



THE WALL-MOUNT™ HEAT PUMPS - (60HZ)

Models: W18H to W60H
Heating Capacities: 16,000 to 54,000 BTUH
Cooling Capacities: 16,400 to 54,000 BTUH

60Hz

GREEN REFRIGERANT
R-410A

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

Engineered Features

Aluminum Finned Copper Coils:

Grooved tubing and enhanced louvered fin for maximum heat transfer and energy efficiency.

Twin Blowers:

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

Heat Pump Compressor:

Scroll Compressors are standard on all 1½ to 5 ton models. Eliminates need for crankcase heater.

Phase Rotation Monitor:

Standard on all 3 phase scroll compressors. Protects against reverse rotation if power supply is not properly connected.

R-410A Refrigerant:

Designed with R-410A (HFC) non-ozone depleting refrigerant in compliance with the Montreal protocol and 2010 EPA requirements.

Liquid Line Filter Drier:

Standard on all units. Protects system against moisture.

Galvanized 20 Gauge Zinc Coated Steel Cabinet:

Cleaned, rinsed, sealed and dried before the polyurethane primer is applied. The cabinet is handsomely finished with a baked on, beige textured enamel, which allows it to withstand 1000 hours of salt spray tests per ASTM B117-03.

Foil Faced Insulation:

Standard on all units.

Electrical Components:

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

Electric Heat Strips:

Features an automatic limit and thermal cut-off safety control. Heater packages are factory or field installed for all 1½ through 5 ton models. Features easy slide-in field assembly with various BTUH outputs.

Condenser Fan and Motor

Shroud Assembly:

Slide out for easy access.

Filter Service Door:

Separate service door provides easy access for filter change.

One Inch, Disposable Air Filters:

Are standard equipment. Optional one inch washable filters available and filter racks permit the addition of 2" pleated filter. Factory or field installed.

Solid State Electronic Heat Pump Control:

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

High & Low Pressure Switches are Auto-Reset:

Standard on all units. Built-in lockout circuit resets from the room thermostat. Provides commercial quality protection to the compressor.

Five Minute Compressor Time Delay:

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

Emergency Heat Circuit:

Permits continuous operation of the system.

Barometric Fresh Air Damper:

Standard on all units. Allows up to 25% outside fresh air.

Built-in Circuit Breakers:

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

Slope Top:

Standard feature for water run-off.

Full Length Mounting Brackets:

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

Top Rain Flashing:

Standard feature on all models.



Ventilation System Packages

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

- Standard - Barometric Fresh Air Damper
- Optional - Motorized Fresh Air Damper
- Optional - Blank off Plate
- Optional - Commercial Room Ventilator w/Exhaust
 - CRV - Spring Return
 - CRVP - Power Return
- Optional - Economizer with Exhaust
- Optional - Energy Recovery Ventilator



- Complies with efficiency requirements of ASHRAE/IESNA 90.1-2010.
- Certified to ANSI/ARI Standard 390-2003 for SPVU (Single Package Vertical Units).
- Intertek ETL Listed to Standard for Safety Heating and Cooling Equipment ANSI/UL 1995/CSA 22.2 No. 236-05, Third Edition.
- Commercial Product - Not intended for Residential application.

Capacity and Efficiency Ratings

| MODELS | W18H1 | W24H1 | W30H1 | W36H1 | W42H1 | W48H1 | W60H1 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Cooling BTUH ① | 16,400 | 23,600 | 29,800 | 34,600 | 42,000 | 46,000 | 54,000 |
| EER ② | 9.50 | 9.00 | 9.20 | 9.00 | 9.00 | 9.00 | 9.00 |
| High Temp Heating (47F) BTUH ① | 16,000 | 24,000 | 29,000 | 35,000 | 42,000 | 44,000 | 54,000 |
| COP ② | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| Low Temp Heating (17F) BTUH ① | 9,000 | 14,000 | 17,000 | 21,000 | 25,000 | 26,000 | 32,000 |
| COP ② | 1.80 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |

① Capacity is certified in accordance with ANSI/ARI Standard 390-2003.

② EER = Energy Efficiency Ratio, COP = Coefficient of Performance and are certified in accordance with ANSI/ARI Standard 390-2003.

Specifications 1-1/2 through 3 Ton

| MODELS | W18H1-A | W24H1-A | W24H1-B | W24H1-C | W30H1-A | W30H1-B | W30H1-C | W36H1-A | W36H1-B | W36H1-C |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Electrical Rating--60HZ | 230/208 - 1 | 230/208 - 1 | 230/208 - 3 | 460 - 3 | 230/208 - 1 | 230/208 - 3 | 460 - 3 | 230/208 - 1 | 230/208 - 3 | 460 - 3 |
| Operating Voltage Range | 197-253 | 197-253 | 197-253 | 414-506 | 197-253 | 197-253 | 414-506 | 197-253 | 197-253 | 414-506 |
| Compressor--Circuit A | | | | | | | | | | |
| Voltage | 230/208 | 230/208 | 230/208 | 460 | 230/208 | 230/208 | 460 | 230/208 | 230/208 | 460 |
| Rated Load Amps | 6.2/7.3 | 12.7/15.2 | 8.3/9.9 | 6.1 | 12.4/13.6 | 8.0/8.7 | 5.5 | 14.7/16.4 | 10.9/12.1 | 5.5 |
| Branch Circuit Selection Current | 9.0 | 15.2 | 9.9 | 6.1 | 14.2 | 9.0 | 5.7 | 18.0 | 13.3 | 6.0 |
| Lock Rotor Amps | 48/48 | 67/64 | 58/58 | 28 | 77/77 | 71/71 | 38 | 112/112 | 88/88 | 44 |
| Compressor Type | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll |
| Fan Motor & Condenser | | | | | | | | | | |
| Fan Motor--HP-RPM | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 | 1/5 - 1075 |
| Fan Motor--Amps | 1.2 | 1.2 | 1.2 | 1.4 | 1.5 | 1.5 | 1.4 | 1.5 | 1.5 | 1.4 |
| Fan--DIA/CFM | 18" - 1600 | 18" - 1600 | 18" - 1600 | 18" - 1600 | 20" - 2000 | 20" - 2000 | 20" - 2000 | 20" - 2000 | 20" - 2000 | 20" - 2000 |
| Motor & Evaporator | | | | | | | | | | |
| Blower Motor--HP/RPM/SPD | 1/6-1100-2 | 1/6-1100-1 | 1/6-1100-1 | 1/3-1100-2 | 1/3-1100-2 | 1/3-1100-2 | 1/3-1100-2 | 1/3-1100-2 | 1/3-1100-2 | 1/3-1100-2 |
| Blower Motor--Amps | 1.0 | 1.0 | 1.0 | 1.1 | 2.2 | 2.2 | 1.1 | 2.2 | 2.2 | 1.1 |
| CFM Cooling & E.S.P. w/Filter (Rated - Wet Coil) | 600 - .3 | 800 - .2 | 800 - .2 | 800 - .2 | 1000 - .4 | 1000 - .4 | 1000 - .4 | 1100 - .3 | 1100 - .3 | 1100 - .3 |
| Filter Sizes (inches) STD. | 16 x 25 x 1 | 16 x 25 x 1 | 16 x 25 x 1 | 16 x 25 x 1 | 16 x 30 x 1 | 16 x 30 x 1 | 16 x 30 x 1 | 16 x 30 x 1 | 16 x 30 x 1 | 16 x 30 x 1 |
| Shipping Weight --LBS. | 360 | 360 | 360 | 360 | 400 | 400 | 400 | 400 | 400 | 400 |

Specifications 3-1/2 through 5 Ton

| MODELS | W42H1-A | W42H1-B | W42H1-C | W48H1-A | W48H1-B | W48H1-C | W60H1-A | W60H1-B | W60H1-C |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Electrical Rating--60HZ | 230/208 - 1 | 230/208 - 3 | 460 - 3 | 230/208 - 1 | 230/208 - 3 | 460 - 3 | 230/208 - 1 | 230/208 - 3 | 460 - 3 |
| Operating Voltage Range | 197-253 | 197-253 | 414-506 | 197-253 | 197-253 | 414-506 | 197-253 | 197-253 | 414-506 |
| Compressor--Circuit A | | | | | | | | | |
| Voltage | 230/208 | 230/208 | 460 | 230/208 | 230/208 | 460 | 230/208 | 230/208 | 460 |
| Rated Load Amps | 18.4/21.5 | 11.6/13.5 | 6.1 | 19.5/21.2 | 13.6/14.7 | 6.6 | 21.5/25.3 | 12.8/15.1 | 7.6 |
| Branch Circuit Selection Current | 21.8 | 13.8 | 6.3 | 23.1 | 16.1 | 7.1 | 26.3 | 15.7 | 7.8 |
| Lock Rotor Amps | 117/117 | 84/84 | 41 | 131/131 | 91/91 | 46 | 134/134 | 110/110 | 52 |
| Compressor Type | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll |
| Fan Motor & Condenser | | | | | | | | | |
| Fan Motor--HP/RPM/SPD | 1/3 - 825 - 2 | 1/3 - 825 - 2 | 1/3 - 825 - 2 | 1/3 - 825 - 2 | 1/3 - 825 - 2 | 1/3 - 825 - 2 | 1/3 - 825 - 2 | 1/3 - 825 - 2 | 1/3 - 825 - 2 |
| Fan Motor--Amps | 2.5 | 2.5 | 1.3 | 2.5 | 2.5 | 1.3 | 2.5 | 2.5 | 1.3 |
| Fan--DIA/CFM | 24" - 2750 | 24" - 2750 | 24" - 2750 | 24" - 2750 | 24" - 2750 | 24" - 2750 | 24" - 2750 | 24" - 2750 | 24" - 2750 |
| Motor & Evaporator | | | | | | | | | |
| Blower Motor--HP/RPM/SPD | 1/2-1070-2 | 1/2-1070-2 | 1/2-1070-2 | 1/2-1070-2 | 1/2-1070-2 | 1/2-1070-2 | 1/2-1070-2 | 1/2-1070-2 | 1/2-1070-2 |
| Blower Motor--Amps | 3.3 | 3.3 | 1.9 | 3.3 | 3.3 | 1.9 | 3.3 | 3.3 | 1.9 |
| CFM Cooling & E.S.P. w/Filter (Rated - Wet Coil) | 1400 - .3 | 1400 - .3 | 1400 - .3 | 1550 - .2 | 1550 - .2 | 1550 - .2 | 1700 - .3 | 1700 - .3 | 1700 - .3 |
| Filter Sizes (inches) STD. | 20 x 30 x 1 | 20 x 30 x 1 | 20 x 30 x 1 | 20 x 30 x 1 | 20 x 30 x 1 | 20 x 30 x 1 | 20 x 30 x 1 | 20 x 30 x 1 | 20 x 30 x 1 |
| Shipping Weight --LBS. | 550 | 550 | 550 | 550 | 550 | 550 | 580 | 580 | 580 |

Ventilation System Packages

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



Barometric Fresh Air Damper

BAROMETRIC FRESH AIR DAMPER - BFAD

STANDARD

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



Motorized Fresh Air Damper

BLANK OFF PLATE - BOP

OPTIONAL

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

MOTORIZED FRESH AIR DAMPER - MFAD

OPTIONAL

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

NOTE: The above vent systems are intake only without built-in exhaust capability. Building will likely require separate field installed barometric relief or mechanical exhaust elsewhere within the conditioned space. Balancing dampers in the return air grille may be required to achieve specified amount of outdoor air intake.



Commercial Room Ventilator

COMMERCIAL ROOM VENTILATOR - CRV

OPTIONAL

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

The commercial room ventilator (CRV) is a simple and innovative approach to improving the indoor air quality by providing fresh air intake and exhaust capability through the CRV. The damper can be easily adjusted to control the amount of fresh air supplied into the building. The CRV can be controlled by indoor blower operation or field controlled based on room occupancy. Two versions available (except on 1.5 and 2-Ton models). The CRV and CRVS are power open - spring return on power loss, and CRVP is power open and power close. Complies with ANSI/ASHRAE Standard 62.1 "Ventilation for Acceptable Indoor Air Quality."



