BARD WALL-MOUNT™ Single Stage Air Conditioners 1 to 6 Ton Capacity
W12AF - W72AF Unit Models 115V - 460V, Single and Three Phase 60hz

WA Series WALL-MOUNT™

The Bard WA Series Wall-Mount Air Conditioner is an energy efficient self contained system that is designed to offer maximum indoor temperature control. Installed on an exterior wall surface, the WA Series provides cooling and heating without using valuable indoor floor space or outside ground space. This unit is the ideal product for versatile applications such as: modular buildings, light commercial, mobile buildings, schools, mining, petro-chemical, telecom, industrial, energy storage, and data centers. Factory or field installed accessories are available to meet specific job requirements for your unique application.

WA Series Features:

- 1 to 6 ton cooling capacity uses energy efficient components including today's newest compressor designs.
- Multi-speed Electronically commutated indoor motor (ECM) technology.
- Enclosed outdoor fan motor with ball bearing construction.
- Copper/Aluminum finned coils, and refrigerant system includes filter drier. Evaporator coil includes green fin coil protection.
- R-454B A2L Refrigerant that meets the global objectives outlined in the Montreal Protocol and the Kigali Amendment.
- Factory or field installed ventilation options including economizers and energy recovery ventilators.
- Multiple cabinet finishes including stainless steel and aluminum.
- Coil and cabinet coating options for additional corrosion protection.
- Optional factory or field installed electric heater options from 2kw up to 15kw.
- Optional Circuit breakers for 208/230V single and three phase units.
- Filter options up to MERV13.
- Indoor air quality options including UVC-LED and NPBI devices.
- Controls include short cycle protection and phase monitoring. High and low pressure switch. Refrigerant detection system (RDS) included in all models.
- Optional hot gas reheat dehumidification is available for most models.

WA Series Compliance:

- Complies with efficiency requirements of ANSI/ASHRAE/IES 90.1-2019.
- Certified to ANSI/AHRI Standard 390-2021 for SPVU (Single Package Vertical Units).
- Intertek ETL Listed to Standard for Safety of Household and Similar Electrical Appliances ANSI/UL STD 60335-1 & ANSI/ UL STD 60335-2-40/CSA STD C22.2 No. 60335-1 & CSA STD C22.2 No. 60335-2-40 Fourth Edition.
- Commercial Product - Not intended for residential applications.
- Bard is an ISO 9001:2015 Certified Manufacturer.
- The AHRI Certified® mark indicates Bard Manufacturing Company participation in the AHRI Certification program. For verification of individual certified products, go to www.ahridirectory.org.

FORM NO. S3656-0625

www.BardHVAC.com

/////// ENGINEERED FEATURES W18 THROUGH W36 UNIT MODELS

Insulation
Non-Fiberglass Foil Faced Insulation: High R-value recycled denim and cotton insulation with FSK foil facing for durability and cleanability.

Cabinet
Durable Cabinet Construction: Multiple construction options available based on environmental requirements. Optional specialized coatings for extreme conditions. Refer to cabinet finish section for specifications.

Maintenance Features
Easy Filter Access: Dedicated filter door for simplified maintenance. Compatible with 1" and 2" filters up to MERV13 rating. See filter specifications for details.

Ventilation And Indoor Air Quality Options
Field or Factory Installed Vents: Multiple ventilation configurations available for outdoor air intake and energy optimization. Can be installed pre-delivery or on-site. NPBI and LED UVC devices available from the factory or field installation.

Heating
Electric Strip Heat: High-reliability heating elements with automatic limiting and thermal safety cutoffs. Available as factory or field installation. See heating section for specifications.

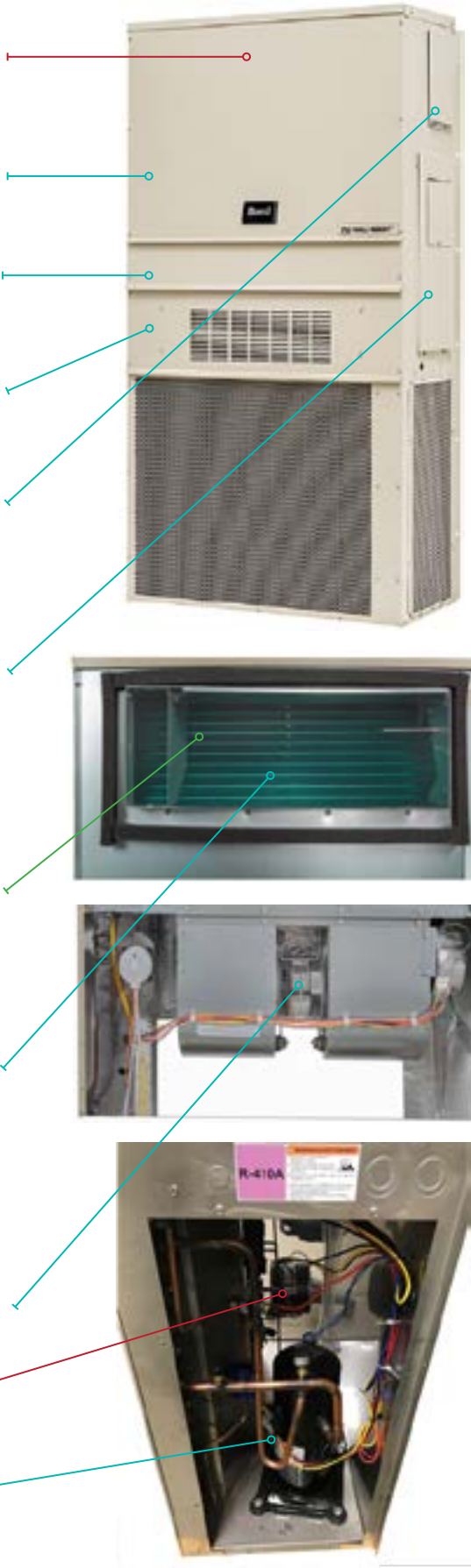
Electrical
Built-in Circuit Protection: Circuit breakers standard on all 208/230V single-phase and three-phase models. Toggle disconnects standard on 460V three-phase models with electric heat.
Control Panel Access: Two access options (left/right) with lockable hinged cover. Phase rotation monitoring on all 3-phase units. Adjustable compressor timing with diagnostic LEDs. Multiple electrical entry points via back and side.

Heat Exchange
Green Fin Hydrophilic Evaporator Coil: Enhanced wettability coating prevents mold formation, improves condensate drainage, and provides protection against corrosive airborne particulates.
Copper/Aluminum Condenser Coil: Rifled copper tubing for encreased efficiency and aluminum fins for easy cleaning and servicability.

Climate Control
Balanced Climate Technology: Superior humidity control with 35% greater latent capacity than market alternatives when paired with 2-stage thermostat or controller. Bard Balanced Climate™ technology standard on all models.
Optional Mechanical Dehumidification: Available with hot gas reheat dehumidification for energy-efficient moisture removal. Electronic Expansion Valves included standard on all dehumidification models.

Air Delivery
ECM Indoor Motor Technology: 5-speed dual shaft motor with twin blower assembly for quiet operation. Motor overload protection standard on all units.
Enclosed Condenser Motor: Ball-bearing condenser motor in sealed enclosure for reliable operation and extended service life. Standard on all units.

Cooling System
High Efficiency Cooling: Scroll compressors deliver quiet, efficient performance. R-454B refrigerant (GWP of 466, 78% lower than R-410A) provides excellent efficiency while meeting environmental regulations. This next-generation A2L refrigerant offers improved thermodynamic properties with lower flammability and greatly reduced global warming potential. Liquid line filter-drier standard on all units for system protection against moisture.



ENGINEERED FEATURES - W42 THROUGH W72 UNIT MODELS

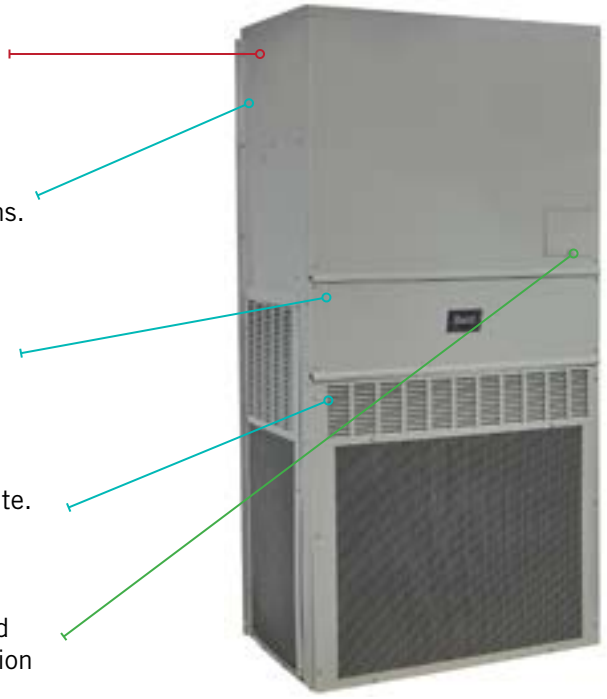
Insulation
Non-Fiberglass Foil Faced Insulation: High R-value recycled denim and cotton insulation with FSK foil facing for durability and cleanability.

Cabinet
Durable Cabinet Construction: Multiple construction options available based on environmental requirements. Optional specialized coatings for extreme conditions. Refer to cabinet finish section for specifications.

Maintenance Features
Easy Filter Access: Dedicated filter door for simplified maintenance. Compatible with 1" and 2" filters up to MERV13 rating. See filter specifications for details.

Ventilation And Indoor Air Quality Options
Field or Factory Installed Vents: Multiple ventilation configurations available for outdoor air intake and energy optimization. Can be installed pre-delivery or on-site. NPBI and LED UVC devices available from the factory or field installation.

Heating
Electric Strip Heat: High-reliability heating elements with automatic limiting and thermal safety cutoffs. Available as factory or field installation. See heating section for specifications.

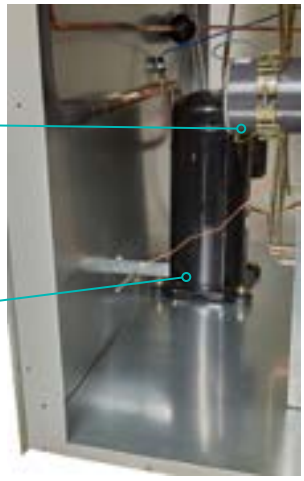


Electrical
Built-in Circuit Protection: Circuit breakers standard on all 208/230V single-phase and three-phase models. Toggle disconnects standard on 460V three-phase models with electric heat.
Control Panel Access: Front location with lockable hinged cover. Phase rotation monitoring on all 3-phase units. Adjustable compressor timing with diagnostic LEDs. Multiple electrical entry points via back and side.

Heat Exchange
Standard Green Fin Hydrophilic Evaporator Coil: Enhanced wettability coating prevents mold formation, improves condensate drainage, and provides protection against corrosive airborne particulates.
Standard Copper/Aluminum Condenser Coil: Rifled copper tubing for encreased efficiency and aluminum fins for easy cleaning and servicability.

Climate Control
Balanced Climate Technology: Superior humidity control with 35% greater latent capacity than market alternatives when paired with 2-stage thermostat or controller. Bard Balanced Climate™ technology standard on all models.
Optional Mechanical Dehumidification: Available with hot gas reheat dehumidification for energy-efficient moisture removal. Electronic Expansion Valves included standard on all dehumidification models.

Air Delivery
ECM Indoor Motor Technology: 5-speed dual shaft motor with twin blower assembly for quiet operation. Motor overload protection standard on all units.
Enclosed Condenser Motor: Ball-bearing condenser motor in sealed enclosure for reliable operation and extended service life. Standard on all units.



Cooling System
High Efficiency Cooling: Scroll compressors deliver quiet, efficient performance. R-454B refrigerant (GWP of 466, 78% lower than R-410A) provides excellent efficiency while meeting environmental regulations. Left-hand compressor location options available. Liquid line filter-drier standard on all units for system protection against moisture.

/////// WALL-MOUNT W12A (1 TON) TO W72A (6 TON) NOMENCLATURE

MODEL #	W	36	A	F	-	A	0Z	X	P	X	X	X	J
DIGIT #	1	2,3	4	5	6	7	8,9	10	11	12	13	14	15

1

1. Series - Single Stage Compressor	
W	Bard Exterior **W**all-Mount

2,3

2-3. Nominal Capacity			
12	1.0 Ton	42	3.5 Ton
18	1.5 Ton	48	4.0 Ton
24	2.0 Ton	60	5.0 Ton
30	2.5 Ton	72	6.0 Ton
36	3.0 Ton		

4

4. Unit Type - Controls Location		Units
A	AC-Right or Center Controls	W12-W72
L	AC-Left Side Controls	W18-W36

5

5. Revision	
F	Revision (R-454B Refrigerant)

6

6. Special Feature Placeholder		Units
-	Standard Unit	W12-W72
D	HGR Dehumidification	W30-W72
L	Left Side Compressor	W42-W72
R	Indoor Motor Isolation (460V)	W36-W72

7

7. Voltage		Ph.	Hz.	Units
A	208/230VAC	1	60	W12-W72
B	208/230VAC	3	60	W24-W72
C	460VAC	3	60	W24-W72
K	115VAC	1	60	W12 Only
Q	575VAC	3	60	W48-W72

8,9

8-9. Electric Heater Options	
00	0Kw with Lug Connections
0Z	0Kw with Breaker or Disconnect
02-15	2-15Kw Heat w/breaker or Disconnect

10

10. Ventilation Package Options		Units
X	Barometric Air Damper (Intake)	W12-W72
A	Bar. Air Damper (Intake+Exhaust)	W18-W72
B	Block Off Plate (No Vent)	W12-W72
F	FEMA Ventilation Damper With Timer	W18-W30
M	Powered Comm. Vent, On/Off	W18-W72
V	Powered Comm. Vent, On/Off/Mod.	W12-W72
D	Econ, Field Supplied Controls	W18-W72
Y	Full Flow Economizer, JADE, Dry Bulb	W18-W72
Z	Full Flow Economizer, JADE, Enthalpy	W18-W72
R	Energy Recovery Ventilator	W18-W72
E	1-Ton Economizer, JADE, Enthalpy	W12 Only
S	No Hood Economizer, JADE, Enthalpy	W18-W36

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11. Filter and IAQ Options		Units
X	Standard 1" MERV2 Disposable Filter.	W12-W72
W	1" MERV2 Washable Filter.	W12-W72
P	2" MERV8 Disposable Filter.	W12-W72
M	2" MERV11 Disposable Filter.	W18-W72
N	2" MERV13 Disposable Filter.	W12-W72
A	2" MERV13 Filter with UVC-LED Light.	W18-W72
B	2" MERV13 Filter with NPBI Device.	W18-W72
C	2" MERV8 Filter with NPBI Device.	W18-W72

12

12. Cabinet Color and Finish		Units
X	Standard Beige Enamel Painted Steel.	W12-W72
1	White Enamel Painted Steel.	W12-W72
4	Buckeye Gray Enamel Painted Steel.	W12-W72
5	Desert Brown Enamel Painted Steel.	W12-W72
8	Dark Bronze Enamel Painted Steel.	W12-W72
S	316 Stainless Steel Exterior Finish.	W18-W72
A	Stucco Textured Aluminum Exterior Finish	W18-W72

13

13. Cabinet Style		Units
X	Standard Cabinet	W12-W72
J	Recessed Cabinet Top for Overhangs	W42-W72 (No Dehum)

14

14. Coil and Cabinet Coatings		Units
X	Standard Copper/Aluminum evap and cond coils.	W12-W72
1	Coated indoor evap coil, std outdoor cond coil.	W12-W72
2	Coated outdoor cond coil, std indoor evap coil.	W12-W72
3	Coated indoor evap and outdoor cond coil.	W12-W72
4	Coated coils and unit cabinet condenser area.	W18-W72
5	Coated coils and interior/exterior cabinet.	W18-W72

15

15. Unit Mounted Controls Options Standard: Hi/Lo Pressure and Ref. Leak (RDS) Sensor		Units
X	Standard Controls (Hi/Low Pressure Switches, RDS)	W12-W72
E	X + Low Ambient Control (LAC)	W12-W72
J	X + LAC and Alarm Relay (ALR)	W12-W72
F	X + LAC, ALR, and Filter Switch (FS)	W42-W72
M	X + LAC, ALR, and PTCR Start Kit	W18-W72
V	X + DDC Control Sensor kit	W18-W72

/////// WA SERIES AHRI CAPACITY AND EFFICIENCY RATINGS

MODELS	W12AF	W18AF W18LF	W24AF W24LF	W30AF W30LF	W36AF W36LF	W42AF	W48AF	W60AF	W72AF
Cooling Capacity BTUH①	13,000	17,800	24,000	29,000	35,600	42,000	48,000	57,000	72,000
Unit efficiency EER	11.2	11.5	11.4	11.3	11.0	11.9	11.4	11.4	10.0

① Capacity is certified in accordance with ANSI/ARI Standard 390-2021.
② EER = Energy Efficiency Ratio and is certified in accordance with ANSI/ARI Standard 390-2021. All ratings based on no outside air introduction).

