

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: AG Entry Series  
Model Number: MSGNS-H18B-2A/MO1BS-H18B-2A

## 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)    |      | 471 / 400 / 330 / 271 / 271 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) |      | 49 / 45 / 38 / 23 / 19      |
| Dimension (W×D×H)                         | inch | 38-1/8 x 9-1/2 x 12-5/8     |
|                                           | mm   | 969 x 241 x 320             |
| Package (W×D×H)                           | inch | 41-1/8 x 12 x 16            |
|                                           | mm   | 1045 x 305 x 405            |
| Net/Gross Weight                          | lbs  | 25/33                       |
|                                           | kg   | 11.5/14.9                   |

## OUTDOOR SPECIFICATION

|                              |      |                      |
|------------------------------|------|----------------------|
| Compressor Type              |      | ROTARY               |
| Compressor Model             |      | KSN140D21UFZ         |
| Refrigerant                  |      | R454B                |
| Refrigerant Oil Charge(mL)   |      | 440                  |
| Refrigerant Oil              |      | VG74                 |
| Outdoor Air Flow (Max) (CFM) |      | 1,235                |
| Outdoor Noise Level (dBA)    |      | 58                   |
| Dimension (W×D×H)            | inch | 31-3/4 x 13 x 21-3/4 |
|                              | mm   | 805 x 330 x 554      |
| Package (W×D×H)              | inch | 36 x 14-5/8 x 24-1/2 |
|                              | mm   | 915 x 370 x 615      |
| Net/Gross Weight             | lbs  | 72/78                |
|                              | kg   | 32.8/35.6            |

## EFFICIENCY

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 20.2 | HSPF2-4 | 9.1  |
| EER2    | 11.5 | COP     | 3.08 |

## PERFORMANCE of Cooling

| Cooling (Btu/hr)                |                                                     |
|---------------------------------|-----------------------------------------------------|
| Rated Capacity                  | 18,000                                              |
| Min/Max Capacity                | 2,600~18,600                                        |
| Moisture Removal(L/h)           | 2.5                                                 |
| Standard Operating Range(*F/*C) | 5~122 (-15 ~ 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                 | 18,800                                              |
| 1. @ 47°F Min/Max Capacity      | 6,100~19,200                                        |
| 2. @ 17°F Rated                 | 11,700                                              |
| 3. @ 5°F Rated: Capacity / COP  | 11,500 / 2.00                                       |
| 3. @ 5°F Max: Capacity          | 11,500                                              |
| Standard Operating Range(*F/*C) | 5~75 (-15 ~ 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   |

