



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

**Models W17A to W70A  
Models W17L to W70L  
1.5 to 6 Ton**

**Right-Side Control Panel  
Left-Side Control Panel  
(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.

## 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

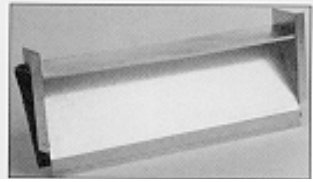
MODELS	W17A2-A W17L2-A	W18A2-A W18L2-A	W24A2-A W24L2-A	W24A2-B W24L2-B	W24A2-C	W30A2-A W30L2-A	W30A2-B W30L2-B	W30A2-C W30L2-C	W36A2-A W36L2-A	W36A2-B W36L2-B	W36A2-C W36L2-C
<b>Electrical Rating – 60 Hz</b>	230/208 - 1	230/208 - 1	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3
<b>Operating Voltage Range</b>	197-253	197-253	197-253	197-253	414-506	197-253	197-253	414-506	197-253	197-253	414-506
<b>Compressor--Circuit A</b>											
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
<b>Fan Motor &amp; Condenser</b>											
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
<b>Blower Motor &amp; Evap.</b>											
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
<b>Shipping Weight --LBS.</b>	295	295	295	295	295	320	320	320	340	340	340

## Specifications 3-1/2 Ton through 6 Ton

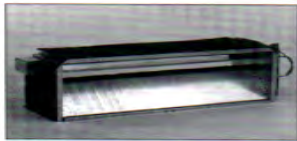
MODELS	W42A2-A W42L2-A	W42A2-B W42L2-B	W42A2-C W42L2-C	W48A2-A W48L2-A	W48A2-B W48L2-B	W48A2-C W48L2-C	W60A2-A W60L2-A	W60A2-B W60L2-B	W60A2-C W60L2-C	W70A2-A W70L2-A	W70A2-B W70L2-B	W70A2-C W70L2-C
<b>Electrical Rating – 60 Hz</b>	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3
<b>Operating Voltage Range</b>	197-253	197-253	414-506	197-253	197-253	414-506	197-253	197-253	414-506	197-253	197-253	414-506
<b>Compressor--Circuit A</b>												
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
<b>Fan Motor &amp; Condenser</b>												
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
<b>Blower Motor &amp; Evap.</b>												
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
<b>Shipping Weight --LBS.</b>	460	460	460	465	465	465	485	485	485	510	510	510

## Ventilation System Packages

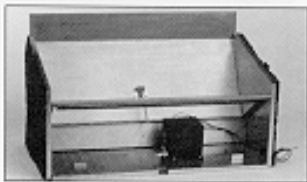
Bard Wall-Mounts are designed to provide optional ventilation packages to meet all of your ventilation and indoor air quality requirements. All units are equipped with a barometric fresh air damper as the standard ventilation package. All ventilation packages can be built-in at the factory or field-installed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



Barometric Fresh Air Damper



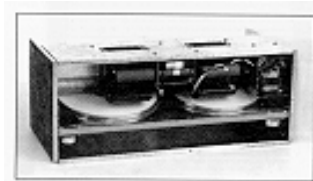
Motorized Fresh Air Damper



Commercial Room Ventilator



Economizer



Energy Recovery Ventilator

### 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 - 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 - 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 – 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

### WALL-MOUNT ENERGY RECOVERY VENTILATOR - ERV

**OPTIONAL**

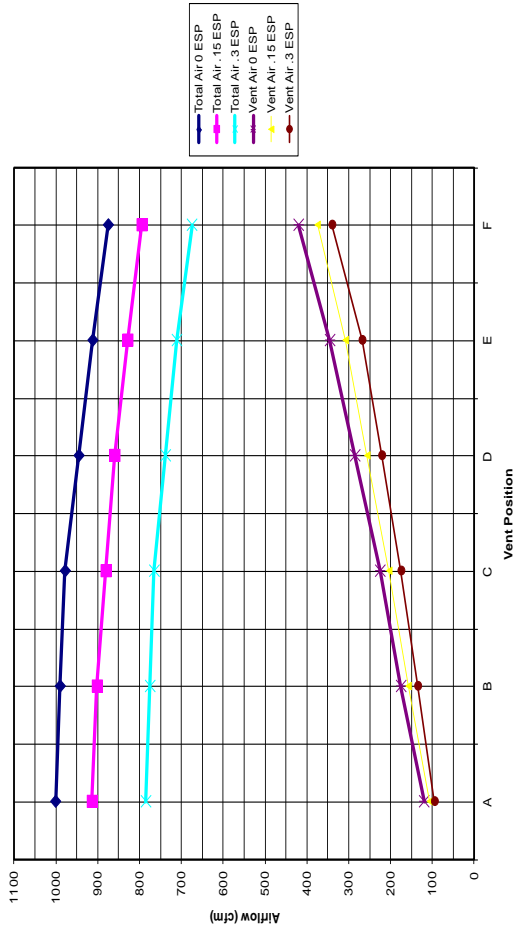
The wall-mount energy recovery ventilator (ERV) is a highly innovative approach to meeting indoor air quality ventilation requirements as established by ANSI/ASHRAE Standard 62.1. The ERV allows from 200 to 450 CFM (depending upon model) of fresh air and exhaust through the unit while maintaining superior 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.

