SOLAIR

11EER JA Series WALL-MOUNT™

The Solair 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, correctional facilities and many more. Factory or field installed accessories are available to meet specific job requirements for your unique application.

- Complies with efficiency requirments of ASHRAE/IESNA 90.1-2013
- Certified to ASNI/ARI Standard 390-2003 for SPVU (Single Package Vertical Units)
- InterteK ETL Listed to Standard for Safety Heating and Cooling Equipment ANSI/UL 1995/CSA 22.2 No. 236-05 Fourth Edition
- Commercial Product - Not intended for residential use.
- Solair is an ISO 9001:2015 Certified Manufacturer

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ETL LISTED C US Intertek

AHRI CERTIFIED www.ahridirectory.org Water Source HP ANSI/AHRI/ASHRAE/ISO13256-1

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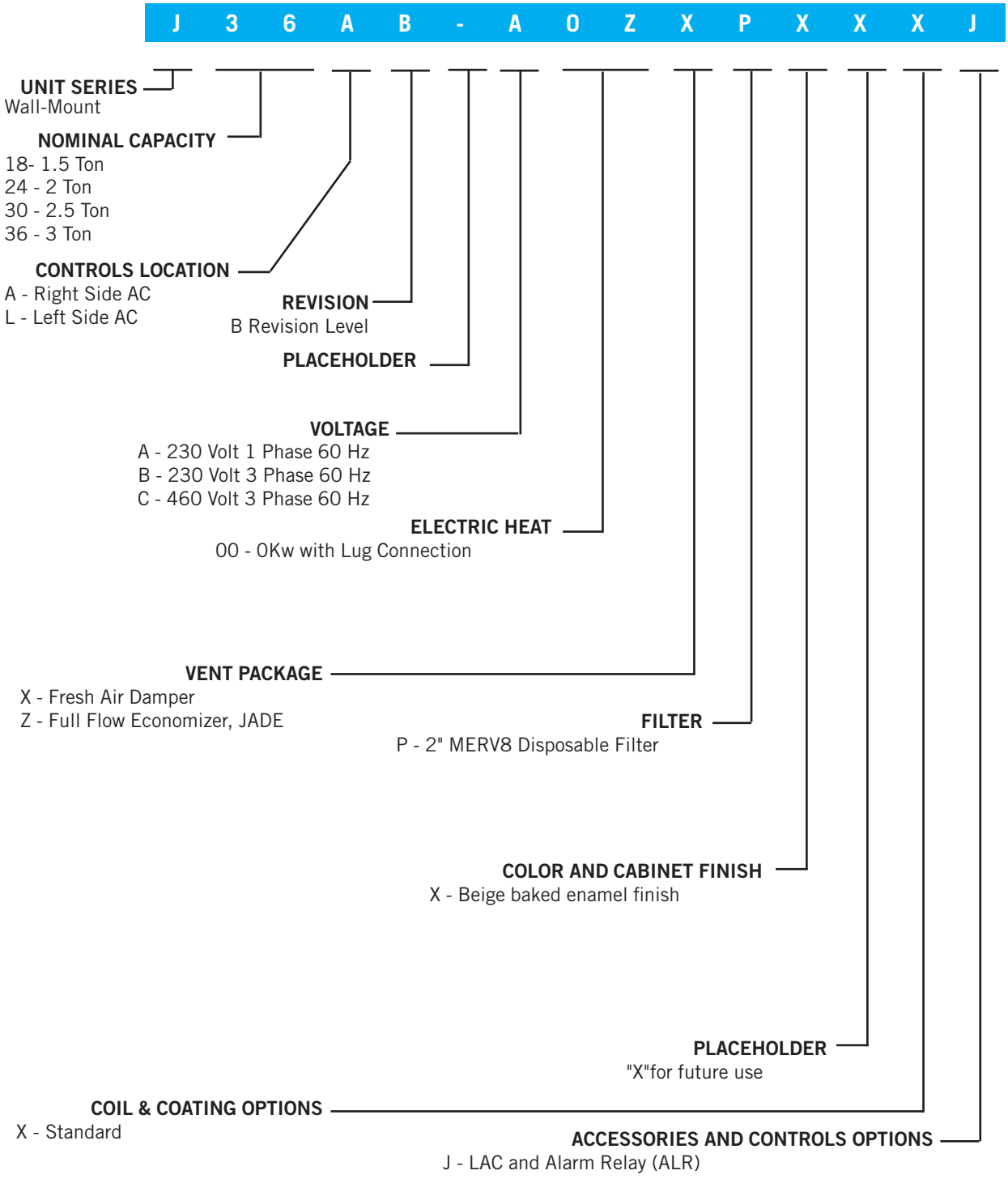
/////// WALL-MOUNT NOMENCLATURE



/////// ENGINEERED FEATURES

NEW! EXCLUSIVE *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.

Easy Filter Access: A separate filter door is provided for ease of filter access during routine unit maintenance. 1" and 2" filters are available with a rating of up to MERV13.

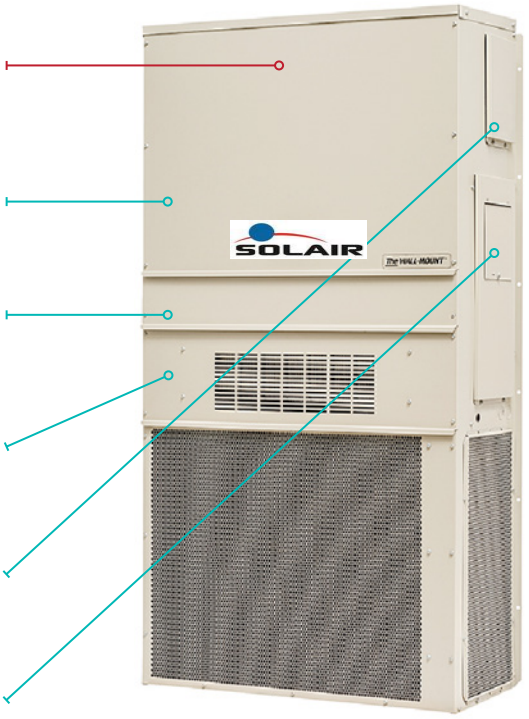
Field or Factory Installed Vents: Multiple ventilation options are available as easily installed kits with electrical plugs, or Factory installed options that can be removed for service.

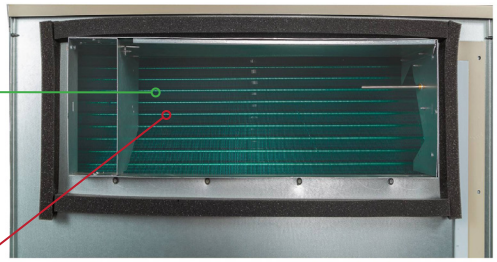
Electric Strip Heat: Reliable, comfortable heater packages feature an automatic limit and thermal cut-off safety control. Heater packages can be factory or field installed.

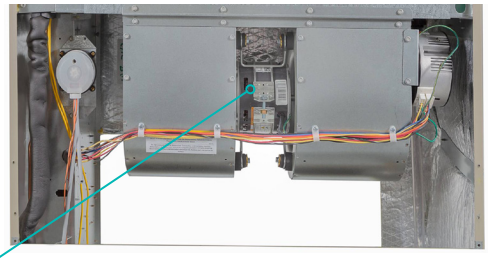
Reliable, Easy-to-Use Controls: Easily accessible through left or right control panel locations. A lockable hinged access cover to circuit protection is provided. Phase rotation monitor is standard on all 3 phase models. Adjustable compressor on/off delay timer (CCM) with diagnostic lights is standard on all models.

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 on the market with the use of a 2 stage thermostat or controlling device. Bard Balanced Climate™ innovation comes 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.

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.

High Efficiency Cooling: Scroll compressors for quiet, efficient cooling. Designed with R-410A (HFC) non-ozone depleting 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.

/////// UNIT MODES OF OPERATION

Cooling Operation: The Solair JA and JL Series WALL MOUNT products offer single stage cooling operation using R410A refrigerant. Copper tube/Aluminum fin coils are used to provide high efficiency and easy serviceability. Scroll compressor technology delivers years of quiet, reliable operation.

Heating Operation: The Solair JA and JL Series WALL MOUNT products offer optional single or two stage heating operation using resistance heaters. Circuit breaker disconnect protection is standard in all units equipped with electric heat.

