

R454b Refrigerant

SUBMITTAL DATA SHEET



Series Name: Slim Duct Xtreme Heat Series
Model Number: MDHUU-H12B-2A/MO1HS-H12B-2A

Slim Duct 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) | 419 / 350 / 256 / 216 / 135 |
| Indoor Noise Level (Turbo/H/M/L/Si) (dBA) | 33 / 33 / 31 / 29 / 26 |
| Indoor static pressure range(in.w.g.) | 0-0.8 |
| Dimension (W×D×H) | inch 27-1/2 x 29-1/2 x 9-5/8 |
| | mm 700 x 750 x 245 |
| Package (W×D×H) | inch 36-3/8 x 33-1/2 x 11-3/4 |
| | mm 925 x 850 x 298 |
| Net/Gross Weight | lbs 64 / 74 |
| | kg 29.1 / 33.5 |

OUTDOOR SPECIFICATION

| | |
|------------------------------|---------------------------|
| Compressor Type | ROTARY |
| Compressor Model | KTN110D42UFZ |
| Refrigerant | R454B |
| Refrigerant Oil Charge(mL) | 350 |
| Refrigerant Oil | VG74 |
| Outdoor Air Flow (Max) (CFM) | 1,472 |
| Outdoor Noise Level (dBA) | 54 |
| 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 73/79 |
| | kg 33/35.7 |

EFFICIENCY

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

| PERFORMANCE of Cooling | |
|---------------------------------|---|
| Cooling (Btu/hr) | |
| Rated Capacity | 12,000 |
| Min/Max Capacity | 3,000~13,300 |
| Moisture Removal(L/h) | 1.39 |
| Standard Operating Range(°F/°C) | -22 ~ 122 (-30 ~ 50) |
| Conditions: | Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB |

PERFORMANCE of Heating

| Heating (Btu/hr) | |
|---------------------------------|---|
| 1. @ 47°F Rated | 12,000 |
| 1. @ 47°F Min/Max Capacity | 3,900~16,500 |
| 2. @ 17°F Rated | 10,200 |
| 3. @ 5°F Rated: Capacity / COP | 12,000/1.95 |
| 3. @ 5°F Max: Capacity | 12,000 |
| Standard Operating Range(°F/°C) | -22 ~ 75 (-30 ~ 24) |
| 1. Conditions: | Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB |
| 2. Conditions: | Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB |
| 3. Conditions | Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB |

ELECTRICAL

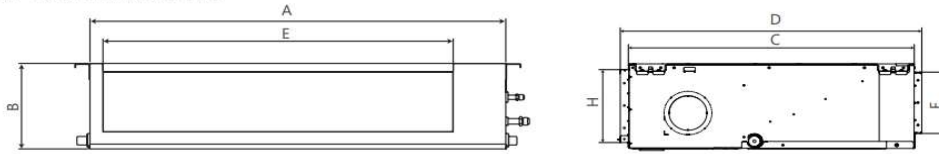
| | |
|----------------------------------|--|
| Power Supply | 208/230V,60Hz,1Ph |
| System MCA | 15.0 |
| Connection Wiring | AWG 14/4 |
| System MOCP | 15.0 |
| Compressor RLA | 11.6 |
| Outdoor Fan Motor RLA | 0.5 |
| Outdoor Fan Motor W | 34 |
| Indoor Fan Motor RLA | 1.5 |
| Indoor Fan Motor W | 165 |
| System Power Input @ Cooling (W) | 1,000 (150 ~ 1,260) |
| System Power Input @ Heating (W) | 970 (260 ~ 1,420) |
| MCA: Min. circuit amps (A) | MOCP: Max. over current protection (A) |
| RLA: Rated load amps (A) | W: Fan motor rated output (W) |

