THE WALL-MOUNT™ AIR CONDITIONERS - 9.0 EER, (60HZ)

Bard® SINCE 1914
Climate Control Solutions

Models W17A to W70A **Right-Side Control Panel**
Models W17L to W70L **Left-Side Control Panel**
1.5 to 6 Ton **(16,400 to 68,000 Btuh)**

GREEN REFRIGERANT
R-410A

The Bard Wall-Mount Air Conditioner is a self contained energy efficient 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.

Air Conditioner Compressor:
Scroll Compressors eliminate need for crankcase heater. Standard on all models.

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

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

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 textured enamel, which allows it to withstand 1000 hours of salt spray tests per ASTM B117-03.

Foil Faced Insulation:
Standard on all units.

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

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 can be factory or field installed.

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.

Condenser Fan and Motor Shroud Assembly:
Slides out for easy access.

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

Built-in Circuit Breakers:
Standard on all electric heat versions of single (230/208 volt) 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.

Top Rain Flashing:
Standard feature on all models.

Freezestat:
Standard on W70 Models. Optional field installed CMC-29 can be used on other models.

Liquid Line Filter Drier:
Standard on all units. Protects system against moisture.

Compressor Control Module:
Standard on all units. Built-in off-delay timer adjustable from 30 seconds to 5 minutes. 2-minute on-delay if power interrupt. 120-second bypass for low pressure control, and both soft and manual lockouts for high and low pressure controls. Alarm output for alarm relay.

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.

- 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.

AHRI CERTIFIED www.ahridirectory.org Single Package Vertical AC AHRI Standard 390

C ETL LISTED US Intertek

INTERTEK ISO 9001:2008

Capacity and Efficiency Ratings

Models	W17A2 / W18A2 W17L2 / W18L2	W24A2 W24L2	W30A2 W30L2	W36A2 W36L2	W42A2 W42L2	W48A2 W48L2	W60A2 W60L2	W70A2 W70L2
Cooling Capacity BTUH ①	16,400	23,600	29,400	35,000	40,000	48,500	55,000	68,000
EER	9.00	9.00	9.00	9.00	9.50	9.00	9.00	9.00

① Capacity is certified in accordance with ANSI/ARI Standard 390-2003.
② EER = Energy Efficiency Ratio and is certified in accordance with ANSI/ARI Standard 390-2003.
All ratings based on fresh air intake being 100% closed (no outside air introduction).

Specifications 1-1/2 Ton through 3 Ton

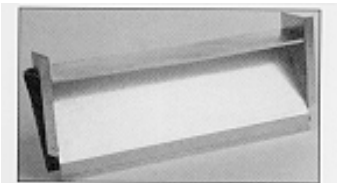
MODELS	W17A2-A W17L2-A	W18A2-A W18L2-A	W24A2-A W24L2-A	W24A2-B W24L2-B	W24A2-C	W30A2-A W30L2-A	W30A2-B W30L2-B	W30A2-C W30L2-C	W36A2-A W36L2-A	W36A2-B W36L2-B	W36A2-C W36L2-C
Electrical Rating – 60 Hz	230/208-1	230/208-1	230/208-1	230/208-3	460-3	230/208-1	230/208-3	460-3	230/208-1	230/208-3	460-3
Operating Voltage Range	197-253	197-253	197-253	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	230/208	460	230/208	230/208	460	230/208	230/208	460
Rated Load Amps	6.5/7.4	6.3/7.2	9.6/11.2	6.3/7.3	4.5	12.2/13.9	7.8/8.9	5.6	15.3/17.2	11.3/12.7	5.8
Branch Circuit Selection Current	9.0	9.0	12.9	8.4	5.2	14.2	9.0	5.7	18	13.3	6.0
Lock Rotor Amps	48/48	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	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	1/5 - 1075
Fan Motor--Amps	1.2	1.2	1.2	1.2	0.8	1.5	1.5	0.8	1.5	1.5	0.8
Fan--DIA/CFM	18" - 1700	18" - 1700	18" - 1700	18" - 1700	18" - 1700	20" - 2200	20" - 2200	20" - 2200	20" - 2000	20" - 2000	20" - 2000
Blower Motor & Evap.											
Blower Motor--HP-RPM-SPD	1/6-1100-2	1/6-1100-2	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
Blower Motor--Amps	1.0	1.0	0.8	0.8	.45	2.1	2.1	1.0	2.1	2.1	1.0
CFM Cooling & E.S.P. w/Filter (Rated-Wet Coil)	600 - .40	550 - .45	800 - .30	800 - .30	800 - .30	1000 - .3	1000 - .3	1000 - .3	1100 - .2	1100 - .2	1100 - .2
Filter Sizes (inches) STD.	16x25x1	16x25x1	16x25x1	16x25x1	16x25x1	16x30x1	16x30x1	16x30x1	16x30x1	16x30x1	16x30x1
Shipping Weight --LBS.	295	295	295	295	295	320	320	320	340	340	340

Specifications 3-1/2 Ton through 6 Ton

MODELS	W42A2-A W42L2-A	W42A2-B W42L2-B	W42A2-C W42L2-C	W48A2-A W48L2-A	W48A2-B W48L2-B	W48A2-C W48L2-C	W60A2-A W60L2-A	W60A2-B W60L2-B	W60A2-C W60L2-C	W70A2-A W70L2-A	W70A2-B W70L2-B	W70A2-C W70L2-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	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	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	230/208	230/208	460
Rated Load Amps	15.9/17.8	10.5/11.8	5.5	21/23.5	13.4/15	6.7	21.9/24.9	13/14.8	7.4	29/31.7	17.7/19.3	9.2
Branch Circuit Selection Current	19.9	13.2	6.1	25	15.9	7.1	26.3	15.7	7.8	37	22.5	10.6
Lock Rotor Amps	109/109	83.1/83.1	41	134/134	110/110	52	134/134	110/110	52	185/185	149/149	75
Compressor Type	Scroll	Scroll	Scroll	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	1/3-825-1	1/3-825-2	1/3-825-2	1/3-825-1	1/3-825-2	1/3-825-2	1/3-825-1	1/2-1075-1	1/2-1075-1	3/4-1075-1
Fan Motor--Amps	2.5	2.5	1.3	2.5	2.5	1.3	2.5	2.5	1.3	4.0	4.0	1.7
Fan--DIA/CFM	24" - 2700	24" - 2700	24" - 2700	24" - 2700	24" - 2700	24" - 2700	24" - 2500	24" - 2500	24" - 2500	24" - 3500	24" - 3500	24" - 3500
Blower Motor & Evap.												
Blower Motor--HP-RPM-SPD	1/3-985-2	1/3-985-2	1/3-985-2	1/3-985-2	1/3-985-2	1/3-985-2	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	2.3	2.3	1.2	2.3	2.3	1.2	3.5	3.5	1.9	3.5	3.5	1.9
CFM Cooling & E.S.P. w/Filter (Rated-Wet Coil)	1400 - .45	1400 - .45	1400 - .45	1550 - .3	1550 - .3	1550 - .3	1700 - .4	1700 - .4	1700 - .4	1700 - .2	1700 - .2	1700 - .2
Filter Sizes (inches) STD.	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1
Shipping Weight --LBS.	460	460	460	465	465	465	485	485	485	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 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 – 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

