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 requirements of ASHRAE/IESNA 90.1-2013
- Certified to ASNI/ARI Standard 390-2003 for SPVU (Single Package Vertical Units)
- Commercial Product - Not intended for residential use.
- Solair is an ISO 9001:2015 Certified Manufacturer
### WALL-MOUNT NOMENCLATURE

**J 3 6 A B - A O Z X P X X X J**

- **UNIT SERIES**
  - Wall-Mount

- **NOMINAL CAPACITY**
  - 18 - 1.5 Ton
  - 24 - 2 Ton
  - 30 - 2.5 Ton
  - 36 - 3 Ton

- **REVISION**
  - B Revision Level

- **PLACEHOLDER**

- **CONTROLS LOCATION**
  - A - Right Side AC
  - L - Left Side AC

- **VOLTAGE**
  - A - 230 Volt 1 Phase 60 Hz
  - B - 230 Volt 3 Phase 60 Hz
  - C - 460 Volt 3 Phase 60 Hz

- **ELECTRIC HEAT**
  - 00 - 0Kw with Lug Connection

- **VENT PACKAGE**
  - X - Fresh Air Damper
  - Z - Full Flow Economizer, JADE

- **FILTER**
  - P - 2\" MERV8 Disposable Filter

- **COLOR AND CABINET FINISH**
  - X - Beige baked enamel finish

- **PLACEHOLDER**
  - *X* for future use

- **COIL & COATING OPTIONS**
  - X - Standard

- **ACCESSORIES AND CONTROLS OPTIONS**
  - J - LAC and Alarm Relay (ALR)
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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Cooling Capacity BTUH ①</td>
<td>18,000</td>
<td>24,000</td>
<td>29,200</td>
<td>35,200</td>
<td>18,000</td>
<td>24,000</td>
<td>29,200</td>
<td>35,200</td>
</tr>
<tr>
<td>EER</td>
<td>11.3</td>
<td>11.2</td>
<td>11.0</td>
<td>11.0</td>
<td>11.3</td>
<td>11.2</td>
<td>11.0</td>
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</table>

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

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<thead>
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<tbody>
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<td>Operating Voltage Range</td>
<td>197-253</td>
<td>197-253</td>
<td>197-253</td>
<td>414-506</td>
<td>197-253</td>
<td>197-253</td>
<td>197-253</td>
<td>197-253</td>
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</table>

### Compressor–Circuit A

| 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 |
| Branch Circuit | 9.0 | 12.9 | 7.7 | 3.6 | 14.2 | 9.0 | 4.2 | 16.7 |
| Selection Current | 48/48 | 58.3/58.3 | 55.4/55.4 | 28 | 73/73 | 58/58 | 28 | 79/79 |
| Lock Rotor Amps | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll | Scroll |
| Compressor Type | 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 |

| Blower Motor—HP-SPD | 1/3-5 | 1/3-5 | 1/3-5 | 1/3-5 | 1/3-5 | 1/3-5 | 1/3-5 | 1/3-5 |
| Blower Motor—Amps | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Motor Type | ECM | ECM | ECM | ECM | ECM | ECM | ECM | ECM |
| CFM Cooling & E.S.P. | 600 - .1 | 800 - .1 | 800 - .1 | 800 - .1 | 800 - .1 | 800 - .1 | 800 - .1 | 800 - .1 |
| w/Filter (Rated-Wet Coil) | 16x25x1 | 16x25x1 | 16x25x1 | 16x25x1 | 16x25x1 | 16x25x1 | 16x25x1 | 16x25x1 |
| Filter Sizes (inches) STD. | 325 | 335 | 335 | 335 | 335 | 335 | 335 | 335 |
| Basic Unit Weight-LBS. | 325 | 335 | 335 | 335 | 350 | 350 | 350 | 380 |