/////// UNIT COOLING CAPACITY AT VARIOUS INDOOR AND OUTDOOR CONDITIONS, W12A TO W42A UNITS

MODEL	INDOOR RETURN AIR (DB/WB)	COOLING CAPACITY (BTUH)	DRY BULB OUTDOOR AIR TEMPERATURE ENTERING UNIT CONDENSER AREA										
			75°F 23.9°C	80°F 26.6°C	85°F 29.4°C	90°F 32.2°C	95°F 35°C	100°F 37.8°C	105°F 40.5°C	110°F 43.3°C	115°F 46.1°C	120°F 48.8°C	125°F 51.6°C
W12AF	75/62	Total Cooling	13800	13300	12600	12000	11400	10900	10300	9700	9200	8600	8100
		Sensible Cooling	10600	10300	10000	9800	9600	9400	9100	8800	8700	8400	8100
	80/67	Total Cooling	14700	14400	13900	13500	13000	12600	12100	11500	11000	10400	9800
		Sensible Cooling	10200	10100	9900	9800	9600	9500	9300	9100	9000	8800	8600
	85/72	Total Cooling	17600	16900	16000	15300	14500	13800	13100	12300	11600	10800	10100
		Sensible Cooling	10500	10300	10000	9800	9500	9200	8900	8600	8300	8000	7700
W18AF	75/62	Total Cooling	19100	18100	17200	16400	15500	14800	14000	13300	12600	11800	11200
		Sensible Cooling	15600	14500	13700	12900	12300	11800	11400	11300	11100	11100	11200
	80/67	Total Cooling	20300	19700	19100	18500	17800	17200	16500	15800	15100	14300	13600
		Sensible Cooling	15100	14200	13500	12900	12400	12000	11700	11600	11500	11600	11800
	85/72	Total Cooling	24200	23100	22000	20900	19800	18900	17800	16800	15900	14900	14000
		Sensible Cooling	15500	14400	13600	12900	12200	11600	11200	10900	10600	10500	10500
W24AF	75/62	Total Cooling	26200	24700	23400	22200	20900	19900	18800	17900	17100	16200	15500
		Sensible Cooling	22200	20600	19300	18200	17300	16500	16000	15500	15300	15200	15300
	80/67	Total Cooling	27900	26900	25900	25000	24000	23100	22200	21300	20500	19600	18800
		Sensible Cooling	21500	20200	19100	18200	17400	16800	16400	16000	15900	15900	16100
	85/72	Total Cooling	33300	31500	29800	28300	26700	25300	24000	22700	21600	20400	19400
		Sensible Cooling	22000	20500	19200	18100	17100	16300	15700	15000	14700	14400	14300
W30AF	75/62	Total Cooling	31500	29800	28100	26700	25300	24100	23000	22100	21200	20400	19700
		Sensible Cooling	24300	23400	22600	22000	21300	20800	20300	19900	19400	19000	18700
	80/67	Total Cooling	33600	32400	31200	30100	29000	28100	27100	26300	25500	24700	24000
		Sensible Cooling	23500	22900	22400	22000	21500	21100	20800	20500	20200	19900	19700
	85/72	Total Cooling	40100	37900	35900	34000	32200	30800	29200	28000	26800	25700	24700
		Sensible Cooling	24100	23300	22500	21900	21100	20400	19900	19200	18600	18000	17500
W36AF	75/62	Total Cooling	38700	36600	34600	32800	31000	29500	28200	26900	25700	24600	23700
		Sensible Cooling	30200	29200	28200	27200	26500	25800	25100	24500	24100	23600	23300
	80/67	Total Cooling	41300	39800	38400	37000	35600	34400	33200	32000	30900	29800	28900
		Sensible Cooling	29300	28600	27900	27200	26700	26200	25700	25300	25000	24700	24500
	85/72	Total Cooling	49200	46600	44100	41800	39600	37700	35800	34100	32500	31000	29700
		Sensible Cooling	30000	29100	28100	27000	26200	25400	24500	23700	23100	22300	21700
W42AF	75/62	Total Cooling	43800	42300	40600	38800	36600	34300	31800	29000	26100	23000	19600
		Sensible Cooling	34500	33300	32200	31300	30400	29700	29100	28500	26100	23000	19600
	80/67	Total Cooling	46700	46100	45100	43800	42000	39900	37500	34600	31400	27800	23900
		Sensible Cooling	33400	32600	31900	31300	30700	30200	29800	29400	29100	27800	23900
	85/72	Total Cooling	55600	53900	51800	49500	46700	43700	40500	36800	33000	28900	24600
		Sensible Cooling	34200	33100	32100	31100	30100	29200	28400	27600	26800	25100	21200

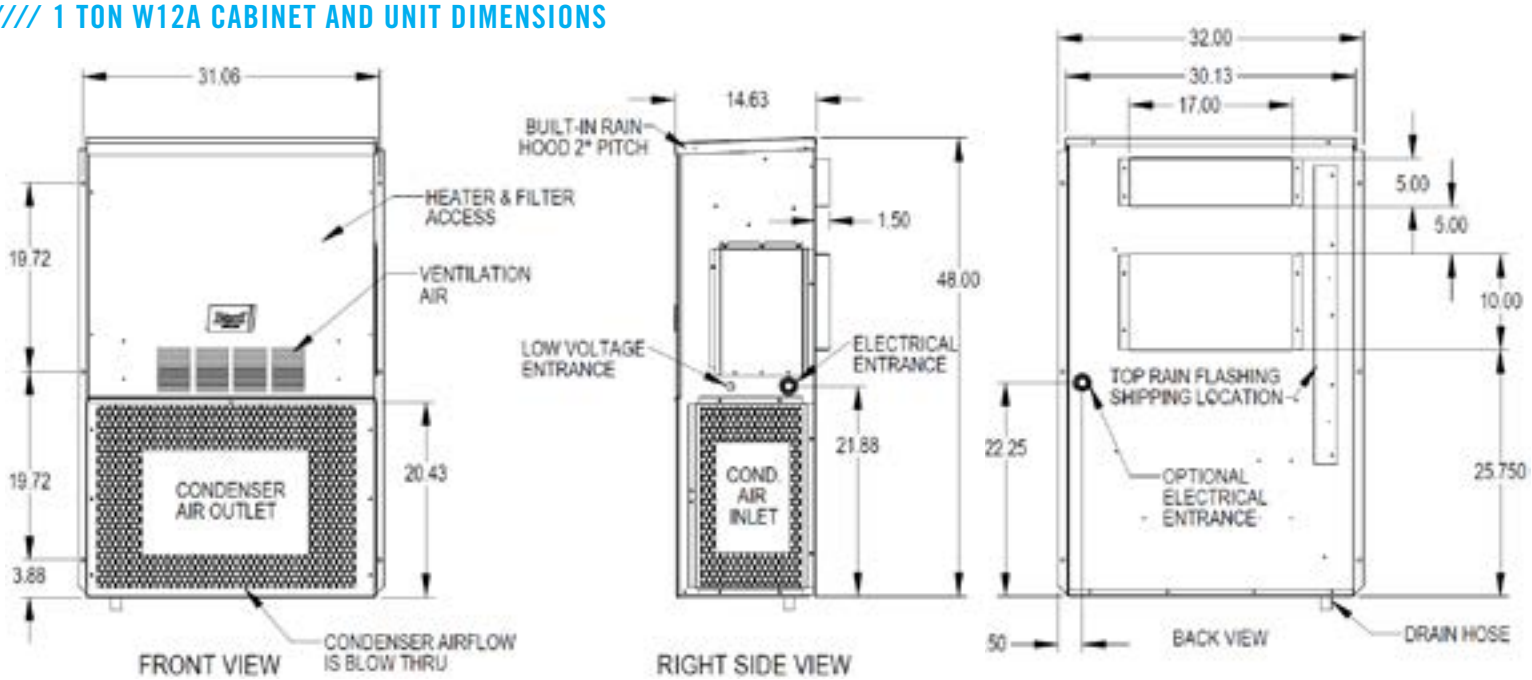
UNIT COOLING CAPACITY AT VARIOUS INDOOR AND OUTDOOR CONDITIONS, W48A TO W72A UNITS

MODEL	INDOOR RETURN AIR (DB/WB)	COOLING CAPACITY (BTUH)	DRY BULB OUTDOOR AIR TEMPERATURE ENTERING UNIT CONDENSER AREA										
			75°F 23.9°C	80°F 26.6°C	85°F 29.4°C	90°F 32.2°C	95°F 35°C	100°F 37.8°C	105°F 40.5°C	110°F 43.3°C	115°F 46.1°C	120°F 48.8°C	125°F 51.6°C
W48AF	75/62	Total Cooling	50600	48200	45900	43900	41800	39900	38200	36500	34800	33300	31900
		Sensible Cooling	40100	39000	38000	37000	36100	35200	34300	33500	32800	32000	31300
	80/67	Total Cooling	54000	52500	51000	49600	48000	46500	45000	43500	41900	40400	38800
		Sensible Cooling	38900	38200	37600	37000	36400	35800	35200	34600	34100	33500	32900
	85/72	Total Cooling	64300	61400	58600	56000	53300	50900	48500	46300	44000	42000	39900
		Sensible Cooling	39900	38800	37800	36800	35700	34700	33600	32500	31400	30300	29100
W60AF	75/62	Total Cooling	64100	59800	56000	52700	49600	47100	44900	43100	41600	40400	39500
		Sensible Cooling	49400	47000	44900	43100	41500	40200	39200	38400	37800	37500	37300
	80/67	Total Cooling	68400	65100	62200	59500	57000	54900	53000	51400	50000	49000	48100
		Sensible Cooling	47900	46100	44500	43100	41900	40900	40200	39700	39300	39200	39300
	85/72	Total Cooling	81500	76100	71400	67200	63300	60100	57200	54700	52500	50900	49500
		Sensible Cooling	49100	46800	44700	42800	41100	39600	38300	37200	36200	35400	34800
W72AF	75/62	Total Cooling	78100	73600	69600	66000	62700	59800	57300	55000	53100	51500	50100
		Sensible Cooling	57100	55000	53000	51200	49600	48100	46900	45800	44800	43900	43200
	80/67	Total Cooling	83400	80200	77300	74600	72000	69700	67600	65600	63900	62400	61000
		Sensible Cooling	55400	53900	52500	51200	50100	49000	48100	47300	46600	46000	45500
	85/72	Total Cooling	99300	93800	88800	84200	80000	76200	72900	69800	67100	64800	62700
		Sensible Cooling	56700	54700	52700	50900	49100	47400	45800	44300	42900	41600	40300

Notes:
- Unit compressor cooling operation between 60°F and 0°F outdoor temperatures requires a Low Ambient Control (LAC). Cooling between 0°F and -40°F outdoor temperatures requires economizer use.
- 1000 BTUH = .29307 kW
- Outdoor air temperatures provided are an average of the entering condenser inlet air temperature. Follow all unit clearance requirements provided for the product.

Capacity Multiplier Factors							
% of Rated Airflow	-30%	-20%	-10%	Rated	+10%	+20%	+30%
Total BTUH	0.93	0.95	0.97	1	1.01	1.02	1.04
Sensible BTUH	0.90	0.93	0.95	1	1.02	1.05	1.09

1 TON W12A CABINET AND UNIT DIMENSIONS



CLEARANCES REQUIRED FOR SERVICE AND CONDENSER AIRFLOW			
MODELS	LEFT SIDE	RIGHT SIDE	FRONT
W12A	15"	20"	10'

MINIMUM CLEARANCES REQUIRED TO COMBUSTIBLE MATERIALS		
MODELS ①	SUPPLY AIR DUCT FIRST 3 FT.	CABINET
W12A	0"	0"

① Refer to the Installation Manual for more detailed information.

/////// 1.5 TON W18A TO 3 TON W36A RIGHT SIDE CONTROLS CABINET DIMENSIONS

DIMENSIONS OF W18-36A BASIC UNIT FOR ARCHITECTURAL & INSTALLATION REQUIREMENTS (NOMINAL)																							
MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN		UNIT CABINET															
				A	B	C	D	E	F	G	I	J	K	L	M	N	O	P	Q	R	S	T	
W18A W24A	33.30	17.13	74.56	7.88	19.88	11.88	19.88	35.00	10.88	29.75	20.56	30.75	32.06	33.25	31	2.63	34.13	26.06	10.55	3.94	12	9	
W30A W36A	38.20	17.13	74.56	7.88	27.88	13.88	27.88	40.00	10.88	29.75	17.93	30.75	32.75	33.25	31	2.75	39.13	26.75	9.14	3.94	12	9	

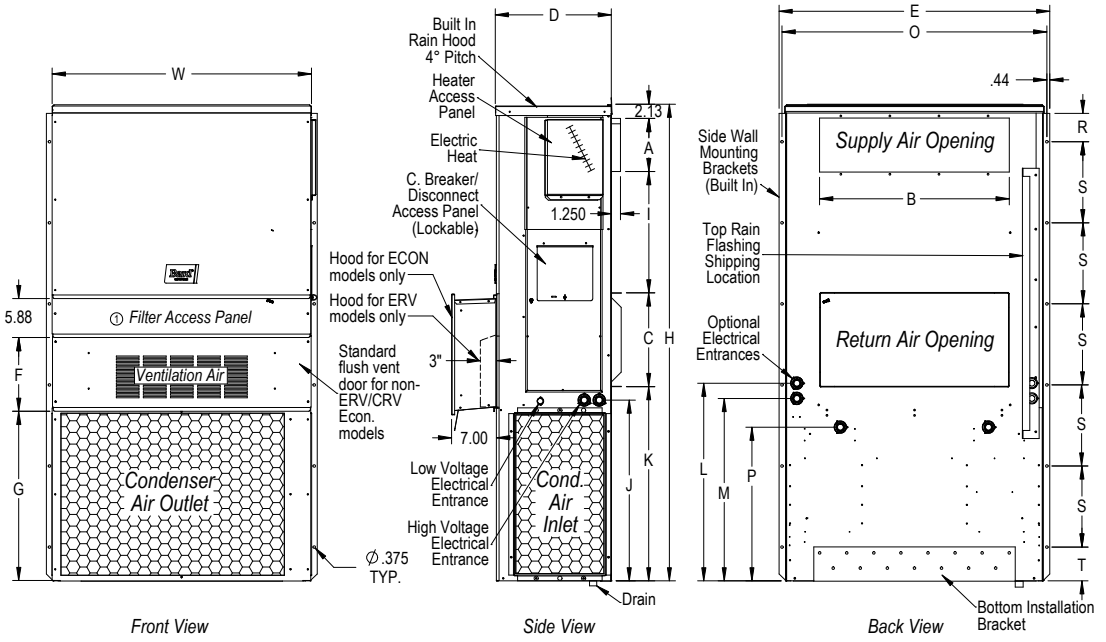
CLEARANCES REQUIRED FOR SERVICE AND CONDENSER AIRFLOW			
MODELS	LEFT SIDE	RIGHT SIDE	FRONT
W18A, W24A W30A, W36A	15"	20"	10'

MINIMUM CLEARANCES REQUIRED TO COMBUSTIBLE MATERIALS		
MODELS ①	SUPPLY AIR DUCT FIRST 3 FT.	CABINET
W18A, W24A	0"	0"
W30A, W36A	1/4"	0"

① Refer to the Installation Manual for more detailed information.