PIPING

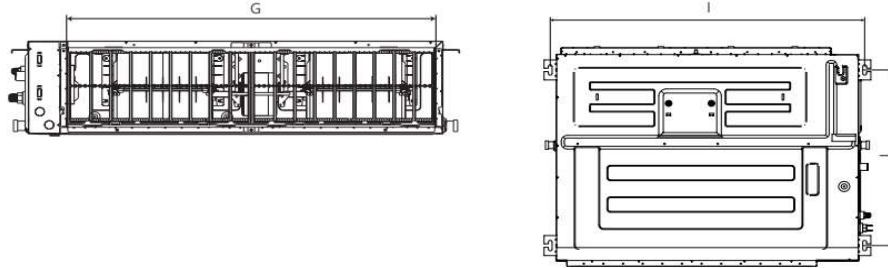
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|--|---------------|
| Throttle type(Indoor) | N/A |
| Throttle type(Outdoor) | EXV |
| Liquid Size | 1/4" (6.35mm) |
| Gas Size | 3/8" (9.52mm) |
| Max. Piping Length(ft/m) | 82 (25) |
| Max. Height Difference(ft/m) | 49 (15) |
| Max. Pre-charged Length(ft/m) | 25 (7.5) |
| Refrigerant Pre-charged Amount(oz/kg) | 35 (1.00) |
| Additional Charge of Refrigerant((oz/ft)/(g/m) | 0.16 (15) |
| Connection Method | Flared |

Indoor Unit Dimension

Air outlet dimensions



Air inlet dimensions

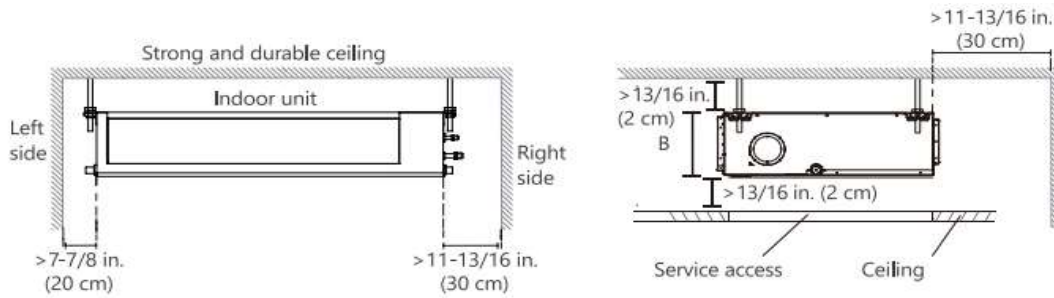


Unit: inch (mm)

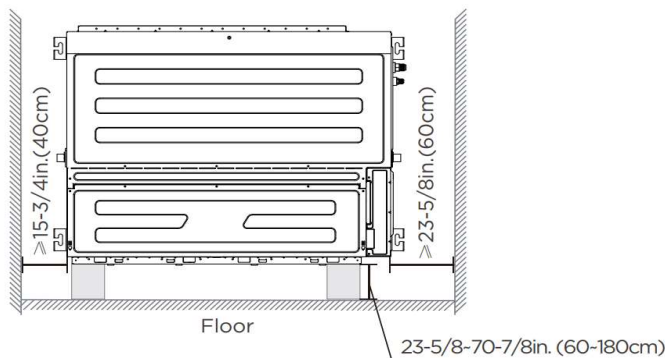
| MODEL | OUTLINE DEMENSION | | | | AIR OUTLET OPENING SIZE | | AIR RETURN OPENING SIZE | | SIZE OF MOUNTED LUG | |
|---------|--------------------|-------------------|-----------------|------------------|-------------------------|-----------------|-------------------------|-----------------|---------------------|------------------|
| | A | B | C | D | E | F | G | H | I | J |
| 9K/12K | 27-5/8 (700) | 9-5/8 (245) | 29-1/2 (750) | 31-5/16 (795) | 20-3/4 (527) | 7 (178) | 23-5/16 (592) | 8-5/16 (212) | 29-3/32 (740) | 25-1/4 (640) |
| 18K/24K | 39-7/16 (1,000) | 9-5/8 (245) | 29-1/2 (750) | 31-5/16 (795) | 32-5/8 (827) | 7 (178) | 35-3/32 (892) | 8-5/16 (212) | 40-7/8 (1,040) | 25-1/4 (640) |
| 36K/48K | 47-1/4 (1,200) | 11-13/16 (300) | 29-1/2 (750) | 31-5/16 (795) | 40-7/16 (1,027) | 9-1/4 (233) | 43 (1,092) | 10-1/2 (267) | 48-13/16 (1,240) | 25-1/4 (640) |
| 55K/60K | 55-3/32 (1,400) | 14-7/8 (380) | 29-1/2 (750) | 31-5/16 (795) | 48-3/32 (1,223) | 12-5/8 (320) | 50-3/32 (1,272) | 13 (330) | 56-13/16 (1,440) | 26-5/16 (668) |

