



# 11 EER 1.5 - 5 Ton Vertical Packaged **Wall Mount Heat Pumps**

7AA1024H-1030H-1036H-1042H-1048H-1060H

(High Efficiency Single Stage Cooling)

7AA2024H-2030H-2036H-2042H-2048H-2060H

(High Efficiency 2-Stage Cooling)

## **General Description**

Eubank wall mounted heat pumps are the ideal HVAC system for a wide variety of applications. The exterior mounting means that no valuable interior space is required. Eubank heat pumps are packaged units – the refrigerant piping and internal wiring are factory assembled and thoroughly tested. All components are readily accessible for easy service and maintenance. The energy efficient operation keeps operating costs to a minimum and makes Eubank heat pumps ideal problem solvers for a wide variety of applications, including offices, classrooms and telecommunication shelters.

#### Eubank Heat Pumps Are Available To Meet Any Budget Or Efficiency Requirement:

7AA1024H - 1060H High Efficiency Models

Eubank's most efficient wall mount heat pumps with highly efficient scroll compressors result in Energy Efficiency Ratios (EER's) of up to 11.50. Available in cooling capacities of 2, 2½, 3, 3½, 4 and 5 tons (24,000 to 60,000 BTUH). No other wall mount heat pump is more efficient

7AA2024H - 2060H 2-Stage Compressor Models

These models feature a 2-stage compressor which can reduce energy costs by more precisely matching the cooling capacity to the heat load with first stage cooling approximately 65% of the total cooling capacity. This results in Energy Efficiency Ratios (EER's) of up to 11.00 and an Integrated Part Load Value (IPLV) of up to 15.00. 7AA 2-Stage models are available in cooling capacities of 2, 21/2, 3, 3½, 4 and 5 tons (24,000 to 60,000 BTUH).

#### Outside Air for Ventilation or Free Cooling

A full range of accessories and options allows Eubank wall mount heat pumps to be optimized for each application. For classrooms, a complete range of ventilation options are available to meet the fresh air requirements of the ASHRAE 62 standard, "Ventilation for Acceptable Indoor Air Quality", including the exclusive Eubank GreenWheel® Energy Recovery Ventilator. Where cooling is required during cool or cold weather, e.g., telecommunications shelters, a factory installed economizer should be used. To insure proper operation and optimum performance, all outside air ventilation packages are non-removable, factory installed and factory calibrated.



AHRI CERTIFIED







#### FEATURES AND BENEFITS

#### GreenWheel® and GreenCube® Energy Recovery **Ventilators**

- Total Energy (Sensible and Latent) Recovery Ventilators

#### R-410A Refrigerant

- Non-Ozone Depleting Refrigerant
- Synthetic Lubricant
- Reduced Compressor Wear

#### **High Efficiency and Reliability**

- EER up to 11.50 No Wall Mount Heat Pump is More Efficient
- Optional Economizer Reduces Energy Usage
- High Efficiency Compressor and Lanced Coil Fins • Liquid Line Temperature Monitoring & Control
- Suction Line Temperature Monitoring & Control

#### **Ease of Installation and Service**

- Single Point Power Entry
- Built-In Mounting Flanges and Internal Disconnect
- · Standard Access Valves and Filters, Status LEDs

#### > 2-Stage Compressor

All Eubank 7AA2024H-2060H models feature a two stage compressor with a first stage capacity of 65% of the total capacity. The two stage compressor offers better comfort by maintaining more precise temperature and relative humidity levels with improved overall energy efficiency. During mild days, the first stage can satisfy the load, minimizing temperature fluctuations providing steady, even comfort. With Integrated Part Load Performance Values (IPLV) of up to 15.00, the heat pump with the two stage, high efficiency compressor can provide significant energy savings compared to older, less efficient systems. The cooling mode has two stage operation; heating is single stage.

#### Quiet in the Classroom



In addition to high efficiency, Eubank heat pumps minimize sound levels in the classroom. A high efficiency axial fan moves air silently through the outdoor coils. A low vibration, scroll compressor ensures quiet operation as well as energy efficiency. The indoor air mover utilizes a revolutionary electronically commutated motor (ECM). This motor consumes a minimum of power with whisper quiet operation. The ECM automatically adjusts its speed to maintain the proper air flow at various external static pressures.

#### > Safety Listed and Energy Certified

All Eubank heat pumps are built to UL standard 1995, 4th edition and CAN/CSA C22.2, No. 236-11. For energy efficiency and performance, the units are tested and rated in accordance to the ANSI/AHRI (Air-Conditioning Heating and Refrigeration Institute) Standard 390 (Single Package Vertical Units). All units meet or exceed the efficiency requirements of ANSI/ASHRAE/IESNA 90.1.2016. Eubank wall mount heat pumps are commercial units and are not intended for use in residential applications.

#### ➤ Dehumidification

The introduction of outside air can cause humidity levels to rise to unacceptable levels. To reduce humidity, the Eubank heat pumps can be ordered with a Hot Gas Reheat (HGR) coil. The HGR coil allows the heat pump to dehumidify without adversely lowering the temperature in the classroom and uses less energy than electric reheat. When used in conjunction with the GreenWheel® ERV, humidity levels can be controlled at a minimum of expense. See page 4 for a detailed description of the operation of the Hot Gas Reheat Coil.

## **Eubank Wall Mount Heat Pump Features**

#### ➤ High Efficiency

- Scroll compressors are standard on all units.
- Lanced fins and rifled tubing on the indoor & outdoor coils maximize heat transfer.
- Electronically commutated indoor blower motor.

#### Engineered Reliability

- PC board simplifies wiring, consolidates several of the electrical functions in one device.
- High refrigerant pressure switch with lockout relay protects the compressor in the event of insufficient condenser air flow.
- High pressure switch and low pressure sensor with lockout protects refrigerant circuit.
- Time delay for short cycle protection.

#### ➤ Ease of Installation

- Sloped top with flashing eliminates need of rain hood.
- Built-in mounting flanges facilitate installation and minimize chance of water leaks.
- Factory installed phase monitor is standard on all 3Ø units and will turn the air conditioner off if power supply is not phased properly.
- Factory installed disconnect on all units, including 460v. models.
- Outside air hood included with each unit.
- Single Point Power Entry complies with latest edition of U.L. Standard 1995.

#### Rugged Construction

- Baked on beige finish over galvaneel steel on exterior sheet metal.
- Copper tube, aluminum fin evaporator and condenser coils.
- Corrosion resistant Dacromet<sup>®</sup> external fasteners.

#### ➤ Ease of Service

- LED's on the control board indicate operational status and fault conditions.
- Refrigerant access valves are standard
- All major components are readily accessible
- Front control panel allows easy access and complies with NEC clearance codes on side by side units.
- Major components accessible from either side.

## **Options for Outside Air for Ventilation**

ASHRAE standard 62 requires 30 cfm of outside air per occupant of a classroom. To meet this requirement, Marvair offers ventilation packages for every budget and requirement.

#### ➤ Configuration "C": Up to 100% Modulating Economizer

The economizer reduces the cost of air conditioning by using outside air when acceptable to cool the room. The factory installed Eubank® economizer has integral pressure relief. On a signal from a thermostat that cooling is required, either mechanical cooling with the compressor or free cooling with the economizer is provided. The Eubank economizer is capable of bringing in outside air equal to 100% of the rated cooling capacity of the unit and has built in pressure relief.

An internal enthalpy controller determines whether the outside air is sufficiently cool and dry to be used with cooling. If suitable, the compressor is locked out and the economizer damper opens to bring in outside air. The temperature at which the economizer opens is adjustable from approximately 55°F (13°C) to 73°F (23°C) at 50% RH. If the outside air becomes too hot or humid, the economizer damper closes completely or to a minimum position and mechanical cooling is activated. When used with minimum position potentiometer (optional), the Eubank® economizer can meet requirements of ASHRAE Std. 62.

#### Configuration "D": Two-Position Motorized Fresh Air Damper w/Pressure Relief Ventilation

Control Board Logic: The 92589 control board allows the position of the "D" damper to be set for desired outside air intake from fully closed to fully open. Setting 15 of the control board configuration menu allows the user to set the position from 20 (2VDC / Closed) to 100 (10VDC 100% open). The damper position can be adjusted in 1VDC increments to any position from closed to 100% open as required.

*Operation:* Anytime the indoor blower operates, the damper drives open to the position selected in the control board configuration menu setting 15. When the indoor blower stops operation the motorized damper spring returns to the fully closed position.

*Note:* This circuit does not interrupt the compressor or heater operation.

➤ Configuration "E": Two-Position Motorized Fresh Air Damper w/Pressure Relief Ventilation & Independent Control Control Board/Factory Installed Relay Logic: The 92589 control board allows the position of the "E" damper to be set for desired outside air intake from fully closed to fully open. Setting 15 of the control board configuration menu allows the user to set the position from 20 (2VDC / Closed) to 100 (10VDC 100% open). The damper position can be adjusted in 1VDC increments to any position from closed to 100% open as required.

Operation: Upon a "Call for Motorized damper" via a 24V signal from an external user-installed device, the motorized damper opens to the position selected in the control board configuration menu setting 15 and the indoor blower operates. A 24VAC signal {sourced from LVTB 24VAC "R" and supplied through a user-provided Normally Open (NO) contact} activates (opens) the Motorized Damper and connected Relief Damper. When the 24VAC signal is removed, the motorized damper spring returns to the fully closed position and the indoor blower stops operation. The motorized damper Does NOT open when there is a call for the indoor fan (G).

**Note:** This circuit does not interrupt the compressor or heater operation..

# ➤ Configuration "F": No Free Cooling, 100%- Damper Opening, Emergency Ventilation Only w/Pressure Relief and Independent Control

Factory Installed Relay Logic: Upon a "Call for emergency ventilation", from an external user-provided device; the motorized damper opens to 100% open position and the indoor blower is forced to operate. During "Emergency Ventilation mode", the compressor and heater do not operate. The relay has a wire lead extended for the installer to connect their emergency ventilation control signal.

**Note:** This circuit interrupts the compressor and heater operation and forces the indoor blower and damper to operate during emergency ventilation mode.

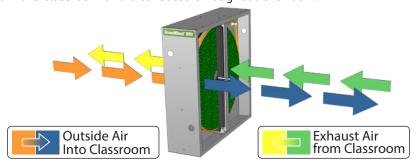
#### ➤ Configuration "H": GreenWheel® ERV Energy Recovery Ventilator (Optional)

Allows independent control of the exhaust and intake blowers. When used, the standard speed controller operates the intake blower and the optional second controller, the exhaust blower. Individual blower control allows positive pressurization of the classroom. Field or factory installed.

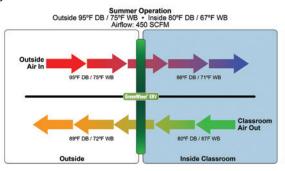
The Eubank GreenWheel® ERV is a total energy (both sensible and latent) wheel that reduces both construction and operating cost while ventilating the classroom to ASHRAE 62-1999 requirements. The use of the GreenWheel ERV reduces the energy load of the outside air. Exhausting stale, inside air keeps indoor pollutants and harmful gases to a minimum. The Eubank GreenWheel ERV has been tested and certified according to ARI Standard 1060.

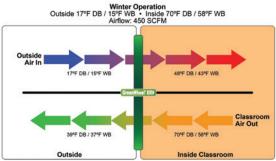
How It Works - During the summer, cool dry air from the classroom is exhausted through the GreenWheel ERV to the outside. As the air passes through the rotating wheel, the desiccant becomes cooler and drier. Simultaneously, hot humid air is being pulled across the rotating wheel. The cool, dry desiccant absorbs moisture and heat from the incoming air. The cooler, drier air is mixed with the return air from the classroom and distributed throughout the room.

In the winter, warm moist air is exhausted through the GreenWheel ERV to the outside. As the air passes through the rotating wheel, the desiccant becomes warmer and absorbs moisture. Simultaneously, cold dry air is being pulled across the rotating wheel. The cold, dry air absorbs heat and moisture from the desiccant. The warmed air is mixed with the return air from the classroom and distributed throughout the room.



Quality Components - The GreenWheel ERV Ventilation package consists of the GreenWheel cassette, an incoming air blower, an exhaust air blower, an air filter for the incoming air and one fan speed controller that controls the speed of both blower motors simultaneously. As an option, a second fan speed controller can be factory installed for independent control of the exhaust air motor and positive pressurization of the classroom. Also, an optional filter on the exhaust air is available on selected models. Please consult your Eubank representative for details. The two blowers simultaneously pull fresh air from outside and exhaust air from the classroom through the rotating wheel. The air streams are separated by an insulated partition so that the incoming fresh air is not mixed with the exhaust air. Two variable speed blowers ensure that up to 450 CFM of outside air can be brought into the room and the indoor air is properly exhausted. Variable speed blowers permit that the desired quantity of outside air is delivered into the room. Optional independent exhaust air blower control allows positive pressurization of the classroom, i.e., more outside air can be introduced through the GreenWheel ERV than is exhausted.





#### **GreenWheel® Energy Recovery Ventilator Performance**

|                      |               |                  | Energy Cons     | erved, BTUH   |                  |                 |
|----------------------|---------------|------------------|-----------------|---------------|------------------|-----------------|
| SCFM* of Outside Air | 95° DB/73° WB | Outside • 80° DE | 3/67° WB Inside | 95° DB/80° WB | Outside • 80° DE | 3/67° WB Inside |
|                      | Sensible      | Latent           | Total           | Sensible      | Latent           | Total           |
| 225                  | 2,900         | 1,100            | 4,000           | 2,900         | 6,400            | 9,300           |
| 250                  | 3,100         | 1,200            | 4,300           | 3,100         | 6,900            | 10,000          |
| 325                  | 3,700         | 1,400            | 5,100           | 3,700         | 8,100            | 11,800          |
| 400                  | 4,200         | 1,500            | 5,700           | 4,200         | 9,100            | 13,300          |
| 450                  | 4,500         | 1,600            | 6,100           | 4,500         | 9,700            | 14,200          |

|                      |               |                  |                 | Enei          | rgy Conserved, B | тин            |               |                  |                 |
|----------------------|---------------|------------------|-----------------|---------------|------------------|----------------|---------------|------------------|-----------------|
| SCFM* of Outside Air | 90° DB/74° WB | Outside • 75° DE | 3/64° WB Inside | 80° DB/70° WB | Outside • 75° DB | /64° WB Inside | 60° DB/54° WB | Outside • 70° DE | 3/58° WB Inside |
|                      | Sensible      | Latent           | Total           | Sensible      | Latent           | Total          | Sensible      | Latent           | Total           |
| 225                  | 2800          | 3600             | 6400            | 900           | 2800             | 2700           | 1900          | 200              | 2100            |
| 250                  | 3000          | 3800             | 6800            | 1000          | 3000             | 4000           | 2000          | 200              | 2200            |
| 325                  | 3600          | 4500             | 8100            | 1200          | 3500             | 4700           | 2400          | 200              | 2600            |
| 400                  | 4100          | 4900             | 9000            | 1400          | 3800             | 5200           | 2700          | 300              | 3000            |
| 450                  | 4300          | 5200             | 9500            | 1400          | 4000             | 5400           | 2900          | 300              | 3200            |

|                      |               |                  |                 | Ene           | rgy Conserved, B | TUH             |               |                   |               |
|----------------------|---------------|------------------|-----------------|---------------|------------------|-----------------|---------------|-------------------|---------------|
| SCFM* of Outside Air | 40° DB/36° WB | Outside • 70° DE | 3/58° WB Inside | 20° DB/18° WB | Outside • 70° DE | 3/58° WB Inside | 0° DB/7° WB ( | Outside • 70° DB/ | 58° WB Inside |
|                      | Sensible      | Latent           | Total           | Sensible      | Latent           | Total           | Sensible      | Latent            | Total         |
| 225                  | 5600          | 3300             | 8900            | 9300          | 4900             | 14200           | 13000         | 5700              | 18700         |
| 250                  | 6000          | 3600             | 9600            | 10000         | 5300             | 15300           | 14000         | 6100              | 14100         |
| 325                  | 7200          | 4200             | 11400           | 12000         | 6200             | 18200           | 16700         | 7100              | 23800         |
| 400                  | 8100          | 4600             | 12700           | 13500         | 6800             | 20300           | 18900         | 7900              | 26800         |
| 450                  | 8600          | 4800             | 13400           | 14400         | 7100             | 21500           | 20100         | 8200              | 28300         |

\*SCFM = Standard Cubic Feet per Minute

For performance of the GreenWheel® ERV at conditions other than those shown, please contact your Eubank® representative or the factory.

