

THE WALL-MOUNT™ HEAT PUMPS - WH (60HZ)

WH-Series Refrigerant 22 60Hz
Heating Capacities: 18,800 to 58,000 BTUH
Cooling Capacities: 19,000 to 56,500 BTUH

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

Engineered Features

Aluminum Finned Copper Coils:

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

Twin Blowers:

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

Heat Pump Compressor:

Reciprocating compressor designed to withstand higher compressor ratios and longer operation than normal air conditioning compressors. Equipped with crankcase heater and dual discharge muffler. Standard on all 2, 2½, 3 and 3½ ton models.

Scroll compressor designed for increased efficiency, quieter operation and improved reliability for longer life. Eliminates need for crankcase heater and suction accumulator. Standard on all 1½, 4 and 5 ton models.

Galvanized 20 Gauge Zinc Coated Steel Cabinet:

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

Electrical Components:

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

One Inch, Disposable Air Filters:

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

Solid State Electronic Heat Pump Control:

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

High Pressure Switch:

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

Five Minute Compressor Time Delay:

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

Suction Accumulator:

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

Emergency Heat Circuit:

Permits continuous operation of the system.

Barometric Fresh Air Damper:

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

Built-in Circuit Breakers:

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

Slope Top:

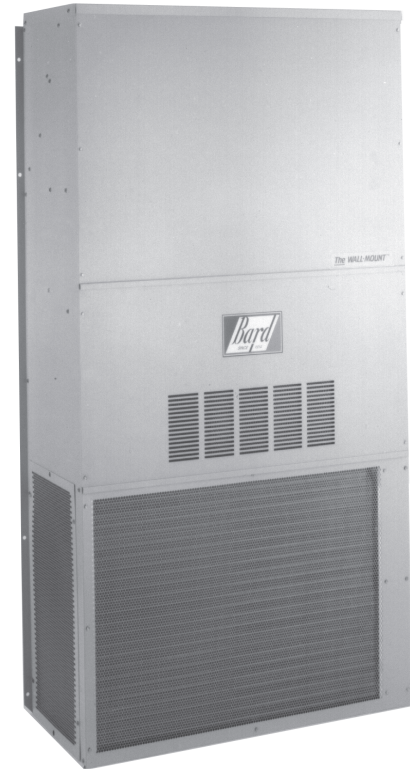
Standard feature for water run-off.

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 90.1-2004.
- Certified to ARI Standard 390-2003 for SPVU (Single Package Vertical Units).
- Commercial Product - Not intended for Residential application.



Capacity and Efficiency Ratings

MODELS	WH184	WH242	WH301	WH361	WH421	WH483	WH602
Cooling BTUH ①	18,400	23,600	30,000	35,600	41,500	47,000	56,500
EER ②	9.10	9.20	8.70	9.00	8.70	9.00	8.70
SEER ③	11.00	10.50	10.00	10.00	10.00	10.50	10.20
High Temp Heating (47F) BTUH ①	18,000	23,200	28,000	34,400	41,000	46,000	58,000
COP ②	2.80	3.00	3.00	2.90	3.00	3.00	3.00
Low Temp Heating (17F) BTUH ①	10,000	12,000	15,600	19,000	23,000	28,000	35,000
COP ②	1.80	1.90	1.90	1.90	2.00	2.10	2.00
HSPF ③	6.60	6.60	6.60	6.60	6.80	7.00	7.00

① Capacity is certified in accordance with ARI Standard 390-2003 and tested in accordance with ARI Standard 210/240-2003.

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

③ SEER = Seasonal Energy Efficiency Ratio, HSPF = Heating Seasonal Performance Factor and are tested in accordance with ARI Standard 210/240-2003.

All ratings based on fresh air intake being 100% closed (no outside air introduction).

Specifications 1-1/2 through 3 Ton

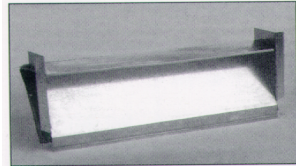
MODELS	WH184-A	WH242-A	WH242-B	WH242-C	WH301-A	WH301-B	WH301-C	WH361-A	WH361-B	WH361-C
Electrical Rating--60HZ	230/208 - 1	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3
Operating Voltage Range	197-253	197-253	197-253	414-506	197-253	197-253	414-506	197-253	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	7.0/8.8	10.0/11.0	6.9/7.6	3.9	12.9/14.0	8.1/8.7	4.8	16.3/17.0	9.8/10.5	5.2
Branch Circuit Selection Current	10.0	11.0	8.0	4.0	14.0	10.0	5.0	17.0	11.0	6.0
Lock Rotor Amps	45/45	56/56	51/51	25	75/75	68/68	34	96/96	75/75	40
Compressor Type	Scroll	Recip.	Recip.	Recip.	Recip.	Recip.	Recip.	Recip.	Recip.	Recip.
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" - 1900	20" - 1900
Motor & Evaporator										
Blower Motor--HP/RPM/SPD	1/6-1100-1	1/6-1100-1	1/6-1100-1	1/3-1100-2	1/3-1100-2	1/3-1100-2	1/3-1100-2	1/3-1100-2	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)	650 - .4	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.	300	300	300	300	365	365	365	380	380	380

Specifications 3-1/2 through 5 Ton

MODELS	WH421-A	WH421-B	WH421-C	WH483-A	WH483-B	WH483-C	WH602-A	WH602-B	WH602-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	18.3/20.4	12.2/13.1	6.1	20.8/21.6	12.3/12.7	6.2	25.9/29.6	16.5/20.1	8.6
Branch Circuit Selection Current	21.0	14.0	7.0	21.8	12.9	6.5	30.0	20.0	9.0
Lock Rotor Amps	102/102	91/91	42/42	131/131	91/91	46	169/169	137/137	62/62
Compressor Type	Recip.	Recip.	Recip.	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Fan Motor & Condenser									
Fan Motor--HP/RPM/SPD	1/3 - 850 - 2	1/3 - 850 - 2	1/3 - 850 - 2	1/3 - 850 - 2	1/3 - 850 - 2	1/3 - 850 - 2	1/3 - 850 - 2	1/3 - 850 - 2	1/3 - 850 - 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.	510	510	510	510	510	510	510	510	510

