



# Submittal Data Sheet

Indoor Unit Model#: ACiQ-12CD-HH-MC  
Outdoor Unit Model#: ACiQ-12ZPL-HP230C

## 12K Concealed Duct (High Static Pressure) Heat Pump System

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

System Product Code: 810175551494

Indoor Unit Product Code: 810175551203

Outdoor Unit Product Code: 810175550954



### EFFICIENCY RATINGS

| Cooling |      | Heating |      |
|---------|------|---------|------|
| SEER2   | 20   | HSPF2-4 | 10.6 |
| EER2    | 12.0 | COP     | 3.63 |

### COOLING PERFORMANCE

| Cooling (Btu/hr)                 |   |
|----------------------------------|---|
| Rated Capacity                   | 12000   |
| Min/Max Capacity                 | 3000~13300  |
| Moisture Removal (L/h)           | 1.39  |
| 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 |

### HEATING PERFORMANCE

| Heating (Btu/hr)                 |   |
|----------------------------------|---|
| 1. @ 47°F Rated                  | 12000   |
| 1. @ 47°F Min/Max Capacity       | 3900~16500  |
| 2. @ 17°F Rated                  | 10200   |
| 3. @ 5°F Rated: Capacity / COP   | 12000 / 1.95  |
| 3. @ 5°F Max: Capacity           | 12000   |
| 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   |

### INDOOR UNIT SPECIFICATIONS

|   |      |                                       |
|---|------|---------------------------------------|
| Indoor Air Flow (Turbo/H/M/L/Si) (CFM)    |      | 419.1 / 350.2 / 256.0 / 216.0 / 135.4 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) |      | NA / 32.5 / 30.5 / 28.5 / 26          |
| Indoor static pressure range (in.w.g.)    |      | 0-0.8                                 |
| Dimension (W×D×H)                         | inch | 27.56 x 29.53 x 9.65                  |
|   | mm   | 700.0 x 750.0 x 245.0                 |
| Package (W×D×H)                           | inch | 36.42 x 33.46 x 11.73                 |
|   | mm   | 925 x 850 x 298                       |
| Net/Gross Weight                          | lbs  | 64.15 / 73.85                         |
|   | kg   | 29.1 / 33.5                           |

### OUTDOOR UNIT SPECIFICATIONS

|                              |      |                       |
|------------------------------|------|-----------------------|
| Compressor Type              |      | ROTARY                |
| Compressor Model             |      | KTN110D42UFZ          |
| Refrigerant                  |      | R454B                 |
| Refrigerant Oil Charge (mL)  |      | 350                   |
| Refrigerant Oil              |      | 6.0                   |
| Outdoor Air Flow (Max) (CFM) |      | 1471.5                |
| Outdoor Noise Level (dBA)    |      | 54.0                  |
| Dimension (W×D×H)            | inch | 31.69 x 12.99 x 21.81 |
|                              | mm   | 805.0 x 330.0 x 554.0 |
| Package (W×D×H)              | inch | 36.02 x 14.57 x 24.21 |
|                              | mm   | 915 x 370 x 615       |
| Net/Gross Weight             | lbs  | 72.75 / 78.70         |
|                              | kg   | 33 / 35.7             |

### ELECTRICAL SPECIFICATIONS

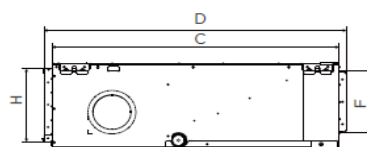
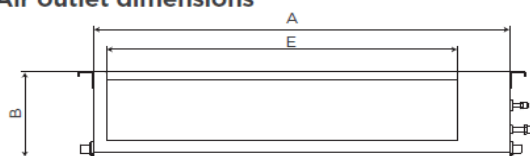
|                                  |                                      |
|----------------------------------|--------------------------------------|
| Power Supply                     | 208/230V, 60Hz, 1Ph                  |
| System MCA                       | 15.00                                |
| Connection Wiring                | 14#x4                                |
| System MOP                       | 15                                   |
| Compressor RLA                   | 11.6                                 |
| Outdoor Fan Motor RLA            | 0.5                                  |
| Outdoor Fan Motor W              | 34                                   |
| Indoor Fan Motor RLA             | 1.5                                  |
| Indoor Fan Motor W               | 165                                  |
| System Power Input @ Cooling (W) | 1000 (150 ~ 1260)                    |
| System Power Input @ Heating (W) | 970 (260 ~ 1420)                     |
| MCA: Min. circuit amps (A)       | MOP: Max. overcurrent protection (A) |
| RLA: Rated load amps (A)         | W: Fan motor rated output (W)        |