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#### ➤ Configuration "N": Manual Fresh Air Damper (Standard)

Barometric damper capable of up to 15% of the air conditioner's total rated airflow of outside air; field adjustable, no pressure relief.

### **Hot Gas Reheat Operation**

Eubank® heat pumps equipped with Hot Gas Reheat (HGR) allow the indoor humidity of the controlled environment to be maintained at or below a certain humidity set point. These units do not have the ability to add humidity to the classroom. Dehumidification is achieved by operating mechanical cooling in conjunction with a hot gas reheat coil.

*Operation* - If the humidity rises above the set point on the humidity controller and the temperature in the classroom is satisfied, both mechanical cooling and the HGR coil operate to temper the air and lower the humidity. If the temperature in the classroom rises above (or falls below) the set point of the thermostat and the unit is operating in the dehumidification mode, the call for cooling (or heating) will override the call for dehumidification and the coil is disengaged until the thermostat is satisfied. This assures the environment temperature is maintained as first priority and humidity control is second.

## **Protection of the Refrigerant Components**

#### ➤ High Refrigerant Pressure Switch

The high pressure switch is located on the liquid line. It is electrically connected to the PC board and will turn the compressor off if the pressure rises above the set point twice within one hour. This protects the compressor if airflow is significantly reduced or lost through the coil performing the condenser function.

#### ➤ Loss of Charge Switch

The loss of charge switch is located on the liquid line. It is electrically connected to the PC board and will turn the compressor off if the pressure drops below the set point twice within one hour. This protects the compressor if airflow is significantly reduced or lost through the coil performing the evaporator function or there is a loss of refrigerant.

# **Heat Pump PC Board**

#### ➤ Electronic Control Board

The exclusive Printed Circuit Board (PCB) in base model Eubank heat pumps sets the standard for the industry in terms of flexibility, reliability, and performance. This UL certified component is engineered to optimize Heating, Cooling and Dehumidification operation while communicating valuable information to the end user.

#### **Special Features Include:**

- Improved HVAC System Reliability (Built In Sequence / Timer Functionality And Simplified Wiring)
- On Board Configuration Menu With Adjustments Of Various Functions and Setpoints
- 2-Stage Compressor Operation
- Independent Indoor Blower Speed Adjustments For 1st Stage Cooling, 2nd Stage Cooling, Electric Heat And Dehumidification (Optimize Latent and Sensible Capacity)
- Built-In Remote Communication (Monitor and Control Via MODBUS Qty. 2 RJ11 Ports)
- Alarm Status and Fault Display(Drastically Reduces Troubleshooting Time and System Downtime)
- Sensors To Monitor Refrigerant Temperature Of The Low Pressure Circuit and Liquid Line Circuit
- Economizer Control With Adjustments For Both Enthalpy Or Dry Bulb Sensor
- Economizer Status Output Contacts
- Emergency Ventilation Control (Systems Equipped with Ventilation Package)
- Forced Cooling (Overrides Economizer Operation)
- Dehumidification Control (Systems Equipped With Electric Reheat Or Hot Gas Reheat Dehumidification)
- Lockout Contacts (Normally Open Or Normally Closed)
- Alarms Communicated Via MODBUS



# **Eubank Wall Mount Heat Pump Options**

Eubank® options can be used to provide optimum performance over a full range of operating conditions.

#### ➤ Adjustable Outdoor Thermostat

Will not allow electric resistance heat to be energized unless the outdoor temperature is below the desired set point. Field or factory installed. Available on all Eubank heat pumps.

#### ➤ Energy Management System (EMS) Relay Kit

Relay to control the unit. Available in 24, 120 or 240 VAC. Field or factory installed.

#### ➤ Electric Reheat

Control provides simultaneous operation of compressor when in cooling mode and the electric elements to provide dehumidification without over cooling the room. The electric element (kW) must be properly sized for each model for proper operation. Factory installed. Consult factory for details.

#### > Compressor Sound Jackets

Reduces sound of compressor.

# **Special Application Packages and Coil Coatings**

#### ➤ Protective Coating Packages

Two corrosion protection packages are offered - one for the condenser section (Coastal Environmental Package) and the other for the entire unit (Coat-All Package).

#### The Coastal Environmental Package includes:

- Corrosion resistant fasteners
- Sealed or partially sealed condenser fan motor
- Protective coating applied to all exposed internal copper and metal in the condenser section
- Protective coating on the condenser coil (Luvata Insitu®) contains ES2 (embedded stainless steel pigment) technology

#### The Coat all Package includes all of the above, plus:

- Protective coating on the evaporator coil (Luvata Insitu®) contains ES2 (embedded stainless steel pigment) technology
- Protective coating on exterior and interior components and sheet metal.
  - **Note 1:** The insulated internal sheet metal and the internal control box are not coated.
  - **Note 2:** The corrosion prevention coating can not be applied to stainless steel.

#### ➤ Protective Coil Coatings

The Condenser Coil or the Evaporator Coil or Both can be coated. Coating the Evaporator Coil in not common. For harsh conditions, e.g., power plants, paper mills or sites where the unit will be exposed to salt water, the coils should be protected by a protective coating.

**Note:** Cooling capacity may be reduced by up to 5% on units with coated coils.

#### **Accessories**

#### ➤ Thermostats and Controllers for Single Stage and 2-Stage Heat Pumps

See the *Marvair Thermostats and Controllers Product Data Sheet* for the thermostats and controllers for use with Marvair heat pumps.

#### > Thermostat Guards

Clear Thermostat Guard with Keylock & Clear Plastic Cover & Base.......P/N 50119 For use with 50248 thermostat.

#### > Humidity Controller

To be used with units with Hot Gas or electric reheat. Programmable dehumidistat, ventilation control. Permanent memory retention of set points. Humidity sensor can be field calibrated. High & low dehumidification set points. Outdoor temperature and humidity sensor included. °F or °C selectable.

#### ➤ Grilles

| 7AA1024H                                            |                           |       |
|-----------------------------------------------------|---------------------------|-------|
| Double Deflection, Aluminum Supply Grille           | 28" x 8" (711mm x 203mm)  | 80675 |
| Aluminum Return Grille                              | 28" x 14" (711mm x 356mm) | 80678 |
| Return Filter Grille*                               | 28" x 14" (711mm x 356mm  | 80672 |
| 7AA1030H, 1036H, 1042H, 1048H & 1060H and 7AA2036H, | , 2042H, 2048H & 2060H    |       |
| Double Deflection, Aluminum Supply Grille           | 30" x 10" (762mm x 254mm) | 80676 |
| Aluminum Return Grille                              | 30" x 16" (762mm x 406mm) | 80679 |
| Return Filter Grille                                | 30" x 16" (762mm x 406mm) | 80673 |

**Note:** Return filter grilles should be used when the 2" (51mm) filter in the Eubank unit is not accessible from the exterior of the building. Filter used in the return filter grille is a 1" (25mm) thick filter. The return filter grille is not recommended for use with the Eubank II heat pumps with economizers.

# **Indoor Air Quality Options**

#### > Anti-Microbial Light

A germicidal UV light destroys toxic bacteria, viruses and mold on the indoor air coil.

#### ➤ Cold Plasma Air Purification Device

Installed inside the unit, this device neutralizes odors, kills mold, bacteria and viruses. It also helps to control allergens\*, asthma\*, smoke and airborne particles.

\*These statements are based on customer testimonials and have not been evaluated by the FDA.

#### Model: GPS-2400-3 24VAC-80190HZ-19VA

#### Cold Plasma Air Purifier

#### ➤ MERV 13 Return Air Filters

Factory installed two inch (51 cm) MERV 13 filters. Ultra high filtration material that removes most airborne mold, spores and dust. Replaces standard MERV 7 return air filters.

# **Eubank Heat Pump Model Identification**

| Example  | 7 | Α | Α | 1 | 0 | 3 | 6 | Н | D | 0  | 5  | 0  | С  | +  | +  | +  | +  | 1  | Е  | Α  | +  | Α  | 1  | 1  | +  | +  | +  | +  | +  | +  |
|----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Position | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |

| 1  | Unit Designation/Family                        | 7 = Eubank Wall Mount                                                                                                                                                                          |    |                               | <b>D</b> = Dry Bulb Sensor                                                                                                                                                                   |
|----|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Energy Efficiency Patio                        | 7 - Lubank Wall Would                                                                                                                                                                          |    | Indoor Air Quality            | E = Dry Bulb Sensor w/Dirty Filter                                                                                                                                                           |
| 2  | (EER)                                          | <b>A</b> = 11 <b>A</b> = R-410a                                                                                                                                                                | 17 | Features                      | G = Dirty Filter Sensor<br>+ = None                                                                                                                                                          |
| 3  | Refrigerant Type  Compressor Type/             | 1 = Fixed Speed/Single                                                                                                                                                                         |    |                               | \$ = Special  1 = Top Supply/Bottom Return                                                                                                                                                   |
| 5  | Quantity  Unit Capacity/Nominal Cooling (BTUH) | 2 = 2-Stage/Single  024 = 24,000                                                                                                                                                               | 18 | Air Flow                      | 2 = Center Supply (Reverse) 3 = Bottom Supply/Top Return (Counter) 4 = Top Panel Discharge 5 = Centrifugal Blowers 6 = 3T3 7 = 3T5                                                           |
| 8  | System Type                                    | H = Heat Pump                                                                                                                                                                                  |    |                               | 8 = 4T2                                                                                                                                                                                      |
| g  | Power Supply                                   | <b>A</b> = 208/230-1-60 <b>D</b> = 460-3-60 <b>C</b> = 208/230-3-60                                                                                                                            |    |                               | 9 = 4T3<br>A = 3T2<br>\$ = Special                                                                                                                                                           |
| 1  | -                                              | 000 = No Heat   090 = 9KW   100 = 10KW                                                                                                                                                         | 19 | Compressor Location           | C = Center - All 6 ton units and above D = Left Hand - All 3½ to 5 ton units E = Right Hand - All 2 to 3 ton units                                                                           |
| 1: | @ Rated Voltage                                | 050 = 5KW<br>060 = 6KW<br>080 = 8KW<br>120 = 12KW<br>150 = 15KW                                                                                                                                |    |                               | A = 2" Pleated (MERV 8, AC/HP-C) C = 2" Charcoal D = MERV 11 High Filtration Package E = MERV 13 High Filtration Package                                                                     |
|    |                                                | A = Solid Front Door C = Economizer D = Motorized Damper w/Pressure Relief E = Motorized Damper w/Pressure Relief &                                                                            | 20 | Filter Option                 | F = Filter Access Through Return Air Grille W = Aluminum Washable + = None \$ = Special                                                                                                      |
| 1  | Nentilation Configuration                      | Independent Motorized Damper Control  F = No Free Cooling, 100% Emergency Ventilation Only w/Independent Control  H = GreenWheel® ERV  N = Barometric Damper w/15% OSA  + = None  \$ = Special | 21 | Corrosion Protection          | A = Condenser Coil Only C = Evaporator Coil Only D = Both Coils Condenser & Evaporator E = All Coils Cond/Evap/Reheat F = Coat All G = Coastal Package & Evaporator Coil K = Coastal Package |
| 1  | 1 Dehumidification                             | G = Hot Gas Reheat R = Electric Reheat T = Electric Reheat w/Humidity Control + = None \$ = Special                                                                                            | 22 | Engineering Revision<br>Level | + = None<br>\$ = Special                                                                                                                                                                     |
| 1  | 5 Controls                                     | A = Power Fail Alarm w/Additional Lockouts C = 24V EMS Relay Kit D = 24V EMS Relay Kit w/Factory Installed T-Stat E = Factory Installed T-Stat + = None \$ = Special                           | 24 | Cabinet Color                 | 1 = Beige (Standard Eubank) 2 = Gray 3 = Carlsbad Canyon 4 = White 5 = Stainless Steel Exterior 6 = Dark Bronze 8 = Mesa Tan 9 = Pebble Gray                                                 |
|    |                                                | A = Evaporator Freeze Sensor (EFS) C = EFS w/Hot Gas Bypass D = Desert Duty                                                                                                                    |    |                               | A = Stainless Steel - Unit<br>\$ = Custom Color (Powder Coat)                                                                                                                                |
|    |                                                | F = Desert Duty w/Hard Start                                                                                                                                                                   | 25 | Sound Attenuation             | 2 = Compressor Blanket<br>+ = None                                                                                                                                                           |
|    |                                                | G = Desert Duty w/EFS H = Desert Duty w/Hard Start & EFS N = Hard Start P = Hard Start w/Low Ambient & CCH Q = Hard Start w/Low Ambient & Fan Cycle Control (FCC)                              | 26 | Security Option               | A = Lockable Access Plate/Tamper Proof C = Tamper Proof Screws D = Lockable Access Plate w/Tamper Proof + = None \$ = Special                                                                |
| 1  | Operating Condition                            | R = Crank Case Heater (CCH) T = Hard Start w/EFS U = Hard Start w/Hot Gas Bypass V = Hard Start w/Low Ambient & CCH & EFS W = Low Ambient w/CCH                                                | 27 | Fastener/Drain Pan<br>Option  | A = Stainless Steel Fasteners C = Stainless Steel Drain Pan D = Stainless Steel Fasteners & Drain Pan + = None \$ = Special                                                                  |
|    |                                                | X = Hot Gas Bypass                                                                                                                                                                             | 28 | Unused                        | + = None<br>\$ = Special                                                                                                                                                                     |
|    |                                                | Y = Low Ambient w/CCH & FCC Z = Low Ambient w/CCH & EFS 1 = Low Ambient w/FCC                                                                                                                  | 29 | Unused                        | + = None<br>\$ = Special                                                                                                                                                                     |
|    |                                                | 2 = Low Ambient w/FCC & EFS 3 = CCH w/Hot Gas Bypass + = None \$ = Special                                                                                                                     | 30 | Special Variation             | + = None<br>\$ = Special Configuration Not Covered by<br>Model Nomenclature                                                                                                                  |

**Note:** Not all options are available with all configurations. Contact your Eubank sales representative for configuration details and feature compatibility.

# **EER Comparison by Model**

| Nominal Cooling Capacity (BTUH)           | Basic Model | EER  |
|-------------------------------------------|-------------|------|
| 22,000                                    | 7AA1024H    | 11.0 |
| 22,000                                    | 7AA2024H    | 11.0 |
| 20,000                                    | 7AA1030H    | 11.5 |
| 30,000                                    | 7AA2030H    | 11.0 |
| 26,000                                    | 7AA1036H    | 11.0 |
| 36,000                                    | 7AA2036H    | 11.0 |
| 42,000                                    | 7AA1042H    | 11.0 |
| 42,000                                    | 7AA2042H    | 11.0 |
| 49.000                                    | 7AA1048H    | 11.0 |
| 48,000                                    | 7AA2048H    | 11.0 |
| 60,000                                    | 7AA1060H    | 11.0 |
| 60,000                                    | 7AA2060H    | 11.0 |
| Note: 2024H-2060H models have 2-stage con | nressors    |      |

**Note:** 2024H-2060H models have 2-stage compressors.

# **Air Flow (Cubic Feet per Minute)**

| Model Number     |      | Ex   | ternal Static Pre | essure (WET CO | PIL) |      |
|------------------|------|------|-------------------|----------------|------|------|
| Model Number     | 0.10 | 0.20 | 0.25              | 0.30           | 0.40 | 0.50 |
| 7AA1024H & 2024H | 800  | 770  | 725               | 680            | 600  | 500  |
| 7AA1030H & 2030H | 1200 | 1100 | 1050              | 1000           | 900  | 800  |
| 7AA1036H & 2036H | 1290 | 1170 | 1115              | 1060           | 1000 | 920  |
| 7AA1042H & 2042H | 1500 | 1360 | 1295              | 1230           | 1160 | 1070 |
| 7AA1048H & 2048H | 1900 | 1800 | 1700              | 1600           | 1500 | 1350 |
| 7AA1060H & 2060H | 2200 | 2100 | 2000              | 1900           | 1800 | 1650 |

Air flow ratings of 208-230v. Units are at 230v. Air flow ratings of 480 v. units are at 460 volts. Operation of units at a different voltage from the rating point will affect air flow.

**Note:** Follow local codes and standards when designing duct runs to deliver the required airflow. Minimize noise and excessive pressure drops caused by duct aspect ratio changes, bends, dampers and outlet grilles in duct runs.

