

9EER WALL-MOUNT™ HEAT PUMPS

Models: W18H2 to W60H2 **60Hz**
Heating Capacities: 16,000 to 54,000 BTUH
Cooling Capacities: 16,400 to 54,000 BTUH

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 - Blank off Plate
- Optional - Commercial Room Ventilator w/Exhaust
 - CRV - Spring Return
- Optional - Economizer with Exhaust



Bard is an
ISO 9001:2015
Certified Manufacturer

- 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, Fourth Edition.
- Commercial Product - Not intended for Residential application.

Capacity and Efficiency Ratings

MODELS	W18H2	W24H2	W30H2	W36H2	W42H2	W48H2	W60H2
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

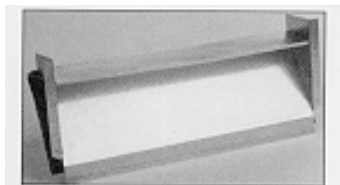
MODELS	W18H2-A	W24H2-A	W24H2-B	W24H2-C	W30H2-A	W30H2-B	W30H2-C	W36H2-A	W36H2-B	W36H2-C
Electrical Rating – 60 Hz	230/208 - 1	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3
Operating Voltage Range	197-253	197-253	197-253	414-506	197-253	197-253	414-506	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	64/64	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
Blower Motor & Evap.										
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	W42H2-A	W42H2-B	W42H2-C	W48H2-A	W48H2-B	W48H2-C	W60H2-A	W60H2-B	W60H2-C
Electrical Rating – 60 Hz	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
Blower Motor & Evap.									
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.

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 the unit. The blank off plate should be utilized in applications where outside air is not required to be mixed with the conditioned air.



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. The CRV and CRVS are power open - spring return on power loss. Complies with ANSI/ASHRAE Standard 62.1 "Ventilation for Acceptable Indoor Air Quality".



Economizer

ECONOMIZER – ECONWM-Series

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.

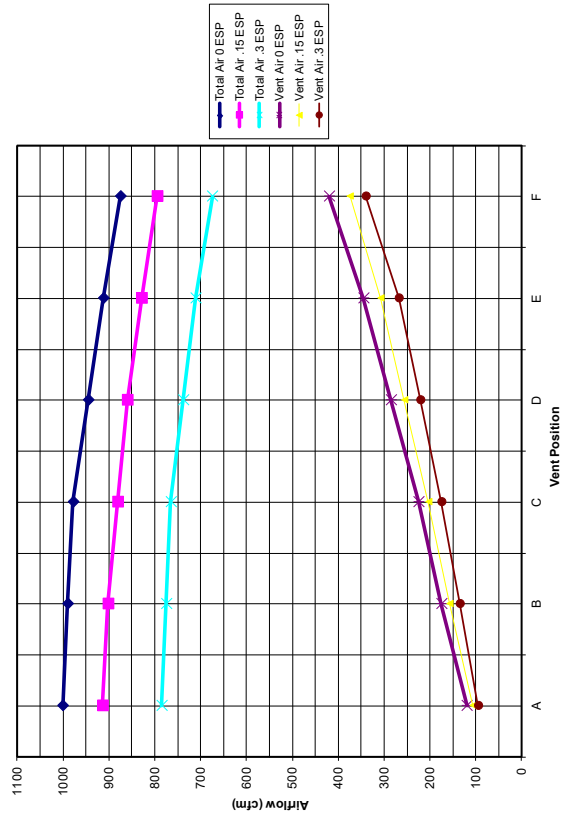
- ECONWMT Equipment Building versions have extended 11" air intake hood to deliver up to 100% of cooling rated airflow.
- ECONWMS Standard versions have 3" air intake hood to deliver up to 75% of cooling rated airflow.

Standard Features:

- Fully modulating
- Honeywell Direct Drive Hi-Torque Actuator
- No linkage required
- Simple single blade design
- Positive shut-off with non-stick gaskets
- Electronic DB and/or Enthalpy sensors depending upon version
- Honeywell JADE electronic economizer module with precision settings and diagnostics
- DB or Enthalpy economizer versions available

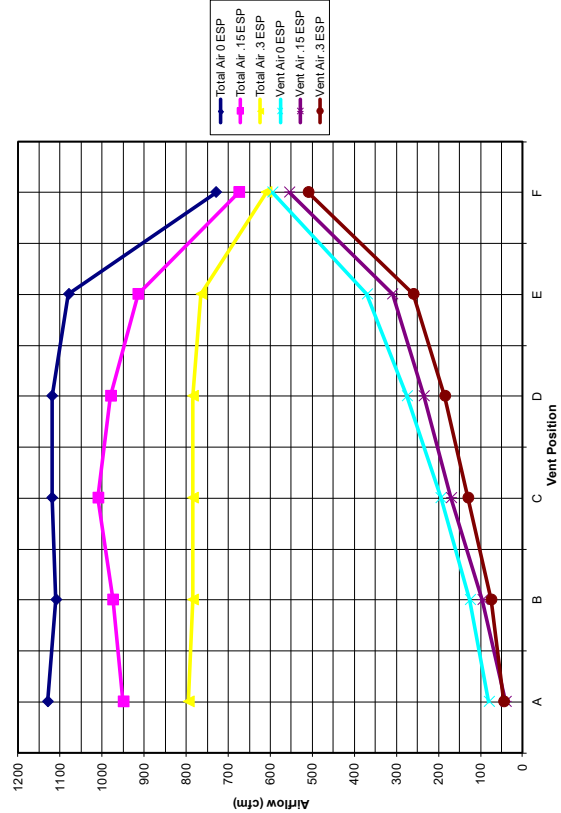
Commercial Room Ventilator Performance Data - CRV-2