Economizer

ECONOMIZER - EIFM

OPTIONAL

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

Standard Features:

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



Energy Recovery Ventilator

WALL-MOUNT ENERGY RECOVERY VENTILATOR - ERVF

OPTIONAL

The wall-mount energy recovery ventilator (ERV) is a highly innovative approach to meeting indoor air quality ventilation requirements as established by ANSI/ASHRAE Standard 62.1. The ERV allows from 200 to 450 CFM (depending upon model) of fresh air and exhaust through the unit while maintaining superior indoor comfort and humidity levels. In most cases this can be accomplished without increasing equipment sizing or operating costs. Heat transfer efficiency is up to 67% during summer and 75% during winter conditions.

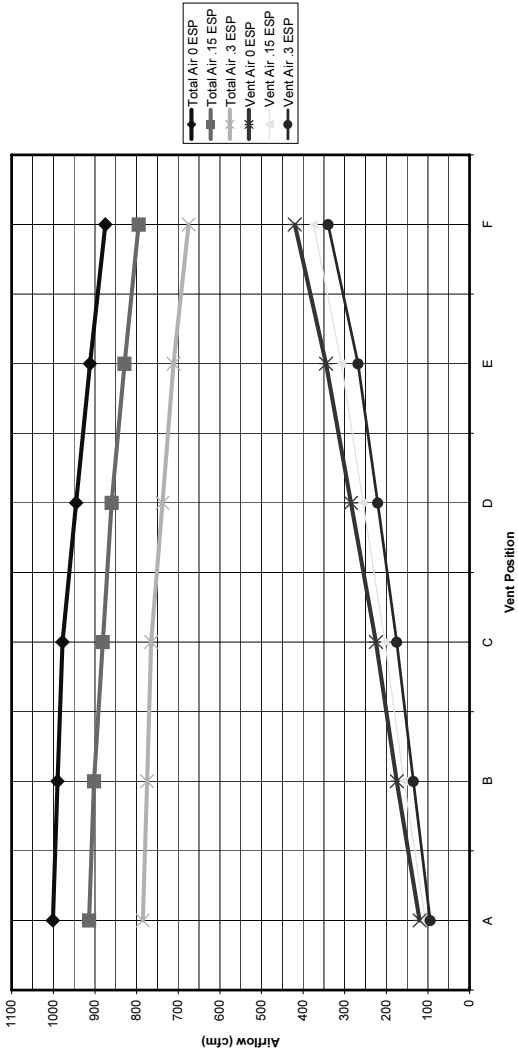
The ERV consists of a unique "rotary energy recovery cassette" that provides effective sensible and latent heat transfer capabilities during summer and winter conditions. Various control schemes are addressed including limiting ventilation during building occupancy only.

The ERV is designed to be internally mounted behind the service door in the W**A, W**H or W**L model wall-mount units. It can be built-in at the factory or field installed as an option. ERVF-*3 and ERVF-*5 can be independently adjusted for intake and exhaust rates.

Manufactured under U.S. Patent Nos. 5,485,878; 5,301,744.

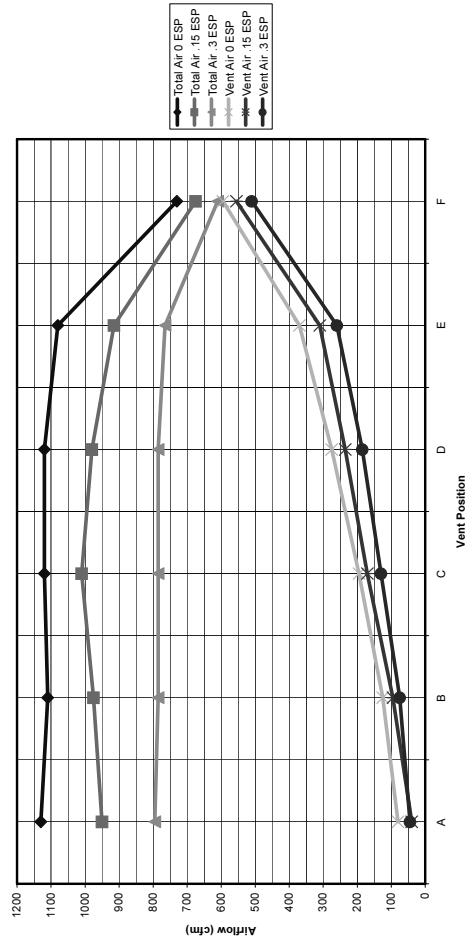
Commercial Room Ventilator Performance Data - CRV-2

W18 & W24 TOTAL AND VENTILATION AIRFLOW

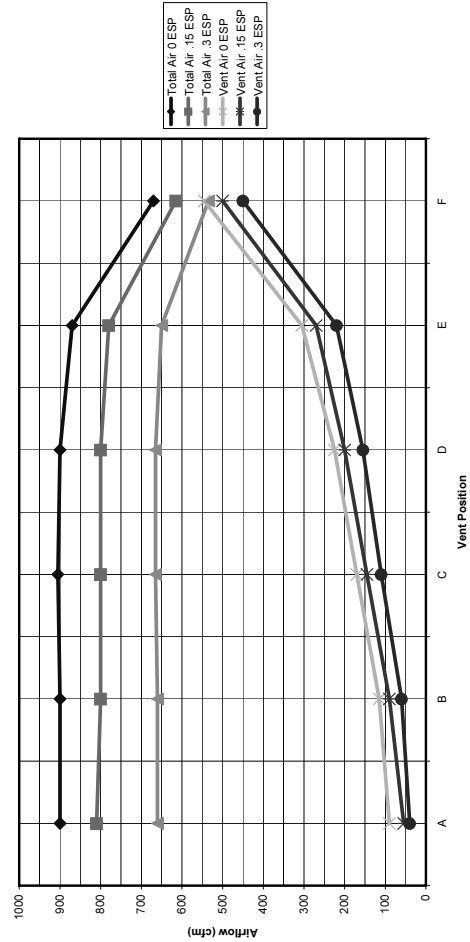


Commercial Room Ventilator Performance Data - CRVS-3 and CRVP-3

W30 & W36 HIGH SPEED TOTAL AND VENTILATION AIRFLOW

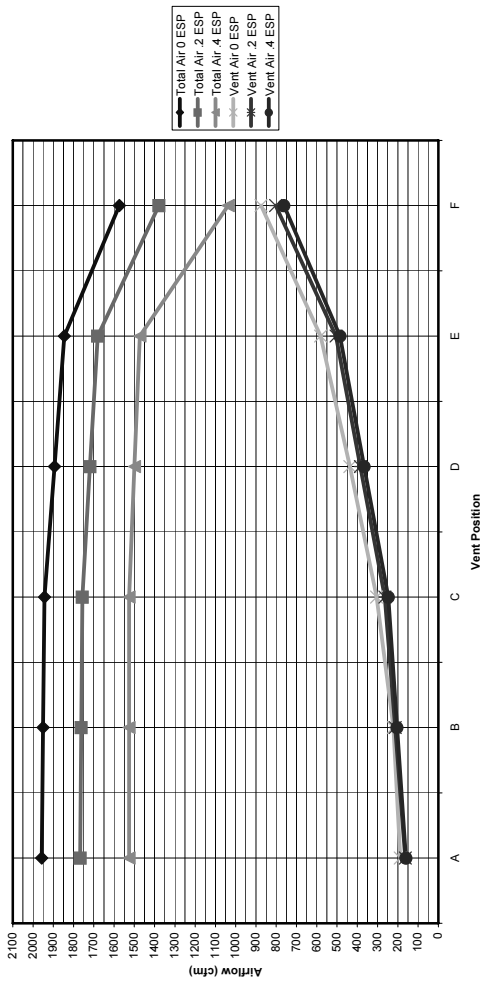


W30 & W36 LOW SPEED TOTAL AND VENTILATION AIRFLOW

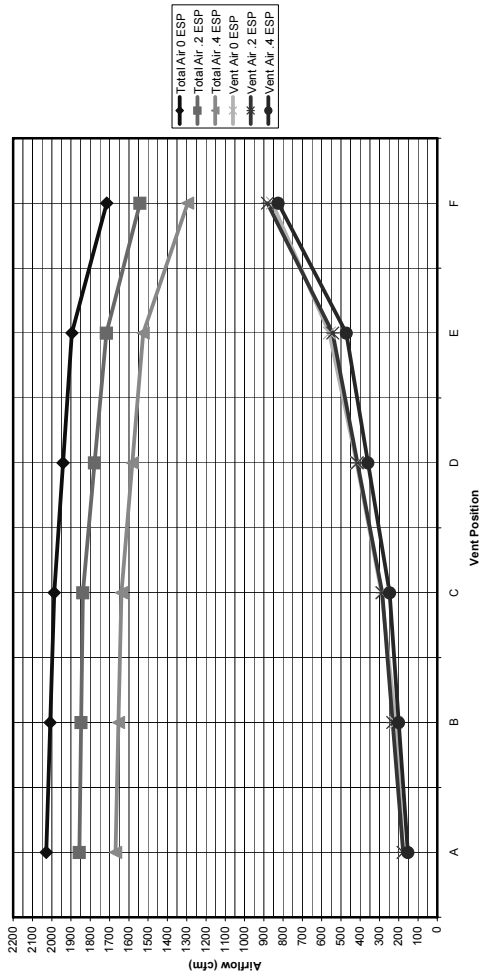


Commercial Room Ventilator Performance Data - CRVS-5 and CRVP-5

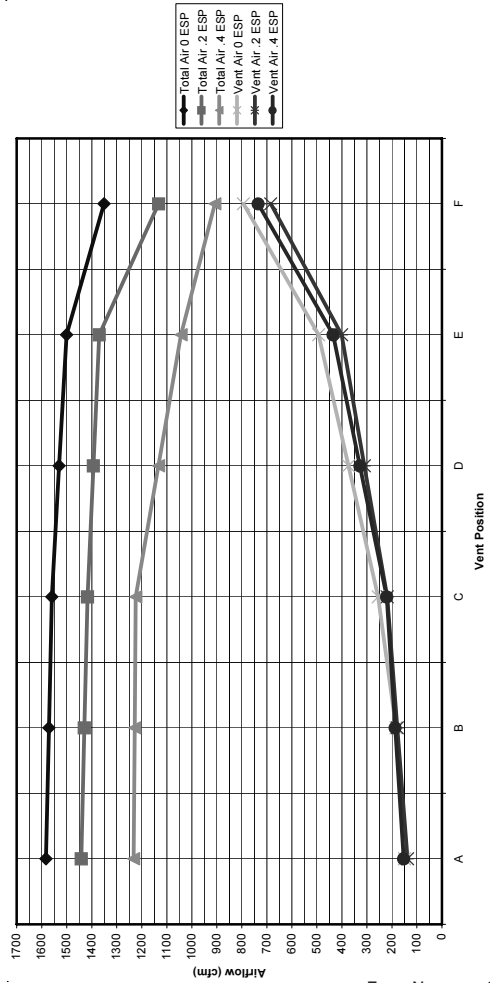
W42 & W48 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



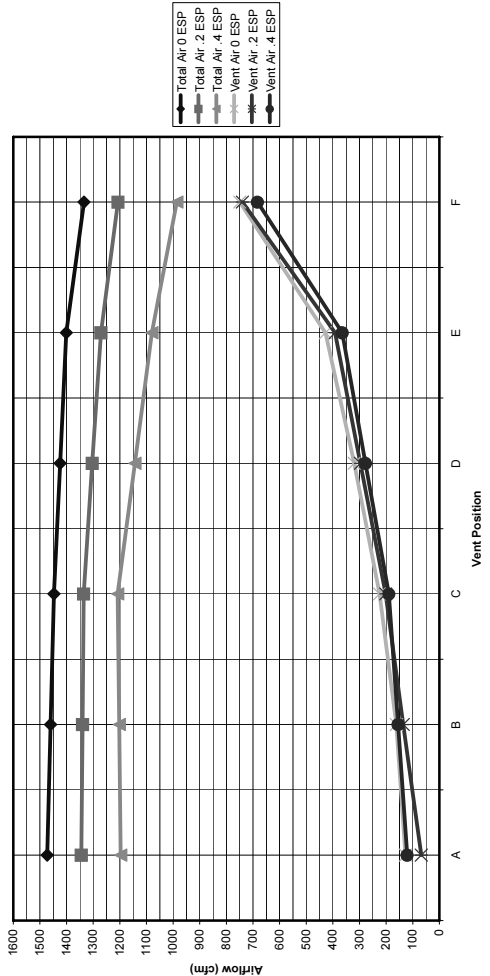
W60 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



