

# BARD WALL-MOUNT™ Single Stage Heat Pumps 1.5 to 5 Ton Capacity W18H - W60H Unit Models 208V - 460V Single and Three Phase 60hz

## WH Series WALL-MOUNT™

The Bard WH Series Wall-Mount Heat Pump is an energy efficient self contained system that is designed to offer maximum indoor temperature control. Installed on an exterior wall surface, the WH Series provides cooling and heating without using valuable indoor floor space or outside ground space. This unit is the ideal product for versatile applications such as: modular buildings, light commercial, mobile buildings, schools, mining, petro-chemical, telecom, industrial, energy storage, and data centers. Factory or field installed accessories are available to meet specific job requirements for your unique application.

### WH Series Features:

- 1.5 to 5 ton cooling capacity uses energy efficient components including today's newest compressor designs. Heat is provided using the refrigeration system to save energy costs.
- Multi-speed Electronically commutated indoor motor (ECM) technology.
- Enclosed outdoor fan motor with ball bearing construction.
- Copper/Aluminum finned coils, and refrigerant system includes filter drier. Evaporator coil includes green fin coil protection.
- R-454B A2L Refrigerant that meets the global objectives outlined in the Montreal Protocol and the Kigali Amendment.
- Factory or field installed ventilation options including economizers and energy recovery ventilators.
- Multiple cabinet finishes including stainless steel and aluminum.
- Coil and cabinet coating options for additional corrosion protection.
- Optional factory or field installed electric heater options from 4kw up to 15kw.
- Optional Circuit breakers for 208/230V single and three phase units.
- Filter options up to MERV13.
- Indoor air quality options including UVC-LED and NPBI devices.
- Controls include short cycle protection and phase monitoring. Hi and low pressure switch refrigerant system protection standard.
- Optional hot gas reheat dehumidification is available for most models.



### WH Series Compliance:

- Complies with efficiency requirements of ANSI/ASHRAE/IES 90.1-2022.
- Certified to ANSI/AHRI Standard 390-2025 for SPVU (Single Package Vertical Units).
- Intertek ETL Listed to Standard for Safety of Household and Similar Electrical Appliances ANSI/UL STD 60335-1 & ANSI/UL STD 60335-2-40/CSA STD C22.2 No. 60335-1 & CSA STD C22.2 No. 60335-2-40 Fourth Edition.
- Commercial Product - Not intended for residential applications.
- Bard is an ISO 9001:2015 Certified Manufacturer.
- The AHRI Certified® mark indicates Bard Manufacturing Company participation in the AHRI Certification program. For verification of individual certified products, go to [www.ahridirectory.org](http://www.ahridirectory.org).



Globally Recognized. Industry Respected.



## Insulation

Non-Fiberglass Foil Faced Insulation: High R-value recycled denim and cotton insulation with FSK foil facing for durability and clean-ability.

## Cabinet

Durable Cabinet Construction: Multiple construction options available based on environmental requirements. Optional specialized coatings for extreme conditions. Refer to cabinet finish section for specifications.

## Maintenance Features

Easy Filter Access: Dedicated filter door for simplified maintenance. Compatible with 1" and 2" filters up to MERV13 rating. See filter specifications for details.

## Ventilation And Indoor Air Quality Options

Field or Factory Installed Vents: Multiple ventilation configurations available for outdoor air intake and energy optimization. Can be installed pre-delivery or on-site. NPBI and LED UVC devices available from the factory or field installation.

## Supplemental Electric Heat

Electric Strip Heat: High-reliability heating elements with automatic limiting and thermal safety cutoffs. Available as factory or field installation. See heating section for specifications.

## Electrical

Built-in Circuit Protection: Circuit breakers standard on all 208/230V single-phase and three-phase models. Toggle disconnects standard on 460V three-phase models with electric heat.

Control Panel Access: Lockable hinged cover on the right side.

Phase rotation monitoring on all 3-phase units. Adjustable compressor timing with diagnostic LEDs. Multiple electrical entry points via back and side.

## Heat Exchange

Green Fin Hydrophilic Evaporator Coil: Enhanced wettability coating prevents mold formation, improves condensate drainage, and provides protection against corrosive airborne particulates.

Copper/Aluminum Condenser Coil: Rifled copper tubing for increased efficiency and aluminum fins for easy cleaning and serviceability.

## Climate Control

Balanced Climate Technology: Superior humidity control with 35% greater latent capacity than market alternatives when paired with 2-stage thermostat or controller. Bard Balanced Climate™ technology standard on all models.

Optional Mechanical Dehumidification: Available with hot gas reheat dehumidification for energy-efficient moisture removal. Electronic Expansion Valves included standard on all dehumidification models.

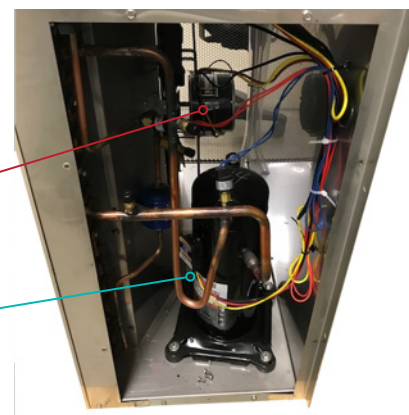
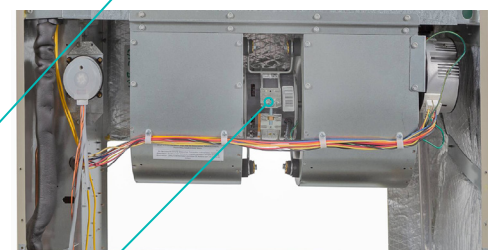
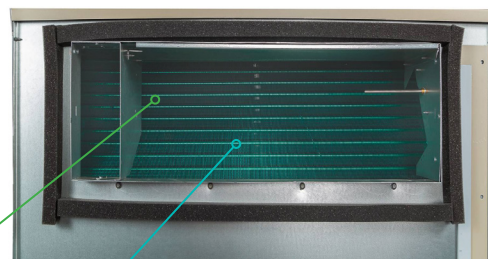
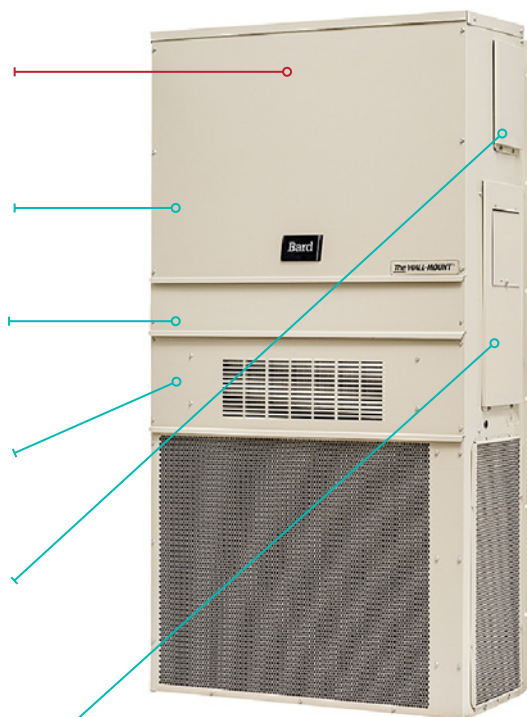
## Air Delivery

ECM Indoor Motor Technology: 5-speed dual shaft motor with twin blower assembly for quiet operation. Motor overload protection standard on all units.

Enclosed Condenser Motor: Ball-bearing condenser motor in sealed enclosure for reliable operation and extended service life. Standard on all units.

## Cooling and Heating Refrigeration System

High Efficiency Cooling and Heating: Scroll compressors deliver quiet, efficient performance. R-454B refrigerant (GWP of 466, 78% lower than R-410A) provides excellent efficiency while meeting environmental regulations. This next-generation A2L refrigerant offers improved thermodynamic properties with lower flammability and greatly reduced global warming potential. Liquid line filter-drier standard on all units for system protection against moisture.



## ////// ENGINEERED FEATURES - W42 THROUGH W60 UNIT MODELS

### Insulation

Non-Fiberglass Foil Faced Insulation: High R-value recycled denim and cotton insulation with FSK foil facing for durability and cleanability.

### Cabinet

Durable Cabinet Construction: Multiple construction options available based on environmental requirements. Optional specialized coatings for extreme conditions. Refer to cabinet finish section for specifications.

### Maintenance Features

Easy Filter Access: Dedicated filter door for simplified maintenance. Compatible with 1" and 2" filters up to MERV13 rating. See filter specifications for details.

### Ventilation And Indoor Air Quality Options

Field or Factory Installed Vents: Multiple ventilation configurations available for outdoor air intake and energy optimization. Can be installed pre-delivery or on-site. NPBI and LED UVC devices available from the factory or field installation.

### Supplemental Electric Heat

Electric Strip Heat: High-reliability heating elements with automatic limiting and thermal safety cutoffs. Available as factory or field installation. See heating section for specifications.

### Electrical

Built-in Circuit Protection: Circuit breakers standard on all 208/230V single-phase and three-phase models. Toggle disconnects standard on 460V three-phase models with electric heat.

Control Panel Access: Front location with lockable hinged cover. Phase rotation monitoring on all 3-phase units. Adjustable compressor timing with diagnostic LEDs. Multiple electrical entry points via back and side.

### Heat Exchange

Standard Green Fin Hydrophilic Evaporator Coil: Enhanced wettability coating prevents mold formation, improves condensate drainage, and provides protection against corrosive airborne particulates.

Standard Copper/Aluminum Condenser Coil: Rifled copper tubing for increased efficiency and aluminum fins for easy cleaning and serviceability.

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Optional Mechanical Dehumidification: Available with hot gas reheat dehumidification for energy-efficient moisture removal. Electronic Expansion Valves included standard on all dehumidification models.

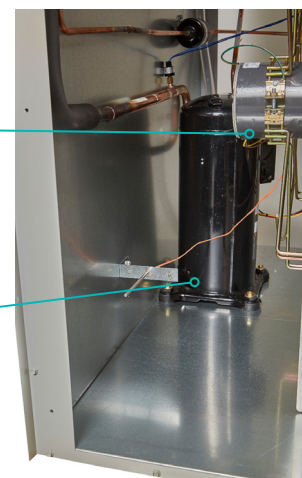
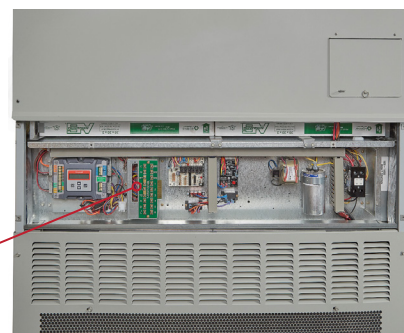
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# 111111 WALL-MOUNT W18H (1.5 TON) TO W60H (5 TON) HEAT PUMP NOMENCLATURE

| MODEL # | W | 36  | H | F | - | A | 0Z  | X  | P  | X  | X  | X  | J  |
|---------|---|-----|---|---|---|---|-----|----|----|----|----|----|----|
| DIGIT # | 1 | 2,3 | 4 | 5 | 6 | 7 | 8,9 | 10 | 11 | 12 | 13 | 14 | 15 |

1

| 1. Series - Single Stage Compressor |                          |
|-------------------------------------|--------------------------|
| W                                   | Bard Exterior Wall-Mount |

2,3

| 2-3. Nominal Capacity |         |    |         |
|-----------------------|---------|----|---------|
| 18                    | 1.5 Ton | 42 | 3.5 Ton |
| 24                    | 2.0 Ton | 48 | 4.0 Ton |
| 30                    | 2.5 Ton | 60 | 5.0 Ton |
| 36                    | 3.0 Ton |    |         |

4

| 4. Unit Type - Controls Location |           | Units   |
|----------------------------------|-----------|---------|
| H                                | Heat Pump | W18-W60 |

5

| 5. Revision |                               |
|-------------|-------------------------------|
| F           | Revision (R-454B Refrigerant) |

6

| 6. Special Feature Placeholder |                      | Units   |
|--------------------------------|----------------------|---------|
| -                              | Standard Unit        | W18-W60 |
| D                              | HGR Dehumidification | W24-W60 |
| L                              | Low Ampacity and HGR | W24-W60 |

7

| 7. Voltage |            | Ph. | Hz. | Units   |
|------------|------------|-----|-----|---------|
| A          | 208/230VAC | 1   | 60  | W18-W60 |
| B          | 208/230VAC | 3   | 60  | W24-W60 |
| C          | 460VAC     | 3   | 60  | W24-W60 |

8,9

| 8-9. Electric Heater Options |                                     |
|------------------------------|-------------------------------------|
| 00                           | 0Kw with Lug Connections            |
| 0Z                           | 0Kw with Breaker or Disconnect      |
| 04-15                        | 4-15Kw Heat w/breaker or Disconnect |

10

| 10. Ventilation Package Options |                                   | Units   |
|---------------------------------|-----------------------------------|---------|
| X                               | Barometric Air Damper (Intake)    | W18-W60 |
| A                               | Bar. Air Damper (Intake+Exh)      | W18-W60 |
| B                               | Block Off Plate (No Vent)         | W18-W60 |
| M                               | Powered Comm. Vent, On/Off        | W18-W60 |
| V                               | Powered Comm. Vent, On/Off/ Mod.  | W18-W60 |
| D                               | Econ, Field Supplied Controls     | W18-W60 |
| Y                               | Economizer, JADE, Dry Bulb        | W18-W60 |
| Z                               | Economizer, JADE, Enthalpy        | W18-W60 |
| R                               | Energy Recovery Ventilator        | W18-W60 |
| S                               | Partial Flow Econ, JADE, Enthalpy | W18-W36 |

|    |                            |                                      |  |         |
|----|----------------------------|--------------------------------------|--|---------|
| 11 | 11. Filter and IAQ Options |                                      |  | Units   |
|    | X                          | Standard 1" MERV2 Disposable Filter. |  | W18-W60 |
|    | W                          | 1" MERV2 Washable Filter.            |  | W18-W60 |
|    | P                          | 2" MERV8 Disposable Filter.          |  | W18-W60 |
|    | M                          | 2" MERV11 Disposable Filter.         |  | W18-W60 |
|    | N                          | 2" MERV13 Disposable Filter.         |  | W18-W60 |
|    | A                          | 2" MERV13 Filter with UVC-LED Light. |  | W18-W60 |
|    | B                          | 2" MERV13 Filter with NPBI Device.   |  | W18-W60 |
|    | C                          | 2" MERV8 Filter with NPBI Device.    |  | W18-W60 |

|    |                              |                                          |  |         |
|----|------------------------------|------------------------------------------|--|---------|
| 12 | 12. Cabinet Color and Finish |                                          |  | Units   |
|    | X                            | Standard Beige Enamel Painted Steel.     |  | W18-W60 |
|    | 1                            | White Enamel Painted Steel.              |  | W18-W60 |
|    | 4                            | Buckeye Gray Enamel Painted Steel.       |  | W18-W60 |
|    | 5                            | Desert Brown Enamel Painted Steel.       |  | W18-W60 |
|    | 8                            | Dark Bronze Enamel Painted Steel.        |  | W18-W60 |
|    | S                            | 316 Stainless Steel Exterior Finish.     |  | W18-W60 |
|    | A                            | Stucco Textured Aluminum Exterior Finish |  | W18-W60 |

|    |                   |                                    |  |                    |
|----|-------------------|------------------------------------|--|--------------------|
| 13 | 13. Cabinet Style |                                    |  | Units              |
|    | X                 | Standard Cabinet                   |  | W18-W60            |
|    | J                 | Recessed Cabinet Top for Overhangs |  | W42-W60 (No Dehum) |

|    |                               |                                                  |  |         |
|----|-------------------------------|--------------------------------------------------|--|---------|
| 14 | 14. Coil and Cabinet Coatings |                                                  |  | Units   |
|    | X                             | Standard Copper/Aluminum evap and cond coils.    |  | W18-W60 |
|    | 1                             | Coated indoor evap coil, std outdoor cond. coil. |  | W18-W60 |
|    | 2                             | Coated outdoor cond coil, std indoor evap coil.  |  | W18-W60 |
|    | 3                             | Coated indoor evap and outdoor cond coil.        |  | W18-W60 |
|    | 4                             | Coated coils and unit cabinet condenser area.    |  | W18-W60 |
|    | 5                             | Coated coils and interior/exterior cabinet.      |  | W18-W60 |

|    |                                                     |                                             |  |         |
|----|-----------------------------------------------------|---------------------------------------------|--|---------|
| 15 | 15. Unit Mounted Controls Options                   |                                             |  | Units   |
|    | Standard: Hi/Lo Pressure and Ref. Leak (RDS) Sensor |                                             |  |         |
|    | X                                                   | Standard Controls                           |  | W18-W60 |
|    | E                                                   | X + Low Ambient Control (LAC)               |  | W18-W60 |
|    | J                                                   | X + LAC and Alarm Relay (ALR)               |  | W18-W60 |
|    | F                                                   | X + LAC, ALR, and Filter Switch (FS)        |  | W42-W60 |
|    | Q                                                   | X + Outdoor Thermostat                      |  | W18-W60 |
|    | R                                                   | X + LAC, Outdoor Thermostat                 |  | W18-W60 |
|    | T                                                   | X + LAC, Outdoor Thermostat, Hard Start Kit |  | W18-W60 |
|    |                                                     |                                             |  |         |
|    |                                                     |                                             |  |         |

\* Low Ampacity models for non-concurrent electric heat and heat pump operation are available for HGR Dehumidification models. Please contact Bard for more information.