### 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.

<table>
<thead>
<tr>
<th>CRATE NO.</th>
<th>UNITS USING CRATE</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>8620-263</td>
<td>J18AB, J18LB, J24AB, J24LB</td>
<td>Standard Unit Crate</td>
</tr>
<tr>
<td>8620-275</td>
<td>J18AB, J18LB, J24AB, J24LB</td>
<td>Units with “z” Economizer With Factory Installed 7” Hood</td>
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<tr>
<td>8620-262</td>
<td>J30AB, J30LB, J36AB, J36LB</td>
<td>Standard Unit Crate</td>
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<tr>
<td>8620-276</td>
<td>J30AB, J30LB, J36AB, J36LB</td>
<td>Units with “z” Economizer With Factory Installed 7” Hood</td>
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### UNIT CHARGE RATES

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<thead>
<tr>
<th>UNIT</th>
<th>STD. UNIT - LBS.</th>
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<tbody>
<tr>
<td>J18AB/LB - 11 EER Right &amp; Left A/C</td>
<td>3.5</td>
</tr>
<tr>
<td>J24AB/LB - 11 EER Right &amp; Left A/C</td>
<td>4.25</td>
</tr>
<tr>
<td>J30AB/LB - 11 EER Right &amp; Left A/C</td>
<td>4.125</td>
</tr>
<tr>
<td>J36AB/LB- 11 EER Right &amp; Left A/C</td>
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</table>
### BALANCED CLIMATE APPLICATION DATA (OPTIONAL, REQUIRES THERMOSTAT WITH 2 COOLING STAGES)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>RETURN AIR (IN/OUT)</th>
<th>COOLING CAPACITY</th>
<th>75°F</th>
<th>80°F</th>
<th>85°F</th>
<th>95°F</th>
<th>100°F</th>
<th>105°F</th>
<th>110°F</th>
<th>115°F</th>
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<th>125°F</th>
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<tbody>
<tr>
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<td>17900</td>
<td>17200</td>
<td>16500</td>
<td>15700</td>
<td>15000</td>
<td>14300</td>
<td>13500</td>
<td>12700</td>
<td>12000</td>
<td>11200</td>
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<tr>
<td></td>
<td></td>
<td>Sensible Cooling</td>
<td>12900</td>
<td>12700</td>
<td>12400</td>
<td>11900</td>
<td>11600</td>
<td>11300</td>
<td>11000</td>
<td>10600</td>
<td>10200</td>
<td>9900</td>
<td>9400</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Latent Cooling</td>
<td>5800</td>
<td>5200</td>
<td>4800</td>
<td>4600</td>
<td>4100</td>
<td>3700</td>
<td>3300</td>
<td>2900</td>
<td>2500</td>
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<td>1800</td>
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<tr>
<td></td>
<td></td>
<td>% Latent Increase</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td>8%</td>
<td>10%</td>
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<tr>
<td></td>
<td></td>
<td>Lbs. H2O per Hr.</td>
<td>5.472</td>
<td>4.906</td>
<td>4.528</td>
<td>4.34</td>
<td>3.868</td>
<td>3.49</td>
<td>3.113</td>
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<td>10300</td>
<td>9900</td>
<td>9500</td>
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<td></td>
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<td>Latent Cooling</td>
<td>7400</td>
<td>7100</td>
<td>6900</td>
<td>6700</td>
<td>6300</td>
<td>5900</td>
<td>5600</td>
<td>5200</td>
<td>4700</td>
<td>4200</td>
<td>3700</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% Latent Increase</td>
<td>17%</td>
<td>15%</td>
<td>15%</td>
<td>14%</td>
<td>13%</td>
<td>11%</td>
<td>10%</td>
<td>11%</td>
<td>10%</td>
<td>9%</td>
<td>10%</td>
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<tr>
<td>J30</td>
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<td>Total Cooling</td>
<td>23700</td>
<td>22800</td>
<td>22000</td>
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<td>Sensible Cooling</td>
<td>12800</td>
<td>12600</td>
<td>12300</td>
<td>11900</td>
<td>11500</td>
<td>11200</td>
<td>10700</td>
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<td>9300</td>
<td>8800</td>
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<tr>
<td></td>
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<td>Latent Cooling</td>
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<td>10200</td>
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<td>8500</td>
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<td>6300</td>
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<td></td>
<td></td>
<td>% Latent Increase</td>
<td>10%</td>
<td>14%</td>
<td>21%</td>
<td>19%</td>
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<td>21%</td>
<td>27%</td>
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<tr>
<td>J36</td>
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<td>Total Cooling</td>
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<td>23300</td>
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<td>Sensible Cooling</td>
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<tr>
<td></td>
<td></td>
<td>Latent Cooling</td>
<td>6000</td>
<td>6000</td>
<td>5800</td>
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<td></td>
<td></td>
<td>% Latent Increase</td>
<td>20%</td>
<td>22%</td>
<td>37%</td>
<td>38%</td>
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<td>50%</td>
<td>57%</td>
<td>78%</td>
<td>81%</td>
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<td>J52</td>
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<td>Total Cooling</td>
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<td>Latent Cooling</td>
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<td>8800</td>
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<tr>
<td></td>
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<td>16%</td>
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<td>46%</td>
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<tr>
<td></td>
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<td>Lbs. H20 per Hr.</td>
<td>8.962</td>
<td>8.679</td>
<td>8.302</td>
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<td>7.453</td>
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<td>6.604</td>
<td>6.132</td>
<td>5.566</td>
<td>5.43</td>
<td>5.385</td>
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</table>