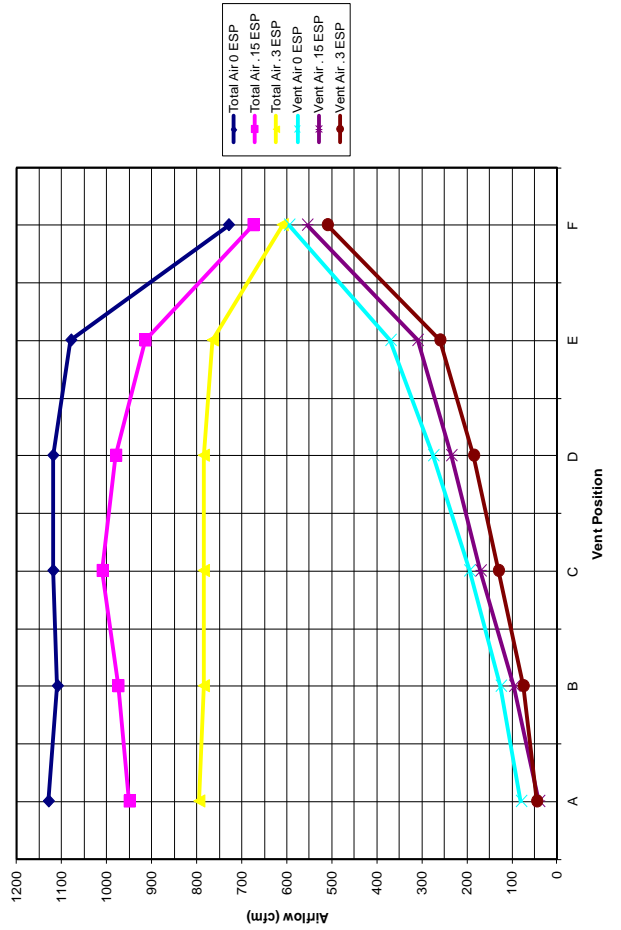
## Commercial Room Ventilator Performance Data - CRV-2