W42 & W48 LOW SPEED TOTAL AND VENTILATION AIRFLOW



W60 LOW SPEED TOTAL AND VENTILATION AIRFLOW



Performance and Application Data- ERVF-*2B

SUMMER COOLING PERFORMANCE (INDOOR DESIGN CONDITIONS 75°DB/62°WB)

| Ambient O.D. | VENTILATION RATE -- 250 CFM 62% EFFICIENCY | | | | | | | VENTILATION RATE -- 225 CFM 63% EFFICIENCY | | | | | | VENTILATION RATE -- 200 CFM 63% EFFICIENCY | | | | | |
|--------------|---|-------|------|-------|-------|------|------|---|------|-------|------|------|------|---|------|-------|------|------|------|
| | DB/ WB | F | VLT | VLS | VLL | HRT | HRS | HRL | VLT | VLS | VLL | HRT | HRS | HRL | VLT | VLS | VLL | HRT | HRS |
| 105 | 75 | 11925 | 8100 | 1325 | 7394 | 5022 | 822 | 10727 | 7287 | 3441 | 6758 | 4591 | 2168 | 9540 | 6480 | 3060 | 6010 | 4082 | 1928 |
| | 70 | 8100 | 8100 | 0 | 5022 | 5022 | 0 | 7287 | 7287 | 0 | 4591 | 4591 | 0 | 6480 | 6480 | 0 | 4082 | 4082 | 0 |
| | 65 | 8100 | 8100 | 0 | 5022 | 5022 | 0 | 7287 | 7287 | 0 | 4591 | 4591 | 0 | 6480 | 6480 | 0 | 4082 | 4082 | 0 |
| 100 | 80 | 17550 | 6750 | 10800 | 10881 | 4185 | 6696 | 15788 | 6072 | 9716 | 9946 | 3826 | 6121 | 14040 | 5400 | 8640 | 8845 | 3402 | 5443 |
| | 75 | 11925 | 6750 | 5175 | 7394 | 4185 | 3209 | 10727 | 6072 | 4655 | 6758 | 3826 | 2933 | 9540 | 5400 | 4140 | 6010 | 3402 | 2608 |
| | 70 | 6863 | 6750 | 113 | 4255 | 4185 | 70 | 6173 | 6072 | 101 | 3889 | 3826 | 64 | 5490 | 5400 | 90 | 3458 | 3402 | 56 |
| | 65 | 6750 | 6750 | 0 | 4185 | 4185 | 0 | 6072 | 6072 | 0 | 3826 | 3826 | 0 | 5400 | 5400 | 0 | 3402 | 3402 | 0 |
| | 60 | 6750 | 6750 | 0 | 4185 | 4185 | 0 | 6072 | 6072 | 0 | 3826 | 3826 | 0 | 5400 | 5400 | 0 | 3402 | 3402 | 0 |
| 95 | 80 | 17550 | 5400 | 12150 | 10881 | 3348 | 7533 | 15788 | 4858 | 10930 | 9946 | 3060 | 6886 | 14040 | 4320 | 9720 | 8845 | 2722 | 6124 |
| | 75 | 11925 | 5400 | 6525 | 7394 | 3348 | 4046 | 10727 | 4858 | 5870 | 6758 | 3060 | 3698 | 9540 | 4320 | 5220 | 6010 | 2722 | 3289 |
| | 70 | 6863 | 5400 | 1463 | 4255 | 3348 | 907 | 6173 | 4858 | 1315 | 3889 | 3060 | 829 | 5490 | 4320 | 1170 | 3458 | 2722 | 737 |
| | 65 | 5400 | 5400 | 0 | 3348 | 3348 | 0 | 4858 | 4858 | 0 | 3060 | 3060 | 0 | 4320 | 4320 | 0 | 2722 | 2722 | 0 |
| | 60 | 5400 | 5400 | 0 | 3348 | 3348 | 0 | 4858 | 4858 | 0 | 3060 | 3060 | 0 | 4320 | 4320 | 0 | 2722 | 2722 | 0 |
| 90 | 80 | 17550 | 4050 | 13500 | 10881 | 2511 | 8370 | 15788 | 3643 | 12145 | 9946 | 2295 | 7651 | 14040 | 3240 | 10800 | 8845 | 2041 | 6804 |
| | 75 | 11925 | 4050 | 7875 | 7394 | 2511 | 4883 | 10727 | 3643 | 7084 | 6758 | 2295 | 4463 | 9540 | 3240 | 6300 | 6010 | 2041 | 3969 |
| | 70 | 6863 | 4050 | 2813 | 4255 | 2511 | 1744 | 6173 | 3643 | 2530 | 3889 | 2295 | 1594 | 5490 | 3240 | 2250 | 3458 | 2041 | 1417 |
| | 65 | 4050 | 4050 | 0 | 2511 | 2511 | 0 | 3643 | 3643 | 0 | 2295 | 2295 | 0 | 3240 | 3240 | 0 | 2041 | 2041 | 0 |
| | 60 | 4050 | 4050 | 0 | 2511 | 2511 | 0 | 3643 | 3643 | 0 | 2295 | 2295 | 0 | 3240 | 3240 | 0 | 2041 | 2041 | 0 |
| 85 | 80 | 17550 | 2700 | 14850 | 10881 | 1674 | 9207 | 15788 | 2429 | 13359 | 9946 | 1530 | 8416 | 14040 | 2160 | 11880 | 8845 | 1361 | 7484 |
| | 75 | 11925 | 2700 | 9225 | 7394 | 1674 | 5720 | 10727 | 2429 | 8298 | 6758 | 1530 | 5228 | 9540 | 2160 | 7380 | 6010 | 1361 | 4649 |
| | 70 | 6863 | 2700 | 4163 | 4255 | 1674 | 2581 | 6173 | 2429 | 3744 | 3889 | 1530 | 2359 | 5490 | 2160 | 3300 | 3458 | 1361 | 2098 |
| | 65 | 2700 | 2700 | 0 | 1674 | 1674 | 0 | 2429 | 2429 | 0 | 1530 | 1530 | 0 | 2160 | 2160 | 0 | 1361 | 1361 | 0 |
| | 60 | 2700 | 2700 | 0 | 1674 | 1674 | 0 | 2429 | 2429 | 0 | 1530 | 1530 | 0 | 2160 | 2160 | 0 | 1361 | 1361 | 0 |
| 80 | 75 | 11925 | 1350 | 10575 | 7394 | 837 | 6557 | 10727 | 1214 | 9513 | 6758 | 765 | 5993 | 9540 | 1080 | 8460 | 6010 | 680 | 5330 |
| | 70 | 6863 | 1350 | 5513 | 4255 | 837 | 3418 | 6173 | 1214 | 4959 | 3889 | 765 | 3124 | 5490 | 1080 | 4410 | 3458 | 680 | 2778 |
| | 65 | 2363 | 1350 | 1013 | 1465 | 837 | 628 | 2125 | 1214 | 911 | 1339 | 765 | 547 | 1890 | 1080 | 810 | 1190 | 680 | 510 |
| | 60 | 1350 | 1350 | 0 | 837 | 837 | 0 | 1214 | 1214 | 0 | 765 | 765 | 0 | 1080 | 1080 | 0 | 680 | 680 | 0 |
| 75 | 70 | 6863 | 0 | 6863 | 4255 | 0 | 4255 | 6173 | 0 | 6173 | 6889 | 0 | 3889 | 5490 | 0 | 5490 | 3458 | 0 | 3458 |
| | 65 | 2363 | 0 | 2363 | 1465 | 0 | 1465 | 2125 | 0 | 2125 | 1339 | 0 | 1339 | 1890 | 0 | 1890 | 1190 | 0 | 1190 |
| | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ERVF-A2 WINTER HEATING PERFORMANCE (INDOOR DESIGN CONDITIONS 70°F DB)

| Ambient O.D. | VENTILATION RATE | | | | | |
|--------------|---------------------|-------|---------------------|-------|---------------------|------|
| | 250 CFM 74% EFF. | | 225 CFM 75% EFF. | | 200 CFM 75% EFF. | |
| DB/°F | WVL | WHR | WVL | WHR | WVL | WHR |
| 65 | 1350 | 999 | 1214 | 911 | 1080 | 810 |
| 60 | 2700 | 1998 | 2429 | 1822 | 2160 | 1620 |
| 55 | 4050 | 2997 | 3643 | 2733 | 3240 | 2430 |
| 50 | 5400 | 3996 | 4858 | 3643 | 4320 | 3240 |
| 45 | 6750 | 4995 | 6072 | 4554 | 5400 | 4050 |
| 40 | 8100 | 5994 | 7287 | 5465 | 6480 | 4860 |
| 35 | 9450 | 6993 | 8501 | 6376 | 7560 | 5670 |
| 30 | 10800 | 7992 | 9716 | 7287 | 8640 | 6480 |
| 25 | 12150 | 8991 | 10930 | 8198 | 9720 | 7290 |
| 20 | 13500 | 9990 | 12145 | 9108 | 10800 | 8100 |
| 15 | 14850 | 10989 | 13359 | 10019 | 11880 | 8910 |

LEGEND:

- VLT = Ventilation Load - Total
- VLS = Ventilation Load - Sensible
- VLL = Ventilation Load - Latent
- HRT = Heat Recovery - Total
- HRS = Heat Recovery - Sensible
- HRL = Heat Recovery - Latent
- WVL = Winter Ventilation Load
- WHR = Winter Heat Recovery

NOTE: Sensible performance only is shown for winter application.

Performance and Application Data- ERVF-*3C

SUMMER COOLING PERFORMANCE (INDOOR DESIGN CONDITIONS 75°DB/62°WB)

