

TECHNICAL GUIDE

**R-410A
ZJ SERIES
3 - 12.5 TON
60 Hertz**



ZJ 3 THROUGH 10 TON



ZJ 12.5 TON

Description

ASHRAE 90.1 COMPLIANT

Pro units are convertible single packages with a common footprint cabinet and common roof curb for all 3 through 12.5 ton models. All 6.5 through 12.5 ton units have two compressors with independent refrigeration circuits to provide 2 stages of cooling. The units were designed for light commercial applications and can be easily installed on a roof curb, slab, or frame.

All Pro units are self-contained and assembled on rigid full perimeter base rails allowing for 3-way forklift access and overhead rigging. Every unit is completely charged, wired, piped, and tested at the factory to provide a quick and easy field installation.

Pro units in all tonnage sizes are convertible between side airflow and down airflow, with corresponding economizer if economizer option is desired.

Pro units are available as cooling only, cooling with electric heat, and cooling with gas heat. Electric heaters are available as factory-installed options or field-installed accessories.

Patents: <https://jcpat.com>

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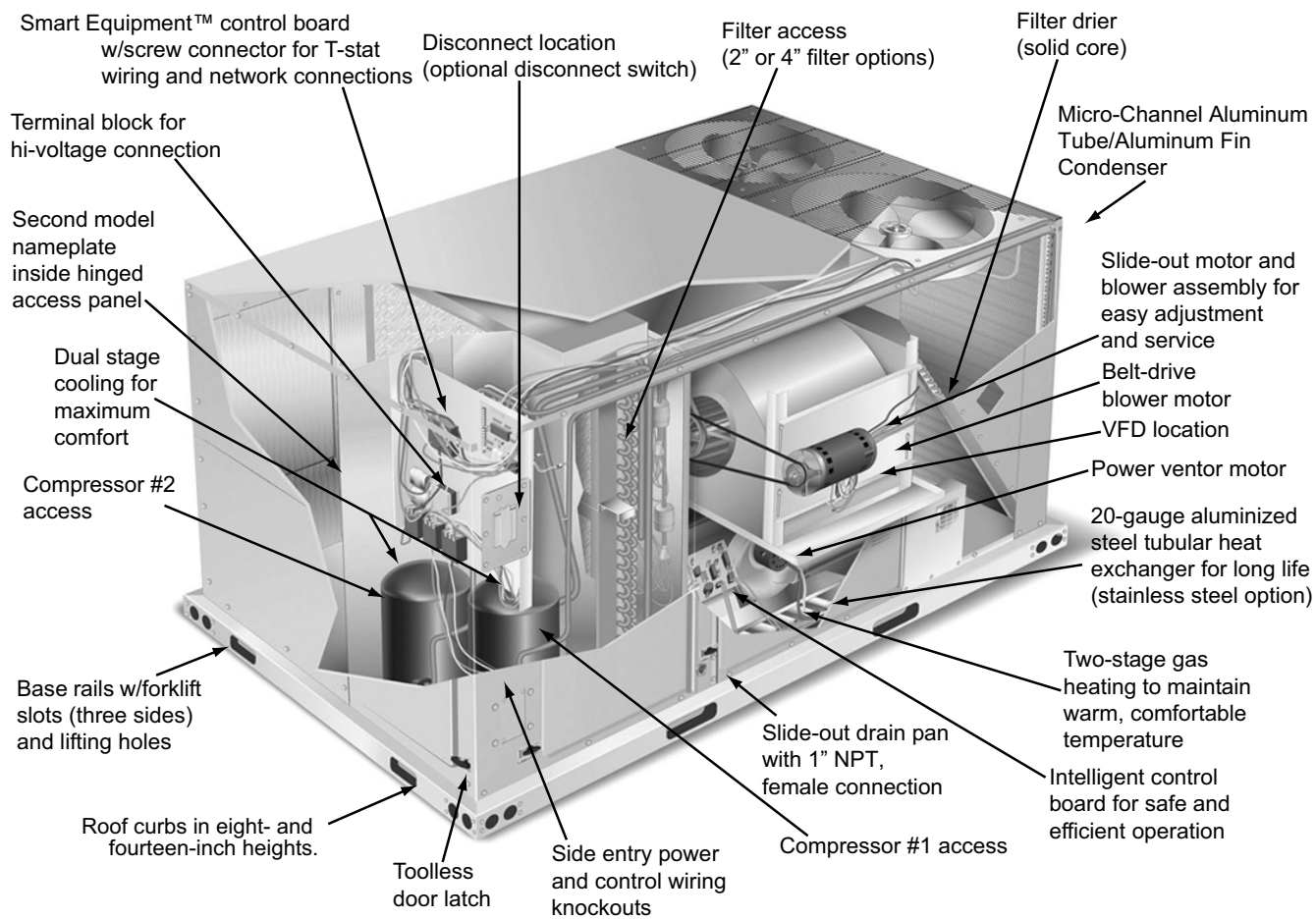


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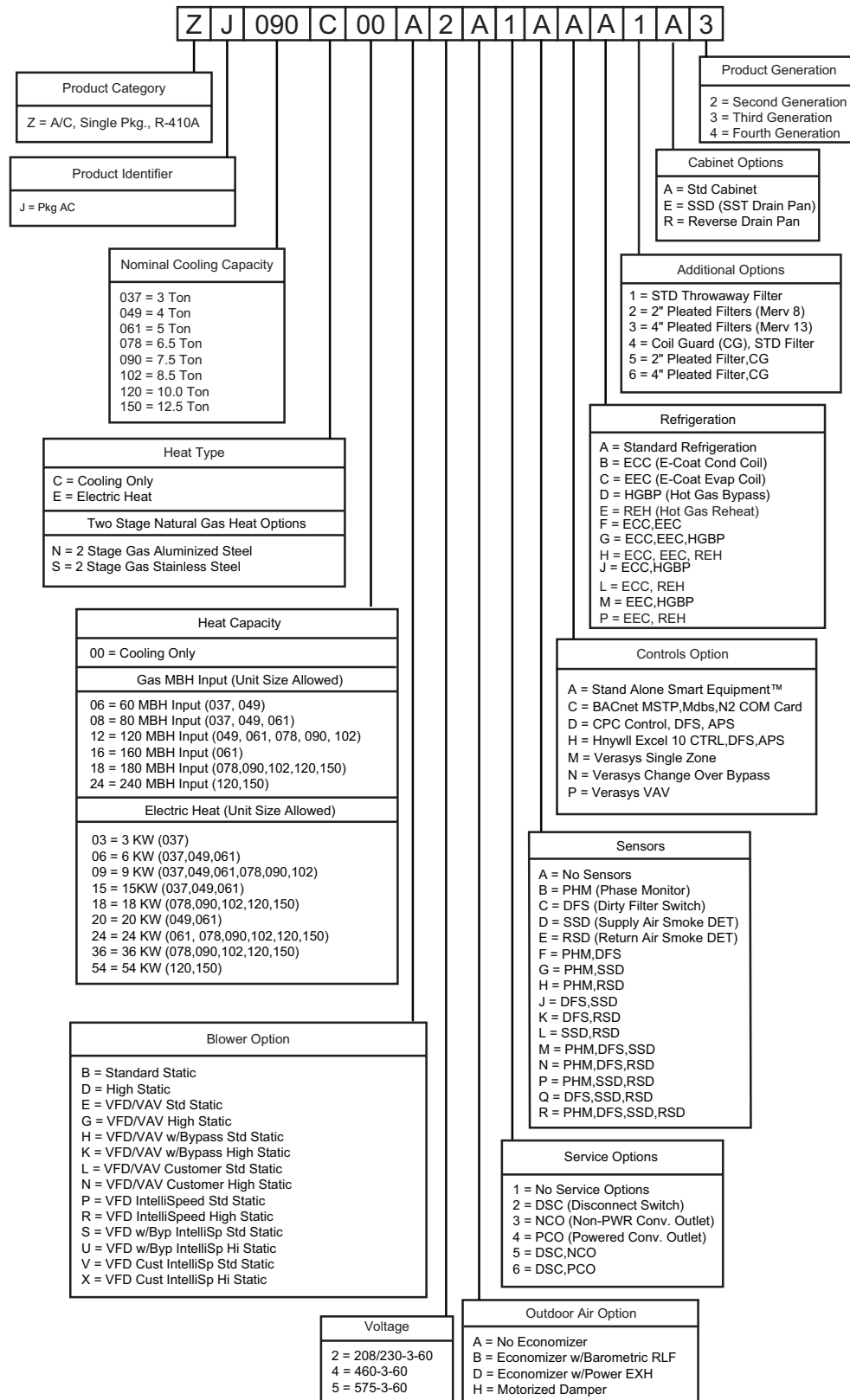
Component Location

Cooling With Gas Heat (6 Through 10 Ton)



Nomenclature

3-12.5 Ton Model Number Nomenclature



Features and Benefits

Standard Features

- **Service Friendly** - The Pro incorporates a number of key features for ease of serviceability.

The motor and blower slide out of the unit as a common assembly. This facilitates greater access to all the indoor airflow components, thus simplifying maintenance and adjustment.

Service time is reduced through the use of hinged, toolless panels. Such panels provide access to frequently inspected components and areas, including the control box, compressors, filters, indoor motor & blower, and the heating section. The panels are screwed in place at the factory to prevent access by children or other unauthorized persons. It is recommended that the panels be secured with screws once service is complete.

Service windows have been placed in both condenser section walls. Rotation of the cover allows easy access to the condenser coils for cleaning or inspection.

The Smart Equipment™ control board provides alarm messages to help quickly identify any faults.

All units use four filters of the same standard size. This standardization simplifies selections for filter replacement.

The non-corrosive drain pan slides out of the unit to permit easy cleaning. The drain pan is accessed by removing the drain pan cover plate on the rear of the unit. Once the plate is removed, the drain pan slides out through the rear of the unit.

All Pro units have a second model nameplate located inside the control access door. This is to prevent deterioration of the nameplate through weathering.

- **Coil Technology** – All ZJ condensers utilize Micro-Channel “all-aluminum” condensers which provide improved heat transfer capabilities and reduced charge volumes. All evaporators utilize a conventional copper tube/aluminum fin design for proven reliability and performance. For specific unit model information see Physical Data Tables.
- **Environmentally Aware** - For improved Indoor Air Quality, a combination of aluminum foil faced and elastomeric rubber insulations are used exclusively throughout the units.

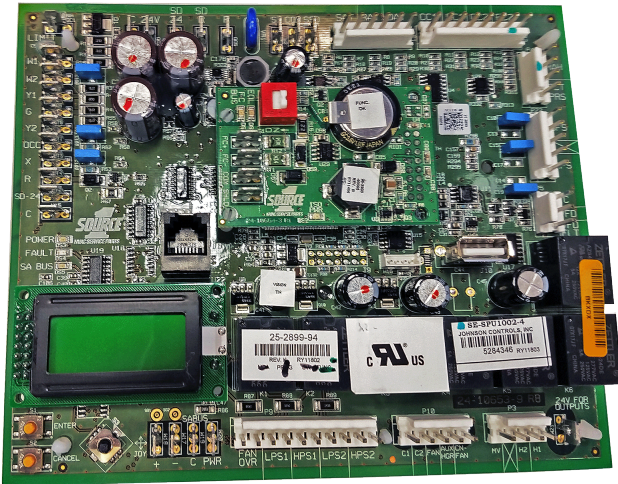
- **Balanced Heating** - The Pro two stage gas heating offers "Ultimate Heating Comfort" with a balance between 1st and 2nd stage gas heating to provide a well maintained desired temperature.

Unit Tonnage	1st. Stage	2nd. Stage
3-5 Ton	70 to 75% of Heating Capacity	100% of Heating Capacity
6.5 - 12.5 Ton	60% of Heating Capacity	100% of Heating Capacity

- **Convertible Airflow Design** – The side duct openings are covered when they leave the factory. If a side supply/return is desired, the installer simply removes the two side duct covers from the outside of the unit and installs them over the down shot openings. No panel cutting is required. Convertible airflow design allows maximum field flexibility and minimum inventory.
- **System Protection** - Suction line freezestats are supplied on all units to protect against loss of charge and coil frosting when the economizer operates at low outdoor air temperatures while the compressors are running. Every unit has solid-core liquid line filter-driers and high and low-pressure switches. Phase Monitors are available on units with Scroll compressors. This accessory monitors the incoming power to the unit and protects the unit from phase loss and reversed phase rotation.
- **Advanced Controls** - Smart Equipment™ control boards have standardized a number of features previously available only as options or by utilizing additional controls.

CAUTION

The Smart Equipment™ control board used in this product will effectively operate the cooling system down to 0°F when this product is applied in a comfort cooling application for people. An economizer is typically included in this type of application. When applying this product for process cooling applications (computer rooms, switchgear, etc.), please call the applications department for Ducted Systems @ 1-877-874-SERV for guidance. Additional accessories may be needed for stable operation at temperatures below 30°F.



- Units will come with the new state of the art Smart Equipment™ control system.** The new unit control incorporates the best of the already proven controls and creates a more robust, intelligent control. The goal of this control is to utilize cutting edge technology making the equipment easier to install, operate, and service. All units are Factory commissioned, configured, and run tested.
- Versatile** - The Smart Equipment™ control can be configured to use with a standard thermostat (easy to connect screw terminals), A zone sensor, or can be setup to communicate with multiple BAS communication protocols to integrate with building automation systems.
- Reduce field installed complexity** - Each unit will come equipped with factory installed supply air, return air, and outdoor air temperature sensors providing key temperature readings thus reduce field installed complexity.
- On-board USB Port** - The new control comes with a long list of features including data logging, current and previous system faults and software update capabilities using the on board USB port and common flash drive. Energy use monitoring capabilities allow custom tailoring to allow a system to work more efficiently at all times and occupancy levels. Self test and start-up reports also available from the board VIA the USB port.
- Embedded LCD Display** - The board has a easy to read, built-in LCD display and easy to use navigation joystick and buttons allowing the user to quickly navigate the menus displaying unit status, options, current function, supply, return and outdoor temperatures, fault codes and other information.
- Safety Monitoring** - The control monitors the outdoor, supply, and return air temperatures and the high and low pressure switch status on the independent refrigerant circuits. On units with heating the gas valve and high temperature limit switches are monitored on gas and electric heating units. The control also monitors the voltage supplied to the unit and will protect the unit if low voltage due to a brown out, or other electrical issue occurs.
- Low Ambient** - An integrated low-ambient control allows units to operate in the cooling mode down to 0°F outdoor ambient without additional components or intervention. Optionally, the control board can be programmed to lockout the compressors when the outdoor air temperature is low or when free cooling is available.
- Anti-Short Cycle Protection** - To aid compressor life, an anti- short cycle delay is incorporated into the standard control. Compressor reliability is further ensured by programmable minimum run times. For testing, the anti-short cycle delay can be temporarily overridden with the push of a button.
- Fan Delays** - Fan on and fan off delays are fully programmable. Furthermore, the heating and cooling fan delay times are independent of one another. All units are programmed with default values based upon their configuration of cooling and/or heating capacity.
- Nuisance Trip Protection and Three Strikes** - To prevent nuisance calls, the control board uses a three times, you're out philosophy. The high, low-pressure switch, anti-freeze protection, low voltage or heating high limit must trip three times within two hours before the unit control board will lock out the associated compressor. An alarm message will be displayed on the LCD screen.
- Lead-Lag** - An integrated Lead-Lag option allows equal run time hours on all compressors, thereby extending the life of all compressors. This option is selectable on the unit control board.
- Low Limit Control (LLC)** - To prevent the supply air from dropping below a specified set point, when there is a demand for cooling during cold outside conditions. (Programmable Set point)
- Reliable** - From the beginning - All units undergo computer automated testing before they leave the factory. Units are tested for refrigerant charge and pressure, unit amperage, and 100% functionality. For the long term - All units are painted with a long lasting, powder paint that stands up over the life of the unit. The paint used has been proven by a 750-hour salt spray test.
- Full Perimeter Base Rails** - The permanently attached base rails provide a solid foundation for the entire unit and protect the unit during shipment. The rails offer rigging holes so that an overhead crane can be used to place the units on a roof.
- Easy Installation** - Gas and electric utility knockouts are supplied in the unit underside as well as the side of the unit. Utility connections can be made quickly and with a minimum amount of field labor. All units are shipped with 2" throw-away filters installed.
- Wide Range of Indoor Airflows** - All supply air blowers are equipped with a belt drive that can be adjusted to meet the exact requirements of the job. A high static drive option is available for applications with a higher CFM and/or static pressure requirement.
- Warranty** - All models include a 1-year limited warranty on the complete unit. Compressors and electric heater elements each carry a 5-year warranty. Aluminized steel (10 yr.) and stainless steel tubular heat exchangers carry a 15- year warranty.

Factory Installed Options

There are several factory installed options for the Pro line.

- **Optional Factory Installed Economizers** - Pro units offer a variety of optional factory installed economizers with low leak dampers. The outdoor air dry bulb sensor enables economizer operation if the outdoor air temperature is less than the set point of the economizer logic module. See economizer options section to determine the correct economizer for your application.
- **Down flow / End Return Economizers (with barometric relief and fresh air hood)** - All units offer a variety of optional factory installed down flow economizers that are shipped, installed and wired with low leak dampers designed to meet ASHRAE 90.1, AMCA 511 Class 1A damper, and the International Energy Conservation Code (IECC) certification requirements by achieving leakage rates of 3 CFM/sq. ft. at 1" of static pressure. Each economizer goes through a rigorous 60,000 cycle test. Dry bulb, single enthalpy, and dual enthalpy (with field installed kit) can be selected. The economizer has spring return, fully modulating damper actuators and is capable of introducing up to 100% outdoor air. As the outdoor air intake dampers open, the return air dampers close. The changeover from mechanical refrigeration to economizer operation is regulated by the outdoor air dry bulb temperature or the outdoor air enthalpy input. The optional (field installed) single or dual enthalpy kits provide additional inputs to monitor outdoor air/ or return air humidity and temperature for true enthalpy control. The installer needs only to assemble the outdoor air hood, attach the enthalpy control the hood and mount the hood to the unit (Hood and control are provided).
- **Power Exhaust** - This factory option allows down flow or horizontal end return economizer operation. **The power exhaust must be removed from the unit and mounted in the horizontal end return duct work when applying the product in the horizontal, end return configuration.**
- **Motorized Outdoor Air Damper** - The motorized outdoor air damper includes a slide-in/plug-in damper assembly with an outdoor air hood and filters. The outdoor air dampers open to the preset position when the indoor fan motor is energized. The damper has a range of 0% to 100% outdoor air entry.
- **Alternate Indoor Blower Motor** - For applications with high static restrictions, units are offered with optional indoor motors that provide higher static output and/or higher airflow, depending upon the installer's needs.
- **Variable Air Volume** - A factory-installed variable frequency drive (VFD), mounted in the Blower Access compartment, is used to control the speed of the indoor blower motor in order to maintain a constant static pressure in the supply duct. A duct pressure transducer is provided with the unit. The drive comes completely wired and pre-programmed from the factory.
An optional, factory-installed manual bypass switch available with factory-installed VFD can be found in the

Blower Motor Access compartment. The switch can be used to either route power to the VFD for modulating control of the blower motor, to bypass the drive and operate the motor at full speed, or to power the drive (and not the motor) for diagnostic purposes.

VAV is not available with the factory-installed 3rd. party BAS controllers. VAV is only factory installed with the Smart Equipment™ Controller.

A 'VFD-ready' option provides the provisions for a customer-installed drive. The unit comes with a mounting bracket installed in the Blower Access compartment which may accommodate other vendor's drives depending on their size. In order to utilize the unit's mounting bracket, the maximum recommended drive dimensions are limited to approximately 9" H x 5" W x 7.5" D.

If the drive will not fit in the allotted space, then it will have to be mounted elsewhere; either within the building on a perpendicular wall which is not subjected to excessive temperature, vibration, humidity, dust, corrosive gas, explosive gas, etc., or within an appropriate enclosure rated for outside installation to safeguard against moisture, dust and excessive heat. A terminal block located in the control box is provided for field connection of the VFD controls.

- **IntelliSpeed™ Supply Fan Control Option (ASHRAE 90.1 compliant)** - Units configured with the IntelliSpeed™ Supply Fan Option will contain a VFD for multi-speed supply fan operation. This option allows the supply fan RPM to vary based on the number of compressors or heating stages energized. The economizer's minimum position will also be configurable to vary based on the supply fan VFD frequency output.
- **Aluminized Steel Gas Heat Exchanger** - For applications in non-corrosive environments.
- **Stainless Steel Gas Heat Exchanger** - For applications in corrosive environments, this option provides a full stainless steel heat exchanger assembly.
- **Stainless Steel Drain Pan** - An optional rust-proof stainless steel drain pan is available to provide years of trouble-free operation in corrosive environments.
- **Electric Heaters** - The electric heaters range from 3kW to 54kW and are available in all the voltage options of the base units. All heaters are intended for single point power supply.
- **Disconnect Switch** - For gas heat units and cooling units with electric heat, a HACR breaker sized to the unit is provided. For cooling only units, a switch sized to the largest electric heat available for the particular unit is provided. Factory installed option only.
- **Convenience Outlet - (Non-Powered/Powered)** - This option locates a 120V single-phase GFCI outlet with cover, on the corner of the unit housing adjacent to the compressors. The "Non-powered" option requires the installer to provide the 120V single-phase power source and wiring. The "Powered" option is powered by a stepdown transformer in the unit. Factory installed option only.
- **Smoke Detectors** - The smoke detectors stop operation of the unit and provide a fault message to the control

board. Smoke detectors are available for both the supply and/or return air configurations.

- **Filters** - 2" Pleated MERV 8 or 4" Pleated MERV 13 are available to meet LEED requirements. A 2" Throwaway is shipped as standard.

⚠ WARNING

Factory-installed smoke detectors may be subjected to extreme temperatures during "off" times due to outside air infiltration. These smoke detectors have an operational limit of -4°F to 158°F. Smoke detectors installed in areas that could be outside this range will have to be relocated to prevent false alarms.

- **Phase Monitors** - Designed to prevent unit damage. The phase monitor will shut the unit down in an out-of phase condition.
- **Coil Guard** - Customers can purchase a coil guard kit to protect the condenser coil from damage. Additionally, this kit stops animals and foreign objects from entering the space between the inner condenser coil and the main cabinet. This is not a hail guard kit.
- **Dirty Filter Switch** - This kit includes a differential pressure switch that energizes the fault light on the unit thermostat, indicating that there is an abnormally high pressure drop across the filters. Factory installed option or field installed accessory.
- **E-Coat Condenser Coils** - The condenser coils are coated with an epoxy polymer coating to protect against corrosion.
- **MagnaDry™ Hot Gas Reheat** - Units optioned with reheat coils provide superior dehumidification at a wide range of outdoor temperatures. This system provides comfort without over-cooling the space.
- **E-Coat Evaporator Coils** - The evaporator coils are coated with an epoxy polymer coating to protect against corrosion.
- **Hot Gas Bypass** - Allows operation during low load conditions while avoiding coil frosting and damage to compressor. When suction pressure falls below valve setpoint, the valve modulates hot gas to the inlet of the evaporator. HGBP is standard on all units with VAV and optional with constant-volume units.

Control Options

- **Smart Equipment™ with Communication Option Control** - The Smart Equipment™ with Communication Option Control is factory installed. It includes all the features of the Smart Equipment™ control with an additional gateway to BACnet MS/TP (programmable to Modbus or N2 protocols).
- **FDD (Fault Detection and Diagnostics) - Refrigerant side (Modification Center Option Only)** A factory installed control system option on the commercial equipment that constantly monitors refrigerant circuit

pressures, refrigerant circuit temperatures, as well as the environmental temperatures and humidity via multiple sensor inputs.

- Provides a building owner, technician or contractor with the operational characteristics of the RTUs entire refrigerant circuit to ensure the unit is functioning at its specified performance level.
- Provides alarms if the unit is not functioning optimally.
- Remotely accessible via the Mobile Access Portal (MAP) gateway as well as scrolled on the UCB LCD screen.
- **CPC BAS Control** - The Computer Process Controls Model 810-3060 ARTC Advanced Rooftop building automation system controller is factory installed. Includes supply air sensor, return air sensor, with optional dirty filter indicator switch and air proving switch.
- **Honeywell BAS Control** - The Honeywell W7750C building automation system controller is factory installed. Includes air supply sensor, return air sensor, with optional dirty filter indicator switch, and air proving switch.
- **Verasys** - Verasys provides a simple user experience with configurable self-recognizing controllers without the need for any additional tools. Verasys creates enhanced integration of HVACR equipment, zoning, and controls. Contractors are able to offer a complete bundled solution of equipment and controls to serve the light commercial market.

Field Installed Accessories

There are several field installed accessories available for the Pro line.

- **Down flow and End Return Economizers (with fresh air hood and barometric relief)** - All units offer a variety of optional factory installed down flow economizers that are shipped, installed and wired with low leak dampers designed to meet ASHRAE 90.1, AMCA 511 Class 1A damper, and the International Energy Conservation Code (IECC) certification requirements by achieving leakage rates of 3 CFM/sq. ft. at 1" of static pressure. Each economizer goes through a rigorous 60,000 cycle test. Dry bulb, single enthalpy, and dual enthalpy (with field installed kit) can be selected. The economizer has spring return, fully modulating damper actuators and is capable of introducing up to 100% outdoor air. As the outdoor air intake dampers open, the return air dampers close. The changeover from mechanical refrigeration to economizer operation is regulated by the outdoor air dry bulb temperature or the outdoor air enthalpy input. The dual enthalpy kit provides a second input used to monitor the return air (field installed). The installer needs only to assemble the outdoor air hood, attach the enthalpy control the hood and mount the hood to the unit (Hood and control are provided).
- **Single or Dual Enthalpy Control, Accessories** - These kits contain the required components to convert a dry bulb economizer to a single enthalpy and/or dual enthalpy economizer.

- **Barometric Relief Damper** - Zero to 100% capacity barometric relief dampers for use with horizontal flow, or field installed economizers.
- **Power Exhaust** - This accessory installs in the unit with a down flow or horizontal end return economizer. Power exhaust plugs into the connector in the unit bulkhead. **User must purchase the 1EH0408 barometric relief and hood kit when applying the product in a horizontal flow application. The power exhaust must be mounted in the horizontal end return ductwork.**
- **Manual Outdoor Air Damper** - Like the motorized outdoor air damper, each manual outdoor air damper includes a slide-in damper assembly with an outdoor air hood and filters. Customers have a choice of dampers with ranges of 0% to 100% or 0% to 35% outdoor air entry.
- **Motorized Outdoor Air Damper** - The motorized outdoor air damper includes a slide-in/plug-in damper assembly with an outdoor air hood and filters. The outdoor air dampers open to the preset position when the indoor fan motor is energized. The damper has a range of 0% to 100% outdoor air entry. Factory installed option or field installed accessory.
- **Smoke Detectors** - The smoke detectors stop operation of the unit by interrupting power to the control board if smoke is detected within the air compartment.
- **CO₂ Sensor** - Senses CO₂ levels and automatically overrides the economizer when levels rise above the preset limits.
- **Dirty Filter Switch** - This kit includes a differential pressure switch that energizes the fault light on the unit thermostat, indicating that there is an abnormally high pressure drop across the filters.
- **Coil Guard** - Field installed decorative wire coil guard.
- **Hail Guard** - This kit includes a sloped hood which installs over the outside condenser coil and prevents damage to the coil fins from hail strikes. Field installed accessory only.
- **Flue Exhaust Extension Kit** - In locations with wind or weather conditions which may interfere with proper exhausting of furnace combustion products, this kit can be installed to prevent the flue exhaust from entering nearby fresh air intakes.
- **Gas Heat High Altitude Kit** - This kit converts a gas heat unit to operate at high altitudes, 2,000 to 6,000 feet. Conversion kits are available for natural gas and propane.
- **Gas Heat Propane Conversion Kit** - This kit converts a gas-fired heater from natural gas to propane. It contains the main burner orifices and gas valve replacement springs.
- **Electric Heaters** - The electric heaters range from 3kW to 54kW and are available in all the voltage options of the base units. The 54kW/208-240 volt, field-installed heater kit is not available with VAV units due to a lack of space to accommodate the heater's fuse block accessory. All heaters are dual staged. Cooling units include an adapter panel for easy installation of the electric heaters. Necessary hardware and connectors are included with the heaters. All heaters are intended for single point power supply.
- **Metal Frame Filter Kit** - Metal frame with polyester filter medium.
- **Permanent Filters** - Permanent filters are available.
- **Roof Curbs** - The roof curbs have insulated decks and are shipped disassembled. The roof curbs are available in 8" and 14" heights. For applications with security concerns, burglar bars are available for the duct openings of the roof curbs.
- **Roof Curb Transition** - Single Piece Adapter (10" High) - Roof curbs for transitioning from Sunline™ units to Pro units. Fits 7.5 to 12.5 Sunline™ roof curbs only.
- **Burglar Bars** - Mount in the supply and return openings to prevent entry into the duct work.
- **Thermostat** - The units are designed to operate with 24-volt electronic and electro-mechanical thermostats. All 6.5 thru 12.5 ton ZJ units (with or without an economizer) operate with two-stage heat/two-stage cool or two-stage cooling only thermostats, depending upon unit configuration.

Accessories**Field Installed Accessories - Non-Electrical**

MODEL	VOLTAGE	DESCRIPTION	WHERE USED
1BD0408	All	Burglar Bars, Downflow	All Cabinets
1CG0419	All	Coil Guard	(Electric / Electric Models), 50 in. Tall Standard Cabinets
1CG0420	All	Coil Guard	(Gas / Electric Models), 50 in. Tall Standard Cabinets
1CG0427	All	Coil Guard	(Electric / Electric Models), 42 in. Tall Cabinets
1CG0428	All	Coil Guard	(Gas / Electric Models), 42 in. Tall Cabinets
1HG0411	All	Hail Guard Kit	All Tall (50 in.) Standard Cabinets, (Excludes 12.5T "V" cabinets)
1HG0415	All	Hail Guard Kit	All Short (42 in.) Standard Cabinets
1HG0441	All	Hail Guard Kit	Diamond Pattern "W" Style Cabinets (ZJ150)
1HG0434	All	Hail Guard Kit	Provent Style 50 in. W Cabinet (ZJ150)
1HG0431	All	Hail Guard Kit	Provent Style 42 in. Std Short Cabinets
1HG0432	All	Hail Guard Kit	Provent Style 50 in. Std Tall Cabinets (Excludes 12.5T "V" cabinets)
1FE0412	All	Flue Exhaust Extension Kit	All Cabinets
1FF0414	All	2 in. only Metal Filter Frame Kit	All Tall 50 in. Cabinets
1FF0415	All	2 in. only Metal Filter Frame Kit	All Tall 42 in. Cabinets
1FL0402	All	Permanent 2 in. only Filter Kit Includes (4) Four Filters)	All Tall 50 in. Cabinets
1FL0423	All	Permanent 2 in. only Filter Kit (Includes (4) four Filters)	All Tall 42 in. Cabinets
1HA0448	All	High Altitude Kit for Natural Gas	All 6 - 12T Cabinets
1HA0447	All	High Altitude Kit for Natural Gas	All 3 - 5T Cabinets
1HA0425	All	High Altitude Kit for Propane	All 6 - 12T Cabinets
1HA0424	All	High Altitude Kit for Propane	All 3 - 5T Cabinets
1NP0463	All	Propane Conversion Kit	All 6 - 12T Cabinets
1NP0462	All	Propane Conversion Kit	All 3 - 5T Cabinets
1RC0470	All	Roof Curb, 8 in. Height	All Cabinets
1RC0471	All	Roof Curb, 14 in. Height	All Cabinets
1RC0472	All	Roof Curb, Transition (7.5 T thru 12.5T Sunline to Pro 3- 12T)	All Cabinets
1WC0412	All	Wooden Crate for extra protection during shipping and handling	Standard Cabinets Only (not applicable to units 119 in. in length)

Accessories (Continued)**Field Installed Accessories - Electric Heat**

MODEL	VOLTAGE	DESCRIPTION	WHERE USED
2TP04520925	230	9kW Electric Heat	All 50" Cabinet 6.5 and 8.5 Ton Models
2TP04520946	460		
2TP04520958	575		
2TP04531825	230	18kW Electric Heat	All 50" Cabinet 6.5, 8.5, 10 and 12.5 Ton Models
2TP04531846	460		
2TP04521858	575		
2TP04532425	230	24kW Electric Heat	All 50" Cabinet 6.5, 8.5, 10 and 12.5 Ton Models
2TP04532446	460		
2TP04522458	575		
2TP04533625	230	36kW Electric Heat	All 50" Cabinet 6.5, 8.5, 10 and 12.5 Ton Models
2TP04533646	460		
2TP04523658	575		
2TP04525425	230	54kW Electric Heat	All 50" 10 and 12.5 Ton Models
2TP04525446	460		
2TP04525458	575		
2TP04540925	230	9kW Electric Heat	All 42" Cabinet 6.5, 7.5 and 8.5 Ton Models
2TP04540946	460		
2TP04540958	575		
2TP04541825	230	18kW Electric Heat	All 42" 6.5, 7.5 and 8.5 Ton Models
2TP04541846	460		
2TP04541858	575		
2TP04542425	230	24kW Electric Heat	All 42" Cabinet 6.5, 7.5 and 8.5 Ton Models
2TP04542446	460		
2TP04542458	575		
2TP04543625	230	36kW Electric Heat	All 42" Cabinet 6.5, 7.5 and 8.5 Ton Models
2TP04543646	460		
2TP04543658	575		
2TP04510325	230	3kW Electric Heat	All 42" Cabinet 3 Ton Models
2TP04510346	460		
2TP04510625	230	6kW Electric Heat	All 42" Cabinet 3, 4 and 5 Ton Models
2TP04510646	460		
2TP04510825	230	9kW Electric Heat	All 42" Cabinet 3, 4 and 5 Ton Models
2TP04510846	460		
2TP04510858	575		
2TP04511525	230	15kW Electric Heat	All 42" Cabinet 3, 4 and 5 Ton Models
2TP04511546	460		
2TP04511558	575		
2TP04512025	230	20kW Electric Heat	All 42" 4 and 5 Ton Models
2TP04512046	460		
2TP04512058	575		
2TP04512325	230	24kW Electric Heat	All 42" Cabinet 5 Ton Models
2TP04512346	460		
2TP04512358	575		

Accessories (Continued)

Field Installed Accessories - Fresh Air

MODEL	VOLTAGE	DESCRIPTION	WHERE USED
1FA0413	All	Manual Outside Air Damper 0-35%, Downflow	All Cabinets
1FA0414	All	Manual Outside Air Damper 0-100%, Downflow	All Cabinets
1EH0408	All	Barometric Relief Kit for Power Exhaust, Horizontal Application	All Cabinets
2EC0401	All	Single Enthalpy Control	All Cabinets
2EC0402	All	Dual Enthalpy Control (Includes 2 Sensors)	All Cabinets
2EE04717425	All	Economizer for Downflow, End Return Horizontal, or Bottom Return Vertical Applications. Includes FA Hood, Exhaust Hood w/Baro Relief	All 42 in. Cabinets
2EE04717625	All	Economizer for Downflow, End Return Horizontal, or Bottom Return Vertical Applications. Includes FA Hood, Exhaust Hood w/Baro Relief	All 50 in. Cabinets
2EE04709725	All	Economizer for Downflow, End Return Horizontal, or Bottom Return Vertical Applications. Includes FA Hood, Exhaust Hood w/Baro Relief, BAS Ready	All 42 in. Cabinets
2EE04709825	All	Economizer for Downflow, End Return Horizontal, or Bottom Return Vertical Applications. Includes FA Hood, Exhaust Hood w/Baro Relief, BAS Ready	All 50 in. Cabinets
2EE04706924	All	Horizontal Economizer without Barometric Relief	All Cabinets
2MD04703824	All	Motorized Damper, Downflow without Barometric Relief	All Cabinets
2MD04703924	All	Motorized Damper, Horizontal without Barometric Relief	All Cabinets
2PE04704706	230	Power Exhaust 230V Downflow or Horizontal	All Cabinets
2PE04704746	460	Power Exhaust 460V Downflow or Horizontal	All Cabinets
2PE04704758	575	Power Exhaust 575V Downflow or Horizontal	All Cabinets

Field Installed Accessories - Controls

MODEL	VOLTAGE	DESCRIPTION	WHERE USED
2AP0401	All	Air Proving Switch	All Units
2AQ04700524	All	CO ² Space Accessory	All Units
2AQ04700624	All	CO ² Unit Accessory	All Units
2DF0402	All	Dirty Air Switch	All Units
2SD04700824	All	Smoke Detector for Supply	All Units
2SD04700924	All	Smoke Detector for Return	All Units
2SD04701024	All	Smoke Detector for Supply and Return	All Units
S1-YK-MAP1810-0P	All	MAP (Mobile Access Portal) Gateway- For use with Smart Equipment™ Control.	All Units
S1-MP-PRTKIT-0P	All	MAP (Mobile Access Portal) Gateway Kit- Replacement MAP gateway protective case, lanyard and communication cable. Use only to replace worn or damaged components.	All Units

Field Installed Accessories - Electrical

MODEL	VOLTAGE	DESCRIPTION	WHERE USED
2LA04702412	All	Low Ambient Kit	All 3 - 10T units (excludes ZT)
2LA04702424	All	Low Ambient Kit	All 12.5T cabinets

Guide Specifications

GENERAL

Pro units are convertible single packages with a common footprint cabinet and common roof curb for all 3 through 12.5 ton models. All 6.5 through 12.5 ton units have two compressors with independent R-410A refrigeration circuits to provide 2 stages of cooling. The units were designed for light commercial applications and can be easily installed on a roof curb, slab, or frame. All Pro units are self-contained and assembled on rigid full perimeter base rails allowing for 3-way forklift access and overhead rigging. Every unit is completely charged with R-410A, wired, piped, and tested at the factory to

provide a quick and easy field installation. All units are convertible between side and down airflow. Independent economizer designs are used on side and down discharge applications, as well as all tonnage sizes. Pro units are available in the following configurations: cooling only, cooling with electric heat, cooling with gas heat, reheat only, reheat with electric heat and reheat with gas heat. Electric heaters are available as factory-installed options or field-installed accessories.

DESCRIPTION

Units shall be factory assembled, single package, (Elec/Elec, Gas/Elec), designed for outdoor installation. They shall have built in

field convertible duct connections for down discharge supply/return or horizontal discharge supply/return and be available with factory installed options or field installed accessories. The units shall be factory wired, piped and charged with R-410A refrigerant and factory tested prior to shipment. All unit wiring shall be both numbered and color coded. The cooling performance shall be rated in accordance with DOE and AHRI test procedures. Units shall be CSA certified to ANSI Z21.47 and UL 1995/CAN/CSA No. 236-M90 standards.

UNIT CABINET

Unit cabinet shall be constructed of galvanized steel with exterior surfaces coated with a non-chalking, powder paint finish, certified at a 750-hour salt spray test per ASTM-B117 standards. Indoor blower sections shall be insulated with up to 1" thick insulation coated on the airside. Either aluminum foil faced or elastomeric rubber insulation shall be used in the unit's compartments and be fastened to prevent insulation from entering the air stream. Cabinet doors shall be hinged with toolless access for easy servicing and maintenance. Full perimeter base rails shall be provided to assure reliable transit of equipment, overhead rigging, fork truck access and proper sealing on roof curb applications. Disposable 2" filters shall be furnished as standard and be accessible through hinged access door. Fan performance measuring ports shall be provided on the outside of the cabinet to allow accurate air measurements of evaporator fan performance without removing panels or creating bypass of the coils. Condensate pan shall be slide out design, constructed of a non corrosive material, internally sloped and conforming to ASHRAE 62-B9 standards. Condensate connection shall be a minimum of ¾" I.D. female and be rigid mount connection.

INDOOR (EVAPORATOR) FAN ASSEMBLY

Fan shall be a belt drive assembly and include an adjustable pitch motor pulley. Job site selected brake horsepower shall not exceed the motors nameplate horsepower rating plus the service factor. Units shall be designed to operate within the service factor. Fan wheel shall be double inlet type with forward curve blades, dynamically balanced to operate smoothly throughout the entire range of operation. Airflow design shall be constant volume. Bearings shall be sealed and permanently lubricated for longer life and no maintenance. Entire blower assembly and motor shall be slide out design.

OUTDOOR (CONDENSER) FAN ASSEMBLY

The outdoor fans shall be of the direct drive type, discharge air vertically, have aluminum blades riveted to corrosion resistant steel spider brackets and shall be dynamically balanced for smooth operation. The outdoor fan motors shall have permanently lubricated bearings internally protected against overload conditions and staged independently. A cleaning window shall be provided on two sides of the units for coil cleaning.

REFRIGERANT COMPONENTS

Compressors:

- a. Shall be fully hermetic type, direct drive, internally protected with internal high-pressure relief and over temperature protection. The hermetic motor shall be

suction gas cooled and have a voltage range of + or – 10% of the unit nameplate voltage.

- b. Shall have internal spring isolation and sound muffling to minimize vibration and noise, and be externally isolated on a dedicated, independent mounting.

Coils:

- a. Evaporator coils shall have aluminum plate fins mechanically bonded to seamless internally enhanced copper tubes with all joints brazed. Special Phenolic coating shall be available as a factory option.
- b. Evaporator coils shall be of the direct expansion, draw-thru design.
- c. Condenser coils shall have aluminum plate fins mechanically bonded to seamless internally enhanced copper tubes with all joints brazed or Micro-Channel aluminum tube, aluminum fins.
- d. Condenser coils shall be of the draw-thru design.

Refrigerant Circuit and Refrigerant Safety Components shall include:

- a. Independent fixed-orifice or thermally operated expansion devices.
- b. Solid core filter drier/strainer to eliminate any moisture or foreign matter.
- c. Accessible service gage connections on both suction and discharge lines to charge, evacuate, and measure refrigerant pressure during any necessary servicing or troubleshooting, without losing charge.
- d. The 6.5 through 12.5 ton unit shall have two independent refrigerant circuits, equally split in 50% capacity increments.

Unit Controls:

- a. Unit shall be complete with self-contained low-voltage control circuit protected by a resettable circuit breaker on the 24-volt transformer side.
- b. Unit shall incorporate a lockout circuit which provides reset capability at the space thermostat or base unit, should any of the following standard safety devices trip and shut off compressor.
 1. Loss-of-charge/Low-pressure switch.
 2. High-pressure switch.
 3. Freeze condition sensor on evaporator coil. If any of these safety devices trip, the LCD screen will display the alarm message.
- c. Unit shall incorporate "AUTO RESET" compressor over temperature, over current protection.
- d. Unit shall operate with conventional thermostat designs and have a low voltage terminal strip for easy hook-up.
- e. Unit control board shall have on-board diagnostics and fault message display.
- f. Standard controls shall include anti-short cycle and low voltage protection, and permit cooling operation down to a selectable value as low as 0 °F.

- g. Control board shall monitor each refrigerant safety switch independently.

GAS HEATING SECTION (IF EQUIPPED)

Heat exchanger and exhaust system shall be constructed of aluminized steel, and be designed with induced draft combustion with post purge logic, energy saving direct spark ignition, and redundant main gas valve. The heat exchanger shall be of the tubular type, constructed of T1-40 aluminized steel for corrosion resistance and allowing minimum mixed air entering temperature of 40 °F. Burners shall be of the in-shot type, constructed of aluminum-coated steel. All gas piping shall enter the unit cabinet at a single location, through either the side or bottom, without any field modifications. An integrated control board shall provide timed control of evaporator fan functioning and burner ignition. Heating section shall be provided with the following minimum protection:

- a. Primary and auxiliary high-temperature limit switches.
- b. Induced draft pressure sensor.
- c. Flame roll out switch (manual reset).
- d. Flame proving controls.
- e. All two stage gas units shall have two independent stages of capacity.

ELECTRIC HEATING SECTION (IF EQUIPPED)

An electric heating section, with nickel chromium elements, shall be provided in a range of 3 thru 54KW. The heating section shall have a primary limit control(s) (automatic reset) to prevent the heating element system from operating at an excessive temperature. The Heating Section assembly shall slide out of the unit for easy maintenance and service. Units with Electric Heating Sections shall be wired for a single point power supply with branch circuit fusing (where required).

UNIT OPERATING CHARACTERISTICS

Unit shall be capable of starting and running at 125 °F outdoor temperature, exceeding maximum load criteria of AHRI Standard 340/360. The compressor, with standard controls, shall be capable of operation down to 0 °F outdoor temperature. Unit shall be provided with fan time delay to prevent cold air delivery before heat exchanger warms up. (Gas heat only)

ELECTRICAL REQUIREMENTS - All unit power wiring shall enter unit cabinet at a single factory provided location and be capable of side or bottom entry to minimize roof penetrations and avoid unit field modifications. Separate side and bottom openings shall be provided for the control wiring.

STANDARD LIMITED WARRANTIES - Compressor – 5 Years, Heat Exchanger – 10 Years, Elect. Heat Elem. – 5 Years, Parts – 1 Year

OPTIONAL OUTDOOR AIR (Shall be made available by either/or):

- **DRY BULB AUTOMATIC ECONOMIZER** - Outdoor and return air dampers that are interlocked and positioned by

a fully-modulating, spring-return damper actuator. The maximum leakage rate for the outdoor air intake dampers shall be designed to meet ASHRAE 90.1, AMCA 511 Class 1A damper, and the International Energy Conservation Code (IECC) certification requirements by achieving leakage rates of 3 CFM/sq. ft. at 1" of static pressure. Changeover from compressor to economizer operation shall be provided by an integral electronic enthalpy control that feeds input into the basic module. The outdoor intake opening shall be covered with a rain hood that matches the exterior of the unit. Water eliminator/filters shall be provided.

Simultaneous economizer/compressor operation is also possible. Dampers shall fully close on power loss. Available with barometric relief and power exhaust.

- **MOTORIZED OUTDOOR AIR DAMPERS** - Outdoor and return air dampers that are interlocked and positioned by a 2- position, spring-return damper actuator. A unit-mounted potentiometer shall be provided to adjust the outdoor and return air damper assembly to take in the design CFM of outdoor air to meet the ventilation requirements of the conditioned space during normal operation. Whenever the indoor fan motor is energized, the dampers open up to one of two pre-selected positions - regardless of the outdoor air enthalpy. Dampers return to the fully closed position when the indoor fan motor is de-energized. Dampers shall fully close on power loss.

ADDITIONAL FACTORY INSTALLED OPTIONS

- **ALTERNATE INDOOR BLOWER MOTOR** – For applications with high restrictions, units are available with optional indoor blower motors that provide higher static output and/or higher airflow.
- **VARIABLE AIR VOLUME (VAV)** - The VAV option using a variable frequency drive (VFD) shall be available for applications requiring a constant supply-duct static pressure. Units equipped for VAV shall be controlled by a duct pressure transducer with a 0 - 5" WC pressure range. The pressure transducer shall provide a 0 - 5 VDC output signal to a VAV control board which, in turn shall provide a 2 - 10 VDC speed reference signal to the VFD. The control board shall operate using factory-installed Supply Air, Return Air and Outside Air Temperature Sensors with a nominal resistance of 10,000 Ohms. Units equipped with VFD's shall have factory-installed manual bypass as an option.
- **CONVENIENCE OUTLET (POWERED/NON-POWERED)**– Unit can be provided with an optional 120VAC GFCI outlet with cover on the corner of the unit housing the compressors.
- **ELECTRIC HEAT** - Electric Heaters range from 3kW to 54kW and are available in all the voltage options of the base unit.
- **PHASE MONITOR** - Designed to prevent damage in out-of-phase condition.
- **COIL GUARD** - Designed to prevent condenser coil damage.

- **BAS CONTROLS HARDWARE** - Include supply air sensor, return air sensor, dirty filter indicator and air proving switch.
- **DIRTY FILTER SWITCH** – This kit includes a differential pressure switch that energizes the fault light on the unit thermostat, indicating that there is an abnormally high-pressure drop across the filters.
- **BREAKER** – An HACR breaker can be factory installed on gas heat units or cooling units with electric heat.
- **DISCONNECT SWITCH** - A disconnect can be factory installed on a cooling only units sized for the largest electric heat available.
- **STAINLESS STEEL HEAT EXCHANGER** – For applications in a corrosive environment, this option provides a full stainless steel heat exchanger assembly.
- **SMOKE DETECTOR** – A smoke detector can be factory mounted and wired in the supply and/or return air compartments.

OTHER PRE-ENGINEERED ACCESSORIES AVAILABLE

- **ROOF CURB** - 14" and 8" high, full perimeter knockdown curb, with hinged design for quick assembly.
- **BAROMETRIC RELIEF DAMPER** – (Unit mounted – Downflow, Duct Mounted – Horizontal) – Contains a rain hood, air inlet screen, exhaust damper and mounting hardware. Used to relieve internal air pressure through the unit during economizer operation.
- **PROPANE CONVERSION KIT** – Contains new orifices and gas valve springs to convert from natural to L.P. gas.
- **ECONOMIZER** (Downflow and Horizontal flow)
- **POWER EXHAUST** – (Unit mount – Downflow, Duct mount – Horizontal flow)
- **DUAL ENTHALPY KIT** - Provides a second input to economizer to monitor return air.

Physical Data

ZJ037-061 Two Stage Gas Heat Physical Data

Component	Models							
	ZJ037		ZJ049			ZJ061		
Nominal Tonnage	3.0		4.0			5.0		
AHRI COOLING PERFORMANCE								
Gross Capacity @ AHRI A point (MBh)	36000		48500			59000		
AHRI net capacity (MBh)	35000		47000			57000		
EER	12.2		12.2			12.2		
SEER	14.5		15			14.5		
CFM	1200		1600			2000		
System power (KW)	2.87		3.85			4.67		
Refrigerant type	R-410A		R-410A			R-410A		
Refrigerant charge (lb-oz)								
System 1	6-8		8-6			7-8		
System 2	-		-			-		
Refrigerant charge (lb-oz) Magna Dry option	6-12		8-6			7-8		
AHRI HEATING PERFORMANCE								
Heating model	N06	N08	N06	N08	N12	N08	N12	N16
Heat input (K Btu)	60	80	60	80	120	80	120	160
Heat output (K Btu)	49	65	49	65	97	65	97	130
AFUE %	-		-		-	-		-
Steady state efficiency (%)	81	81	81	81	81	81	81	81
No. burners	4	4	4	4	6	4	6	8
No. stages	2 ¹	2 ²	2 ¹	2 ²	2 ²	2 ²	2 ²	2 ²
Temperature Rise Range (°F)	20-50°F	25-65°F	20-50°F	25-65°F	35-70°F	25-65°F	35-70°F	45-75°F
Gas piping connection (in.)	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
DIMENSIONS (inches)								
Length	89		89			89		
Width	59		59			59		
Height	42		42			42		
OPERATING WEIGHT (lb.)	719		748			765		
Operating weight (lb.) with Magna Dry	785		800			830		
COMPRESSORS ³								
Type	Scroll		Scroll			Scroll		
Quantity	1		1			1		
Unit Capacity Steps (%)	100		100			100		
CONDENSER COIL DATA								
Face area (Sq. Ft.)	18.5		23.8			23.8		
Rows	1		1			1		
Fins per inch	23		23			23		
Tube diameter (in./MM)	.71/18		.71/18			.71/18		
Circuitry Type	2-pass Microchannel		2-pass Microchannel			2-pass Microchannel		
EVAPORATOR COIL DATA								
Face area (Sq. Ft.)	7.9		23.8			10.5		
Rows	3		3			3		
Fins per inch	15		15			15		
Tube diameter	0.375		0.375			0.375		
Refrigerant control	TXV		TXV			TXV		

ZJ037-061 Two Stage Gas Heat Physical Data (Continued)

Component	Models							
	ZJ037		ZJ049			ZJ061		
Nominal Tonnage	3.0		4.0			5.0		
REHEAT OPTION COIL DATA								
Face area (Sq. Ft.)	6.7		7.8			7.8		
Rows	1		1			1		
Fins per inch	13		13			13		
Tube diameter	3/8		3/8			3/8		
CONDENSER FAN DATA								
Quantity of fans	1		1			2		
Fan diameter (Inch)	24		24			24		
Type	Prop		Prop			Prop		
Drive type	Direct		Direct			Direct		
Quantity of motors	1		1			2		
Motor HP each	1/3		1/3			1/3		
No. speeds	1		1			1		
RPM	850		850			850		
Total CFM	3300		3700			6300		
BELT DRIVE EVAP FAN DATA								
Quantity	1		1			1		
Fan Size (Inch)	12 x 9		12 x 9			12 x 9		
Type	Centrifugal		Centrifugal			Centrifugal		
Motor Sheave	1VM34	1VL44	1VM34		1VL44	1VL40		1VP56
Blower Sheave	AK69	AK69	AK56		AK56	AK61		AK74
Belt	A47	A47	A47		A47	A47		A51
Motor HP each	1-1/2	1-1/2	1-1/2		1-1/2	1-1/2		2
RPM	1725	1725	1725		1725	1725		1725
Frame size	56	56	56		56	56		56
FILTERS								
Quantity - Size	4 - (24 x 16 x 2) ^{4,5}		4 - (24 x 16 x 2) ^{4,5}			4 - (24 x 16 x 2) ^{4,5}		
	4 - (24 x 16 x 4) ⁶		4 - (24 x 16 x 4) ⁶			4 - (24 x 16 x 4) ⁶		

1. 1st Stage Capacity is 75% of Full Capacity.
2. 1st Stage Capacity is 70% of Full Capacity.
3. ZJ037, ZJ049 and ZJ061 have crankcase heaters standard.
4. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value)
5. 2 In. Pleated, Optional, MERV 8.
6. 4 In. Pleated, Optional, MERV 13.

ZJ078-150 Physical Data

Component	Models									
	ZJ078		ZJ090		ZJ102		ZJ120		ZJ150	
Nominal Tonnage	6.5		7.5		8.5		10		12.5	
AHRI COOLING PERFORMANCE										
Gross Capacity @ AHRI A point (Btu)	78000		88000		99700		124000		154000	
AHRI net capacity (Btu)	76000		86000		95000		120000		150000	
EER	12.0/11.8		12.0 ¹		12.2 ¹ /12.0 ²		12.0		12.1 ¹ /12 ²	
IEER with Intellispeed	15.2 ¹ /15.0 ²		14.8 ¹ /14.6 ²		14.8 ¹ /14.6 ²		15.2 ¹ /15.0 ²		15.4 ¹ /15.2 ²	
IEER with VAV	15.2 ¹ /15.0 ²		15.2 ¹ /15.0 ²		14.8 ¹ /14.6 ²		15.2 ¹ /15.0 ²		15.4 ¹ /15.2 ²	
CFM	2500		3000		3300		3400		3500	
System power (KW)	6.40		7.17		8.00		9.80		12.50	
Refrigerant type	R-410A		R-410A		R-410A		R-410A		R-410A	
Refrigerant charge (lb-oz)										
System 1	5-12		6-4		7		7-12		10-8	
System 2	5-12		6-7		7-8		7-10		9-12	
Refrigerant charge (lb-oz) with MagnaDry										
System 1	6-2		8-4		7-4		7-12		11-0	
System 2	5-12		6-7		7-8		7-10		9-12	
AHRI HEATING PERFORMANCE										
Heating model	N12	N18	N12	N18	N12	N18	N18	N24	N18	N24
Heat input (K Btu)	120	180	120	180	120	180	180	240	180	240
Heat output (K Btu)	97	146	97	146	97	146	146	194	146	194
AFUE %	-	-	-	-	-	-	-	-	-	-
Steady state efficiency (%)	81	81	81	81	81	81	81	81	81	81
No. burners	5	7	5	7	5	7	7	8	7	8
No. stages	2 ³	2 ³	2 ³	2 ³	2 ³	2 ³	2 ³	2 ³	2 ³	2 ³
Temperature Rise Range (°F)	20-50	20-65	20-50	20-65	20-50	20-65	20-65	30-60	20-65	30-60
Gas piping connection (in.)	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
DIMENSIONS (inches)										
Length	89		89		89		89		119-1/2	
Width	59		59		59		59		59	
Height	50-3/4		50-3/4		50-3/4		50-3/4		50-3/4	
OPERATING WT. (lbs.)										
Operating weight with MagnaDry option	1033		1035		1044		1070		1280	
COMPRESSORS ⁴										
Type	Scroll		Scroll		Scroll		Scroll		Scroll	
Quantity	2		2		2		2		2	
Unit Capacity Steps (%)	50 / 100		50 / 100		50 / 100		50 / 100		50 / 100	
CONDENSER COIL DATA										
Face area (Sq. Ft.)	29.0		23.8		29.0		29.0		47.5	
Rows	1		1		1		1		1	
Fins per inch	23		23		23		23		23	
Tube diameter (in./MM)	.71/18		1/25		1/25		1/25		.71/18	
Circuitry Type	2-pass Microchannel		2-pass Microchannel		2-pass Microchannel		2-pass Microchannel		2-pass Microchannel	
EVAPORATOR COIL DATA										
Face area (Sq. Ft.)	13.2		13.2		13.2		13.2		13.2	
Rows	3		3		3		4		4	
Fins per inch	15		15		15		15		15	
Tube diameter	0.375		0.375		0.375		0.375		0.375	
Circuitry Type	Intertwined		Intertwined		Intertwined		Intertwined		Intertwined	
Refrigerant control	TXV		TXV		TXV		TXV		TXV	

ZJ078-150 Physical Data (Continued)

Component	Models									
	ZJ078		ZJ090		ZJ102		ZJ120		ZJ150	
Nominal Tonnage	6.5		7.5		8.5		10		12.5	
REHEAT OPTION COIL DATA										
Face area (Sq. Ft.)	10		10		10		10		10	
Rows	1		2		2		2		2	
Fins per inch	13		13		13		13		13	
Tube diameter	3/8		3/8		3/8		3/8		3/8	
CONDENSER FAN DATA										
Quantity of fans	2		2		2		2		4	
Fan diameter (Inch)	24		24		24		24		24	
Type	Prop		Prop		Prop		Prop		Prop	
Drive type	Direct		Direct		Direct		Direct		Direct	
Quantity of motors	2		2		2		2		4	
Motor HP each	1/3		3/4		3/4		3/4		1/3	
No. speeds	1		1		1		1		1	
RPM	850		1110		1110		1110		850	
Total CFM	7400		8000		9000		9400		14000	
BELT DRIVE EVAP FAN DATA										
Quantity	1		1		1		1		1	
Fan Size (Inch)	15 x 15		15 x 15		15 x 15		15 x 15		15 x 15	
Type	Centrifugal		Centrifugal		Centrifugal		Centrifugal		Centrifugal	
Motor Sheave	1VL40	1VM50	1VL40	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VP56
Blower Sheave	AK74	AK74	AK69	AK69	AK89	AK74	AK84	AK74	AK74	BK77
Belt	A53	A54	A52	A54	A56	A54	A56	A54	A54	BX56
Motor HP each	1-1/2	2	1-1/2	3	2	3	2	3	3	5
RPM	1725	1725	1725	1725	1725	1725	1725	1725	1725	1725
Frame size	56	56	56	56	56	56	56	56	56	184T
FILTERS										
Quantity - Size	4 - (24 x 20 x 2) ^{5,6}		4 - (24 x 20 x 2) ^{5,6}		4 - (24 x 20 x 2) ^{5,6}		4 - (24 x 20 x 2) ^{5,6}		4 - (24 x 20 x 2) ^{5,6}	
	4 - (24 x 20 x 4) ⁷		4 - (24 x 20 x 4) ⁷		4 - (24 x 20 x 4) ⁷		4 - (24 x 20 x 4) ⁷		4 - (24 x 20 x 4) ⁷	

1. Cooling Only Unit or Cooling Unit with Electric Heat
2. Cooling Unit with Gas Heat
3. 1st Stage 60% of Full Capacity
4. ZJ078 through ZJ150 have crankcase heaters standard.
5. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value) 3.
6. 2 In. Pleated, Optional, MERV 8.
7. 4 In. Pleated, Optional, MERV 13.

