) | 771 (300 ~1,110)                       |
| MCA: Min. circuit amps (A)       | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)          |

## PIPING

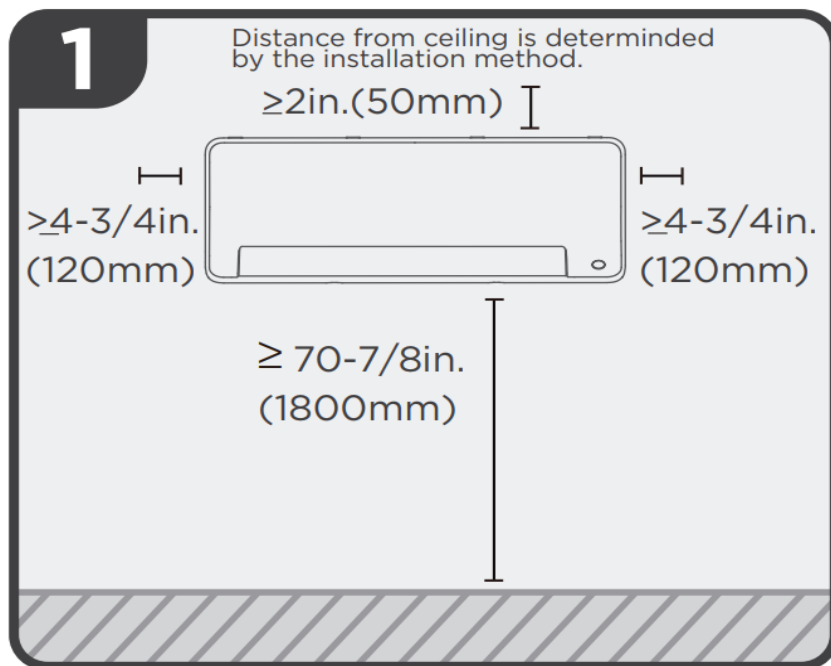
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|-----------------------------------------------|---------------|
| Throttle type(Indoor)                         | N/A           |
| Throttle type(Outdoor)                        | EXV           |
| Liquid Size                                   | 1/4" (6.35mm) |
| Gas Size                                      | 3/8" (9.52mm) |
| Max. Piping Length(ft/m)                      | 82 (25)       |
| Max. Height Difference(ft/m)                  | 49 (15)       |
| Max. Pre-charged Length(ft/m)                 | 25 (7.5)      |
| Refrigerant Pre-charged Amount(oz/g)          | 34 (0.95)     |
| Additional Charge of Refrigerant((oz/ft)/(g/r | 0.16 (15)     |
| Connection Method                             | Flared        |

#### Indoor Unit Dimension



| Capacity | Body Code | Unit | W      | D      | H      |
|----------|-----------|------|--------|--------|--------|
| 6k~12k   | B         | mm   | 795    | 225    | 295    |
|          |           | inch | 31-3/8 | 8-7/8  | 11-5/8 |
| 12k~18k  | C         | mm   | 965    | 239    | 319    |
|          |           | inch | 38     | 9-3/8  | 12-1/2 |
| 24k~36k  | D         | mm   | 1140   | 275    | 370    |
|          |           | inch | 44-7/8 | 10-7/8 | 14-1/2 |