# **Eubank 7AA Single Stage Wall Mount Heat Pump Performance Data**

# Certified Efficiency and Capacity Ratings at ANSI/ARI Standard 390 - for 7AA Heat Pumps with Single Stage Compressor

| Model Number                          | 74     | A102   | 4H | 7₽     | A103 | 0H | 7A     | A103 | 6Н | 7A     | A104   | 2H | 74     | A104   | 8H     | 7AA1060H |   |   |
|---------------------------------------|--------|--------|----|--------|------|----|--------|------|----|--------|--------|----|--------|--------|--------|----------|---|---|
| woder Number                          | 22,000 |        | D  | Α      | С    | D  | Α      | С    | D  | Α      | С      | D  | Α      | С      | D      | Α        | С | D |
| Cooling BTUH <sup>1</sup>             | ,      |        | :  | 26,800 | )    | ;  | 34,000 | )    | 4  | 40,500 | )      |    | 46,200 | )      | 57,000 |          |   |   |
| EER <sup>2</sup>                      |        | 11.0   |    |        | 11.5 |    |        | 11.0 |    |        | 11.0   |    |        | 11.0   |        | 11.0     |   |   |
| High Temperature Heating <sup>3</sup> | :      | 21,000 |    | 26,000 |      |    | 33,000 |      |    | ;      | 33,000 | )  |        | 42,000 | )      | 51,000   |   |   |
| High Temperature COP <sup>3,4</sup>   |        | 3.3    |    | 3.3    |      |    | 3.3    |      |    |        | 3.3    |    |        | 3.3    |        | 3.3      |   |   |
| Rated Air Flow (CFM <sup>5</sup> )    |        | 800    |    | 1,000  |      |    | 1,200  |      |    |        | 1,300  |    |        | 1,750  |        | 1,750    |   |   |

¹Cooling is rated at 95°F (35°C) outdoor and 80°F DB/67°F WB (26.5°C DB/19.5°C WB) return air.

Ratings are with no outside air. Performance will be affected by altitude. Ratings are at 230 volts for 208/230 volt units ("A" & "C" models) and 460 volts for "D" models.

Operation of units at a different voltage from that of the rating point will affect performance and air flow.

# Sensible Total Heat Ratio @ 95°F (35°C) Outside Air DB - 7AA Heat Pumps with Single Stage Compressor

| Model Number          | 7A     | A102   | 4H     | 7.4    | A103 | 0H   | 7A     | A103 | 6H | 7A     | A104   | 2H   | 7AA1048H |        |        | 7AA1060H |   |   |
|-----------------------|--------|--------|--------|--------|------|------|--------|------|----|--------|--------|------|----------|--------|--------|----------|---|---|
| Woder Number          | Α      | С      | D      | Α      | С    | D    | Α      | С    | D  | Α      | С      | D    | Α        | С      | D      | Α        | C | D |
| Total Capacity        | 22,000 |        | 26,800 |        |      | (    | 34,000 | )    | 4  | 40,500 | )      | 4    | 46,200   | )      | 57,000 |          |   |   |
| Sensible Heat Ratio   | 0.75   |        | 0.75   |        |      | 0.78 |        |      |    | 0.74   |        | 0.79 |          |        | 0.73   |          |   |   |
| Sensible Capacity     |        | 16,400 | )      | 20,000 |      |      | 25,500 |      |    | ;      | 30,000 | )    | (        | 36,800 | )      | 41,700   |   | ) |
| Rated Air Flow (CFM¹) |        | 800    |        | 1,000  |      |      | 1,200  |      |    |        | 1,300  |      |          | 1,750  |        | 1,750    |   |   |

<sup>&</sup>lt;sup>1</sup>CFM = Cubic Feet per Minute

Sensible Heat Ratios based upon ANSI/AHRI std. 390 outdoor conditions of 95°F (35°C) outdoor and 80°F DB/67°F WB (26.5°C DB/19.5°C WB) return air.

# Cooling Performance (BTUH) at Various Outdoor Temperatures - 7AA Heat Pumps with Single Stage Compressor

| Model Number        |             |              |               | Outd       | oor Tempei | rature      |              |                |             |
|---------------------|-------------|--------------|---------------|------------|------------|-------------|--------------|----------------|-------------|
| Woder Number        | 75°F/24°C   | 80°F/26.5°C  | 85°F/29°C     | 90°F/32°C  | 95°F/35°C  | 100°F/38°C  | 105°F/40.5°C | 110°F/43.3°C   | 115°F/46°C  |
| 7AA1024H            | 25,520      | 24,640       | 23,760        | 22,880     | 22,000     | 21,120      | 20,240       | 19,360         | 18,920      |
| 7AA1030H            | 31,088      | 30,016       | 28,944        | 27,872     | 26,800     | 25,728      | 26,656       | 23,584         | 23,048      |
| 7AA1036H            | 39,440      | 38,080       | 36,720        | 35,360     | 34,000     | 32,640      | 31,280       | 29,920         | 29,240      |
| 7AA1042H            | 46,980      | 45,360       | 43,740        | 42,120     | 40,500     | 38,880      | 37,260       | 35,640         | 34,830      |
| 7AA1048H            | 53,592      | 51,744       | 49,896        | 48,048     | 46,200     | 44,352      | 42,504       | 40,656         | 39,732      |
| 7AA1060H            | 66,120      | 63,840       | 61,560        | 59,280     | 57,000     | 54,720      | 52,440       | 50,160         | 49,020      |
| Based upon ANSI/AHR | Lstd 390 re | turn air con | ditions of 80 | °F DB/67°F | WB (26.5°) | C DB/19 5°0 | CWB) Retu    | rn air at rate | ed air flow |

<sup>&</sup>lt;sup>2</sup>EER = Energy Efficiency Ratio

<sup>3</sup>High Temperature Heating & COP is rated at 47°F DB/43°WB (8.3°C DB/6.1°C WB) outdoor and 70°F (21.1°C) return air.

<sup>&</sup>lt;sup>4</sup>COP = Coefficient of Performance

<sup>&</sup>lt;sup>5</sup>CFM = Cubic Feet per Minute

# Heating Performance (BTUH) at Various Outdoor Temperatures -7AA Heat Pumps with Single Stage Compressor

|                     |                |                  |                  | Outd             | oor Temper      | ature           |                |                  |                  |
|---------------------|----------------|------------------|------------------|------------------|-----------------|-----------------|----------------|------------------|------------------|
| Model Number        | 10°F / -12.2°C | 17ºF /<br>-8.3ºC | 20°F /<br>-6.7°C | 30°F /<br>-1.1°C | 40°F /<br>4.4°C | 47°F /<br>8.3°C | 50°F / 10°C    | 60°F /<br>15.6°C | 70°F /<br>21.1°C |
| 7AA1024H            | 9,775          | 11,500           | 12,450           | 15,775           | 18,625          | 21,000          | 21,630         | 22,575           | 23,625           |
| 7AA1030H            | 12,410         | 14,600           | 15,740           | 19,730           | 23,150          | 26,000          | 26,780         | 27,950           | 29,250           |
| 7AA1036H            | 14,110         | 16,600           | 18,240           | 23,980           | 28,900          | 33,000          | 33,990         | 35,475           | 37,125           |
| 7AA1042H            | 16,150         | 19,000           | 20,400           | 25,300           | 29,500          | 33,000          | 33,990         | 35,475           | 37,125           |
| 7AA1048H            | 20,060         | 23,600           | 25,440           | 31,880           | 37,400          | 42,000          | 43,260         | 45,150           | 47,250           |
| 7AA1060H            | 23,800         | 28,000           | 30,300           | 38,350           | 45,250          | 51,000          | 52,530         | 54,825           | 57,375           |
| Based upon ANSI/AHF | RI std. 390 re | turn air con     | ditions of 70    | °F DB (21.1      | I°C DB). Re     | turn air at ra  | ated air flow. |                  |                  |

# **Electrical Characteristics -**Compressor, Fan, Ventilation & Blower Motors -7AA Heat Pumps with Single Stage Compressor

|           | COMPRE        | ecop.            |                  | OTHER         | OL               | JTDO  | DR . |                  | NDOO! | _   | VE               | NTILATI          | ON              |
|-----------|---------------|------------------|------------------|---------------|------------------|-------|------|------------------|-------|-----|------------------|------------------|-----------------|
| Model     | COMPRE        | 330K             |                  | MOTORS        | FAI              | TOM I | OR   |                  | R (EC |     | GREEN            | WHEE             | _® ERV          |
| Number    | VOLTS-HZ-PH   | RLA <sup>1</sup> | LRA <sup>2</sup> | VOLTS-HZ-PH   | RPM <sup>3</sup> | FLA⁴  | HP⁵  | RPM <sup>3</sup> | FLA⁴  | HP⁵ |                  | AMPS             |                 |
|           | VOL13-112-F11 | INLA             | LIVA             | VOL13-112-F11 | IXFIVI           | ILA   | H    | IXFIVI           | ILA   | H   | OAM <sup>6</sup> | EXM <sup>7</sup> | WD <sup>8</sup> |
| 7AA1024HA | 208/230-60-1  | 12.8             | 58.3             | 208/230-60-1  | 1200             | 3.5   | 1/3  | 1050             | 2.8   | 1/3 |                  |                  |                 |
| 7AA1030HA | 208/230-60-1  | 12.8             | 77.0             | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1036HA | 208/230-60-1  | 16.6             | 112.0            | 208/230-60-1  | 1200             | 2.5   | 1/3  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1042HA | 208/230-60-1  | 19.8             | 109.0            | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1048HA | 208/230-60-1  | 21.8             | 117.0            | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 6.8   | 3/4 | 1.0              | 1.0              | 0.2             |
| 7AA1060HA | 208/230-60-1  | 26.2             | 134.0            | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 6.8   | 3/4 | 1.0              | 1.0              | 0.2             |
| 7AA1024HC | 208/230-60-3  | 7.7              | 55.1             | 208/230-60-1  | 1200             | 3.5   | 1/3  | 1050             | 2.8   | 1/3 |                  |                  |                 |
| 7AA1030HC | 208/230-60-3  | 8.3              | 71.0             | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1036HC | 208/230-60-3  | 10.4             | 88.0             | 208/230-60-1  | 1200             | 2.5   | 1/3  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1042HC | 208/230-60-3  | 13.6             | 83.1             | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1048HC | 208/230-60-3  | 13.7             | 83.1             | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 6.8   | 3/4 | 1.0              | 1.0              | 0.2             |
| 7AA1060HC | 208/230-60-3  | 15.6             | 111.0            | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 6.8   | 3/4 | 1.0              | 1.0              | 0.2             |
| 7AA1024HD | 460-60-3      | 3.6              | 28.0             | 208/230-60-1  | 1200             | 3.5   | 1/3  | 1050             | 2.8   | 1/3 |                  |                  |                 |
| 7AA1030HD | 460-60-3      | 5.1              | 38.0             | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1036HD | 460-60-3      | 5.8              | 44.0             | 208/230-60-1  | 1200             | 2.5   | 1/3  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1042HD | 460-60-3      | 6.1              | 41.0             | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 4.3   | 1/2 | 1.0              | 1.0              | 0.2             |
| 7AA1048HD | 460-60-3      | 6.2              | 41.0             | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 6.8   | 3/4 | 1.0              | 1.0              | 0.2             |
| 7AA1060HD | 460-60-3      | 7.7              | 52.0             | 208/230-60-1  | 1200             | 5.3   | 1/2  | 1050             | 6.8   | 3/4 | 1.0              | 1.0              | 0.2             |

<sup>&</sup>lt;sup>1</sup>RLA = Rated Load Amps <sup>5</sup>HP = Horsepower

<sup>&</sup>lt;sup>2</sup>LRA = Locked Rotor Amps <sup>6</sup>OAM = Outside Air Mover The 460 volt units have a step down transformer for the 230 volt motors.

<sup>&</sup>lt;sup>3</sup>RPM = Revolutions per Minute <sup>7</sup>EXM = Exhaust Air Mover

<sup>&</sup>lt;sup>4</sup>FLA = Full Load Amps <sup>8</sup>WD = Wheel Drive Motor

# Summary Electrical Ratings (Wire and HACR Circuit Breaker Sizing) -7AA Heat Pumps w/Single Stage Compressor & Ventilation Configuration: Manual Damper, up to 15% outside air ("N") Motorized, 2-Position Damper, up to 450 CFM of Outside Air w/Pressure Relief ("D") Economizer, Outside Air ("C")

| FLECTE         | RIC HEAT        | 000 =            | None             | 040 =            | 4 kw             | 050 =            | 5 kw             | 060 =            | 6 kw             | 080 =            | 8 kw             | 090 =            | 9 kw             | 100 =            | 10 kw            | 120 =            | 12 kw            | 150 =            | 15 kw            |
|----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| ELECTR         | IIC REAL        | SPI              | PE <sup>3</sup>  |
| BASIC<br>MODEL | VOLTS-HZ-<br>PH | MCA <sup>1</sup> | MFS <sup>2</sup> |
| 7AA1024HA      | 208/230-1-60    | 22.3             | 35               | 43.1             | 45               | 48.3             | 50               | 53.6             | 60               | 64.7             | 70               |                  |                  | 74.4             | 80               |                  |                  |                  |                  |
| 7AA1030HA      | 208/230-1-60    | 25.6             | 35               |                  |                  | 51.6             | 60               | 56.9             | 60               | 67.3             | 70               |                  |                  | 77.7             | 80               | 88.1             | 90               | 103.7            | 110              |
| 7AA1036HA      | 208/230-1-60    | 27.6             | 40               |                  |                  | 53.6             | 60               | 58.8             | 60               | 69.2             | 70               |                  |                  | 79.6             | 80               | 90.1             | 100              | 105.7            | 110              |
| 7AA1042HA      | 208/230-1-60    | 34.4             | 50               |                  |                  | 60.4             | 70               |                  |                  |                  |                  |                  |                  | 86.4             | 90               | 96.9             | 100              | 112.5            | 120              |
| 7AA1048HA      | 208/230-1-60    | 39.4             | 60               |                  |                  | 65.4             | 70               |                  |                  |                  |                  |                  |                  | 91.4             | 100              | 101.9            | 110              | 117.5            | 120              |
| 7AA1060HA      | 208/230-1-60    | 44.9             | 70               |                  |                  | 70.9             | 80               |                  |                  |                  |                  |                  |                  | 96.9             | 100              | 107.4            | 110              | 123.0            | 130              |
| 7AA1024HC      | 208/230-3-60    | 15.9             | 20               |                  |                  |                  |                  | 34.0             | 40               |                  |                  | 43.0             | 45               |                  |                  |                  |                  |                  |                  |
| 7AA1030HC      | 208/230-3-60    | 20.0             | 25               |                  |                  |                  |                  | 38.0             | 40               |                  |                  | 47.0             | 50               |                  |                  | 56.1             | 60               | 65.1             | 70               |
| 7AA1036HC      | 208/230-3-60    | 19.8             | 30               |                  |                  |                  |                  | 37.8             | 40               |                  |                  | 46.9             | 50               |                  |                  | 55.9             | 60               | 64.9             | 70               |
| 7AA1042HC      | 208/230-3-60    | 26.6             | 40               |                  |                  |                  |                  | 44.6             | 50               |                  |                  | 53.7             | 60               |                  |                  | 62.7             | 70               | 71.7             | 80               |
| 7AA1048HC      | 208/230-3-60    | 29.2             | 40               |                  |                  |                  |                  | 47.3             | 50               |                  |                  | 56.3             | 60               |                  |                  | 65.3             | 70               | 74.3             | 80               |
| 7AA1060HC      | 208/230-3-60    | 31.6             | 45               |                  |                  |                  |                  | 49.6             | 60               |                  |                  | 58.7             | 60               |                  |                  | 67.7             | 70               | 76.7             | 80               |
| 7AA1024HD      | 460-3-60        | 7.7              | 15               |                  |                  |                  |                  | 16.7             | 20               |                  |                  | 21.2             | 25               |                  |                  | 25.7             | 30               | 30.2             | 35               |
| 7AA1030HD      | 460-3-60        | 11.2             | 15               |                  |                  |                  |                  | 20.2             | 20               |                  |                  | 24.7             | 25               |                  |                  | 29.2             | 30               | 33.7             | 35               |
| 7AA1036HD      | 460-3-60        | 10.7             | 15               |                  |                  |                  |                  | 19.7             | 20               |                  |                  | 24.2             | 25               |                  |                  | 28.7             | 30               | 33.2             | 35               |
| 7AA1042HD      | 460-3-60        | 12.4             | 15               |                  |                  |                  |                  | 21.4             | 25               |                  |                  | 26.0             | 30               |                  |                  | 30.5             | 35               | 35.0             | 40               |
| 7AA1048HD      | 460-3-60        | 13.8             | 20               |                  |                  |                  |                  | 22.8             | 25               |                  |                  | 27.3             | 30               |                  |                  | 31.8             | 35               | 36.4             | 40               |
| 7AA1060HD      | 460-3-60        | 15.7             | 20               |                  |                  |                  |                  | 24.7             | 25               |                  |                  | 29.2             | 30               |                  |                  | 33.7             | 35               | 38.2             | 40               |