# WH SERIES AHRI CAPACITY AND EFFICIENCY RATINGS

| MODELS                      | W18HF  | W24HF  | W30HF  | W36HF  | W42HF  | W48HF  | W60HF  |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|
| Cooling Capacity BTUH       | 18,000 | 23,000 | 29,400 | 36,000 | 41,500 | 48,000 | 57,000 |
| Unit Cooling efficiency EER | 11.3   | 11.0   | 11.4   | 11.4   | 11.4   | 11.6   | 11.0   |
| Heating Capacity BTUH       | 16,000 | 22,800 | 27,000 | 33,000 | 38,000 | 43,500 | 54,000 |
| Unit Heating efficiency COP | 3.3    | 3.3    | 3.4    | 3.3    | 3.3    | 3.3    | 3.3    |

Capacity is certified in accordance with ANSI/ARI Standard 390-2021.

EER and COP = Energy Efficiency Ratio (EER) and Coefficient of Performance (COP) are certified in accordance with ANSI/ARI Standard 390-2021.

All ratings based on no outside air introduction.

## UNIT COOLING CAPACITY AT VARIOUS INDOOR AND OUTDOOR CONDITIONS, W18H TO W48H UNITS

| MODEL | INDOOR RETURN AIR (DB/WB) | COOLING CAPACITY (BTUH) | DRY BULB OUTDOOR AIR TEMPERATURE ENTERING UNIT CONDENSER AREA |                |                |                |              |                 |                 |                 |                 |                 |                 |
|-------|---------------------------|-------------------------|---------------------------------------------------------------|----------------|----------------|----------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|       |                           |                         | 75°F<br>23.9°C                                                | 80°F<br>26.6°C | 85°F<br>29.4°C | 90°F<br>32.2°C | 95°F<br>35°C | 100°F<br>37.8°C | 105°F<br>40.5°C | 110°F<br>43.3°C | 115°F<br>46.1°C | 120°F<br>48.8°C | 125°F<br>51.6°C |
| W18HF | 75/62                     | Total Cooling           | 20200                                                         | 18900          | 17800          | 16800          | 15700        | 14800           | 14000           | 13200           | 12400           | 11800           | 11100           |
|       |                           | Sensible Cooling        | 16000                                                         | 15200          | 14500          | 13900          | 13400        | 12900           | 12500           | 12200           | 12100           | 11800           | 11100           |
|       | 80/67                     | Total Cooling           | 21500                                                         | 20600          | 19700          | 18900          | 18000        | 17200           | 16500           | 15700           | 14900           | 14200           | 13500           |
|       |                           | Sensible Cooling        | 15500                                                         | 14900          | 14300          | 13900          | 13500        | 13100           | 12800           | 12600           | 12500           | 12400           | 12400           |
|       | 85/72                     | Total Cooling           | 25600                                                         | 24100          | 22700          | 21400          | 20000        | 18900           | 17800           | 16700           | 15700           | 14800           | 13900           |
|       |                           | Sensible Cooling        | 15900                                                         | 15200          | 14400          | 13800          | 13300        | 12700           | 12200           | 11900           | 11600           | 11200           | 11000           |
| W24HF | 75/62                     | Total Cooling           | 25500                                                         | 24000          | 22500          | 21300          | 20100        | 19100           | 18200           | 17400           | 16700           | 16100           | 15700           |
|       |                           | Sensible Cooling        | 14200                                                         | 15300          | 16200          | 16800          | 17300        | 17400           | 17500           | 17300           | 16700           | 16100           | 15500           |
|       | 80/67                     | Total Cooling           | 27200                                                         | 26100          | 25000          | 24000          | 23000        | 22200           | 21400           | 20700           | 20100           | 19500           | 19100           |
|       |                           | Sensible Cooling        | 13700                                                         | 15000          | 16000          | 16800          | 17400        | 17700           | 17900           | 17800           | 17500           | 17000           | 16300           |
|       | 85/72                     | Total Cooling           | 32400                                                         | 30500          | 28700          | 27100          | 25600        | 24300           | 23100           | 22100           | 21200           | 20300           | 19700           |
|       |                           | Sensible Cooling        | 14100                                                         | 15300          | 16100          | 16700          | 17100        | 17200           | 17100           | 16700           | 16200           | 15400           | 14500           |
| W30HF | 75/62                     | Total Cooling           | 31400                                                         | 29800          | 28300          | 26900          | 25600        | 24500           | 23500           | 22500           | 21600           | 20900           | 20100           |
|       |                           | Sensible Cooling        | 25300                                                         | 24500          | 23800          | 23000          | 22400        | 21900           | 21500           | 21000           | 20700           | 20400           | 20100           |
|       | 80/67                     | Total Cooling           | 33500                                                         | 32400          | 31400          | 30400          | 29400        | 28500           | 27700           | 26800           | 26000           | 25300           | 24500           |
|       |                           | Sensible Cooling        | 24500                                                         | 24000          | 23500          | 23000          | 22600        | 22300           | 22000           | 21700           | 21500           | 21300           | 21100           |
|       | 85/72                     | Total Cooling           | 39900                                                         | 37900          | 36100          | 34300          | 32700        | 31200           | 29900           | 28500           | 27300           | 26300           | 25200           |
|       |                           | Sensible Cooling        | 25100                                                         | 24400          | 23600          | 22900          | 22200        | 21600           | 21000           | 20400           | 19800           | 19300           | 18700           |
| W36HF | 75/62                     | Total Cooling           | 39000                                                         | 36800          | 34900          | 33100          | 31400        | 29900           | 28400           | 27100           | 25900           | 24700           | 23700           |
|       |                           | Sensible Cooling        | 29700                                                         | 28600          | 27500          | 26500          | 25600        | 24700           | 24000           | 23200           | 22700           | 22100           | 21700           |
|       | 80/67                     | Total Cooling           | 41600                                                         | 40100          | 38700          | 37400          | 36000        | 34800           | 33500           | 32300           | 31100           | 29900           | 28800           |
|       |                           | Sensible Cooling        | 28800                                                         | 28000          | 27200          | 26500          | 25800        | 25100           | 24600           | 24000           | 23600           | 23100           | 22800           |
|       | 85/72                     | Total Cooling           | 49600                                                         | 46900          | 44500          | 42200          | 40000        | 38100           | 36100           | 34400           | 32700           | 31100           | 29600           |
|       |                           | Sensible Cooling        | 29500                                                         | 28400          | 27400          | 26300          | 25300        | 24300           | 23500           | 22500           | 21800           | 20900           | 20200           |
| W42HF | 75/62                     | Total Cooling           | 44500                                                         | 42300          | 40300          | 38200          | 36200        | 34300           | 32300           | 30500           | 28600           | 26800           | 24900           |
|       |                           | Sensible Cooling        | 35700                                                         | 34500          | 33200          | 32200          | 31100        | 30100           | 29200           | 28300           | 27400           | 26600           | 24900           |
|       | 80/67                     | Total Cooling           | 47500                                                         | 46100          | 44700          | 43200          | 41500        | 39900           | 38100           | 36300           | 34400           | 32400           | 30300           |
|       |                           | Sensible Cooling        | 34600                                                         | 33800          | 32900          | 32200          | 31400        | 30600           | 29900           | 29200           | 28500           | 27800           | 27200           |
|       | 85/72                     | Total Cooling           | 56600                                                         | 53900          | 51400          | 48800          | 46100        | 43700           | 41100           | 38600           | 36200           | 33700           | 31200           |
|       |                           | Sensible Cooling        | 35500                                                         | 34300          | 33100          | 32000          | 30800        | 29600           | 28500           | 27400           | 26300           | 25100           | 24100           |
| W48HF | 75/62                     | Total Cooling           | 52900                                                         | 49800          | 46900          | 44300          | 41800        | 39700           | 37600           | 35800           | 34200           | 32800           | 31400           |
|       |                           | Sensible Cooling        | 41200                                                         | 39300          | 37600          | 36100          | 34800        | 33600           | 32700           | 31900           | 31300           | 30900           | 30600           |
|       | 80/67                     | Total Cooling           | 56500                                                         | 54200          | 52100          | 50000          | 48000        | 46200           | 44400           | 42700           | 41200           | 39700           | 38300           |
|       |                           | Sensible Cooling        | 39900                                                         | 38500          | 37200          | 36100          | 35100        | 34200           | 33500           | 33000           | 32600           | 32300           | 32200           |
|       | 85/72                     | Total Cooling           | 67300                                                         | 63400          | 59800          | 56500          | 53300        | 50600           | 47900           | 45400           | 43300           | 41300           | 39400           |
|       |                           | Sensible Cooling        | 40900                                                         | 39100          | 37400          | 35900          | 34400        | 33100           | 31900           | 31000           | 30000           | 29200           | 28500           |

# UNIT COOLING CAPACITY AT VARIOUS INDOOR AND OUTDOOR CONDITIONS, W60H UNITS

| MODEL | INDOOR RETURN AIR (DB/WB) | COOLING CAPACITY (BTUH) | DRY BULB OUTDOOR AIR TEMPERATURE ENTERING UNIT CONDENSER AREA |                |                |                |              |                 |                 |                 |                 |                 |                 |
|-------|---------------------------|-------------------------|---------------------------------------------------------------|----------------|----------------|----------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|       |                           |                         | 75°F<br>23.9°C                                                | 80°F<br>26.6°C | 85°F<br>29.4°C | 90°F<br>32.2°C | 95°F<br>35°C | 100°F<br>37.8°C | 105°F<br>40.5°C | 110°F<br>43.3°C | 115°F<br>46.1°C | 120°F<br>48.8°C | 125°F<br>51.6°C |
| W60HF | 75/62                     | Total Cooling           | 60600                                                         | 57600          | 54800          | 52200          | 49600        | 47300           | 45200           | 43100           | 41100           | 39300           | 37600           |
|       |                           | Sensible Cooling        | 47500                                                         | 46000          | 44600          | 43300          | 42000        | 40900           | 39900           | 38900           | 38000           | 37200           | 36500           |
|       | 80/67                     | Total Cooling           | 64700                                                         | 62800          | 60900          | 59000          | 57000        | 55100           | 53300           | 51400           | 49500           | 47600           | 45800           |
|       |                           | Sensible Cooling        | 46100                                                         | 45100          | 44200          | 43300          | 42400        | 41600           | 40900           | 40200           | 39500           | 38900           | 38400           |
|       | 85/72                     | Total Cooling           | 77100                                                         | 73400          | 69900          | 66600          | 63300        | 60300           | 57500           | 54700           | 52000           | 49500           | 47100           |
|       |                           | Sensible Cooling        | 47200                                                         | 45800          | 44400          | 43000          | 41600        | 40300           | 39000           | 37700           | 36400           | 35200           | 34000           |

- Notes:
- Unit compressor cooling operation below 60°F requires a Low Ambient Control (LAC).
  - 1000 BTUH = .29307 kW
  - Outdoor air temperatures provided are an average of the condenser inlet air temperature.

| Capacity Multiplier Factors |      |      |      |       |      |      |      |
|-----------------------------|------|------|------|-------|------|------|------|
| % of Rated Airflow          | -30% | -20% | -10% | Rated | +10% | +20% | +30% |
| Total BTUH                  | 0.93 | 0.95 | 0.97 | 1     | 1.01 | 1.02 | 1.04 |
| Sensible BTUH               | 0.90 | 0.93 | 0.95 | 1     | 1.02 | 1.05 | 1.09 |

