

THE WALL-MOUNT™ - AIR CONDITIONERS - WA (50Hz)

WA-SERIES Refrigerant 22 50Hz 21,300 Btuh (6.24KW) to 60,000 Btuh (17.58KW) Right Side Control Panel

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:

Reciprocating compressors are designed for high compression ratios. Equipped with crankcase heater and dual discharge muffler. Standard on 242 model.

Scroll compressors are designed for increased efficiency, quieter operation and improved reliability for longer life. Eliminates need for crankcase heater. Standard on all models except 242, and available on 253 model.

Phase Rotation Monitor:

Standard on all 3 phase scroll compressors. Protects against reverse rotation if power supply is not properly connected. Not required on reciprocating compressors.

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.

Slope Top:

Standard feature for water run-off.

Top Rain Flashing:

Standard feature on all models.

Electrical Components:

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

Electric Heat Strips:

Features an automatic limit and thermal cut-off safety control. Heater packages are factory installed for all models.

1-Inch (25mm), Disposable Air Filters:

Are standard equipment.
Optional 1-inch (25mm)
washable filters available and
filter racks permit the addition of
2-inch (51mm) 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.

Built-in Circuit Breakers:

Standard on all versions of single (240/220 volt) and three phase (220/200 volt) equipment.
Toggle disconnects are standard on all versions of three phase (415/240 volt) equipment.

Full Length Mounting Brackets:

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





Economizer



Unit shown with optional Economizer.

Ventilation System Packages

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	WA242	WA253	WA302	WA372	WA423	WA484	WA602	WA701				
Cooling Capacity Btuh	21,300	21,000	27,300	32,000	38,300	42,000	51,000	60,000				
Cooling Capacity KW	6.24	6.15	8.00	9.38	11.22	12.30	14.95	17.58				
EER	9.2	9.5	9.2	9.2	9.5	9.6	8.7	8.7				

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 is not required.

Specifications 21,000 Btuh (6.24 KW) through 32,000 Btuh (9.38 KW)												
MODELS	WA242-D	WA242-F	WA253-D	WA253-F	WA302-D	WA302-F	WA372-D	WA372-E	WA372-F			
Cooling Capacity Btuh	21,300	21,300	21,000	21,000	27,600	27,600	32,000	32,000	32,000			
Cooling Capacity KW	6.24	6.24	6.15	6.15	8.09	8.09	9.38	9.38	9.38			
Heating Capacity		See Electric Heat Table										
Electrical Rating-50 Hz	240/220 - 1	415/380 - 3 0	240/220 - 1	415/380 - 30	240/220 - 1	415/380 - 30	240/220 - 1	220/200 - 3	415/380 - 30			
Operating Voltage Range	198-254	342-456	198-254	342-456	198-254	342-456	198-254	180-242	342-456			
Compressor-Circuit A												
Voltage	240/220	415/380	240/220	415/380	240/220	415/380	240/220	220/200	415/380			
Rated Load Amps	9.1/9.9	3.9/3.9	7.2/8.0	3.2/2.5	12.2/13.7	4.2/4.2	15.1/15.8	9.8/10.3	5.2/5.5			
Branch Circuit Selection Current	10.0	4.0	9.0	3.9	14.1	4.5	15.8	10.3	5.5			
Lock Rotor Amps	55/55	25/25	43/43	22.4/21.4	61/61	31/31	75/82	76/83	36/40			
Compressor Type	Recip.	Recip.	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll			
Fan Motor & Condenser												
Fan MotorHPRPM	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950			
Fan MotorAmps	1.0	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5			
FanDIA m³/s	458/0.66	458/0.66	458/0.66	458/0.66	508/0.86	508/0.86	508/0.86	508/0.86	508/0.86			
Blower Motor & Evaporator												
Blower MotorHP-RPM-SPD	1/5-950-1	1/5-950-1	1/5-950-1	1/5-950-1	1/3-950-2	1/3-950-2	1/3-950-2	1/3-950-2	1/3-950-2			
Blower MotorAmps	1.2	1.2	1.2	1.2	2.2	2.2	2.2	2.2	2.2			
m³/s Cooling & E.S.P. (pa) w/Filter (Rated-Wet Coil)	0.32/55	0.32/55	0.32/55	0.32/55	0.45/55	0.45/55	0.47/50	0.47/50	0.47/50			
Filter Sizes (mm) STD.	405x635x25	405x635x25	405x635x25	405x635x25	405x765x25	405x765x25	405x765x25	405x765x25	405x765x25			
Shipping Weight Lbs. (Kg)	300 (136)	300 (136)	300 (136)	300 (136)	355 (161)	355 (161)	355 (161)	355 (161)	355 (161)			