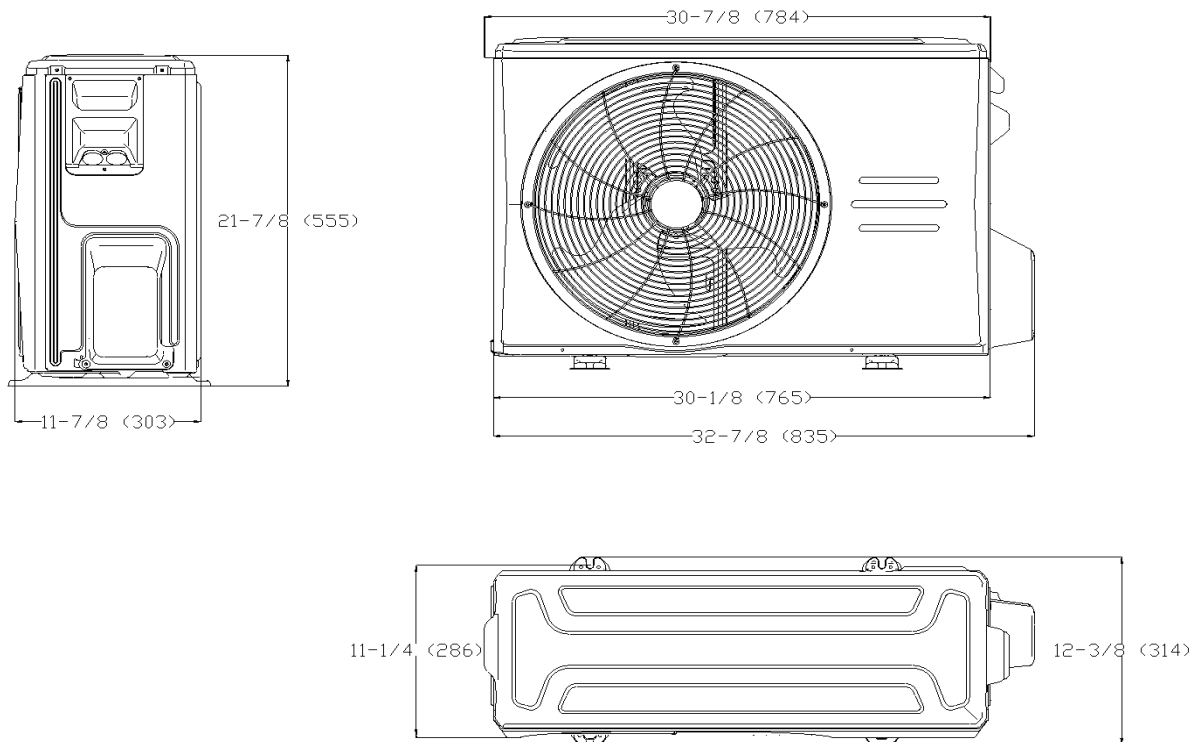
#### Installation Instruction



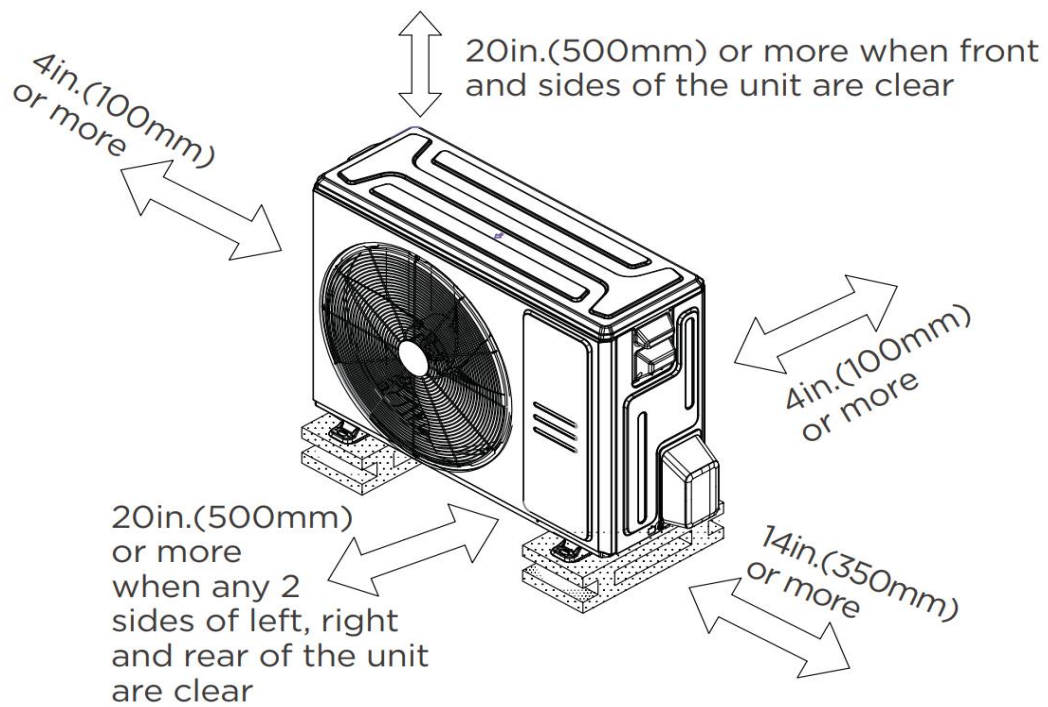
Select Installation Location

### Outdoor Unit Dimension

Unit: inch (mm)



### Installation Instruction



## FEATURES

- Intelligent eye
- Easy maintenance design
- Indoor unit TU1 copper coil
- Humidity control
- 1~100% fan speed setting
- WiFi capability: through WiFi dongle or wired controller with built-in WiFi
- OTA(by using WiFi dongle)
- Multiple control options available:
  - Two way communication wired controller:120N(X6)
  - Two way communication wired controller with built-in WiFi:120N(X6W)
  - Infrared wired controller: 120L
  - Wireless remote controller
  - Third-Party 24V Thermostat\*

\*24V interface is required.