### W17/W18 & W24 TOTAL AND VENTILATION AIRFLOW

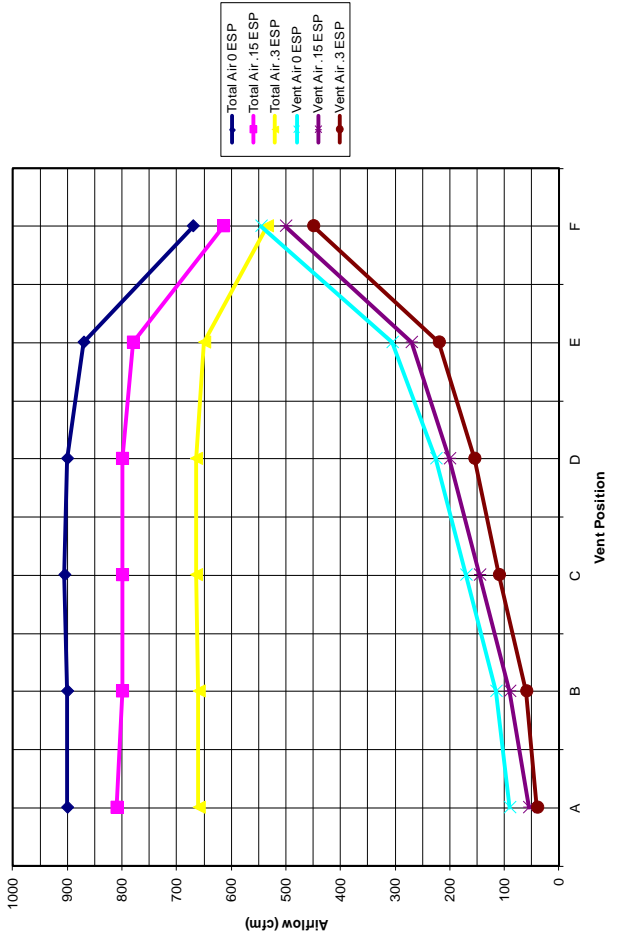


## Commercial Room Ventilator Performance Data - CRVS-3 and CRVP-3

### W30 & W36 HIGH SPEED TOTAL AND VENTILATION AIRFLOW

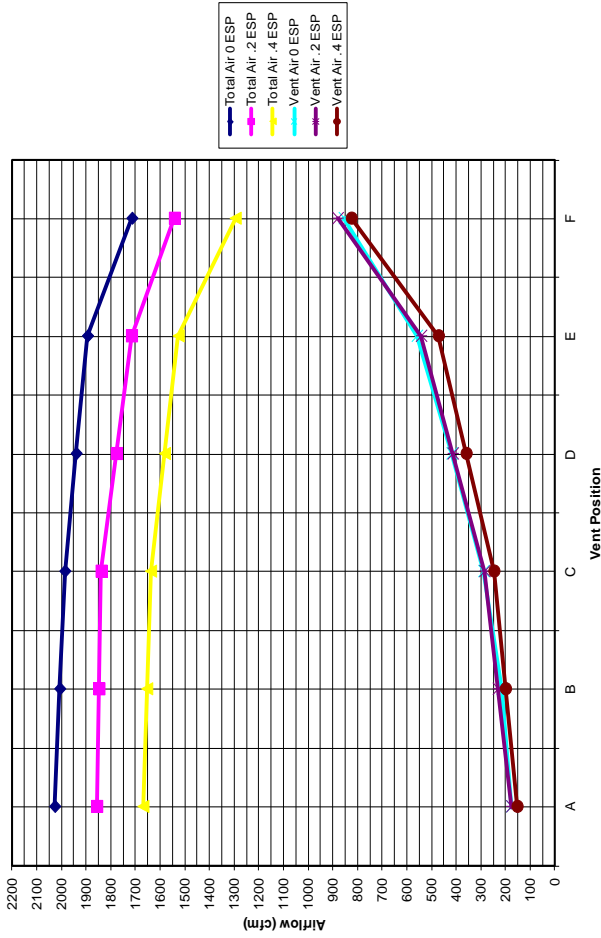


### W30 & W36 LOW SPEED TOTAL AND VENTILATION AIRFLOW

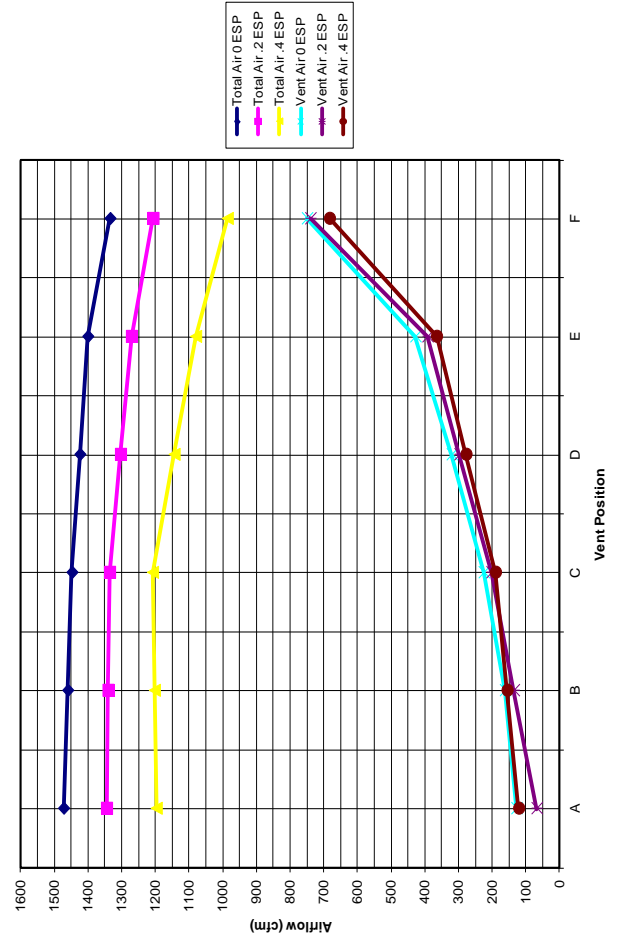


Commercial Room Ventilator Performance Data - CRVS-5 and CRVP-5

W60 & W70 HIGH SPEED TOTAL AND VENTILATION AIRFLOW

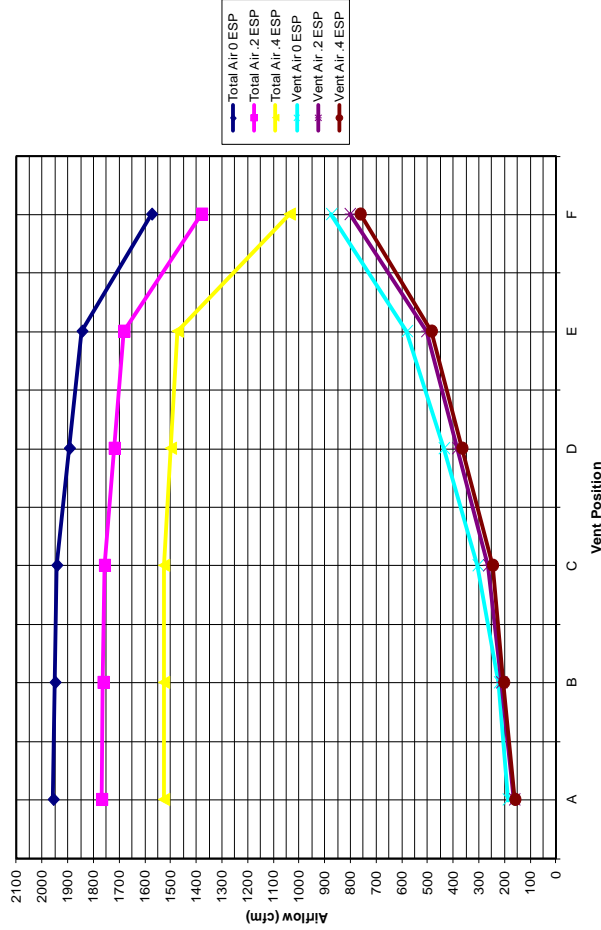


W60 & W70 LOW SPEED TOTAL AND VENTILATION AIRFLOW

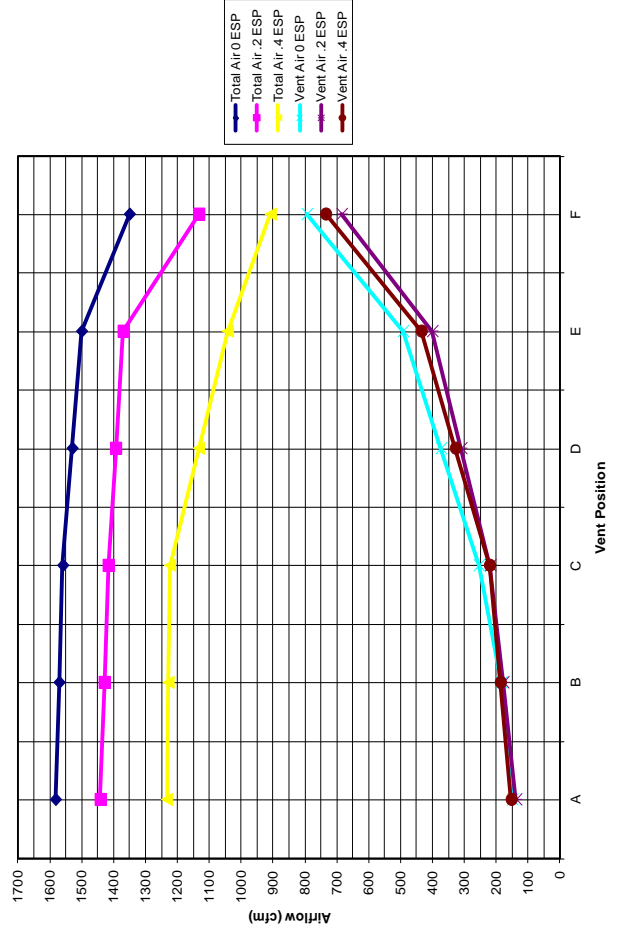


Commercial Room Ventilator Performance Data - CRVS-5 and CRVP-5

W42 & W48 HIGH SPEED TOTAL AND VENTILATION AIRFLOW



W42 & W48 LOW SPEED TOTAL AND VENTILATION AIRFLOW





# Performance and Application Data- ERVF-A2

## 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

### LEGEND:

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

NOTE: Sensible performance only is shown for winter application.

