

THE WALL-MOUNT™ - HI-BOY HEAT PUMPS

WH-Series Refrigerant 22 60Hz

Heating Capacities: 18,800 to 58,000 BTUH Cooling Capacities: 19,000 to 56,500 BTUH HSPF: 6.60 to 7.00 SEER: 10.00 to 11.00

The Bard Wall-Mount Heat Pump is a self contained energy efficient heating and cooling system which is designed to offer maximum indoor comfort at a minimal cost without using valuable indoor floor space or outside ground space. This unit is the ideal product for versatile applications such as: new construction, modular offices, school modernization, telecommunication structures, portable structures or correctional facilities. Factory or field installed accessories are available to meet specific job requirements.









Engineered Features

Aluminum Finned Copper Coils: Grooved tubing and enhanced louvered fin for maximum heat transfer and energy efficiency.

Twin Blowers:

Move air quietly. Most models feature multispeed blower motors providing airflow adjustment for high and low static operation. Motor overload protection is standard on all models.

Heat Pump Compressor:

Reciprocating compressor designed to withstand higher compressor ratios and longer operation than normal air conditioning compressors. Equipped with crankcase heater and dual discharge muffler. Standard on all 2, 2-1/2, 3 and 3-1/2 ton models.

Scroll compressor designed for increased efficiency, quieter operation and improved reliability for longer life. Eliminates need for crankcase heater and suction accumulator. Standard on all 1-1/2, 4 and 5 ton models.

Galvanized 20 Gauge Zinc Coated Steel Cabinet:

Cleaned, rinsed, sealed and dried before the polyurethane primer is applied. The cabinet is handsomely finished with a baked on, beige textured enamel which allows it to withstand 1000 hours of salt spray exposure.

Electrical Components:

Are easily accessible for routine inspection and maintenance through a right side, service panel opening. Features a lockable, hinged access cover to the circuit breaker or pull disconnect

Electric Heat Strips:

Features an automatic limit and thermal cut-off safety control. Heater packages are factory or field installed for all 1-1/2 through 5 ton models. Features easy slide-in field assembly with various BTUH outputs.

Condenser Fan and Motor Shroud Assembly:

Slide out for easy access.

One Inch, Disposable Air Filters: Are standard equipment. Optional one inch washable filters available and filter racks permit the addition of 2' pleated filter. Factory or field installed.

Solid State Electronic Heat Pump Control:

Provides efficient 30, 60 or 90 minute defrost cycle. A thermistor sensor, speed up terminal for service and 10 minute defrost override are standard on the electronic heat pump control.

High Pressure Switch:

Is built-in with a lockout circuit that resets from the room thermostat.

Five Minute Compressor Time

Delay:Short cycle protection is standard. Built into the heat pump control.

Suction Accumulator:

Protects the reciprocating compressor from refrigerant flood back and prevents damage to the compressor bearing surfaces. Not required on scroll compressor applications

Emergency Heat Circuit:

Permits continuous operation of the system.

Barometric Fresh Air Damper: Standard on all units. Allows up to 25% outside fresh air.

Built-in Circuit Breakers:

Standard on all electric heat versions of single and three phase (230/208 volt) equipment. Pull disconnects are standard on all electric heat versions of three phase (460 volt) equipment.

Standard feature for water run-off.

Full Length Mounting Brackets: Built into cabinet for improved appearance and easy installation. NOTE: Bottom mounting bracket included to assist in installation.

Top Rain Flashing: Standard feature on all models.







Unit shown with optional Economizer.

Economizer

Ventilation System Packages

All packages are designed to meet your specific ventilation requirements utilizing one of six ventilation options for the product. The ventilation package is mounted within the unit eliminating the need for an exterior mounted hood or damper assembly on the unit. All assemblies can be factory installed, installed in the field at time of installation or as a retrofit system after installation.

- Standard Barometric Fresh Air Damper
- · Optional Motorized Fresh Air Damper
- Optional Blank off Plate
- Optional Commercial Room Ventilator (CRV)
- Optional Economizer
- Optional Energy Recovery Ventilator

| Capacity | Capacity and Efficiency Ratings ① | | | | | | | | | | | | | | |
|----------------|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|--|
| MODELS | | | | | | | | | | | | | | | |
| Phase | 1 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | | |
| Clg. Cap. BTUH | 19,000 | 23,600 | 23,600 | 30,000 | 30,000 | 35,600 | 35,400 | 41,500 | 41,500 | 47,000 | 47,000 | 56,500 | 56,500 | | |
| SEER | 11.00 | 10.50 | 10.50 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.50 | 10.50 | 10.20 | 10.20 | | |
| Htg. 47° BTUH | 18,800 | 23,200 | 23,200 | 28,000 | 28,000 | 34,400 | 34,200 | 41,000 | 41,000 | 46,000 | 46,000 | 58,000 | 58,000 | | |
| HSPF* | 6.60 | 6.60 | 6.60 | 6.60 | 6.60 | 6.60 | 6.60 | 6.80 | 6.80 | 7.00 | 7.00 | 7.00 | 7.00 | | |

① Certified in accordance with ARI Standard 210/240-94.

^{*}Heating Seasonal Performance Factor at region IV minimum design heating requirement per DOE test procedures in effect at time of printing.

All capacity, efficiency and cost of operation information is based on high speed operation with fresh air cover plate. Cover plate must be ordered separately and is recommended for use to obtain maximum