### REFRIGERANT PIPING SPECIFICATIONS

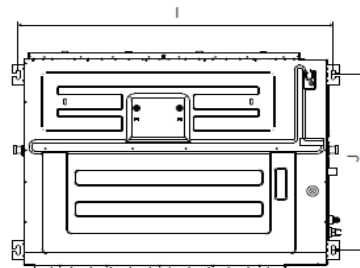
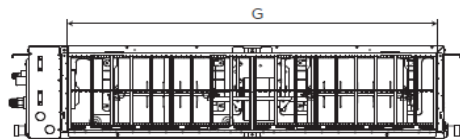
|  |                |
|--|----------------|
| Throttle type (Indoor)                           | N/A            |
| Throttle type (Outdoor)                          | EXV            |
| Liquid Size                                      | 6.35mm (1/4in) |
| Gas Size   | 9.52mm (3/8in) |
| Max. Piping Length (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 Dimensions

### Air outlet dimensions



### Air inlet dimensions



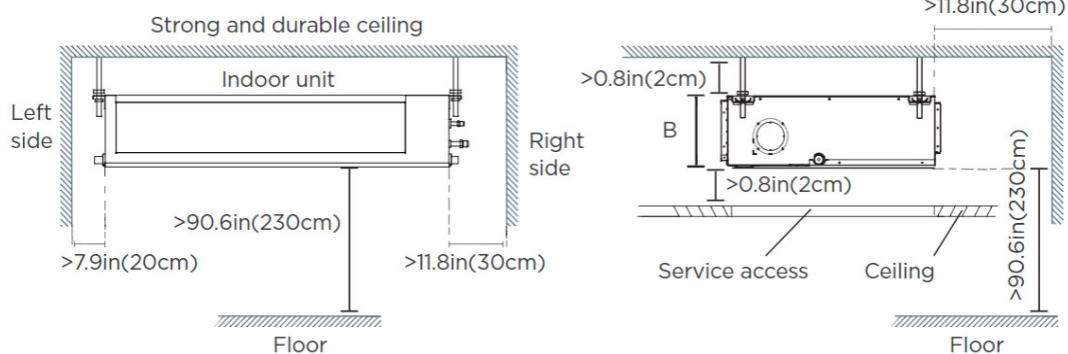
| MODEL   | OUTLINE DIMENSION |          |          |          | AIR OUTLET OPENING SIZE |          | AIR RETURN OPENING SIZE |          | SIZE OF MOUNTED LUG |          |
|---------|-------------------|----------|----------|----------|-------------------------|----------|-------------------------|----------|---------------------|----------|
|         | A                 | B        | C        | D        | E                       | F        | G                       | H        | I                   | J        |
| 9K/12K  | 27.6/700          | 9.6/245  | 29.5/750 | 31.3/795 | 20.7/527                | 7.0/178  | 23.3/592                | 8.3/212  | 29.1/740            | 25.2/640 |
| 18K/24K | 39.4/1000         | 9.6/245  | 29.5/750 | 31.3/795 | 32.6/827                | 7.0/178  | 35.1/892                | 8.3/212  | 40.9/1040           | 25.2/640 |
| 36K/48K | 47.2/1200         | 11.8/300 | 29.5/750 | 31.3/795 | 40.4/1027               | 9.2/233  | 43.0/1092               | 10.5/267 | 48.8/1240           | 25.2/640 |
| 55K/60K | 55.1/1400         | 14.9/380 | 31.5/800 | 33.3/845 | 48.1/1223               | 12.6/320 | 50.1/1272               | 13.0/330 | 56.7/1440           | 26.3/668 |