Note:

Opposing units that face each other require 15' clearance between condenser outlets.



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/////// 1.5 TON W18L TO 3 TON W36L LEFT SIDE CONTROLS CABINET DIMENSIONS

DIMENSIONS OF W18-36L BASIC UNIT FOR ARCHITECTURAL & INSTALLATION REQUIREMENTS (NOMINAL)																							
MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN		UNIT CABINET															
				A	B	C	B	E	F	G	I	J	K	L	M	N	O	P	Q	R	S	T	
W18L W24L	33.30	17.13	74.56	7.88	19.88	11.88	19.88	35.00	10.88	29.75	20.56	30.75	32.06	33.25	31	2.63	34.13	26.06	10.55	3.94	12.00	9.00	
W30L W36L	38.20	17.13	74.56	7.88	27.88	13.88	27.88	40.00	10.88	29.75	17.93	30.75	32.75	33.25	31	2.75	39.13	26.75	9.14	3.94	12.00	9.00	

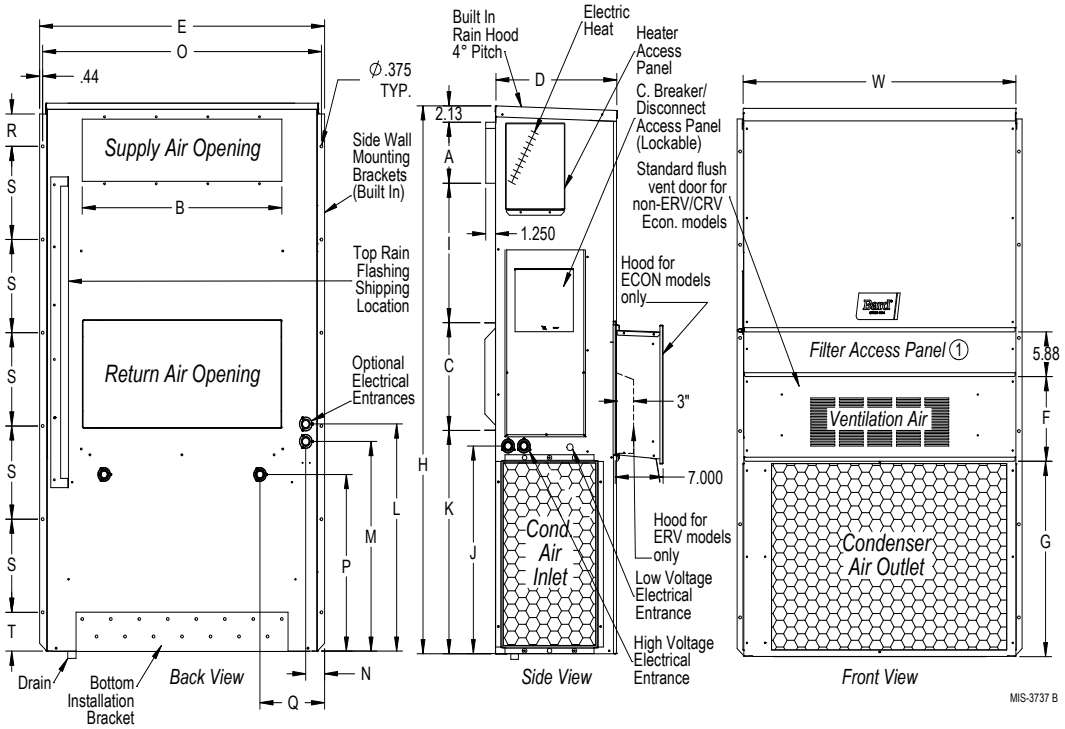
CLEARANCES REQUIRED FOR SERVICE AND CONDENSER AIRFLOW			
MODELS	LEFT SIDE	RIGHT SIDE	FRONT
W18L, W24L W30L, W36L	20"	15"	10'

MINIMUM CLEARANCES REQUIRED TO COMBUSTIBLE MATERIALS		
MODELS ①	SUPPLY AIR DUCT FIRST 3 FT.	CABINET
W18L, W24L	0"	0"
W30L, W36L	1/4"	0"

① Refer to the Installation Manual for more detailed information.

Note:

Opposing units that face each other require 15' clearance between condenser outlets.



MIS-3737 B

/////// 3.5 TON W42 TO 6 TON W72 CENTER CONTROLS CABINET DIMENSIONS

DIMENSIONS OF W42-72A BASIC UNIT FOR ARCHITECTURAL & INSTALLATION REQUIREMENTS (NOMINAL)																							
MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN		UNIT CABINET															
				A	B	C	B	E	F	G	I	J	K	L	M	N	O	R	S	T	U	V	
W42A W48A	42	25.52	84.75	9.88	29.88	15.88	29.88	43.88	12.63	39.06	30.06	43.25	26.94	55.59	52.59	8.82	43	1.44	16	1.88	10.50	12.00	
W60A W72A	42	25.52	92.88	9.88	29.88	15.88	29.88	43.88	12.63	45	30.06	49.25	35.06	61.72	58.72	8.82	43	1.44	16	10	13.88	15.43	

CLEARANCES REQUIRED FOR SERVICE AND CONDENSER AIRFLOW			
MODELS	LEFT SIDE	RIGHT SIDE	FRONT
W42A, W48A W60A, W72A	20"	20"	10'

ECONOMIZER, ERV, OR CRV VENTS REQUIRE 40" ON EITHER RIGHT OR LEFT SIDE FOR INSTALLATION OR REMOVAL. SEE INSTALLATION INSTRUCTIONS FOR MORE INFORMATION.

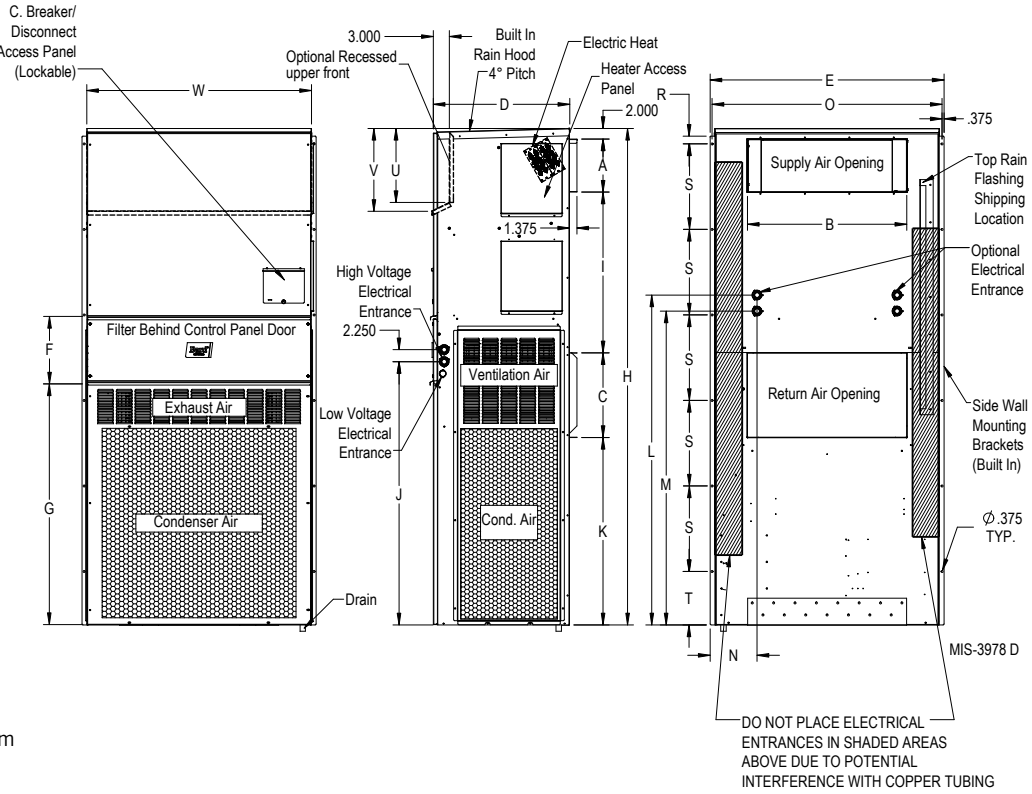
MINIMUM CLEARANCES REQUIRED TO COMBUSTIBLE MATERIALS		
MODELS	SUPPLY AIR DUCT FIRST 3 FT.	CABINET
W42A, W48A W60A, W72A	1/4"	0"

Refer to the Installation Manual for more detailed information.

Note:

Opposing units that face each other require 15' clearance between condenser outlets.

W42AFL to W72AFL left-hand compressor models have the same cabinet dimensions, but servicability of the condenser area is from the left side.



/////// SOUND DATA - DBA @ 5 FT. AND 10 FT.*

UNIT	DUCT FREE INDOOR COOLING OPERATION @ 5 FT.	DUCT FREE INDOOR COOLING OPERATION @ 10 FT.	DUCTED INDOOR COOLING OPERATION @ 5 FT.	DUCTED INDOOR COOLING OPERATION @ 10 FT.	OUTDOOR @ 10 FT.
W12A	57	53.6	NA	NA	64.9
W18A/W18L	49.6	47.3	48.6	46.2	62.8
W24A/W24L	52.4	50.4	51.9	48.9	62.3
W30A/W30L	53.9	52.9	54.5	47.3	67.1
W36A/W36L	53.9	52.9	54.5	47.3	67.1
W42A	56.1	51.7	56.3	51.1	68.6
W48A	57	52.7	57.8	52.8	69
W60A	56.5	53.3	56	52.7	66.8
W72A	61.2	56.6	60.8	57.1	77.1

Published dBA numbers are 3rd octave A weighted scale. Integrated values calculated per ANSI/ASA S12.60-2009/Part 2, Section 5.2.2.1.

//////// GENERAL UNIT ELECTRICAL SPECIFICATIONS

MODELS	CONTROL PANEL AND SERVI-CABILITY LOCATION	NOMINAL VOLTAGE VAC	PH	HZ	VOLTAGE RANGE VAC	COMPRESSOR RATED LOAD AMPS (RLA)	BRANCH CIRCUIT SELECTION CURRENT (BCSC)	LOCKED ROTOR AMPS (LRA)	IN-DOOR MOTOR VOLT-AGE	INDOOR MOTOR AMPS	INDOOR MOTOR HP	OUT-DOOR MOTOR VOLT-AGE	OUTDOOR MOTOR AMPS	OUT-DOOR MOTOR HP
W12AF-K	Right Side	115V	1	60	104-126V	11.3	9.9	52	115V	1.3	1/8	115V	1.0	1/12
W12AF-A	Right Side	230/208V	1	60	197-253V	5.7/6.2	5.2	26	230V	.9/.9	1/8	230V	.5/.5	1/12
W18AF-A	Right Side	230/208V	1	60	197-253V	7.8/8.8	8.3	45.1	230V	.8/.8	1/3	230V	1.0/1.0	1/5
W18LF-A	Left Side													
W24AF-A	Right Side	230/208V	1	60	197-253V	11.1/12.7	11.4	64.4	230V	1.2/1.3	1/3	230V	1.0/1.0	1/5
W24LF-A	Left Side													
W24AF-B	Right Side	230/208V	3	60	197-253V	7.5/8.6	7.7	59.9	230V	1.2/1.3	1/3	230V	1.0/1.0	1/5
W24LF-B	Left Side													
W24AF-C	Right Side	460V	3	60	414-506V	4.3	3.8	32.4	460V	.7	1/3	460V	.5	1/5
W30AF-A	Right Side	230/208V	1	60	197-253V	12.6/14.6	12.7	75.6	230V	1.7/1.7	1/2	230V	1.4/1.4	1/5
W30LF-A	Left Side													
W30AF-B	Right Side	230/208V	3	60	197-253V	9.6/11.1	9.6	67.7	230V	1.7/1.7	1/2	230V	1.4/1.4	1/5
W30LF-B	Left Side													
W30AF-C	Right Side	460V	3	60	414-506V	5.2	4.5	38.1	460V	.9	1/2	460V	.7	1/5
W30LF-C	Left Side													
W36AF-A	Right Side	230/208V	1	60	197-253V	16.5/18.8	16.7	93.5	230V	2.3/2.5	1/2	230V	1.3/1.3	1/5
W36LF-A	Left Side													
W36AF-B	Right Side	230/208V	3	60	197-253V	12.1/13.8	12.2	97.5	230V	2.3/2.5	1/2	230V	1.3/1.3	1/5
W36LF-B	Left Side													
W36AF-C	Right Side	460V	3	60	414-506V	6.6	5.8	44.3	460V	1.3	1/2	460V	.7	1/5
W36LF-C	Left Side													
W36AFRC	Right Side	460V	3	60	414-506V	6.6	5.8	44.3	230V	2.5	1/2	460V	.7	1/5
W36LFRC	Left Side													
W42AF-A	Front/Right	230/208V	1	60	197-253V	18.8/21.5	18.6	123	230V	1.8/2	1/2	230V	2/1.9	1/3
W42AFLA	Front/Left													
W42AF-B	Front/Right	230/208V	3	60	197-253V	13/14.9	12.8	102.8	230V	1.8/2	1/2	230V	2/1.9	1/3
W42AFLB	Front/Left													
W42AF-C	Front/Right	460V	3	60	414-506V	6.7	5.8	50	460V	1.0	1/2	460V	1.0	1/3
W42AFLC	Front/Left													
W42AFRC	Front/Right	460V	3	60	414-506V	6.7	5.8	50	230V	2.0	1/2	460V	1.0	1/3
W48AF-A	Front/Right	230/208V	1	60	197-253V	21.6/24.9	22.4	126	230V	3.1/3.2	3/4	230V	1.9/1.9	1/3
W48AFLA	Front/Left													
W48AF-B	Front/Right	230/208V	3	60	197-253V	12.4/14.3	12.8	120.4	230V	3.1/3.2	3/4	230V	1.9/1.9	1/3
W48AFLB	Front/Left													
W48AF-C	Front/Right	460V	3	60	414-506V	6.7	6.0	49.4	460V	1.6	3/4	460V	1.0	1/3
W48AFLC	Front/Left													
W48AFRC	Front/Right	460V	3	60	414-506V	6.7	6.0	49.4	230V	3.2	3/4	460V	1.0	1/3
W48AF-Q	Front/Right	575V	3	60	520-630V	5.4	5.8	41	230V	3.2	3/4	230V	1.9	1/3

Notes:

1.) The Short Circuit Current Rating (SCCR) is a critical safety rating for HVAC equipment that indicates the maximum fault current a component or assembly can withstand without creating a fire or shock hazard. All Bard equipment is SCCR rated at 5kA (5,000 amperes) Symmetrical. Consult with a qualified electrical professional regarding SCCR ratings based on application requirements.

2.) All electrical requirements must comply with relevant electrical codes (NEC, local requirements), and it is importatant to consult with a qualified electrical professional before installing HVAC products including models listed.

3.) Compressor Rated Load Amps (RLA) are provided by the compressor manufacturer and are calculated by using a formula based on compressor Maximum Continuous Current (MCC). Indoor and outdoor motor amps are based on actual motor power usage at rated static, and do not reflect the maximum amp draw of the motor listed on the motor nameplate. Amp values are provided for both 230 and 208 volt or 460 volt applications. Amp values may vary based on actual voltage applied to unit and site indoor and outdoor conditions.

