

THE WALL-MOUNT™ AIR CONDITIONERS (50HZ)

Models W24A2 to W70A2 Right Side Control Panel Models W24L2 to W70L2 Left Side Control Panel 21,600 Btuh (6.33 KW) – 62,000 Btuh (18.16 KW)

FOR EXPORT
ONLY

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

Engineered Features

Aluminum Finned Copper Coils:

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

Twin Blowers:

Move air quietly. Most models feature multispeed blower motors providing airflow adjustment for high and low static operation. Motor overload protection is standard on all models.

Air Conditioner Compressor:

Scroll Compressors eliminate need for crankcase heater. Standard on all models, except 5-Ton.

R-410A Refrigerant:

Designed with R-410A (HFC) non-ozone depleting refrigerant in compliance with the Montreal protocol and 2010 EPA requirements.

Phase Rotation Monitor:

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

Galvanized 20 Gauge Zinc Coated Steel Cabinet:

Cleaned, rinsed, sealed and dried before the polyurethane primer is applied. The cabinet is handsomely finished with a baked on textured enamel, which allows it to withstand 1000 hours of salt spray tests per ASTM B117-03.

Foil Faced Insulation:

Standard on all units.

Full Length Mounting Brackets:

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

Electrical Components:

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

Electric Heat Strips:

Features an automatic limit and thermal cut-off safety control.

Filter Service Door:

Separate service door provides easy access for filter change.

One Inch, Disposable Air Filters:

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

Condenser Fan and Motor Shroud Assembly:

Slides out for easy access.

Barometric Fresh Air Damper:

Standard on all units. Allows up to 25% outside fresh air. Optional ventilation packages available.

Built-in Circuit Breakers:

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

Slope Top:

Standard feature for water run-off.

Top Rain Flashing:

Standard feature on all models.

Liquid Line Filter Drier:

Standard on all units. Protects system against moisture.



Compressor Control Module:

Standard on all units. Built-in off-delay timer adjustable from 30 seconds to 5 minutes. 2-minute on-delay if power interrupt. 120-second bypass for low pressure control, and both soft and manual lockouts for high and low pressure controls. Alarm output for alarm relay.

High & Low Pressure Switches are Auto-Reset:

Standard on all units. Built-in lockout circuit resets from the room thermostat. Provides commercial quality protection to the compressor.

Bard is an ISO 9001:2008 Certified Manufacturer

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Capacity and Efficiency Ratings												
Models	W24A2 W24L2	W30A2	W36A2 W36L2	W42A2 W42L2	W48A2 W48L2	W60A2 W60L2	W70A2 W70L2					
Cooling Capacity BTUH	21,600	26,800	32,000	36,8000	45,000	50,000	62,000					
Cooling Capacity KW	6.33	7.85	9.38	10.78	13.18	14.65	18.16					
EER	9.0	9.0	9.0	9.5	9.0	9.0	9.0					

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

Specifications 21	Specifications 21,200 Btuh (6.21 KW) — 31,200 Btuh (9.14 KW)												
MODELS	W24A2-D	W24A2-F W24L2-F	W30A2-D	W30A2-F	W36A2-D	W36A2-E	W36A2-F W36L2-F						
Electrical Rating – 50 Hz	240/220 - 1	415/380 - 3 ①	240/220 - 1	415/380 - 3 ①	240/220 - 1	220/200 - 3	415/380 - 3 ①						
Operating Voltage Range	198-254	342-456	198-254	342-456	198-254	180-242	342-456						
CompressorCircuit A													
Voltage Rated Load Amps	240/220 8.2/9.5	415/380 3.8/4.5	240/220 10.6/12.0	415/380 4.6/5.2	240/220 13.7/15.4	220/200 11.3/12.7	415/380 5.1/5.8						
Branch Circuit Selection Current	10.9	5.1	12.2	5.3	16.0	13.2	6.0						
Lock Rotor Amps Compressor Type	60/60 Scroll	28/28 Scroll	67/67 Scroll	38/38 Scroll	87/87 Scroll	95/95 Scroll	46/46 Scroll						
Fan Motor & Condenser													
Fan MotorHPRPM Fan MotorAmps FanDIA m³/s	1/5 - 1090 1.2 458/0.66	1/5 - 1090 1.2 458/0.66	1/5 - 1075 1.5 508/0.86	1/5 - 1075 1.5 508/0.86	1/5 - 1075 1.5 508/0.78	1/5 - 1075 1.5 508/0.83	1/5 - 1075 1.5 508/0.78						
Blower Motor & Evap.													
Blower MotorHP-RPM-SPD Blower MotorAmps	1/6-1100-1 0.8	1/6-1100-1 0.8	1/3-1100-2 2.1	1/3-1100-2 2.1	1/3-1100-2 2.1	1/3-1100-2 2.1	1/3-1100-2 2.1						
m ³ /s Cooling & E.S.P. (pa) w/Filter (Rated-Wet Coil)	0.32/75	0.32/75	0.39/75	0.39/75	0.43/50	0.43/50	0.43/50						
Filter Sizes (mm) STD.	405x635x25	405x635x25	405x765x25	405x765x25	405x765x25	405x765x25	405x765x25						
Shipping WeightLBS. (Kg)	335 (152)	335 (152)	375 (170)	375 (170)	375 (170)	375 (170)	375 (170)						