## Installation Instructions

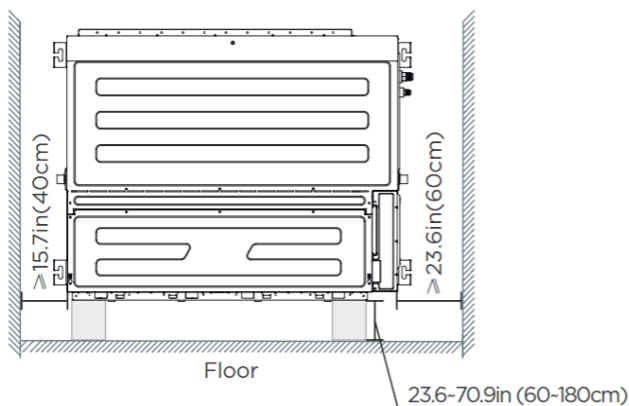
### Installation place

The distance between the mounted indoor unit should meet the specifications illustrated in the following diagram.

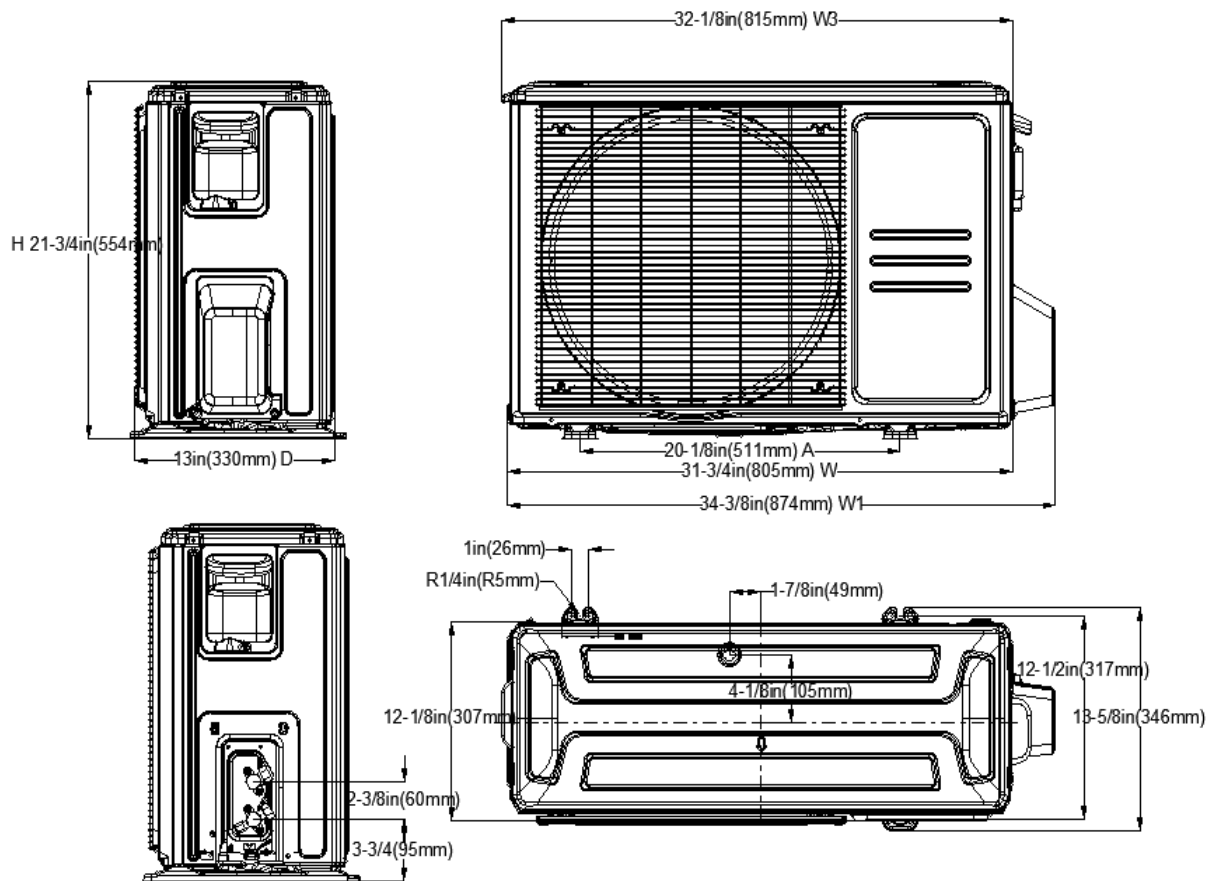