# Performance and Application Data- ERVF-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	VL	VLS	VLL	HRT	HRS	HRL	VL	VLS	VLL	HRT	HRS	HRL	VL	VLS	VLL	HRT	HRS	HRL	VL	VLS	VLL	HRT	HRS	HRL				
75	19080	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960			
105	75	19080	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960	12960			
100	75	19080	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800			
65	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800			
60	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800			
95	75	19080	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640	8640			
90	75	19080	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480			
65	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480			
60	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480	6480			
85	75	19080	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320	4320			
80	75	19080	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160	2160			
65	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780			
60	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780	3780			

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  
WVR = Winter Heat Recovery

NOTE: Sensible performance only is shown for winter application.

# 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	VL	VLS	VLL	HRT	HRS	HRL	VL	VLS	VLL	HRT	HRS	HRL	VL	VLS	VLL	HRT	HRS	HRL	VL	VLS	VLL	HRT	HRS	HRL				
75	21465	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580				
105	75	21465	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580	14580				
100	75	21465	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150				
65	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150			
60	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150	12150			
95	75	21465	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720	9720			
90	75	21465	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290			
65	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290			
60	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290	7290			
85	75	21465	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860	4860			
80	75	21465	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430			
65	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252			
60	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252	4252			

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  
WVR = Winter Heat Recovery

NOTE: Sensible performance only is shown for winter application.

## ERV-5 WINTER HEATING PERFORMANCE (INDOOR DESIGN CONDITIONS 70°F DB)

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

NOTE: Sensible performance only is shown for winter application.

## ERV-3 WINTER HEATING PERFORMANCE (INDOOR DESIGN CONDITIONS 70°F DB)

Ambient O.D.	VENTILATION RATE 400 CFM 75% EFFICIENCY						VENTILATION RATE 325 CFM 76% EFFICIENCY						VENTILATION RATE 250 CFM 77% EFFICIENCY					
	DB/°F	WVL	WHR	WVL	WHR	WHL	WVL	WHR	WVL	WHR	WHL	WVL	WHR	WVL	WHR	WHL		
65	2160	1620	1755	1333	1350	1039	2160	1620	1755	1333	1350	1039	2160	1620	1755	1333	1350	1039
60	4320	3240	3510	2667	2700	2079	4320	3240	3510	2667	2700	2079	4320	3240	3510	2667	2700	2079
55	6480	4860	5265	4001	4050	3118	6480	4860										