Installation Instruction

1) Ceiling-mounted

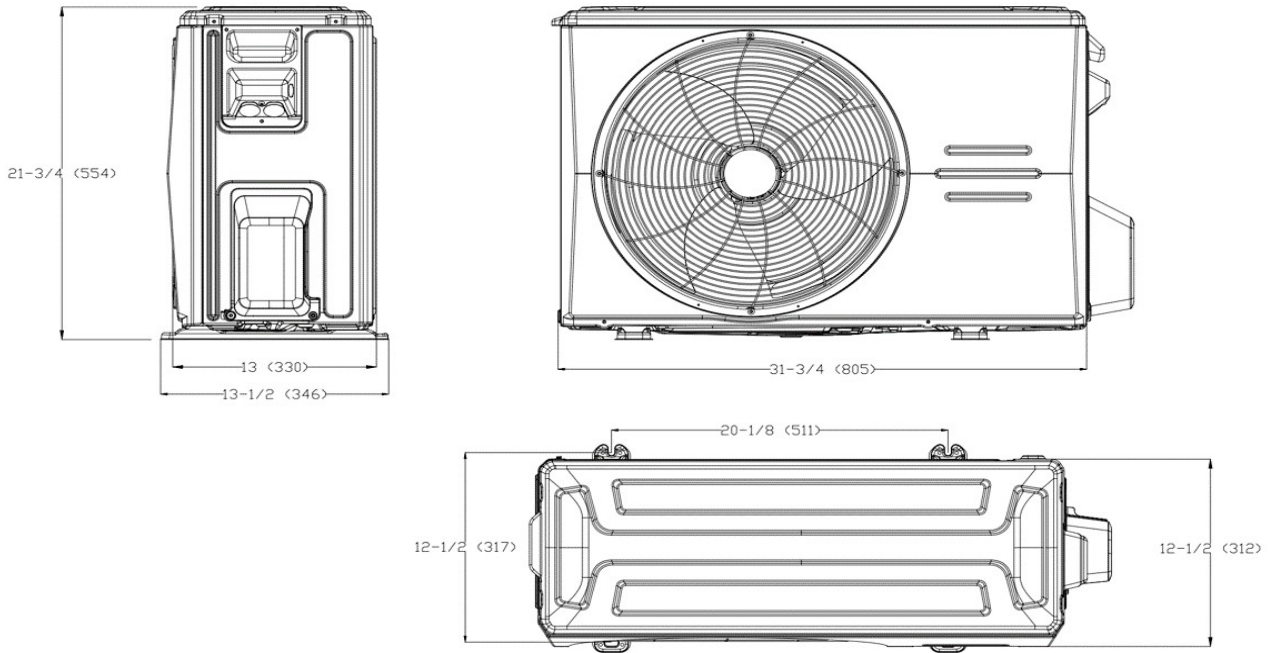


2) Wall-mounted

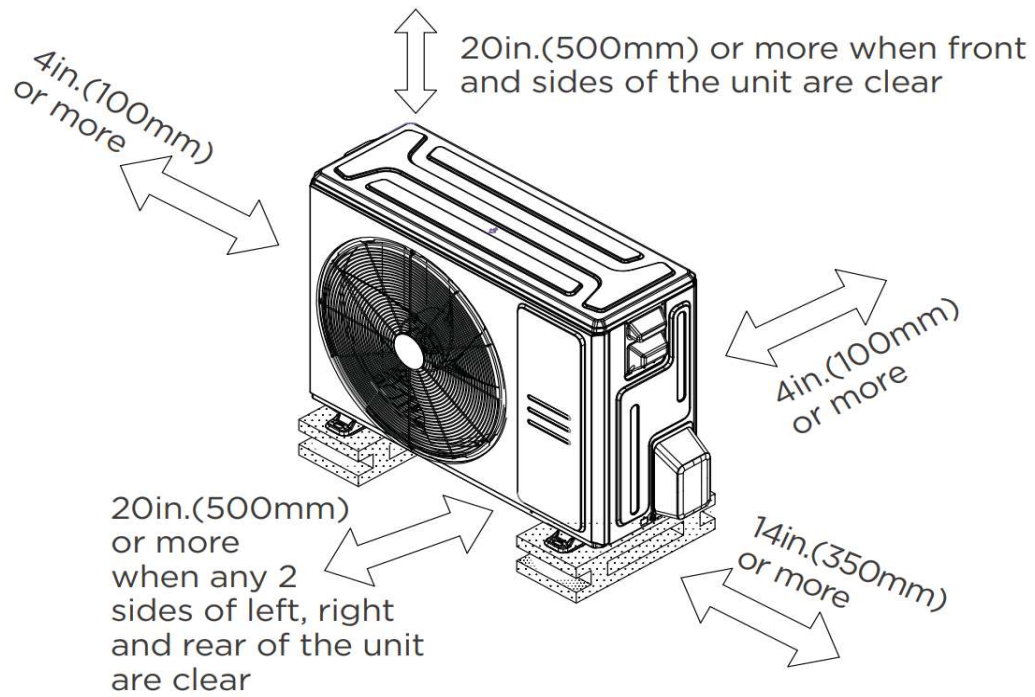


Outdoor Unit Dimension

Unit: inch (mm)

