



THE WALL-MOUNT™ HI-BOY

AIR CONDITIONERS

18 Models

Cooling Capacities: 18,300 to 57,500 BTUH
SEER: 10.00 to 11.00

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



CERTIFIED



LISTED



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:

Reciprocating compressor designed to withstand higher compressor ratios. Equipped with crankcase heater and dual discharge muffler. Standard on selected models.

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

Galvanized 20 Gauge Zinc Coated Steel Cabinet:

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

Electrical Components:

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

Electric Heat Strips:

Feature an automatic limit and thermal cut-off safety control. Heater packages are factory or field installed for all 1-1/2 through 5 ton models. Features easy slide-in field assembly with various BTUH outputs.

One Inch, Disposable Air Filters:

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

Condenser Fan and Motor Shroud Assembly:

Slide out for easy access.

Built-in Circuit Breakers:

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

Rain Hood:

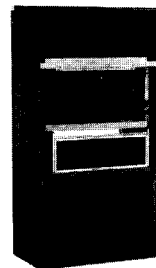
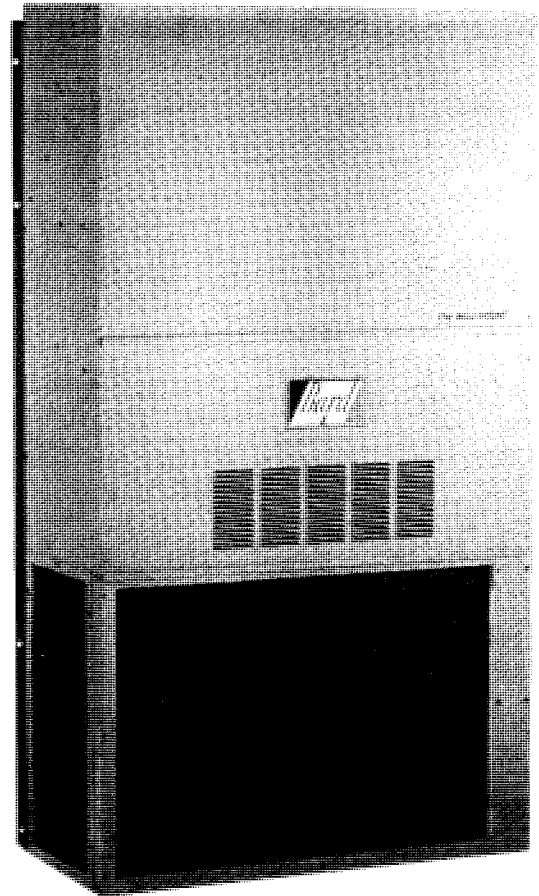
Standard built in feature on all models.

Full Length Mounting Brackets:

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

Top Rain Flashing:

Standard feature on all models.



Unit shown with optional economizer.



Economizer

Ventilation System Packages

Patent Pending

All packages are designed to meet your specific ventilation requirements utilizing one of five ventilation options for the product. The ventilation package is mounted within the unit eliminating the need for an exterior mounted hood or damper assembly on the unit. All assemblies can be factory installed, installed in the field at time of installation or as a retrofit system after installation.

- **Standard – Barometric Fresh Air Damper**
- **Optional – Motorized Fresh Air Damper**
- **Optional – Blank off Plate**
- **Optional – Commercial Room Ventilator (CRV)**
- **Optional – Economizer**

Capacity and Efficiency Ratings

MODELS	WA181-A	WA241-A	WA241-B	WA301-A	WA301-B WA301-C	WA361-A	WA361-B WA361-C	WA421-A	WA421-B WA421-C	WA481-A	WA481-B WA481-C	WA601-A	WA601-B WA601-C
Phase	1	1	3	1	3	1	3	1	3	1	3	1	3
Cooling Cap. BTUH	18,300	24,000	24,000	31,000	31,000	36,000	36,000	43,000	43,000	47,500	47,500	57,500	57,500
SEER	10.20	10.50	10.50	10.00	10.00	10.00	10.00	10.00	10.00	11.00	11.00	10.20	10.20

All capacity, efficiency and cost of operation information is based on high speed operation with fresh air cover plate. Cover plate must be ordered separately and is recommended for use to obtain maximum energy efficiency where fresh air opening is not required.