MODELS	WA423-F	WA484-E	WA484-F	WA602-E	WA602-F	WA701-F
Cooling Capacity Btuh	38,300	42,000	42,000	51,000	51,000	60,000
Cooling Capacity KW	11.22	12.30	12.30	14.95	14.95	17.58
Heating Capacity			See Electric	Heat Table -	·	
Electrical Rating50 Hz	415/380-3 ①	220/200-3	415/380-3 ①	220/200-3	415/380-3 ①	415/380-3 ①
Operating Voltage Range	342-456	180-242	342-456	180-242	342-456	342-456
CompressorCircuit A						
Voltage	415/380	220/200	415/380	220/200	415/380	415/380
Rated Load Amps	5.8/5.8	11.9/12.3	6.2/6.2	15.7/18.4	6.8/6.8	10.2/10.2
Branch Circuit Selection Current	6.0	12.9	6.5	19.0	9.0	10.2
Lock Rotor Amps	44/44	98/98	46/46	123/123	62/62	75/75
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
an Motor & Condenser		-	•		•	
Fan MotorHP-RPM	1/3-825	1/3-825	1/3-825	1/3-825	1/3-825	1/3-825
Fan MotorAmps	2.5	2.5	2.5	2.5	2.5	2.5
FanDIA. m³/s	610/1.01	610/1.01	610/1.01	610/1.01	610/1.01	610/1.01
Blower Motor & Evaporator		•	•	-		-
Blower MotorHP-RPM-SPD	1/2-950-2	1/2-950-2	1/2-950-2	1/2-950-2	1/2-950-2	1/2-950-2
Blower MotorAmps	3.3	3.3	3.3	3.3	3.3	3.3
m³/s Cooling & E.S.P. (pa) w/Filter (Rated-Wet Coil)	0.55/75	0.60/50	0.60/50	0.66/75	0.66/75	0.70/50
Filter Sizes (mm) STD.	508x765x25	508x765x25	508x765x25	508x765x25	508x765x25	508x765x25
Shipping Weight Lbs. (Kg)	500 (227)	500 (227)	500 (227)	500 (227)	500 (227)	520 (236)

① 415/380-3 electrical ratings are 3-phase wye (star) systems requiring three (3) phase legs plus neutral and ground. **NOTE:** The indoor and outdoor motors, and 24V transformer primary are connected at 240V derived from one (1) phase leg to neutral. This is internally connected and no field wiring required.

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 all existing local codes.

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Ventilation System Packages

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 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.



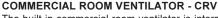
MOTORIZED FRESH AIR DAMPER

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.



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. The CRV is power open - spring return on power loss. Complies with ASHRAE Standard 62.1 "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 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.



ECONOMIZER

Standard Features:

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

Clearances - Inches (mm) Required for Service Access and Adequate Condenser Airflow

MODELS	LEFT SIDE	RIGHT SIDE
WA24, WA25, WA37	15 (380)	20 (510)
WA42, WA48, WA60, WA70	20 (510)	20 (510)

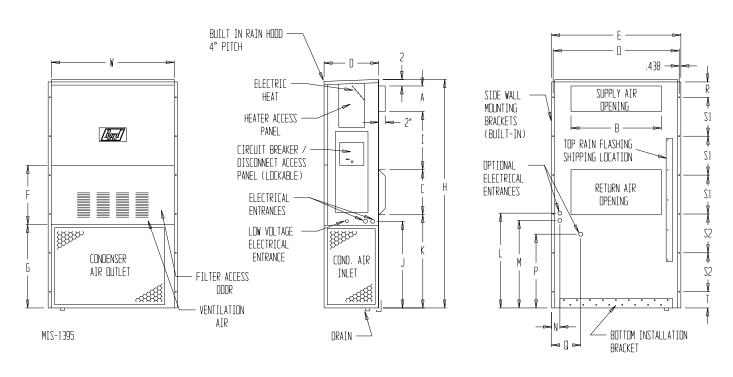
Minimum Clearances - Inches (mm) Required to Combustible Materials