| Ambient O.D. | VENTILATION RATE -- 400CFM 63% EFFICIENCY | | | | | | VENTILATION RATE -- 325 CFM 64% EFFICIENCY | | | | | | VENTILATION RATE -- 250 CFM 65% EFFICIENCY | | | | | | |
|-----------------|--|-------|-------|-------|-------|------|---|-------|-------|-------|-------|------|---|-------|------|-------|-------|------|------|
| | DB/ WB | F | VLT | VLS | VLL | HRT | HRS | HRL | VLT | VLS | VLL | HRT | HRS | HRL | VLT | VLS | VLL | HRT | HRS |
| 105 | 75 | 19080 | 12960 | 6120 | 12020 | 8164 | 3855 | 15502 | 10530 | 4972 | 9921 | 6739 | 3182 | 11925 | 8100 | 3825 | 7751 | 5265 | 2486 |
| | 70 | 12960 | 12960 | 0 | 8164 | 8164 | 0 | 10530 | 10530 | 0 | 6739 | 6739 | 0 | 8100 | 8100 | 0 | 5265 | 5265 | 0 |
| | 65 | 12960 | 12960 | 0 | 8164 | 8164 | 0 | 10530 | 10530 | 0 | 6739 | 6739 | 0 | 8100 | 8100 | 0 | 5265 | 5265 | 0 |
| 100 | 80 | 28080 | 10800 | 17280 | 17690 | 6804 | 10886 | 22815 | 8775 | 14040 | 14601 | 5616 | 8985 | 17550 | 6750 | 10800 | 11407 | 4387 | 7019 |
| | 75 | 19080 | 10800 | 8280 | 12020 | 6804 | 5216 | 15502 | 8775 | 6727 | 9921 | 5616 | 4305 | 11925 | 6750 | 5175 | 7751 | 4387 | 3363 |
| | 70 | 10980 | 10800 | 180 | 6717 | 6804 | 113 | 8921 | 8775 | 146 | 5709 | 5616 | 93 | 6862 | 6750 | 112 | 4460 | 4387 | 73 |
| | 65 | 10800 | 10800 | 0 | 6804 | 6804 | 0 | 8775 | 8775 | 0 | 5616 | 5616 | 0 | 6750 | 6750 | 0 | 4387 | 4387 | 0 |
| | 60 | 10800 | 10800 | 0 | 6804 | 6804 | 0 | 8775 | 8775 | 0 | 5616 | 5616 | 0 | 6750 | 6750 | 0 | 4387 | 4387 | 0 |
| 95 | 80 | 28080 | 8640 | 19440 | 17690 | 5443 | 12247 | 22815 | 7020 | 15795 | 14601 | 4492 | 10108 | 17550 | 5400 | 12150 | 11407 | 3510 | 7897 |
| | 75 | 19080 | 8640 | 10440 | 12020 | 5443 | 6577 | 15502 | 7020 | 8482 | 9921 | 4492 | 5428 | 11925 | 5400 | 6525 | 7751 | 3510 | 4241 |
| | 70 | 10980 | 8640 | 2340 | 6917 | 5443 | 1474 | 8921 | 7020 | 1901 | 5709 | 4492 | 1216 | 6862 | 5400 | 1462 | 4460 | 3510 | 950 |
| | 65 | 8640 | 8640 | 0 | 5443 | 5443 | 0 | 7020 | 7020 | 0 | 4492 | 4492 | 0 | 5400 | 5400 | 0 | 3510 | 3510 | 0 |
| | 60 | 8640 | 8640 | 0 | 5443 | 5443 | 0 | 7020 | 7020 | 0 | 4492 | 4492 | 0 | 5400 | 5400 | 0 | 3510 | 3510 | 0 |
| 90 | 80 | 28080 | 6480 | 21600 | 17690 | 4082 | 13608 | 22815 | 5265 | 17550 | 14601 | 3369 | 11232 | 17550 | 4050 | 13500 | 11407 | 2632 | 8774 |
| | 75 | 19080 | 6480 | 12600 | 12020 | 4082 | 7938 | 15502 | 5265 | 10237 | 9921 | 3369 | 6552 | 11925 | 4050 | 7875 | 7751 | 2632 | 5118 |
| | 70 | 10980 | 6480 | 4500 | 6917 | 4082 | 2835 | 8921 | 5265 | 3656 | 5709 | 3369 | 2340 | 6862 | 4050 | 2812 | 4460 | 2632 | 1828 |
| | 65 | 6480 | 6480 | 0 | 4082 | 4082 | 0 | 5265 | 5265 | 0 | 3369 | 3369 | 0 | 4050 | 4050 | 0 | 2632 | 2632 | 0 |
| | 60 | 6480 | 6480 | 0 | 4082 | 4082 | 0 | 5265 | 5265 | 0 | 3369 | 3369 | 0 | 4050 | 4050 | 0 | 2632 | 2632 | 0 |
| 85 | 80 | 28080 | 4320 | 23760 | 17690 | 2721 | 14968 | 22815 | 3510 | 19305 | 14601 | 2246 | 12355 | 17550 | 2700 | 14850 | 11407 | 1755 | 9652 |
| | 75 | 19080 | 4320 | 14760 | 12020 | 2721 | 9298 | 15502 | 3510 | 11992 | 9921 | 2246 | 7675 | 11925 | 2700 | 9225 | 7751 | 1755 | 5996 |
| | 70 | 10980 | 4320 | 6660 | 6917 | 2721 | 4195 | 8921 | 3510 | 5411 | 5709 | 2246 | 3463 | 6862 | 2700 | 4162 | 4460 | 1755 | 2705 |
| | 65 | 4320 | 4320 | 0 | 2721 | 2721 | 0 | 3510 | 3510 | 0 | 2246 | 2246 | 0 | 2700 | 2700 | 0 | 1755 | 1755 | 0 |
| | 60 | 4320 | 4320 | 0 | 2721 | 2721 | 0 | 3510 | 3510 | 0 | 2246 | 2246 | 0 | 2700 | 2700 | 0 | 1755 | 1755 | 0 |
| 80 | 75 | 19080 | 2160 | 16920 | 12020 | 1360 | 10659 | 15502 | 1755 | 13747 | 9921 | 1123 | 8798 | 11925 | 1350 | 10575 | 7751 | 877 | 6873 |
| | 70 | 10980 | 2160 | 8820 | 6917 | 1360 | 5556 | 8921 | 1755 | 7166 | 5709 | 1123 | 4586 | 6862 | 1350 | 5512 | 4460 | 877 | 3583 |
| | 65 | 3780 | 2160 | 1620 | 2381 | 1360 | 1020 | 3071 | 1755 | 1316 | 1965 | 1123 | 842 | 2362 | 1350 | 1012 | 1535 | 877 | 658 |
| | 60 | 2160 | 2160 | 0 | 1360 | 1360 | 0 | 1755 | 1755 | 0 | 1123 | 1123 | 0 | 1350 | 1350 | 0 | 877 | 877 | 0 |
| 75 | 70 | 10980 | 0 | 10980 | 6917 | 0 | 6917 | 8921 | 0 | 8921 | 5709 | 0 | 5709 | 6862 | 0 | 6862 | 4460 | 0 | 4460 |
| | 65 | 3780 | 0 | 3780 | 2381 | 0 | 2380 | 3071 | 0 | 3071 | 1965 | 0 | 1965 | 2362 | 0 | 2362 | 1535 | 0 | 1535 |
| | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ERVF-*3 WINTER HEATING PERFORMANCE (INDOOR DESIGN CONDITIONS 70°F DB)

| Ambient O.D. | VENTILATION RATE | | | | | |
|-----------------|---------------------------|-------|---------------------------|-------|---------------------------|-------|
| | 400 CFM 75% EFFICIENCY | | 325 CFM 76% EFFICIENCY | | 250 CFM 77% EFFICIENCY | |
| DB/°F | WVL | WHR | WVL | WHR | WVL | WHR |
| 65 | 2160 | 1620 | 1755 | 1333 | 1350 | 1039 |
| 60 | 4320 | 3240 | 3510 | 2667 | 2700 | 2079 |
| 55 | 6480 | 4860 | 5265 | 4001 | 4050 | 3118 |
| 50 | 8640 | 6480 | 7020 | 5335 | 5400 | 4158 |
| 45 | 10800 | 8100 | 8775 | 6669 | 6750 | 5197 |
| 40 | 12960 | 9720 | 10530 | 8002 | 8100 | 6237 |
| 35 | 15120 | 11340 | 12285 | 9336 | 9450 | 7276 |
| 30 | 17280 | 12960 | 14040 | 10670 | 10800 | 8316 |
| 25 | 19440 | 14580 | 15795 | 12004 | 12150 | 9355 |
| 20 | 21600 | 16200 | 17550 | 13338 | 13500 | 10395 |
| 15 | 23760 | 17820 | 19305 | 14671 | 14850 | 11434 |

LEGEND:

VLT = Ventilation Load - Total
VLS = Ventilation Load - Sensible
VLL = Ventilation Load - Latent
HRT = Heat Recovery - Total
HRS = Heat Recovery - Sensible
HRL = Heat Recovery - Latent
WVL = Winter Ventilation Load
WHR = Winter Heat Recovery

NOTE: Sensible performance only is shown for winter application.

Performance and Application Data- ERVF-*5C

SUMMER COOLING PERFORMANCE (INDOOR DESIGN CONDITIONS 75°DB/62°WB)

| Ambient O.D. | VENTILATION RATE 450 CFM 65% EFFICIENCY | | | | | | VENTILATION RATE 375 CFM 66% EFFICIENCY | | | | | | VENTILATION RATE 300 CFM 67% EFFICIENCY | | | | | | | |
|--------------|--|---|-------|-------|-------|-------|--|-------|-------|-------|-------|-------|--|-------|-------|------|-------|-------|------|-------|
| | DB/ WB | F | VLT | VLS | VLL | HRT | HRS | HRL | VLT | VLS | VLL | HRT | HRS | HRL | VLT | VLS | VLL | HRT | HRS | HRL |
| 105 | 75 | | 21465 | 14580 | 6884 | 13952 | 9477 | 4475 | 17887 | 12150 | 5737 | 11805 | 8018 | 3786 | 14310 | 9720 | 4590 | 9587 | 6512 | 3075 |
| | 70 | | 14580 | 14580 | 0 | 9477 | 9477 | 0 | 12150 | 12150 | 0 | 8018 | 8018 | 0 | 9720 | 9720 | 0 | 6512 | 6512 | 0 |
| | 65 | | 14580 | 14580 | 0 | 9477 | 9477 | 0 | 12150 | 12150 | 0 | 8018 | 8018 | 0 | 9720 | 9720 | 0 | 6512 | 6512 | 0 |
| 100 | 80 | | 31590 | 12150 | 19440 | 20533 | 7897 | 12635 | 26325 | 10125 | 16200 | 17374 | 6682 | 10692 | 21060 | 8100 | 12960 | 14110 | 5427 | 8683 |
| | 75 | | 21465 | 12150 | 9314 | 13952 | 7897 | 6054 | 17887 | 10125 | 7762 | 11805 | 6682 | 5123 | 14310 | 8100 | 6210 | 9587 | 5427 | 4160 |
| | 70 | | 12352 | 12150 | 202 | 8029 | 7897 | 131 | 10293 | 10125 | 168 | 6793 | 6682 | 111 | 8235 | 8100 | 135 | 5517 | 5427 | 90 |
| | 65 | | 12150 | 12150 | 0 | 7897 | 7897 | 0 | 10125 | 10125 | 0 | 6682 | 6682 | 0 | 8100 | 8100 | 0 | 5427 | 5427 | 0 |
| | 60 | | 12150 | 12150 | 0 | 7897 | 7897 | 0 | 10125 | 10125 | 0 | 6682 | 6682 | 0 | 8100 | 8100 | 0 | 5427 | 5427 | 0 |
| 95 | 80 | | 31590 | 9720 | 21870 | 20533 | 6318 | 14215 | 26325 | 8100 | 18225 | 17374 | 5345 | 12028 | 21060 | 6480 | 14580 | 14110 | 4341 | 9768 |
| | 75 | | 21465 | 9720 | 11744 | 13952 | 6318 | 7634 | 17887 | 8100 | 9787 | 11805 | 5345 | 6459 | 14310 | 6480 | 7830 | 9587 | 4341 | 5246 |
| | 70 | | 12352 | 9720 | 2632 | 8029 | 6318 | 1711 | 10293 | 8100 | 2193 | 6793 | 5345 | 1447 | 8235 | 6480 | 1755 | 5517 | 4341 | 1175 |
| | 65 | | 9720 | 9720 | 0 | 6318 | 6318 | 0 | 8100 | 8100 | 0 | 5345 | 5345 | 0 | 6480 | 6480 | 0 | 4341 | 4341 | 0 |
| | 60 | | 9720 | 9720 | 0 | 6318 | 6318 | 0 | 8100 | 8100 | 0 | 5345 | 5345 | 0 | 6480 | 6480 | 0 | 4341 | 4341 | 0 |
| 90 | 80 | | 31590 | 7290 | 24300 | 20533 | 4738 | 15794 | 26325 | 6075 | 20250 | 17374 | 4009 | 13365 | 21060 | 4860 | 16200 | 14110 | 3256 | 10854 |
| | 75 | | 21465 | 7290 | 14175 | 13952 | 4738 | 9213 | 17887 | 6075 | 11812 | 11805 | 4009 | 7796 | 14310 | 4860 | 9450 | 9587 | 3256 | 6331 |
| | 70 | | 12352 | 7290 | 5062 | 8029 | 4738 | 3290 | 10293 | 6075 | 4218 | 6793 | 4009 | 2784 | 8235 | 4860 | 3375 | 5517 | 3256 | 2261 |
| | 65 | | 7290 | 7290 | 0 | 4738 | 4738 | 0 | 6075 | 6075 | 0 | 4009 | 4009 | 0 | 4860 | 4860 | 0 | 3256 | 3256 | 0 |
| | 60 | | 7290 | 7290 | 0 | 4738 | 4738 | 0 | 6075 | 6075 | 0 | 4009 | 4009 | 0 | 4860 | 4860 | 0 | 3256 | 3256 | 0 |
| 85 | 80 | | 31590 | 4860 | 26730 | 20533 | 3159 | 17374 | 26325 | 4050 | 22275 | 17374 | 2672 | 14701 | 21060 | 3240 | 17820 | 14110 | 2170 | 11939 |
| | 75 | | 21465 | 4860 | 16605 | 13952 | 3159 | 10793 | 17887 | 4050 | 13837 | 11805 | 2672 | 9132 | 14310 | 3240 | 11070 | 9587 | 2170 | 7416 |
| | 70 | | 12352 | 4860 | 7492 | 8029 | 3159 | 4870 | 10293 | 4050 | 6243 | 6793 | 2672 | 4120 | 8235 | 3240 | 4995 | 5517 | 2170 | 3346 |
| | 65 | | 4860 | 4860 | 0 | 3159 | 3159 | 0 | 4050 | 4050 | 0 | 2672 | 2672 | 0 | 3240 | 3240 | 0 | 2170 | 2170 | 0 |
| | 60 | | 4860 | 4860 | 0 | 3159 | 3159 | 0 | 4050 | 4050 | 0 | 2672 | 2672 | 0 | 3240 | 3240 | 0 | 2170 | 2170 | 0 |
| 80 | 75 | | 21465 | 2430 | 19035 | 13952 | 1579 | 12372 | 17887 | 2025 | 15862 | 11805 | 1336 | 10469 | 14310 | 1620 | 12690 | 9587 | 1085 | 8502 |
| | 70 | | 12352 | 2430 | 9922 | 8029 | 1579 | 6449 | 10293 | 2025 | 8268 | 6793 | 1336 | 5457 | 8235 | 1620 | 6615 | 5517 | 1085 | 4432 |
| | 65 | | 4252 | 2430 | 1822 | 2764 | 1579 | 1184 | 3543 | 2025 | 1518 | 2338 | 1336 | 1002 | 2835 | 1620 | 1215 | 1899 | 1085 | 814 |
| | 60 | | 2430 | 2430 | 0 | 1579 | 1579 | 0 | 2025 | 2025 | 0 | 1336 | 1336 | 0 | 1620 | 1620 | 0 | 1085 | 1085 | 0 |
| 75 | 70 | | 12352 | 0 | 12352 | 8029 | 0 | 8029 | 10293 | 0 | 10293 | 6793 | 0 | 6793 | 8235 | 0 | 8235 | 5517 | 0 | 5517 |
| | 65 | | 4252 | 0 | 4252 | 2764 | 0 | 2764 | 3543 | 0 | 3543 | 2338 | 0 | 2338 | 2835 | 0 | 2835 | 1899 | 0 | 1899 |
| | 60 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ERVF-*5 WINTER HEATING PERFORMANCE (INDOOR DESIGN CONDITIONS 70°F DB)