| Specifications 1-1 | /2 throug | nh 3 To | n | | | | | | | |
|---|---------------|-------------|--------------------|---------------|-------------|--------------|---------------------|-------------------|---------------|---------------|
| MODELS | WH183-A | WH242-A | WH242-B | WH242-C | WH301-A | WH301-B | WH301-C | WH361-A | WH361-B | WH361-C |
| Cooling Capacity BTUH | 19,000 | 23,600 | 23,600 | 23,600 | 30,000 | 30,000 | 30,000 | 35,600 | 35,400 | 35,400 |
| * Hi-Temp Heating BTUH (47) | 18,800 | 23,200 | 23,200 | 23,200 | 28,000 | 28,000 | 28,000 | 34,400 | 34,200 | 34,200 |
| Electrical Rating60HZ | 230/208 - 1 | 230/208 - 1 | 230/208 - 3 | 460 - 3 | 230/208 - 1 | 230/208 - 3 | 460 - 3 | 230/208 - | 1 230/208 - 3 | 460 - 3 |
| Operating Voltage Range | 197-253 | 197-253 | 197-253 | 414-506 | 197-253 | 197-253 | 414-506 | 197-253 | 197-253 | 414-506 |
| CompressorCircuit A | | | | | - | | | - | | |
| Voltage | 230/208 | 230/208 | 230/208 | 460 | 230/208 | 230/208 | 460 | 230/208 | 230/208 | 460 |
| Rated Load Amps | 8.5/9.5 | 10.0/11.0 | 6.9/7.6 | 3.9 | 12.9/14.0 | 8.1/8.7 | 4.8 | 16.3/17.0 | 9.8/10.5 | 5.2 |
| Branch Circuit Selection Current | 10.0 | 11.0 | 8.0 | 4.0 | 14.0 | 10.0 | 5.0 | 17.0 | 11.0 | 6.0 |
| Lock Rotor Amps | 50/50 | 56/56 | 51/51 | 25 | 75/75 | 68/68 | 34 | 96/96 | 75/75 | 40 |
| Fan Motor & Condenser | | | | | | | | | | |
| Fan MotorHP-RPM | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 |
| Fan MotorAmps | 1.2 | 1.2 | 1.2 | 1.4 | 1.5 | 1.5 | 1.4 | 1.5 | 1.5 | 1.4 |
| FanDIA/CFM | 18" - 1600 | 18" - 1600 | 18" - 1600 | 18" - 1600 | 20" - 2000 | 20" - 2000 | 20" - 2000 | 20" - 2000 | 20" - 1900 | 20" - 1900 |
| Motor & Evaporator | | | | | _ | | | _ | | |
| Blower MotorHP/RPM/SPD | 1/6-1100-1 | 1/6-1100-1 | 1/6-1100-1 | 1/3-1100-2 | 1/3-1100-2 | 1/3-1100-2 | 1/3-1100-2 | 1/3-1100-2 | 2 1/3-1100-2 | 1/3-1100-2 |
| Blower MotorAmps | 1.0 | 1.0 | 1.0 | 1.1 | 2.2 | 2.2 | 1.1 | 2.2 | 2.2 | 1.1 |
| CFM Cooling & E.S.P. | 6504 | 800 2 | 8002 | 8002 | 10004 | 10004 | 10004 | 11003 | 11003 | 11003 |
| w/Filter (Rated - Wet Coil) | | | | | | | | | | |
| Filter Sizes (inches) STD. | 16 x 25 x 1 | 16 x 25 x 1 | 16 x 25 x 1 | 16 x 25 x 1 | 16 x 30 x 1 | 16 x 30 x 1 | | | | 16 x 30 x |
| Shipping WeightLBS. | 300 | 300 | 300 | 300 | 365 | 365 | 365 | 380 | 380 | 380 |
| Specifications 3-1/ | 2 throug | h 5 Tor | <u> </u> | | | | | | | |
| MODELS | WH421-A | WH421- | | -C WH48 | 32-A WH | 482-B W | H482-C \ | NH602-A | WH602-B | WH602-C |
| Cooling Capacity BTUH | 41,500 | 41,500 | 41,500 | 0 47,0 | 00 47 | .000 | 17,000 | 56,500 | 56,500 | 56,500 |
| * Hi-Temp Heating BTUH (47) | 41,000 | 41,000 | 41,000 | | | · | 16,000 | 58,000 | 58,000 | 58,000 |
| Electrical Rating60HZ | 230/208 - 1 | 230/208 - | | | | · | | · · | 230/208 - 3 | 460 - 3 |
| Operating Voltage Range | 197-253 | 197-253 | | | | | | 197-253 | 197-253 | 414-506 |
| CompressorCircuit A | 10. 200 | 1 .0. 200 | , | | | | | .0. 200 | .0. 200 | |
| Voltage | 230/208 | 230/208 | 3 460 | 230/2 | 208 230 | 0/208 | 460 | 230/208 | 230/208 | 460 |
| Rated Load Amps | 18.3/20.4 | 12.2/13. | | 22.0/2 | | 5/14.7 | | 25.9/29.6 | 16.5/20.1 | 8.6 |
| Branch Circuit Selection Current | 21.0 | 14.0 | 7.0 | 24. | | 5.0 | 8.0 | 30.0 | 20.0 | 9.0 |
| Lock Rotor Amps | 102/102 | 91/91 | 42/42 | | | | 9.5/49.5 | 169/169 | 137/137 | 62/62 |
| Fan Motor & Condenser | 102/102 | 31/31 | 72/72 | 123/ | 125 12 | 3/120 40 | 7.0/40.0 | 103/103 | 107/107 | 02/02 |
| Fan MotorHP/RPM/SPD | 1/3 - 850 - 2 | 1/3 - 850 | - 2 1/3 - 850 |) - 2 1/3 - 8 | 50 2 1/2 | 850 - 2 1/3 | - 850 - 2 1/ | 3 - 850 - 2 | 1/3 - 850 - 2 | 1/3 - 850 - 2 |
| | 2.5 | 2.5 | | | | 2.5 | | | 2.5 | 1.3 |
| Fan MotorAmps | 2.5 | 2.5 | 1.3 50 24" - 27 | 2.50 24" - 2 | | | 1.3 " - 2750 2 | 2.5 24" - 2750 | 2.5 | |
| FanDIA/CFM | 24 - 2/30 | 24 -2/5 | 0 24 - 21 | 24 - 2 | 2730 24 | - 2130 24 | 22130 2 | 2/30 | Z+ - Z/30 | 24" - 2750 |
| Motor & Evaporator | 1/0 4070 0 | 1/2-1070 | 0 40 407 | 0 0 1 4/0 40 | 700 1 4/2 | 1070-2 1/2 | 1070 0 1 4 | /2 4072 2 | 1/0 1070 0 | 4/0 4070 0 |
| Blower MotorHP/RPM/SPD | 1/2-1070-2 | | | | | | | /2-1070-2 | 1/2-1070-2 | 1/2-1070-2 |
| Blower MotorAmps | 3.3 | 3.3 | 1.9 | 3.0 | · · | 3.3 | 1.9 | 3.3 | 3.3 | 1.9 |
| | - | 1 | 1 | | - 1 | | | | | |
| CFM Cooling & E.S.P. w/Filter (Rated - Wet Coil) | 14003 | 1400: | 3 1400 - | .3 1550 | 2 155 | 502 | 5502 | 17003 | 17003 | 17003 |

^{*} For additional heating capacity add the KW from the electric heat table. **IMPORTANT**

While this electrical data is presented as a guide, it is important to electrically connect properly sized fuses and conductor wires in accordance with the National Electrical Code and all existing local codes.

510

510

Shipping Weight -- LBS.

Ventilation System Packages

Bard Wall-Mounts are designed to provide optional ventilation packages to meet all of your ventilation and indoor air quality requirements. All units are equipped with a barometric fresh air damper as the standard ventilation package. All ventilation packages can be built-in at the factory, or field-installed at a later date.