Specifications 1-1/2 through 3 Ton

MODELS	WA181-A	WA241-A	WA241-B	WA301-A	WA301-B	WA301-C	WA361-A	WA361-B	WA361-C
Cooling Capacity BTUH	18,300	24,000	24,000	31,000	31,000	31,000	36,000	36,000	36,000
Heating Capacity BTUH	See Electric Heat Table								
ELECTRICAL RATING — 60HZ	230/208-1		230/208-3	230/208-1	230/208-3	460-3	230/208-1	230/208-3	460-3
Operating Voltage Range	197-253				414-506	197-253		414-506	
COMPRESSOR — CIRCUIT A									
Voltage	230/208					460	230/208		460
Rated Load Amps	7.0/8.0	9.5/10.0	6.6/6.9	12.6/13.7	8.2/8.5	4.8	15.7/17.0	9.9/10.7	5.2
Branch Circuit Selection Current	9.0	10.0	7.0	14.0	9.0	5.0	17.0	11.0	6.0
Lock Rotor Amps	49/49	56/56	51/51	75/75	68/68	34	96/96	75/75	40
FAN MOTOR & CONDENSER									
Fan Motor — HP/RPM	1/5-1075								
Fan Motor — Amps	1.2			1.5		1.4	1.5		1.4
Fan — DIA/CFM	18" -1600			20" -2100		20" -1900			
MOTOR AND EVAPORATOR									
Blower Motor — HP/RPM/SPD	1/6-1100-1Spd.				1/3-1100-2 Spd.				
Blower Motor — Amps	1.0			2.2		1.1	2.2		1.1
CFM Cooling & E.S.P. w/ Filter (Rated-Wet Coil)	650-.4	800-.2		1000-.4			1100-.3		
Filter Sizes (inches) STD.	16 x 25 x 1			16 x 30 x 1					
SHIPPING WEIGHT —LBS.	300			355			355		

Specifications 3-1/2 through 5 Ton

MODELS	WA421-A	WA421-B	WA421-C	WA481-A	WA481-B	WA481-C	WA601-A	WA601-B	WA601-C
Cooling Capacity BTUH	43,000	43,000	43,000	47,500	47,500	47,500	57,500	57,500	57,500
Heating Capacity BTUH	See Electric Heat Table								
ELECTRICAL RATING — 60HZ	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3
Operating Voltage Range	197 - 253		414 - 506	197 - 253		414 - 506	197 - 253		414 - 506
COMPRESSOR — CIRCUIT A									
Voltage	230/208		460	230/208		460	230/208		460
Rated Load Amps	17.5/19.7	11.6/12.6	5.8	20.6/22.7	12.7/13.9	6.6	26.0/28.6	18.1/18.4	6.8
Branch Circuit Selection Current	20.0	13.0	6.0	24.0	14.0	7.0	29.0	19.0	9.0
Lock Rotor Amps	102/102	91/91	42/42	129/129	99/99	49.5/49.5	169/169	123/123	62/62
FAN MOTOR & CONDENSER									
Fan Motor — HP/RPM	1/3 - 850								
Fan Motor — Amps	2.5		1.4	2.5		1.4	2.5		1.4
Fan — DIA/CFM	24" - 2600								
MOTOR AND EVAPORATOR									
Blower Motor — HP/RPM/SPD	1/2 - 1070 - 2 Spd.								
Blower Motor — Amps	3.3		1.9	3.3		1.9	3.3		1.9
CFM Cooling & E.S.P. w/ Filter (Rated-Wet Coil)	1400 - .3			1550 - .2			1700 - .3		
Filter Sizes (inches) STD.	20 x 30 x 1								
SHIPPING WEIGHT —LBS.	500								

IMPORTANT

While this electrical data is presented as a guide, it is important to electrically connect properly sized fuses and conductor wires in accordance with the National Electrical Code and all existing local codes.



All models ARI certified.

