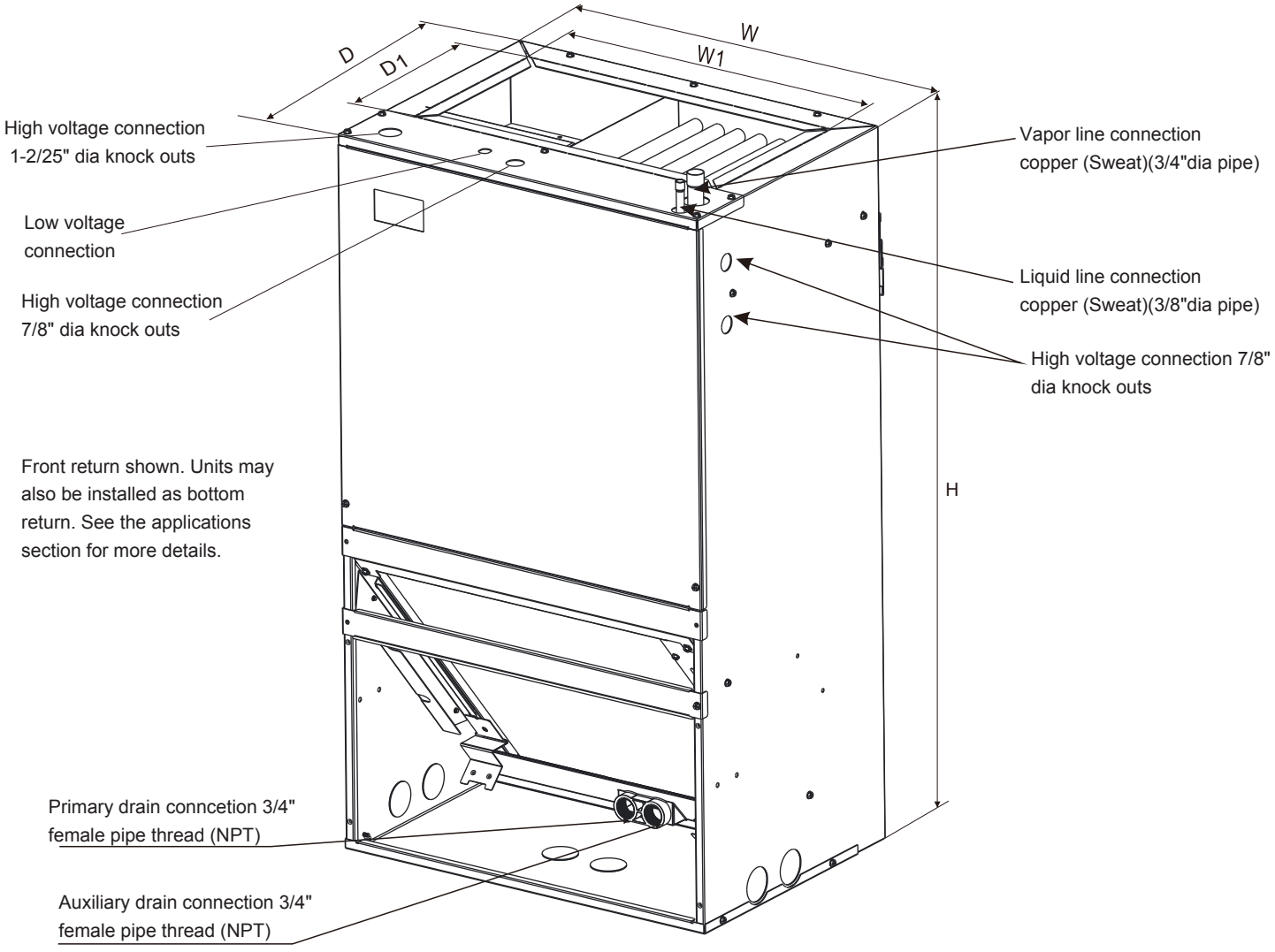
FAHC2414BA15

# Submittal

TAG:

## Air Handler
## FAHC2414BA15
## Capacity: 24 kBTU/h




All units are configured for vertical upflow.
Units cannot be installed in any other configuration.