Barometric Fresh Air Damper

BAROMETRIC FRESH AIR DAMPER - BFAD

STANDARD

The barometric fresh air damper is a standard feature on all models. It is installed on the inside of the service door and allows outside ventilation air, up to 25% of the total airflow rating of the unit, to be introduced through the air inlet openings and to be mixed with the conditioned air. The damper opens during blower operation and closes when the blower is off. Adjustable blade stops allow different amounts of outside air to be introduced into the building and can be easily locked closed if required.

BLANK OFF PLATE - BOP

OPTIONAL

A blank off plate is installed on the inside of the service door. It covers the air inlet openings which restricts any outside air from entering into the unit. The blank off plate should be utilized in applications where outside air is not required to be mixed with the conditioned air.

MOTORIZED FRESH AIR DAMPER - MFAD

OPTIONAL

The motorized fresh air damper is internally mounted behind the service door and allows outside ventilation air, up to 25% of the total airflow rating of the unit, to be introduced through the air inlet openings and to be mixed with the conditioned air. The two position damper can be fully open or closed. The damper blade is powered open by a 24VAC motor with spring return on power loss. The damper can be controlled by indoor blower operation or can be field connected to be managed based on building occupancy.

NOTE: The above vent systems are without exhaust capability. May require separate field installed barometric relief and/or mechanical exhaust elsewhere within the conditioned space.



COMMERCIAL ROOM VENTILATOR - CRV

OPTIONAL

The built-in commercial room ventilator is internally mounted behind the service door and allows outside ventilation air, up to 50% of the total airflow rating of the unit, to be introduced through the air inlet openings. It includes a built-in exhaust air damper.

The commercial room ventilator (CRV) is a simple and innovative approach to improving the indoor air quality by providing fresh air intake and exhaust capability through the CRV. The damper can be easily adjusted to control the amount of fresh air supplied into the building. The CRV can be controlled by indoor blower operation or field controlled based on room occupancy. The CRV is power open - spring return on power loss. Complies with ASHRAE Standard 62-99 "Ventilation for Acceptable Indoor Air Quality."



Motorized Fresh Air Damper

Commercial Room Ventilator

ECONOMIZER - EIFM

OPTIONAL

The built-in economizer system is internally mounted behind the service door and allows outdoor air to be introduced through the air inlet openings. The amount of outdoor air varies in response to the system controls and settings defined by the end user. It includes a built-in exhaust air damper. The economizer is designed to provide "free cooling" when outside air conditions are cool and dry enough to satisfy cooling requirements without running the compressor. This in turn provides lower operating costs, while extending the life of the compressor.



Economizer

Standard Features:

- · One Piece Construction Easy to install with no mechanical linkage adjustment required.
- Exhaust Air Damper Built in with positive closed position. Provides exhaust air capability to prevent pressurization of tight buildings.
- Actuator Motor 24 volt, power open, spring return with built in torque limiting switch.
- Proportioning Type Control for maximum "free cooling" economy and comfort.
- · Moisture Eliminator & Prefilter permanent, washable aluminum construction.
- Enthalpy Control adjustable to monitor outdoor temperature and humidity.
- Minimum Position Potentiometer adjustable to control minimum damper blade position for ventilation purposes.
- Mixed Air Sensor to monitor outside and return air to automatically modulate damper position.



Energy Recovery Ventilator

WALL-MOUNT ENERGY RECOVERY VENTILATOR - WERV

OPTIONAL

The wall-mount energy recovery ventilator (WERV) is a highly innovative approach to meeting indoor air quality ventilation requirements as established by ASHRAE Standard 62-99. The WERV allows from 200 to 450 CFM (depending upon model) of fresh air and exhaust through the unit while maintaining superior indoor comfort and humidity levels. In most cases this can be accomplished without increasing equipment sizing or operating costs. Heat transfer efficiency is up to 67% during summer and 75% during winter conditions.

The WERV consists of a unique "rotary energy recovery cassette" that provides effective sensible and latent heat transfer capabilities during summer and winter conditions. Various control schemes are addressed including limiting ventilation during building occupancy only.

The WERV is designed to be internally mounted behind the service door in the WA, WH or WL model wall-mount units. It can be built-in at the factory or field installed as an option. (See Form F1403 for complete performance and application details.)

Manufactured under U.S. Patent Nos. 5,485,878; 5,301,744; 5,002,116; 4,924,934; 4,875,520; 4,825,936; 4,432,409.

Clearances Required for Service Access and Adequate Condenser Air Flow

| MODELS | LEFT SIDE | RIGHT SIDE |
|------------------------|-----------|------------|
| WH18, WH24, WH30, WH36 | 15" | 20" |
| WH42. WH48. WH60 | 20" | 20" |

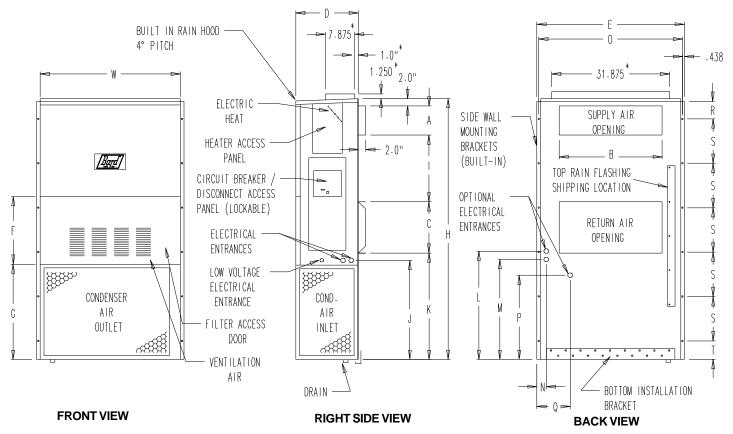
Minimum Clearances Required to Combustible Materials

| MODELS ① | SUPPLY AIR DUCT FIRST THREE FEET | CABINET |
|------------------|-------------------------------------|---------|
| WH18, WH24 | 0" | 0" |
| WH30, WH36 | 1/4" | 0" |
| WH42, WH48, WH60 | 1/4" | 0" |

① Refer to the installation manual for more detailed information.