W18 & W24 TOTAL AND VENTILATION AIRFLOW

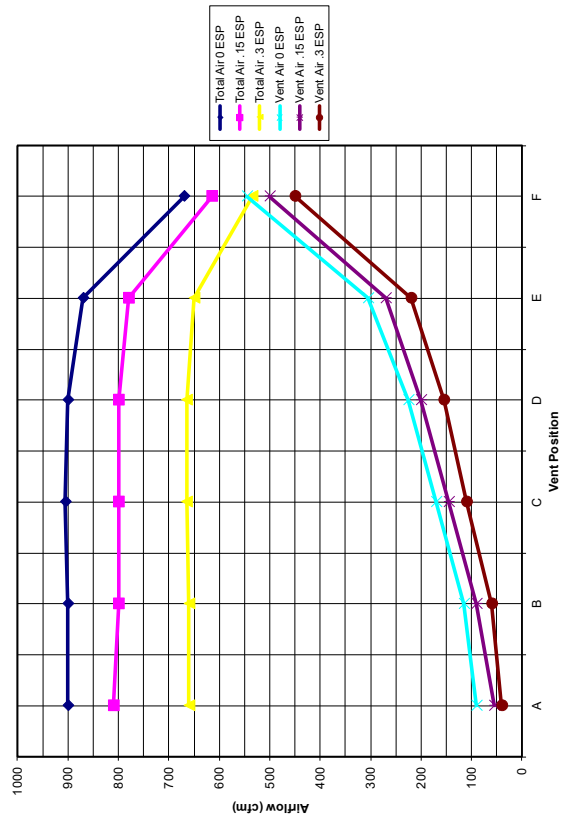


Commercial Room Ventilator Performance Data - CRV-3

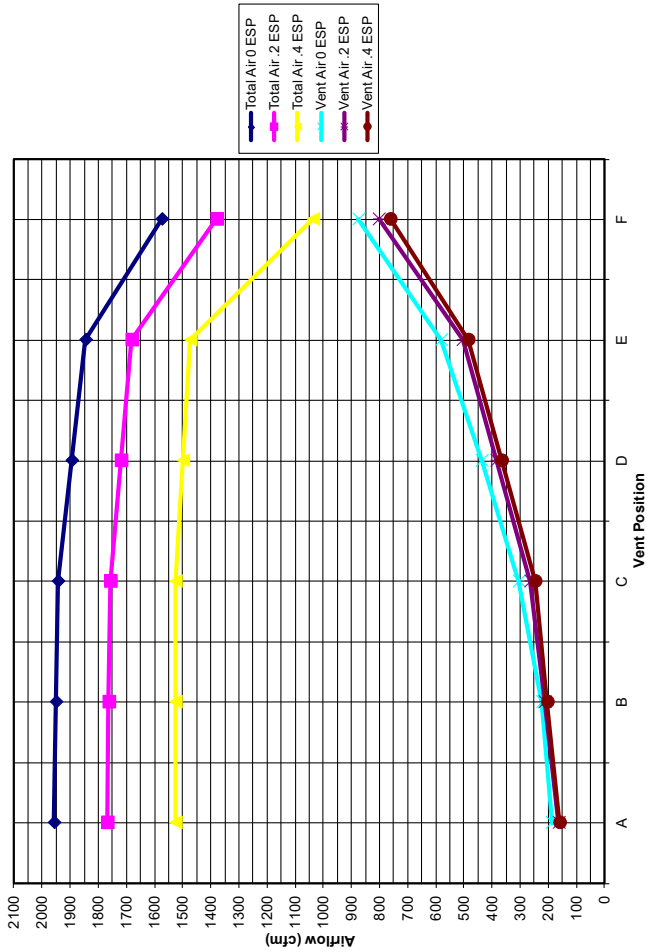
W30 & W36 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



