



4, 5 and 6 Ton Telecommunication Shelter Upgrade Air Conditioners

These special air conditioners are designed to replace all brands of 2 or 3 ton wall mounted air conditioners **using the existing wall openings** that have become industry standards based upon Bard's 40+ years of industry leadership. This makes it an ideal replacement/upgrade to existing facilities where increased capacity is required because of upgrading or expanding the telecommunication or other electronic systems housed within.

Retrofitting this unit to an existing shelter equipped with 2 or 3 ton air conditioners, especially concrete designs, becomes a relatively simple task. The major openings for supply and return air require no changes. Only the mounting holes, and possibly the electrical entrance, require modification which can be easily accomplished. The units are available in both the standard WA right side compressor and control access and the WL left compressor and control access for applications where the existing units are located close together.

These models are designed for closed loop (no ventilation air) only, and some models require that air filters be installed at return air grille location. See details inside.

The building electrical wiring and circuit breaker must be reviewed to see if any changes will be required. See Electrical Specifications on page 3.

Engineered Features

Aluminum Finned Copper Coils:

Grooved tubing and enhanced louvered fin for maximum heat transfer and energy efficiency.

Twin Blowers:

Air moving system designed for non-ducted shelter applications already equipped with industry standard supply and return air wall openings. Motor overload protection is standard on all models.

Air Conditioner Compressor:

Scroll compressor designed for increased efficiency, quieter operation and improved reliability for longer life. Eliminates need for crankcase heater. Uses Refrigerant 22.

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 service panel opening. Features a lockable, hinged access cover to the circuit breaker.

Electric Heat Strips:

Available only on certain models. Features an automatic limit and thermal cut-off safety control.

Alarm Relay:

NO and NC dry contacts available for remote alarming of high or low pressure lock-out conditions.

Auto-Reset High Pressure Switch:

Built-in lock-out circuit resets from the room thermostat. Provides commercial quality protection to the compressor.

Auto-Reset Low Pressure Switch:

Built-in lock-out circuit and low pressure timed bypass circuit. Resets from room thermostat.

Compressor Control Module:

Bard exclusive control provides the lock-out circuit for high and low pressure controls, each with 1 retry, and the low pressure control 2-minute timed bypass. 30 seconds to 5-minutes adjustable time delay is also incorporated.

Low Ambient Control:

Permits cooling operation down to 0°F outdoor ambient.

Built-in Circuit Breakers:

Standard on all single and three phase (230/208 volt) equipment.

Slope Top:

Standard built in feature on all models for water run off.

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 Component Warranty:

Parts - One Year
Compressor - Five Years



Specifications

Models	WA4842A0Z WL4842A0Z	WA4842B0Z WL4842B0Z	WA4843A0Z WL4843A0Z	WA4843B0Z WL4843B0Z	WA6022A0Z WL6022A0Z
Cooling Capacity	47,500	47,500	47,500	47,500	57,500
Heating Capacity	None	None	None	None	None
Electrical Rating -- 60HZ	230/208-1	230/208-3	230/208-1	230/208-3	230/208-1
Operating Voltage Range	197-253	197-253	197-253	197-253	197-253
Compressor -- Circuit A					
Voltage	230/208	230/208	230/208	230/208	230/208
Rated Load Amps	20.2 / 20.8	11.9 / 12.3	20.2 / 20.9	11.9 / 12.3	26.0 / 28.5
Branch Circuit Selection Current	21.8	12.9	21.8	12.9	29
Lock Rotor Amps	131/131	91/91	131/131	91/91	148/148
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll
Fan Motor & Condenser					
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
Fan Motor -- Amps	2.5	2.5	2.5	2.5	2.5
Fan -- DIA/CFM	24" x 2600	24" x 2600	24" x 2600	24" x 2600	24" x 2600
Blower Motor & Evaporator					
Blower Motor -- HP-RPM-SPD	1/2 - 1070 - 2	1/2 - 1070 - 2	1/2 - 1070 - 2	1/2 - 1070 - 2	1/2 - 1070 - 2
Blower Motor -- Amps	3.3	3.3	3.3	3.3	3.3
CFM (Wet Coil) non-ducted	1400	1400	1350	1350	1525
Filter Sizes (inches)	20 x 30 x 1①	20 x 30 x 1①	14 x 28 x 1②	14 x 28 x 1②	20 x 30 x 1①
Shipping Weight -- Lbs.	500	500	500	500	500

① 20 x 30 x 1 filter is installed internally in the unit.