¹MCA = Minimum Circuit Ampacity (Wiring Size Amps) <sup>2</sup>MFS = Maximum Fuse or HACR Breaker Size <sup>3</sup>SPPE = Single Point Power Entry MCA & MFS are calculated at 230 volts on the 208-230v. (HPA & HPC) models. The 460 volt HPD models are calculated at 460 volts. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

Summary Electrical Ratings (Wire and HACR Circuit Breaker Sizing) - 7AA Heat Pumps with Single Stage Compressor and with the "S" Circuit Enabled and Ventilation Configuration:

Manual Damper, up to 15% outside air ("N")
Motorized, 2-Position Damper, up to 450 CFM of Outside Air w/Pressure Relief ("D") **Economizer, Outside Air ("C** 

| FLECTR         | IC HEAT         | 000 =            | None             | 040 =            | 4 kw             | 050 =            | 5 kw             | 060 =            | 6 kw             | 080 =            | 8 kw             | 090 =            | 9 kw             | 100 =            | 10 kw            | 120 =            | 12 kw            | 150 =            | 15 kw            |
|----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                 | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  |
| BASIC<br>MODEL | VOLTS-HZ-<br>PH | MCA <sup>1</sup> | MFS <sup>2</sup> |
| 7AA1024HA      | 208/230-1-60    | 22.3             | 35               | 23.6             | 35               | 28.8             | 35               | 34.1             | 35               |                  |                  |                  |                  | 54.9             | 60               |                  |                  |                  |                  |
| 7AA1030HA      | 208/230-1-60    | 25.6             | 35               |                  |                  | 30.3             | 35               | 35.6             | 40               |                  |                  |                  |                  | 56.4             | 60               | 66.8             | 70               | 82.4             | 90               |
| 7AA1036HA      | 208/230-1-60    | 27.6             | 40               |                  |                  | 30.3             | 40               | 35.6             | 40               |                  |                  |                  |                  | 56.4             | 60               | 66.8             | 70               | 82.4             | 90               |
| 7AA1042HA      | 208/230-1-60    | 34.4             | 45               |                  |                  | 34.4             | 45               |                  |                  |                  |                  |                  |                  | 56.4             | 60               | 66.8             | 70               | 82.4             | 90               |
| 7AA1048HA      | 208/230-1-60    | 39.4             | 60               |                  |                  | 39.4             | 60               |                  |                  |                  |                  |                  |                  | 58.9             | 60               | 69.3             | 70               | 84.9             | 90               |
| 7AA1060HA      | 208/230-1-60    | 44.9             | 70               |                  |                  | 44.9             | 70               |                  |                  |                  |                  |                  |                  | 59.9             | 60               | 69.3             | 70               | 84.9             | 90               |
| 7AA1024HC      | 208/230-3-60    | 15.9             | 20               |                  |                  |                  |                  | 20.8             | 35               |                  |                  | 29.9             | 35               |                  |                  | 38.9             | 40               | 47.9             | 50               |
| 7AA1030HC      | 208/230-3-60    | 20.0             | 25               |                  |                  |                  |                  | 22.3             | 25               |                  |                  | 31.4             | 35               |                  |                  | 40.4             | 45               | 49.4             | 50               |
| 7AA1036HC      | 208/230-3-60    | 19.8             | 35               |                  |                  |                  |                  | 22.3             | 30               |                  |                  | 31.4             | 35               |                  |                  | 40.4             | 45               | 49.4             | 50               |
| 7AA1042HC      | 208/230-3-60    | 26.6             | 40               |                  |                  |                  |                  | 26.6             | 40               |                  |                  | 31.4             | 40               |                  |                  | 40.4             | 45               | 49.4             | 50               |
| 7AA1048HC      | 208/230-3-60    | 29.2             | 40               |                  |                  |                  |                  | 29.6             | 40               |                  |                  | 33.9             | 40               |                  |                  | 42.9             | 45               | 51.9             | 60               |
| 7AA1060HC      | 208/230-3-60    | 31.6             | 45               |                  |                  |                  |                  | 31.6             | 45               |                  |                  | 33.9             | 45               |                  |                  | 42.9             | 45               | 51.9             | 60               |
| 7AA1024HD      | 460-3-60        | 7.7              | 15               |                  |                  |                  |                  | 10.4             | 15               |                  |                  | 14.9             | 20               |                  |                  | 19.4             | 20               | 24.0             | 25               |
| 7AA1030HD      | 460-3-60        | 11.2             | 15               |                  |                  |                  |                  | 11.2             | 15               |                  |                  | 15.7             | 20               |                  |                  | 20.2             | 25               | 24.7             | 25               |
| 7AA1036HD      | 460-3-60        | 10.7             | 15               |                  |                  |                  |                  | 11.2             | 15               |                  |                  | 15.7             | 20               |                  |                  | 20.2             | 25               | 24.7             | 25               |
| 7AA1042HD      | 460-3-60        | 12.4             | 15               |                  |                  |                  |                  | 12.4             | 15               |                  |                  | 15.7             | 20               |                  |                  | 20.2             | 25               | 24.7             | 25               |
| 7AA1048HD      | 460-3-60        | 13.8             | 20               |                  |                  |                  |                  | 13.8             | 15               |                  |                  | 16.9             | 20               |                  |                  | 21.4             | 25               | 26.0             | 30               |
| 7AA1060HD      | 460-3-60        | 15.7             | 20               |                  |                  |                  |                  | 15.7             | 20               |                  |                  | 16.9             | 20               |                  |                  | 21.4             | 25               | 26.0             | 30               |

S-Circuit - The user can move a pin on the board to control whether the electric heat will operate simultaneously with the compressor (S Circuit – NO) or will not run simultaneously with the compressor (S Circuit – Yes).

¹MCA = Minimum Circuit Ampacity (Wiring Size Amps)

²MFS = Maximum Fuse or HACR Breaker Size

³SPPE = Single Point Power Entry

MCA & MFS are calculated at 230 volts on the 208-230v. (HPA & HPC) models. The 460 volt HPD models are calculated at 460 volts. This chart should only be used as a guideline for estimating conductor size and overcurrent MCA & MFS are calculated protection. For the requirements of specific units, always refer to the data label on the unit.

# Summary Electrical Ratings (Wire and HACR Circuit Breaker Sizing) - 7AA Heat Pumps with Single Stage Compressor and GreenWheel® ERV - Ventilation Configuration ("H")

| ELECTRIC HEAT   |                                                                                                                                                          |                                                                                                                                                                                                                                                         | 040 =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| 460-3-60        | 11.8                                                                                                                                                     | 15                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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| 460-3-60        | 13.5                                                                                                                                                     | 15                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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| 460-3-60        | 16.8                                                                                                                                                     | 20                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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|                 | VOLTS-HZ-PH  208/230-1-60 208/230-1-60 208/230-1-60 208/230-1-60 208/230-3-60 208/230-3-60 208/230-3-60 208/230-3-60 460-3-60 460-3-60 460-3-60 460-3-60 | VOLTS-HZ-<br>PH MCA <sup>1</sup> 208/230-1-60 27.8  208/230-1-60 29.8  208/230-1-60 36.6  208/230-1-60 41.6  208/230-1-60 47.1  208/230-3-60 22.2  208/230-3-60 22.0  208/230-3-60 31.4  208/230-3-60 33.8  460-3-60 12.3  460-3-60 11.8  460-3-60 13.5 | SPPE³           VOLTS-HZ-PH         MCA¹         MFS²           208/230-1-60         27.8         35           208/230-1-60         29.8         40           208/230-1-60         36.6         45           208/230-1-60         47.1         60           208/230-3-60         22.2         25           208/230-3-60         22.0         30           208/230-3-60         28.8         35           208/230-3-60         31.4         40           208/230-3-60         33.8         45           460-3-60         12.3         15           460-3-60         11.8         15           460-3-60         13.5         15           460-3-60         14.9         15 | SPPE3   SP       | SPPE3   SPPE | SPPE3   SPPE | SPPE3   SPPE | SPPE3   SPPE | SPPE3   SPPE3   SPPE3   SPPE3   SPPE3   SPPE3 | SPPE3   SPPE | SPPE3   SPPE3   SPPE3   SPPE3   SPPE3   SPPE3   SPPE3 | SPPE3   SPPE | SPPE3   SPPE | SPPE3   SPPE | SPPE3   SPPE | Note             | Note   Note | Note   Note |

<sup>1</sup>MCA = Minimum Circuit Ampacity (Wiring Size Amps) 2MFS = Maximum Fuse or HACR Breaker Size 3SPPE = Single Point Power Entry

# Summary Electrical Ratings (Wire and HACR Circuit Breaker Sizing) - 7AA Heat Pumps w/Single Stage Compressor & "S" Circuit Enabled & GreenWheel® ERV - Ventilation Configuration ("H")

| FLECTE         | RIC HEAT        | 000 =            | None             | 040 =            | 4 kw             | 050 =            | 5 kw             | 060 =            | 6 kw             | 080 =            | 8 kw             | 090 =            | 9 kw             | 100 =            | 10 kw            | 120 =            | 12 kw            | 150 =            | 15 kw            |
|----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                |                 | SPI              | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  |
| BASIC<br>MODEL | VOLTS-HZ-<br>PH | MCA <sup>1</sup> | MFS <sup>2</sup> |
| 7AA1030HA      | 208/230-1-60    | 27.8             | 35               |                  |                  | 32.5             | 35               | 37.8             | 40               |                  |                  |                  |                  | 58.6             | 60               | 69.0             | 70               | 84.6             | 90               |
| 7AA1036HA      | 208/230-1-60    | 29.8             | 40               |                  |                  | 32.6             | 40               | 37.8             | 40               |                  |                  |                  |                  | 58.6             | 60               | 69.0             | 70               | 84.6             | 90               |
| 7AA1042HA      | 208/230-1-60    | 36.6             | 45               |                  |                  | 36.6             | 45               |                  |                  |                  |                  |                  |                  | 58.6             | 60               | 69.0             | 70               | 84.6             | 90               |
| 7AA1048HA      | 208/230-1-60    | 41.6             | 50               |                  |                  | 41.6             | 50               |                  |                  |                  |                  |                  |                  | 61.1             | 70               | 71.5             | 80               | 87.1             | 90               |
| 7AA1060HA      | 208/230-1-60    | 47.1             | 60               |                  |                  | 47.1             | 60               |                  |                  |                  |                  |                  |                  | 62.1             | 70               | 71.5             | 80               | 87.1             | 90               |
| 7AA1030HC      | 208/230-3-60    | 22.2             | 25               |                  |                  |                  |                  | 24.5             | 25               |                  |                  | 33.6             | 35               |                  |                  | 42.6             | 45               | 51.6             | 60               |
| 7AA1036HC      | 208/230-3-60    | 22.0             | 30               |                  |                  |                  |                  | 24.8             | 30               |                  |                  | 33.6             | 35               |                  |                  | 42.6             | 45               | 51.6             | 60               |
| 7AA1042HC      | 208/230-3-60    | 28.8             | 35               |                  |                  |                  |                  | 28.8             | 35               |                  |                  | 33.6             | 35               |                  |                  | 42.6             | 45               | 51.6             | 60               |
| 7AA1048HC      | 208/230-3-60    | 31.4             | 40               |                  |                  |                  |                  | 31.8             | 40               |                  |                  | 36.1             | 40               |                  |                  | 45.1             | 50               | 54.1             | 60               |
| 7AA1060HC      | 208/230-3-60    | 33.8             | 45               |                  |                  |                  |                  | 33.8             | 45               |                  |                  | 36.1             | 45               |                  |                  | 45.1             | 50               | 54.1             | 60               |
| 7AA1030HD      | 460-3-60        | 12.3             | 15               |                  |                  |                  |                  | 12.3             | 15               |                  |                  | 16.8             | 20               |                  |                  | 21.3             | 25               | 25.8             | 30               |
| 7AA1036HD      | 460-3-60        | 11.8             | 15               |                  |                  |                  |                  | 13.5             | 15               |                  |                  | 16.8             | 20               |                  |                  | 21.3             | 25               | 25.8             | 30               |
| 7AA1042HD      | 460-3-60        | 13.5             | 15               |                  |                  |                  |                  | 13.5             | 15               |                  |                  | 16.8             | 20               |                  |                  | 21.3             | 25               | 25.8             | 30               |
| 7AA1048HD      | 460-3-60        | 14.9             | 15               |                  |                  |                  |                  | 14.9             | 15               |                  |                  | 18.0             | 20               |                  |                  | 22.5             | 25               | 27.0             | 30               |
| 7AA1060HD      | 460-3-60        | 16.8             | 20               |                  |                  |                  |                  | 16.8             | 20               |                  |                  | 18.0             | 20               |                  |                  | 22.5             | 25               | 27.0             | 30               |

S-Circuit - The user can move a pin on the board to control whether the electric heat will operate simultaneously with the compressor (S Circuit – NO) or will not run simultaneously with the compressor (S Circuit – Yes).

1MCA = Minimum Circuit Ampacity (Wiring Size Amps)

2MFS = Maximum Fuse or HACR Breaker Size

3SPPE = Single Point Power Entry

MCA & MFS are calculated at 230 volts on the 208-230v. (HPA & HPC) models. The 460 volt HPD models are calculated at 460 volts. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

MCA & MFS are calculated at 230 volts on the 208-230v. (HPA & HPC) models. The 460 volt HPD models are calculated at 460 volts. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

### **Unit Load Amps (Heating) -**

7AA Heat Pumps w/Single Stage Compressor & Ventilation Configuration:

Manual Damper, up to 15% outside air ("N")