CERTIFIED



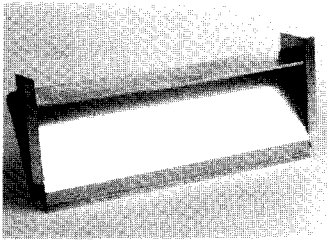
Underwriters listed for outdoor installation.

LISTED



Canadian Standard Approval

Bard Wall-Mounts are designed to provide optional ventilation packages to meet all of your ventilation and indoor air quality requirements. Standard on all units is the barometric fresh air damper. All packages can be ordered built-in at the factory or can be easily field installed at the time of installation of the Wall-Mount, or can be retrofitted at a later date.



BAROMETRIC FRESH AIR DAMPER

BAROMETRIC FRESH AIR DAMPER - BFAD

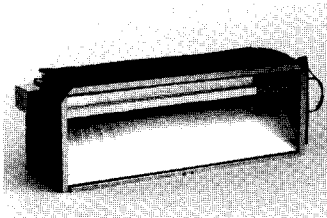
STANDARD

The barometric fresh air damper is a standard feature on all models. It is installed on the inside of the service door and allows up to 25% outside fresh air through the air inlet openings and 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 or 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 eliminate outside air from entering into the unit. The blank off plate should be utilized in applications where outside air is not required to be mixed with the conditioned air.



MOTORIZED FRESH AIR DAMPER

MOTORIZED FRESH AIR DAMPER - MFAD

OPTIONAL

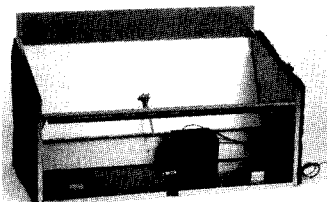
The motorized fresh air damper is internally mounted behind the service door and allows up to 25% outside fresh air through the air inlet openings and mixed with the conditioned air. The two position damper can be fully open or closed. The damper blade is powered open by a 24VAC motor with spring return on power loss. The damper can be controlled by indoor blower operation or can be field connected to be managed based on building occupancy.

COMMERCIAL ROOM VENTILATOR - CRV

OPTIONAL

The built-in commercial room ventilator is internally mounted behind the service door and allows up to 75% outside air 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 improve the indoor air quality by providing fresh air intake and exhaust capability through the CRV. The damper can be easily adjusted to control the amount of fresh air supplied into the building. The CRV can be controlled by indoor blower operation or field controlled based on room occupancy. The CRV is power open - spring return on power loss. Complies with ASHRAE Standard 62-89 "Ventilation for acceptable indoor air quality."



COMMERCIAL ROOM VENTILATOR

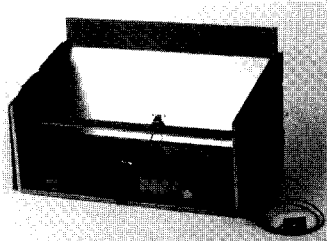
ECONOMIZER - EIFM

OPTIONAL

The built-in economizer system is internally mounted behind the service door and allows up to 100% outside air through the air inlet openings. It includes a built-in exhaust air damper. The economizer is designed to provide "free cooling" when the outside air temperature is cool enough to provide needed cooling without running the compressor. This in turn, provides lower operating costs, while extending the life of the compressor.

Standard Features:

- One Piece Construction - Easy to install with no mechanical linkage adjustment required.
- Exhaust Air Damper - Built in with positive closed position. Provides exhaust air capability to prevent pressurization of tight buildings.
- Actuator Motor - 24 volt, power open, spring return with built in torque limiting switch.
- Proportioning Type Control - for maximum "free cooling" economy and comfort with up to 100% outside air.
- Moisture Eliminator & Prefilter - permanent, washable aluminum construction.
- Enthalpy Control - adjustable to monitor outdoor temperature and humidity.
- Minimum Position Potentiometer - adjustable to control minimum damper blade position.
- Mixed Air Sensor - to monitor outside and return air to automatically modulate damper position.