### DIMENSIONAL DATA

| Model | Dimensions-In.(mm) | | | | | Unit Weight/ Shipping Weight Lbs.(kg) |
|---|---|---|---|---|---|---|
| | Height H | Width W | Width W1 | Depth D | Depth D1 | |
| 24K | 36 (915) | 20-1/2(522) | 17-2/5 (442) | 15(381) | 9-3/5 (244) | 88/97 (40/44) |

# Product Specifications

| INDOOR UNIT | FAHC2414BA15 |
|---|---|
| **NOMINAL RATING** | |
| Cooling (BTU/h) | 22000 |
| External Static(in.w.c.) | 0-0.8 |
| **ELECTRICAL DATA** | |
| Voltage/Phase/Hz | 208/230/1/60 |
| Min. / Max. Voltage | 187/253 |
| MCA | 4.2 |
| MOP | 6 |
| **EVAPORATOR COIL** | |
| Type | Copper Tube & Fin |
| Tube Size(in.) | 9/32 |
| Refrigerant Control | Orifice |
| **FAN MOTOR** | |
| Motor Type | ECM |
| Horsepower (HP) | 1/3 |
| Full Load Amps (FLA) | 2.2 |
| Capacitor (uF) | / |
| Rated RPM | 960 |
| **REFRIGERATION SYSTEM** | |
| Refrigerant | R454B |
| Liquid Line Size (O.D.) | 3/8 |
| Suction Line Size (O.D.) | 3/4 |
| **FAN BLOWER** | |
| Type | Centrifugal |
| Diameter (in.) | 11 |
| Height (in.) | 6 |
| **DIMENSIONS** | W×D×H |
| Unit | 20-1/2×15×36 |
| Packing | 23-1/5×17-7/10×39-2/5 |
| **WEIGHT** | |
| SHIPPING (LBS.) | 97 |
| NET (LBS.) | 88 |

# Airflow Data

| Model | Blower Speeds | External Static Pressure (in.w.c.) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| 24K/ 2Ton | 1 | 806 | 776 | 735 | 698 | 664 | 618 | 581 | 527 | 473 |
| | 2 | 893 | 854 | 815 | 788 | 749 | 721 | 678 | 640 | 595 |
| | 3-Factory Default | 997 | 962 | 934 | 900 | 873 | 839 | 814 | 781 | 740 |
| | 4 | 1099 | 1068 | 1042 | 1010 | 985 | 952 | 926 | 896 | 857 |
| | 5 | 1156 | 1125 | 1098 | 1067 | 1038 | 1008 | 982 | 949 | 893 |

--- Shaded boxes represent airflow outside the required 300-450 cfm/ton, which are not recommended.

NOTES:
1. Airflow based upon dry coil at 230V with no electric heat and no filter. For 18, 24, 30 and 36 sizes, airflow at 208V is approximately the same as 230V because the mult-tap ECM motor is a constant torque motor. The torque doesn't drop off at the speeds in which the motor operates.
2. Airflow is equivalent for front or bottom return configurations.
3. The air distribution system has the greatest effect on airflow. The duct system is totally controlled by the contractor. For this reason, the contractor should use only industry-recognized procedures.
Heat pump systems require a specified airflow. Each ton of cooling requires between 350 and 450 cubic feet of air per minute (CFM), or 400 CFM nominally.
4. Duct design and construction should be carefully done. System performance can be lowered dramatically through bad planning or workmanship. Air supply diffusers must be selected and located carefully. They must be sized and positioned to deliver air along the perimerter of the space. If they are too small for their intended airflow, they become noisy. If they are not located properly, they cause drafts. Air grilles must be properly sized to carry air back to the blower.If they are too small, they also cause noise. The installers should balance the air distribution system to ensure proper quiet airflow to all rooms in the home. This ensures a comfortable living space.
5. Shaded boxes represent airflow outside the required 300-450 cfm/ton.

# Electrical Data

| Electrical Data for Regular Air Handlers | | | | | |
|---|---|---|---|---|---|
| Model | Heater Kit Usage | MCA (Min. Circuit Ampacity) | | MOP (Max. Fuse or Breaker (HACR) Ampacity) | |
| | | **208V** | **230V** | **208V** | **230V** |
| FAHC2414BA15 | WFM0502BE / 5kW | 23.1 | 25.1 | 25 | 30 |
| | WFM0802BE / 7.5kW | 35.3 | 38.5 | 40 | 40 |
| | WFM1002BE / 10kW | 46.3 | 50.3 | 50 | 60 |

Note:
1. Heat kit suitable for Wall-Mounted installation.
2. Ampacities for MCA and Fuse/breaker excluding the blower motor.

## Standard Features:

a. R454B environmentally friendly refrigerant.

b. Metal shell and glass cotton thermal insulation layer.

c. 24V communication.

d. Front or bottom return air.

e. Braze in Refrigerant Connection.

f. All use DC motors.

g. Inner-groove copper tube and high -efficiency aluminumfin fin.

h. Refrigerant Leakage Detection. Ensure safe use of the unit.

i. AHRI certified and ETL listed.

## Optional Features:

a. Electrical heater kits are optional: 5/7.5/10kW.

b. TXV is optional.