#### 1) Ceiling-mounted



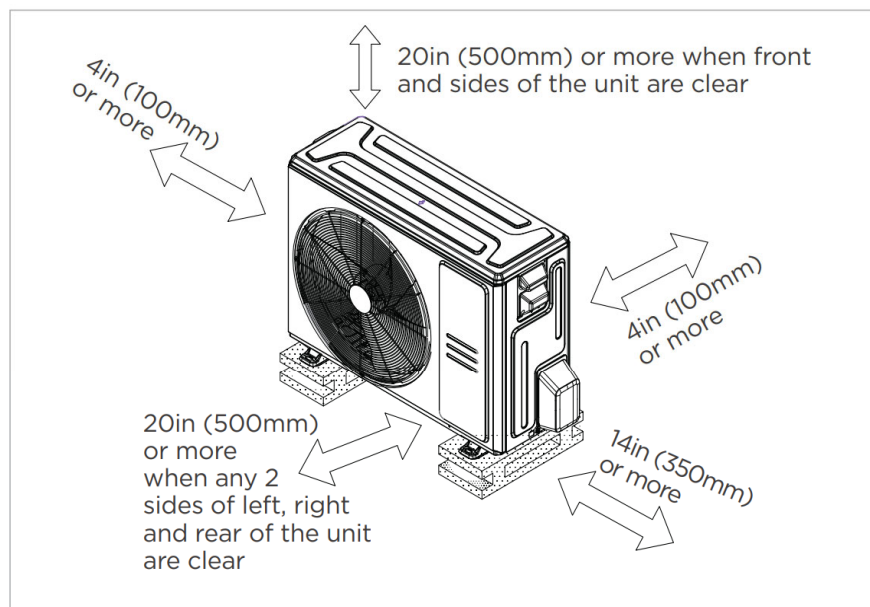
#### 2) Wall-mounted



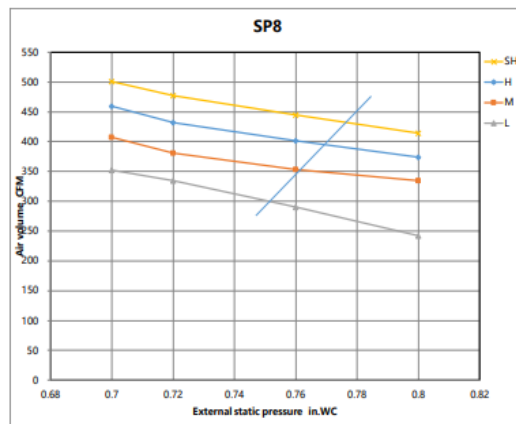
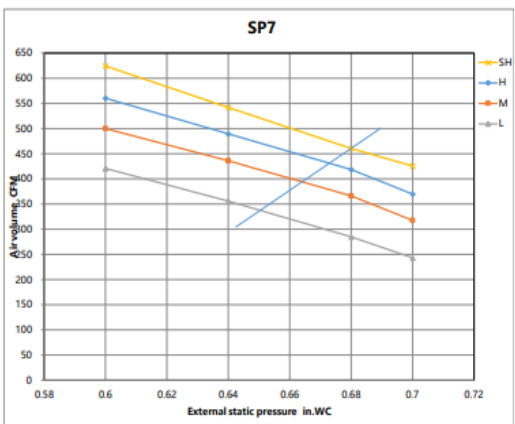
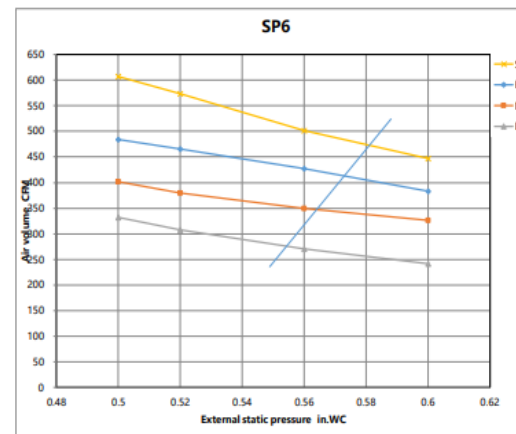