ECONOMIZER

Clearances Required for Service Access and Adequate Condenser Air Flow

MODELS	LEFT SIDE	RIGHT SIDE
WA18, WA24, WA30, WA36	15"	20"
WA42, WA48, WA60	20"	20"

Minimum Clearances Required to Combustible Materials

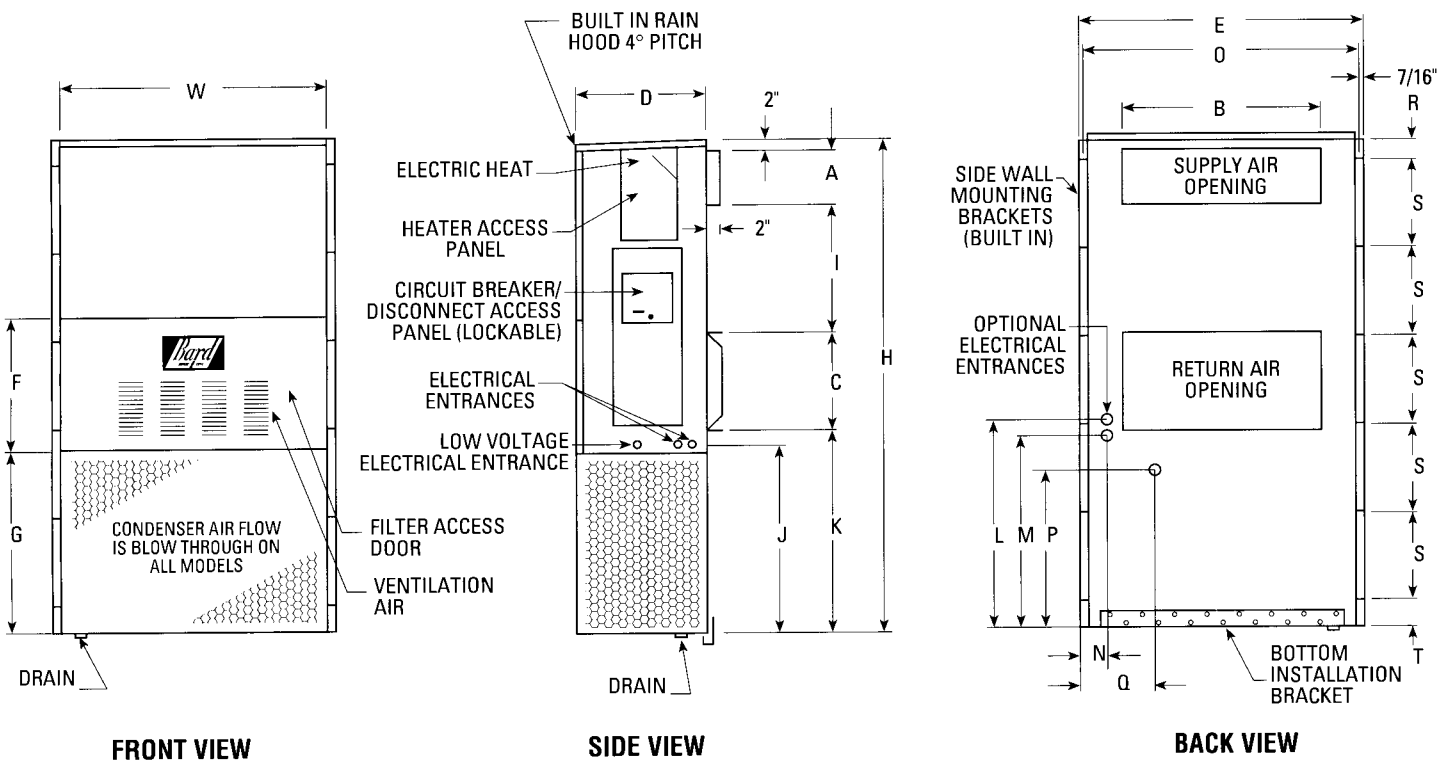
MODELS ①	SUPPLY AIR DUCT	
	FIRST THREE FEET	CABINET
WA18, WA24,	0"	0"
WA30, WA36	1/4"	0"
WA42, WA48, WA60	1/4"	0"

① Refer to the installation manual for more detailed information.

