



# THE WALL-MOUNT™ “Quiet Climate” A/C – 10.0 EER

**Models** W38A2, W49A2, W61A2  
**3 to 5 Ton** (35,600 to 57,500 Btuh)  
**Right Side Control Panel** 60Hz

**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. All models feature multispeed ECM blower motors providing airflow adjustment for high and low static operation. Motor overload protection is standard on all models.

### ECM Indoor Blower Motor:

Features a variable speed motor providing super-high efficiency, low sound levels and soft-start capabilities. The motor is self-adjusting to provide the proper airflow rate for the staged capacity, and for higher static pressure in ducted installations without user adjustment or wiring changes.

### Air Conditioner Compressor:

Copeland scroll compressors are designed for increased efficiency, quieter operation and improved reliability for longer life. Eliminates need for crankcase heater.

### 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 for all 1½ through 5 ton models.

### 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. Rotary disconnects are standard on all electric heat versions of three phase (460 volt) equipment.

### PTCR Start Assist:

Standard on 1-phase models.

### Slope Top:

Standard feature for water run-off.



### Top Rain Flashing:

Standard feature on all 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	W38A2	W49A2	W61A2
Cooling BTUH ①	35,600	46,500	57,500
EER ②	10.00	10.00	10.00

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.

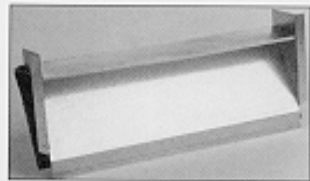
All ratings based on fresh air intake being 100% closed (no outside air introduction).

## Specifications 3 Ton through 5 Ton

MODELS	W38A2-A	W38A2-B	W38A2-C	W49A2-A	W49A2-B	W49A2-C	W61A2-A	W61A2-B	W61A2-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
Operating Voltage Range	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
Rated Load Amps	14.3/15.6	10.6/11.6	5.3	18.9/20.4	13.1/14.2	6.3	24.2/26.9	16.5/18.4	8.6
Branch Circuit Selection Current	18.0	13.3	6.0	23.1	16.1	7.1	30.2	20.6	9.7
Lock Rotor Amps	112/112	88/88	44	134/134	91/91	46	158/158	155/155	75
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
<b>Fan Motor &amp; Condenser</b>									
Fan Motor--HP--RPM-SPD	1/3-850-2	1/3-850-2	1/3-850-2	1/3-850-2	1/3-850-2	1/3-850-2	1/3-850-2	1/3-850-2	1/3-850-2
Fan Motor--Amps	2.5	2.5	1.3	2.5	2.5	1.3	2.5	2.5	1.3
Fan--DIA/CFM	24" - 2600	24" - 2600	24" - 2600	24" - 2600	24" - 2600	24" - 2600	24" - 2600	24" - 2600	24" - 2600
<b>Blower Motor &amp; Evap.</b>									
Blower Motor--HP-RPM-SPD	1/2 Variable	1/2 Variable	1/2 Variable	1/2 Variable	1/2 Variable	1/2 Variable	3/4 Variable	3/4 Variable	3/4 Variable
Blower Motor--Amps	4.5	4.5	4.5	5.0	5.0	5.0	5.0	5.0	5.0
CFM Cooling & E.S.P. w/Filter (Rated-Wet Coil)	1100 - .15	1100 - .15	1100 - .15	1300 - .20	1300 - .20	1300 - .20	1450 - .20	1450 - .20	1450 - .20
Filter Sizes (inches) STD.	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1	20x30x1
<b>Shipping Weight --LBS.</b>	525	525	525	525	525	525	575	575	575

## 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.



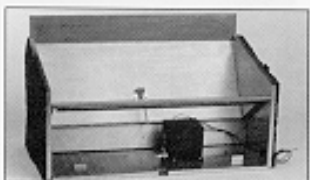
**Motorized Fresh Air Damper**

### **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 - 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 Classroom 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



**Economizer**



**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 ERVF allows from 300 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 ERVF 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 ERVF is designed to be internally mounted behind the service door in the W\*\*A, W\*\*H or W\*\*L model wall-mount units. It can be built-in at the factory or field installed as an option. ERVF-\*3 and ERVF-\*5 can be independently adjusted for intake and exhaust rates.