Ventilation System Packages

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



Barometric Fresh Air Damper

BAROMETRIC FRESH AIR DAMPER - BFAD

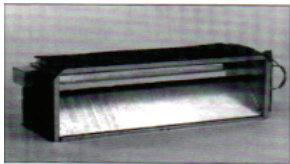
STANDARD

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

BLANK OFF PLATE - BOP

OPTIONAL

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



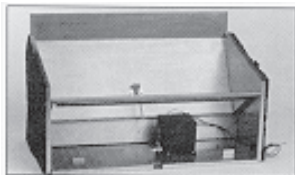
Motorized Fresh Air Damper

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

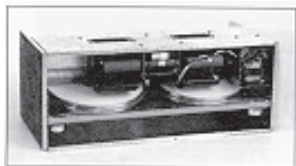
ECONOMIZER - EIFM

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 - WERV

OPTIONAL

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

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

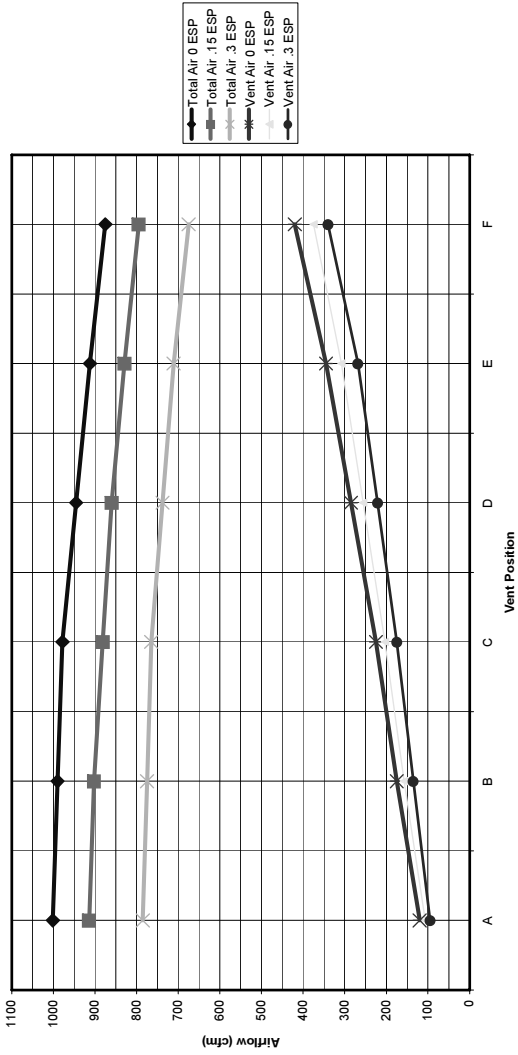
The WERV is designed to be internally mounted behind the service door in the WA, WH or WL model wall-mount units. It can be built-in at the factory or field installed as an option. WERV-*3C and WERV-*5C can be independently adjusted for intake and exhaust rates.

Manufactured under U.S. Patent Nos. 5,485,878; 5,301,744; 5,002,116; 4,924,934; 4,875,520; 4,825,936; 6,310,330.

Form No. S3210-206
Supersedes S3210-106
Page 3 of 12

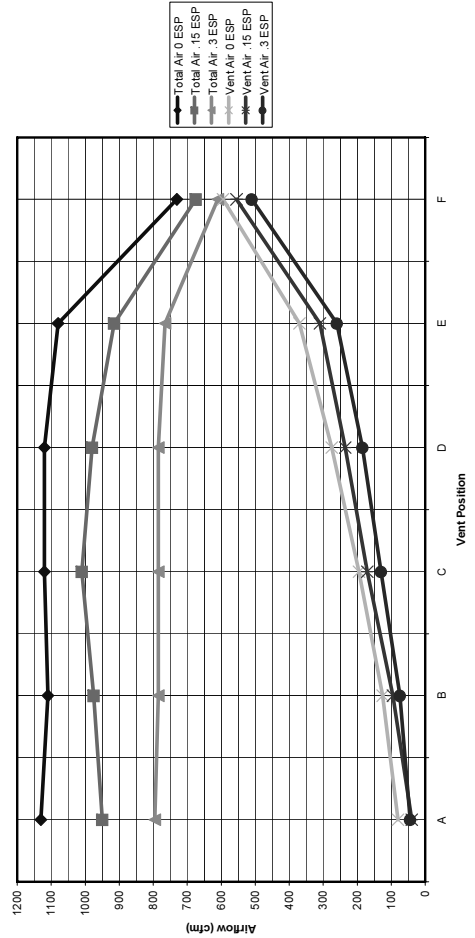
Commercial Room Ventilator Performance Data - CRV-2