Z 037-150 Unit Limitations

Size (Tons)	Model	Unit Voltage	SCCR (kVA)	Unit Limitations		
				Applied Voltage		Outdoor DB Temp
				Min	Max	Max (°F)
037 (3)	ZJ	208/230-3-60	5	187	252	125
		460-3-60	5	432	504	125
		575-3-60	5	540	630	125
049 (4)	ZJ	208/230-3-60	5	187	252	125
		460-3-60	5	432	504	125
		575-3-60	5	540	630	125
061 (5)	ZJ	208/230-3-60	5	187	252	125
		460-3-60	5	432	504	125
		575-3-60	5	540	630	125
078 (6.5)	ZJ	208/230-3-60	5	187	252	125
		460-3-60	5	432	504	125
		575-3-60	5	540	630	125
090 (7.5)	ZJ	208/230-3-60	5	187	252	125
		460-3-60	5	432	504	125
		575-3-60	5	540	630	125
102 (8.5)	ZJ	208/230-3-60	5	187	252	125
		460-3-60	5	432	504	125
		575-3-60	5	540	630	125
120 (10)	ZJ	208/230-3-60	5	187	252	125
		460-3-60	5	432	504	125
		575-3-60	5	540	630	125
150 (12.5)	ZJ	208/230-3-60	5	187	252	125
		460-3-60	5	432	504	125
		575-3-60	5	540	630	125

Capacity Performance

ZJ037-150 Cooling and Reheat Capacities

ZJ037 (3.0 ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								85°F							
750	77	48.1	1.8	23.3	19.3	15.3	-	-	-	45.0	2.1	21.6	17.8	14.1	-	-	-
	72	43.0	1.8	27.6	23.5	19.3	15.2	-	-	40.3	2.1	26.4	22.2	18.1	14.0	-	-
	67	37.8	1.8	32.0	27.7	23.4	19.0	14.9	-	35.7	2.1	31.1	26.6	22.1	17.8	13.7	-
	62	35.9	1.8	35.6	31.5	27.4	22.2	18.8	14.5	34.1	2.1	34.1	30.1	26.1	21.5	17.7	13.4
900	77	48.6	1.9	25.8	20.7	15.6	-	-	-	45.3	2.1	24.4	19.4	14.4	-	-	-
	72	44.0	1.8	30.3	25.4	20.5	15.6	-	-	41.2	2.1	29.0	24.1	19.2	14.3	-	-
	67	39.4	1.8	34.8	30.1	25.4	20.3	15.4	-	37.2	2.1	33.6	28.8	24.1	19.1	14.2	-
	62	37.8	1.8	37.6	33.9	30.3	24.5	20.2	15.1	35.9	2.1	35.9	32.4	28.9	23.6	18.9	14.0
	57	36.2	1.8	36.2	36.2	35.2	30.0	24.9	19.8	34.6	2.1	34.6	34.6	33.8	28.7	23.7	18.7
1050	77	49.1	1.9	28.4	22.1	15.9	-	-	-	45.6	2.1	27.2	20.9	14.7	-	-	-
	72	45.1	1.8	33.0	27.3	21.6	16.0	-	-	42.1	2.1	31.7	26.0	20.3	14.7	-	-
	67	41.1	1.8	37.6	32.5	27.4	21.6	15.9	-	38.6	2.1	36.1	31.1	26.0	20.3	14.6	-
	62	39.7	1.8	39.6	36.4	33.2	26.8	21.5	15.7	37.7	2.1	37.7	34.7	31.7	25.7	20.2	14.5
	57	38.4	1.8	38.4	38.4	37.9	33.0	27.1	21.2	36.7	2.1	36.7	36.7	36.7	31.6	25.8	20.0
1200	77	49.7	1.9	31.0	23.6	16.2	-	-	-	45.9	2.1	30.0	22.5	14.9	-	-	-
	72	46.2	1.9	35.7	29.2	22.8	16.3	-	-	43.0	2.1	34.3	27.9	21.5	15.1	-	-
	67	42.7	1.8	40.4	34.9	29.4	22.8	16.4	-	40.1	2.1	38.6	33.3	28.0	21.5	15.1	-
	62	41.6	1.8	41.6	38.9	36.1	29.1	22.9	16.3	39.5	2.1	39.5	37.1	34.5	27.8	21.5	15.0
	57	40.6	1.8	40.6	40.6	40.6	36.0	29.4	22.7	38.8	2.1	38.8	38.8	38.8	34.5	27.9	21.4
1350	72	47.2	1.9	38.4	31.2	24.0	16.7	-	-	43.9	2.1	36.9	29.8	22.6	15.4	-	-
	67	44.3	1.8	43.2	37.3	31.5	24.1	16.9	-	41.6	2.1	41.0	35.5	30.0	22.7	15.5	-
	62	43.5	1.9	43.5	41.3	39.0	31.4	24.2	16.9	41.3	2.1	41.3	39.4	37.3	30.0	22.8	15.5
	57	42.8	1.9	42.8	42.8	42.8	39.0	31.6	24.2	41.0	2.1	41.0	41.0	41.0	37.4	30.1	22.7
1500	72	48.3	1.9	41.1	33.1	25.1	17.1	-	-	44.8	2.1	39.6	31.7	23.7	15.8	-	-
	67	45.9	1.9	45.9	39.7	33.5	25.4	17.4	-	43.1	2.1	43.1	37.7	31.9	23.9	16.0	-
	62	45.5	1.9	45.5	43.8	41.8	33.7	25.6	17.5	43.1	2.1	43.1	41.7	40.1	32.1	24.1	16.0
	57	45.0	1.9	45.0	45.0	45.0	42.0	33.8	25.6	43.1	2.1	43.1	43.1	43.1	40.3	32.2	24.1
		95°F								105°F							
750	77	41.9	2.4	20.0	16.4	12.9	-	-	-	38.8	2.8	19.1	15.4	11.7	-	-	-
	72	37.7	2.3	25.1	21.0	16.9	12.7	-	-	34.8	2.7	23.8	19.7	15.6	11.5	-	-
	67	33.6	2.3	30.2	25.5	20.9	16.7	12.6	-	30.8	2.7	28.4	23.9	19.4	15.3	11.2	-
	62	32.2	2.3	32.2	28.7	24.9	20.7	16.5	12.4	30.1	2.7	30.1	26.7	23.3	19.1	15.0	10.9
900	77	42.0	2.4	23.0	18.1	13.1	-	-	-	38.8	2.8	22.1	16.9	11.8	-	-	-
	72	38.4	2.3	27.7	22.8	18.0	13.1	-	-	35.4	2.7	26.2	21.4	16.5	11.7	-	-
	67	34.9	2.3	32.3	27.6	22.8	17.9	13.0	-	32.1	2.7	30.4	25.8	21.3	16.4	11.5	-
	62	33.9	2.3	33.9	30.9	27.6	22.7	17.7	12.8	31.6	2.7	31.6	28.9	26.0	21.1	16.2	11.2
	57	32.9	2.3	32.9	32.9	32.4	27.4	22.5	17.5	31.1	2.7	31.1	31.1	30.7	25.8	20.8	15.9
1050	77	42.1	2.4	26.1	19.7	13.4	-	-	-	38.8	2.8	25.1	18.5	11.9	-	-	-
	72	39.1	2.4	30.3	24.7	19.1	13.4	-	-	36.1	2.8	28.7	23.1	17.5	11.9	-	-
	67	36.2	2.3	34.5	29.6	24.7	19.0	13.4	-	33.4	2.7	32.3	27.7	23.1	17.5	11.8	-
	62	35.6	2.3	35.6	33.1	30.3	24.6	18.9	13.3	33.1	2.7	33.1	31.1	28.7	23.0	17.3	11.6
	57	35.0	2.3	35.0	35.0	35.0	30.2	24.5	18.8	32.8	2.7	32.8	32.8	32.8	28.6	22.8	17.1
1200	77	42.1	2.4	29.1	21.4	13.7	-	-	-	38.8	2.8	28.1	20.0	11.9	-	-	-
	72	39.8	2.4	32.9	26.5	20.2	13.8	-	-	36.8	2.8	31.2	24.8	18.4	12.1	-	-
	67	37.6	2.3	36.7	31.6	26.6	20.2	13.8	-	34.7	2.7	34.2	29.6	25.0	18.5	12.1	-
	62	37.3	2.3	37.3	35.3	33.0	26.6	20.1	13.7	34.6	2.7	34.6	33.2	31.5	25.0	18.5	12.0
	57	37.1	2.3	37.1	37.1	37.1	33.0	26.5	20.0	34.5	2.7	34.5	34.5	34.5	31.4	24.8	18.3
1350	72	40.6	2.4	35.5	28.4	21.3	14.1	-	-	37.4	2.8	33.6	26.5	19.4	12.3	-	-
	67	38.9	2.4	38.9	33.7	28.5	21.3	14.2	-	36.0	2.8	36.0	31.4	26.8	19.6	12.4	-
	62	39.0	2.3	39.0	37.5	35.7	28.5	21.3	14.1	36.0	2.8	36.0	35.4	34.2	26.9	19.6	12.3
	57	39.1	2.3	39.1	39.1	39.1	35.7	28.5	21.3	36.1	2.8	36.1	36.1	36.1	34.2	26.8	19.5
1500	72	41.3	2.4	38.1	30.2	22.352	14.5	-	-	38.1	2.8	36.1	28.2	20.3	12.5	-	-
	67	40.2	2.4	40.2	35.7	30.4	22.5	14.6	-	37.3	2.8	37.3	33.3	28.6	20.7	12.7	-
	62	40.7	2.4	40.7	39.7	38.4	30.5	22.5	14.6	37.5	2.8	37.5	37.5	36.9	28.8	20.8	12.7
	57	41.2	2.4	41.0	41.0	41.0	38.5	30.5	22.5	37.8	2.8	37.8	37.8	37.8	37.0	28.8	20.7

ZJ037 (3.0 ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F								125°F							
750	77	35.7	3.2	18.2	14.4	10.6	-	-	-	32.6	3.6	17.3	13.4	9.5	-	-	-
	72	31.8	3.1	22.5	18.4	14.3	10.3	-	-	28.9	3.5	21.1	17.1	13.1	9.0	-	-
	67	28.0	3.0	26.7	22.4	18.0	13.9	9.8	-	25.2	3.4	25.0	20.8	16.6	12.5	8.5	-
	62	28.0	3.1	27.7	24.7	21.7	17.6	13.5	9.4	25.9	3.4	25.3	22.7	20.1	16.1	12.0	7.9
900	77	35.7	3.2	21.2	15.8	10.5	-	-	-	32.5	3.6	20.3	14.7	9.1	-	-	-
	72	32.4	3.1	24.8	19.9	15.1	10.3	-	-	29.4	3.5	23.3	18.5	13.7	8.9	-	-
	67	29.2	3.1	28.4	24.1	19.8	14.9	10.0	-	26.4	3.5	26.4	22.3	18.3	13.4	8.6	-
	62	29.3	3.1	29.3	26.9	24.4	19.5	14.6	9.7	27.0	3.5	26.8	24.8	22.9	18.0	13.0	8.1
	57	29.4	3.1	29.4	29.4	29.1	24.1	19.2	14.2	27.6	3.5	27.2	27.2	27.2	22.5	17.5	12.5
1050	77	35.6	3.2	24.2	17.2	10.3	-	-	-	32.4	3.6	23.2	16.0	8.7	-	-	-
	72	33.0	3.2	27.1	21.5	15.9	10.3	-	-	30.0	3.6	25.5	19.9	14.4	8.8	-	-
	67	30.5	3.1	30.0	25.8	21.6	15.9	10.2	-	27.6	3.5	27.6	23.9	20.0	14.3	8.7	-
	62	30.6	3.1	30.6	29.0	27.2	21.4	15.7	9.9	28.0	3.5	28.0	27.0	25.6	19.9	14.1	8.3
	57	30.6	3.1	30.6	30.6	30.6	27.0	21.2	15.3	28.4	3.5	28.4	28.4	28.4	25.4	19.5	13.6
1200	77	35.6	3.2	27.1	18.6	10.1	-	-	-	32.3	3.6	26.1	17.2	8.3	-	-	-
	72	33.7	3.2	29.4	23.1	16.7	10.4	-	-	30.6	3.6	27.7	21.3	15.0	8.7	-	-
	67	31.7	3.2	31.7	27.5	23.3	16.9	10.4	-	28.8	3.6	28.8	25.4	21.7	15.2	8.7	-
	62	31.8	3.2	31.8	31.2	29.9	23.4	16.8	10.2	29.1	3.6	29.1	29.1	28.4	21.8	15.1	8.5
	57	31.9	3.2	31.9	31.9	31.9	29.9	23.2	16.5	29.3	3.6	29.3	29.3	29.3	28.3	21.5	14.7
1350	72	34.3	3.2	31.7	24.6	17.5	10.4	-	-	31.1	3.6	29.8	22.7	15.7	8.6	-	-
	67	33.0	3.2	33.0	29.2	25.1	17.9	10.6	-	30.1	3.6	30.1	27.0	23.4	16.1	8.8	-
	62	33.1	3.2	33.1	33.1	32.7	25.3	17.9	10.5	30.1	3.6	30.1	30.1	30.1	23.7	16.2	8.7
	57	33.1	3.2	33.1	33.1	33.1	32.7	25.2	17.6	30.1	3.6	30.1	30.1	30.1	30.1	23.5	15.8
1500	72	34.9	3.2	34.0	26.2	18.3	10.5	-	-	31.7	3.7	31.7	24.2	16.3	8.5	-	-
	67	34.3	3.2	34.3	30.9	26.9	18.8	10.8	-	31.3	3.7	31.3	28.5	25.1	17.0	8.9	-
	62	34.3	3.2	34.3	34.3	34.3	27.2	19.0	10.8	31.1	3.6	31.1	31.1	31.1	25.6	17.2	8.9
	57	34.4	3.2	34.4	34.4	34.4	34.4	27.2	18.8	31.0	3.6	31.0	31.0	31.0	31.0	25.5	16.9

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ049 (4.0 ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								85°F							
1000	77	64.5	2.6	31.6	26.5	21.4	-	-	-	60.3	2.9	28.9	24.1	19.4	-	-	-
	72	58.2	2.5	37.2	31.8	26.4	21.1	-	-	54.5	2.9	35.4	30.1	24.7	19.4	-	-
	67	51.9	2.5	42.8	37.1	31.5	26.0	20.7	-	48.6	2.8	41.9	36.0	30.0	24.5	19.0	-
	62	47.1	2.5	54.6	39.8	36.5	38.0	25.7	20.2	45.4	2.8	43.7	39.5	35.4	28.7	24.1	18.4
1200	77	66.1	2.6	34.9	28.4	21.9	-	-	-	61.3	2.9	32.9	26.4	19.9	-	-	-
	72	60.2	2.5	40.8	34.5	28.1	21.7	-	-	56.1	2.9	39.1	32.7	26.3	19.9	-	-
	67	54.2	2.5	46.8	40.5	34.3	27.8	21.4	-	50.8	2.8	45.3	39.0	32.7	26.1	19.6	-
	62	50.4	2.5	46.8	43.6	40.4	41.0	27.4	20.9	48.3	2.9	46.6	42.9	39.1	31.6	25.8	19.1
1400	77	67.8	2.6	38.2	30.3	22.5	-	-	-	62.3	2.9	36.9	28.6	20.4	-	-	-
	72	62.1	2.6	44.5	37.1	29.8	22.4	-	-	57.7	2.9	42.8	35.3	27.9	20.4	-	-
	67	56.4	2.5	50.9	44.0	37.1	29.5	22.1	-	53.1	2.8	48.7	42.0	35.3	27.7	20.2	-
	62	53.6	2.5	50.5	47.4	44.3	35.5	29.2	21.7	51.2	2.9	49.5	46.2	42.8	34.5	27.5	19.8
1600	77	69.5	2.6	41.5	32.2	23.0	-	-	-	63.4	2.9	40.9	30.9	20.9	-	-	-
	72	64.1	2.6	48.2	39.8	31.4	23.1	-	-	59.3	2.9	46.5	38.0	29.4	20.9	-	-
	67	58.7	2.5	54.9	47.4	39.8	31.3	22.8	-	55.3	2.9	52.1	45.0	38.0	29.4	20.8	-
	62	56.8	2.5	54.2	51.2	48.2	38.8	31.0	22.4	54.0	2.9	52.4	49.5	46.5	37.4	29.2	20.5
1800	77	71.0	2.6	43.5	34.2	25.0	-	-	-	65.0	2.9	43.5	33.2	24.0	-	-	-
	72	66.0	2.6	51.9	42.5	33.1	23.7	-	-	60.9	2.9	50.2	40.6	31.0	21.4	-	-
	67	60.9	2.5	59.0	50.8	42.6	33.1	23.6	-	57.5	2.9	55.5	48.0	40.6	31.0	21.4	-
	62	60.1	2.5	57.9	55.0	52.1	42.0	32.8	23.1	56.9	2.9	55.3	52.8	50.3	40.3	30.9	21.1
2000	77	72.0	2.6	45.0	36.0	26.0	-	-	-	66.0	2.9	45.0	36.0	26.0	-	-	-
	72	68.0	2.6	55.5	45.1	34.8	24.4	-	-	62.5	2.9	53.8	43.2	32.6	22.0	-	-
	67	63.2	2.6	63.0	54.2	45.4	34.8	24.3	-	59.7	2.9	58.8	51.1	43.3	32.6	21.9	-
	62	63.3	2.6	69.7	58.8	56.0	45.3	34.6	23.8	59.8	2.9	58.2	56.1	54.0	43.3	32.5	21.8
2200	77	73.0	2.6	46.0	37.0	27.0	-	-	-	67.0	2.9	46.0	37.0	27.0	-	-	-
	72	70.0	2.6	57.0	47.0	37.0	27.0	-	-	64.0	2.9	57.0	47.0	37.0	27.0	-	-
	67	65.0	2.6	65.0	56.0	46.0	36.0	26.0	-	61.0	2.9	65.0	56.0	46.0	36.0	26.0	-
	62	65.0	2.6	72.0	63.0	53.0	45.0	35.0	25.0	61.0	2.9	72.0	63.0	53.0	45.0	35.0	25.0
		95°F								105°F							
1000	77	56.2	3.2	26.2	21.8	17.4	-	-	-	51.6	3.8	25.3	20.7	16.1	-	-	-
	72	50.8	3.2	33.7	28.3	23.0	17.6	-	-	47.1	3.7	32.4	26.9	21.5	16.0	-	-
	67	45.3	3.2	41.1	34.9	28.6	23.0	17.4	-	42.6	3.7	39.4	33.1	26.8	21.2	15.6	-
	62	43.7	3.2	43.7	39.3	34.2	28.4	22.5	16.6	41.5	3.7	41.2	36.7	32.2	26.4	20.7	14.9
1200	77	56.6	3.2	30.9	24.4	17.8	-	-	-	52.0	3.8	29.7	22.9	16.1	-	-	-
	72	52.0	3.2	37.4	30.9	24.5	18.0	-	-	48.3	3.7	35.7	29.2	22.7	16.2	-	-
	67	47.5	3.2	43.8	37.5	31.1	24.5	17.8	-	44.6	3.7	41.7	35.5	29.3	22.6	15.9	-
	62	46.2	3.2	46.2	42.1	37.8	30.9	24.1	17.3	43.6	3.7	43.1	39.5	35.9	29.1	22.2	15.4
1400	77	56.9	3.2	35.6	26.9	18.3	-	-	-	52.3	3.8	34.1	25.1	16.1	-	-	-
	72	53.3	3.2	41.1	33.5	26.0	18.4	-	-	49.4	3.7	39.0	31.5	23.9	16.4	-	-
	67	49.7	3.2	46.5	40.1	33.6	26.0	18.3	-	46.5	3.7	43.9	37.9	31.8	24.0	16.3	-
	62	48.7	3.2	48.5	44.9	41.3	33.5	25.7	17.9	45.8	3.7	45.0	42.3	39.6	31.7	23.8	15.8
1600	77	57.2	3.2	40.3	29.5	18.7	-	-	-	52.7	3.7	38.5	27.3	16.1	-	-	-
	72	54.6	3.2	44.8	36.1	27.4	18.8	-	-	50.5	3.7	42.4	33.8	25.2	16.6	-	-
	67	51.9	3.2	49.2	42.7	36.1	27.4	18.7	-	48.4	3.7	46.2	40.2	34.3	25.5	16.7	-
	62	51.2	3.2	50.6	47.7	44.8	36.1	27.3	18.5	47.9	3.7	47.0	45.1	43.3	34.3	25.3	16.3
1800	77	58.0	3.2	41.0	31.0	21.0	-	-	-	53.0	3.7	40.0	30.0	20.0	-	-	-
	72	55.8	3.2	48.4	38.7	28.9	19.2	-	-	51.7	3.7	45.7	36.1	26.4	16.8	-	-
	67	54.1	3.2	51.9	45.3	38.7	28.9	19.2	-	50.3	3.7	48.4	42.6	36.7	26.9	17.0	-
	62	53.7	3.2	52.7	50.6	48.4	38.6	28.9	19.2	50.1	3.7	48.9	47.9	47.0	36.9	26.9	16.8
2000	77	59.0	3.2	42.0	32.0	22.0	-	-	-	54.0	3.7	41.0	31.0	21.0	-	-	-
	72	57.1	3.2	52.1	41.3	30.405	19.5	-	-	52.8	3.7	49.0	38.3	27.7	17.0	-	-
	67	56.3	3.2	54.6	47.9	41.2	30.4	19.6	-	52.3	3.7	50.7	45.0	39.2	28.3	17.4	-
	62	56.2	3.2	54.8	53.4	51.9	41.2	30.5	19.8	52.2	3.7	50.8	50.8	50.7	39.6	28.4	17.2
2200	77	60.0	3.2	44.0	34.0	24.0	-	-	-	56.0	3.7	44.0	34.0	24.0	-	-	-
	62	56.2	3.2	55.0	55.0	55.0	52.1	41.4	30.8	52.2	3.7	50.9	50.9	50.9	50.9	39.4	28.0

ZJ049 (4.0 ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM		WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)								
					Return Dry Bulb (°F)								Return Dry Bulb (°F)								
					90	85	80	75	70	65			90	85	80	75	70	65			
		115°F										125°F									
1000	77	47.0	4.4	24.4	19.6	14.8	-	-	-	42.5	4.9	23.5	18.5	13.5	-	-	-				
	72	43.5	4.3	31.1	25.5	19.9	14.3	-	-	39.9	4.8	29.8	24.1	18.4	12.7	-	-				
	67	39.9	4.2	37.8	31.4	25.0	19.4	13.8	-	37.2	4.7	44.0	29.7	23.3	17.6	12.0	-				
	62	39.3	4.1	38.1	34.1	30.2	24.5	18.8	13.2	37.1	4.6	35.0	31.5	28.1	22.5	17.0	11.4				
	77	47.4	4.3	28.5	21.5	14.4	-	-	-	42.8	4.9	27.3	20.0	12.6	-	-	-				
1200	72	44.5	4.3	34.1	27.5	20.9	14.4	-	-	40.7	4.8	32.4	25.8	19.2	12.5	-	-				
	67	41.6	4.2	39.6	33.5	27.5	20.8	14.1	-	38.6	4.7	46.2	31.6	25.7	18.9	12.2	-				
	62	41.1	4.1	39.8	36.9	34.0	27.2	20.3	13.5	38.5	4.6	36.5	34.3	32.2	25.3	18.4	11.5				
	57	40.6	4.1	40.1	40.1	40.1	33.6	26.6	19.6	38.4	4.5	46.4	37.1	38.7	31.7	24.7	17.7				
	77	47.7	4.3	32.7	23.3	13.9	-	-	-	43.1	4.8	31.2	21.5	11.8	-	-	-				
1400	72	45.5	4.2	37.0	29.5	21.9	14.4	-	-	41.6	4.8	35.0	27.5	19.9	12.4	-	-				
	67	43.3	4.2	41.4	35.6	29.9	22.1	14.3	-	40.0	4.7	48.2	33.4	28.1	20.2	12.4	-				
	62	42.9	4.1	41.5	39.7	37.9	29.9	21.8	13.8	39.9	4.6	38.1	37.1	36.2	28.0	19.9	11.7				
	57	42.5	4.1	41.7	41.7	41.7	37.6	29.3	21.0	39.9	4.5	48.4	40.8	44.4	35.9	27.4	18.9				
	77	48.1	4.2	36.8	25.1	13.5	-	-	-	43.5	4.7	35.0	23.0	10.9	-	-	-				
1600	72	46.5	4.2	40.0	31.5	22.9	14.4	-	-	42.4	4.7	37.6	29.1	20.7	12.2	-	-				
	67	44.9	4.2	43.2	37.8	32.4	23.5	14.6	-	41.4	4.7	50.2	35.3	30.5	21.5	12.6	-				
	62	44.6	4.2	43.3	42.5	41.8	32.6	23.3	14.1	41.4	4.6	39.6	39.6	39.6	30.8	21.3	11.8				
	57	44.4	4.1	43.4	43.4	43.4	41.6	32.0	22.4	41.3	4.6	50.4	44.6	50.1	40.1	30.1	20.1				
	72	47.5	4.2	42.9	33.4	23.9	14.5	-	-	43.3	4.7	40.2	30.8	21.5	12.1	-	-				
1800	67	46.6	4.2	45.0	39.9	34.8	24.8	14.9	-	42.8	4.7	52.3	37.2	32.9	22.8	12.7	-				
	62	46.4	4.2	45.0	45.0	45.0	35.2	24.8	14.4	42.8	4.6	41.1	41.1	41.1	33.5	22.7	12.0				
	57	46.3	4.2	45.1	45.1	45.1	45.1	34.7	23.8	42.7	4.6	52.5	48.3	52.5	44.2	32.7	21.3				
	72	48.5	4.2	45.9	35.4	25.0	14.5	-	-	44.2	4.6	42.8	32.5	22.2	12.0	-	-				
	67	48.2	4.2	46.7	42.0	37.3	26.2	15.2	-	44.2	4.7	42.8	39.0	35.3	24.1	12.9	-				
2000	62	48.2	4.2	46.7	46.7	46.7	37.9	26.3	14.7	44.2	4.7	42.7	42.7	42.7	36.3	24.2	12.1				
	57	48.2	4.2	46.7	46.7	46.7	46.7	37.4	25.2	44.2	4.7	42.6	42.6	42.6	42.6	35.4	22.4				

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ061 (5.0 ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								85°F							
1250	77	80.3	3.2	40.2	34.0	27.8	-	-	-	76.4	3.6	37.4	31.5	25.6	-	-	-
	72	72.1	3.2	46.8	40.1	33.4	26.6	-	-	69.0	3.6	44.9	38.1	31.4	24.7	-	-
	67	63.9	3.2	53.4	46.2	38.9	32.4	25.7	-	61.7	3.6	52.3	44.7	37.2	30.5	23.8	-
	62	58.2	3.1	54.6	49.3	44.4	38.0	31.4	25.0	56.3	3.6	55.3	49.1	43.0	35.2	29.7	23.1
1500	77	81.3	3.3	43.6	35.8	28.0	-	-	-	77.2	3.6	41.5	33.7	26.0	-	-	-
	72	73.7	3.2	51.1	43.1	35.1	27.2	-	-	70.3	3.6	49.2	41.2	33.2	25.3	-	-
	67	66.1	3.2	58.5	50.4	42.3	34.4	26.4	-	63.4	3.6	56.9	48.7	40.5	32.5	24.5	-
	62	61.7	3.2	58.5	54.0	49.5	41.0	33.6	25.6	59.4	3.6	58.7	53.2	47.8	38.9	31.7	23.6
	57	57.3	3.1	57.3	57.3	56.7	48.7	40.8	32.8	55.4	3.6	55.4	55.4	55.1	47.0	38.9	30.8
1750	77	82.3	3.3	47.0	37.5	28.1	-	-	-	77.9	3.6	45.6	35.9	26.3	-	-	-
	72	75.3	3.2	55.3	46.1	36.9	27.7	-	-	71.5	3.6	53.5	44.3	35.1	25.8	-	-
	67	68.2	3.2	63.6	54.7	45.8	36.5	27.1	-	65.1	3.6	61.4	52.6	43.8	34.5	25.1	-
	62	65.2	3.2	62.9	58.8	54.6	43.9	35.7	26.3	62.5	3.6	62.1	57.4	52.6	42.5	33.6	24.1
	57	62.1	3.2	62.1	62.1	61.8	53.9	44.3	34.7	60.0	3.6	60.0	60.0	60.0	51.8	42.2	32.5
2000	77	83.3	3.3	50.3	39.3	28.2	-	-	-	78.6	3.7	49.7	38.1	26.6	-	-	-
	72	76.9	3.3	59.5	49.1	38.7	28.3	-	-	72.7	3.6	57.8	47.4	36.9	26.4	-	-
	67	70.4	3.2	68.7	58.9	49.2	38.6	27.9	-	66.8	3.6	66.0	56.6	47.2	36.5	25.8	-
	62	68.7	3.2	67.3	63.5	59.7	47.9	37.9	26.9	65.6	3.6	65.5	61.5	57.5	46.1	35.6	24.7
	57	67.0	3.2	66.0	66.0	66.0	59.0	47.8	36.7	64.5	3.6	64.5	64.5	64.5	56.6	45.5	34.3
2250	72	78.4	3.3	63.7	52.1	40.5	28.9	-	-	73.9	3.6	62.2	50.4	38.7	27.0	-	-
	67	72.6	3.2	72.6	63.2	52.7	40.7	28.6	-	68.5	3.6	68.5	60.5	50.5	38.5	26.4	-
	62	72.2	3.2	71.7	68.3	64.8	52.0	40.0	27.6	68.7	3.6	68.7	65.6	62.3	49.7	37.6	25.2
	57	71.8	3.2	69.7	69.7	69.7	64.2	51.4	38.6	69.0	3.6	67.2	67.2	67.2	61.5	48.8	36.1
2500	72	80.0	3.3	67.9	55.1	42.3	29.4	-	-	75.1	3.7	66.5	53.5	40.5	27.5	-	-
	67	74.8	3.2	74.8	67.5	56.1	42.7	29.4	-	70.2	3.6	70.2	64.5	53.8	40.5	27.1	-
	62	75.7	3.3	69.7	69.7	69.7	56.0	42.1	28.3	71.9	3.6	71.9	69.7	67.2	53.4	39.6	25.8
	57	76.7	3.3	69.9	69.9	69.9	69.3	54.9	40.5	73.5	3.6	68.4	68.4	68.4	66.3	52.1	37.9
		95°F								105°F							
1250	77	72.6	4.0	34.6	29.0	23.4	-	-	-	65.5	4.6	30.7	26.1	21.4	-	-	-
	72	66.0	4.0	42.9	36.2	29.5	22.7	-	-	61.0	4.6	40.8	34.8	28.7	22.7	-	-
	67	59.4	4.0	51.2	43.3	35.5	28.7	22.0	-	56.5	4.6	50.9	43.5	36.0	29.4	22.8	-
	62	54.4	4.1	54.4	49.0	41.5	34.7	27.9	21.2	53.2	4.6	53.2	48.9	43.4	36.2	29.0	21.8
1500	77	73.0	4.0	39.4	31.7	23.9	-	-	-	66.4	4.6	36.2	28.9	21.6	-	-	-
	72	66.8	4.0	47.3	39.3	31.3	23.3	-	-	62.0	4.6	45.1	37.6	30.1	22.7	-	-
	67	60.7	4.0	55.2	47.0	38.7	30.6	22.5	-	57.5	4.6	53.9	46.3	38.7	30.7	22.7	-
	62	57.1	4.0	57.1	52.5	46.1	37.9	29.8	21.6	55.2	4.6	55.2	51.8	47.3	38.7	30.1	21.5
	57	53.6	4.1	53.6	53.6	53.5	45.2	37.0	28.7	52.8	4.6	52.8	52.8	52.8	46.7	37.5	28.4
1750	77	73.5	4.0	44.2	34.3	24.4	-	-	-	67.2	4.6	41.8	31.8	21.8	-	-	-
	72	67.7	4.0	51.8	42.5	33.2	23.9	-	-	62.9	4.6	49.3	40.4	31.6	22.7	-	-
	67	61.9	4.0	59.3	50.6	41.9	32.5	23.1	-	58.6	4.6	56.8	49.1	41.4	31.9	22.5	-
	62	59.8	4.0	59.8	56.0	50.7	41.1	31.6	22.0	57.2	4.6	57.2	54.6	51.2	41.2	31.2	21.2
	57	57.8	4.1	57.8	57.8	57.8	49.7	40.0	30.3	55.7	4.6	55.7	55.7	55.7	50.4	39.9	29.4
2000	77	73.9	4.0	49.1	37.0	24.9	-	-	-	68.1	4.6	47.3	34.6	22.0	-	-	-
	72	68.5	4.0	56.2	45.6	35.0	24.5	-	-	63.9	4.6	53.6	43.3	33.0	22.7	-	-
	67	63.2	4.0	63.2	54.2	45.2	34.4	23.6	-	59.7	4.6	59.7	51.9	44.0	33.2	22.4	-
	62	62.6	4.0	62.6	59.5	55.3	44.3	33.4	22.4	59.1	4.6	59.1	57.5	55.1	43.7	32.3	20.9
	57	62.0	4.0	62.0	62.0	62.0	54.2	43.1	32.0	58.6	4.6	58.6	58.6	58.6	54.2	42.3	30.3
2250	72	69.4	4.0	60.6	48.8	36.9	25.1	-	-	64.8	4.6	57.8	46.1	34.4	22.7	-	-
	67	64.4	4.0	64.4	57.9	48.4	36.3	24.2	-	60.7	4.6	60.7	54.7	46.7	34.5	22.2	-
	62	65.3	4.0	65.3	62.9	59.8	47.5	35.2	22.8	61.1	4.6	61.1	60.4	59.0	46.2	33.4	20.7
	57	66.1	4.0	64.7	64.7	64.7	58.7	46.2	33.6	61.5	4.5	60.8	60.8	60.8	57.9	44.6	31.3
2500	72	70.3	4.0	65.1	51.9	38.778	25.6	-	-	65.8	4.6	62.0	48.9	35.8	22.7	-	-
	67	65.6	4.0	65.6	61.5	51.6	38.2	24.7	-	61.8	4.6	61.8	57.5	49.4	35.7	22.1	-
	62	68.0	4.0	68.0	66.4	64.4	50.7	37.0	23.3	63.1	4.5	63.1	63.1	62.9	48.7	34.6	20.4
	57	70.3	4.0	65.5	65.5	65.5	63.2	49.2	35.2	64.5	4.5	61.5	61.5	61.5	61.5	47.0	32.3

ZJ061 (5.0 ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F										125°F					
1250	77	58.5	5.1	26.8	23.1	19.3	-	-	-	51.5	5.7	22.9	20.1	17.3	-	-	-
	72	56.0	5.1	38.8	33.4	28.0	22.6	-	-	51.0	5.7	36.7	32.0	27.2	22.5	-	-
	67	53.5	5.2	50.7	43.7	36.6	30.1	23.6	-	50.5	5.7	44.0	43.8	37.2	30.8	24.4	-
	62	51.9	5.2	51.9	48.9	45.2	37.6	30.0	22.4	50.6	5.7	50.5	48.8	47.1	39.1	31.0	23.0
1500	77	59.8	5.1	33.0	26.1	19.2	-	-	-	53.1	5.7	29.9	23.4	16.9	-	-	-
	72	57.1	5.1	42.8	35.9	29.0	22.0	-	-	52.2	5.7	40.6	34.2	27.8	21.4	-	-
	67	54.4	5.1	52.6	45.6	38.7	30.7	22.8	-	51.2	5.7	46.2	45.0	38.7	30.8	22.9	-
	62	53.2	5.2	53.2	51.1	48.5	39.4	30.4	21.4	51.2	5.7	51.2	50.4	49.6	40.2	30.8	21.3
	57	52.0	5.2	52.0	52.0	52.0	48.1	38.1	28.0	51.2	5.7	46.4	46.4	46.4	46.4	38.6	27.7
1750	77	61.0	5.2	39.3	29.2	19.1	-	-	-	54.7	5.7	36.8	26.6	16.4	-	-	-
	72	58.1	5.1	46.9	38.4	29.9	21.5	-	-	53.4	5.7	44.4	36.4	28.3	20.3	-	-
	67	55.3	5.1	54.4	47.6	40.8	31.4	21.9	-	52.0	5.7	48.2	46.1	40.3	30.8	21.4	-
	62	54.5	5.1	54.5	53.3	51.7	41.3	30.9	20.4	51.8	5.7	51.8	51.8	51.8	41.3	30.5	19.7
	57	53.6	5.1	53.6	53.6	53.6	51.2	39.8	28.4	51.6	5.7	48.4	48.4	48.4	48.4	39.6	27.4
2000	77	62.2	5.2	45.6	32.3	19.0	-	-	-	56.3	5.7	43.8	29.9	16.0	-	-	-
	72	59.2	5.1	50.9	40.9	30.9	20.9	-	-	54.5	5.7	48.3	38.6	28.9	19.2	-	-
	67	56.2	5.1	56.2	49.6	42.9	32.0	21.1	-	52.7	5.7	50.2	47.3	41.8	30.8	19.9	-
	62	55.7	5.1	55.7	55.6	54.9	43.1	31.3	19.5	52.3	5.7	52.3	52.3	52.3	42.5	30.2	18.0
	57	55.3	5.1	55.3	55.3	55.3	54.2	41.4	28.7	52.0	5.7	50.4	50.4	50.4	50.4	40.6	27.1
2250	72	60.3	5.1	55.0	43.4	31.9	20.4	-	-	55.7	5.7	52.1	40.8	29.4	18.1	-	-
	67	57.1	5.1	57.1	51.6	45.0	32.6	20.3	-	53.4	5.6	52.3	48.4	43.3	30.8	18.3	-
	62	57.0	5.1	57.0	57.0	57.0	44.9	31.7	18.5	52.9	5.6	52.9	52.9	52.9	43.6	30.0	16.3
	57	56.9	5.1	56.9	56.9	56.9	56.9	43.1	29.1	52.4	5.6	52.5	52.5	52.5	52.5	41.6	26.8
2500	72	61.3	5.1	59.0	46.0	32.9	19.8	-	-	56.9	5.7	56.0	43.0	30.0	16.9	-	-
	67	58.0	5.1	58.0	53.5	47.1	33.3	19.5	-	54.2	5.6	54.2	49.5	44.9	30.8	16.8	-
	62	58.3	5.1	58.3	58.3	58.3	46.7	32.1	17.5	53.5	5.6	53.5	53.5	53.5	44.7	29.7	14.7
	57	58.6	5.1	57.6	57.6	57.6	57.6	44.8	29.4	52.7	5.6	52.7	52.7	52.7	52.7	42.6	26.5

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ078 (6.5 ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								85°F							
1625	77	109.0	5.3	61.1	51.7	42.4	-	-	-	98.6	5.5	51.7	43.3	35.0	-	-	-
	72	94.4	4.9	64.2	53.6	43.1	32.5	-	-	86.7	5.2	58.8	49.1	39.5	29.8	-	-
	67	79.8	4.4	67.2	55.5	43.8	36.8	30.7	-	74.8	5.0	66.0	55.0	44.0	36.0	28.5	-
	62	72.8	4.4	72.8	62.9	49.3	41.7	39.4	36.8	70.0	4.9	70.0	61.8	50.8	42.5	36.8	31.0
1950	77	107.9	5.2	64.3	50.9	37.6	-	-	-	98.7	5.5	57.1	45.4	33.7	-	-	-
	72	95.7	4.8	68.9	57.4	45.8	34.3	-	-	88.6	5.3	64.3	53.4	42.6	31.8	-	-
	67	83.6	4.5	73.6	63.8	54.1	43.2	33.0	-	78.5	5.1	71.4	61.5	51.5	41.1	31.0	-
	62	78.0	4.5	78.0	71.4	62.3	52.7	43.4	33.9	74.6	5.0	74.6	68.5	60.4	50.6	40.9	31.2
	57	72.5	4.4	72.5	72.5	70.5	62.1	53.7	45.3	70.7	5.0	70.7	70.7	69.3	60.1	50.9	41.6
2275	77	106.8	5.1	67.5	50.2	32.8	-	-	-	98.9	5.5	62.6	47.5	32.5	-	-	-
	72	97.1	4.8	73.7	61.1	48.6	36.0	-	-	90.5	5.3	69.7	57.7	45.8	33.8	-	-
	67	87.4	4.5	79.9	72.1	64.3	49.6	35.4	-	82.2	5.2	76.8	68.0	59.1	46.1	33.4	-
	62	83.2	4.5	83.2	79.9	75.3	63.6	47.4	31.1	79.2	5.2	79.2	75.3	70.1	58.6	45.0	31.3
	57	79.0	4.5	79.0	79.0	78.1	73.9	59.4	41.2	76.3	5.1	76.3	76.3	76.3	69.3	56.5	41.9
2600	77	105.7	5.0	70.7	49.4	28.0	-	-	-	99.0	5.4	68.0	49.6	31.2	-	-	-
	72	98.4	4.8	78.5	64.9	51.3	37.7	-	-	92.4	5.4	75.1	62.0	48.9	35.9	-	-
	67	91.2	4.6	86.2	80.4	74.6	56.0	37.8	-	85.8	5.3	82.3	74.5	66.7	51.2	35.9	-
	62	88.4	4.6	88.4	88.4	88.4	74.5	51.4	28.2	83.8	5.3	83.8	82.0	79.7	66.7	49.1	31.4
	57	85.6	4.6	85.6	85.6	85.6	85.6	65.1	37.0	81.9	5.3	81.9	81.9	81.9	78.4	62.2	42.2
2925	72	99.8	4.8	83.2	68.6	54.0	39.4	-	-	94.3	5.4	80.6	66.3	52.1	37.9	-	-
	67	95.0	4.7	92.5	88.6	84.8	62.4	40.1	-	89.5	5.4	87.7	81.0	74.2	56.3	38.4	-
	62	93.6	4.7	93.6	93.6	93.6	85.5	55.4	25.3	88.5	5.4	88.5	88.5	88.5	74.7	53.1	31.5
	57	92.2	4.7	92.2	92.2	92.2	92.2	70.7	32.9	87.5	5.4	87.5	87.5	87.5	87.5	67.9	42.5
3250	72	101.1	4.8	88.0	72.4	56.7	41.2	-	-	96.2	5.4	86.0	70.6	55.3	39.9	-	-
	67	98.8	4.8	98.8	96.9	95.1	68.8	42.5	-	93.1	5.5	93.1	87.5	81.8	61.3	40.9	-
	62	98.8	4.8	98.8	98.8	98.8	96.4	59.4	22.5	93.1	5.5	93.1	93.1	93.1	82.8	57.2	31.6
	57	98.8	4.8	98.8	98.8	98.8	98.8	76.4	28.8	93.1	5.5	93.1	93.1	93.1	93.1	73.5	42.8
		95°F								105°F							
1625	77	88.2	5.7	42.3	34.9	27.6	-	-	-	81.7	6.6	39.5	32.4	25.4	-	-	-
	72	79.0	5.6	53.5	44.7	35.9	27.1	-	-	72.4	6.5	50.9	42.2	33.5	24.8	-	-
	67	69.9	5.5	64.7	54.4	44.1	35.2	26.3	-	63.6	6.4	62.3	51.9	41.5	32.7	23.9	-
	62	67.1	5.5	67.1	60.7	52.4	43.3	34.3	25.3	62.3	6.4	62.3	56.9	49.6	40.6	31.6	22.7
1950	77	89.6	5.8	49.9	39.9	29.9	-	-	-	82.8	6.6	47.4	37.5	27.6	-	-	-
	72	81.5	5.7	59.6	49.5	39.4	29.4	-	-	75.2	6.6	57.0	47.1	37.1	27.1	-	-
	67	73.4	5.7	69.2	59.1	49.0	38.9	28.9	-	67.6	6.5	66.6	56.6	46.6	36.6	26.6	-
	62	71.2	5.6	71.2	65.7	58.6	48.5	38.4	28.4	66.6	6.5	66.6	62.2	56.2	46.0	35.9	25.8
	57	68.9	5.6	68.9	68.9	68.1	58.1	48.0	38.0	65.6	6.5	65.6	65.6	65.6	55.5	45.3	35.1
2275	77	91.0	5.8	57.6	44.9	32.1	-	-	-	84.0	6.7	55.4	42.6	29.7	-	-	-
	72	84.0	5.8	65.7	54.4	43.0	31.7	-	-	78.0	6.7	63.1	51.9	40.7	29.5	-	-
	67	76.9	5.8	73.8	63.8	53.9	42.7	31.5	-	71.7	6.6	70.9	61.3	51.7	40.5	29.3	-
	62	75.2	5.8	75.2	70.6	64.8	53.7	42.6	31.5	70.9	6.6	70.9	67.4	62.8	51.5	40.2	28.9
	57	73.5	5.8	73.5	73.5	73.5	64.7	53.7	42.7	70.1	6.6	70.1	70.1	70.1	62.4	51.1	39.8
2600	77	92.4	5.9	65.2	49.8	34.4	-	-	-	85.2	6.7	63.4	47.6	31.9	-	-	-
	72	86.4	5.9	71.8	59.2	46.6	34.0	-	-	80.8	6.8	69.3	56.8	44.4	31.9	-	-
	67	80.4	5.9	78.4	68.6	58.8	46.4	34.0	-	75.7	6.8	75.2	66.0	56.8	44.4	32.0	-
	62	79.3	5.9	79.3	75.5	71.0	58.8	46.7	34.6	75.2	6.8	75.2	72.7	69.3	56.9	44.5	32.0
	57	78.2	5.9	78.2	78.2	78.2	71.3	59.3	47.4	74.7	6.8	74.7	74.7	74.7	69.4	57.0	44.6
2925	72	88.9	6.0	77.9	64.0	50.2	36.3	-	-	83.6	6.9	75.4	61.7	48.0	34.3	-	-
	67	84.0	6.1	82.9	73.3	63.7	50.2	36.6	-	79.8	6.9	79.5	70.7	62.0	48.3	34.7	-
	62	83.4	6.1	83.4	80.5	77.2	64.0	50.8	37.6	79.5	6.9	79.5	77.9	75.9	62.3	48.7	35.2
	57	82.8	6.0	82.8	82.8	82.8	77.8	65.0	52.2	79.2	6.9	79.2	79.2	79.2	76.3	62.8	49.3
3250	72	91.3	6.1	84.0	68.9	53.7	38.6	-	-	86.4	6.9	81.5	66.6	51.6	36.7	-	-
	67	87.5	6.2	87.5	87.0	86.6	53.9	39.2	-	83.8	7.0	83.8	75.4	67.1	52.2	37.4	-
	62	87.4	6.2	87.4	85.4	83.4	69.2	54.9	40.7	83.8	7.0	83.8	83.1	82.5	67.8	53.0	38.3
	57	87.4	6.2	87.4	87.4	87.4	84.4	70.7	56.9	83.8	7.0	83.8	83.8	83.8	83.3	68.7	54.1

ZJ078 (6.5 ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM		WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)								
					Return Dry Bulb (°F)								Return Dry Bulb (°F)								
					90	85	80	75	70	65			90	85	80	75	70	65			
		115°F										125°F									
1625	77	75.1	7.4	36.7	30.0	23.2	-	-	-	68.6	8.2	34.0	27.5	21.0	-	-	-				
	72	65.8	7.3	48.3	39.7	31.1	22.5	-	-	59.2	8.1	45.7	37.2	28.7	20.2	-	-				
	67	57.2	7.2	57.2	49.4	39.0	30.2	21.4	-	50.9	8.0	50.9	46.9	36.4	27.7	19.0	-				
	62	57.5	7.2	57.5	53.1	46.8	37.9	29.0	20.0	52.7	8.1	52.7	49.3	44.1	35.2	26.3	17.4				
1950	77	76.1	7.5	45.0	35.1	25.3	-	-	-	69.3	8.3	42.5	32.7	23.0	-	-	-				
	72	68.9	7.4	54.4	44.6	34.8	24.9	-	-	62.7	8.2	51.9	42.2	32.4	22.7	-	-				
	67	61.8	7.3	61.8	54.1	44.3	34.3	24.2	-	56.0	8.2	56.0	51.6	41.9	31.9	21.9	-				
	62	62.0	7.3	62.0	58.7	53.8	43.6	33.4	23.2	57.5	8.2	57.5	55.2	51.4	41.1	30.9	20.6				
	57	62.3	7.4	62.3	62.3	52.9	42.5	32.2		58.9	8.2	56.7	56.7	56.7	50.3	39.8	29.3				
2275	77	77.0	7.5	53.2	40.3	27.3	-	-	-	70.0	8.4	51.0	38.0	24.9	-	-	-				
	72	72.1	7.5	60.6	49.5	38.5	27.4	-	-	66.1	8.4	58.1	47.1	36.2	25.2	-	-				
	67	66.4	7.5	66.4	58.8	49.6	38.3	27.1	-	61.1	8.3	61.1	56.3	47.4	36.2	24.9	-				
	62	66.6	7.5	66.6	64.2	60.7	49.3	37.8	26.4	62.2	8.3	62.2	61.0	58.7	47.1	35.4	23.8				
	57	66.7	7.5	66.7	66.7	60.2	48.6	36.9		63.3	8.3	61.6	61.6	61.6	58.0	46.0	34.1				
2600	77	77.9	7.6	61.5	45.4	29.4	-	-	-	70.7	8.4	59.6	43.2	26.8	-	-	-				
	72	75.2	7.6	66.8	54.4	42.1	29.8	-	-	69.6	8.5	64.2	52.1	39.9	27.7	-	-				
	67	71.0	7.6	71.0	63.5	54.9	42.4	29.9	-	66.3	8.4	66.3	60.9	53.0	40.4	27.8	-				
	62	71.1	7.6	71.1	69.8	67.7	55.0	42.2	29.5	67.0	8.4	67.0	66.9	66.0	53.0	40.0	27.0				
	57	71.2	7.6	71.2	71.2	71.2	67.5	54.6	41.7	67.7	8.5	66.6	66.6	66.6	65.7	52.2	38.8				
2925	72	78.4	7.7	72.9	59.4	45.8	32.3	-	-	73.1	8.6	70.4	57.0	43.6	30.3	-	-				
	67	75.6	7.7	75.6	68.2	60.2	46.5	32.7	-	71.4	8.6	71.4	65.6	58.5	44.6	30.7	-				
	62	75.6	7.7	75.6	75.3	74.6	60.7	46.7	32.7	71.8	8.6	71.8	71.8	71.8	59.0	44.6	30.2				
	57	75.7	7.7	75.7	75.7	75.7	74.8	60.6	46.5	72.1	8.6	71.5	71.5	71.5	71.5	58.5	43.6				
3250	72	81.5	7.8	79.1	64.3	49.5	34.7	-	-	76.6	8.7	76.6	62.0	47.4	32.8	-	-				
	67	80.2	7.9	80.2	72.9	65.5	50.5	35.5	-	76.6	8.7	76.6	70.3	64.0	48.8	33.7	-				
	62	80.2	7.9	80.2	80.2	80.2	66.3	51.1	35.9	76.5	8.7	76.5	76.5	76.5	64.9	49.2	33.4				
	57	80.1	7.9	80.1	80.1	80.1	80.1	66.7	51.2	76.5	8.7	76.5	76.5	76.5	76.5	64.7	48.4				

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ090 (7.5 ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)									
				Return Dry Bulb (°F)								Return Dry Bulb (°F)									
				90	85	80	75	70	65			90	85	80	75	70	65				
		75°F										85°F									
1875	77	117.2	4.8	57.7	49.7	41.7	-	-	-	113.7	5.4	56.6	48.5	40.4	-	-	-				
	72	106.9	4.7	71.6	62.0	52.4	42.7	-	-	102.5	5.3	69.8	60.1	50.4	40.7	-	-				
	67	96.6	4.7	85.4	74.2	63.0	53.2	43.3	-	91.3	5.3	83.0	71.7	60.4	50.7	41.0	-				
	62	91.7	4.7	91.7	82.7	73.6	61.2	53.5	43.4	87.9	5.3	87.9	79.1	70.3	59.5	50.9	41.2				
2250	77	117.1	4.9	65.4	54.2	43.1	-	-	-	113.2	5.5	64.8	53.3	41.7	-	-	-				
	72	108.2	4.8	77.9	66.6	55.203	43.8	-	-	103.7	5.4	76.1	64.7	53.2	41.8	-	-				
	67	99.3	4.8	90.4	78.9	67.4	55.9	44.3	-	94.1	5.4	87.4	76.1	64.7	53.4	42.0	-				
	62	95.4	4.8	95.4	87.5	79.5	66.0	56.2	44.6	91.3	5.4	91.3	83.8	76.3	64.0	53.6	42.3				
	57	91.5	4.7	91.5	91.5	91.5	79.9	68.1	56.3	88.5	5.4	88.5	88.5	87.8	76.5	65.3	54.1				
2625	77	117.0	5.0	73.1	58.8	44.4	-	-	-	112.7	5.6	73.1	58.1	43.0	-	-	-				
	72	109.6	4.9	84.3	71.2	58.1	44.9	-	-	104.8	5.6	82.5	69.3	56.1	42.9	-	-				
	67	102.1	4.9	95.4	83.6	71.7	58.6	45.4	-	96.8	5.5	91.8	80.5	69.1	56.1	43.0	-				
	62	99.1	4.9	99.1	92.3	85.4	70.8	59.0	45.8	94.7	5.5	94.7	88.5	82.2	68.6	56.4	43.5				
	57	96.2	4.9	96.2	96.2	96.2	85.8	72.5	59.3	92.6	5.5	92.6	92.6	92.6	82.5	69.8	57.0				
3000	77	116.9	5.1	80.9	63.3	45.7	-	-	-	112.2	5.7	81.4	62.8	44.3	-	-	-				
	72	110.9	5.0	90.6	75.8	60.9	46.0	-	-	105.9	5.7	88.8	73.9	58.9	44.0	-	-				
	67	104.9	5.0	100.4	88.2	76.1	61.3	46.4	-	99.6	5.6	96.2	84.9	73.5	58.8	44.1	-				
	62	102.9	5.0	102.9	97.0	91.2	75.5	61.7	47.0	98.2	5.6	98.2	93.1	88.1	73.2	59.2	44.7				
	57	100.9	5.0	100.9	100.9	100.9	91.7	77.0	62.3	96.7	5.6	96.7	96.7	96.7	88.5	74.2	60.0				
3375	72	112.2	5.1	97.0	80.4	63.7	47.1	-	-	107.0	5.8	95.2	78.5	61.8	45.1	-	-				
	67	107.7	5.1	105.4	92.9	80.4	64.0	47.5	-	102.3	5.8	100.7	89.3	77.9	61.5	45.1	-				
	62	106.6	5.1	106.6	101.8	97.1	80.3	64.5	48.2	101.6	5.8	101.6	97.8	94.0	77.7	61.9	45.9				
	57	105.5	5.1	105.5	105.5	105.5	97.6	81.5	65.3	100.8	5.8	100.8	100.8	100.8	94.4	78.7	63.0				
3750	72	113.6	5.2	103.3	85.0	66.596	48.2	-	-	108.1	5.9	101.5	83.0	64.6	46.1	-	-				
	67	110.4	5.2	110.4	97.6	84.8	66.7	48.5	-	105.1	5.9	105.1	93.7	82.3	64.2	46.2	-				
	62	110.3	5.2	110.3	106.6	102.9	85.1	67.2	49.4	105.0	5.9	105.0	102.5	99.9	82.3	64.7	47.0				
	57	110.2	5.2	110.2	110.2	110.2	103.5	85.9	68.3	104.9	5.9	104.9	104.9	104.9	100.4	83.2	65.9				
		95°F										105°F									
1875	77	110.3	6.0	55.4	47.3	39.2	-	-	-	102.6	6.9	53.7	45.8	37.8	-	-	-				
	72	98.2	5.9	68.0	58.2	48.4	38.7	-	-	92.0	6.8	65.8	56.2	46.6	37.0	-	-				
	67	86.1	5.9	80.6	69.1	57.7	48.2	38.6	-	81.6	6.8	77.9	66.7	55.4	46.0	36.7	-				
	62	84.0	5.9	84.0	75.5	67.0	57.7	48.3	39.0	80.3	6.7	80.3	72.2	64.1	55.1	46.0	36.9				
2250	77	109.3	6.1	64.2	52.3	40.4	-	-	-	101.7	7.0	61.9	50.1	38.4	-	-	-				
	72	99.1	6.1	74.3	62.8	51.272	39.7	-	-	93.0	6.9	71.6	60.3	49.1	37.8	-	-				
	67	88.8	6.0	84.4	73.3	62.1	50.9	39.6	-	84.3	6.9	81.3	70.5	59.8	48.7	37.6	-				
	62	87.2	6.0	87.2	80.1	73.0	62.0	51.1	40.1	83.1	6.9	83.1	76.8	70.5	59.6	48.7	37.8				
	57	85.5	6.0	85.5	85.5	83.9	73.2	62.5	51.8	82.0	6.9	82.0	82.0	81.2	70.5	59.8	49.1				
2625	77	108.4	6.2	73.1	57.4	41.7	-	-	-	100.7	7.1	70.1	54.5	38.9	-	-	-				
	72	100.0	6.2	80.7	67.4	54.1	40.8	-	-	93.9	7.1	77.4	64.5	51.5	38.6	-	-				
	67	91.6	6.2	88.2	77.4	66.5	53.6	40.7	-	86.9	7.1	84.7	74.4	64.2	51.4	38.6	-				
	62	90.3	6.1	90.3	84.7	79.0	66.4	53.8	41.3	86.0	7.0	86.0	81.4	76.9	64.2	51.5	38.8				
	57	89.1	6.1	89.1	89.1	89.1	79.2	67.0	54.7	85.2	7.0	85.2	85.2	85.2	76.9	64.3	51.8				
3000	77	107.5	6.3	81.9	62.4	42.9	-	-	-	99.8	7.2	78.3	58.8	39.4	-	-	-				
	72	100.9	6.3	87.0	72.0	56.9	41.9	-	-	94.8	7.2	83.1	68.6	54.0	39.4	-	-				
	67	94.3	6.3	92.1	81.5	71.0	56.3	41.7	-	89.5	7.2	88.0	78.3	68.6	54.1	39.5	-				
	62	93.5	6.3	93.5	89.2	85.0	70.8	56.6	42.4	88.9	7.2	88.9	86.1	83.2	68.7	54.2	39.7				
	57	92.6	6.3	92.6	92.6	92.6	85.2	71.4	57.7	88.3	7.2	88.3	88.3	88.3	83.3	68.9	54.4				
3375	72	101.8	6.4	93.3	76.5	59.8	43.0	-	-	95.8	7.4	88.9	72.7	56.5	40.2	-	-				
	67	97.0	6.4	95.9	85.6	75.4	59.1	42.8	-	92.1	7.3	91.4	82.2	73.0	56.7	40.5	-				
	62	96.6	6.4	96.6	93.8	91.0	75.2	59.3	43.5	91.8	7.3	91.8	90.7	89.6	73.2	56.9	40.6				
	57	96.1	6.4	96.1	96.1	96.1	91.3	75.9	60.6	91.5	7.3	91.5	91.5	91.5	89.8	73.4	57.0				
3750	72	102.7	6.6	99.7	81.1	62.587	44.1	-	-	96.7	7.5	94.7	76.8	58.9	41.1	-	-				
	67	99.8	6.6	99.8	89.8	79.8	61.8	43.8	-	94.7	7.5	94.7	86.1	77.4	59.4	41.4	-				
	62	99.7	6.6	99.7	98.3	97.0	79.5	62.1	44.7	94.7	7.5	94.7	94.7	94.7	77.8	59.7	41.5				
	57	99.7	6.6	99.7	99.7	99.7	97.3	80.4	63.5	94.6	7.5	94.6	94.6	94.6	94.6	77.9	59.6				