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

### CAPACITY MULTIPLIER FACTORS

- % of Rated Airflow
- Rated
- % of Rated BTUH
- Sensible BTUH

<table>
<thead>
<tr>
<th>% of Rated Airflow</th>
<th>-10</th>
<th>Rated</th>
<th>+10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total BTUH</td>
<td>0.975</td>
<td>1.0</td>
<td>1.02</td>
</tr>
<tr>
<td>Sensible BTUH</td>
<td>0.950</td>
<td>1.0</td>
<td>1.05</td>
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</table>
### INDOOR AIRFLOW CFM @ STATIC PRESSURES - EC BLOWER CONSTANT TORQUE MOTOR WITH ADJUSTMENT SPEEDS

<table>
<thead>
<tr>
<th>ESP</th>
<th>J18 BLOWER TAPS - DRY/WET COIL CFM</th>
<th>J24 BLOWER TAPS - DRY/WET COIL CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tap 2</td>
<td>Tap 1 &amp; 3</td>
</tr>
<tr>
<td>In H2O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.0&quot;</td>
<td>520/510</td>
<td>680/665</td>
</tr>
<tr>
<td>.1&quot;</td>
<td>435/420</td>
<td>615/600</td>
</tr>
<tr>
<td>.15&quot;</td>
<td>395/380</td>
<td>585/565</td>
</tr>
<tr>
<td>.2&quot;</td>
<td>Not Used</td>
<td>555/535</td>
</tr>
<tr>
<td>.3&quot;</td>
<td>Not Used</td>
<td>495/480</td>
</tr>
<tr>
<td>.4&quot;</td>
<td>Not Used</td>
<td>440/425</td>
</tr>
<tr>
<td>.5&quot;</td>
<td>Not Used</td>
<td>385/375</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESP</th>
<th>J30 BLOWER TAPS - DRY/WET COIL CFM</th>
<th>J36 BLOWER TAPS - DRY/WET COIL CFM</th>
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<tbody>
<tr>
<td></td>
<td>Tap 2</td>
<td>Tap 1 &amp; 3</td>
</tr>
<tr>
<td>In H2O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0&quot;</td>
<td>830/825</td>
<td>1050/1020</td>
</tr>
<tr>
<td>.1&quot;</td>
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<td>730/705</td>
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<td>.3&quot;</td>
<td>630/605</td>
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<td>.4&quot;</td>
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<td>830/815</td>
</tr>
<tr>
<td>.5&quot;</td>
<td>Not Used</td>
<td>770/755</td>
</tr>
</tbody>
</table>