Ventilation Operation: The Solair JA and JL Series WALL MOUNT products offer optional ventilation operation that brings outdoor air into the structure. Vent options can be factory or field installed, and can be used to bring in outdoor air for occupants, save energy by using outdoor air for free cooling, or positively pressurize a structure. Exhaust air options allow room air to be vented outdoors when fresh air is being brought into the structure. Energy recovery options are also available for occupied structures which condition the air being brought in to save energy when ventilation is necessary regardless of outdoor temperature.

Balanced Climate™ Operation: The Solair JA and JL Series WALL MOUNT products offer an enhanced latent capacity stage that can be controlled by a two stage cooling thermostat. During the first cooling stage, the unit will increase the amount of moisture removed during compressor operation. The second stage of cooling increases the sensible cooling capacity to increase the amount of heat removed from the structure during compressor operation. This feature is not used by default allowing the use of a single cooling stage thermostat and normal unit cooling operation. Not available with economizer ventilation option. Not available in high supply static applications.

/////// ADVANCED FEATURE DESCRIPTIONS

ECM Indoor Blower Motor: Energy efficient indoor 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.

Non Fiberglass Cabinet Insulation: The WALL MOUNT products use advanced non-fiberglass insulation that is made with recycled denim materials. High "R" value, enhanced sound absorption, and reduced delamination are some of the features of this revolutionary product.

CAPACITY AND EFFICIENCY RATINGS

MODELS	J18AB J18LB	J24AB J24LB	J30AB J30LB	J36AB J36LB
Cooling Capacity BTUH ①	18,000	24,000	29,200	35,200
EER	11.3	11.2	11.0	11.0

① Capacity is certified in accordance with ANSI/ARI Standard 390-2003.

② EER = Energy Efficiency Ratio and is certified in accordance with ANSI/ARI Standard 390-2003. All ratings based on fresh air intake being 100% closed (no outside air introduction).

SPECIFICATIONS 1-1/2 TON THROUGH 3 TON

MODELS	J18AB-A J18LB-A	J24AB-A J24LB-A	J24AB-B J24LB-B	J24AB-C	J30AB-A J30LB-A	J30AB-B J30LB-B	J30AB-C J30LB-C	J36AB-A J36LB-A	J36AB-B J36LB-B	J36AB-C J36LB-C
Electrical Rating – 60 Hz	230/208 - 1	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3	230/208 - 1	230/208 - 3	460 - 3
Operating Voltage Range	197-253	197-253	197-253	414-506	197-253	197-253	414-506	197-253	197-253	414-506
Compressor--Circuit A										
Voltage	230/208	230/208	230/208	460	230/208	230/208	460	230/208	230/208	460
Rated Load Amps	6.0/6.9	8.3/9.4	5.0/5.7	2.7	9.6/10.9	6.1/6.9	3.3	11.4/13.3	7.1/8.3	4.7
Branch Circuit Selection Current	9.0	12.9	7.7	3.6	14.2	9.0	4.2	16.7	10.5	5.8
Lock Rotor Amps	48/48	58.3/58.3	55.4/55.4	28	73/73	58/58	28	79/79	73/73	38
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Fan Motor & Condenser										
Fan Motor--HP--RPM	1/5 - 1090	1/5 - 1090	1/5 - 1090	1/5 - 1075	1/5 - 1075	1/5 - 1075	1/5 - 1075	1/5 - 1075	1/5 - 1075	1/5 - 1075
Fan Motor--Amps	1.1	1.1	1.1	0.6	1.2	1.2	0.6	1.2	1.2	0.6
Fan--DIA/CFM	18" - 1800	18" - 1800	18" - 1800	18" - 1800	20" - 2400	20" - 2400	20" - 2400	20" - 2200	20" - 2200	20" - 2200
Blower Motor & Evap.										
Blower Motor—HP-SPD	1/3-5	1/3-5	1/3-5	1/3-5	1/2-5	1/2-5	1/2-5	1/2-5	1/2-5	1/2-5
Blower Motor—Amps	0.7	0.7	0.7	.8	1.4	1.4	1.1	2.3	2.3	1.0
Motor Type	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM
CFM Cooling & E.S.P. w/Filter (Rated-Wet Coil)	600 - .1	800 - .1	800 - .1	800 - .1	950 - .15	950 - .15	950 - .15	1150 - .15	1150 - .15	1150 - .15
Filter Sizes (inches) STD.	16x25x1	16x25x1	16x25x1	16x25x1	16x30x1	16x30x1	16x30x1	16x30x1	16x30x1	16x30x1
Basic Unit Weight-LBS.	325	335	335	335	350	350	350	380	380	380
Barometric Fresh Air Damper (X)	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
Barometric Damper w/ Exhaust (A)	8.0	8.0	8.0	8.0	9.0	9.0	9.0	9.0	9.0	9.0
Blank-Off Plate (B)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Commercial Room Ventilator (M, V)	31.0	31.0	31.0	31.0	35.0	35.0	35.0	35.0	35.0	35.0
Economizer (D, S, Z)	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0	37.0
Energy Recovery Ventilator (R)	54.0	54.0	54.0	54.0	65.0	65.0	65.0	65.0	65.0	65.0

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 NO.	UNITS USING CRATE	DESCRIPTION
8620-263	J18AB, J18LB, J24AB, J24LB	Standard Unit Crate
8620-275	J18AB, J18LB, J24AB, J24LB	Units with "z" Economizer With Factory Installed 7" Hood
8620-262	J30AB, J30LB, J36AB, J36LB	Standard Unit Crate
8620-276	J30AB, J30LB, J36AB, J36LB	Units with "z" Economizer With Factory Installed 7" Hood

COOLING APPLICATION DATA - OUTDOOR TEMPERATURE ①②

MODEL	RETURN AIR (DB/WB)	COOLING CAPACITY	75°F	80°F	85°F	90°F	95°F	100°F	105°F	110°F	115°F	120°F	125°F	131°F
J18	75/62	Total Cooling	19800	18700	17600	16700	15700	15000	14200	13600	13000	12500	12000	11500
		Sensible Cooling	15000	14600	14200	13800	13400	13100	12800	12500	12200	12000	11700	11500
	80/67	Total Cooling	21100	20300	19500	18800	18000	17400	16700	16200	15600	15100	14600	14000
		Sensible Cooling	14500	14300	14000	13800	13500	13300	13100	12900	12700	12500	12300	12100
	85/72	Total Cooling	25200	23800	22400	21300	20000	19100	18000	17300	16400	15700	15100	14300
		Sensible Cooling	14900	14600	14100	13700	13300	12900	12500	12100	11700	11300	10900	10500
J24	75/62	Total Cooling	25000	24000	23000	22000	20900	20000	19000	18100	17100	16200	15200	14000
		Sensible Cooling	18400	18300	18200	18000	17800	17400	17100	16800	16300	15800	15200	14000
	80/67	Total Cooling	26600	26100	25500	24800	24000	23300	22400	21500	20600	19600	18500	17100
		Sensible Cooling	17800	17900	18000	18000	17900	17700	17500	17300	16900	16500	16000	15400
	85/72	Total Cooling	31700	30500	29300	28000	26700	25500	24200	22900	21700	20400	19100	17400
		Sensible Cooling	18300	18200	18100	17900	17600	17200	16700	16300	15600	14900	14200	13300
J30	75/62	Total Cooling	30800	29300	28000	26700	25500	24300	23200	22100	21000	19900	18900	17700
		Sensible Cooling	23500	23000	22400	21900	21400	20900	20400	20000	19400	19000	18600	17700
	80/67	Total Cooling	32800	31900	31100	30200	29200	28300	27300	26300	25200	24100	23000	N/A
		Sensible Cooling	22800	22500	22200	21900	21600	21200	20900	20600	20200	19900	19500	
	85/72	Total Cooling	39100	37300	35700	34100	32500	31000	29500	28000	26500	25100	23700	N/A
		Sensible Cooling	23400	22900	22300	21800	21200	20500	19900	19300	18600	18000	17300	
J36	75/62	Total Cooling	37300	35500	33900	32200	30700	29200	27800	26400	25100	23900	22600	21200
		Sensible Cooling	29200	28400	27600	26800	26100	25500	24800	24200	23700	23100	22600	21200
	80/67	Total Cooling	39800	38700	37600	36400	35200	34000	32800	31500	30200	28900	27500	25900
		Sensible Cooling	28300	27800	27300	26800	26300	25900	25400	25000	24600	24200	23800	23400
	85/72	Total Cooling	47400	45300	43200	41100	39100	37200	35400	33500	31800	30100	28300	N/A
		Sensible Cooling	29000	28200	27500	26600	25800	25100	24200	23500	22700	21900	21100	

① Low ambient control allows for compressor operation down to 0°F.
② Outdoor temperatures shown are measured at the condenser section air inlet.
③ Return air temperature °F.