MODELS ①	SUPPLY AIR DUCT FIRST 3 FEET (1m)	CABINET
WA24, WA25	0	0
WA30, WA37	.25 (6.35)	0
WA42, WA48, WA60, WA70	.25 (6.35)	0

① Refer to the installation manual for more detailed information.

Dimensions of Basic Unit for Architectural and Installation Requirements - Inches (mm)

MODEL	WIDTH	DEPTH	HEIGHT	SUF	PPLY	RET	URN																
WODEL	(W)	(D)	(H)	Α	В	С	В	Е	F	G	I	J	K	L	М	N	0	Р	Q	R	S1	S2	Т
WA24 WA25	33.300 (845)	17.125 (435)	70.563 (1792)												27.00 (686)								
WA30 WA37	38.200 (970)	17.125 (435)	70.563 (1792)												27.00 (686)	-							
WA42 WA48 WA60	42.075 (1069)	22.432 (570)													32.43 (824)								
WA70	42.075 (1069)	22.432 (570)	94.875 (2410)																				



FRONT VIEW SIDE VIEW BACK VIEW

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Electrical Specifications

Model	Rated Volts and Phase	Operating Voltage Range	No. Field Power Circuits	Ø MinimumCircuitAmps	Maximum External Fuse or Circuit Breaker
WA242 - D0Z D05 D08	240/220-1	198-254	1 1 1	15 28 44	20 30 45
WA242 - F0Z F05	415/380-3 ③	342-456	1 1	8 12	15 15
WA253 - D0Z D05 D08	240/220-1	198-254	1 1 1	15 27 43	20 30 45
WA253 - F0Z F05	415/380-3 ③	342-456	1 1	7 10	15 15
WA302 - D0Z D05 D10	240/220-1	198-254	1 1 1	22 29 55	35 35 60
WA302 - F0Z F07 F12	415/380-3 ③	342-456	1 1 1	9 15 23	15 15 25
WA372 - D0Z D05 D10	240/220-1	198-254	1 1 1	24 29 55	35 35 60
WA372 - E0Z E06 E12	220/200-3	180-242	1 1 1	17 21 39	25 25 40
WA372 - F0Z F07 F12	415/380-3 ③	342-456	1 1 1	11 16 25	15 20 25
WA423 - F0Z F07 F14	415/380-3 ③	342-456	1 1 1	11 16 30	15 20 30
WA484 - E0Z E09 E15	220/200-3	180-242	1 1 1	24 32 50	35 35 50
WA484 - F0Z F07 F14	415/380-3 ③	342-456	1 1 1	12 16 30	15 20 30
WA602 - E0Z E09 E15	220/200-3	180-242	1 1 1	30 32 50	45 45 50
WA602 - F0Z F07 F14	415/380-3 ③	342-456	1 1 1	15 16 30	20 20 30
WA701 - F0Z F07 F14	415/380-3 ③	342/456	1 1 1	19 19 32	25 25 35

① Maximum size of the time delay fuse or "D" rated circuit breaker for protection of field wiring conductors.

NOTE: Based on 75C copper wire. All wiring must conform to NIC/EIC latest edition.

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 all existing local codes.

② These "Minimum Circuit Amps" values are to be used for sizing the field power conductors.

^{3 415/380-3} electrical ratings are 3-phase wye (star) systems requiring three (3) phase legs plus neutral and ground. **NOTE**: The indoor and outdoor motors and 24V transformer primary are connected at 240V derived from one (1) phase leg to neutral. This is internally connected and no field wiring required.