| Ambient O.D. | VENTILATION RATE | | | | | |
|--------------|---------------------------|-------|---------------------------|-------|---------------------------|-------|
| | 450 CFM 80% EFFICIENCY | | 375 CFM 81% EFFICIENCY | | 300 CFM 82% EFFICIENCY | |
| DB/°F | WVL | WHR | WVL | WHR | WVL | WHR |
| 65 | 2430 | 1944 | 2025 | 1640 | 1620 | 1328 |
| 60 | 4860 | 3888 | 4050 | 3280 | 3240 | 2656 |
| 55 | 7290 | 5832 | 6075 | 4920 | 4860 | 3985 |
| 50 | 9720 | 7776 | 8100 | 6561 | 6480 | 5313 |
| 45 | 12150 | 9720 | 10125 | 8201 | 8100 | 6642 |
| 40 | 14580 | 11664 | 12150 | 9841 | 9720 | 7970 |
| 35 | 17010 | 13608 | 14175 | 11481 | 11340 | 9298 |
| 30 | 19440 | 15552 | 16200 | 13122 | 12960 | 10627 |
| 25 | 21870 | 17496 | 18225 | 14762 | 14580 | 11955 |
| 20 | 24300 | 19440 | 20250 | 16402 | 16200 | 13284 |
| 15 | 26730 | 21384 | 22275 | 18042 | 17820 | 14612 |

LEGEND:

VLT = Ventilation Load - Total
VLS = Ventilation Load - Sensible
VLL = Ventilation Load - Latent
HRT = Heat Recovery - Total
HRS = Heat Recovery - Sensible
HRL = Heat Recovery - Latent
WVL = Winter Ventilation Load
WHR = Winter Heat Recovery

NOTE: Sensible performance only is shown for winter application.

Clearances Required for Service Access and Adequate Condenser Airflow

| MODELS | LEFT SIDE | RIGHT SIDE |
|----------------------------|-----------|------------|
| W18H1, W24H1, W30H1, W36H1 | 15" | 20" |
| W42H1, W48H1, W60H1 | 20" | 20" |

Minimum Clearances Required to Combustible Materials

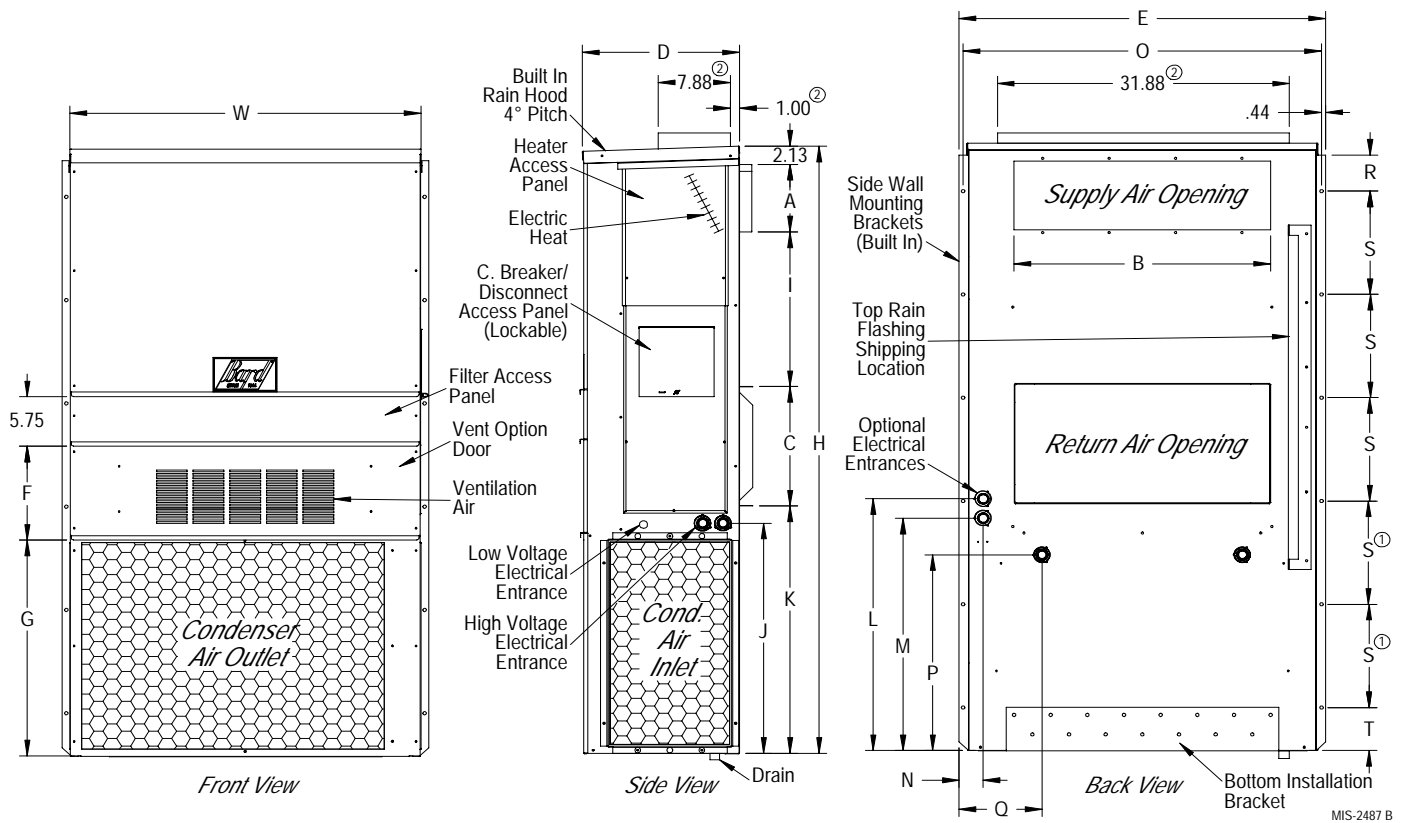
| MODELS ① | SUPPLY AIR DUCT FIRST THREE FEET | CABINET |
|---------------------|----------------------------------|---------|
| W18H1, W24H1 | 0" | 0" |
| W30H1, W36H1 | 1/4" | 0" |
| W42H1, W48H1, W60H1 | 1/4" | 0" |

① Refer to the Installation Manual for more detailed information.

Dimensions of Basic Unit for Architectural and Installation Requirements (Nominal)

| MODEL | WIDTH (W) | DEPTH (D) | HEIGHT (H) | SUPPLY | | RETURN | | | | | | | | | | | | | | | | |
|----------------|-----------|-----------|------------|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|-------|------|
| | | | | A | B | C | B | E | F | G | I | J | K | L | M | N | O | P | Q | R | S | T |
| W18H1 W24H1 | 33.300 | 17.125 | 70.563 | 7.88 | 19.88 | 11.88 | 19.88 | 35.00 | 10.88 | 25.75 | 20.56 | 26.75 | 28.06 | 29.25 | 27.00 | 2.63 | 34.13 | 22.06 | 10.55 | 5.00 | 12.00 | 5.00 |
| W30H1 W36H1 | 38.200 | 17.125 | 70.563 | 7.88 | 27.88 | 13.88 | 27.88 | 40.00 | 10.88 | 25.75 | 17.93 | 26.75 | 28.75 | 29.25 | 27.00 | 2.63 | 39.13 | 22.75 | 9.14 | 5.00 | 12.00 | 5.00 |
| W42H1 W48H1 | 42.075 | 22.432 | 84.875 | 9.88 | 29.88 | 15.88 | 29.88 | 43.88 | 13.56 | 31.66 | 30.00 | 32.68 | 26.94 | 34.69 | 32.43 | 3.37 | 43.00 | 23.88 | 10.00 | 1.44 | 16.00 | 1.88 |
| W60H1 | 42.075 | 22.432 | 94.875 | 9.88 | 29.88 | 15.88 | 29.88 | 43.88 | 13.56 | 41.66 | 30.00 | 42.68 | 36.94 | 44.69 | 42.43 | 3.37 | 43.00 | 33.88 | 10.00 | 1.44 | 16.00 | 1.88 |

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



① 21.00" for model W60H1.
 ② Top supply opening is optional and available factory-built only on models W30H1 and W36H1.