CAPACITY MULTIPLIER FACTORS				
% of Rated Airflow	-10	Rated	+10	
Total BTUH	0.975	1.0	1.02	
Sensible BTUH	0.950	1.0	1.05	

UNIT CHARGE RATES

UNIT	STD. UNIT - LBS.
J18AB/LB - 11 EER Right & Left A/C	3.5
J24AB/LB - 11 EER Right & Left A/C	4.25
J30AB/LB - 11 EER Right & Left A/C	4.125
J36AB/LB- 11 EER Right & Left A/C	4.5

BALANCED CLIMATE APPLICATION DATA (OPTIONAL, REQUIRES THERMOSTAT WITH 2 COOLING STAGES)

MODEL	RETURN AIR (DB/WB)	COOLING CAPACITY	75°F	80°F	85°F	90°F	95°F	100°F	105°F	110°F	115°F	120°F	125°F	131°F
J18	75/62	Total Cooling	18700	17900	17200	16500	15700	15000	14300	13500	12700	12000	11200	10300
		Sensible Cooling	12900	12700	12400	11900	11600	11300	11000	10600	10200	9900	9400	9000
		Latent Cooling	5800	5200	4800	4600	4100	3700	3300	2900	2500	2100	1800	1300
		% Latent Increase	17%	21%	29%	37%	44%	49%	58%	62%	68%	76%	83%	100%
		Lbs. H2O per Hr.	5.472	4.906	4.528	4.34	3.868	3.491	3.113	2.736	2.358	1.981	1.698	1.226
	80/67	Total Cooling	19900	19500	19100	18600	18000	17400	16800	16100	15300	14500	13600	12500
		Sensible Cooling	12500	12400	12200	11900	11700	11500	11200	10900	10600	10300	9900	9500
		Latent Cooling	7400	7100	6900	6700	6300	5900	5600	5200	4700	4200	3700	3000
		% Latent Increase	11%	15%	20%	25%	29%	31%	36%	37%	38%	38%	38%	37%
		Lbs. H2O per Hr.	6.981	6.698	6.509	6.321	5.943	5.566	5.283	4.906	4.434	3.962	3.491	2.83
	85/72	Total Cooling	23700	22800	2200	21000	20000	19100	18200	17200	16100	15100	14000	12800
		Sensible Cooling	12800	12600	12300	11900	11500	11200	10700	10300	9800	9300	8800	8200
		Latent Cooling	10900	10200	9700	9100	8500	7900	7500	6900	6300	5800	5200	4600
		% Latent Increase	6%	10%	14%	16%	21%	22%	27%	25%	25%	24%	19%	17%
		Lbs. H2O per Hr.	10.8	9.623	9.151	8.585	8.019	7.453	7.075	6.509	5.943	5.472	4.906	4.34
J24	75/62	Total Cooling	24300	23300	22400	21400	20400	19500	18600	17600	16700	15800	14800	13700
		Sensible Cooling	16900	16600	16200	15800	15400	15000	14600	14100	13700	13200	12800	12200
		Latent Cooling	7400	6700	6200	5600	5000	4500	4000	3500	3000	2600	2000	1500
		% Latent Increase	20%	22%	27%	30%	38%	42%	50%	57%	70%	81%	100%	100%
		Lbs. H2O per Hr.	6.981	6.321	5.849	5.283	4.717	4.245	3.774	3.302	2.83	2.453	1.887	1.415
	80/67	Total Cooling	25900	25400	24800	24100	23400	22700	21900	21000	20100	19100	18000	16700
		Sensible Cooling	16400	16200	16000	15800	15500	15200	14900	14500	14200	13800	13400	12900
		Latent Cooling	9500	9200	8800	8300	7900	7500	7000	6500	5900	5300	4600	3800
		% Latent Increase	14%	16%	18%	19%	23%	25%	29%	32%	37%	40%	46%	55%
		Lbs. H2O per Hr.	8.962	8.679	8.302	7.83	7.453	7.075	6.604	6.132	5.566	5	4.34	3.585
	85/72	Total Cooling	30900	29700	28500	27200	26000	24900	23600	22400	21200	19900	18500	17000
		Sensible Cooling	16800	16500	16100	15700	15200	14700	14200	13600	13100	12500	11900	11100
		Latent Cooling	14100	13200	12400	11500	10800	10200	9400	8800	8100	7400	6600	5900
		% Latent Increase	8%	10%	12%	13%	16%	19%	19%	23%	25%	26%	26%	31%
		Lbs. H2O per Hr.	13.3	12.45	11.7	10.85	10.19	9.623	8.868	8.302	7.642	6.981	6.226	5.566
J30	75/62	Total Cooling	29100	27800	26700	25600	24400	23400	22300	21300	20300	19300	18300	17100
		Sensible Cooling	20700	20000	19500	19000	18600	18100	17600	17200	16700	16300	15800	15300
		Latent Cooling	8400	7800	7200	6600	5800	5300	4700	4100	3600	3000	2500	1800
		% Latent Increase	13%	19%	22%	27%	29%	36%	40%	49%	56%	70%	88%	100%
		Lbs. H2O per Hr.	7.925	7.358	6.792	6.226	5.472	5	4.434	3.868	3.396	2.83	2.358	1.698
	80/67	Total Cooling	31000	30300	29600	28900	28000	27200	26300	25400	24400	23400	22300	
		Sensible Cooling	20000	19600	19300	19000	18700	18400	18000	17700	17300	17000	16600	
		Latent Cooling	11000	10700	10300	9900	9300	8800	8300	7700	7100	6400	5700	N/A
		% Latent Increase	9%	12%	14%	16%	18%	19%	23%	26%	30%	34%	39%	
		Lbs. H2O per Hr.	10.38	10.09	9.717	9.34	8.774	8.302	7.83	7.264	6.698	6.038	5.377	
	85/72	Total Cooling	37000	35500	34000	32700	31100	29800	28400	27100	25700	24300	23000	
		Sensible Cooling	20500	19900	19400	18900	18400	17800	17200	16600	16000	15400	14700	
		Latent Cooling	16500	15600	14600	13800	12700	12000	11200	10500	9700	8900	8300	N/A
		% Latent Increase	5%	8%	8%	11%	11%	13%	14%	17%	19%	20%	23%	
		Lbs. H2O per Hr.	15.57	14.72	13.77	13.02	11.98	11.32	10.57	9.906	9.151	8.396	7.83	
J36	75/62	Total Cooling	35200	33600	32000	30500	28900	27600	26300	25000	23800	22600	21400	20100
		Sensible Cooling	24700	23900	23300	22500	21900	21300	20700	20100	19500	18900	18500	17800
		Latent Cooling	10500	9700	8700	8000	7000	6300	5600	4900	4300	3700	2900	2300
		% Latent Increase	23%	27%	28%	33%	34%	41%	46%	55%	67%	78%	100%	100%
		Lbs. H2O per Hr.	9.906	9.151	8.208	7.547	6.604	5.943	5.283	4.623	4.057	3.491	2.736	2.17
	80/67	Total Cooling	37600	36600	35500	34400	33200	32100	31000	29800	28600	27400	26100	24600
		Sensible Cooling	23900	23400	23000	22500	22100	21600	21200	20700	20300	19800	19400	18800
		Latent Cooling	13700	13200	12500	11900	11100	10500	9800	9100	8300	7600	6700	5800
		% Latent Increase	16%	17%	18%	19%	20%	23%	24%	29%	33%	38%	45%	57%
		Lbs. H2O per Hr.	12.92	12.45	11.79	11.23	10.47	9.906	9.245	8.585	7.83	7.17	6.321	5.472
	85/72	Total Cooling	44800	42800	40800	38900	36900	35100	33500	31700	30100	28500	26900	
		Sensible Cooling	24500	23800	23100	22400	21700	20900	20200	19400	18700	17900	17200	
		Latent Cooling	20300	19000	17700	16500	15200	14200	13300	12300	11400	10600	9700	N/A
		% Latent Increase	9%	10%	11%	12%	13%	15%	16%	19%	20%	23%	26%	
		Lbs. H2O per Hr.	19.15	17.92	16.7	15.57	14.34	13.4	12.55	11.6	10.75	10	9.151	

① Low ambient operation disables Balanced Climate Operation.
② Outdoor temperatures shown are measured at the condenser section air inlet.
③ Return air temperature °F.
④ % Latent increase is a comparison to non-Balanced Climate unit operation.