| Dime | Dimensions of Basic Unit for Architectural and Installation Requirements (Nominal) | | | | | | | | | | | | | | | | | | | | | |
|----------------------|--|--------|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|-------|------|
| MODEL | WIDTH | DEPTH | HEIGHT | SUF | PPLY | RET | URN | | | | | | | | | | | | | | | |
| MODEL | (W) | (D) | (H) | Α | В | O | В | Е | F | G | I | 7 | K | L | М | Ν | 0 | Р | Q | R | S | Т |
| WH18 WH24 | 33.300 | 17.125 | 70.563 | 7.88 | 19.88 | 11.88 | 19.88 | 35.00 | 18.50 | 25.75 | 20.56 | 26.75 | 28.06 | 29.25 | 27.00 | 2.63 | 34.13 | 22.06 | 10.55 | 4.75 | 12.00 | 5.00 |
| WH30 WH36 | 38.200 | 17.125 | 70.563 | 7.88 | 27.88 | 13.88 | 27.88 | 40.00 | 18.50 | 25.75 | 17.93 | 26.75 | 28.75 | 29.25 | 27.00 | 2.63 | 39.19 | 22.75 | 9.14 | 4.75 | 12.00 | 5.00 |
| WH42 WH48 WH60 | 42.075 | 22.432 | 84.875 | 9.88 | 29.88 | 15.88 | 29.88 | 43.88 | 19.10 | 31.66 | 30.00 | 32.68 | 26.94 | 34.69 | 32.43 | 3.37 | 42.88 | 23.88 | 10.00 | 2.00 | 16.00 | 1.88 |

All dimensions are in inches. Dimensional drawings are not to scale.



*NOTE: Top supply opening is optional and available factory-built only on models WH30 and WH36.

| Thermostat | Part No. 8403-017 | (Honeywell T874R1129) |
|-----------------------|------------------------------|--|
| Subbase | Part No. 8404-009 | (Honeywell Q674L1189) |
| Thermostat | Part No. 8403-045 | (Honeywell T841A1761 - Integral Subbase) |
| AUTOMATIC CHANGEOVER | R (Mercury) | |
| Thermostat | Part No. 8403-018 | (Honeywell T874N1024) |
| Subbase | Part No. 8404-010 | (Honeywell Q674F1261) |
| MANUAL OR AUTOMATIC (| CHANGEOVER | |
| Electronic Digital | Part No. 8403-042 | (Honeywell T8511G1070) |
| Non-Programmable | , does not require batteries | |
| Electronic Digital | Part No. 8403-034 | (White-Rodgers 1F94-80) |
| Programmable, req | uires batteries | |
| Note: Required wh | en economizer or energy reco | overy ventilator are used with heat pump |

| Electrical S | Specifica | ntions | | | | | | | _ | | | | | |
|--|-----------------------------|---|----------------------------------|---|-------------------------------|-------------------------|----------------------|----------------------------------|----------------|---------------------------------------|-------------|--------------------------------|----------------------|-------------------------|
| | | | • | Single Circuit | | | | | | Dual (| | | | |
| Model | Rated Volts and Phase | No. Field Power Circuits | ③ Minimum Circuit Ampacity | Maximum External Fuse or Ckt. Brkr. | © Field Power Wire Size | ② Ground Wire | Cir Amp | nimum cuit acity Ckt. B | Externa | ximum al Fuse Breaker Ckt. B | Po | rield wer Size Ckt. B | | round Size Ckt. B |
| WH183- A00, A0Z A04 ③ A08 | 230/208-1 | 1 1 1 | 17 38 59 | 20 40 60 | 12 8 6 | 12 10 10 | CKI. A | CKI. B | OKI. A | CKI. B | OKI. A | CKI. B | OKI. A | CKI. B |
| WH242- A00, A0Z A04 | 230/208-1 | 1 1 | 18 39 | 25 40 | 10 8 | 10 10 | | | | | | | | |
| ③ A08 WH242- B00, B0Z B06 | 230/208-3 | 1 1 1 | 60 15 33 | 60 20 35 | 6 12 8 | 10 12 10 | | | | | | | | |
| WH242-C00, C0Z C06 | 460-3 | 1 1 | 8 17 | 15 20 | 14 12 | 14 12 | | | | | | | | |
| WH301- A00, A0Z* A05* 3 A10* | 230/208-1 | 1 1 1 or 2 | 24 50 76 | 35 50 80 | 8 8 4 | 10 10 8 | 50 | 26 | 50 | 30 | 8 | 10 | 10 | 10 |
| WH301- B00, B0Z* B06 3 B09* | 230/208-3 | 1 1 1 | 19 37 46 | 25 40 50 | 10 8 8 | 10 10 10 | | | | | | | | |
| WH301- C00, C0Z* C06 3 C09* C15 | 460-3 | 1 1 1 | 10 19 24 26 | 15 20 25 30 | 14 12 10 10 | 14 12 10 10 | | | | | | | | |
| WH361- A00, A0Z* A05 3 A10* A15 | 230/208-1 | 1 1 1 or 2 1 or 2 | 27 53 79 83 | 40 60 80 90 | 8 6 4 4 | 10 10 8 8 | 53 53 | 26 52 | 60 60 | 30 60 | 6 6 | 10 6 | 10 | 10 |
| WH361- B00, B0Z* B06 3 B09* B15 | 230/208-3 | 1 1 1 1 | 20 38 47 50 | 25 40 50 50 | 10 8 8 8 | 10 10 10 10 | _ 55 | 52 | 60 | - 60 | | - 6 | 10 | 10 |
| WH361- C00, C0Z* C06 3 C09* C15 | 460-3 | 1 1 1 1 | 11 20 25 26 | 15 20 25 30 | 14 12 10 10 | 14 12 10 10 | | | | | | | | |
| WH421- A00, A0Z A05 3 A10 A15 | 230/208-1 | 1 1 or 2 1 or 2 1 or 2 | 34 60 86 86 | 50 70 90 90 | 8 6 3 3 | 10 8 8 8 | 34 34 34 | 26 52 52 | 50 50 50 | 30 60 60 | 8 8 8 | 10 6 6 | 10 10 10 | 10 10 10 |
| WH421- B00, B0Z ③ B09 B15 | 230/208-3 | 1 1 1 | 26 53 53 | 35 60 60 | 8 6 6 | 10 10 10 | | | | | | | | |
| WH421- C00, C0Z C06 3 C09 C15 | 460-3 | 1 1 1 1 | 13 23 27 27 | 20 25 30 30 | 12 10 10 10 | 12 10 10 10 | | | | | | | | |
| WH482- A00, A0Z A04 A05 3 A10 A15 A20 | 230/208-1 | 1 1 or 2 1 or 2 1 or 2 1 or 2 1 or 2 | 38 59 64 90 90 | 50 60 80 100 100 110 | 8 6 6 3 3 | 10 10 8 8 8 | 38 38 38 59 | 26 52 52 52 | 60 60 60 | 30 60 60 60 | 8 8 8 | 10 6 6 6 | 10 10 10 10 | 10 10 10 10 |
| WH482- B00, B0Z ③ B09 B15 B18 | 230/208-3 | 1 1 1 | 27 54 54 60 | 35 60 60 60 | 8 6 6 6 | 10 10 10 10 | | | | | | | | |
| WH482- C00, C0Z ③ C09 C15 | 460-3 | 1 1 1 | 15 29 29 | 20 30 30 | 12 10 10 | 12 10 10 | | | | | | | | |
| WH602- A00, A0Z A05 3 A10 A15 A20 | 230/208-1 | 1 1 or 2 1 or 2 1 or 2 1 or 2 | 45 71 97 97 110 | 60 90 110 110 110 | 8 4 3 3 2 | 10 8 6 6 | 45 45 45 59 | 26 52 52 52 | 60 60 60 | 30 60 60 60 | 8 8 8 | 10 6 6 6 | 10 10 10 10 | 10 10 10 10 |
| WH602- B00, B0Z ③ B09 B15 B18 | 230/208-3 | 1 1 1 1 | 33 60 60 60 | 45 60 60 60 | 8 6 6 6 | 10 10 10 10 | | | | | | | | |
| WH602- C00, C0Z ③ C09 C15 | 460-3 | 1 1 1 | 16 29 29 | 20 35 35 | 12 8 8 | 12 10 10 | | | | | | | | |