Specifications 36	Specifications 36,000 Btuh (10.54 KW) — 59,000 Btuh (17.28 KW)												
MODELS	W42A2-E	W42A2-F W42L2-F	W48A2-E	W48A2-F W48L2-F	W60A2-E	W60A2-F W60L2-F	W70A2-F W70L2-F						
Electrical Rating – 50 Hz	220/200 - 3	415/380 - 3 ①	220/200 - 3	415/380 - 3 ①	220/200 - 3	415/380 - 3 ①	415/380 - 3 ①						
Operating Voltage Range	180-242	342-456	180-242	342-456	180-242	342-456	342-440						
CompressorCircuit A													
Voltage Rated Load Amps	220/200 10.1/11.3	415/380 4.8/5.4	220/200 12.6/14.2	415/380 5.7/6.4	220/200 13/14.8	415/380 6.5/7.4	415/380 8.3/9.1						
Branch Circuit Selection Current	12.6	16.0	15.0	6.8	15.6	7.8	10.6						
Lock Rotor Amps Compressor Type	80.7/80.7 Scroll	43/43 Scroll	110/110 Scroll	51.5/51.5 Scroll	110/110 Scroll	51.5/51.5 Scroll	74/74 Scroll						
Fan Motor & Condenser													
Fan MotorHPRPM Fan MotorAmps FanDIA m³/s	1/3 - 825 2.5 610/1.05	1/3 - 825 2.5 610/1.05	1/3 - 825 2.5 610/1.05	1/3 - 825 2.5 610/1.05	1/3 - 825 2.5 610/0.98	1/3 - 825 2.5 610/0.98	1/3 - 950 4.0 610/1.37						
Blower Motor & Evap.													
Blower MotorHP-RPM-SPD Blower MotorAmps	1/3-985-2 2.3	1/3-985-2 2.3	1/3-985-2 2.3	1/3-985-2 2.3	1/2-1070-2 3.5	1/2-1070-2 3.5	1/2-1070-2 3.5						
m ³ /s Cooling & E.S.P. (pa) w/Filter (Rated-Wet Coil)	0.55/112	0.55/112	0.60/75	0.60/75	0.66/100	0.66/100	0.66/50						
Filter Sizes (mm) STD.	508x765x25	508x765x25	508x765x25	508x765x25	508x765x25	508x765x25	508x765x25						
Shipping WeightLBS. (Kg)	525 (238)	525 (238)	525 (238)	525 (238)	525 (238)	525 (238)	525 (238)						

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

Unit Charge Rates - R410A

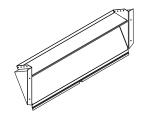
UNIT	Std. Unit - Lbs.
W24A2/L2 - 9 EER Right & Left A/C	2.875
W30A2/L2 - 9 EER Right & Left A/C	4.125
W36A2/L2 - 9 EER Right & Left A/C	4.3125
W42A2/L2 - 9 EER Right & Left A/C	5.5625

UNIT	Std. Unit - Lbs.
W48A2/L2 - 9 EER Right & Left A/C	5.0625
W60A2/L2 - 9 EER Right & Left A/C	6.125
W70A2/L2 - 9 EER Right & Left A/C	6.750

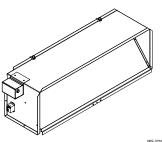
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Ventilation System Packages

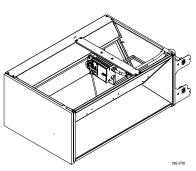
Bard Wall-Mounts are designed to provide optional ventilation packages to meet all of your ventilation and indoor air quality requirements. All units are equipped with a barometric fresh air damper as the standard ventilation package. All ventilation packages can be built-in at the factory or field-installed at a later date.