ZJ090 (7.5 ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM		WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)								
					Return Dry Bulb (°F)								Return Dry Bulb (°F)								
					90	85	80	75	70	65			90	85	80	75	70	65			
		115°F										125°F									
1875	77	95.0	7.7	52.0	44.3	36.5	-	-	-	87.3	8.6	50.4	42.8	35.2	-	-	-				
	72	85.9	7.7	63.7	54.2	44.8	35.3	-	-	79.7	8.5	61.5	52.2	42.9	33.6	-	-				
	67	77.2	7.6	75.3	64.2	53.0	43.9	34.8	-	72.7	8.5	72.7	61.7	50.7	41.8	32.8	-				
	62	76.5	7.6	76.5	68.9	61.3	52.5	43.7	34.9	72.7	8.5	72.7	65.5	58.4	49.9	41.4	32.8				
2250	77	94.0	7.9	59.6	47.9	36.3	-	-	-	86.3	8.7	57.2	45.7	34.3	-	-	-				
	72	86.8	7.8	68.9	57.9	46.9	35.9	-	-	80.7	8.7	66.2	55.4	44.7	33.9	-	-				
	67	79.7	7.8	78.2	67.8	57.4	46.5	35.6	-	75.1	8.7	75.1	65.1	55.1	44.3	33.6	-				
	62	79.1	7.8	79.1	73.5	68.0	57.2	46.4	35.6	75.1	8.7	75.1	70.3	65.5	54.8	44.0	33.3				
	57	78.5	7.8	78.5	78.5	78.5	67.9	57.2	46.5	75.0	8.7	75.0	75.0	75.0	65.2	54.5	43.8				
2625	77	93.0	8.0	67.1	51.6	36.1	-	-	-	85.2	8.8	64.1	48.7	33.3	-	-	-				
	72	87.8	8.0	74.1	61.5	49.0	36.4	-	-	81.7	8.9	70.8	58.6	46.4	34.2	-	-				
	67	82.2	7.9	81.1	71.5	61.8	49.2	36.5	-	77.5	8.8	77.5	68.5	59.5	46.9	34.4	-				
	62	81.7	7.9	81.7	78.2	74.7	61.9	49.1	36.3	77.4	8.8	77.4	75.0	72.6	59.7	46.7	33.8				
	57	81.3	7.9	81.3	81.3	81.3	74.7	61.7	48.8	77.4	8.8	77.4	77.4	77.4	72.4	59.1	45.8				
3000	77	92.0	8.1	74.6	55.2	35.9	-	-	-	84.2	9.0	71.0	51.7	32.4	-	-	-				
	72	88.8	8.1	79.3	65.2	51.1	37.0	-	-	82.7	9.0	75.4	61.8	48.1	34.5	-	-				
	67	84.7	8.1	83.9	75.1	66.3	51.8	37.3	-	79.9	9.0	79.9	71.9	63.9	49.5	35.1	-				
	62	84.4	8.1	84.4	82.9	81.4	66.6	51.8	37.0	79.8	9.0	79.8	79.8	79.7	64.5	49.4	34.3				
	57	84.0	8.1	84.0	84.0	84.0	81.5	66.3	51.1	79.8	9.0	79.8	79.8	79.8	79.6	63.7	47.8				
3375	72	89.7	8.3	84.5	68.8	53.2	37.5	-	-	83.7	9.2	80.1	65.0	49.9	34.8	-	-				
	67	87.2	8.3	86.8	78.7	70.7	54.4	38.2	-	82.3	9.2	82.3	75.3	68.3	52.1	35.9	-				
	62	87.0	8.3	87.0	87.0	87.0	71.3	54.5	37.7	82.2	9.2	82.2	82.2	82.2	69.4	52.1	34.7				
	57	86.8	8.3	86.8	86.8	86.8	86.8	70.8	53.4	82.2	9.2	82.2	82.2	82.2	82.2	68.3	49.8				
3750	72	90.7	8.4	89.7	72.5	55.3	38.1	-	-	84.7	9.4	84.7	68.1	51.6	35.1	-	-				
	67	89.7	8.4	89.7	82.4	75.1	57.1	39.0	-	84.7	9.4	84.7	78.7	72.7	54.7	36.6	-				
	62	89.6	8.4	89.6	89.6	89.6	76.1	57.2	38.4	84.6	9.4	84.6	84.6	84.6	74.3	54.8	35.2				
	57	89.6	8.4	89.6	89.6	89.6	89.6	75.4	55.7	84.5	9.4	84.5	84.5	84.5	84.5	72.9	51.8				

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ102 (8.5 ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)									
				Return Dry Bulb (°F)								Return Dry Bulb (°F)									
				90	85	80	75	70	65			90	85	80	75	70	65				
		75°F										85°F									
2125	77	126.0	5.4	63.3	54.5	45.7	-	-	-	124.6	5.7	62.0	52.6	43.2	-	-	-				
	72	112.8	5.4	74.1	63.9	53.7	43.5	-	-	108.9	5.7	72.1	61.5	50.9	40.3	-	-				
	67	99.6	5.4	85.0	73.3	61.7	52.4	42.3	-	93.2	5.7	82.2	70.4	58.7	49.0	38.9	-				
	62	93.8	5.3	93.8	82.6	69.7	60.3	51.3	42.2	89.4	5.7	89.4	79.1	66.4	57.1	48.1	38.9				
2550	77	128.4	5.4	70.2	58.0	45.8	-	-	-	120.5	5.7	66.7	54.3	41.8	-	-	-				
	72	116.2	5.4	81.4	69.0	56.6	44.2	-	-	109.2	5.7	77.8	65.4	53.0	40.6	-	-				
	67	104.1	5.4	92.5	80.0	67.4	55.7	43.4	-	97.8	5.7	88.9	76.6	64.3	52.2	39.8	-				
	62	99.6	5.3	99.6	89.4	78.2	66.3	54.9	43.2	95.0	5.7	95.0	85.7	75.5	63.4	51.5	39.5				
	57	95.0	5.3	95.0	95.0	89.0	77.7	66.4	55.0	92.3	5.7	92.3	92.3	86.7	74.9	63.1	51.3				
2975	77	130.7	5.4	77.0	61.5	45.9	-	-	-	116.5	5.7	71.5	55.9	40.3	-	-	-				
	72	119.7	5.4	88.6	74.0	59.5	45.0	-	-	109.4	5.7	83.6	69.3	55.1	40.8	-	-				
	67	108.6	5.4	100.1	86.6	73.1	58.9	44.4	-	102.4	5.7	95.7	82.8	69.8	55.4	40.7	-				
	62	105.3	5.3	105.3	96.3	86.7	72.3	58.4	44.2	100.7	5.7	100.3	92.4	84.6	69.7	54.9	40.0				
	57	102.0	5.3	102.0	102.0	99.0	86.3	72.3	58.4	99.0	5.7	99.0	99.0	98.8	84.2	69.0	53.8				
3400	77	133.1	5.4	83.9	64.9	46.0	-	-	-	112.4	5.7	76.2	57.5	38.8	-	-	-				
	72	123.1	5.3	95.8	79.1	62.4	45.7	-	-	109.7	5.7	89.3	73.2	57.1	41.1	-	-				
	67	113.1	5.3	107.7	93.2	78.8	62.2	45.4	-	107.0	5.7	102.4	88.9	75.4	58.6	41.6	-				
	62	111.1	5.3	111.0	103.1	95.2	78.4	61.9	45.2	106.4	5.7	104.5	99.1	93.7	75.9	58.3	40.5				
	57	109.1	5.3	109.1	109.1	109.1	94.9	78.3	61.7	105.8	5.7	104.0	104.0	104.0	93.5	74.9	56.4				
3825	72	126.5	5.3	103.0	84.1	65.3	46.4	-	-	110.0	5.7	95.0	77.1	59.2	41.3	-	-				
	67	117.6	5.3	115.3	99.9	84.5	65.5	46.5	-	111.6	5.7	109.2	95.1	81.0	61.8	42.5	-				
	62	116.9	5.3	116.2	109.9	103.6	84.4	65.4	46.3	112.1	5.7	108.8	105.8	102.9	82.2	61.7	41.1				
	57	116.1	5.4	114.5	114.5	114.5	103.5	84.3	65.0	112.5	5.7	107.1	107.1	107.1	102.7	80.8	58.9				
4250	72	130.0	5.3	110.2	89.2	68.2	47.2	-	-	110.2	5.7	100.8	81.0	61.3	41.5	-	-				
	67	122.2	5.3	122.2	106.5	90.1	68.8	47.5	-	116.2	5.7	116.0	101.3	86.6	65.0	43.4	-				
	62	122.6	5.3	121.4	116.8	112.1	90.5	68.9	47.3	117.7	5.7	113.0	112.5	112.0	88.5	65.1	41.6				
	57	123.1	5.4	119.9	119.9	119.9	112.1	90.2	68.3	119.3	5.7	110.1	110.1	110.1	110.1	86.7	61.4				
		95°F										105°F									
2125	77	123.2	6.0	60.7	50.7	40.7	-	-	-	110.9	6.6	56.0	46.6	37.2	-	-	-				
	72	105.0	6.0	70.1	59.1	48.2	37.2	-	-	95.9	6.5	66.5	55.6	44.7	33.7	-	-				
	67	86.8	6.0	79.4	67.5	55.6	45.6	35.5	-	80.9	6.5	77.0	64.5	52.1	42.0	31.9	-				
	62	85.0	6.0	85.0	75.5	63.0	53.9	44.8	35.7	80.4	6.5	80.4	71.2	59.6	50.3	41.0	31.7				
2550	77	112.7	6.0	63.3	50.5	37.7	-	-	-	104.1	6.5	60.5	47.5	34.6	-	-	-				
	72	102.1	6.0	74.3	61.9	49.4	36.9	-	-	94.7	6.5	71.2	58.6	46.1	33.5	-	-				
	67	91.5	6.0	85.3	73.2	61.1	48.7	36.3	-	85.3	6.5	81.9	69.7	57.6	45.1	32.6	-				
	62	90.5	6.0	90.5	82.1	72.8	60.4	48.1	35.8	85.2	6.5	85.2	77.5	69.0	56.6	44.2	31.8				
	57	89.6	6.0	89.6	89.6	84.5	72.2	59.9	47.6	85.2	6.4	85.2	85.2	80.5	68.2	55.9	43.6				
2975	77	102.3	6.0	65.9	50.3	34.7	-	-	-	97.3	6.5	64.9	48.4	32.0	-	-	-				
	72	99.2	6.0	78.6	64.6	50.6	36.7	-	-	93.5	6.5	75.9	61.7	47.5	33.3	-	-				
	67	96.2	6.0	91.3	78.9	66.6	51.8	37.0	-	89.7	6.5	86.9	74.9	63.0	48.1	33.3	-				
	62	96.1	6.0	94.7	88.6	82.6	67.0	51.4	35.8	90.1	6.5	89.2	83.9	78.5	63.0	47.5	32.0				
	57	96.0	6.0	96.0	96.0	96.0	82.1	65.7	49.3	90.5	6.4	90.5	90.5	90.5	77.8	61.7	45.5				
3400	77	91.8	6.0	68.5	50.1	31.7	-	-	-	90.5	6.5	69.3	49.3	29.3	-	-	-				
	72	96.3	6.0	82.8	67.4	51.9	36.4	-	-	92.3	6.5	80.6	64.7	48.9	33.0	-	-				
	67	100.8	6.0	97.2	84.6	72.1	55.0	37.8	-	94.2	6.5	91.8	80.1	68.4	51.2	33.9	-				
	62	101.7	6.0	98.0	95.2	92.3	73.5	54.7	35.8	95.0	6.5	92.5	90.2	88.0	69.3	50.7	32.1				
	57	102.5	6.0	98.9	98.9	98.9	92.0	71.5	51.0	95.8	6.4	93.1	93.1	93.1	87.5	67.5	47.5				
3825	72	93.4	6.0	87.1	70.1	53.1	36.1	-	-	91.2	6.5	85.3	67.8	50.3	32.8	-	-				
	67	105.5	6.0	103.1	90.4	77.6	58.1	38.6	-	98.6	6.5	96.8	85.3	73.9	54.2	34.6	-				
	62	107.2	6.0	101.3	101.3	101.3	80.0	58.0	35.9	99.9	6.5	95.7	95.7	95.7	75.7	53.9	32.2				
	57	108.9	6.0	99.6	99.6	99.6	99.6	77.3	52.7	101.2	6.4	94.7	94.7	94.7	94.7	73.3	49.4				
4250	72	90.5	6.0	90.5	72.9	54.4	35.9	-	-	90.0	6.5	90.0	70.8	51.7	32.5	-	-				
	67	110.2	6.0	109.0	96.1	83.1	61.2	39.3	-	103.0	6.5	101.7	90.5	79.3	57.3	35.3	-				
	62	112.8	6.0	104.7	104.7	104.7	86.6	61.2	35.9	104.8	6.5	99.0	99.0	99.0	82.0	57.2	32.3				
	57	115.4	6.0	100.3	100.3	100.3	100.3	83.2	54.4	106.5	6.5	96.2	96.2	96.2	96.2	79.1	51.4				

ZJ102 (8.5 ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F										125°F					
2125	77	98.6	7.1	51.4	42.5	33.7	-	-	-	86.3	7.7	46.7	38.4	30.2	-	-	-
	72	86.8	7.1	62.9	52.0	41.2	30.3	-	-	77.7	7.6	59.4	48.5	37.7	26.8	-	-
	67	75.0	7.0	74.5	61.6	48.6	38.5	28.3	-	69.1	7.5	69.1	58.6	45.2	34.9	24.7	-
	62	75.8	6.9	75.8	66.8	56.1	46.7	37.2	27.7	71.2	7.4	71.2	62.4	52.7	43.0	33.4	23.7
2550	77	95.5	7.1	57.6	44.5	31.5	-	-	-	86.9	7.6	54.8	41.6	28.3	-	-	-
	72	87.3	7.0	68.1	55.4	42.7	30.1	-	-	79.9	7.5	64.9	52.2	39.4	26.6	-	-
	67	79.2	7.0	78.5	66.2	54.0	41.5	28.9	-	73.0	7.5	73.0	62.8	50.5	37.8	25.2	-
	62	80.0	6.9	80.0	73.0	65.3	52.8	40.4	27.9	74.7	7.4	74.7	68.4	61.5	49.0	36.5	24.0
	57	80.8	6.8	80.8	79.7	76.6	64.2	51.9	39.5	76.3	7.3	75.5	74.0	72.6	60.2	47.8	35.4
2975	77	92.4	7.0	63.9	46.6	29.2	-	-	-	87.4	7.6	62.9	44.7	26.5	-	-	-
	72	87.8	7.0	73.2	58.7	44.3	29.9	-	-	82.2	7.5	70.5	55.8	41.1	26.5	-	-
	67	83.3	7.0	82.5	70.9	59.4	44.4	29.5	-	76.9	7.5	76.9	66.9	55.8	40.7	25.7	-
	62	84.2	6.9	83.8	79.1	74.4	59.0	43.6	28.1	78.2	7.4	78.2	74.4	70.4	55.0	39.7	24.3
	57	85.0	6.9	85.0	85.0	85.0	73.6	57.6	41.7	79.4	7.3	78.6	78.6	78.6	69.3	53.6	37.9
3400	77	89.2	7.0	70.1	48.6	27.0	-	-	-	88.0	7.5	70.9	47.8	24.7	-	-	-
	72	88.4	7.0	78.3	62.1	45.9	29.6	-	-	84.4	7.5	76.0	59.4	42.9	26.3	-	-
	67	87.5	7.0	86.5	75.6	64.7	47.4	30.1	-	80.8	7.4	80.8	71.1	61.0	43.6	26.2	-
	62	88.3	6.9	86.9	85.3	83.6	65.2	46.8	28.3	81.7	7.4	81.4	80.3	79.2	61.0	42.8	24.6
	57	89.2	6.9	87.4	87.4	87.4	82.9	63.4	43.9	82.6	7.3	81.7	81.7	81.7	78.4	59.4	40.3
3825	72	88.9	7.0	83.4	65.4	47.4	29.4	-	-	86.6	7.4	81.6	63.1	44.6	26.1	-	-
	67	91.7	7.0	90.5	80.3	70.1	50.4	30.7	-	84.7	7.4	84.2	75.3	66.3	46.5	26.8	-
	62	92.5	6.9	90.1	90.1	90.1	71.3	49.9	28.5	85.2	7.4	84.5	84.5	84.5	67.0	45.9	24.9
	57	93.4	6.9	89.7	89.7	89.7	89.7	69.2	46.1	85.7	7.4	84.8	84.8	84.8	84.8	65.1	42.8
4250	72	89.4	6.9	88.6	68.8	49.0	29.2	-	-	88.8	7.4	87.2	66.7	46.3	-	-	-
	67	95.8	6.9	94.5	85.0	75.5	53.4	31.3	-	88.6	7.4	87.2	79.4	71.6	49.4	27.3	-
	62	96.7	6.9	93.3	93.3	93.3	77.5	53.1	28.7	88.7	7.4	87.6	87.6	87.6	73.0	49.1	25.2
	57	97.6	6.9	92.0	92.0	92.0	92.0	75.0	48.3	88.8	7.4	87.9	87.9	87.9	87.9	70.9	-

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ120 (10 ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								85°F							
2500	77	159.5	7.3	63.5	52.6	41.7	-	-	-	148.2	8.2	61.1	50.3	39.4	-	-	-
	72	145.9	7.2	83.1	72.2	61.3	50.4	-	-	136.1	8.1	80.2	69.3	58.4	47.6	-	-
	67	132.2	7.1	102.7	91.8	80.9	70.0	59.1	-	124.0	8.0	99.3	88.4	77.5	66.6	55.8	-
	62	123.1	7.0	123.1	118.4	99.0	88.1	77.2	66.3	114.8	7.9	114.8	112.5	95.6	84.8	73.9	63.0
3000	77	164.8	7.4	71.2	58.4	45.5	-	-	-	153.7	8.2	68.6	55.9	43.1	-	-	-
	72	150.7	7.2	92.6	79.8	67.0	54.2	-	-	141.1	8.1	89.5	76.7	64.0	51.3	-	-
	67	136.6	7.1	114.0	101.2	88.4	75.6	62.8	-	128.6	8.0	110.4	97.6	84.9	72.2	59.5	-
	62	127.2	7.0	127.2	124.1	108.2	95.4	82.6	69.8	119.0	7.9	119.0	117.5	104.8	92.1	79.3	66.6
	57	125.9	7.0	125.9	125.9	113.4	100.6	87.8	75.0	118.5	7.9	118.5	118.5	107.1	94.4	81.7	69.0
3500	77	170.1	7.4	78.9	64.2	49.4	-	-	-	159.1	8.2	76.0	61.5	46.9	-	-	-
	72	155.5	7.3	102.1	87.4	72.7	57.9	-	-	146.1	8.1	98.7	84.2	69.6	55.0	-	-
	67	140.9	7.1	125.4	110.6	95.9	81.2	66.5	-	133.1	8.1	121.5	106.9	92.3	77.7	63.2	-
	62	131.2	7.1	131.2	129.7	117.5	102.7	88.0	73.3	123.3	8.0	123.3	122.5	113.9	99.3	84.8	70.2
	57	129.9	7.0	129.9	129.9	123.1	108.3	93.6	78.9	122.7	7.9	122.7	122.7	116.5	101.9	87.3	72.8
4000	77	175.4	7.4	86.6	70.0	53.3	-	-	-	164.5	8.3	83.5	67.1	50.7	-	-	-
	72	160.3	7.3	111.7	95.0	78.4	61.7	-	-	151.1	8.2	108.0	91.6	75.2	58.8	-	-
	67	145.3	7.2	136.7	120.1	103.4	86.8	70.1	-	137.6	8.1	132.5	116.1	99.7	83.3	66.9	-
	62	135.3	7.1	135.3	135.3	126.7	110.0	93.4	76.7	127.5	8.0	127.5	127.5	123.0	106.6	90.2	73.8
	57	133.9	7.1	133.9	133.9	132.7	116.1	99.4	82.8	126.9	8.0	126.9	126.9	125.8	109.4	93.0	76.6
4500	72	164.1	7.4	118.0	100.1	82.2	64.4	-	-	154.0	8.2	115.6	97.7	79.8	61.9	-	-
	67	148.7	7.2	144.4	126.4	108.5	90.7	72.8	-	140.3	8.1	137.7	123.7	105.8	87.9	70.1	-
	62	138.4	7.1	138.4	138.4	134.1	116.3	98.4	80.5	129.9	8.0	129.9	129.9	127.7	109.8	91.9	74.0
	57	137.0	7.1	137.0	137.0	136.4	118.6	100.7	82.8	129.3	8.0	129.3	129.3	128.8	110.9	93.0	75.1
5000	72	167.8	7.4	124.3	105.2	86.1	67.0	-	-	156.8	8.2	123.1	103.7	84.4	65.0	-	-
	67	152.0	7.3	152.0	132.7	113.6	94.5	75.5	-	142.9	8.1	142.9	131.3	111.9	92.6	73.2	-
	62	141.6	7.2	141.6	141.6	141.6	122.5	103.4	84.3	132.3	8.0	132.3	132.3	132.3	112.9	93.6	74.2
	57	140.1	7.2	140.1	140.1	140.1	121.0	101.9	82.9	131.7	8.0	131.7	131.7	131.7	112.4	93.0	73.7
		95°F								105°F							
2500	77	136.9	9.0	58.8	47.9	37.1	-	-	-	125.0	10.0	52.9	44.3	33.5	-	-	-
	72	126.4	8.9	77.3	66.5	55.6	44.8	-	-	115.5	10.0	73.3	62.5	51.7	40.9	-	-
	67	115.8	8.9	95.9	85.0	74.1	63.3	52.4	-	105.9	10.0	93.6	80.7	69.9	59.1	48.3	-
	62	106.6	8.8	106.6	106.6	92.2	81.4	70.5	59.7	98.2	9.9	98.2	98.2	86.0	75.2	64.5	53.7
3000	77	142.5	9.0	66.0	53.4	40.7	-	-	-	131.1	10.1	62.3	49.7	37.2	-	-	-
	72	131.5	9.0	86.3	73.7	61.1	48.5	-	-	121.1	10.0	82.5	69.9	57.3	44.7	-	-
	67	120.5	8.9	106.7	94.1	81.4	68.8	56.2	-	111.1	10.0	102.6	90.0	77.5	64.9	52.3	-
	62	110.9	8.8	110.9	110.9	101.3	88.7	76.0	63.4	102.9	9.9	102.9	102.9	95.3	82.7	70.2	57.6
	57	111.2	8.8	111.2	111.2	100.9	88.2	75.6	63.0	103.1	9.9	103.1	103.1	93.2	80.6	68.0	55.5
3500	77	148.1	9.1	73.2	58.8	44.4	-	-	-	137.1	10.1	71.7	55.1	40.8	-	-	-
	72	136.7	9.0	95.4	80.9	66.5	52.1	-	-	126.7	10.1	91.6	77.3	62.9	48.5	-	-
	67	125.3	9.0	117.5	103.1	88.7	74.3	59.9	-	116.2	10.1	111.6	99.4	85.0	70.7	56.3	-
	62	115.3	8.9	115.3	115.3	110.4	96.0	81.6	67.2	107.7	10.0	107.7	107.7	104.6	90.3	75.9	61.5
	57	115.6	8.9	115.6	115.6	109.9	95.5	81.1	66.7	107.9	9.9	107.9	107.9	102.3	87.9	73.5	59.2
4000	77	153.7	9.1	80.4	64.2	48.0	-	-	-	143.2	10.2	81.1	60.5	44.4	-	-	-
	72	141.9	9.0	104.4	88.2	72.0	55.8	-	-	132.3	10.2	100.8	84.7	68.5	52.3	-	-
	67	130.0	9.0	128.3	112.2	96.0	79.8	63.7	-	121.4	10.1	120.5	108.8	92.6	76.4	60.3	-
	62	119.6	8.9	119.6	119.6	119.4	103.3	87.1	70.9	112.5	10.0	112.5	112.5	113.9	97.8	81.6	65.4
	57	120.0	8.9	120.0	120.0	118.9	102.7	86.6	70.4	112.6	10.0	112.6	112.6	111.3	95.2	79.0	62.8
4500	72	143.9	9.1	113.1	95.2	77.3	59.4	-	-	133.6	10.1	109.0	91.2	73.5	55.7	-	-
	67	131.8	9.0	131.0	121.0	103.1	85.2	67.3	-	122.6	10.1	122.2	115.3	99.4	81.6	63.8	-
	62	121.3	8.9	121.3	121.3	121.2	103.3	85.4	67.5	113.6	10.0	113.6	113.6	114.3	96.6	78.8	61.1
	57	121.7	8.9	121.7	121.7	121.1	103.2	85.3	67.5	113.8	10.0	113.8	113.8	113.1	95.4	77.6	59.8
5000	72	145.9	9.1	121.9	102.3	82.7	63.1	-	-	134.9	10.1	117.2	97.8	78.5	59.1	-	-
	67	133.7	9.0	133.7	129.8	110.2	90.6	71.0	-	123.8	10.1	123.8	121.9	106.1	86.8	67.4	-
	62	123.0	8.9	123.0	123.0	123.0	103.4	83.8	64.2	114.7	10.0	114.7	114.7	114.7	95.4	76.1	56.7
	57	123.4	8.9	123.4	123.4	123.4	103.7	84.1	64.5	114.9	10.0	114.9	114.9	114.9	95.5	76.2	56.8

ZJ120 (10 ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F										125°F					
2500	77	113.0	11.0	47.0	40.7	30.0	-	-	-	101.1	12.1	44.1	37.0	26.4	-	-	-
	72	104.5	11.0	69.2	58.5	47.8	37.1	-	-	93.6	12.1	65.1	54.5	43.9	33.3	-	-
	67	96.0	11.0	91.4	76.3	65.6	55.0	44.3	-	86.1	12.1	86.1	72.0	61.4	50.8	40.2	-
	62	89.7	11.0	89.7	89.7	79.8	69.1	58.4	47.7	81.3	12.1	81.3	81.3	74.1	63.0	52.3	41.7
3000	77	119.6	11.1	58.6	46.1	33.6	-	-	-	108.1	12.1	57.2	42.5	30.0	-	-	-
	72	110.6	11.1	78.6	66.1	53.5	41.0	-	-	100.1	12.2	74.7	62.2	49.8	37.3	-	-
	67	101.6	11.1	98.5	86.0	73.5	61.0	48.5	-	92.1	12.2	92.1	82.0	69.5	57.1	44.6	-
	62	94.9	11.0	94.9	94.9	89.3	76.8	64.3	51.8	87.0	12.2	87.0	87.0	83.3	70.9	58.4	46.0
	57	94.9	11.0	94.9	94.9	85.5	73.0	60.5	47.9	86.7	12.0	86.7	86.7	77.8	65.3	52.9	40.4
3500	77	126.1	11.2	70.2	51.5	37.2	-	-	-	115.1	12.2	70.3	47.9	33.6	-	-	-
	72	116.6	11.2	87.9	73.6	59.3	44.9	-	-	106.6	12.3	84.2	69.9	55.6	41.3	-	-
	67	107.2	11.2	105.6	95.7	81.4	67.0	52.7	-	98.1	12.3	98.1	92.0	77.7	63.4	49.1	-
	62	100.1	11.1	100.1	100.1	98.9	84.6	70.2	55.9	92.6	12.3	92.6	92.6	92.6	78.8	64.6	50.3
	57	100.1	11.0	100.1	100.1	94.6	80.3	66.0	51.6	92.3	12.1	92.3	92.3	87.0	72.7	58.4	44.1
4000	77	132.7	11.3	81.8	56.9	40.8	-	-	-	122.2	12.3	83.4	53.3	37.1	-	-	-
	72	122.7	11.3	97.3	81.1	65.0	48.8	-	-	113.1	12.4	93.7	77.6	61.5	45.3	-	-
	67	112.7	11.3	112.7	105.4	89.2	73.1	56.9	-	104.1	12.4	104.1	102.0	85.8	69.7	53.6	-
	62	105.3	11.2	105.3	105.3	108.4	92.3	76.1	60.0	98.2	12.4	98.2	98.2	98.2	86.8	70.7	54.5
	57	105.3	11.1	105.3	105.3	103.7	87.6	71.5	55.3	98.0	12.2	98.0	98.0	96.2	80.0	63.9	47.8
4500	72	123.4	11.2	104.9	87.3	69.6	52.0	-	-	113.1	12.3	100.8	83.3	65.8	48.3	-	-
	67	113.3	11.2	113.3	109.7	95.6	78.0	60.4	-	104.1	12.3	104.1	104.0	91.9	74.4	56.9	-
	62	105.9	11.2	105.9	105.9	107.5	89.8	72.2	54.6	98.2	12.3	98.2	98.2	98.2	83.1	65.6	48.1
	57	105.9	11.1	105.9	105.9	105.1	87.5	69.9	52.2	98.0	12.2	98.0	98.0	97.1	79.6	62.1	44.6
5000	72	124.0	11.2	112.5	93.4	74.3	55.2	-	-	113.1	12.3	107.8	89.0	70.1	51.3	-	-
	67	113.9	11.2	113.9	113.9	102.0	82.9	63.8	-	104.1	12.3	104.1	104.1	97.9	79.1	60.3	-
	62	106.5	11.2	106.5	106.5	106.5	87.4	68.3	49.2	98.2	12.3	98.2	98.2	98.2	79.4	60.6	41.7
	57	106.4	11.1	106.4	106.4	106.4	87.3	68.3	49.2	98.0	12.1	98.0	98.0	98.0	79.1	60.3	41.5

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ150 (12.5 ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)									
				Return Dry Bulb (°F)								Return Dry Bulb (°F)									
				90	85	80	75	70	65			90	85	80	75	70	65				
		75°F										85°F									
3125	77	191.5	9.8	80.3	66.9	53.5	-	-	-	184.5	10.7	76.0	62.6	49.3	-	-	-				
	72	178.7	9.5	103.3	89.9	76.4	63.0	-	-	171.3	10.5	99.0	85.7	72.3	59.0	-	-				
	67	165.9	9.2	126.3	112.8	99.4	86.0	72.6	-	158.1	10.2	122.1	108.8	95.4	82.1	68.7	-				
	62	149.9	9.1	149.9	139.5	122.9	109.5	96.1	82.7	143.1	10.1	143.1	135.8	117.5	104.2	90.8	77.5				
3750	77	201.3	9.8	89.4	74.2	58.9	-	-	-	193.5	10.7	85.1	69.8	54.5	-	-	-				
	72	187.9	9.5	114.7	99.5	84.2	69.0	-	-	179.6	10.5	110.6	95.3	80.0	64.6	-	-				
	67	174.5	9.3	140.0	124.8	109.5	94.3	79.1	-	165.8	10.3	136.1	120.8	105.5	90.1	74.8	-				
	62	157.6	9.1	157.6	150.7	135.4	120.2	105.0	89.7	150.1	10.1	150.1	145.2	129.9	114.6	99.3	83.9				
	57	152.3	9.1	152.3	152.3	140.7	125.5	110.2	95.0	145.8	10.1	145.8	145.8	134.0	118.7	103.3	88.0				
4375	77	211.1	9.8	98.5	81.5	64.4	-	-	-	202.4	10.8	94.2	76.9	59.6	-	-	-				
	72	197.0	9.6	126.2	109.1	92.0	75.0	-	-	187.9	10.6	122.1	104.9	87.6	70.3	-	-				
	67	183.0	9.3	153.8	136.7	119.7	102.6	85.5	-	173.5	10.3	150.1	132.8	115.5	98.2	80.9	-				
	62	165.3	9.1	165.3	161.8	148.0	130.9	113.8	96.8	157.0	10.1	157.0	154.6	142.3	125.0	107.7	90.4				
	57	159.7	9.1	159.7	159.7	153.7	136.6	119.6	102.5	152.6	10.2	152.6	152.6	146.7	129.4	112.2	94.9				
5000	77	221.0	9.9	107.6	88.8	69.9	-	-	-	211.4	10.9	103.3	84.1	64.8	-	-	-				
	72	206.2	9.6	137.6	118.7	99.8	80.9	-	-	196.3	10.6	133.7	114.4	95.2	75.9	-	-				
	67	191.5	9.3	167.5	148.7	129.8	110.9	92.0	-	181.2	10.4	164.1	144.8	125.5	106.3	87.0	-				
	62	173.0	9.1	173.0	173.0	160.5	141.6	122.7	103.8	164.0	10.2	164.0	164.0	154.6	135.4	116.1	96.9				
	57	167.2	9.1	167.2	167.2	166.7	147.8	129.0	110.1	159.3	10.2	159.3	159.3	159.5	140.2	121.0	101.7				
5625	72	215.4	9.6	150.0	129.1	108.3	87.5	-	-	204.6	10.7	146.0	124.7	103.5	82.2	-	-				
	67	200.0	9.3	185.5	161.6	140.8	119.9	99.1	-	188.8	10.4	179.0	157.7	136.5	115.2	93.9	-				
	62	180.7	9.2	180.7	180.7	174.4	153.6	132.8	111.9	170.9	10.2	170.9	170.9	166.3	145.0	123.7	102.4				
	57	174.6	9.1	174.6	174.6	174.4	153.5	132.7	111.9	166.1	10.3	166.1	166.1	166.2	144.9	123.6	102.3				
	6250	72	224.6	9.6	162.3	139.5	116.7	94.0	-	-	212.9	10.7	158.4	135.1	111.7	88.4	-	-			
	67	208.5	9.3	203.5	174.5	151.8	129.0	106.2	-	196.5	10.5	194.0	170.7	147.4	124.1	100.8	-				
	62	188.4	9.2	188.4	188.4	188.4	165.6	142.8	120.0	177.9	10.3	177.9	177.9	177.9	154.6	131.3	108.0				
	57	182.0	9.2	182.0	182.0	182.0	159.2	136.5	113.7	172.8	10.3	172.8	172.8	172.8	149.5	126.2	102.9				
		95°F										105°F									
3125	77	177.5	11.6	71.6	58.3	45.1	-	-	-	168.0	12.8	67.5	55.1	42.0	-	-	-				
	72	163.9	11.4	94.8	81.5	68.2	55.0	-	-	154.2	12.7	90.8	77.7	64.5	51.4	-	-				
	67	150.3	11.2	118.0	104.7	91.4	78.1	64.9	-	140.3	12.6	114.2	100.2	87.1	73.9	60.8	-				
	62	136.4	11.0	136.4	132.1	112.1	98.9	85.6	72.3	128.6	12.4	128.6	126.4	106.8	93.6	80.5	67.3				
3750	77	185.6	11.7	80.8	65.4	50.0	-	-	-	175.2	12.9	77.1	61.9	46.7	-	-	-				
	72	171.4	11.5	106.5	91.1	75.7	60.3	-	-	160.8	12.8	102.2	86.9	71.7	56.5	-	-				
	67	157.2	11.3	132.2	116.8	101.4	86.0	70.6	-	146.4	12.7	127.2	112.0	96.8	81.6	66.4	-				
	62	142.6	11.1	142.6	139.7	124.3	109.0	93.6	78.2	134.1	12.5	134.1	132.7	118.7	103.5	88.2	73.0				
	57	139.4	11.1	139.4	139.4	127.2	111.8	96.5	81.1	131.5	12.5	131.5	131.5	118.9	103.7	88.5	73.3				
4375	77	193.7	11.8	89.9	72.4	54.9	-	-	-	182.4	13.0	86.7	68.6	51.3	-	-	-				
	72	178.9	11.6	118.1	100.6	83.1	65.6	-	-	167.4	12.9	113.5	96.2	78.9	61.6	-	-				
	67	164.0	11.4	146.4	128.8	111.3	93.8	76.3	-	152.4	12.8	140.3	123.8	106.5	89.2	71.9	-				
	62	148.8	11.2	148.8	147.4	136.6	119.1	101.5	84.0	139.6	12.6	139.6	138.9	130.6	113.3	96.0	78.7				
	57	145.4	11.2	145.4	145.4	139.7	122.2	104.7	87.2	136.9	12.6	136.9	136.9	130.9	113.6	96.3	79.0				
5000	77	201.8	11.9	99.1	79.4	59.8	-	-	-	189.6	13.1	96.3	75.4	56.0	-	-	-				
	72	186.3	11.7	129.8	110.2	90.5	70.9	-	-	174.0	13.0	124.8	105.5	86.1	66.8	-	-				
	67	170.8	11.5	160.6	140.9	121.3	101.7	82.0	-	158.5	12.9	153.3	135.6	116.2	96.9	77.5	-				
	62	155.0	11.3	155.0	155.0	148.8	129.2	109.5	89.9	145.1	12.7	145.1	145.1	142.5	123.2	103.8	84.5				
	57	151.5	11.3	151.5	151.5	152.2	132.6	113.0	93.4	142.3	12.7	142.3	142.3	142.8	123.4	104.1	84.7				
5625	72	193.8	11.8	142.1	120.4	98.6	76.9	-	-	180.7	13.1	136.9	115.4	94.0	72.5	-	-				
	67	177.7	11.6	172.5	153.9	132.1	110.4	88.7	-	164.5	13.0	161.9	148.3	126.8	105.3	83.9	-				
	62	161.2	11.3	161.2	161.2	158.1	136.4	114.6	92.9	150.7	12.8	150.7	150.7	149.3	127.9	106.4	84.9				
	57	157.6	11.4	157.6	157.6	157.9	136.2	114.5	92.7	147.8	12.8	147.8	147.8	148.0	126.5	105.0	83.6				
6250	72	201.2	11.9	154.4	130.6	106.7	82.9	-	-	187.3	13.2	149.0	125.4	101.8	78.2	-	-				
	67	184.5	11.7	184.5	166.8	143.0	119.2	95.3	-	170.5	13.1	170.5	161.0	137.4	113.8	90.2	-				
	62	167.4	11.4	167.4	167.4	167.4	143.6	119.7	95.9	156.2	12.9	156.2	156.2	156.2	132.6	109.0	85.4				
	57	163.6	11.5	163.6	163.6	163.6	139.8	116.0	92.1	153.2	12.9	153.2	153.2	153.2	129.6	106.0	82.4				

ZJ150 (12.5 ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F										125°F					
3125	77	158.4	14.0	63.3	51.9	38.9	-	-	-	148.8	15.3	56.6	48.7	35.8	-	-	-
	72	144.4	14.0	86.9	73.8	60.8	47.8	-	-	134.6	15.3	82.9	70.0	57.1	44.2	-	-
	67	130.4	14.0	110.4	95.8	82.7	69.7	56.7	-	120.4	15.4	106.6	91.3	78.4	65.5	52.6	-
	62	120.7	13.8	120.7	120.7	101.4	88.4	75.3	62.3	112.9	15.2	112.9	112.9	96.0	83.1	70.2	57.3
3750	77	164.8	14.1	73.4	58.4	43.3	-	-	-	154.3	15.4	69.8	54.9	40.0	-	-	-
	72	150.2	14.1	97.9	82.8	67.8	52.7	-	-	139.6	15.4	93.6	78.7	63.8	48.9	-	-
	67	135.6	14.1	122.3	107.3	92.2	77.2	62.1	-	124.8	15.5	117.4	102.5	87.6	72.7	57.9	-
	62	125.6	13.9	125.6	125.6	113.0	98.0	82.9	67.9	117.1	15.3	117.1	117.1	107.3	92.5	77.6	62.7
	57	123.7	13.9	123.7	123.7	110.6	95.6	80.5	65.5	115.8	15.3	115.8	115.8	102.3	87.4	72.5	57.7
4375	77	171.1	14.2	83.5	64.8	47.8	-	-	-	159.8	15.5	82.9	61.1	44.2	-	-	-
	72	156.0	14.2	108.8	91.8	74.7	57.7	-	-	144.5	15.5	104.2	87.4	70.5	53.7	-	-
	67	140.8	14.2	134.2	118.7	101.7	84.6	67.6	-	129.2	15.6	128.1	113.7	96.9	80.0	63.2	-
	62	130.4	14.0	130.4	130.4	124.6	107.6	90.5	73.4	121.2	15.4	121.2	121.2	118.6	101.8	85.0	68.1
	57	128.4	14.0	128.4	128.4	122.0	104.9	87.9	70.8	119.9	15.5	119.9	119.9	113.1	96.3	79.4	62.6
5000	77	177.5	14.4	93.6	71.3	52.2	-	-	-	165.3	15.6	96.0	67.2	48.5	-	-	-
	72	161.8	14.3	119.8	100.8	81.7	62.6	-	-	149.5	15.7	114.8	96.1	77.3	58.5	-	-
	67	146.1	14.3	146.1	130.2	111.2	92.1	73.0	-	133.7	15.7	133.7	124.9	106.1	87.3	68.5	-
	62	135.3	14.1	135.3	135.3	136.2	117.2	98.1	79.0	125.4	15.5	125.4	125.4	125.4	111.1	92.4	73.6
	57	133.2	14.1	133.2	133.2	133.3	114.3	95.2	76.1	124.1	15.6	124.1	124.1	123.9	105.1	86.3	67.5
5625	72	167.6	14.4	131.7	110.5	89.3	68.1	-	-	154.5	15.8	126.5	105.6	84.6	63.6	-	-
	67	151.3	14.4	151.3	142.7	121.5	100.3	79.0	-	138.1	15.8	138.1	137.1	116.1	95.2	74.2	-
	62	140.1	14.2	140.1	140.1	140.6	119.4	98.1	76.9	129.6	15.6	129.6	129.6	129.6	110.9	89.9	68.9
	57	138.0	14.2	138.0	138.0	138.0	116.8	95.6	74.4	128.2	15.7	128.2	128.2	128.1	107.1	86.1	65.2
6250	72	173.4	14.5	143.6	120.2	96.9	73.5	-	-	159.4	15.9	138.2	115.1	91.9	68.8	-	-
	67	156.5	14.5	156.5	155.2	131.8	108.4	85.0	-	142.5	15.9	142.5	142.5	126.2	103.0	79.9	-
	62	145.0	14.3	145.0	145.0	145.0	121.6	98.2	74.8	133.7	15.7	133.7	133.7	133.7	110.6	87.4	64.3
	57	142.7	14.3	142.7	142.7	142.7	119.4	96.0	72.6	132.3	15.8	132.3	132.3	132.3	109.1	86.0	62.8

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ037 (3.0 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		35°F								45°F							
750	77	42.0	2.1	8.4	7.1	5.8	-	-	-	32.6	2.1	3.9	3.0	2.1	-	-	-
	72	32.9	2.0	10.9	9.6	8.3	7.0	-	-	26.8	2.0	6.8	5.8	4.9	3.9	-	-
	67	23.7	1.8	13.4	12.1	10.7	9.4	8.1	-	21.1	1.8	9.6	8.6	7.7	6.7	5.8	-
	62	19.7	1.8	19.7	19.0	17.7	16.4	15.1	13.8	17.3	1.8	14.4	13.4	12.5	11.5	10.6	9.6
900	77	37.5	2.1	8.6	7.6	6.5	-	-	-	31.2	2.1	4.0	3.1	2.1	-	-	-
	72	29.1	1.9	10.0	8.9	7.8	6.8	-	-	25.7	1.9	6.9	5.9	4.9	3.9	-	-
	67	20.6	1.7	11.3	10.2	9.2	8.1	7.1	-	20.2	1.8	9.7	8.7	7.8	6.8	5.8	-
	62	17.2	1.7	17.2	16.2	15.2	14.1	13.1	12.0	16.5	1.8	14.6	13.6	12.6	11.7	10.7	9.7
	57	18.3	1.7	18.3	18.3	18.2	17.2	16.1	15.1	15.4	1.7	15.4	14.7	13.7	12.7	11.7	10.7
1050	77	33.0	2.0	8.8	8.0	7.2	-	-	-	29.8	2.0	4.1	3.1	2.1	-	-	-
	72	25.3	1.9	9.0	8.2	7.4	6.6	-	-	24.5	1.9	7.0	6.0	5.0	4.0	-	-
	67	17.5	1.7	9.2	8.4	7.6	6.8	6.0	-	19.2	1.8	9.9	8.9	7.9	6.9	5.8	-
	62	14.7	1.7	14.7	13.5	12.7	11.9	11.1	10.3	15.8	1.7	14.8	13.8	12.8	11.8	10.8	9.8
	57	16.1	1.7	16.1	16.1	16.0	15.2	14.5	13.7	14.7	1.7	14.7	14.3	13.8	12.8	11.8	10.8
1200	77	28.6	2.0	9.0	8.5	7.9	-	-	-	28.4	2.0	4.2	3.2	2.1	-	-	-
	72	21.5	1.8	8.1	7.5	7.0	6.4	-	-	23.3	1.9	7.1	6.1	5.0	4.0	-	-
	67	14.4	1.7	7.1	6.6	6.0	5.5	4.9	-	18.3	1.7	10.0	9.0	8.0	6.9	5.9	-
	62	12.1	1.7	12.1	10.8	10.2	9.7	9.1	8.6	15.0	1.7	15.0	14.0	13.0	11.9	10.9	9.8
	57	13.9	1.7	13.9	13.9	13.9	13.3	12.8	12.2	14.0	1.7	14.0	14.0	14.0	13.0	11.9	10.9
1350	72	21.2	1.8	9.3	8.7	8.0	7.4	-	-	23.2	1.8	8.1	6.9	5.8	4.6	-	-
	67	14.1	1.7	8.4	7.7	7.1	6.5	5.8	-	18.2	1.7	11.5	10.3	9.1	7.9	6.7	-
	62	11.9	1.7	11.9	11.2	11.0	10.3	9.7	9.1	15.0	1.7	15.0	14.4	13.9	12.7	11.5	10.3
	57	13.7	1.7	13.7	13.7	13.7	13.0	12.4	11.8	13.9	1.7	13.9	13.9	13.9	12.8	11.6	10.4
1500	72	20.8	1.8	10.5	9.8	9.1	8.4	-	-	23.1	1.8	9.2	7.8	6.5	5.1	-	-
	67	13.9	1.7	9.6	8.9	8.2	7.4	6.7	-	18.1	1.7	12.9	11.6	10.2	8.8	7.5	-
	62	11.7	1.7	11.7	11.7	11.7	11.0	10.3	9.5	14.9	1.7	14.9	14.9	14.9	13.5	12.2	10.8
	57	13.5	1.7	13.5	13.5	13.5	12.8	12.0	11.3	13.9	1.6	13.9	13.9	13.9	12.5	11.2	9.8
		55°F								65°F							
750	77	23.3	2.1	-	-	-	-	-	-	21.9	2.2	-	-	-	-	-	-
	72	20.8	2.0	2.6	2.0	1.4	0.9	-	-	19.2	2.1	1.2	0.8	0.5	0.1	-	-
	67	18.4	1.9	5.8	5.2	4.6	4.0	3.4	-	16.5	2.0	3.9	3.6	3.2	2.8	2.4	-
	62	14.8	1.8	8.9	7.9	7.3	6.7	6.1	5.5	13.2	1.9	6.8	6.0	5.6	5.2	4.8	4.4
900	77	24.9	2.1	-	-	-	-	-	-	23.2	2.1	-	-	-	-	-	-
	72	22.3	2.0	3.8	2.9	2.0	1.1	-	-	20.3	2.0	1.8	1.2	0.5	-	-	-
	67	19.7	1.9	8.1	7.2	6.3	5.4	4.5	-	17.4	1.9	6.0	5.3	4.7	4.0	3.4	-
	62	15.9	1.8	11.9	11.0	10.1	9.2	8.3	7.4	14.0	1.9	9.7	9.0	8.4	7.7	7.1	6.4
	57	12.5	1.8	10.9	10.0	9.1	8.2	7.3	6.4	12.2	1.8	9.3	8.7	8.0	7.4	6.7	6.1
1050	77	26.5	2.0	-	-	-	-	-	-	24.4	2.1	-	-	-	-	-	-
	72	23.8	1.9	5.0	3.8	2.5	1.3	-	-	21.4	2.0	2.5	1.5	0.6	-	-	-
	67	21.0	1.8	10.5	9.3	8.1	6.9	5.7	-	18.4	1.9	8.1	7.1	6.2	5.3	4.4	-
	62	16.9	1.8	14.9	14.1	12.9	11.7	10.5	9.2	14.8	1.8	12.6	12.1	11.2	10.3	9.3	8.4
	57	13.4	1.7	12.5	12.1	11.6	10.4	9.2	8.0	12.8	1.8	11.4	11.1	10.8	9.8	8.9	8.0
1200	77	28.2	2.0	-	-	-	-	-	-	25.7	2.0	-	-	-	-	-	-
	72	25.2	1.9	6.2	4.6	3.1	1.6	-	-	22.5	1.9	3.1	1.9	0.7	-	-	-
	67	22.3	1.8	12.9	11.4	9.9	8.3	6.8	-	19.3	1.8	10.1	8.9	7.7	6.5	5.3	-
	62	17.9	1.7	17.9	17.2	15.7	14.2	12.6	11.1	15.6	1.8	15.6	15.2	14.0	12.8	11.6	10.4
	57	14.2	1.7	14.2	14.2	14.2	12.7	11.1	9.6	13.5	1.7	13.5	13.5	13.5	12.3	11.1	9.9
1350	72	25.3	1.9	7.0	5.2	3.5	1.7	-	-	22.7	1.9	3.6	2.1	0.7	-	-	-
	67	22.4	1.8	14.6	12.8	11.0	9.3	7.5	-	19.5	1.8	11.8	10.3	8.9	7.5	6.0	-
	62	18.0	1.7	18.0	17.6	16.9	15.1	13.4	11.6	15.7	1.8	15.7	15.5	14.9	13.5	12.0	10.6
	57	14.2	1.7	14.2	14.2	14.2	12.5	10.7	9.0	13.6	1.7	13.6	13.6	13.6	12.2	10.7	9.3
1500	72	25.4	1.8	7.8	5.8	3.8	1.9	-	-	22.9	1.9	4.0	2.4	0.7	-	-	-
	67	22.4	1.7	16.2	14.2	12.2	10.2	8.3	-	19.7	1.8	13.4	11.8	10.1	8.4	6.8	-
	62	18.0	1.7	18.0	18.0	18.0	16.1	14.1	12.1	15.8	1.7	15.8	15.8	15.8	14.1	12.5	10.8
	57	14.3	1.6	14.3	14.3	14.3	12.3	10.3	8.3	13.7	1.7	13.7	13.7	13.7	12.0	10.4	8.7

ZJ037 (3.0 ton) reheate capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F										85°F					
750	77	20.5	2.3	-	-	-	-	-	-	19.1	2.3	-	-	-	-	-	
	72	17.5	2.1	-	-	-	-	-	-	15.9	2.2	-	-	-	-	-	
	67	14.5	2.0	2.1	1.9	1.8	1.6	1.4	-	12.6	2.1	0.3	0.3	0.3	0.4	0.4	
	62	11.7	1.9	4.7	4.1	3.9	3.7	3.5	3.3	10.1	2.0	2.6	2.2	2.2	2.2	2.3	
900	77	21.4	2.2	-	-	-	-	-	-	19.6	2.3	-	-	-	-	-	
	72	18.3	2.1	-	-	-	-	-	-	16.3	2.2	-	-	-	-	-	
	67	15.2	2.0	3.8	3.4	3.0	2.6	2.2	-	12.9	2.0	1.7	1.5	1.4	1.2	1.0	
	62	12.2	1.9	7.5	7.1	6.7	6.3	5.9	5.5	10.4	2.0	5.3	5.2	5.0	4.8	4.7	
	57	11.8	1.9	7.8	7.4	6.9	6.5	6.1	5.7	11.4	2.0	6.2	6.0	5.9	5.7	5.5	
1050	77	22.3	2.2	-	-	-	-	-	-	20.1	2.2	-	-	-	-	-	
	72	19.0	2.1	-	-	-	-	-	-	16.7	2.1	-	-	-	-	-	
	67	15.8	1.9	5.6	4.9	4.3	3.7	3.0	-	13.2	2.0	3.1	2.8	2.4	2.0	1.7	
	62	12.7	1.9	10.3	10.1	9.5	8.9	8.2	7.6	10.6	1.9	8.1	8.2	7.8	7.4	7.1	
	57	12.3	1.9	10.3	10.1	9.9	9.2	8.6	7.9	11.8	1.9	9.1	9.1	9.0	8.6	8.3	
1200	77	23.2	2.1	-	-	-	-	-	-	20.6	2.2	-	-	-	-	-	
	72	19.8	2.0	-	-	-	-	-	-	17.0	2.1	-	-	-	-	-	
	67	16.4	1.9	7.3	6.4	5.6	4.7	3.8	-	13.4	2.0	4.5	4.0	3.4	2.9	2.3	
	62	13.2	1.8	13.2	13.2	12.3	11.4	10.6	9.7	10.8	1.9	10.8	10.8	10.6	10.1	9.5	
	57	12.8	1.8	12.8	12.8	12.8	11.9	11.0	10.2	12.1	1.9	12.1	12.1	12.1	11.5	11.0	
1350	72	20.1	2.0	0.2	-	-	-	-	-	17.4	2.1	-	-	-	-	-	
	67	16.6	1.9	9.0	7.9	6.8	5.7	4.5	-	13.8	1.9	6.2	5.4	4.6	3.8	3.0	
	62	13.4	1.8	13.4	13.4	12.9	11.8	10.7	9.6	11.1	1.9	11.1	11.1	11.0	10.2	9.4	
	57	13.0	1.8	13.0	13.0	13.0	11.9	10.7	9.6	12.3	1.9	12.3	12.3	12.3	11.5	10.8	
1500	72	20.4	2.0	0.3	-	-	-	-	-	17.8	2.0	-	-	-	-	-	
	67	16.9	1.9	10.7	9.3	8.0	6.6	5.3	-	14.1	1.9	7.9	6.9	5.8	4.8	3.8	
	62	13.6	1.8	13.6	13.6	13.6	12.2	10.9	9.5	11.3	1.8	11.3	11.3	11.3	10.3	9.3	
	57	13.2	1.8	13.2	13.2	13.2	11.8	10.4	9.1	12.6	1.8	12.6	12.6	12.6	11.6	10.5	