① Maximum size of the time delay fuse or HACR type circuit breaker for protection of field wiring conductors.

 $^{@ \ \, \}text{Based on 75°C copper wire. All wiring must conform to the National Electrical Code and all local codes.}$

③ Maximum KW that can operate with the heat pump on.

These "Minimum Circuit Ampacity" values are to be used for sizing the field power conductors. Refer to the National Electrical Code (latest version), Article 310 for power conductor sizing.
Caution: When more than one field power circuit is run through one conduit, the conductors must be derated. Pay special attention to note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three (3) conductors are in a raceway.

^{*} Available factory-built only with top outlet supply as an option.

Indoor Blower Performance - CFM at 230 or 460 Volts

| ESP in | WH18 WH24 | | 130 136 | | 142 148 | WH60 | | |
|------------------|--------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|--|
| H ₂ O | Dry/Wet Coil | High Speed Dry/Wet Coil | Low Speed Dry/Wet Coil | High Speed Dry/Wet Coil | Low Speed Dry/Wet Coil | High Speed Dry/Wet Coil | Low Speed Dry/Wet Coil | |
| 0 | 1020/975 | 1395/1315 | 950/935 | 1885/1800 | 1650/1600 | 2200/2000 | 1600/1450 | |
| .1 | 960/905 | 1340/1270 | 930/915 | 1770/1665 | 1550/1500 | 2100/1900 | 1525/1375 | |
| .2 | 865/800 | 1285/1190 | 910/885 | 1635/1550 | 1450/1400 | 2000/1800 | 1460/1200 | |
| .3 | 820/735 | 1205/1100 | 855/830 | 1500/1400 | 1350/1300 | 1875/1700 | -/- | |
| .4 | 735/650 | 1110/1000 | 800/755 | 1370/1285 | 1300/1175 | 1775/1600 | -/- | |
| .5 | 615/535 | 1005/870 | -/- | 1250/1150 | -/- | 1650/1475 | -/- | |

Above data is with 1" standard throwaway filter and 1" washable filter.

For optional 2" pleated filter - reduce ESP by .15 in.

See installation instructions for maximum ESP information on various KW applications.

Electric Heat Table

| Models | WH1 WH2 | | WH2 | 42-B | WH242-C | WH3 | 801-A | WH3 | 801-B | WH301-C | WH3 | 861-A | WH3 | 61-B | WH361-C | WH4 WH4 WH6 | | WH4 WH4 WH6 | | WH421-C WH482-C WH602-C |
|--------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|----------------|-------------------|----------------|-------------------------------|
| KW | 240V-1 BTUH | 208V-1 BTUH | 240V-3 BTUH | 208V-3 BTUH | 460V-3 BTUH | 240V-1 BTUH | 208V-1 BTUH | 240V-3 BTUH | 208V-3 BTUH | 460V-3 BTUH | 240V-1 BTUH | 208V-1 BTUH | 240V-3 BTUH | 208V-3 BTUH | 460V-3 BTUH | 240V-1 BTUH | 208V-1 BTUH | 240V-3 BTUH | 208V-3 BTUH | 460V-3 BTUH |
| 4.0 | 13,650 | 10,240 | | | | | | | | | | | | | | | | | | |
| 5.0 | | | | | | 17,065 | 12,800 | | | | 17,065 | 12,800 | | | | 17,065 | 12,800 | | | |
| 8.0 | 27,300 | 20,475 | | | | | | | | | | | | | | | | | | |
| 10.0 | | | | | | 34,130 | 25,600 | | | | 34,130 | 25,600 | | | | 34,130 | 25,600 | | | |
| 15.0 | | | | | | | | | | | 51,200 | 38,400 | | | | 51,200 | 38,400 | | | |
| 20.0 | | | | | | | | | | | | | | | | 68,250 | 51,200 | | | |
| 6.0 | | | 20,500 | 15,360 | 20,475 | | | 20,500 | 15,360 | 20,475 | | | 20,500 | 15,360 | 20,475 | | | | | |
| 9.0 | | | | | | | | 30,600 | 23,030 | 30,700 | | | 30,600 | 23,030 | 30,700 | | | 30,600 | 23,030 | 20,475 |
| 15.0 | | | | | | | | | | 51,200 | | | 51,200 | 38,400 | 51,200 | | | 51,200 | 38,400 | 51,200 |
| 18.0 | | | | · | | | | | | | | | | | | | | 61,400 | 46,050 | |