CAPACITY MULTIPLIER FACTORS				
% of Rated Airflow	-10	Rated	+10	
Total BTUH	0.975	1.0	1.02	
Sensible BTUH	0.950	1.0	1.05	

INDOOR AIRFLOW CFM @ STATIC PRESSURES - EC BLOWER CONSTANT TORQUE MOTOR WITH ADJUSTMENT SPEEDS

ESP	J18 BLOWER TAPS - DRY/WET COIL CFM				J24 BLOWER TAPS - DRY/WET COIL CFM			
In H2O	Tap 2	Tap 1 & 3	Tap 4	Tap 5	Tap 2	Tap 1 & 3	Tap 4	Tap 5
0"	520/510	680/665	865/855	Not Used	630/625	890/835	1005/980	1025/1035
.1"	435/420	615/600	810/800	Not Used	580/565	825/800	960/930	990/980
.15"	395/380	585/565	785/770	Not Used	550/535	795/780	935/910	975/955
.2"	Not Used	555/535	760/745	Not Used	525/500	770/755	910/885	955/930
.3"	Not Used	495/480	710/695	Not Used	Not Used	715/705	870/840	915/885
.4"	Not Used	440/425	665/650	Not Used	Not Used	670/650	825/805	870/845
.5"	Not Used	385/375	620/605	Not Used	Not Used	630/585	785/765	825/805

ESP	J30 BLOWER TAPS - DRY/WET COIL CFM				J36 BLOWER TAPS - DRY/WET COIL CFM			
In H2O	Tap 2	Tap 1 & 3	Tap 4	Tap 5	Tap 2	Tap 1 & 3	Tap 4	Tap 5
0"	830/825	1050/1020	1170/1135	1200/1205	925/900	1255/1225	1365/1345	1495/1480
.1"	765/745	1000/975	1120/1105	1170/1155	850/825	1205/1175	1320/1300	1445/1425
.15"	730/705	975/950	1095/1085	1150/1130	815/790	1180/1150	1295/1275	1415/1395
.2"	700/670	950/925	1070/1060	1130/1105	780/755	1155/1125	1275/1250	1385/1360
.3"	630/605	890/870	1025/1015	1085/1055	700/685	1100/1070	1225/1195	1310/1280
.4"	Not Used	830/815	975/955	1040/1000	Not Used	1050/1015	1180/1140	1225/1185
.5"	Not Used	770/755	930/890	985/945	Not Used	1000/960	1130/1075	1130/1075

Blower Speed Tap 2 - Balanced Comfort™ speed. This speed tap has been programmed for use in high latent capacity operation.
Blower Speed Tap 1 & 3 - Rated/Vent speed. This speed tap is used for standard operation and provides optimized efficiency and capacity.
Blower Speed Tap 4 - High blower speed. This speed tap has been programmed for high speed blower operation.
Blower Speed Tap 5 - Maximum motor speed. This speed tap provides the highest amount of airflow possible with the unit blower assembly.
Note: Taps 3, 4, and 5 are user selectable. Balanced comfort use not recommended for ducted applications.

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

DUCT FREE	INDOOR COOLING OPERATION @ 5 FT.			INDOOR COOLING OPERATION @ 10 FT.			OUTDOOR @ 10 FT.
Unit	Standard Grilles	With WMICF	With WMICF and WAPR-11	Standard Grilles	With WMICF	With WMICF and WAPR-11	Standard Features
J18AB/J18LB	49.6	47.3	45.1	47.3	45.2	42.9	66.2
J24AB/J24LB	52.4	49.7	46.9	50.4	46.9	44.8	67.1
J30AB/J30LB	53.9	52.8	50.3	52.9	50.4	48.8	67.1
J36AB/J36LB	53.9	52.8	50.3	52.9	50.4	48.8	67.1

DUCTED SUPPLY	INDOOR COOLING OPERATION @ 5 FT.			INDOOR COOLING OPERATION @ 10 FT.			OUTDOOR @ 10 FT.
Unit	Standard Grilles	With WMICF	With WMICF and WAPR-11	Standard Grilles	With WMICF	With WMICF and WAPR-11	Standard Features
J18AB/J18LB	48.6	45.5	46.6	46.2	44.0	43.1	66.2
J24AB/J24LB	51.9	45.4	47.5	48.9	42.9	44.8	67.1
J30AB/J30LB	54.5	47.3	51.1	47.3	44.7	48.5	67.1
J36AB/J36LB	54.5	47.3	51.1	47.3	44.7	48.5	67.1

ELECTRICAL SPECIFICATIONS — J**AB SERIES

MODEL	Rated Volts & Phase	No. Field Power Circuits	Single Circuit				Multiple Circuit											
			③ Minimum Circuit Ampacity	① Maximum External Fuse or Ckt. Brkr.	② Field Power Wire Size	② Ground Wire	③ Minimum Circuit Ampacity			① Maximum External Fuse or Ckt. Breaker			② Field Power Wire Size			② Ground Wire Size		
							Ckt. A	Ckt. B	Ckt. C	Ckt. A	Ckt. B	Ckt. C	Ckt. A	Ckt. B	Ckt. C	Ckt. A	Ckt. B	Ckt. C
J18AB-A00, A0Z	230/208-1	1	16	20	12	12												
A05		1	30	30	10	10												
A08		1	46	50	8	10												
A10		1	56	60	6	10												
J24AB-A00, A0Z	230/208-1	1	21	30	10	10												
A05		1	30	30	10	10												
A08		1	46	50	8	10												
A10		1	56	60	6	10												
J24AB-B00, B0Z	230/208-3	1	15	20	12	12												
B06		1	22	25	10	10												
J24AB-C00, C0Z	460-3	1	9	15	14	14												
C06		1	11	15	14	14												
J30AB-A00, A0Z	230/208-1	1	26	35	8	10												
A05		1	32	35	8	10												
A08		1	47	50	8	10												
A10		1	58	60	6	10												
A15		1 or 2	84	90	4	8	58	26		60	30		6	10		10	10	
J30AB-B00, B0Z	230/208-3	1	19	20	12	12												
B06		1	24	25	10	10												
B09		1	33	35	8	10												
B15		1	51	60	6	10												
J30AB-C00, C0Z	460-3	1	9	15	14	14												
C06		1	12	15	14	14												
C09		1	17	20	12	12												
C15		1	26	30	10	10												
J36AB-A00, A0Z	230/208-1	1	29	35	8	10												
A05		1	32	35	8	10												
A08		1	47	50	8	10												
A10		1	58	60	6	10												
A15		1 or 2	84	90	4	8	58	26		60	30		6	10		10	10	
J36AB-B00, B0Z	230/208-3	1	23	30	10	10												
B06		1	24	30	10	10												
B09		1	33	35	8	10												
B15		1	51	60	6	10												
J36AB-C00, C0Z	460-3	1	11	15	14	14												
C06		1	12	15	14	14												
C09		1	17	20	12	12												
C12		1	21	25	10	10												
C15		1	26	30	10	10												