# 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 A05 A08 A10	230/208-1	1	16	20	12	12								
		1	30	30	10	10								
		1	46	50	8	10								
		1	56	60	6	10								
W24A2-A00, A0Z A04 A05 A08 A10	230/208-1	1	21	30	10	10								
		1	25	30	10	10								
		1	30	30	10	10								
		1	46	50	8	10								
		1	56	60	6	10								
W24A2-B00, B0Z B06	230/208-3	1	15	20	12	12								
		1	22	25	10	10								
W24A2-C00, C0Z C06	460-3	1	9	15	14	14								
		1	11	15	14	14								
W30A2-A00*, A0Z* A05* A08 A10* A15	230/208-1	1	24	35	8	10								
		1	32	35	8	10								
		1	47	50	8	10								
		1	58	60	6	10								
		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
		1	18	20	12	12								
W30A2-B00*, B0Z* B06 B09* B15	230/208-3	1	24	25	10	10								
		1	33	35	8	10								
		1	51	60	6	10								
		1	11	15	14	14								
W30A2-C00*, C0Z* C06 C09* C15	460-3	1	12	15	14	14								
		1	17	20	12	12								
		1	26	30	10	10								
		1	29	35	8	10								
W36A2-A00*, A0Z* A05* A08 A10* A15	230/208-1	1	32	35	8	10								
		1	47	50	8	10								
		1	58	60	6	10								
		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
		1	23	30	10	10								
		1	24	30	10	10								
W36A2-B00*, B0Z* B06* B09* B15	230/208-3	1	33	35	8	10								
		1	51	60	6	10								
		1	11	15	14	14								
		1	12	15	14	14								
W36A2-C00*, C0Z* C06* C09* C15	460-3	1	16	20	12	12								
		1	26	30	10	10								
		1	32	50	8	10								
		1	32	50	8	10								
W42A2-A00, A0Z A05 A10 A15 A20	230/208-1	1	58	60	6	10								
		1 or 2	84	90	4	8	58	26	60	30	6	10	10	
		1 or 2	110	125	2	6	58	52	60	60	6	6	10	10
		1	24	35	8	10								
		1	33	35	8	10								
W42A2-B00, B0Z B09 B15 B18	230/208-3	1	51	60	6	10								
		1	60	60	6	10								
		1	12	15	14	14								
		1	17	20	12	12								
W42A2-C00, C0Z C09 C15	460-3	1	26	30	10	10								
		1	39	50	8	10								
		1	39	50	8	10								
		1	58	60	6	10								
W48A2-A00, A0Z A05 A10 A15 A20	230/208-1	1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
		1 or 2	110	125	2	6	58	52	60	60	6	6	10	10
		1	27	40	8	10								
		1	33	40	8	10								
		1	51	60	6	10								
W48A2-B00, B0Z B09 B15 B18	230/208-3	1	60	60	6	10								
		1	13	20	12	12								
		1	17	20	12	12								
		1	26	30	10	10								
W48A2-C00, C0Z C09 C15	460-3	1	26	30	10	10								
		1	42	60	8	10								
		1	42	60	8	10								
		1	60	60	6	10								
W60A2-A00, A0Z A05 A10 A15 A20	230/208-1	1 or 2	86	90	3	8	60	26	60	30	6	10	10	10
		1 or 2	112	125	2	6	60	52	60	60	6	6	10	10
		1	28	40	8	10								
		1	35	40	8	10								
		1	53	60	6	10								
W60A2-B00, B0Z B09 B15 B18	230/208-3	2	N/A	N/A	N/A	N/A	35	28	40	30	8	10	10	10
		1	15	20	12	12								
		1	18	20	12	12								
		1	27	30	10	10								
W70A2-A00, A0Z A05 A10 A15 A20	230/208-1	1	56	60	6	10								
		1	56	60	6	10								
		1	59	60	6	10								
		1 or 2	85	90	4	8	59	26	60	30	6	10	10	10
		1 or 2	111	125	2	6	59	52	60	60	6	6	10	10
		1	38	60	8	10								
W70A2-B00, B0Z B09 B15 B18	230/208-3	1	38	60	8	10								
		1	53	60	6	10								
		2	N/A	N/A	N/A	N/A	38	28	60	30	8	10	10	10
		1	19	30	10	10								
W70A2-C00, C0Z C09 C15	460-3	1	19	30	10	10								
		1	19	30	10	10								
		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 A05 A08 A10	230/208-1	1	16	20	12	12								
		1	30	30	10	10								
		1	46	50	8	10								
		1	56	60	6	10								
W24L2-A00, A0Z A05 A08 A10	230/208-1	1	21	30	10	10								
		1	30	30	10	10								
		1	46	50	8	10								
		1	56	60	6	10								
W24L2-B00, B0Z B06	230/208-3	1	15	20	12	12								
		1	22	25	10	10								
W30L2-A00, A0Z A05 A08 A10 A15	230/208-1	1	24	35	8	10								
		1	32	35	8	10								
		1	47	50	8	10								
		1	58	60	6	10								
		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
W30L2-B00, B0Z B09 B15	230/208-3	1	18	20	12	12								
		1	33	35	8	10								
		1	51	60	6	10								
W30L2-C00, C0Z C09 C15	460-3	1	11	15	14	14								
		1	17	20	12	12								
		1	26	30	10	10								
W36L2-A00, A0Z A05 A10 A15	230/208-1	1	29	35	8	10								
		1	32	35	8	10								
		1	58	60	6	10								
		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
		1	23	30	10	10								
W36L2-B00, B0Z B09 B15	230/208-3	1	23	30	10	10								
		1	33	35	8	10								
		1	51	60	6	10								
W36L2-C00, C0Z C09 C15	460-3	1	11	15	14	14								
		1	16	20	12	12								
		1	26	30	10	10								
W42L2-A00, A0Z A05 A10 A15	230/208-1	1	32	50	8	10								
		1	32	50	8	10								
		1	58	60	6	10								
		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
		1	24	35	8	10								
W42L2-B00, B0Z B09 B15	230/208-3	1	24	35	8	10								
		1	33	35	8	10								
		1	51	60	6	10								
W42L2-C00, C0Z C09 C15	460-3	1	12	15	14	14								
		1	17	20	12	12								
		1	26	30	10	10								
W48L2-A00, A0Z A05 A10 A15	230/208-1	1	39	50	8	10								
		1	39	50	8	10								
		1	58	60	6	10								
		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
		1	27	40	8	10								
W48L2-B00, B0Z B09 B15	230/208-3	1	27	40	8	10								
		1	33	40	8	10								
		1	51	60	6	10								
W48L2-C00, C0Z C09 C15	460-3	1	13	20	12	12								
		1	17	20	12	12								
		1	26	30	10	10								
W60L2-A00, A0Z A05 A10 A15	230/208-1	1	42	60	8	10								
		1	42	60	8	10								
		1	60	60	6	10								
		1 or 2	86	90	3	8	60	26	60	30	6	10	10	10
		1	28	40	8	10								
W60L2-B00, B0Z B09 B15	230/208-3	1	28	40	8	10								
		1	35	40	8	10								
		1	53	60	6	10								
W60L2-C00, C0Z C09 C15	460-3	1	15	20	12	12								
		1	18	20	12	12								
		1	27	30	10	10								
W70L2-A0Z A05 A10 A15	230/208-1	1	56	60	6	10								
		1	56	60	6	10								
		1	59	60	6	10								
		1 or 2	85	90	4	8	59	26	60	30	6	10	10	10
		1	38	60	8	10								
W70L2-B0Z B09 B15	230/208-3	1	38	60	8	10								
		1	38	60	8	10								
		1	53	60	6	10								
W70L2-C0Z C09 C15	460-3	1	19	30	10	10								
		1	19	30	10	10								
		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 H2O)	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.