② 14 x 28 x 1 filter is installed in return air filter grille location

WA-Models have RIGHT side compressor & controls
WL-Models have LEFT side compressor & controls

Specifications

Models	WA6022B0Z WL6022B0Z	WA6023A0Z WL6023A0Z	WA6023B0Z WL6023B0Z	WA7013A0Z WL7013A0Z	WA7013B0Z WL7013B0Z
Cooling Capacity	57,500	57,500	57,500	64,000	67,000
Heating Capacity	None	0, 5 or 10 KW	0 or 9 KW	0 or 10 KW	0 or 9 KW
Electrical Rating -- 60HZ	230/208-3	230/208-1	230/208-3	230/208-1	230/208-3
Operating Voltage Range	197-253	197-253	197-253	197-253	197-253
Compressor -- Circuit A					
Voltage	230/208	230/208	230/208	230/208	230/208
Rated Load Amps	18.1 / 18.4	26.0 / 28.5	18.1 / 18.4	28.2 / 33.6	20.5 / 21.5
Branch Circuit Selection Current	19	29	19	32	22
Lock Rotor Amps	137/137	148/148	137/137	129/129	150/156
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll
Fan Motor & Condenser					
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
Fan Motor -- Amps	2.5	2.5	2.5	2.5	2.5
Fan -- DIA/CFM	24" x 2600	24" x 2600	24" x 2600	24" x 2600	24" x 2600
Blower Motor & Evaporator					
Blower Motor -- HP-RPM-SPD	1/2 - 1070 - 2	1/2 - 1070 - 2	1/2 - 1070 - 2	1/2 - 1070 - 2	1/2 - 1070 - 2
Blower Motor -- Amps	3.3	3.3	3.3	3.3	3.3
CFM (Wet Coil) non-ducted	1525	1425	1425	1425	1425
Filter Sizes (inches)	20 x 30 x 1①	14 x 28 x 1②	14 x 28 x 1②	14 x 28 x 1②	14 x 28 x 1②
Shipping Weight -- Lbs.	500	500	500	520	520

① 20 x 30 x 1 filter is installed internally in the unit.

② 14 x 28 x 1 filter is installed in return air filter grille location

Electrical Specifications

MODEL	ELECTRIC HEATER KW	ELECTRIC HEATER BTU @ 240V	UNIT RATED VOLTS & PHASE	SINGLE CIRCUIT				
				NO. FIELD POWER CIRCUITS	③ MINIMUM CIRCUIT AMPACITY	① MAXIMUM EXTERNAL FUSE OR CKT. BRKR.	② FIELD POWER WIRE SIZE	② GROUND WIRE
WA/WL4842A0Z	0	0	230/208-1	1	36	50	8	10
WA/WL4842B0Z	0	0	230/208-3	1	25	35	8	10
WA/WL4843A0Z	0	0	230/208-1	1	36	50	8	10
WA/WL4843B0Z	0	0	230/208-3	1	25	35	8	10
WA/WL6022A0Z	0	0	230/208-1	1	44	60	8	10
WA/WL6022B0Z	0	0	230/208-3	1	32	45	8	10
WA/WL6023A0Z	0	-	230/208-1	1	44	60	8	10
WA/WL6023A05	5	17,065		1	44	60	8	10
WA/WL6023A10	10	34,130		1	55	60	6	10
WA/WL6023B0Z	0	-	230/208-3	1	32	45	8	10
WA/WL6023B09	9	30,717		1	34	45	8	10
WA/WL7013A0Z	0	-	230/208-1	1	48	60	8	10
WA/WL7013A10	10	34,130		1	59	60	6	10
WA/WL7013B0Z	0	-	230/208-3	1	36	50	8	10
WA/WL7013B9Z	9	30,717		1	36	50	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) conductors are in a raceway.

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 local codes.

Rated CFM and ESP			
Model	Rated CFM	ESP	Recommended Airflow Range
WA / WL4842	1400	0.20	1700 - 1400 ②
WA / WL4843	1350	0.20	1600 - 1350 ①
WA / WL6022	1525	0.20	1850 - 1525 ②
WA / WL6023	1425	0.20	1775 - 1425 ①
WA / WL7013	1425	0.20	1775 - 1425 ①

- ① Rated CFM and ESP on High Speed with standard 8 x 28 supply grille and 14 x 28 return air filter grille with 1" filter.
 ② Rated CFM and ESP on High Speed with standard 8 x 20 supply grille and 12 x 20 return grille, and 20 x 30 x 1 filter installed inside the unit.