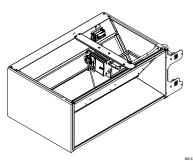
Barometric Fresh Air Damper



Motorized Fresh Air Damper



Commercial Room Ventilator



Economizer

BAROMETRIC FRESH AIR DAMPER - BFAD

STANDARD

The barometric fresh air damper is a standard feature on all models. It is installed on the inside of the service door and allows outside ventilation air, up to 25% of the total airflow rating of the unit, to be introduced through the air inlet openings and to be mixed with the conditioned air. The damper opens during blower operation and closes when the blower is off. Adjustable blade stops allow different amounts of outside air to be introduced into the building and can be easily locked closed if required.

BLANK OFF PLATE - BOP

OPTIONAL

A blank off plate is installed on the inside of the service door. It covers the air inlet openings, which restricts any outside air from entering the unit. The blank off plate should be utilized in applications where outside air is not required to be mixed with the conditioned air.

MOTORIZED FRESH AIR DAMPER - MFAD

OPTIONAL

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

NOTE: The above vent systems are intake only without built-in exhaust capability. Building will likely require separate field installed barometric relief or mechanical exhaust elsewhere within the conditioned space. Balancing dampers in the return air grille may be required to achieve specified amount of outdoor air intake.

COMMERCIAL ROOM VENTILATOR - CRV

OPTIONAL

The built-in commercial room ventilator is internally mounted behind the service door and allows outside ventilation air, up to 100% of the total airflow rating of the unit, to be introduced through the air inlet openings. It includes a built-in exhaust air damper.

The commercial room ventilator (CRV) is a simple and innovative approach to improving the indoor air quality by providing fresh air intake and exhaust capability through the CRV. The damper can be easily adjusted to control the amount of fresh air supplied into the building. The CRV can be controlled by indoor blower operation or field controlled based on room occupancy. The CRV is power open - spring return on power loss. Complies with ANSI/ASHRAE Standard 62.1 "Ventilation for Acceptable Indoor Air Quality".

Standard Features:

- Fully modulating
- Honeywell Hi-Torque Actuator
- No hood required
- Simple single blade design
- Positive shut-off with non-stick gaskets
- Solid State Controller with occupancy CFM setting

ECONOMIZER - WECO Series

OPTIONAL

The built-in economizer system is internally mounted behind the service door and allows outdoor air to be introduced through the air inlet openings. The amount of outdoor air varies in response to the system controls and settings defined by the end user. It includes a built-in exhaust air damper. The economizer is designed to provide "free cooling" when outside air conditions are cool and dry enough to satisfy cooling requirements without running the compressor. This in turn provides lower operating costs, while extending the life of the compressor.

Standard Features:

- Full rated outdoor intake
- Fully modulating
- Honeywell Hi-Torque Actuator
- 11" Intake hood with filter
- Simple single blade design
- Positive shut-off with non-stick gaskets
- Electronic DB and/or Enthalpy sensors depending upon version
 Honeywell JADE electronic economizer module with precision settings and diagnostics
- DB or Enthalpy economizer versions available

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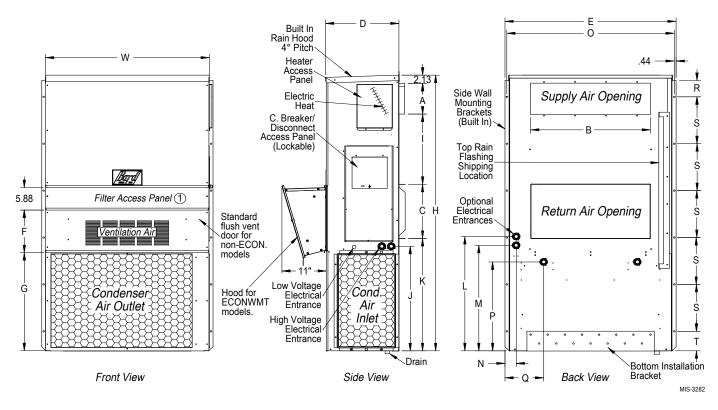
Clearances - Inches (mm) Required for Service Access and Adequate Condenser Inlet Airflow MODELS W24A2, W30A2, W36A2 W42A2, W48A2, W60A2, W70A2 LEFT SIDE RIGHT SIDE RIGHT SIDE W24A2, W30A2, W36A2 20" (510) W42A2, W48A2, W60A2, W70A2 20" (510)