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.*

<table>
<thead>
<tr>
<th>DUCT FREE</th>
<th>INDOOR COOLING OPERATION @ 5 FT.</th>
<th>INDOOR COOLING OPERATION @ 10 FT.</th>
<th>OUTDOOR @ 10 FT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>Standard Grilles</td>
<td>With WMICF</td>
<td>With WMICF and WAPR-11</td>
</tr>
<tr>
<td>J18AB/J18LB</td>
<td>49.6</td>
<td>47.3</td>
<td>45.1</td>
</tr>
<tr>
<td>J24AB/J24LB</td>
<td>52.4</td>
<td>49.7</td>
<td>46.9</td>
</tr>
<tr>
<td>J30AB/J30LB</td>
<td>53.9</td>
<td>52.8</td>
<td>50.3</td>
</tr>
<tr>
<td>J36AB/J36LB</td>
<td>53.9</td>
<td>52.8</td>
<td>50.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DUCTED SUPPLY</th>
<th>INDOOR COOLING OPERATION @ 5 FT.</th>
<th>INDOOR COOLING OPERATION @ 10 FT.</th>
<th>OUTDOOR @ 10 FT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>Standard Grilles</td>
<td>With WMICF</td>
<td>With WMICF and WAPR-11</td>
</tr>
<tr>
<td>J18AB/J18LB</td>
<td>48.6</td>
<td>45.5</td>
<td>46.6</td>
</tr>
<tr>
<td>J24AB/J24LB</td>
<td>51.9</td>
<td>54.4</td>
<td>47.5</td>
</tr>
<tr>
<td>J30AB/J30LB</td>
<td>54.5</td>
<td>47.3</td>
<td>51.1</td>
</tr>
<tr>
<td>J36AB/J36LB</td>
<td>54.5</td>
<td>47.3</td>
<td>51.1</td>
</tr>
</tbody>
</table>
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.

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

<table>
<thead>
<tr>
<th>Air Conditioner Models</th>
<th>-A00 Models 230/208-1</th>
<th>-B00 Models 230/208-3</th>
<th>-C00 Models 460-3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heater Model #</td>
<td>KW</td>
<td>Heater Model #</td>
</tr>
<tr>
<td>J18AB</td>
<td>WMCB-02A</td>
<td>5</td>
<td>EHW1TAB-A05</td>
</tr>
<tr>
<td>J24AB</td>
<td>WMCB-03A</td>
<td>5</td>
<td>EHW2TAB-A05</td>
</tr>
<tr>
<td>J30AB</td>
<td>WMCB-05A</td>
<td>5</td>
<td>EHW3TA-A05</td>
</tr>
<tr>
<td>J36AB</td>
<td>WMCB-05A</td>
<td>5</td>
<td>EHW3TA-A05</td>
</tr>
</tbody>
</table>

### HEATER PACKAGES - FIELD INSTALLED “LB” SERIES LEFT-HAND UNITS

<table>
<thead>
<tr>
<th>Air Conditioner Models</th>
<th>-A00 Models 230/208-1</th>
<th>-B00 Models 230/208-3</th>
<th>-C00 Models 460-3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heater Model #</td>
<td>KW</td>
<td>Heater Model #</td>
</tr>
<tr>
<td>J18LB</td>
<td>WMCB-02AL</td>
<td>0Z</td>
<td>EHW1TAB-A05L</td>
</tr>
<tr>
<td>J24LB</td>
<td>WMCB-03AL</td>
<td>0Z</td>
<td>EHW2TAB-A05L</td>
</tr>
<tr>
<td>J30LB</td>
<td>WMCB-05AL</td>
<td>0Z</td>
<td>EHW3TA-A05L</td>
</tr>
<tr>
<td>J36LB</td>
<td>WMCB-05AL</td>
<td>0Z</td>
<td>EHW3TA-A05L</td>
</tr>
</tbody>
</table>

11EER JA SERIES WALL-MOUNT™

Page 10 of 20

Form No. 53582-0319 • Supersedes New
### ELECTRIC HEAT TABLE - REFER TO ELECTRICAL SPECIFICATIONS FOR AVAILABILITY BY UNIT MODEL