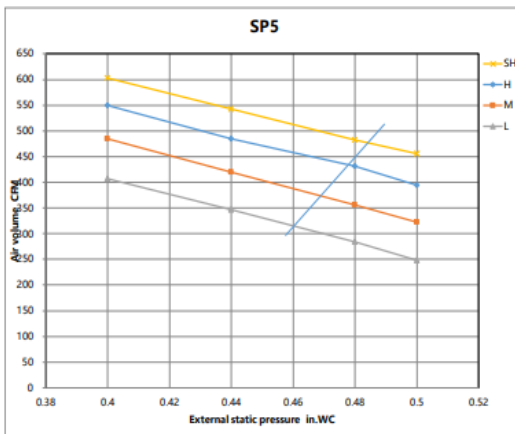
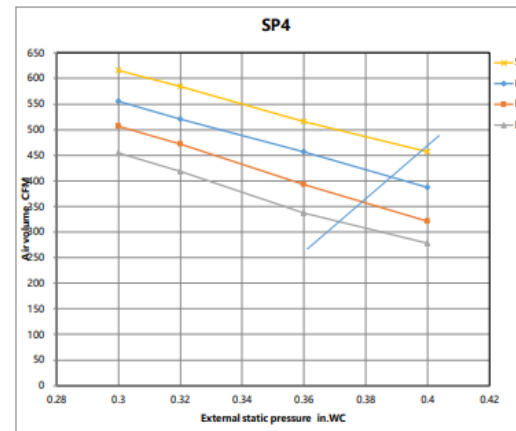
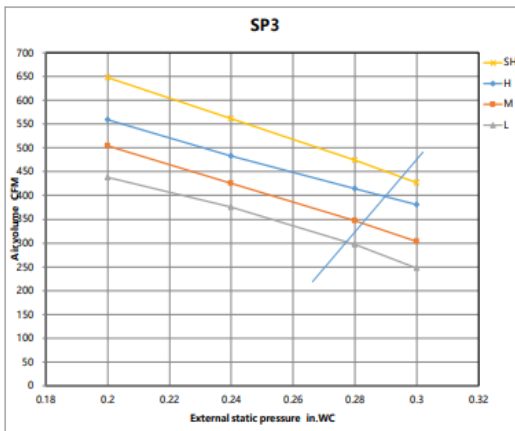
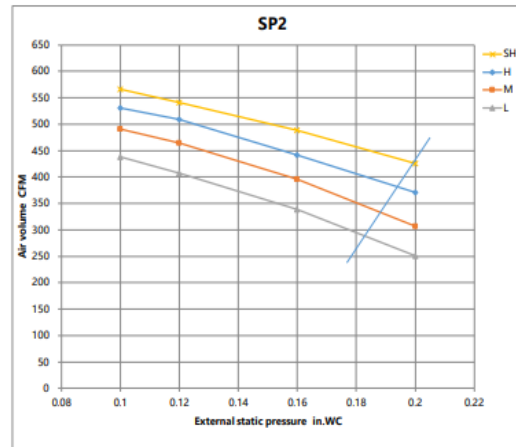
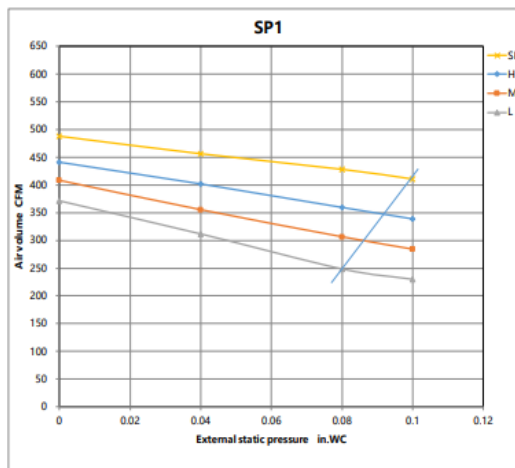
## Outdoor Unit Dimensions