Minimum Clearance Required to Combus		
MODELS ①	SUPPLY AIR DUCT FIRST THREE FEET (1m)	CABINET
W24A2	0"	0"
W30A2, W36A2	1/4" (6.35)	0"
W42A2, W48A2, W60A2, W70A2	1/4" (6.35)	0"

① Refer to the Installation Manual for more detailed information.

Dimen	Dimensions of Basic Unit for Architectural & Installation Requirements - Inches (mm)																					
MODEL	WIDTH	DEPTH	HEIGHT	SUF	PLY	RET	URN															
WIODEL	(W)	(D)	(H)	Α	В	С	В	E	F	G	- 1	J	K	L	М	Ν	0	Р	Q	R	S	Т
W24A2	33.300 (845)	17.125 (435)	70.563 (1792)	7.88 (200)				35.00 (889)							27.00 (686)	2.63 (67)	34.13 (867)	22.06 (560)	10.55 (268)	4.19 (106)	12.00 (305)	5.00 (127)
W30A2 W36A2	38.200 (970)	17.125 (435)	70.563 (1792)					40.00 (1016)								2.75 (10)	39.19 (996)	22.75 (578)	9.14 (232)	4.19 (106)	12.00 (305)	5.00 (127)
W42A2 W48A2	42.075 (1069)	22.432 (570)	84.875 (2156)					43.88 (1115)							32.43 (824)		42.88 (1089)		10.00 (254)	2.00 (51)	16.00 (406)	1.88 (48)
W60A2 W70A2	42.075 (1069)	22.432 (570)	84.875 (2156)					43.88 (1115)							32.43 (824)		42.88 (1089)		10.00 (254)	2.00 (51)	16.00 (406)	1.88 (48)

W24A2 - 70A2 Models



① Not used when WECO Economizers installed. Filter access is through the WECO hood.

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Required for Service Adequate Condenser I	ccess and	
MODELS	LEFT SIDE	RIGHT SIDE
W24L2, W30L2, W36L2	15" (380)	20" (510)

20" (510)

20" (510)

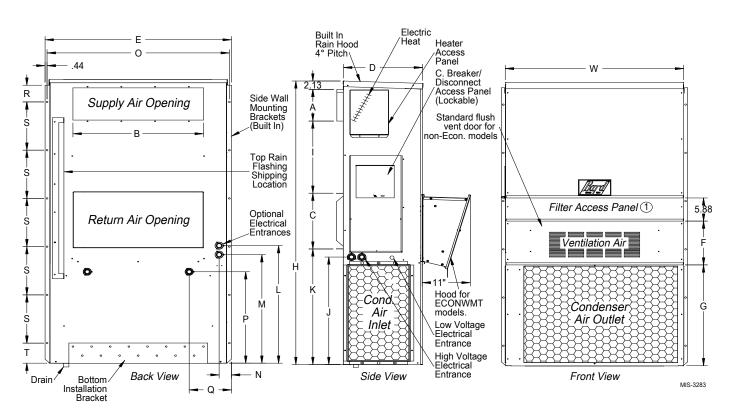
Minimum Clearance Required to Combus		
MODELS ①	SUPPLY AIR DUCT FIRST THREE FEET (1m)	CABINET
W24L2	0"	0"
W30L2, W36L2	1/4" (6.35)	0"
W42L2, W48L2, W60L2, W70L2	1/4" (6.35)	0"

① Refer to the Installation Manual for more detailed information.