# Electrical Specifications

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		
W38A2-A0Z A05 A08 A10 A15	230/208-1	1 1 1 1 or 2 1 or 2	32 35 50 61 87	45 45 50 70 90	8 8 8 6 3	10 10 10 8 8										
W38A2-B0Z B06 B09 B15	230/208-3	1 1 1 1	26 27 36 54	35 35 40 60	8 8 8 6	10 10 10 10										
W38A2-C0Z C06 C09 C15	460-3	1 1 1 1	14 15 19 28	15 15 20 30	14 14 12 10	14 14 12 10										
W49A2-A0Z A05 A08 A10 A15	230/208-1	1 1 1 1 or 2 1 or 2	39 39 51 61 87	50 50 60 70 90	8 8 6 6 3	10 10 10 8 8										
W49A2-B0Z B06 B09 B15	230/208-3	1 1 1 1	30 30 37 55	45 45 45 60	8 8 8 6	10 10 10 10										
W49A2-C0Z C06 C09 C15	460-3	1 1 1 1	15 15 19 28	20 20 20 30	12 12 12 10	12 12 12 10										
W61A2-A0Z A05 A08 A10 A15	230/208-1	1 1 1 1 or 2 1 or 2	48 48 51 61 87	60 60 60 70 90	8 8 6 6 3	10 10 8 8 8										
W61A2-B0Z B09 B15	230/208-3	1 1 1	36 37 55	50 50 60	8 8 6	10 10 10										
W61A2-C0Z C09 C15	460-3	1 1 1	18 19 28	25 25 30	10 10 10	10 10 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 fuses & conductor wires in accordance with the National Electrical Code & all local codes.

**Data Pending**

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

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

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

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

LEGEND:

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

NOTE: Sensible performance only is shown for winter application.

## Indoor Blower Performance - CFM (0.00" - 0.50" H<sub>2</sub>O) ①

Model	Rated ESP	① Max ESP	② Blower Only	③ Cooling	③ Electric Heat
<b>W38A</b>	.15	.50	1100	1100	1100
<b>W49A</b>	.20	.50	1300	1300	1300
<b>W61A</b>	.20	.50	1450	1450	1450

**NOTE:** These units are equipped with a variable speed (ECM) indoor motor that automatically adjusts itself to maintain approximately the same rate of indoor airflow in both heating & cooling, dry & wet coil conditions and at both 230/208 or 460 volts.

- ① Maximum ESP (inches WC) shown is with 2" thick disposable filter.
- ② Blower only CFM is the total air being circulated during continuous fan mode.
- ③ CFM output on Cooling or Electric Heat.

## 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

- ① These electric heaters are available in 230/208V units only.
- ② These electric heaters are available in 480V units only.

## Heater Packages - Field Installed

- Designed for adding Electric Heat to 0 KW Units
- ETL US & Canada Listed
- Circuit Breaker Standard on 230/208V Models
- Rotary 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
<b>W38A2</b>	EHS03A-A05B	5	EHS03A-B06B	6	EHS03A-C06	6
	EHS03A-A08B	8	EHS03A-B09B	9	EHS03A-C09	9
	EHS03A-A10B	10	EHS03A-B15B	15	EHS03A-C15	15
	EHS03A-A15B	15				
<b>W49A2</b>	EHS04A-A05B	5	EHS03A-B06B	6	EHS03A-C06	6
	EHS04A-A08B	8	EHS04A-B09B	9	EHS04A-C09	9
	EHS03A-A10B	10	EHS04A-B15B	15	EHS04A-C15	15
	EHS04A-A15B	15				
<b>W61A2</b>	EHS05A-A05B	5	EHS04A-B09B	9	EHS04A-C09	9
	EHS04A-A08B	8	EHS04A-B15B	15	EHS04A-C15	15
	EHS05A-A10B	10				
	EHS05A-A15B	15				