Heater Packages - Field Installed

- Designed for adding Electric Heat to 0 KW Units
- Circuit Breaker Standard on 230/208V Models
- UL Listed
- CUL Listed

| • | Pull | Disconnect | Standard | on 460V | Models |
|---|------|------------|----------|---------|--------|
|---|------|------------|----------|---------|--------|

| Heat Pump | -A00 Models 230/208-1 | | -B00 Models 230/208-3 | | -C00 Models 460-3 | |
|----------------|--|---------------------|--|---------------|---|--------------|
| Models | Heater Model # | KW | Heater Model # | KW | Heater Model # | KW |
| WH183 | EHWH02A-A04 EHWH02A-A08 | 4 8 | N/A | | N/A | |
| WH242 | EHWH02A-A04 EHWH02A-A08 | 4 8 | EHWH24-B06 | 6 | EHWH24B-C06 | 6 |
| WH301 | EHWH30-A05 EHWH30-A10 | 5 10 | EHWH03-B06 EHWH03-B09 | 6 9 | EHWC03A-C06 EHWC03A-C09 EHWH03A-C15 | 6 9 15 |
| WH361 | EHWH36-A05 EHWH36-A10 EHWH36-A15 | 5 10 15 | EHWH03-B06 EHWH03-B09 EHWH36-B15 | 6 9 15 | EHWC03A-C06 EHWC03A-C09 EHWH03A-C15 | 6 9 15 |
| WH421 | EHWH42-A05 EHWH42-A10 EHWH42-A15 | 5 10 15 | EHWH05-B09 EHWH05-B15 | 9 15 | EHWH05A-C09 EHWH05A-C15 | 9 15 |
| WH482 WH602 | EHWH04-A05 EHWH04-A10 EHWH04-A15 EHWH04-A20 | 5 10 15 20 | EHWH05-B09 EHWH05-B15 EHWH04-B18 | 9 15 18 | EHWH05A-C09 EHWH05A-C15 | 9 15 |

NOTE: Field installed heater packages are not approved for use with top supply opening models.

Cooling Application Data - Outdoor Temperature ${}^{\mathrm{o}} F \ {}^{\mathrm{o}}$

| Model | D.B./W.B. | Cooling | 75°F | 80°F | 85°F | 90°F | 95°F | 100°F | 105°F | 110°F | 115°F |
|---------|-----------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Wodei | 2 | Capacity | 731 | 00 I | 05 1 | 90 1 | 95 1 | 1001 | 103 1 | 1101 | |
| | 75/ | Total Cooling | 20,680 | 19,550 | 18,470 | 17,470 | 16,530 | 15,660 | 14,850 | 14,110 | 13,435 |
| | 62 | Sensible Cooling | 16,150 | 15,490 | 14,900 | 14,380 | 13,920 | 13,520 | 13,200 | 12,930 | 12,730 |
| WH183 | 80/ | Total Cooling | 22,130 | 21,320 | 20,530 | 19,750 | 19,000 | 18,270 | 17,550 | 16,860 | 16,190 |
| WITIOS | 67 | Sensible Cooling | 15,690 | 15,200 | 14,770 | 14,390 | 14,060 | 13,780 | 13,560 | 13,380 | 13,260 |
| | 85/ | Total Cooling | 26,320 | 24,910 | 23,560 | 22,290 | 21,090 | 19,960 | 18,900 | 17,920 | 17,000 |
| | 72 | Sensible Cooling | 16,050 | 15,415 | 14,830 | 14,280 | 13,780 | 13,320 | 12,900 | 12,530 | 12,200 |
| | 75/ | Total Cooling | 24,780 | 23,800 | 23,760 | 21,670 | 20,530 | 19,330 | 18,080 | 16,780 | 15,420 |
| | 62 | Sensible Cooling | 19,600 | 19,090 | 18,570 | 18,040 | 17,495 | 16,940 | 16,380 | 15,800 | 15,220 |
| WH242 | 80/ | Total Cooling | 26,450 | 25,940 | 25,300 | 24,520 | 23,600 | 22,550 | 21,360 | 20,040 | 18,575 |
| ******* | 67 | Sensible Cooling | 19,030 | 18,730 | 18,410 | 18,050 | 17,670 | 17,260 | 16,820 | 16,350 | 15,855 |
| | 85/ | Total Cooling | 31,520 | 30,320 | 29,030 | 27,660 | 26,200 | 24,650 | 23,020 | 21,300 | 19,500 |
| | 72 | Sensible Cooling | 19,490 | 19,000 | 18,470 | 17,910 | 17,315 | 16,680 | 16,020 | 15,320 | 14,585 |
| | 75/ | Total Cooling | 31,600 | 30,290 | 28,930 | 27,540 | 26,100 | 24,620 | 23,100 | 21,530 | 19,920 |
| | 62 | Sensible Cooling | 24,370 | 24,210 | 23,940 | 23,560 | 23,075 | 22,480 | 21,770 | 20,960 | 20,040 |
| WH301 | 80/ | Total Cooling | 33,760 | 33,030 | 32,160 | 31,150 | 30,000 | 28,710 | 27,280 | 25,710 | 24,000 |
| | 67 | Sensible Cooling | 24,000 | 23,830 | 23,650 | 23,485 | 23,310 | 22,900 | 22,360 | 21,690 | 20,880 |
| | 85/ | Total Cooling | 40,220 | 38,600 | 36,910 | 35,140 | 33,300 | 31,390 | 29,400 | 27,340 | 25,200 |
| | 72 | Sensible Cooling | 24,220 | 24,090 | 23,810 | 23,400 | 22,845 | 22,150 | 21,310 | 20,330 | 19,210 |
| | 75/ | Total Cooling | 36,960 | 35,600 | 34,150 | 32,600 | 30,972 | 29,250 | 27,440 | 25,540 | 23,550 |
| | 62 | Sensible Cooling | 28,730 | 28,320 | 27,820 | 27,220 | 26,530 | 25,740 | 24,850 | 23,875 | 22,800 |
| WH361 | 80/ | Total Cooling | 39,475 | 38,820 | 37,960 | 36,880 | 35,600 | 34,100 | 32,400 | 30,500 | 28,375 |
| | 67 | Sensible Cooling | 27,870 | 27,790 | 27,580 | 27,250 | 26,800 | 26,220 | 25,520 | 24,700 | 23,750 |
| | 85/ | Total Cooling | 45,360 | 45,000 | 43,910 | 42,080 | 39,515 | 37,000 | 34,650 | 32,200 | 29,790 |
| | 72 | Sensible Cooling | 28,570 | 28,190 | 27,670 | 27,030 | 26,260 | 25,350 | 24,320 | 23,150 | 21,850 |
| | 75/ | Total Cooling | 46,330 | 43,420 | 40,680 | 38,350 | 36,100 | 33,920 | 31,800 | 29,770 | 27,800 |
| | 62 | Sensible Cooling | 36,530 | 34,230 | 33,380 | 32,970 | 32,300 | 31,370 | 30,180 | 28,720 | 27,000 |
| WH421 | 80/ | Total Cooling | 49,670 | 47,390 | 45,220 | 43,380 | 41,500 | 39,570 | 37,600 | 35,570 | 33,500 |
| | 67 | Sensible Cooling | 35,900 | 34,900 | 33,020 | 32,900 | 32,600 | 32,110 | 31,430 | 30,560 | 29,500 |
| | 85/ 72 | Total Cooling Sensible Cooling | 59,150 36,750 | 55,450 35,400 | 51,740 33,100 | 48,590 32,600 | 45,600 31,900 | 42,770 31,000 | 40,090 29,900 | 37,570 28,600 | 35,200 27,100 |
| | 75/ | Total Cooling | 50,250 | 47,770 | 45,375 | 43,100 | 40,900 | 38,800 | 36,800 | 34,900 | 33,100 |
| | 62 | Sensible Cooling | 39,550 | 38,500 | 37,500 | 36,525 | 35,600 | 34,700 | 33,875 | 33,050 | 32,300 |
| | 80/ | Total Cooling | 53,700 | 52,050 | 50,400 | 48,700 | 47,000 | 45,250 | 43,500 | 41,700 | 39,900 |
| WH482 | 67 | Sensible Cooling | 38,500 | 37,850 | 37,200 | 36,600 | 36,000 | 35,400 | 34,850 | 34,250 | 33,700 |
| | 85/ | Total Cooling | 63,800 | 60,800 | 57,840 | 54,980 | 52,200 | 49,500 | 46,890 | 44,350 | 41,900 |
| | 72 | Sensible Cooling | 39,250 | 38,300 | 37,300 | 36,325 | 35,300 | 34,250 | 33,200 | 32,100 | 31,000 |
| | 75/ | Total Cooling | 58,200 | 56,300 | 54,200 | 51,800 | 49,100 | 46,150 | 42,950 | 39,450 | 35,700 |
| | 62 | | 44,100 | 43,000 | 41,900 | 40,750 | 39,500 | 38,200 | 36,800 | 39,450 35,300 | 35,700 |
| | 80/ | Sensible Cooling Total Cooling | 62,000 | | 60,250 | | 56,500 | 53,900 | | 47,100 | 43,000 |
| WH602 | 67 | Sensible Cooling | 42,800 | 61,400 42,200 | 41,600 | 58,625 40,800 | 39,900 | 38,900 | 50,750 37,800 | 36,600 | 35,600 |
| | 85/ | Total Cooling | 74,000 | 71,750 | 69,150 | 66,100 | 62,725 | 58,900 | 54,700 | 50,125 | 45,150 |
| | 72 | Sensible Cooling | 43,800 | 42,800 | 41,700 | 40,475 | 39,100 | 37,600 | 36,000 | 34,250 | 32,400 |
| | 1 / 2 | Denoine Cooling | 43,000 | 42,000 | 41,700 | 40,473 | J9,100 | J J ,000 | 30,000 | 34,230 | 32,400 |