WH18 & WH24 TOTAL AND VENTILATION AIRFLOW

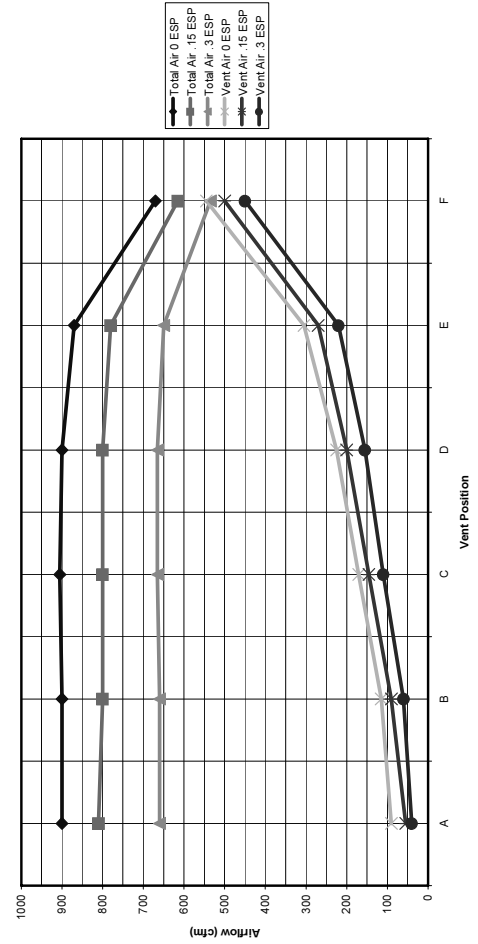


Commercial Room Ventilator Performance Data - CRVS-3 and CRVP-3

WH30 & WH36 HIGH SPEED TOTAL AND VENTILATION AIRFLOW

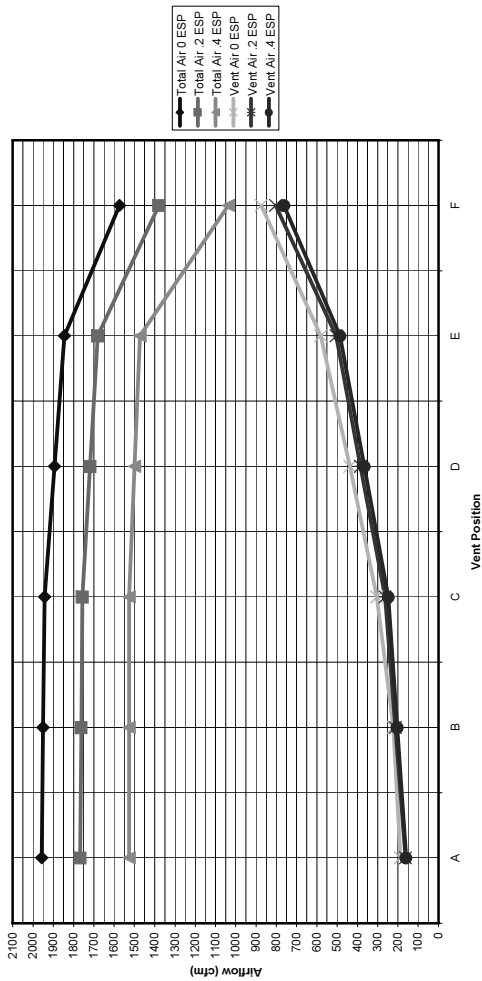


WH30 & WH36 LOW SPEED TOTAL AND VENTILATION AIRFLOW

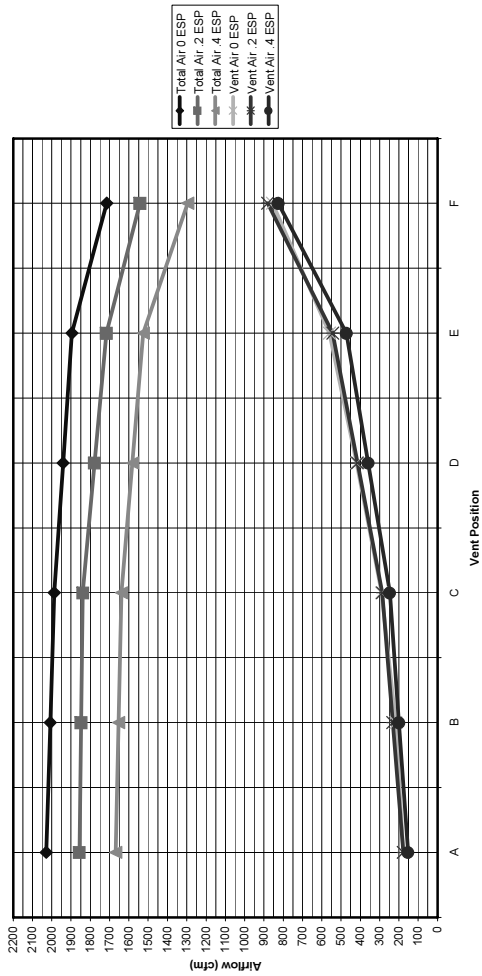


Commercial Room Ventilator Performance Data - CRVS-5 and CRVP-5

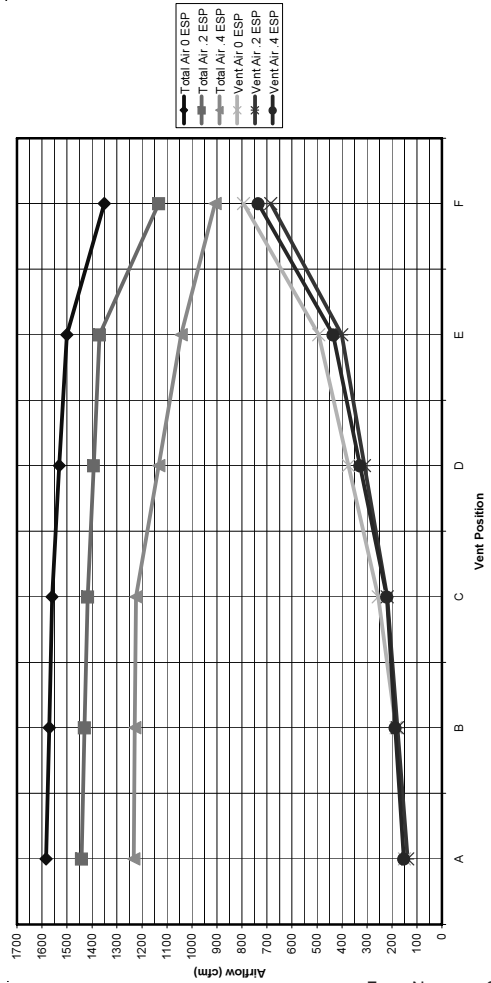
WH42 & WH48 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