## Cooling Application Data - Outdoor Temperature ①

Model	(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
<b>W38A2</b>	75/62	Total Cooling Sensible Cooling	37,700 28,600	35,900 27,800	34,200 27,100	32,600 26,300	31,000 25,600	29,600 24,900	28,200 24,100	26,900 23,400	25,700 22,700	24,400 22,000
	80/67	Total Cooling Sensible Cooling	40,200 27,700	39,100 27,200	38,000 26,800	36,800 26,300	35,600 25,800	34,500 25,300	33,300 24,700	32,100 24,200	30,900 23,600	29,600 23,000
	85/72	Total Cooling Sensible Cooling	47,900 28,400	45,700 27,600	43,700 26,900	41,600 26,100	39,600 25,300	37,800 24,500	35,900 23,600	34,200 22,700	32,500 21,800	30,800 20,800
<b>W49A2</b>	75/62	Total Cooling Sensible Cooling	48,900 36,700	46,500 35,200	44,400 33,800	42,400 32,700	40,500 31,700	38,800 31,000	37,200 30,300	35,600 29,800	34,200 29,600	33,000 29,400
	80/67	Total Cooling Sensible Cooling	52,200 35,600	50,700 34,500	49,300 33,500	47,900 32,700	46,500 32,000	45,200 31,500	43,900 31,100	42,500 30,800	41,200 30,800	40,000 30,800
	85/72	Total Cooling Sensible Cooling	62,200 36,500	59,300 35,000	56,600 33,700	54,100 32,500	51,700 31,400	49,500 30,500	47,300 29,700	45,200 28,900	43,300 28,400	41,600 27,800
<b>W61A2</b>	75/62	Total Cooling Sensible Cooling	58,900 41,400	56,900 40,600	54,900 39,800	53,000 39,000	50,900 38,100	49,000 37,200	47,000 36,100	45,000 35,000	43,000 33,800	41,100 32,700
	80/67	Total Cooling Sensible Cooling	62,900 40,100	62,000 39,800	61,000 39,400	59,000 39,000	57,500 38,400	56,500 37,800	55,500 37,000	53,700 36,200	51,800 35,200	49,800 34,200
	85/72	Total Cooling Sensible Cooling	74,900 41,100	72,500 40,400	70,100 39,600	67,600 38,800	65,000 37,700	62,500 36,600	59,800 35,300	57,100 34,000	54,400 32,400	51,800 30,900

Capacity Multiplier Factors			
% of Rated Airflow	-10	Rated	+10
<b>Total BTUH</b>	0.975	1.0	1.02
<b>Sensible BTUH</b>	0.950	1.0	1.05

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

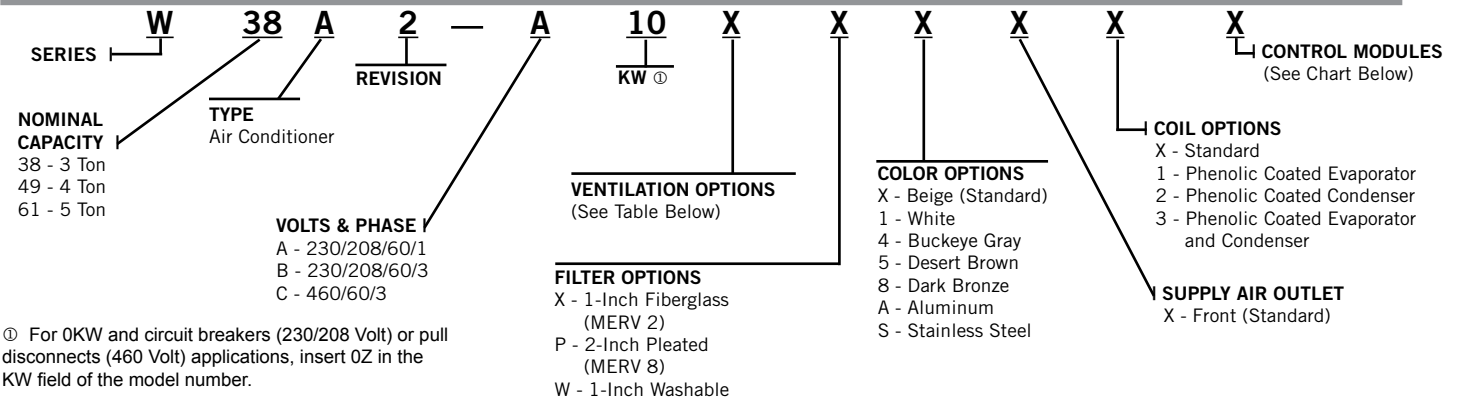
② Return air temperature.