Below 65°F, unit requires a factory or field installed low ambient control. Return air temperature °F.

| Capacity Multiplier Factors | | | | | | | | |
|-----------------------------|-------|-------|------|--|--|--|--|--|
| % of Rated Airflow | -10 | Rated | +10 | | | | | |
| Total BTUH | 0.975 | 1.0 | 1.02 | | | | | |
| Sensible BTUH | 0.950 | 1.0 | 1.05 | | | | | |

Heating Application Rating and Outdoor Temperature °F *

| Model | | -5° | 0° | 5° | 10° | 15° | 17° | 20° | 25° | 30° | 35° | 40° | 45° | 47° | 50° | 55° | 60° | 65° |
|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | BTUH | 6,000 | 7,000 | 8,000 | 9,000 | 10,000 | 11,100 | 11,500 | 12,000 | 13,000 | 14,000 | 16,000 | 18,000 | 18,800 | 19,500 | 20,800 | 22,000 | 23,400 |
| WH183 | WATTS | 1,600 | 1,630 | 1,680 | 1,700 | 1,730 | 1,739 | 1,760 | 1,795 | 1,820 | 1,860 | 1,890 | 1,920 | 1,925 | 1,950 | 1,980 | 2,020 | 2,040 |
| | COP | 1.09 | 1.25 | 1.39 | 1.55 | 1.69 | 1.87 | 1.91 | 1.95 | 2.09 | 2.35 | 2.48 | 2.74 | 2.86 | 2.93 | 3.07 | 3.19 | 3.36 |
| | BTUH | 6,960 | 8,030 | 9,090 | 10,160 | 11,230 | 12,400 | 12,775 | 13,360 | 14,430 | 15,500 | 18,700 | 21,910 | 23,200 | 24,280 | 26,080 | 27,880 | 29,680 |
| WH242 | WATTS | 1,726 | 1,775 | 1,825 | 1,875 | 1,925 | 1,942 | 1,970 | 2,020 | 2,070 | 1,976 | 2,165 | 2,215 | 2,236 | 2,265 | 2,315 | 2,365 | 2,412 |
| | COP | 1.18 | 1.32 | 1.45 | 1.58 | 1.70 | 1.87 | 1.90 | 1.93 | 2.04 | 2.29 | 2.53 | 2.88 | 3.04 | 3.14 | 3.30 | 3.45 | 3.60 |
| | BTUH | 8,295 | 9,875 | 11,450 | 13,025 | 14,600 | 16,200 | 16,790 | 17,750 | 19,325 | 20,900 | 23,860 | 26,815 | 28,000 | 29,180 | 31,150 | 33,115 | 35,080 |
| WH301 | WATTS | 2,100 | 2,165 | 2,230 | 2,290 | 2,350 | 2,373 | 2,400 | 2,470 | 2,530 | 2,662 | 2,650 | 2,710 | 2,735 | 2,770 | 2,830 | 2,890 | 2,952 |
| | COP | 1.15 | 1.33 | 1.50 | 1.66 | 1.82 | 2.00 | 2.05 | 2.10 | 2.23 | 2.30 | 2.63 | 2.89 | 3.00 | 3.08 | 3.22 | 3.57 | 3.48 |
| | BTUH | 12,490 | 13,970 | 15,445 | 16,920 | 18,400 | 20,200 | 20,900 | 21,830 | 22,825 | 24,303 | 28,510 | 32,720 | 34,400 | 35,820 | 38,180 | 40,550 | 42,920 |
| WH361 | WATTS | 2,600 | 2,680 | 2,760 | 2,845 | 2,925 | 2,959 | 3,000 | 3,090 | 3,170 | 3,185 | 3,335 | 3,420 | 3,451 | 3,500 | 3,580 | 3,664 | 3,750 |
| | COP | 1.40 | 1.52 | 1.64 | 1.74 | 1.84 | 2.00 | 2.05 | 2.07 | 2.10 | 2.23 | 2.50 | 2.80 | 2.92 | 2.99 | 3.12 | 3.24 | 3.35 |
| | BTUH | 13,700 | 15,750 | 17,825 | 19,900 | 21,975 | 22,800 | 24,050 | 26,100 | 28,200 | 30,250 | 34,725 | 39,200 | 41,000 | 42,800 | 45,850 | 48,875 | 51,900 |
| WH421 | WATTS | 2,975 | 3,075 | 3,175 | 3,275 | 3,350 | 3,400 | 3,450 | 3,550 | 3,650 | 3,750 | 3,825 | 3,925 | 3,950 | 4,025 | 4,100 | 4,200 | 4,300 |
| | COP | 1.34 | 1.50 | 1.64 | 1.78 | 1.92 | 1.96 | 2.08 | 2.15 | 2.26 | 2.36 | 2.65 | 2.92 | 3.03 | 3.11 | 3.27 | 3.41 | 3.53 |
| | BTUH | 17,950 | 19,900 | 21,875 | 23,850 | 25,800 | 26,600 | 27,775 | 29,750 | 31,700 | 33,675 | 38,800 | 43,900 | 46,000 | 47,950 | 51,175 | 54,400 | 57,650 |
| WH482 | WATTS | 3,450 | 3,550 | 3,625 | 3,700 | 3,800 | 3,840 | 3,900 | 3,975 | 4,075 | 4,150 | 4,250 | 4,300 | 4,375 | 4,425 | 4,500 | 4,600 | 4,700 |
| | COP | 1.52 | 1.64 | 1.76 | 1.88 | 1.98 | 2.03 | 2.08 | 2.19 | 2.27 | 2.37 | 2.67 | 2.99 | 3.08 | 3.17 | 3.33 | 3.46 | 3.59 |
| | BTUH | 24,775 | 26,500 | 28,300 | 30,100 | 31,900 | 32,900 | 33,650 | 35,450 | 37,200 | 39,000 | 46,900 | 54,800 | 58,000 | 60,500 | 64,700 | 68,900 | 73,000 |
| WH602 | WATTS | 4,100 | 4,225 | 4,325 | 4,425 | 4,525 | 4,575 | 4,625 | 4,750 | 4,850 | 4,950 | 5,050 | 5,150 | 5,200 | 5,250 | 5,375 | 5,475 | 5,575 |
| | COP | 1.76 | 1.83 | 1.91 | 1.99 | 2.06 | 2.10 | 2.12 | 2.19 | 2.24 | 2.30 | 2.71 | 3.11 | 3.26 | 3.36 | 3.53 | 3.69 | 3.83 |