Energy Recovery Ventilator

WALL-MOUNT ENERGY RECOVERY VENTILATOR - ERVF **OPTIONAL**

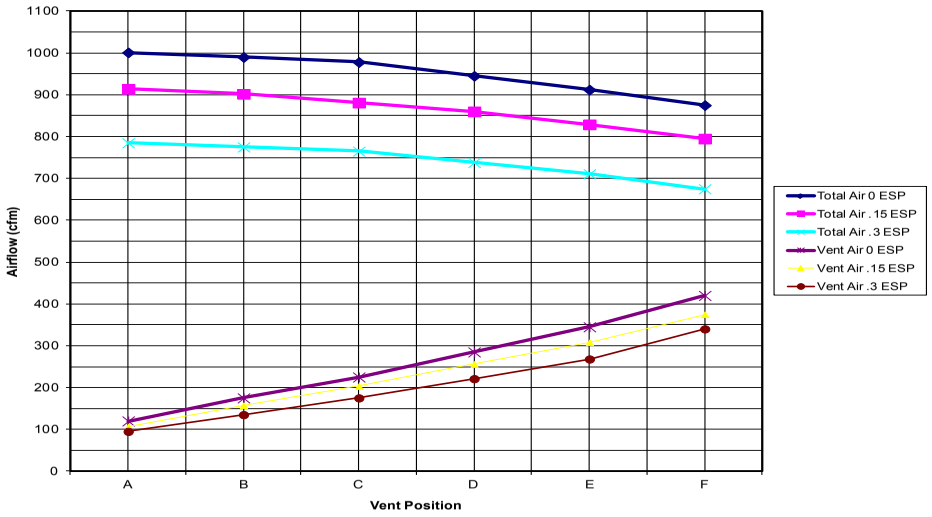
The wall-mount energy recovery ventilator (ERV) is a highly innovative approach to meeting indoor air quality ventilation requirements as established by ANSI/ASHRAE Standard 62.1. The ERV allows from 200 to 450 CFM (depending upon model) of fresh air and exhaust through the unit while maintaining superior 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 or W**L model wall-mount units. It can be built-in at the factory (W**A only) or field installed as an option. ERVF-*3 and ERVF-*5 can be independently adjusted for intake and exhaust rates.

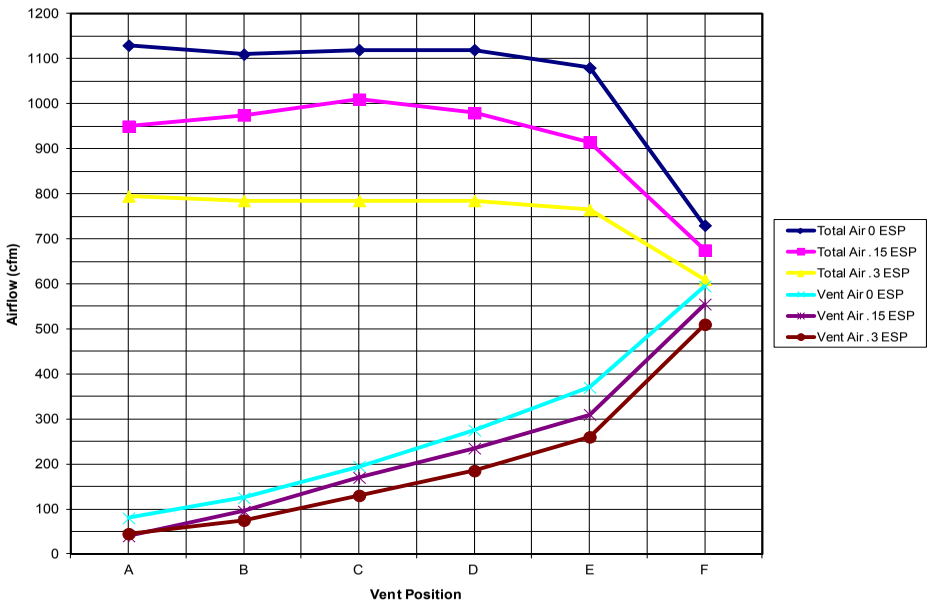
Commercial Room Ventilator Performance Data · CRV-Z

W17/W18 & W24 TOTAL AND VENTILATION AIRFLOW

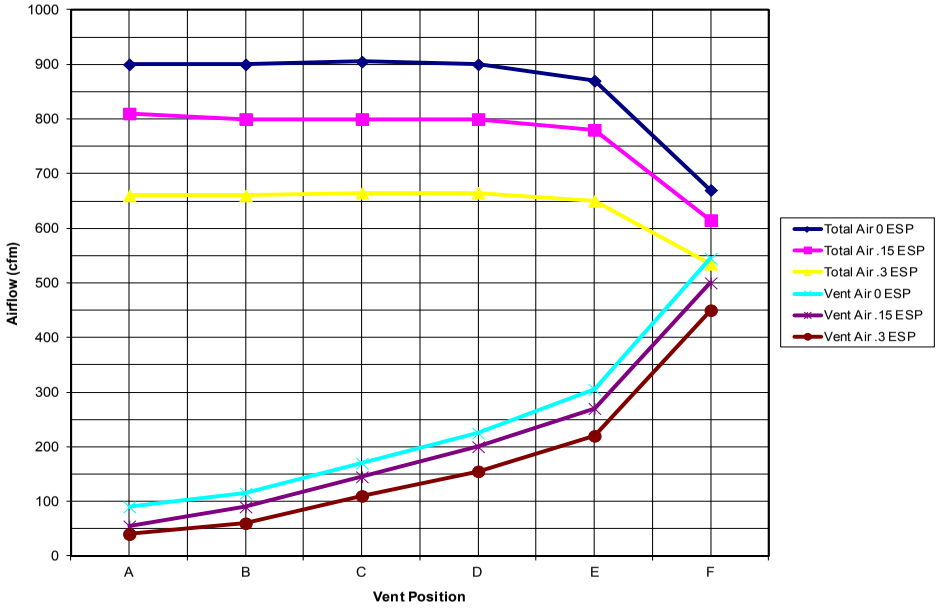


Commercial Room Ventilator Performance Data · CRVS-3 and CRVP-3

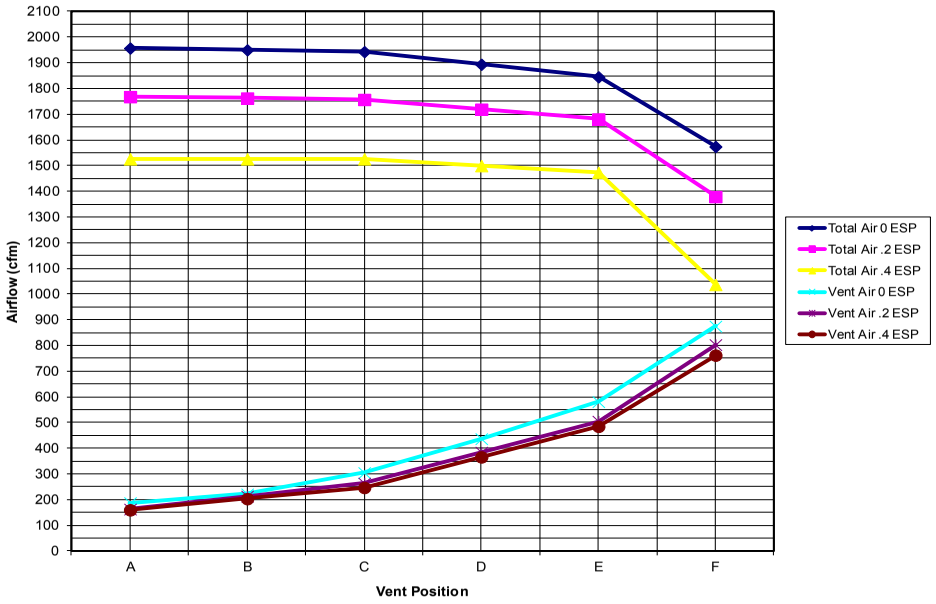
W30 & W36 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