Indoor Blower Performance - CFM @ 230V								
E.S.P. in H ₂ O	WA/WL4842		WA/WL4843		WA/WL6022		WA/WL7013 WA/WL6023	
	High Speed		High Speed		High Speed		High Speed	
	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil
.0	1700	1625	1600	1525	1850	1675	1775	1600
.1	1600	1525	1525	1425	1755	1600	1675	1525
.2	1475	1400	1425	1350	1700	1525	1575	1425

Clearances Required for Service Access and Adequate Condenser Clearance

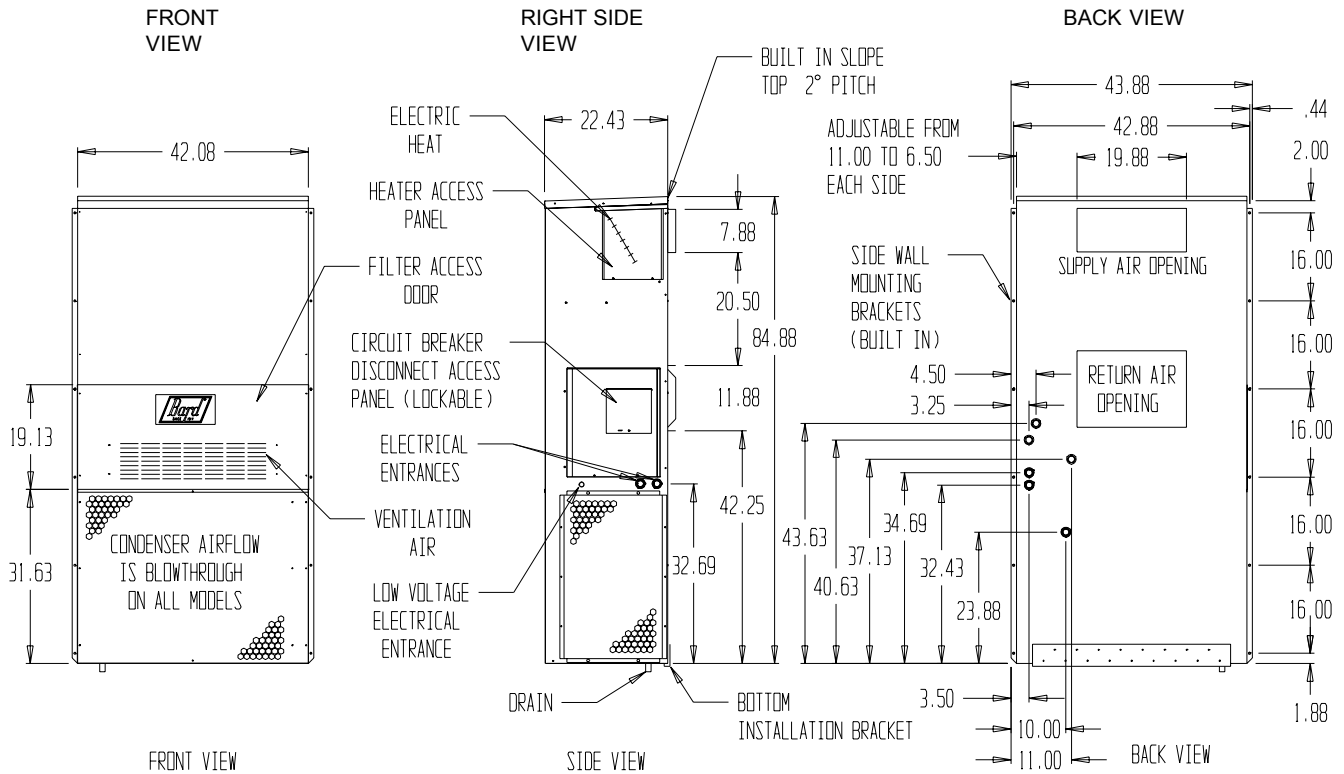
MODELS	LEFT SIDE	RIGHT SIDE
WA - Models	15"	20"
WL - Models	20"	15"

Cooling Application Data

For Cooling Application Data, refer to the standard WA and WL-Series specification sheets.