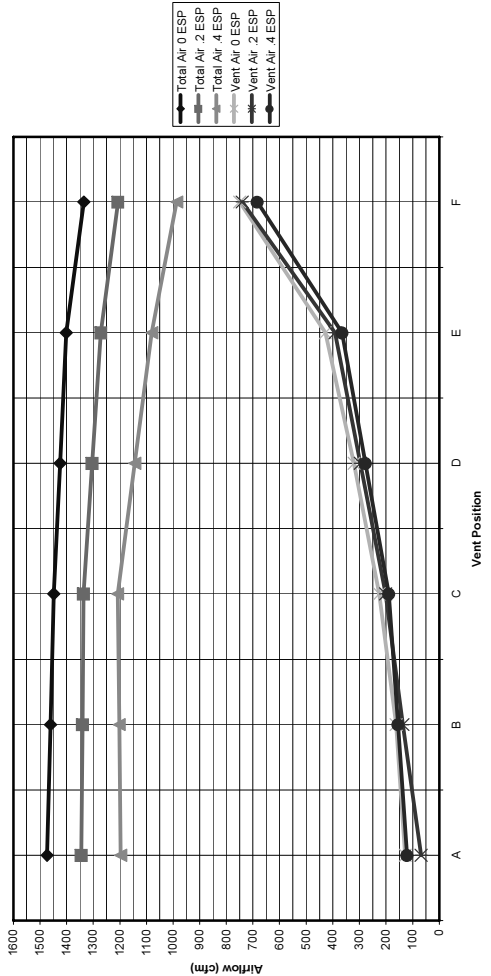
WH60 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



WH42 & WH48 LOW SPEED TOTAL AND VENTILATION AIRFLOW



WH60 LOW SPEED TOTAL AND VENTILATION AIRFLOW



Performance and Application Data- WERV-*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	HRL
75	105	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	65	6863	0	6863	4255	0	4255	6173	0	6173	6889	0	3889	5490	0	5490	3458	0	3458
	60	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

WERV-*2B 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	VWL	WHR	VWL	WHR	VWL	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
- VWL = Winter Ventilation Load
- WHR = Winter Heat Recovery

NOTE: Sensible performance only is shown for winter application.

Performance and Application Data- WERV- *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	HRL	VLT	VLS	VLL	HRT	HRS	HRL	VLT	VLS	VLL	HRT	HRS	HRL	
75	19080	12960	12960	0	8164	8164	0	10530	10530	0	6739	6739	0	8100	8100	0	5265	5265	0
105	70	10980	12960	0	8164	8164	0	10530	10530	0	6739	6739	0	8100	8100	0	5265	5265	0
65	12360	12960	0	8164	8164	0	10530	10530	0	6739	6739	0	8100	8100	0	5265	5265	0	
80	28080	10800	17280	17690	6804	10886	22815	8775	14040	14601	5618	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	
100	70	10980	10800	180	6717	6804	113	8921	8775	146	5709	5616	93	6862	6750	112	4480	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	
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	
95	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	
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	
90	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	
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	
85	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	
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	
80	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	
70	10980	0	10980	6917	0	6917	8921	0	8921	5709	0	5709	6862	0	6862	4460	0	4460	
75	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	0

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

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

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

NOTE: Sensible performance only is shown for winter application.

Performance and Application Data- WERV- *5C

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

Ambient O.D.	VENTILATION RATE 450 CFM						VENTILATION RATE 375 CFM						VENTILATION RATE 300 CFM						
	DB/ WB	F	VLT	VLS	VLL	HRL	VLT	VLS	VLL	HRT	HRS	HRL	VLT	VLS	VLL	HRT	HRS	HRL	
75	21465	14580	6884	13952	9477	4475	17887	12150	5737	11805	8018	3786	14310	9720	4590	9587	6512	3075	
105	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	
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	
100	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	
80	31590	9720	21870	20533	6318	14215	26325	8100	18225	17374	6345	12028	21060	6480	14580	14110	4341	9788	
75	21465	9720	11744	13952	6318	7634	17887	8100	9787	11805	5345	6459	14310	6480	7830	9587	4341	5246	
95	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	
80	31590	7290	24300	20533	4738	15794	26325	6075	20250	17374	4009	13363	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	
90	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	
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	
85	70	12352	4860	7482	8029	3159	4870	10293	4050	6243	6793	2672	4120	8235	3240	4995	5517	2170	3346
65	4860	4860	0	3159	3159	0													