# UNIT HEAT PUMP HEATING CAPACITY AT VARIOUS OUTDOOR CONDITIONS, W18H TO W60H UNITS

| MODEL | UNITS | DRY BULB OUTDOOR AIR TEMPERATURE ENTERING UNIT CONDENSER AREA |              |                 |                |                |                |                |               |               |               |              |                |                |                |
|-------|-------|---------------------------------------------------------------|--------------|-----------------|----------------|----------------|----------------|----------------|---------------|---------------|---------------|--------------|----------------|----------------|----------------|
|       |       | 0°F<br>-17.7°C                                                | 5°F<br>-15°C | 10°F<br>-12.2°C | 15°F<br>-9.4°C | 20°F<br>-6.6°C | 25°F<br>-3.8°C | 30°F<br>-1.1°C | 35°F<br>1.6°C | 40°F<br>4.4°C | 45°F<br>7.2°C | 50°F<br>10°C | 55°F<br>12.7°C | 60°F<br>15.5°C | 65°F<br>18.3°C |
| W18HF | BTUH  | 7100                                                          | 7700         | 8400            | 9200           | 10000          | 11000          | 12000          | 13100         | 14300         | 15500         | 16900        | 18300          | 19800          | 21400          |
|       | WATTS | 1270                                                          | 1290         | 1300            | 1310           | 1330           | 1340           | 1360           | 1370          | 1390          | 1410          | 1430         | 1440           | 1460           | 1480           |
|       | COP   | 1.6                                                           | 1.7          | 1.9             | 2.1            | 2.2            | 2.4            | 2.6            | 2.8           | 3.0           | 3.2           | 3.5          | 3.7            | 4.0            | 4.2            |
| W24HF | BTUH  | 8300                                                          | 9800         | 11300           | 12800          | 14300          | 15800          | 17400          | 19000         | 20600         | 22200         | 23800        | 25500          | 27200          | 28900          |
|       | WATTS | 1700                                                          | 1720         | 1740            | 1760           | 1790           | 1810           | 1840           | 1860          | 1890          | 1920          | 1950         | 1980           | 2010           | 2040           |
|       | COP   | 1.4                                                           | 1.7          | 1.9             | 2.1            | 2.3            | 2.6            | 2.8            | 3.0           | 3.2           | 3.4           | 3.6          | 3.8            | 4.0            | 4.2            |
| W30HF | BTUH  | 11600                                                         | 13000        | 14400           | 15900          | 17500          | 19100          | 20800          | 22600         | 24400         | 26300         | 28200        | 30200          | 32300          | 34400          |
|       | WATTS | 1950                                                          | 1990         | 2020            | 2050           | 2080           | 2110           | 2140           | 2170          | 2190          | 2220          | 2250         | 2280           | 2300           | 2330           |
|       | COP   | 1.7                                                           | 1.9          | 2.1             | 2.3            | 2.5            | 2.7            | 2.8            | 3.1           | 3.3           | 3.5           | 3.7          | 3.9            | 4.1            | 4.3            |
| W36HF | BTUH  | 10900                                                         | 12500        | 14200           | 15900          | 17600          | 19300          | 21100          | 22900         | 24800         | 26700         | 28600        | 30600          | 32500          | 34600          |
|       | WATTS | 1980                                                          | 2000         | 2030            | 2050           | 2080           | 2100           | 2130           | 2160          | 2180          | 2210          | 2240         | 2270           | 2300           | 2320           |
|       | COP   | 1.61                                                          | 1.83         | 2.05            | 2.27           | 2.48           | 2.69           | 2.90           | 3.11          | 3.33          | 3.54          | 3.74         | 3.95           | 4.14           | 4.37           |
| W42HF | BTUH  | 16800                                                         | 18700        | 20600           | 22600          | 24800          | 27000          | 29400          | 31800         | 34300         | 37000         | 39700        | 42500          | 45500          | 48500          |
|       | WATTS | 2830                                                          | 2870         | 2910            | 2950           | 3000           | 3040           | 3080           | 3130          | 3180          | 3230          | 3280         | 3330           | 3380           | 3440           |
|       | COP   | 1.7                                                           | 1.9          | 2.1             | 2.2            | 2.4            | 2.6            | 2.8            | 3.0           | 3.2           | 3.4           | 3.5          | 3.7            | 3.9            | 4.1            |
| W48HF | BTUH  | 21000                                                         | 22800        | 24800           | 26900          | 29100          | 31500          | 34000          | 36600         | 39400         | 42300         | 45400        | 48600          | 51900          | 55400          |
|       | WATTS | 3370                                                          | 3410         | 3460            | 3510           | 3550           | 3600           | 3660           | 3710          | 3760          | 3820          | 3880         | 3940           | 4000           | 4060           |
|       | COP   | 0.7                                                           | 1.0          | 1.4             | 1.7            | 2.0            | 2.3            | 2.5            | 2.8           | 3.0           | 3.2           | 3.5          | 3.6            | 3.8            | 4.0            |
| W60HF | BTUH  | 25800                                                         | 28300        | 30900           | 33700          | 36500          | 39500          | 42600          | 45800         | 49200         | 52600         | 56200        | 59900          | 63800          | 67700          |
|       | WATTS | 3790                                                          | 3940         | 4080            | 4210           | 4340           | 4450           | 4570           | 4670          | 4770          | 4860          | 4940         | 5020           | 5090           | 5150           |
|       | COP   | 2.0                                                           | 2.1          | 2.2             | 2.3            | 2.5            | 2.6            | 2.7            | 2.9           | 3.0           | 3.2           | 3.3          | 3.5            | 3.7            | 3.9            |

- Notes:
- Performance given for 70°F DB indoor return air at rated CFM. Data includes defrost operation below 45° outdoor temperature.
  - Supplemental Electric heaters are recommended for applications requiring heating below a 15°F outdoor temperature.
  - 1000 BTUH = .29307 kW
  - Outdoor air temperatures provided are an average of the condenser inlet air temperature.

| Capacity Multiplier Factors |      |      |      |       |      |      |      |
|-----------------------------|------|------|------|-------|------|------|------|
| % of Rated Airflow          | -30% | -20% | -10% | Rated | +10% | +20% | +30% |
| Total BTUH                  | 0.93 | 0.95 | 0.97 | 1     | 1.01 | 1.02 | 1.04 |



## GENERAL UNIT ELECTRICAL SPECIFICATIONS

| MODELS         | CONTROL PANEL CABINET LOCATION | NOMINAL VOLTAGE VAC | PH | HZ | VOLT-AGE RANGE VAC | COMPRES-SOR RATED LOAD AMPS (RLA) | BRANCH CIRCUIT SELEC-TION CUR-RENT (BCSC) | LOCKED ROTOR AMPS (LRA) | INDOOR / OUT-DOOR MOTOR VOLT-AGE | INDOOR MOTOR AMPS | IN-DOOR MO-TOR HP | OUT-DOOR MOTOR AMPS | OUT-DOOR MOTOR HP |
|----------------|--------------------------------|---------------------|----|----|--------------------|-----------------------------------|-------------------------------------------|-------------------------|----------------------------------|-------------------|-------------------|---------------------|-------------------|
| <b>W18HF-A</b> | Right Side                     | 230/208V            | 1  | 60 | 197-253V           | 7.9/9A                            | 8.3A                                      | 45.1A                   | 230V                             | 1.0/1.0A          | 1/3               | 1.0/1.0A            | 1/5               |
| <b>W24HF-A</b> | Right Side                     | 230/208V            | 1  | 60 | 197-253V           | 10.9/12.4A                        | 11.4A                                     | 64.4A                   | 230V                             | 1.6/1.7A          | 1/3               | 1.1/1.1A            | 1/5               |
| <b>W24HF-B</b> | Right Side                     | 230/208V            | 3  | 60 | 197-253V           | 7.4/8.4A                          | 7.7A                                      | 59.9A                   | 230V                             | 1.6/1.7A          | 1/3               | 1.1/1.1A            | 1/5               |
| <b>W24HF-C</b> | Right Side                     | 460V                | 3  | 60 | 414-506V           | 4.2A                              | 3.8A                                      | 32.4A                   | 460V                             | .9A               | 1/3               | .6A                 | 1/5               |
| <b>W30HF-A</b> | Right Side                     | 230/208V            | 1  | 60 | 197-253V           | 13.4/15.1A                        | 12.7A                                     | 75.6A                   | 230V                             | 1.8/1.9A          | 1/2               | 1.4/1.4A            | 1/5               |
| <b>W30HF-B</b> | Right Side                     | 230/208V            | 3  | 60 | 197-253V           | 10.2/11.5A                        | 9.6A                                      | 67.7A                   | 230V                             | 1.8/1.9A          | 1/2               | 1.4/1.4A            | 1/5               |
| <b>W30HF-C</b> | Right Side                     | 460V                | 3  | 60 | 414-506V           | 5.4A                              | 4.5A                                      | 38.1A                   | 460V                             | 1.0A              | 1/2               | .7A                 | 1/5               |
| <b>W36HF-A</b> | Right Side                     | 230/208V            | 1  | 60 | 197-253V           | 16.0/18.0A                        | 16.7A                                     | 93.5A                   | 230V                             | 2.2/2.4A          | 1/2               | 1.5/1.5A            | 1/5               |
| <b>W36HF-B</b> | Right Side                     | 230/208V            | 3  | 60 | 197-253V           | 11.7/13.2A                        | 12.2A                                     | 97.5A                   | 230V                             | 2.2/2.4A          | 1/2               | 1.5/1.5A            | 1/5               |
| <b>W36HF-C</b> | Right Side                     | 460V                | 3  | 60 | 414-506V           | 6.3A                              | 5.8A                                      | 44.3A                   | 460V                             | 1.2A              | 1/2               | .8A                 | 1/5               |
| <b>W42HF-A</b> | Unit Front                     | 230/208V            | 1  | 60 | 197-253V           | 19.1/22A                          | 18.6A                                     | 123A                    | 230V                             | 2.5A              | 1/2               | 2.1A                | 1/3               |
| <b>W42HF-B</b> | Unit Front                     | 230/208V            | 3  | 60 | 197-253V           | 13.2/15.2A                        | 12.8A                                     | 102.8A                  | 230V                             | 2.5A              | 1/2               | 2.1A                | 1/3               |
| <b>W42HF-C</b> | Unit Front                     | 460V                | 3  | 60 | 414-506V           | 6.9A                              | 5.8A                                      | 50A                     | 460V                             | 1.3A              | 1/2               | 1.1A                | 1/3               |
| <b>W48HF-A</b> | Unit Front                     | 230/208V            | 1  | 60 | 197-253V           | 22.1/25A                          | 22.4A                                     | 126A                    | 230V                             | 3.1A              | 3/4               | 2.1A                | 1/3               |
| <b>W48HF-B</b> | Unit Front                     | 230/208V            | 3  | 60 | 197-253V           | 12.7/14.3A                        | 12.8A                                     | 120.4A                  | 230V                             | 3.1A              | 3/4               | 2.1A                | 1/3               |
| <b>W48HF-C</b> | Unit Front                     | 460V                | 3  | 60 | 414-506V           | 6.8A                              | 6.0A                                      | 49.4A                   | 460V                             | 1.6A              | 3/4               | 1.1A                | 1/3               |
| <b>W60HF-A</b> | Unit Front                     | 230/208V            | 1  | 60 | 197-253V           | 26.7/31.1A                        | 23.7A                                     | 157A                    | 230V                             | 4.2A              | 3/4               | 1.8A                | 1/3               |
| <b>W60HF-B</b> | Unit Front                     | 230/208V            | 3  | 60 | 197-253V           | 18.1/21.1A                        | 16.0A                                     | 156.4A                  | 230V                             | 4.2A              | 3/4               | 1.8A                | 1/3               |
| <b>W60HF-C</b> | Unit Front                     | 460V                | 3  | 60 | 414-506V           | 9.3A                              | 7.1A                                      | 69A                     | 460V                             | 2.1A              | 3/4               | .9A                 | 1/3               |

Notes:

1.) The Short Circuit Current Rating (SCCR) is a critical safety rating for HVAC equipment that indicates the maximum fault current a component or assembly can withstand without creating a fire or shock hazard. All Bard equipment is SCCR rated at 5kA (5,000 amperes) Symmetrical. Consult with a qualified electrical professional regarding SCCR ratings based on application requirements.

2.) All electrical requirements must comply with relevant electrical codes (NEC, local requirements), and it is important to consult with a qualified electrical professional before installing HVAC products including models listed.

3.) Compressor Rated Load Amps (RLA) are provided by the compressor manufacturer and are calculated by using a formula based on compressor Maximum Continuous Current (MCC). Indoor and outdoor motor amps are based on actual motor power usage at rated static, and do not reflect the maximum amp draw of the motor listed on the motor nameplate. Amp values are provided for both 230 and 208 volt or 460 volt applications. Amp values may vary based on actual voltage applied to unit and site indoor and outdoor conditions.

3.) Efficiency ratings (such as EER) account for the relationship between energy input and cooling/heating output under standardized conditions. These industry-recognized metrics incorporate multiple performance factors including thermal transfer capabilities tested in climate controlled labs. Efficiency cannot be determined from provided electrical consumption data in this chart without additional information.

## GENERAL UNIT REFRIGERANT AND MECHANICAL SPECIFICATIONS

| UNIT MOD-EL | STAN-DARD UNIT WEIGHT WITH PACK-AGING | DEHUM UNIT WEIGHT WITH PACK-AGING | REFRIGERANT SYSTEM |                            |                                    |                   | INDOOR EVAPORATOR BLOWER |             |                         | OUTDOOR CONDENSER FAN |              |                  |
|-------------|---------------------------------------|-----------------------------------|--------------------|----------------------------|------------------------------------|-------------------|--------------------------|-------------|-------------------------|-----------------------|--------------|------------------|
|             |                                       |                                   | CHARGE TYPE        | STAN-DARD UNIT CHARGE RATE | DEHUMID-IFICATION UNIT CHARGE RATE | COM-PRES-SOR TYPE | INDOOR MOTOR -SPEEDS     | INDOOR FAN  | INDOOR CFM - RAT-ED ESP | OUT-DOOR MO-TOR       | OUT-DOOR FAN | OUT-DOOR FAN CFM |
| <b>W18</b>  | 318 lbs.                              | NA                                | R-454B             | 4.00 lbs.                  | N/A                                | Scroll            | ECM-5SPD                 | Dual Blower | 600 - .10               | PSC                   | 18" Axial    | 1800             |
| <b>W24</b>  | 330 lbs.                              | 357 lbs.                          | R-454B             | 4.50 lbs.                  | 4.56 lbs.                          | Scroll            | ECM-5SPD                 | Dual Blower | 800 - .10               | PSC                   | 18" Axial    | 1800             |
| <b>W30</b>  | 345 lbs.                              | 372 lbs.                          | R-454B             | 5.94 lbs.                  | 6.00 lbs.                          | Scroll            | ECM-5SPD                 | Dual Blower | 950 - .15               | PSC                   | 20" Axial    | 2200             |
| <b>W36</b>  | 372 lbs.                              | 387 lbs.                          | R-454B             | 6.50 lbs.                  | 6.50 lbs.                          | Scroll            | ECM-5SPD                 | Dual Blower | 1150 - .15              | PSC                   | 20" Axial    | 2200             |
| <b>W42</b>  | 495 lbs.                              | 510 lbs.                          | R-454B             | 6.81 lbs.                  | 6.62 lbs.                          | Scroll            | ECM-5SPD                 | Dual Blower | 1350 - .15              | PSC                   | 24" Axial    | 2900             |
| <b>W48</b>  | 505 lbs.                              | 525 lbs.                          | R-454B             | 8.25 lbs                   | 7.50 lbs.                          | Scroll            | ECM-5SPD                 | Dual Blower | 1550 - .20              | PSC                   | 24" Axial    | 3000             |
| <b>W60</b>  | 540 lbs.                              | 555 lbs.                          | R-454B.            | 9.50 lbs.                  | 8.75 lbs.                          | Scroll            | ECM-5SPD                 | Dual Blower | 1750 - .20              | PSC                   | 24" Axial    | 3100             |

Notes:

1.) Rated External Static Pressure (ESP) provided is external static applied to the external supply and return duct connections during rating and unit performance tests. CFM calculations include the E.S.P. value provided, internal unit static, and the standard filter (X) listed. Additional items such as higher filtration, supply ducting, return ducting, fire dampers, and additional supply or return grilles must be calculated for a total ESP value for the application. Total ESP cannot exceed .5" W.C.

2.) Weights provided are with skid and packaging materials. On average, packaging materials will add 30lbs. to 50lbs. to overall unit weight.

3.) Unit charge rates provided are for shipping purposes only. Always consult the serial plate on the unit before performing refrigerant system service.

# AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W18H TO W36H STANDARD UNITS

| UNIT<br>MODEL | KW<br>OPTION | RATED<br>VOLTAGE<br>AND PHASE<br>(60HZ) | CONNECTION<br>POINT | NO. OF<br>FIELD<br>CIR-<br>CUITS | SINGLE CIRCUIT                          |                                              | DUAL CIRCUIT |        |        |        | FIELD INSTALLED<br>HEATER KIT PART<br>NUMBERS. HEATERS<br>CAN BE FACTORY OR<br>FIELD INSTALLED. |
|---------------|--------------|-----------------------------------------|---------------------|----------------------------------|-----------------------------------------|----------------------------------------------|--------------|--------|--------|--------|-------------------------------------------------------------------------------------------------|
|               |              |                                         |                     |                                  | MINIMUM<br>CIRCUIT<br>AMPACITY<br>(MCA) | MAX. OVER<br>CURRENT<br>PROTECTION<br>(MOCP) | MCA          |        | MOCP   |        |                                                                                                 |
|               |              |                                         |                     |                                  |                                         |                                              | CKT. A       | CKT. B | CKT. A | CKT. B |                                                                                                 |
| W18HF-A       | 00           | 230/208-1                               | LUGS                | 1                                | 15                                      | 20                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 15                                      | 20                                           |              |        |        |        | WMCB-02A                                                                                        |
|               | 04           | 230/208-1                               | C BREAKER           | 1                                | 36                                      | 40                                           |              |        |        |        | EHWH018A-A04                                                                                    |
|               | 08           | 230/208-1                               | C BREAKER           | 1                                | 57                                      | 60                                           |              |        |        |        | EHWH018A-A08                                                                                    |
| W24HF-A       | 00           | 230/208-1                               | LUGS                | 1                                | 20                                      | 25                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 20                                      | 25                                           |              |        |        |        | WMCB-03A                                                                                        |
|               | 04           | 230/208-1                               | C BREAKER           | 1                                | 41                                      | 45                                           |              |        |        |        | EHWH024A-A04                                                                                    |
|               | 08           | 230/208-1                               | C BREAKER           | 1 or 2                           | 61                                      | 70                                           | 20           | 42     | 25     | 45     | EHWH024A-A08                                                                                    |
| W24HF-B       | 00           | 230/208-3                               | LUGS                | 1                                | 15                                      | 20                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 15                                      | 20                                           |              |        |        |        | WMCB-02B                                                                                        |
|               | 05           | 230/208-3                               | C BREAKER           | 1                                | 30                                      | 30                                           |              |        |        |        | EHWH024A-B05                                                                                    |
| W24HF-C       | 00           | 460-3                                   | LUGS                | 1                                | 8                                       | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 8                                       | 15                                           |              |        |        |        | WMPD-01C                                                                                        |
|               | 05           | 460-3                                   | DISCONNECT          | 1                                | 15                                      | 15                                           |              |        |        |        | EHWH024A-C05                                                                                    |
| W30HF-A       | 00           | 230/208-1                               | LUGS                | 1                                | 22                                      | 25                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 22                                      | 25                                           |              |        |        |        | WMCB-03A                                                                                        |
|               | 05           | 230/208-1                               | C BREAKER           | 1                                | 48                                      | 50                                           |              |        |        |        | EHWH030A-A05                                                                                    |
|               | 10           | 230/208-1                               | C BREAKER           | 1 or 2                           | 74                                      | 80                                           | 22           | 52     | 25     | 60     | EHWH030B-A10                                                                                    |
| W30HF-B       | 00           | 230/208-3                               | LUGS                | 1                                | 18                                      | 20                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 18                                      | 20                                           |              |        |        |        | WMCB-02B                                                                                        |
|               | 05           | 230/208-3                               | C BREAKER           | 1                                | 33                                      | 35                                           |              |        |        |        | EHWH030A-B05                                                                                    |
|               | 09           | 230/208-3                               | C BREAKER           | 1                                | 45                                      | 45                                           |              |        |        |        | EHWH030A-B09                                                                                    |
| W30HF-C       | 00           | 460-3                                   | LUGS                | 1                                | 9                                       | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 9                                       | 15                                           |              |        |        |        | WMPD-01C                                                                                        |
|               | 05           | 460-3                                   | DISCONNECT          | 1                                | 16                                      | 20                                           |              |        |        |        | EHWH030A-C05                                                                                    |
|               | 09           | 460-3                                   | DISCONNECT          | 1                                | 22                                      | 25                                           |              |        |        |        | EHWH030A-C09                                                                                    |
| W36HF-A       | 00           | 230/208-1                               | LUGS                | 1                                | 27                                      | 35                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 27                                      | 35                                           |              |        |        |        | WMCB-05A                                                                                        |
|               | 05           | 230/208-1                               | C BREAKER           | 1                                | 53                                      | 60                                           |              |        |        |        | EHWH036A-A05                                                                                    |
|               | 10           | 230/208-1                               | C BREAKER           | 1 or 2                           | 79                                      | 80                                           | 27           | 52     | 35     | 60     | EHWH036A-A10                                                                                    |
|               | 15           | 230/208-1                               | C BREAKER           | 1 or 2                           | 84                                      | 90                                           | 32           | 52     | 35     | 60     | EHWH036A-A15                                                                                    |
| W36HF-B       | 00           | 230/208-3                               | LUGS                | 1                                | 22                                      | 25                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 22                                      | 25                                           |              |        |        |        | WMCB-03B                                                                                        |
|               | 05           | 230/208-3                               | C BREAKER           | 1                                | 37                                      | 40                                           |              |        |        |        | EHWH036A-B05                                                                                    |
|               | 09           | 230/208-3                               | C BREAKER           | 1                                | 49                                      | 50                                           |              |        |        |        | EHWH036A-B09                                                                                    |
| W36HF-C       | 00           | 460-3                                   | LUGS                | 1                                | 11                                      | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|               | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 11                                      | 15                                           |              |        |        |        | WMPD-01C                                                                                        |
|               | 05           | 460-3                                   | DISCONNECT          | 1                                | 18                                      | 20                                           |              |        |        |        | EHWH030A-C05                                                                                    |
|               | 09           | 460-3                                   | DISCONNECT          | 1                                | 24                                      | 25                                           |              |        |        |        | EHWH030A-C09                                                                                    |

**CAUTION:** When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three current carrying conductors are in a raceway.

**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 local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

# AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W42H TO W60H STANDARD UNITS

| UNIT MODEL | KW<br>OPTION | RATED<br>VOLTAGE<br>AND PHASE<br>(60HZ) | CONNECTION<br>POINT | NO. OF<br>FIELD<br>CIR-<br>CUITS | SINGLE CIRCUIT                          |                                              | DUAL CIRCUIT |        |        |        | FIELD INSTALLED<br>HEATER KIT PART<br>NUMBERS. HEATERS<br>CAN BE FACTORY OR<br>FIELD INSTALLED. |
|------------|--------------|-----------------------------------------|---------------------|----------------------------------|-----------------------------------------|----------------------------------------------|--------------|--------|--------|--------|-------------------------------------------------------------------------------------------------|
|            |              |                                         |                     |                                  | MINIMUM<br>CIRCUIT<br>AMPACITY<br>(MCA) | MAX. OVER<br>CURRENT<br>PROTECTION<br>(MOCP) | MCA          |        | MOCP   |        |                                                                                                 |
|            |              |                                         |                     |                                  |                                         |                                              | CKT. A       | CKT. B | CKT. A | CKT. B |                                                                                                 |
| W42HF-A    | 00           | 230/208-1                               | LUGS                | 1                                | 31                                      | 35                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 31                                      | 35                                           |              |        |        |        | WMCBC-05A                                                                                       |
|            | 05           | 230/208-1                               | C BREAKER           | 1                                | 57                                      | 60                                           |              |        |        |        | EHWH042A-A05                                                                                    |
|            | 10           | 230/208-1                               | C BREAKER           | 1 or 2                           | 83                                      | 90                                           | 31           | 52     | 35     | 60     | EHWH042B-A10                                                                                    |
|            | 15           | 230/208-1                               | C BREAKER           | 1 or 2                           | 84                                      | 90                                           | 32           | 52     | 35     | 60     | EHWH042B-A15                                                                                    |
| W42HF-B    | 00           | 230/208-3                               | LUGS                | 1                                | 23                                      | 30                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 23                                      | 30                                           |              |        |        |        | WMCBC-04B                                                                                       |
|            | 05           | 230/208-3                               | C BREAKER           | 1                                | 38                                      | 40                                           |              |        |        |        | EHWH042A-B05                                                                                    |
|            | 09           | 230/208-3                               | C BREAKER           | 1                                | 50                                      | 60                                           |              |        |        |        | EHCH042A-B09                                                                                    |
|            | 15           | 230/208-3                               | C BREAKER           | 1                                | 52                                      | 60                                           |              |        |        |        | EHCH042A-B15                                                                                    |
| W42HF-C    | 00           | 460-3                                   | LUGS                | 1                                | 11                                      | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 11                                      | 15                                           |              |        |        |        | WMCBC-06C                                                                                       |
|            | 05           | 460-3                                   | DISCONNECT          | 1                                | 19                                      | 20                                           |              |        |        |        | EHCH036A-C05                                                                                    |
|            | 09           | 460-3                                   | DISCONNECT          | 1                                | 25                                      | 25                                           |              |        |        |        | EHCH036A-C09                                                                                    |
|            | 15           | 460-3                                   | DISCONNECT          | 1                                | 26                                      | 30                                           |              |        |        |        | EHCH036A-C15                                                                                    |
| W48HF-A    | 00           | 230/208-1                               | LUGS                | 1                                | 36                                      | 45                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 36                                      | 45                                           |              |        |        |        | WMCBC-07A                                                                                       |
|            | 04           | 230/208-1                               | C BREAKER           | 1                                | 57                                      | 60                                           |              |        |        |        | EHWH048A-A04                                                                                    |
|            | 05           | 230/208-1                               | C BREAKER           | 1 or 2                           | 62                                      | 70                                           | 36           | 26     | 45     | 30     | EHWH048A-A05                                                                                    |
|            | 10           | 230/208-1                               | C BREAKER           | 1 or 2                           | 88                                      | 90                                           | 36           | 52     | 45     | 60     | EHWH048A-A10                                                                                    |
|            | 15           | 230/208-1                               | C BREAKER           | 1 or 2                           | 88                                      | 90                                           | 36           | 52     | 45     | 60     | EHWH048A-A15                                                                                    |
| W48HF-B    | 00           | 230/208-3                               | LUGS                | 1                                | 24                                      | 30                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 24                                      | 30                                           |              |        |        |        | WMCBC-04B                                                                                       |
|            | 05           | 230/208-3                               | C BREAKER           | 1                                | 39                                      | 40                                           |              |        |        |        | EHWH042A-B05                                                                                    |
|            | 09           | 230/208-3                               | C BREAKER           | 1                                | 51                                      | 60                                           |              |        |        |        | EHCH042A-B09                                                                                    |
|            | 15           | 230/208-3                               | C BREAKER           | 1                                | 52                                      | 60                                           |              |        |        |        | EHCH042A-B15                                                                                    |
| W48HF-C    | 00           | 460-3                                   | LUGS                | 1                                | 12                                      | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 12                                      | 15                                           |              |        |        |        | WMCBC-06C                                                                                       |
|            | 05           | 460-3                                   | DISCONNECT          | 1                                | 19                                      | 20                                           |              |        |        |        | EHCH036A-C05                                                                                    |
|            | 09           | 460-3                                   | DISCONNECT          | 1                                | 25                                      | 25                                           |              |        |        |        | EHCH036A-C09                                                                                    |
|            | 15           | 460-3                                   | DISCONNECT          | 1                                | 26                                      | 30                                           |              |        |        |        | EHCH036A-C15                                                                                    |
| W60HF-A    | 00           | 230/208-1                               | LUGS                | 1                                | 38                                      | 45                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 38                                      | 45                                           |              |        |        |        | WMCBC-07A                                                                                       |
|            | 05           | 230/208-1                               | C BREAKER           | 1 or 2                           | 64                                      | 70                                           | 38           | 26     | 45     | 30     | EHWH048A-A05                                                                                    |
|            | 10           | 230/208-1                               | C BREAKER           | 1 or 2                           | 90                                      | 90                                           | 38           | 52     | 45     | 60     | EHWH060A-A10                                                                                    |
|            | 15           | 230/208-1                               | C BREAKER           | 1 or 2                           | 90                                      | 90                                           | 38           | 52     | 45     | 60     | EHWH060A-A15                                                                                    |
| W60HF-B    | 00           | 230/208-3                               | LUGS                | 1                                | 29                                      | 35                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 29                                      | 35                                           |              |        |        |        | WMCBC-05B                                                                                       |
|            | 05           | 230/208-3                               | C BREAKER           | 1                                | 44                                      | 45                                           |              |        |        |        | EHCH042A-B05                                                                                    |
|            | 09           | 230/208-3                               | C BREAKER           | 1                                | 56                                      | 60                                           |              |        |        |        | EHCH042A-B09                                                                                    |
|            | 15           | 230/208-3                               | C BREAKER           | 1                                | 56                                      | 60                                           |              |        |        |        | EHWH060A-B15                                                                                    |
| W60HF-C    | 00           | 460-3                                   | LUGS                | 1                                | 13                                      | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 13                                      | 15                                           |              |        |        |        | WMCBC-06C                                                                                       |
|            | 05           | 460-3                                   | DISCONNECT          | 1                                | 21                                      | 25                                           |              |        |        |        | EHCH036A-C05                                                                                    |
|            | 09           | 460-3                                   | DISCONNECT          | 1                                | 27                                      | 30                                           |              |        |        |        | EHCH036A-C09                                                                                    |
|            | 15           | 460-3                                   | DISCONNECT          | 1                                | 27                                      | 30                                           |              |        |        |        | EHCH036A-C15                                                                                    |

**CAUTION:** When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three current carrying conductors are in a raceway.