ELECTRICAL SPECIFICATIONS — J**LB SERIES

	Rated Volts & Phase	No. Field Power Circuits	Single Circuit				Dual Circuit							
			③ Minimum Circuit Ampacity	① Maximum External Fuse or Ckt. Brkr.	② Field Power Wire Size	② Ground Wire	③ Minimum Circuit Ampacity		① Maximum External Fuse or Ckt. Breaker		② Field Power Wire Size		② Ground Wire Size	
							Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B	Ckt. A	Ckt. B
J18LB-A00,A0Z	230/208-1	1	16	20	12	12								
A05		1	30	30	10	10								
A08		1	46	50	8	10								
A10		1	56	60	6	10								
J24LB-A00, A0Z	230/208-1	1	21	30	10	10								
A05		1	30	30	10	10								
A08		1	46	50	8	10								
A10		1	56	60	6	10								
J24LB-B00, B0Z	230/208-3	1	15	20	12	12								
B06		1	22	25	10	10								
J30LB-A00, A0Z	230/208-1	1	26	35	8	10								
A05		1	32	35	8	10								
A08		1	47	50	8	10								
A10		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
J30LB-B00, B0Z	230/208-3	1	19	20	12	12								
B09		1	33	35	8	10								
B15		1	51	60	6	10								
J30LB-C00, C0Z	460-3	1	9	15	14	14								
C09		1	17	20	12	12								
C15		1	26	30	10	10								
J36LB-A00, A0Z	230/208-1	1	29	35	8	10								
A05		1	32	35	8	10								
A10		1	58	60	6	10								
A15		1 or 2	84	90	4	8	58	26	60	30	6	10	10	10
J36LB-B00, B0Z	230/208-3	1	23	30	10	10								
B09		1	33	35	8	10								
B15		1	51	60	6	10								
J36LB-C00, C0Z	J460-3	1	11	15	14	14								
C09		1	17	20	12	12								
C15		1	26	30	10	10								

① Maximum size of the time delay fuse or circuit breaker for protection of field wiring conductors.
② Based on 75°C copper wire. All wiring must conform to the National Electrical Code and all local codes.
③ These "Minimum Circuit Ampacity" values are to be used for sizing the field power conductors. Refer to the National Electrical code (latest version), Article 310 for power conductor sizing.

CAUTION: When more than one field power circuit is run through one conduit, the conductors must be derated. Pay special attention to Note 8 of Table 310 regarding Ampacity Adjustment Factors when more than three 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.

HEATER PACKAGES - FIELD INSTALLED "AB" SERIES RIGHT-HAND UNITS

- Designed for adding Electric Heat to 0 KW Units
- Circuit Breaker Standard on 230/208V Models
- ETL US & Canada Listed
- Toggle Disconnect Standard on 460V Models

Air Conditioner Models	-A00 Models 230/208-1		-B00 Models 230/208-3		-C00 Models 460-3	
	Heater Model #	KW	Heater Model #	KW	Heater Model #	KW
J18AB	WMCB-02A EHW1TAB-A05 EHW1TAB-A08 EHW2TA-A10	0Z 5 8 10	N/A		N/A	
J24AB	WMCB-03A EHW2TAB-A05 EHW2TAB-A08 EHW2TA-A10	0Z 5 8 10	WMCB-01B EHW2TA-B06	0Z 6	WMPD-01C EHWH24B-C06	0Z 6
J30AB	WMCB-05A EHW3TA-A05 EHW3TA-A08 EHW3TA-A10 EHW3TAB-A15	0Z 5 8 10 15	WMCB-02B EHW30A-B06 EHW3TA-B09 EHW3TAB-B15	0Z 6 9 15	WMPD-01C EHW3TA-C06 EHW3TA-C09 EHW3TA-C12 EHW3TAB-C15	0Z 6 9 12 15
J36AB	WMCB-05A EHW3TA-A05 EHW3TA-A08 EHW3TAB-A10 EHW3TA-A15	0Z 5 8 10 15	WMCB-03B EHW3TA-B06 EHW3TAB-B09 EHW3TA-B15	0Z 6 9 15	WMPD-01C EHW3TA-C06 EHW3TA-C09 EHW3TA-C15	0Z 6 9 15

HEATER PACKAGES - FIELD INSTALLED "LB" SERIES LEFT-HAND UNITS

Air Conditioner Models	-A00 Models 230/208-1		-B00 Models 230/208-3		-C00 Models 460-3	
	Heater Model #	KW	Heater Model #	KW	Heater Model #	KW
J18LB	WMCB-02AL EHW1TAB-A05L EHW1TAB-A08L EHW2TA-A10L	0Z 05 08 10	N/A		N/A	
J24LB	WMCB-03AL EHW2TAB-A05L EHW2TAB-A08L EHW2TA-A10L	0Z 05 08 10	WMCB-02BL EHW2TA-B06L	0Z 06	N/A	
J30LB	WMCB-05AL EHW3TA-A05L EHW3TA-A08L EHW3TA-A10L EHW3TA-A15L	0Z 05 08 10 15	WMCB-02BL EHW3TA-B09L EHW3TAB-B15L	0Z 09 15	WMPD-01CL EHW3TA-C09L EHW3TAB-C15L	0Z 09 15
J36LB	WMCB-05AL EHW3TA-A05L EHW3TAB-A10L EHW3TA-A15L	0Z 05 10 15	WMCB-03BL EHW3TAB-B09L EHW3TA-B15L	0Z 09 15	WMPD-01CL EHW3TA-C09L EHW3TA-C15L	0Z 09 15

ELECTRIC HEAT TABLE - REFER TO ELECTRICAL SPECIFICATIONS FOR AVAILABILITY BY UNIT MODEL

NOMINAL KW	AT 240V (1)				AT 208V (1)				AT 480V (2)			AT 460V (2)		
	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
4.0	4.0	16.7		13,652	3.00	14.4		10,239						
5.0	5.0	20.8		17,065	3.75	18.0		12,799						
6.0	6.0		14.4	20,478	4.50		12.5	15,359	6.0	7.2	20,478	5.52	6.9	18,840
8.0	8.0	33.3		27,304	6.00	28.8		20,478						
9.0	9.0		21.7	30,717	6.75		18.7	23,038	9.0	10.8	30,717	8.28	10.4	28,260
10.0	10.0	41.7		34,130	7.50	36.1		25,598						
15.0	15.0	62.5	36.1	51,195	11.25	54.1	31.2	38,396	15.0	18.0	51,195	13.80	17.3	47,099
18.0	18.0		43.3	61,434	13.50		37.5	46,076	18.0	21.7	61,434	16.56	20.8	56,519
20.0	20.0	83.3		68,260	15.00	72.1		51,195						

(1) These electric heaters are available in 230/208V units only.
(2) These electric heaters are available in 480V units only.

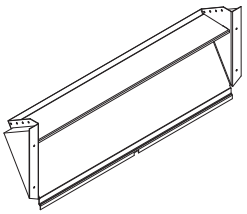
WALL MOUNT™ VENTILATION OPTION SELECTION CHART

VENT CODE	FIELD INSTALL KIT	UNIT	OPERATION	DESCRIPTION
Z	**ECON-WD2-X**	J18AB, J18LB, J24AB, J24LB	JADE Controller	Full flow Economizer that uses the JADE controller and included sensors to operate free cooling. Enthalpy or Dry Bulb operation user selectable. 7" intake hood required.
	ECON-WD3-X	J30AB, J30LB, J36AB, J36LB	JADE Controller	

/////// WALL MOUNT™ VENTILATION OPTIONS SPECIFICATIONS

"X" Vent Code Option – Standard Fresh Air Damper No Exhaust (FAD-NE)

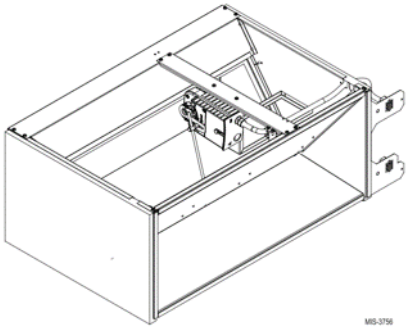
The barometric fresh air damper without exhaust is a standard feature on all models. It is installed on the inside of the service door and allows outside ventilation air, up to 25% of the total airflow rating of the unit, to be introduced through the air inlet openings and to be mixed with the conditioned 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. The room exhaust air path is sealed with an insulated block-off plate.



Barometric Fresh Air Damper

"Z" Vent Code Option – Economizers with JADE® Controller (ECON-S and ECON-WD)

The JADE controlled economizer is internally mounted behind the service door and allows outside ventilation air. The ECON-S allows up to 50% of the total airflow of the unit. The ECON-WD allows up to 100% of the total airflow rating of the unit. Both include a built-in exhaust air damper for room pressurization relief. 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 provides lower operating costs, extended equipment life, and cooling operation down to -40°F outdoor temperatures. The "S" economizer does not requirean intake hood. The "Z" economizer requires a 7" air intake hood.