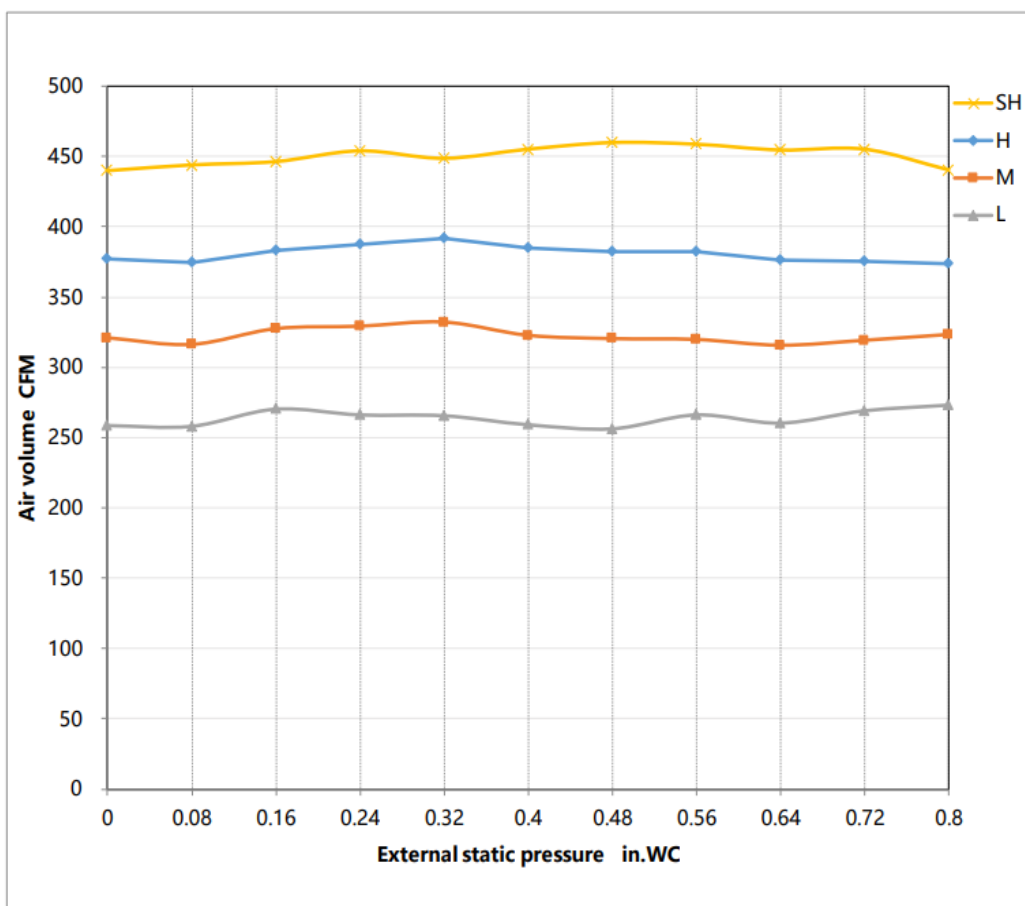
## Installation Instructions



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



## Constant air volume



## Features

- Compatible with both horizontal and vertical installation
- Static pressure up to 0.8 in.w.g (for all models)
- Static pressure setting stages: 8
- Refrigerant leakage detection sensor
- Constant airflow
- Built-in pump
- i-clean
- Fan speed stages: 1~100%
- WiFi capability: through wired controller with built-in WiFi
- OTA (by using wired controller 120N (X6W))
- 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.