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ049 (4.0 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		35°F								45°F							
1000	77	29.7	2.5	6.2	4.4	2.7	-	-	-	32.2	2.7	3.7	2.1	0.6	-	-	-
	72	31.2	2.5	12.1	10.3	8.5	6.7	-	-	31.4	2.6	9.5	7.9	6.4	4.9	-	-
	67	32.6	2.4	17.9	16.1	14.4	12.6	10.8	-	30.5	2.5	15.3	13.7	12.2	10.7	9.2	-
	62	32.6	2.2	24.9	23.0	21.2	19.4	17.6	15.9	28.7	2.3	21.7	19.7	18.2	16.7	15.2	13.7
1200	77	29.4	2.5	7.0	5.1	3.1	-	-	-	32.8	2.7	4.3	2.5	0.7	-	-	-
	72	31.0	2.5	13.4	11.5	9.6	7.7	-	-	31.9	2.6	10.9	9.2	7.4	5.6	-	-
	67	32.6	2.4	19.9	18.0	16.0	14.1	12.2	-	31.0	2.5	17.6	15.8	14.1	12.3	10.5	-
	62	32.6	2.2	27.5	25.6	23.6	21.7	19.8	17.9	29.2	2.3	24.5	22.8	21.0	19.2	17.4	15.7
	57	32.7	2.2	30.9	29.0	27.1	25.1	23.2	21.3	28.4	2.3	26.8	25.0	23.3	21.5	19.7	18.0
1400	77	29.1	2.5	7.7	5.7	3.6	-	-	-	33.4	2.7	4.9	2.8	0.8	-	-	-
	72	30.8	2.5	14.8	12.7	10.7	8.6	-	-	32.5	2.6	12.4	10.4	8.4	6.4	-	-
	67	32.5	2.4	21.8	19.8	17.7	15.7	13.6	-	31.6	2.4	20.0	18.0	15.9	13.9	11.9	-
	62	32.6	2.2	30.0	28.2	26.1	24.1	22.0	19.9	29.8	2.3	27.4	25.8	23.8	21.7	19.7	17.7
	57	32.7	2.2	31.8	30.9	29.9	27.9	25.8	23.8	28.9	2.3	28.1	27.2	26.3	24.3	22.3	20.3
1600	77	28.8	2.5	8.5	6.3	4.1	-	-	-	34.0	2.7	5.5	3.2	0.9	-	-	-
	72	30.6	2.5	16.1	13.9	11.8	9.6	-	-	33.0	2.5	13.9	11.6	9.4	7.1	-	-
	67	32.4	2.4	23.8	21.6	19.4	17.2	15.0	-	32.1	2.4	22.3	20.1	17.8	15.5	13.2	-
	62	32.6	2.3	32.6	30.8	28.6	26.4	24.2	22.0	30.3	2.3	30.3	28.8	26.5	24.2	22.0	19.7
	57	32.8	2.2	32.8	32.8	32.8	30.6	28.4	26.2	29.4	2.3	29.4	29.4	29.4	27.1	24.9	22.6
1800	72	30.7	2.5	16.9	14.7	12.5	10.3	-	-	33.6	2.5	15.1	12.6	10.1	7.7	-	-
	67	32.6	2.4	24.9	22.7	20.5	18.3	16.0	-	32.6	2.4	24.2	21.7	19.3	16.8	14.3	-
	62	32.8	2.3	32.8	31.9	30.5	28.3	26.1	23.8	30.8	2.3	30.8	30.0	28.7	26.3	23.8	21.3
	57	33.0	2.2	33.0	33.0	33.0	30.8	28.6	26.4	29.9	2.3	29.9	29.9	29.9	27.4	24.9	22.5
2000	72	30.8	2.5	17.7	15.5	13.2	11.0	-	-	34.1	2.5	16.2	13.6	10.9	8.2	-	-
	67	32.8	2.4	26.0	23.8	21.5	19.3	17.1	-	33.1	2.4	26.1	23.4	20.7	18.1	15.4	-
	62	33.1	2.3	33.1	33.1	32.4	30.2	27.9	25.7	31.2	2.3	31.2	31.2	30.9	28.3	25.6	22.9
	57	33.3	2.2	33.3	33.3	33.3	31.0	28.8	26.6	30.3	2.3	30.3	30.3	30.3	27.7	25.0	22.4
		55°F								65°F							
1000	77	34.8	2.9	-	-	-	-	-	-	32.1	2.9	-	-	-	-	-	-
	72	31.5	2.7	6.9	5.6	4.3	3.1	-	-	28.7	2.8	4.5	3.5	2.5	1.5	-	-
	67	28.3	2.5	12.6	11.3	10.1	8.8	7.6	-	25.3	2.6	10.1	9.1	8.1	7.1	6.1	-
	62	24.8	2.4	18.4	16.5	15.3	14.0	12.7	11.5	21.4	2.5	16.0	14.4	13.4	12.4	11.4	10.4
1200	77	36.2	2.8	1.6	0.5	-	-	-	-	33.3	2.9	-	-	-	-	-	-
	72	32.9	2.7	8.5	6.8	5.2	3.6	-	-	29.8	2.8	5.5	4.2	3.0	1.7	-	-
	67	29.5	2.5	15.4	13.7	12.1	10.5	8.9	-	26.2	2.6	12.3	11.0	9.7	8.4	7.1	-
	62	25.9	2.4	21.6	20.0	18.3	16.7	15.1	13.4	22.2	2.5	18.6	17.3	16.0	14.7	13.4	12.1
	57	24.1	2.4	22.8	21.1	19.5	17.9	16.2	14.6	21.2	2.5	19.7	18.4	17.1	15.8	14.6	13.3
1400	77	37.7	2.8	2.0	0.6	-	-	-	-	34.5	2.9	-	-	-	-	-	-
	72	34.2	2.7	10.1	8.1	6.1	4.1	-	-	30.8	2.7	6.6	5.0	3.4	1.8	-	-
	67	30.6	2.5	18.1	16.1	14.1	12.1	10.2	-	27.1	2.6	14.4	12.8	11.2	9.6	8.1	-
	62	26.9	2.4	24.8	23.4	21.4	19.4	17.4	15.4	23.0	2.5	21.2	20.2	18.6	17.0	15.4	13.8
	57	25.1	2.4	24.4	23.6	22.8	20.8	18.8	16.8	21.9	2.5	21.2	20.6	19.9	18.3	16.7	15.1
1600	77	39.1	2.8	2.5	0.1	-	-	-	-	35.7	2.9	-	-	-	-	-	-
	72	35.5	2.6	11.7	9.3	7.0	4.6	-	-	31.9	2.7	7.7	5.8	3.9	2.0	-	-
	67	31.8	2.5	20.9	18.5	16.2	13.8	11.5	-	28.1	2.6	16.6	14.7	12.8	10.9	9.0	-
	62	27.9	2.4	27.9	26.8	24.5	22.1	19.8	17.4	23.8	2.5	23.8	23.1	21.2	19.3	17.4	15.5
	57	26.0	2.4	26.0	26.0	23.7	21.3	19.0	-	22.7	2.5	22.7	22.7	22.7	20.8	18.9	17.0
1800	72	36.4	2.6	13.2	10.5	7.8	5.1	-	-	32.2	2.7	8.9	6.6	4.4	2.2	-	-
	67	32.7	2.5	23.5	20.8	18.1	15.3	12.6	-	28.4	2.6	19.0	16.8	14.6	12.4	10.2	-
	62	28.7	2.4	28.7	28.1	26.9	24.2	21.5	18.8	24.0	2.5	24.0	23.7	22.7	20.5	18.3	16.1
	57	26.7	2.4	26.7	26.7	26.7	24.0	21.3	18.6	22.9	2.5	22.9	22.9	22.9	20.7	18.5	16.3
2000	72	37.4	2.6	14.7	11.6	8.6	5.5	-	-	32.5	2.7	10.0	7.4	4.9	2.4	-	-
	67	33.5	2.5	26.1	23.0	19.9	16.9	13.8	-	28.7	2.6	21.5	18.9	16.4	13.9	11.3	-
	62	29.4	2.4	29.4	29.4	26.3	23.3	20.2	-	24.3	2.5	24.3	24.3	24.3	21.8	19.2	16.7
	57	27.4	2.4	27.4	27.4	24.3	21.3	18.2	-	23.2	2.5	23.2	23.2	23.2	20.6	18.1	15.6

ZJ049 (4.0 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)									
				Return Dry Bulb (°F)								Return Dry Bulb (°F)									
				90	85	80	75	70	65			90	85	80	75	70	65				
		75°F										85°F									
1000	77	29.5	3.0	-	-	-	-	-	-	26.8	3.1	-	-	-	-	-	-				
	72	25.9	2.9	2.0	1.3	0.6	-	-	-	23.0	3.0	-	-	-	-	-	-				
	67	22.2	2.8	7.6	6.9	6.1	5.4	4.7	-	19.2	2.9	5.1	4.6	4.2	3.7	3.3	-				
	62	17.9	2.6	13.6	12.3	11.6	10.9	10.1	9.4	14.5	2.7	11.2	10.2	9.8	9.3	8.8	8.4				
1200	77	30.4	3.0	-	-	-	-	-	-	27.4	3.0	-	-	-	-	-	-				
	72	26.7	2.9	2.6	1.7	0.7	-	-	-	23.5	2.9	-	-	-	-	-	-				
	67	22.9	2.7	9.2	8.2	7.2	6.3	5.3	-	19.7	2.8	6.1	5.4	4.8	4.2	3.6	-				
	62	18.5	2.6	15.6	14.6	13.7	12.7	11.8	10.8	14.8	2.7	12.6	12.0	11.4	10.7	10.1	9.5				
	57	18.2	2.6	16.7	15.8	14.8	13.8	12.9	11.9	15.3	2.7	13.7	13.1	12.4	11.8	11.2	10.6				
1400	77	31.3	3.0	-	-	-	-	-	-	28.1	3.0	-	-	-	-	-	-				
	72	27.4	2.8	3.2	2.0	0.8	-	-	-	24.1	2.9	-	-	-	-	-	-				
	67	23.6	2.7	10.7	9.5	8.3	7.2	6.0	-	20.1	2.8	7.1	6.3	5.5	4.7	3.9	-				
	62	19.0	2.6	17.6	17.0	15.8	14.6	13.4	12.2	15.1	2.7	14.0	13.7	12.9	12.1	11.3	10.5				
	57	18.8	2.6	18.0	17.5	17.1	15.9	14.7	13.5	15.6	2.7	14.8	14.5	14.2	13.4	12.6	11.8				
1600	77	32.2	2.9	-	-	-	-	-	-	28.7	3.0	-	-	-	-	-	-				
	72	28.2	2.8	3.8	2.3	0.9	-	-	-	24.6	2.9	-	-	-	-	-	-				
	67	24.3	2.7	12.3	10.9	9.5	8.0	6.6	-	20.5	2.8	8.0	7.1	6.1	5.1	4.2	-				
	62	19.6	2.6	19.6	19.3	17.8	16.4	15.0	13.5	15.4	2.7	15.4	15.4	14.5	13.6	12.6	11.6				
	57	19.3	2.6	19.3	19.3	19.3	17.9	16.4	15.0	15.9	2.7	15.9	15.9	15.9	15.0	14.0	13.0				
1800	72	28.0	2.8	4.5	2.8	1.1	-	-	-	23.7	2.9	0.3	-	-	-	-	-				
	67	24.1	2.7	14.6	12.9	11.2	9.4	7.7	-	19.8	2.8	10.1	8.9	7.7	6.5	5.3	-				
	62	19.4	2.6	19.4	19.2	18.5	16.8	15.1	13.4	14.7	2.7	14.7	14.7	14.3	13.1	11.9	10.6				
	57	19.1	2.6	19.1	19.1	19.1	17.4	15.7	14.0	15.3	2.7	15.3	15.3	15.3	14.1	12.9	11.7				
2000	72	27.7	2.8	5.2	3.2	1.2	-	-	-	22.9	2.9	0.5	-	-	-	-	-				
	67	23.8	2.7	16.9	14.9	12.8	10.8	8.8	-	19.0	2.8	12.3	10.8	9.3	7.8	6.3	-				
	62	19.2	2.6	19.2	19.2	19.2	17.2	15.2	13.2	14.1	2.7	14.1	14.1	14.1	12.6	11.1	9.7				
	57	18.9	2.6	18.9	18.9	18.9	16.9	14.9	12.9	14.7	2.7	14.7	14.7	14.7	13.2	11.7	10.3				

ZJ061 (5.0 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		35°F								45°F							
1250	77	52.3	3.2	10.6	8.4	6.2	-	-	-	48.0	3.6	5.4	3.6	1.8	-	-	-
	72	46.7	2.9	16.8	14.6	12.4	10.2	-	-	43.0	3.3	12.2	10.4	8.6	6.8	-	-
	67	41.2	2.5	23.0	20.8	18.6	16.4	14.2	-	38.0	3.0	19.0	17.2	15.4	13.6	11.8	-
	62	24.3	3.5	21.6	19.5	17.3	15.1	12.9	10.7	27.7	3.4	21.7	19.9	18.1	16.3	14.6	12.8
1500	77	51.2	3.4	11.5	9.2	7.0	-	-	-	48.1	3.6	5.9	4.0	2.0	-	-	-
	72	45.7	3.1	17.5	15.3	13.1	10.8	-	-	43.1	3.3	13.3	11.3	9.3	7.3	-	-
	67	40.3	2.7	23.6	21.3	19.1	16.9	14.6	-	38.0	3.0	20.7	18.7	16.7	14.7	12.7	-
	62	23.4	3.7	21.5	19.3	17.1	14.8	12.6	10.3	27.7	3.4	23.6	21.6	19.7	17.7	15.7	13.7
1750	77	50.0	3.6	12.3	10.0	7.8	-	-	-	48.2	3.6	6.5	4.3	2.1	-	-	-
	72	44.7	3.3	18.3	16.0	13.7	11.4	-	-	43.2	3.3	14.5	12.3	10.0	7.8	-	-
	67	39.3	2.9	24.2	21.9	19.6	17.3	15.0	-	38.1	3.0	22.4	20.2	18.0	15.8	13.6	-
	62	22.6	3.9	21.4	19.1	16.8	14.5	12.2	9.9	27.8	3.4	25.6	23.4	21.2	19.0	16.8	14.5
2000	77	48.9	3.9	13.2	10.9	8.5	-	-	-	48.3	3.6	7.1	4.7	2.3	-	-	-
	72	43.7	3.5	19.0	16.6	14.3	11.9	-	-	43.3	3.3	15.6	13.2	10.8	8.3	-	-
	67	38.4	3.1	24.8	22.4	20.1	17.7	15.4	-	38.2	3.1	24.1	21.7	19.3	16.9	14.4	-
	62	21.7	4.0	21.3	19.0	16.6	14.3	11.9	9.6	27.8	3.4	27.5	25.1	22.7	20.3	17.8	15.4
2250	77	48.9	4.1	19.0	17.0	14.7	12.3	10.0	-	25.1	3.5	25.1	23.1	21.1	19.1	17.1	15.1
	72	46.4	3.3	21.5	18.9	16.2	13.6	-	-	45.1	3.3	17.6	14.8	12.1	9.4	-	-
	67	40.8	2.9	28.3	25.6	23.0	20.3	17.6	-	39.8	3.0	27.1	24.4	21.7	19.0	16.3	-
	62	23.3	3.8	23.1	21.9	19.2	16.6	13.9	11.3	29.0	3.4	28.9	27.7	25.5	22.8	20.1	17.4
2500	77	46.4	3.9	20.4	18.4	16.4	14.4	12.4	10.4	26.2	3.4	26.2	24.2	22.2	20.2	18.2	16.2
	72	49.1	3.0	24.1	21.1	18.2	15.2	-	-	46.9	3.3	19.5	16.5	13.5	10.4	-	-
	67	43.2	2.7	31.7	28.8	25.8	22.9	19.9	-	41.4	3.0	30.1	27.1	24.1	21.1	18.1	-
	62	24.9	3.6	24.9	21.9	18.9	16.0	13.0	-	30.2	3.4	30.2	27.2	24.2	21.2	18.2	-
1250	77	43.8	3.9	0.1	-	-	-	-	-	38.3	3.8	-	-	-	-	-	-
	72	39.3	3.7	7.5	6.2	4.8	3.4	-	-	34.4	3.6	4.8	3.8	2.8	1.7	-	-
	67	34.8	3.5	15.0	13.6	12.2	10.8	9.4	-	30.6	3.4	11.5	10.4	9.4	8.4	7.3	-
	62	31.1	3.3	21.8	20.4	19.0	17.6	16.2	14.8	26.5	3.3	17.4	16.3	15.3	14.3	13.2	12.2
1500	77	45.1	3.7	0.4	-	-	-	-	-	40.0	3.7	-	-	-	-	-	-
	72	40.5	3.5	9.1	7.4	5.6	3.8	-	-	36.0	3.5	6.1	4.7	3.3	1.9	-	-
	67	35.8	3.3	17.8	16.0	14.3	12.5	10.8	-	31.9	3.3	14.3	12.9	11.5	10.1	8.7	-
	62	32.1	3.1	25.8	24.0	22.3	20.5	18.7	17.0	27.7	3.2	21.6	20.2	18.8	17.3	15.9	14.5
1750	77	45.1	3.0	27.6	25.9	24.1	22.4	20.6	18.9	25.6	3.1	23.1	21.7	20.3	18.9	17.5	16.1
	72	46.4	3.6	0.7	-	-	-	-	-	41.7	3.6	-	-	-	-	-	-
	72	41.7	3.4	10.7	8.5	6.4	4.3	-	-	37.5	3.4	7.4	5.6	3.8	2.0	-	-
	67	36.9	3.2	20.6	18.5	16.4	14.3	12.1	-	33.3	3.2	17.1	15.4	13.6	11.8	10.0	-
2000	77	46.4	3.0	29.8	27.6	25.5	23.4	21.3	19.1	28.8	3.1	25.7	24.0	22.2	20.4	18.7	16.9
	62	33.0	3.0	29.4	28.6	27.7	25.5	23.4	21.3	26.7	3.0	25.4	24.7	24.0	22.2	20.5	18.7
	77	47.8	3.4	1.0	-	-	-	-	-	43.4	3.5	-	-	-	-	-	-
	72	42.9	3.2	12.2	9.7	7.2	4.7	-	-	39.1	3.3	8.6	6.5	4.3	2.2	-	-
2250	77	42.9	3.0	23.5	21.0	18.5	16.0	13.5	-	34.7	3.1	20.0	17.8	15.7	13.5	11.4	-
	67	37.9	2.8	33.8	31.3	28.8	26.3	23.8	21.3	30.0	3.0	29.9	27.8	25.7	23.5	21.4	19.2
	62	34.0	2.8	31.2	28.7	26.2	23.7	-	-	27.8	2.9	27.8	25.8	23.8	21.8	19.8	17.8
	57	31.2	2.8	31.2	28.7	26.2	23.7	-	-	27.8	2.9	27.8	25.8	23.8	21.8	19.8	17.8
2500	72	43.8	3.3	13.6	10.8	8.0	5.2	-	-	39.2	3.4	9.6	7.2	4.8	2.4	-	-
	67	38.8	3.1	26.0	23.2	20.4	17.7	14.9	-	34.8	3.2	22.1	19.7	17.3	14.9	12.6	-
	62	34.7	3.0	34.6	33.4	31.8	29.0	26.2	23.5	30.2	3.1	30.1	29.1	27.8	25.5	23.1	20.7
	57	31.9	2.9	31.9	31.9	31.9	29.1	26.3	23.6	27.9	3.0	27.9	27.9	27.9	25.5	23.1	20.8
2500	72	44.8	3.5	14.9	11.8	8.8	5.7	-	-	39.4	3.5	10.5	7.9	5.3	2.7	-	-
	67	39.6	3.3	28.5	25.5	22.4	19.3	16.3	-	35.0	3.3	24.1	21.5	18.9	16.3	13.7	-
	62	35.5	3.1	35.5	35.5	34.9	31.8	28.7	25.7	30.3	3.1	30.3	30.3	30.0	27.4	24.8	22.2
	57	32.6	3.0	32.6	32.6	32.6	29.5	26.5	23.4	28.0	3.1	28.0	28.0	28.0	25.4	22.8	20.2

ZJ061 (5.0 ton) reheate capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								85°F							
1250	77	32.8	3.8	-	-	-	-	-	-	27.3	3.7	-	-	-	-	-	-
	72	29.6	3.6	2.1	1.4	0.7	0.1	-	-	24.8	3.5	-	-	-	-	-	-
	67	26.4	3.4	8.0	7.3	6.6	5.9	5.2	-	22.2	3.4	4.5	4.2	3.8	3.5	3.1	-
	62	21.9	3.3	13.0	12.3	11.6	10.9	10.2	9.5	17.3	3.3	8.7	8.3	7.9	7.6	7.2	6.9
1500	77	34.9	3.7	-	-	-	-	-	-	29.8	3.7	-	-	-	-	-	-
	72	31.5	3.5	3.1	2.0	1.0	-	-	-	27.0	3.5	0.1	-	-	-	-	-
	67	28.1	3.4	10.8	9.8	8.7	7.6	6.6	-	24.2	3.4	7.3	6.6	5.9	5.2	4.5	-
	62	23.3	3.2	17.4	16.3	15.3	14.2	13.1	12.1	18.9	3.3	13.2	12.5	11.8	11.1	10.3	9.6
	57	21.7	3.2	18.6	17.5	16.4	15.4	14.3	13.3	17.8	3.3	14.0	13.3	12.6	11.9	11.2	10.4
1750	77	37.0	3.7	-	-	-	-	-	-	32.3	3.7	-	-	-	-	-	-
	72	33.4	3.5	4.1	2.6	1.2	-	-	-	29.2	3.5	0.8	-	-	-	-	-
	67	29.8	3.3	13.6	12.2	10.8	9.4	7.9	-	26.2	3.4	10.1	9.1	8.0	6.9	5.8	-
	62	24.7	3.2	21.7	20.3	18.9	17.5	16.1	14.6	20.5	3.3	17.7	16.7	15.6	14.5	13.5	12.4
	57	23.0	3.1	21.4	20.9	20.4	18.9	17.5	16.1	19.3	3.3	17.4	17.1	16.7	15.6	14.6	13.5
2000	77	39.1	3.6	-	-	-	-	-	-	34.8	3.7	-	-	-	-	-	-
	72	35.3	3.4	5.0	3.2	1.4	-	-	-	31.5	3.6	1.4	-	-	-	-	-
	67	31.4	3.3	16.4	14.7	12.9	11.1	9.3	-	28.2	3.4	12.9	11.5	10.1	8.6	7.2	-
	62	26.1	3.1	26.1	24.4	22.6	20.8	19.0	17.2	22.1	3.3	22.1	20.9	19.5	18.0	16.6	15.1
	57	24.3	3.1	24.3	24.3	24.3	22.5	20.7	18.9	20.8	3.3	20.8	20.8	20.8	19.4	18.0	16.5
2250	72	34.6	3.5	5.5	3.6	1.6	-	-	-	30.0	3.5	1.5	-	-	-	-	-
	67	30.9	3.3	18.1	16.1	14.2	12.2	10.2	-	26.9	3.3	14.2	12.6	11.0	9.5	7.9	-
	62	25.6	3.1	25.6	24.7	23.8	21.9	19.9	17.9	21.0	3.2	21.0	20.4	19.9	18.3	16.7	15.2
	57	23.8	3.1	23.8	23.8	23.8	21.9	19.9	17.9	19.8	3.2	19.8	19.8	19.8	18.3	16.7	15.1
2500	72	34.0	3.5	6.0	3.9	1.7	-	-	-	28.6	3.5	1.6	-	-	-	-	-
	67	30.3	3.3	19.8	17.6	15.5	13.3	11.2	-	25.6	3.3	15.4	13.7	12.0	10.3	8.7	-
	62	25.1	3.2	25.1	25.1	25.1	23.0	20.8	18.7	19.9	3.2	19.9	19.9	19.9	18.6	16.9	15.2
	57	23.4	3.1	23.4	23.4	23.4	21.3	19.1	17.0	18.8	3.2	18.8	18.8	18.8	17.1	15.5	13.8

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ078 (6.5 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		35°F								45°F							
1625	77	54.0	4.3	2.1	0.5	-	-	-	-	53.7	4.6	-	-	-	-	-	-
	72	51.0	4.1	8.9	7.4	5.9	4.4	-	-	49.5	4.4	5.7	4.5	3.4	2.2	-	-
	67	48.1	4.0	15.8	14.3	12.8	11.2	9.7	-	45.4	4.2	12.7	11.5	10.3	9.1	7.9	-
	62	43.5	3.8	23.0	21.5	20.0	18.5	17.0	15.5	40.6	4.0	19.6	18.4	17.2	16.0	14.8	13.6
1950	77	58.5	4.2	3.1	1.0	-	-	-	-	57.4	4.6	-	-	-	-	-	-
	72	55.3	4.1	12.1	10.0	8.0	5.9	-	-	53.0	4.4	8.0	6.3	4.6	2.9	-	-
	67	52.1	4.0	21.0	19.0	17.0	14.9	12.9	-	48.5	4.1	17.5	15.7	14.0	12.3	10.6	-
	62	47.1	3.8	30.6	28.5	26.5	24.4	22.4	20.4	43.4	3.9	26.9	25.2	23.5	21.7	20.0	18.3
	57	39.1	3.6	34.6	32.6	30.5	28.5	26.5	24.4	38.1	3.8	31.5	29.8	28.1	26.4	24.7	22.9
2275	77	63.1	4.2	4.1	1.6	-	-	-	-	61.1	4.6	-	-	-	-	-	-
	72	59.6	4.1	15.2	12.6	10.1	7.5	-	-	56.4	4.3	10.3	8.0	5.8	3.5	-	-
	67	56.1	3.9	26.3	23.7	21.2	18.6	16.0	-	51.7	4.1	22.3	20.0	17.8	15.5	13.3	-
	62	50.7	3.7	38.1	35.5	33.0	30.4	27.8	25.3	46.2	3.9	34.2	31.9	29.7	27.5	25.2	23.0
	57	42.2	3.6	39.9	38.9	37.9	35.4	32.8	30.3	40.6	3.8	37.3	36.4	35.6	33.3	31.1	28.8
2600	77	67.7	4.1	5.1	2.1	-	-	-	-	64.9	4.5	-	-	-	-	-	-
	72	63.9	4.0	18.3	15.3	12.2	9.1	-	-	59.8	4.3	12.6	9.8	7.0	4.2	-	-
	67	60.1	3.9	31.5	28.4	25.4	22.3	19.2	-	54.8	4.1	27.1	24.3	21.5	18.7	16.0	-
	62	54.3	3.7	45.0	42.5	39.4	36.4	33.3	30.2	49.1	3.9	41.5	38.7	36.0	33.2	30.4	27.6
	57	45.2	3.6	45.2	45.2	45.2	42.3	39.2	36.1	43.1	3.8	43.1	43.1	43.1	40.3	37.5	34.7
2925	72	63.9	4.0	19.7	16.5	13.3	10.1	-	-	60.8	4.3	13.9	10.8	7.7	4.6	-	-
	67	60.2	3.9	33.5	30.3	27.1	23.8	20.6	-	55.7	4.1	29.8	26.8	23.7	20.6	17.5	-
	62	54.4	3.7	49.3	45.0	41.8	38.6	35.4	32.2	49.9	3.9	43.5	42.7	39.6	36.5	33.4	30.4
	57	45.2	3.6	45.2	45.2	45.2	42.1	38.9	35.7	43.8	3.8	43.8	43.8	43.8	40.7	37.6	34.5
3250	72	64.0	4.0	21.1	17.8	14.5	11.1	-	-	61.8	4.3	15.2	11.8	8.4	5.1	-	-
	67	60.3	3.9	35.4	32.1	28.7	25.4	22.1	-	56.6	4.1	32.6	29.2	25.9	22.5	19.1	-
	62	54.5	3.7	53.0	47.6	44.2	40.9	37.5	34.2	50.7	3.9	44.4	44.0	43.2	39.8	36.5	33.1
	57	45.3	3.6	45.3	45.3	45.3	41.9	38.6	35.2	44.5	3.8	44.5	44.5	44.5	41.1	37.7	34.4
		55°F								65°F							
1625	77	53.4	4.9	-	-	-	-	-	-	50.2	5.2	-	-	-	-	-	-
	72	48.0	4.6	2.5	1.7	0.8	-	-	-	44.8	4.9	1.2	0.6	-	-	-	-
	67	42.6	4.3	9.5	8.7	7.8	7.0	6.1	-	39.3	4.6	7.3	6.7	6.0	5.4	4.8	-
	62	37.7	4.1	16.1	15.3	14.4	13.5	12.7	11.8	34.5	4.4	13.0	12.4	11.8	11.2	10.5	9.9
1950	77	56.3	4.9	-	-	-	-	-	-	52.7	5.2	-	-	-	-	-	-
	72	50.6	4.6	4.0	2.6	1.2	-	-	-	47.0	4.9	2.2	1.0	-	-	-	-
	67	44.9	4.3	13.9	12.5	11.1	9.7	8.3	-	41.2	4.6	11.4	10.3	9.1	8.0	6.9	-
	62	39.7	4.1	23.2	21.8	20.4	19.0	17.6	16.2	36.2	4.4	20.2	19.1	17.9	16.8	15.7	14.5
	57	37.1	4.0	28.4	27.0	25.6	24.2	22.9	21.5	34.2	4.3	24.4	23.3	22.2	21.0	19.9	18.7
2275	77	59.2	4.9	-	-	-	-	-	-	55.1	5.1	-	-	-	-	-	-
	72	53.2	4.6	5.4	3.4	1.5	-	-	-	49.2	4.8	3.1	1.5	-	-	-	-
	67	47.2	4.3	18.3	16.3	14.4	12.4	10.5	-	43.2	4.6	15.6	13.9	12.2	10.6	8.9	-
	62	41.8	4.1	30.3	28.4	26.4	24.5	22.6	20.6	37.9	4.4	27.4	25.7	24.1	22.4	20.8	19.1
	57	39.0	4.0	34.7	34.0	33.2	31.3	29.3	27.4	35.8	4.3	30.9	30.4	29.8	28.1	26.4	24.8
2600	77	62.0	4.9	-	-	-	-	-	-	57.6	5.1	-	-	-	-	-	-
	72	55.8	4.6	6.8	4.3	1.8	-	-	-	51.3	4.8	4.1	1.9	-	-	-	-
	67	49.5	4.3	22.6	20.1	17.7	15.2	12.7	-	45.1	4.5	19.7	17.5	15.3	13.2	11.0	-
	62	43.8	4.1	37.4	34.9	32.5	30.0	27.5	25.0	39.6	4.3	34.6	32.4	30.2	28.1	25.9	23.7
	57	40.9	4.0	40.9	40.9	40.7	38.3	35.8	33.3	37.4	4.2	37.4	37.4	37.3	35.2	33.0	30.8
2925	72	57.7	4.6	8.0	5.1	2.1	-	-	-	53.2	4.8	4.9	2.2	-	-	-	-
	67	51.3	4.3	26.2	23.2	20.3	17.4	14.4	-	46.7	4.5	23.3	20.6	18.0	15.3	12.7	-
	62	45.3	4.1	42.1	40.3	37.3	34.4	31.5	28.5	41.0	4.3	38.5	37.1	35.2	32.5	29.9	27.2
	57	42.3	4.0	42.3	42.3	42.2	39.3	36.4	33.4	38.7	4.2	38.7	38.7	38.7	36.1	33.4	30.8
3250	72	59.7	4.6	9.2	5.8	2.4	-	-	-	55.0	4.8	5.7	2.6	-	-	-	-
	67	53.0	4.3	29.8	26.4	23.0	19.6	16.2	-	48.3	4.5	26.8	23.7	20.6	17.5	14.4	-
	62	46.9	4.1	43.5	43.5	42.2	38.8	35.4	32.0	42.4	4.3	39.9	39.9	39.9	36.9	33.8	30.6
	57	43.7	4.0	43.7	43.7	43.7	40.3	36.9	33.5	40.1	4.2	40.1	40.1	40.1	37.0	33.8	30.7

ZJ078 (6.5 ton) reheate capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F										85°F					
1625	77	47.1	5.5	-	-	-	-	-	-	43.9	5.7	-	-	-	-	-	
	72	41.5	5.2	-	-	-	-	-	-	38.2	5.5	-	-	-	-	-	
	67	35.9	4.9	5.0	4.6	4.2	3.9	3.5	-	32.6	5.2	2.7	2.6	2.5	2.3	2.2	
	62	31.3	4.7	9.9	9.5	9.2	8.8	8.4	8.0	28.1	5.0	6.8	6.7	6.5	6.4	6.2	
1950	77	49.1	5.4	-	-	-	-	-	-	45.5	5.6	-	-	-	-	-	
	72	43.3	5.1	0.4	-	-	-	-	-	39.7	5.4	-	-	-	-	-	
	67	37.5	4.9	8.9	8.1	7.2	6.3	5.4	-	33.8	5.1	6.5	5.8	5.2	4.6	3.9	
	62	32.7	4.7	17.2	16.3	15.4	14.6	13.7	12.8	29.1	5.0	14.2	13.6	13.0	12.3	11.7	
	57	31.3	4.6	20.5	19.6	18.7	17.8	16.9	16.0	28.4	4.9	16.5	15.9	15.2	14.6	14.0	
2275	77	51.1	5.3	-	-	-	-	-	-	47.1	5.5	-	-	-	-	-	
	72	45.1	5.1	0.9	-	-	-	-	-	41.1	5.3	-	-	-	-	-	
	67	39.1	4.8	12.9	11.5	10.1	8.7	7.3	-	35.0	5.0	10.2	9.1	7.9	6.8	5.7	
	62	34.0	4.6	24.5	23.1	21.7	20.3	19.0	17.6	30.2	4.9	21.6	20.5	19.4	18.3	17.1	
	57	32.6	4.5	27.2	26.8	26.3	24.9	23.5	22.1	29.4	4.8	23.5	23.2	22.9	21.7	20.6	
2600	77	53.2	5.3	-	-	-	-	-	-	48.8	5.5	-	-	-	-	-	
	72	46.9	5.0	1.3	-	-	-	-	-	42.5	5.2	-	-	-	-	-	
	67	40.6	4.7	16.8	14.9	13.0	11.1	9.2	-	36.2	5.0	13.9	12.3	10.7	9.1	7.5	
	62	35.4	4.6	31.8	29.9	28.0	26.1	24.2	22.3	31.2	4.8	29.0	27.4	25.8	24.2	22.6	
	57	33.9	4.5	33.9	33.9	33.9	32.0	30.1	28.2	30.5	4.7	30.5	30.5	30.5	28.9	27.3	
2925	72	48.6	5.0	1.8	-	-	-	-	-	44.1	5.2	-	-	-	-	-	
	67	42.1	4.7	20.3	18.0	15.6	13.3	10.9	-	37.6	5.0	17.4	15.3	13.3	11.2	9.1	
	62	36.7	4.6	34.9	34.0	33.0	30.7	28.3	25.9	32.4	4.8	31.3	30.8	30.9	28.8	26.7	
	57	35.2	4.5	35.2	35.2	35.2	32.8	30.5	28.1	31.6	4.7	31.6	31.6	31.6	29.6	27.5	
3250	72	50.4	5.0	2.2	-	-	-	-	-	45.7	5.2	-	-	-	-	-	
	67	43.6	4.7	23.9	21.0	18.2	15.4	12.6	-	38.9	5.0	20.9	18.4	15.8	13.3	10.7	
	62	38.0	4.6	36.3	36.3	36.3	33.5	30.7	27.8	33.6	4.8	32.7	32.7	32.7	30.0	27.5	
	57	36.4	4.5	36.4	36.4	36.4	33.6	30.8	27.9	32.8	4.8	32.8	32.8	32.8	30.2	27.7	

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ90 (7.5 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)									
				Return Dry Bulb (°F)								Return Dry Bulb (°F)									
				90	85	80	75	70	65			90	85	80	75	70	65				
		35°F										45°F									
1875	77	65.1	4.2	3.8	2.1	-	-	-	-	64.3	4.6	-	-	-	-	-	-				
	72	59.7	4.1	11.4	9.7	7.9	6.2	-	-	58.8	4.4	6.9	5.3	3.8	2.3	-	-				
	67	54.3	3.9	19.0	17.3	15.5	13.8	12.1	-	53.4	4.2	16.4	14.9	13.3	11.8	10.3	-				
	62	46.7	3.7	26.2	24.4	22.7	21.0	19.3	17.5	47.6	3.9	26.5	25.0	23.4	21.9	20.3	18.8				
2250	77	68.8	4.3	4.7	2.6	-	-	-	-	66.8	4.6	-	-	-	-	-	-				
	72	63.1	4.1	14.0	11.9	9.7	7.5	-	-	61.2	4.4	8.5	6.6	4.6	2.7	-	-				
	67	57.4	4.0	23.3	21.1	19.0	16.8	14.7	-	55.5	4.2	20.2	18.2	16.3	14.3	12.4	-				
	62	49.4	3.7	32.1	29.9	27.8	25.6	23.5	21.3	49.5	4.0	32.5	30.6	28.6	26.7	24.7	22.8				
2625	77	72.5	4.3	5.6	3.0	-	-	-	-	69.3	4.6	-	-	-	-	-	-				
	72	66.5	4.2	16.6	14.0	11.5	8.9	-	-	63.5	4.4	10.2	7.8	5.5	3.1	-	-				
	67	60.5	4.0	27.6	25.0	22.4	19.9	17.3	-	57.6	4.2	23.9	21.6	19.2	16.9	14.5	-				
	62	52.1	3.8	38.0	35.4	32.8	30.3	27.7	25.1	51.3	4.0	38.5	36.2	33.8	31.5	29.1	26.7				
3000	77	76.2	4.4	6.5	3.5	-	-	-	-	71.9	4.7	-	-	-	-	-	-				
	72	69.9	4.2	19.2	16.2	13.2	10.2	-	-	65.8	4.4	11.8	9.1	6.3	3.6	-	-				
	67	63.5	4.0	31.9	28.9	25.9	22.9	19.9	-	59.8	4.2	27.7	25.0	22.2	19.4	16.7	-				
	62	54.8	3.8	43.9	40.9	37.9	34.9	31.9	28.9	53.2	4.0	44.5	41.8	39.0	36.2	33.5	30.7				
3375	77	79.7	4.4	7.4	4.4	-	-	-	-	75.9	4.7	-	-	-	-	-	-				
	72	71.3	4.2	20.4	17.3	14.2	11.2	-	-	67.5	4.5	12.7	9.7	6.8	3.9	-	-				
	67	64.8	4.1	32.7	29.7	26.6	23.6	20.5	-	61.3	4.2	29.8	26.8	23.9	20.9	18.0	-				
	62	55.9	3.8	45.6	41.2	38.1	35.1	32.0	28.9	54.6	4.0	47.8	44.9	41.9	39.0	36.0	33.1				
3750	77	84.7	4.4	8.3	5.3	-	-	-	-	81.9	4.7	-	-	-	-	-	-				
	72	72.7	4.2	21.5	18.4	15.3	12.2	-	-	69.2	4.5	13.5	10.4	7.3	4.1	-	-				
	67	66.1	4.1	33.6	30.5	27.4	24.2	21.1	-	62.8	4.3	31.8	28.7	25.5	22.4	19.3	-				
	62	57.0	3.9	47.3	41.4	38.3	35.2	32.1	29.0	55.9	4.0	51.1	48.0	44.9	41.7	38.6	35.5				
4125	77	90.7	4.4	9.2	6.2	-	-	-	-	87.9	4.7	-	-	-	-	-	-				
	72	77.7	4.2	24.5	21.4	18.3	15.2	-	-	74.7	4.5	15.7	12.6	9.5	6.4	-	-				
	67	68.7	4.1	36.7	33.6	30.5	27.4	24.3	-	65.7	4.2	33.8	30.7	27.6	24.5	21.4	-				
	62	58.7	3.9	50.7	46.6	43.5	40.4	37.3	34.2	58.7	4.0	55.7	51.6	48.5	45.4	42.3	39.2				
		55°F										65°F									
1875	77	63.4	5.0	-	-	-	-	-	-	60.1	5.2	-	-	-	-	-	-				
	72	57.9	4.7	2.4	1.0	-	-	-	-	54.1	4.9	1.3	0.3	-	-	-	-				
	67	52.5	4.4	13.8	12.5	11.1	9.8	8.4	-	48.1	4.7	10.4	9.4	8.4	7.4	6.4	-				
	62	48.4	4.2	26.8	25.5	24.1	22.8	21.4	20.1	42.8	4.4	20.3	19.3	18.3	17.3	16.3	15.3				
2250	77	64.8	5.0	-	-	-	-	-	-	62.0	5.2	-	-	-	-	-	-				
	72	59.2	4.7	3.1	1.3	-	-	-	-	55.8	4.9	1.9	0.4	-	-	-	-				
	67	53.7	4.4	17.1	15.3	13.6	11.9	10.1	-	49.6	4.6	14.4	12.9	11.4	9.9	8.5	-				
	62	49.5	4.2	32.9	31.2	29.5	27.7	26.0	24.2	44.1	4.4	27.9	26.4	24.9	23.4	22.0	20.5				
2625	77	66.2	5.0	-	-	-	-	-	-	63.9	5.2	-	-	-	-	-	-				
	72	60.5	4.7	3.8	1.6	-	-	-	-	57.5	4.9	2.5	0.5	-	-	-	-				
	67	54.8	4.4	20.3	18.2	16.0	13.9	11.8	-	51.2	4.6	18.5	16.5	14.5	12.5	10.5	-				
	62	50.6	4.2	39.0	36.9	34.8	32.7	30.5	28.4	45.4	4.4	35.6	33.6	31.6	29.6	27.6	25.6				
3000	77	67.6	5.0	-	-	-	-	-	-	65.9	5.2	-	-	-	-	-	-				
	72	61.8	4.7	4.5	2.0	-	-	-	-	59.3	4.9	3.2	0.7	-	-	-	-				
	67	56.0	4.4	23.5	21.0	18.5	16.0	13.5	-	52.7	4.6	22.5	20.0	17.5	15.0	12.5	-				
	62	51.7	4.2	45.1	42.6	40.1	37.6	35.1	32.6	46.8	4.4	43.2	40.7	38.2	35.7	33.2	30.7				
3375	77	69.7	5.0	-	-	-	-	-	-	67.9	5.2	-	-	-	-	-	-				
	72	63.7	4.7	5.0	2.2	-	-	-	-	61.1	4.9	3.6	0.7	-	-	-	-				
	67	57.7	4.4	26.8	23.9	21.1	18.3	15.4	-	54.3	4.6	26.7	23.7	20.8	17.9	14.9	-				
	62	53.3	4.2	50.0	48.6	45.7	42.9	40.1	37.2	48.2	4.4	46.4	45.1	43.0	40.1	37.1	34.2				
3750	77	71.7	5.0	-	-	-	-	-	-	69.9	5.2	-	-	-	-	-	-				
	72	65.7	4.7	5.6	2.4	-	-	-	-	62.8	4.9	4.1	0.7	-	-	-	-				
	67	59.5	4.4	30.0	26.9	23.7	20.5	17.4	-	55.9	4.7	30.9	27.5	24.1	20.7	17.3	-				
	62	54.9	4.2	54.9	54.5	51.4	48.2	45.1	41.9	49.6	4.4	49.6	49.4	47.8	44.4	41.1	37.7				
4125	77	73.7	5.0	-	-	-	-	-	-	71.9	5.2	-	-	-	-	-	-				
	72	67.7	4.7	6.7	2.9	-	-	-	-	65.9	4.9	5.1	1.1	-	-	-	-				
	67	61.7	4.4	28.7	25.7	22.7	19.7	16.7	-	59.7	4.6	28.7	25.7	22.7	19.7	16.7	-				
	62	57.7	4.2	50.7	48.7	45.7	42.7	39.7	36.7	53.7	4.4	50.7	48.7	45.7	42.7	39.7	36.7				

ZJ90 (7.5 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F										85°F					
1875	77	56.7	5.5	-	-	-	-	-	-	53.4	5.7	-	-	-	-	-	
	72	50.2	5.2	-	-	-	-	-	-	46.4	5.4	-	-	-	-	-	
	67	43.7	4.9	6.9	6.3	5.6	5.0	4.4	-	39.3	5.2	3.4	3.2	2.9	2.7	2.4	
	62	37.1	4.7	13.7	13.0	12.4	11.8	11.2	10.6	31.4	4.9	7.1	6.8	6.6	6.3	6.1	
2250	77	59.2	5.4	-	-	-	-	-	-	56.4	5.7	-	-	-	-	-	
	72	52.4	5.2	-	-	-	-	-	-	49.0	5.4	-	-	-	-	-	
	67	45.6	4.9	11.8	10.5	9.3	8.0	6.8	-	41.6	5.1	9.1	8.1	7.1	6.1	5.1	
	62	38.7	4.7	22.9	21.6	20.4	19.2	17.9	16.7	33.3	4.9	17.9	16.9	15.9	14.9	13.9	
	57	38.2	4.6	25.7	24.4	23.2	22.0	20.7	19.5	34.2	4.9	19.1	18.1	17.1	16.1	15.2	
2625	77	61.7	5.4	-	-	-	-	-	-	59.4	5.6	-	-	-	-	-	
	72	54.6	5.1	-	-	-	-	-	-	51.6	5.4	-	-	-	-	-	
	67	47.5	4.9	16.6	14.8	12.9	11.0	9.2	-	43.9	5.1	14.8	13.1	11.3	9.6	7.8	
	62	40.3	4.6	32.1	30.2	28.4	26.5	24.7	22.8	35.1	4.9	28.7	26.9	25.2	23.5	21.7	
	57	39.8	4.6	33.5	32.9	32.3	30.4	28.5	26.7	36.1	4.9	28.6	28.1	27.6	25.8	24.1	
3000	77	64.1	5.4	-	-	-	-	-	-	62.4	5.6	-	-	-	-	-	
	72	56.8	5.1	-	-	-	-	-	-	54.2	5.3	-	-	-	-	-	
	67	49.4	4.8	21.5	19.0	16.5	14.0	11.5	-	46.1	5.0	20.5	18.0	15.5	13.1	10.6	
	62	41.9	4.6	41.3	38.9	36.4	33.9	31.4	28.9	37.0	4.8	37.0	37.0	34.5	32.0	29.5	
	57	41.3	4.6	41.3	41.3	41.3	38.9	36.4	33.9	38.0	4.8	38.0	38.0	38.0	35.5	33.0	
3375	72	58.4	5.1	-	-	-	-	-	-	55.7	5.3	-	-	-	-	-	
	67	50.8	4.8	26.6	23.5	20.5	17.4	14.4	-	47.3	5.1	26.5	23.3	20.2	17.0	13.9	
	62	43.1	4.6	42.8	41.6	40.3	37.3	34.2	31.2	38.0	4.9	38.0	38.0	37.6	34.4	31.3	
	57	42.5	4.6	42.5	42.5	42.5	39.5	36.4	33.4	39.0	4.9	39.0	39.0	39.0	35.8	32.7	
3750	72	60.0	5.1	-	-	-	-	-	-	57.1	5.4	-	-	-	-	-	
	67	52.2	4.9	31.7	28.1	24.5	20.8	17.2	-	48.6	5.1	32.5	28.7	24.8	21.0	17.1	
	62	44.3	4.7	44.3	44.3	44.3	40.7	37.0	33.4	39.0	4.9	39.0	39.0	39.0	36.9	33.0	
	57	43.7	4.6	43.7	43.7	43.7	40.1	36.5	32.8	40.0	4.9	40.0	40.0	40.0	36.1	32.3	

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ102 (8.5 ton) reheate capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		35°F								45°F							
2125	77	76.3	4.6	9.7	6.7	3.7	-	-	-	70.8	4.9	2.9	0.7	-	-	-	-
	72	72.8	4.5	20.0	17.0	14.0	11.0	-	-	66.0	4.8	12.9	10.7	8.4	6.2	-	-
	67	69.3	4.4	30.2	27.2	24.2	21.2	18.2	-	61.1	4.6	22.9	20.7	18.4	16.2	13.9	-
	62	60.7	4.3	40.7	37.7	34.7	31.7	28.7	25.7	52.8	4.5	32.3	30.1	27.8	25.6	23.3	21.1
2550	77	80.4	4.5	13.1	9.5	5.8	-	-	-	76.6	4.9	4.1	1.0	-	-	-	-
	72	76.8	4.4	24.6	21.0	17.3	13.7	-	-	71.4	4.7	16.8	13.7	10.7	7.7	-	-
	67	73.2	4.3	36.2	32.5	28.9	25.2	21.6	-	66.1	4.6	29.5	26.5	23.4	20.4	17.4	-
	62	64.2	4.2	48.2	44.5	40.9	37.2	33.6	29.9	57.2	4.5	41.5	38.5	35.4	32.4	29.4	26.4
2975	77	84.4	4.5	16.6	12.3	7.9	-	-	-	82.5	4.9	5.2	1.4	-	-	-	-
	72	80.8	4.4	29.3	25.0	20.7	16.4	-	-	76.8	4.7	20.6	16.8	13.0	9.2	-	-
	67	77.2	4.3	42.1	37.8	33.5	29.2	24.9	-	71.2	4.5	36.1	32.3	28.5	24.7	20.8	-
	62	67.7	4.2	55.7	51.4	47.1	42.8	38.5	34.2	61.5	4.4	50.7	46.9	43.0	39.2	35.4	31.6
3400	77	88.5	4.5	20.0	15.0	10.1	-	-	-	88.3	4.8	6.3	1.7	-	-	-	-
	72	84.8	4.4	34.0	29.0	24.1	19.1	-	-	82.3	4.7	24.5	19.9	15.3	10.7	-	-
	67	81.1	4.3	48.0	43.1	38.1	33.2	28.2	-	76.2	4.5	42.7	38.1	33.5	28.9	24.3	-
	62	71.2	4.2	63.2	58.2	53.3	48.3	43.3	38.4	65.9	4.4	59.8	55.2	50.6	46.1	41.5	36.9
3825	77	87.2	4.3	38.0	32.5	27.0	21.5	-	-	84.1	4.6	27.8	22.5	17.3	12.0	-	-
	67	83.4	4.2	53.4	47.9	42.4	36.9	31.4	-	77.9	4.5	48.3	43.0	37.8	32.5	27.3	-
	62	73.2	4.1	69.2	66.7	59.1	53.6	48.1	42.6	67.4	4.4	64.3	62.0	57.1	51.8	46.6	41.3
	57	66.3	4.1	66.3	66.3	65.1	59.6	54.1	48.5	60.8	4.3	60.8	60.8	60.0	54.8	49.5	44.3
4250	77	89.6	4.3	42.1	36.0	30.0	23.9	-	-	86.0	4.6	31.0	25.1	19.2	13.3	-	-
	67	85.6	4.2	58.8	52.8	46.7	40.7	34.6	-	79.7	4.5	53.8	47.9	42.0	36.1	30.2	-
	62	75.1	4.1	75.1	75.1	65.0	58.9	52.8	46.8	68.9	4.4	68.9	68.9	63.5	57.6	51.7	45.8
	57	68.1	4.0	68.1	68.1	68.1	62.0	55.9	49.9	62.2	4.3	62.2	62.2	62.2	56.3	50.4	44.5
		55°F								65°F							
2125	77	65.3	5.3	-	-	-	-	-	-	62.6	5.6	-	-	-	-	-	-
	72	59.1	5.1	5.8	4.4	2.9	1.4	-	-	55.5	5.3	3.6	2.4	1.3	0.1	-	-
	67	52.9	4.9	15.6	14.1	12.6	11.1	9.6	-	48.5	5.1	12.5	11.4	10.2	9.0	7.8	-
	62	44.9	4.7	24.0	22.5	21.0	19.5	18.0	16.5	41.1	5.0	21.0	19.4	18.3	17.1	15.9	14.7
2550	77	72.9	5.3	-	-	-	-	-	-	68.3	5.5	-	-	-	-	-	-
	72	66.0	5.0	8.9	6.5	4.1	1.7	-	-	60.7	5.3	5.8	3.8	1.8	-	-	-
	67	59.0	4.8	22.8	20.4	18.0	15.6	13.2	-	53.0	5.1	18.9	16.9	14.9	12.9	10.9	-
	62	50.1	4.7	34.8	32.4	30.0	27.6	25.2	22.8	44.9	4.9	30.8	28.8	26.8	24.8	22.8	20.8
2975	77	80.6	5.2	-	-	-	-	-	-	74.0	5.5	-	-	-	-	-	-
	72	72.9	5.0	12.0	8.6	5.3	2.0	-	-	65.8	5.3	8.0	5.1	2.3	-	-	-
	67	65.2	4.8	30.1	26.8	23.4	20.1	16.8	-	57.5	5.0	25.3	22.5	19.7	16.8	14.0	-
	62	55.4	4.6	45.7	42.3	39.0	35.7	32.4	29.1	48.7	4.9	40.7	38.2	35.4	32.6	29.8	27.0
3400	77	84.2	5.2	-	-	-	-	-	-	79.8	5.4	-	-	-	-	-	-
	72	79.8	5.0	15.0	10.8	6.5	2.3	-	-	70.9	5.2	10.1	6.5	2.8	-	-	-
	67	71.4	4.7	37.3	33.1	28.9	24.6	20.4	-	62.0	5.0	31.7	28.0	24.4	20.8	17.1	-
	62	60.6	4.6	56.5	52.3	48.0	43.8	39.6	35.3	52.5	4.9	50.5	47.6	44.0	40.4	36.7	33.1
3825	77	84.2	5.2	-	-	-	-	-	-	79.8	5.4	-	-	-	-	-	-
	72	79.8	5.0	15.0	10.8	6.5	2.3	-	-	70.9	5.2	10.1	6.5	2.8	-	-	-
	67	71.4	4.7	37.3	33.1	28.9	24.6	20.4	-	62.0	5.0	31.7	28.0	24.4	20.8	17.1	-
	62	60.6	4.6	56.5	52.3	48.0	43.8	39.6	35.3	52.5	4.9	50.5	47.6	44.0	40.4	36.7	33.1
4250	77	84.2	5.2	-	-	-	-	-	-	79.8	5.4	-	-	-	-	-	-
	72	79.8	5.0	15.0	10.8	6.5	2.3	-	-	70.9	5.2	10.1	6.5	2.8	-	-	-
	67	71.4	4.7	37.3	33.1	28.9	24.6	20.4	-	62.0	5.0	31.7	28.0	24.4	20.8	17.1	-
	62	60.6	4.6	56.5	52.3	48.0	43.8	39.6	35.3	52.5	4.9	50.5	47.6	44.0	40.4	36.7	33.1
2125	77	65.3	5.3	-	-	-	-	-	-	62.6	5.6	-	-	-	-	-	-
	72	59.1	5.1	5.8	4.4	2.9	1.4	-	-	55.5	5.3	3.6	2.4	1.3	0.1	-	-
	67	52.9	4.9	15.6	14.1	12.6	11.1	9.6	-	48.5	5.1	12.5	11.4	10.2	9.0	7.8	-
	62	44.9	4.7	24.0	22.5	21.0	19.5	18.0	16.5	41.1	5.0	21.0	19.4	18.3	17.1	15.9	14.7
2550	77	72.9	5.3	-	-	-	-	-	-	68.3	5.5	-	-	-	-	-	-
	72	66.0	5.0	8.9	6.5	4.1	1.7	-	-	60.7	5.3	5.8	3.8	1.8	-	-	-
	67	59.0	4.8	22.8	20.4	18.0	15.6	13.2	-	53.0	5.1	18.9	16.9	14.9	12.9	10.9	-
	62	50.1	4.7	34.8	32.4	30.0	27.6	25.2	22.8	44.9	4.9	30.8	28.8	26.8	24.8	22.8	20.8
2975	77	80.6	5.2	-	-	-	-	-	-	74.0	5.5	-	-	-	-	-	-
	72	72.9	5.0	12.0	8.6	5.3	2.0	-	-	65.8	5.3	8.0	5.1	2.3	-	-	-
	67	65.2	4.8	30.1	26.8	23.4	20.1	16.8	-	57.5	5.0	25.3	22.5	19.7	16.8	14.0	-
	62	55.4	4.6	45.7	42.3	39.0	35.7	32.4	29.1	48.7	4.9	40.7	38.2	35.4	32.6	29.8	27.0
3400	77	84.2	5.2	-	-	-	-	-	-	79.8	5.4	-	-	-	-	-	-
	72	79.8	5.0	15.0	10.8	6.5	2.3	-	-	70.9	5.2	10.1	6.5	2.8	-	-	-
	67	71.4	4.7	37.3	33.1	28.9	24.6	20.4	-	62.0	5.0	31.7	28.0	24.4	20.8	17.1	-
	62	60.6	4.6	56.5	52.3	48.0	43.8	39.6	35.3	52.5	4.9	50.5	47.6	44.0	40.4	36.7	33.1
3825	77	84.2	5.2	-	-	-	-	-	-	79.8	5.4	-	-	-	-	-	-
	72	79.8	5.0	15.0	10.8	6.5	2.3	-	-	70.9	5.2	10.1	6.5	2.8	-	-	-
	67	71.4	4.7	37.3	33.1	28.9	24.6	20.4	-	62.0	5.0	31.7	28.0	24.4	20.8	17.1	-
	62	60.6	4.6	56.5	52.3	48.0	43.8	39.6	35.3	52.5	4.9	50.5	47.6	44.0	40.4	36.7	33.1
4250	77	84.2	5.2	-	-	-	-	-	-	79.8	5.4	-	-	-	-	-	-
	72	79.8	5.0	15.0	10.8	6.5	2.3	-	-	70.9	5.2	10.1	6.5	2.8	-	-	-
	67	71.4	4.7	37.3	33.1	28.9	24.6	20.4	-	62.0	5.0	31.7	28.0	24.4	20.8	17.1	-
	62	60.6	4.6	56.5	52.3	48.0	43.8	39.6	35.3	52.5	4.9	50.5	47.6	44.0	40.4	36.7	33.1

ZJ102 (8.5 ton) reheate capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F										85°F					
2125	77	59.8	5.8	-	-	-	-	-	-	57.1	6.1	-	-	-	-	-	-
	72	52.0	5.6	1.4	0.5	-	-	-	-	48.4	5.9	-	-	-	-	-	-
	67	44.1	5.4	9.5	8.6	7.7	6.9	6.0	-	39.8	5.7	6.4	5.9	5.3	4.8	4.2	-
	62	37.3	5.2	18.1	16.4	15.5	14.7	13.8	12.9	33.4	5.5	15.1	13.4	12.8	12.2	11.7	11.1
2550	77	63.7	5.8	-	-	-	-	-	-	59.1	6.0	-	-	-	-	-	-
	72	55.3	5.6	2.7	1.1	-	-	-	-	50.0	5.8	-	-	-	-	-	-
	67	47.0	5.4	15.0	13.4	11.8	10.2	8.6	-	41.0	5.6	11.1	9.9	8.7	7.5	6.3	-
	62	39.7	5.2	26.9	25.3	23.7	22.1	20.5	18.9	34.4	5.5	22.9	21.7	20.5	19.3	18.1	16.9
	57	39.3	5.2	29.3	27.7	26.1	24.5	22.9	21.3	36.4	5.4	24.8	23.6	22.4	21.2	20.0	18.8
2975	77	67.5	5.7	-	-	-	-	-	-	61.0	6.0	-	-	-	-	-	-
	72	58.7	5.5	4.0	1.6	-	-	-	-	51.6	5.8	-	-	-	-	-	-
	67	49.8	5.3	20.5	18.2	15.9	13.5	11.2	-	42.1	5.6	15.7	13.9	12.1	10.3	8.4	-
	62	42.0	5.2	35.7	34.1	31.8	29.5	27.2	24.8	35.4	5.4	30.6	30.0	28.2	26.4	24.6	22.7
	57	41.7	5.1	36.7	35.9	35.1	32.7	30.4	28.1	37.6	5.4	31.8	31.2	30.8	29.0	27.2	25.3
3400	77	71.4	5.7	-	-	-	-	-	-	63.0	5.9	-	-	-	-	-	-
	72	62.0	5.5	5.2	2.2	-	-	-	-	53.1	5.7	0.3	-	-	-	-	-
	67	52.7	5.3	26.0	23.0	19.9	16.9	13.8	-	43.3	5.5	20.4	17.9	15.5	13.0	10.5	-
	62	44.4	5.1	44.4	43.0	39.9	36.9	33.9	30.8	36.4	5.4	36.4	36.4	35.9	33.4	31.0	28.5
	57	44.0	5.1	44.0	44.0	44.0	41.0	37.9	34.9	38.8	5.4	38.8	38.8	38.8	36.8	34.3	31.9
3825	72	64.9	5.5	6.5	2.7	-	-	-	-	56.8	5.7	1.1	-	-	-	-	-
	67	55.1	5.3	31.9	28.1	24.3	20.5	16.7	-	46.3	5.5	26.3	23.1	19.9	16.7	13.5	-
	62	46.5	5.1	46.5	45.8	44.2	40.4	36.6	32.8	38.9	5.4	38.9	38.9	38.8	35.6	32.4	29.2
	57	46.0	5.1	46.0	46.0	46.0	42.2	38.4	34.6	41.4	5.4	41.4	41.4	41.4	38.4	35.2	32.0
4250	72	67.7	5.4	7.9	3.3	-	-	-	-	60.4	5.7	1.8	-	-	-	-	-
	67	57.5	5.2	37.8	33.2	28.7	24.1	19.5	-	49.4	5.5	32.2	28.3	24.3	20.4	16.4	-
	62	48.5	5.1	48.5	48.5	48.5	44.0	39.4	34.8	41.5	5.4	41.5	41.5	41.5	37.7	33.8	29.8
	57	48.1	5.1	48.1	48.1	48.1	43.5	38.9	34.4	43.9	5.3	43.9	43.9	43.9	40.0	36.0	32.1