Motorized 2-Position Damper, up to 450 cfm of outside air w/Pressure Relief ("D") Economizer Outside Air ("C")

| ECOHOL          | lizer, Oui           | tside A        | Ir ( C     |          |           |                     |                |         |       |        |       |       |        |        |       |                                     |        |        |       |
|-----------------|----------------------|----------------|------------|----------|-----------|---------------------|----------------|---------|-------|--------|-------|-------|--------|--------|-------|-------------------------------------|--------|--------|-------|
| MODEL<br>NUMBER | VOLTAGE<br>PHASE     | CURRENT        | (AMPS)     | (1,      | ALL HE    | SISTIVE<br>EATING I | ELEMEN<br>CIR( | NTS ARE | ONAS  | SEPARA | TE    |       | JDES A | MPS FR | ом мо | I HEAT<br>TOR(S)<br>JIT THA<br>TERS | THAT A | RE LOC |       |
| NOMBER          | HERTZ                | nr.            | IDIVI      | 04 kW    | 05 kW     | 06 kW               | 08 kW          | 09 kW   | 10 kW | 12 kW  | 15 kW | 04 Kw | 05 Kw  | 06 Kw  | 08 Kw | 09 Kw                               | 10 Kw  | 12 Kw  | 15 Kw |
| 7AA1024HA       | 208-230/1/60         | 19.1           | 2.8        | 16.7     | 20.8      | 25.00               | 33.3           |         | 41.7  |        |       | 35.8  | 39.9   | 44.1   | 52.4  |                                     | 60.8   |        |       |
| 7AA1030HA       | 208-230/1/60         | 22.4           | 4.3        | 16.7     | 20.8      | 25.00               | 33.3           |         | 41.7  | 50.0   | 62.5  | 39.1  | 43.2   | 47.4   | 55.7  |                                     | 64.1   | 72.4   | 84.9  |
| 7AA1036HA       | 208-230/1/60         | 23.4           | 4.3        | 16.7     | 20.8      | 25.00               | 33.3           |         | 41.7  | 50.0   | 62.5  | 40.1  | 44.2   | 48.4   | 56.7  |                                     | 65.1   | 76.2   | 88.7  |
| 7AA1042HA       | 208-230/1/60         | 29.4           | 4.3        |          | 20.8      |                     |                |         | 41.7  | 50.0   | 62.5  |       | 50.2   |        |       |                                     | 71.1   | 79.4   | 91.9  |
| 7AA1048HA       | 208-230/1/60         | 33.9           | 6.8        |          | 20.8      |                     |                |         | 41.7  | 50.0   | 62.5  |       | 54.7   |        |       |                                     | 75.6   | 83.9   | 96.4  |
| 7AA1060HA       | 208-230/1/60         | 38.3           | 6.8        |          | 20.8      |                     |                |         | 41.7  | 50.0   | 62.5  |       | 59.1   |        |       |                                     | 80.0   | 88.3   | 100.8 |
| 7AA1024HC       | 208-230/3/60         | 14.0           | 2.8        |          |           | 14.4                |                | 22      |       | 28.9   | 36.1  |       |        | 28.4   |       | 35.7                                |        | 42.9   | 50.1  |
| 7AA1030HC       | 208-230/3/60         | 17.9           | 4.3        |          |           | 14.4                |                | 22      |       | 28.9   | 36.1  |       |        | 32.3   |       | 39.6                                |        | 46.8   | 54.0  |
| 7AA1036HC       | 208-230/3/60         | 17.2           | 4.3        |          |           | 14.4                |                | 22      |       | 28.9   | 36.1  |       |        | 34.4   |       | 41.7                                |        | 48.9   | 56.1  |
| 7AA1042HC       | 208-230/3/60         | 23.2           | 4.3        |          |           | 14.4                |                | 22      |       | 28.9   | 36.1  |       |        | 37.6   |       | 44.9                                |        | 52.1   | 59.3  |
| 7AA1048HC       | 208-230/3/60         | 25.8           | 6.8        |          |           | 14.4                |                | 22      |       | 28.9   | 36.1  |       |        | 40.2   |       | 47.5                                |        | 54.7   | 61.9  |
| 7AA1060HC       | 208-230/3/60         | 27.7           | 6.8        |          |           | 14.4                |                | 22      |       | 28.9   | 36.1  |       |        | 42.1   |       | 49.4                                |        | 56.6   | 63.8  |
| 7AA1024HD       | 460/3/60             | 6.8            | 1.4        |          |           | 7.2                 |                | 10.8    |       | 14.4   | 18.0  |       |        | 14.0   |       | 17.6                                |        | 21.2   | 24.8  |
| 7AA1030HD       | 460/3/60             | 9.9            | 2.2        |          |           | 7.2                 |                | 10.8    |       | 14.4   | 18.0  |       |        | 17.1   |       | 20.7                                |        | 24.3   | 27.9  |
| 7AA1036HD       | 460/3/60             | 9.2            | 2.2        |          |           | 7.2                 |                | 10.8    |       | 14.4   | 18.0  |       |        | 16.4   |       | 20.0                                |        | 23.6   | 27.2  |
| 7AA1042HD       | 460/3/60             | 10.9           | 2.2        |          |           | 7.2                 |                | 10.8    |       | 14.4   | 18.0  |       |        | 18.1   |       | 21.7                                |        | 25.3   | 28.9  |
| 7AA1048HD       | 460/3/60             | 12.3           | 3.4        |          |           | 7.2                 |                | 10.8    |       | 14.4   | 18.0  |       |        | 19.5   |       | 23.1                                |        | 26.7   | 30.3  |
| 7AA1060HD       | 460/3/60             | 13.8           | 3.4        |          |           | 7.2                 |                | 10.8    |       | 14.4   | 18.0  |       |        | 21.0   |       | 24.6                                |        | 28.2   | 31.8  |
| 1HP = Heat Pur  | np Unit Amps (includ | des Indoor Mot | or amps) 2 | IBM = Ir | ndoor Blo | ower Mo             | tor            |         |       |        |       |       |        |        |       |                                     |        |        |       |

Heating kW is rated at 240 volts on the 208-230v. (HPA & HPC) models. Derate heater output by 25% for operation at 208 volts. Heating kW is rated at 480 volts on the HPD models.

Total heating amps for single phase units with two circuits (#1 and #2) includes both circuits. Total heating amp cooling amps includes all motors. Three phase models contain single phase motor loads. Values shown are maximum phase loads. Loads are not equally balanced on each phase.

# **Unit Load Amps (Heating) -**7AA Heat Pumps with Single Stage Compressor and GreenWheel® ERV -**Ventilation Configuration ("H")**

|                 |                  | CURF | RENT (A | MPS)           |       | OF RES              |       |       |       |       |       |       |       |       |       |        | I HEAT                    |       |       | 4755  |
|-----------------|------------------|------|---------|----------------|-------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|---------------------------|-------|-------|-------|
| MODEL<br>NUMBER | VOLTAGE<br>PHASE | HP¹  | IBM²    | H <sup>3</sup> | '     | ) ALL HE<br>JADED V |       | CIR   | CUIT  |       |       |       |       |       |       | L CIRC | TOR(S)<br>UIT THA<br>TERS |       |       |       |
|                 | HERTZ            | •••  | IDIVI   |                | 04 kW | 05 kW               | 06 kW | 08 kW | 09 kW | 10 kW | 12 kW | 15 kW | 04 Kw | 05 Kw | 06 Kw | 08 Kw  | 09 Kw                     | 10 Kw | 12 Kw | 15 Kw |
| 7AA1030HA       | 208-230/1/60     | 24.6 | 2.8     | 2.2            | 16.7  | 20.8                | 25.0  | 33.3  |       | 41.7  | 50.0  | 62.5  | 41.3  | 45.4  | 49.6  | 57.9   |                           | 66.3  | 74.6  | 87.1  |
| 7AA1036HA       | 208-230/1/60     | 25.6 | 2.8     | 2.2            | 16.7  | 20.8                | 25.0  | 33.3  |       | 41.7  | 50.0  | 62.5  | 41.3  | 49.2  | 53.4  | 61.7   |                           | 70.1  | 78.4  | 90.9  |
| 7AA1042HA       | 208-230/1/60     | 31.6 | 2.8     | 2.2            |       | 20.8                |       |       |       | 41.7  | 50.0  | 62.5  |       | 52.4  |       |        |                           | 73.3  | 81.6  | 94.1  |
| 7AA1048HA       | 208-230/1/60     | 36.1 | 4.3     | 2.2            |       | 20.8                |       |       |       | 41.7  | 50.0  | 62.5  |       | 56.9  |       |        |                           | 77.8  | 86.1  | 98.6  |
| 7AA1060HA       | 208-230/1/60     | 40.5 | 4.3     | 2.2            |       | 20.8                |       |       |       | 41.7  | 50.0  | 62.5  |       | 61.3  |       |        |                           | 82.2  | 90.5  | 103.0 |
| 7AA1030HC       | 208-230/3/60     | 20.1 | 2.8     | 2.2            |       |                     | 14.4  |       | 21.7  |       | 28.9  | 36.1  |       |       | 34.5  |        | 41.8                      |       | 49.0  | 56.2  |
| 7AA1036HC       | 208-230/3/60     | 19.4 | 2.8     | 2.2            |       |                     | 14.4  |       | 21.7  |       | 28.9  | 36.1  |       |       | 36.6  |        | 43.9                      |       | 51.1  | 58.3  |
| 7AA1042HC       | 208-230/3/60     | 25.4 | 2.8     | 2.2            |       |                     | 14.4  |       | 21.7  |       | 28.9  | 36.1  |       |       | 39.8  |        | 47.1                      |       | 54.3  | 61.5  |
| 7AA1048HC       | 208-230/3/60     | 28.0 | 4.3     | 2.2            |       |                     | 14.4  |       | 21.7  |       | 28.9  | 36.1  |       |       | 42.4  |        | 49.7                      |       | 56.9  | 64.1  |
| 7AA1060HC       | 208-230/3/60     | 29.9 | 4.3     | 2.2            |       |                     | 14.4  |       | 21.7  |       | 28.9  | 36.1  |       |       | 44.3  |        | 51.6                      |       | 58.8  | 66.0  |
| 7AA1030HD       | 460/3/60         | 11.0 | 1.4     | 1.1            |       |                     | 7.2   |       | 10.8  |       | 14.4  | 18.0  |       |       | 18.2  |        | 21.8                      |       | 25.4  | 29.0  |
| 7AA1036HD       | 460/3/60         | 10.3 | 1.4     | 1.1            |       |                     | 7.2   |       | 10.8  |       | 14.4  | 18.0  |       |       | 18.9  |        | 22.5                      |       | 26.1  | 29.7  |
| 7AA1042HD       | 460/3/60         | 12.0 | 1.4     | 1.1            |       |                     | 7.2   |       | 10.8  |       | 14.4  | 18.0  |       |       | 19.2  |        | 22.8                      |       | 26.4  | 30.0  |
| 7AA1048HD       | 460/3/60         | 13.4 | 2.2     | 1.1            |       |                     | 7.2   |       | 10.8  |       | 14.4  | 18.0  |       |       | 20.6  |        | 24.2                      |       | 27.8  | 31.4  |
| 7AA1060HD       | 460/3/60         | 14.9 | 2.2     | 1.1            |       |                     | 7.2   |       | 10.8  |       | 14.4  | 18.0  |       |       | 22.1  |        | 25.7                      |       | 29.3  | 32.9  |

<sup>1</sup>HP = Heat Pump Unit Amps (includes Indoor Motor amps) <sup>2</sup>IBM = Indoor Blower Motor <sup>3</sup>H = GreenWheel ERV

Heating kW is rated at 240 volts on the 208-230v. (HPA & HPC) models. Derate heater output by 25% for operation at 208 volts. Heating kW is rated at 480 volts on the HPD models. Total heating amps for single phase units with two circuits (#1 and #2) includes both circuits. Total heating and cooling amps includes all motors. Three phase models contain single phase motor loads. Values shown are maximum phase loads. Loads are not equally balanced on each phase

## **Eubank 7AA 2-Stage Wall Mount Heat Pump Performance Data**

Certified Efficiency and Capacity Ratings at ANSI/ARI Standard 390 - for 7AA Heat Pumps with 2-Stage Compressor

| Model Number                            | 7AA2024H | 7AA2030H | 7AA2036H | 7AA2042H | 7AA2048H | 7AA2060H |
|-----------------------------------------|----------|----------|----------|----------|----------|----------|
| woder Number                            | A C D    | A C D    | A C D    | A C D    | A C D    | A C D    |
| Cooling BTUH <sup>1</sup> - 2nd Stage   | 22,000   | 28,800   | 33,000   | 39,000   | 47,000   | 56,000   |
| EER <sup>2</sup> - 2nd Stage            | 11.0     | 11.0     | 11.0     | 11.0     | 11.0     | 11.0     |
| Integrated Part Load Value <sup>3</sup> | 13.5     | 14.0     | 14.0     | 13.6     | 15.0     | 14.8     |
| High Temperature Heating⁴               | 21,400   | 26,000   | 31,400   | 37,600   | 39,000   | 50,500   |
| High Temperature COP⁵                   | 3.3      | 3.3      | 3.3      | 3.3      | 3.3      | 3.3      |
| Rated Air Flow (CFM <sup>6</sup> )      | 800      | 1,000    | 1,200    | 1,300    | 1,750    | 1,750    |

<sup>1</sup>Cooling is rated at 95°F (35°C) outdoor and 80°F DB/67°F WB (26.5°C DB/19.5°C WB) return air.

<sup>2</sup>EER = Energy Efficiency Ratio

Integrated Part Load Value is an integrated efficiency measure from 1st and 2nd stage capacity modulation.

<sup>4</sup>High Temperature Heating & COP is rated at 47°F DB/43°WB (8.3°C DB/6.1°C WB) outdoor and 70°F (21.1°C) return air.

<sup>5</sup>COP = Coefficient of Performance

<sup>6</sup>CFM = Cubic Feet per Minute

Ratings are with no outside air. Performance will be affected by altitude. Ratings are at 230 volts for 208/230 volt units ("A" & "C" models) and 460 volts for "D" models.

Operation of units at a different voltage from that of the rating point will affect performance and air flow.

# Sensible Total Heat Ratio @ 95°F (35°C) Outside Air DB - 7AA Heat Pumps - Stage 2

| Model Number         | 7/ | 4A2024 | 4H | 7. | AA2030 | DΗ | 7, | 4A2036 | SH | 7/ | AA2042 | 2H | 7,4 | AA2048 | ВН | 7.4 | A2060  | Н |
|----------------------|----|--------|----|----|--------|----|----|--------|----|----|--------|----|-----|--------|----|-----|--------|---|
| woder Number         | Α  | С      | D  | Α  | С      | D  | Α  | С      | D  | Α  | С      | D  | Α   | С      | D  | Α   | С      | D |
| Total Capacity       | 2  | 22,000 | 0  | :  | 28,80  | 0  | 3  | 33,00  | )  | 3  | 39,000 | )  |     | 17,000 | )  | 5   | 6,000  | ) |
| Sensible Heat Ratio  |    | 0.78   |    |    | 0.80   |    |    | 0.78   |    |    | 0.74   |    |     | 0.77   |    |     | 0.70   |   |
| Sensible Capacity    |    | 17,000 | 0  | :  | 23,000 | 0  | 2  | 26,000 | )  | 2  | 29,000 | )  | 3   | 36,000 | )  | 3   | 39,000 | ) |
| Rated Air Flow (CFM) |    | 800    |    |    | 1,000  | )  |    | 1,200  | )  |    | 1,300  |    |     | 1,750  |    |     | 1,750  |   |

<sup>1</sup>CFM=Cubic Feet per Minute

Sensible Heat Ratios based upon ANSI/AHRI std. 390 outdoor conditions of 95°F (35°C) outdoor and 80°F DB/67°F WB (26.5°C DB/19.5°C WB) return air.

# Cooling Performance (BTUH) at Various Outdoor Temperatures - 7AA Heat Pumps - Stage 2

| 77 11 1 1 1 1 1 1 1 | 0 1 01111   |               |               | ,             | ,            |             |              |                |              |
|---------------------|-------------|---------------|---------------|---------------|--------------|-------------|--------------|----------------|--------------|
| Model               |             |               |               | Outd          | loor Tempera | ature       |              |                |              |
| Number              | 75°F/24°C   | 80°F/26.5°C   | 85°F/29°C     | 90°F/32°C     | 95°F/35°C    | 100°F/38°C  | 105°F/40.5°C | 110°F/43.3°C   | 115°F/46°C   |
| 7AA2024H            | 25,520      | 24,640        | 23,700        | 22,800        | 22,000       | 21,000      | 20,200       | 19,300         | 18,900       |
| 7AA2030H            | 33,408      | 32,256        | 31,104        | 29,952        | 28,800       | 27,648      | 26,496       | 25,344         | 24,768       |
| 7AA2036H            | 38,280      | 36,960        | 35,640        | 34,320        | 33,000       | 31,680      | 30,360       | 29,040         | 28,380       |
| 7AA2042H            | 45,240      | 43,680        | 42,120        | 40,560        | 39,000       | 37,440      | 35,880       | 34,320         | 33,540       |
| 7AA2048H            | 54,520      | 52,640        | 50,760        | 48,880        | 47,000       | 45,120      | 43,240       | 41,360         | 40,420       |
| 7AA2060H            | 64,960      | 62,720        | 60,480        | 59,280        | 56,000       | 53,760      | 51,520       | 49,280         | 48,160       |
| Based upon          | ANSI/AHRI d | td 390 return | air condition | ns of 80°F DE | 3/67°F WB (2 | 6.5°C DB/19 | 5°C WB) Re   | turn air at ra | ted air flow |