**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 local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

# AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W24HFD TO W42HFD DEHUMIDIFICATION UNITS

| UNIT MODEL | KW<br>OPTION | RATED<br>VOLTAGE<br>AND PHASE<br>(60HZ) | CONNECTION<br>POINT | NO. OF<br>FIELD<br>CIR-<br>CUITS | SINGLE CIRCUIT                          |                                              | DUAL CIRCUIT |        |        |        | FIELD INSTALLED<br>HEATER KIT PART<br>NUMBERS. HEATERS<br>CAN BE FACTORY OR<br>FIELD INSTALLED. |
|------------|--------------|-----------------------------------------|---------------------|----------------------------------|-----------------------------------------|----------------------------------------------|--------------|--------|--------|--------|-------------------------------------------------------------------------------------------------|
|            |              |                                         |                     |                                  | MINIMUM<br>CIRCUIT<br>AMPACITY<br>(MCA) | MAX. OVER<br>CURRENT<br>PROTECTION<br>(MOCP) | MCA          |        | MOCP   |        |                                                                                                 |
|            |              |                                         |                     |                                  |                                         |                                              | CKT. A       | CKT. B | CKT. A | CKT. B |                                                                                                 |
| W24HFDA    | 00           | 230/208-1                               | LUGS                | 1                                | 20                                      | 25                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 20                                      | 25                                           |              |        |        |        | WMCB-03A                                                                                        |
|            | 04           | 230/208-1                               | C BREAKER           | 1                                | 41                                      | 45                                           |              |        |        |        | EHWH024A-A04                                                                                    |
|            | 08           | 230/208-1                               | C BREAKER           | 1 or 2                           | 61                                      | 70                                           | 20           | 42     | 25     | 45     | EHWH024A-A08                                                                                    |
| W24HFDB    | 00           | 230/208-3                               | LUGS                | 1                                | 15                                      | 20                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 15                                      | 20                                           |              |        |        |        | WMCB-02B                                                                                        |
|            | 05           | 230/208-3                               | C BREAKER           | 1                                | 30                                      | 30                                           |              |        |        |        | EHWH024A-B05                                                                                    |
| W24HFDC    | 00           | 460-3                                   | LUGS                | 1                                | 8                                       | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 8                                       | 15                                           |              |        |        |        | WMPD-01C                                                                                        |
|            | 05           | 460-3                                   | DISCONNECT          | 1                                | 15                                      | 15                                           |              |        |        |        | EHWH024A-C05                                                                                    |
| W30HFDA    | 00           | 230/208-1                               | LUGS                | 1                                | 22                                      | 25                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 22                                      | 25                                           |              |        |        |        | WMCB-03A                                                                                        |
|            | 05           | 230/208-1                               | C BREAKER           | 1                                | 48                                      | 50                                           |              |        |        |        | EHWH030A-A05                                                                                    |
|            | 10           | 230/208-1                               | C BREAKER           | 1 or 2                           | 74                                      | 80                                           | 22           | 52     | 25     | 60     | EHWH030B-A10                                                                                    |
| W30HFDB    | 00           | 230/208-3                               | LUGS                | 1                                | 18                                      | 25                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 18                                      | 25                                           |              |        |        |        | WMCB-03B                                                                                        |
|            | 05           | 230/208-3                               | C BREAKER           | 1                                | 33                                      | 35                                           |              |        |        |        | EHWH030A-B05                                                                                    |
|            | 09           | 230/208-3                               | C BREAKER           | 1                                | 45                                      | 45                                           |              |        |        |        | EHWH030A-B09                                                                                    |
| W30HFDC    | 00           | 460-3                                   | LUGS                | 1                                | 9                                       | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 9                                       | 15                                           |              |        |        |        | WMPD-01C                                                                                        |
|            | 05           | 460-3                                   | DISCONNECT          | 1                                | 17                                      | 20                                           |              |        |        |        | EHWH030A-C05                                                                                    |
|            | 09           | 460-3                                   | DISCONNECT          | 1                                | 23                                      | 25                                           |              |        |        |        | EHWH030A-C09                                                                                    |
| W36HFDA    | 00           | 230/208-1                               | LUGS                | 1                                | 28                                      | 35                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 28                                      | 35                                           |              |        |        |        | WMCB-05A                                                                                        |
|            | 05           | 230/208-1                               | C BREAKER           | 1                                | 54                                      | 60                                           |              |        |        |        | EHWH036A-A05                                                                                    |
|            | 10           | 230/208-1                               | C BREAKER           | 1 or 2                           | 80                                      | 80                                           | 28           | 52     | 35     | 60     | EHWH036A-A10                                                                                    |
| W36HFDB    | 00           | 230/208-3                               | LUGS                | 1                                | 22                                      | 25                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 22                                      | 25                                           |              |        |        |        | WMCB-03B                                                                                        |
|            | 05           | 230/208-3                               | C BREAKER           | 1                                | 37                                      | 40                                           |              |        |        |        | EHWH036A-B05                                                                                    |
|            | 09           | 230/208-3                               | C BREAKER           | 1                                | 49                                      | 50                                           |              |        |        |        | EHWH036A-B09                                                                                    |
| W36HFDC    | 00           | 460-3                                   | LUGS                | 1                                | 11                                      | 15                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 460-3                                   | DISCONNECT          | 1                                | 11                                      | 15                                           |              |        |        |        | WMPD-01C                                                                                        |
|            | 05           | 460-3                                   | DISCONNECT          | 1                                | 18                                      | 20                                           |              |        |        |        | EHWH030A-C05                                                                                    |
|            | 09           | 460-3                                   | DISCONNECT          | 1                                | 24                                      | 25                                           |              |        |        |        | EHWH030A-C09                                                                                    |
| W42HFDA    | 00           | 230/208-1                               | LUGS                | 1                                | 31                                      | 35                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-1                               | C BREAKER           | 1                                | 31                                      | 35                                           |              |        |        |        | WMCBC-05A                                                                                       |
|            | 05           | 230/208-1                               | C BREAKER           | 1                                | 57                                      | 60                                           |              |        |        |        | EHWH042A-A05                                                                                    |
|            | 10           | 230/208-1                               | C BREAKER           | 1 or 2                           | 83                                      | 90                                           | 31           | 52     | 35     | 60     | EHWH042B-A10                                                                                    |
|            | 15           | 230/208-1                               | C BREAKER           | 1 or 2                           | 85                                      | 90                                           | 32           | 52     | 35     | 60     | EHWH042B-A15                                                                                    |
| W42HFDB    | 00           | 230/208-3                               | LUGS                | 1                                | 23                                      | 30                                           |              |        |        |        | NOT NEEDED                                                                                      |
|            | 0Z           | 230/208-3                               | C BREAKER           | 1                                | 23                                      | 30                                           |              |        |        |        | WMCBC-04B                                                                                       |
|            | 05           | 230/208-3                               | C BREAKER           | 1                                | 38                                      | 40                                           |              |        |        |        | EHWH042A-B05                                                                                    |
|            | 09           | 230/208-3                               | C BREAKER           | 1                                | 51                                      | 60                                           |              |        |        |        | EHCH042A-B09                                                                                    |
|            | 15           | 230/208-3                               | C BREAKER           | 1                                | 52                                      | 60                                           |              |        |        |        | EHCH042A-B15                                                                                    |

**CAUTION:** When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three current carrying conductors are in a raceway.

**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 local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

# AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W42HFD TO W60HFD DEHUMIDIFICATION UNITS

| UNIT MOD-EL | KW OPTION | RATED VOLTAGE AND PHASE (60HZ) | CONNECTION POINT | NO. OF FIELD CIR-CUITS | SINGLE CIRCUIT                 |                                     | DUAL CIRCUIT |        |        |        | FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED. |
|-------------|-----------|--------------------------------|------------------|------------------------|--------------------------------|-------------------------------------|--------------|--------|--------|--------|-------------------------------------------------------------------------------------|
|             |           |                                |                  |                        | MINIMUM CIRCUIT AMPACITY (MCA) | MAX. OVER CURRENT PROTECTION (MOCP) | MCA          |        | MOCP   |        |                                                                                     |
|             |           |                                |                  |                        |                                |                                     | CKT. A       | CKT. B | CKT. A | CKT. B |                                                                                     |
| W42HFDC     | 00        | 460-3                          | LUGS             | 1                      | 11                             | 15                                  |              |        |        |        | NOT NEEDED                                                                          |
|             | 0Z        | 460-3                          | DISCONNECT       | 1                      | 11                             | 15                                  |              |        |        |        | WMCBC-06C                                                                           |
|             | 05        | 460-3                          | DISCONNECT       | 1                      | 19                             | 20                                  |              |        |        |        | EHCH036A-C05                                                                        |
|             | 09        | 460-3                          | DISCONNECT       | 1                      | 25                             | 25                                  |              |        |        |        | EHCH036A-C09                                                                        |
|             | 15        | 460-3                          | DISCONNECT       | 1                      | 26                             | 30                                  |              |        |        |        | EHCH036A-C15                                                                        |
| W48HFDA     | 00        | 230/208-1                      | LUGS             | 1                      | 36                             | 45                                  |              |        |        |        | NOT NEEDED                                                                          |
|             | 0Z        | 230/208-1                      | C BREAKER        | 1                      | 36                             | 45                                  |              |        |        |        | WMCBC-07A                                                                           |
|             | 05        | 230/208-1                      | C BREAKER        | 1 or 2                 | 62                             | 70                                  | 36           | 26     | 45     | 30     | EHWH048A-A05                                                                        |
|             | 10        | 230/208-1                      | C BREAKER        | 1 or 2                 | 88                             | 90                                  | 36           | 52     | 45     | 60     | EHWH048A-A10                                                                        |
|             | 15        | 230/208-1                      | C BREAKER        | 1 or 2                 | 88                             | 90                                  | 36           | 52     | 45     | 60     | EHWH048A-A15                                                                        |
| W48HFDB     | 00        | 230/208-3                      | LUGS             | 1                      | 24                             | 30                                  |              |        |        |        | NOT NEEDED                                                                          |
|             | 0Z        | 230/208-3                      | C BREAKER        | 1                      | 24                             | 30                                  |              |        |        |        | WMCBC-04B                                                                           |
|             | 05        | 230/208-3                      | C BREAKER        | 1                      | 39                             | 40                                  |              |        |        |        | EHWH042A-B05                                                                        |
|             | 09        | 230/208-3                      | C BREAKER        | 1                      | 51                             | 60                                  |              |        |        |        | EHCH042A-B09                                                                        |
|             | 15        | 230/208-3                      | C BREAKER        | 1                      | 53                             | 60                                  |              |        |        |        | EHCH042A-B15                                                                        |
| W48HFDC     | 00        | 460-3                          | LUGS             | 1                      | 12                             | 15                                  |              |        |        |        | NOT NEEDED                                                                          |
|             | 0Z        | 460-3                          | DISCONNECT       | 1                      | 12                             | 15                                  |              |        |        |        | WMCBC-06C                                                                           |
|             | 05        | 460-3                          | DISCONNECT       | 1                      | 19                             | 20                                  |              |        |        |        | EHCH036A-C05                                                                        |
|             | 09        | 460-3                          | DISCONNECT       | 1                      | 25                             | 25                                  |              |        |        |        | EHCH036A-C09                                                                        |
|             | 15        | 460-3                          | DISCONNECT       | 1                      | 27                             | 30                                  |              |        |        |        | EHCH036A-C15                                                                        |
| W60HFDA     | 00        | 230/208-1                      | LUGS             | 1                      | 38                             | 45                                  |              |        |        |        | NOT NEEDED                                                                          |
|             | 0Z        | 230/208-1                      | C BREAKER        | 1                      | 38                             | 45                                  |              |        |        |        | WMCBC-07A                                                                           |
|             | 05        | 230/208-1                      | C BREAKER        | 1 or 2                 | 64                             | 70                                  | 38           | 26     | 45     | 30     | EHWH048A-A05                                                                        |
|             | 10        | 230/208-1                      | C BREAKER        | 1 or 2                 | 90                             | 90                                  | 38           | 52     | 45     | 60     | EHWH060A-A10                                                                        |
|             | 15        | 230/208-1                      | C BREAKER        | 1 or 2                 | 90                             | 90                                  | 38           | 52     | 45     | 60     | EHWH060A-A15                                                                        |
| W60HFDB     | 00        | 230/208-3                      | LUGS             | 1                      | 29                             | 35                                  |              |        |        |        | NOT NEEDED                                                                          |
|             | 0Z        | 230/208-3                      | C BREAKER        | 1                      | 29                             | 35                                  |              |        |        |        | WMCBC-05B                                                                           |
|             | 05        | 230/208-3                      | C BREAKER        | 1                      | 44                             | 45                                  |              |        |        |        | EHCH042A-B05                                                                        |
|             | 09        | 230/208-3                      | C BREAKER        | 1                      | 56                             | 60                                  |              |        |        |        | EHCH042A-B09                                                                        |
|             | 15        | 230/208-3                      | C BREAKER        | 1                      | 56                             | 60                                  |              |        |        |        | EHWH060A-B15                                                                        |
| W60HFDC     | 00        | 460-3                          | LUGS             | 1                      | 13                             | 15                                  |              |        |        |        | NOT NEEDED                                                                          |
|             | 0Z        | 460-3                          | DISCONNECT       | 1                      | 13                             | 15                                  |              |        |        |        | WMCBC-06C                                                                           |
|             | 05        | 460-3                          | DISCONNECT       | 1                      | 21                             | 25                                  |              |        |        |        | EHCH036A-C05                                                                        |
|             | 09        | 460-3                          | DISCONNECT       | 1                      | 27                             | 30                                  |              |        |        |        | EHCH036A-C09                                                                        |
|             | 15        | 460-3                          | DISCONNECT       | 1                      | 27                             | 30                                  |              |        |        |        | EHCH036A-C15                                                                        |

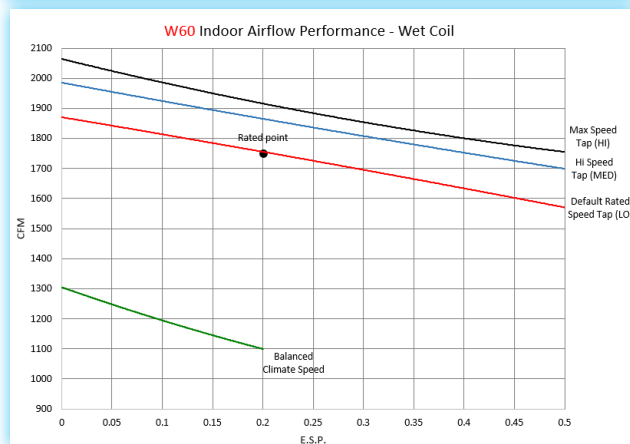
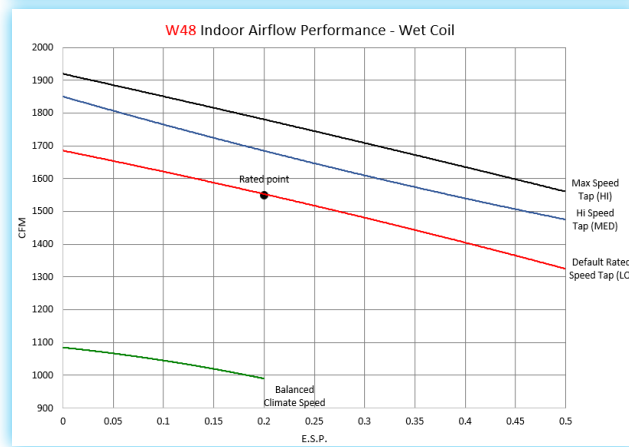
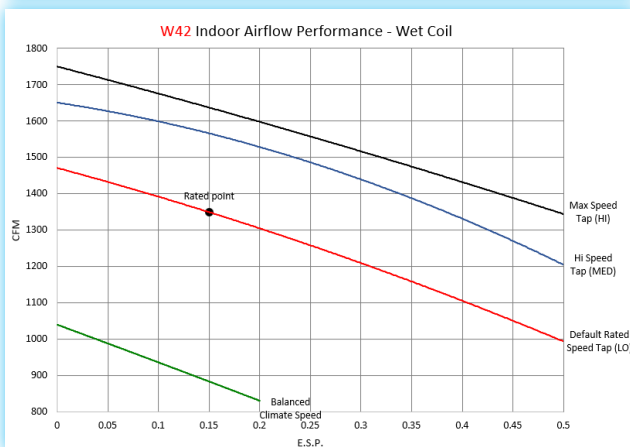
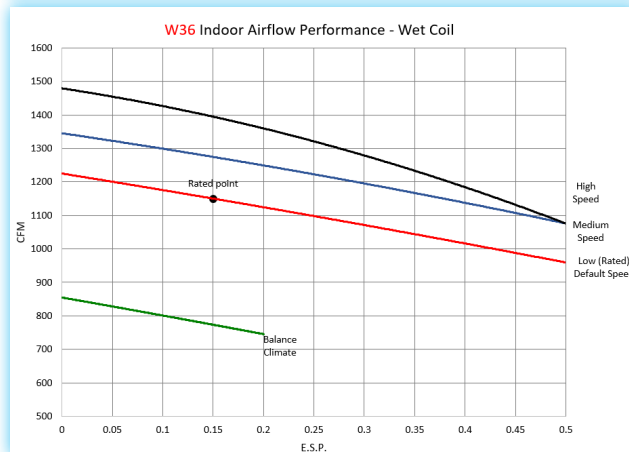
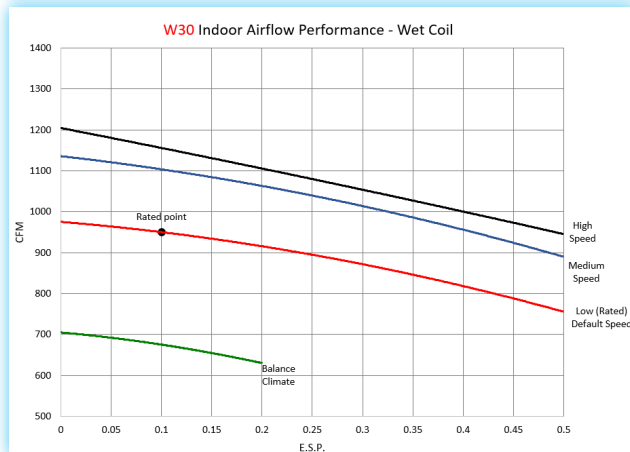
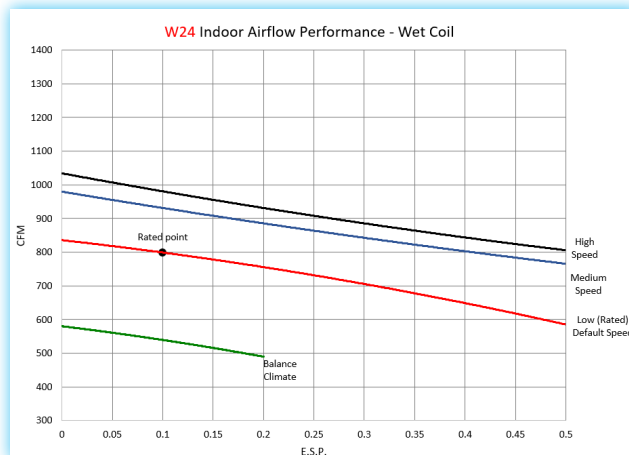
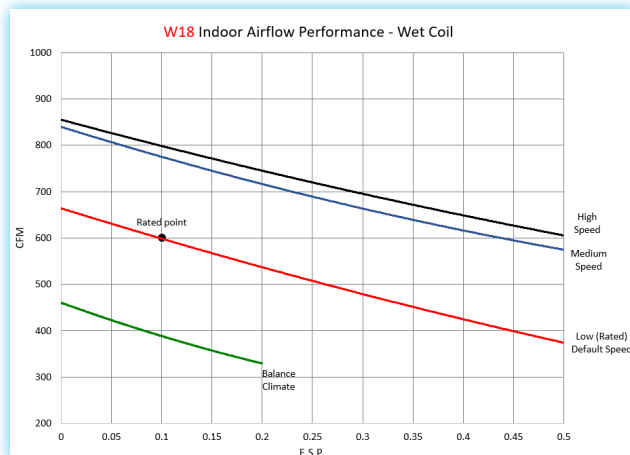
SEE ELECTRICAL NOTES ON PREVIOUS PAGE.