Economizer, Jade Control

"Z" Vent Code Option – (ECON-S and ECON-WD) JADE® Controller Information

JADE Economizer controls provide Demand Ventilation Control, operational checkout, an easy to read LCD screen, configurable freeze protection, and LCD displayed economizer component failure alarms. Minimum vent position, occupancy ventilation, and 0-10V CO2 input is available for use with select CO2 room sensors. Economizer operation can be controlled by outdoor dry bulb or outdoor enthalpy measurement. When used with a Bard economizer assembly, the JADE controller is able to meet most state and local codes for economizer use.

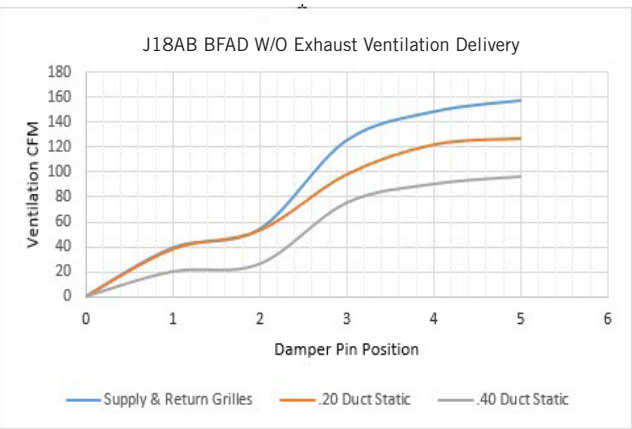
Jade Control Module

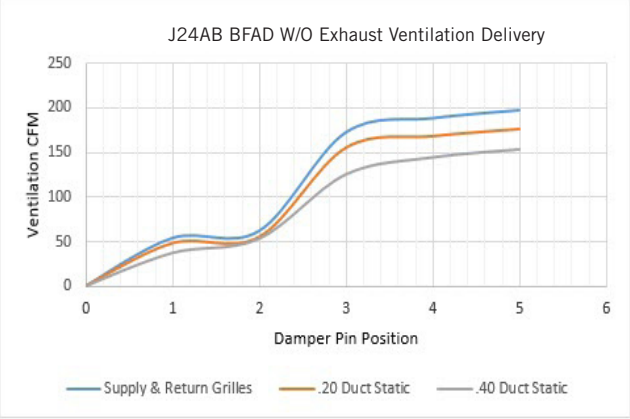
JADE Controller Specifications:

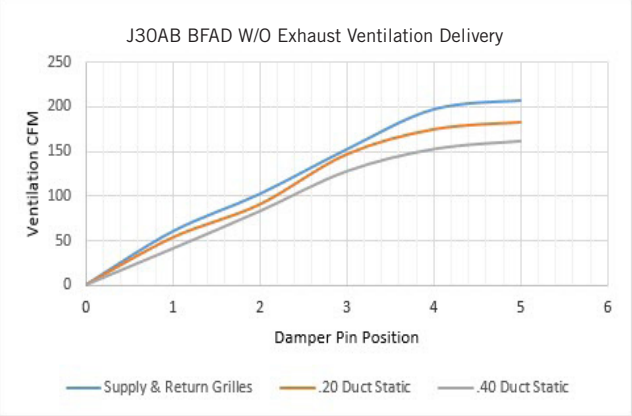
- Operating Humidity Range (% RH) 5 to 95% RH, non-condensing
- Contact Ratings 30 VAC-- 1.5 A Run, 3.5 A Inrush
- Voltage 20 to 30 VAC RMS
- Operating Temperature Range (F) -40 F to +150 F
- Operating Temperature Range (C) -40 C to +65 C
- Approvals, Federal Communications Commission Compliant
- Approvals, CE Compliant
- Complies with California Title 24
- Mixed air and Outdoor Enthalpy Sensor using Sylk Bus.
- Output 2-10 VDC to actuator, Sylk Bus.

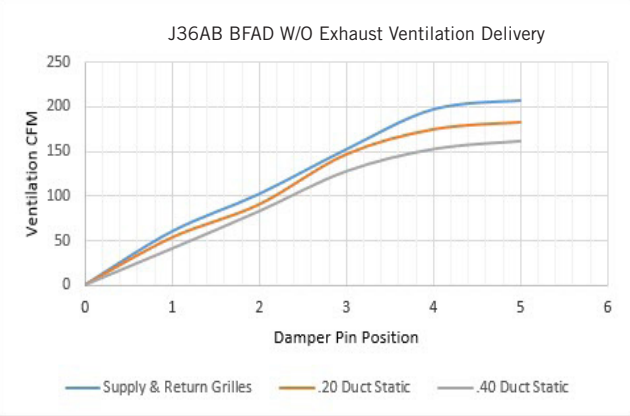
WALL MOUNT™ BAROMETRIC DAMPER (FAD) PERFORMANCE

"X" (FAD-NE2 and FAD-NE3) Barometric Damper Without Exhaust Vent Code Options



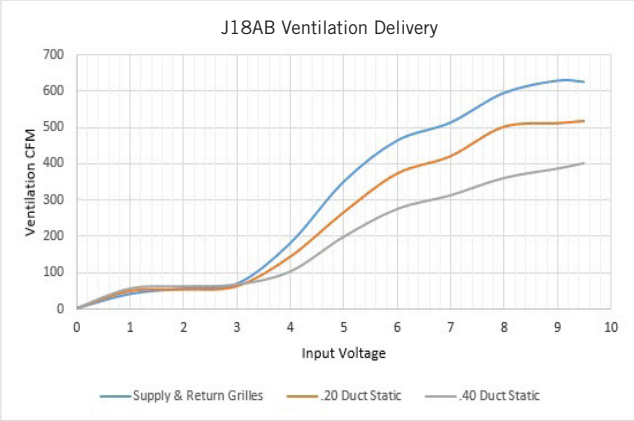


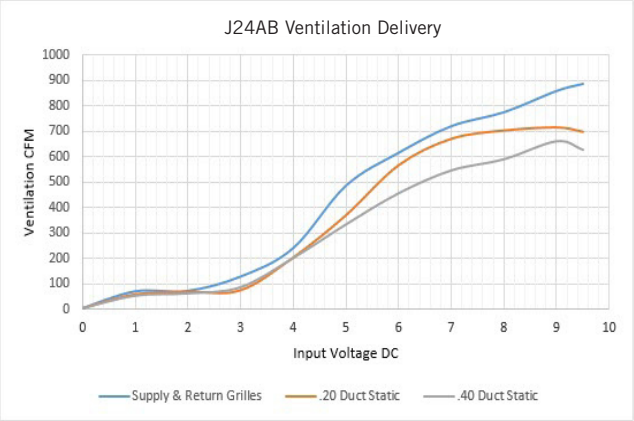


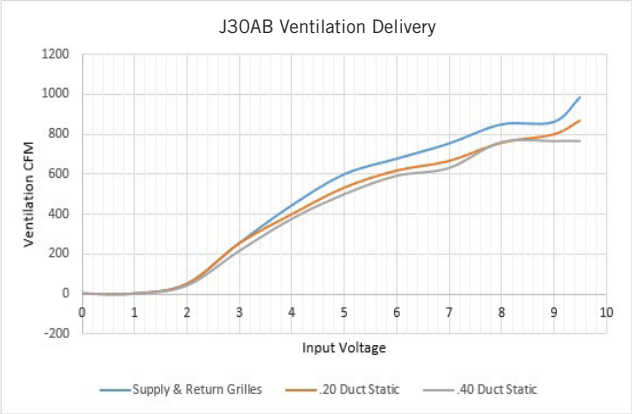


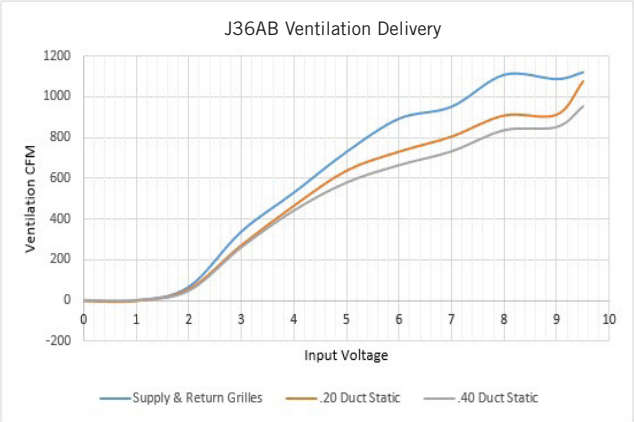
/////// WALL MOUNT™ VENTILATION AIRFLOW CHARTS

"Z" (ECON-WD) Vent Code Options









CABINET AND COIL OPTIONS

Cabinet Finish Options

Unit models are available in Beige. Painted cabinet construction is comprised of 20 gauge Zinc coated steel. Parts are cleaned, rinsed, sealed, and dried before a polyurethane primer is applied. The cabinet coating is completed with a baked on textured enamel. The resulting finish is designed to withstand 1000 hours of salt spray tests per ASTM B117-03.