Clearances Required for Service Access and Adequate Condenser Air Flow

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

Minimum Clearances Required to Combustible Materials

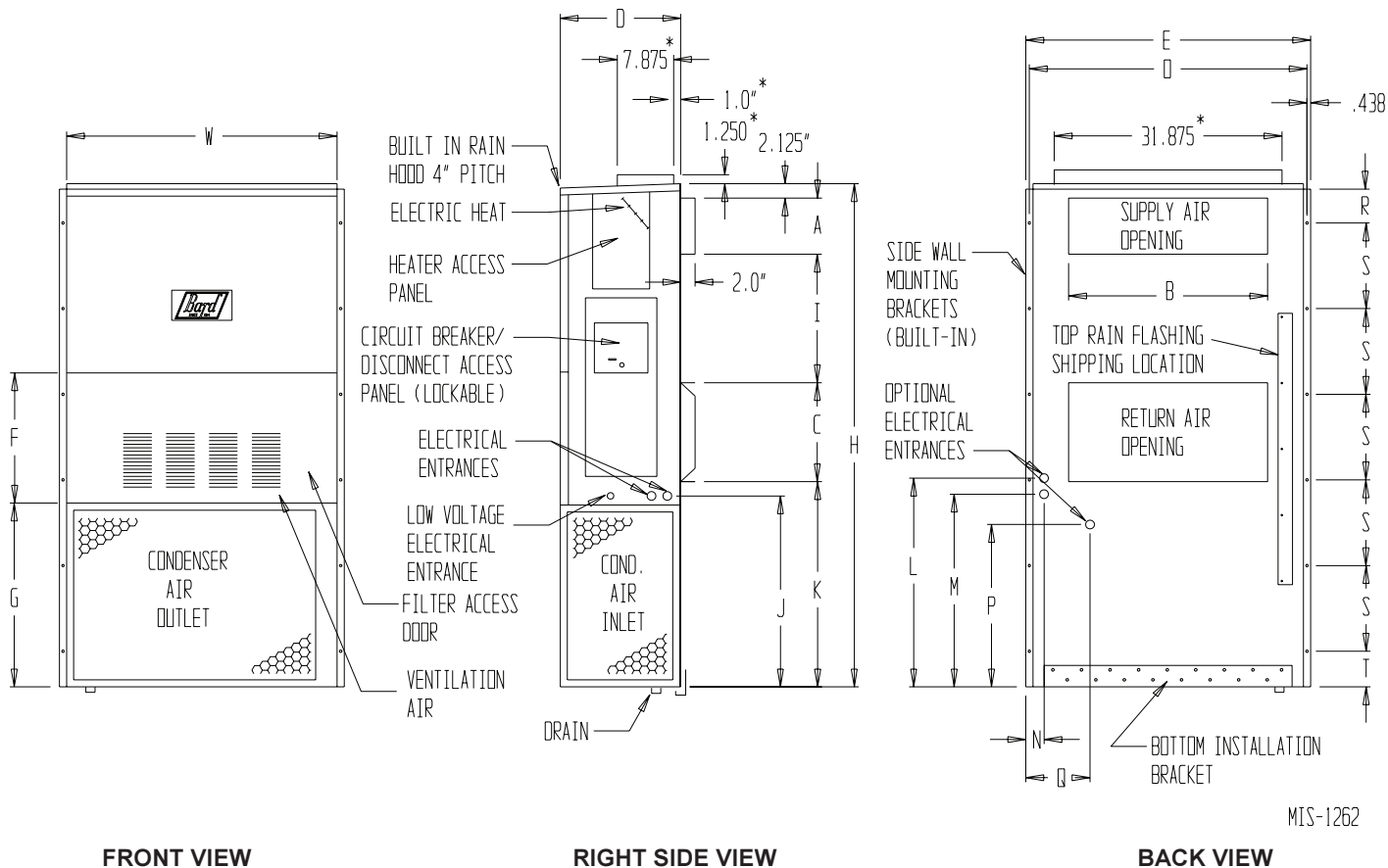
MODELS ①	SUPPLY AIR DUCT FIRST THREE FEET	CABINET
WH18, WH24	0"	0"
WH30, WH36	1/4"	0"
WH42, WH48, WH60	1/4"	0"

① Refer to the Installation Manual for more detailed information.

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
WH18 WH24	33.300	17.125	70.563	7.88	19.88	11.88	19.88	35.00	18.50	25.75	20.56	26.75	28.06	29.25	27.00	2.63	34.13	22.06	10.55	4.75	12.00	5.00
WH30 WH36	38.200	17.125	70.563	7.88	27.88	13.88	27.88	40.00	18.50	25.75	17.93	26.75	28.75	29.25	27.00	2.63	39.19	22.75	9.14	4.75	12.00	5.00
WH42 WH48 WH60	42.075	22.432	84.875	9.88	29.88	15.88	29.88	43.88	19.10	31.66	30.00	32.68	26.94	34.69	32.43	3.37	42.88	23.88	10.00	2.00	16.00	1.88