Electrical Specifications — Standard Heat Pumps

| Model | Rated Volts and Phase | No. Field Power Circuits | Single Circuit | | | | Dual Circuit | | | | | | | |
|--|-----------------------|--------------------------|----------------------------|---------------------------------------|-------------------------|---------------|----------------------------|--------|---|--------|-------------------------|--------|--------------------|--------|
| | | | ① Minimum Circuit Ampacity | ② Maximum External Fuse or Ckt. Brkr. | ③ Field Power Wire Size | ④ Ground Wire | ① Minimum Circuit Ampacity | | ② Maximum External Fuse or Ckt. Breaker | | ③ Field Power Wire Size | | ④ Ground Wire Size | |
| | | | | | | | Ckt. A | Ckt. B | Ckt. A | Ckt. B | Ckt. A | Ckt. B | Ckt. A | Ckt. B |
| W18H1- A00, A0Z A04 A08 | 230/208-1 | 1 | 16 | 20 | 12 | 12 | | | | | | | | |
| | | 1 | 37 | 40 | 8 | 10 | | | | | | | | |
| | | 1 | 58 | 60 | 6 | 10 | | | | | | | | |
| W24H1- A00, A0Z A04 A08 | 230/208-1 | 1 | 24 | 25 | 10 | 10 | | | | | | | | |
| | | 1 | 44 | 50 | 8 | 10 | | | | | | | | |
| | | 1 or 2 | 65 | 70 | 6 | 8 | 44 | 21 | 45 | 25 | 8 | 10 | 10 | 10 |
| W24H1- B00, B0Z B06 | 230/208-3 | 1 | 17 | 20 | 12 | 12 | | | | | | | | |
| | | 1 | 35 | 40 | 8 | 10 | | | | | | | | |
| W24H1- C00, C0Z C06 | 460-3 | 1 | 11 | 15 | 14 | 14 | | | | | | | | |
| | | 1 | 21 | 25 | 10 | 10 | | | | | | | | |
| W30H1- A00, A0Z* A05* A10* | 230/208-1 | 1 | 24 | 35 | 8 | 10 | | | | | | | | |
| | | 1 | 50 | 50 | 8 | 10 | | | | | | | | |
| | | 1 or 2 | 76 | 80 | 4 | 8 | 50 | 26 | 50 | 30 | 8 | 10 | 10 | 10 |
| W30H1- B00, B0Z* B06 B09* | 230/208-3 | 1 | 18 | 25 | 10 | 10 | | | | | | | | |
| | | 1 | 36 | 40 | 8 | 10 | | | | | | | | |
| | | 1 | 45 | 45 | 8 | 10 | | | | | | | | |
| W30H1- C00, C0Z* C06 C09* ③ C15 | 460-3 | 1 | 11 | 15 | 14 | 14 | | | | | | | | |
| | | 1 | 20 | 20 | 12 | 12 | | | | | | | | |
| | | 1 | 25 | 25 | 10 | 10 | | | | | | | | |
| | | 1 | 26 | 30 | 10 | 10 | | | | | | | | |
| W36H1- A00, A0Z* A05 A10* A15 | 230/208-1 | 1 | 29 | 40 | 8 | 10 | | | | | | | | |
| | | 1 | 55 | 60 | 6 | 10 | | | | | | | | |
| | | 1 or 2 | 81 | 90 | 4 | 8 | 55 | 26 | 60 | 30 | 6 | 10 | 10 | 10 |
| | | 1 or 2 | 84 | 90 | 4 | 8 | 55 | 52 | 60 | 60 | 6 | 6 | 10 | 10 |
| W36H1- B00, B0Z* B06 B09* ③ B15 | 230/208-3 | 1 | 23 | 30 | 10 | 10 | | | | | | | | |
| | | 1 | 41 | 45 | 8 | 10 | | | | | | | | |
| | | 1 | 50 | 50 | 8 | 10 | | | | | | | | |
| | | 1 | 51 | 60 | 8 | 10 | | | | | | | | |
| W36H1- C00, C0Z* C06 C09* ③ C15 | 460-3 | 1 | 12 | 15 | 14 | 14 | | | | | | | | |
| | | 1 | 21 | 25 | 10 | 10 | | | | | | | | |
| | | 1 | 25 | 25 | 10 | 10 | | | | | | | | |
| | | 1 | 26 | 30 | 10 | 10 | | | | | | | | |
| W42H1- A00, A0Z A04 A05 A10 ④ A15 | 230/208-1 | 1 | 36 | 50 | 8 | 10 | | | | | | | | |
| | | 1 | 57 | 60 | 6 | 10 | | | | | | | | |
| | | 1 or 2 | 62 | 70 | 6 | 8 | 36 | 26 | 50 | 30 | 8 | 10 | 10 | 10 |
| | | 1 or 2 | 88 | 90 | 3 | 8 | 36 | 52 | 50 | 60 | 8 | 6 | 10 | 10 |
| | | 1 or 2 | 88 | 90 | 3 | 8 | 36 | 52 | 50 | 60 | 8 | 6 | 10 | 10 |
| W42H1- B00, B0Z B06 B09 ③ B15 | 230/208-3 | 1 | 26 | 35 | 8 | 10 | | | | | | | | |
| | | 1 | 44 | 50 | 8 | 10 | | | | | | | | |
| | | 1 | 53 | 60 | 6 | 10 | | | | | | | | |
| | | 1 | 53 | 60 | 6 | 10 | | | | | | | | |
| W42H1- C00, C0Z C06 C09 ③ C15 | 460-3 | 1 | 13 | 15 | 14 | 14 | | | | | | | | |
| | | 1 | 22 | 25 | 10 | 10 | | | | | | | | |
| | | 1 | 26 | 30 | 10 | 10 | | | | | | | | |
| | | 1 | 26 | 30 | 10 | 10 | | | | | | | | |
| W48H1- A00, A0Z A04 A05 A10 ④ A15 ④ A20 | 230/208-1 | 1 | 37 | 50 | 8 | 10 | | | | | | | | |
| | | 1 | 58 | 60 | 6 | 10 | | | | | | | | |
| | | 1 or 2 | 63 | 70 | 6 | 8 | 37 | 26 | 50 | 30 | 8 | 10 | 10 | 10 |
| | | 1 or 2 | 89 | 90 | 3 | 8 | 37 | 52 | 50 | 60 | 8 | 6 | 10 | 10 |
| | | 1 or 2 | 89 | 90 | 3 | 8 | 37 | 52 | 50 | 60 | 8 | 6 | 10 | 10 |
| | | 1 or 2 | 111 | 125 | 2 | 6 | 59 | 52 | 60 | 60 | 6 | 6 | 10 | 10 |
| W48H1- B00, B0Z B06 B09 ③ B15 ③ B18 | 230/208-3 | 1 | 29 | 35 | 8 | 10 | | | | | | | | |
| | | 1 | 47 | 50 | 8 | 10 | | | | | | | | |
| | | 1 | 56 | 60 | 6 | 10 | | | | | | | | |
| | | 1 | 56 | 60 | 6 | 10 | | | | | | | | |
| | | 2 | N/A | N/A | N/A | N/A | 34 | 28 | 40 | 30 | 8 | 10 | 10 | 10 |
| W48H1- C00, C0Z C09 ③ C15 | 460-3 | 1 | 14 | 20 | 12 | 12 | | | | | | | | |
| | | 1 | 27 | 30 | 10 | 10 | | | | | | | | |
| | | 1 | 27 | 30 | 10 | 10 | | | | | | | | |
| W60H1- A00, A0Z A05 A10 ④ A15 ④ A20 | 230/208-1 | 1 | 41 | 60 | 8 | 10 | | | | | | | | |
| | | 1 or 2 | 67 | 80 | 4 | 8 | 41 | 26 | 60 | 30 | 8 | 10 | 10 | 10 |
| | | 1 or 2 | 93 | 100 | 3 | 8 | 41 | 52 | 60 | 60 | 8 | 6 | 10 | 10 |
| | | 1 or 2 | 93 | 100 | 3 | 8 | 41 | 52 | 60 | 60 | 8 | 6 | 10 | 10 |
| | | 1 or 2 | 111 | 125 | 2 | 6 | 59 | 52 | 60 | 60 | 6 | 6 | 10 | 10 |
| W60H1- B00, B0Z B09 ③ B15 ③ B18 | 230/208-3 | 1 | 28 | 40 | 8 | 10 | | | | | | | | |
| | | 1 | 55 | 60 | 6 | 10 | | | | | | | | |
| | | 1 | 55 | 60 | 6 | 10 | | | | | | | | |
| | | 2 | N/A | N/A | N/A | N/A | 34 | 28 | 40 | 30 | 8 | 10 | 10 | 10 |
| W60H1- C00, C0Z C09 ③ C15 | 460-3 | 1 | 15 | 20 | 12 | 12 | | | | | | | | |
| | | 1 | 28 | 30 | 10 | 10 | | | | | | | | |
| | | 1 | 28 | 30 | 10 | 10 | | | | | | | | |

① These "Minimum Circuit Ampacity" values are to be used for sizing the field power conductors. Refer to the National Electrical Code (latest version), Article 310 for power conductor sizing.
CAUTION: When more than one field power circuit is run through one conduit, the conductors must be derated. Pay special attention to note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three (3) conductors are in a raceway.

- ② Maximum size of the time delay fuse or HACR type circuit breaker for protection of field wiring conductors.
- ③ Maximum KW that can operate with the heat pump on is 9KW. Full heat available during emergency heat mode.
- ④ Maximum KW that can operate with the heat pump on is 10KW. Full heat available during emergency heat mode.

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

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

Electrical Specifications — Dehumidification Models

| Model | SINGLE CIRCUIT | | | | | | DUAL CIRCUIT | | | | | | | |
|------------------------------|---------------------|-----------------------|--------------------------|--|-----------------------|------------------|--------------------------|---------------------------------------|-----------------------|------------------|-------|-------|-------|-------|
| | Rated Volts & Phase | No. Field Power Ckts. | ① | ② | ③ | ③ | ① | | ② | | ③ | | ③ | |
| | | | Minimum Circuit Ampacity | Maximum External Fuse or Circuit Breaker | Field Power Wire Size | Ground Wire Size | Minimum Circuit Ampacity | Maximum External Fuse or Ckt. Breaker | Field Power Wire Size | Ground Wire Size | Ckt A | Ckt B | Ckt A | Ckt B |
| W24H1DA00, A0Z A04 A08 | 230/208-1 | 1 | 24 | 30 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 44 | 50 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 or 2 | 65 | 70 | 6 | 8 | 44 | 21 | 45 | 25 | 8 | 10 | 10 | 10 |
| W24H1DB00, B0Z B06 | 230/208-3 | 1 | 17 | 20 | 12 | 12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 35 | 40 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W24H1DC00, C0Z C06 | 460-3 | 1 | 12 | 15 | 14 | 14 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 21 | 25 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W30H1DA00, A0Z A05 A10 | 230/208-1 | 1 | 27 | 35 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 52 | 60 | 6 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 or 2 | 79 | 80 | 4 | 8 | 52 | 26 | 60 | 30 | 6 | 10 | 10 | 10 |
| W30H1DB00, B0Z B06 B09 | 230/208-3 | 1 | 19 | 25 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 37 | 40 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 47 | 50 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W30H1DC00, C0Z C06 C09 | 460-3 | 1 | 12 | 15 | 14 | 14 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 21 | 25 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 26 | 30 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W36H1DA00, A0Z A05 A10 | 230/208-1 | 1 | 30 | 40 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 56 | 60 | 6 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 or 2 | 82 | 90 | 4 | 8 | 55 | 26 | 60 | 30 | 6 | 10 | 10 | 10 |
| W36H1DB00, B0Z B06 B09 | 230/208-3 | 1 | 24 | 30 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 42 | 50 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 51 | 60 | 6 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W36H1DC00, C0Z C06 C09 | 460-3 | 1 | 12 | 15 | 14 | 14 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 21 | 25 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 25 | 25 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W42H1DA00, A0Z A05 A10 | 230/208-1 | 1 | 40 | 60 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 or 2 | 66 | 70 | 6 | 8 | 40 | 26 | 50 | 30 | 8 | 10 | 10 | 10 |
| | | 1 or 2 | 92 | 100 | 3 | 8 | 40 | 52 | 50 | 60 | 8 | 6 | 10 | 10 |
| W42H1DB00, B0Z B06 B09 | 230/208-3 | 1 | 28 | 40 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 46 | 50 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 55 | 60 | 6 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W42H1DC00, C0Z C06 C09 | 460-3 | 1 | 14 | 20 | 12 | 12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 23 | 25 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 27 | 30 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W48H1DA00, A0Z A05 A10 | 230/208-1 | 1 | 38 | 50 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 or 2 | 64 | 80 | 6 | 8 | 38 | 26 | 50 | 30 | 8 | 10 | 10 | 10 |
| | | 1 or 2 | 90 | 90 | 3 | 8 | 38 | 52 | 50 | 60 | 8 | 6 | 10 | 10 |
| W48H1DB00, B0Z B06 B09 | 230/208-3 | 1 | 29 | 35 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 47 | 50 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 56 | 60 | 6 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W48H1DC00, C0Z C09 | 460-3 | 1 | 14 | 20 | 12 | 12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 27 | 30 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W60H1DA00, A0Z A05 A10 | 230/208-1 | 1 | 41 | 60 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 or 2 | 67 | 80 | 4 | 8 | 41 | 26 | 60 | 60 | 8 | 10 | 10 | 10 |
| | | 1 or 2 | 93 | 100 | 3 | 8 | 41 | 52 | 60 | 60 | 8 | 6 | 10 | 10 |
| W60H1DB00, B0Z B09 | 230/208-3 | 1 | 28 | 40 | 8 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 55 | 60 | 6 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| W60H1DC00, C0Z C09 | 460 | 1 | 15 | 20 | 12 | 12 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | | 1 | 28 | 30 | 10 | 10 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

① These "Minimum Circuit Ampacity" values are to be used for sizing the field power conductors. Refer to the National Electrical Code (latest version), Article 310 for power conductor sizing.
CAUTION: When more than one field power circuit is run through one conduit, the conductors must be derated. Pay special attention to note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three (3) conductors are in a raceway.

② Maximum size of the time delay fuse or HACR type circuit breaker for protection of field wiring conductors.

③ Based on 75°C copper wire. All wiring must conform to the National Electrical Code and all local codes.