3.) Efficiency ratings (such as EER) account for the relationship between energy input and cooling/heating output under standardized conditions. These industry-recognized metrics incorporate multiple performance factors including thermal transfer capabilities tested in climate controlled labs. Efficiency cannot be determined from provided electrical consumption data in this chart without additional information.

/////// GENERAL UNIT ELECTRICAL SPECIFICATIONS

MODELS	CONTROL PANEL AND SERVI-CABILITY LOCATION	NOMINAL VOLTAGE VAC	PH	HZ	VOLTAGE RANGE VAC	RATED LOAD AMPS (RLA)	BRANCH CIRCUIT SELECTION CURRENT (BCSC)	LOCKED ROTOR AMPS (LRA)	IN-DOOR MOTOR VOLT-AGE	INDOOR MOTOR AMPS	INDOOR MOTOR HP	OUT-DOOR MOTOR VOLT-AGE	OUTDOOR MOTOR AMPS	OUT-DOOR MOTOR HP
W60AF-A	Front/Right	230/208V	1	60	197-253V	26.9/31.1	23.7	157	230V	3.4/3.6	3/4	230V	1.8/1.9	1/3
W60AFLA	Front/Left													
W60AF-B	Front/Right	230/208V	3	60	197-253V	18.2/21.1	16.0	156.4	230V	3.4/3.6	3/4	230V	1.8/1.9	1/3
W60AFLB	Front/Left													
W60AF-C	Front/Right	460V	3	60	414-506V	9.3	7.1	69	460V	1.8	3/4	460V	1	1/3
W60AFLC	Front/Left													
W60AF-Q	Front/Right	575V	3	60	520-630V	5.7	6.4	47.8	230V	3.6	3/4	230V	1.9	1/3
W60AFRC	Front/Right	460V	3	60	414-506V	9.3	7.1	69	230V	3.6	3/4	460V	1	1/3
W72AF-A	Front/Right	230/208V	1	60	197-253V	37.8/42.1	32.8	183.9	230V	4.3/4.6	3/4	230V	3.7/3.8	1/2
W72AFLA	Front/Left													
W72AF-B	Front/Right	230/208V	3	60	197-253V	25.8/28.7	22.4	166.2	230V	4.3/4.6	3/4	230V	3.7/3.8	1/2
W72AFLB	Front/Left													
W72AF-C	Front/Right	460V	3	60	414-506V	11.4	8.8	74.6	460V	2.3	3/4	460V	1.9	1/2
W72AFLC	Front/Left													
W72AF-Q	Front/Right	575V	3	60	520-630V	8.9	7.2	54	230V	4.6	3/4	230V	3.8	1/2
W72AFRC	Front/Right	460V	3	60	414-506V	11.4	8.8	74.6	230V	4.6	3/4	460V	1.9	1/2

Notes:

1.) The Short Circuit Current Rating (SCCR) is a critical safety rating for HVAC equipment that indicates the maximum fault current a component or assembly can withstand without creating a fire or shock hazard. All Bard equipment is SCCR rated at 5kA (5,000 amperes) Symmetrical. Consult with a qualified electrical professional regarding SCCR ratings based on application requirements.

2.) All electrical requirements must comply with relevant electrical codes (NEC, local requirements), and it is importatant to consult with a qualified electrical professional before installing HVAC products including models listed.

3.) Compressor Rated Load Amps (RLA) are provided by the compressor manufacturer and are calculated by using a formula based on compressor Maximum Continuous Current (MCC). Indoor and outdoor motor amps are based on actual motor power usage at rated static, and do not reflect the maximum amp draw of the motor listed on the motor nameplate. Amp values are provided for both 230 and 208 volt or 460 volt applications. Amp values may vary based on actual voltage applied to unit and site indoor and outdoor conditions.

3.) Efficiency ratings (such as EER) account for the relationship between energy input and cooling/heating output under standardized conditions. These industry-recognized metrics incorporate multiple performance factors including thermal transfer capabilities tested in climate controlled labs. Efficiency cannot be determined from provided electrical consumption data in this chart without additional information.

/////// GENERAL UNIT REFRIGERANT AND MECHANICAL SPECIFICATIONS

UNIT MODEL	STANDARD UNIT WEIGHT WITH PACKAG-ING	DEHUM UNIT WEIGHT WITH PACKAG-ING	REFRIGERANT SYSTEM				INDOOR EVAPORATOR BLOWER			OUTDOOR CONDENSER FAN		
			CHARGE TYPE	STANDARD UNIT CHARGE RATE	DEHUMID-IFICATION UNIT CHARGE RATE	COM-PRESSOR TYPE	INDOOR MOTOR -SPEEDS	INDOOR FAN	INDOOR CFM - RATED ESP	OUT-DOOR MOTOR	OUTDOOR FAN	OUT-DOOR FAN CFM
W12	182 lbs.	NA	R-454B	3.19 lbs.	N/A	Rotary	ECM-1SPD	Dual Blower	425 - .10	PSC	18" Axial	1000
W18	325 lbs.	NA	R-454B	3.00 lbs.	N/A	Scroll	ECM-5SPD	Dual Blower	600 - .10	PSC	18" Axial	1800
W24	335 lbs.	NA	R-454B	3.88 lbs.	N/A	Scroll	ECM-5SPD	Dual Blower	800 - .10	PSC	18" Axial	1800
W30	350 lbs.	372 lbs.	R-454B	3.44 lbs.	3.38 lbs.	Scroll	ECM-5SPD	Dual Blower	950 - .15	PSC	20" Axial	2400
W36	350 lbs.	387 lbs.	R-454B	3.81 lbs.	3.88 lbs.	Scroll	ECM-5SPD	Dual Blower	1150 - .15	PSC	20" Axial	2400
W42	495 lbs.	510 lbs.	R-454B	6.25 lbs.	6.00 lbs.	Scroll	ECM-5SPD	Dual Blower	1350 - .15	PSC	24" Axial	2900
W48	505 lbs.	525 lbs.	R-454B	6.00 lbs	6.50 lbs.	Scroll	ECM-5SPD	Dual Blower	1550 - .20	PSC	24" Axial	3000
W60	540 lbs.	555 lbs.	R-454B	7.56 lbs.	7.50 lbs.	Scroll	ECM-5SPD	Dual Blower	1750 - .20	PSC	24" Axial	3100
W72	565 lbs.	575 lbs.	R-454B	8.31 lbs.	8.00 lbs.	Scroll	ECM-5SPD	Dual Blower	1900 - .25	PSC	24" Axial	4000

Notes:

1.) Rated External Static Pressure (ESP) provided is external static applied to the external supply and return duct connections during rating and unit performance tests. CFM calculations include the E.S.P. value provided, internal unit static, and the standard filter (X) listed. Additional items such as higher filtration, supply ducting, return ducting, fire dampers, and additional supply or return grilles must be calculated for a total ESP value for the application. Total ESP cannot exceed .5" W.C.

2.) Weights provided are with skid and packaging materials. On average, packaging materials will add 30lbs. to 50lbs. to overall unit weight.

3.) Unit charge rates provided are for shipping purposes only. Always consult the serial plate on the unit before performing refrigerant system service.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W12A TO W24A STANDARD UNITS

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED FOR ALL MODELS EXCEPT W12
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	
W12AF-K	00	115-1	LUGS	1	15	20	NOT NEEDED
	02	115-1	LUGS	1	25	25	NOT AVAILABLE
W12AF-A	0Z	230/208-1	C BREAKER	1	8	15	NOT AVAILABLE
	03	230/208-1	C BREAKER	1	19	25	NOT AVAILABLE
	05	230/208-1	C BREAKER	1	28	30	NOT AVAILABLE
W18AF-A	00	230/208-1	LUGS	1	15	20	NOT NEEDED
	0Z	230/208-1	C BREAKER	1	15	20	WMCB-02A
	05	230/208-1	C BREAKER	1	30	30	EHWA018A-A05
	08	230/208-1	C BREAKER	1	46	50	EHWA018A-A08
	10	230/208-1	C BREAKER	1	56	60	EHWA018A-A10
W24AF-A	00	230/208-1	LUGS	1	19	25	NOT NEEDED
	0Z	230/208-1	C BREAKER	1	19	25	WMCB-03A
	05	230/208-1	C BREAKER	1	31	35	EHWA024A-A05
	08	230/208-1	C BREAKER	1	46	50	EHWA018A-A08
	10	230/208-1	C BREAKER	1	57	60	EHWA018A-A10
W24AF-B	00	230/208-3	LUGS	1	15	20	NOT NEEDED
	0Z	230/208-3	C BREAKER	1	15	20	WMCB-02B
	05	230/208-3	C BREAKER	1	20	20	EHWA024A-B05
W24AF-C	00	460-3	DISCONNECT	1	8	15	NOT NEEDED
	0Z	460-3	DISCONNECT	1	8	15	WMPD-01C
	05	460-3	DISCONNECT	1	10	15	EHWA024A-C05

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three 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 and conductor wires in accordance with the National Electrical Code and all local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W30A TO W42A STANDARD UNITS

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W30AF-A	00	230/208-1	LUGS	1	22	25					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	22	25					WMCB-03A
	05	230/208-1	C BREAKER	1	31	35					EHWA030A-A05
	10	230/208-1	C BREAKER	1	57	60					EHWA030A-A10
	15	230/208-1	C BREAKER	1 OR 2	83	90	57	26	60	30	EHWA030A-A15
W30AF-B	00	230/208-3	LUGS	1	18	20					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	18	20					WMCB-02B
	05	230/208-3	C BREAKER	1	20	20					EHWA024A-B05
	09	230/208-3	C BREAKER	1	32	35					EHWA030A-B09
	15	230/208-3	C BREAKER	1	51	60					EHWA030B-B15
W30AF-C	00	460-3	LUGS	1	9	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	9	15					WMPD-01C
	05	460-3	DISCONNECT	1	11	15					EHWA030A-C05
	09	460-3	DISCONNECT	1	17	20					EHWA030A-C09
	15	460-3	DISCONNECT	1	26	30					EHWA030A-C15
W36AF-A	00	230/208-1	LUGS	1	27	35					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	27	35					WMCB-05A
	05	230/208-1	C BREAKER	1	32	35					EHWA024A-A05
	10	230/208-1	C BREAKER	1	58	60					EHWA030A-A10
	15	230/208-1	C BREAKER	1 OR 2	84	90	58	26	60	30	EHWA036A-A15
W36AF-B	00	230/208-3	LUGS	1	22	25					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	22	25					WMCB-03B
	05	230/208-3	C BREAKER	1	22	25					EHWA036A-B05
	09	230/208-3	C BREAKER	1	33	35					EHWA030A-B09
	15	230/208-3	C BREAKER	1	52	60					EHWA036A-B15
W36AF-C	00	460-3	LUGS	1	11	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	11	15					WMPD-01C
	05	460-3	DISCONNECT	1	11	15					EHWA036A-C05
	09	460-3	DISCONNECT	1	17	20					EHWA036A-C09
	15	460-3	DISCONNECT	1	26	30					EHWA036A-C15
W42AF-A	00	230/208-1	LUGS	1	30	35					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	30	35					WMCBC-05A
	05	230/208-1	C BREAKER	1	32	35					EHWA042B-A05
	10	230/208-1	C BREAKER	1	58	60					EHWA042A-A10
	15	230/208-1	C BREAKER	1 or 2	84	90	58	26	60	30	EHWA042A-A15
W42AF-B	00	230/208-3	LUGS	1	23	30					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	23	30					WMCBC-04B
	05	230/208-3	C BREAKER	1	23	30					EHWA042A-B05
	09	230/208-3	C BREAKER	1	33	35					EHWA042A-B09
	15	230/208-3	C BREAKER	1	51	60					EHWA042A-B15
W42AF-C	00	460-3	LUGS	1	11	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	11	15					WMCBC-06C
	05	460-3	DISCONNECT	1	11	15					EHWA042ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	26	30					EHWA042A-C15

SEE ELECTRICAL NOTES ON NEXT PAGE.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W48A TO W60A STANDARD UNITS

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W48AF-A	00	230/208-1	LUGS	1	36	45					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	36	45					WMCBC-07A
	05	230/208-1	C BREAKER	1	36	45					EHWA048ADA05
	10	230/208-1	C BREAKER	1	59	60					EHWA048A-A10
	15	230/208-1	C BREAKER	1 or 2	85	90	59	26	60	30	EHWA048A-A15
W48AF-B	00	230/208-3	LUGS	1	24	30					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	24	30					WMCBC-04B
	05	230/208-3	C BREAKER	1	24	30					EHWA048A-B05
	09	230/208-3	C BREAKER	1	34	35					EHWA048A-B09
	15	230/208-3	C BREAKER	1	52	60					EHWA048A-B15
W48AF-C	00	460-3	LUGS	1	12	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	12	15					WMCBC-06C
	05	460-3	DISCONNECT	1	12	15					EHWA048ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA048A-C09
	15	460-3	DISCONNECT	1	26	30					EHWA048A-C15
W48AF-Q	00	575-3	LUGS	1	11	15					NOT NEEDED
	0Z	575-3	DISCONNECT	1	11	15					WMCBC-06C
	15	575-3	DISCONNECT	1	23	25					EHWA060A-Q15
W60AF-A	00	230/208-1	LUGS	1	38	45					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	38	45					WMCBC-07A
	05	230/208-1	C BREAKER	1	38	45					EHWA060B-A05
	10	230/208-1	C BREAKER	1	60	60					EHWA060A-A10
	15	230/208-1	C BREAKER	1 or 2	86	90	60	26	60	30	EHWA060A-A15
W60AF-B	00	230/208-3	LUGS	1	28	35					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	28	35					WMCBC-05B
	05	230/208-3	C BREAKER	1	28	35					EHWA060A-B05
	09	230/208-3	C BREAKER	1	35	35					EHWA042A-B09
	15	230/208-3	C BREAKER	1	53	60					EHWA060A-B15
W60AF-C	00	460-3	LUGS	1	13	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	13	15					WMCBC-06C
	05	460-3	DISCONNECT	1	13	15					EHWA042ADC05
	09	460-3	DISCONNECT	1	18	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	27	30					EHWA042A-C15
W60AF-Q	00	575-3	LUGS	1	13	15					NOT NEEDED
	0Z	575-3	DISCONNECT	1	13	15					WMCBC-06C
	15	575-3	DISCONNECT	1	24	25					EHWA060A-Q15

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three 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 and conductor wires in accordance with the National Electrical Code and all local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W72A STANDARD UNITS

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W72AF-A	00	230/208-1	LUGS	1	52	60					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	52	60					WMCBC-09A
	05	230/208-1	C BREAKER	1	52	60					EHWA072A-A05
	10	230/208-1	C BREAKER	1 or 2	61	70	52	52	60	60	EHWA072A-A10
	15	230/208-1	C BREAKER	1 or 2	87	90	52	52	60	60	EHWA072A-A15
W72AF-B	00	230/208-3	LUGS	1	39	45					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	39	45					WMCBC-07B
	05	230/208-3	C BREAKER	1	39	45					EHWA072A-B05
	09	230/208-3	C BREAKER	1	39	45					EHWA072A-B09
	15	230/208-3	C BREAKER	1	54	60					EHWA060A-B15
W72AF-C	00	460-3	LUGS	1	17	20					NOT NEEDED
	0Z	460-3	DISCONNECT	1	17	20					WMCBC-06C
	05	460-3	DISCONNECT	1	17	20					EHWA042ADC05
	09	460-3	DISCONNECT	1	18	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	27	30					EHWA042A-C15
W72AF-Q	00	575-3	LUGS	1	14	20					NOT NEEDED
	0Z	575-3	DISCONNECT	1	14	20					WMCBC-06C
	15	575-3	DISCONNECT	1	24	25					EHWA060A-Q15