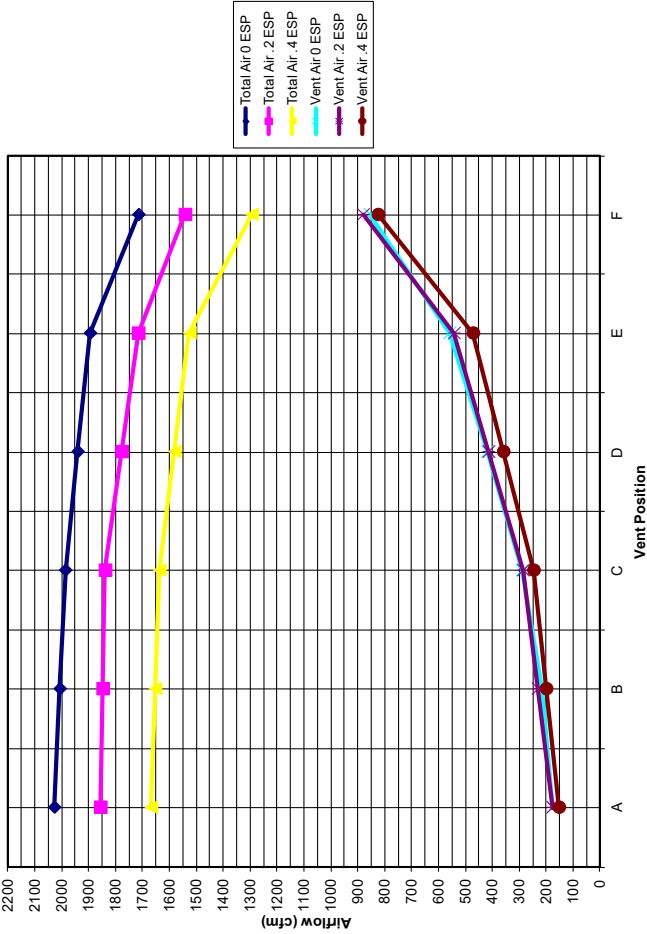
W30 & W36 LOW SPEED TOTAL AND VENTILATION AIRFLOW



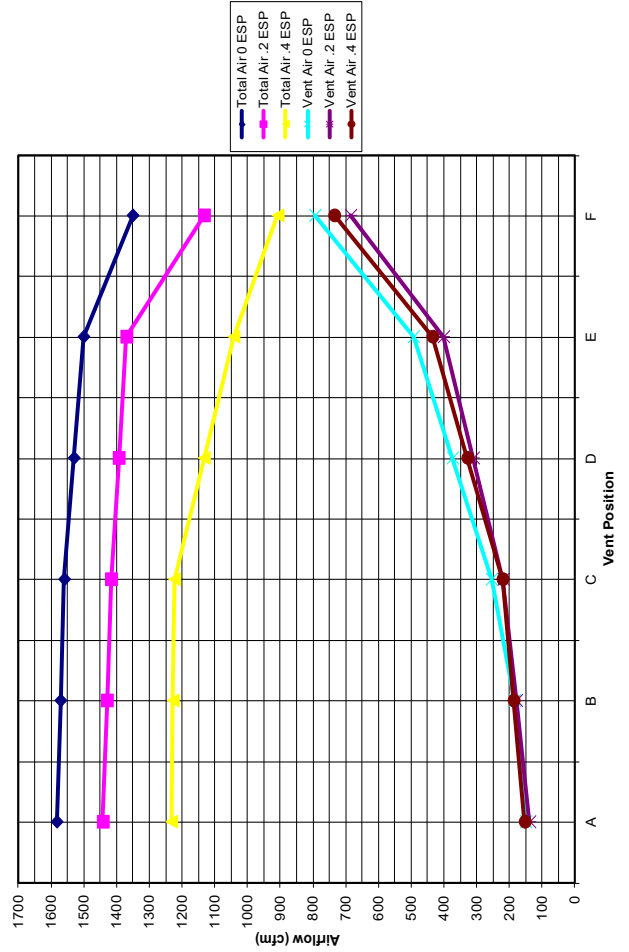
W42 & W48 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



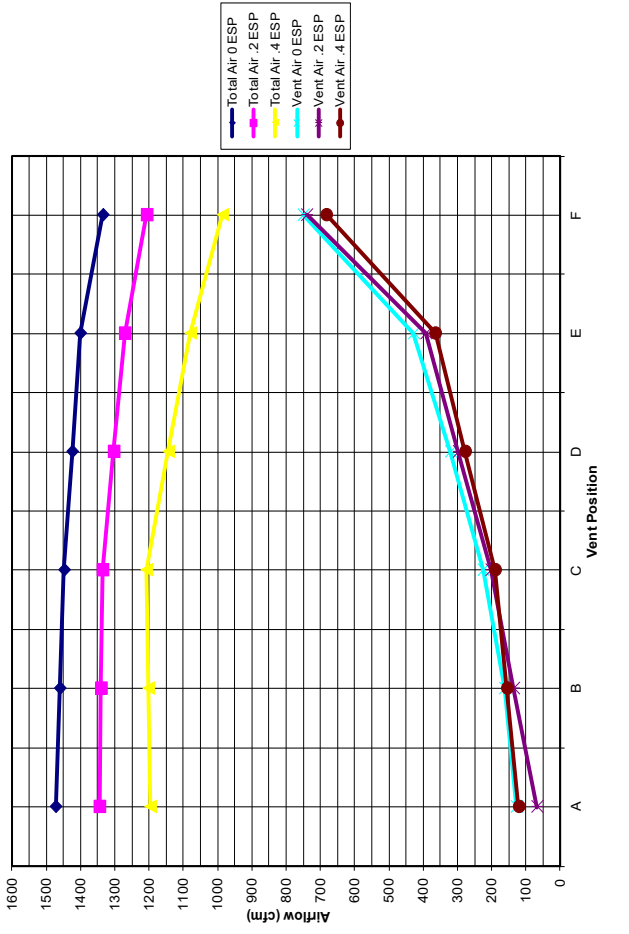
W60 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