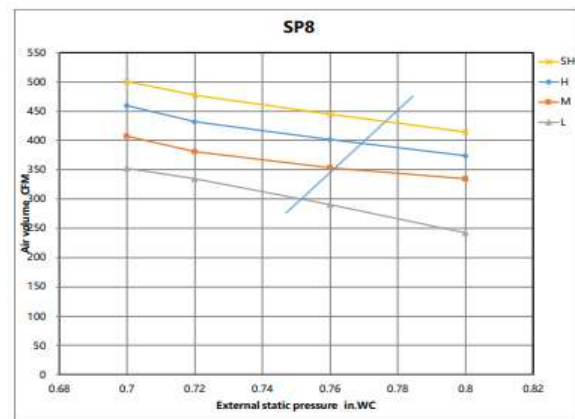
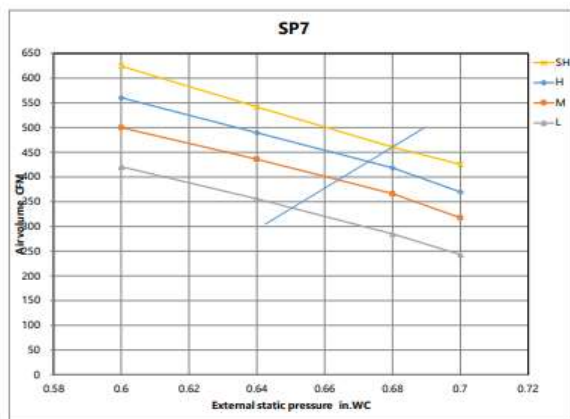
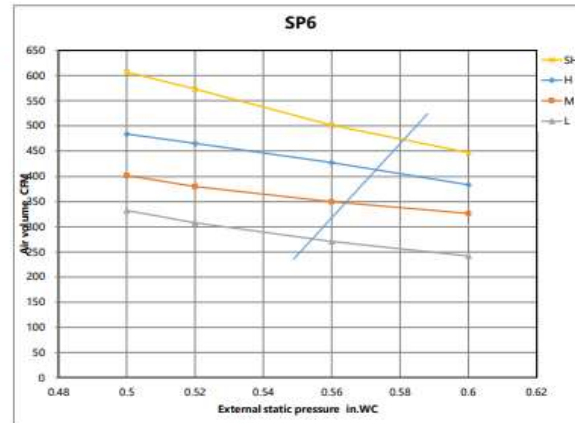
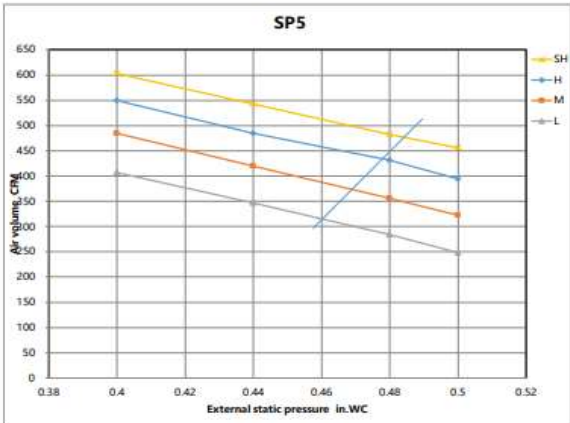