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ120 (10 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		35°F								45°F							
2500	77	87.5	5.7	-	-	-	-	-	-	82.5	6.2	-	-	-	-	-	-
	72	89.2	5.6	13.1	10.1	7.1	4.1	-	-	80.6	6.0	9.3	6.7	4.2	1.6	-	-
	67	87.0	5.5	30.1	27.1	24.2	21.2	18.2	-	78.7	5.8	25.9	23.3	20.8	18.2	15.7	-
	62	83.6	5.2	44.5	41.5	38.6	35.6	32.6	29.6	74.6	5.5	42.1	39.6	37.0	34.5	31.9	29.4
3000	77	88.4	5.6	-	-	-	-	-	-	85.2	6.2	-	-	-	-	-	-
	72	89.1	5.6	15.7	12.2	8.6	5.1	-	-	83.2	6.0	11.3	8.2	5.1	1.9	-	-
	67	87.6	5.5	36.4	32.8	29.3	25.7	22.2	-	81.2	5.8	31.4	28.3	25.1	22.0	18.8	-
	62	85.3	5.2	53.8	50.2	46.7	43.2	39.6	36.1	76.9	5.4	51.1	47.9	44.8	41.7	38.5	35.4
3500	57	77.1	5.0	66.8	63.3	59.7	56.2	52.6	49.1	69.7	5.3	61.2	58.1	54.9	51.8	48.6	45.5
	77	89.6	5.6	-	-	-	-	-	-	87.8	6.1	-	-	-	-	-	-
	72	89.0	5.5	18.3	14.2	10.1	6.0	-	-	85.8	5.9	13.4	9.7	5.9	2.2	-	-
	67	88.2	5.4	42.6	38.5	34.4	30.2	26.1	-	83.7	5.7	37.0	33.2	29.5	25.7	22.0	-
4000	62	87.0	5.1	63.1	58.9	54.8	50.7	46.6	42.5	79.3	5.4	60.1	56.3	52.6	48.9	45.1	41.4
	57	78.7	5.0	73.5	71.7	70.1	66.0	61.9	57.8	71.8	5.3	67.6	66.0	64.5	60.7	57.0	53.3
	77	92.0	5.5	-	-	-	-	-	-	90.5	6.1	-	-	-	-	-	-
	72	91.2	5.5	21.0	16.3	11.6	6.9	-	-	88.4	5.9	15.5	11.1	6.8	2.5	-	-
4500	67	91.0	5.4	48.8	44.1	39.5	34.8	30.1	-	86.3	5.7	42.5	38.2	33.8	29.5	25.2	-
	62	88.7	5.1	72.3	67.6	63.0	58.3	53.6	48.9	81.7	5.4	69.0	64.7	60.4	56.0	51.7	47.4
	57	80.2	4.9	80.2	80.2	80.2	75.9	71.2	66.5	74.0	5.2	74.0	74.0	74.0	69.7	65.3	61.0
	72	94.5	5.4	23.7	18.4	13.2	8.0	-	-	91.3	5.8	17.7	12.8	7.8	2.8	-	-
5000	67	94.3	5.3	54.9	49.7	44.5	39.2	34.0	-	89.1	5.6	48.6	43.6	38.6	33.7	28.7	-
	62	91.9	5.0	83.7	77.4	70.7	65.5	60.3	55.0	84.4	5.3	78.0	73.9	68.9	63.9	58.9	54.0
	57	83.1	4.8	83.1	83.1	83.1	78.1	72.8	67.6	76.4	5.2	76.4	76.4	76.4	71.4	66.4	61.5
	72	99.3	5.3	26.4	20.6	14.8	9.0	-	-	94.2	5.7	20.0	14.4	8.7	3.1	-	-
5500	67	95.5	5.2	61.1	55.3	49.5	43.7	37.9	-	91.9	5.6	54.7	49.1	43.4	37.8	32.1	-
	62	93.1	4.9	93.1	87.2	78.5	72.7	66.9	61.2	87.1	5.3	87.1	83.1	77.5	71.8	66.2	60.5
	57	86.1	4.8	86.1	86.1	86.1	80.3	74.5	68.7	78.8	5.1	78.8	78.8	78.8	73.2	67.6	61.9
			55°F								65°F						
2500	77	76.2	6.7	-	-	-	-	-	-	76.3	7.1	-	-	-	-	-	-
	72	73.8	6.4	5.5	3.4	1.2	-	-	-	70.8	6.8	2.8	1.2	-	-	-	-
	67	71.5	6.1	21.6	19.5	17.3	15.2	13.1	-	65.4	6.6	16.6	15.0	13.4	11.8	10.2	-
	62	65.5	5.8	39.7	37.6	35.5	33.4	31.2	29.1	57.7	6.2	31.2	29.6	27.9	26.3	24.7	23.1
3000	77	79.8	6.7	-	-	-	-	-	-	79.7	7.1	-	-	-	-	-	-
	72	77.3	6.4	7.0	4.2	1.5	-	-	-	74.0	6.8	3.8	1.5	-	-	-	-
	67	74.8	6.1	26.5	23.7	21.0	18.2	15.5	-	68.3	6.5	21.8	19.5	17.3	15.0	12.8	-
	62	68.6	5.7	48.4	45.6	42.9	40.2	37.4	34.7	60.3	6.2	40.6	38.3	36.1	33.8	31.6	29.3
3500	57	62.2	5.6	55.6	52.8	50.1	47.4	44.6	41.9	56.1	6.1	46.4	44.1	41.9	39.6	37.4	35.1
	77	83.3	6.6	-	-	-	-	-	-	83.1	7.0	-	-	-	-	-	-
	72	80.8	6.3	8.5	5.1	1.8	-	-	-	77.2	6.7	4.8	1.9	-	-	-	-
	67	78.2	6.0	31.3	28.0	24.6	21.3	17.9	-	71.2	6.4	26.9	24.0	21.1	18.2	15.3	-
4000	62	71.7	5.7	57.0	53.7	50.3	47.0	43.6	40.3	62.9	6.1	50.0	47.1	44.2	41.3	38.4	35.5
	57	65.0	5.6	61.7	60.3	58.8	55.4	52.1	48.7	58.5	6.0	53.6	52.5	51.3	48.4	45.5	42.6
	77	86.9	6.6	-	-	-	-	-	-	86.5	6.9	-	-	-	-	-	-
	72	84.2	6.3	10.0	6.0	2.0	-	-	-	80.3	6.7	5.7	2.2	-	-	-	-
4500	67	81.5	6.0	36.2	32.2	28.2	24.3	20.3	-	74.1	6.4	32.0	28.5	25.0	21.4	17.9	-
	62	74.8	5.7	65.7	61.7	57.8	53.8	49.8	45.9	65.5	6.1	59.4	55.9	52.3	48.8	45.3	41.8
	57	67.8	5.6	67.8	67.8	67.4	63.5	59.5	55.5	60.9	6.0	60.9	60.9	60.7	57.2	53.7	50.1
	72	86.6	6.2	11.8	7.1	2.3	-	-	-	82.8	6.6	7.0	2.7	-	-	-	-
5000	67	83.8	5.9	42.3	37.5	32.8	28.1	23.3	-	76.4	6.3	37.8	33.6	29.3	25.0	20.7	-
	62	76.9	5.6	72.3	70.4	67.1	62.4	57.6	52.9	67.5	6.0	64.4	62.7	60.2	56.0	51.7	47.4
	57	69.7	5.5	69.7	69.7	69.5	64.8	60.1	55.3	62.7	5.9	62.7	62.7	62.7	58.4	54.1	49.8
	72	89.0	6.2	13.7	8.2	2.7	-	-	-	85.2	6.5	8.2	3.2	-	-	-	-
5500	67	86.2	5.9	48.3	42.8	37.3	31.8	26.4	-	78.6	6.3	43.6	38.6	33.6	28.6	23.5	-
	62	79.0	5.6	79.0	79.0	76.4	70.9	65.4	59.9	69.4	6.0	69.4	69.4	68.1	63.1	58.1	53.0
	57	71.6	5.5	71.6	71.6	71.6	66.1	60.6	55.1	64.6	5.9	64.6	64.6	64.6	59.6	54.5	49.5

ZJ120 (10 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil																
CFM		WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
					Return Dry Bulb (°F)								Return Dry Bulb (°F)					
					90	85	80	75	70	65			90	85	80	75	70	65
		75°F										85°F						
2500	77	76.4	7.5	-	-	-	-	-	-	-	76.5	7.9	-	-	-	-	-	
	72	67.8	7.2	0.2	-	-	-	-	-	-	64.8	7.7	-	-	-	-	-	
	67	59.3	7.0	11.7	10.6	9.4	8.3	7.2	-	-	53.1	7.4	6.7	6.1	5.5	4.9	4.3	
	62	49.9	6.7	22.6	21.5	20.4	19.3	18.2	17.1	-	42.1	7.1	14.1	13.5	12.9	12.3	11.7	
3000	77	79.6	7.4	-	-	-	-	-	-	-	79.5	7.8	-	-	-	-	-	
	72	70.7	7.2	0.6	-	-	-	-	-	-	67.4	7.6	-	-	-	-	-	
	67	61.8	6.9	17.1	15.3	13.5	11.8	10.0	-	-	55.2	7.4	12.4	11.1	9.8	8.5	7.3	
	62	52.0	6.6	32.8	31.0	29.2	27.5	25.7	23.9	-	43.7	7.1	25.0	23.7	22.4	21.1	19.9	
3500	77	82.8	7.4	-	-	-	-	-	-	-	82.6	7.7	-	-	-	-	-	
	72	73.6	7.1	1.1	-	-	-	-	-	-	69.9	7.5	-	-	-	-	-	
	67	64.3	6.9	22.5	20.1	17.6	15.2	12.8	-	-	57.3	7.3	18.1	16.1	14.1	12.2	10.2	
	62	54.1	6.6	42.9	40.5	38.1	35.7	33.2	30.8	-	45.3	7.0	35.9	33.9	32.0	30.0	28.0	
4000	77	86.1	7.3	-	-	-	-	-	-	-	85.6	7.7	-	-	-	-	-	
	72	76.4	7.0	1.5	-	-	-	-	-	-	72.5	7.4	-	-	-	-	-	
	67	66.8	6.8	27.9	24.8	21.7	18.6	15.5	-	-	59.4	7.2	23.8	21.1	18.5	15.8	13.1	
	62	56.2	6.5	53.1	50.0	46.9	43.8	40.7	37.6	-	46.9	6.9	46.8	44.2	41.5	38.8	36.2	
4500	77	89.9	7.3	-	-	-	-	-	-	-	89.8	7.7	-	-	-	-	-	
	72	78.9	7.0	2.1	-	-	-	-	-	-	75.0	7.3	-	-	-	-	-	
	67	68.9	6.7	33.4	29.6	25.8	21.9	18.1	-	-	61.5	7.1	29.0	25.6	22.3	18.9	15.5	
	62	58.0	6.4	56.5	54.9	53.4	49.6	45.7	41.9	-	48.6	6.8	48.6	47.2	46.5	43.2	39.8	
5000	77	91.4	7.3	-	-	-	-	-	-	-	91.3	7.7	-	-	-	-	-	
	72	81.4	6.9	2.7	-	-	-	-	-	-	77.6	7.2	-	-	-	-	-	
	67	71.1	6.6	38.9	34.4	29.8	25.3	20.7	-	-	63.6	7.0	34.2	30.2	26.1	22.0	17.9	
	62	59.9	6.4	59.9	59.9	59.9	55.3	50.7	46.2	-	50.3	6.8	50.3	50.3	50.3	47.5	43.4	
5500	77	93.9	7.3	-	-	-	-	-	-	-	93.8	7.7	-	-	-	-	-	
	72	83.9	6.9	3.2	-	-	-	-	-	-	79.6	7.2	-	-	-	-	-	
	67	73.9	6.6	49.9	45.9	41.9	37.9	33.9	-	-	66.6	6.9	51.9	47.9	43.9	39.9	35.9	
	62	63.9	6.3	89.9	85.9	81.9	77.9	73.9	69.9	-	56.6	6.6	89.9	85.9	81.9	77.9	73.9	

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

ZJ150 (12.5 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil																			
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)									
				Return Dry Bulb (°F)								Return Dry Bulb (°F)									
				90	85	80	75	70	65			90	85	80	75	70	65				
		35°F										45°F									
3125	72	85.6	7.6	5.2	3.7	2.2	0.8	-	-	85.5	8.3	3.0	2.1	1.0	0.4	-	-				
	67	80.7	7.6	16.7	15.3	13.8	12.4	10.9	-	79.9	8.0	12.8	11.7	10.7	9.6	8.6	-				
	62	76.8	7.6	29.8	28.3	26.8	25.4	23.9	22.5	74.4	7.8	29.1	28.0	27.0	25.9	24.8	23.8				
3750	72	89.8	7.5	7.0	5.1	3.2	1.3	-	-	90.0	8.2	5.0	3.3	2.2	1.1	-	-				
	67	84.7	7.5	22.6	20.7	18.8	16.9	15.0	-	84.0	7.9	17.5	16.1	14.6	13.2	11.7	-				
	62	80.5	7.5	40.2	38.3	36.4	34.5	32.6	30.7	78.3	7.8	39.8	38.4	36.9	35.5	34.0	32.5				
	57	74.4	7.3	57.0	55.1	53.2	51.3	49.4	47.5	72.1	7.6	54.3	52.9	51.4	49.9	48.5	47.0				
4375	72	94.0	7.4	8.8	6.5	4.1	1.8	-	-	94.4	8.2	6.3	4.2	3.1	1.3	-	-				
	67	88.6	7.4	28.6	26.2	23.8	21.5	19.1	-	88.1	7.9	22.3	20.4	18.6	16.7	14.9	-				
	62	84.3	7.4	50.7	48.4	46.0	43.6	41.3	38.9	82.1	7.7	50.6	48.7	46.9	45.0	43.2	41.3				
	57	77.8	7.2	69.2	68.2	67.3	64.9	62.6	60.2	75.6	7.6	66.7	66.0	65.3	63.4	61.5	59.7				
5000	72	98.1	7.2	10.7	7.9	5.1	2.3	-	-	98.8	8.1	6.8	4.4	3.3	1.5	-	-				
	67	92.6	7.2	34.5	31.7	28.9	26.1	23.2	-	92.2	7.8	27.0	24.8	22.5	20.3	18.0	-				
	62	88.0	7.2	61.2	58.4	55.6	52.8	50.0	47.2	85.9	7.7	61.4	59.1	56.9	54.6	52.3	50.1				
	57	81.3	7.1	81.3	81.3	81.3	78.5	75.7	72.9	79.1	7.5	79.1	79.1	79.1	76.9	74.6	72.4				
5625	72	99.5	7.3	12.8	9.9	7.0	4.1	-	-	100.6	8.1	7.0	6.1	5.7	2.2	-	-				
	67	93.8	7.3	36.2	33.3	30.4	27.5	24.6	-	94.0	7.8	29.7	27.2	24.7	22.2	19.7	-				
	62	89.3	7.3	62.2	59.3	56.4	53.6	50.7	47.8	87.6	7.7	67.4	64.9	62.4	59.9	57.4	54.9				
	57	84.1	7.1	82.5	82.5	82.5	79.6	76.7	73.8	80.6	7.5	80.6	80.6	80.6	78.1	75.7	73.2				
6250	72	100.9	7.3	14.9	11.9	8.9	6.0	-	-	102.5	8.1	9.0	7.3	6.8	4.0	-	-				
	67	95.1	7.3	37.9	34.9	32.0	29.0	26.0	-	95.7	7.8	32.4	29.7	26.9	24.2	21.5	-				
	62	90.5	7.3	63.3	60.3	57.3	54.3	51.4	48.4	89.2	7.7	73.4	70.7	68.0	65.2	62.5	59.8				
	57	85.6	7.1	83.6	83.6	83.6	80.6	77.7	74.7	82.2	7.5	82.2	82.2	82.2	79.4	76.7	73.9				
		55°F										65°F									
3125	72	85.5	9.0	2.0	1.1	0.4	-	-	-	82.5	9.5	-	-	-	-	-	-				
	67	79.0	8.6	8.9	8.2	7.5	6.9	6.2	-	74.1	9.0	5.6	5.3	4.9	4.6	4.2	-				
	62	75.6	8.1	28.4	27.8	27.1	26.4	25.8	25.1	66.1	8.6	19.3	19.0	18.7	18.3	18.0	17.7				
3750	72	90.1	9.0	2.5	1.3	0.5	-	-	-	87.0	9.5	-	-	-	-	-	-				
	67	82.1	8.6	12.4	11.4	10.4	9.4	8.4	-	78.2	9.0	9.4	8.7	8.0	7.2	6.5	-				
	62	80.2	8.1	39.5	38.5	37.4	36.4	35.4	34.4	69.7	8.6	32.4	31.7	31.0	30.3	29.5	28.8				
	57	74.2	7.9	51.6	50.6	49.6	48.6	47.5	46.5	65.0	8.4	41.6	40.9	40.2	39.4	38.7	38.0				
4375	72	94.7	9.0	3.1	1.5	0.9	-	-	-	91.5	9.5	-	-	-	-	-	-				
	67	87.6	8.6	16.0	14.7	13.3	11.9	10.6	-	82.2	9.0	13.2	12.1	11.0	9.9	8.8	-				
	62	82.3	8.1	50.5	49.1	47.8	46.4	45.1	43.7	73.3	8.6	45.5	44.4	43.3	42.2	41.1	40.0				
	57	76.6	7.9	64.3	63.8	63.3	61.9	60.5	59.2	68.4	8.4	56.7	56.3	56.0	54.9	53.7	52.6				
5000	72	99.4	9.0	3.5	1.8	1.0	-	-	-	96.0	9.5	-	-	-	-	-	-				
	67	91.9	8.6	19.6	17.9	16.2	14.5	12.8	-	86.3	9.0	17.0	15.5	14.0	12.5	11.0	-				
	62	83.8	8.1	61.6	59.8	58.1	56.4	54.7	53.0	76.9	8.5	58.6	57.1	55.6	54.1	52.6	51.1				
	57	77.0	7.9	77.0	77.0	77.0	75.3	73.5	71.8	71.8	8.3	71.8	71.8	71.8	70.3	68.8	67.3				
5625	72	101.8	8.9	3.8	2.0	1.1	-	-	-	98.4	9.5	-	-	-	-	-	-				
	67	94.1	8.6	23.2	21.1	19.0	16.9	14.8	-	88.4	9.0	20.3	18.5	16.6	14.8	12.9	-				
	62	85.8	8.1	72.6	70.5	68.4	66.3	64.2	62.1	78.8	8.5	68.6	67.2	65.9	64.0	62.1	60.3				
	57	78.8	7.9	78.8	78.8	78.8	76.7	74.6	72.5	73.5	8.3	73.5	73.5	73.5	71.7	69.8	67.9				
6250	72	104.2	8.9	4.0	2.3	1.2	-	-	-	100.8	9.5	-	-	-	-	-	-				
	67	96.3	8.6	26.9	24.4	21.9	19.4	16.9	-	90.5	9.0	23.7	21.4	19.2	17.0	14.8	-				
	62	87.9	8.1	83.6	81.1	78.6	76.1	73.6	71.1	80.7	8.5	76.5	76.0	75.0	73.8	71.6	69.4				
	57	80.7	7.8	80.7	80.7	80.7	78.2	75.7	73.2	76.8	8.3	76.8	76.8	76.8	73.1	70.8	68.6				

ZJ150 (12.5 ton) reheat capacity

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
CFM	WB (°F)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)						Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								85°F							
3125	72	79.5	10.1	-	-	-	-	-	-	76.5	10.7	-	-	-	-	-	-
	67	69.2	9.5	2.3	2.3	2.3	2.3	2.3	-	64.3	9.9	1.1	0.9	0.5	0.3	0.2	-
	62	62.8	9.0	10.3	10.2	10.2	10.2	10.2	10.2	60.1	9.5	1.2	1.5	1.8	2.1	2.5	2.8
3750	72	83.9	10.1	-	-	-	-	-	-	80.8	10.6	-	-	-	-	-	-
	67	73.0	9.5	6.4	5.9	5.5	5.1	4.6	-	70.3	9.9	3.3	3.2	3.0	2.9	2.7	-
	62	63.4	9.0	25.4	25.0	24.5	24.1	23.7	23.2	65.2	9.5	18.4	18.2	18.1	18.0	17.8	17.7
	57	63.9	8.8	31.6	31.2	30.7	30.3	29.9	29.4	61.1	9.3	21.6	21.5	21.3	21.2	21.0	20.9
4375	72	88.3	10.0	-	-	-	-	-	-	85.1	10.6	-	-	-	-	-	-
	67	76.9	9.4	10.4	9.5	8.7	7.8	7.0	-	71.5	9.8	7.6	7.0	6.4	5.8	5.1	-
	62	66.7	9.0	40.6	39.7	38.8	38.0	37.1	36.3	66.1	9.4	35.6	35.0	34.4	33.8	33.2	32.5
	57	65.5	8.8	49.1	48.9	48.7	47.8	46.9	46.1	62.9	9.3	41.5	41.4	41.4	40.7	40.1	39.5
5000	72	92.7	10.0	-	-	-	-	-	-	89.4	10.5	-	-	-	-	-	-
	67	80.7	9.4	14.5	13.2	11.9	10.6	9.3	-	75.1	9.8	11.9	10.8	9.7	8.6	7.6	-
	62	70.0	9.0	55.7	54.4	53.1	51.9	50.6	49.3	67.0	9.4	52.8	51.7	50.7	49.6	48.5	47.4
	57	68.9	8.8	66.6	66.6	66.6	65.3	64.0	62.7	64.5	9.3	61.4	61.4	61.4	60.3	59.2	58.1
5625	72	95.0	10.0	-	-	-	-	-	-	91.6	10.5	-	-	-	-	-	-
	67	82.7	9.4	17.5	15.8	14.2	12.6	11.0	-	77.0	9.8	14.6	13.2	11.8	10.4	9.0	-
	62	71.8	9.0	64.6	64.0	63.3	61.7	60.1	58.5	68.8	9.4	60.6	60.7	60.8	59.4	58.1	56.7
	57	70.2	8.8	68.2	68.2	68.2	66.6	65.0	63.4	65.3	9.3	65.3	65.3	65.3	65.3	60.2	58.8
6250	72	97.3	10.0	-	-	-	-	-	-	93.9	10.6	-	-	-	-	-	-
	67	84.7	9.4	20.4	18.5	16.5	14.6	12.6	-	81.9	9.8	17.2	15.5	13.9	12.2	10.5	-
	62	73.5	9.0	73.5	73.5	73.5	71.6	69.6	67.7	70.1	9.4	66.3	66.3	66.3	66.3	66.3	65.9
	57	72.1	8.8	69.9	69.9	69.9	67.9	66.0	64.0	67.8	9.3	67.8	67.8	67.8	67.8	67.8	67.8

1. These capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance Table for the kW of the supply air blower motor.
2. These ratings include the condenser fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

Drive Selection

1. Determine side or bottom supply duct Application.
2. Determine desired airflow.
3. Calculate or measure the amount of external static pressure.
 - Add or deduct any additional static resistance from "Additional Static Resistance Table".
4. Using the operating point determined from steps 1, 2 & 3, locate this point on the appropriate supply air blower performance table. (Linear interpolation may be necessary.)
5. Noting the RPM and BHP from step 4, locate the appropriate motor and, or drive on the RPM selection table.
6. Review the BHP compared to the motor options available. Select the appropriate motor and, or drive.
7. Review the RPM range for the motor options available. Select the appropriate drive if multiple drives are available for the chosen motor.
8. Determine turns open to obtain the desired operation point.

Example

1. 2600 CFM
2. 1.6 iwg
3. Using the supply air blower performance table below, the following data point was located: 1268 RPM & 1.95 BHP.
4. Using the RPM selection table below, Size X and Model Y is found.
5. 1.95 BHP exceeds the maximum continuous BHP rating of the 1.5 HP motor. The 2 HP motor is required.
6. 1268 RPM is within the range of the 2 HP drives.
7. Using the 2 HP motor and drive, .5 turns open will achieve 1268 RPM.

Airflow Performance**Example Supply Air Blower Performance**

Air Flow (CFM)	Available External Static Pressure - IWG																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	1.5 HP & Field Supplied Drive								Standard 1.5 HP & Drive						Alternate 2 HP & Drive					
2200	804	0.50	866	0.71	925	0.90	982	1.06	1038	1.21	1092	1.35	1147	1.48	1203	1.61	1259	1.73	1317	1.87
2400	835	0.66	897	0.87	956	1.06	1013	1.22	1069	1.37	1124	1.51	1178	1.64	1234	1.77	1290	1.90	1348	2.03
2600	869	0.84	931	1.05	990	1.24	1047	1.40	1103	1.55	1158	1.69	1212	1.82	1268	1.95	1324	2.07	1382	2.21
2800	906	1.03	968	1.25	1027	1.43	1084	1.60	1139	1.75	1194	1.89	1249	2.02	1304	2.14	1361	2.27	-	-

Example RPM Selection

Size (Tons)	Model	Airflow Option	HP	Max BHP	Motor Sheave	Blower Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Fully Closed
X	Y	Std.	1.5	1.73	1VM50	AK74	N/A	897	945	991	1035	1079	1126
		H. Static	2	2.30	1VM50	AK64	N/A	1039	1094	1150	1207	1256	1308

Example Additional Static Resistance

Size (Tons)	Model	CFM	Cooling Only	Economizer	4" Pleated Filter	Electric Heat kW					
						3	6	9	15	20	24
X	Y	900	0.05	-0.05	0.01	0.00	0.00	0.00	0.01	0.01	0.01
		1000	0.05	-0.03	0.02	0.00	0.00	0.00	0.02	0.02	0.02
		1100	0.04	-0.02	0.03	0.01	0.01	0.01	0.02	0.02	0.02
		1200	0.04	0.00	0.04	0.01	0.01	0.01	0.02	0.02	0.02
		1300	0.03	0.01	0.05	0.01	0.01	0.01	0.03	0.03	0.03

Altitude and Temperature Correction for CFM, Static Pressure and Power.

The information below should be used to assist in application of product when being applied at altitudes at or exceeding 1000 feet above sea level.

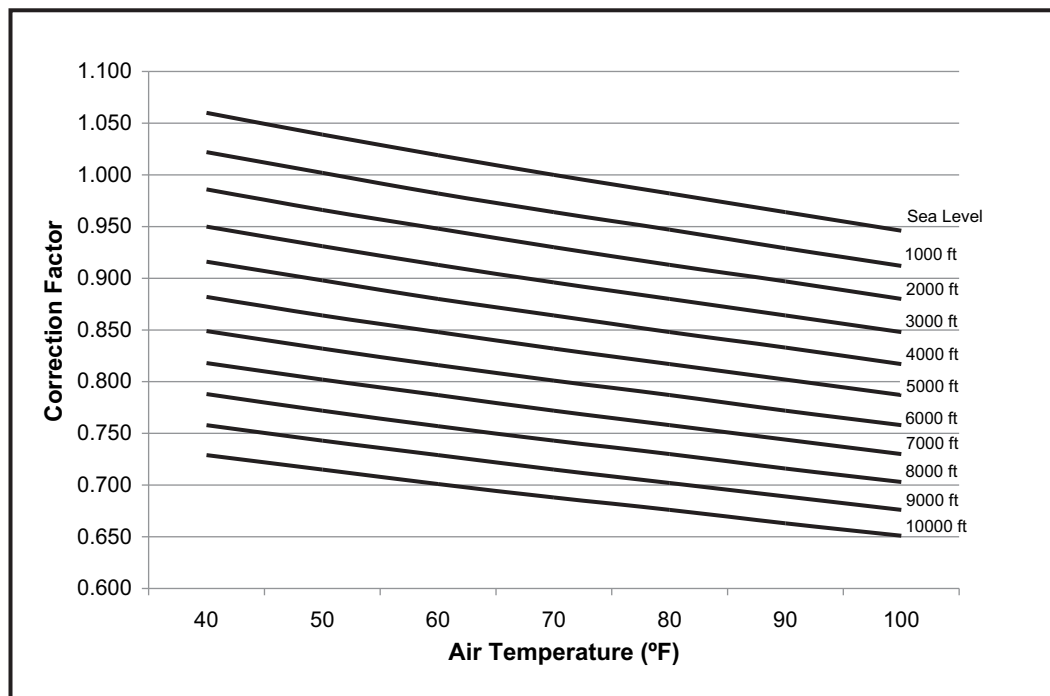
The air flow rates listed in the standard blower performance tables are based on standard air at sea level. As the altitude or temperature increases, the density of air decreases. In order to

use the indoor blower tables for high altitude applications, certain corrections are necessary.

A centrifugal fan is a "constant volume" device. This means that, if the rpm remains constant, the CFM delivered is the same regardless of the density of the air. However, since the air at high altitude is less dense, less static pressure will be generated and less power will be required than a similar application at sea level. Air density correction factors are shown in Table **Altitude/ Temperature Correction Factors** and following Figure.

Altitude/Temperature Correction Factors

Air Temp.	Altitude (Ft.)										
	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
40	1.060	1.022	0.986	0.950	0.916	0.882	0.849	0.818	0.788	0.758	0.729
50	1.039	1.002	0.966	0.931	0.898	0.864	0.832	0.802	0.772	0.743	0.715
60	1.019	0.982	0.948	0.913	0.880	0.848	0.816	0.787	0.757	0.729	0.701
70	1.000	0.964	0.930	0.896	0.864	0.832	0.801	0.772	0.743	0.715	0.688
80	0.982	0.947	0.913	0.880	0.848	0.817	0.787	0.758	0.730	0.702	0.676
90	0.964	0.929	0.897	0.864	0.833	0.802	0.772	0.744	0.716	0.689	0.663
100	0.946	0.912	0.880	0.848	0.817	0.787	0.758	0.730	0.703	0.676	0.651



The examples below will assist in determining the airflow performance of the product at altitude.

Example 1: What are the corrected CFM, static pressure, and BHP at an elevation of 5,000 ft. if the blower performance data is 6,000 CFM, 1.5 IWC and 4.0 BHP?

Solution: At an elevation of 5,000 ft. the indoor blower will still deliver 6,000 CFM if the rpm is unchanged. However, **Airflow Performance Table** must be used to determine the static pressure and BHP. Since no temperature data is given, we will assume an air temperature of 70°F. **Altitude/Temperature Correction Factors Table** shows the correction factor to be 0.832.

$$\begin{aligned}\text{Corrected static pressure} &= 1.5 \times 0.832 = 1.248 \text{ IWC} \\ \text{Corrected BHP} &= 4.0 \times 0.832 = 3.328\end{aligned}$$

Example 2: A system, located at 5,000 feet of elevation, is to deliver 6,000 CFM at a static pressure of 1.5". Use the unit blower tables to select the blower speed and the BHP requirement.

Solution: As in the example above, no temperature information is given so 70°F is assumed.

The 1.5" static pressure given is at an elevation of 5,000 ft. The first step is to convert this static pressure to equivalent sea level conditions.

Sea level static pressure = $1.5 / .832 = 1.80"$
Enter the blower table at 6000 CFM and static pressure of 1.8". The rpm listed will be the same rpm needed at 5,000 ft.

Suppose that the corresponding BHP listed in the table is 3.2. This value must be corrected for elevation.

$$\text{BHP at 5,000 ft.} = 3.2 \times .832 = 2.66$$

Indoor Blower Specifications

Size (Tons)	Model	Airflow Option	Motor					Motor Sheave			Blower Sheave			Belt
			HP	RPM	Eff.	SF	Frame	Datum Dia. (in.)	Bore (in.)	Model	Datum Dia. (in.)	Bore (in.)	Model	
037 (3)	ZJ	Std.	1-1/2	1725	0.8	1.15	56	2.0 - 3.0	7/8	1VM34	6.5	1	AK69	A47
		H. Static	1-1/2	1725	0.8	1.15	56	3.0 - 4.0	7/8	1VL44	6.5	1	AK69	A47
049 (4)	ZJ	Std.	1-1/2	1725	0.8	1.15	56	2.0 - 3.0	7/8	1VM34	5.2	1	AK56	A47
		H. Static	1-1/2	1725	0.8	1.15	56	3.0 - 4.0	7/8	1VL44	5.2	1	AK56	A47
061 (5)	ZJ	Std.	1-1/2	1725	0.8	1.15	56	2.6 - 3.6	7/8	1VL40	5.7	1	AK61	A47
		H. Static	2	1725	0.8	1.15	56	4.2 - 5.2	7/8	1VP56	7.0	1	AK74	A51
078 (6.5)	ZJ	Std.	1-1/2	1725	0.8	1.15	56	2.6 - 3.6	7/8	1VL40	7.0	1	AK74	A53
		H. Static	2	1725	0.8	1.15	56	3.6 - 4.6	7/8	1VM50	7.0	1	AK74	A54
090 (7.5)	ZJ	Std.	1-1/2	1725	0.8	1.15	56	2.6 - 3.6	7/8	1VL40	6.5	1	AK69	A52
		H. Static	3	1725	0.8	1.15	56	3.6 - 4.6	7/8	1VM50	6.5	1	AK69	A54
102 (8.5)	ZJ	Std.	2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	8.5	1	AK89	A56
		H. Static	3	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	7.0	1	AK74	A54
120 (10)	ZJ	Std.	2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	8.0	1	AK84	A56
		H. Static	3	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	7.0	1	AK74	A54
150 (12.5)	ZJ	Std.	3	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	7.0	1	AK74	A54
		H. Static	5	1725	0.87	1.15	184T	4.3 - 5.3	1-1/8	1VP56	6.7	1	BK77	BX55

Power Exhaust Specifications

Model	Voltage	Motor			Unit (Per Circuit)			Fuse Size	CFM @ 0.1 ESP
		HP	RPM ¹	QTY	LRA	FLA	MCA		
2PE04704706	208/230-1-60	3/4	1075	1	24.9	5	6.3	10	4800
2PE04704746	460-1-60	3/4	1075	1	N/A	2.2	2.8	5	4800
2PE04704758	575-1-60	3/4	1050	1	N/A	1.5	1.9	4	4800

1. Motors are multi-tapped and factory wired for high speed.

RPM Selection

Size (Tons)	Model	Airflow Option	HP	Max BHP	Motor Sheave	Blower Sheave	6 Turns Open	5 Turns Open	4 Turns Open	3 Turns Open	2 Turns Open	1 Turn Open	Fully Closed
037 (3)	ZJ	Std.	1.5	1.5	1VM34	AK69	N/A	531	584	637	690	743	796
		H. Static	1.5	1.5	1VL44	AK69	N/A	796	849	902	955	1008	1062
049 (4)	ZJ	Std.	1.5	1.5	1VM34	AK56	N/A	663	730	796	863	929	995
		H. Static	1.5	1.5	1VL44	AK56	N/A	995	1062	1128	1194	1261	1327
061 (5)	ZJ	Std.	1.5	1.5	1VL40	AK61	N/A	787	847	908	968	1029	1089
		H. Static	2	2	1VP56	AK74	N/A	1035	1084	1134	1183	1232	1281
078 (6.5)	ZJ	Std.	1.5	1.73	1VL40	AK74	N/A	641	690	739	789	838	887
		H. Static	2	2.30	1VM50	AK74	N/A	887	936	986	1035	1084	1134
090 (7.5)	ZJ	Std.	1.5	1.73	1VL40	AK69	N/A	690	743	796	849	902	955
		H. Static	3	3.45	1VM50	AK69	N/A	955	1008	1062	1115	1168	1221
102 (8.5)	ZJ	Std.	2	2.30	1VM50	AK89	N/A	731	771	812	852	893	934
		H. Static	3	3.45	1VM50	AK74	N/A	887	936	986	1035	1084	1134
120 (10)	ZJ	Std.	2	2.30	1VM50	AK84	N/A	776	819	863	906	949	992
		H. Static	3	3.45	1VM50	AK74	N/A	887	936	986	1035	1084	1134
150 (12.5)	ZJ	Std.	3	3.45	1VM50	AK74	N/A	887	936	986	1035	1084	1134
		H. Static	5	5.75	1VP56	BK77	1052	1095	1136	1175	1216	1272	N/A

Additional Static Resistance - ZJ037 thru 061

Size (Ton)	Model	CFM	Cooling Only ¹	Reheat coil	Economizer ^{2 3}	4" Pleated Filter ²	Electric Heat kW ²					
							3	6	9	15	20	24
037 (3)	ZJ	900	0.05	0.01	-0.05	0.01	0.00	0.00	0.00	0.01	0.01	0.01
		1000	0.05	0.01	-0.03	0.02	0.00	0.00	0.00	0.02	0.02	0.02
		1100	0.04	0.01	-0.02	0.03	0.01	0.01	0.01	0.02	0.02	0.02
		1200	0.04	0.02	0.00	0.04	0.01	0.01	0.01	0.02	0.02	0.02
		1300	0.03	0.02	0.01	0.05	0.01	0.01	0.01	0.03	0.03	0.03
		1400	0.03	0.03	0.03	0.07	0.02	0.02	0.02	0.03	0.03	0.03
		1500	0.03	0.03	0.04	0.08	0.02	0.02	0.02	0.04	0.04	0.04
049 (4) 061 (5)	ZJ	1200	-0.01	0.01	0.10	0.05	0.01	0.01	0.01	0.02	0.02	0.02
		1300	-0.01	0.01	0.11	0.06	0.01	0.01	0.01	0.03	0.03	0.03
		1400	-0.01	0.01	0.12	0.06	0.02	0.02	0.02	0.03	0.03	0.03
		1500	-0.01	0.01	0.13	0.07	0.02	0.02	0.02	0.04	0.04	0.04
		1600	-0.01	0.02	0.14	0.08	0.02	0.02	0.02	0.04	0.04	0.04
		1700	-0.01	0.02	0.15	0.08	0.03	0.03	0.03	0.05	0.05	0.05
		1800	-0.02	0.02	0.16	0.09	0.03	0.03	0.03	0.05	0.05	0.05
		1900	-0.02	0.02	0.17	0.10	0.04	0.04	0.04	0.06	0.06	0.06
		2000	-0.02	0.03	0.18	0.10	0.04	0.04	0.04	0.07	0.07	0.07
		2100	-0.03	0.03	0.19	0.11	0.05	0.05	0.05	0.07	0.07	0.07
		2200	-0.03	0.04	0.20	0.12	0.06	0.06	0.06	0.08	0.08	0.08
		2300	-0.04	0.04	0.21	0.12	0.06	0.06	0.06	0.09	0.09	0.09
		2400	-0.04	0.05	0.22	0.13	0.07	0.07	0.07	0.10	0.10	0.10
		2500	-0.05	0.05	0.23	0.14	0.08	0.08	0.08	0.11	0.11	0.11

1. Add these values to the available static resistance in the respective Blower Performance Tables.
2. Deduct these values from the available external static pressure shown in the respective Blower Performance Tables.
3. The pressure drop through the economizer is greater for 100% outdoor air than for 100% return air. If the resistance of the return air duct is less than 0.25 IWG, the unit will deliver less CFM during full economizer operation.

Additional Static Resistance - ZJ078-150

Size (Tons)	Model	CFM	Cooling Only ¹	Reheat coil	Economizer ^{2,3}	4" Filter ²	Electric Heat kW ²				
							9	18	24	36	54
078 (6.5)	ZJ	1900	0.06	0.01	0.02	0.08	0.05	0.06	0.07	0.08	0.10
		2100	0.07	0.01	0.02	0.09	0.06	0.07	0.08	0.09	0.11
		2300	0.08	0.02	0.04	0.10	0.07	0.08	0.09	0.10	0.13
		2500	0.09	0.02	0.11	0.11	0.08	0.09	0.10	0.11	0.14
		2700	0.11	0.03	0.18	0.12	0.09	0.10	0.12	0.13	0.16
		2900	0.12	0.03	0.25	0.13	0.10	0.11	0.13	0.14	0.18
		3100	0.14	0.04	0.31	0.15	0.12	0.13	0.15	0.16	0.20
		3300	0.16	0.04	0.37	0.16	0.13	0.14	0.17	0.18	0.22
090 (7.5) 102 (8.5) 120 (10) 150 (12.5)	ZJ	2300	0.08	0.09	0.04	0.10	0.07	0.08	0.09	0.10	0.13
		2500	0.09	0.10	0.11	0.11	0.08	0.09	0.10	0.11	0.14
		2700	0.11	0.11	0.18	0.12	0.09	0.10	0.12	0.13	0.16
		2900	0.12	0.12	0.25	0.13	0.10	0.11	0.13	0.14	0.18
		3100	0.14	0.13	0.31	0.15	0.12	0.13	0.15	0.16	0.20
		3300	0.16	0.14	0.37	0.16	0.13	0.14	0.17	0.18	0.22
		3500	0.18	0.15	0.43	0.17	0.15	0.16	0.19	0.20	0.24
		3700	0.20	0.17	0.49	0.18	0.17	0.18	0.21	0.22	0.26
		3900	0.23	0.18	0.54	0.19	0.19	0.20	0.23	0.24	0.28
		4100	0.25	0.19	0.58	0.21	0.21	0.22	0.25	0.26	0.31
		4300	0.28	0.20	0.65	0.22	0.23	0.24	0.28	0.29	0.34
		4500	0.30	0.21	0.69	0.24	0.25	0.26	0.30	0.31	0.37
		4700	0.33	0.22	0.74	0.25	0.28	0.29	0.33	0.34	0.40
		4900	0.36	0.24	0.78	0.27	0.30	0.31	0.35	0.37	0.43
		5100	0.39	0.25	0.82	0.28	0.33	0.34	0.38	0.40	0.46
		5300	0.42	0.26	0.86	0.30	0.35	0.37	0.41	0.43	0.49
		5500	0.45	0.27	0.89	0.31	0.38	0.40	0.44	0.46	0.53
		5700	0.48	0.28	0.93	0.33	0.41	0.43	0.47	0.49	0.56
		5900	0.52	0.30	0.96	0.35	0.44	0.46	0.50	0.53	0.59
		6100	0.56	0.31	0.98	0.36	0.47	0.49	0.53	0.56	0.62
		6300	0.60	0.32	1.01	0.38	0.50	0.53	0.56	0.59	0.65

1. Add these values to the available static resistance in the respective Blower Performance Tables.
2. Deduct these values from the available external static pressure shown in the respective Blower Performance Tables.
3. The pressure drop through the economizer is greater for 100% outdoor air than for 100% return air. If the resistance of the return air duct is less than 0.25 IWG, the unit will deliver less CFM during full economizer operation.

Gas Heat Minimum Supply Air

Size (Tons)	Model	Heat Size	Supply Air (CFM)	
			Heating	
			Min	Max
037 (3)	ZJ	N06	900	1500
		N08	920	1500
049 (4)	ZJ	N06	900	2000
		N08	920	2000
		N12	1290	2000
061 (5)	ZJ	N08	920	2500
		N12	1290	2500
		N16	1600	2500
078 (6.5)	ZJ	N12	1800	3250
		N18	2080	3250
090 (7.5)	ZJ	N12	1800	3750
		N18	2080	3750
102 (8.5)	ZJ	N12	1800	4250
		N18	2080	4250
120 (10)	ZJ	N18	2080	5000
		N24	3000	5000
150 (12.5)	ZJ	N18	2080	6250
		N24	3000	6250

Electric Heat Minimum Supply Air**3 thru 5 Tons**

Size (Tons)	Model	Voltage	Minimum Supply Air (CFM)					
			Heater kW					
			3	6	9	15	20	24
037 (3)	ZJ	208/230-3-60	960	960	1020	1020	-	-
		460-3-60	980	960	960	960	-	-
		600-3-60	-	-	960	960	-	-
049 (4)	ZJ	208/230-3-60	-	1280	1420	1420	1420	-
		460-3-60	-	1400	1400	1400	1400	-
		600-3-60	-	-	1400	1400	1400	-
061 (5)	ZJ	208/230-3-60	-	1600	1600	1600	1600	1600
		460-3-60	-	1600	1600	1600	1600	1600
		600-3-60	-	-	1600	1600	1600	1600

6-1/2 thru 12-1/5 Tons

Size (Tons)	Model	Voltage	Minimum Supply Air (CFM)				
			Heater kW				
			9	18	24	36	54
078 (6.5)	ZJ	208/230-3-60	1950	1950	1950	1950	-
		460-3-60	1950	1950	1950	1950	-
		600-3-60	1950	1950	1950	1950	-
090 (7.5)	ZJ	208/230-3-60	2250	2250	2250	2250	-
		460-3-60	2250	2250	2250	2250	-
		600-3-60	2250	2250	2250	2250	-
102 (8.5)	ZJ	208/230-3-60	2550	2550	2550	2550	-
		460-3-60	2550	2550	2550	2550	-
		600-3-60	2550	2550	2550	2550	-
120 (10)	ZJ	208/230-3-60	-	3000	3000	3000	3500
		460-3-60	-	3000	3000	3000	3000
		600-3-60	-	3000	3000	3000	3500
150 (12.5)	ZJ	208/230-3-60	-	3750	3750	3750	4000
		460-3-60	-	3750	3750	3750	3750
		600-3-60	-	3750	3750	3750	3750

Airflow Performance

ZJ037-150 Side Duct Application

ZJ037 (3.0 Ton) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹													
	0.2		0.4		0.6		0.8		1.0		1.2		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Standard 1.5 HP & Drive						Hi Static 1.5 HP & Drive							
900	560	0.29	628	0.35	695	0.42	760	0.51	823	0.61	886	0.72	949	0.82
1000	582	0.29	650	0.34	716	0.42	781	0.51	845	0.61	908	0.71	970	0.82
1100	601	0.30	670	0.35	736	0.43	801	0.52	864	0.62	927	0.72	990	0.83
1200	620	0.32	688	0.37	754	0.45	819	0.54	883	0.64	946	0.74	1008	0.85
1300	638	0.35	706	0.40	772	0.48	837	0.57	901	0.67	964	0.77	1026	0.88
1400	655	0.39	724	0.44	790	0.51	855	0.60	918	0.70	981	0.81	1044	0.91
1500	673	0.43	741	0.48	807	0.56	872	0.65	936	0.75	999	0.85	1061	0.96
1.5 HP & Field Supplied Drive														

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

ZJ049 (4.0 Ton) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹													
	0.2		0.4		0.6		0.8		1.0		1.2		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Standard 1.5 HP & Drive						Hi Static 1.5 HP & Drive							
1200	608	0.25	677	0.34	744	0.44	807	0.54	868	0.64	927	0.74	986	0.84
1300	623	0.28	692	0.37	758	0.47	822	0.57	883	0.67	942	0.77	1001	0.86
1400	637	0.31	706	0.40	772	0.50	836	0.60	897	0.70	956	0.80	1015	0.90
1500	650	0.35	720	0.44	786	0.54	849	0.64	911	0.74	970	0.84	1028	0.93
1600	664	0.39	734	0.49	800	0.58	863	0.68	924	0.78	984	0.88	1042	0.98
1700	678	0.44	748	0.54	814	0.63	877	0.73	938	0.83	998	0.93	1056	1.03
1800	693	0.50	763	0.59	829	0.69	892	0.79	953	0.89	1013	0.99	1071	1.08
1900	708	0.56	778	0.65	844	0.75	907	0.85	968	0.95	1028	1.05	1086	1.15
2000	725	0.62	794	0.72	860	0.82	924	0.92	985	1.02	1044	1.12	1102	1.21

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.
4. Field Supplied Drive

ZJ061 (5.0 Ton) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹													
	0.2		0.4		0.6		0.8		1.0		1.2		1.4	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	1.5 HP & Field Supplied Drive						Standard 1.5 HP & Drive						Hi Static 2 HP & Drive	
1500	659	0.35	719	0.46	780	0.57	843	0.67	905	0.77	964	0.87	1020	0.97
1600	675	0.38	735	0.50	796	0.60	859	0.71	920	0.81	980	0.91	1036	1.01
1700	691	0.42	751	0.54	812	0.64	875	0.75	936	0.85	996	0.95	1052	1.05
1800	707	0.47	767	0.58	829	0.69	891	0.79	953	0.90	1012	0.99	1069	1.09
1900	724	0.53	784	0.64	846	0.75	908	0.85	970	0.95	1029	1.05	1085	1.15
2000	741	0.59	801	0.70	863	0.81	925	0.91	987	1.01	1047	1.11	1103	1.21
2100	759	0.65	819	0.77	881	0.87	943	0.98	1005	1.08	1065	1.18	1121	1.28
2200	778	0.73	838	0.84	900	0.95	962	1.05	1024	1.15	1083	1.25	1139	1.35
2300	797	0.81	857	0.92	919	1.03	981	1.13	1043	1.23	1103	1.33	1159	1.43
2400	817	0.90	877	1.01	939	1.12	1002	1.22	1063	1.32	1123	1.42	1179	1.52
2500	838	1.00	898	1.11	960	1.22	1022	1.32	1084	1.42	1144	1.52	1200	1.62
FS ⁴														

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.
4. Field Supplied Drive.

ZJ078 (6.5 Ton) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	FS ⁴				Standard 1.5 HP & Drive								Hi Static 2 HP & Drive							
1800	514	0.15	586	0.33	657	0.52	727	0.71	794	0.89	857	1.07	917	1.23	972	1.38	1021	1.50	1064	1.59
2000	529	0.23	601	0.41	672	0.60	741	0.79	808	0.97	872	1.15	931	1.31	986	1.46	1036	1.58	1079	1.67
2200	544	0.33	616	0.51	687	0.69	756	0.88	823	1.07	886	1.24	946	1.41	1001	1.55	1051	1.67	1094	1.77
2400	559	0.43	631	0.61	702	0.80	771	0.98	838	1.17	902	1.35	961	1.51	1016	1.65	1066	1.78	1109	1.87
2600	574	0.54	646	0.72	717	0.91	787	1.10	853	1.28	917	1.46	977	1.62	1032	1.77	1081	1.89	1124	1.98
2800	590	0.67	662	0.85	733	1.03	802	1.22	869	1.41	933	1.59	993	1.75	1047	1.89	1097	2.02	1140	2.11
3000	607	0.80	679	0.98	750	1.17	819	1.36	886	1.54	949	1.72	1009	1.88	1064	2.03	1113	2.15	1157	2.24
3200	624	0.95	695	1.13	766	1.31	836	1.50	903	1.69	966	1.86	1026	2.03	1081	2.17	1130	2.29	-	-
3400	641	1.10	713	1.28	784	1.47	853	1.66	920	1.84	984	2.02	1043	2.18	1098	2.33	-	-	-	-
	FS ⁴																			

FS⁴

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.
4. Field Supplied Drive.

ZJ090 (7.5 Ton) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Supplied Drive				Standard 1.5 HP & Drive								Hi Static 3 HP & Drive							
2000	562	0.15	633	0.37	702	0.60	769	0.82	835	1.03	900	1.24	963	1.44	1025	1.63	1085	1.81	1144	1.98
2200	572	0.25	643	0.47	712	0.70	779	0.91	845	1.13	910	1.34	973	1.54	1035	1.73	1095	1.91	1154	2.08
2400	584	0.36	654	0.59	723	0.81	790	1.03	856	1.24	921	1.45	984	1.65	1046	1.84	1106	2.03	1165	2.20
2600	596	0.49	667	0.71	736	0.94	803	1.16	869	1.37	934	1.58	997	1.78	1059	1.97	1119	2.15	1178	2.32
2800	611	0.63	681	0.86	750	1.08	817	1.30	883	1.51	948	1.72	1011	1.92	1073	2.11	1133	2.30	1192	2.47
3000	627	0.79	697	1.01	766	1.23	834	1.45	900	1.67	964	1.88	1027	2.08	1089	2.27	1150	2.45	1209	2.62
3200	645	0.95	715	1.18	784	1.40	852	1.62	918	1.84	982	2.04	1046	2.24	1107	2.44	1168	2.62	1227	2.79
3400	665	1.13	735	1.36	804	1.58	872	1.80	938	2.01	1002	2.22	1066	2.42	1127	2.62	1188	2.80	1247	2.97
3600	687	1.32	757	1.55	826	1.77	894	1.99	960	2.21	1024	2.41	1087	2.61	1149	2.81	1210	2.99	-	-
3800	711	1.52	781	1.75	850	1.97	918	2.19	984	2.41	1048	2.62	1111	2.82	1173	3.01	-	-	-	-
	3 HP & Field Supplied Drive																			

3 HP & Field Supplied Drive

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.85.

ZJ102 (8.5 Ton) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Supplied Drive						Standard 2 HP & Drive						Hi Static 3 HP & Drive							
2200	603	0.16	667	0.38	729	0.61	789	0.85	849	1.08	907	1.31	965	1.54	1022	1.76	1079	1.96	1136	2.15
2400	615	0.27	679	0.49	741	0.72	802	0.96	861	1.19	920	1.43	978	1.65	1035	1.87	1092	2.07	1149	2.26
2600	629	0.39	693	0.61	755	0.84	816	1.08	875	1.31	934	1.55	991	1.77	1049	1.99	1106	2.19	1163	2.38
2800	644	0.53	708	0.75	770	0.98	831	1.21	890	1.45	949	1.68	1006	1.91	1064	2.13	1121	2.33	1178	2.52
3000	660	0.68	724	0.90	786	1.13	847	1.36	906	1.60	965	1.83	1023	2.06	1080	2.28	1137	2.48	1194	2.67
3200	678	0.84	742	1.06	804	1.30	864	1.53	924	1.77	982	2.00	1040	2.23	1097	2.44	1154	2.65	1211	2.83
3400	696	1.02	760	1.25	822	1.48	883	1.71	942	1.95	1001	2.18	1059	2.41	1116	2.62	1173	2.83	1230	3.01
3600	716	1.22	780	1.45	842	1.68	902	1.91	962	2.15	1020	2.38	1078	2.61	1135	2.82	1193	3.03	-	-
3800	737	1.44	800	1.66	863	1.89	923	2.13	983	2.36	1041	2.59	1099	2.82	1156	3.04	-	-	-	-
4000	759	1.67	822	1.89	884	2.12	945	2.36	1004	2.59	1063	2.82	1121	3.05	-	-	-	-	-	-
4200	781	1.91	845	2.14	907	2.37	968	2.60	1027	2.84	1086	3.07	-	-	-	-	-	-	-	-
	3 HP & Field Supplied Drive																			

3 HP & Field Supplied Drive

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.85.

ZJ120 (10 Ton) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Supplied Drive				Standard 2 HP & Drive								Hi Static 3 HP & Drive							
2600	675	0.53	726	0.74	776	0.94	824	1.12	870	1.30	914	1.48	957	1.65	1000	1.82	1041	1.99	1082	2.17
2800	686	0.63	738	0.84	787	1.04	835	1.23	881	1.41	925	1.58	969	1.76	1011	1.93	1052	2.10	1093	2.27
3000	699	0.75	750	0.96	800	1.16	847	1.34	893	1.52	938	1.70	981	1.87	1024	2.04	1065	2.21	1106	2.39
3200	713	0.88	764	1.09	814	1.28	861	1.47	907	1.65	952	1.83	995	2.00	1037	2.17	1079	2.34	1119	2.52
3400	728	1.02	779	1.23	829	1.43	877	1.61	923	1.79	967	1.97	1010	2.14	1053	2.31	1094	2.48	1135	2.66
3600	745	1.18	796	1.39	846	1.59	893	1.77	939	1.95	984	2.13	1027	2.30	1069	2.47	1111	2.64	1152	2.82
3800	763	1.36	815	1.57	864	1.76	912	1.95	958	2.13	1002	2.31	1046	2.48	1088	2.65	1129	2.82	1170	3.00
4000	783	1.55	835	1.76	884	1.96	932	2.15	978	2.33	1022	2.50	1066	2.67	1108	2.84	1149	3.02	1190	3.19
4200	805	1.77	856	1.98	906	2.17	953	2.36	999	2.54	1044	2.72	1087	2.89	1129	3.06	1171	3.23	1211	3.41
4400	828	2.00	879	2.21	929	2.41	976	2.59	1022	2.77	1067	2.95	1110	3.12	1152	3.29	-	-	-	-
4600	852	2.25	904	2.46	953	2.66	1001	2.85	1047	3.03	1092	3.20	1135	3.37	-	-	-	-	-	-
4800	879	2.52	930	2.73	980	2.93	1027	3.12	1073	3.30	-	-	-	-	-	-	-	-	-	-
5000	906	2.81	958	3.02	1007	3.22	1055	3.41	-	-	-	-	-	-	-	-	-	-	-	-
3 HP & Field Supplied Drive																				

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

ZJ150 (12.5 Ton) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Supplied Drive								Standard 3 HP & Drive											
3200	713	0.88	764	1.09	814	1.28	861	1.47	907	1.65	952	1.83	995	2.00	1037	2.17	1079	2.34	1119	2.52
3400	728	1.02	779	1.23	829	1.43	877	1.61	923	1.79	967	1.97	1010	2.14	1053	2.31	1094	2.48	1135	2.66
3600	745	1.18	796	1.39	846	1.59	893	1.77	939	1.95	984	2.13	1027	2.30	1069	2.47	1111	2.64	1152	2.82
3800	763	1.36	815	1.57	864	1.76	912	1.95	958	2.13	1002	2.31	1046	2.48	1088	2.65	1129	2.82	1170	3.00
4000	783	1.55	835	1.76	884	1.96	932	2.15	978	2.33	1022	2.50	1066	2.67	1108	2.84	1149	3.02	1190	3.19
4200	805	1.77	856	1.98	906	2.17	953	2.36	999	2.54	1044	2.72	1087	2.89	1129	3.06	1171	3.23	1211	3.41
4400	828	2.00	879	2.21	929	2.41	976	2.59	1022	2.77	1067	2.95	1110	3.12	1152	3.29	1194	3.46	1235	3.64
4600	852	2.25	904	2.46	953	2.66	1001	2.85	1047	3.03	1092	3.20	1135	3.37	1177	3.54	1219	3.72	1259	3.89
4800	879	2.52	930	2.73	980	2.93	1027	3.12	1073	3.30	1118	3.47	1161	3.65	1203	3.82	1245	3.99	1285	4.16
5000	906	2.81	958	3.02	1007	3.22	1055	3.41	1101	3.59	1146	3.76	1189	3.94	1231	4.11	1273	4.28	1313	4.45
5200	936	3.12	987	3.33	1037	3.53	1084	3.72	1130	3.90	1175	4.07	1218	4.24	1260	4.42	1302	4.59	1343	4.76
5400	966	3.45	1018	3.66	1067	3.86	1115	4.05	1161	4.23	1206	4.40	1249	4.57	1291	4.74	1333	4.91	1373	5.09
5600	999	3.80	1050	4.01	1100	4.20	1147	4.39	1193	4.57	1238	4.75	1281	4.92	1323	5.09	1365	5.26	1405	5.44
5800	1032	4.16	1084	4.37	1133	4.57	1181	4.75	1227	4.93	1271	5.11	1315	5.28	1357	5.45	1398	5.62	-	-
6000	1067	4.54	1119	4.75	1168	4.95	1216	5.13	1262	5.31	1306	5.49	1350	5.66	-	-	-	-	-	-
6200	1103	4.94	1155	5.15	1204	5.34	1252	5.53	1298	5.71	-	-	-	-	-	-	-	-	-	-
	Hi Static 5 HP & Drive								5 HP & Field Supplied Drive											

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

ZJ037-150 Bottom Duct Application**ZJ037 (3.0 Ton) Bottom Duct**

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Standard 1.5 HP & Drive						Hi Static 1.5 HP & Drive													
900	605	0.23	671	0.33	738	0.42	804	0.52	869	0.62	933	0.71	995	0.80	1054	0.89	1111	0.98	1164	1.07
1000	621	0.25	688	0.34	754	0.44	820	0.53	885	0.63	949	0.72	1011	0.82	1071	0.91	1127	1.00	1180	1.09
1100	637	0.27	703	0.36	769	0.46	835	0.56	900	0.65	964	0.74	1026	0.84	1086	0.93	1142	1.02	1195	1.11
1200	651	0.30	717	0.39	784	0.49	850	0.58	915	0.68	979	0.77	1041	0.87	1100	0.96	1157	1.05	1210	1.13
1300	666	0.33	732	0.43	799	0.52	865	0.62	930	0.71	994	0.81	1056	0.90	1115	0.99	1172	1.08	1225	1.17
1400	681	0.37	747	0.47	814	0.56	880	0.66	945	0.75	1009	0.85	1071	0.94	1130	1.03	1187	1.12	1240	1.21
1500	697	0.42	763	0.51	830	0.61	896	0.71	961	0.80	1025	0.90	1087	0.99	1146	1.08	1203	1.17	1256	1.26
	1.5 HP & Field Supplied Drive																			

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

ZJ049 (4.0 Ton) Bottom Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	FS ⁴		Standard 1.5 HP & Drive										Hi Static 1.5 HP & Drive							
1200	635	0.25	704	0.34	770	0.44	832	0.54	893	0.65	953	0.75	1013	0.85	1073	0.94	1134	1.02	1197	1.08
1300	648	0.28	717	0.38	782	0.47	845	0.58	906	0.68	966	0.78	1025	0.88	1085	0.97	1147	1.05	1210	1.12
1400	661	0.32	730	0.42	796	0.51	858	0.62	919	0.72	979	0.82	1039	0.92	1099	1.01	1160	1.09	1223	1.16
1500	675	0.37	744	0.46	810	0.56	872	0.66	933	0.77	993	0.87	1053	0.96	1113	1.05	1174	1.14	1237	1.20
1600	690	0.42	759	0.51	825	0.61	887	0.72	948	0.82	1008	0.92	1068	1.02	1128	1.11	1189	1.19	1252	1.26
1700	706	0.48	775	0.57	841	0.67	903	0.77	964	0.88	1024	0.98	1084	1.08	1144	1.17	1205	1.25	1268	1.31
1800	723	0.55	792	0.64	857	0.74	920	0.84	981	0.94	1041	1.04	1101	1.14	1161	1.23	1222	1.31	1285	1.38
1900	741	0.62	810	0.71	875	0.81	938	0.91	999	1.01	1059	1.11	1118	1.21	1178	1.30	1240	1.38	1303	1.45
2000	760	0.69	829	0.79	894	0.88	957	0.99	1018	1.09	1078	1.19	1137	1.29	1197	1.38	1258	1.46	1322	1.53

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.
4. Field Supplied Drive.