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W18L TO W30L LEFT SIDE CONTROL PANEL UNITS

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W18LF-A	0Z	230/208-1	C BREAKER	1	15	20					WMCB-02AL
	05	230/208-1	C BREAKER	1	30	30					EHWL018A-A05
	10	230/208-1	C BREAKER	1	56	60					EHWL018A-A10
W24LF-A	0Z	230/208-1	C BREAKER	1	19	25					WMCB-03AL
	05	230/208-1	C BREAKER	1	31	35					EHWL024A-A05
	10	230/208-1	C BREAKER	1	57	60					EHWL018A-A10
W24LF-B	0Z	230/208-3	C BREAKER	1	15	20					WMCB-02BL
	05	230/208-3	C BREAKER	1	20	20					EHWL024A-B05
W30LF-A	0Z	230/208-1	C BREAKER	1	22	25					WMCB-03AL
	05	230/208-1	C BREAKER	1	31	35					EHWL030A-A05
	10	230/208-1	C BREAKER	1	57	60					EHWL030A-A10
	15	230/208-1	C BREAKER	1 OR 2	83	90	57	26	60	30	EHWL030A-A15
W30LF-B	0Z	230/208-3	C BREAKER	1	18	20					WMCB-02BL
	05	230/208-3	C BREAKER	1	20	20					EHWL024A-B05
	09	230/208-3	C BREAKER	1	32	35					EHWL030A-B09
	15	230/208-3	C BREAKER	1	51	60					EHWL030B-B15
W30LF-C	0Z	460-3	DISCONNECT	1	9	15					WMPD-01CL
	09	460-3	DISCONNECT	1	17	20					EHWL030A-C09
	15	460-3	DISCONNECT	1	26	30					EHWL030A-C15

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three 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 and conductor wires in accordance with the National Electrical Code and all local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W36L LEFT SIDE CONTROL PANEL UNITS

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W36LF-A	0Z	230/208-1	C BREAKER	1	27	35					WMCB-05AL
	05	230/208-1	C BREAKER	1	32	35					EHWL024A-A05
	10	230/208-1	C BREAKER	1	58	60					EHWL030A-A10
	15	230/208-1	C BREAKER	1 OR 2	84	90	58	26	60	30	EHWL036A-A15
W36LF-B	0Z	230/208-3	C BREAKER	1	22	25					WMCB-03BL
	05	230/208-3	C BREAKER	1	22	25					EHWL036A-B05
	09	230/208-3	C BREAKER	1	33	35					EHWL030A-B09
	15	230/208-3	C BREAKER	1	52	60					EHWL036A-B15
W36LF-C	0Z	460-3	DISCONNECT	1	11	15					WMPD-01CL
	09	460-3	DISCONNECT	1	17	20					EHWL036A-C09
	15	460-3	DISCONNECT	1	26	30					EHWL036A-C15

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W30A TO W42A "D" DEHUMIDIFICATION UNITS

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W30AFDA	0Z	230/208-1	C BREAKER	1	22	25					WMCB-03A
	05	230/208-1	C BREAKER	1	31	35					EHWA030A-A05
	10	230/208-1	C BREAKER	1	57	60					EHWA030A-A10
W30AFDB	0Z	230/208-3	C BREAKER	1	18	20					WMCB-02B
	05	230/208-3	C BREAKER	1	20	20					EHWA024A-B05
	09	230/208-3	C BREAKER	1	33	35					EHWA030A-B09
W30AFDC	0Z	460-3	DISCONNECT	1	9	15					WMPD-01C
	05	460-3	DISCONNECT	1	11	15					EHWA030ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA030A-C09
W36AFDA	0Z	230/208-1	C BREAKER	1	27	35					WMCB-05A
	05	230/208-1	C BREAKER	1	32	35					EHWA036ADA05
	10	230/208-1	C BREAKER	1	58	60					EHWA036ADA10
W36AFDB	0Z	230/208-3	C BREAKER	1	22	25					WMCB-03B
	05	230/208-3	C BREAKER	1	22	25					EHWA036A-B05
	09	230/208-3	C BREAKER	1	33	35					EHWA036ADB09
W36AFDC	0Z	460-3	DISCONNECT	1	11	15					WMPD-01C
	05	460-3	DISCONNECT	1	11	15					EHWA036ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA036ADC09
W42AFDA	00	230/208-1	LUGS	1	30	35					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	30	35					WMCBC-05A
	05	230/208-1	C BREAKER	1	32	35					EHWA042B-A05
	10	230/208-1	C BREAKER	1	58	60					EHWA042ADA10
	15	230/208-1	C BREAKER	1 or 2	84	90	58	26	60	30	EHWA042A-A15
W42AFDB	00	230/208-3	LUGS	1	22	30					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	22	30					WMCBC-04B
	05	230/208-3	C BREAKER	1	22	30					EHWA042A-B05
	09	230/208-3	C BREAKER	1	33	35					EHWA042A-B09
W42AFDC	00	460-3	LUGS	1	11	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	11	15					WMCBC-06C
	05	460-3	DISCONNECT	1	11	15					EHWA042ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA042A-C09

SEE ELECTRICAL NOTES ON NEXT PAGE.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W48A TO W72A "D" DEHUMIDIFICATION UNITS

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W48AFDA	00	230/208-1	LUGS	1	36	45					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	36	45					WMCBC-07A
	05	230/208-1	C BREAKER	1	36	45					EHWA048ADA05
	10	230/208-1	C BREAKER	1	59	60					EHWA048A-A10
	15	230/208-1	C BREAKER	1 or 2	86	90	59	26	60	30	EHWA048A-A15
W48AFDB	00	230/208-3	LUGS	1	24	30					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	24	30					WMCBC-04B
	05	230/208-3	C BREAKER	1	24	30					EHWA048A-B05
	09	230/208-3	C BREAKER	1	35	35					EHWA048A-B09
W48AFDC	00	460-3	LUGS	1	12	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	12	15					WMCBC-06C
	05	460-3	DISCONNECT	1	12	15					EHWA048ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA048A-C09
W60AFDA	00	230/208-1	LUGS	1	38	45					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	38	45					WMCBC-07A
	05	230/208-1	C BREAKER	1	38	45					EHWA060B-A05
	10	230/208-1	C BREAKER	1	60	60					EHWA060A-A10
	15	230/208-1	C BREAKER	1 or 2	86	90	60	26	60	30	EHWA060A-A15
W60AFDB	00	230/208-3	LUGS	1	28	35					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	28	35					WMCBC-05B
	05	230/208-3	C BREAKER	1	28	35					EHWA060A-B05
	09	230/208-3	C BREAKER	1	35	35					EHWA042A-B09
	15	230/208-3	C BREAKER	1	53	60					EHWA060A-B15
W60AFDC	00	460-3	LUGS	1	13	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	13	15					WMCBC-06C
	05	460-3	DISCONNECT	1	13	15					EHWA042ADC05
	09	460-3	DISCONNECT	1	18	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	27	30					EHWA042A-C15
W72AFDA	00	230/208-1	LUGS	1	52	60					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	52	60					WMCBC-09A
	05	230/208-1	C BREAKER	1	52	60					EHWA072A-A05
	10	230/208-1	C BREAKER	1 or 2	61	70	52	52	60	60	EHWA072A-A10
	15	230/208-1	C BREAKER	1 or 2	87	90	52	52	60	60	EHWA072A-A15
W72AFDB	00	230/208-3	LUGS	1	39	45					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	39	45					WMCBC-07B
	05	230/208-3	C BREAKER	1	39	45					EHWA072A-B05
	09	230/208-3	C BREAKER	1	39	45					EHWA072A-B09
	15	230/208-3	C BREAKER	1	54	60					EHWA060A-B15
W72AFDC	00	460-3	LUGS	1	17	20					NOT NEEDED
	0Z	460-3	DISCONNECT	1	17	20					WMCBC-06C
	05	460-3	DISCONNECT	1	17	20					EHWA042ADC05
	09	460-3	DISCONNECT	1	18	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	27	30					EHWA042A-C15

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three 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 and conductor wires in accordance with the National Electrical Code and all local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W42 TO W72 "L" LEFT SIDE COMPRESSOR UNITS

Some applications may have limited access to the unit right unit side and require additional servicability from the left side area of the condenser section. The following units will have the compressor and filter-drier located on the left side of the condenser section, and can be accessed for servicability by removing the left side grille.

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W42AFLA	00	230/208-1	LUGS	1	30	35					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	30	35					WMCBC-05A
	05	230/208-1	C BREAKER	1	32	35					EHWA042B-A05
	10	230/208-1	C BREAKER	1	58	60					EHWA042A-A10
	15	230/208-1	C BREAKER	1 or 2	84	90	58	26	60	30	EHWA042A-A15
W42AFLB	00	230/208-3	LUGS	1	23	30					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	23	30					WMCBC-04B
	05	230/208-3	C BREAKER	1	23	30					EHWA042A-B05
	09	230/208-3	C BREAKER	1	33	35					EHWA042A-B09
	15	230/208-3	C BREAKER	1	51	60					EHWA042A-B15
W42AFLC	00	460-3	LUGS	1	11	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	11	15					WMCBC-06C
	05	460-3	DISCONNECT	1	11	15					EHWA042ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	26	30					EHWA042A-C15
W48AFLA	00	230/208-1	LUGS	1	36	45					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	36	45					WMCBC-07A
	05	230/208-1	C BREAKER	1	36	45					EHWA048ADA05
	10	230/208-1	C BREAKER	1	59	60					EHWA048A-A10
	15	230/208-1	C BREAKER	1 or 2	85	90	59	26	60	30	EHWA048A-A15
W48AFLB	00	230/208-3	LUGS	1	24	30					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	24	30					WMCBC-04B
	05	230/208-3	C BREAKER	1	24	30					EHWA048A-B05
	09	230/208-3	C BREAKER	1	34	35					EHWA048A-B09
	15	230/208-3	C BREAKER	1	52	60					EHWA048A-B15
W48AFLC	00	460-3	LUGS	1	12	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	12	15					WMCBC-06C
	05	460-3	DISCONNECT	1	12	15					EHWA048ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA048A-C09
	15	460-3	DISCONNECT	1	26	30					EHWA048A-C15
W60AFLA	00	230/208-1	LUGS	1	38	45					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	38	45					WMCBC-07A
	05	230/208-1	C BREAKER	1	38	45					EHWA060B-A05
	10	230/208-1	C BREAKER	1	60	60					EHWA060A-A10
	15	230/208-1	C BREAKER	1 or 2	86	90	60	26	60	30	EHWA060A-A15
W60AFLB	00	230/208-3	LUGS	1	28	35					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	28	35					WMCBC-05B
	05	230/208-3	C BREAKER	1	28	35					EHWA060A-B05
	09	230/208-3	C BREAKER	1	35	35					EHWA042A-B09
	15	230/208-3	C BREAKER	1	53	60					EHWA060A-B15
W60AFLC	00	460-3	LUGS	1	13	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	13	15					WMCBC-06C
	05	460-3	DISCONNECT	1	13	15					EHWA042ADC05
	09	460-3	DISCONNECT	1	18	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	27	30					EHWA042A-C15

SEE ELECTRICAL NOTES ON NEXT PAGE.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W42 TO W72 "L" LEFT SIDE COMPRESSOR UNITS

Some applications may have limited access to the unit right unit side and require additional servicability from the left side area of the condenser section. The following units will have the compressor and filter-drier located on the left side of the condenser section, and can be accessed for servicability by removing the left side grille.

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W72AFLA	00	230/208-1	LUGS	1	52	60					NOT NEEDED
	0Z	230/208-1	C BREAKER	1	52	60					WMCBC-09A
	05	230/208-1	C BREAKER	1	52	60					EHWA072A-A05
	10	230/208-1	C BREAKER	1 or 2	61	70	52	52	60	60	EHWA072A-A10
	15	230/208-1	C BREAKER	1 or 2	87	90	52	52	60	60	EHWA072A-A15
W72AFLB	00	230/208-3	LUGS	1	39	45					NOT NEEDED
	0Z	230/208-3	C BREAKER	1	39	45					WMCBC-07B
	05	230/208-3	C BREAKER	1	39	45					EHWA072A-B05
	09	230/208-3	C BREAKER	1	39	45					EHWA072A-B09
	15	230/208-3	C BREAKER	1	54	60					EHWA060A-B15
W72AFLC	00	460-3	LUGS	1	17	20					NOT NEEDED
	0Z	460-3	DISCONNECT	1	17	20					WMCBC-06C
	05	460-3	DISCONNECT	1	17	20					EHWA042ADC05
	09	460-3	DISCONNECT	1	18	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	27	30					EHWA042A-C15

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three 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 and conductor wires in accordance with the National Electrical Code and all local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W36 TO W72 "R" INDOOR MOTOR ISOLATION UNITS

Today's ECM motor technology used in HVAC equipment provides a higher level of energy efficiency and more options for installers than older PSC motor designs. However, high resistance ground applications and locations where power supplied to the unit may not be clean (dirty power) require special consideration. Bard recommends ordering the motor isolation option "R" for new 460V products where high resistance grounding or dirty power may be present. A kit for 460V products can also be ordered Bard Part #8620-330 that can easily be installed to help avoid issues related to high resistance grounding or dirty power sources.

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W36AFRC	00	460-3	LUGS	1	11	15					NOT NEEDED
	0Z	460-3	C BREAKER	1	11	15					WMPD-01C
	05	460-3	C BREAKER	1	11	15					EHWA036A-C05
	09	460-3	C BREAKER	1	17	20					EHWA036A-C09
	15	460-3	C BREAKER	1	26	30					EHWA036A-C15
W36LFRC	0Z	460-3	DISCONNECT	1	11	15					WMPD-01CL
	09	460-3	DISCONNECT	1	17	20					EHWL036A-C09
	15	460-3	DISCONNECT	1	26	30					EHWL036A-C15
W42AFRC	00	460-3	LUGS	1	11	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	11	15					WMCBC-06C
	05	460-3	DISCONNECT	1	11	15					EHWA042ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	26	30					EHWA042A-C15

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three 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 and conductor wires in accordance with the National Electrical Code and all local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

/////// AVAILABLE HEATER PACKAGES AND FIELD WIRING DATA - W36 TO W72 "R" INDOOR MOTOR ISOLATION UNITS

Today's ECM motor technology used in HVAC equipment provides a higher level of energy efficiency and more options for installers than older PSC motor designs. However, high resistance ground applications and locations where power supplied to the unit may not be clean (dirty power) require special consideration. Bard recommends ordering the motor isolation option "R" for new 460V products where high resistance grounding or dirty power may be present. A kit for 460V products can also be ordered Bard Part #8620-330 that can easily be installed to help avoid issues related to high resistance grounding or dirty power sources.

UNIT MODEL	KW OPTION	RATED VOLTAGE AND PHASE (60HZ)	CONNECTION POINT	NO. OF FIELD CIRCUITS	SINGLE CIRCUIT		DUAL CIRCUIT				FIELD INSTALLED HEATER KIT PART NUMBERS. HEATERS CAN BE FACTORY OR FIELD INSTALLED.
					MINIMUM CIRCUIT AMPACITY (MCA)	MAX. OVER CURRENT PROTECTION (MOCP)	MCA		MOCP		
							CKT. A	CKT. B	CKT. A	CKT. B	
W48AFRC	00	460-3	LUGS	1	12	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	12	15					WMCBC-06C
	05	460-3	DISCONNECT	1	12	15					EHWA048ADC05
	09	460-3	DISCONNECT	1	17	20					EHWA048A-C09
	15	460-3	DISCONNECT	1	26	30					EHWA048A-C15
W60AFRC	00	460-3	LUGS	1	13	15					NOT NEEDED
	0Z	460-3	DISCONNECT	1	13	15					WMCBC-06C
	05	460-3	DISCONNECT	1	13	15					EHWA042ADC05
	09	460-3	DISCONNECT	1	18	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	27	30					EHWA042A-C15
W72AFRC	00	460-3	LUGS	1	17	20					NOT NEEDED
	0Z	460-3	DISCONNECT	1	17	20					WMCBC-06C
	05	460-3	DISCONNECT	1	17	20					EHWA042ADC05
	09	460-3	DISCONNECT	1	18	20					EHWA042A-C09
	15	460-3	DISCONNECT	1	27	30					EHWA042A-C15

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be de-rated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three 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 and conductor wires in accordance with the National Electrical Code and all local codes. MOCP (Maximum Over-current Protection) value listed is the maximum value as per UL 60335 calculations for MOCP (branch-circuit conductor sizes in this chart are based on this MOCP). The actual factory installed Over-current Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 60335 allowable MOCP value, but still above the UL 60335 minimum calculated value or Minimum Circuit Ampacity (MCA) listed. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing. Review all wiring and safety information provided in the installation manual for the product.