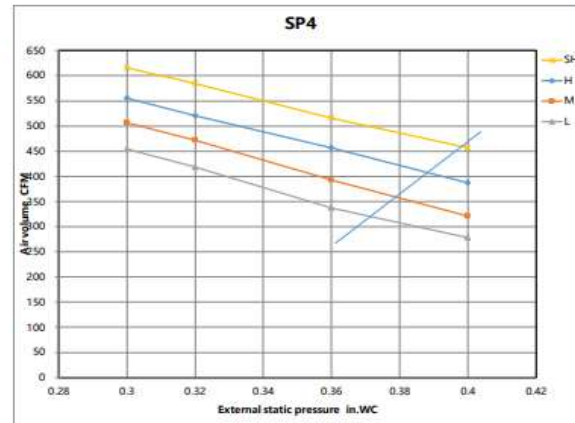
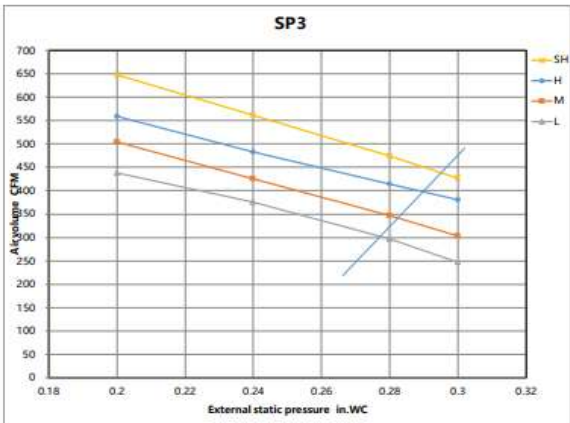
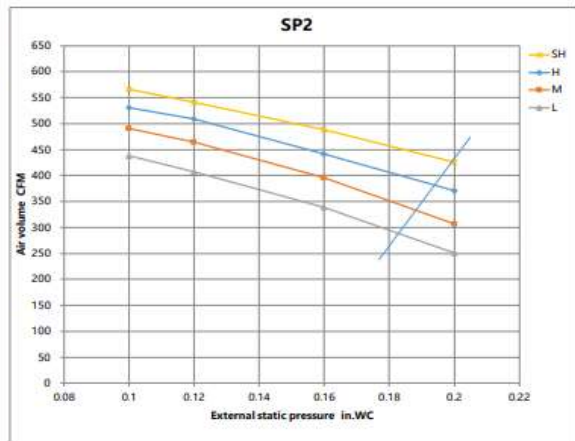
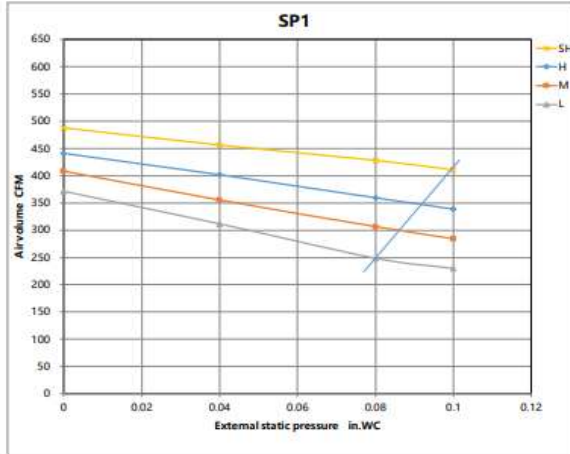