W42 & W48 LOW SPEED TOTAL AND VENTILATION AIRFLOW



W60 LOW SPEED TOTAL AND VENTILATION AIRFLOW



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Electrical Specifications - Standard Heat Pumps

MODEL	Rated Volts & Phase	No. Field Power Circuits	Single Circuit				Dual Circuit							
			① Minimum Circuit Ampacity	② Maximum External Fuse or Ckt. Brkr.	⑤ Field Power Wire Size	⑤ Ground Wire	① Minimum Circuit Ampacity		② Maximum External Fuse or Ckt. Breaker		⑤ Field Power Wire Size		⑤ Ground Wire Size	
							Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B
W18H2-A00, A0Z A04 A08	230/208-1	1 1 1	16 37 58	20 40 60	12 8 6	12 10 10								
W24H2-A00, A0Z A04 A08	230/208-1	1 1 1 or 2	24 44 65	25 45 70	10 8 6	10 10 8	44	21	45	25	8	10	10	10
W24H2-B00, B0Z B06	230/208-3	1 1	17 35	20 40	12 8	12 10								
W24H2-C00, C0Z C06	460-3	1 1	11 21	15 25	14 10	14 10								
W30H2-A00, A0Z* A05* A10*	230/208-1	1 1 1 or 2	24 50 76	35 50 80	8 8 4	10 10 8	50	26	50	30	8	10	10	10
W30H2-B00, B0Z* B06 B09*	230/208-3	1 1 1	18 36 45	25 40 45	10 8 8	10 10 10								
W30H2-C00, C0Z* C06 C09* ③ C15	460-3	1 1 1 1	11 20 25 26	15 20 25 30	14 12 10 10	14 12 10 10								
W36H2-A00, A0Z* A05 A10* ④ A15	230/208-1	1 1 1 or 2 1 or 2	29 55 81 84	40 60 90 90	8 6 4 4	10 8 8 8	55 55	26 52	60 60	30 60	6 6	10 6	10 10	10 10
W36H2-B00, B0Z* B06 B09* ③ B15	230/208-3	1 1 1 1	23 41 50 51	30 45 50 60	10 8 8 8	10 10 10 10								
W36H2-C00, C0Z* C06 C09* ③ C15	460-3	1 1 1 1	12 21 25 26	15 25 25 30	14 10 10 10	14 10 10 10								
W42H2-A00, A0Z A04 A05 A10 ④ A15	230/208-1	1 1 1 or 2 1 or 2 1 or 2	36 57 62 88 88	50 60 70 90 90	8 6 6 3 3	10 10 8 8 8	36 36 36	26 52 52	50 50 50	30 60 60	8 8 8	10 6 6	10 10 10	10 10 10
W42H2-B00, B0Z B06 B09 ③ B15	230/208-3	1 1 1 1	26 44 53 53	35 50 60 60	8 8 6 6	10 10 10 10								
W42H2-C00, C0Z C06 C09 ③ C15	460-3	1 1 1 1	13 22 26 26	15 25 30 30	14 10 10 10	14 10 10 10								
W48H2-A00, A0Z A04 A05 A10 ④ A15 ④ A20	230/208-1	1 1 1 or 2 1 or 2 1 or 2 1 or 2	37 58 63 89 89 111	50 60 70 90 90 125	8 6 6 3 3 2	10 8 8 8 8 6	37 41 37 41 59	26 52 52 52 52	50 50 50 50 60	30 60 60 60 60	8 8 8 8 6	10 6 6 6 6	10 10 10 10 10	10 10 10 10 10
W48H2-B00, B0Z B06 B09 ③ B15 ③ B18	230/208-3	1 1 1 1 2	29 47 56 56 N/A	35 50 60 60 N/A	8 8 6 6 N/A	10 10 10 10 N/A	34	28	40	30	8	10	10	10
W48H2-C00, C0Z C09 ③ C15	460-3	1 1 1	14 27 27	20 30 30	12 10 10	12 10 10								
W60H2-A00, A0Z A05 A10 ④ A15 ④ A20	230/208-1	1 1 or 2 1 or 2 1 or 2 1 or 2	41 67 93 93 111	60 80 100 100 125	8 4 3 3 2	10 8 8 8 6	41 41 41 59	26 52 52 52	60 60 60 60	30 60 60 60	8 8 8 8	10 6 6 6	10 10 10 10	10 10 10 10
W60H2-B00, B0Z B09 ③ B15 ③ B18	230/208-3	1 1 1 2	28 55 55 N/A	40 60 60 N/A	8 6 6 N/A	10 10 10 N/A	34	28	40	30	8	10	10	10
W60H2-C00, C0Z C09 ③ C15	460-3	1 1 1	15 28 28	20 30 30	12 10 10	12 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 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.