Indoor Blower Performance - CFM (m³/s) at 220 Volts

ESP WA24 WA25			A30 A37	WA WA		WA60 WA70		
H²O	Dry / Wet Coil	High Speed	Low Speed	High Speed	Low Speed	High Speed	Low Speed	
(Pa)		Dry / Wet Coil	Dry / Wet Coil	Dry / Wet Coil	Dry / Wet Coil	Dry / Wet Coil	Dry / Wet Coil	
.00	800 / 845	1160 / 1095	790 / 780	1565 / 1500	1370 / 1330	1825 / 1660	1330 / 1200	
(0)	(0.38 / 0.40)	(0.55 / 0.52)	(0.37 / 0.37)	(0.74 / 0.71)	(0.65 / 0.63)	(0.86 / 0.78)	(0.63 / 0.57)	
.10	830 / 780	1115 / 1060	775 / 760	1470 / 1380	1285 / 1240	1740 / 1570	-/-	
(25)	(0.39 / 0.37)	(0.53 / 0.50)	(0.36 / 0.35)	(0.69 / 0.65)	(0.61 / 0.59)	(0.82 / 0.74)		
.20	780 / 720	1070 / 1000	760 / 740	1360 / 1285	1200 / 1160	1660 / 1500	-/-	
(50)	(0.37 / 0.34)	(0.50 / 0.47)	(0.35 / 0.35)	(0.64 / 0.61)	(0.57 / 0.55)	(0.78 / 0.71)		
.30 (75)	710 / 640 (0.33 / 0.30)	1000 / 915 (0.47 / 0.43)	-/-	1250 / 1160 (0.59 / 0.55)	1120 / 1080 (0.53 / 0.51)	1550 / 1400 (0.73 / 0.66)	-/-	
.40 (100)	640 / 560 (0.30 / 0.26)	925 / 830 (0.44 / 0.39)	-/-	1140 / 1065 (0.54 / 0.50)	-/-	1470 / 1330 (0.69 / 0.63)	-/-	

Above data is with 1 inch (25mm) standard disposable filter and 1 inch (25mm) washable filter. For optional 2 inch (51mm) pleated filter - reduce ESP by .15 inches (37.33Pa) See installation instructions for maximum ESP information on various KW applications.

Electric Heat Table

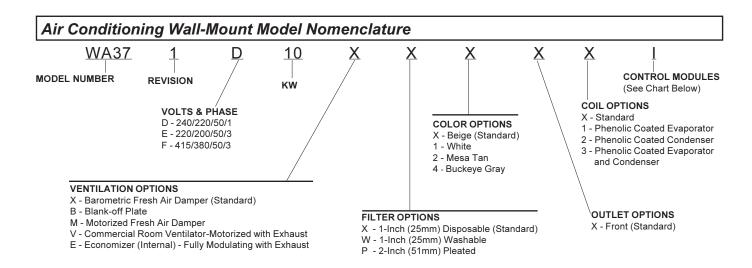
Model	ı	42-D 53-D	WA242-F WA253-F				WA372-E		WA302-F WA372-F		WA484-E WA602-E		WA423-F WA484-F WA602-F WA701-F	
KW	240V-1 WATTS	220V-1 WATTS	415V-3 WATTS	380V-3 WATTS	240V-1 WATTS	220V-1 WATTS	220V-3 WATTS	200V-3 WATTS	415V-3 WATTS	380V-3 WATTS	220V-3 WATTS	200V-3 WATTS	415V-3 WATTS	380V-3 WATTS
5.0	5011	4220	4484	3751	5011	4220								
8.0	8011	6721												
10.0					9994	8411								
6.0							5041	4161						
7.0									6740	5656			6740	5660
9.0											7562	6213		
12.0							10082	8323	11178	9408				
14.0													13450	11280
15.0								·			12603	10345		

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Cooling Application Data - Btuh (KW)