# ELECTRIC HEAT KW AND BTUH CHART AT FIELD SUPPLIED VOLTAGE

| Electric Heat No-menclature | Total KW and BTUH @ Field-Supplied Voltage |           |           |        |        |           |           |        |        |           |        |
|-----------------------------|--------------------------------------------|-----------|-----------|--------|--------|-----------|-----------|--------|--------|-----------|--------|
|                             | @ 208V                                     |           |           |        | @ 230V |           |           |        | @ 460V |           |        |
|                             | KW                                         | 1-PH Amps | 3-PH Amps | BTUH   | KW     | 1-PH Amps | 3-PH Amps | BTUH   | KW     | 3-PH Amps | BTUH   |
| 04                          | 3.0                                        | 14.4      |           | 10,200 | 3.7    | 16.0      |           | 12,600 |        |           |        |
| 05                          | 3.8                                        | 18.0      | 10.4      | 12,800 | 4.6    | 20.0      | 11.5      | 15,700 | 4.6    | 5.8       | 15,700 |
| 08                          | 6.0                                        | 28.8      |           | 20,500 | 7.4    | 32.0      |           | 25,100 |        |           |        |
| 09                          | 6.8                                        |           | 18.7      | 23,000 | 8.3    |           | 20.8      | 28,300 | 8.3    | 10.4      | 28,300 |
| 10                          | 7.5                                        | 36.1      |           | 25,600 | 9.2    | 40.0      |           | 31,400 |        |           |        |
| 15                          | 11.3                                       | 54.1      | 31.2      | 38,400 | 13.8   | 60.0      | 34.6      | 47,100 | 13.8   | 17.3      | 47,100 |

VENTILATION OPTIONS FOR OUTDOOR AIR INTAKE AND ROOM EXHAUST

|                          | Vent Code      | Field Installed Kit Part Number | Unit Model Number | Installed Weight | External Front Hood Depth | Ventilation Operation        | Occupancy Ventilation Input Signal | Vent Airflow                                      | Damp-er Leak-age Stan-dard | Vent Use                                                                                                                                                                    |
|--------------------------|----------------|---------------------------------|-------------------|------------------|---------------------------|------------------------------|------------------------------------|---------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Barometric Dampers       | X              | <a href="#">FAD-NE2</a>         | W18, W24          | 4.0 (1.8)        | No Hood                   | Barometric                   | None                               | Up to 25% of rated intake air. No exhaust.        | N/A                        | The Barometric Intake Damper opens when the indoor fan is operating. Pins provide an easy way to set up the damper assembly.                                                |
|                          |                | <a href="#">FAD-NE3</a>         | W30, W36          | 5.0 (2.3)        | No Hood                   | Barometric                   | None                               |                                                   |                            |                                                                                                                                                                             |
|                          |                | <a href="#">FAD-NE5</a>         | W42, W48 W60      | 13 (5.9)         | No Hood                   | Barometric                   | None                               |                                                   |                            |                                                                                                                                                                             |
|                          | A              | <a href="#">FAD-BE2</a>         | W18, W24          | 8.0 (3.6)        | No Hood                   | Barometric                   | None                               | Up to 25% of rated intake air with room exhaust.  | N/A                        | This damper provides the same features as the intake version with an added exhaust damper.                                                                                  |
|                          |                | <a href="#">FAD-BE3</a>         | W30, W36          | 9.0 (4.0)        | No Hood                   | Barometric                   | None                               |                                                   |                            |                                                                                                                                                                             |
|                          |                | <a href="#">FAD-BE5</a>         | W42, W48 W60      | 16 (7.3)         | No Hood                   | Barometric                   | None                               |                                                   |                            |                                                                                                                                                                             |
| No Vent                  | B              | <a href="#">BOP-2</a>           | W18, W24          | 1.0 (.5)         | No Hood                   | No Air path                  | None                               | None, Air paths are sealed with block off plates. | N/A                        | The No Vent option provides plates over the intake and exhaust ventilation openings.                                                                                        |
|                          |                | <a href="#">BOP-3</a>           | W30, W36          | 1.0 (.5)         | No Hood                   | No Air path                  | None                               |                                                   |                            |                                                                                                                                                                             |
|                          |                | <a href="#">BOPLATE-5</a>       | W42, W48 W60      | 14 (6.4)         | No Hood                   | No Air path                  | None                               |                                                   |                            |                                                                                                                                                                             |
| Commercial Ventilators   | M              | <a href="#">CRV-F2-*</a>        | W18, W24          | 31.0 (14.0)      | No Hood                   | Motor,Spring Return          | 24VAC                              | Up to 50% of rated intake air with room exhaust.  | 10cfm/ft2                  | Powered outdoor intake and room exhaust air damper. Opens when 24VAC is applied.                                                                                            |
|                          |                | <a href="#">CRV-F3-*</a>        | W30, W36          | 35.0 (15.9)      | No Hood                   | Motor,Spring Return          | 24VAC                              |                                                   |                            |                                                                                                                                                                             |
|                          |                | <a href="#">CRV-F5</a>          | W42, W48 W60      | 42 (19.1)        | No Hood                   | Motor,Spring Return          | 24VAC                              |                                                   |                            |                                                                                                                                                                             |
|                          | V              | <a href="#">CRV-V2-*</a>        | W18, W24          | 31.0 (14.0)      | No Hood                   | Motor,Spring Return          | 24VAC or 2-10VDC                   | Up to 50% of rated intake air with room exhaust.  | 4cfm/ft2                   | Provides outdoor intake and room exhaust air with improved damper sealing. Opens with either a 24VAC signal or DC voltage is applied.                                       |
|                          |                | <a href="#">CRV-V3-*</a>        | W30, W36          | 35.0 (15.9)      | No Hood                   | Motor,Spring Return          | 24VAC or 2-10VDC                   |                                                   |                            |                                                                                                                                                                             |
|                          |                | <a href="#">CRV-V5A</a>         | W42, W48 W60      | 42 (19.1)        | No Hood                   | Motor,Spring Return          | 24VAC or 2-10VDC                   |                                                   |                            |                                                                                                                                                                             |
| Free Cooling Economizers | D              | <a href="#">ECON-NC2A-*</a>     | W18, W24          | 37.0 (16.8)      | 7" (17.8cm)               | Motor,Spring Return          | 2-10VDC                            | Full rated intake air with room exhaust.          | 4cfm/ft2                   | Economizer assembly with damper motor. Field supplied controls needed for operation.                                                                                        |
|                          |                | <a href="#">ECON-NC3A-*</a>     | W30, W36          | 37.0 (16.8)      | 7" (17.8cm)               | Motor,Spring Return          | 2-10VDC                            |                                                   |                            |                                                                                                                                                                             |
|                          |                | <a href="#">ECON-NC5A</a>       | W42, W48 W60      | 44 (20)          | No Hood                   | Motor,Spring Return          | 2-10VDC                            |                                                   |                            |                                                                                                                                                                             |
|                          | S              | <a href="#">ECON-S2-*</a>       | W18, W24          | 37.0 (16.8)      | No Hood                   | Motor,Spring Return          | 24VAC or 0-10VDC                   | Up to 75% of rated intake air with room exhaust.  | 4cfm/ft2                   | Economizer with JADE controller. User defined economizing based on enthalpy curves.                                                                                         |
|                          |                | <a href="#">ECONS3-*</a>        | W30, W36          | 37.0 (16.8)      | No Hood                   | Motor,Spring Return          | 24VAC or 0-10VDC                   |                                                   |                            |                                                                                                                                                                             |
|                          | Y              | <a href="#">ECON-DB2A-*</a>     | W18, W24          | 37.0 (16.8)      | 7" (17.8cm)               | Motor,Spring Return          | 24VAC or 0-10VDC                   | Full rated intake air with room exhaust.          | 4cfm/ft2                   | Economizer with JADE controller. User defined economizing based on dry bulb temperature.                                                                                    |
|                          |                | <a href="#">ECON-DB3A-*</a>     | W30, W36          | 37.0 (16.8)      | 7" (17.8cm)               | Motor,Spring Return          | 24VAC or 0-10VDC                   |                                                   |                            |                                                                                                                                                                             |
|                          |                | <a href="#">ECON-DB5A</a>       | W42, W48 W60      | 44 (20)          | No Hood                   | Motor,Spring Return          | 24VAC or 0-10VDC                   |                                                   |                            |                                                                                                                                                                             |
|                          | Z              | <a href="#">ECON-WD2A-*</a>     | W18, W24          | 37.0 (16.8)      | 7" (17.8cm)               | Motor,Spring Return          | 24VAC or 0-10VDC                   | Full rated intake air with room exhaust.          | 4cfm/ft2                   | Economizer with JADE controller. User defined economizing based on enthalpy curves.                                                                                         |
|                          |                | <a href="#">ECON-WD3A-*</a>     | W30, W36          | 37.0 (16.8)      | 7" (17.8cm)               | Motor,Spring Return          | 24VAC or 0-10VDC                   |                                                   |                            |                                                                                                                                                                             |
|                          |                | <a href="#">ECON-WD5A</a>       | W42, W48 W60, W72 | 44 (20)          | No Hood                   | Motor,Spring Return          | 24VAC or 0-10VDC                   |                                                   |                            |                                                                                                                                                                             |
| Energy Recovery Vents    | R (230V Units) | <a href="#">ERV-FA2-*</a>       | W18, W24          | 54.0 (24.4)      | 4" (10.2cm)               | <b>208/230V</b> Unit Blowers | 24VAC - 3 speeds                   | Up to 200cfm                                      | N/A                        | Energy Recovery Ventilator with independently adjustable intake and exhaust fans. Heat exchange wheel used to transfer heat from outdoor intake and room exhaust air paths. |
|                          |                | <a href="#">ERV-FA3-*</a>       | W30, W36          | 54.0 (24.4)      | 4" (10.2cm)               | <b>208/230V</b> Unit Blowers | 24VAC - 3 speeds                   | Up to 400cfm                                      |                            |                                                                                                                                                                             |
|                          |                | <a href="#">ERV-FA5</a>         | W42, W48 W60      | 87 (39.5)        | No Hood                   | <b>208/230V</b> Unit Blowers | 24VAC - 3 speeds                   | Up to 450cfm                                      |                            |                                                                                                                                                                             |
|                          | R (460V Units) | <a href="#">ERV-FC2-*</a>       | W24               | 54.0 (24.4)      | 4" (10.2cm)               | <b>460V</b> Unit Blowers     | 24VAC - 3 speeds                   | Up to 200cfm                                      |                            |                                                                                                                                                                             |
|                          |                | <a href="#">ERV-FC3-*</a>       | W30, W36          | 54.0 (24.4)      | 4" (10.2cm)               | <b>460V</b> Unit Blowers     | 24VAC - 3 speeds                   | Up to 400cfm                                      |                            |                                                                                                                                                                             |
|                          |                | <a href="#">ERV-FC5</a>         | W42, W48 W60      | 100 (45.4)       | No Hood                   | <b>460V</b> Unit Blowers     | 24VAC - 3 speeds                   | Up to 450cfm                                      |                            |                                                                                                                                                                             |



#### Indoor Airflow Speeds:

**Balanced Climate Speed:** The WH series uses this speed when the **Balanced Climate** option (Y1) or **mechanical dehumidification option (D)** is used. Not recommended for static levels higher than Balanced Climate airflow data provided.

**LO Speed (Default):** The WH series uses this speed by default when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as LO on the speed selection terminal strip inside the unit control panel. The WH series also uses this speed when **fan only (G) or ventilation operation (A)** is used. All units ship with cooling and heating operation at LO cooling and heating speed, and provides the **optimal airflow amount for normal use**.

**MED Speed (User Selectable):** This speed is user selectable when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as MED on the speed selection terminal strip inside the unit control panel. The MED speed tap provides an **increase in unit airflow** per the airflow performance chart. Fan only and dehumidification fan operation is not effected by using MED speed.

**Hi Speed (User Selectable):** This speed is user selectable when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as HI on the speed selection terminal strip inside the unit control panel. The HI speed tap provides **maximum unit airflow** per the airflow performance chart. Fan only and dehumidification fan operation is not effected by using Hi speed.