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# Air Conditioning Wall-Mount Model Nomenclature



## Ventilation Options

Models	W38A2, W49A2, W61A2	
	Factory Installed Code No.	Field Installed Part No.
Barometric Fresh Air Damper - Standard	X	BFAD-5
Blank-Off Plate	B	BOP-5
Motorized Fresh Air Damper	M	MFAD-5
Commercial Ventilator - Spring Return w/Exhaust	V	CRVS-5
Commercial Ventilator - Power Return w/Exhaust	P	CRVP-5
Economizer - School Versions, Enthalpy ④	S	ECONWMS-E5B ②
Economizer - Equipment Bldg., Enthalpy ⑤	W	ECONWMT-E5B ②
Economizer - Equipment Bldg., DB Temp ⑤	T	ECONWMT-T5B ②
Energy Recovery Ventilator - 230 Volt ③	R	ERVF-A5 ①
Energy Recovery Ventilator - 460 Volt ③	R	ERVF-C5 ①
Door Kit for ERVF (Required)	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 and 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). ECONWMT versions have 11" deep intake hood.

## Air Conditioning Control Modules

AVAILABLE CONTROL OPTIONS								W38A2, W49A2, W61A2 Models with Scroll Compressors	
HPC ①	LPC ②	CCM ③	LAC ④	ALR ⑤	SK ⑥	ODT ⑧	DDC ⑨	Factory Installed Code	Field Installed Part
STD	STD	STD			STD			X	N/A
STD	STD	STD	●		STD			E	CMA-28
STD	STD	STD	●	●	STD			J	Factory Only
STD	STD	STD			STD			Field Installed Only	SK111 ⑦ W38A2-A Only
STD	STD	STD			STD			Field Installed Only	SK119 ⑦ W49A2-A Only
STD	STD	STD			STD			Field Installed Only	SK113 ⑦ W61A2-A Only
STD	STD	STD			STD	●		Field Installed Only	CMA-14
STD	STD	STD	●	●	STD		●	V ⑩	Factory Only
STD	STD	STD			STD		●	Field Installed Only	CMA-24

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.
- 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 is standard with all -A single phase models only. Increases starting torque 2-3x. Must be disconnected if SK111 or SK113 is used. Is not used or available for -B or -C three phase models.
- ⑦ Start capacitor and potential relay start kit can be used with all -A single phase models. Increases starting torque 9x. Not used for -B or -C three phase models. Do not use if CMC-15 is used. Use SK111 for W38A2-A, SK119 for W49A2-A and SK113 for W61A2-A only.
- ⑧ ODT. Outdoor thermostat is adjustable from 0 to 50°F. It is suitable for use as a compressor cutoff 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 air flow, compressor status or filter status.
- ⑩ "V" control module should be ordered in conjunction w/direct digital controller (DDC) model TCS24. Refer to DDC specification sheet S3280 for more information.

## Clearances Required for Service Access and Adequate Condenser Airflow

MODELS	LEFT SIDE	RIGHT SIDE
All Models	20"	20"