X—Beige

Green Fin Hydrophilic Evaporator Coils Standard On All Units

Solair WALL MOUNT products include a green protective coating applied to the aluminum fin stock used for the evaporator coil. The evaporator coil coating is hydrophilic (attracts water) and allows for proper condensate drainage along with mild corrosion protection. Resistance to corrosive agents include ammonia, sodium hydroxide, sodium chloride, acidic solutions and solvents.

/////// WALL MOUNT™ FACTORY INSTALLED CONTROLS OPTIONS

Factory installed controls are provided by Solair 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	DESCRIPTION OF FACTORY INSTALLED COMPONENTS
X	Hi Pressure Switch, Low Pressure Switch, Compressor Control Module.
J	Hi Pressure Switch, Low Pressure Switch, Compressor Control Module, **Low Ambient Control, Alarm Relay**

/////// WALL MOUNT™ FIELD INSTALLED 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-15	J18AB, J24AB, J30AB, J36AB J18LB, J24AB, J30AB, J36AB	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
NA	SK-111	J18AB, J24AB, J30AB, J36AB J18LB, J24LB, J30AB, J36AB	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-40 Kit does not include low ambient control. Low ambient control can be ordered separately either as factory installed or as a kit.

24VAC LOW VOLTAGE TERMINAL DESIGNATIONS

Solair WALL MOUNT products provide 24VAC power to controllers and thermostats. They also are able to receive 24VAC signals from a controlling device. The V controls option provides additional sensors for use with a fiels supplied DDC controls systems. The information below provides terminal designations and how they are used in the WALL MOUNT unit. More information on low voltage connections and operational sequences is provided in the unit installation manual.

Terminal	Unit	Description
R	All Units	24VAC low voltage output (HOT Terminal)
RT	All Units	RT terminal has jumper to R terminal. When jumper is removed, R and RT can be used with normally closed contacts for fire/smoke detector for unit shutdown.
C	All Units	Ground Terminal
G	All Units	Indoor fan input
Y1	All Units	1st Stage cooling input. Economizer stage when used. Balanced Climate stage when used.
Y2	All Units	2nd Stage cooling input. Compressor cooling stage when Econ or Balanced Climate is used.
B/W1	All Units	1st Stage electric heat
W2	All Units	2nd State electric heat. Jumper between W1 and W2 must be removed for staged heat
A	Vent option units only	Ventilation option input. Calls for occupied vent air intake for ECON
L	All Units	24VAC Alarm active output
1	J Control Opt.	Alarm relay Normally Closed Contract
2	J Control Opt.	Alarm relay Normally Open Contact
3	J Control Opt.	Alarm Relay Common Contact

/////// OPTIONAL CONTROLS AND KIT COMPONENT DEFINITIONS

Hi Pressure Control (HPC) - The high pressure control provides a means of protecting the refrigeration circuit when high system pressures occur. It is a auto-reset device that is connected to the Compressor Control Module. When activated, the compressor is disabled until pressures reach an acceptable level. If activated twice in the same cooling call, compressor operation is locked out until the cooling call is interrupted.

Low Pressure Control (LPC) - The low pressure control provides a means of protecting the refrigeration circuit when extremely low system pressures occur. It is a auto-reset device that is connected to the Compressor Control Module. When activated, the compressor is disabled ntil pressures reach an acceptable level.

Compressor Control Module (CCM) - The compressor control module tocks out compressor operation to protect the refrigeration system based on signals from the hi and low pressure switches. It provides diagnostics to indicate when a refrigerant pressure event occurs, and also sends a signal to the alarm relay. Low incoming unit power protection suspends compressor operation when incoming voltage is too low. Suspending compressor operation avoids reverse scroll operation. The low voltage feature is adjustable or can be disables. An adjustable delay on break timer is provided. Delay on make is 2 mins. plus 10% of delay on break setting.

Alarm Relay (ALR) - The alarm relay provides a set of NO and NC pilot duty contacts that operate when the compressor control module locks out compressor operation because of a high or low system refrigerant pressure event.

Low Ambient Control (LAC) - The low ambient control pressure sensor is attached to the suction line of the system, and monitors low side system pressure. Operation of the LAC occurs as outdoor temperatures drop below the 65°F to 50°F range. On/Off and modulating controls are used. On/Off LAC operation cycles the condenser fan operation based on outdoor temperature. Modulating LAC operation is factory adjusted and slows the condenser fan speed RPM based on outdoor temperature.

PTCR Start Kit - PTCR (Precision Temperature Coefficient Resistor) start kit includes the start device and wires needed for installation. The device is located inside the unit control panel near the compressor capacitor and provides an increase in starting torque. The PTCR Start Kit is not normally required when a clean, stable power source is available for the unit. The kit can only be used in 230 Volt single phase units.

Start Capacitor and Potential Relay Start Kit - The kit includes a start capacitor and relay that is energized during startup of the compressor. The capacitor, relay, and needed wires are provided in a metal enclosure that is field installed in the outdoor section attached to the back. The Start Capacitor Kit is not normally required when a clean, stable power source is available for the unit. The kit can only be used in 230 Volt single phase units. Start capacitor kit cannot be used with the PTCR start kit installed.

CABINET AND CLEARANCE DIMENSIONS - WA RIGHT SIDE CONTROL PANEL UNITS

CLEARANCES REQUIRED FOR SERVICE ACCESS AND ADEQUATE CONDENSER INLET AIRFLOW

MODELS	LEFT SIDE	RIGHT SIDE
J18AB, J24AB, J30AB, J36AB	15"	20"

NOTE: For side-by-side installation of two (2) JA models, there must be 20" between units. This can be reduced to 15" by using a JL model (left side compressor and controls) for the left unit and WA (right side compressor and controls) for right unit.