① **Factory Connected Speed.**

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

## 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
- Circuit Breaker Standard on 230/208V Models

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

Air Conditioner Models	-A00 Models 230/208-1		-B00 Models 230/208-3		-C00 Models 460-3	
	Heater Model #	KW	Heater Model #	KW	Heater Model #	KW
W17A2 W18A2	EHWA02-A05 EHW02A-A08 EHWA02A-A10	5 8 10	N/A		N/A	
W24A2	EHWA24A-A04 EHWA02-A05 EHW02A-A08 EHWA02A-A10	4 5 8 10	EHWA24-B06	6	EHWH24B-C06	6
W30A2	EHWA03-A05 EHWA03-A08 EHWA03-A10 EHWA03-A15	5 8 10 15	EHWA03-B06 EHWA03-B09 EHWA37-B15	6 9 15	EHWC03A-C06 EHWC03A-C09 EHWA03A-C12 EHWA03A-C15	6 9 12 15
W36A2	EHWA03-A05 EHWA03-A08 EHWA03-A10 EHWA03-A15	5 8 10 15	EHW36A-B06 EHWA03-B09 EHWA37-B15	6 9 15	EHWC03A-C06 EHWC03A-C09 EHWA03A-C12 EHWA03A-C15	6 9 12 15
W42A2 W48A2	EHWA05-A05 ① EHWA05-A10 ① EHWA05-A15 EHWA05-A20	5 10 15 20	EHWA05-B09 ① EHWA05-B15 EHWA05-B18 ①	9 15 18	EHWA05A-C09 ① EHWA05A-C15	9 15
W60A2	EHWA60-A05 ① EHWA05-A10 ① EHWA05-A15 EHWA05-A20	5 10 15 20	EHW60A-B09 ① EHWA05-B15 ① EHW05A-B18 ①	9 15 18	EHWA05A-C09 ① EHWA05A-C15	9 15
W70A2	EHWA60-A05 EHWA05-A10 EHWA05-A15 EHWA05-A20	5 10 15 20	EHW70A-B09 EHWA05-B15 EHW70A-B18	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-A05L EHW02A-A08L EHWA02-A10L	5 8 10	N/A		N/A	
W24L2	EHWA02A-A05L EHW02A-A08L EHWA02-A10L	5 8 10	EHWA24-B06L	6	N/A	
W30L2	EHWA03-A05L EHWA03-A08L EHWA03-A10L EHWA03-A15L	5 8 10 15	EHWA03-B09L EHWA37-B15L	9 15	EHWC03-C09L EHWA03-C15L	9 15
W36L2	EHWA03-A05L EHWA03-A10L EHWA03-A15L	5 10 15	EHWA03-B09L EHWA37-B15L	9 15	EHWC03-C09L EHWA03-C15L	9 15
W42L2 W48L2	EHWA05-A05L EHWA05-A10L EHWA05-A15L	5 10 15	EHWA05-B09L EHWA05-B15L	9 15	EHWA05A-C09L EHWA05A-C15L	9 15
W60L2	EHWA05-A05L EHWA05-A10L EHWA05-A15L	5 10 15	EHWA60-B09L EHWA05-B15L	9 15 18	EHWA05A-C09L EHWA05A-C15L	9 15
W70L2	EHWA70-A05 EHWA05-A10L EHWA05-A15L	5 10 15	EHW70A-B09L EHWA05-B15L	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.

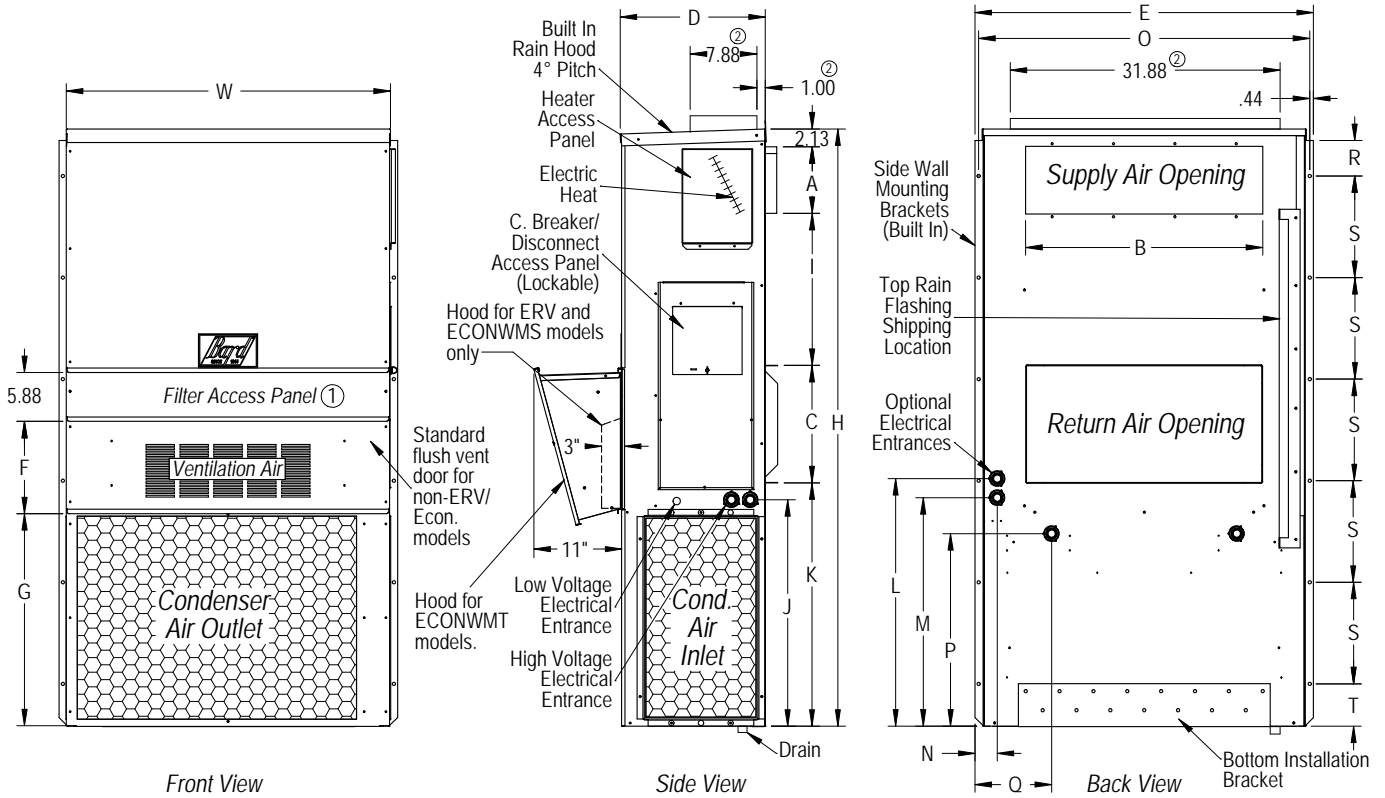
### Minimum Clearances Required to Combustible Materials