⑤ Based on 75°C copper wire. All wiring must conform to the National Electrical Code and all local codes.

* 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	Rated Volts & 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
W24H2DA00, A0Z A04 A08	230/208-1	1 1 1 or 2	24 44 65	30 45 70	10 8 6	10 10 8	44	21	45	25	8	10	10	10
W24H2DB00, B0Z B06	230/208-3	1 1	17 35	20 40	12 8	12 10								
W24H2DC00, C0Z C06	460-3	1 1	12 21	15 25	14 10	14 10								
W30H2DA00, A0Z A05 A10	230/208-1	1 1 1 or 2	27 52 79	35 60 80	8 6 4	10 10 8	52	26	60	30	6	10	10	10
W30H2DB00, B0Z B06 B09	230/208-3	1 1 1	19 37 47	25 40 50	10 8 8	10 10 10								
W30H2DC00, C0Z C06 C09	460-3	1 1 1	12 21 26	15 25 30	14 10 10	14 10 10								
W36H2DA00, A0Z A05 A10	230/208-1	1 1 1 or 2	30 56 82	40 60 90	10 6 4	10 10 8	55	26	60	30	6	10	10	10
W36H2DB00, B0Z B06 B09	230/208-3	1 1 1	24 42 51	30 50 60	10 8 6	10 10 10								
W36H2DC00, C0Z C06 C09	460-3	1 1 1	12 21 25	15 25 25	14 10 10	14 10 10								
W42H2DA00, A0Z A05 A10	230/208-1	1 1 or 2 1 or 2	40 66 92	60 70 100	8 6 3	10 8 8	40 40	26 52	50 50	30 60	8 8	10 6	10 10	10 10
W42H2DB00, B0Z B06 B09	230/208-3	1 1 1	28 46 55	40 50 60	8 8 6	10 10 10								
W42H2DC00, C0Z C06 C09	460-3	1 1 1	14 23 27	20 25 30	12 10 10	12 10 10								
W48H2DA00, A0Z A05 A10	230/208-1	1 1 or 2 1 or 2	38 64 90	50 80 90	8 6 3	10 8 8	38 38	26 52	50 60	30 60	8 8	10 6	10 10	10 10
W48H2DB00, B0Z B06 B09	230/208-3	1 1 1	29 47 56	35 50 60	8 8 6	10 10 10								
W48H2DC00, C0Z C09	460-3	1 1	14 27	20 30	12 10	12 10								
W60H2DA00, A0Z A05 A10	230/208-1	1 1 or 2 1 or 2	41 67 93	60 80 100	8 4 3	10 8 8	41 41	26 52	60 60	60 60	8 8	10 6	10 10	10 10
W60H2DB00, B0Z B09	230/208-3	1 1	28 55	40 60	8 6	10 10								
W60H2DC00, C0Z C09	460-3	1 1	15 28	20 30	12 10	12 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 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	W18H2		W24H2	W30H2 / W36H2		W42H2 / W48H2		W60H2	
	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
0.0	1020/975	750/700	1020/975	1395/1315	950/935	1885/1800	1650/1600	2200/2000	1600/1450
0.1	960/905	735/675	960/905	1340/1270	930/915	1770/1665	1550/1500	2100/1900	1525/1375
0.2	865/800	710/650	865/800	1285/1190	910/885	1635/1550	1450/1400	2000/1800	1465/1200
0.3	820/735	660/600	820/735	1205/1100	855/830	1500/1400	1350/1300	1875/1700	-/-
0.4	735/650	605/550	735/650	1110/1000	800/755	1370/1285	1300/1175	1775/1600	-/-
0.5	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