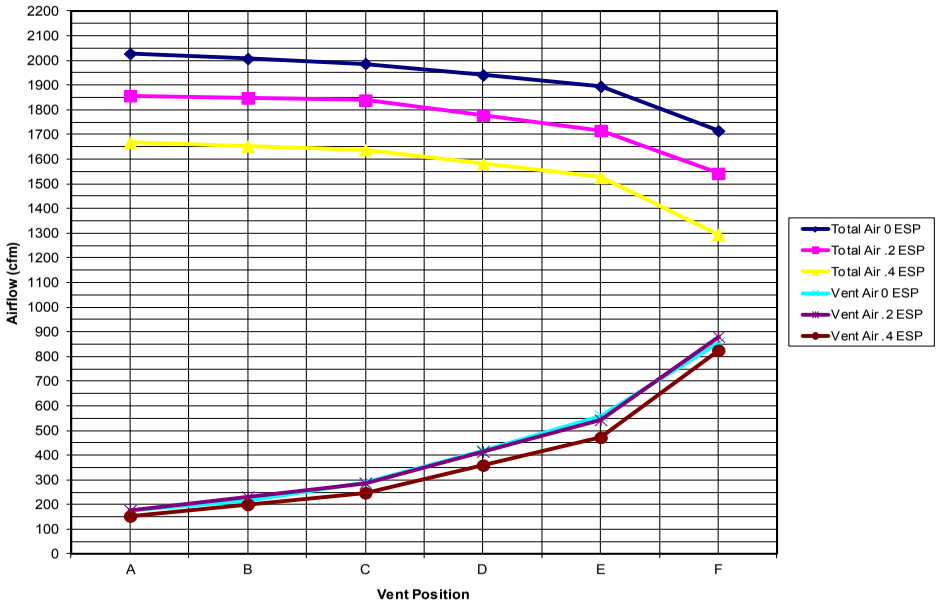
W30 & W36 LOW SPEED TOTAL AND VENTILATION AIRFLOW



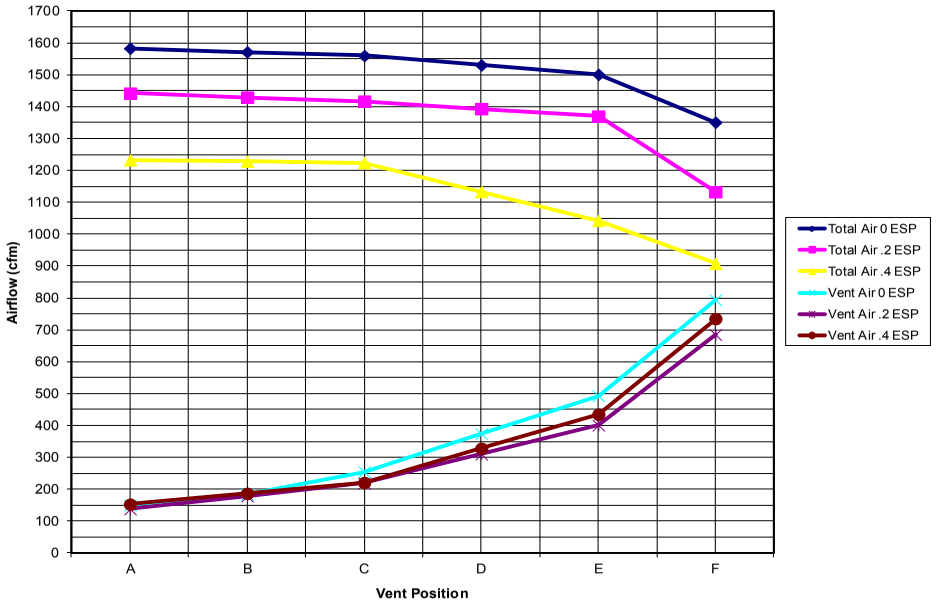
W42 & W48 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



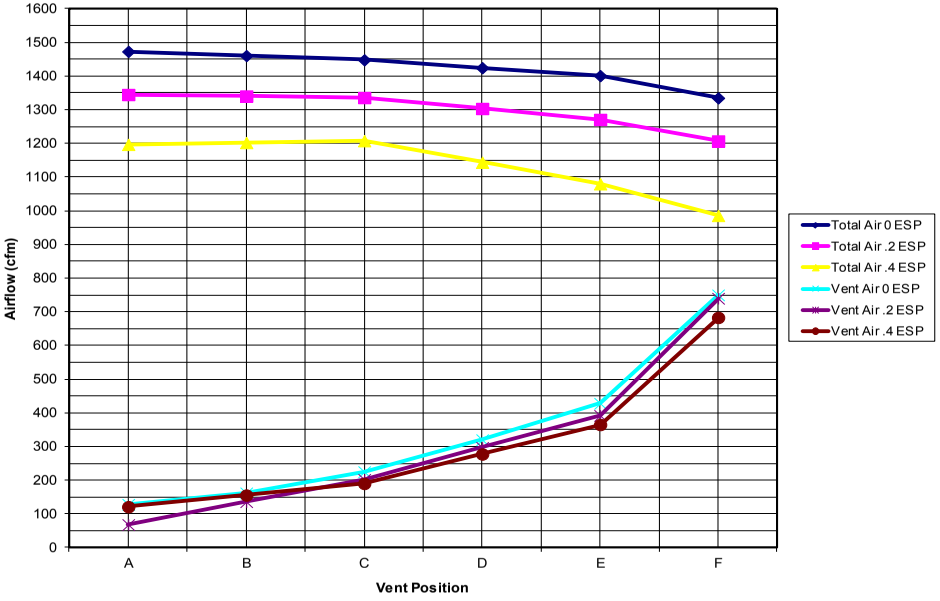
W60 & W70 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



W42 & W48 LOW SPEED TOTAL AND VENTILATION AIRFLOW



W60 & W70 LOW SPEED TOTAL AND VENTILATION AIRFLOW



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
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					
	250 250 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

NOTE: Sensible performance only is shown for winter application.