Installation Instruction

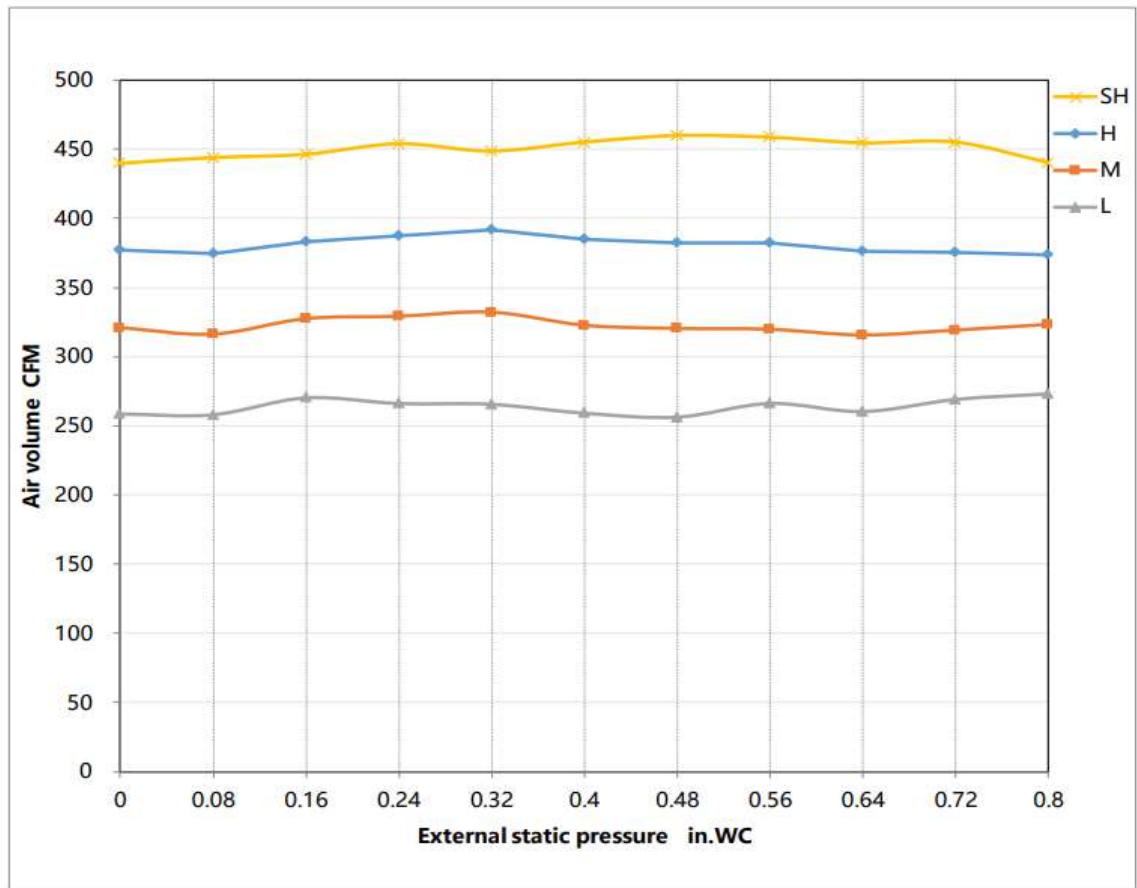


Fan performance

The default setting is SP1, which can be changed to SP2,3,4,5,6,7,8 using the wired controller.



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 with built-in WiFi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat*

*24V interface is required.