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



MIS-1262

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

Electrical Specifications

Model	Rated Volts and Phase	No. Field Power Circuits	Single Circuit				Dual Circuit							
			④ Minimum Circuit Ampacity	① Maximum External Fuse or Ckt. Brkr.	② Field Power Wire Size	③ Ground Wire	④ Minimum Circuit Ampacity		① Maximum External Fuse or Ckt. Breaker		② Field Power Wire Size		③ Ground Wire Size	
							Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B
WH184- A00, A0Z A04 ③ A08	230/208-1	1	17	25	12	12								
		1	38	40	8	10								
		1	59	60	6	10								
WH242- A00, A0Z A04 ③ A08	230/208-1	1	18	25	10	10								
		1	39	40	8	10								
		1	60	60	6	10								
WH242- B00, B0Z B06	230/208-3	1	15	20	12	12								
		1	33	35	8	10								
WH242- C00, C0Z C06	460-3	1	8	15	14	14								
		1	17	20	12	12								
WH301- A00, A0Z* A05* ③ 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
WH301- B00, B0Z* B06 ③ B09*	230/208-3	1	19	25	10	10								
		1	37	40	8	10								
		1	46	50	8	10								
WH301- C00, C0Z* C06 ③ C09* C15	460-3	1	10	15	14	14								
		1	19	20	12	12								
		1	24	25	10	10								
		1	26	30	10	10								
WH361- A00, A0Z* A05 ③ A10* ⑤ A15	230/208-1	1	27	40	8	10								
		1	53	60	6	10								
		1 or 2	79	80	4	8	53	26	60	30	6	10	10	10
		1 or 2	83	90	4	8	53	52	60	60	6	6	10	10
WH361- B00, B0Z* B06 ③ B09* ⑤ B15	230/208-3	1	20	25	10	10								
		1	38	40	8	10								
		1	47	50	8	10								
		1	50	50	8	10								
WH361- C00, C0Z* C06 ③ C09* ⑤ C15	460-3	1	11	15	14	14								
		1	20	20	12	12								
		1	25	25	10	10								
		1	26	30	10	10								
WH421- A00, A0Z A05 ③ A10 ⑤ A15	230/208-1	1	34	50	8	10								
		1 or 2	60	70	6	8	34	26	50	30	8	10	10	10
		1 or 2	86	90	3	8	34	52	50	60	8	6	10	10
		1 or 2	86	90	3	8	34	52	50	60	8	6	10	10
WH421- B00, B0Z B06 ③ B09 ⑤ B15	230/208-3	1	26	35	8	10								
		1	44	50	8	10								
		1	53	60	6	10								
		1	53	60	6	10								
WH421- C00, C0Z C06 ③ C09 ⑤ C15	460-3	1	13	20	12	12								
		1	23	25	10	10								
		1	27	30	10	10								
		1	27	30	10	10								
WH483- A00, A0Z A04 A05 ③ A10 ⑤ A15 ⑤ A20	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
		1 or 2	110	110	2	6	59	52	60	60	6	6	10	10
WH483- B00, B0Z B06 ③ B09 ⑤ B15 ⑤ B18	230/208-3	1	25	35	8	10								
		1	43	50	8	10								
		1	52	60	6	10								
		1	52	60	6	10								
		1	60	60	6	10								
WH483- C00, C0Z ③ C09 ⑤ C15	460-3	1	13	15	14	14								
		1	26	30	10	10								
		1	26	30	10	10								
WH602- A00, A0Z A05 ③ A10 ⑤ A15 ⑤ A20	230/208-1	1	45	60	8	10								
		1 or 2	71	90	4	8	45	26	60	30	8	10	10	10
		1 or 2	97	110	3	6	45	52	60	60	8	6	10	10
		1 or 2	97	110	3	6	45	52	60	60	8	6	10	10
		1 or 2	110	110	2	6	59	52	60	60	6	6	10	10
		1 or 2	110	110	2	6	59	52	60	60	6	6	10	10
WH602- B00, B0Z ③ B09 ⑤ B15 ⑤ B18	230/208-3	1	33	45	8	10								
		1	60	60	6	10								
		1	60	60	6	10								
		1	60	60	6	10								
WH602- C00, C0Z ③ C09 ⑤ C15	460-3	1	16	20	12	12								
		1	29	35	8	10								
		1	29	35	8	10								

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

② Based on 75°C copper wire. All wiring must conform to the National Electrical Code and all local codes.

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

④ 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.

⑤ Not available on dehumidification models.

* 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 and conductor wires in accordance with the National Electrical Code and all local codes.

Indoor Blower Performance - CFM at 230 or 460 Volts

ESP in H ₂ O	WH18 WH24	WH30 WH36		WH42 WH48		WH60	
	Dry/Wet Coil	High Speed Dry/Wet Coil	Low Speed Dry/Wet Coil	High Speed Dry/Wet Coil	Low Speed Dry/Wet Coil	High Speed Dry/Wet Coil	Low Speed Dry/Wet Coil
0	1020/975	1395/1315	950/935	1885/1800	1650/1600	2200/2000	1600/1450
.1	960/905	1340/1270	930/915	1770/1665	1550/1500	2100/1900	1525/1375
.2	865/800	1285/1190	910/885	1635/1550	1450/1400	2000/1800	1460/1200
.3	820/735	1205/1100	855/830	1500/1400	1350/1300	1875/1700	-/-
.4	735/650	1110/1000	800/755	1370/1285	1300/1175	1775/1600	-/-
.5	615/535	1005/870	-/-	1250/1150	-/-	1650/1475	-/-

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

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

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

Electric Heat Table----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
- Pull Disconnect Standard on 460V Models
- UL Listed
- CUL Listed

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 #	
WH184	EHWH02A-A04	4	N/A		N/A	
	EHWH02A-A08	8				
WH242	EHWH02A-A04	4	EHWH24-B06	6	EHWH24B-C06	6
	EHWH02A-A08	8				
WH301	EHWH30-A05	5	EHWH03-B06	6	EHWC03A-C06	6
	EHWH30-A10	10	EHWH03-B09	9	EHWC03A-C09	9
WH361					EHWH03A-C15 *	15
	EHWH36-A05	5	EHWH03-B06	6	EHWC03A-C06	6
	EHWH36-A10	10	EHWH03-B09	9	EHWC03A-C09	9
	EHWH36-A15 *	15	EHWH36-B15 *	15	EHWH03A-C15 *	15
WH421	EHWH42-A05	5	EHWH05-B06	6	EHWH42-C06	6
	EHWH42-A10	10	EHWH05-B09	9	EHWH05A-C09	9
	EHWH42-A15 *	15	EHWH05-B15 *	15	EHWH05A-C15 *	15
WH483	EHWH04-A04	4	EHWH05-B06	6	EHWH05A-C09	9
	EHWH42-A05	5	EHWH05-B09	9		
	EHWH42-A10	10	EHWH05-B15 *	15	EHWH05A-C15 *	15
	EHWH42-A15 *	15	EHWH04-B18 *	18		
	EHWH04-A20 *	20				
WH602	EHWH04-A05	5	EHWH05-B09	9	EHWH05A-C09	9
	EHWH04-A10	10	EHWH05-B15 *	15	EHWH05A-C15 *	15
	EHWH04-A15 *	15	EHWH04-B18 *	18		
	EHWH04-A20 *	20				