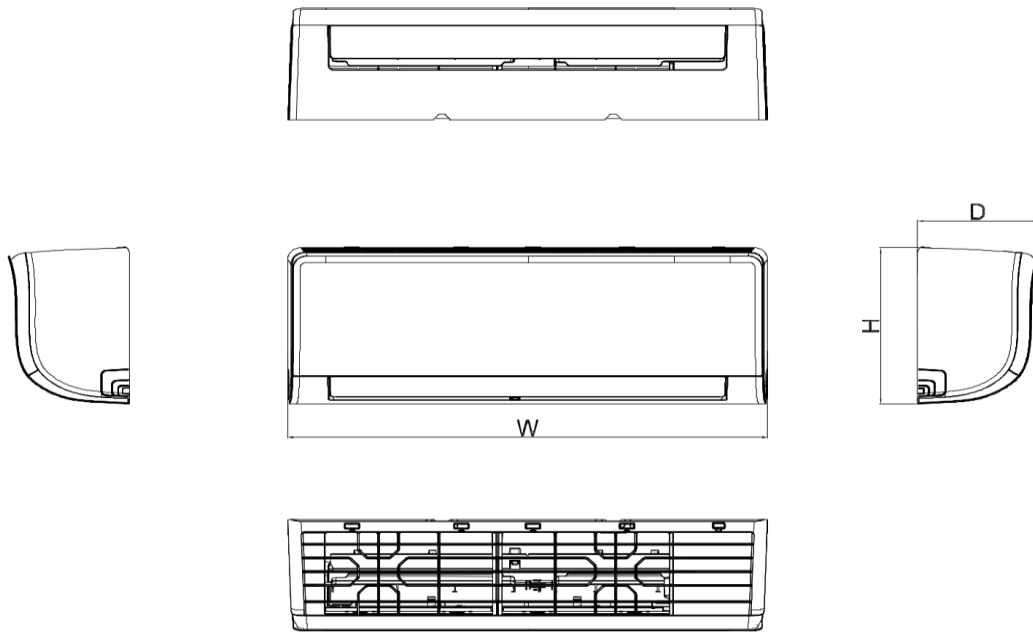
## ELECTRICAL

|                                  |                                        |
|----------------------------------|----------------------------------------|
| Power Supply                     | 208/230V,60Hz,1Ph                      |
| System MCA                       | 15.0                                   |
| Connection Wiring                | AWG 14/4                               |
| System MOCP                      | 20.0                                   |
| Compressor RLA                   | 10.0                                   |
| Outdoor Fan Motor RLA            | 0.4                                    |
| Outdoor Fan Motor W              | 34                                     |
| Indoor Fan Motor RLA             | 0.5                                    |
| Indoor Fan Motor W               | 30                                     |
| System Power Input @ Cooling (W) | 1565 (280 ~ 1,680)                     |
| System Power Input @ Heating (W) | 1790 (365 ~2,010)                      |
| MCA: Min. circuit amps (A)       | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)          |

## PIPING

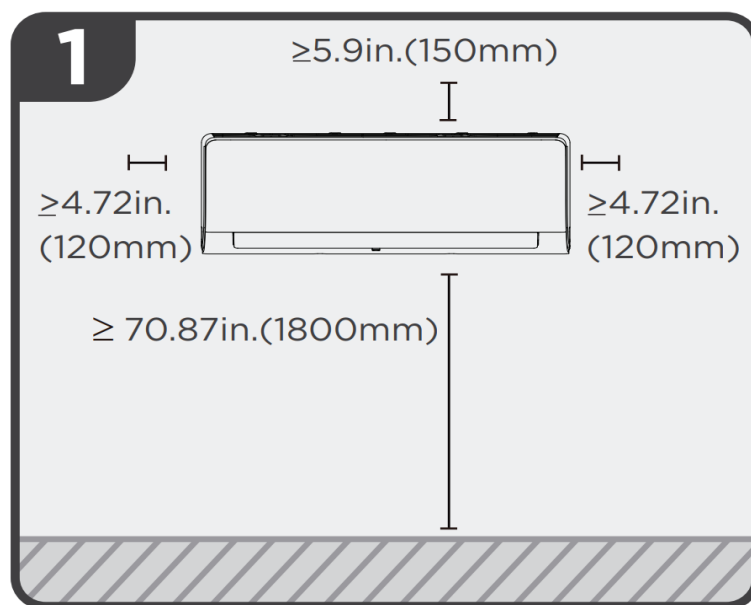
|                                               |               |
|-----------------------------------------------|---------------|
| Throttle type(Indoor)                         | N/A           |
| Throttle type(Outdoor)                        | Capillary     |
| Liquid Size                                   | 1/4" (6.35mm) |
| Gas Size                                      | 1/2" (12.7mm) |
| 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/g)          | 41 (1.15)     |
| Additional Charge of Refrigerant((oz/ft)/(g/r | 0.16 (15)     |
| Connection Method                             | Flared        |

### Indoor Unit Dimension



| Capacity | Body Code | Unit | W      | D      | H      |
|----------|-----------|------|--------|--------|--------|
| 9k       | A         | mm   | 726    | 210    | 291    |
|          |           | inch | 28-5/8 | 8-1/4  | 11-1/2 |
| 12k      | B         | mm   | 835    | 208    | 295    |
|          |           | inch | 32-7/8 | 8-1/4  | 11-5/8 |
| 18k      | C         | mm   | 969    | 241    | 320    |
|          |           | inch | 38-1/8 | 9-1/2  | 12-5/8 |
| 24k      | D         | mm   | 1083   | 244    | 336    |
|          |           | inch | 42-5/8 | 9-5/8  | 13-1/4 |
| 30k~36k  | F         | mm   | 1259   | 283    | 362    |
|          |           | inch | 49-5/8 | 11-1/8 | 14-1/4 |