Dimensions of Basic Unit for Architectural and Installation Requirements (Nominal)

UNIT	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN		E	F	G	I	J	K	L	M	N	D	P	Q	R	S	T
				A	B	C	B															
WA18 WA24	32-7/8	16-7/8	70-1/2	7-7/8	19-7/8	11-7/8	19-7/8	34-7/8	18-1/4	25-3/4	20-3/4	26-3/4	28	29-1/4	27	2-9/16	34	22-1/16	10-1/2	4 - 3/4	12	5
WA30 WA36	37-7/8	16-7/8	70-1/2	7-7/8	27-7/8	13-7/8	27-7/8	39-7/8	18-1/4	25-3/4	18	26-3/4	28-3/4	29-1/4	27	2-9/16	39	22-3/4	9	4 - 3/4	12	5
WA42 WA48 WA60	42	22-1/2	84-7/8	9-7/8	29-7/8	15-7/8	29-7/8	43-7/8	19	31-5/8	30	32-11/16	27	34-3/4	32-1/2	3-1/4	43	23-7/8	10	2	16	1 - 7/8

All dimensions are in inches



Electrical Specifications

MODEL	RATED VOLTS & PHASE	SINGLE CIRCUIT					DUAL CIRCUIT								
		NO. FIELD POWER CIRCUITS	③ MINIMUM CIRCUIT AMPACITY	① MAXIMUM EXTERNAL FUSE OR CKT. BREAKER		② FIELD POWER WIRE SIZE	② GROUND WIRE SIZE	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		
WA181-A00, A0Z	230/208-1	1	14	20	14	12	-	-	-	-	-	-	-	-	
A05		1	28	30	10	10	-	-	-	-	-	-	-	-	
A08		1	44	45	8	10	-	-	-	-	-	-	-	-	
A10		1	54	60	6	10	-	-	-	-	-	-	-	-	
WA241-A00, A0Z	230/208-1	1	15	20	14	12	-	-	-	-	-	-	-	-	
A05		1	28	30	10	10	-	-	-	-	-	-	-	-	
A08		1	44	45	8	10	-	-	-	-	-	-	-	-	
A10		1	54	60	6	10	-	-	-	-	-	-	-	-	
WA241-B00, B0Z	230/208-3	1	11	15	14	12	-	-	-	-	-	-	-	-	
B06		1	20	20	12	12	-	-	-	-	-	-	-	-	
WA301-A00, A0Z	230/208-1	1	22	35	10	10	-	-	-	-	-	-	-	-	
A05		1	29	35	10	10	-	-	-	-	-	-	-	-	
A08		1	45	45	8	10	-	-	-	-	-	-	-	-	
A10		1	55	60	6	10	-	-	-	-	-	-	-	-	
A15		1 or 2	81	90	4	8	55	26	60	30	4	10	8	10	
WA301-B00, B0Z	230/208-3	1	15	20	14	12	-	-	-	-	-	-	-	-	
B06		1	21	25	10	10	-	-	-	-	-	-	-	-	
B09		1	30	30	10	10	-	-	-	-	-	-	-	-	
B15		1	48	50	8	10	-	-	-	-	-	-	-	-	
WA301-C00, C0Z	460-3	1	9	15	14	14	-	-	-	-	-	-	-	-	
C06		1	11	15	14	14	-	-	-	-	-	-	-	-	
C09		1	15	15	14	14	-	-	-	-	-	-	-	-	
C15		1	24	25	10	10	-	-	-	-	-	-	-	-	
WA361-A00, A0Z	230/208-1	1	25	35	10	10	-	-	-	-	-	-	-	-	
A05		1	29	35	10	10	-	-	-	-	-	-	-	-	
A08		1	45	45	8	10	-	-	-	-	-	-	-	-	
A10		1	55	60	6	10	-	-	-	-	-	-	-	-	
A15		1 or 2	81	90	4	8	55	26	60	30	4	10	8	10	
WA361-B00, B0Z	230/208-3	1	18	25	12	10	-	-	-	-	-	-	-	-	
B06		1	21	25	10	10	-	-	-	-	-	-	-	-	