MODELS ①	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



MIS-2487 F

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.

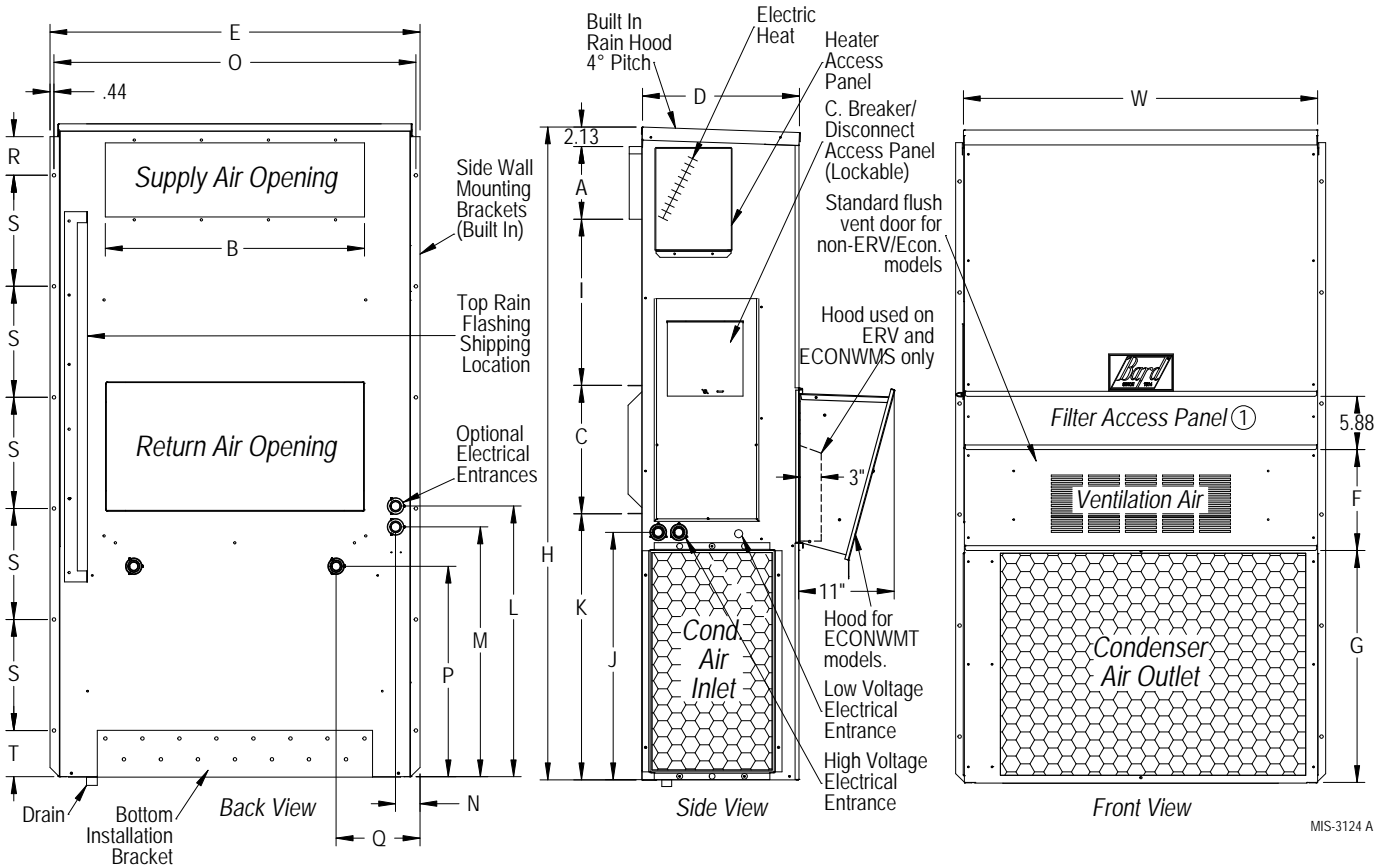
### Minimum Clearances Required to Combustible Materials