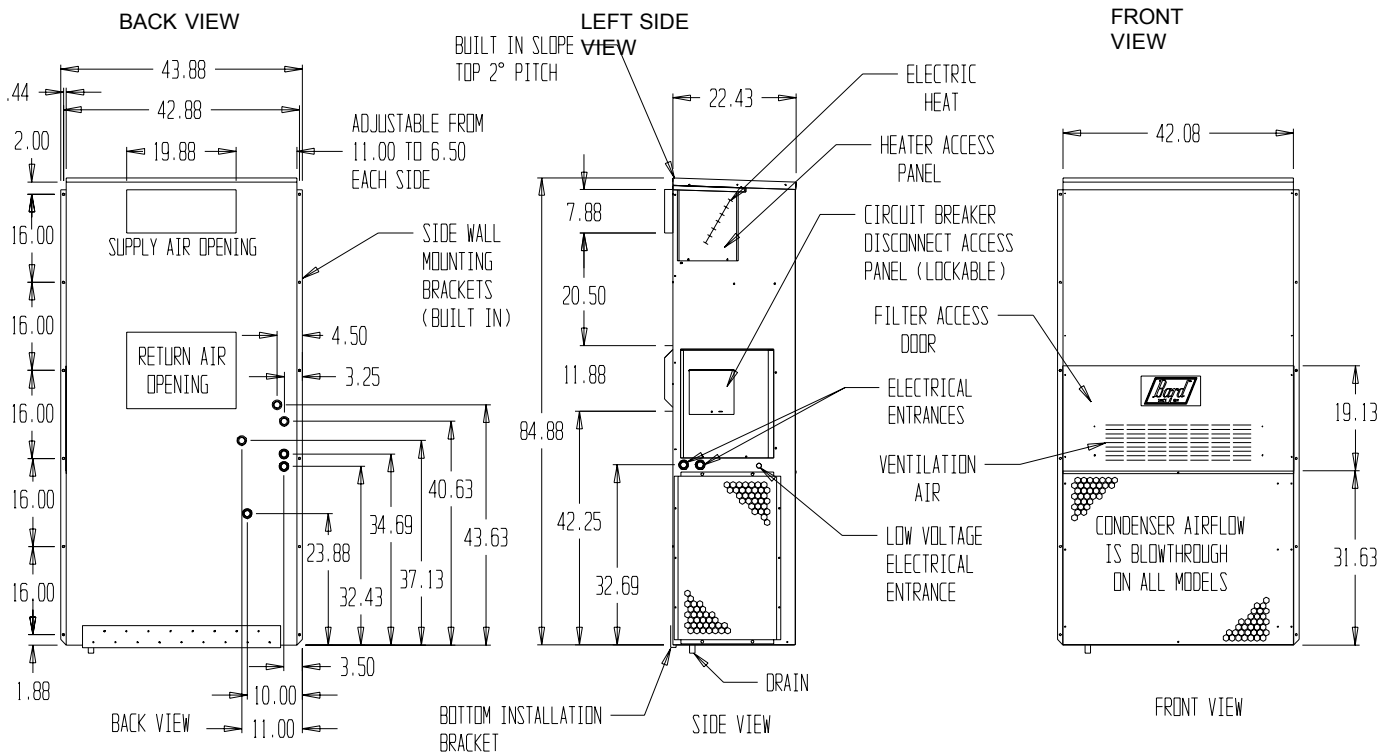
- For WA48 and WA60 models - see Form No. S3208
- For WL48 and WL60 models - see Form No. S3279
- For WA70 (WL70 same ratings as WA70) - see Form No. S3274