B09		1	30	30	10	10	-	-	-	-	-	-	-	-	
B15		1	48	50	8	10	-	-	-	-	-	-	-	-	
WA361-C00, C0Z	460-3	1	9	15	14	14	-	-	-	-	-	-	-	-	
C06		1	11	15	14	14	-	-	-	-	-	-	-	-	
C09		1	15	15	14	14	-	-	-	-	-	-	-	-	
C15		1	24	25	10	10	-	-	-	-	-	-	-	-	
WA421-A00, A0Z	230/208-1	1	31	50	8	10	-	-	-	-	-	-	-	-	
A05		1	31	50	8	10	-	-	-	-	-	-	-	-	
A10		1	56	60	6	10	-	-	-	-	-	-	-	-	
A15		1 or 2	83	90	4	8	56	26	60	30	6	10	10	10	
A20		1 or 2	108	110	2	6	56	52	60	60	6	6	10	10	
WA421-B00, B0Z	230/208-3	1	22	35	8	10	-	-	-	-	-	-	-	-	
B09		1	32	35	8	10	-	-	-	-	-	-	-	-	
B15		1	50	50	8	10	-	-	-	-	-	-	-	-	
B18		1	59	60	6	10	-	-	-	-	-	-	-	-	
WA421-C00, C0Z	460-3	1	11	15	14	14	-	-	-	-	-	-	-	-	
C09		1	16	20	12	12	-	-	-	-	-	-	-	-	
C15		1	25	25	10	10	-	-	-	-	-	-	-	-	
WA481-A00, A0Z	230/208-1	1	36	50	8	10	-	-	-	-	-	-	-	-	
A05		1	36	50	8	10	-	-	-	-	-	-	-	-	
A10		1	56	60	6	10	-	-	-	-	-	-	-	-	
A15		1 or 2	83	90	4	8	56	26	60	30	6	10	10	10	
A20		1 or 2	108	110	2	6	56	52	60	60	6	6	10	10	
WA481-B00, B0Z	230/208-3	1	24	35	8	10	-	-	-	-	-	-	-	-	
B09		1	32	35	8	10	-	-	-	-	-	-	-	-	
B15		1	50	50	8	10	-	-	-	-	-	-	-	-	
B18		1	59	60	6	10	-	-	-	-	-	-	-	-	
WA481-C00, C0Z	460-3	1	12	15	14	14	-	-	-	-	-	-	-	-	
C09		1	16	20	12	12	-	-	-	-	-	-	-	-	
C15		1	25	25	10	10	-	-	-	-	-	-	-	-	
WA601-A00, A0Z	230/208-1	1	42	60	8	10	-	-	-	-	-	-	-	-	
A05		1	42	60	8	10	-	-	-	-	-	-	-	-	
A10		1	56	60	6	10	-	-	-	-	-	-	-	-	
A15		1 or 2	83	90	4	8	56	26	60	30	6	10	10	10	
A20		1 or 2	108	110	2	6	56	52	60	60	6	6	10	10	
WA601-B00, B0Z	230/208-3	1	30	45	8	10	-	-	-	-	-	-	-	-	
B09		1	32	45	8	10	-	-	-	-	-	-	-	-	
B15		1	50	50	8	10	-	-	-	-	-	-	-	-	
B18		1	59	60	6	10	-	-	-	-	-	-	-	-	
WA601-C00, C0Z	460-3	1	15	20	12	12	-	-	-	-	-	-	-	-	
C09		1	16	20	12	12	-	-	-	-	-	-	-	-	
C15		1	25	25	10	10	-	-	-	-	-	-	-	-	

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

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

③ These "Minimum Circuit Ampacity" values are to be used for sizing the field power conductors. Refer to the National Electric Code (latest revision), article 310 for power conductor sizing.

Caution: When more than one field power conductor 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 conductors are in a raceway.