/////// ELECTRIC HEAT KW AND BTUH CHART AT FIELD SUPPLIED VOLTAGE

Electric Heat Nomenclature	Total KW and BTUH @ Field-Supplied Voltage															
	@ 115V			@ 208V				@ 230V				@ 460V			@ 575V		
	KW	1-PH Amps	BTUH	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
02	1.8	16.0	6,300														
03				2.3	10.8		7,700	2.8	12.0		9,400						
05				3.8	18.0	10.4	12,800	4.6	20.0	11.5	15,700	4.6	5.8	15,700			
08				6.0	28.8		20,500	7.4	32.0		25,100						
09				6.8		18.7	23,000	8.3		20.8	28,300	8.3	10.4	28,300	9.0	9.0	30,700
10				7.5	36.1		25,600	9.2	40.0		31,400						
15				11.3	54.1	31.2	38,400	13.8	60.0	34.6	47,100	13.8	17.3	47,100	15.0	15.1	51,200

/////// FIELD GENERATOR USE

Generator power is often used in the field for critical cooling and heating applications. When using generator power it is important to understand the capability of the generator used. Review and follow all instructions and guidelines provided with the generator. The following must be considered when selecting a generator provide power to HVAC equipment;

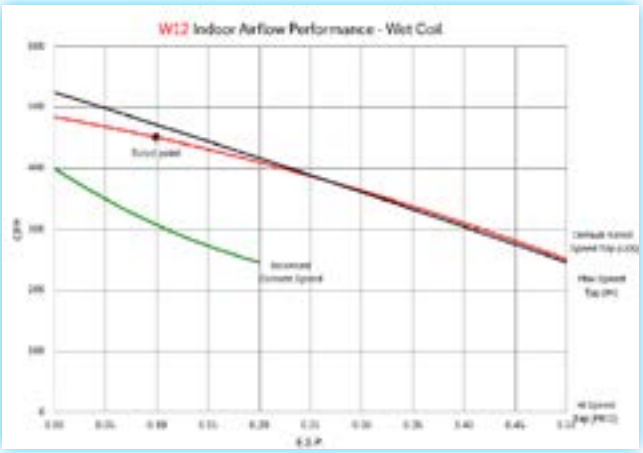
- When calculating the kW size of the generator, it is important to use the MCA values of the unit models being used. This value can be found in the electrical specifications section of this document.
- When calculating inrush current that the generator will see during unit startup, use the Locked Rotor Amp values of the unit being used. This value can be found in the general specifications section in the beginning of this document.

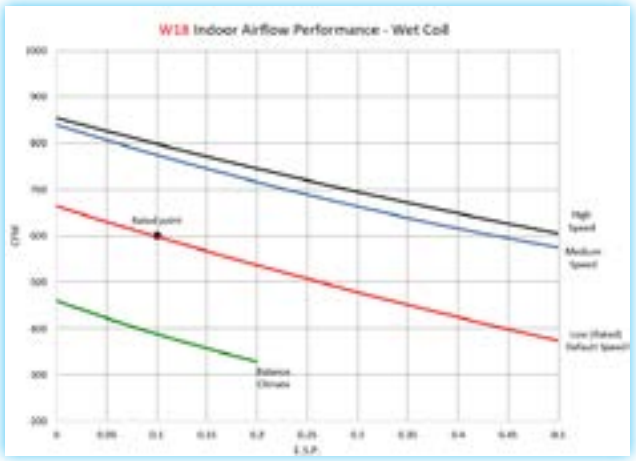
It is important to remember to review power usage for all units that will be operating off of the generator. It is also important to consider all equipment that will consume power (not just HVAC equipment) when calculating a generator size. Bard does offer a Secure Start kit Bard part #8551-014 for units up to a 5 ton cooling capacity that is designed to reduce inrush current load during cooling mode.

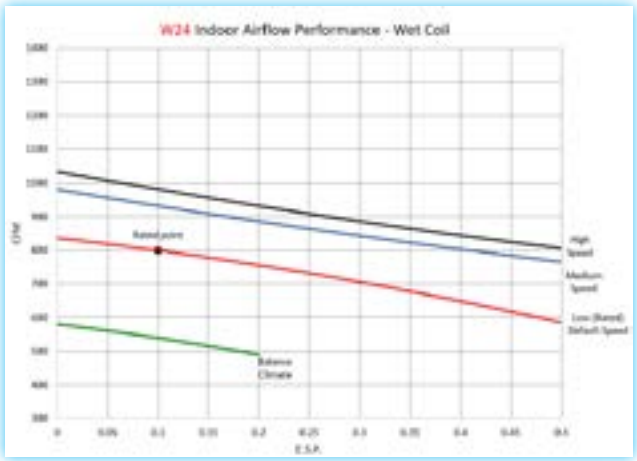
VENTILATION OPTIONS FOR OUTDOOR AIR INTAKE AND ROOM EXHAUST

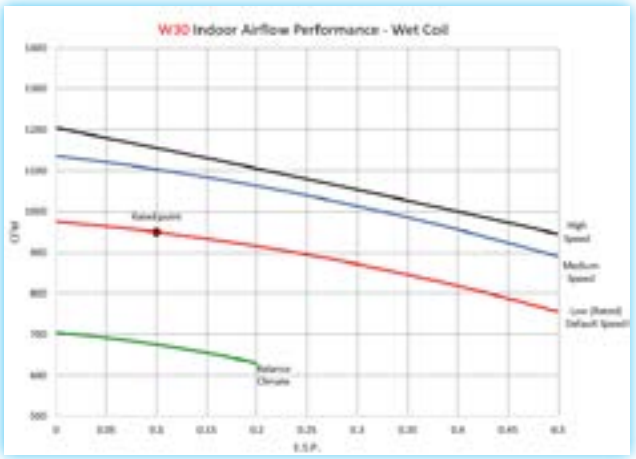
	VENT CODE	FIELD INSTALLED KIT PART NUMBER	UNIT MODEL NUMBER	INSTALLED WEIGHT LBS (KG)	EXTERNAL FRONT HOOD DEPTH	VENTILATION OPERATION	OCCUPANCY VENTILATION INPUT SIGNAL	VENT AIRFLOW	DAMPER LEAKAGE STAN-DARD	VENT USE
Barometric Dampers	X	BFAD-1	W12	4.0 (1.8)	No Hood	Barometric	None	Up to 25% of rated intake air. No exhaust.	N/A	The Barometric Intake Damper opens when the indoor fan is operating. Pins provide an easy way to set up the damper assembly.
		FAD-NE2	W18, W24	4.0 (1.8)	No Hood	Barometric	None			
		FAD-NE3	W30, W36	5.0 (2.3)	No Hood	Barometric	None			
		FAD-NE5	W42, W48 W60, W72	13 (5.9)	No Hood	Barometric	None			
	A	FAD-BE2	W18, W24	8.0 (3.6)	No Hood	Barometric	None	Up to 25% of rated intake air with room exhaust.	N/A	This damper provides the same features as the intake version with an added exhaust damper.
		FAD-BE3	W30, W36	9.0 (4.0)	No Hood	Barometric	None			
		FAD-BE5	W42, W48 W60, W72	16 (7.3)	No Hood	Barometric	None			
No Vent	B	BOP-1A	W12	1.0 (.5)	No Hood	No Air path	None	None, Air paths are sealed with block off plates.	N/A	The No Vent option provides plates over the intake and exhaust ventilation openings.
		BOP-2	W18, W24	1.0 (.5)	No Hood	No Air path	None			
		BOP-3	W30, W36	1.0 (.5)	No Hood	No Air path	None			
		BOPLATE-5	W42, W48 W60, W72	14 (6.4)	No Hood	No Air path	None			
Commercial Ventilators	M	CRV-F2-*	W18, W24	31.0 (14.0)	No Hood	Motor,Spring Return	24VAC	Up to 50% of rated intake air with room exhaust.	10cfm/ ft2	Powered outdoor intake and room exhaust air damper. Opens when 24VAC is applied.
		CRV-F3-*	W30, W36	35.0 (15.9)	No Hood	Motor,Spring Return	24VAC			
		CRV-F5	W42, W48 W60, W72	42 (19.1)	No Hood	Motor,Spring Return	24VAC			
	V	CRVS-1B	W12	31.0 (14.0)	No Hood	Motor,Spring Return	24VAC or 2-10VDC	Up to 50% of rated intake air with room exhaust.	4cfm/ft2	Provides outdoor intake and room exhaust air with improved damper sealing. Opens with either a 24VAC signal or DC voltage is applied.
		CRV-V2-*	W18, W24	31.0 (14.0)	No Hood	Motor,Spring Return	24VAC or 2-10VDC			
		CRV-V3-*	W30, W36	35.0 (15.9)	No Hood	Motor,Spring Return	24VAC or 2-10VDC			
		CRV-V5A	W42, W48 W60, W72	42 (19.1)	No Hood	Motor,Spring Return	24VAC or 2-10VDC			
Free Cooling Economizers	D	ECON-NC2A-*	W18, W24	37.0 (16.8)	7" (17.8cm)	Motor,Spring Return	2-10VDC	Full rated intake air with room exhaust.	4cfm/ft2	Economizer assembly with damper motor. Field supplied controls needed for operation.
		ECON-NC3A-*	W30, W36	37.0 (16.8)	7" (17.8cm)	Motor,Spring Return	2-10VDC			
		ECON-NC5A	W42, W48 W60, W72	44 (20)	No Hood	Motor,Spring Return	2-10VDC			
	E	JIFM-1B	W12	37.0 (16.8)	No Hood	Motor,Spring Return	24VAC or 0-10VDC	Up to 75% of rated intake air with room exhaust.	4cfm/ft2	Economizer with JADE controller. User defined economizing based on enthalpy curves.
	S	ECON-S2-*	W18, W24	37.0 (16.8)	No Hood	Motor,Spring Return	24VAC or 0-10VDC			
		ECON-S3-*	W30, W36	37.0 (16.8)	No Hood	Motor,Spring Return	24VAC or 0-10VDC			
	Y	ECON-DB2A-*	W18, W24	37.0 (16.8)	7" (17.8cm)	Motor,Spring Return	24VAC or 0-10VDC	Full rated intake air with room exhaust.	4cfm/ft2	Economizer with JADE controller. User defined economizing based on dry bulb temperature.
		ECON-DB3A-*	W30, W36	37.0 (16.8)	7" (17.8cm)	Motor,Spring Return	24VAC or 0-10VDC			
		ECON-DB5A	W42, W48 W60, W72	44 (20)	No Hood	Motor,Spring Return	24VAC or 0-10VDC			
	Z	ECON-WD2A-*	W18, W24	37.0 (16.8)	7" (17.8cm)	Motor,Spring Return	24VAC or 0-10VDC	Full rated intake air with room exhaust.	4cfm/ft2	Economizer with JADE controller. User defined economizing based on enthalpy curves.
		ECON-WD3A-*	W30, W36	37.0 (16.8)	7" (17.8cm)	Motor,Spring Return	24VAC or 0-10VDC			
		ECON-WD5A	W42, W48 W60, W72	44 (20)	No Hood	Motor,Spring Return	24VAC or 0-10VDC			
Energy Recovery Vents	R (230V Units)	ERV-FA2-*	W18, W24	54.0 (24.4)	4" (10.2cm)	**208/230V** Vent Blowers	24VAC - 3 speeds	Up to 200cfm	N/A	Energy Recovery Ventilator with inde-pendently adjustable intake and exhaust fans. Heat exchange wheel used to trans-fer heat from outdoor intake and room exhaust air paths.
		ERV-FA3-*	W30, W36	54.0 (24.4)	4" (10.2cm)	**208/230V** Vent Blowers	24VAC - 3 speeds	Up to 400cfm		
		ERV-FA5	W42, W48 W60, W72	87 (39.5)	No Hood	**208/230V** Vent Blowers	24VAC - 3 speeds	Up to 450cfm		
	R (460V Units)	ERV-FC2-*	W24	54.0 (24.4)	4" (10.2cm)	**460V** Vent Blowers	24VAC - 3 speeds	Up to 200cfm		
		ERV-FC3-*	W30, W36	54.0 (24.4)	4" (10.2cm)	**460V** Vent Blowers	24VAC - 3 speeds	Up to 400cfm		
		ERV-FC5	W42, W48 W60, W72	100 (45.4)	No Hood	**208/230V** Vent Blowers	24VAC - 3 speeds	Up to 450cfm		

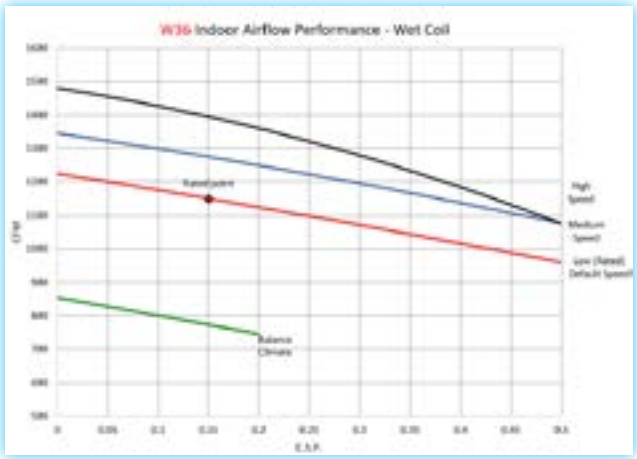
INDOOR AIRFLOW CFM @ STATIC PRESSURES AND ADJUSTABLE SPEEDS - W12 TO W48 UNITS

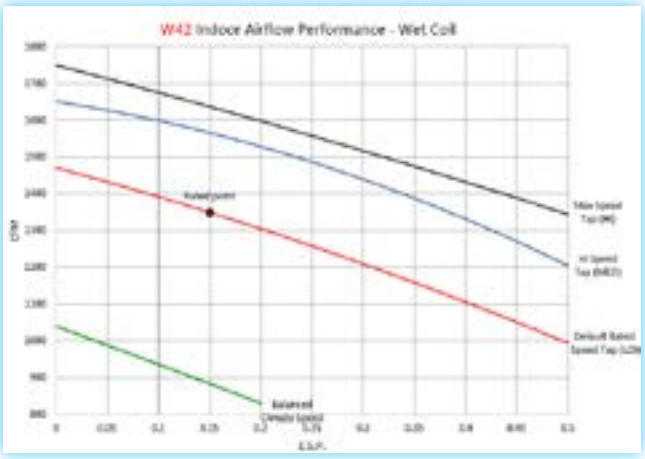


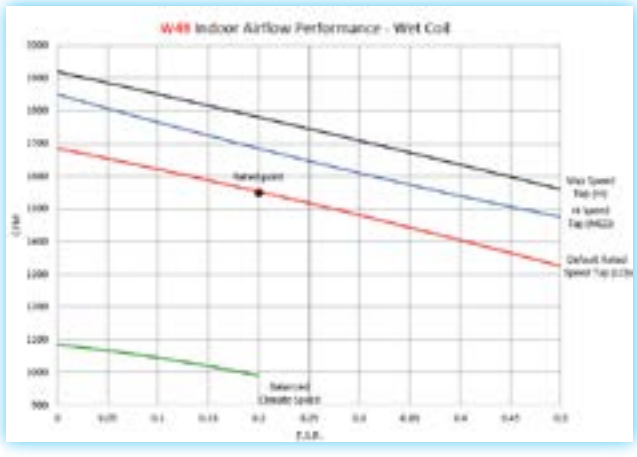












Indoor Airflow Speeds:

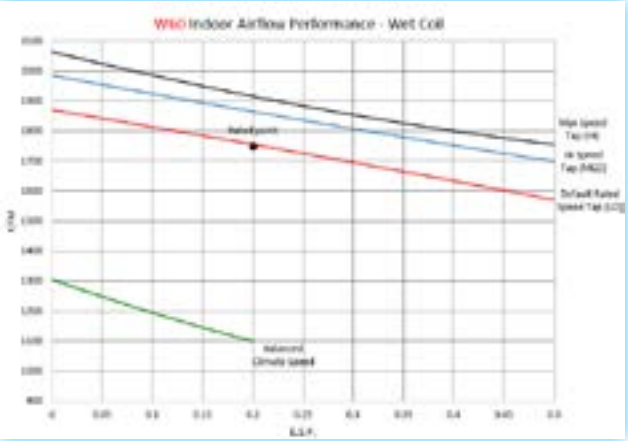
Balanced Climate Speed: The WA series uses this speed when the **Balanced Climate option (Y1) or mechanical dehumidification option (D)** is used. Not recommended for static levels higher that Balanced Climate airflow data provided.