Air Conditioner Models	-A00 Models 230/208-1		-B00 Models 230/208-3		-C00 Models 460-3	
	Heater Model #	KW	Heater Model #	KW	Heater Model #	KW
W18H2	EHWHO2A-A04B EHWHO2A-A08B	4 8	N/A		N/A	
W24H2	EHW24H-A04B EHW24H-A08B	4 8	EHW24H-B06B	6	EHWH24B-C06	6
W30H2	EHWH30-A05B EHWH30-A10B	5 10	EHWH03-B06B EHWH03-B09B	6 9	EHWC03A-C06 EHWC03A-C09 EHWH03A-C15 *	6 9 15
W36H2	EHWH36-A05B EHWH36-A10B EHWH36-A15B *	5 10 15	EHW36H-B06B EHWH03-B09B EHW36H-B15B *	6 9 15	EHWC03A-C06 EHWC03A-C09 EHWH03A-C15 *	6 9 15
W42H2	EHWH04-A04B EHWH42-A05B EHWH42-A10B EHWH42-A15B *	4 5 10 15	EHWH05-B06B EHWH05-B09B EHWH05-B15B *	6 9 15	EHWH42-C06 EHWH05A-C09 EHWH05A-C15 *	6 9 15
W48H2	EHWH04-A04B EHWH42-A05B EHWH42-A10B EHWH42-A15B * EHWH04-A20B *	4 5 10 15 20	EHWH05-B06B EHWH05-B09B EHWH05-B15B * EHWH05H-B18B *	6 9 15 18	EHWH05A-C09 EHWH05A-C15 *	9 15
W60H2	EHWH04-A05B EHWH04-A10B EHWH04-A15B * EHWH04-A20B *	5 10 15 20	EHWH05-B09B EHWH05-B15B * EHWH05H-B18B *	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	Return Air (DB/WB) ②	Cooling Capacity	75°F	80°F	85°F	90°F	95°F	100°F	105°F	110°F	115°F	120°F
W18H2	75/62	Total Cooling Sensible Cooling	17,900 14,300	17,000 13,900	16,200 13,600	15,300 13,200	14,300 12,800	13,500 12,400	12,600 12,000	11,700 11,600	10,800 10,800	9,900 9,900
	80/67	Total Cooling Sensible Cooling	19,100 13,800	18,500 13,600	17,900 13,400	17,200 13,200	16,400 12,900	15,700 12,600	14,800 12,300	13,900 11,900	13,000 11,600	12,000 11,200
	85/72	Total Cooling Sensible Cooling	22,800 14,200	21,700 13,800	20,600 13,500	19,500 13,100	18,300 12,700	17,200 12,200	16,000 11,800	14,800 11,200	13,700 10,700	12,500 10,200
W24H2	75/62	Total Cooling Sensible Cooling	27,100 20,700	25,100 19,800	23,400 19,000	21,800 18,300	20,400 17,700	19,300 17,100	18,300 16,600	17,400 16,100	16,700 15,700	16,000 15,300
	80/67	Total Cooling Sensible Cooling	28,900 20,000	27,300 19,400	25,900 18,800	24,600 18,300	23,400 17,800	22,400 17,400	21,500 17,000	20,700 16,600	20,000 16,300	19,400 16,000
	85/72	Total Cooling Sensible Cooling	34,500 20,500	31,900 19,700	29,800 18,900	27,800 18,200	26,000 17,500	24,500 16,900	23,200 16,200	22,100 15,600	21,000 15,000	20,200 14,500
W30H2	75/62	Total Cooling Sensible Cooling	31,900 24,800	30,300 24,200	28,800 23,700	27,400 23,000	26,000 22,400	24,700 21,700	23,400 21,200	22,200 20,400	21,000 19,800	19,800 19,100
	80/67	Total Cooling Sensible Cooling	34,000 24,000	33,000 23,700	32,000 23,400	30,900 23,000	29,800 22,600	28,700 22,100	27,600 21,700	26,400 21,100	25,200 20,600	24,000 20,000
	85/72	Total Cooling Sensible Cooling	40,500 24,600	38,600 24,100	36,800 23,500	34,900 22,900	33,100 22,200	31,400 21,400	29,800 20,700	28,100 19,800	26,500 19,000	25,000 18,100
W36H2	75/62	Total Cooling Sensible Cooling	35,800 28,600	34,400 28,000	33,000 27,300	31,600 26,600	30,200 25,900	28,900 25,200	27,500 24,500	26,100 23,800	24,800 23,100	23,500 22,400
	80/67	Total Cooling Sensible Cooling	38,200 27,700	37,500 27,400	36,600 27,000	35,700 26,600	34,600 26,100	33,600 25,600	32,400 25,100	31,100 24,600	29,800 24,000	28,400 23,400
	85/72	Total Cooling Sensible Cooling	45,500 28,400	43,900 27,800	42,100 27,200	40,300 26,400	38,500 25,600	36,800 24,800	35,000 23,900	33,100 23,100	31,300 22,100	29,500 21,200
W42H2	75/62	Total Cooling Sensible Cooling	46,500 36,200	43,600 35,100	41,000 34,000	38,700 33,200	36,600 32,400	34,900 31,700	33,200 31,100	32,000 30,600	30,800 30,200	29,900 29,900
	80/67	Total Cooling Sensible Cooling	49,600 35,100	47,500 34,400	45,500 33,700	43,700 33,200	42,000 32,700	40,600 32,200	39,200 31,900	38,100 31,600	37,100 31,400	36,200 31,300
	85/72	Total Cooling Sensible Cooling	59,100 36,000	55,600 34,900	52,300 33,900	49,400 33,000	46,700 32,100	44,400 31,200	42,300 30,400	40,600 29,600	39,000 28,900	37,600 28,300
W48H2	75/62	Total Cooling Sensible Cooling	49,200 39,100	46,800 38,200	44,500 37,200	42,300 36,200	40,100 35,300	38,000 34,300	36,000 33,400	34,000 32,500	32,100 31,700	30,200 30,200
	80/67	Total Cooling Sensible Cooling	52,500 37,900	51,000 37,400	49,400 36,800	47,800 36,200	46,000 35,600	44,300 34,900	42,400 34,300	40,500 33,600	38,600 33,000	36,600 32,300
	85/72	Total Cooling Sensible Cooling	62,600 38,800	59,600 38,000	56,700 37,000	54,000 36,000	51,100 34,900	48,500 33,800	45,700 32,700	43,100 31,500	40,600 30,400	38,000 29,200
W60H2	75/62	Total Cooling Sensible Cooling	56,800 43,800	54,300 42,700	52,000 41,600	49,600 40,400	47,000 39,300	44,600 38,100	42,100 37,000	39,700 35,800	37,100 34,700	34,500 33,400
	80/67	Total Cooling Sensible Cooling	60,600 42,500	59,200 41,800	57,700 41,200	56,000 40,400	54,000 39,600	52,000 38,800	49,700 37,900	47,300 37,000	44,600 36,100	41,800 35,000
	85/72	Total Cooling Sensible Cooling	72,200 43,500	69,200 42,400	66,300 41,400	63,200 40,100	60,000 38,900	56,900 37,600	53,600 36,100	50,300 34,700	46,900 33,300	43,400 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°F	65°F
W18H2	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
W24H2	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
W30H2	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
W36H2	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
W42H2	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
W48H2	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
W60H2	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°.