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

Performance and Application Data- ERVF-*3

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	HRL
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

Performance and Application Data- ERVF-*5

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	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	1580	12372	17887	2025	15862	11805	1336	10469	14310	1620	12690	9587	1085	8502
	70	12352	2430	9922	8029	1580	6449	10293	2025	8268	6793	1336	5457	8235	1620	6615	5517	1085	4432
	65	4252	2430	1822	2764	1580	1184	3543	2025	1518	2338	1336	1002	2835	1620	1215	1899	1085	814
	60	2430	2430	0	1579	1580	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-*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

NOTE: Sensible performance only is shown for winter application.

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

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

NOTE: Sensible performance only is shown for winter application.

Electrical Specifications - W**A Series

MODEL	Rated Volts & Phase	No. Field Power Circuits	Single Circuit				Dual Circuit							
			③ Minimum Circuit Ampacity	① Maximum External Fuse or Ckt. Brkr.	② Field Power Wire Size	② Ground Wire	③ Minimum Circuit Ampacity		① Maximum External Fuse or Ckt. Breaker		② Field Power Wire Size		② Ground Wire Size	
							Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B
W17, 18A2-A00,A0Z	230/208-1	1	16	20	12	12								
A05		1	30	30	10	10								
A08		1	46	50	8	10								
A10		1	56	60	6	10								
W24A2-A00, A0Z	230/208-1	1	21	30	10	10								
A04		1	25	30	10	10								
A05		1	30	30	10	10								
A08		1	46	50	8	10								
A10		1	56	60	6	10								
W24A2-B00, B0Z	230/208-3	1	15	20	12	12								
B06		1	22	25	10	10								
W24A2-C00, C0Z	460-3	1	9	15	14	14								
C06		1	11	15	14	14								
W30A2-A00*, A0Z*	230/208-1	1	24	35	8	10								
A05*		1	32	35	8	10								
A08		1	47	50	8	10								
A10*		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
W30A2-B00*, B0Z*	230/208-3	1	18	20	12	12								
B06		1	24	25	10	10								
B09*		1	33	35	8	10								
B15		1	51	60	6	10								
W30A2-C00*, C0Z*	460-3	1	11	15	14	14								
C06		1	12	15	14	14								
C09*		1	17	20	12	12								
C15		1	26	30	10	10								
W36A2-A00*, A0Z*	230/208-1	1	29	35	8	10								
A05*		1	32	35	8	10								
A08		1	47	50	8	10								
A10*		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
W36A2-B00*, B0Z*	230/208-3	1	23	30	10	10								
B06*		1	24	30	10	10								
B09*		1	33	35	8	10								
B15		1	51	60	6	10								
W36A2-C00*, C0Z*	460-3	1	11	15	14	14								
C06*		1	12	15	14	14								
C09*		1	16	20	12	12								
C15		1	26	30	10	10								
W42A2-A00, A0Z	230/208-1	1	32	50	8	10								
A05		1	32	50	8	10								
A10		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
A20		1 or 2	110	125	2	6	58	52	60	60	6	6	10	10
W42A2-B00, B0Z	230/208-3	1	24	35	8	10								
B09		1	33	35	8	10								
B15		1	51	60	6	10								
B18		1	60	60	6	10								
W42A2-C00, C0Z	460-3	1	12	15	14	14								
C09		1	17	20	12	12								
C15		1	26	30	10	10								
W48A2-A00, A0Z	230/208-1	1	39	50	8	10								
A05		1	39	50	8	10								
A10		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
A20		1 or 2	110	125	2	6	58	52	60	60	6	6	10	10
W48A2-B00, B0Z	230/208-3	1	27	40	8	10								
B09		1	33	40	8	10								
B15		1	51	60	6	10								
B18		1	60	60	6	10								
W48A2-C00, C0Z	460-3	1	13	20	12	12								
C09		1	17	20	12	12								
C15		1	26	30	10	10								
W60A2-A00, A0Z	230/208-1	1	42	60	8	10								
A05		1	42	60	8	10								
A10		1	60	60	6	10								
A15		1 or 2	86	90	3	8	60	26	60	30	6	10	10	10
A20		1 or 2	112	125	2	6	60	52	60	60	6	6	10	10
W60A2-B00, B0Z	230/208-3	1	28	40	8	10								
B09		1	35	40	8	10								
B15		1	53	60	6	10								
B18		2	N/A	N/A	N/A	N/A	35	28	40	30	8	10	10	10
W60A2-C00, C0Z	460-3	1	15	20	12	12								
C09		1	18	20	12	12								
C15		1	27	30	10	10								
W70A2-A00, A0Z	230/208-1	1	56	60	6	10								
A05		1	56	60	6	10								
A10		1	59	60	6	10								
A15		1 or 2	85	90	4	8	59	26	60	30	6	10	10	10
A20		1 or 2	111	125	2	6	59	52	60	60	6	6	10	10
W70A2-B00, B0Z	230/208-3	1	38	60	8	10								
B09		1	38	60	8	10								
B15		1	53	60	6	10								
B18		2	N/A	N/A	N/A	N/A	38	28	60	30	8	10	10	10
W70A2-C00, C0Z	460-3	1	19	30	10	10								
C09		1	19	30	10	10								
C15		1	27	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 75C copper wire. All wiring must conform to the National Electrical Code and all local codes.

③ 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) current carrying conductors are in a raceway.

* Top outlet supply option is available only factory installed and only on the selected models.

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

Electrical Specifications - W**L Series

MODEL	Rated Volts & Phase	No. Field Power Circuits	Single Circuit				Dual Circuit							
			③ Minimum Circuit Ampacity	① Maximum External Fuse or Ckt. Brkr.	② Field Power Wire Size	② Ground Wire	③ Minimum Circuit Ampacity		① Maximum External Fuse or Ckt. Breaker		② Field Power Wire Size		② Ground Wire Size	
							Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B
W17, 18L2-A00,A0Z	230/208-1	1	16	20	12	12								
A05		1	30	30	10	10								
A08		1	46	50	8	10								
A10		1	56	60	6	10								
W24L2-A00, A0Z	230/208-1	1	21	30	10	10								
A05		1	30	30	10	10								
A08		1	46	50	8	10								
A10		1	56	60	6	10								
W24L2-B00, B0Z	230/208-3	1	15	20	12	12								
B06		1	22	25	10	10								
W30L2-A00, A0Z	230/208-1	1	24	35	8	10								
A05		1	32	35	8	10								
A08		1	47	50	8	10								
A10		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
W30L2-B00, B0Z	230/208-3	1	18	20	12	12								
B09		1	33	35	8	10								
B15		1	51	60	6	10								
W30L2-C00, C0Z	460-3	1	11	15	14	14								
C09		1	17	20	12	12								
C15		1	26	30	10	10								
W36L2-A00, A0Z	230/208-1	1	29	35	8	10								
A05		1	32	35	8	10								
A10		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
W36L2-B00, B0Z	230/208-3	1	23	30	10	10								
B09		1	33	35	8	10								
B15		1	51	60	6	10								
W36L2-C00, C0Z	460-3	1	11	15	14	14								
C09		1	16	20	12	12								
C15		1	26	30	10	10								
W42L2-A00, A0Z	230/208-1	1	32	50	8	10								
A05		1	32	50	8	10								
A10		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
W42L2-B00, B0Z	230/208-3	1	24	35	8	10								
B09		1	33	35	8	10								
B15		1	51	60	6	10								
W42L2-C00, C0Z	460-3	1	12	15	14	14								
C09		1	17	20	12	12								
C15		1	26	30	10	10								
W48L2-A00, A0Z	230/208-1	1	39	50	8	10								
A05		1	39	50	8	10								
A10		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
W48L2-B00, B0Z	230/208-3	1	27	40	8	10								
B09		1	33	40	8	10								
B15		1	51	60	6	10								
W48L2-C00, C0Z	460-3	1	13	20	12	12								
C09		1	17	20	12	12								
C15		1	26	30	10	10								
W60L2-A00, A0Z	230/208-1	1	42	60	8	10								
A05		1	42	60	8	10								
A10		1	60	60	6	10								
A15		1 or 2	86	90	3	8	60	26	60	30	6	10	10	10
W60L2-B00, B0Z	230/208-3	1	28	40	8	10								
B09		1	35	40	8	10								
B15		1	53	60	6	10								
W60L2-C00, C0Z	460-3	1	15	20	12	12								
C09		1	18	20	12	12								
C15		1	27	30	10	10								
W70L2-A0Z	230/208-1	1	56	60	6	10								
A05		1	56	60	6	10								
A10		1	59	60	6	10								
A15		1 or 2	85	90	4	8	59	26	60	30	6	10	10	10
W70L2-B0Z	230/208-3	1	38	60	8	10								
B09		1	38	60	8	10								
B15		1	53	60	6	10								
W70L2-C0Z	460-3	1	19	30	10	10								
C09		1	19	30	10	10								
C15		1	27	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 75C copper wire. All wiring must conform to the National Electrical Code and all local codes.
③ 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) current carrying conductors are in a raceway.