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
WH184	75/	Total Cooling	20,680	19,550	18,470	17,470	16,530	15,660	14,850	14,110	13,435
	62	Sensible Cooling	16,150	15,490	14,900	14,380	13,920	13,520	13,200	12,930	12,730
	80/	Total Cooling	22,130	21,320	20,530	19,500	18,400	18,000	17,550	16,860	16,190
	67	Sensible Cooling	15,690	15,200	14,770	14,390	14,060	13,780	13,560	13,380	13,260
	85/	Total Cooling	26,320	24,910	23,560	22,290	21,090	19,960	18,900	17,920	17,000
	72	Sensible Cooling	16,050	15,415	14,830	14,280	13,780	13,320	12,900	12,530	12,200
WH242	75/	Total Cooling	24,780	23,800	23,760	21,670	20,530	19,330	18,080	16,780	15,420
	62	Sensible Cooling	19,600	19,090	18,570	18,040	17,495	16,940	16,380	15,800	15,220
	80/	Total Cooling	26,450	25,940	25,300	24,520	23,600	22,550	21,360	20,040	18,575
	67	Sensible Cooling	19,030	18,730	18,410	18,050	17,670	17,260	16,820	16,350	15,855
	85/	Total Cooling	31,520	30,320	29,030	27,660	26,200	24,650	23,020	21,300	19,500
	72	Sensible Cooling	19,490	19,000	18,470	17,910	17,315	16,680	16,020	15,320	14,585
WH301	75/	Total Cooling	31,600	30,290	28,930	27,540	26,100	24,620	23,100	21,530	19,920
	62	Sensible Cooling	24,370	24,210	23,940	23,560	23,075	22,480	21,770	20,960	20,040
	80/	Total Cooling	33,760	33,030	32,160	31,150	30,000	28,710	27,280	25,710	24,000
	67	Sensible Cooling	24,000	23,830	23,650	23,485	23,310	22,900	22,360	21,690	20,880
	85/	Total Cooling	40,220	38,600	36,910	35,140	33,300	31,390	29,400	27,340	25,200
	72	Sensible Cooling	24,220	24,090	23,810	23,400	22,845	22,150	21,310	20,330	19,210
WH361	75/	Total Cooling	36,960	35,600	34,150	32,600	30,972	29,250	27,440	25,540	23,550
	62	Sensible Cooling	28,730	28,320	27,820	27,220	26,530	25,740	24,850	23,875	22,800
	80/	Total Cooling	39,475	38,820	37,960	36,880	35,600	34,100	32,400	30,500	28,375
	67	Sensible Cooling	27,870	27,790	27,580	27,250	26,800	26,220	25,520	24,700	23,750
	85/	Total Cooling	45,360	45,000	43,910	42,080	39,515	37,000	34,650	32,200	29,790
	72	Sensible Cooling	28,570	28,190	27,670	27,030	26,260	25,350	24,320	23,150	21,850
WH421	75/	Total Cooling	46,330	43,420	40,680	38,350	36,100	33,920	31,800	29,770	27,800
	62	Sensible Cooling	36,530	34,230	33,380	32,970	32,300	31,370	30,180	28,720	27,000
	80/	Total Cooling	49,670	47,390	45,220	43,380	41,500	39,570	37,600	35,570	33,500
	67	Sensible Cooling	35,900	34,900	33,020	32,900	32,600	32,110	31,430	30,560	29,500
	85/	Total Cooling	59,150	55,450	51,740	48,590	45,600	42,770	40,090	37,570	35,200
	72	Sensible Cooling	36,750	35,400	33,100	32,600	31,900	31,000	29,900	28,600	27,100
WH483	75/	Total Cooling	50,250	47,770	45,375	43,100	40,900	38,800	36,800	34,900	33,100
	62	Sensible Cooling	39,550	38,500	37,500	36,525	35,600	34,700	33,875	33,050	32,300
	80/	Total Cooling	53,700	52,050	50,400	48,700	47,000	45,250	43,500	41,700	39,900
	67	Sensible Cooling	38,500	37,850	37,200	36,600	36,000	35,400	34,850	34,250	33,700
	85/	Total Cooling	63,800	60,800	57,840	54,980	52,200	49,500	46,890	44,350	41,900
	72	Sensible Cooling	39,250	38,300	37,300	36,325	35,300	34,250	33,200	32,100	31,000
WH602	75/	Total Cooling	58,200	56,300	54,200	51,800	49,100	46,150	42,950	39,450	35,700
	62	Sensible Cooling	44,100	43,000	41,900	40,750	39,500	38,200	36,800	35,300	33,800
	80/	Total Cooling	62,000	61,400	60,250	58,625	56,500	53,900	50,750	47,100	43,000
	67	Sensible Cooling	42,800	42,200	41,600	40,800	39,900	38,900	37,800	36,600	35,600
	85/	Total Cooling	74,000	71,750	69,150	66,100	62,725	58,900	54,700	50,125	45,150
	72	Sensible Cooling	43,800	42,800	41,700	40,475	39,100	37,600	36,000	34,250	32,400

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

② Return air temperature °F.

Capacity Multiplier Factors

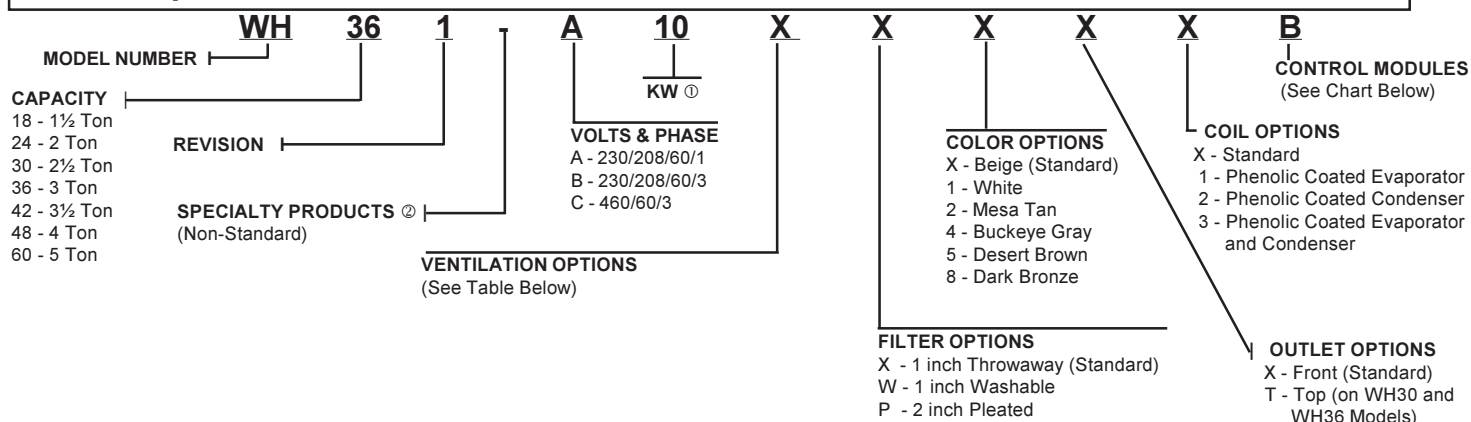
% of Rated Airflow	-10	Rated	+10
Total BTUH	0.975	1.0	1.02
Sensible BTUH	0.950	1.0	1.05

