



# SUBMITTAL DATA

## VHP12CA-1

| 4-Way Cassette 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)    |      | 417.9 / 364.9 / 306.1 / 194.2 / 147.2 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) |      | 46/43.5/40.5/27.5/26.00               |
| Dimension (W×D×H)                         | inch | 22.44 x 22.44 x 9.65                  |
|                                           | mm   | 570.0×570.0×245.0                     |
| Package (W×D×H)                           | inch | 28.15 x 25.20 x 11.61                 |
|                                           | mm   | 715×640×295                           |
| Net/Gross Weight                          | lbs  | 35.27/41.89                           |
|                                           | kg   | 16.0/19.0                             |

| OUTDOOR SPECIFICATION        |      |                       |
|------------------------------|------|-----------------------|
| Compressor Type              |      | ROTARY                |
| Compressor Model             |      | KTN110D42UFZ          |
| Refrigerant                  |      | R454B                 |
| Refrigerant Oil Charge(mL)   |      | 350                   |
| Refrigerant Oil              |      | VG74                  |
| Outdoor Air Flow (Max) (CFM) |      | 1471.5                |
| Outdoor Noise Level (dBA)    |      | 57.0                  |
| Dimension (W×D×H)            | inch | 31.69 x 12.99 x 21.81 |
|                              | mm   | 805.0×330.0×554.0     |
| Package (W×D×H)              | inch | 36.02 x 14.57 x 24.21 |
|                              | mm   | 915×370×615           |
| Net/Gross Weight             | lbs  | 72.75/78.70           |
|                              | kg   | 33/35.7               |

| EFFICIENCY |      |         |      |
|------------|------|---------|------|
| Cooling    |      | Heating |      |
| SEER2      | 22.2 | HSPF2-4 | 11.6 |
| EER2       | 12.5 | COP     | 3.70 |

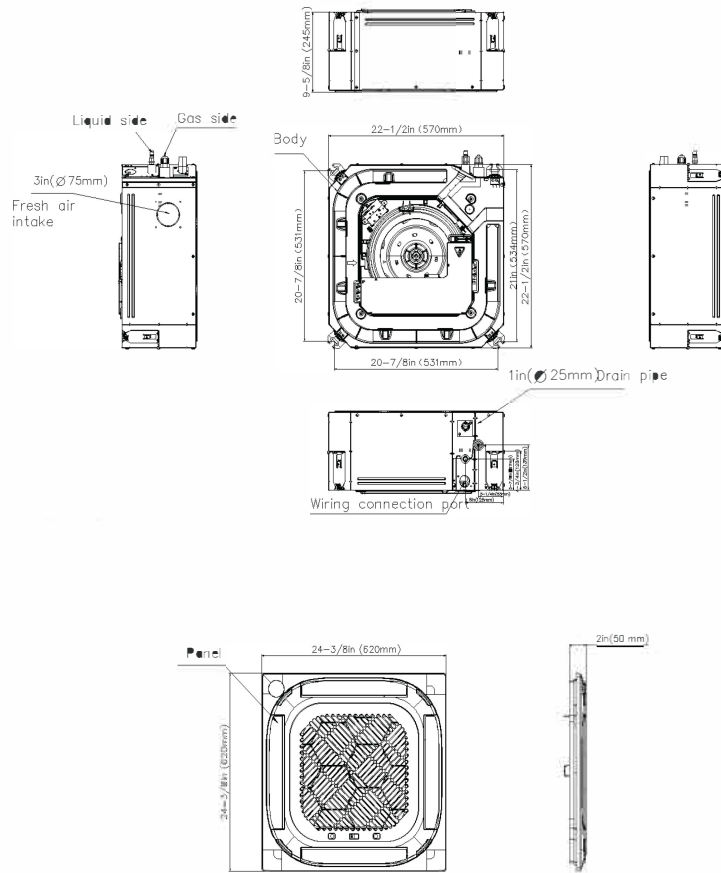
| PERFORMANCE of Cooling          |                                                     |
|---------------------------------|-----------------------------------------------------|
| Cooling (Btu/hr)                |                                                     |
| Rated Capacity                  | 12000                                               |
| Min/Max Capacity                | 3800~15100                                          |
| Moisture Removal(L/h)           | 1.45                                                |
| Standard Operating Range(*F/*C) | -22~122(-30~50)                                     |
| 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                 | 12000                                               |
| 1. @ 47°F Min/Max Capacity      | 5300~16200                                          |
| 2. @ 17°F Rated                 | 10000                                               |
| 3. @ 5°F Rated: Capacity / COP  | 11500/2.00                                          |
| 3. @ 5°F Max: Capacity          | 11500                                               |
| Standard Operating Range(*F/*C) | -22~75(-30~24)                                      |
| 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   |