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

Indoor Blower Performance (60 Hz) · CFM at Rated Volts

Speed	W17/W18				W24		W30				W36				W42/W48				W60				W70			
	High		**Low** ①		**Single** ①		**High** ①		Low		**High** ①		Low		**High** ①		Low		**High** ①		Low		**High** ①		Low	
ESP (Inch H20)	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil
0.0	1045	1025	760	745	990	970	1370	1285	910	885	1415	1275	955	925	1850	1800	1605	1555	2080	2015	1505	1460	2050	1845	1490	1400
0.1	1010	970	730	715	945	925	1305	1225	885	860	1350	1215	945	915	1775	1725	1545	1500	2020	1960	1450	1405	1970	1770	1425	1340
0.2	940	905	700	685	890	870	1225	1135	850	815	1265	1125	925	900	1685	1640	1460	1415	1925	1865	1395	1355	1905	1700	1375	1295
0.3	860	830	670	655	820	800	1115	1020	790	755	1190	1060	875	850	1590	1550	1390	1345	1870	1815	1340	1300	1830	1645	1225	1150
0.4	780	750	610	595	735	720	1005	910	695	660	1085	975	780	755	1495	1460	1310	1270	1755	1705	1225	1185	1725	1550	1140	1070
0.5	665	640	485	455	605	590	865	775	590	560	970	865	640	615	1400	1365	1225	1185	1660	1610	1125	1085	1500	1350	1050	985

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 application.

① **Factory Connected Speed.**

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**
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 "A" Series Right-Hand Units

- Designed for adding Electric Heat to 0 KW Units
- ETL US & Canada Listed
- Circuit Breaker Standard on 230/208V Models
- 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
W17A2 W18A2	EHWA02-A05B EHW02A-A08B EHWA02A-A10B	5 8 10	N/A		N/A	
W24A2	EHWA24A-A04B EHWA02-A05B EHW02A-A08B EHWA02A-A10B	4 5 8 10	EHWA24-B06B	6	EHWH24B-C06	6
W30A2	EHWA03-A05B EHWA03-A08B EHWA03-A10B EHWA03-A15B	5 8 10 15	EHWA03-B06B EHWA03-B09B EHWA37-B15B	6 9 15	EHWC03A-C06 EHWC03A-C09 EHWA03A-C12 EHWA03A-C15	6 9 12 15
W36A2	EHWA03-A05B EHWA03-A08B EHWA03-A10B EHWA03-A15B	5 8 10 15	EHW36A-B06B EHWA03-B09B EHWA37-B15B	6 9 15	EHWC03A-C06 EHWC03A-C09 EHWA03A-C12 EHWA03A-C15	6 9 12 15
W42A2 W48A2	EHWA05-A05B ① EHWA05-A10B ① EHWA05-A15B EHWA05-A20B	5 10 15 20	EHWA05-B09B ① EHWA05-B15B EHWA05-B18B ①	9 15 18	EHWA05A-C09 ① EHWA05A-C15	9 15
W60A2	EHWA60-A05B ① EHWA05-A10B ① EHWA05-A15B EHWA05-A20B	5 10 15 20	EHW60A-B09B ① EHWA05-B15B ① EHW05A-B18B ①	9 15 18	EHWA05A-C09 ① EHWA05A-C15	9 15
W70A2	EHWA60-A05B EHWA05-A10B EHWA05-A15B EHWA05-A20B	5 10 15 20	EHW70A-B09B EHWA05-B15B EHW70A-B18B	9 15 18	EHWA05A-C09 EHWA05A-C15	9 15

NOTE: Field installed Heater Packages are not approved for use with top supply opening models.
Field installed Heater Package not available for W70L models.

① These heater packages approved for use in dehumidification versions with hot gas reheat.

Heater Packages · Field Installed "L" Series Left-Hand Units

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
W17L2 W18L2	EHWA02A-A05LB EHW02A-A08LB EHWA02-A10LB	5 8 10	N/A		N/A	
W24L2	EHWA02A-A05LB EHW02A-A08LB EHWA02-A10LB	5 8 10	EHWA24-B06LB	6	N/A	
W30L2	EHWA03-A05LB EHWA03-A08LB EHWA03-A10LB EHWA03-A15LB	5 8 10 15	EHWA03-B09LB EHWA37-B15LB	9 15	EHWC03-C09L EHWA03-C15L	9 15
W36L2	EHWA03-A05LB EHWA03-A10LB EHWA03-A15LB	5 10 15	EHWA03-B09LB EHWA37-B15LB	9 15	EHWC03-C09L EHWA03-C15L	9 15
W42L2 W48L2	EHWA05-A05LB EHWA05-A10LB EHWA05-A15LB	5 10 15	EHWA05-B09LB EHWA05-B15LB	9 15	EHWA05A-C09L EHWA05A-C15L	9 15
W60L2	EHWA05-A05LB EHWA05-A10LB EHWA05-A15LB	5 10 15	EHWA60-B09LB EHWA05-B15LB	9 15 18	EHWA05A-C09L EHWA05A-C15L	9 15
W70L2	EHWA70-A05B EHWA05-A10LB EHWA05-A15LB	5 10 15	EHW70A-B09LB EHWA05-B15LB	9 15	EHWA05A-C09L EHWA05A-C15L	9 15

Clearances Required for Service Access and Adequate Condenser Inlet Airflow

MODELS	LEFT SIDE	RIGHT SIDE
W17A, W18A, W24A, W30A, W36A	15"	20"
W42A, W48A, W60A, W70A	20"	20"

NOTE: For side-by-side installation of two (2) WA models, there must be 20" between units. This can be reduced to 15" by using a WL model (left side compressor and controls) for the left unit and WA (right side compressor and controls) for right unit.