Dimen	Dimensions of Basic Unit for Architectural & Installation Requirements - Inches (mm)																					
MODEL	WIDTH (W)	DEPTH		SUF		RET			_									_		_		
	(۷۷)	(D)	(H)	A	В	С	В	L E	-	G		J	K	L	M	Ν	0	P	Q	R	S	
W24L2	33.300 (845)	17.125 (435)	70.563 (1792)	7.88 (200)										29.25 (743)		2.63 (67)	34.13 (867)	22.06 (560)			12.00 (305)	5.00 (127)
W30L2 W36L2	38.200 (970)	17.125 (435)	70.563 (1792)											29.25 (743)			39.19 (996)			4.19 (106)	12.00 (305)	
W42L2 W48L2	42.075 (1069)	22.432 (570)	84.875 (2156)					43.88 (1115)						34.69 (881)	32.43 (824)		42.88 (1089)			2.00 (51)	16.00 (406)	
W60L2 W70L2	42.075 (1069)	22.432 (570)	84.875 (2156)											34.69 (881)			42.88 (1089)			2.00 (51)	16.00 (406)	

W24L2 - 70L2 Models

W42L2, W48L2, W60L2, W70L2



① Not used when WECO Economizers installed. Filter access is through the WECO hood.

Electrical :	Specification	ns			
MODEL	Rated Volts & Phase	Operating Voltage Range	No. Field Power Circuits	② Minimum Circuit Amps	① Maximum External Fuse or Circuit Breaker
W24A2-D0Z D05 D08	240/220-1	198-254	1 1 1	16 28 44	20 30 45
W24A2/L2-F0Z F05	415/380-3 ③	342-456	1 1	9 11	15 15
W30A2-D0Z D05 D10	240/220-1	198-254	1 1 1	19 29 55	35 35 60
W30A2-F0Z F07 F12	415/380-3 ③	342-456	1 1 1	11 17 20	15 20 30
W36A2-DOZ D05 D10	240/220-1	198-254	1 1 1	23 29 55	35 35 60
W36A2-E0Z E06 E12	220/200-3	180-242	1 1 1	21 21 39	30 30 40
W36A2/L2-F0Z F07 F12	415/380-3 ③	342-456	1 1 1	11 16 26	15 20 30
W42A2-E0Z E09 E15	220/200-3	180-242	1 1 1	21 30 49	30 35 60
W42A2/L2-F0Z F07 F14	415/380-3 ③	342-456	1 1 1	13 17 30	20 20 35
W48A2-E0Z E09 E15	220/200-3	180-242	1 1 1	24 30 49	35 35 50
W48A2/L2-F0Z F07 F14	415/380-3 ③	342-456	1 1 1	14 17 31	20 20 35
W60A2-E0Z E09 E15	220/200-3	180-242	1 1 1	28 34 53	40 40 60
W60A2/L2-F0Z F07 F14	415/380-3 ③	342-456	1 1 1	16 18 32	20 20 35
W70A2/L2-F0Z F07 F14	415/380-3 ③	342-440	1 1 1	21 21 32	30 30 35

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

NOTE: All wiring must conform to NIC/EIC latest edition.

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

Electric Heat Table - Refer to Electrical Specifications for Availability by Unit Model W42A2-F, W42L2-F W30A2-F W42A2-E W24A2-F W30A2-D W48A2-F, W48L2-F W24A2-D W36A2-E W36A2-F W48A2-E Model W24L2-F W36A2-D W60A2-F, W60L2-F W36L2-F W60A2-E W70A2-F, W70L2-F 240V-1 220V-1 415V-3 380V-3 240V-1 220V-1 220V-3 200V-3 415V-3 380V-3 220V-3 200V-3 415V-3 380V-3 (1) WATTS KW WATTS 5.0 5000 4201 5000 4201 8.0 8000 6722 10.0 6.0 5042 4167 7.0 6728 5641 6728 5641 9.0 7562 6250 12.0 10083 8333 11213 9401 14.0 15.0 12604 10417

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 $[\]ensuremath{\mathfrak{D}}$ These "Minimum Circuit Amp" values are to be used for sizing the field power conductors.

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

① Nominal Heater KW based on unit model number.