Indoor Blower Performance — CFM at 230 Volts

ESP in H ₂ O	WA18		WA30		WA42		WA60	
	WA24		WA36		WA48			
	Dry/Wet Coil		High Speed Dry/Wet Coil	Low Speed Dry/Wet Coil	High Speed Dry/Wet Coil	Low Speed Dry/Wet Coil	High Speed Dry/Wet Coil	Low Speed Dry/Wet Coil
0	1020 / 975	1395 / 1315	950 / 935	1885 / 1800	1650 / 1600	2200 / 2000	1600 / 1450	
.1	960 / 905	1340 / 1270	930 / 915	1770 / 1665	1550 / 1500	2100 / 1900	1525 / 1375	
.2	865 / 800	1285 / 1190	910 / 885	1635 / 1540	1450 / 1400	2000 / 1800	1465 / 1200	
.3	820 / 735	1205 / 1100	855 / 830	1500 / 1400	1350 / 1300	1875 / 1700	— —	
.4	735 / 650	1110 / 1000	800 / 755	1370 / 1285	1300 / 1175	1775 / 1600	— —	
.5	615 / 535	1005 / 870	— —	1250 / 1150	— —	1650 / 1475	— —	

Above data is with 1" standard throw away filter and 1" washable filter.

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

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

Electric Heat Table

MODEL	WA181-A		WA241-B		WA301-A		WA301-B		WA301-C	WA421-A		WA421-B		WA421-C
	WA241-A				WA361-A		WA361-B		WA361-C	WA481-A		WA481-B		WA481-C
KW	240V-1 BTUH	208V-1 BTUH	240V-3 BTUH	208V-3 BTUH	240V-1 BTUH	208V-1 BTUH	240V-3 BTUH	208V-3 BTUH	460V-3 BTUH	240V-1 BTUH	208V-1 BTUH	240V-3 BTUH	208V-3 BTUH	460V-3 BTUH
5.0	18,000	14,000			18,000	14,000				18,840	14,300			
8.0	28,000	21,000			28,000	21,000								
10.0	34,000	26,000			35,000	26,000				35,900	27,100			
15.0					52,000	39,000				52,975	39,900			
20.0										70,035	52,700			
6.0			21,000	16,000			22,000	16,000	22,000					
9.0							32,000	24,000	29,500			32,395	24,530	32,475
15.0							52,000	39,000	48,000			52,975	40,175	52,975
18.0												63,210	47,575	

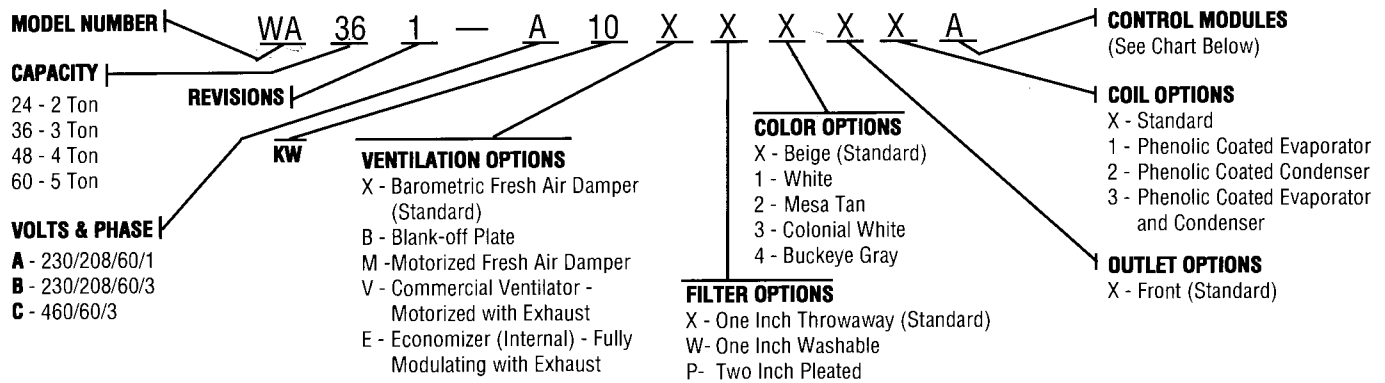
NOTE: Includes indoor blower motor.