<table>
<thead>
<tr>
<th>NOMINAL KW</th>
<th>AT 240V (1)</th>
<th>AT 208V (1)</th>
<th>AT 480V (2)</th>
<th>AT 460V (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KW</td>
<td>1-PH AMPS</td>
<td>3-PH AMPS</td>
<td>BTUH</td>
</tr>
<tr>
<td>4.0</td>
<td>4.0</td>
<td>16.7</td>
<td>13,652</td>
<td>3.00</td>
</tr>
<tr>
<td>5.0</td>
<td>5.0</td>
<td>20.8</td>
<td>17,065</td>
<td>3.75</td>
</tr>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>14.4</td>
<td>20,478</td>
<td>4.50</td>
</tr>
<tr>
<td>6.0</td>
<td>8.0</td>
<td>33.3</td>
<td>27,304</td>
<td>6.00</td>
</tr>
<tr>
<td>9.0</td>
<td>9.0</td>
<td>21.7</td>
<td>30,717</td>
<td>6.75</td>
</tr>
<tr>
<td>10.0</td>
<td>10.0</td>
<td>41.7</td>
<td>34,130</td>
<td>7.50</td>
</tr>
<tr>
<td>15.0</td>
<td>15.0</td>
<td>62.5</td>
<td>51,195</td>
<td>11.25</td>
</tr>
<tr>
<td>18.0</td>
<td>18.0</td>
<td>43.3</td>
<td>61,434</td>
<td>13.50</td>
</tr>
<tr>
<td>20.0</td>
<td>20.0</td>
<td>83.3</td>
<td>68,260</td>
<td>15.00</td>
</tr>
</tbody>
</table>

(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

<table>
<thead>
<tr>
<th>VENT CODE</th>
<th>FIELD INSTALL KIT</th>
<th>UNIT</th>
<th>OPERATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 ECON-WD2-X</td>
<td>J18AB, J18LB, J24AB, J24LB</td>
<td>JADE Controller</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>2 ECON-WD3-X</td>
<td>J30AB, J30LB, J36AB, J36LB</td>
<td>JADE Controller</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
“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.

“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 require an intake hood. The “Z” economizer requires a 7” air intake hood.

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

- J18AB BFAD W/O Exhaust Ventilation Delivery
- J24AB BFAD W/O Exhaust Ventilation Delivery
- J30AB BFAD W/O Exhaust Ventilation Delivery
- J36AB BFAD W/O Exhaust Ventilation Delivery
WALL MOUNT™ VENTILATION AIRFLOW CHARTS

“Z” (ECON-WD) Vent Code Options

J18AB Ventilation Delivery

J24AB Ventilation Delivery

J30AB Ventilation Delivery

J36AB Ventilation Delivery
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.

Green Fin Hydrophilic Evaporator Coils Standard On All Units
Solar 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.

<table>
<thead>
<tr>
<th>CONTROL CODE</th>
<th>DESCRIPTION OF FACTORY INSTALLED COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Hi Pressure Switch, Low Pressure Switch, Compressor Control Module.</td>
</tr>
<tr>
<td>J</td>
<td>Hi Pressure Switch, Low Pressure Switch, Compressor Control Module, Low Ambient Control, Alarm Relay</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>CONTROL CODE</th>
<th>KIT PART NO.</th>
<th>UNITS USING KIT</th>
<th>DESCRIPTION OF FIELD INSTALLED KIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>CMC-15</td>
<td>J18AB, J24AB, J30AB, J36AB J18LB, J24AB, J30AB, J36AB</td>
<td>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</td>
</tr>
<tr>
<td>NA</td>
<td>SK-111</td>
<td>J18AB, J24AB, J30AB, J36AB J18LB, J24LB, J30AB, J36AB</td>
<td>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</td>
</tr>
</tbody>
</table>

* 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 field 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.