Coolin	g Applicat	tion Data - (Outdoor T	emperatu	re ① Btuh	(KW)		
Model	Return Air (DB/WB)	Cooling Capacity	75°F (23.9°C)	85°F (29.4°C)	95°F (35.0°C)	105°F (40.6°C)	115°F (46.1°C)	125°F (51.7°C)
W24A2	75/62°F	Total Cooling	22,600 (6.62)	20,800 (6.09)	19,000 (5.56)	17,200 (5.04)	15,200 (4.45)	13,300 (3.90)
	(23.9/16.7°C)	Sensible Cooling	18,100 (5.30)	17,200 (5.04)	16,300 (4.77)	15,400 (4.51)	14,500 (4.25)	13,600 (3.98)
W24L2	80/67°F	Total Cooling	24,100 (7.06)	23,100 (6.77)	21, 600 (6.33)	20,200 (5.92)	18,300 (5.36)	16,200 (4.74)
	(26.7/19.4°C)	Sensible Cooling	17,500 (5.13	17,000 (4.98)	16,400 (4.80)	15,800 (4.63)	15,100 (4.42)	14,200 (4.16)
W30A2	75/62°F	Total Cooling	27,900 (8.17)	25,600 (7.50)	23,300 (6.82)	21,300 (6.24)	19,200 (5.62)	17,000 (4.98)
	(23.9/16.7°C)	Sensible Cooling	21,400 (6.27	21,200 (6.21)	20,300 (5.95)	19,300 (5.65)	17,800 (5.21)	16,000 (4.69)
	80/67°F	Total Cooling	29,700 (8.70)	28,400 (8.32)	26,800 (7.85)	25,000 (7.32)	23,000 (6.74)	20,600 (6.03)
	(26.7/19.4°C)	Sensible Cooling	20,800 (6.09)	20,900 (6.12)	20,500 (6.00)	19,700 (5.77)	18,500 (5.42)	16.800 (4.92)
W36A2	75/62°F	Total Cooling	33,600 (9.84	30,800 (9.02)	28,000 (8.20)	25,300 (7.41)	22,800 (6.68)	20,300 (5.95)
	(23.9/16.7°C)	Sensible Cooling	24,100 (7.41)	24,100 (7.06)	22,900 (6.71)	21,500 (6.30)	20,000 (5.86)	18,400 (5.39)
W36L2	80/67°F	Total Cooling	35,900 (10.51)	34,200 (10.02)	32,000 (9.38)	29,900 (8.76)	27,400 (8.02)	24,700 (7.23)
	(26.7/19.4°C)	Sensible Cooling	24,400 (7.15)	23,800 (6.97)	23,100 (6.77)	22,100 (6.47)	20,800 (6.09)	19,300 (5.65)
W42A2	75/62°F	Total Cooling	40,100 (11.74)	35,700 (10.46)	32,200 (9.43)	29,300 (8.58)	27,100 (7.94)	25,300 (7.41)
	(23.9/16.7°C)	Sensible Cooling	31,400 (9.20)	29,800 (8.73)	28,300 (8.29)	26,800 (7.85)	25,100 (7.35)	23,400 (6.85)
W42L2	80/67°F	Total Cooling	42,700 (12.51)	39,600 (11.60)	36,800 (10.78)	34,500 (10.10)	32,500 (9.52)	30,800 (9.02)
	(26.7/19.4°C)	Sensible Cooling	30,400 (8.90)	29,500 (8.64)	28,500 (8.35)	27,400 (8.02)	26,100 (7.64)	24,600 (7.20)
W48A2	75/62°F	Total Cooling	47,700 (13.97)	43,400 (12.71)	39,300 (11.51)	35,500 (10.40)	32,000 (9.37)	28,500 (8.35)
	(23.9/16.7°C)	Sensible Cooling	36,200 (10.60)	34,400 (10.07)	32,600 (9.55)	30,600 (8.96)	28,600 (8.38)	26,600 (7.79)
W48L2	80/67°F	Total Cooling	50,900 (14.91)	48,200 (14.12)	45,000 (13.18)	41,900 (12.27)	38,500 (11.28)	34,700 (10.16)
	(26.7/19.4°C)	Sensible Cooling	35,100 (10.28)	34,100 (9.99)	32,900 (9.64)	31,400 (9.20)	29,800 (8.73)	28,000 (8.20)
W60A2	75/62°F	Total Cooling	52,700 (15.43)	48,100 (14.09)	43,600 (12.77)	39,500 (11.57)	35,600 (10.43)	31,800 (9.31)
	(23.9/16.7°C)	Sensible Cooling	40,300 (11.80)	38,200 (11.19)	36,100 (10.57)	34,100 (9.99)	32,300 (9.46)	30,400 (8.90)
W60L2	80/67°F (26.7/19.4°C)	Total Cooling Sensible Cooling	56,300 (16.49) 39,100 (11.45)	53,400 (15.64 37,800 (11.07)	/	46,600 (13.65) 35,000 (10.25)	42,800 (12.54) 33,500 (9.81)	38,700 (11.33) 31,900 (9.34)
W70A2	75/62°F (23.9/16.7°C)	Total Cooling Sensible Cooling	66,200 (19.39) 46,800 (13.71)	59,700 (17.48) 44,300 (12.97)		48,900 (14.32) 39,400 (11.54)	44,500 (13.03) 36,900 (10.81)	40,600 (11.89) 34,500 (10.10)
W70L2	80/67°F (26.7/19.4°C)	Total Cooling Sensible Cooling	70,700 (20.71) 45,400 (13.30)	66,300 (19.42) 43,800 (12.83)	62,000 (18.16) 42,200 (12.36)			49,600 (14.53) 36,400 (10.66)