ZJ061 (5.0 Ton) Bottom Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	1.5 HP & Field Supplied Drive				Standard 1.5 HP & Drive										Hi Static 2 HP & Drive					
1500	673	0.47	736	0.54	797	0.63	855	0.72	910	0.82	964	0.92	1016	1.03	1067	1.14	1117	1.25	1166	1.36
1600	693	0.49	756	0.57	817	0.65	874	0.75	930	0.85	984	0.95	1036	1.06	1087	1.17	1137	1.28	1186	1.39
1700	713	0.53	777	0.60	837	0.69	895	0.78	951	0.88	1004	0.98	1057	1.09	1107	1.20	1157	1.31	1207	1.42
1800	734	0.57	797	0.65	858	0.73	916	0.83	971	0.92	1025	1.03	1077	1.14	1128	1.25	1178	1.36	1228	1.47
1900	755	0.62	819	0.70	879	0.79	937	0.88	992	0.98	1046	1.08	1098	1.19	1149	1.30	1199	1.41	1249	1.52
2000	776	0.69	840	0.76	900	0.85	958	0.94	1014	1.04	1067	1.14	1120	1.25	1171	1.36	1221	1.47	1270	1.59
2100	798	0.76	861	0.84	921	0.92	979	1.02	1035	1.11	1089	1.22	1141	1.32	1192	1.44	1242	1.55	1291	1.66
2200	819	0.84	882	0.92	943	1.00	1001	1.10	1056	1.20	1110	1.30	1162	1.41	1213	1.52	1263	1.63	1312	1.74
2300	840	0.93	903	1.01	964	1.10	1022	1.19	1077	1.29	1131	1.39	1183	1.50	1234	1.61	1284	1.72	1334	1.83
2400	861	1.03	925	1.11	985	1.20	1043	1.29	1099	1.39	1152	1.49	1204	1.60	1255	1.71	1305	1.82	1355	1.93
2500	882	1.14	946	1.22	1006	1.30	1064	1.40	1120	1.50	1173	1.60	1226	1.71	1276	1.82	1326	1.93	1376	2.04
	2 HP & Field Supplied Drive																			

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

ZJ078 (6.5 Ton) Bottom Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹									
	0.2 RPM BHP	0.4 RPM BHP	0.6 RPM BHP	0.8 RPM BHP	1.0 RPM BHP	1.2 RPM BHP	1.4 RPM BHP	1.6 RPM BHP	1.8 RPM BHP	2.0 RPM BHP
	FS ⁴		Standard 1.5 HP & Drive				Hi Static 2 HP & Drive			
1800	603 0.13	656 0.36	718 0.58	784 0.79	851 0.98	914 1.16	968 1.31	1010 1.43	1035 1.53	1039 1.59
2000	627 0.26	680 0.49	742 0.71	808 0.92	875 1.12	937 1.29	992 1.44	1034 1.57	1059 1.66	1063 1.72
2200	650 0.40	703 0.63	765 0.85	831 1.06	898 1.25	961 1.43	1015 1.58	1057 1.71	1082 1.80	1086 1.86
2400	673 0.55	726 0.78	788 1.00	854 1.21	921 1.40	984 1.58	1038 1.73	1080 1.85	1105 1.95	1109 2.01
2600	696 0.71	749 0.94	811 1.16	878 1.37	944 1.56	1007 1.73	1061 1.89	1103 2.01	1128 2.10	1133 2.16
2800	720 0.87	773 1.10	835 1.32	902 1.53	968 1.73	1031 1.90	1085 2.05	1127 2.18	1152 2.27	1157 2.33
3000	745 1.05	798 1.28	860 1.50	926 1.71	993 1.91	1056 2.08	1110 2.23	1152 2.36	1177 2.45	1181 2.51
3200	771 1.24	824 1.47	886 1.69	952 1.90	1019 2.09	1081 2.27	1136 2.42	1178 2.54	1203 2.64	1207 2.70
3400	797 1.44	850 1.67	912 1.89	979 2.10	1045 2.29	1108 2.47	1162 2.62	1204 2.74	1229 2.84	1234 2.90

3 HP & Field Supplied Drive

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.
4. Field Supplied Drive.

ZJ090 (7.5 Ton) Bottom Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹									
	0.2 RPM BHP	0.4 RPM BHP	0.6 RPM BHP	0.8 RPM BHP	1.0 RPM BHP	1.2 RPM BHP	1.4 RPM BHP	1.6 RPM BHP	1.8 RPM BHP	2.0 RPM BHP
	Field Supplied Drive		Standard 1.5 HP & Drive				Hi Static 3 HP & Drive			
2000	626 0.35	683 0.50	740 0.67	797 0.84	854 1.02	912 1.21	971 1.41	1032 1.62	1095 1.82	1160 2.04
2200	638 0.46	695 0.62	752 0.78	808 0.96	865 1.14	923 1.33	982 1.53	1043 1.73	1106 1.94	1172 2.15
2400	651 0.60	709 0.75	765 0.92	822 1.09	879 1.28	937 1.47	996 1.66	1057 1.87	1120 2.08	1185 2.29
2600	668 0.75	725 0.91	781 1.07	838 1.25	895 1.43	953 1.62	1012 1.82	1073 2.02	1136 2.23	1201 2.44
2800	686 0.92	744 1.08	800 1.24	857 1.42	914 1.60	972 1.79	1031 1.99	1092 2.19	1155 2.40	1220 2.61
3000	708 1.11	765 1.26	822 1.43	879 1.60	936 1.78	994 1.97	1053 2.17	1114 2.37	1177 2.58	1242 2.80
3200	733 1.30	790 1.46	847 1.62	903 1.80	960 1.98	1018 2.17	1077 2.37	1138 2.57	1201 2.78	1267 3.00
3400	760 1.52	818 1.67	874 1.84	931 2.01	988 2.19	1046 2.38	1105 2.58	1166 2.78	1229 2.99	- -
3600	791 1.74	848 1.90	905 2.06	961 2.24	1018 2.42	1076 2.61	1135 2.81	1196 3.01	- -	- -
3800	824 1.98	881 2.13	938 2.30	995 2.47	1052 2.65	1109 2.85	1169 3.04	- -	- -	- -

3 HP & Field Supplied Drive

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

ZJ102 (8.5 Ton) Bottom Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹									
	0.2 RPM BHP	0.4 RPM BHP	0.6 RPM BHP	0.8 RPM BHP	1.0 RPM BHP	1.2 RPM BHP	1.4 RPM BHP	1.6 RPM BHP	1.8 RPM BHP	2.0 RPM BHP
	Field Supplied Drive		Standard 2 HP & Drive				Hi Static 3 HP & Drive			
2200	679 0.35	729 0.54	781 0.73	834 0.92	887 1.12	941 1.32	994 1.52	1046 1.74	1098 1.98	1147 2.22
2400	695 0.48	745 0.67	796 0.86	849 1.05	903 1.25	956 1.45	1009 1.66	1062 1.87	1113 2.11	1162 2.35
2600	711 0.63	761 0.82	813 1.01	865 1.20	919 1.40	972 1.60	1025 1.81	1078 2.02	1129 2.26	1179 2.50
2800	728 0.80	778 0.99	830 1.18	883 1.37	936 1.57	989 1.77	1043 1.97	1095 2.19	1146 2.42	1196 2.67
3000	747 0.99	797 1.18	848 1.37	901 1.56	954 1.75	1008 1.95	1061 2.16	1114 2.38	1165 2.61	1214 2.86
3200	767 1.19	817 1.38	868 1.57	921 1.76	974 1.96	1028 2.16	1081 2.36	1133 2.58	1185 2.81	- -
3400	788 1.41	838 1.60	889 1.79	942 1.98	995 2.18	1049 2.38	1102 2.59	1155 2.80	1206 3.04	- -
3600	811 1.65	861 1.84	912 2.03	965 2.22	1018 2.41	1072 2.61	1125 2.82	1177 3.04	- -	- -
3800	835 1.90	885 2.09	936 2.28	989 2.47	1042 2.67	1096 2.87	1149 3.07	- -	- -	- -
4000	860 2.17	910 2.36	962 2.55	1015 2.74	1068 2.94	1121 3.13	- -	- -	- -	- -
4200	887 2.45	937 2.64	989 2.83	1042 3.02	1095 3.22	- -	- -	- -	- -	- -

3 HP & Field Supplied Drive

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

ZJ120 (10 Ton) Bottom Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Supplied Drive		Standard 2 HP & Drive										Hi Static 3 HP & Drive							
2600	722	0.83	776	0.97	828	1.11	878	1.25	926	1.37	973	1.50	1018	1.62	1063	1.74	1106	1.86	1149	1.99
2800	744	0.97	798	1.12	850	1.26	900	1.39	949	1.52	995	1.64	1041	1.76	1085	1.88	1128	2.00	1171	2.13
3000	769	1.13	823	1.28	875	1.42	925	1.55	974	1.68	1020	1.80	1066	1.92	1110	2.05	1153	2.17	1196	2.29
3200	797	1.32	851	1.46	903	1.60	953	1.74	1001	1.86	1048	1.99	1093	2.11	1138	2.23	1181	2.35	1224	2.48
3400	828	1.52	882	1.67	934	1.81	983	1.94	1032	2.07	1078	2.19	1124	2.32	1168	2.44	1212	2.56	1254	2.68
3600	861	1.75	915	1.90	967	2.04	1017	2.17	1065	2.30	1112	2.42	1157	2.54	1201	2.67	1245	2.79	1287	2.91
3800	897	2.00	951	2.15	1002	2.29	1052	2.42	1101	2.55	1147	2.67	1193	2.80	1237	2.92	1280	3.04	1323	3.16
4000	935	2.27	989	2.42	1041	2.56	1091	2.69	1139	2.82	1186	2.95	1231	3.07	1275	3.19	1319	3.31	1362	3.43
4200	976	2.57	1030	2.72	1082	2.86	1132	2.99	1180	3.12	1227	3.24	1272	3.36	-	-	-	-	-	-
4400	1019	2.88	1073	3.03	1125	3.17	1175	3.30	1223	3.43	-	-	-	-	-	-	-	-	-	-
4600	1065	3.22	1119	3.36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3 HP & Field Supplied Drive																			

3 HP & Field Supplied Drive

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

ZJ150 (12.5 Ton) Bottom Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹																			
	0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8		2.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Supplied Drive				Standard 3 HP & Drive								Hi Static 5 HP & Drive							
3200	797	1.32	851	1.46	903	1.60	953	1.74	1001	1.86	1048	1.99	1093	2.11	1138	2.23	1181	2.35	1224	2.48
3400	828	1.52	882	1.67	934	1.81	983	1.94	1032	2.07	1078	2.19	1124	2.32	1168	2.44	1212	2.56	1254	2.68
3600	861	1.75	915	1.90	967	2.04	1017	2.17	1065	2.30	1112	2.42	1157	2.54	1201	2.67	1245	2.79	1287	2.91
3800	897	2.00	951	2.15	1002	2.29	1052	2.42	1101	2.55	1147	2.67	1193	2.80	1237	2.92	1280	3.04	1323	3.16
4000	935	2.27	989	2.42	1041	2.56	1091	2.69	1139	2.82	1186	2.95	1231	3.07	1275	3.19	1319	3.31	1362	3.43
4200	976	2.57	1030	2.72	1082	2.86	1132	2.99	1180	3.12	1227	3.24	1272	3.36	1316	3.48	1360	3.60	1402	3.73
4400	1019	2.88	1073	3.03	1125	3.17	1175	3.30	1223	3.43	1270	3.55	1315	3.67	1360	3.80	1403	3.92	1446	4.04
4600	1065	3.22	1119	3.36	1171	3.50	1221	3.64	1269	3.76	1316	3.89	1361	4.01	1405	4.13	1449	4.25	1491	4.38
4800	1113	3.57	1167	3.72	1219	3.86	1269	3.99	1317	4.12	1364	4.24	1409	4.36	1453	4.48	1497	4.61	1540	4.73
5000	1163	3.94	1217	4.09	1269	4.23	1319	4.36	1367	4.49	1414	4.62	1459	4.74	1504	4.86	1547	4.98	1590	5.10
5200	1216	4.34	1270	4.48	1321	4.62	1371	4.76	1420	4.88	1466	5.01	1512	5.13	1556	5.25	1600	5.37	1642	5.50
5400	1270	4.75	1324	4.89	1376	5.03	1426	5.17	1474	5.29	1521	5.42	1566	5.54	1611	5.66	-	-	-	-
5600	1327	5.17	1381	5.32	1433	5.46	1483	5.59	1531	5.72	-	-	-	-	-	-	-	-	-	-
5800	1385	5.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5 HP & Field Supplied Drive																			

5 HP & Field Supplied Drive

1. Blower performance includes gas heat exchangers and 2" filters. See STATIC RESISTANCE table for additional applications.
2. See RPM SELECTION table to determine desired motor sheave setting and to determine the maximum continuous BHP.
3. kW = BHP x 0.932.

Outdoor Sound Power Levels
ZJ037-150

Size (Tons)	Model	Sound Rating ¹ dB (A)	Octave Band Centerline Frequency (Hz)							
			63	125	250	500	1000	2000	4000	8000
037 (3)	ZJ	72	80.0	83.0	72.0	69.0	65.5	60.5	55.5	49.5
049 (4)	ZJ	76	79.5	81.5	74.5	73.0	71.5	66.5	61.5	54.5
061 (5)	ZJ	77	82.0	86.0	78.5	74.0	70.0	64.5	58.5	51.0
078 (6.5)	ZJ	83	83.0	84.5	81.5	81.5	78.5	73.0	67.0	60.0
090 (7.5)	ZJ	86	87.0	91.0	87.0	84.0	80.5	75.5	71.0	65.5
102 (8.5)	ZJ	88	89.0	91.0	89.0	86.0	83.0	78.0	73.5	67.0
120 (10)	ZJ	89	88.0	91.0	89.5	86.5	83.5	78.0	74.0	69.0
150 (12.5)	ZJ	82	80.5	86.0	82.5	79.5	75.5	70.5	66.5	61.0

1. Rated in accordance with AHRI 270 standard.

Electrical Data

ZJ037-061 Standard Indoor Blower - Without Powered Convenience Outlet

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
037 (3)	208- 3-60	9.2	70	13	1.65	5.2	5.5		None	-	-	-	18.4	23.9	25	30
									E03	2.3	1	6.4	18.4	23.9	25	30
									E06	4.5	1	12.5	22.1	29	25	30
									E08	6.8	1	18.9	30.1	37	35	40
									E15	11.3	2	31.4	45.8	52.6	50	60
	230- 3-60	9.2	70	13	1.65	5.2	5.5		None	-	-	-	18.4	23.9	25	30
									E03	3	1	7.2	18.4	23.9	25	30
									E06	6	1	14.4	24.5	31.4	25	35
									E08	9	1	21.7	33.6	40.5	35	45
									E15	15	2	36.1	51.6	58.5	60	60
	460- 3-60	4	31	6	1.1	2.6	2.2		None	-	-	-	8.7	10.9	15	15
									E03	3	1	3.6	8.7	10.9	15	15
									E06	6	1	7.2	12.3	15	15	15
									E08	9	1	10.8	16.8	19.5	20	20
									E15	15	2	18	25.8	28.5	30	30
	575- 3-60	3.5	27	5	0.65	2	1.8		None	-	-	-	7.1	8.9	15	15
									E08	9	1	8.7	13.4	15.6	15	20
									E15	15	2	14.4	20.5	22.8	25	25
049 (4)	208- 3-60	13.8	83.1	22	1.65	5.2	5.5		None	-	-	-	24.2	29.7	35	40
									E06	4.5	1	12.5	24.2	29.7	35	40
									E08	6.8	1	18.9	30.1	37	35	40
									E15	11.3	2	31.4	45.8	52.6	50	60
									E20	15	2	41.6	58.5	65.4	60	70
	230- 3-60	13.8	83.1	22	1.65	5.2	5.5		None	-	-	-	24.2	29.7	35	40
									E06	6	1	14.4	24.5	31.4	35	40
									E08	9	1	21.7	33.6	40.5	35	45
									E15	15	2	36.1	51.6	58.5	60	60
									E20	20	2	48.1	66.6	73.5	70	80
	460- 3-60	6.2	41	10	1.1	2.6	2.2		None	-	-	-	11.5	13.7	15	15
									E06	6	1	7.2	12.3	15	15	15
									E08	9	1	10.8	16.8	19.5	20	20
									E15	15	2	18	25.8	28.5	30	30
									E20	20	2	24.1	33.4	36.1	35	40
	575- 3-60	4.9	33	8	0.65	2	1.8		None	-	-	-	8.8	10.6	15	15
									E08	9	1	8.7	13.4	15.6	15	20
									E15	15	2	14.4	20.5	22.8	25	25
									E20	20	2	19.2	26.5	28.8	30	30
061 (5)	208- 3-60	12.4	93	19	1.65	5.2	5.5		None	-	-	-	24	29.5	35	40
									E06	4.5	1	12.5	24	29.5	35	40
									E08	6.8	1	18.9	30.1	37	35	40
									E15	11.3	2	31.4	45.8	52.6	50	60
									E20	15	2	41.6	58.5	65.4	60	70
	230- 3-60	12.4	93	19	1.65	5.2	5.5		E23	18	2	50	69	75.9	70	80
									None	-	-	-	24	29.5	35	40
									E06	6	1	14.4	24.5	31.4	35	40
									E08	9	1	21.7	33.6	40.5	35	45
									E15	15	2	36.1	51.6	58.5	60	60
	460- 3-60	6	60	9	1.1	2.6	2.2		E20	20	2	48.1	66.6	73.5	70	80
									E23	24	2	57.7	78.6	85.5	80	90
									None	-	-	-	12.3	14.5	15	20
									E06	6	1	7.2	12.3	15	15	20
									E08	9	1	10.8	16.8	19.5	20	20
	575- 3-60	4.7	41	7	0.65	2	1.8		E15	15	2	18	25.8	28.5	30	30
									E20	20	2	24.1	33.4	36.1	35	40
									E23	24	2	28.9	39.4	42.1	40	45
									None	-	-	-	9.2	11	15	15
									E08	9	1	8.7	13.4	15.6	15	20
									E15	15	2	14.4	20.5	22.8	25	25
									E20	20	2	19.2	26.5	28.8	30	30
									E23	24	2	23.1	31.4	33.6	35	35

1. Minimum Circuit Ampacity.

2. Dual Element, Time Delay Type.

3. HACR type per NEC.

ZJ078-150 Standard Motor - Without Powered Convenience Outlet

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
078 (6)	208- 3-60	11.2	84	18	1.65	5.2	5.5		None	-	-	-	33.7	39.2	40	50
									E09	6.8	1	18.9	33.7	39.2	40	50
									E18	13.5	2	37.5	53.4	60.3	60	70
									E24	18	2	50	69	75.9	70	80
									E36	25.5	2	70.8	95	101.9	100	110
	230- 3-60	11.2	84	18	1.65	5.2	5.5		None	-	-	-	33.7	39.2	40	50
									E09	9	1	21.7	33.7	40.5	40	50
									E18	18	2	43.3	60.6	67.5	70	70
									E24	24	2	57.7	78.6	85.5	80	90
									E36	34	2	81.8	108.8	115.6	110	125
	460- 3-60	5.6	44	9	1.1	2.6	2.2		None	-	-	-	17.4	19.6	20	25
									E09	9	1	10.8	17.4	19.6	20	25
									E18	18	2	21.7	30.4	33.1	35	35
									E24	24	2	28.9	39.4	42.1	40	45
									E36	34	2	40.9	54.4	57.1	60	60
	575- 3-60	3.8	34	6	0.65	2	1.8		None	-	-	-	11.9	13.7	15	15
									E09	9	1	8.7	13.4	15.6	15	20
									E18	18	2	17.3	24.1	26.4	25	30
									E24	24	2	23.1	31.4	33.6	35	35
									E36	34	2	32.7	43.4	45.6	45	50
090 (7.5)	208- 3-60	13.6	83.1	21	2.8	5.2	5.5		None	-	-	-	41.4	46.9	50	60
									E09	6.8	1	18.9	41.4	46.9	50	60
									E18	13.5	2	37.5	53.4	60.3	60	70
									E24	18	2	50	69	75.9	70	80
									E36	25.5	2	70.8	95	101.9	100	110
	230- 3-60	13.6	83.1	21	2.8	5.2	5.5		None	-	-	-	41.4	46.9	50	60
									E09	9	1	21.7	41.4	46.9	50	60
									E18	18	2	43.3	60.6	67.5	70	70
									E24	24	2	57.7	78.6	85.5	80	90
									E36	34	2	81.8	108.8	115.6	110	125
	460- 3-60	6.1	41	10	1.6	2.6	2.2		None	-	-	-	19.5	21.7	25	25
									E09	9	1	10.8	19.5	21.7	25	25
									E18	18	2	21.7	30.4	33.1	35	35
									E24	24	2	28.9	39.4	42.1	40	45
									E36	34	2	40.9	54.4	57.1	60	60
	575- 3-60	4.2	33	7	1.2	2	1.8		None	-	-	-	13.9	15.7	15	20
									E09	9	1	8.7	13.9	15.7	15	20
									E18	18	2	17.3	24.1	26.4	25	30
									E24	24	2	23.1	31.4	33.6	35	35
									E36	34	2	32.7	43.4	45.6	45	50
102 (8.5)	208- 3-60	14.1	120.4	22	2.8	6.8	5.5		None	-	-	-	43.5	49	50	60
									E09	6.8	1	18.9	43.5	49	50	60
									E18	13.5	2	37.5	55.4	62.3	60	70
									E24	18	2	50	71	77.9	80	80
									E36	25.5	2	70.8	97	103.9	100	110
	230- 3-60	14.1	120.4	22	2.8	6.8	5.5		None	-	-	-	43.5	49	50	60
									E09	9	1	21.7	43.5	49	50	60
									E18	18	2	43.3	62.6	69.5	70	70
									E24	24	2	57.7	80.6	87.5	90	90
									E36	34	2	81.8	110.8	117.6	125	125
	460- 3-60	7.1	55.1	11	1.6	3.4	2.2		None	-	-	-	21.9	24.1	25	30
									E09	9	1	10.8	21.9	24.1	25	30
									E18	18	2	21.7	31.4	34.1	35	35
									E24	24	2	28.9	40.4	43.1	45	45
									E36	34	2	40.9	55.4	58.1	60	60
	575- 3-60	6.1	41	10	1.2	2.4	1.8		None	-	-	-	18.5	20.3	20	25
									E09	9	1	8.7	18.5	20.3	20	25
									E18	18	2	17.3	24.6	26.9	25	30
									E24	24	2	23.1	31.9	34.1	35	35
									E36	34	2	32.7	43.9	46.1	45	50

ZJ078-150 Standard Motor - Without Powered Convenience Outlet (Continued)

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
120 (10)	208- 3-60	13.2	93	21	2.8	6.8	5.5		None	-	-	-	42.1	47.6	50	60
									E18	13.5	2	37.5	55.4	62.3	60	70
									E24	18	2	50	71	77.9	80	80
									E36	25.5	2	70.8	97	103.9	100	110
									E54	40.6	2	112.7	149.4	156.3	150	175
	230- 3-60	13.2	93	21	2.8	6.8	5.5		None	-	-	-	42.1	47.6	50	60
									E18	18	2	43.3	62.6	69.5	70	70
									E24	24	2	57.7	80.6	87.5	90	90
									E36	34	2	81.8	110.8	117.6	125	125
									E54	54	2	129.9	138.4	145.3	150	175
	460- 3-60	6.3	60	10	1.6	3.4	2.2		None	-	-	-	20.8	23	25	25
									E18	18	2	21.7	31.4	34.1	35	35
									E24	24	2	28.9	40.4	43.1	45	45
									E36	34	2	40.9	55.4	58.1	60	60
									E54	54	2	65	69.3	72	80	80
	575- 3-60	4.9	41	8	1.2	2.4	1.8		None	-	-	-	15.8	17.6	20	20
									E18	18	2	17.3	24.6	26.9	25	30
									E24	24	2	23.1	31.9	34.1	35	35
									E36	34	2	32.7	43.9	46.1	45	50
									E54	54	2	52	55	57.3	60	60
150 (12.5)	208- 3-60	23.1	160	36	1.65	9.6	5.5		None	-	-	-	68.2	73.7	90	90
									E18	13.5	2	37.5	68.2	73.7	90	90
									E24	18	2	50	74.5	81.4	90	90
									E36	25.5	2	70.8	100.5	107.4	110	110
									E54	40.6	2	112.7	152.9	159.8	175	175
	230- 3-60	23.1	160	36	1.65	9.6	5.5		None	-	-	-	68.2	73.7	90	90
									E18	18	2	43.3	68.2	73.7	90	90
									E24	24	2	57.7	84.1	91	90	100
									E36	34	2	81.8	114.3	121.1	125	125
									E54	54	2	129.9	141.9	148.8	175	175
	460- 3-60	12.2	87	19	1.1	4.7	2.2		None	-	-	-	36.6	38.8	45	50
									E18	18	2	21.7	36.6	38.8	45	50
									E24	24	2	28.9	42	44.8	45	50
									E36	34	2	40.9	57	59.8	60	60
									E54	54	2	65	70.9	73.6	80	80
	575- 3-60	8.7	62	14	0.65	3.6	1.8		None	-	-	-	25.8	27.6	30	35
									E18	18	2	17.3	26.1	28.4	30	35
									E24	24	2	23.1	33.4	35.6	35	40
									E36	34	2	32.7	45.4	47.6	50	50
									E54	54	2	52	56.5	58.8	70	70

1. Minimum Circuit Ampacity.

2. Dual Element, Time Delay Type.

3. HACR type per NEC.

ZJ037-061 Hi Static Indoor Blower - Without Powered Convenience Outlet

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
037 (3)	208- 3-60	9.2	70	13	1.65	5.2	5.5		None	-	-	-	18.4	23.9	25	30
									E03	2.3	1	6.4	18.4	23.9	25	30
									E06	4.5	1	12.5	22.1	29	25	30
									E08	6.8	1	18.9	30.1	37	35	40
									E15	11.3	2	31.4	45.8	52.6	50	60
	230- 3-60	9.2	70	13	1.65	5.2	5.5		None	-	-	-	18.4	23.9	25	30
									E03	3	1	7.2	18.4	23.9	25	30
									E06	6	1	14.4	24.5	31.4	25	35
									E08	9	1	21.7	33.6	40.5	35	45
									E15	15	2	36.1	51.6	58.5	60	60
	460- 3-60	4	31	6	1.1	2.6	2.2		None	-	-	-	8.7	10.9	15	15
									E03	3	1	3.6	8.7	10.9	15	15
									E06	6	1	7.2	12.3	15	15	15
									E08	9	1	10.8	16.8	19.5	20	20
									E15	15	2	18	25.8	28.5	30	30
	575- 3-60	3.5	27	5	0.65	2	1.8		None	-	-	-	7.1	8.9	15	15
									E08	9	1	8.7	13.4	15.6	15	20
									E15	15	2	14.4	20.5	22.8	25	25
049 (4)	208- 3-60	13.8	83.1	22	1.65	5.2	5.5		None	-	-	-	24.2	29.7	35	40
									E06	4.5	1	12.5	24.2	29.7	35	40
									E08	6.8	1	18.9	30.1	37	35	40
									E15	11.3	2	31.4	45.8	52.6	50	60
									E20	15	2	41.6	58.5	65.4	60	70
	230- 3-60	13.8	83.1	22	1.65	5.2	5.5		None	-	-	-	24.2	29.7	35	40
									E06	6	1	14.4	24.5	31.4	35	40
									E08	9	1	21.7	33.6	40.5	35	45
									E15	15	2	36.1	51.6	58.5	60	60
									E20	20	2	48.1	66.6	73.5	70	80
	460- 3-60	6.2	41	10	1.1	2.6	2.2		None	-	-	-	11.5	13.7	15	15
									E06	6	1	7.2	12.3	15	15	15
									E08	9	1	10.8	16.8	19.5	20	20
									E15	15	2	18	25.8	28.5	30	30
									E20	20	2	24.1	33.4	36.1	35	40
	575- 3-60	4.9	33	8	0.65	2	1.8		None	-	-	-	8.8	10.6	15	15
									E08	9	1	8.7	13.4	15.6	15	20
									E15	15	2	14.4	20.5	22.8	25	25
									E20	20	2	19.2	26.5	28.8	30	30
061 (5)	208- 3-60	12.4	93	19	1.65	6.8	5.5		None	-	-	-	25.6	31.1	35	40
									E06	4.5	1	12.5	25.6	31.1	35	40
									E08	6.8	1	18.9	32.1	39	35	40
									E15	11.3	2	31.4	47.8	54.6	50	60
									E20	15	2	41.6	60.5	67.4	70	70
	230- 3-60	12.4	93	19	1.65	6.8	5.5		E23	18	2	50	71	77.9	80	80
									None	-	-	-	25.6	31.1	35	40
									E06	6	1	14.4	26.5	33.4	35	40
									E08	9	1	21.7	35.6	42.5	40	45
									E15	15	2	36.1	53.6	60.5	60	70
	460- 3-60	6	60	9	1.1	3.4	2.2		E20	20	2	48.1	68.6	75.5	70	80
									E23	24	2	57.7	80.6	87.5	90	90
									None	-	-	-	13.1	15.3	15	20
									E06	6	1	7.2	13.3	16	15	20
									E08	9	1	10.8	17.8	20.5	20	25
	575- 3-60	4.7	41	7	0.65	2.4	1.8		E15	15	2	18	26.8	29.5	30	30
									E20	20	2	24.1	34.4	37.1	35	40
									E23	24	2	28.9	40.4	43.1	45	45
									None	-	-	-	9.6	11.4	15	15
									E08	9	1	8.7	13.9	16.1	15	20
									E15	15	2	14.4	21	23.3	25	25
									E20	20	2	19.2	27	29.3	30	30
									E23	24	2	23.1	31.9	34.1	35	35

1. Minimum Circuit Ampacity.
2. Dual Element, Time Delay Type.
3. HACR type per NEC.

ZJ078-150 Hi Static Motor - Without Powered Convenience Outlet

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
078 (6)	208- 3-60	11.2	84	18	1.65	6.8	5.5		None	-	-	-	35.3	40.8	45	50
									E09	6.8	1	18.9	35.3	40.8	45	50
									E18	13.5	2	37.5	55.4	62.3	60	70
									E24	18	2	50	71	77.9	80	80
									E36	25.5	2	70.8	97	103.9	100	110
	230- 3-60	11.2	84	18	1.65	6.8	5.5		None	-	-	-	35.3	40.8	45	50
									E09	9	1	21.7	35.6	42.5	45	50
									E18	18	2	43.3	62.6	69.5	70	70
									E24	24	2	57.7	80.6	87.5	90	90
									E36	34	2	81.8	110.8	117.6	125	125
	460- 3-60	5.6	44	9	1.1	3.4	2.2		None	-	-	-	18.2	20.4	20	25
									E09	9	1	10.8	18.2	20.5	20	25
									E18	18	2	21.7	31.4	34.1	35	35
									E24	24	2	28.9	40.4	43.1	45	45
									E36	34	2	40.9	55.4	58.1	60	60
	575- 3-60	3.8	34	6	0.65	2.4	1.8		None	-	-	-	12.3	14.1	15	15
									E09	9	1	8.7	13.9	16.1	15	20
									E18	18	2	17.3	24.6	26.9	25	30
									E24	24	2	23.1	31.9	34.1	35	35
									E36	34	2	32.7	43.9	46.1	45	50
090 (7.5)	208- 3-60	13.6	83.1	21	2.8	9.6	5.5		None	-	-	-	45.8	51.3	50	60
									E09	6.8	1	18.9	45.8	51.3	50	60
									E18	13.5	2	37.5	58.9	65.8	60	70
									E24	18	2	50	74.5	81.4	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
	230- 3-60	13.6	83.1	21	2.8	9.6	5.5		None	-	-	-	45.8	51.3	50	60
									E09	9	1	21.7	45.8	51.3	50	60
									E18	18	2	43.3	66.1	73	70	80
									E24	24	2	57.7	84.1	91	90	100
									E36	34	2	81.8	114.3	121.1	125	125
	460- 3-60	6.1	41	10	1.6	4.7	2.2		None	-	-	-	21.6	23.8	25	25
									E09	9	1	10.8	21.6	23.8	25	25
									E18	18	2	21.7	33	35.8	35	40
									E24	24	2	28.9	42	44.8	45	45
									E36	34	2	40.9	57	59.8	60	60
	575- 3-60	4.2	33	7	1.2	3.6	1.8		None	-	-	-	15.5	17.3	20	20
									E09	9	1	8.7	15.5	17.6	20	20
									E18	18	2	17.3	26.1	28.4	30	30
									E24	24	2	23.1	33.4	35.6	35	40
									E36	34	2	32.7	45.4	47.6	50	50
102 (8.5)	208- 3-60	14.1	120.4	22	2.8	9.6	5.5		None	-	-	-	46.3	51.8	60	60
									E09	6.8	1	18.9	46.3	51.8	60	60
									E18	13.5	2	37.5	58.9	65.8	60	70
									E24	18	2	50	74.5	81.4	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
	230- 3-60	14.1	120.4	22	2.8	9.6	5.5		None	-	-	-	46.3	51.8	60	60
									E09	9	1	21.7	46.3	51.8	60	60
									E18	18	2	43.3	66.1	73	70	80
									E24	24	2	57.7	84.1	91	90	100
									E36	34	2	81.8	114.3	121.1	125	125
	460- 3-60	7.1	55.1	11	1.6	4.7	2.2		None	-	-	-	23.2	25.4	30	30
									E09	9	1	10.8	23.2	25.4	30	30
									E18	18	2	21.7	33	35.8	35	40
									E24	24	2	28.9	42	44.8	45	45
									E36	34	2	40.9	57	59.8	60	60
	575- 3-60	6.1	41	10	1.2	3.6	1.8		None	-	-	-	19.7	21.5	25	25
									E09	9	1	8.7	19.7	21.5	25	25
									E18	18	2	17.3	26.1	28.4	30	30
									E24	24	2	23.1	33.4	35.6	35	40
									E36	34	2	32.7	45.4	47.6	50	50

ZJ078-150 Hi Static Motor - Without Powered Convenience Outlet (Continued)

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ^{2/} Breaker ³ Size (Amps)	Max Fuse ^{2/} Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC	FLA	FLA	FLA	FLA	Model	kW	Stages	Amps				
120 (10)	208- 3-60	13.2	93	21	2.8	9.6	5.5		None	-	-	-	44.9	50.4	50	60
									E18	13.5	2	37.5	58.9	65.8	60	70
									E24	18	2	50	74.5	81.4	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
									E54	40.6	2	112.7	152.9	159.8	175	175
	230- 3-60	13.2	93	21	2.8	9.6	5.5		None	-	-	-	44.9	50.4	50	60
									E18	18	2	43.3	66.1	73	70	80
									E24	24	2	57.7	84.1	91	90	100
									E36	34	2	81.8	114.3	121.1	125	125
									E54	54	2	129.9	141.9	148.8	175	175
	460- 3-60	6.3	60	10	1.6	4.7	2.2		None	-	-	-	22.1	24.3	25	30
									E18	18	2	21.7	33	35.8	35	40
									E24	24	2	28.9	42	44.8	45	45
									E36	34	2	40.9	57	59.8	60	60
									E54	54	2	65	70.9	73.6	80	80
	575- 3-60	4.9	41	8	1.2	3.6	1.8		None	-	-	-	17	18.8	20	20
									E18	18	2	17.3	26.1	28.4	30	30
									E24	24	2	23.1	33.4	35.6	35	40
									E36	34	2	32.7	45.4	47.6	50	50
									E54	54	2	52	56.5	58.8	70	70
150 (12.5)	208- 3-60	23.1	160	36	1.65	14	5.5		None	-	-	-	72.6	78.1	90	100
									E18	13.5	2	37.5	72.6	78.1	90	100
									E24	18	2	50	80	86.9	90	100
									E36	25.5	2	70.8	106	112.9	110	125
									E54	40.6	2	112.7	158.4	165.3	175	175
	230- 3-60	23.1	160	36	1.65	14	5.5		None	-	-	-	72.6	78.1	90	100
									E18	18	2	43.3	72.6	78.5	90	100
									E24	24	2	57.7	89.6	96.5	90	100
									E36	34	2	81.8	119.8	126.6	125	150
									E54	54	2	129.9	147.4	154.3	175	175
	460- 3-60	12.2	87	19	1.1	6.6	2.2		None	-	-	-	38.5	40.7	50	50
									E18	18	2	21.7	38.5	40.7	50	50
									E24	24	2	28.9	44.4	47.1	50	50
									E36	34	2	40.9	59.4	62.1	60	70
									E54	54	2	65	73.3	76	80	90
	575- 3-60	8.7	62	14	0.65	5.2	1.8		None	-	-	-	27.4	29.2	35	35
									E18	18	2	17.3	28.1	30.4	35	35
									E24	24	2	23.1	35.4	37.6	40	40
									E36	34	2	32.7	47.4	49.6	50	50
									E54	54	2	52	58.5	60.8	70	70

1. Minimum Circuit Ampacity.

2. Dual Element, Time Delay Type.

3. HACR type per NEC.

ZJ037-061 Standard Indoor Blower - With Powered Convenience Outlet

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
037 (3)	208- 3-60	9.2	70	13	1.65	5.2	5.5	20	None	-	-	-	28.6	34.1	35	40
									E03	2.3	1	6.4	28.6	34.1	35	40
									E06	4.5	1	12.5	34.6	41.5	40	45
									E08	6.8	1	18.9	42.6	49.5	45	50
									E15	11.3	2	31.4	58.3	65.1	60	70
	230- 3-60	9.2	70	13	1.65	5.2	5.5	20	None	-	-	-	28.6	34.1	35	40
									E03	3	1	7.2	28.6	34.9	35	40
									E06	6	1	14.4	37	43.9	40	45
									E08	9	1	21.7	46.1	53	50	60
									E15	15	2	36.1	64.1	71	70	80
	460- 3-60	4	31	6	1.1	2.6	2.2	20	None	-	-	-	14	16.2	15	20
									E03	3	1	3.6	14	16.8	15	20
									E06	6	1	7.2	18.5	21.3	20	25
									E08	9	1	10.8	23	25.8	25	30
									E15	15	2	18	32	34.8	35	35
	575- 3-60	3.5	27	5	0.65	2	1.8	20	None	-	-	-	11.2	13	15	15
									E08	9	1	8.7	18.4	20.6	20	25
									E15	15	2	14.4	25.5	27.8	30	30
049 (4)	208- 3-60	13.8	83.1	22	1.65	5.2	5.5	20	None	-	-	-	34.2	39.7	45	50
									E06	4.5	1	12.5	34.6	41.5	45	50
									E08	6.8	1	18.9	42.6	49.5	45	50
									E15	11.3	2	31.4	58.3	65.1	60	70
									E20	15	2	41.6	71	77.9	80	80
	230- 3-60	13.8	83.1	22	1.65	5.2	5.5	20	None	-	-	-	34.2	39.7	45	50
									E06	6	1	14.4	37	43.9	45	50
									E08	9	1	21.7	46.1	53	50	60
									E15	15	2	36.1	64.1	71	70	80
									E20	20	2	48.1	79.1	86	80	90
	460- 3-60	6.2	41	10	1.1	2.6	2.2	20	None	-	-	-	16.5	18.7	20	20
									E06	6	1	7.2	18.5	21.3	20	25
									E08	9	1	10.8	23	25.8	25	30
									E15	15	2	18	32	34.8	35	35
									E20	20	2	24.1	39.6	42.4	40	45
	575- 3-60	4.9	33	8	0.65	2	1.8	20	None	-	-	-	12.8	14.6	15	15
									E08	9	1	8.7	18.4	20.6	20	25
									E15	15	2	14.4	25.5	27.8	30	30
									E20	20	2	19.2	31.5	33.8	35	35
061 (5)	208- 3-60	12.4	93	19	1.65	5.2	5.5	20	None	-	-	-	34	39.5	45	50
									E06	4.5	1	12.5	34.6	41.5	45	50
									E08	6.8	1	18.9	42.6	49.5	45	50
									E15	11.3	2	31.4	58.3	65.1	60	70
									E20	15	2	41.6	71	77.9	80	80
	230- 3-60	12.4	93	19	1.65	5.2	5.5	20	None	-	-	-	34	39.5	45	50
									E06	6	1	14.4	37	43.9	45	50
									E08	9	1	21.7	46.1	53	50	60
									E15	15	2	36.1	64.1	71	70	80
									E20	20	2	48.1	79.1	86	80	90
	460- 3-60	6	60	9	1.1	2.6	2.2	20	None	-	-	-	17.3	19.5	20	25
									E06	6	1	7.2	18.5	21.3	20	25
									E08	9	1	10.8	23	25.8	25	30
									E15	15	2	18	32	34.8	35	35
									E20	20	2	24.1	39.6	42.4	40	45
	575- 3-60	4.7	41	7	0.65	2	1.8	20	None	-	-	-	13.2	15	15	15
									E08	9	1	8.7	18.4	20.6	20	25
									E15	15	2	14.4	25.5	27.8	30	30
									E20	20	2	19.2	31.5	33.8	35	35
									E23	24	2	23.1	36.4	38.6	40	40

1. Minimum Circuit Ampacity.
2. Dual Element, Time Delay Type.
3. HACR type per NEC.

ZJ078-150 Standard Motor - With Powered Convenience Outlet

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
078 (6)	208- 3-60	11.2	84	18	1.65	5.2	5.5	20	None	-	-	-	43.7	49.2	50	60
									E09	6.8	1	18.9	43.7	49.5	50	60
									E18	13.5	2	37.5	65.9	72.8	70	80
									E24	18	2	50	81.5	88.4	90	90
									E36	25.5	2	70.8	107.5	114.4	110	125
	230- 3-60	11.2	84	18	1.65	5.2	5.5	20	None	-	-	-	43.7	49.2	50	60
									E09	9	1	21.7	46.1	53	50	60
									E18	18	2	43.3	73.1	80	80	80
									E24	24	2	57.7	91.1	98	100	100
									E36	34	2	81.8	121.3	128.1	125	150
	460- 3-60	5.6	44	9	1.1	2.6	2.2	20	None	-	-	-	22.4	24.6	25	30
									E09	9	1	10.8	23	25.8	25	30
									E18	18	2	21.7	36.6	39.4	40	40
									E24	24	2	28.9	45.6	48.4	50	50
									E36	34	2	40.9	60.6	63.4	70	70
	575- 3-60	3.8	34	6	0.65	2	1.8	20	None	-	-	-	15.9	17.7	20	20
									E09	9	1	8.7	18.4	20.6	20	25
									E18	18	2	17.3	29.1	31.4	30	35
									E24	24	2	23.1	36.4	38.6	40	40
									E36	34	2	32.7	48.4	50.6	50	60
090 (7.5)	208- 3-60	13.6	83.1	21	2.8	5.2	5.5	20	None	-	-	-	51.4	56.9	60	70
									E09	6.8	1	18.9	51.4	56.9	60	70
									E18	13.5	2	37.5	65.9	72.8	70	80
									E24	18	2	50	81.5	88.4	90	90
									E36	25.5	2	70.8	107.5	114.4	110	125
	230- 3-60	13.6	83.1	21	2.8	5.2	5.5	20	None	-	-	-	51.4	56.9	60	70
									E09	9	1	21.7	51.4	56.9	60	70
									E18	18	2	43.3	73.1	80	80	80
									E24	24	2	57.7	91.1	98	100	100
									E36	34	2	81.8	121.3	128.1	125	150
	460- 3-60	6.1	41	10	1.6	2.6	2.2	20	None	-	-	-	24.5	26.7	30	30
									E09	9	1	10.8	24.5	26.7	30	30
									E18	18	2	21.7	36.6	39.4	40	40
									E24	24	2	28.9	45.6	48.4	50	50
									E36	34	2	40.9	60.6	63.4	70	70
	575- 3-60	4.2	33	7	1.2	2	1.8	20	None	-	-	-	17.9	19.7	20	20
									E09	9	1	8.7	18.4	20.6	20	25
									E18	18	2	17.3	29.1	31.4	30	35
									E24	24	2	23.1	36.4	38.6	40	40
									E36	34	2	32.7	48.4	50.6	50	60
102 (8.5)	208- 3-60	14.1	120.4	22	2.8	6.8	5.5	20	None	-	-	-	53.5	59	60	70
									E09	6.8	1	18.9	53.5	59	60	70
									E18	13.5	2	37.5	67.9	74.8	70	80
									E24	18	2	50	83.5	90.4	90	100
									E36	25.5	2	70.8	109.5	116.4	110	125
	230- 3-60	14.1	120.4	22	2.8	6.8	5.5	20	None	-	-	-	53.5	59	60	70
									E09	9	1	21.7	53.5	59	60	70
									E18	18	2	43.3	75.1	82	80	90
									E24	24	2	57.7	93.1	100	100	100
									E36	34	2	81.8	123.3	130.1	125	150
	460- 3-60	7.1	55.1	11	1.6	3.4	2.2	20	None	-	-	-	26.9	29.1	30	35
									E09	9	1	10.8	26.9	29.1	30	35
									E18	18	2	21.7	37.6	40.4	40	45
									E24	24	2	28.9	46.6	49.4	50	50
									E36	34	2	40.9	61.6	64.4	70	70
	575- 3-60	6.1	41	10	1.2	2.4	1.8	20	None	-	-	-	22.5	24.3	25	30
									E09	9	1	8.7	22.5	24.3	25	30
									E18	18	2	17.3	29.6	31.9	30	35
									E24	24	2	23.1	36.9	39.1	40	40
									E36	34	2	32.7	48.9	51.1	50	60

ZJ078-150 Standard Motor - With Powered Convenience Outlet (Continued)

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
120 (10)	208- 3-60	13.2	93	21	2.8	6.8	5.5	20	None	-	-	-	52.1	57.6	60	70
									E18	13.5	2	37.5	67.9	74.8	70	80
									E24	18	2	50	83.5	90.4	90	100
									E36	25.5	2	70.8	109.5	116.4	110	125
									E54	40.6	2	112.7	161.9	168.8	175	175
	230- 3-60	13.2	93	21	2.8	6.8	5.5	20	None	-	-	-	52.1	57.6	60	70
									E18	18	2	43.3	75.1	82	80	90
									E24	24	2	57.7	93.1	100	100	100
									E36	34	2	81.8	123.3	130.1	125	150
									E54	54	2	129.9	150.9	157.8	175	175
	460- 3-60	6.3	60	10	1.6	3.4	2.2	20	None	-	-	-	25.8	28	30	30
									E18	18	2	21.7	37.6	40.4	40	45
									E24	24	2	28.9	46.6	49.4	50	50
									E36	34	2	40.9	61.6	64.4	70	70
									E54	54	2	65	75.5	78.3	80	90
	575- 3-60	4.9	41	8	1.2	2.4	1.8	20	None	-	-	-	19.8	21.6	20	25
									E18	18	2	17.3	29.6	31.9	30	35
									E24	24	2	23.1	36.9	39.1	40	40
									E36	34	2	32.7	48.9	51.1	50	60
									E54	54	2	52	60	62.3	70	70
150 (12.5)	208- 3-60	23.1	160	36	1.65	9.6	5.5	10	None	-	-	-	78.2	83.7	100	100
									E18	13.5	2	37.5	78.2	83.7	100	100
									E24	18	2	50	87	93.9	100	100
									E36	25.5	2	70.8	113	119.9	125	125
									E54	40.6	2	112.7	165.4	172.3	175	175
	230- 3-60	23.1	160	36	1.65	9.6	5.5	10	None	-	-	-	78.2	83.7	100	100
									E18	18	2	43.3	78.6	85.5	100	100
									E24	24	2	57.7	96.6	103.5	100	110
									E36	34	2	81.8	126.8	133.6	150	150
									E54	54	2	129.9	154.4	161.3	175	175
	460- 3-60	12.2	87	19	1.1	4.7	2.2	5	None	-	-	-	41.6	43.8	50	50
									E18	18	2	21.7	41.6	43.8	50	50
									E24	24	2	28.9	48.3	51	50	60
									E36	34	2	40.9	63.3	66	70	70
									E54	54	2	65	77.1	79.9	90	90
	575- 3-60	8.7	62	14	0.65	3.6	1.8	4	None	-	-	-	29.8	31.6	35	40
									E18	18	2	17.3	31.1	33.4	35	40
									E24	24	2	23.1	38.4	40.6	40	45
									E36	34	2	32.7	50.4	52.6	60	60
									E54	54	2	52	61.5	63.8	70	70

1. Minimum Circuit Ampacity.
2. Dual Element, Time Delay Type.
3. HACR type per NEC.

ZJ037-150 Hi Static Blower - With Powered Convenience Outlet

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
037 (3)	208- 3-60	9.2	70	13	1.65	5.2	5.5	20	None	-	-	-	28.6	34.1	35	40
									E03	2.3	1	6.4	28.6	34.1	35	40
									E06	4.5	1	12.5	34.6	41.5	40	45
									E08	6.8	1	18.9	42.6	49.5	45	50
									E15	11.3	2	31.4	58.3	65.1	60	70
	230- 3-60	9.2	70	13	1.65	5.2	5.5	20	None	-	-	-	28.6	34.1	35	40
									E03	3	1	7.2	28.6	34.9	35	40
									E06	6	1	14.4	37	43.9	40	45
									E08	9	1	21.7	46.1	53	50	60
									E15	15	2	36.1	64.1	71	70	80
	460- 3-60	4	31	6	1.1	2.6	2.2	20	None	-	-	-	14	16.2	15	20
									E03	3	1	3.6	14	16.8	15	20
									E06	6	1	7.2	18.5	21.3	20	25
									E08	9	1	10.8	23	25.8	25	30
									E15	15	2	18	32	34.8	35	35
	575- 3-60	3.5	27	5	0.65	2	1.8	20	None	-	-	-	11.2	13	15	15
									E08	9	1	8.7	18.4	20.6	20	25
									E15	15	2	14.4	25.5	27.8	30	30
									None	-	-	-	34.2	39.7	45	50
									E06	4.5	1	12.5	34.6	41.5	45	50
049 (4)	208- 3-60	13.8	83.1	22	1.65	5.2	5.5	20	None	-	-	-	34.2	39.7	45	50
									E06	4.5	1	12.5	34.6	41.5	45	50
									E08	6.8	1	18.9	42.6	49.5	45	50
									E15	11.3	2	31.4	58.3	65.1	60	70
									E20	15	2	41.6	71	77.9	80	80
	230- 3-60	13.8	83.1	22	1.65	5.2	5.5	20	None	-	-	-	34.2	39.7	45	50
									E06	6	1	14.4	37	43.9	45	50
									E08	9	1	21.7	46.1	53	50	60
									E15	15	2	36.1	64.1	71	70	80
									E20	20	2	48.1	79.1	86	80	90
	460- 3-60	6.2	41	10	1.1	2.6	2.2	20	None	-	-	-	16.5	18.7	20	20
									E06	6	1	7.2	18.5	21.3	20	25
									E08	9	1	10.8	23	25.8	25	30
									E15	15	2	18	32	34.8	35	35
									E20	20	2	24.1	39.6	42.4	40	45
	575- 3-60	4.9	33	8	0.65	2	1.8	20	None	-	-	-	12.8	14.6	15	15
									E08	9	1	8.7	18.4	20.6	20	25
									E15	15	2	14.4	25.5	27.8	30	30
									E20	20	2	19.2	31.5	33.8	35	35
									None	-	-	-	35.6	41.1	45	50
061 (5)	208- 3-60	12.4	93	19	1.65	6.8	5.5	20	None	-	-	-	35.6	41.1	45	50
									E06	4.5	1	12.5	36.6	43.5	45	50
									E08	6.8	1	18.9	44.6	51.5	45	60
									E15	11.3	2	31.4	60.3	67.1	70	70
									E20	15	2	41.6	73	79.9	80	80
	230- 3-60	12.4	93	19	1.65	6.8	5.5	20	E23	18	2	50	83.5	90.4	90	100
									None	-	-	-	35.6	41.1	45	50
									E06	6	1	14.4	39	45.9	45	50
									E08	9	1	21.7	48.1	55	50	60
									E15	15	2	36.1	66.1	73	70	80
	460- 3-60	6	60	9	1.1	3.4	2.2	20	E20	20	2	48.1	81.1	88	90	90
									E23	24	2	57.7	93.1	100	100	100
									None	-	-	-	18.1	20.3	20	25
									E06	6	1	7.2	19.5	22.3	20	25
									E08	9	1	10.8	24	26.8	25	30
575- 3-60	4.7	41	7	0.65	2.4	1.8	20	20	E15	15	2	14.4	26	28.3	30	30
									E20	20	2	19.2	32	34.3	35	35
									None	-	-	-	13.6	15.4	15	20
									E08	9	1	8.7	18.9	21.1	20	25
									E23	24	2	23.1	36.9	39.1	40	40

ZJ037-150 Hi Static Blower - With Powered Convenience Outlet (Continued)

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
078 (6)	208- 3-60	11.2	84	18	1.65	6.8	5.5	20	None	-	-	-	45.3	50.8	50	60
									E09	6.8	1	18.9	45.3	51.5	50	60
									E18	13.5	2	37.5	67.9	74.8	70	80
									E24	18	2	50	83.5	90.4	90	100
									E36	25.5	2	70.8	109.5	116.4	110	125
	230- 3-60	11.2	84	18	1.65	6.8	5.5	20	None	-	-	-	45.3	50.8	50	60
									E09	9	1	21.7	48.1	55	50	60
									E18	18	2	43.3	75.1	82	80	90
									E24	24	2	57.7	93.1	100	100	100
									E36	34	2	81.8	123.3	130.1	125	150
	460- 3-60	5.6	44	9	1.1	3.4	2.2	20	None	-	-	-	23.2	25.4	25	30
									E09	9	1	10.8	24	26.8	25	30
									E18	18	2	21.7	37.6	40.4	40	45
									E24	24	2	28.9	46.6	49.4	50	50
									E36	34	2	40.9	61.6	64.4	70	70
	575- 3-60	3.8	34	6	0.65	2.4	1.8	20	None	-	-	-	16.3	18.1	20	20
									E09	9	1	8.7	18.9	21.1	20	25
									E18	18	2	17.3	29.6	31.9	30	35
									E24	24	2	23.1	36.9	39.1	40	40
									E36	34	2	32.7	48.9	51.1	50	60
090 (7.5)	208- 3-60	13.6	83.1	21	2.8	9.6	5.5	20	None	-	-	-	55.8	61.3	60	70
									E09	6.8	1	18.9	55.8	61.3	60	70
									E18	13.5	2	37.5	71.4	78.3	80	80
									E24	18	2	50	87	93.9	90	100
									E36	25.5	2	70.8	113	119.9	125	125
	230- 3-60	13.6	83.1	21	2.8	9.6	5.5	20	None	-	-	-	55.8	61.3	60	70
									E09	9	1	21.7	55.8	61.3	60	70
									E18	18	2	43.3	78.6	85.5	80	90
									E24	24	2	57.7	96.6	103.5	100	110
									E36	34	2	81.8	126.8	133.6	150	150
	460- 3-60	6.1	41	10	1.6	4.7	2.2	20	None	-	-	-	26.6	28.8	30	30
									E09	9	1	10.8	26.6	28.8	30	30
									E18	18	2	21.7	39.3	42	40	45
									E24	24	2	28.9	48.3	51	50	60
									E36	34	2	40.9	63.3	66	70	70
	575- 3-60	4.2	33	7	1.2	3.6	1.8	20	None	-	-	-	19.5	21.3	20	25
									E09	9	1	8.7	20.4	22.6	25	25
									E18	18	2	17.3	31.1	33.4	35	35
									E24	24	2	23.1	38.4	40.6	40	45
									E36	34	2	32.7	50.4	52.6	60	60
102 (8.5)	208- 3-60	14.1	120.4	22	2.8	9.6	5.5	20	None	-	-	-	56.3	61.8	70	70
									E09	6.8	1	18.9	56.3	61.8	70	70
									E18	13.5	2	37.5	71.4	78.3	80	80
									E24	18	2	50	87	93.9	90	100
									E36	25.5	2	70.8	113	119.9	125	125
	230- 3-60	14.1	120.4	22	2.8	9.6	5.5	20	None	-	-	-	56.3	61.8	70	70
									E09	9	1	21.7	56.3	61.8	70	70
									E18	18	2	43.3	78.6	85.5	80	90
									E24	24	2	57.7	96.6	103.5	100	110
									E36	34	2	81.8	126.8	133.6	150	150
	460- 3-60	7.1	55.1	11	1.6	4.7	2.2	20	None	-	-	-	28.2	30.4	35	35
									E09	9	1	10.8	28.2	30.4	35	35
									E18	18	2	21.7	39.3	42	40	45
									E24	24	2	28.9	48.3	51	50	60
									E36	34	2	40.9	63.3	66	70	70
	575- 3-60	6.1	41	10	1.2	3.6	1.8	20	None	-	-	-	23.7	25.5	25	30
									E09	9	1	8.7	23.7	25.5	25	30
									E18	18	2	17.3	31.1	33.4	35	35
									E24	24	2	23.1	38.4	40.6	40	45
									E36	34	2	32.7	50.4	52.6	60	60