Clearances Required for Service Access and Adequate Condenser Inlet Airflow

MODELS	LEFT SIDE	RIGHT SIDE
W18H2, W24H2, W30H2, W36H2	15"	20"
W42H2, W48H2, W60H2	20"	20"

Minimum Clearances Required to Combustible Materials

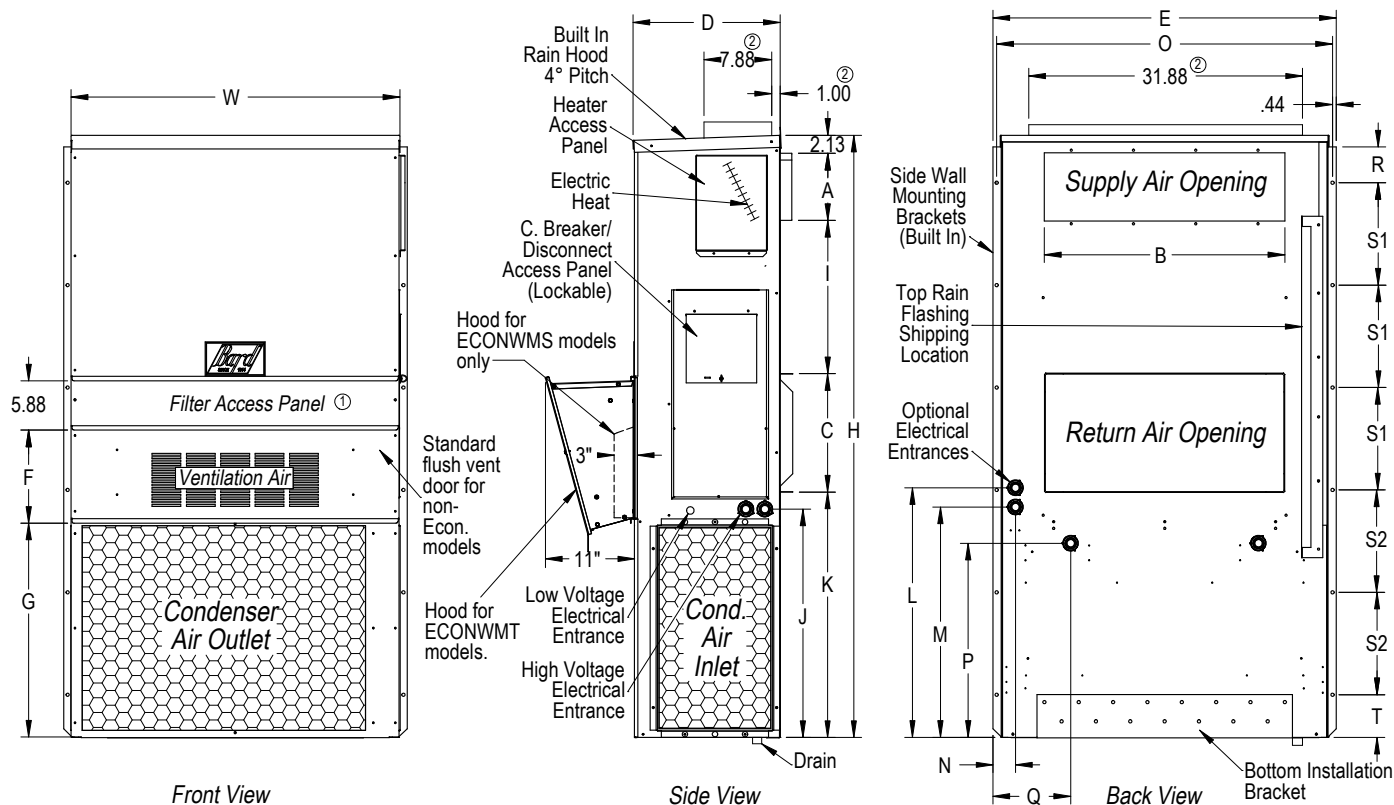
MODELS ①	SUPPLY AIR DUCT FIRST THREE FEET	CABINET
W18H2, W24H2	0"	0"
W30H2, W36H2	1/4"	0"
W42H2, W48H2, W60H2	1/4"	0"

① Refer to the Installation Manual for more detailed information.