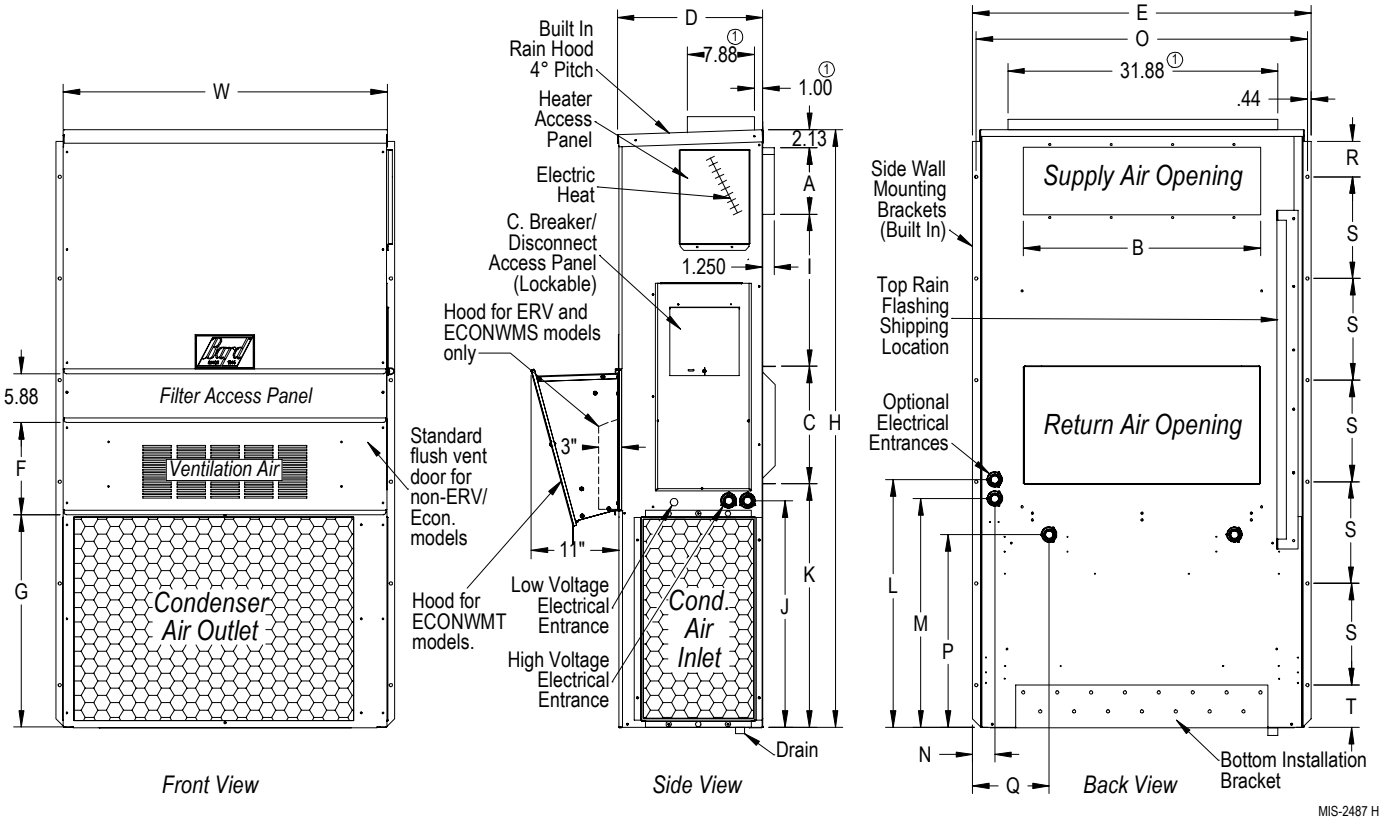
Minimum Clearances Required to Combustible Materials

MODELS	SUPPLY AIR DUCT FIRST THREE FEET	CABINET
W17A, W18A, W24A	0"	0"
W30A, W36A	1/4"	0"
W42A, W48A, W60A, W70A	1/4"	0"

① Refer to the Installation Manual for more detailed information.

Dimensions of W17-70A Basic Unit for Architectural & 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
W17A2 W18A2 W24A2	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	4.19	12.00	5.00
W30A2 W36A2	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	2.75	39.13	22.75	9.14	4.19	12.00	5.00
W42A2 W48A2 W60A2 W70A2	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



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 W30A and W36A models only.

Clearances Required for Service Access and Adequate Condenser Inlet Airflow

MODELS	LEFT SIDE	RIGHT SIDE
W17L, W18L, W24L, W30L, W36L	15"	20"
W42L, W48L, W60L, W70L	20"	20"

NOTE: For side-by-side installation of two (2) WL models, there must be 20" between units. This can be reduced to 15" by using a WL model (left side compressor and controls) for the left unit and WA (right side compressor and controls) for right unit.

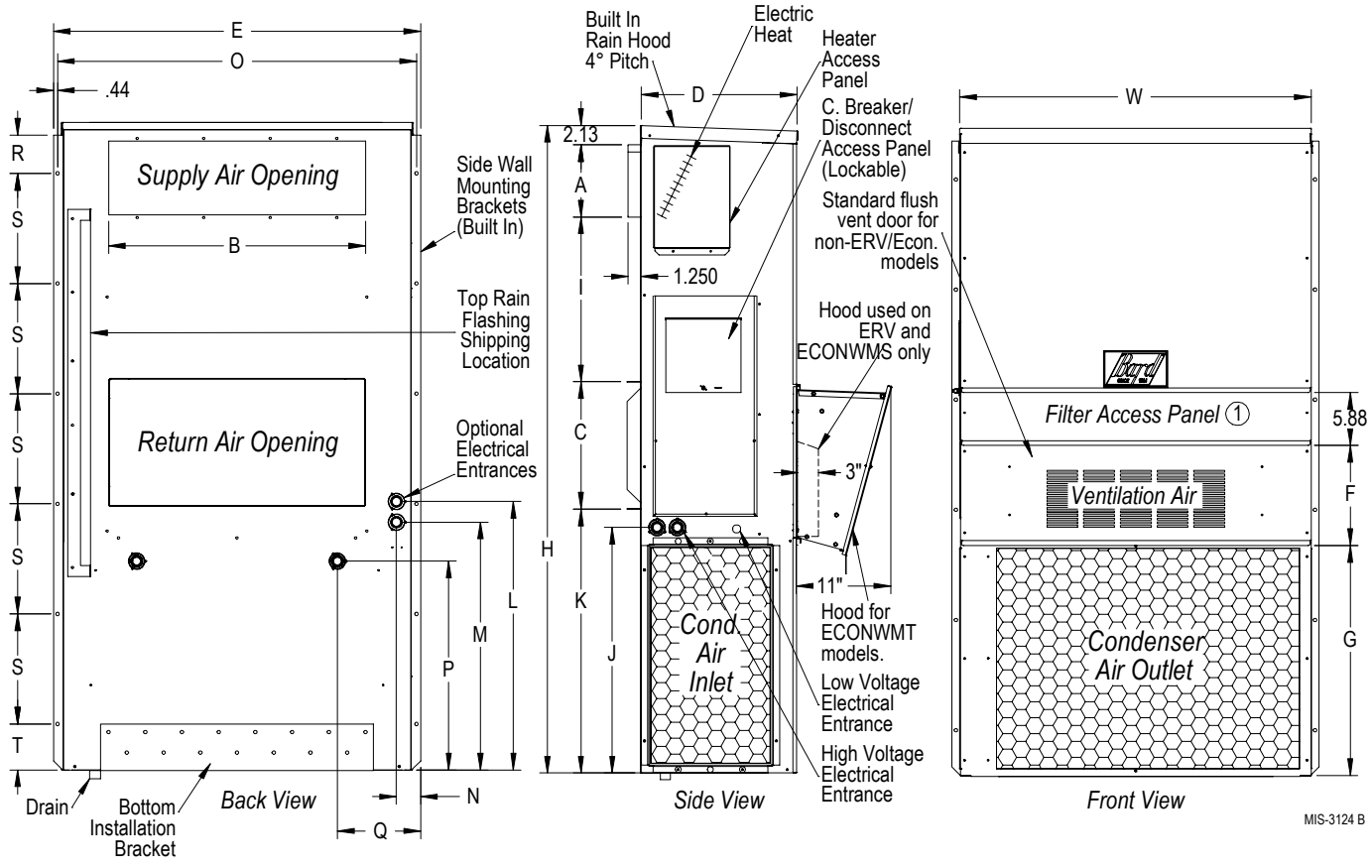
Minimum Clearances Required to Combustible Materials