ZJ037-150 Hi Static Blower - With Powered Convenience Outlet (Continued)

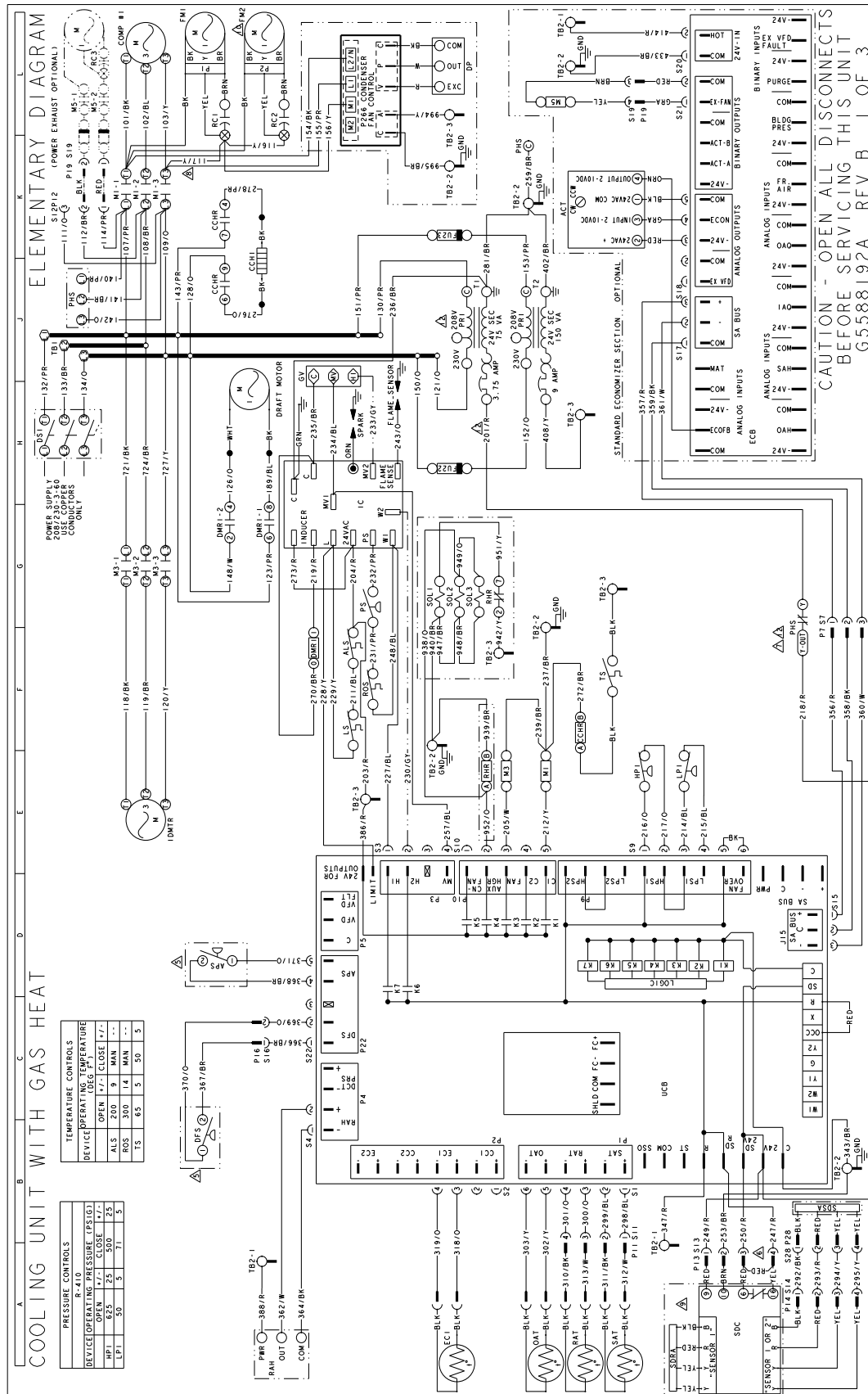
Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	Pwr Exh Motor	Pwr Conv Outlet	Electric Heat Option				MCA ¹ (Amps)	MCA ¹ w/Pwr Exh (Amps)	Max Fuse ² / Breaker ³ Size (Amps)	Max Fuse ² / Breaker ³ Size w/ Pwr Exh (Amps)
		RLA	LRA	MCC					Model	kW	Stages	Amps				
120 (10)	208- 3-60	13.2	93	21	2.8	9.6	5.5	20	None	-	-	-	54.9	60.4	60	70
									E18	13.5	2	37.5	71.4	78.3	80	80
									E24	18	2	50	87	93.9	90	100
									E36	25.5	2	70.8	113	119.9	125	125
									E54	40.6	2	112.7	165.4	172.3	175	175
	230- 3-60	13.2	93	21	2.8	9.6	5.5	20	None	-	-	-	54.9	60.4	60	70
									E18	18	2	43.3	78.6	85.5	80	90
									E24	24	2	57.7	96.6	103.5	100	110
									E36	34	2	81.8	126.8	133.6	150	150
									E54	54	2	129.9	154.4	161.3	175	175
	460- 3-60	6.3	60	10	1.6	4.7	2.2	20	None	-	-	-	27.1	29.3	30	35
									E18	18	2	21.7	39.3	42	40	45
									E24	24	2	28.9	48.3	51	50	60
									E36	34	2	40.9	63.3	66	70	70
									E54	54	2	65	77.1	79.9	90	90
	575- 3-60	4.9	41	8	1.2	3.6	1.8	20	None	-	-	-	21	22.8	25	25
									E18	18	2	17.3	31.1	33.4	35	35
									E24	24	2	23.1	38.4	40.6	40	45
									E36	34	2	32.7	50.4	52.6	60	60
									E54	54	2	52	61.5	63.8	70	70
150 (12.5)	208- 3-60	23.1	160	36	1.65	14	5.5	10	None	-	-	-	82.6	88.1	100	110
									E18	13.5	2	37.5	82.6	88.1	100	110
									E24	18	2	50	92.5	99.4	100	110
									E36	25.5	2	70.8	118.5	125.4	125	150
									E54	40.6	2	112.7	170.9	177.8	175	200
	230- 3-60	23.1	160	36	1.65	14	5.5	10	None	-	-	-	82.6	88.1	100	110
									E18	18	2	43.3	84.1	91	100	110
									E24	24	2	57.7	102.1	109	110	110
									E36	34	2	81.8	132.3	139.1	150	150
									E54	54	2	129.9	159.9	166.8	175	175
	460- 3-60	12.2	87	19	1.1	6.6	2.2	5	None	-	-	-	43.5	45.7	50	50
									E18	18	2	21.7	43.5	45.7	50	50
									E24	24	2	28.9	50.6	53.4	60	60
									E36	34	2	40.9	65.6	68.4	70	70
									E54	54	2	65	79.5	82.3	90	90
	575- 3-60	8.7	62	14	0.65	5.2	1.8	4	None	-	-	-	31.4	33.2	40	40
									E18	18	2	17.3	33.1	35.4	40	40
									E24	24	2	23.1	40.4	42.6	45	45
									E36	34	2	32.7	52.4	54.6	60	60
									E54	54	2	52	63.5	65.8	70	70

1. Minimum Circuit Ampacity.
2. Dual Element, Time Delay Type.
3. HACR type per NEC.

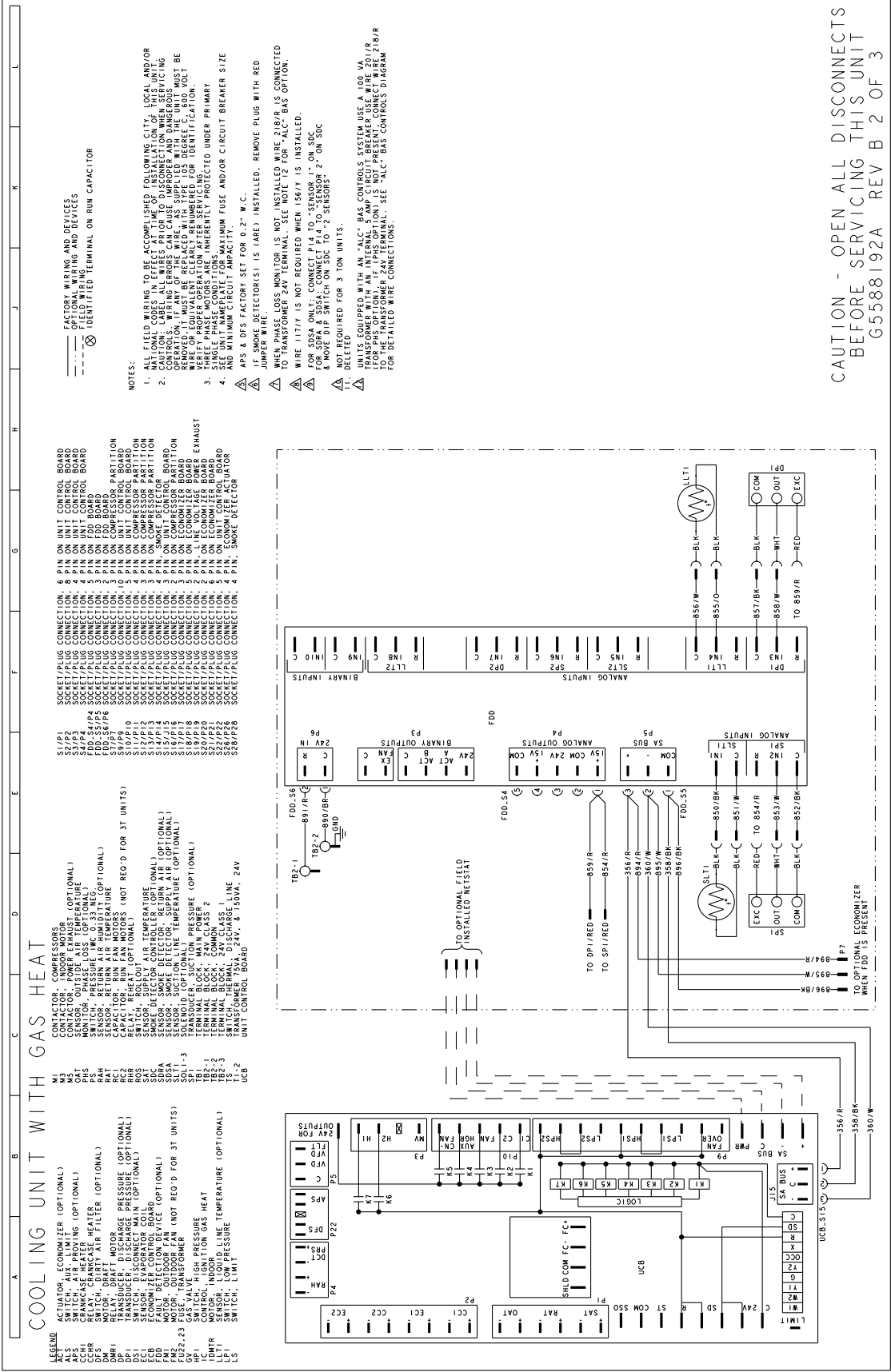
Typical Wiring Diagrams

ZJ037-150 Typical Wiring Diagrams

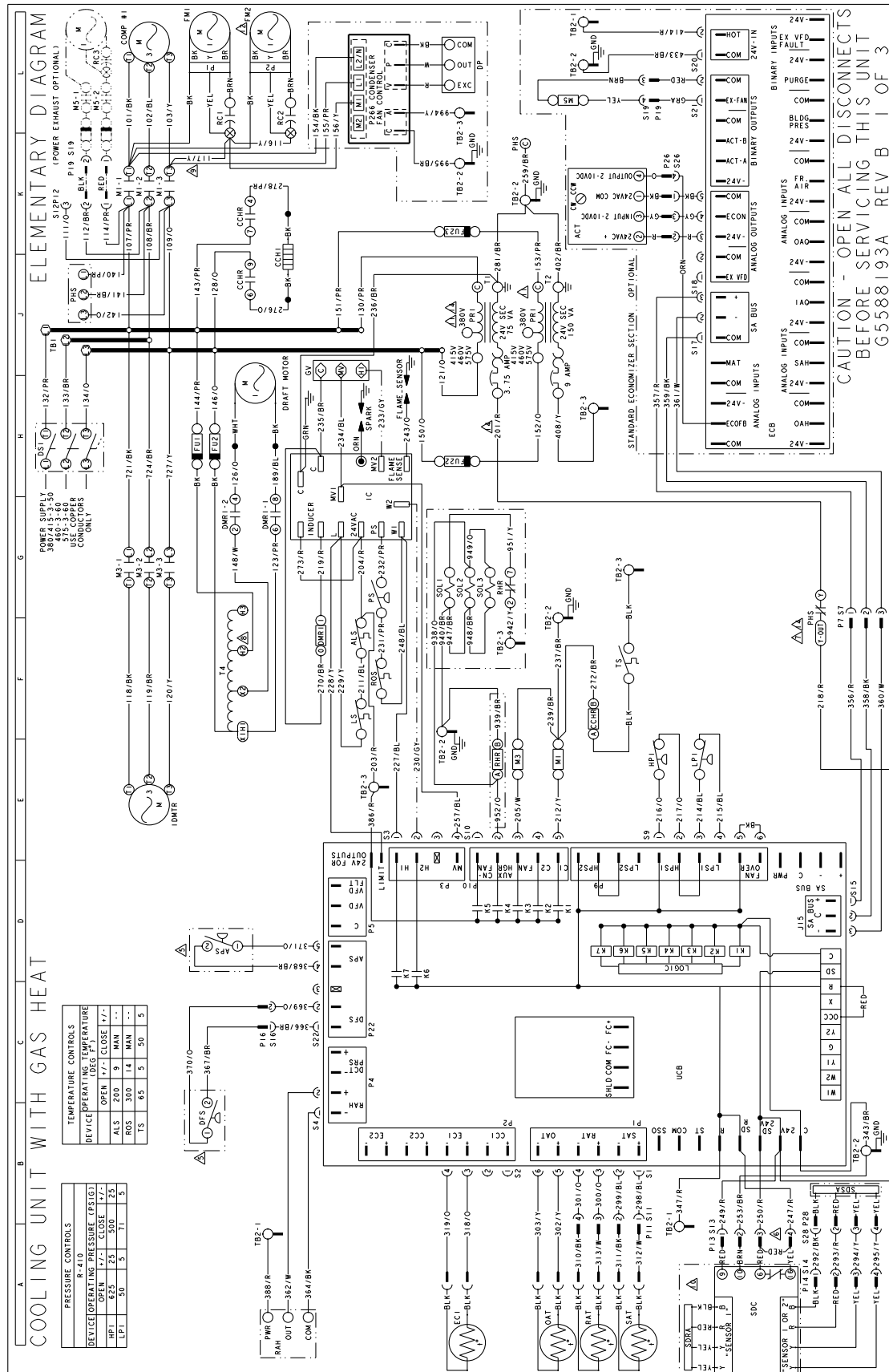
Typical ZJ037-061 Cooling Unit with Gas Heat 208/230 Volt Wiring Diagram



Typical ZJ037-061 Cooling Unit with Gas Heat 208/230 Volt Unit (Options)



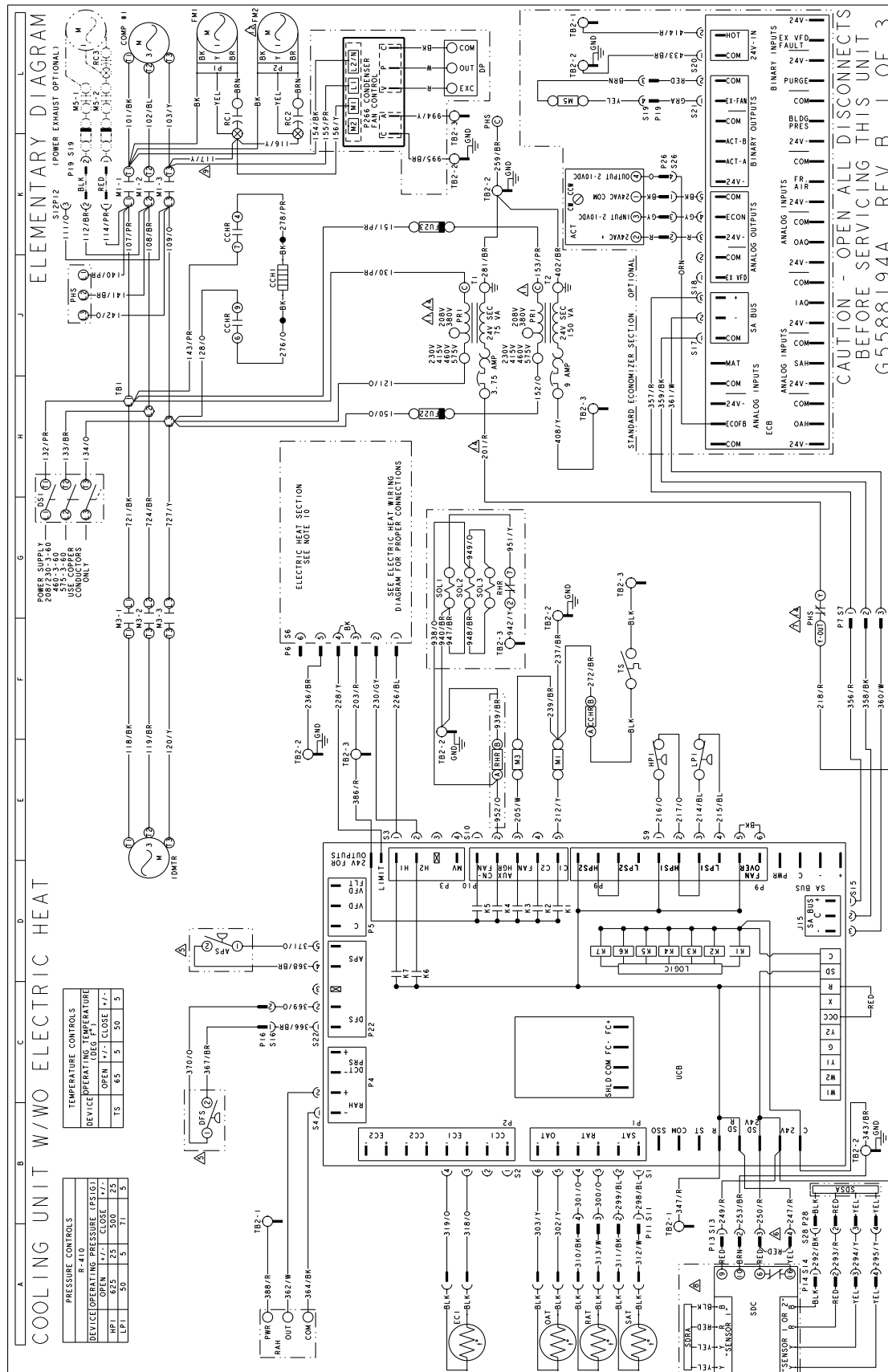
Typical ZJ037-061 Cooling Unit with Gas Heat 460/575 Volt Wiring Diagram



Johnson Controls Ducted Systems

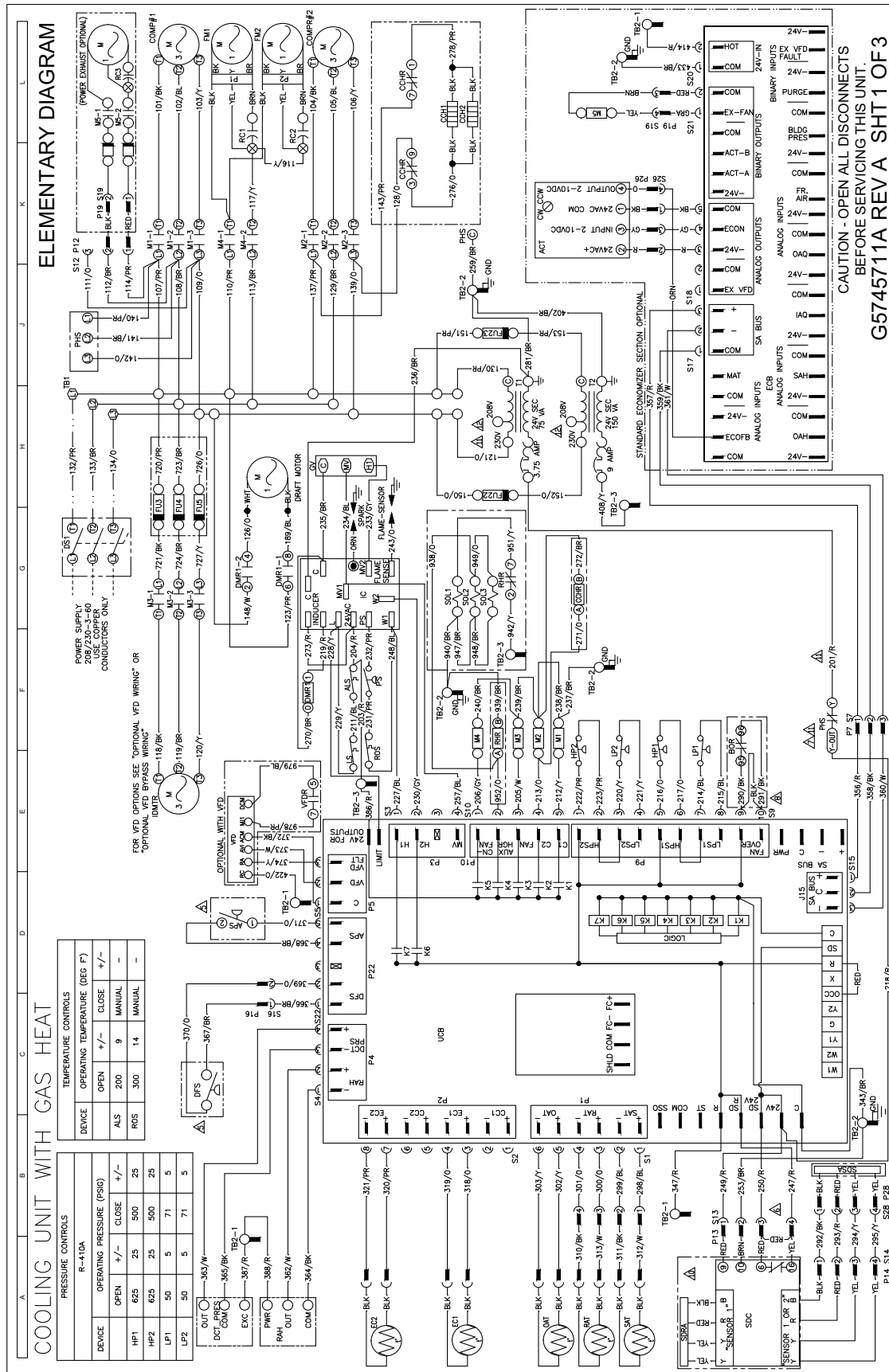


Typical ZJ037-061 Cooling Unit with/without Electric Heat Wiring Diagram

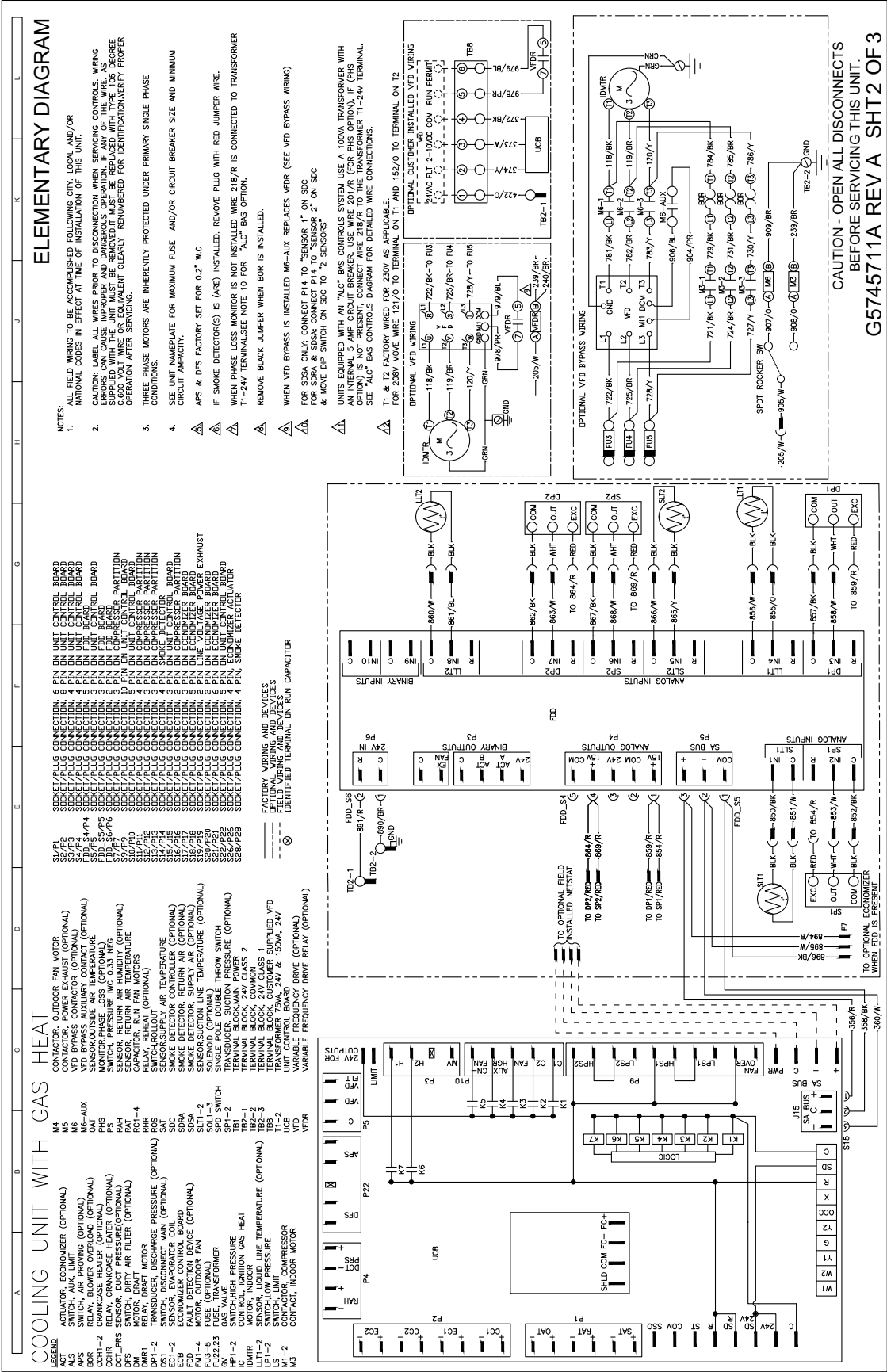




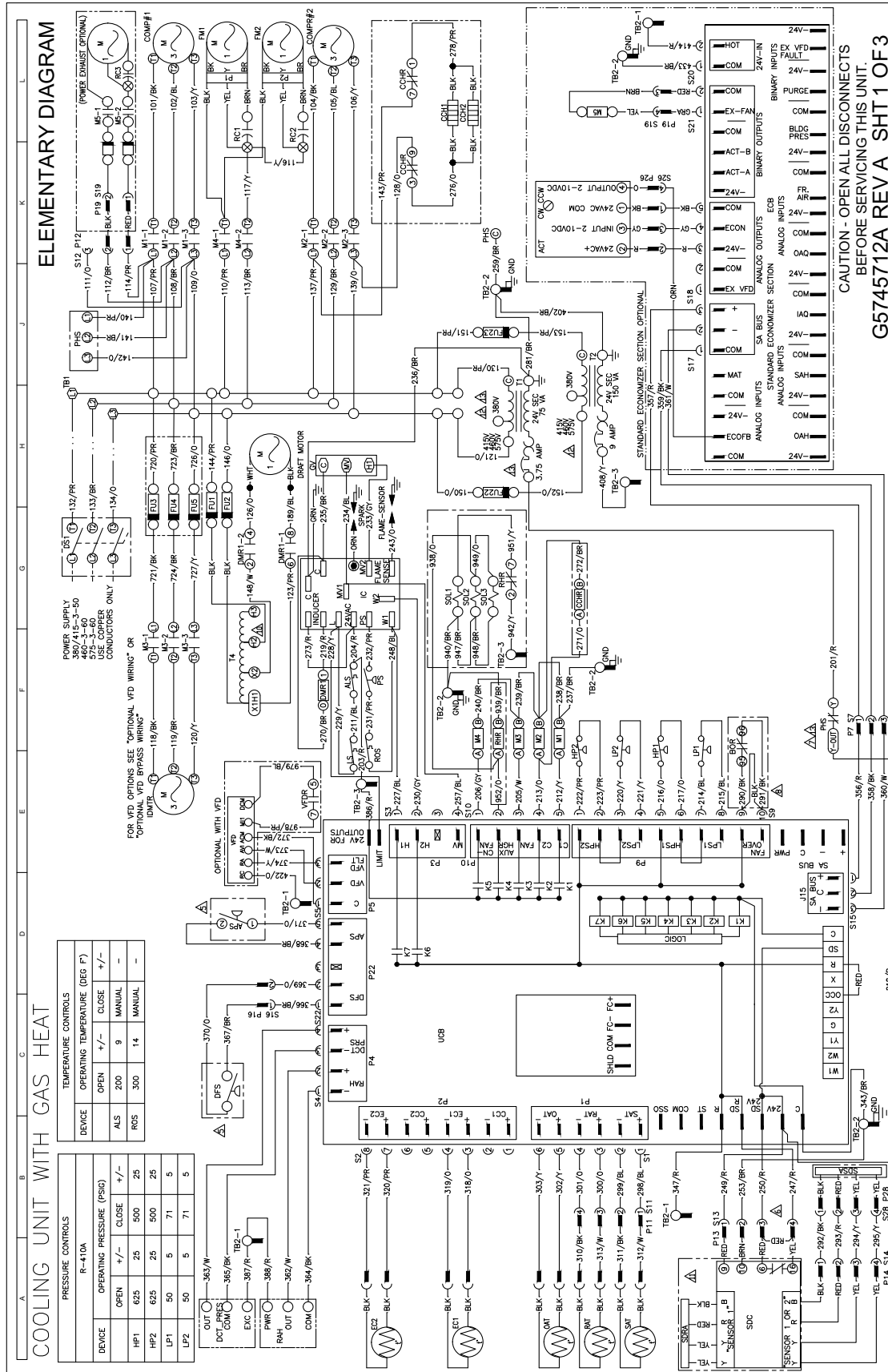
Typical ZJ078-120 Cooling Unit with Gas Heat 208/230 Volt Wiring Diagram



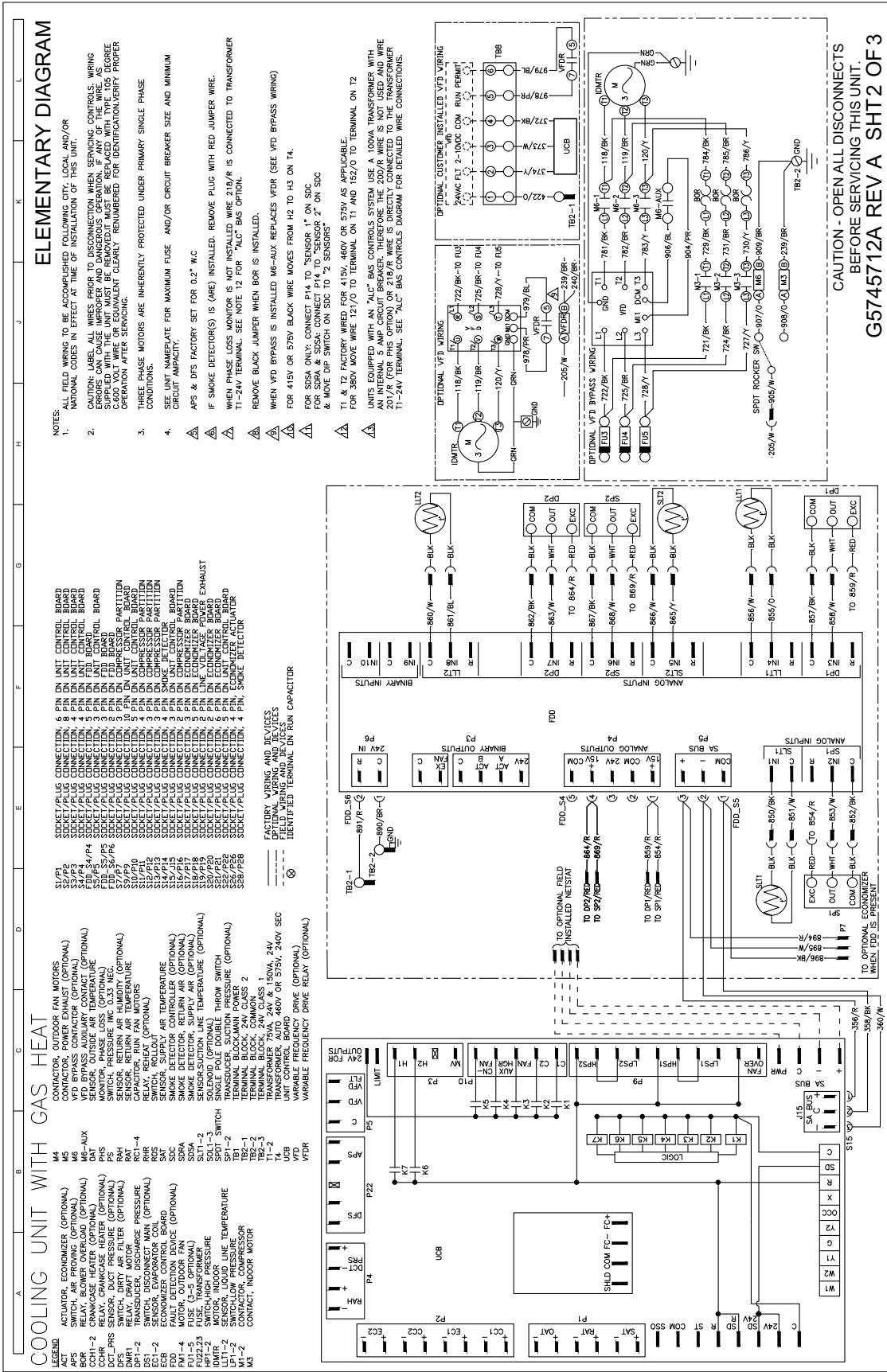
Typical ZJ078-120 Cooling Unit with Gas Heat 208/230 Volt Wiring Diagram (Options)



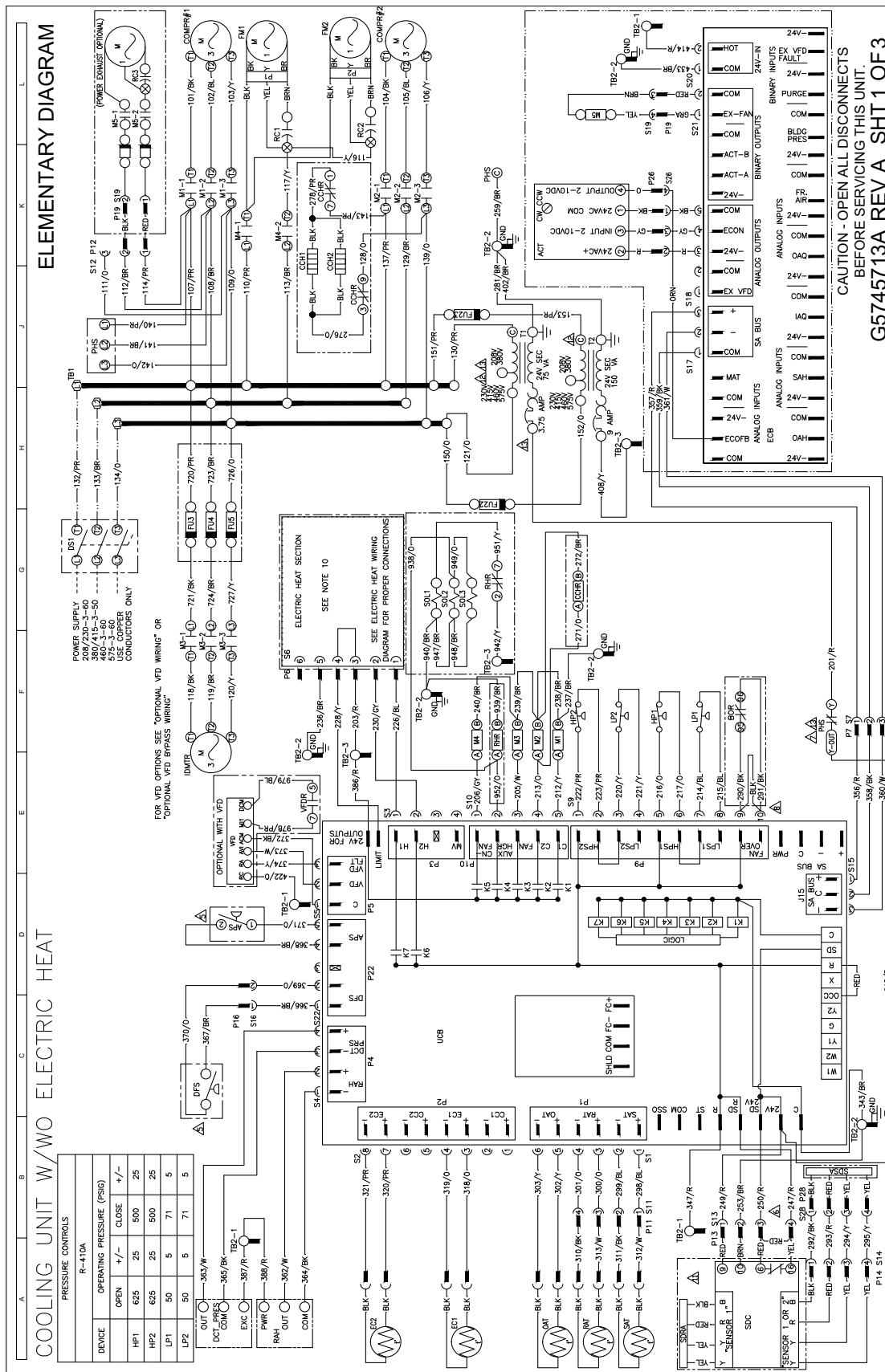
Typical ZJ078-120 Cooling Unit with Gas Heat 460/575 Volt Wiring Diagram



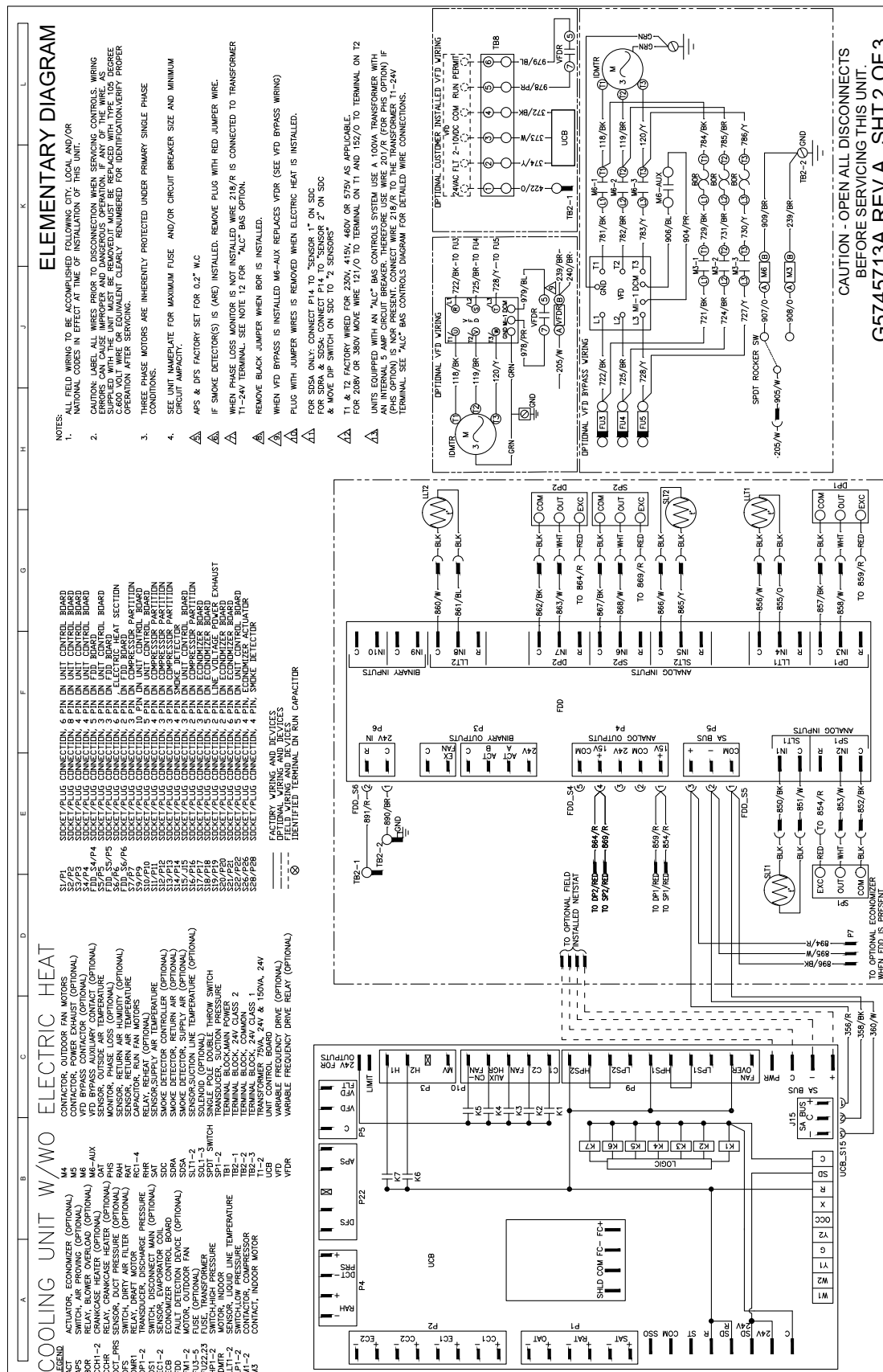
Typical ZJ078-120 Cooling Unit with Gas Heat 460/575 Volt Unit (Options)



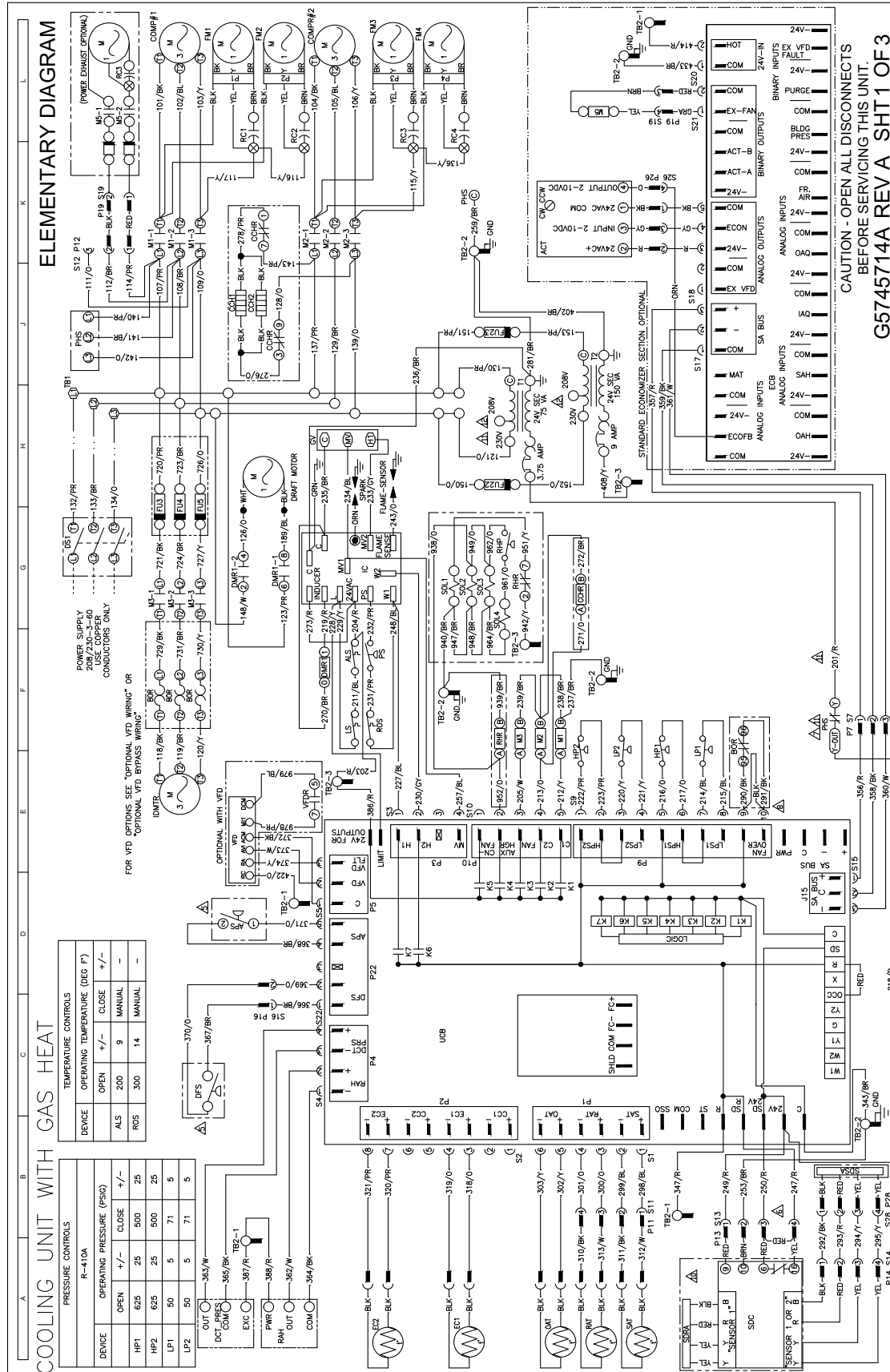
Typical ZJ078-120 Cooling Unit with/without Electric Heat Wiring Diagram



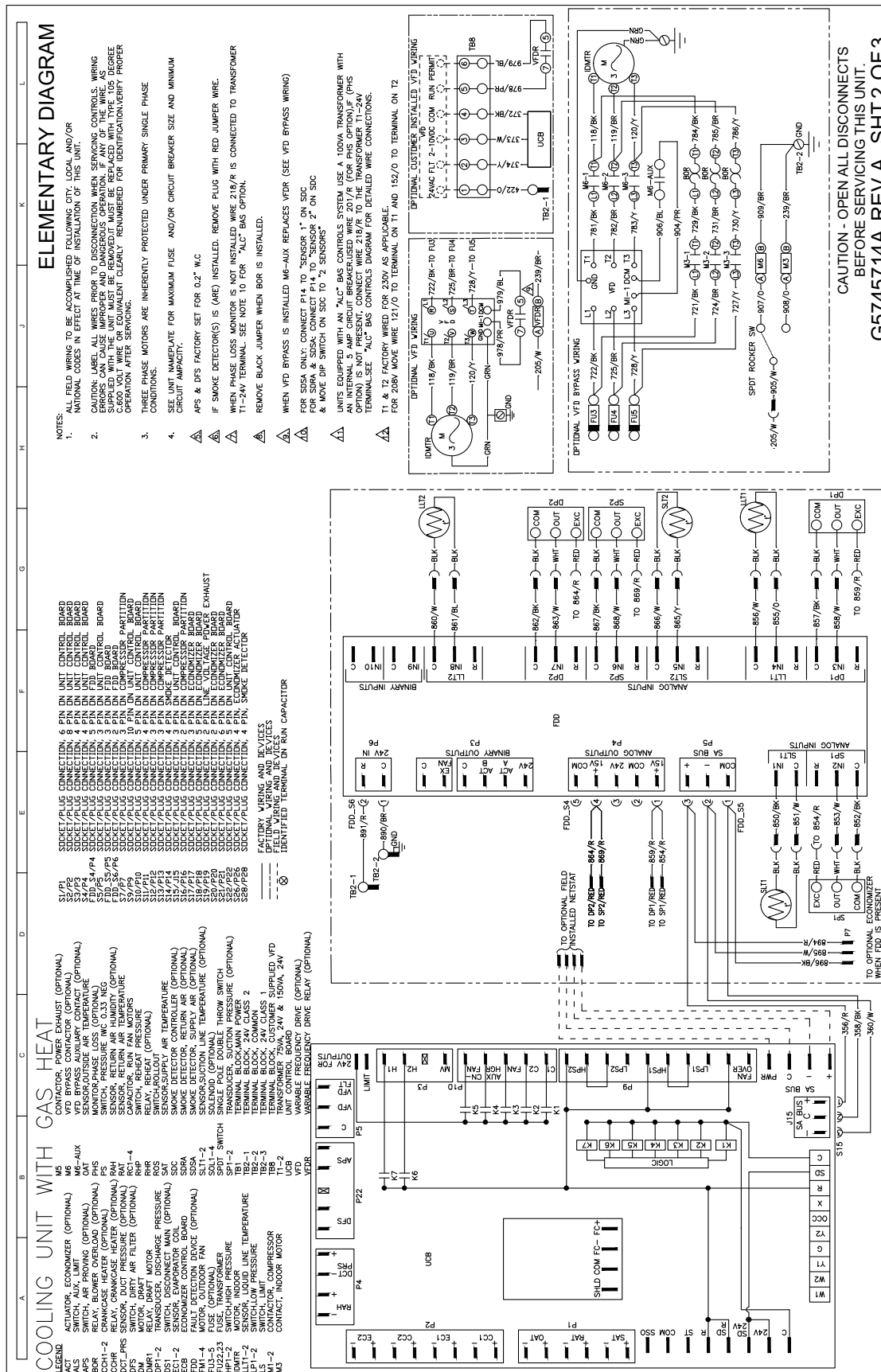
Typical ZJ078-120 Cooling Unit with/without Electric Heat Unit (Options)



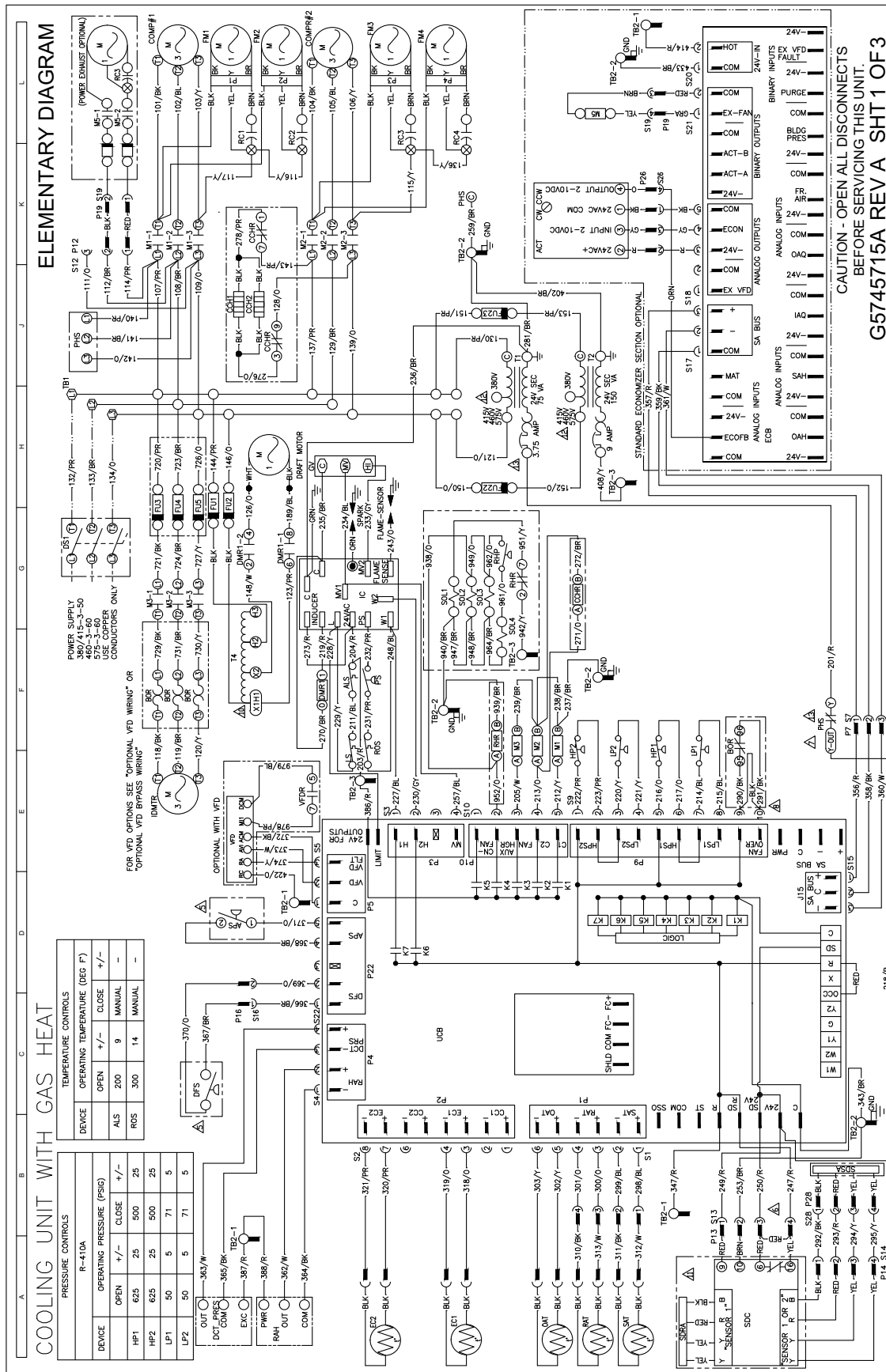
Typical ZJ150 Cooling Unit with Gas Heat 208/230 Volt Wiring Diagram



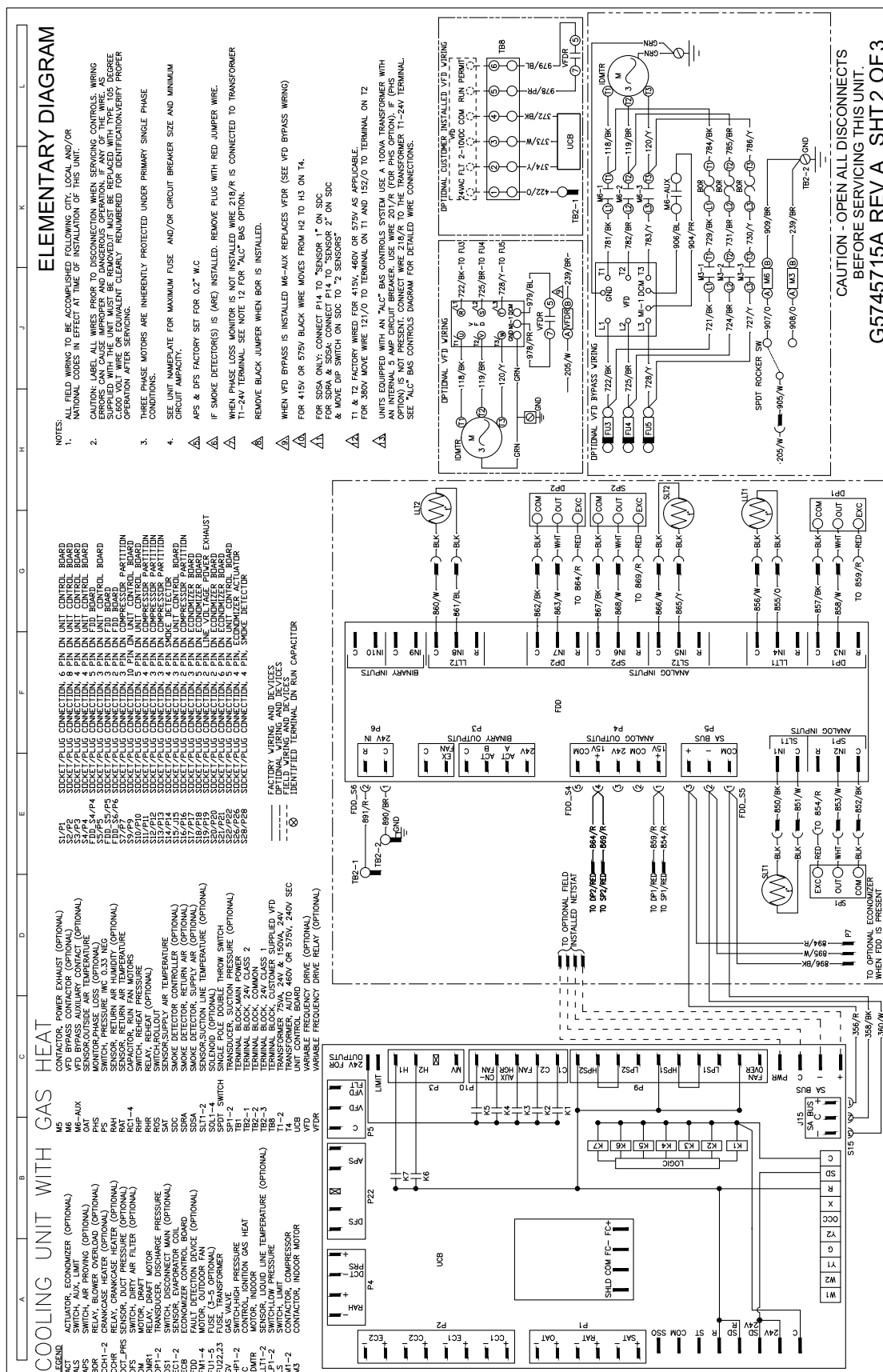
Johnson Controls Ducted Systems

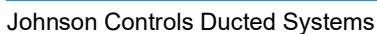


Typical ZJ150 Cooling Unit with Gas Heat 460/575 Volt Wiring Diagram

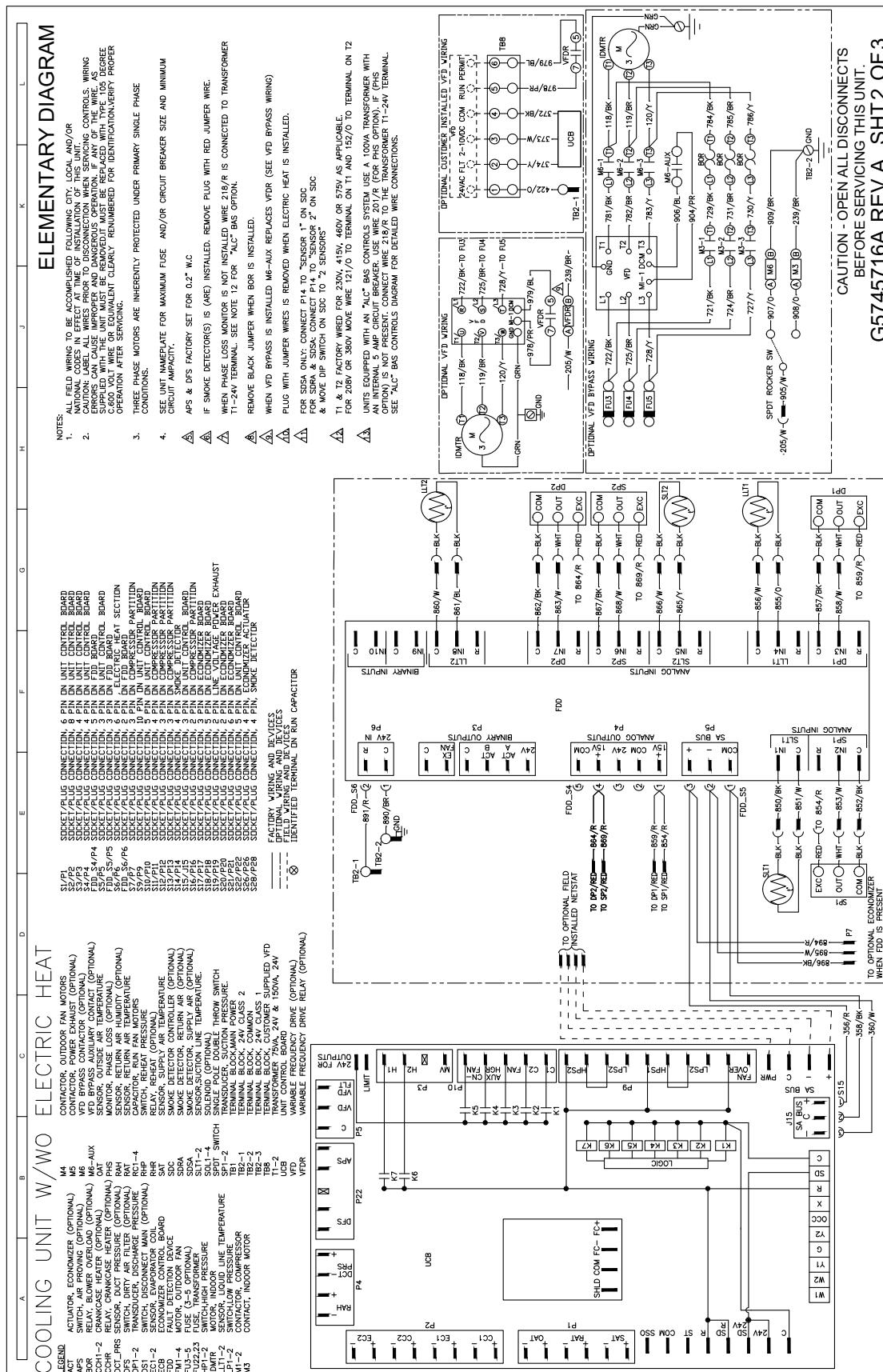


Typical ZJ150 Cooling Unit with Gas Heat 460/575 Volt Unit (Options)