MODELS ①	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



MIS-3124 A

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



## Cooling Application Data - Outdoor Temperature ①

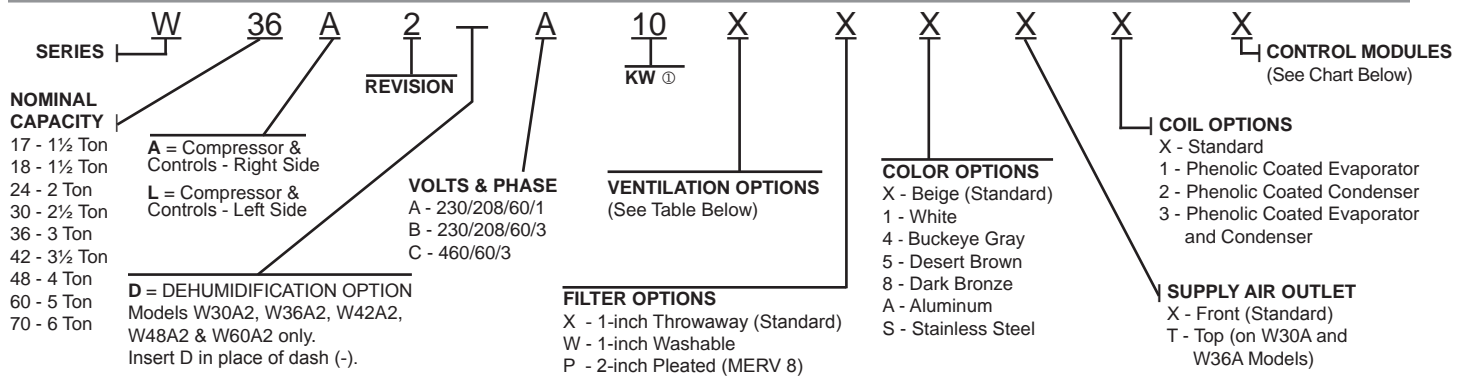
Model	Return Air (DB/WB) ②	Cooling Capacity	75°F	80°F	85°F	90°F	95°F	100°F	105°F	110°F	115°F	120°F
W17A2 W17L2	75/62	Total Cooling	17200	16500	15700	15000	14300	13700	13100	12500	11900	11300
		Sensible Cooling	13900	13600	13400	13000	12700	12400	12000	11700	11400	11000
	80/67	Total Cooling	18300	17900	17400	16900	16400	15900	15400	14900	14300	13700
W18A2 W18L2	75/62	Total Cooling	21800	21000	20000	19100	18300	17400	16600	15900	15100	14300
		Sensible Cooling	13800	13500	13300	13000	12600	12200	11800	11400	10900	10400
	80/67	Total Cooling	17700	16800	16000	15200	14300	13600	12900	12200	11600	10900
W24A2 W24L2	75/62	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
W30A2 W30L2	75/62	Total Cooling	14100	13700	13300	13000	12500	12100	11700	11200	10800	10300
		Sensible Cooling	25000	23800	22700	21600	20600	19600	18700	17600	16700	15800
	80/67	Total Cooling	19800	19300	18800	18300	17900	17300	16900	16400	15900	15400
W36A2 W36L2	75/62	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
W42A2 W42L2	75/62	Total Cooling	19700	19200	18700	18200	17700	17100	16500	15900	15200	14600
		Sensible Cooling	30200	29000	27900	26800	25600	24500	23300	22200	21000	19700
	80/67	Total Cooling	23500	23400	23200	22700	22300	21700	21100	20300	19500	18600
W48A2 W48L2	75/62	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
W60A2 W60L2	75/62	Total Cooling	23400	23300	23000	22600	22100	21400	20600	19700	18700	17600
		Sensible Cooling	37100	35400	33700	32100	30500	29000	27700	26300	25000	23700
	80/67	Total Cooling	27700	27100	26400	25700	25100	24300	23600	22800	21900	21100
W70A2 W70L2	75/62	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
W84A2 W84L2	75/62	Total Cooling	27500	26900	26200	25600	24800	23900	23100	22100	21000	20000
		Sensible Cooling	42500	40300	38400	36600	34800	33400	32000	30700	29600	28600
	80/67	Total Cooling	32800	32600	32100	31500	30800	30100	29200	28200	27000	25800
W96A2 W96L2	75/62	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
W108A2 W108L2	75/62	Total Cooling	32600	32400	32000	31300	30500	29600	28500	27300	25900	24400
		Sensible Cooling	53400	50200	47300	44700	42200	40200	38200	36600	35100	33800
	80/67	Total Cooling	39900	38800	37700	36600	35500	34500	33400	32400	31400	30500
W120A2 W120L2	75/62	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
W144A2 W144L2	75/62	Total Cooling	39600	38600	37500	36400	35100	34000	32700	31400	30100	28800
		Sensible Cooling	57000	54700	52400	50200	47900	45800	43500	41300	39100	36800
	80/67	Total Cooling	43700	42800	41700	40700	39600	38600	37500	36500	35400	34200
W168A2 W168L2	75/62	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
W192A2 W192L2	75/62	Total Cooling	43400	42500	41500	40400	39200	38000	36700	35400	33900	32400
		Sensible Cooling	71300	68100	65000	62100	59200	56600	53900	51400	48900	46500
	80/67	Total Cooling	50800	49600	48400	47100	45900	44500	43200	41900	40500	39100
W216A2 W216L2	75/62	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	
	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 ⑥	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

All Models Except As Noted									W17A2 W17L2 Factory Only	
HPC ①	LPC ②	CCM ③	LAC ④	ALR ⑤	SK ⑥	SK ⑦	ODT ⑧	DDC ⑨	Factory Installed Code	Field Installed Part
STD	STD	STD							X	N/A
STD	STD	STD	●						E	CMA-28
STD	STD	STD	●	●					J	Factory Only
STD	STD	STD	●		●				K	CMC-15 and CMA-28
STD	STD	STD	●	●	●				M	Factory Only
STD	STD	STD		●					N, W18A Only	N/A
STD	STD	STD			●				Field Installed Only	CMC-15
STD	STD	STD					●		Field Installed Only	CMA-14
STD	STD	STD	●	●				●	V ⑩	Factory Only
STD	STD	STD						●	Field Installed Only	CMA-23 for W17-36 CMA-24 for W42-70
STD	STD	STD				●			Field Installed Only	SK111 Except W70 SK121 W70 Only

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.



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