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

Indoor Blower Performance - CFM at 230 or 460 Volts

| ESP in H ₂ O | W18H1 | | W24H1 | W30H1 W36H1 | | W42H1 W48H1 | | W60H1 | |
|-------------------------|----------------------------|---------------------------|------------------------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|
| | High Speed Dry/Wet Coil | Low Speed Dry/Wet Coil | Single Speed Dry/Wet Coil | High Speed Dry/Wet Coil | Low Speed Dry/Wet Coil | High Speed Dry/Wet Coil | Low Speed Dry/Wet Coil | High Speed Dry/Wet Coil | Low Speed Dry/Wet Coil |
| 0 | 1020/975 | 750/700 | 1020/975 | 1395/1315 | 950/935 | 1885/1800 | 1650/1600 | 2200/2000 | 1600/1450 |
| .1 | 960/905 | 735/675 | 960/905 | 1340/1270 | 930/915 | 1770/1665 | 1550/1500 | 2100/1900 | 1525/1375 |
| .2 | 865/800 | 710/650 | 865/800 | 1285/1190 | 910/885 | 1635/1550 | 1450/1400 | 2000/1800 | 1465/1200 |
| .3 | 820/735 | 660/600 | 820/735 | 1205/1100 | 855/830 | 1500/1400 | 1350/1300 | 1875/1700 | -/- |
| .4 | 735/650 | 605/550 | 735/650 | 1110/1000 | 800/755 | 1370/1285 | 1300/1175 | 1775/1600 | -/- |
| .5 | 615/535 | 540/490 | 615/535 | 1005/870 | -/- | 1250/1150 | -/- | 1650/1475 | -/- |

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

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

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

Speeds marked "bold" above are **Factory Connected**.

Electric Heat Table---Refer to Electrical Specifications for Availability by Unit Model

| Nominal KW | At 240V (1) | | | | At 208V (1) | | | | At 480V (2) | | | At 460V (2) | | |
|------------|-------------|--------------|--------------|--------|-------------|--------------|--------------|--------|-------------|--------------|--------|-------------|--------------|--------|
| | KW | 1-Ph Amps | 3-Ph Amps | Btuh | KW | 1-Ph Amps | 3-Ph Amps | Btuh | KW | 3-Ph Amps | Btuh | KW | 3-Ph Amps | Btuh |
| 4.0 | 4.0 | 16.7 | | 13,652 | 3.00 | 14.4 | | 10,239 | | | | | | |
| 5.0 | 5.0 | 20.8 | | 17,065 | 3.75 | 18.0 | | 12,799 | | | | | | |
| 6.0 | 6.0 | | 14.4 | 20,478 | 4.50 | | 12.5 | 15,359 | 6.0 | 7.2 | 20,478 | 5.52 | 6.9 | 18,840 |
| 8.0 | 8.0 | 33.3 | | 27,304 | 6.00 | 28.8 | | 20,478 | | | | | | |
| 9.0 | 9.0 | | 21.7 | 30,717 | 6.75 | | 18.7 | 23,038 | 9.0 | 10.8 | 30,717 | 8.28 | 10.4 | 28,260 |
| 10.0 | 10.0 | 41.7 | | 34,130 | 7.50 | 36.1 | | 25,598 | | | | | | |
| 15.0 | 15.0 | 62.5 | 36.1 | 51,195 | 11.25 | 54.1 | 31.2 | 38,396 | 15.0 | 18.0 | 51,195 | 13.80 | 17.3 | 47,099 |
| 18.0 | 18.0 | | 43.3 | 61,434 | 13.50 | | 37.5 | 46,076 | 18.0 | 21.7 | 61,434 | 16.56 | 20.8 | 56,519 |
| 20.0 | 20.0 | 83.3 | | 68,260 | 15.00 | 72.1 | | 51,195 | | | | | | |

(1) These electric heaters are available in 230/208V units only.

(2) These electric heaters are available in 480V units only.

Heater Packages - Field Installed

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

- ETL US & Canada Listed
- Toggle Disconnect Standard on 460V Models

| Heat Pump Models | -A00 Models 230/208-1 | KW | -B00 Models 230/208-3 | KW | -C00 Models 460-3 | KW |
|------------------|--|--------------------------|--|--------------------|---|--------------|
| | Heater Model # | | Heater Model # | | Heater Model # | |
| W18H1 | EHWH02A-A04 EHWH02A-A08 | 4 8 | N/A | | N/A | |
| W24H1 | EHW24H-A04 EHW24H-A08 | 4 8 | EHW24H-B06 | 6 | EHWH24B-C06 | 6 |
| W30H1 | EHWH30-A05 EHWH30-A10 | 5 10 | EHWH03-B06 EHWH03-B09 | 6 9 | EHWC03A-C06 EHWC03A-C09 EHWH03A-C15 * | 6 9 15 |
| W36H1 | EHWH36-A05 EHWH36-A10 EHWH36-A15 * | 5 10 15 | EHW36H-B06 EHWH03-B09 EHW36H-B15 * | 6 9 15 | EHWC03A-C06 EHWC03A-C09 EHWH03A-C15 * | 6 9 15 |
| W42H1 | EHWH04-A04 EHWH42-A05 EHWH42-A10 EHWH42-A15 * | 4 5 10 15 | EHWH05-B06 EHWH05-B09 EHWH05-B15 * | 6 9 15 | EHWH42-C06 EHWH05A-C09 EHWH05A-C15 * | 6 9 15 |
| W48H1 | EHWH04-A04 EHWH42-A05 EHWH42-A10 EHWH42-A15 * EHWH04-A20 * | 4 5 10 15 20 | EHWH05-B06 EHWH05-B09 EHWH05-B15 * EHW05H-B18 * | 6 9 15 18 | EHWH05A-C09 EHWH05A-C15 * | 9 15 |
| W60H1 | EHWH04-A05 EHWH04-A10 EHWH04-A15 * EHWH04-A20 * | 5 10 15 20 | EHWH05-B09 EHWH05-B15 * EHWH04-B18 * | 9 15 18 | EHWH05A-C09 EHWH05A-C15 * | 9 15 |

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

* Not available for dehumidification models.

Cooling Application Data - Outdoor Temperature °F ①

| Model | D.B./W.B. ② | Cooling Capacity | 75°F | 80°F | 85°F | 90°F | 95°F | 100°F | 105°F | 110°F | 115°F | 120°F |
|--------|----------------|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| W18H1 | 75/62 | Total Cooling | 17,900 | 17,000 | 16,200 | 15,300 | 14,300 | 13,500 | 12,600 | 11,700 | 10,800 | 9,900 |
| | | Sensible Cooling | 14,300 | 13,900 | 13,600 | 13,200 | 12,800 | 12,400 | 12,000 | 11,600 | 10,800 | 9,900 |
| | 80/67 | Total Cooling | 19,100 | 18,500 | 17,900 | 17,200 | 16,400 | 15,700 | 14,800 | 13,900 | 13,000 | 12,000 |
| | | Sensible Cooling | 13,800 | 13,600 | 13,400 | 13,200 | 12,900 | 12,600 | 12,300 | 11,900 | 11,600 | 11,200 |
| W24H1 | 85/72 | Total Cooling | 22,800 | 21,700 | 20,600 | 19,500 | 18,300 | 17,200 | 16,000 | 14,800 | 13,700 | 12,500 |
| | | Sensible Cooling | 14,200 | 13,800 | 13,500 | 13,100 | 12,700 | 12,200 | 11,800 | 11,200 | 10,700 | 10,200 |
| | 75/62 | Total Cooling | 27,100 | 25,100 | 23,400 | 21,800 | 20,400 | 19,300 | 18,300 | 17,400 | 16,700 | 16,000 |
| | | Sensible Cooling | 20,700 | 19,800 | 19,000 | 18,300 | 17,700 | 17,100 | 16,600 | 16,100 | 15,700 | 15,300 |
| W30H1 | 80/67 | Total Cooling | 28,900 | 27,300 | 25,900 | 24,600 | 23,400 | 22,400 | 21,500 | 20,700 | 20,000 | 19,400 |
| | | Sensible Cooling | 20,000 | 19,400 | 18,800 | 18,300 | 17,800 | 17,400 | 17,000 | 16,600 | 16,300 | 16,000 |
| | 85/72 | Total Cooling | 34,500 | 31,900 | 29,800 | 27,800 | 26,000 | 24,500 | 23,200 | 22,100 | 21,000 | 20,200 |
| | | Sensible Cooling | 20,500 | 19,700 | 18,900 | 18,200 | 17,500 | 16,900 | 16,200 | 15,600 | 15,000 | 14,500 |
| W36H1 | 75/62 | Total Cooling | 31,900 | 30,300 | 28,800 | 27,400 | 26,000 | 24,700 | 23,400 | 22,200 | 21,000 | 19,800 |
| | | Sensible Cooling | 24,800 | 24,200 | 23,700 | 23,000 | 22,400 | 21,700 | 21,200 | 20,400 | 19,800 | 19,100 |
| | 80/67 | Total Cooling | 34,000 | 33,000 | 32,000 | 30,900 | 29,800 | 28,700 | 27,600 | 26,400 | 25,200 | 24,000 |
| | | Sensible Cooling | 24,000 | 23,700 | 23,400 | 23,000 | 22,600 | 22,100 | 21,700 | 21,100 | 20,600 | 20,000 |
| W42H1 | 85/72 | Total Cooling | 40,500 | 38,600 | 36,800 | 34,900 | 33,100 | 31,400 | 29,800 | 28,100 | 26,500 | 25,000 |
| | | Sensible Cooling | 24,600 | 24,100 | 23,500 | 22,900 | 22,200 | 21,400 | 20,700 | 19,800 | 19,000 | 18,100 |
| | 75/62 | Total Cooling | 35,800 | 34,400 | 33,000 | 31,600 | 30,200 | 28,900 | 27,500 | 26,100 | 24,800 | 23,500 |
| | | Sensible Cooling | 28,600 | 28,000 | 27,300 | 26,600 | 25,900 | 25,200 | 24,500 | 23,800 | 23,100 | 22,400 |
| W48H1 | 80/67 | Total Cooling | 38,200 | 37,500 | 36,600 | 35,700 | 34,600 | 33,600 | 32,400 | 31,100 | 29,800 | 28,400 |
| | | Sensible Cooling | 27,700 | 27,400 | 27,000 | 26,600 | 26,100 | 25,600 | 25,100 | 24,600 | 24,000 | 23,400 |
| | 85/72 | Total Cooling | 45,500 | 43,900 | 42,100 | 40,300 | 38,500 | 36,800 | 35,000 | 33,100 | 31,300 | 29,500 |
| | | Sensible Cooling | 28,400 | 27,800 | 27,200 | 26,400 | 25,600 | 24,800 | 23,900 | 23,100 | 22,100 | 21,200 |
| W60H1 | 75/62 | Total Cooling | 46,500 | 43,600 | 41,000 | 38,700 | 36,600 | 34,900 | 33,200 | 32,000 | 30,800 | 29,900 |
| | | Sensible Cooling | 36,200 | 35,100 | 34,000 | 33,200 | 32,400 | 31,700 | 31,100 | 30,600 | 30,200 | 29,900 |
| | 80/67 | Total Cooling | 49,600 | 47,500 | 45,500 | 43,700 | 42,000 | 40,600 | 39,200 | 38,100 | 37,100 | 36,200 |
| | | Sensible Cooling | 35,100 | 34,400 | 33,700 | 33,200 | 32,700 | 32,200 | 31,900 | 31,600 | 31,400 | 31,300 |
| W72H1 | 85/72 | Total Cooling | 59,100 | 55,600 | 52,300 | 49,400 | 46,700 | 44,400 | 42,300 | 40,600 | 39,000 | 37,600 |
| | | Sensible Cooling | 36,000 | 34,900 | 33,900 | 33,000 | 32,100 | 31,200 | 30,400 | 29,600 | 28,900 | 28,300 |
| | 75/62 | Total Cooling | 49,200 | 46,800 | 44,500 | 42,300 | 40,100 | 38,000 | 36,000 | 34,000 | 32,100 | 30,200 |
| | | Sensible Cooling | 39,100 | 38,200 | 37,200 | 36,200 | 35,300 | 34,300 | 33,400 | 32,500 | 31,700 | 30,200 |
| W84H1 | 80/67 | Total Cooling | 52,500 | 51,000 | 49,400 | 47,800 | 46,000 | 44,300 | 42,400 | 40,500 | 38,600 | 36,600 |
| | | Sensible Cooling | 37,900 | 37,400 | 36,800 | 36,200 | 35,600 | 34,900 | 34,300 | 33,600 | 33,000 | 32,300 |
| | 85/72 | Total Cooling | 62,600 | 59,600 | 56,700 | 54,000 | 51,100 | 48,500 | 45,700 | 43,100 | 40,600 | 38,000 |
| | | Sensible Cooling | 38,800 | 38,000 | 37,000 | 36,000 | 34,900 | 33,800 | 32,700 | 31,500 | 30,400 | 29,200 |
| W96H1 | 75/62 | Total Cooling | 56,800 | 54,300 | 52,000 | 49,600 | 47,000 | 44,600 | 42,100 | 39,700 | 37,100 | 34,500 |
| | | Sensible Cooling | 43,800 | 42,700 | 41,600 | 40,400 | 39,300 | 38,100 | 37,000 | 35,800 | 34,700 | 33,400 |
| | 80/67 | Total Cooling | 60,600 | 59,200 | 57,700 | 56,000 | 54,000 | 52,000 | 49,700 | 47,300 | 44,600 | 41,800 |
| | | Sensible Cooling | 42,500 | 41,800 | 41,200 | 40,400 | 39,600 | 38,800 | 37,900 | 37,000 | 36,100 | 35,000 |
| W108H1 | 85/72 | Total Cooling | 72,200 | 69,200 | 66,300 | 63,200 | 60,000 | 56,900 | 53,600 | 50,300 | 46,900 | 43,400 |
| | | Sensible Cooling | 43,500 | 42,400 | 41,400 | 40,100 | 38,900 | 37,600 | 36,100 | 34,700 | 33,300 | 31,600 |

① Below 65°F, unit requires a factory or field installed low ambient control.