Heater Packages - Field Installed

- Designed for adding Electric Heat to 0 KW Units
- Circuit Breaker Standard on 230/208V Models
- Pull Disconnect Standard on 460V Models
- UL Listed
- CSA Certified

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
WA181	EHWA02-A05	5	N/A		N/A	
	EHWA02-A08	8				
	EHWA02-A10	10				
WA241	EHWA02-A05	5	EHWA24-B06	6	N/A	
	EHWA02-A08	8				
	EHWA02-A10	10				
WA301 WA361	EHWA03-A05	5	EHWA03-B06	6	EHWC03-C06	6
	EHWA03-A08	8	EHWA03-B09	9	EHWC03-C09	9
	EHWA03-A10	10	EHWA03-B15	15	EHWA03-C15	15
	EHWA03-A15	15				
WA421 WA481 WA601	EHWA05-A05	5	EHWA05-B09	9	EHWA05-C09	9
	EHWA05-A10	10	EHWA05-B15	15	EHWA05-C15	15
	EHWA05-A15	15	EHWA05-B18	18		
	EHWA05-A20	20				

Air Conditioning Wall-Mount Model Nomenclature



Note: For 0 KW and circuit breakers (230/208 Volt) or pull disconnects (460 Volt) applications, insert OZ in the KW field of the model number.

Ventilation Options

MODELS	WA18 WA24		WA30 WA36		WA42 WA48 WA60	
	FIELD INSTALLED	FACTORY INSTALLED	FIELD INSTALLED	FACTORY INSTALLED	FIELD INSTALLED	FACTORY INSTALLED
	PART NO.	CODE NO.	PART NO.	CODE NO.	PART NO.	CODE NO.
Barometric Fresh Air Damper	BFAD-2	X	BFAD-3	X	BFAD-5	X
Blank-off Plate	BOP-2	B	BOP-3	B	BOP-5	B
Motorized Fresh Air Damper	MFAD-2	M	MFAD-3	M	MFAD-5	M
Commercial Ventilator - Motorized	CRV-2	V	CRV-3	V	CRV-5	V
Economizer (Internal) - Fully Modulating ①	EIFM-2	E	EIFM-3	E	EIFM-5	E

① Low ambient control is required with economizer for low temperature compressor operation. Requires 8403-021 (T874D1934) thermostat and 8404-012 (O674A1001) sub-base combination.

Air Conditioning Control Modules

FACTORY INSTALLED CODE NO.	FIELD INSTALLED PART NO.	DESCRIPTION					
		HIGH PRESSURE CONTROL	LOW PRESSURE CONTROL	COMPRESSOR ANTI-CYCLE RELAY	LOW AMBIENT CONTROL	ALARM RELAY	START KIT
		②	③	④	⑤	⑥	⑦
WA18-WA60	WA18-WA42	WA48-WA60					
A	CMA-1	---	•				
B	CMA-2	CMA-16		•			
C	CMA-4	---	•	•			
D	CMA-5	CMA-5		•			
E	CMA-6	CMA-6			•		
F	CMA-8	---	•		•		
G	CMA-10	CMA-17	•	•	•		
H	CMA-11	CMA-18	•	•		•	
I	CMA-12	CMA-19			•	•	
J	---	---	•	•	•	•	
K	---	---	•	•	•		•
L	---	---	•	•	•		•
M	---	---	•	•	•	•	•
N	---	---			•		•
P	CMC-15 ⑦	---					•
---	CMA-13	CMA-20	•	•	•	•	

① For WA481-A,B,C and WA601-A,B,C models, the lock-out relay and high pressure control are standard features.

② The high pressure control is auto reset. It includes a lock-out feature and is resettable from the wall thermostat.

③ The low pressure control is auto reset. It includes a lock-out feature and is resettable from the wall thermostat. All low pressure controls use a timed bypass circuit to prevent nuisance tripping during low pressure start-up.

④ The compressor anti-cycle relay on control modules J and M is adjustable (6 seconds to 10 minutes). It operates on delay on make and is factory set at 5 minutes.

⑤ The low ambient control permits cooling operation down to 0°F.

⑥ 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 the high or low pressure switch.

⑦ For WA181-A, WA241-A, WA301-A, WA361-A and WA421-A models. The CMC-15 can be used with any control module combination.



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**Form No.
S3208
April, 1993**

Supersedes S3208-193