DIMENSIONS - Models WA4842 and WA6022 Only



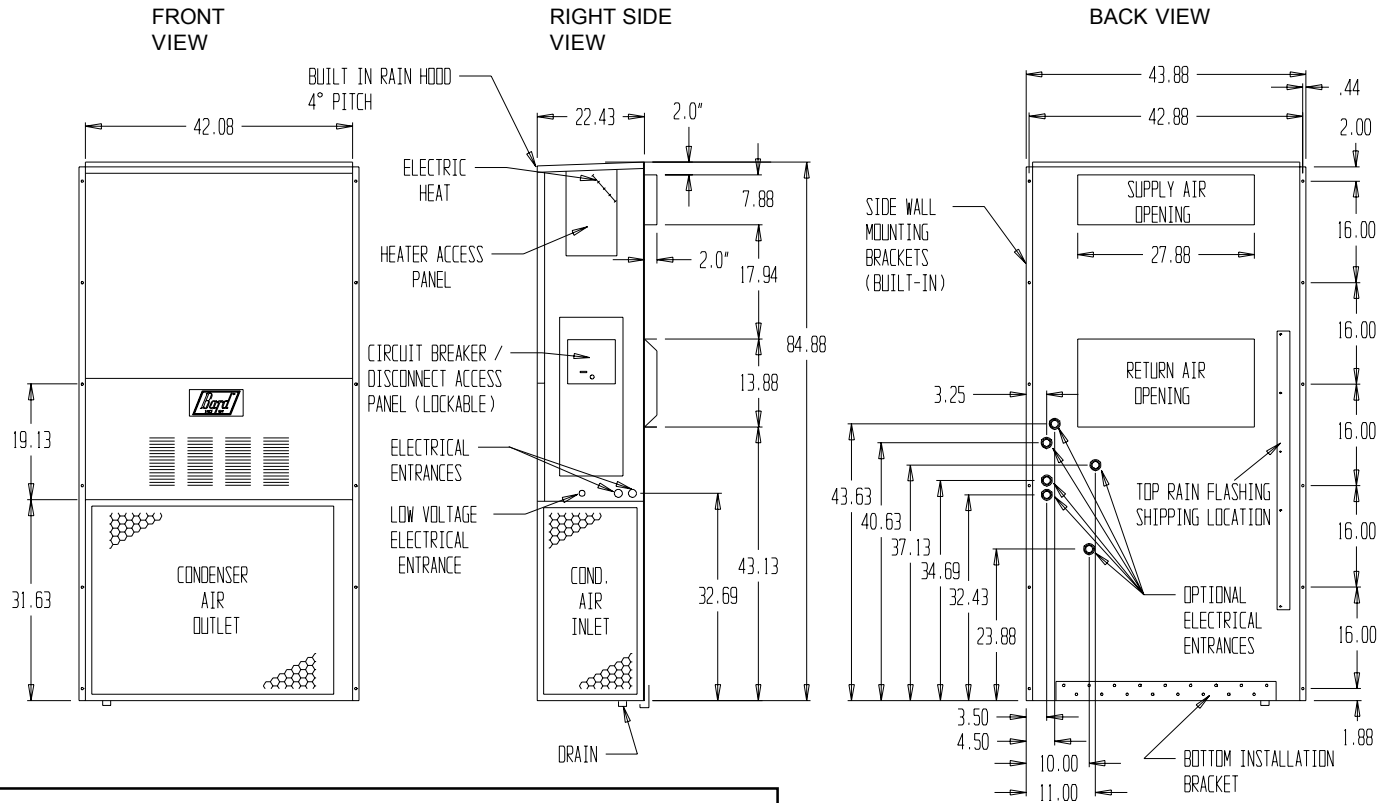
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DIMENSIONS - Models WL4842 and WL6022 Only