MODELS	SUPPLY AIR DUCT FIRST THREE FEET	CABINET
W17L, W18L, W24L	0"	0"
W30L, W36L	1/4"	0"
W42L, W48L, W60L, W70L	1/4"	0"

① Refer to the Installation Manual for more detailed information.

Dimensions of W17-70A Basic Unit for Architectural & 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
W17L2 W18L2 W24L2	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	4.19	12.00	5.00
W30L2 W36L2	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	2.75	39.13	22.75	9.14	4.19	12.00	5.00
W42L2 W48L2 W60L2 W70L2	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



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

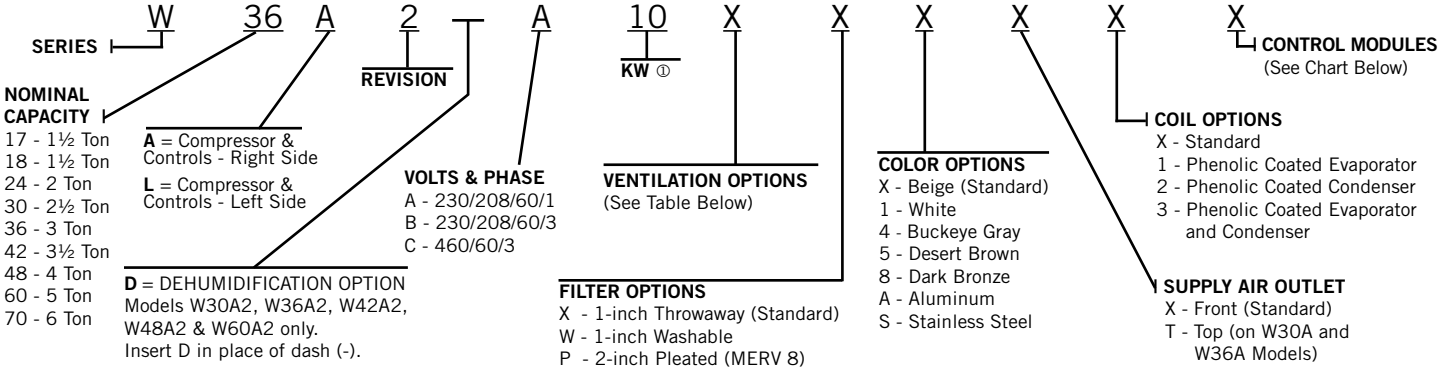
Cooling Application Data · Outdoor Temperature ①

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
W17A2 W17L2	75/62	Total Cooling	17200	16500	15700	15000	14300	13700	13100	12500	11900	11300
		Sensible Cooling	13900	13600	13400	13000	12700	12400	12000	11700	11400	11000
	80/67	Total Cooling	18300	17900	17400	16900	16400	15900	15400	14900	14300	13700
		Sensible Cooling	13400	13300	13200	13000	12800	12600	12300	12100	11800	11500
	85/72	Total Cooling	21800	21000	20000	19100	18300	17400	16600	15900	15100	14300
		Sensible Cooling	13800	13500	13300	13000	12600	12200	11800	11400	10900	10400
W18A2 W18L2	75/62	Total Cooling	17700	16800	16000	15200	14300	13600	12900	12200	11600	10900
		Sensible Cooling	14200	13800	13400	13000	12600	12300	11900	11600	11300	10900
	80/67	Total Cooling	18900	18300	17700	17100	16400	15800	15200	14500	13900	13200
		Sensible Cooling	13700	13500	13200	13000	12700	12500	12200	11900	11700	11400
	85/72	Total Cooling	22600	21400	20400	19300	18300	17300	16400	15500	14600	13800
		Sensible Cooling	14100	13700	13300	13000	12500	12100	11700	11200	10800	10300
W24A2 W24L2	75/62	Total Cooling	25000	23800	22700	21600	20600	19600	18700	17600	16700	15800
		Sensible Cooling	19800	19300	18800	18300	17900	17300	16900	16400	15900	15400
	80/67	Total Cooling	26600	25900	25200	24400	23600	22800	22000	21000	20100	19100
		Sensible Cooling	19200	18900	18600	18300	18000	17600	17300	16900	16500	16100
	85/72	Total Cooling	31700	30300	29000	27600	26200	25000	23800	22400	21200	19900
		Sensible Cooling	19700	19200	18700	18200	17700	17100	16500	15900	15200	14600
W30A2 W30L2	75/62	Total Cooling	30200	29000	27900	26800	25600	24500	23300	22200	21000	19700
		Sensible Cooling	23500	23400	23200	22700	22300	21700	21100	20300	19500	18600
	80/67	Total Cooling	32200	31600	31000	30300	29400	28500	27500	26400	25200	23800
		Sensible Cooling	22800	22900	22900	22700	22500	22100	21600	21000	20300	19400
	85/72	Total Cooling	38400	37000	35600	34200	32700	31200	29700	28100	26500	24800
		Sensible Cooling	23400	23300	23000	22600	22100	21400	20600	19700	18700	17600
W36A2 W36L2	75/62	Total Cooling	37100	35400	33700	32100	30500	29000	27700	26300	25000	23700
		Sensible Cooling	27700	27100	26400	25700	25100	24300	23600	22800	21900	21100
	80/67	Total Cooling	39600	38500	37400	36200	35000	33800	32600	31300	30100	28700
		Sensible Cooling	26800	26500	26100	25700	25300	24700	24200	23500	22800	22100
	85/72	Total Cooling	47200	45000	43000	40900	38900	37000	35200	33300	31700	29800
		Sensible Cooling	27500	26900	26200	25600	24800	23900	23100	22100	21000	20000
W42A2 W42L2	75/62	Total Cooling	42500	40300	38400	36600	34800	33400	32000	30700	29600	28600
		Sensible Cooling	32800	32600	32100	31500	30800	30100	29200	28200	27000	25800
	80/67	Total Cooling	45300	43900	42600	41300	40000	38900	37700	36600	35600	34600
		Sensible Cooling	31800	31900	31800	31500	31100	30600	29900	29100	28100	27000
	85/72	Total Cooling	54000	51300	48900	46600	44500	42600	40700	39000	37400	36000
		Sensible Cooling	32600	32400	32000	31300	30500	29600	28500	27300	25900	24400
W48A2 W48L2	75/62	Total Cooling	53400	50200	47300	44700	42200	40200	38200	36600	35100	33800
		Sensible Cooling	39900	38800	37700	36600	35500	34500	33400	32400	31400	30500
	80/67	Total Cooling	57000	54700	52500	50500	48500	46800	45100	43600	42200	40900
		Sensible Cooling	38700	38000	37300	36600	35800	35100	34300	33500	32700	31900
	85/72	Total Cooling	67900	64000	60300	57000	53900	51200	48600	46400	44400	42500
		Sensible Cooling	39600	38600	37500	36400	35100	34000	32700	31400	30100	28800
W60A2 W60L2	75/62	Total Cooling	57000	54700	52400	50200	47900	45800	43500	41300	39100	36800
		Sensible Cooling	43700	42800	41700	40700	39600	38600	37500	36500	35400	34200
	80/67	Total Cooling	60800	59600	58200	56700	55000	53300	51300	49200	47000	44600
		Sensible Cooling	42400	41900	41300	40700	40000	39300	38500	37700	36800	35800
	85/72	Total Cooling	72400	69700	66800	64000	61100	58300	55300	52400	49400	46400
		Sensible Cooling	43400	42500	41500	40400	39200	38000	36700	35400	33900	32400
W70A2 W70L2	75/62	Total Cooling	71300	68100	65000	62100	59200	56600	53900	51400	48900	46500
		Sensible Cooling	50800	49600	48400	47100	45900	44500	43200	41900	40500	39100
	80/67	Total Cooling	76100	74200	72200	70200	68000	65900	63600	61300	58900	56400
		Sensible Cooling	49300	48600	47900	47100	46300	45300	44300	43300	42100	40900
	85/72	Total Cooling	90600	86700	82900	79300	75500	72100	68600	65200	61900	58600
		Sensible Cooling	50500	49300	48100	46800	45400	43800	42200	40600	38800	37000