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Unit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>All Units</td>
<td>24VAC low voltage output (HOT Terminal)</td>
</tr>
<tr>
<td>RT</td>
<td>All Units</td>
<td>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.</td>
</tr>
<tr>
<td>C</td>
<td>All Units</td>
<td>Ground Terminal</td>
</tr>
<tr>
<td>G</td>
<td>All Units</td>
<td>Indoor fan input</td>
</tr>
<tr>
<td>Y1</td>
<td>All Units</td>
<td>1st Stage cooling input. Economizer stage when used. Balanced Climate stage when used.</td>
</tr>
<tr>
<td>Y2</td>
<td>All Units</td>
<td>2nd Stage cooling input. Compressor cooling stage when Econ or Balanced Climate is used.</td>
</tr>
<tr>
<td>B/W1</td>
<td>All Units</td>
<td>1st Stage electric heat</td>
</tr>
<tr>
<td>W2</td>
<td>All Units</td>
<td>2nd State electric heat. Jumper between W1 and W2 must be removed for staged heat</td>
</tr>
<tr>
<td>A</td>
<td>Vent option units only</td>
<td>Ventilation option input. Calls for occupied vent air intake for ECON</td>
</tr>
<tr>
<td>L</td>
<td>All Units</td>
<td>24VAC Alarm active output</td>
</tr>
<tr>
<td>1</td>
<td>J Control Opt.</td>
<td>Alarm relay Normally Closed Contact</td>
</tr>
<tr>
<td>2</td>
<td>J Control Opt.</td>
<td>Alarm relay Normally Open Contact</td>
</tr>
<tr>
<td>3</td>
<td>J Control Opt.</td>
<td>Alarm Relay Common Contact</td>
</tr>
</tbody>
</table>
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 until pressures reach an acceptable level.

Compressor Control Module (CCM) - The compressor control module locks 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

<table>
<thead>
<tr>
<th>MODELS</th>
<th>LEFT SIDE</th>
<th>RIGHT SIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>J18AB, J24AB</td>
<td>15°</td>
<td>20°</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>MODELS</th>
<th>SUPPLY AIR DUCT FIRST THREE FEET</th>
<th>CABINET</th>
</tr>
</thead>
<tbody>
<tr>
<td>J18AB, J24AB</td>
<td>0°</td>
<td>0°</td>
</tr>
<tr>
<td>J30AB, J36AB</td>
<td>1/4&quot;</td>
<td>0°</td>
</tr>
</tbody>
</table>

© 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 A | B | C | D | E | F | G | I | J | K | L | M | N | O | P | Q | R | S | T |
|-------------|-----------|-----------|------------|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J18AB       | 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 |
| J24AB       | 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 |

© Refer to the Installation Manual for more detailed information.
CABINET AND CLEARANCE DIMENSIONS - WL LEFT SIDE CONTROL PANEL UNITS

CLEARANCES REQUIRED FOR SERVICE ACCESS AND ADEQUATE CONDENSER INLET AIRFLOW

<table>
<thead>
<tr>
<th>MODELS</th>
<th>LEFT SIDE</th>
<th>RIGHT SIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>J18LB, J24LB, J30LB, J36LB</td>
<td>20&quot;</td>
<td>15&quot;</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>MODELS</th>
<th>SUPPLY AIR DUCT FIRST THREE FEET</th>
<th>CABINET</th>
</tr>
</thead>
<tbody>
<tr>
<td>J18LB, J24LB</td>
<td>0&quot;</td>
<td>0&quot;</td>
</tr>
<tr>
<td>J30LB, J36LB</td>
<td>1/4&quot;</td>
<td>0&quot;</td>
</tr>
</tbody>
</table>

(© Refer to the Installation Manual for more detailed information.)

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

<table>
<thead>
<tr>
<th>MODEL</th>
<th>WIDTH (W)</th>
<th>DEPTH (D)</th>
<th>HEIGHT (H)</th>
<th>SUPPLY</th>
<th>RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>J18LB</td>
<td>33.300</td>
<td>17.125</td>
<td>74.563</td>
<td>7.88</td>
<td>19.88</td>
</tr>
<tr>
<td>J24LB</td>
<td>38.200</td>
<td>17.125</td>
<td>74.563</td>
<td>7.88</td>
<td>27.88</td>
</tr>
<tr>
<td>J30LB</td>
<td>33.300</td>
<td>17.125</td>
<td>74.563</td>
<td>10.88</td>
<td>27.88</td>
</tr>
<tr>
<td>J36LB</td>
<td>38.200</td>
<td>17.125</td>
<td>74.563</td>
<td>10.88</td>
<td>27.88</td>
</tr>
</tbody>
</table>

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.