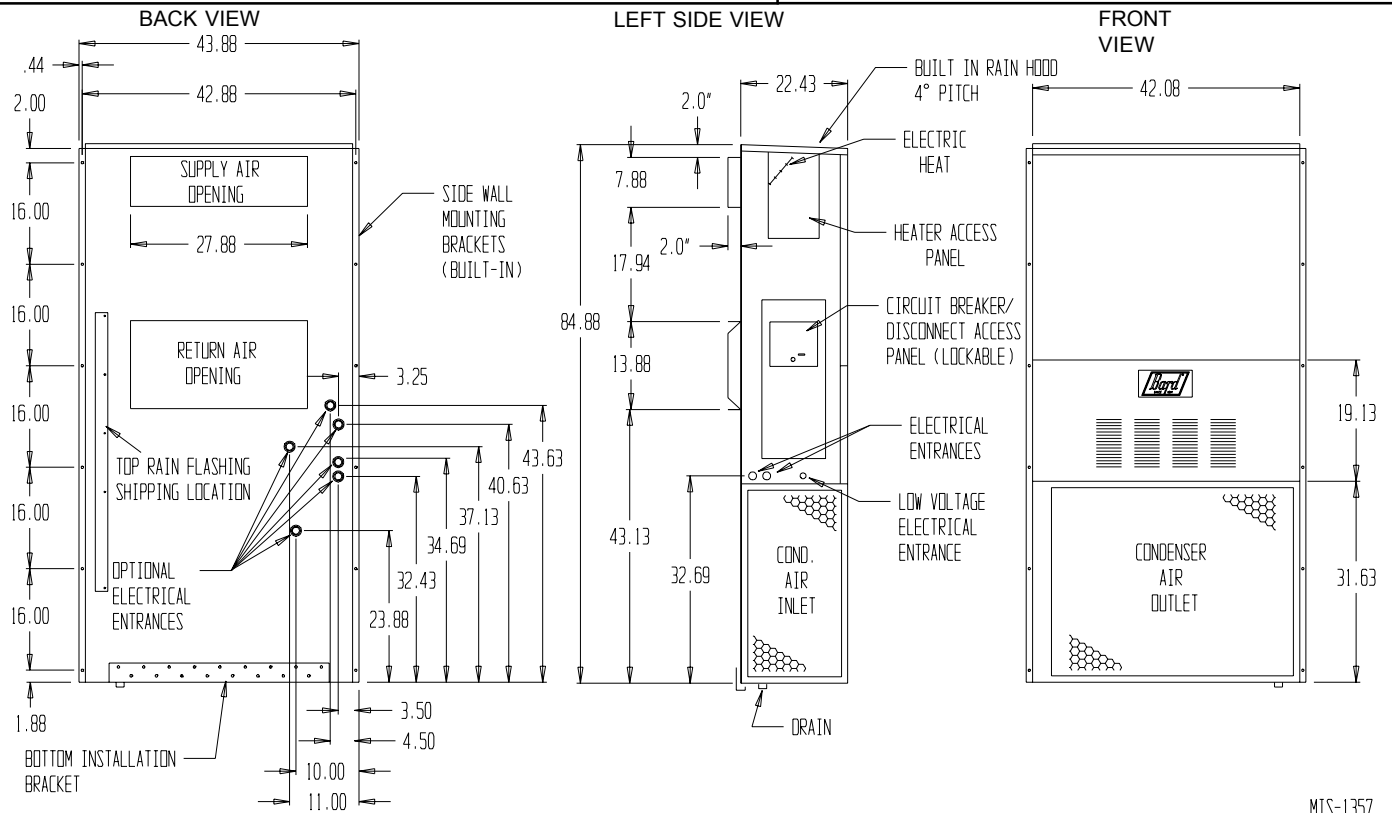
MIS-1457

DIMENSIONS - Models WA4843 and WA6023 Only



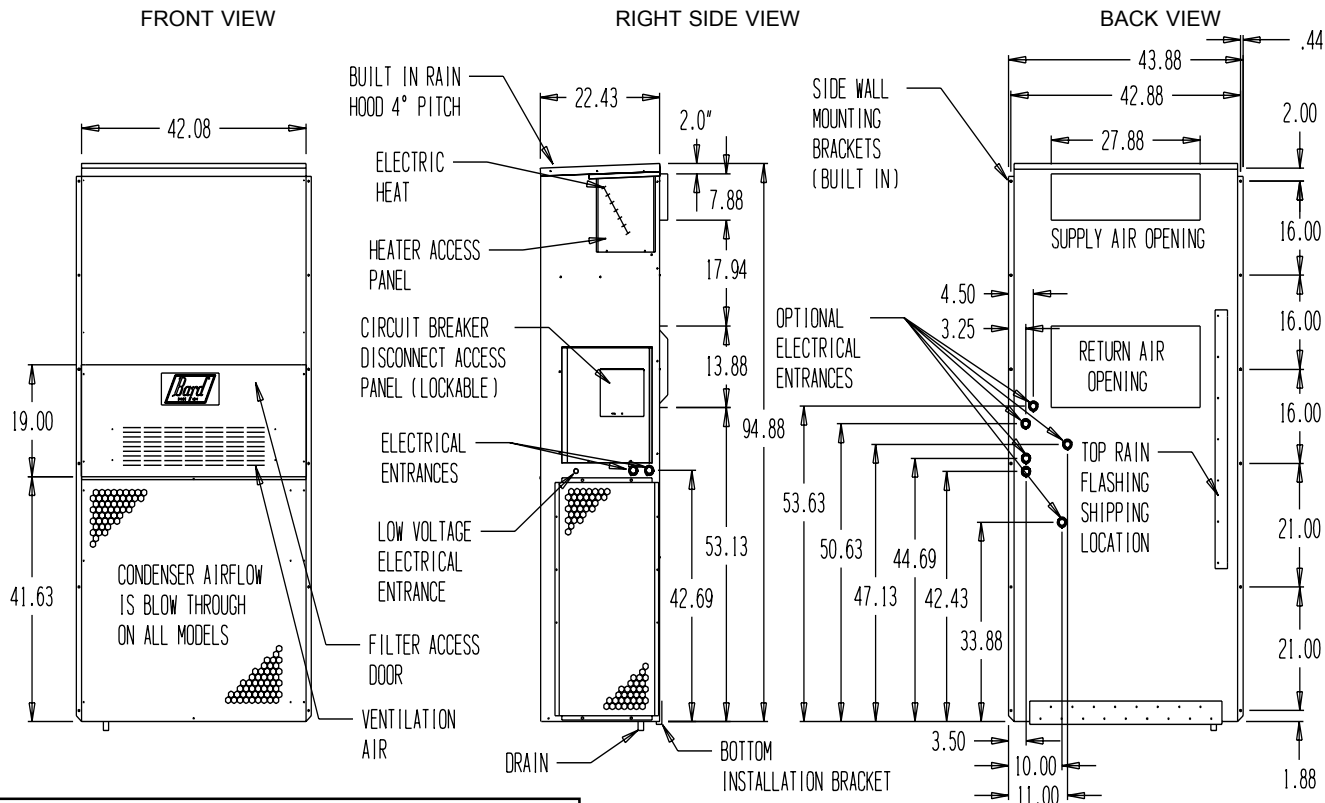
MIS-1357