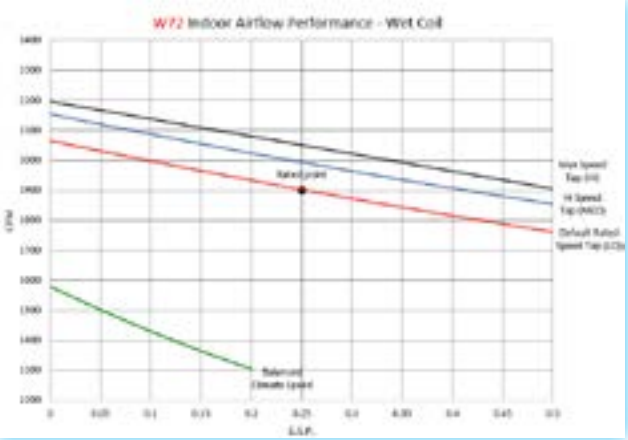
LO Speed (Default): The WA series uses this speed by default when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as LO on the speed selection terminal strip inside the unit control panel. The WA series also uses this speed when **fan only (G) or ventilation operation (A)** is used. All units ship with cooling and heating operation at LO cooling and heating speed, and provides the **optimal airflow amount for normal use**.

MED Speed (User Selectable): This speed is user selectable when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as MED on the speed selection terminal strip inside the unit control panel. The MED speed tap provides an **increase in unit airflow** per the airflow performance chart. Fan only and dehumidification fan operation is not effected by using MED speed.

HI Speed (User Selectable): This speed is user selectable when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as HI on the speed selection terminal strip inside the unit control panel. The HI speed tap provides **maximum unit airflow** per the airflow performance chart. Fan only and dehumidification fan operation is not effected by using Hi speed.

INDOOR AIRFLOW CFM @ STATIC PRESSURES AND ADJUSTABLE SPEEDS - W60 AND W72 UNITS





Indoor Airflow Speeds:

Balanced Climate Speed: The WA series uses this speed when the **Balanced Climate option (Y1) or mechanical dehumidification option (D)** is used. Not recommended for static levels higher that Balanced Climate airflow data provided.

LO Speed (Default): The WA series uses this speed by default when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as LO on the speed selection terminal strip inside the unit control panel. The WA series also uses this speed when **fan only (G) or ventilation operation (A)** is used. All units ship with cooling and heating operation at LO cooling and heating speed, and provides the **optimal airflow amount for normal use**.

MED Speed (User Selectable): This speed is user selectable when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as MED on the speed selection terminal strip inside the unit control panel. The MED speed tap provides an **increase in unit airflow** per the airflow performance chart. Fan only and dehumidification fan operation is not effected by using MED speed.

HI Speed (User Selectable): This speed is user selectable when using **standard cooling (Y2) or heating operation (W1/W2)**. This speed is labeled as HI on the speed selection terminal strip inside the unit control panel. The HI speed tap provides **maximum unit airflow** per the airflow performance chart. Fan only and dehumidification fan operation is not effected by using Hi speed.

INDOOR AIR STREAM FILTRATION OPTIONS

UNIT MODEL	FILTER CODE	FILTER MERV RATING	NUMBER OF FILTERS USED	BARD PART NUMBER	FILTER SIZE INCHES (CM)	FILTER ESP	FILTRATION LEVEL
W12	X	MERV 2	1	7004-056	12x24x1 (30x61x3)	0" WC	Low Filtration, 1" Thickness Disposable Media.
	W	MERV 2	1	7003-073	12x24x1 (30x61x3)	0" WC	Low Filtration, 1" Thickness Cleanable Media.
	P	MERV 8	1	7004-057	12x24x2 (30x61x6)	.03" WC	Average Filtration, 2" Thickness Pleated Disposable Media.
	N	MERV 13	1	7004-072	12x24x2 (30x61x6)	.08" WC	High Filtration, 2" Thickness Pleated Disposable Media.
W18, W24	X	MERV 2	1	7004-011	16x25x1 (41x64x3)	0" WC	Low Filtration, 1" Thickness Disposable Media.
	W	MERV 2	1	7003-032	16x25x1 (41x64x3)	0" WC	Low Filtration, 1" Thickness Cleanable Media.
	P, C	MERV 8	1	7004-025	16x25x2 (41x64x6)	.03" WC	Average Filtration, 2" Thickness Pleated Disposable Media.
	M	MERV 11	1	7004-059	16x25x2 (41x64x6)	.05" WC	Above Average Filtration, 2" Thickness Pleated Disposable Media.
	A, B, N	MERV 13	1	7004-061	16x25x2 (41x64x6)	.08" WC	High Filtration, 2" Thickness Pleated Disposable Media.
W30, W36	X	MERV 2	1	7004-019	16x30x1 (41x77x3)	0" WC	Low Filtration, 1" Thickness Disposable Media.
	W	MERV 2	1	7003-031	16x30x1 (41x77x3)	0" WC	Low Filtration, 1" Thickness Cleanable Media.
	P	MERV 8	1	7004-026	16x30x2 (41x77x6)	.03" WC	Average Filtration, 2" Thickness Pleated Disposable Media.
	M	MERV 11	1	7004-048	16x30x2 (41x77x6)	.05" WC	Above Average Filtration, 2" Thickness Pleated Disposable Media.
	A, B, N	MERV 13	1	7004-062	16x30x2 (41x77x6)	.08" WC	High Filtration, 2" Thickness Pleated Disposable Media.
W42, W48, W60, W72	X	MERV 2	2	7004-012	20x20x1 (51x51x3)	0" WC	Low Filtration, 1" Thickness Disposable Media.
	W	MERV 2	2	7003-085	20x20x1 (51x51x3)	0" WC	Low Filtration, 1" Thickness Cleanable Media.
	P, C	MERV 8	2	7004-052	20x20x2 (51x51x6)	.03" WC	Average Filtration, 2" Thickness Pleated Disposable Media.
	M	MERV 11	2	7004-060	20x20x2 (51x51x6)	.05" WC	Above Average Filtration, 2" Thickness Pleated Disposable Media.
	A, B, N	MERV 13	2	7004-063	20x20x2 (51x51x6)	.08" WC	High Filtration, 2" Thickness Pleated Disposable Media.

CABINET COLOR AND FINISH OPTIONS

UNIT MODEL	CABINET COLOR AND FINISH CODE	COLOR AND FINISH	Description
All Units	X	Beige Painted Steel	This cabinet option uses zinc coated steel panels that are cleaned, rinsed, sealed and dried before a polyurethane primer is applied. The cabinet paint coating is comprised of a textured enamel. The resulting finish is designed to withstand over 1000 hours of salt spray tests per ASTM B117-03. . Unit top, structural sides, and front service panels are constructed using 20 gauge materials. The unit base is constructed using 16 gauge galvanized steel. Cabinet components are insulated with a non-fiberglass formaldehyde free insulation that has a high "R" value, is easy to clean with a FSK foil backing, and resists delamination.
	1	White Painted Steel	
	4	Buckeye Gray Painted Steel	
	5	Desert Brown Painted Steel	
	8	Dark Bronze Painted Steel	
W18, W24, W30, W36, W42, W48, W60, W72	S	Stainless Steel	Exterior Stainless Steel finish cabinets are often selected for corrosion and chemical resistance. The Bard stainless steel unit offers a high quality stainless steel 316 grade enclosure and fasteners for years of operation in these conditions. The exterior cabinet, sheet metal screws, washers, nuts, compressor mounting hardware and outdoor fan motor mount are stainless steel. The condenser fan is corrosion coated for additional protection.
W18, W24, W30, W36, W42, W48, W60, W72	A	Aluminum	Aluminum external cabinet finish option "A" units are constructed of ASTM B 209 grade .06" thickness panels with a stucco appearance.


X—Beige

1—White


4—Gray


5—Desert


8—Bronze


S—Stainless


A—Aluminum

ADDITIONAL CORROSION COATED EVAPORATOR COIL, CONDENSER COIL, AND CABINET OPTIONS

UNIT MODEL	COIL AND CABINET COATING OPTION	EVAPORATOR COIL	CONDENSER COIL	INTERIOR CONDENSER SECTION	EXTERIOR AND INTERIOR CABINET	DESCRIPTION
All Units	X	STANDARD	STANDARD	STANDARD	STANDARD	Standard green fin evaporator coil and copper aluminum condenser coil. Cabinet is not coated.
	1	**COATED**	STANDARD	STANDARD	STANDARD	Corrosion coated evaporator coil and copper aluminum condenser coil. Cabinet is not coated.
	2	STANDARD	**COATED**	STANDARD	STANDARD	Standard green fin evaporator coil and corrosion coated condenser coil. Cabinet is not coated.
	3	**COATED**	**COATED**	STANDARD	STANDARD	Evaporator coil and condenser coil are both corrosion coated. Cabinet is not coated.
W18, W24, W30, W36, W42, W48, W60, W72	4	**COATED**	**COATED**	**COATED**	STANDARD	Evaporator coil and condenser coil are both corrosion coated. Cabinet interior condenser section is coated.
W18, W24, W30, W36, W42, W48, W60, W72	5	**COATED**	**COATED**	**COATED**	**COATED**	Evaporator coil and condenser coil are both corrosion coated. Cabinet interior and exterior is coated.

/////// FACTORY CONTROLS OPTIONS CHART INCLUDING SWITCHES, SENSORS, RELAYS, AND START KITS

Factory installed controls are provided by Bard to enhance a Wall-Mount product before it is shipped. All Wall-Mount products are shipped with a auto-reset high pressure switch and an auto-reset low pressure switch to help protect refrigeration components. A compressor control module with adjustable voltage protection, delay on make and break, and high/low pressure diagnostics is also standard

CONTROL CODE	MODELS	DESCRIPTION OF FACTORY INSTALLED COMPONENTS
X	ALL MODELS	Standard Hi Pressure Switch, Low Pressure Switch, Compressor Control Module, and Refrigerant Detection System (RDS). These controls are standard for all models.
E	ALL MODELS	Standard controls **and Low Ambient Control.**
F	W18AF-W72AF W42AFD-W72AFD	Standard controls, **Low Ambient Control, Alarm Relay, and Dirty Filter Pressure Switch.**
J	ALL MODELS	Standard controls, **Low Ambient Control, and Alarm Relay.**
M	W18AF-W72AF W42AFD-W72AFD	Standard controls, **Low Ambient Control, Alarm Relay, and PTCR Start Kit. 208V/230V single phase units only.**
V	W18AF-W72AF W42AFD-W72AFD	Standard controls, **Low Ambient Control, Alarm Relay, Discharge temperature sensor, Indoor Blower Airflow Press. Switch, Compressor Current Sensor, Dirty Filter Pressure Switch.**

/////// FIELD KIT CONTROLS OPTIONS CHART INCLUDING SWITCHES, SENSORS, RELAYS, AND START KITS

Field installed kits provide accessories that can be installed in the field. Required components, wires, enclosures, screws, and instructions that are needed are provided within the kit.

KIT PART NO.	UNITS USING KIT	DESCRIPTION OF FIELD INSTALLED KIT
CMA-37 = 230V	W18A, W18L, W24A, W24L	Low Ambient Control allows compressor cooling between 0°F and 50°F outdoor temp. - modulating.
CMA-38 = 460V	W18A, W18L, W24A, W24L	Low Ambient Control allows compressor cooling between 0°F and 50°F outdoor temp. - modulating.
CMA-39	W12A, W42A, W48A, W60A, W72A	Low Ambient Control allows compressor cooling between 0°F and 50°F outdoor temp. - fan cycling.
CMA-41	W30A, W30L,W36A, W36L	Low Ambient Control allows compressor cooling between 0°F and 50°F outdoor temp. - fan cycling.
CMC-15	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	PTCR Start Kit. Increases starting torque by 2 to 3x. 230V-60hz-1 phase (A voltage) only. Cannot be used in combination with SK start kit.
CMC-32	W42A, W48A, W60A, W72A	PTCR Start Kit. Increases starting torque by 2 to 3x. 230V-60hz-1 phase (A voltage) only. Cannot be used in combination with SK start kit.
SK111	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L, W42A, W48A, W60A	Start Capacitor and Potential Relay Start Kit. Increases starting torque by 9x. 230V-60hz-1 phase (A voltage) only. Cannot be used in combination with CMC start kit.
SK121	W72A	Start Capacitor and Potential Relay Start Kit. Increases starting torque by 9x. 230V-60hz-1 phase (A voltage) only. Cannot be used in combination with CMC start kit.
CMA-14	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Outdoor Thermostat Kit used to disable compressor cooling below 50°F outdoor temp. Adjustable between 50° and 0°F.
CMA-43	W42A, W48A, W60A, W72A	Outdoor Thermostat Kit used to disable compressor cooling below 50°F outdoor temp. Adjustable between 50° and 0°F.
CMC-34	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Compressor Control Module Lockout Alarm Relay Kit.
CMC-35	W42A, W48A, W60A, W72A	Compressor Control Module Lockout Alarm Relay Kit.
CMC-36	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Crank case heater kit. 230V 1-PH units only.
CMC-40	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Crank case heater kit. 230V 3-PH units only.
CMC-37	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Crank case heater kit. 460V 3-PH units only.
CMC-38	W42A, W48A, W60A, W72A	Crank case heater kit. 230V 1-PH units only.
CMC-41	W42A, W48A, W60A, W72A	Crank case heater kit. 230V 3-PH units only.
CMC-39	W42A, W48A, W60A, W72A	Crank case heater kit. 460V 3-PH units only.

/////// FIELD INSTALLED AIR QUALITY KITS

Field installed kits provide accessories that can be installed in the field. Required components, wires, enclosures, screws, and instructions that are needed are provided within the kit.

CONTROL CODE	KIT PART NO.	UNITS USING KIT	DESCRIPTION OF FIELD INSTALLED KIT
NA	CMC-31	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Dirty Filter Alarm Pressure Sensor Kit. Provides Normally Open Contacts to send an alarm signal to a thermostat or controller.
NA	CMC-33	W42A, W48A, W60A, W72A	Dirty Filter Alarm Pressure Sensor Kit. Provides Normally Open Contacts to send an alarm signal to a thermostat or controller.
NA	8620-343	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L, W42A, W48A, W60A, W72A	LED UV-C Long Life Light Kit. 460V units only. Installed in evaporator coil entering air stream along with door safety switch. Indicator light provided to monitor LED use.
NA	8620-344	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L, W42A, W48A, W60A, W72A	LED UV-C Long Life Light Kit. 230V units only. Installed in evaporator coil entering air stream along with door safety switch. Indicator light provided to monitor LED use.
NA	8620-370	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L, W42A, W48A, W60A, W72A	NBPI (AIR4) kit installed in evaporator area. The kit includes wires and mounting hardware needed to install the NBPI device on or near the indoor fan.