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

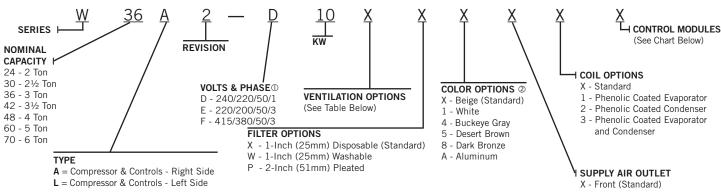
② Return air temperature.

Indoor Blower Performance - CFM (m³/s) at 220 Volts																						
Speed	W24A2/L2		W30A2/L2			W36A2/L2			W42A2/L2 W48A2/L2			W60A2/L2			W70A2/L2							
	Single ①		High ①		Low		High ①		Low		High		Low ①		High ①		Low		High		Low	
ESP (Inch H20) (Pa)	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil
0.0 (0)	820	805	1135	1065	755	735	1175	1060	795	770	1535	1495	1330	1290	1725	1670	1250	1210	1700	1530	1235	1160
	(0.39)	(0.38)	(0.54)	(0.50)	(0.36)	(0.35)	(0.55)	(0.50)	(0.38)	(0.36)	(0.72)	(0.71)	(0.63)	(0.61)	(0.81)	(0.79)	(0.59)	(0.57)	(0.80)	(0.72)	(0.58)	(0.55)
0.1	785	770	1085	1015	735	715	1120	1010 (0.48)	785	760	1475	1430	1280	1245	1675	1625	1205	1165	1635	1470	1185	1110
(25)	(0.37)	(0.36)	(0.51)	(0.48)	(0.35)	(0.34)	(0.53)		(0.37)	(0.36)	(0.70)	(0.67)	(0.60)	(0.59)	(0.79)	(0.77)	(0.57)	(0.55)	(0.77)	(0.69)	(0.56)	(0.52)
0.2	740	720	1015	940	705	675	1050	935	770	745	1400	1360	1210	1175	1600	1550	1160	1125	1580	1410	1140	1075
(50)	(0.35)	(0.34)	(0.48)	(0.44)	(0.33)	(0.32)	(0.50)	(0.44)	(0.36)	(0.35)	(0.66)	(0.64)	(0.57)	(0.55)	(0.76)	(0.73)	(0.55)	(0.53)	(0.75)	(0.67)	(0.54)	(0.51)
0.3	680	665	925	845	655	625	990	880	725	705	1320	1285	1155	1115	1550	1505	1110	1080	1520	1365	1015	955
(75)	(0.32)	(0.31)	(0.44)	(0.40)	(0.31)	(0.29)	(0.47)	(0.42)	(0.34)	(0.33)	(0.62)	(0.61)	(0.55)	(0.53)	(0.73)	(0.71)	(0.52)	(0.510	(0.72)	(0.64)	(0.48)	(0.45)
0.4	610	600	835	755	575	550	900	810	645	625	1240	1210	1085	1055	1455	1415	1015	985	1430	1285	945	890
(100)	(0.29)	(0.28)	(0.39)	(0.36)	(0.27)	(0.26)	(0.42)	(0.38)	(0.30)	(0.29)	(0.59)	(0.57)	(0.51)	(0.50)	(0.69)	(0.67)	(0.48)	(0.46)	(0.67)	(0.61)	(0.45)	(0.42)

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

Speeds marked "bold" above are Factory Connected.