Heating Application Rating and Outdoor Temperature °F *

Model		-5°	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°
WH184	BTUH	6,000	7,000	8,000	9,000	10,000	11,500	12,000	13,000	14,000	16,000	17,500	19,000	20,800	22,000	23,400
	WATTS	1,600	1,630	1,680	1,700	1,730	1,760	1,795	1,820	1,860	1,890	1,920	1,950	1,980	2,020	2,040
	COP	1.09	1.25	1.39	1.55	1.69	1.91	1.95	2.09	2.35	2.48	2.74	2.93	3.07	3.19	3.36
WH242	BTUH	6,960	8,030	9,090	10,160	11,230	12,775	13,360	14,430	15,500	18,700	21,910	24,280	26,080	27,880	29,680
	WATTS	1,726	1,775	1,825	1,875	1,925	1,970	2,020	2,070	1,976	2,165	2,215	2,265	2,315	2,365	2,412
	COP	1.18	1.32	1.45	1.58	1.70	1.90	1.93	2.04	2.29	2.53	2.88	3.14	3.30	3.45	3.60
WH301	BTUH	8,295	9,875	11,450	13,025	14,600	16,790	17,750	19,325	20,900	23,860	26,815	29,180	31,150	33,115	35,080
	WATTS	2,100	2,165	2,230	2,290	2,350	2,400	2,470	2,530	2,662	2,650	2,710	2,770	2,830	2,890	2,952
	COP	1.15	1.33	1.50	1.66	1.82	2.05	2.10	2.23	2.30	2.63	2.89	3.08	3.22	3.37	3.48
WH361	BTUH	12,490	13,970	15,445	16,920	18,400	20,900	21,830	22,825	24,303	28,510	32,720	35,820	38,180	40,550	42,920
	WATTS	2,600	2,680	2,760	2,845	2,925	3,000	3,090	3,170	3,185	3,335	3,420	3,500	3,580	3,664	3,750
	COP	1.40	1.52	1.64	1.74	1.84	2.05	2.07	2.10	2.23	2.50	2.80	2.99	3.12	3.24	3.35
WH421	BTUH	13,700	15,750	17,825	19,900	21,975	24,050	26,100	28,200	30,250	34,725	39,200	42,800	45,850	48,875	51,900
	WATTS	2,975	3,075	3,175	3,275	3,350	3,450	3,550	3,650	3,750	3,825	3,925	4,025	4,100	4,200	4,300
	COP	1.34	1.50	1.64	1.78	1.92	2.08	2.15	2.26	2.36	2.65	2.92	3.11	3.27	3.41	3.53
WH483	BTUH	17,950	19,900	21,875	23,850	26,200	28,500	29,750	31,700	33,675	38,800	43,900	47,950	51,175	54,400	57,650
	WATTS	3,450	3,550	3,625	3,700	3,800	3,900	3,975	4,075	4,150	4,250	4,300	4,425	4,500	4,600	4,700
	COP	1.52	1.64	1.76	1.88	2.00	2.15	2.20	2.27	2.37	2.67	2.89	3.17	3.33	3.46	3.59
WH602	BTUH	24,775	26,500	28,300	30,100	31,900	33,650	35,450	37,200	39,000	46,900	54,800	60,500	64,700	68,900	73,000
	WATTS	4,100	4,225	4,325	4,425	4,525	4,625	4,750	4,850	4,950	5,050	5,150	5,250	5,375	5,475	5,575
	COP	1.65	1.72	1.79	1.83	1.87	2.05	2.19	2.24	2.30	2.71	2.90	3.26	3.53	3.69	3.83

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

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. Reference Form F1743 for complete details.

Ventilation Options

MODELS	WH184, WH242		WH301, WH361		WH421, WH483, WH602	
	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	WERV-A2B	R	WERV-A3C ①	R	WERV-A5C ①
Energy Recovery Ventilator - 460 Volt	R	WERV-C2B	R	WERV-C3C ①	R	WERV-C5C ①

① Intake and exhaust can be independently adjusted.

Heat Pump Control Modules

Factory Installed Code Number	Field Installed Part Number	Description			
		Low Pressure Control ①	Low Ambient Control and Relay ②	Start Kit ③	Outdoor Thermostat ④
B	CMH-3	●			
E	CMH-7		●		
O	CMH-9	●	●		
Q	CMH-14				●
R	---	●	●		●
S	---	●	●	●	
T	---	●	●	●	●
P	CMC-15 ③			●	
U	---	●			●

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

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

③ For WH242-A, WH301-A, WH361-A and WH421-A models. The CMC-15 can be used with any control module combination.

NOTE: The compressor anti-cycle relay is standard on all heat pump models.

④ The outdoor thermostat is adjustable from 0°F to 50°F. It is suitable for use as a compressor cut-off thermostat.



BARD MANUFACTURING CO.
BRYAN, OHIO 43506
www.bardhvac.com

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.

Form No.
S3210
February, 2006

Supersedes S3210-106

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>