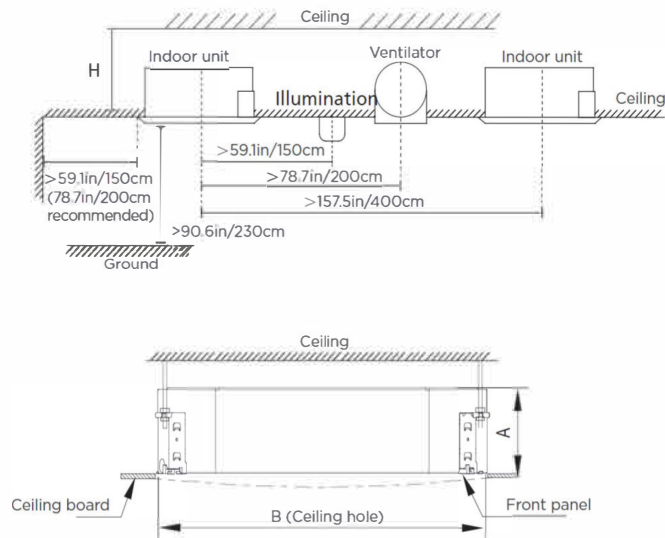
| ELECTRICAL                       |                                        |
|----------------------------------|----------------------------------------|
| Power Supply                     | 208/230V, 60Hz, 1Ph                    |
| System MCA                       | 15.00                                  |
| Connection Wiring                | 14#x4                                  |
| System MOCP                      | 15                                     |
| Compressor RLA                   | 11.6                                   |
| Outdoor Fan Motor RLA            | 0.5                                    |
| Outdoor Fan Motor W              | 34                                     |
| Indoor Fan Motor RLA             | 0.9                                    |
| Indoor Fan Motor W               | 45                                     |
| System Power Input @ Cooling (W) | 945(210 ~ 1260)                        |
| System Power Input @ Heating (W) | 951(285 ~ 1330)                        |
| 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)                          | EXV           |
| Liquid Size                                     | 6.35mm(1/4in) |
| Gas Size                                        | 9.52mm(3/8in) |
| Max. Piping Length(ft/m)                        | 82.00(25)     |
| Max. Height Difference(ft/m)                    | 49.20(15)     |
| Max. Pre-charged Length(ft/m)                   | 24.6(7.5)     |
| Refrigerant Pre-charged Amount(oz/kg)           | 35.27(1.00)   |
| Additional Charge of Refrigerant((oz/ft)/(g/m)) | 0.16(15)      |
| Connection Method                               | Flared        |