Air Conditioning Wall-Mount Model Nomenclature



- ① See Electrical Specifications (Page 6).
- Aftermarket corrosion resistance coating is necessary for installations in a corrosive environment or coastal area where the unit will be exposed to salt

Ventilation Options												
Models		24A2 24L2		30A2 2, W36L2	W42A2, W48A2, W60A2, W70A2 W42L2, W48L2, W60L2, W70L2							
Description	Factory Installed Code No.	Field Installed Part No.	Factory Installed Code No.	Field Installed Part No.	Factory Installed Code No.	Field Installed Part No.						
Barometric Fresh Air Damper - Standard	Х	WBFAD-2	Х	WBFAD-3	Х	WBFAD-5						
Blank-Off Plate	В	WBOP-2	В	WBOP-3	В	WBOP-5						
Motorized Fresh Air Damper w/Plug	M	WMFADP2	M	WMFADP3	M	WMFADP5						
Commercial Ventilator - Spring Return w/Plug & Exhaust	V WCRVPS2-* ①		V	WCRVPS3-* ①	V	WCRVPS5-* ①						
Economizer w/Plug, Temp Only ②	W	WECOPT2-* ①	W	WECOPT3-* ①	W	WECOPT5-* ①						
Economizer w/Plug, Enthalpy ②	Т	WECOPE2-* ①	Т	WECOPE3-* ①	Т	WECOPE5-* ①						

- ① Insert color to match unit ("X" = Beige; "4" = Buckeye Gray; etc.)
- ② All Economizer versions have 7" deep intake hood.

Air Co	onditio	ning (All Models Except As Noted							
HPC ①	LPC ②	ссм 3	LAC ④	ALR ⑤	SK ®	SK ⑦	ODT ®	DDC ⑨	Factory Installed Code	Field Installed Part
STD	STD	STD							Х	N/A
STD	STD	STD	•						E	CMA-28
STD	STD	STD	•	•					J	Factory Only
STD	STD	STD	•		•				K	CMC-15 and CMA-28
STD	STD	STD	•	•	•				М	Factory Only
STD	STD	STD		•					N	N/A
STD	STD	STD			•				Field Installed Only	CMC-15
STD	STD	STD					•		Field Installed Only	CMA-14
STD	STD	STD	•	•				•	V @	Factory Only
STD	STD	STD						•	Field Installed Only	CMA-31 for W18-36 CMA-30 for W42-70
STD - Standa	STD	STD				•			Field Installed Only	SK111 Except W60 & 70 SK121 W70 Only SK122 W60 Only

- STD = Standard equipment for these specified models.
- ① HPC. High pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ③.
- ② LPC. Low pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ③.
- © CCM. Compressor control module has adjustable 30-second to 5-minute delay-on-break timer. On initial power-up, or any time the power is interrupted, the delay-on-make will be 2-minutes plus 10% of the delay-on-break setting. There is no delay-on-make during routine operation of the unit. The module also provides the lockout feature (with 1 retry) for high and/or low pressure controls, and a 2-minute timed bypass for low-pressure control.
- ⊕ LAC. Low ambient control permits cooling operation down to 0°F. LAC is fan-cycling control for outdoor fan motor on all models except W18/W24 Dehum. units, which have modulating control.
- 3 ALR. The alarm relay has a set of normally open and normally closed dry contacts to provide the ability to signal a condition of shutdown on either high or low pressure controls. © SK. PTCR start kit can be used with all -A single phase models. Increases starting torque 2-3x. Not used for -B or -C three phase models. Do not use if SK111 or SK121 is used.
- Start capacitor & potential relay start kit can be used with all -A single phase models. Increases starting torque 9x. Not used for -B or -C three phase models. Do not use if CMC-15 is used.
- ® ODT. Outdoor thermostat is adjustable from 0 to 50°F. It is suitable for use as a compressor cut-off thermostat.
- 9 DDC. Incorporates 4 additional sensors: discharge air temperature, indoor blower airflow, compressor current, and dirty filter. These sensing devices function to input analog data such as temperature, as well as digital data such as airflow, compressor status or filter status. Special economizer required; consult factory.
- "V" control module should be ordered in conjunction with direct digital controller (DDC). Refer to V module document F1605 for more information.



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Since 1914 . . . Moving ahead, just as planned.

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

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

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