	DD14/D 0			OUTD	OOR TEMPERAT	URE ①	
Model	DB/WB②	Cooling Capacity	75°F (23.9°C)	85°F (29.4°C)	95°F (35.0°C)	105°F (40.6°C)	115°F (46.1°C)
WA242	75/62°F	Total	22,000 (6.45)	20,250 (5.93)	18,500 (5.42)	16,700 (4.89)	15,000 (4.39)
	(23.9/16.7°C)	Sensible	17,650 (5.17)	16,900 (4.95)	16,200 (4.75)	15,500 (4.54)	14,750 (4.32)
VVA242	80/67°F	Total	26,200 (7.68)	23,750 (6.96)	21,300 (6.24)	18,800 (5.51)	16,350 (4.79)
	(26.7/19.4°C)	Sensible	17,200 (5.04)	16,800 (4.92)	16,400 (4.81)	16,000 (4.69)	15,600 (4.57)
WA253	75/62°F	Total	21,300 (6.24)	19,900 (5.83)	18,300 (5.36)	16,700 (4.89)	15,000 (4.39)
	(23.9/16.7°C)	Sensible	17,400 (5.10)	16,800 (4.92)	16,100 (4.72)	15,200 (4.45)	14,200 (4.16)
VVA255	80/67°F	Total	22,700 (6.65)	22,100 (6.48)	21,000 (6.15)	19,600 (5.74)	18,000 (5.27)
	(26.7/19.4°C)	Sensible	16,900 (4.95)	16,600 (4.86)	16,200 (4.75)	15,500 (4.54)	14,800 (4.34)
WA302	75/62°F	Total	28,200 (8.26)	26,000 (7.61)	23,800 (6.97)	21,900 (6.41)	20,000 (5.85)
	(23.9/16.7°C)	Sensible	23,400 (6.85)	22,700 (6.65)	21,800 (6.38)	20,700 (6.06)	19.600 (5.74)
VVA302	80/67°F	Total	30,100 (8.81)	28,800 (8.43)	27,300 (7.99)	25,800 (7.55)	24,000 (7.03)
	(26.7/19.4°C)	Sensible	22,700 (6.65)	22,400 (6.56)	22,000 (6.44)	21,300 (6.24)	20,300 (5.94)
WA372	75/62°F	Total	33,200 (9.73)	30,500 (8.94)	28,000 (8.20)	25,800 (7.56)	23,800 (6.97)
	(23.9/16.7°C)	Sensible	25,100 (7.35)	24,300 (7.12)	23,500 (6.89)	22,500 (6.59)	21,200 (6.21)
VVA372	80/67°F	Total	35,500 (10.40)	33,900 (9.93)	32,000 (9.38)	30,400 (8.91)	28,600 (8.38)
	(26.7/19.4°C)	Sensible	24,300 (7.12)	24,100 (7.06)	23,700 (6.94)	23,000 (6.74)	22,000 (6.45)
WA423	75/62°F	Total	39,400 (11.54)	36,500 (10.69)	33,400 (9.78)	30,100 (8.81)	26,400 (7.73)
	(23.9/16.7°C)	Sensible	31,900 (9.34)	30,500 (8.94)	29,200 (8.55)	27,500 (8.05)	25,800 (7.55)
VVA423	80/67°F	Total	42,000 (12.30)	40,500 (11.86)	38,300 (11.22)	35,400 (10.37)	31,800 (9.31)
	(26.7/19.4°C)	Sensible	30,900 (9.05)	30,300 (8.87)	29,400 (8.61)	28,300 (8.30)	26,800 (7.85)
WA484	75/62°F	Total	42,350 (12.41)	39,450 (11.56)	36,500 (10.69)	33,550 (9.83)	30,650 (8.98)
	(23.9/16.7°C)	Sensible	34,450 (10.09)	33,550 (9.83)	32,700 (9.58)	31,850 (9.33)	30,000 (8.79)
VVA484	80/67°F	Total	45,450 (13.32)	43,750 (12.82)	42,000 (12.31)	40,250 (11.79)	38,550 (11.30)
	(26.7/19.4°C)	Sensible	33,550 (9.83)	33,250 (9.74)	32,000 (9.38)	32,750 (9.60)	32,450 (9.51)
WA602	75/62°F	Total	53,200 (15.59)	48,800 (14.30)	44,350 (12.99)	39,900 (11.69)	35,500 (10.40)
	(23.9/16.7°C)	Sensible	39,800 (11.66)	37,650 (11.03)	35,500 (10.40)	33,300 (9.76)	31,150 (9.13)
VVA602	80/67°F	Total	57,200 (16.76)	54,100 (15.85)	51,000 (14.94)	47,900 (14.03)	44,800 (13.13)
	(26.7/19.4°C)	Sensible	38,850 (11.38)	37,300 (10.93)	35,800 (10.49)	34,250 (10.04)	32,750 (9.60)
\\\\\ 704	75/62°F	Total	62,050 (18.18)	56,875 (16.66)	51,900 (15.21)	47,000 (13.77)	42,275 (12.39)
	(23.9/16.7°C)	Sensible	52,875 (15.49)	41,475 (12.15)	39,160 (11.47)	37,025 (10.85)	35,150 (10.30)
WA701	80/67°F	Total	66,350 (19.44)	63,235 (18.53)	60,000 (17.58)	55,535 (16.27)	50,950 (14.93)
	(26.7/19.4°C)	Sensible	42,775 (12.53)	41,100 (12.04)	39,560 (11.59)	38,050 (11.15)	36,625 (10.73)