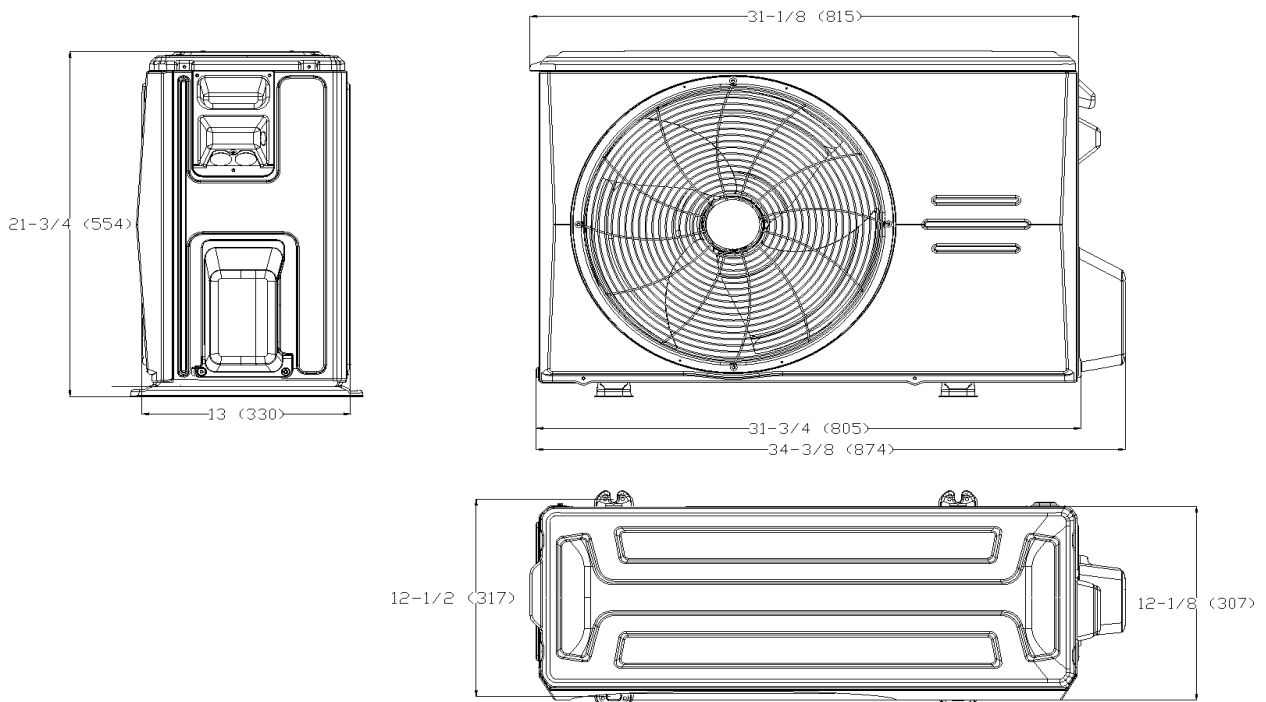
### Installation Instruction



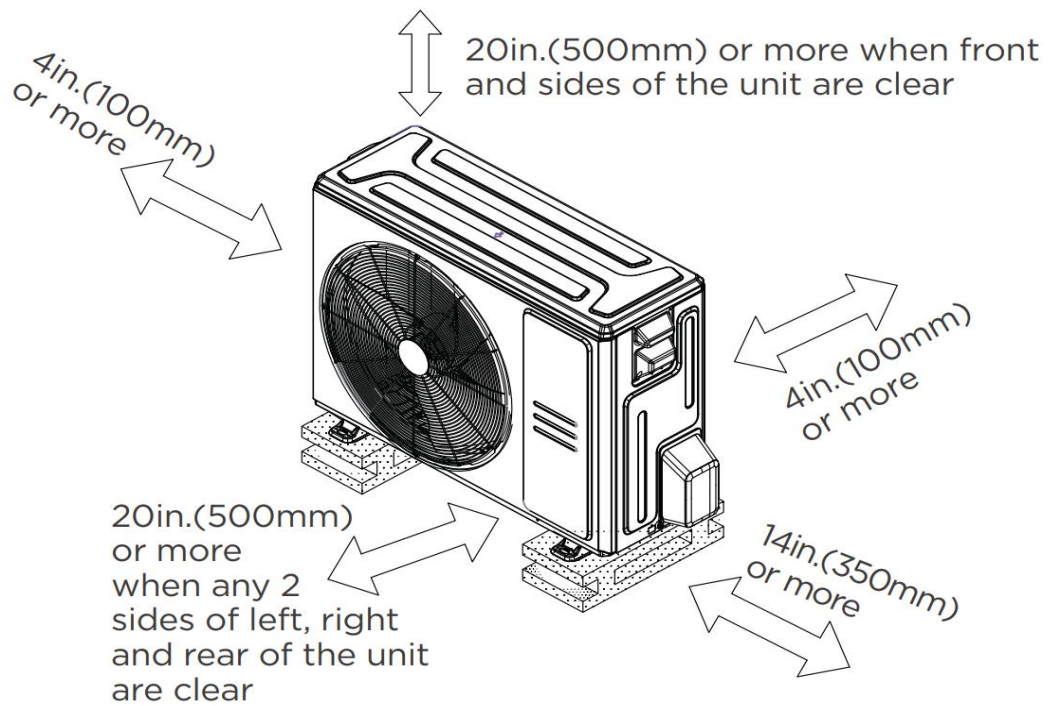
Select Installation Location

### Outdoor Unit Dimension

Unit: inch (mm)



### Installation Instruction



## FEATURES

- 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.