**NOTE:** For side by side installation of two (2) W\*\*A models there must be 20" between units.

## Minimum Clearances Required to Combustible Materials

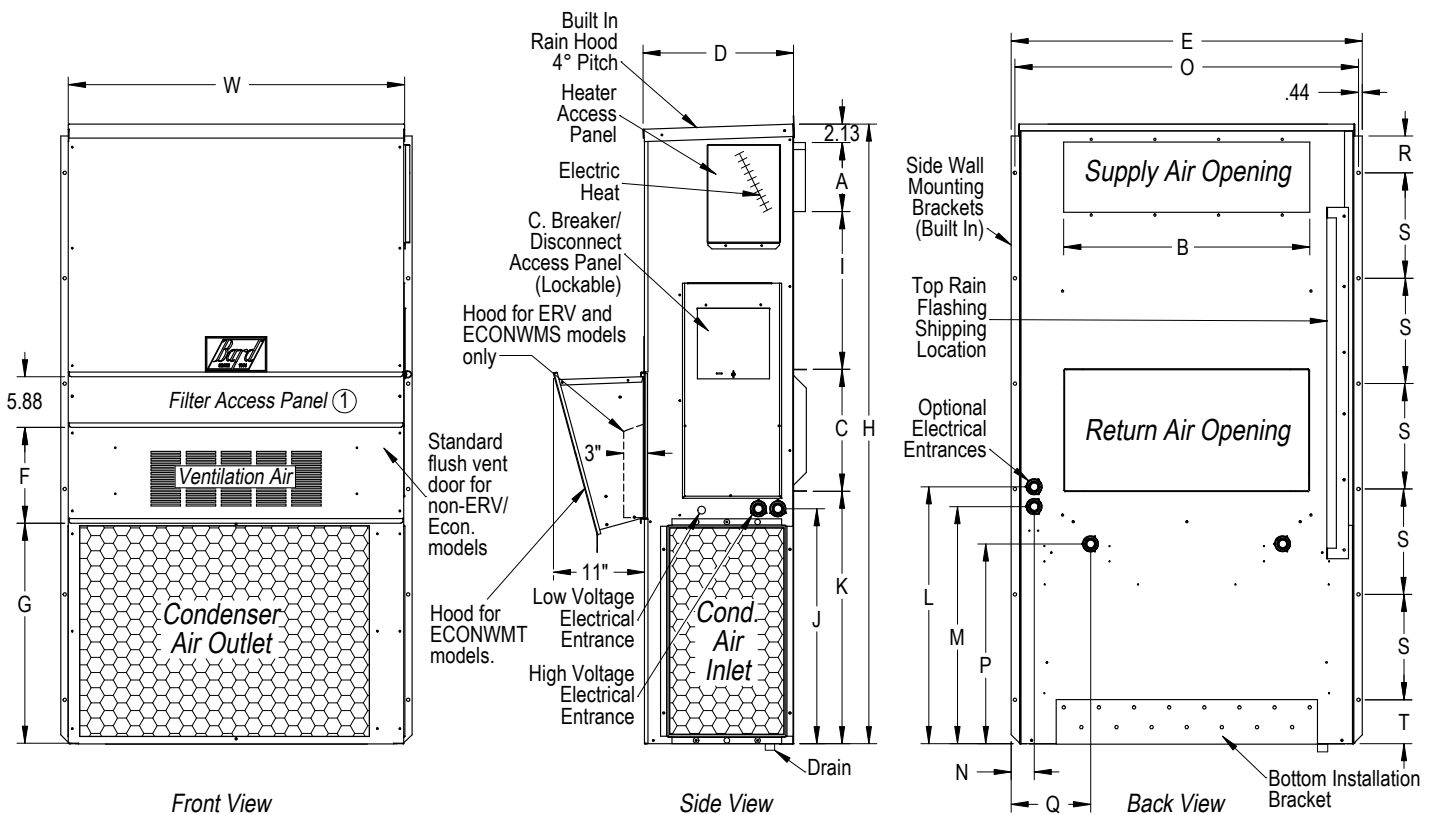
MODELS ①	SUPPLY AIR DUCT FIRST THREE FEET	CABINET
All Models	1/4"	0"

① Refer to the Installation Manual for more detailed information.

## Dimensions of Basic Unit for Architectural & Installation Requirements [Nominal]

MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN		E	F	G	I	J	K	L	M	N	O	P	Q	R	S	T
				A	B	C	B															
W38A2 W49A2	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
W61A2	42.075	22.432	94.875	9.88	29.88	15.88	29.88	43.88	13.56	41.66	30.00	42.68	36.94	44.69	42.43	3.37	43.00	33.88	10.00	2.00	21.00	1.88

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



MIS-3234

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



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**Due to our continuous product improvement policy, all specifications subject to change without notice.**

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.

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