 $^{\ \, \}oplus$ Below 65°F (18.3°C), unit requires a factory or field installed low ambient control. $\ \, \oslash$ Return air temperature.



Ventilation Options											
Models	Models WA24, WA25			WA37	WA42, WA48, WA60						
Description	Factory Installed Code No.	Field Installed Part No.	Factory Installed Code No.	Field Installed Part No.	Factory Installed Code No.	Field Installed Part No.					
Barometric Fresh Air Damper	X	BFAD-2	Х	BFAD-3	X	BFAD-5					
Blank-Off Plate	В	BOP-2	В	BOP-3	В	BOP-5					
Motorized Fresh Air Damper	М	MFAD-2	М	MFAD-3	М	MFAD-5					
Commercial Ventilator - Motorized	V	CRV-2	V	CRV-3	V	CRV-5					
Economizer (Internal) - Fully Modulating ①	E	EIFM-2B	Е	EIFM-3B	Е	EIFM-5B					

① Low ambient control is required with economizer for low temperature compressor operation.

Air C	Air Conditioning Control Modules AVAILABLE CONTROL OPTIONS						odels	Models			
	AVAILAE	BLE CO	NTROL C	PTIONS	5	VVA242, VVA302	2, WA372, WA423	WA253, WA484, WA602, WA701			
HPC ①	LPC ②	TDR	LAC ©	ALR ®	SK Ø	Factory Installed Code	Field Installed Part	Factory Installed Code	Field Installed Part		
•						N/A, Order G	N/A, Use CMA-10A	HPC is	Standard		
	•					N/A, Order G	N/A, Use CMA-10A	G	CMA-16A		
	•		•			N/A, Order H	N/A, Use CMA-13A	Н	CMA-18A		
•	•					G	CMA-10A	G	CMA-16		
		•				D ③	CMA-5	CCM is	Standard ④		
			•			Е	CMA-6	I ④	CMA-6		
•	•		•			Н	CMA-13A	Н	CMA-18A		
			•			13	CMA-12	I ④	CMA-6		
•	•		•	•		J	Factory Only	J	Factory Only		
•	•		•		•	KΦ	CMA-13A & CMC-15	ΚØ	CMA-13A & CMC-15		
•	•	•			•	LØ	CMA-10A & CMC-15	L ④	CMA-10A & CMC-15		
•	•		•	•	•	M ⑦	Factory Only	M Ø	Factory Only		
		•	•		•	N ③	CMA-6 & CMC-15 Ø	N ③	CMA-5 & -6, & CMC-15 ®		
					•	Р	CMC-15 Ø	Р	CMC-15 ⑦		

N/A = Not available. Order/use the nearest replacement control module as shown.

- ① HPC: High pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ④.
- ② LPC: Low pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ④.
- © TDR: Time delay relay only for compressor is fixed 5-minute delay-on-break to prevent short cycling. Not needed if HPC or LPC are used. See notes ①, ② and ④. ④ 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
- © 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.
- © ALR: The alarm relay has a set of normally open & normally closed dry contacts to provide the ability to signal a condition of shutdown on either high or low pressure controls.
- ② SK: Start kit can be used with all -D single phase models only. Is not used or available for -E or -F three phase models.



Bard Manufacturing Co., Inc. BRYAN, OH 43506

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

Form No. \$3352 July, 2006

Supersedes S3352-204