DIMENSIONS - Models WL4843 and WL6023 Only

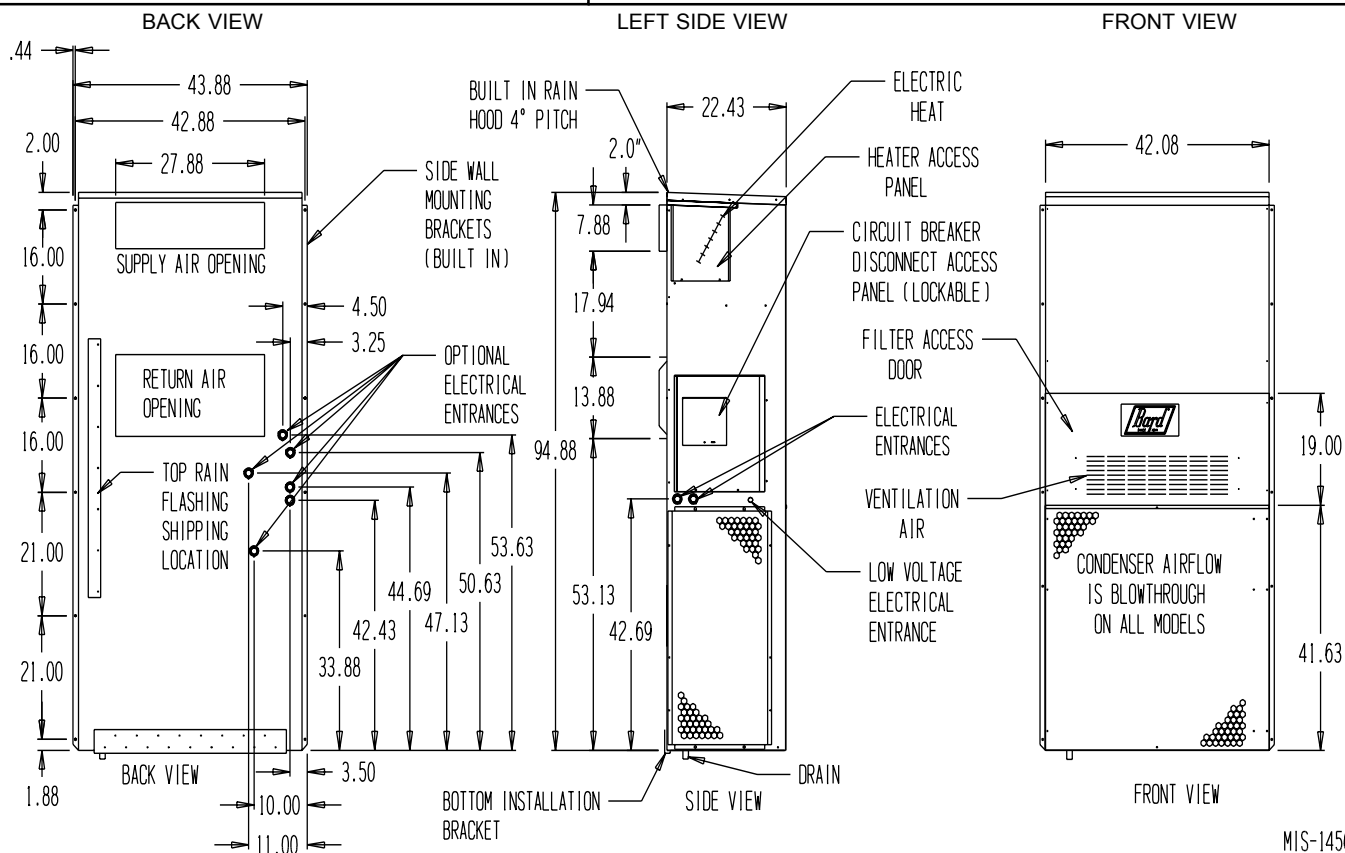


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DIMENSIONS - Models WA7013 Only