Heat Pump Wall-Mount Model Nomenclature (10.00-11.00 SEER, 6.60-7.00 HSPF) CONTROL MODULES MODEL NUMBER H (See Chart Below) CAPACITY | KW **COLOR OPTIONS** 18 - 1-1/2 Ton **COIL OPTIONS** X - Beige (Standard) 24 - 2 Ton X - Standard 1 - White 30 - 2-1/2 Ton 1 - Phenolic Coated Evaporator REVISION I 2 - Mesa Tan 36 - 3 Ton - Buckeye Gray 2 - Phenolic Coated Condenser 42 - 3-1/2 Ton 3 - Phenolic Coated Evaporator 5 - Desert Brown VENTILATION OPTIONS 48 - 4 Ton 8 - Dark Bronze and Condenser X - Barometric Fresh Air Damper (Standard) 60 - 5 Ton B - Blank-off Plate **FILTER OPTIONS VOLTS & PHASE R** M - Motorized Fresh Air Damper X - 1 inch Throwaway (Standard) **OUTLET OPTIONS** A - 230/208/60/1 Commercial Ventilator-Motorized with W - 1 inch Washable B - 230/208/60/3 X - Front (Standard) Exhaust P - 2 inch Pleated T - Top (on WH30 and C - 460/60/3 E - Economizer (Internal) - Fully Modulating WH36 Models) with Exhaust R - Energy Recovery Ventilator with Exhaust

Note: For 0KW and circuit breakers (230/208 volt) or pull disconnects (460 volt) applications, insert 0Z in the KW field of the model number.

Ventilation Options MODELS WH183, WH242 WH301, WH361 WH421, WH482, WH602 Factory Installed Field Installed Factory Installed Field Installed Factory Installed Field Installed Description Code No Code No. Part No. Code No Part No Part No Barometric Fresh Air Damper Χ BFAD-2 Χ BFAD-3 Χ BFAD-5 Blank-Off Plate В BOP-2 В BOP-3 В BOP-5 Motorized Fresh Air Damper Μ MFAD-2 Μ MFAD-3 Μ MFAD-5 Commercial Ventilator - Motorized ٧ CRV-2 ٧ CRV-3 V CRV-5 Economizer (Internal) - Fully Modulating (1) Ε EIFM-2B Ε EIFM-3B Ε EIFM-5B R R R Energy Recovery Ventilator - 230 Volt WERV-A2B WERV-A3B WERV-A5B Energy Recovery Ventilator - 460 Volt R WERV-C2B R WERV-C3B R WERV-C5B

① Low ambient control is required with economizer for low temperature compressor operation. Requires the 8403-034 (IF94-80) thermostat.

| Heat Pump Control Modules | | | | | | | | | | |
|-------------------------------------|-----------------------------------|---------------------------|---------------------------------|-------------|-------------------------|--|--|--|--|--|
| Factory Installed Code Number | Field Installed Part Number | Description | | | | | | | | |
| | | Low Pressure Control ① | Low Ambient Control and Relay ② | Start Kit ③ | Outdoor Thermostat ④ | | | | | |
| В | CMH-3 | • | | | | | | | | |
| E | CMH-7 | | • | | | | | | | |
| 0 | CMH-9 | • | • | | | | | | | |
| Q | CMH-14 | | | | • | | | | | |
| R | | • | • | | • | | | | | |
| S | | • | • | • | | | | | | |
| Т | | • | • | • | • | | | | | |
| Р | CMC-15 3 | | | • | | | | | | |
| U | | • | | | • | | | | | |

① The low pressure control is auto reset. It includes a lock-out feature and is resettable from the wall thermostat. All low pressure controls use a timed bypass circuit to prevent nuisance tripping during low temperature start-up.

① The outdoor thermostat is adjustable from 0°F to 50°F. It is suitable for use as a compressor cut-off thermostat.



BARD MANUFACTURING CO. BRYAN, OHIO 43506

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Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Form No. \$3210 May, 2001

Supersedes S3210-600

[©] The low ambient control includes an 8201-008 (fan relay) and permits cooling operation down to 0°F.

⑤ For WH242-A, WH301-A, WH361-A and WH421-A models. The CMC-15 can be used with any control module combination. NOTE: The compressor anti-cycle relay is standard on all heat pump models.