## INDOOR AIR STREAM FILTRATION OPTIONS

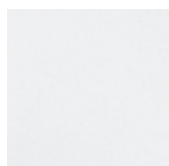
| UNIT MODEL    | FILTER CODE | FILTER MERV RATING | NUMBER OF FILTERS USED | BARD PART NUMBER | FILTER SIZE INCHES (CM) | FILTER ESP | FILTRATION LEVEL                                                 |
|---------------|-------------|--------------------|------------------------|------------------|-------------------------|------------|------------------------------------------------------------------|
| W18, W24      | X           | MERV 2             | 1                      | 7004-011         | 16x25x1 (41x64x3)       | 0" WC      | Low Filtration, 1" Thickness Disposable Media.                   |
|               | W           | MERV 2             | 1                      | 7003-032         | 16x25x1 (41x64x3)       | 0" WC      | Low Filtration, 1" Thickness Cleanable Media.                    |
|               | P           | MERV 8             | 1                      | 7004-025         | 16x25x2 (41x64x6)       | .03" WC    | Average Filtration, 2" Thickness Pleated Disposable Media.       |
|               | M           | MERV 11            | 1                      | 7004-059         | 16x25x2 (41x64x6)       | .05" WC    | Above Average Filtration, 2" Thickness Pleated Disposable Media. |
|               | A, B, N     | MERV 13            | 1                      | 7004-061         | 16x25x2 (41x64x6)       | .08" WC    | High Filtration, 2" Thickness Pleated Disposable Media.          |
| W30, W36      | X           | MERV 2             | 1                      | 7004-019         | 16x30x1 (41x77x3)       | 0" WC      | Low Filtration, 1" Thickness Disposable Media.                   |
|               | W           | MERV 2             | 1                      | 7003-031         | 16x30x1 (41x77x3)       | 0" WC      | Low Filtration, 1" Thickness Cleanable Media.                    |
|               | P           | MERV 8             | 1                      | 7004-026         | 16x30x2 (41x77x6)       | .03" WC    | Average Filtration, 2" Thickness Pleated Disposable Media.       |
|               | M           | MERV 11            | 1                      | 7004-048         | 16x30x2 (41x77x6)       | .05" WC    | Above Average Filtration, 2" Thickness Pleated Disposable Media. |
|               | A, B, N     | MERV 13            | 1                      | 7004-062         | 16x30x2 (41x77x6)       | .08" WC    | High Filtration, 2" Thickness Pleated Disposable Media.          |
| W42, W48, W60 | X           | MERV 2             | 2                      | 7004-012         | 20x20x1 (51x51x3)       | 0" WC      | Low Filtration, 1" Thickness Disposable Media.                   |
|               | W           | MERV 2             | 2                      | 7003-085         | 20x20x1 (51x51x3)       | 0" WC      | Low Filtration, 1" Thickness Cleanable Media.                    |
|               | P           | MERV 8             | 2                      | 7004-052         | 20x20x2 (51x51x6)       | .03" WC    | Average Filtration, 2" Thickness Pleated Disposable Media.       |
|               | M           | MERV 11            | 2                      | 7004-060         | 20x20x2 (51x51x6)       | .05" WC    | Above Average Filtration, 2" Thickness Pleated Disposable Media. |
|               | A, B, N     | MERV 13            | 2                      | 7004-063         | 20x20x2 (51x51x6)       | .08" WC    | High Filtration, 2" Thickness Pleated Disposable Media.          |

## CABINET COLOR AND FINISH OPTIONS

| UNIT MODEL | CABINET COLOR AND FINISH CODE | COLOR AND FINISH           | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|-------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All Units  | X                             | Beige Painted Steel        | This cabinet option uses zinc coated steel panels that are cleaned, rinsed, sealed and dried before a polyurethane primer is applied. The cabinet paint coating is comprised of a textured enamel. The resulting finish is designed to withstand over 1000 hours of salt spray tests per ASTM B117-03. . Unit top, structural sides, and front service panels are constructed using 20 gauge materials. The unit base is constructed using 16 gauge galvanized steel. Cabinet components are insulated with a non-fiberglass formaldehyde free insulation that has a high "R" value, is easy to clean with a FSK foil backing, and resists delamination. |
|            | 1                             | White Painted Steel        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|            | 4                             | Buckeye Gray Painted Steel |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|            | 5                             | Desert Brown Painted Steel |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|            | 8                             | Dark Bronze Painted Steel  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|            | S                             | Stainless Steel            | Exterior Stainless Steel finish cabinets are often selected for corrosion and chemical resistance. The Bard stainless steel unit offers a high quality stainless steel 316 grade enclosure and fasteners for years of operation in these conditions. The exterior cabinet, sheet metal screws, washers, nuts, compressor mounting hardware and outdoor fan motor mount are stainless steel. The condenser fan is corrosion coated for additional protection.                                                                                                                                                                                             |
|            | A                             | Aluminum                   | Aluminum external cabinet finish option "A" units are constructed of ASTM B 209 grade .06" thickness panels with a stucco appearance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



X—Beige



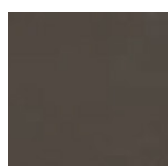
1—White



4—Gray



5—Desert



8—Bronze



S—Stainless



A—Aluminum

## ////// ADDITIONAL CORROSION COATED EVAPORATOR COIL, CONDENSER COIL, AND CABINET OPTIONS

| UNIT MODEL | COIL AND CABINET COATING OPTION | EVAPORATOR COIL | CONDENSER COIL | INTERIOR CONDENSER SECTION | EXTERIOR AND INTERIOR CABINET | DESCRIPTION                                                                                                 |
|------------|---------------------------------|-----------------|----------------|----------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------|
| All Units  | X                               | STANDARD        | STANDARD       | STANDARD                   | STANDARD                      | Standard green fin evaporator coil and copper aluminum condenser coil. Cabinet is not coated.               |
|            | 1                               | COATED          | STANDARD       | STANDARD                   | STANDARD                      | Corrosion coated evaporator coil and copper aluminum condenser coil. Cabinet is not coated.                 |
|            | 2                               | STANDARD        | COATED         | STANDARD                   | STANDARD                      | Standard green fin evaporator coil and corrosion coated condenser coil. Cabinet is not coated.              |
|            | 3                               | COATED          | COATED         | STANDARD                   | STANDARD                      | Evaporator coil and condenser coil are both corrosion coated. Cabinet is not coated.                        |
|            | 4                               | COATED          | COATED         | COATED                     | STANDARD                      | Evaporator coil and condenser coil are both corrosion coated. Cabinet interior condenser section is coated. |
|            | 5                               | COATED          | COATED         | COATED                     | COATED                        | Evaporator coil and condenser coil are both corrosion coated. Cabinet interior and exterior is coated.      |

## ////// SOUND DATA - DBA @ 5 FT. AND 10 FT.\*

| UNIT | DUCT FREE IN-DOOR COOLING OPERATION @ 5 FT. | DUCT FREE IN-DOOR COOLING OPERATION @ 10 FT. | DUCTED INDOOR COOLING OPERATION @ 5 FT. | DUCTED INDOOR COOLING OPERATION @ 10 FT. | OUTDOOR @ 10 FT. |
|------|---------------------------------------------|----------------------------------------------|-----------------------------------------|------------------------------------------|------------------|
| W18H | 49.6                                        | 47.3                                         | 48.6                                    | 46.2                                     | 62.8             |
| W24H | 52.4                                        | 50.4                                         | 51.9                                    | 48.9                                     | 62.3             |
| W30H | 53.9                                        | 52.9                                         | 54.5                                    | 47.3                                     | 67.1             |
| W36H | 53.9                                        | 52.9                                         | 54.5                                    | 47.3                                     | 67.1             |
| W42H | 56.1                                        | 51.7                                         | 56.3                                    | 51.1                                     | 68.6             |
| W48H | 57                                          | 52.7                                         | 57.8                                    | 52.8                                     | 69               |
| W60H | 56.5                                        | 53.3                                         | 56                                      | 52.7                                     | 66.8             |

Published dBA numbers are 3rd octave A weighted scale. Integrated values calculated per ANSI/ASA S12.60-2009/Part 2, Section 5.2.2.1.

## ////// FACTORY CONTROLS OPTIONS CHART INCLUDING SWITCHES, SENSORS, RELAYS, AND START KITS

Factory installed controls are provided by Bard to enhance a Wall-Mount product before it is shipped. All Wall-Mount products are shipped with a auto-reset high pressure switch and an auto-reset low pressure switch to help protect refrigeration components. A compressor control module with adjustable voltage protection, delay on make and break, and high/low pressure diagnostics is also standard

| CONTROL CODE | MODELS                       | DESCRIPTION OF FACTORY INSTALLED COMPONENTS                                                                                                                   |
|--------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X            | ALL MODELS                   | Standard Hi Pressure Switch, Low Pressure Switch, Compressor Control Module, and Refrigerant leak detector (RDS). These controls are standard for all models. |
| E            | ALL MODELS                   | Standard controls and Low Ambient Control.                                                                                                                    |
| F            | W42HF-W60HF<br>W42HFD-W60HFD | Standard controls, Low Ambient Control, Refrigerant Alarm Relay with NO/NC Contacts, and Dirty Filter Pressure Switch.                                        |
| J            | ALL MODELS                   | Standard controls, Low Ambient Control and Refrigerant Alarm Relay with NO/NC Contacts.                                                                       |
| Q            | ALL MODELS                   | Standard controls and Outdoor Thermostat.                                                                                                                     |
| R            | ALL MODELS                   | Standard controls, Low Ambient Control, Outdoor Thermostat.                                                                                                   |
| T            | ALL MODELS                   | Standard controls, Low Ambient Control, Outdoor Thermostat, Hard Start Kit, 230V/208V single phase only.                                                      |

## FIELD KIT CONTROLS OPTIONS CHART INCLUDING SWITCHES, SENSORS, RELAYS, AND START KITS

Field installed kits provide accessories that can be installed in the field. Required components, wires, enclosures, screws, and instructions that are needed are provided within the kit.

| KIT PART NO.  | UNITS USING KIT        | DESCRIPTION OF FIELD INSTALLED KIT                                                                                                                                   |
|---------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CMH-33</b> | W18H                   | Low Ambient Control allows compressor cooling between 0°F and 50°F outdoor temp. - Modulating.                                                                       |
| <b>CMH-34</b> | W24H, W30H, W36H       | Low Ambient Control allows compressor cooling between 0°F and 50°F outdoor temp. - fan cycling.                                                                      |
| <b>CMH-35</b> | W42H, W48H, W60H       | Low Ambient Control allows compressor cooling between 0°F and 50°F outdoor temp. - fan cycling.                                                                      |
| <b>CMC-15</b> | W18H, W24H, W30H, W36H | PTCR Start Kit. Increases starting torque by 2 to 3x. 230V-60hz-1 phase (A voltage) only. Cannot be used in combination with SK start kit                            |
| <b>CMC-32</b> | W42H, W48H, W60H       | PTCR Start Kit. Increases starting torque by 2 to 3x. 230V-60hz-1 phase (A voltage) only. Cannot be used in combination with SK start kit                            |
| <b>SK111</b>  | W18H, W24H, W30H, W36H | Start Capacitor and Potential Relay Start Kit. Increases starting torque by 9x. 230V-60hz-1 phase (A voltage) only. Cannot be used in combination with CMC start kit |
| <b>CMH-28</b> | W18H, W24H, W30H, W36H | Outdoor Thermostat Kit used to disable compressor cooling below 50°F outdoor temp. Adjustable between 50° and 0°F                                                    |
| <b>CMH-36</b> | W42H, W48H, W60H       | Outdoor Thermostat Kit used to disable compressor cooling below 50°F outdoor temp. Adjustable between 50° and 0°F.                                                   |
| <b>CMC-34</b> | W18H, W24H, W30H, W36H | Compressor Control Module Lockout Alarm Relay Kit.                                                                                                                   |
| <b>CMC-35</b> | W42H, W48H, W60H       | Compressor Control Module Lockout Alarm Relay Kit.                                                                                                                   |
| <b>CMC-36</b> | W18H, W24H, W30H, W36H | Crank case heater kit. 230V 1-PH units only.                                                                                                                         |
| <b>CMC-40</b> | W18H, W24H, W30H, W36H | Crank case heater kit. 230V 3-PH units only.                                                                                                                         |
| <b>CMC-37</b> | W18H, W24H, W30H, W36H | Crank case heater kit. 460V 3-PH units only.                                                                                                                         |
| <b>CMC-38</b> | W42H, W48H, W60H       | Crank case heater kit. 230V 1-PH units only.                                                                                                                         |
| <b>CMC-41</b> | W42H, W48H, W60H       | Crank case heater kit. 230V 3-PH units only.                                                                                                                         |
| <b>CMC-39</b> | W42H, W48H, W60H       | Crank case heater kit. 460V 3-PH units only.                                                                                                                         |

## WALL CURB ACCESSORIES

Optional wall curb accessories are available to help reduce vibration through the outer wall surface or to use existing wall openings when replacing equipment. Follow all static pressure airflow requirements, safety and installation guidelines in the instructions provided with the curb and Wall-Mount products.

| CURB                | UNIT MODEL    | FUNCTION                           | DESCRIPTION                                                                                                                                                                                                                                                              |
|---------------------|---------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WWC2-*</b>       | W18, W24      | Upgrade                            | Use with existing 1, 2 or 3 ton wall openings. Wall openings must provide sufficient airflow. Review all instructions in manual #7960-931.                                                                                                                               |
| <b>WWC3-*</b>       | W30, W36      | Upgrade                            | Use with existing 2, 3, or 5 ton wall openings. Wall openings must provide sufficient airflow. Review all instructions in manual #7960-568.                                                                                                                              |
| <b>WWC5-*</b>       | W42, W48, W60 | Upgrade                            | Use with existing 3 and 5 ton wall openings. Wall openings must provide sufficient airflow. Review all instructions in manual #7960-465.                                                                                                                                 |
| <b>CCURBF2430-*</b> | W30, W36      | Indoor Sound Reduction             | Provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows return opening of unit and wall opening to be offset. Top outlet supply for use with overhanging roof lines. Review installation manual #7960-689.          |
| <b>CCURBT2430-*</b> | W30, W36      | Indoor Sound Reduction             | Provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows return opening of unit and wall opening to be offset. Top outlet supply for use with overhanging roof lines. Review installation manual #7960-689.          |
| <b>CCURBF4860-*</b> | W42, W48, W60 | Indoor Sound Reduction             | Provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows return opening of unit and wall opening to be offset. Review installation manual #7960-689.                                                                 |
| <b>CCURBT4860-*</b> | W42, W48, W60 | Indoor Sound Reduction             | Provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows return opening of unit and wall opening to be offset. Top outlet supply for use with overhanging roof lines. Review installation manual #7960-689.          |
| <b>CFCF-53-*</b>    | W42, W48, W60 | Upgrade and S. Reduction           | Upgrades from W30/W36 wall openings and provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows offset return opening. Review manual #7960-930.                                                                     |
| <b>CFCT-53-*</b>    | W42, W48, W60 | Upgrade and Indoor Sound Reduction | Upgrades from W30/W36 wall openings and provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows offset return opening. Top outlet supply for use with overhanging roof lines. Review installation manual #7960-930. |
| <b>WAPR11A-*</b>    | All Units     | Indoor Sound Reduction             | Sound plenum that attaches to indoor wall for return air sound reduction. Air enters bottom of indoor sound plenum then into return area of unit. Review installation manual #7960-950.                                                                                  |
| <b>WAPFB31-*</b>    | W30, W36      | Indoor Sound Reduction             | Sound plenum that attaches to indoor wall for supply air sound reduction. Supply air travels through plenum that includes perforated baffles before exiting supply grille. Review installation manual #7960-552.                                                         |
| <b>WAPFB51-*</b>    | W42, W48, W60 | Indoor Sound Reduction             | Sound plenum that attaches to indoor wall for supply air sound reduction. Supply air travels through plenum that includes perforated baffles before exiting supply grille. Review installation manual #7960-552.                                                         |