# Heating Performance (BTUH) at Various Outdoor Temperatures - 7AA Heat Pumps with 2-Stage Compressor

|            |              |                | 9               |               |              |                 |                  |             |             |
|------------|--------------|----------------|-----------------|---------------|--------------|-----------------|------------------|-------------|-------------|
| Model      |              |                |                 | Outd          | oor Tempera  | ature           |                  |             |             |
| Number     | 10°F/-12.2°C | 17°F/-8.3°C    | 20°F/-6.7°C     | 30°F/-1.1°C   | 40°F/4.4°C   | 47°F/8.3°C      | 50°F/10°C        | 60°F/15.6°C | 70°F/21.1°C |
| 7AA2024H   | 11,880       | 13,200         | 14,500          | 17,160        | 19,800       | 21,400          | 22,400           | 25,800      | 27,000      |
| 7AA2030H   | 12,155       | 14,300         | 15,470          | 19,565        | 23,075       | 26,000          | 26,780           | 27,950      | 29,250      |
| 7AA2036H   | 14,620       | 17,200         | 18,620          | 23,590        | 27,850       | 31,400          | 32,342           | 33,755      | 35,325      |
| 7AA2042H   | 17,680       | 20,800         | 22,420          | 28,090        | 32,950       | 37,000          | 38,110           | 39,775      | 41,625      |
| 7AA2048H   | 18,700       | 22,000         | 23,700          | 29,650        | 34,750       | 39,000          | 40,170           | 41,925      | 43,875      |
| 7AA2060H   | 25,500       | 30,000         | 32,050          | 39,225        | 45,375       | 50,500          | 52,015           | 54,288      | 56,813      |
| Based upon | ANSI/AHRI s  | td. 390 returi | n air conditior | ns of 70°F DE | 3 (21.1°C DB | ). Return air a | at rated air flo | )W.         |             |

Electrical Characteristics - 7AA Heat Pumps - 2-Stage Compressor Manual Damper, up to 15% outside air ("N") Motorized 2-Position Damper, up to 450 cfm of outside air w/Pressure Relief ("D") Economizer, Outside air with Pressure Relief ("C") GreenWheel® Energy Recovery Ventilator ("H") Compressor, Fan, Ventilation & Blower Motors -

|                             |              |                    |                  | OTHER        | OI               | JTDOO   | )R       | ll ll            | NDOOI         | R      | VE               | NTILATI          | ON              |
|-----------------------------|--------------|--------------------|------------------|--------------|------------------|---------|----------|------------------|---------------|--------|------------------|------------------|-----------------|
| Model                       | COMPRE       | SSOR               |                  | MOTORS       |                  | N MOT   |          |                  | LOWE<br>OR (E |        | GREEN            | NWHEEI           | _® ERV          |
| Number                      | VOLTO UZ DU  | DI A1              | LDA2             | VOLTO UZ DU  | DDM3             | EL A4   | LID5     | DDM3             | <b>FI A</b> 4 | LID5   |                  | AMPS             |                 |
|                             | VOLTS-HZ-PH  | RLA <sup>1</sup>   | LRA <sup>2</sup> | VOLTS-HZ-PH  | RPM <sup>3</sup> | FLA⁴    | HP⁵      | RPM <sup>3</sup> | FLA⁴          | HP⁵    | OAM <sup>6</sup> | EXM <sup>7</sup> | WD <sup>8</sup> |
| 7AA2024HA                   | 208/230-60-1 | 11.7               | 58.3             | 208/230-60-1 | 1200             | 3.5     | 1/3      | 1050             | 2.8           | 1/3    | 1.0              | 1.0              | 0.2             |
| 7AA2030HA                   | 208/230-60-1 | 13.1               | 73.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2036HA                   | 208/230-60-1 | 15.2               | 83.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2042HA                   | 208/230-60-1 | 17.9               | 96.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2048HA                   | 208/230-60-1 | 21.1               | 104.0            | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 6.8           | 3/4    | 1.0              | 1.0              | 0.2             |
| 7AA2060HA                   | 208/230-60-1 | 27.1               | 152.9            | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 6.8           | 3/4    | 1.0              | 1.0              | 0.2             |
| 7AA2024HC                   | 208/230-60-3 | 6.5                | 55.4             | 208/230-60-1 | 1200             | 3.5     | 1/3      | 1050             | 2.8           | 1/3    | 1.0              | 1.0              | 0.2             |
| 7AA2030HC                   | 208/230-60-3 | 8.6                | 58.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2036HC                   | 208/230-60-3 | 11.6               | 73.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2042HC                   | 208/230-60-3 | 14.1               | 88.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2048HC                   | 208/230-60-3 | 14.0               | 83.1             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 6.8           | 3/4    | 1.0              | 1.0              | 0.2             |
| 7AA2060HC                   | 208/230-60-3 | 16.5               | 110.0            | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 6.8           | 3/4    | 1.0              | 1.0              | 0.2             |
| 7AA2024HD                   | 460-60-3     | 3.5                | 28.0             | 208/230-60-1 | 1200             | 3.5     | 1/3      | 1050             | 2.8           | 1/3    | 1.0              | 1.0              | 0.2             |
| 7AA2030HD                   | 460-60-3     | 4.3                | 28.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2036HD                   | 460-60-3     | 5.7                | 38.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2042HD                   | 460-60-3     | 6.2                | 44.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 4.3           | 1/2    | 1.0              | 1.0              | 0.2             |
| 7AA2048HD                   | 460-60-3     | 6.4                | 41.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 6.8           | 3/4    | 1.0              | 1.0              | 0.2             |
| 7AA2060HD                   | 460-60-3     | 7.2                | 52.0             | 208/230-60-1 | 1200             | 5.3     | 1/2      | 1050             | 6.8           | 3/4    | 1.0              | 1.0              | 0.2             |
| <sup>1</sup> RLA = Rated Lo | ad Amps      | <sup>2</sup> LRA = | Locked           | Rotor Amps   | ³RPM :           | = Revol | utions p | per Minu         | ıte           | 4FLA = | Full Load        | Amps             |                 |

<sup>5</sup>HP = Horsepower

<sup>6</sup>OAM = Outside Air Mover

<sup>7</sup>EXM = Exhaust Air Mover

8WD = Wheel Drive Motor

The 460 volt units have a step down transformer for the 230 volt motors.

Summary Electrical Ratings (Wire and HACR Circuit Breaker Sizing) - 7AA Heat Pumps w/2-Stage Compressor and Ventilation Configurations: Manual Damper, up to 15% outside air ("N") Motorized, 2-Position Damper, up to 450 CFM of Outside Air w/Pressure Relief ("D")

**Economizer, Outside Air ("C")** 

| ELECTE         | RIC HEAT        | 000 =            | None             | 040 =            | 4 kw             | 050 =            | 5 kw             | 060 =            | 6 kw             | 080 =            | 8 kw             | 090 =            | 9 kw             | 100 =            | 10 kw            | 120 =            | 12 kw            | 150 =            | 15 kw            |
|----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LLLCTI         | III III III     | SP               | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  |
| BASIC<br>MODEL | VOLTS-HZ-<br>PH | MCA <sup>1</sup> | MFS <sup>2</sup> |
| 7AA2024HA      | 208/230-1-60    | 20.9             | 30               | 41.8             | 50               | 47.0             | 50               | 52.2             | 60               | 62.6             | 70               |                  |                  | 73.0             | 80               |                  |                  |                  |                  |
| 7AA2030HA      | 208/230-1-60    | 26.0             | 35               |                  |                  | 52.0             | 60               | 57.2             | 60               | 67.6             | 70               |                  |                  | 78.1             | 80               | 88.5             | 90               | 104.1            | 110              |
| 7AA2036HA      | 208/230-1-60    | 28.6             | 40               |                  |                  | 54.6             | 60               | 59.9             | 60               | 70.3             | 80               |                  |                  | 80.7             | 90               | 91.1             | 100              | 106.7            | 110              |
| 7AA2042HA      | 208/230-1-60    | 32.0             | 45               |                  |                  | 58.0             | 60               |                  |                  |                  |                  |                  |                  | 84.1             | 90               | 94.5             | 100              | 110.1            | 120              |
| 7AA2048HA      | 208/230-1-60    | 38.5             | 60               |                  |                  | 64.5             | 70               |                  |                  |                  |                  |                  |                  | 90.6             | 100              | 101.0            | 110              | 116.6            | 120              |
| 7AA2060HA      | 208/230-1-60    | 46.0             | 70               |                  |                  | 72.0             | 80               |                  |                  |                  |                  |                  |                  | 98.1             | 100              | 108.5            | 110              | 124.1            | 130              |
| 7AA2024HC      | 208/230-3-60    | 14.4             | 20               |                  |                  |                  |                  | 32.5             | 35               |                  |                  | 41.5             | 45               |                  |                  |                  |                  |                  |                  |
| 7AA2030HC      | 208/230-3-60    | 20.4             | 25               |                  |                  |                  |                  | 38.4             | 40               |                  |                  | 47.4             | 50               |                  |                  | 56.4             | 60               | 65.5             | 70               |
| 7AA2036HC      | 208/230-3-60    | 24.1             | 35               |                  |                  |                  |                  | 42.1             | 45               |                  |                  | 51.2             | 60               |                  |                  | 60.2             | 70               | 69.2             | 70               |
| 7AA2042HC      | 208/230-3-60    | 27.2             | 40               |                  |                  |                  |                  | 45.3             | 50               |                  |                  | 54.3             | 60               |                  |                  | 63.3             | 70               | 72.3             | 80               |
| 7AA2048HC      | 208/230-3-60    | 29.6             | 40               |                  |                  |                  |                  | 47.6             | 50               |                  |                  | 56.7             | 60               |                  |                  | 65.7             | 70               | 74.7             | 80               |
| 7AA2060HC      | 208/230-3-60    | 32.7             | 45               |                  |                  |                  |                  | 50.8             | 60               |                  |                  | 59.8             | 60               |                  |                  | 68.8             | 70               | 77.8             | 80               |
| 7AA2024HD      | 460-3-60        | 7.5              | 15               |                  |                  |                  |                  | 16.5             | 20               |                  |                  | 21.1             | 25               |                  |                  | 25.6             | 30               | 30.1             | 35               |
| 7AA2030HD      | 460-3-60        | 10.2             | 15               |                  |                  |                  |                  | 19.2             | 20               |                  |                  | 23.7             | 25               |                  |                  | 28.2             | 30               | 32.7             | 35               |
| 7AA2036HD      | 460-3-60        | 11.9             | 15               |                  |                  |                  |                  | 20.9             | 25               |                  |                  | 25.5             | 30               |                  |                  | 30.0             | 35               | 34.5             | 35               |
| 7AA2042HD      | 460-3-60        | 12.6             | 15               |                  |                  |                  |                  | 21.6             | 25               |                  |                  | 26.1             | 30               |                  |                  | 30.6             | 35               | 35.1             | 40               |
| 7AA2048HD      | 460-3-60        | 14.1             | 20               |                  |                  |                  |                  | 23.1             | 25               |                  |                  | 27.6             | 30               |                  |                  | 32.1             | 35               | 36.6             | 40               |
| 7AA2060HD      | 460-3-60        | 15.1             | 20               |                  |                  |                  |                  | 24.1             | 25               |                  |                  | 28.6             | 30               |                  |                  | 33.1             | 35               | 37.6             | 40               |

¹MCA = Minimum Circuit Ampacity (Wiring Size Amps.) ²MFS = Maximum Fuse or HACR Breaker Size ³SPPE = Single Point Power Entry
MCA & MFS are calculated at 230 volts on the 208-230v. (HPA & HPC) models. The 460 volt HPD models are calculated at 460 volts. This chart should only be used as a guideline for estimating

conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

Summary Electrical Ratings (Wire and HACR Circuit Breaker Sizing) -7AA Heat Pumps with 2-Stage Compressor and "S" Circuit Enabled and **Ventilation Configurations:** 

Manual Damper, up to 15% outside air ("N")
Motorized, 2-Position Damper, up to 450 CFM of Outside Air w/Pressure Relief ("D")

**Economizer, Outside Air ("C")** 

|                | RIC HEAT        | 000 =            | None             | 040 =            | 4 kw             | 050 =            | 5 kw             | 060 =            | 6 kw             | 080 =            | 8 kw             | 090 =            | 9 kw             | 100 =            | 10 kw            | 120 =            | 12 kw            | 150 =            | 15 kw            |
|----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| ELECTI         | NO FIEAT        | SP               | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  |
| BASIC<br>MODEL | VOLTS-HZ-<br>PH | MCA <sup>1</sup> | MFS <sup>2</sup> |
| 7AA2024HA      | 208/230-1-60    | 20.9             | 30               | 25.2             | 35               | 30.3             | 35               | 35.6             | 40               |                  |                  |                  |                  | 56.4             | 60               |                  |                  |                  |                  |
| 7AA2030HA      | 208/230-1-60    | 26.0             | 35               |                  |                  | 30.3             | 35               | 35.6             | 40               |                  |                  |                  |                  | 56.4             | 60               | 66.8             | 70               | 82.4             | 90               |
| 7AA2036HA      | 208/230-1-60    | 28.6             | 40               |                  |                  | 30.3             | 40               | 35.6             | 40               |                  |                  |                  |                  | 56.4             | 60               | 66.8             | 70               | 82.4             | 90               |
| 7AA2042HA      | 208/230-1-60    | 32.0             | 45               |                  |                  | 32               | 45               |                  |                  |                  |                  |                  |                  | 56.4             | 60               | 66.8             | 70               | 82.4             | 90               |
| 7AA2048HA      | 208/230-1-60    | 38.5             | 60               |                  |                  | 41               | 60               |                  |                  |                  |                  |                  |                  | 58.9             | 60               | 69.3             | 70               | 84.9             | 90               |
| 7AA2060HA      | 208/230-1-60    | 46.0             | 70               |                  |                  | 41               | 70               |                  |                  |                  |                  |                  |                  | 58.9             | 60               | 69.3             | 70               | 84.9             | 90               |
| 7AA2024HC      | 208/230-3-60    | 14.4             | 20               |                  |                  |                  |                  | 22.3             | 25               |                  |                  | 31.4             | 35               |                  |                  | 40.4             | 45               | 49.4             | 50               |
| 7AA2030HC      | 208/230-3-60    | 20.4             | 25               |                  |                  |                  |                  | 22.3             | 25               |                  |                  | 31.4             | 35               |                  |                  | 40.4             | 45               | 49.4             | 50               |
| 7AA2036HC      | 208/230-3-60    | 24.1             | 35               |                  |                  |                  |                  | 24.1             | 35               |                  |                  | 31.4             | 35               |                  |                  | 40.4             | 45               | 49.4             | 50               |
| 7AA2042HC      | 208/230-3-60    | 27.2             | 40               |                  |                  |                  |                  | 27.2             | 40               |                  |                  | 31.4             | 40               |                  |                  | 40.4             | 45               | 49.4             | 50               |
| 7AA2048HC      | 208/230-3-60    | 29.6             | 40               |                  |                  |                  |                  | 29.6             | 40               |                  |                  | 33.9             | 40               |                  |                  | 42.9             | 45               | 51.9             | 60               |
| 7AA2060HC      | 208/230-3-60    | 32.7             | 45               |                  |                  |                  |                  | 32.7             | 45               |                  |                  | 33.9             | 45               |                  |                  | 42.9             | 45               | 51.9             | 60               |
| 7AA2024HD      | 460-3-60        | 7.5              | 15               |                  |                  |                  |                  | 11.2             | 15               |                  |                  | 15.7             | 20               |                  |                  | 20.2             | 25               | 24.7             | 25               |
| 7AA2030HD      | 460-3-60        | 10.2             | 15               |                  |                  |                  |                  | 11.2             | 15               |                  |                  | 15.7             | 20               |                  |                  | 20.2             | 25               | 24.7             | 25               |
| 7AA2036HD      | 460-3-60        | 11.9             | 15               |                  |                  |                  |                  | 11.9             | 15               |                  |                  | 15.7             | 20               |                  |                  | 20.2             | 25               | 24.7             | 25               |
| 7AA2042HD      | 460-3-60        | 12.6             | 15               |                  |                  |                  |                  | 12.6             | 15               |                  |                  | 15.7             | 20               |                  |                  | 20.2             | 25               | 24.7             | 25               |
| 7AA2048HD      | 460-3-60        | 14.1             | 20               |                  |                  |                  |                  | 14.1             | 15               |                  |                  | 16.9             | 20               |                  |                  | 21.4             | 25               | 25.9             | 30               |
| 7AA2060HD      | 460-3-60        | 15.1             | 20               |                  |                  |                  |                  | 15.1             | 20               |                  |                  | 16.9             | 20               |                  |                  | 21.4             | 25               | 25.9             | 30               |

S-Circuit - The user can move a pin on the board to control whether the electric heat will operate simultaneously with the compressor (S Circuit – NO) or will not run simultaneously with the compressor (S Circuit – Yes).