Dimensions of W18-60H Basic Unit for Architectural & Installation Requirements (Nominal)

MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN		E	F	G	I	J	K	L	M	N	O	P	Q	R	S1	S2	T
				A	B	C	B																
W18H2 W24H2	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	12.00	5.00
W30H2 W36H2	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	12.00	5.00
W42H2 W48H2	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	16.00	1.88
W60H2	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	21.00	1.88

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

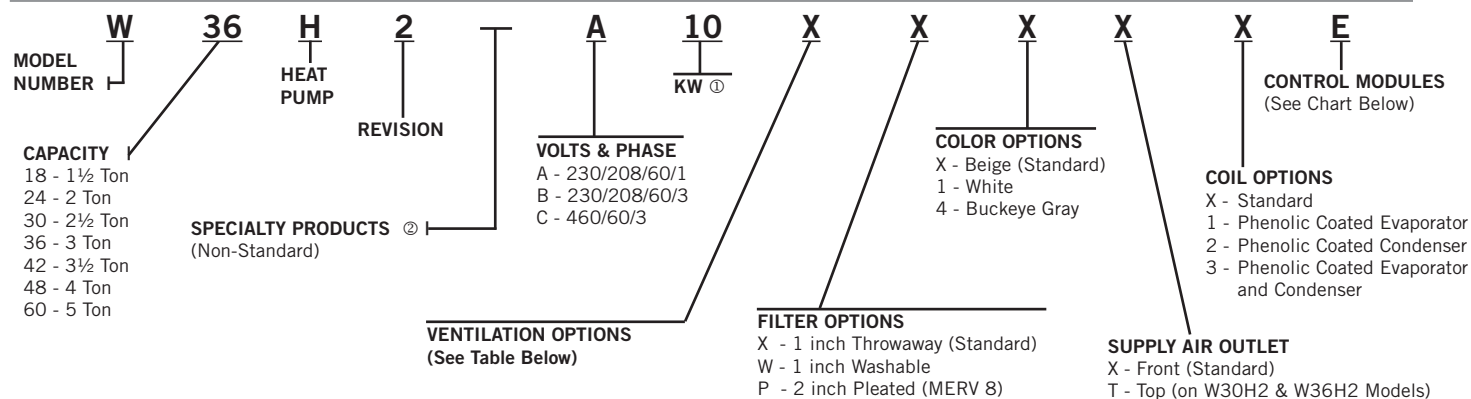


MIS-3340

① Not used when ECONWMT Economizers installed. Filter access is through the ECONWMT hood.

② Optional top outlet (factory installed only) in place of standard front supply air opening for W30H and W36H models only.

Heat Pump Wall-Mount Model Nomenclature



① For 0KW and circuit breakers (230/208 volt) or toggle disconnects (460 volt) applications, insert OZ 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	W18H2, W24H2		W30H2, W36H2		W42H2, W48H2, W60H2	
Description	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
Commercial Ventilator - Spring Return w/Exhaust	V	CRV-2	V	CRVS-3	V	CRVS-5
Economizer - Standard Versions, Enthalpy ④	S	ECONWMS-E2B ②	S	ECONWMS-E3B ②	S	ECONWMS-E5B ②
Economizer - Equipment Bldg., Enthalpy ⑤	W	ECONWMT-E2B ②	W	ECONWMT-E3B ②	W	ECONWMT-E5B ②
Economizer - Equipment Bldg., DB Temp ⑥	T	ECONWMT-T2B ②	T	ECONWMT-T3B ②	T	ECONWMT-T5B ②

② Insert color to match unit ("X" = Beige; "4" = Buckeye Gray; etc.)

④ Partial Full Flow (75% of Rated Cooling CFM). All ECONWMS versions have 3" deep intake hood.

⑤ Full Flow (100% of Rated Cooling CFM). All ECONWMT versions have 11" deep intake hood.

⑥ W24H2 Only.

Heat Pump Control Modules - All Models

Low Pressure Control ①	High Pressure Control ①	Low Ambient Control and Relay ②	Start Kit ③	Start Kit ④	Outdoor Thermostat ⑤	Factory Installed Code	Field Installed Part
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 ③
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.



Bard Manufacturing Company, Inc.
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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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 S3398
 October 2018**

Supersedes S3398-215