



Submittal Data

square roots

Date: August 27, 2021



Project: square roots

Plan-ID	Qty	Model No	Description	Page
WM-01	1	W5SACDA05VPXXXV	Wall-Mount™ Air Conditioner 208/230-1 ph	3



AHRI Rated Cooling Performance

AHRI Certified Reference #	204458017	
AHRI Rated Cooling Capacity	57,000	Btuh
EER	11.00	
IPLV	15.1	
Rated Airflow	1700	cfm

Cooling Performance @ Project Parameters

Cooling Capacity	71,585	Btuh
Sensible Capacity	41,439	Btuh
Latent Capacity	30,145	Btuh
Integrated Efficiency	15.3	IPLV
Efficiency (at AHRI)	11.00	EER
Outdoor DB Temp	95.0	°F
Entering DB Temp	85.0	°F
Entering WB Temp	78.0	°F
Leaving DB Temp	63.5	°F
Leaving WB Temp	63.5	°F

Electric Resistance Heat

Nominal Heat Size	5	kW
Electric Heat Voltage	240	Volts
Heat Output	17,065	Btuh
Heating Entering Air	70.0	°F
Heating Leaving Temp	78.9	°F

Dehumidification Performance

95° Outdoor 65% Indoor RH (75° / 66.7° db/wb)		
Air Flow	1700	cfm
Sensible Capacity	-3,400	Btuh
Latent Capacity	21,700	Btuh
Water Removed per hour	20.50	lb

Supply Air Performance

Total Supply Air	1784	cfm
Blower Motor	3/4	hp
Low Blower Speed Non-Ducted		
Filter Static Pressure	0.03	in wg.

Air flow is based on Wet Coil

Electrical Data

Power Supply	208/230	Volts
	1	Phase
	60	Hertz
Minimum Circuit Ampacity	39	Amps
Maximum External Fuse or Circuit Breaker	50	Amps
Field Power Wire Size	8	
Ground Wire	10	

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

Caution: When more than one field power circuit is run through one conduit, the conductors must be derated. Pay special attention to note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three (3) current carrying conductors are in a raceway.

NOTE: MOCP (Maximum Overcurrent Protection) value listed is the maximum value as per UL 1995 calculations for MOCP (branch-circuit conductor sizes shown are based on this MOCP). The actual factory installed Overcurrent Protective Device (Circuit Breaker) in this model may be lower than the maximum UL 1995 allowable MOCP value, but still above the UL 1995 minimum calculated value or Minimum Circuit Ampacity (MCA) listed.

Balanced Climate™ Mode Performance

Cooling Capacity	68,369	Btuh
Sensible Capacity	35,311	Btuh
Latent Capacity	34,061	Btuh
Latent Increase	3	%
Water removal per hour	32.13	lb/ hr
Outdoor DB Temp	95.0	°F
Entering DB Temp	85.0	°F
Entering WB Temp	78.0	°F

Factory Options Selected

- D - Active Dehumidification
- A - 208/240 Volt 1 phase
- 05 - 5 KW - 1 Circuit w/Circuit Breaker Disconnect
- V - Commercial Ventilator - Modulating
- P - 2-Inch Pleated Filter MERV 8
- X - Beige
- X - Standard Coils
- V - DDC Control Sensor kit with 10K Discharge air sensor, indoor blower airflow sensor, compressor current sensor, filter pressure switch, Low Ambient Control, Alarm Relay

Field Installed Accessories



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Quantity: 1

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Field Installed Accessories - Continued

RG-5W - Return air grill - Extruded aluminum with blades fixed at 30 degree angle, 2" Flange

SG-5W - Sidewall supply register with 2 sets of individually adjusted blades, 2" Flange



Standard Product Features

- **Non-Fiberglass Foil Faced Insulation:** Environmentally friendly high "R" value non-fiberglass insulation that is made with recycled denim and cotton materials used with a FSK foil face that is both durable and cleanable
- **Durable Cabinet Construction:** Multiple cabinet construction options are available for different outdoor conditions. Optional cabinet coatings may be ordered for extreme outdoor environments.
- **Green Fin Hydrophilic Evaporator Coil:** Green fin stock is used to help prevent mold growth, aid with condensate drainage, and provide a limited amount of protection to corrosive particulates in the airstream.
- **Balanced Climate™ Technology (patent pending):** High latent capacity humidity & sound reduction removes up to 35% more humidity than any other wall mount on the market with the use of a 2 stage thermostat or controlling device. Bard Balanced Climate innovation comes standard on all models.
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- **Reliable, Easy-to-Use Controls:** Easily accessible through front control panel locations. A lockable hinged access cover to circuit protection is provided. Phase rotation monitor is standard on all 3 phase models. Adjustable compressor on/off delay timer (CCM) with diagnostic lights is standard on all models.
- **ECM Indoor Motor Technology:** 5 speed dual shaft motor provides quiet airflow operation when used with a twin blower assembly. Motor overload protection standard on all models.
- **Electric Strip Heat:** Reliable, comfortable heater packages feature an automatic limit and thermal cut-off safety control.
- **Easy Filter Access:** A separate filter door is provided for ease of filter access during routine unit maintenance.
- **Enclosed Condenser Motor:** An enclosed casing condenser motor with ball bearings is used for reliable operation and extended motor life. Enclosed condenser motors are standard on all units.
- **Improved Condenser Coil Cleaning:** Removable fan shroud side panels allow for easy condenser coil intake surface cleaning.
- **High Efficiency Cooling:** Scroll compressors for quiet, efficient cooling. Designed with R-410A (HFC) non-ozonedepleting refrigerant in compliance with the Montreal protocol and 2010 EPA requirements. A liquid line filter-drier to protect the system from moisture is standard on all units.
- **Cooling Operation:** This Bard WALL MOUNT product offers two stage cooling operation using R-410A refrigerant. Copper tube/Aluminum hydrophilic green fin coils are used to provide high efficiency and easy serviceability. Scroll compressor technology delivers years of quiet, reliable operation.
- **Heating Operation:** Single or two stage heating operation using resistance heaters. Circuit breaker disconnect protection is standard in all units equipped with electric heat.
- **ECM Indoor Blower Motor:** Energy efficient indoor brush-less DC blower motors use EC constant torque technology with 4 selectable pre-programmed speeds. By selecting the needed speed, the WALL MOUNT product can reduce or increase airflow. A NEMA48® frame enclosure is used. A high speed tap can be selected to offer the maximum CFM possible with the blower assembly.
- **Outdoor Fan Motor:** Outdoor fan motors use ball bearing construction and are fully enclosed for increased life expectancy.

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

Width (W)	Depth (D)	Height (H)	Supply		Return		E	F	G
			A	B	C	D			
42	25.52	92.88	9.88	29.88	15.88	29.88	43.88	12.63	45
I	J	K	L	M	N	O	R	S	T
30.06	49.25	35.06	61.72	58.72	8.82	43	1.44	16	10