1MCA = Minimum Circuit Ampacity (Wiring Size Amps)

2MFS = Maximum Fuse or HACR Breaker Size

3SPPE = Single Point Power Entry

MCA & MFS are calculated at 230 volts on the 208-230v. (HPA & HPC) models. The 460 volt HPD models are calculated at 460 volts. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

## Summary Electrical Ratings (Wire and HACR Circuit Breaker Sizing) -7AA Heat Pumps with 2-Stage Compressor and GreenWheel® Energy Recovery Ventilator - Ventilation Configuration ("H")

|                | 51 SCIPIC USAT   000 = None   040 = 4 kw   050 = 5 kw   060 = 6 kw   080 = 8 kw   090 = 9 kw   100 = 10 kw   120 = 12 kw   150 = 15 kw |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| ELECTR         | IC HEAT                                                                                                                                | 000 =            | None             | 040 =            | 4 kw             | 050 =            | 5 kw             | 060 =            | 6 kw             | 080 =            | 8 kw             | 090 =            | 9 kw             | 100 =            | 10 kw            | 120 =            | 12 kw            | 150 =            | 15 kw            |
|                | I                                                                                                                                      | SP               | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  |
| BASIC<br>MODEL | VOLTS-HZ-<br>PH                                                                                                                        | MCA <sup>1</sup> | MFS <sup>2</sup> |
|                |                                                                                                                                        |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |
| 7AA2024HA      | 208/230-1-60                                                                                                                           | 23.1             | 30               | 44.0             | 50               | 49.2             | 60               | 54.4             | 60               | 64.8             | 70               |                  |                  | 75.2             | 80               |                  |                  |                  |                  |
| 7AA2030HA      | 208/230-1-60                                                                                                                           | 28.2             | 35               |                  |                  | 54.2             | 60               | 59.4             | 60               | 69.8             | 70               |                  |                  | 80.3             | 90               | 90.7             | 90               | 106.3            | 110              |
| 7AA2036HA      | 208/230-1-60                                                                                                                           | 30.8             | 40               |                  |                  | 56.8             | 60               | 62.1             | 70               | 72.5             | 80               |                  |                  | 82.9             | 90               | 93.3             | 100              | 108.9            | 110              |
| 7AA2042HA      | 208/230-1-60                                                                                                                           | 34.2             | 45               |                  |                  | 60.2             | 70               |                  |                  |                  |                  |                  |                  | 86.3             | 90               | 96.7             | 100              | 112.3            | 120              |
| 7AA2048HA      | 208/230-1-60                                                                                                                           | 40.7             | 50               |                  |                  | 66.7             | 70               |                  |                  |                  |                  |                  |                  | 92.8             | 100              | 103.2            | 105              | 118.8            | 120              |
| 7AA2060HA      | 208/230-1-60                                                                                                                           | 48.2             | 60               |                  |                  | 74.2             | 80               |                  |                  |                  |                  |                  |                  | 100.3            | 105              | 110.7            | 110              | 126.3            | 130              |
| 7AA2024HC      | 208/230-3-60                                                                                                                           | 14.9             | 20               |                  |                  |                  |                  | 34.7             | 40               |                  |                  | 43.7             | 50               |                  |                  |                  |                  |                  |                  |
| 7AA2030HC      | 208/230-3-60                                                                                                                           | 18.6             | 25               |                  |                  |                  |                  | 40.6             | 45               |                  |                  | 49.6             | 50               |                  |                  | 58.6             | 60               | 67.7             | 70               |
| 7AA2036HC      | 208/230-3-60                                                                                                                           | 22.3             | 30               |                  |                  |                  |                  | 44.3             | 45               |                  |                  | 53.4             | 60               |                  |                  | 62.4             | 70               | 71.4             | 80               |
| 7AA2042HC      | 208/230-3-60                                                                                                                           | 25.4             | 35               |                  |                  |                  |                  | 47.5             | 50               |                  |                  | 56.5             | 60               |                  |                  | 65.5             | 70               | 74.5             | 80               |
| 7AA2048HC      | 208/230-3-60                                                                                                                           | 26.8             | 40               |                  |                  |                  |                  | 49.8             | 50               |                  |                  | 58.9             | 60               |                  |                  | 67.9             | 70               | 76.9             | 80               |
| 7AA2060HC      | 208/230-3-60                                                                                                                           | 29.9             | 45               |                  |                  |                  |                  | 53.0             | 60               |                  |                  | 62.0             | 70               |                  |                  | 71.0             | 80               | 80.0             | 80               |
| 7AA2024HD      | 460-3-60                                                                                                                               | 7.8              | 15               |                  |                  |                  |                  | 17.6             | 20               |                  |                  | 22.2             | 25               |                  |                  | 26.7             | 30               | 31.2             | 35               |
| 7AA2030HD      | 460-3-60                                                                                                                               | 9.3              | 15               |                  |                  |                  |                  | 20.3             | 25               |                  |                  | 24.8             | 25               |                  |                  | 29.3             | 30               | 33.8             | 35               |
| 7AA2036HD      | 460-3-60                                                                                                                               | 11.0             | 15               |                  |                  |                  |                  | 22.0             | 25               |                  |                  | 26.6             | 30               |                  |                  | 31.1             | 30               | 35.6             | 40               |
| 7AA2042HD      | 460-3-60                                                                                                                               | 11.7             | 15               |                  |                  |                  |                  | 22.7             | 25               |                  |                  | 27.2             | 30               |                  |                  | 31.7             | 30               | 36.2             | 40               |
| 7AA2048HD      | 460-3-60                                                                                                                               | 12.7             | 15               |                  |                  |                  |                  | 24.2             | 25               |                  |                  | 28.7             | 30               |                  |                  | 33.2             | 35               | 37.7             | 40               |
| 7AA2060HD      | 460-3-60                                                                                                                               | 13.7             | 20               |                  |                  |                  |                  | 25.2             | 30               |                  |                  | 29.7             | 30               |                  |                  | 34.2             | 35               | 38.7             | 40               |

<sup>1</sup>MCA = Minimum Circuit Ampacity (Wiring Size Amps) <sup>2</sup>MFS = Maximum Fuse or HACR Breaker Size <sup>3</sup>SPPE = Single Point Power Entry

MCA & MFS are calculated at 230 volts on the 208-230v. (HPA & HPC) models. The 460 volt HPD models are calculated at 460 volts. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

# Summary Electrical Ratings (Wire and HACR Circuit Breaker Sizing) -7AA Heat Pumps with 2-Stage Compressor and "S" Circuit Enabled GreenWheel® Energy Recovery Ventilator - Ventilation Configuration ("H")

| ELECTRI        | CHEAT           | 000 =            | None             | 040 =            | 4 kw             | 050 =            | 5 kw             | 060 =            | 6 kw             | 080 =            | 8 kw             | 090 =            | 9 kw             | 100 =            | 10 kw            | 120 =            | 12 kw            | 150 =            | 15 kw            |
|----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| LLLOTT         |                 | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  | SP               | PE <sup>3</sup>  | SPI              | PE <sup>3</sup>  |
| BASIC<br>MODEL | VOLTS-HZ-<br>PH | MCA <sup>1</sup> | MFS <sup>2</sup> |
| 7AA2024HA      | 208/230-1-60    | 23.1             | 30               | 27.4             | 30               | 32.5             | 35               | 37.8             | 40               |                  |                  |                  |                  | 58.6             | 60               |                  |                  |                  |                  |
| 7AA2030HA      | 208/230-1-60    | 28.2             | 35               |                  |                  | 32.5             | 35               | 37.8             | 40               |                  |                  |                  |                  | 58.6             | 60               | 69.0             | 70               | 84.6             | 90               |
| 7AA2036HA      | 208/230-1-60    | 30.8             | 40               |                  |                  | 32.5             | 40               | 37.8             | 40               |                  |                  |                  |                  | 58.6             | 60               | 69.0             | 70               | 84.6             | 90               |
| 7AA2042HA      | 208/230-1-60    | 34.2             | 45               |                  |                  | 34.2             | 45               |                  |                  |                  |                  |                  |                  | 58.6             | 60               | 69.0             | 70               | 84.6             | 90               |
| 7AA2048HA      | 208/230-1-60    | 40.7             | 50               |                  |                  | 43.2             | 50               |                  |                  |                  |                  |                  |                  | 61.1             | 70               | 71.5             | 80               | 87.1             | 90               |
| 7AA2060HA      | 208/230-1-60    | 48.2             | 60               |                  |                  | 43.2             | 60               |                  |                  |                  |                  |                  |                  | 61.1             | 70               | 71.5             | 80               | 87.1             | 90               |
| 7AA2024HC      | 208/230-3-60    | 14.9             | 20               |                  |                  |                  |                  | 24.5             | 25               |                  |                  | 33.6             | 35               |                  |                  | 42.6             | 45               | 51.6             | 60               |
| 7AA2030HC      | 208/230-3-60    | 18.6             | 25               |                  |                  |                  |                  | 24.5             | 25               |                  |                  | 33.6             | 35               |                  |                  | 42.6             | 45               | 51.6             | 60               |
| 7AA2036HC      | 208/230-3-60    | 22.3             | 30               |                  |                  |                  |                  | 26.3             | 30               |                  |                  | 33.6             | 35               |                  |                  | 42.6             | 45               | 51.6             | 60               |
| 7AA2042HC      | 208/230-3-60    | 25.4             | 35               |                  |                  |                  |                  | 29.4             | 35               |                  |                  | 33.6             | 35               |                  |                  | 42.6             | 45               | 51.6             | 60               |
| 7AA2048HC      | 208/230-3-60    | 26.8             | 40               |                  |                  |                  |                  | 31.8             | 40               |                  |                  | 36.1             | 40               |                  |                  | 45.1             | 50               | 54.1             | 60               |
| 7AA2060HC      | 208/230-3-60    | 29.9             | 45               |                  |                  |                  |                  | 34.9             | 45               |                  |                  | 36.1             | 45               |                  |                  | 45.1             | 50               | 54.1             | 60               |
| 7AA2024HD      | 460-3-60        | 7.8              | 15               |                  |                  |                  |                  | 12.3             | 15               |                  |                  | 16.8             | 20               |                  |                  | 21.3             | 25               | 25.8             | 30               |
| 7AA2030HD      | 460-3-60        | 9.3              | 15               |                  |                  |                  |                  | 12.3             | 15               |                  |                  | 16.8             | 20               |                  |                  | 21.3             | 25               | 25.8             | 30               |
| 7AA2036HD      | 460-3-60        | 11.0             | 15               |                  |                  |                  |                  | 13.0             | 15               |                  |                  | 16.8             | 20               |                  |                  | 21.3             | 25               | 25.8             | 30               |
| 7AA2042HD      | 460-3-60        | 11.7             | 15               |                  |                  |                  |                  | 13.7             | 15               |                  |                  | 16.8             | 20               |                  |                  | 21.3             | 25               | 25.8             | 30               |
| 7AA2048HD      | 460-3-60        | 12.7             | 15               |                  |                  |                  |                  | 15.2             | 15               |                  |                  | 18.0             | 20               |                  |                  | 22.5             | 25               | 27.0             | 30               |
| 7AA2060HD      | 460-3-60        | 13.7             | 20               |                  |                  |                  |                  | 16.2             | 20               |                  |                  | 18.0             | 20               |                  |                  | 22.5             | 25               | 27.0             | 30               |

S-Circuit - The user can move a pin on the board to control whether the electric heat will operate simultaneously with the compressor (S Circuit - NO) or will not run simultaneously with the compressor (S Circuit - Yes). 1MCA = Minimum Circuit Ampacity (Wiring Size Amps) 2MFS = Maximum Fuse or HACR Breaker Size 3SPPE = Single Point Power Entry MCA & MFS are calculated at 230 volts on the 208-230v. (HPA & HPC) models. The 460 volt HPD models are calculated at 460 volts. This chart should only be used as a quideline for estimating

conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

## **Unit Load Amps (Heating) -**

7AA Heat Pumps w/2-Stage Compressor & Ventilation Configuration: Manual Damper, up to 15% outside air ("N")

Motorized 2-Position Damper, up to 450 cfm of outside air w/Pressure Relief ("D")

**Economizer. Outside Air ("C")** 

| ECOHOIII        | conomizer, outside Air ( |        |                  |       |       |                   |       |       |       |       |       |       |       |       |        |       |       |                                                                                                             |       |
|-----------------|--------------------------|--------|------------------|-------|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------------------------------------------------------------------------------------------------------------|-------|
|                 | VOLTAGE                  | CURREN | T (AMPS)         |       |       | SISTIVE<br>EATING |       |       |       |       |       | INICI |       |       |        | HEAT  |       |                                                                                                             | ATED  |
| MODEL<br>NUMBER | VOLTAGE<br>PHASE         | HP¹    | IBM <sup>2</sup> | , ,   |       | ALUES             | CIR   | CUIT  |       |       |       |       |       |       | L CIRC |       |       | 72.7 85. 74.8 87. 77.5 90. 83.2 95. 89.2 101 41.7 48. 47.1 54. 50.1 57. 52.6 59. 55.0 62. 57.5 64. 21.1 24. |       |
|                 | HERTZ                    |        |                  | 04 kW | 05 kW | 06 kW             | 08 kW | 09 kW | 10 kW | 12 kW | 15 kW | 04 Kw | 05 Kw | 06 Kw | 08 Kw  | 09 Kw | 10 Kw | 12 Kw                                                                                                       | 15 Kw |
| 7AA2024HA       | 208-230/1/60             | 17.9   | 2.8              | 16.7  | 20.8  | 25.00             | 33.3  |       | 41.7  |       |       | 34.6  | 38.7  | 42.9  | 51.2   |       | 59.6  |                                                                                                             |       |
| 7AA2030HA       | 208-230/1/60             | 22.7   | 4.3              | 16.7  | 20.8  | 25.00             | 33.3  |       | 41.7  | 50.0  | 62.5  | 39.4  | 43.5  | 47.7  | 56.0   |       | 64.4  | 72.7                                                                                                        | 85.2  |
| 7AA2036HA       | 208-230/1/60             | 24.8   | 4.3              | 16.7  | 20.8  | 25.00             | 33.3  |       | 41.7  | 50.0  | 62.5  | 41.5  | 45.6  | 49.8  | 58.1   |       | 66.5  | 74.8                                                                                                        | 87.3  |
| 7AA2042HA       | 208-230/1/60             | 27.5   | 4.3              |       | 20.8  |                   |       |       | 41.7  | 50.0  | 62.5  |       | 48.3  |       |        |       | 69.2  | 77.5                                                                                                        | 90.0  |
| 7AA2048HA       | 208-230/1/60             | 33.2   | 6.8              |       | 20.8  |                   |       |       | 41.7  | 50.0  | 62.5  |       | 54.0  |       |        |       | 74.9  | 83.2                                                                                                        | 95.7  |
| 7AA2060HA       | 208-230/1/60             | 39.2   | 6.8              |       | 20.8  |                   |       |       | 41.7  | 50.0  | 62.5  |       | 60.0  |       |        |       | 80.9  | 89.2                                                                                                        | 101.7 |
| 7AA2024HC       | 208-230/3/60             | 12.8   | 2.8              |       |       | 14.4              |       | 22    |       | 28.9  | 36.1  |       |       | 27.2  |        | 34.5  |       | 41.7                                                                                                        | 48.9  |
| 7AA2030HC       | 208-230/3/60             | 18.2   | 4.3              |       |       | 14.4              |       | 22    |       | 28.9  | 36.1  |       |       | 32.6  |        | 39.9  |       | 47.1                                                                                                        | 54.3  |
| 7AA2036HC       | 208-230/3/60             | 21.2   | 4.3              |       |       | 14.4              |       | 22    |       | 28.9  | 36.1  |       |       | 35.6  |        | 42.9  |       | 50.1                                                                                                        | 57.3  |
| 7AA2042HC       | 208-230/3/60             | 23.7   | 4.3              |       |       | 14.4              |       | 22    |       | 28.9  | 36.1  |       |       | 38.1  |        | 45.4  |       | 52.6                                                                                                        | 59.8  |
| 7AA2048HC       | 208-230/3/60             | 26.1   | 6.8              |       |       | 14.4              |       | 22    |       | 28.9  | 36.1  |       |       | 40.5  |        | 47.8  |       | 55.0                                                                                                        | 62.2  |
| 7AA2060HC       | 208-230/3/60             | 28.6   | 6.8              |       |       | 14.4              |       | 22    |       | 28.9  | 36.1  |       |       | 43.0  |        | 50.3  |       | 57.5                                                                                                        | 64.7  |
| 7AA2024HD       | 460/3/60                 | 6.7    | 1.4              |       |       | 9.0               |       | 10.8  |       | 14.4  | 18.0  |       |       | 15.7  |        | 17.5  |       | 21.1                                                                                                        | 24.7  |
| 7AA2030HD       | 460/3/60                 | 9.1    | 2.2              |       |       | 9.0               |       | 10.8  |       | 14.4  | 18.0  |       |       | 18.1  |        | 19.9  |       | 23.5                                                                                                        | 27.1  |
| 7AA2036HD       | 460/3/60                 | 10.5   | 2.2              |       |       | 9.0               |       | 10.8  |       | 14.4  | 18.0  |       |       | 19.5  |        | 21.3  |       | 24.9                                                                                                        | 28.5  |
| 7AA2042HD       | 460/3/60                 | 11.0   | 2.2              |       |       | 9.0               |       | 10.8  |       | 14.4  | 18.0  |       |       | 20.0  |        | 21.8  |       | 25.4                                                                                                        | 29.0  |
| 7AA2048HD       | 460/3/60                 | 12.5   | 3.4              |       |       | 9.0               |       | 10.8  |       | 14.4  | 18.0  |       |       | 21.5  |        | 23.3  |       | 26.9                                                                                                        | 30.5  |
| 7AA2060HD       | 460/3/60                 | 13.3   | 3.4              |       |       | 9.0               |       | 10.8  |       | 14.4  | 18.0  |       |       | 22.3  |        | 24.1  |       | 27.7                                                                                                        | 31.3  |