# Indoor Unit Dimension



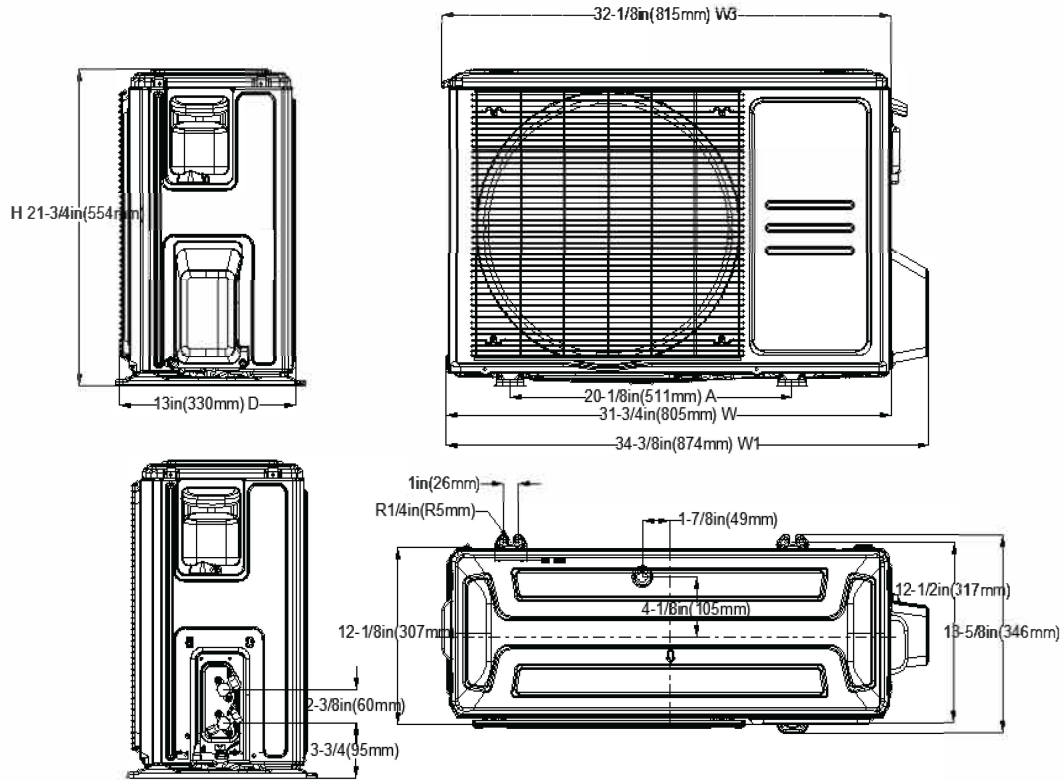
# Installation Instruction



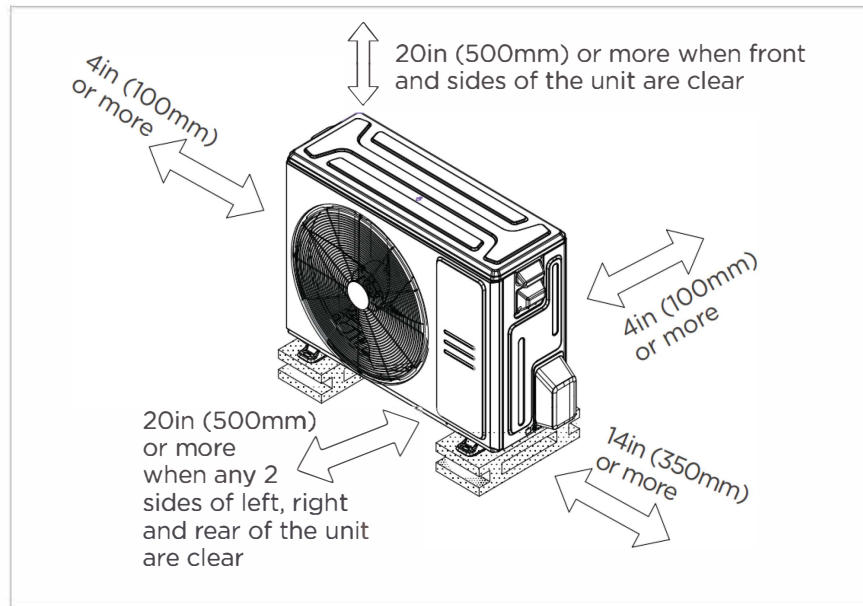
Distance from ceiling relative to height of indoor unit

| MODEL      | Length of A    | Length of H     | Length of B    |
|------------|----------------|-----------------|----------------|
| 9K/12K/18K | 9.6in (245mm)  | >10.8in (275mm) | 23.6in (600mm) |
| 24K        | 8.03in (205mm) | 9.06in (230mm)  |                |
| 36K        | 9.65in (245mm) | 10.7in (271mm)  | 35.4in (900mm) |
| 48K        | 11.3in (287mm) | 12.3in (313mm)  |                |

## Outdoor Unit Dimension



## Installation Instruction



Meets all spatial requirements shown in Installation Clearance Requirements above.

## FEATURES

- 360° Air Flow
- Remote on-off and alarm ports
- Refrigerant leakage detection sensor(Optional)
- Humidity sensor
- Built-in pump
- 1~100% fan speed setting
- WiFi capability: through WiFi dongle or wired controller with built-in WiFi
- OTA(by using WiFi dongle)
- 2-pin connector(HA/HB) for programmable wired controller
- 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.