② Return air temperature °F.

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

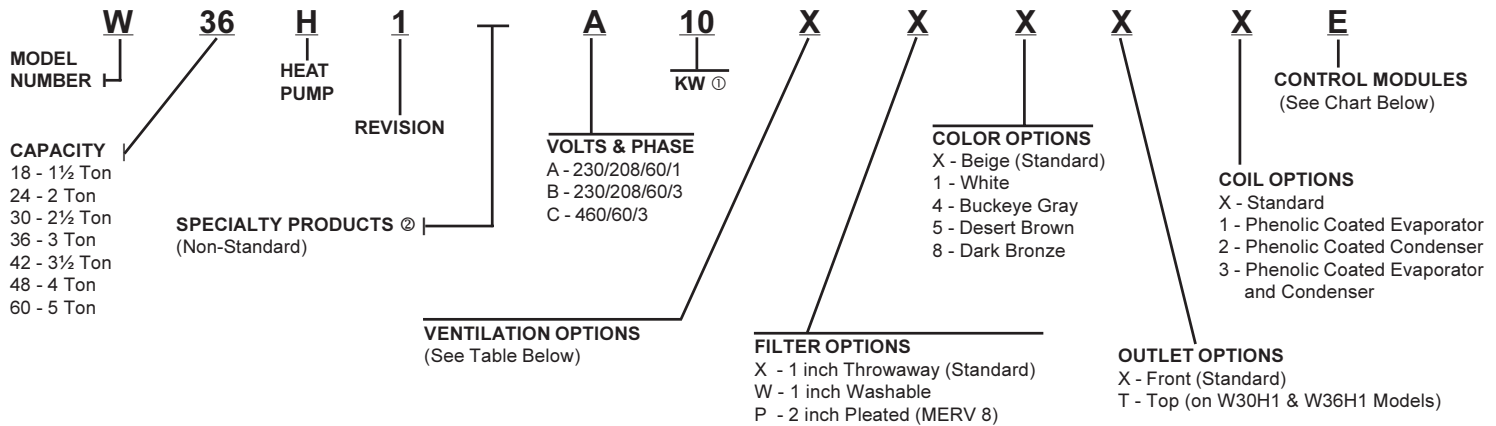
Heating Application Rating and Outdoor Temperature °F *

| Model | | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° |
|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| W18H1 | BTUH | 4,700 | 6,000 | 7,300 | 8,500 | 9,500 | 10,200 | 11,000 | 11,700 | 13,800 | 15,800 | 17,400 | 18,700 | 19,900 | 21,200 |
| | WATTS | 1,480 | 1,500 | 1,520 | 1,540 | 1,540 | 1,540 | 1,540 | 1,540 | 1,590 | 1,630 | 1,660 | 1,680 | 1,700 | 1,720 |
| | COP | 0.94 | 1.18 | 1.41 | 1.62 | 1.81 | 1.95 | 2.10 | 2.23 | 2.55 | 2.85 | 3.08 | 3.27 | 3.43 | 3.62 |
| W24H1 | BTUH | 8,400 | 10,000 | 11,700 | 13,400 | 14,300 | 14,700 | 15,100 | 15,500 | 19,100 | 22,600 | 25,000 | 26,700 | 28,400 | 30,000 |
| | WATTS | 2,040 | 2,080 | 2,110 | 2,150 | 2,170 | 2,170 | 2,170 | 2,170 | 2,270 | 2,360 | 2,420 | 2,460 | 2,500 | 2,540 |
| | COP | 1.21 | 1.41 | 1.63 | 1.83 | 1.94 | 1.99 | 2.04 | 2.10 | 2.47 | 2.81 | 3.03 | 3.19 | 3.33 | 3.47 |
| W30H1 | BTUH | 10,200 | 12,200 | 14,200 | 16,200 | 17,700 | 18,800 | 19,900 | 21,000 | 24,400 | 27,700 | 30,200 | 32,200 | 34,200 | 36,200 |
| | WATTS | 2,460 | 2,500 | 2,540 | 2,580 | 2,600 | 2,600 | 2,590 | 2,590 | 2,700 | 2,800 | 2,860 | 2,900 | 2,940 | 2,980 |
| | COP | 1.22 | 1.43 | 1.64 | 1.84 | 2.00 | 2.12 | 2.26 | 2.38 | 2.65 | 2.90 | 3.10 | 3.26 | 3.41 | 3.56 |
| W36H1 | BTUH | 13,100 | 15,400 | 17,800 | 20,100 | 21,500 | 22,300 | 23,100 | 23,900 | 28,500 | 33,200 | 36,400 | 38,800 | 41,100 | 43,400 |
| | WATTS | 2,800 | 2,850 | 2,900 | 2,950 | 2,970 | 2,970 | 2,970 | 2,970 | 3,090 | 3,220 | 3,300 | 3,350 | 3,400 | 3,450 |
| | COP | 1.38 | 1.59 | 1.80 | 2.00 | 2.13 | 2.20 | 2.28 | 2.36 | 2.71 | 3.03 | 3.24 | 3.40 | 3.55 | 3.69 |
| W42H1 | BTUH | 15,400 | 18,200 | 21,100 | 23,900 | 25,400 | 26,100 | 26,700 | 27,400 | 33,500 | 39,600 | 43,700 | 46,600 | 49,400 | 52,200 |
| | WATTS | 3,460 | 3,540 | 3,620 | 3,690 | 3,740 | 3,760 | 3,780 | 3,800 | 3,960 | 4,130 | 4,240 | 4,320 | 4,390 | 4,470 |
| | COP | 1.31 | 1.51 | 1.71 | 1.90 | 1.99 | 2.04 | 2.07 | 2.12 | 2.48 | 2.81 | 3.02 | 3.17 | 3.30 | 3.43 |
| W48H1 | BTUH | 15,800 | 18,800 | 21,800 | 24,800 | 26,500 | 27,300 | 28,100 | 28,900 | 35,200 | 41,500 | 45,800 | 48,800 | 51,800 | 54,800 |
| | WATTS | 3,560 | 3,620 | 3,670 | 3,730 | 3,750 | 3,760 | 3,770 | 3,770 | 3,900 | 4,030 | 4,110 | 4,160 | 4,220 | 4,270 |
| | COP | 1.31 | 1.53 | 1.75 | 1.95 | 2.08 | 2.13 | 2.19 | 2.25 | 2.65 | 3.02 | 3.27 | 3.44 | 3.6 | 3.77 |
| W60H1 | BTUH | 19,600 | 23,200 | 26,900 | 30,600 | 32,300 | 32,800 | 33,300 | 33,800 | 42,200 | 50,700 | 56,200 | 59,900 | 63,600 | 67,200 |
| | WATTS | 4,320 | 4,410 | 4,490 | 4,580 | 4,620 | 4,630 | 4,650 | 4,660 | 4,850 | 5,050 | 5,170 | 5,260 | 5,340 | 5,430 |
| | COP | 1.33 | 1.55 | 1.76 | 1.96 | 2.05 | 2.08 | 2.10 | 2.13 | 2.55 | 2.95 | 3.19 | 3.34 | 3.49 | 3.63 |

*70°F DB indoor return air at rated CFM includes defrost operation below 45°.

NOTES

Heat Pump Wall-Mount Model Nomenclature



① For 0KW and circuit breakers (230/208 volt) or toggle disconnects (460 volt) applications, insert 0Z in the KW field of the model number.

② Insert "D" for dehumidification with hot gas reheat. Not available for Model W18H. Reference Form 7960-576 for complete details.

Ventilation Options

| MODELS | W18H1, W24H1 | | W30H1, W36H1 | | W42H1, W48H1, W60H1 | |
|---|----------------------------|--------------------------|----------------------------|--------------------------|----------------------------|--------------------------|
| | Factory Installed Code No. | Field Installed Part No. | Factory Installed Code No. | Field Installed Part No. | Factory Installed Code No. | Field Installed Part No. |
| Barometric Fresh Air Damper - Standard | X | BFAD-2 | X | BFAD-3 | X | BFAD-5 |
| Blank-Off Plate | B | BOP-2 | B | BOP-3 | B | BOP-5 |
| Motorized Fresh Air Damper | M | MFAD-2 | M | MFAD-3 | M | MFAD-5 |
| Commercial Ventilator - Spring Return w/Exhaust | V | CRV-2 | V | CRVS-3 | V | CRVS-5 |
| Commercial Ventilator - Power Return w/Exhaust | --- | --- | P | CRVP-3 | P | CRVP-5 |
| Economizer (Internal) - Fully Modulating | E | EIFM-2B | E | EIFM-3C | E | EIFM-5C |
| Energy Recovery Ventilator - 230 Volt | R | ERVF-A2 | R | ERVF-A3 ① | R | ERVF-A5 ① |
| Energy Recovery Ventilator - 460 Volt | R | ERVF-C2 | R | ERVF-C3 ① | R | ERVF-C5 ① |
| Door Kit for ERVF (Required) | N/A | WMDK2-* | N/A | WMDK3-* | N/A | WMDK5-* |

① Intake and exhaust can be independently adjusted.

* WMDK Door Kit must be ordered in addition to ERVF Assembly and color matched to unit ("X" = Beige; "4" = Buckeye Gray; "8" = Dark Bronze)

Heat Pump Control Modules — All Models

| Description | | | | | | Factory Installed Code Number | Field Installed Part Number |
|------------------------|-------------------------|---------------------------------|-------------|-------------|----------------------|-------------------------------|-----------------------------|
| Low Pressure Control ① | High Pressure Control ① | Low Ambient Control and Relay ② | Start Kit ③ | Start Kit ④ | Outdoor Thermostat ⑤ | | |
| STD | STD | | | | | X | N/A |
| STD | STD | ● | | | | E | CMH-19 |
| STD | STD | | | | ● | Q | CMH-14A |
| STD | STD | ● | | | ● | R | --- |
| STD | STD | ● | ● | | | S | --- |
| STD | STD | ● | ● | | ● | T | --- |
| STD | STD | | ● | | | Field Installed | CMC-15 ⑥ |
| STD | STD | | | ● | | Field Installed | SK111 |

STD = Standard Equipment

① The high & low pressure controls are auto reset. Operating circuit includes a lockout feature and is resettable from the wall thermostat. All low pressure controls use a timed bypass circuit to prevent nuisance tripping during low temperature start-up.

② The low ambient control includes an 8201-008 (fan relay) and permits cooling operation down to 0°F.

③ PTCR start kit can be used with all -A single phase models. Increases starting torque 2-3x. Not used for -B or -C three phase models. Do not use if SK111 is used.

④ Start capacitor and potential relay start kit can be used with all -A single phase models. Increases starting torque 9x. Not used for -B or -C three phase models. Do not use if CMC-15 is used.

⑤ The outdoor thermostat is adjustable from 0°F to 50°F. It is suitable for use as a compressor cut-off thermostat.

NOTE: Standard heat pump control board has a 5-minute compressor anti-short cycle timer.



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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.

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