\* Color Option

## ////// NON-DUCTED SUPPLY AND RETURN GRILLES

Supply and return louver grilles are of a brushed aluminum finish. 2" flange versions are recommended for standard installations to allow grille attachment when large wall openings are present. Return filter grilles are available for filter access from an indoor area. Filter grilles do not include a filter, and are not recommended for unit with ventilation due to filter location. A manual damper return grille is available for all models. The manual damper is adjustable, and is only recommended for installations where increased return duct static pressure is required.

| GRILLE NO.     | UNITS USING GRILLE | DESCRIPTION OF LOUVER GRILLE                                                                                                                                              |
|----------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SG-2</b>    | W18H, W24H         | 8" x 20" with 1" Flange 4 way deflection supply grille.                                                                                                                   |
| <b>SG-3</b>    | W30H, W36H         | 8" x 28" with 1" Flange 4 way deflection supply grille.                                                                                                                   |
| <b>SG-5</b>    | W42H, W48H, W60H   | 10" x 30" with 1" Flange 4 way deflection supply grille.                                                                                                                  |
| <b>RG-2</b>    | W18H, W24H         | 12" x 20" with 1" Flange return grille.                                                                                                                                   |
| <b>RG-3</b>    | W30H, W36H         | 12" x 28" with 1" Flange return grille.                                                                                                                                   |
| <b>RG-5</b>    | W42H, W48H, W60H   | 16" x 30" with 1" Flange return grille.                                                                                                                                   |
| <b>SG-2W</b>   | W18H, W24H         | 8" x 20" with 2" Flange 4 way deflection supply grille.                                                                                                                   |
| <b>SG-3W</b>   | W30H, W36H         | 8" x 28" with 2" Flange 4 way deflection supply grille.                                                                                                                   |
| <b>SG-5W</b>   | W42H, W48H, W60H   | 10" x 30" with 2" Flange 4 way deflection supply grille.                                                                                                                  |
| <b>RG-2W</b>   | W18H, W24H         | 12" x 20" with 2" Flange return grille.                                                                                                                                   |
| <b>RG-3W</b>   | W30H, W36H         | 12" x 28" with 2" Flange return grille.                                                                                                                                   |
| <b>RG-5W</b>   | W42H, W48H, W60H   | 16" x 30" with 2" Flange return grille.                                                                                                                                   |
| <b>RFG-2W</b>  | W18H, W24H         | 12" x 20" with 2" Flange return grille with filter bracket.*                                                                                                              |
| <b>RFG-3W</b>  | W30H, W36H         | 12" x 28" with 2" Flange return grille with filter bracket.*                                                                                                              |
| <b>RFG-5W</b>  | W42H, W48H, W60H   | 16" x 30" with 2" Flange return grille with filter bracket.*                                                                                                              |
| <b>RGDK-2W</b> | W18H, W24H         | 12" x 20" with 2" manual shutter style damper that is mounted in the return duct behind the return grille (sold separately). Adjustable to restrict return air from room. |
| <b>RGDK-3W</b> | W30H, W36H         | 12" x 28" with 2" manual shutter style damper that is mounted in the return duct behind the return grille (sold separately). Adjustable to restrict return air from room. |
| <b>RGDK-5W</b> | W42H, W48H, W60H   | 16" x 30" manual shutter style damper that is mounted in the return duct behind the return grille (sold separately). Adjustable to restrict return air from room.         |

\* Not recommended to provide primary filtration with units that will bring in outdoor air.

## ////// NON-DUCTED SUPPLY GRILLES - SPREAD AND THROW CHARACTERISTICS

One of the most important setup procedures for non-ducted supply applications is to adjust the 4 way supply grille blade positions. Placement of equipment, occupants, the thermostat, and room size can all play an important role in deciding how the conditioned supply air must be directed in an indoor area. The chart below may be used as a reference tool to help with this process.

| SUPPLY GRILLE         | AIRFLOW CFM | DEFLECTION | VELOCITY | TOTAL PRESSURE | THROW     |
|-----------------------|-------------|------------|----------|----------------|-----------|
| <b>SG-2<br/>SG-2W</b> | 800 CFM     | 0°         | 1053     | .076" WC       | 37-52 ft. |
|                       |             | 22.5°      | 1143     | .1" WC         | 28-40 ft. |
|                       |             | 45°        | 1428     | .162" WC       | 20-29 ft. |
|                       | 865 CFM     | 0°         | 1138     | .054" WC       | 40-55 ft. |
|                       |             | 22.5°      | 1236     | .075" WC       | 31-42 ft. |
|                       |             | 45°        | 1544     | .113" WC       | 21-30 ft. |
| <b>SG-3<br/>SG-3W</b> | 885 CFM     | 0°         | 852      | .054" WC       | 37-54 ft. |
|                       |             | 22.5°      | 1075     | .075" WC       | 35-49 ft. |
|                       |             | 45°        | 1162     | .113" WC       | 21-30 ft. |
|                       | 1285 CFM    | 0°         | 1237     | .108" WC       | 42-66 ft. |
|                       |             | 22.5°      | 1359     | .147" WC       | 35-50 ft. |
|                       |             | 45°        | 1687     | .249" WC       | 25-37 ft. |
| <b>SG-5<br/>SG-5W</b> | 1450 CFM    | 0°         | 968      | .073" WC       | 51-73 ft. |
|                       |             | 22.5°      | 1071     | .103" WC       | 39-56 ft. |
|                       |             | 45°        | 1331     | .169" WC       | 28-40 ft. |
|                       | 2000 CFM    | 0°         | 1336     | .130" WC       | 61-86 ft. |
|                       |             | 22.5°      | 1477     | .188" WC       | 54-65 ft. |
|                       |             | 45°        | 1835     | .335" WC       | 33-46 ft. |

## //////// FIELD INSTALLED AIR QUALITY KITS

Field installed kits provide accessories that can be installed in the field. Required components, wires, enclosures, screws, and instructions that are needed are provided within the kit.

| CONTROL CODE | KIT PART NO. | UNITS USING KIT                          | DESCRIPTION OF FIELD INSTALLED KIT                                                                                                                                         |
|--------------|--------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NA           | CMC-31       | W18H, W24H, W30H, W36H                   | Dirty Filter Alarm Pressure Sensor Kit. Provides Normally Open Contacts to send an alarm signal to a thermostat or controller.                                             |
| NA           | CMC-33       | W42H, W48H, W60H                         | Dirty Filter Alarm Pressure Sensor Kit. Provides Normally Open Contacts to send an alarm signal to a thermostat or controller.                                             |
| NA           | 8620-343     | W18H, W24H, W30H, W36H, W42H, W48H, W60H | LED UV-C Long Life Light Kit. 460V units only. Installed in evaporator coil entering airstream along with door safety switch. Indicator light provided to monitor LED use. |
| NA           | 8620-344     | W18H, W24H, W30H, W36H, W42H, W48H, W60H | LED UV-C Long Life Light Kit. 230V units only. Installed in evaporator coil entering airstream along with door safety switch. Indicator light provided to monitor LED use. |
| NA           | 8620-370     | W18H, W24H, W30H, W36H, W42H, W48H, W60H | NBPI (AIR4) kit installed in evaporator area. The kit includes wires and mounting hardware needed to install the NBPI device on or near the indoor fan.                    |

## //////// ADVANCED SENSOR OPTIONS AND KITS

Field installed kits provide accessories that can be installed in the field. Required components, wires, enclosures, screws, and instructions that are needed are provided within the kit.

| CONTROL CODE | KIT PART NO. | UNITS USING KIT        | DESCRIPTION OF FIELD INSTALLED KIT                                           |
|--------------|--------------|------------------------|------------------------------------------------------------------------------|
| NA           | 8620-340     | W18H, W24H, W30H, W36H | Return Air Sensor Kit for use with all economizers with the JADE controller. |
| NA           | 8620-334     | W42H, W48H, W60H       | Return Air Sensor Kit for use with all economizers with the JADE controller. |

## //////// SOUND REDUCTION ACCESSORIES

Field installed kits provide accessories that can be installed in the field. Required components, wires, enclosures, screws, and instructions that are needed are provided within the kit.

| CONTROL CODE | KIT PART NO. | UNITS USING KIT        | DESCRIPTION OF FIELD INSTALLED KIT                                                                  |
|--------------|--------------|------------------------|-----------------------------------------------------------------------------------------------------|
| NA           | 8002-012     | W18H, W24H, W30H, W36H | Compressor sound cover. Weatherized vinyl insulated cover that helps reduce compressor sound level. |
| NA           | 8002-013     | W42H, W48H, W60H       | Compressor sound cover. Weatherized vinyl insulated cover that helps reduce compressor sound level. |

## //////// OPTIONAL SHIPPING CRATES

Optional crates are available to help protect your valuable Wall-Mount investment during shipping. Constructed from OSB sheathing with steel corner posts, and sized for standard truck transportation. Treated for pests in accordance with the International Plant Protection Convention, Publication 15, Annex 1. Packaging is acceptable for international shipments.

| CRATE NO. | UNIT MODELS | DESCRIPTION                                             |
|-----------|-------------|---------------------------------------------------------|
| 8620-263  | W18H, W24H  | Standard Unit Crate, all vents except economizer.       |
| 8620-275  | W18H, W24H  | Units with Economizer vent (Factory Installed 7" Hood). |
| 8620-262  | W30H, W36H  | Standard Unit Crate, all vents except economizer        |
| 8620-276  | W30H, W36H  | Units with Economizer vent (Factory Installed 7" Hood). |
| 8620-304  | W42H, W48H  | Standard Unit Crate, all ventilation options            |
| 8620-305  | W60H        | Standard Unit Crate, all ventilation options            |

# CONTROLLER, THERMOSTAT, HUMIDISTAT AND CO2 VENTILATION CONTROL OPTIONS

Bard provides a wide variety of controllers for equipment cooling, thermostats, for equipment and comfort cooling, humidistats for dehumidification units, and CO2 sensors for ventilation control. Lockable thermostat covers are available for applications where security or supervisory control is desired.

| CONTROLLER    | OPERATION                       | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MC4002</b> | 1 to 2 Unit Lead/Lag Controller | Standard unit Lead/Lag Controller with remote alarming capability. Optional alarm board and SNMP or web page communication board. On board temperature sensor can be remote mounted. Can use up to (2) remote temperature sensors part #8612-023B (35' cable). -A includes alarm board. -B includes enhanced alarm board. -BC includes enh. alarm board and SNMP comm board. Review MC4002 installation instructions for use with heat pump models. Not recommended for heat pump models with economizer. |
| <b>MC5300</b> | 1 to 3 Unit Lead/Lag Controller | Advanced multi-unit Lead/Lag Controller with remote alarming capability. All models have Modbus communication and web pages. Optional alarm board with NO/NC contacts. Standard on-board temperature and humidity sensor or optional remote temp/humidity sensor part #8408-061 (35' cable). Can use up to (2) remote temperature sensors part #8301-095A (35' cable).                                                                                                                                    |
| <b>MC5600</b> | 1 to 6 Unit Lead/Lag Controller | Advanced multi-unit Lead/Lag Controller with remote alarming capability. All models have Modbus communication and web pages. Optional alarm board with NO/NC contacts. Standard on-board temp/humidity sensor or optional remote temp/humidity sensor part #8408-061 (35' cable). Can use up to (2) remote temperature sensors part #8301-095A (35' cable).                                                                                                                                               |

| THERMOSTAT      | OPERATION     | DESCRIPTION                                                                                                 |
|-----------------|---------------|-------------------------------------------------------------------------------------------------------------|
| <b>8403-060</b> | 3 Heat/3 Cool | Programmable or Nonprogrammable, ventilation output, dehumidification operation.                            |
| <b>8403-081</b> | 3 Heat/2 Cool | BrightStat with motion, BACnet/Modbus, vent output, dehum control, LUA, optional CO2 or Wi-Fi card.         |
| <b>8403-083</b> | 3 Heat/2 Cool | BrightStat with BACnet/Modbus, vent output, dehum control, LUA, optional CO2 or Wi-Fi card.                 |
| <b>8403-098</b> | 3 Heat/2 Cool | BrightStat with motion, ZigBee, BACnet/Modbus, vent output, dehum control, LUA, optional CO2 or Wi-Fi card. |
| <b>8403-090</b> | 2 Heat/2 Cool | Temp. Settings per Day 4, 2, 1, 0 Programs per Week 7, 5-2, 5-1-1 or Nonprogrammable.                       |
| <b>8403-092</b> | 2 Heat/2 Cool | Programmable or Nonprogrammable, Wi-Fi with Lyric Phone application for wireless set point control.         |
| <b>8403-095</b> | 2 Heat/1 Cool | Temp. Settings per Day 4, 2, 1, 0 Programs per Week 7, 5-2, 5-1-1 or Nonprogrammable.                       |

| BRIGHTSTAT ACCESSORY | OPERATION       | DESCRIPTION                                                                                                      |
|----------------------|-----------------|------------------------------------------------------------------------------------------------------------------|
| <b>8612-052</b>      | Expansion Card* | ZigBee Pro plug-in card, required for wireless sensors unless using 8403-098. See document S3583 for sensors.    |
| <b>8612-074</b>      | Expansion Card* | CO2 plug-in card for modulating ventilation when using Economizer or CRV-V vent option. ERV requires LUA script. |
| <b>8612-079</b>      | Expansion Card* | Wi-Fi plug-in card for wireless Building Management System (BMS). BMS software required for communication.       |
| <b>8612-058</b>      | Wired Sensor    | Wired wall-mounted temperature sensor. 10k. 5000ft max. wire length. Up to 3 sensors for averaging.              |
| <b>8612-059</b>      | Wired Sensor    | Wired wall-mounted temp and occ sensor. 5000ft max. wire length. Up to 3 sensors for averaging.                  |

\* BrightStat controllers include a single expansion slot for an expansion card. More than one expansion card cannot be used with a single controller.

| HUMIDISTAT      | OPERATION    | DESCRIPTION                                                                       |
|-----------------|--------------|-----------------------------------------------------------------------------------|
| <b>8403-047</b> | Humidity %RH | Electronic with display, lockable keypad, humidity sensor calibration (Viconics)  |
| <b>8403-100</b> | Humidity %RH | Electronic with display, lockable keypad, humidity sensor calibration (Honeywell) |

| CO2 CONTROL      | OPERATION | DESCRIPTION                                                                                               |
|------------------|-----------|-----------------------------------------------------------------------------------------------------------|
| <b>S8403-096</b> | CO2 PPM   | CO2 ventilation control with digital display. On/Off or modulating (Econ or CRV-V) ventilation operation. |

| THERMOSTAT COVER** | SIZE                                                                         | DESCRIPTION                                                          |
|--------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>8405-003</b>    | (Inside) 5-1/16" H x 6-1/16" W<br>(Outside) 6-1/2" H x 7-1/2" W x 2-15/16" D | Clear acrylic with ventilation. Fits all thermostats except 8403-060 |
| <b>8405-005</b>    | (Inside) 5-7/8" H x 8-3/8" W<br>(Outside) 7-1/4" H x 9-3/4" W x 3-3/8" D     | Clear acrylic with ventilation. Fits all thermostats.                |
| <b>8405-007</b>    | (Inside) 5-7/8" H x 8-3/8" W<br>(Outside) 7-1/8" H x 9-5/8" W x 3-1/4" D     | Beige painted steel cover with ventilation. Fits all thermostats.    |

\*\* Thermostat covers include ventilation, but may effect temperature control reaction time. If security control lockout is needed, the 8403-060 and BrightStat thermostat provide programming control lockout features.



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Due to our continuous product improvement policy, all specifications subject to change without notice.

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.