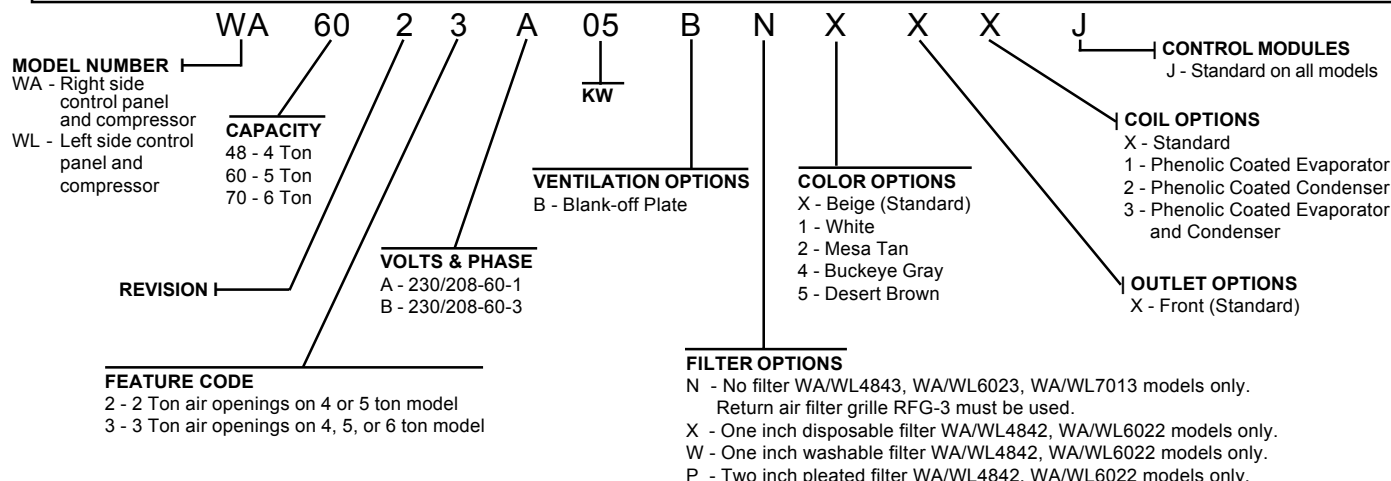


DIMENSIONS - Models WL7013 Only



MIS-1456

Air Conditioning Wall-Mount Model Nomenclature



Available Model Summary

Model	Nominal Tons A/C	Volts & Phase	Compressor & Controls	Heater KW	Fits Wall Openings		
					Old Unit Nominal Size	Supply Air	Return Air
WA4842A0Z	4	230/208-1	Right	0	2	8 x 20	12 x 20
WA4842B0Z		230/208-3		0			
WA6022A0Z	5	230/208-1	Right	0	2	8 x 20	12 x 20
WA6022B0Z		230/208-3		0			
WA4843A0Z	4	230/208-1	Right	0	3	8 x 28	14 x 28
WA4843B0Z		230/208-3		0			
WA6023A0Z	5	230/208-1	Right	0	3	8 x 28	14 x 28
WA6023A05				5			
WA6023A10				10			
WA6023B0Z	5	230/208-3	Right	0	3	8 x 28	14 x 28
WA6023B09				9			
WA7013A0Z	6	230/208-1	Right	0	3	8 x 28	14 x 28
WA7013A10				10			
WA7013B0Z	6	230/208-3	Right	0	3	8 x 28	14 x 28
WA7013B09				9			
WL4842A0Z	4	230/208-1	Left	0	2	8 x 20	12 x 20
WL4842B0Z		230/208-3		0			
WL6022A0Z	5	230/208-1	Left	0	2	8 x 20	12 x 20
WL6022B0Z		230/208-3		0			
WL4843A0Z	4	230/208-1	Left	0	3	8 x 28	14 x 28
WL4843B0Z		230/208-3		0			
WL6023A0Z	5	230/208-1	Left	0	3	8 x 28	14 x 28
WL6023A05				5			
WL6023A10				10			
WL6023B0Z	5	230/208-3	Left	0	3	8 x 28	14 x 28
WL6023B09				9			
WL7013A0Z	6	230/208-1	Left	0	3	8 x 28	14 x 28
WL7013A10				10			
WL7013B0Z	6	230/208-3	Left	0	3	8 x 28	14 x 28
WL7013B09				9			



BARD MANUFACTURING CO.
 BRYAN, OHIO 43506

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 just as planned*

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.

**Form No.
 S3339
 February, 2005**

Supersedes S3339-702