<sup>1</sup>HP = Heat Pump Unit Amps (includes Indoor Motor amps)

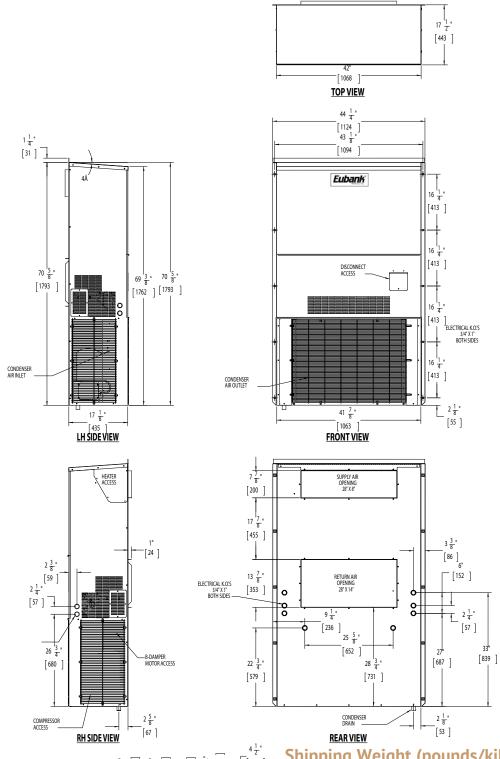
<sup>2</sup>IBM = Indoor Blower Motor
Heating kW is rated at 240 volts on the 208-230v. (HPA & HPC) models. Derate heater output by 25% for operation at 208 volts. Heating kW is rated at 480 volts on the HPD models.
Total heating amps for single phase units with two circuits (#1 and #2) includes both circuits. Total heating and cooling amps includes all motors. Three phase models contain single phase motor loads. Values shown are maximum phase loads. Loads are not equally balanced on each phase.

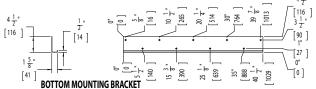
# Unit Load Amps (Heating) -7AA Heat Pumps with 2-Stage Compressor and GreenWheel® Energy Recovery Ventilator - Ventilation Configuration ("H")

| CURRENT (A       |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                           |         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                                                                                                                                        |
| 460/3/60         | 14.4                                                                                                                                                                                           | 3.4                                                                                                                                                                                                                                                                                         | 1.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                           |         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                                                                                                                                        |
|                  | PHASE<br>HERTZ  208/230-1-60 208-230/1/60 208-230/1/60 208-230/1/60 208-230/1/60 208-230/1/60 208-230/3/60 208-230/3/60 208-230/3/60 208-230/3/60 460-3-60 460/3/60 460/3/60 460/3/60 460/3/60 | VOLTAGE PHASE HERTZ  208/230-1-60 20.1  208-230/1/60 24.9  208-230/1/60 29.7  208-230/1/60 35.4  208-230/1/60 41.4  208/230-3-60 15.0  208-230/3/60 20.4  208-230/3/60 23.4  208-230/3/60 25.9  208-230/3/60 30.8  460-3-60 7.8  460/3/60 10.2  460/3/60 11.6  460/3/60 13.6  460/3/60 13.6 | VOLTAGE PHASE HERTZ  208/230-1-60 20.1 4.3 208-230/1/60 24.9 4.3 208-230/1/60 29.7 4.3 208-230/1/60 35.4 6.8 208-230/1/60 41.4 6.8 208/230-3-60 15.0 4.3 208-230/3/60 20.4 4.3 208-230/3/60 20.4 4.3 208-230/3/60 25.9 4.3 208-230/3/60 25.9 4.3 208-230/3/60 25.9 4.3 208-230/3/60 25.9 4.3 208-230/3/60 25.9 4.3 208-230/3/60 25.9 4.3 208-230/3/60 25.9 4.3 208-230/3/60 10.2 2.2 460/3/60 10.2 2.2 460/3/60 11.6 2.2 460/3/60 12.1 2.2 460/3/60 13.6 3.4 460/3/60 14.4 3.4 | PHASE HERTZ  208/230-1-60 | VOLTAGE<br>PHASE<br>HERTZ         HP¹         IBM²         H³         (1)         (2)           208/230-1-60         20.1         4.3         2.2         16.7           208-230/1/60         24.9         4.3         2.2         16.7           208-230/1/60         27.0         4.3         2.2         16.7           208-230/1/60         29.7         4.3         2.2         16.7           208-230/1/60         35.4         6.8         2.2         208-230/1/60         41.4         6.8         2.2           208-230/3/60         20.4         4.3         2.2         208-230/3/60         23.4         4.3         2.2           208-230/3/60         25.9         4.3         2.2         208-230/3/60         25.9         4.3         2.2           208-230/3/60         25.9         4.3         2.2         208-230/3/60         28.3         6.8         2.2           208-230/3/60         28.3         6.8         2.2         208-230/3/60         30.8         6.8         2.2           208-230/3/60         30.8         6.8         2.2         1.1         460/3/60         10.2         2.2         1.1           460/3/60         10.2         2.2 | VOLTAGE<br>PHASE<br>HERTZ         HP¹         IBM²         H³         (1) ALL HE<br>(2) SHADEL<br>MW           208/230-1-60         20.1         4.3         2.2         16.7         20.8           208-230/1/60         24.9         4.3         2.2         16.7         20.8           208-230/1/60         27.0         4.3         2.2         16.7         20.8           208-230/1/60         29.7         4.3         2.2         20.8           208-230/1/60         35.4         6.8         2.2         20.8           208/230-3-60         15.0         4.3         2.2         20.8           208-230/3/60         20.4         4.3         2.2         20.8           208-230/3/60         23.4         4.3         2.2         20.8           208-230/3/60         25.9         4.3         2.2         20.8           208-230/3/60         25.9         4.3         2.2         20.8           208-230/3/60         28.3         6.8         2.2         20.8           208-230/3/60         30.8         6.8         2.2         20.8           208-230/3/60         10.2         2.2         1.1         1.1           460/3/60         10.2 | VOLTAGE<br>PHASE<br>HERTZ         HP¹         IBM²         H³         (1) ALL HEATING I<br>(2) SHADED VALUE<br>(2) SHADED VALUE<br>( | VOLTAGE<br>PHASE<br>HERTZ         HP¹         IBM²         H³         H³         (1) ALL HEATING ELEMEN<br>(2) SHADED VALUES (12 & CU<br>04 kW         05 kW         06 kW         08 kW           208/230-1-60         20.1         4.3         2.2         16.7         20.8         25.0         33.3           208-230/1/60         24.9         4.3         2.2         16.7         20.8         25.0         33.3           208-230/1/60         29.7         4.3         2.2         16.7         20.8         25.0         33.3           208-230/1/60         29.7         4.3         2.2         20.8         20.8         20.8           208-230/1/60         35.4         6.8         2.2         20.8         20.8         20.8           208/230-3-60         15.0         4.3         2.2         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         20.8         14.4         40.8< | NOLTAGE   PHASE   HP1   IBM²   H3 | NOLTAGE   PHASE   HP1   IBM2   H3  | NOLTAGE   PHASE   HP1 | NOLTAGE | NOLTAGE   PHASE   HP1 | Notage   Hertz   Her | Nounce   Phase   Pha | VOLTAGE   PHASE   HP1 | VOLTAGE   PHASE   HERTZ   He | VOLTAGE PHASE HERTZ | VOLTAGE   PHASE   Hertz   He |

HP = Heat Pump Unit Amps (includes Indoor Motor amps) 2IBM = Indoor Blower Motor 3H = GreenWheel ERV
Heating kW is rated at 240 volts on the 208-230v. (HPA & HPC) models. Derate heater output by 25% for operation at 208 volts. Heating kW is rated at 480 volts on the HPD models.
Total heating amps for single phase units with two circuits (#1 and #2) includes both circuits. Total heating and cooling amps includes all motors. Three phase models contain single phase motor loads. Values shown are maximum phase loads. Loads are not equally balanced on each phase.

# Dimensional Data: 7AA1024H & 7AA2024H





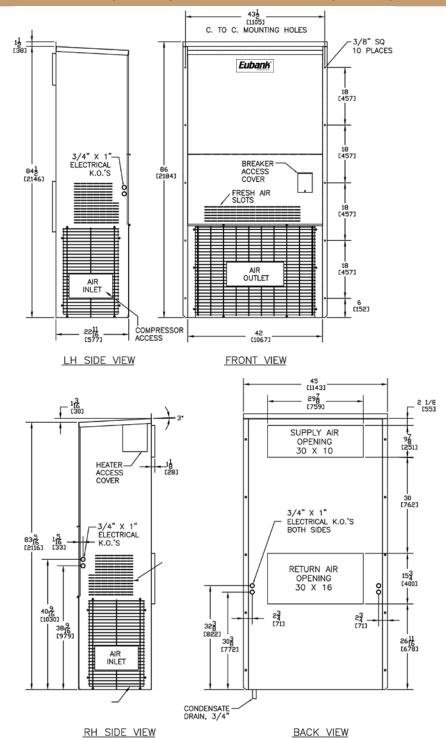
# Shipping Weight (pounds/kilograms)

| 7AA1024H & 7AA2024H                      | LBS/KGS   |
|------------------------------------------|-----------|
| WITH VENTILATION CONFIGURATION "N"       | 420/191   |
| WITH VENTILATION CONFIGURATION "C" & "D" | 445/202.5 |

# **Filter Size**

|                   | INCHES      | MILLIMETERS    |       | FILTERS<br>PER UNIT |   |
|-------------------|-------------|----------------|-------|---------------------|---|
| RETURN AIR FILTER | 30 x 16 x 1 | 762 x 406 x 25 | 80136 | 1                   | 8 |

# Dimensional Data: 7AA1030H/1036H/1042H & 7AA2030H/2036H/2042H



The GreenCube® ERV is only available on 2-Stage units.

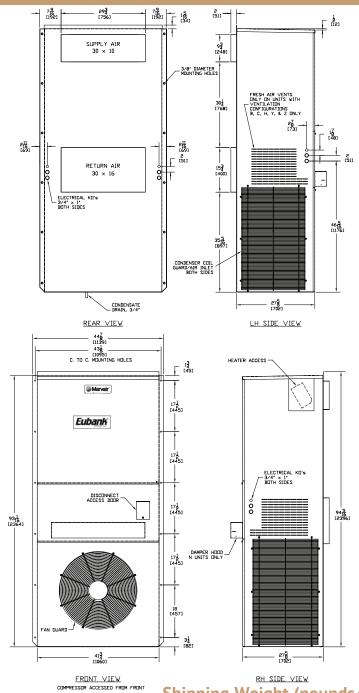
# **Shipping Weight (pounds/kilograms)**

| 7AA1030H/1036H/1042H & 7AA2030H/2036H/2042H | LBS/KGS   |
|---------------------------------------------|-----------|
| WITH VENTILATION CONFIGURATION "N"          | 540/246   |
| WITH VENTILATION CONFIGURATION "C" & "D"    | 495/224.5 |

#### Filter Size

|                   | INCHES       | MILLIMETERS    | PART<br>NUMBER | FILTERS<br>PER UNIT | MERV<br>RATING |
|-------------------|--------------|----------------|----------------|---------------------|----------------|
| RETURN AIR FILTER | 36½ x 22 x 1 | 927 x 559 x 25 | 80139          | 1                   | 8              |

# Dimensional Data: 7AA1048H/1060H & 7AA2048H/2060H 7AA1036H/1042H/1048H/1060H & 7AA2048H/2060H w/GreenWheel ERV



BOTTOM MOUNTING BRACKET

43
43
193
193
193

# Shipping Weight (pounds/kilograms)

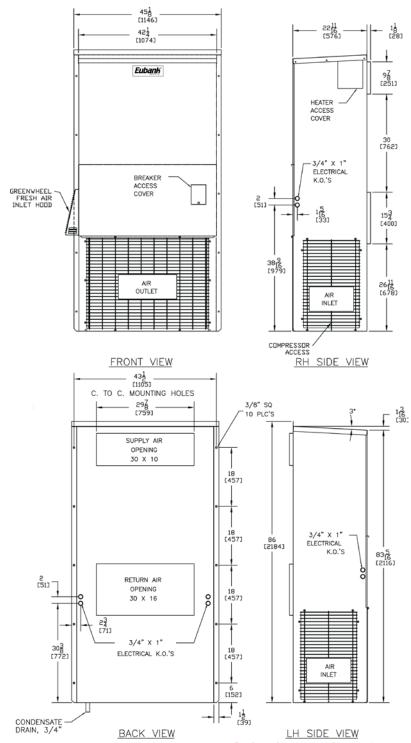
| 0/309  |
|--------|
| /298.9 |
| 0/369  |
|        |

#### **Filter Size**

|                              | INCHES             | MILLIMETERS      | PART<br>NUMBER | FILTERS<br>PER UNIT | MERV<br>RATING |
|------------------------------|--------------------|------------------|----------------|---------------------|----------------|
| RETURN AIR FILTER            | 18 x 24 x1         | 457 x 610 x 25   | 81199          | 2                   | 8              |
| INTAKE AIR FILTER*           | 14 x 14 x 1        | 356 x 356 x 25   | 80192          | 1                   | N/A            |
| RETURN AIR FILTER (STD)**    | 16 x 24 x 1        | 406 x 635 x 25   | 92367          | 2                   | 8              |
| RETURN AIR FILTER (OPT)**    | 16 x 24 x 2        | 406 x 635 x 51   | 91968          | 2                   | 8              |
| INTAKE AIR FILTER**          | 93/4 x 223/4 x 3/4 | 248 x 222 x 19   | 92113          | 1                   | N/A            |
| EXHAUST AIR FILTER**         | 93/4 x 223/4 x 3/4 | 248 x 222 x 19   | 92113          | 1                   | N/A            |
| *Units with the GreenWheel F | RV **Units v       | vith the GreenCu | he® FRV        |                     |                |

412

# Dimensional Data: 7AA1030H/1036H/1042H & 7AA2030H/2036H/2042H w/GreenWheel ERV



# Shipping Weight (pounds/kilograms)

| Cabinet D           | LBS/KGS |
|---------------------|---------|
| With GreenWheel ERV | 590/268 |

# 

# **Filter Size**

| Cabinet D          | INCHES      | MILLIMETERS    |       | FILTERS<br>PER UNIT |     |
|--------------------|-------------|----------------|-------|---------------------|-----|
| RETURN AIR FILTER  | 36 x 22 x 1 | 927 x 559 x 25 | 80139 | 1                   | 8   |
| INTAKE AIR FILTER* | 14 x 14 x 1 | 356 x 356 x 25 | 80192 | 1                   | N/A |

<sup>\*</sup>Units with the GreenWheel ERV

#### **Notes**

Please consult the Eubank® website at www.EubankWallmount.com for the latest product literature. Detailed dimensional data is available upon request. A complete warranty statement can be found in each product's Installation/Operation Manual, on our website or by contacting Eubank at 229-273-3636. As part of the Eubank continuous improvement program, specifications are subject to change without notice.