① Below 65°F (18.3C), unit requires a factory or field installed low ambient control.
② Return air temperature.

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

Air Conditioning 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. See Pages 8 & 9 for available Factory Installed KW options and Page 11 for Field Installed Heater Packages.

Ventilation Options

Models	W17A2, W18A2, W24A2 W17L2, W18L2, W24L2		W30A2, W36A2 W30L2, W36L2		W42A2, W48A2, W60A2, W70A2 W42L2, W48L2, W60L2, W70L2	
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
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 - 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 ⑤	T	ECONWMT-T2B ②	T	ECONWMT-T3B ②	T	ECONWMT-T5B ②
Energy Recovery Ventilator - 230 Volt ③	R ⑦	ERVF-A2	R ⑦	ERVF-A3 ①	R ⑦	ERVF-A5 ①
Energy Recovery Ventilator - 460 Volt ③	N/A	ERVF-C2 ⑥	R ⑦	ERVF-C3 ①	R ⑦	ERVF-C5 ①
Door Kit for ERVF (Required)	N/A	WMDK2- ③	N/A	WMDK3- ③	N/A	WMDK5- ③

① Intake and exhaust can be independently adjusted.
② Insert color to match unit ("X" = Beige; "4" = Buckeye Gray; etc.)
③ WMDK Door Kit must be ordered in addition to ERVF Assembly & color matched to 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 Model W24A2-C & W24L2-C only.
⑦ Energy Recovery Ventilator must be field-installed on W**L models. Also see Note ③.

Air Conditioning Control Modules

HPC ①	LPC ②	CCM ③	LAC ④	ALR ⑤	SK ⑥	SK ⑦	ODT ⑧	DDC ⑨	All Models Except As Noted: Factory Installed Code	All Models Except As Noted: Field Installed Part	W17A2 W17L2 Factory Only
STD	STD	STD							X	N/A	N/A
STD	STD	STD	●						E ⑪	CMA-28	N/A
STD	STD	STD	●	●					J ⑪	Factory Only	J ⑬
STD	STD	STD	●		●				K ⑪	CMC-15 and CMA-28	N/A
STD	STD	STD	●	●	●				M ⑪	Factory Only	M ⑬
STD	STD	STD		●					N, W18A Only ⑫	N/A	N/A
STD	STD	STD			●				Field Installed Only	CMC-15	CMC-15
STD	STD	STD					●		Field Installed Only	CMA-14	N/A
STD	STD	STD	●	●				●	V ⑩⑪	Factory Only	N/A
STD	STD	STD						●	Field Installed Only	CMA-23 for W17-36 CMA-24 for W42-70	N/A
STD	STD	STD				●			Field Installed Only	SK111 Except W70 SK121 W70 Only	SK111

STD = Standard equipment for these specified models.
① HPC. High pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ③.
② LPC. Low pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ③.
③ CCM. Compressor control module has adjustable 30-second to 5-minute delay-on-break timer. On initial power-up, or any time the power is interrupted, the delay-on-make will be 2-minutes plus 10% of the delay-on-break setting. There is no delay-on-make during routine operation of the unit. The module also provides the lockout feature (with 1 retry) for high and/or low pressure controls, and a 2-minute timed bypass for low-pressure control.
④ LAC. Low ambient control permits cooling operation down to 0°F. LAC is fan-cycling control for outdoor fan motor on all models except W48/W60 Dehum. units, which have modulating control.
⑤ ALR. The alarm relay has a set of normally open and normally closed dry contacts to provide the ability to signal a condition of shutdown on either high or low pressure controls.
⑥ SK. 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 or SK121 is used.
⑦ SK. Start capacitor & 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.
⑧ ODT. Outdoor thermostat is adjustable from 0 to 50°F. It is suitable for use as a compressor cut-off thermostat.
⑨ DDC. Incorporates 4 additional sensors: discharge air temperature, indoor blower airflow, compressor current, and dirty filter. These sensing devices function to input analog data such as temperature, as well as digital data such as airflow, compressor status or filter status. Special economizer required; consult factory.
⑩ "V" control module should be ordered in conjunction with direct digital controller (DDC) model TCS24. Refer to DDC specification sheet S3280 for more information.
⑪ Option not available for Model W18A.
⑫ Use option N for Alarm Relay on Model W18A only.
⑬ LAC consists of special heat transfer device suitable for operation down to 0°F. Fan-cycling control is not used.

NOTES

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Bard® SINCE 1914
Climate Control Solutions

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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