/////// ADVANCED SENSOR OPTIONS AND KITS

Field installed kits provide accessories that can be installed in the field. Required components, wires, enclosures, screws, and instructions that are needed are provided within the kit.

CONTROL CODE	KIT PART NO.	UNITS USING KIT	DESCRIPTION OF FIELD INSTALLED KIT
V	CMA-40	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Kit Includes Discharge temperature sensor, Indoor Blower Airflow Press. Switch, Compressor Current Sensor, Dirty Filter Alarm Pressure Sensor.
V	CMA-44	W42A, W48A, W60A, W72A	Kit Includes Discharge temperature sensor, Indoor Blower Airflow Press. Switch, Compressor Current Sensor, Dirty Filter Alarm Pressure Sensor.
NA	8620-340	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Return Air Sensor Kit for use with all economizers with the JADE controller.
NA	8620-334	W42A, W48A, W60A, W72A	Return Air Sensor Kit for use with all economizers with the JADE controller.

* CMA-40 and CMA-44 kit does not include low ambient control (sold separately).

/////// SOUND REDUCTION ACCESSORIES

Field installed kits provide accessories that can be installed in the field. Required components, wires, enclosures, screws, and instructions that are needed are provided within the kit.

CONTROL CODE	KIT PART NO.	UNITS USING KIT	DESCRIPTION OF FIELD INSTALLED KIT
NA	8620-331	W60A, W72A	Kit Includes Outdoor Fan Speed Control Board and outdoor fan motor components and wire harnesses along with outdoor temperature sensor. Compressor sound cover is included. Fan modulates based on outdoor temperature.
NA	8002-012	W18A, W18L, W24A, W24L, W30A, W30L, W36A, W36L	Compressor sound cover. Weatherized vinyl insulated cover that helps reduce compressor sound level.
NA	8002-013	W42A, W48A, W60A, W72A	Compressor sound cover. Weatherized vinyl insulated cover that helps reduce compressor sound level.

/////// OPTIONAL SHIPPING CRATES

Optional crates are available to help protect your valuable Wall-Mount investment during shipping. Constructed from OSB sheathing with steel corner posts, and sized for standard truck transportation. Treated for pests in accordance with the International Plant Protection Convention, Publication 15, Annex 1. Packaging is acceptable for international shipments.

CRATE PART NO.	UNIT MODELS	DESCRIPTION
8620-263	W18A, W18L, W24A, W24L	Standard unit crate, all vents except D, Y and Z economizers.
8620-275	W18A, W18L, W24A, W24L	Crate for units with D, Y and Z economizer vents (Factory Installed 7" Hood).
8620-262	W30A, W30L, W36A, W36L	Standard unit crate, all vents except D, Y and Z economizers.
8620-276	W30A, W30L, W36A, W36L	Crate for units with D, Y and Z economizer vents (Factory Installed 7" Hood).
8620-304	W42A, W48A	Standard Unit Crate, all ventilation options.
8620-305	W60A, W72A	Standard Unit Crate, all ventilation options.

/////// WALL CURB ACCESSORIES

Optional wall curb accessories are available to help reduce vibration through the outer wall surface or to use existing wall openings when replacing equipment. Follow all static pressure airflow requirements, safety and installation guidelines in the instructions provided with the curb and Wall-Mount products.

CURB	UNIT MODEL	FUNCTION	DESCRIPTION
WWC2-*	W18A, W18L, W24A, W24L	Upgrade	Use with existing 1, 2 or 3 ton wall openings. Wall openings must provide sufficient airflow. Review all instructions in manual #7960-931.
WWC3-*	W30A, W30L, W36A, W36L	Upgrade	Use with existing 2, 3, or 5 ton wall openings. Wall openings must provide sufficient airflow. Review all instructions in manual #7960-568.
WWC5-*	W42A, W48A, W60A, W72A	Upgrade	Use with existing 3 and 5 ton wall openings. Wall openings must provide sufficient airflow. Review all instructions in manual #7960-465.
CCURBF2430-*	W30A, W30L, W36A, W36L	Indoor Sound Reduction	Provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows return opening of unit and wall opening to be offset. Top outlet supply for use with overhanging roof lines. Review installation manual #7960-689.
CCURBT2430-*	W30A, W30L, W36A, W36L	Indoor Sound Reduction	Provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows return opening of unit and wall opening to be offset. Top outlet supply for use with overhanging roof lines. Review installation manual #7960-689.
CCURBF4860-*	W42A, W48A, W60A, W72A	Indoor Sound Reduction	Provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows return opening of unit and wall opening to be offset. Review installation manual #7960-689.
CCURBT4860-*	W42A, W48A, W60A, W72A	Indoor Sound Reduction	Provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows return opening of unit and wall opening to be offset. Top outlet supply for use with overhanging roof lines. Review installation manual #7960-689.
CFCF-53-*	W42A, W48A, W60A, W72A	Upgrade and S. Reduction	Upgrades from W30/W36 wall openings and provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows offset return opening. Review manual #7960-930.
CFCT-53-*	W42A, W48A, W60A, W72A	Upgrade and Indoor Sound Reduction	Upgrades from W30/W36 wall openings and provides sound reduction using isolators between an inner and outer curb assembly. Movable back panel allows offset return opening. Top outlet supply for use with overhanging roof lines. Review installation manual #7960-930.
WAPR11A-*	All Units	Indoor Sound Reduction	Sound plenum that attaches to indoor wall for return air sound reduction. Air enters bottom of indoor sound plenum then into return area of unit. Review installation manual #7960-950.
WAPFB31-*	W30A, W30L, W36A, W36L	Indoor Sound Reduction	Sound plenum that attaches to indoor wall for supply air sound reduction. Supply air travels through plenum that includes perforated baffles before exiting supply grille. Review installation manual #7960-552.
WAPFB51-*	W42A, W48A, W60A, W72A	Indoor Sound Reduction	Sound plenum that attaches to indoor wall for supply air sound reduction. Supply air travels through plenum that includes perforated baffles before exiting supply grille. Review installation manual #7960-552.

* Color Option: Beige (-X), White (-1), Gray (-4), Mesa Tan (-5), Dark Bronze (-8). Some colors may not be available for certain accessories.

NON-DUCTED SUPPLY AND RETURN GRILLES

GRILLE NO.	UNITS USING GRILLE	DESCRIPTION OF LOUVER GRILLE
SG-1	W12A	5” x 17” with 1” Flange 4 way deflection supply grille.
SG-2	W18A, W18L, W24A, W24L	8” x 20” with 1” Flange 4 way deflection supply grille.
SG-3	W30A, W30L, W36A, W36L	8” x 28” with 1” Flange 4 way deflection supply grille.
SG-5	W42A, W48A, W60A, W72A	10” x 30” with 1” Flange 4 way deflection supply grille.
RG-1	W12A	10” x 17” with 1” Flange return grille.
RG-2	W18A, W18L, W24A, W24L	12” x 20” with 1” Flange return grille.
RG-3	W30A, W30L, W36A, W36L	12” x 28” with 1” Flange return grille.
RG-5	W42A, W48A, W60A, W72A	16” x 30” with 1” Flange return grille.
SG-1W	W12A	5” x 17” with 2” Flange return grille.
SG-2W	W18A, W18L, W24A, W24L	8" x 20" with 2" Flange 4 way deflection supply grille.
SG-3W	W30A, W30L, W36A, W36L	8" x 28" with 2" Flange 4 way deflection supply grille.
SG-5W	W42A, W48A, W60A, W72A	10" x 30" with 2" Flange 4 way deflection supply grille.
RG-1W	W12A	10” x 17” with 2” Flange return grille.
RG-2W	W18A, W18L, W24A, W24L	12" x 20" with 2" Flange return grille.
RG-3W	W30A, W30L, W36A, W36L	12" x 28" with 2" Flange return grille.
RG-5W	W42A, W48A, W60A, W72A	16" x 30" with 2" Flange return grille.
RFG-1W	W12A	10” x 17” with 2” Flange return grille with filter bracket.*
RFG-2W	W18A, W18L, W24A, W24L	12” x 20” with 2” Flange return grille with filter bracket.*
RFG-3W	W30A, W30L, W36A, W36L	12” x 28” with 2” Flange return grille with filter bracket.*
RFG-5W	W42A, W48A, W60A, W72A	16” x 30” with 2” Flange return grille with filter bracket.*
RGDK-2W	W18A, W24A, W24L	12” x 20” with 2” manual shutter style damper. return grille sold separately.
RGDK-3W	W30A, W30L, W36A, W36L	12” x 28” with 2” manual shutter style damper. return grille sold separately.
RGDK-5W	W42A, W48A, W60A, W72A	16" x 30" with 2” manual shutter style damper. return grille sold separately.

* Not recommended to provide primary filtration with units that will bring in outdoor air.

NON-DUCTED SUPPLY GRILLES - SPREAD AND THROW CHARACTERISTICS

One of the most important setup procedures for non-ducted supply applications is to adjust the 4 way supply grille blade positions. Placement of equipment, occupants, the thermostat, and room size can all play an important role in deciding how the conditioned supply air must be directed in an indoor area. The chart below may be used as a reference tool to help with this process.

SUPPLY GRILLE	AIRFLOW CFM	DEFLECTION	VELOCITY	TOTAL PRESSURE	THROW
SG-2 SG-2W	800 CFM	0°	1053	.076" WC	37-52 ft.
		22.5°	1143	.1" WC	28-40 ft.
		45°	1428	.162" WC	20-29 ft.
	865 CFM	0°	1138	.054" WC	40-55 ft.
		22.5°	1236	.075" WC	31-42 ft.
		45°	1544	.113" WC	21-30 ft.
SG-3 SG-3W	885 CFM	0°	852	.054" WC	37-54 ft.
		22.5°	1075	.075" WC	35-49 ft.
		45°	1162	.113" WC	21-30 ft.
	1285 CFM	0°	1237	.108" WC	42-66 ft.
		22.5°	1359	.147" WC	35-50 ft.
		45°	1687	.249" WC	25-37 ft.
SG-5 SG-5W	1450 CFM	0°	968	.073" WC	51-73 ft.
		22.5°	1071	.103" WC	39-56 ft.
		45°	1331	.169" WC	28-40 ft.
	2000 CFM	0°	1336	.130" WC	61-86 ft.
		22.5°	1477	.188" WC	54-65 ft.
		45°	1835	.335" WC	33-46 ft.

CONTROLLER, THERMOSTAT, HUMIDISTAT AND CO2 VENTILATION CONTROL OPTIONS

Bard provides a wide variety of controllers for equipment cooling, thermostats, for equipment and comfort cooling, humidistats for dehumidification units, and CO2 sensors for ventilation control. Lockable thermostat covers are available for applications where security or supervisory control is desired.

CONTROLLER	OPERATION	DESCRIPTION
MC4002	1 to 2 Unit Lead/Lag Controller	Standard unit Lead/Lag Controller with remote alarming capability. Optional alarm board and SNMP or web page communication board. On board temperature sensor can be remote mounted. Can use up to (2) remote temperature sensors part #8612-023B (35' cable). -A includes alarm board. -B includes enhanced alarm board. -BC includes enh. alarm board and SNMP comm board.
MC5300	1 to 3 Unit Lead/Lag Controller	Advanced multi-unit Lead/Lag Controller with remote alarming capability. All models have Modbus communication and web pages. Optional alarm board with NO/NC contacts. Standard on-board temperature and humidity sensor or optional remote temp/humidity sensor part #8408-061 (35' cable). Can use up to (2) remote temperature sensors part #8301-095A (35' cable).
MC5600	1 to 6 Unit Lead/Lag Controller	Advanced multi-unit Lead/Lag Controller with remote alarming capability. All models have Modbus communication and web pages. Optional alarm board with NO/NC contacts. Standard on-board temp/humidity sensor or optional remote temp/humidity sensor part #8408-061 (35' cable). Can use up to (2) remote temperature sensors part #8301-095A (35' cable).

THERMOSTAT	OPERATION	DESCRIPTION
8403-060	3 Heat/3 Cool	Programmable or Nonprogrammable, ventilation output, dehumidification operation
8403-081	3 Heat/2 Cool	BrightStat with motion, BACnet/Modbus, vent output, dehum control, LUA, optional CO2 or Wi-Fi card.
8403-083	3 Heat/2 Cool	BrightStat with BACnet/Modbus, vent output, dehum control, LUA, optional CO2 or Wi-Fi card.
8403-098	3 Heat/2 Cool	BrightStat with motion, ZigBee, BACnet/Modbus, vent output, dehum control, LUA, optional CO2 or Wi-Fi card.
8403-089	1 Heat/1 Cool	Temp. Settings per Day 4, 2, 1, 0 Programs per Week 7, 5-2, 5-1-1 or Nonprogrammable.
8403-090	2 Heat/2 Cool	Temp. Settings per Day 4, 2, 1, 0 Programs per Week 7, 5-2, 5-1-1 or Nonprogrammable.
8403-092	2 Heat/2 Cool	Programmable or Nonprogrammable, Wi-Fi with Lyric Phone application for wireless set point control.
8403-095	2 Heat/1 Cool	Temp. Settings per Day 4, 2, 1, 0 Programs per Week 7, 5-2, 5-1-1 or Nonprogrammable.

BRIGHTSTAT ACCESSORY	OPERATION	DESCRIPTION
8612-052	Expansion Card*	ZigBee Pro plug-in card, required for wireless sensors unless using 8403-098. See document S3583 for sensors.
8612-074	Expansion Card*	CO2 plug-in card for modulating ventilation when using Economizer or CRV-V vent option. ERV requires LUA script.
8612-079	Expansion Card*	Wi-Fi plug-in card for wireless Building Management System (BMS). BMS software required for communication.
8612-058	Wired Sensor	Wired wall-mounted temperature sensor. 10k. 5000ft max. wire length. Up to 3 sensors for averaging.
8612-059	Wired Sensor	Wired wall-mounted temp and occ sensor. 5000ft max. wire length. Up to 3 sensors for averaging.

* BrightStat controllers include a single expansion slot for an expansion card. More than one expansion card cannot be used with a single controller.

HUMIDISTAT	OPERATION	DESCRIPTION
8403-047	Humidity %RH	Electronic with display, lockable keypad, humidity sensor calibration (Viconics)
8403-100	Humidity %RH	Electronic with display, lockable keypad, humidity sensor calibration (Honeywell)

CO2 CONTROL	OPERATION	DESCRIPTION
S8403-096	CO2 PPM	CO2 ventilation control with digital display. On/Off or modulating (Econ or CRV-V) ventilation operation.

THERMOSTAT COVER**	SIZE	DESCRIPTION
8405-003	(Inside) 5-1/16" H x 6-1/16" W (Outside) 6-1/2" H x 7-1/2" W x 2-15/16" D	Clear acrylic with ventilation. Fits all thermostats except 8403-060
8405-005	(Inside) 5-7/8" H x 8-3/8" W (Outside) 7-1/4" H x 9-3/4" W x 3-3/8" D	Clear acrylic with ventilation. Fits all thermostats.
8405-007	(Inside) 5-7/8" H x 8-3/8" W (Outside) 7-1/8" H x 9-5/8" W x 3-1/4" D	Beige painted steel cover with ventilation. Fits all thermostats.

** Thermostat covers include ventilation, but may effect temperature control reaction time. If security control lockout is needed, the 8403-060 and BrightStat thermostat provide programming control lockout features.

Bard Manufacturing Company, Inc.
1914 Randolph Dr., Bryan, OH 43506
419-636-1194
www.bardhvac.com