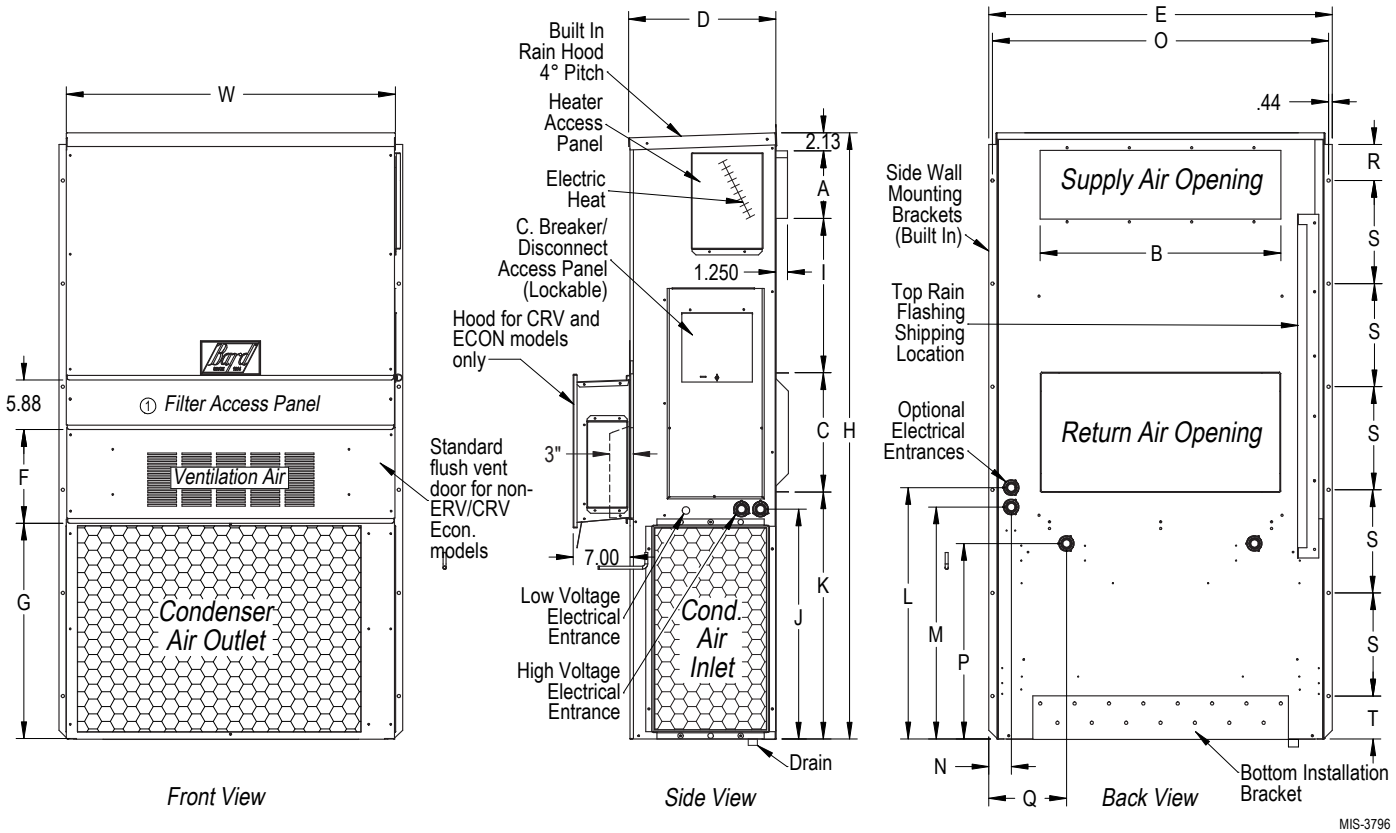
MINIMUM CLEARANCES REQUIRED TO COMBUSTIBLE MATERIALS

MODELS ①	SUPPLY AIR DUCT FIRST THREE FEET	CABINET
J18AB, J24AB	0"	0"
J30AB, J36AB	1/4"	0"

① Refer to the Installation Manual for more detailed information.

DIMENSIONS OF J18-72A BASIC UNIT FOR ARCHITECTURAL & INSTALLATION REQUIREMENTS (NOMINAL)

MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN																
				A	B	C	B	E	F	G	I	J	K	L	M	N	O	P	Q	R	S	T
J18AB J24AB	33.300	17.125	74.563	7.88	19.88	11.88	19.88	35.00	10.88	29.75	20.56	30.75	32.06	33.25	31.00	2.63	34.13	26.06	10.55	4.19	12.00	9.00
J30AB J36AB	38.200	17.125	74.563	7.88	27.88	13.88	27.88	40.00	10.88	29.75	17.93	30.75	32.75	33.25	31.00	2.75	39.13	26.75	9.14	4.19	12.00	9.00



CABINET AND CLEARANCE DIMENSIONS - WL LEFT SIDE CONTROL PANEL UNITS

CLEARANCES REQUIRED FOR SERVICE ACCESS AND ADEQUATE CONDENSER INLET AIRFLOW

MODELS	LEFT SIDE	RIGHT SIDE
J18LB, J24LB, J30LB, J36LB	20"	15"

NOTE: For side-by-side installation of two (2) JL models, there must be 20" between units. This can be reduced to 15" by using a JL model (left side compressor and controls) for the left unit and JA (right side compressor and controls) for right unit.

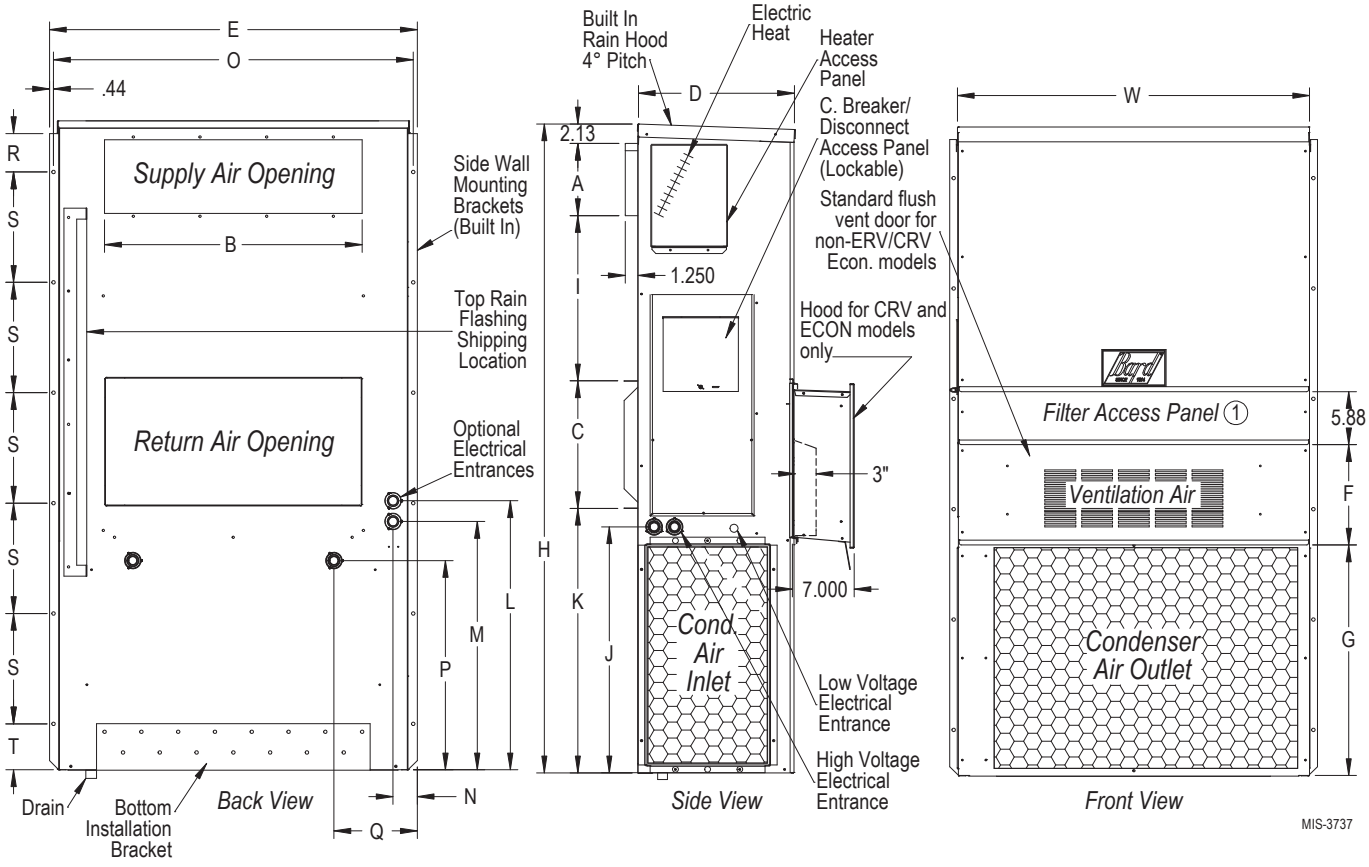
MINIMUM CLEARANCES REQUIRED TO COMBUSTIBLE MATERIALS

MODELS ①	SUPPLY AIR DUCT FIRST THREE FEET	CABINET
J18LB, J24LB	0"	0"
J30LB, J36LB	1/4"	0"

① Refer to the Installation Manual for more detailed information.

DIMENSIONS OF J18-72L BASIC UNIT FOR ARCHITECTURAL & INSTALLATION REQUIREMENTS (NOMINAL)

MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN																
				A	B	C	B	E	F	G	I	J	K	L	M	N	O	P	Q	R	S	T
J18LB J24LB	33.300	17.125	74.563	7.88	19.88	11.88	19.88	35.00	10.88	29.75	20.56	30.75	32.06	33.25	31.00	2.63	34.13	26.06	10.55	4.19	12.00	9.00
J30LB J36LB	38.200	17.125	74.563	7.88	27.88	13.88	27.88	40.00	10.88	29.75	17.93	30.75	32.75	33.25	31.00	2.75	39.13	26.75	9.14	4.19	12.00	9.00



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.