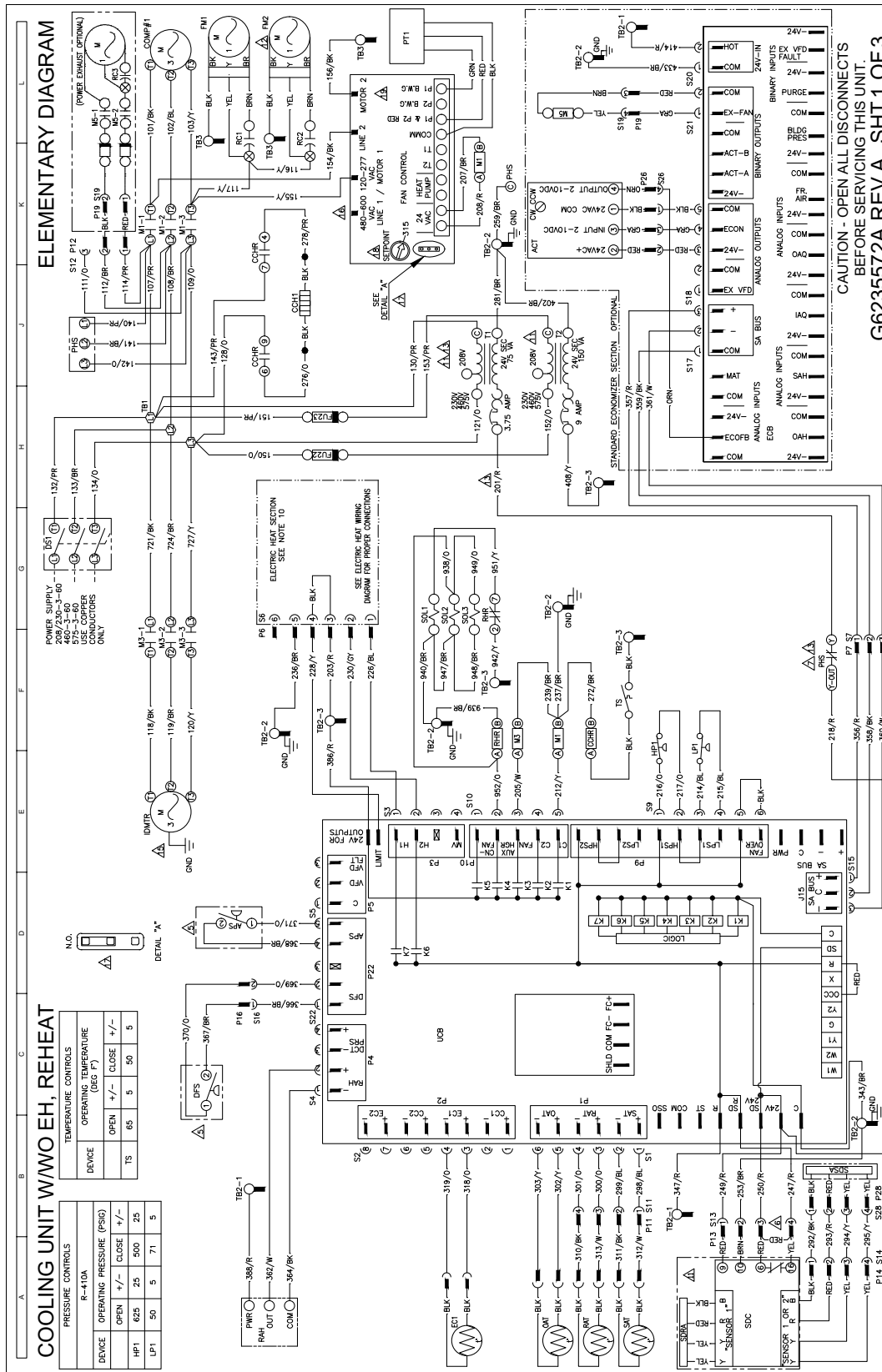




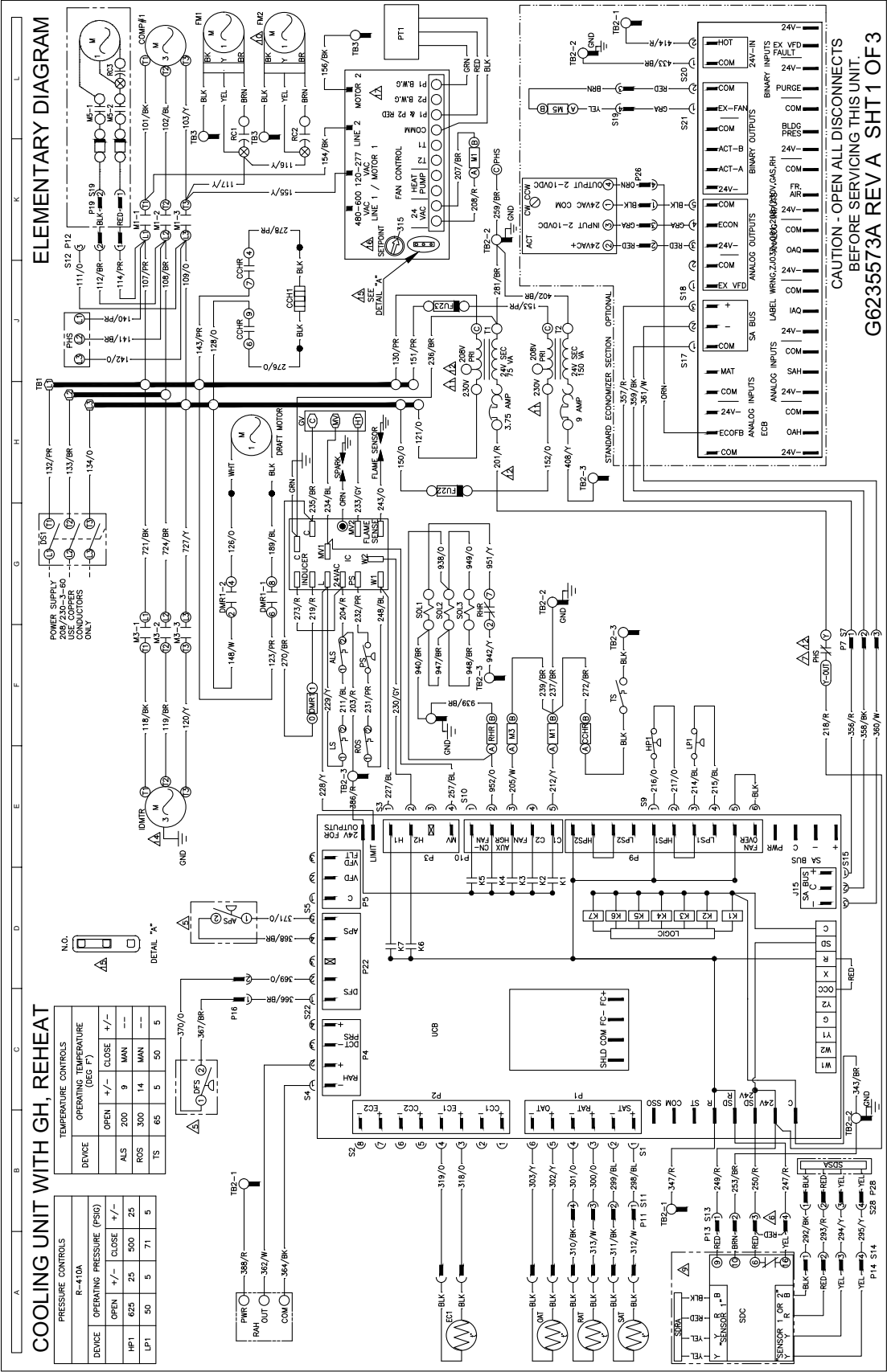
Typical ZJ150 Cooling Unit with/without Electric Heat Unit (Options)



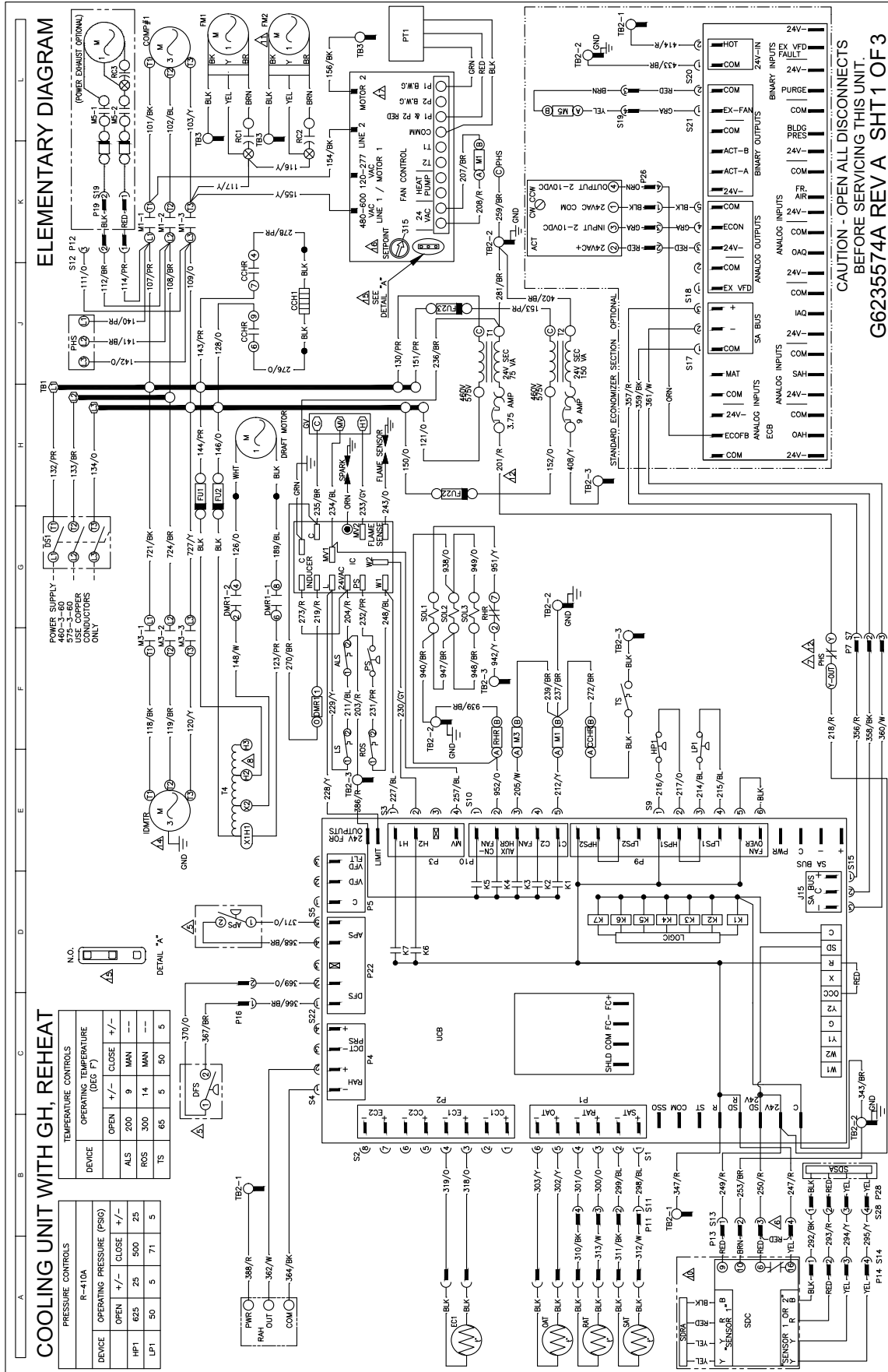
Typical ZJ037-061 cooling unit with/without electric heat with reheat wiring diagram



Typical ZJ037-061 cooling unit with gas heat with reheat 208/230 volt wiring diagram

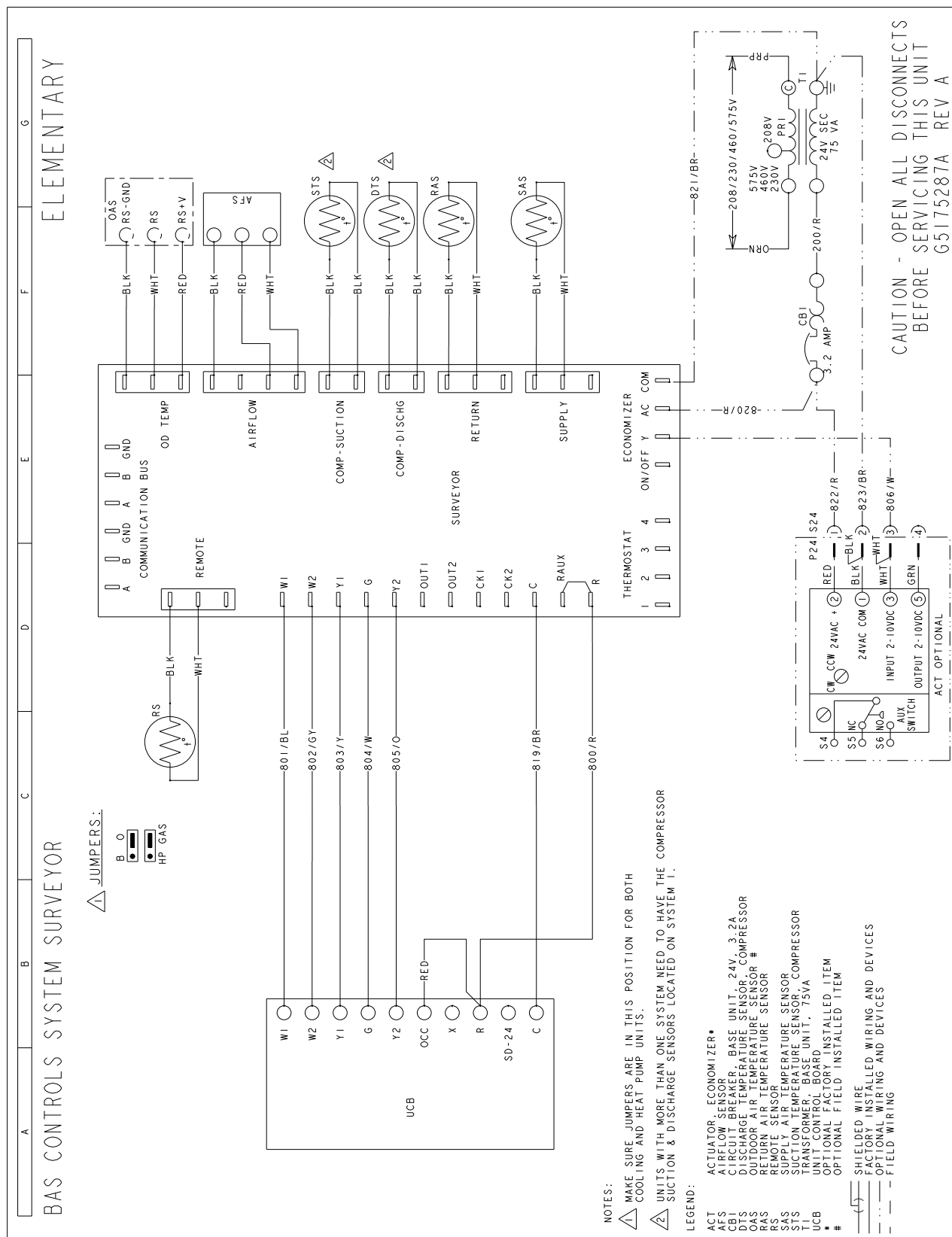


Typical ZJ037-061 cooling unit with gas heat with reheat 460/575 volt wiring diagram

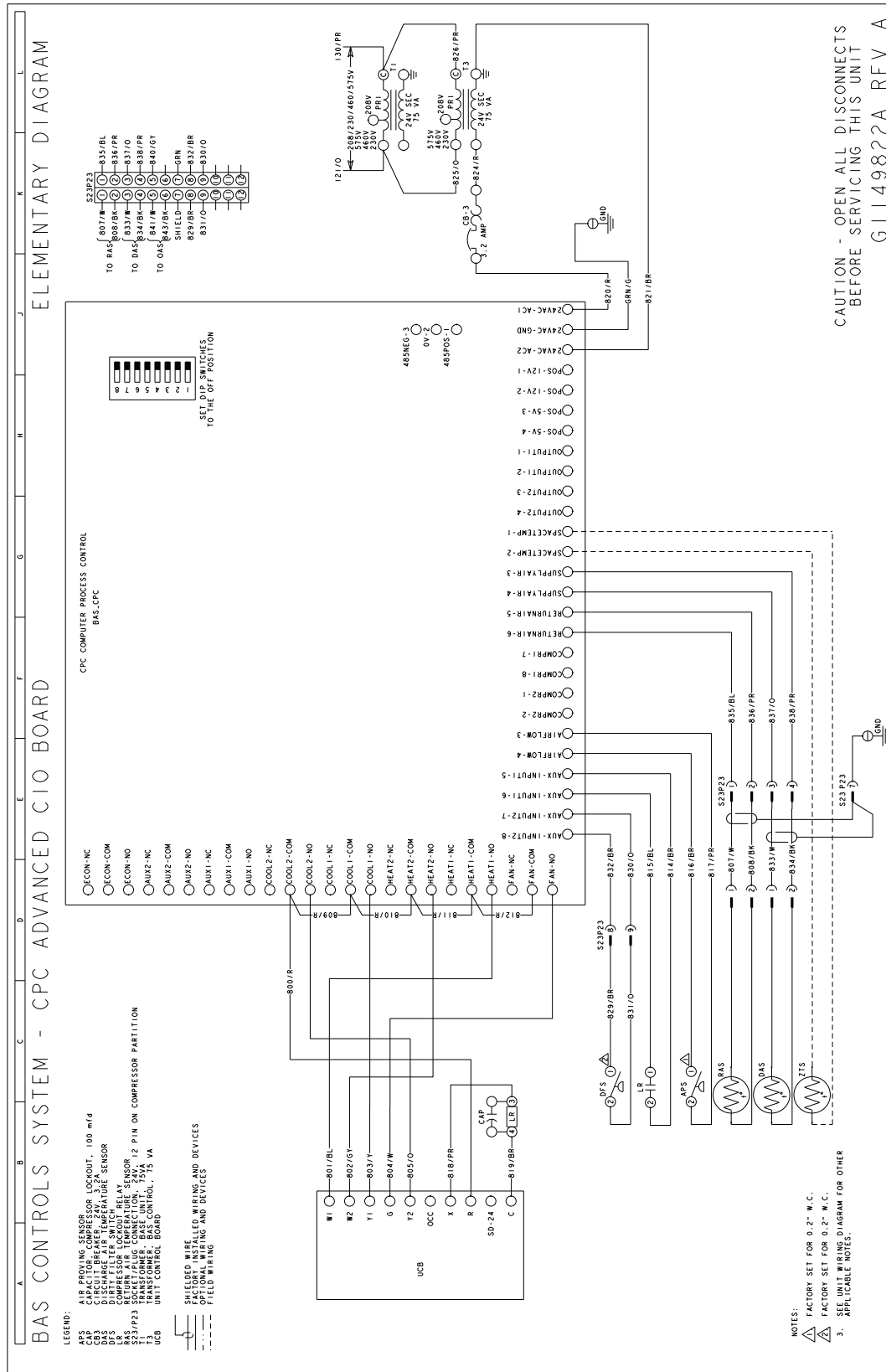


BAS Controls Typical Wiring Diagrams

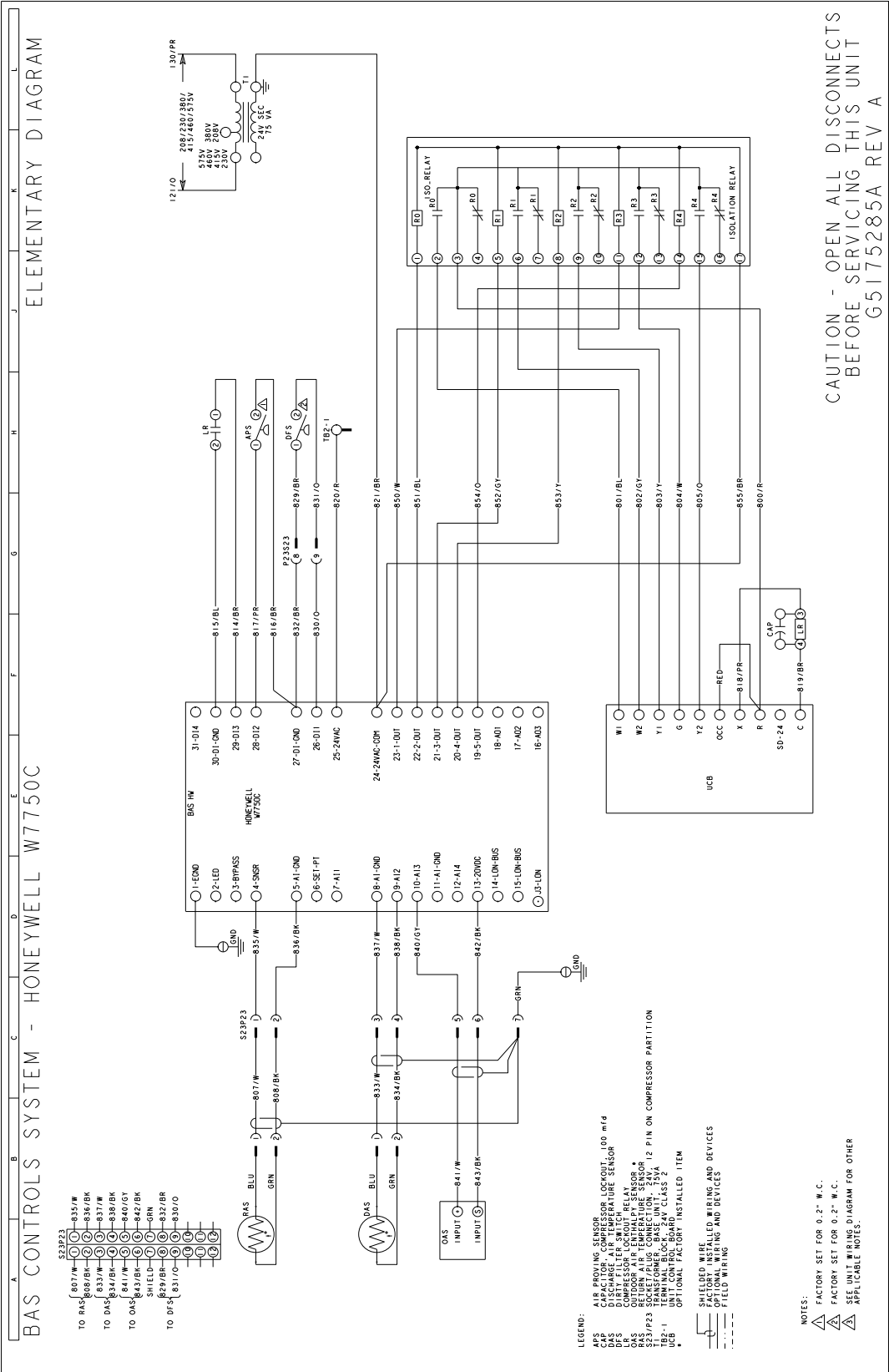
Typical SURVEYOR BAS Control Wiring Diagram



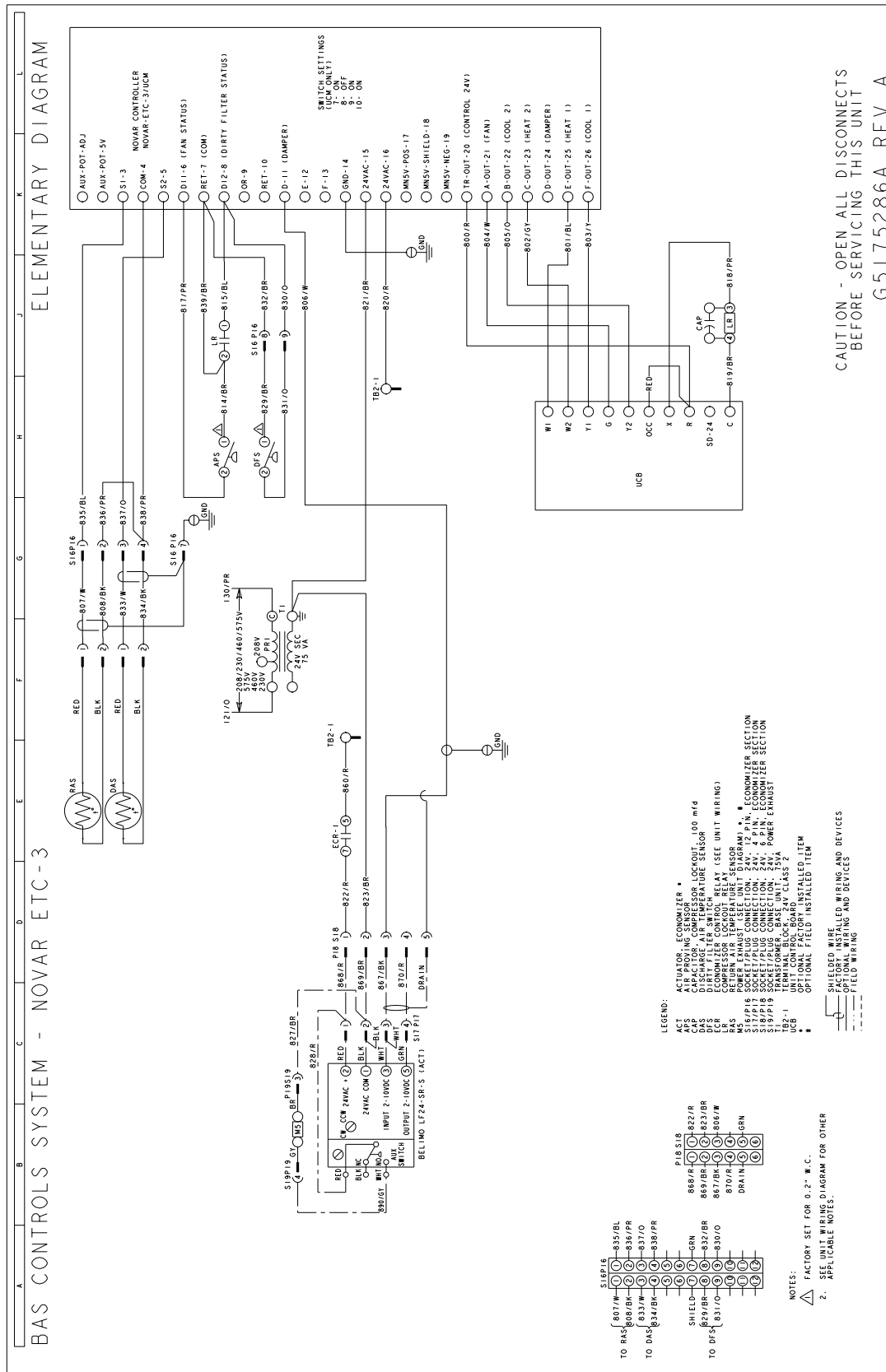
Typical CPC BAS Control Wiring Diagram



Typical HONEYWELL BAS Control Wiring Diagram



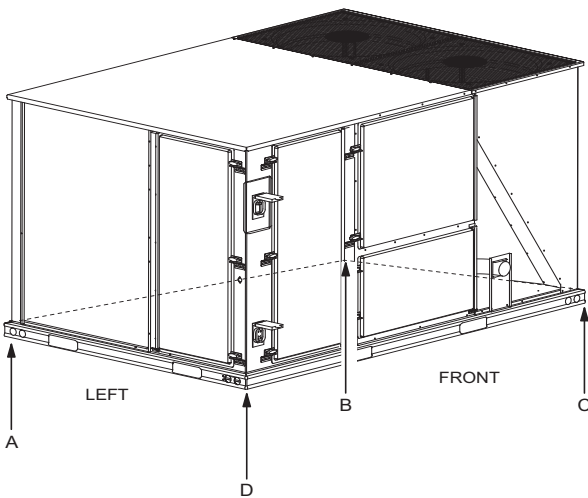
Typical NOVAR BAS Control Wiring Diagram



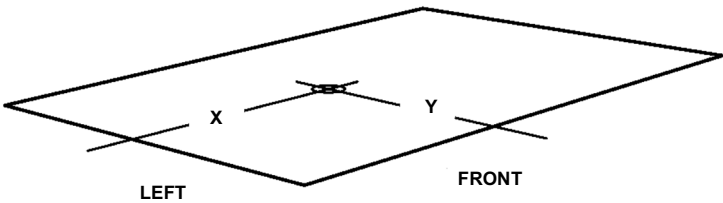
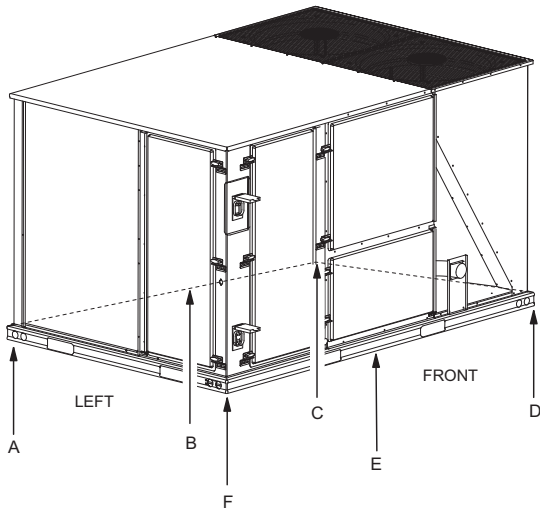
Weights and Dimensions

ZJ037-150 Unit Weights

Unit 4 Point Load Weight



Unit 6 Point Load Weight



ZJ037-150 standard unit weights

Size (ton)	Model	Weight (lbs.)		Center of Gravity		4 Point Load Location (lbs.)				6 Point Load Location (lbs.)					
		Shipping	Operating	X	Y	A	B	C	D	A	B	C	D	E	F
037 (3)	ZJ	724	719	47.25	24.00	137	155	226	200	90	97	106	154	142	131
049 (4)	ZJ	753	748	48.25	25.34	147	174	231	195	95	106	119	159	141	127
061 (5)	ZJ	770	765	47.25	24.75	151	170	236	208	98	107	116	160	148	136
078 (6.5)	ZJ	1038	1033	47.25	24	197	223	325	287	129	140	152	221	204	188
090 (7.5)	ZJ	1125	1120	49.5	23.25	196	245	377	301	126	145	170	261	224	194
102 (8.5)	ZJ	1130	1125	39.9	23.8	250	203	301	370	173	150	131	194	222	256
120 (10)	ZJ	1075	1070	45	24.5	220	225	316	309	146	148	150	212	209	205
150 (12.5)	ZJ	1285	1280	49.75	24.5	234	297	418	330	150	175	206	290	246	212

ZJ037-150 MagnaDry unit weights

Size (ton)	Model	Weight (lbs.)		Center of gravity		4 point load location (lbs.)				6 point load location (lbs.)					
		Shipping	Operating	X	Y	A	B	C	D	A	B	C	D	E	F
037 (3)	ZJ	790	785	47	24	150	170	247	218	98	106	115	168	155	143
049 (4)	ZJ	805	800	48	25	157	186	247	209	102	114	128	170	151	136
061 (5)	ZJ	835	830	47	25	163	185	256	226	107	116	126	174	160	148
078 (6.5)	ZJ	1085	1080	47	24	206	233	340	301	135	146	159	232	213	196
090 (7.5)	ZJ	1085	1080	48	25	212	251	334	282	138	154	172	229	204	183
102 (8.5)	ZJ	1070	1065	47	25	210	237	328	290	137	148	161	223	205	189
120 (10)	ZJ	1090	1085	45	26	232	237	311	305	154	156	159	208	205	202
150 (12.5)	ZJ	1385	1380	50	25	253	320	451	356	162	189	222	313	266	228

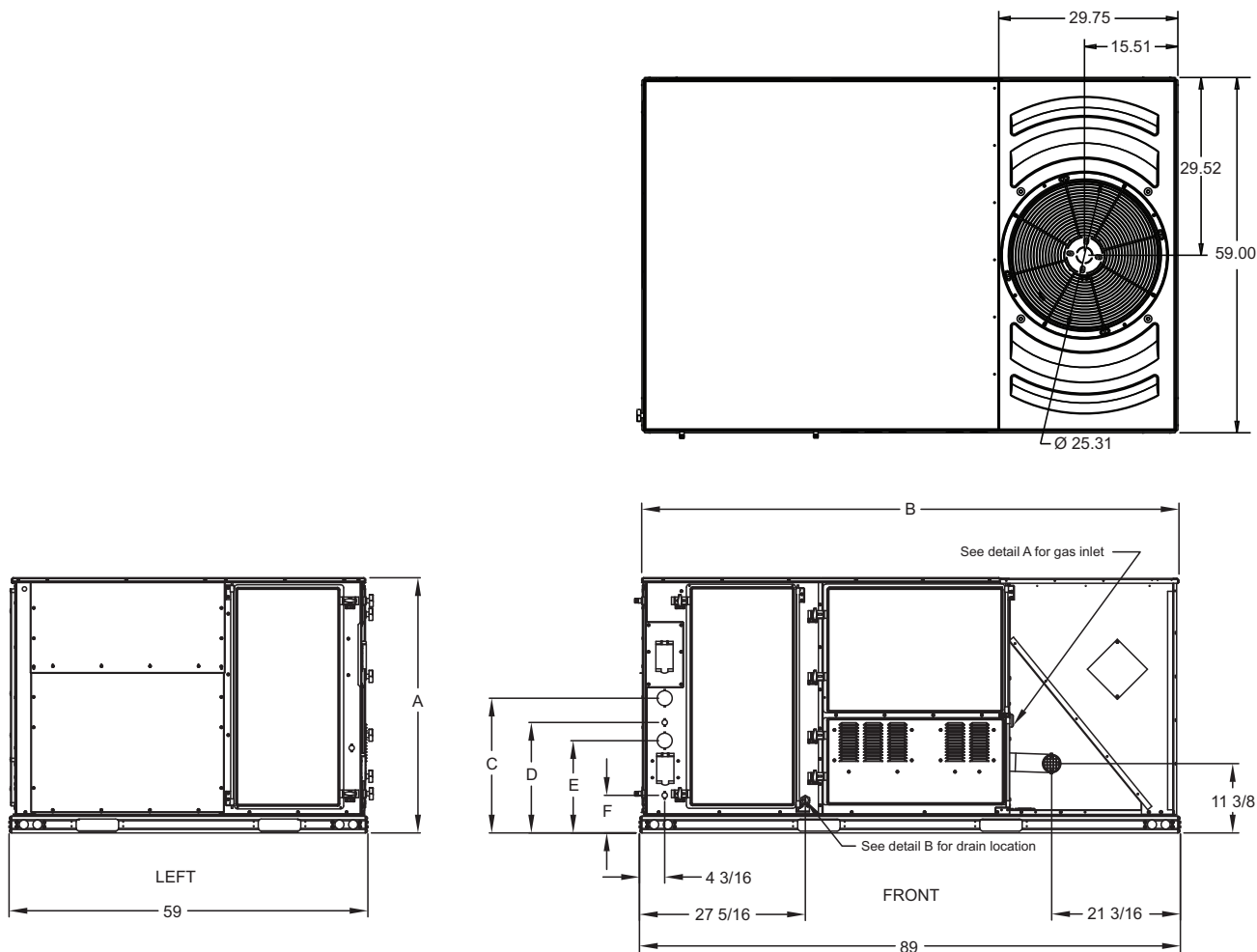
ZJ037-150 Unit Accessory Weights

Unit Accessory	Weight (lbs.)	
	Shipping	Operating
Economizer	90	85
Power Exhaust	40	35
Electric Heat ¹	49	49
Gas Heat ²	110	110
Variable Frequency Drive ³	30	30

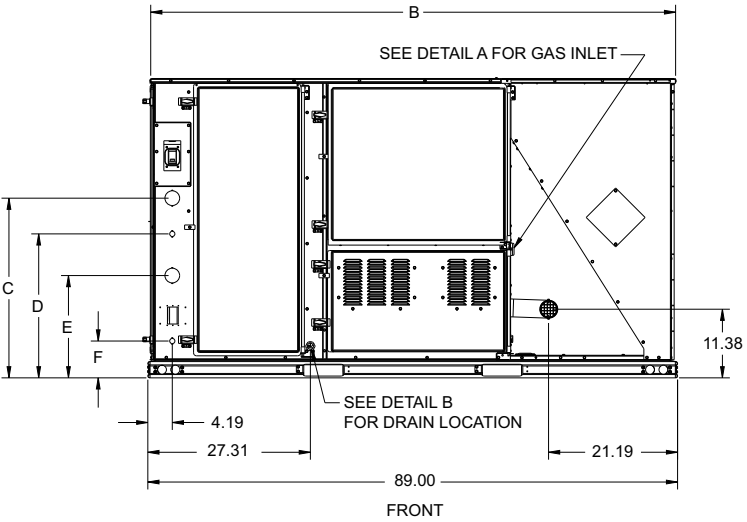
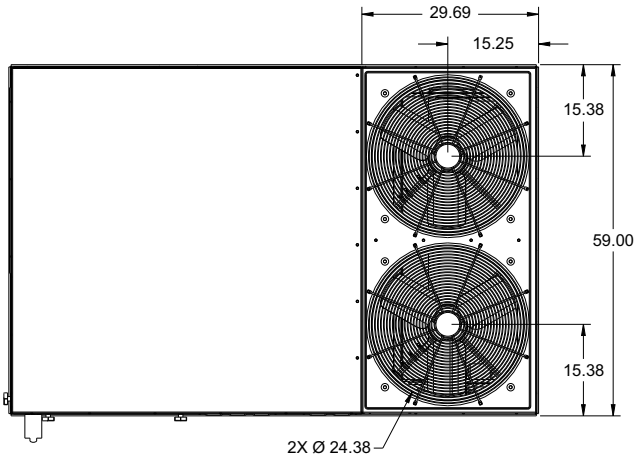
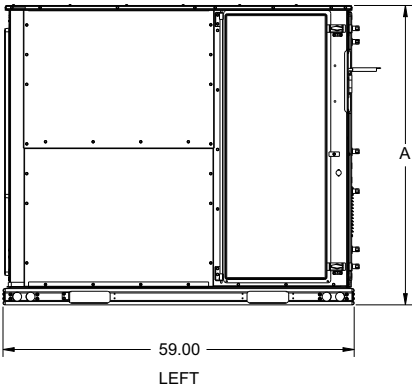
1. Weight given is for the maximum heater size available (54KW).
2. Weight given is for the maximum number of tube heat exchangers available (8 tube).
3. Weight includes mounting hardware, controls and manual bypass option (6-1/2 to 12-1/2 ton only).

ZJ037-150 Unit Dimensions

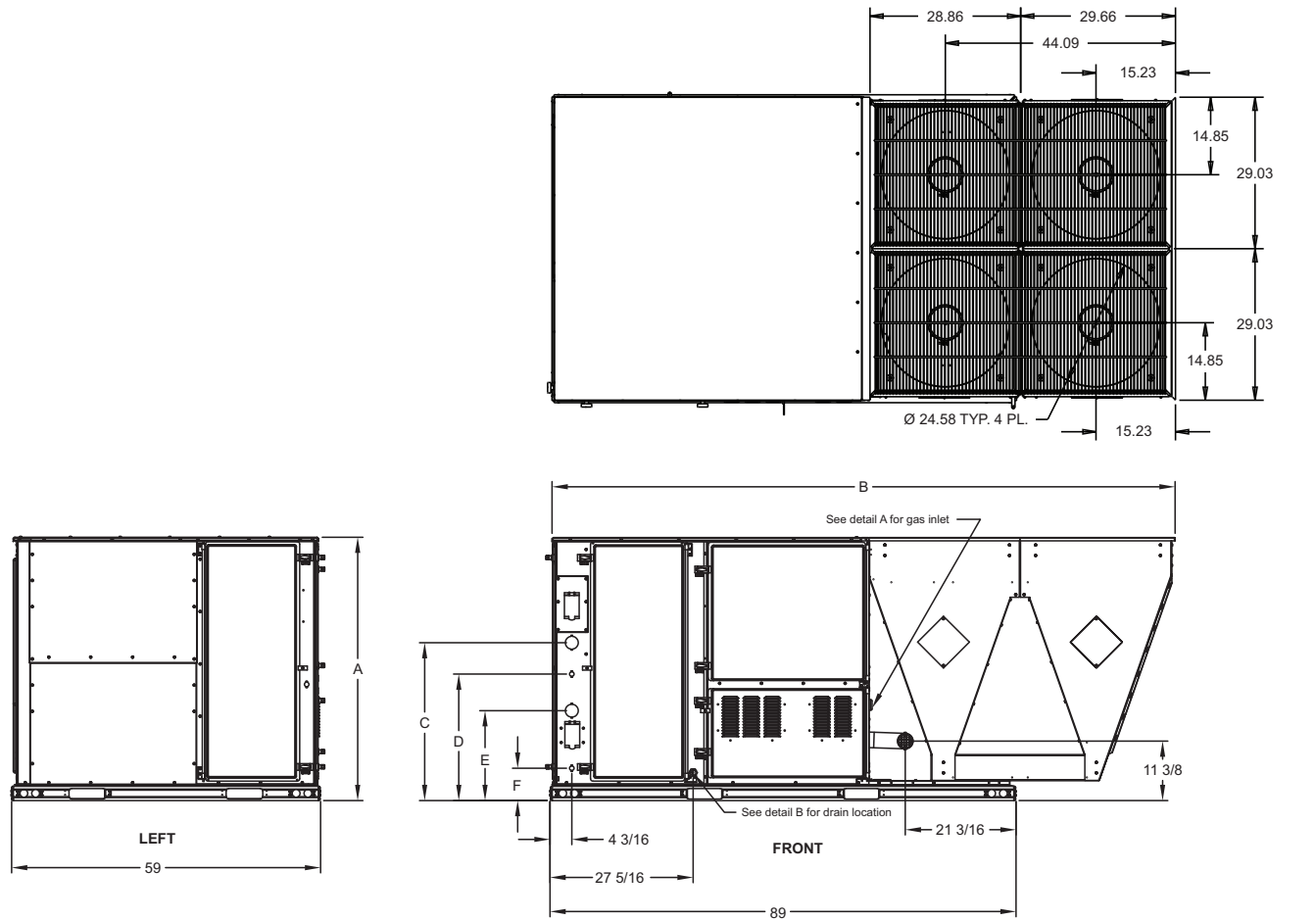
ZJ037-049



ZJ 061 and ZJ078 thru 120

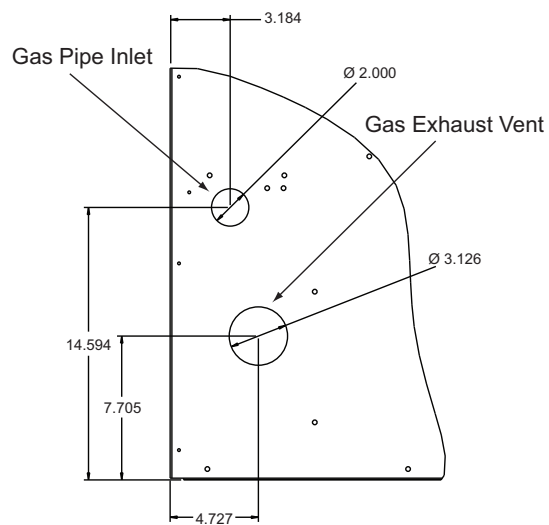
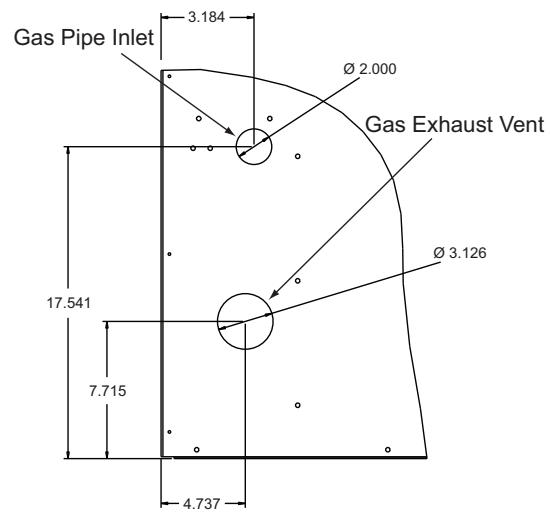
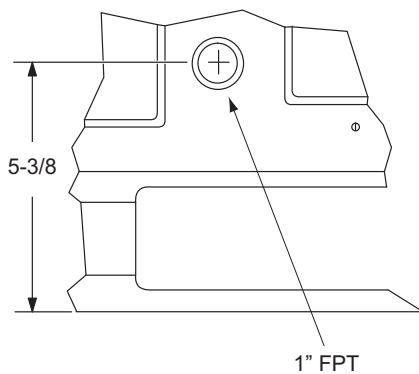


ZJ150



ZJ037-150 Unit Physical Dimensions

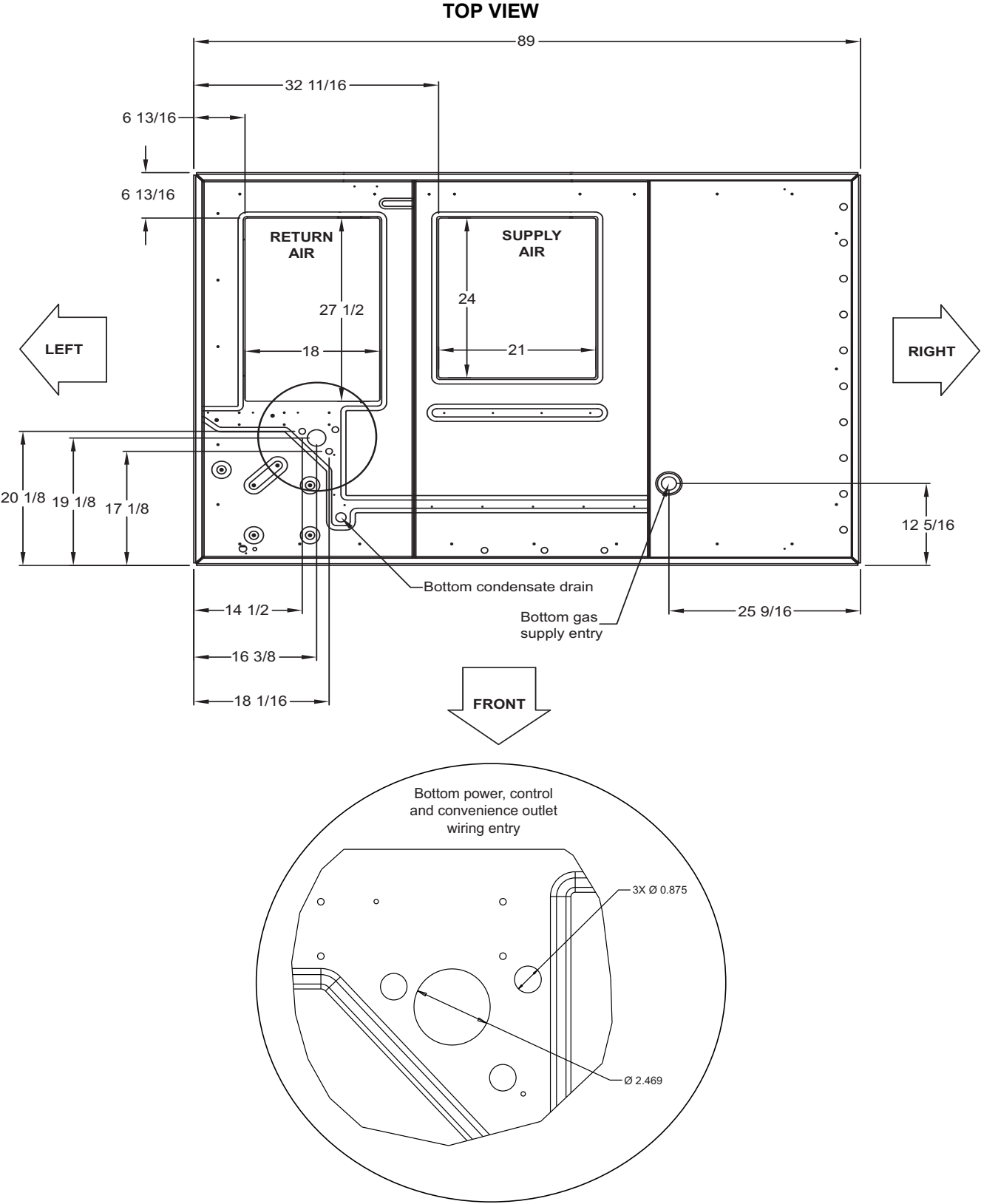
Unit Model Number	Dimension (in.)					
	A	B	C	D	E	F
ZJ037, 049, 061	42	89	22 1/8	18 3/16	15 3/16	6 3/16
ZJ078, 090, 102, 120	50 3/4	89	30 3/16	24 3/16	17 3/16	6 3/16
ZJ150	50 3/4	119 1/2	30 3/16	24 3/16	17 3/16	6 3/16

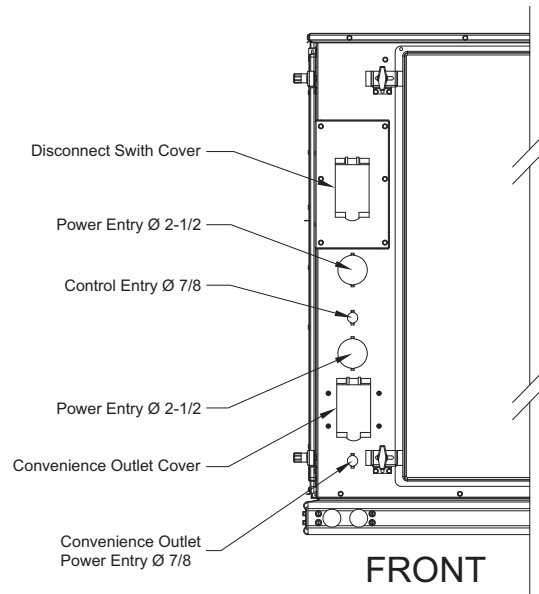
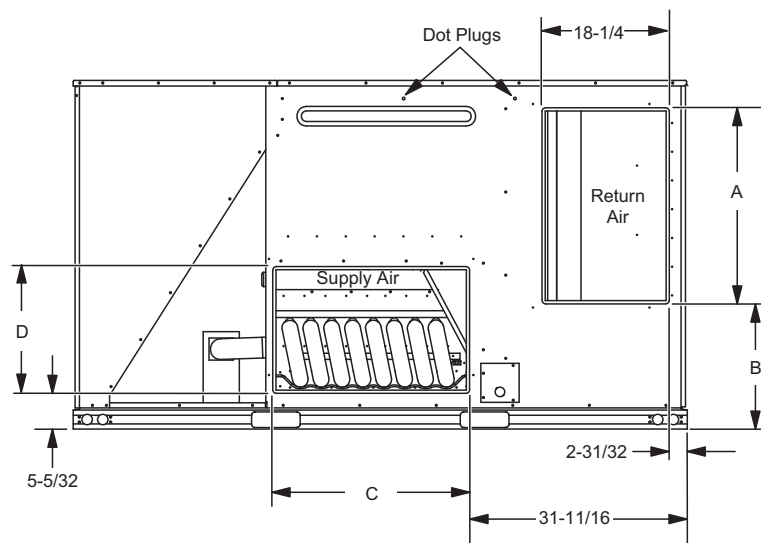
Detail A**42" CABINET****50 3/4" CABINET****Detail B****ZJ037-150 Unit Clearances**

Direction	Distance (in.)	Direction	Distance (in.)
Top ¹	72	Right	12
Front (037-061)	36	Left	36
Front (078-150)	48	Bottom ²	0
Rear	36		

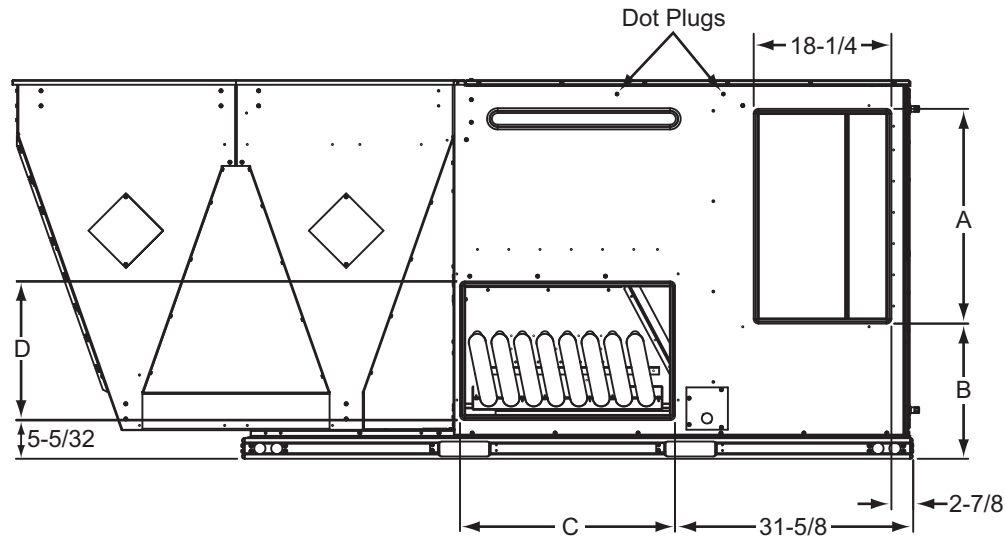
1. Units must be installed outdoors. Over hanging structure or shrubs should not obscure condenser air discharge outlet.
2. Units may be installed on combustible floors made from wood or class A, B or C roof covering materials.

ZJ037-150 Unit Bottom Duct Openings



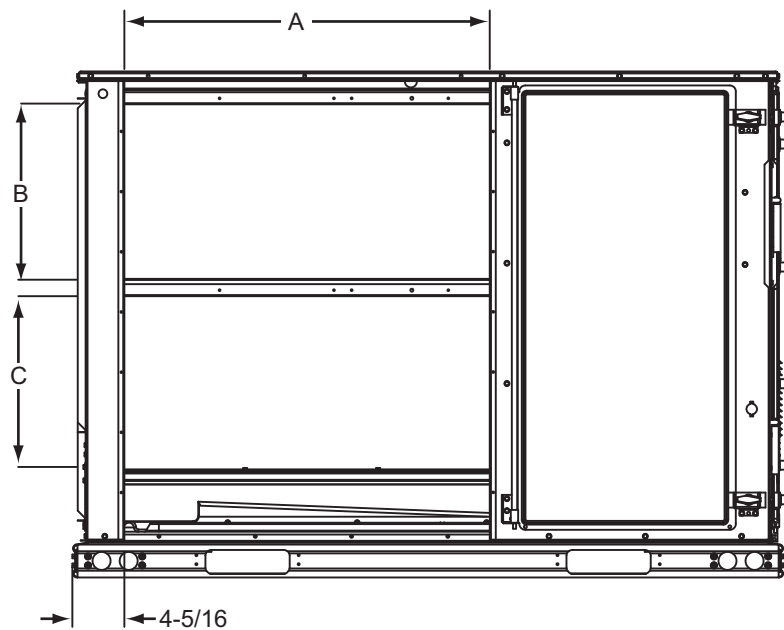
ZJ037-150 Unit Electrical Entry**ZJ037-120 Unit Side Duct Openings**

ZJ150 Unit Side Duct Openings



ZJ037-150 Side Duct Dimensions

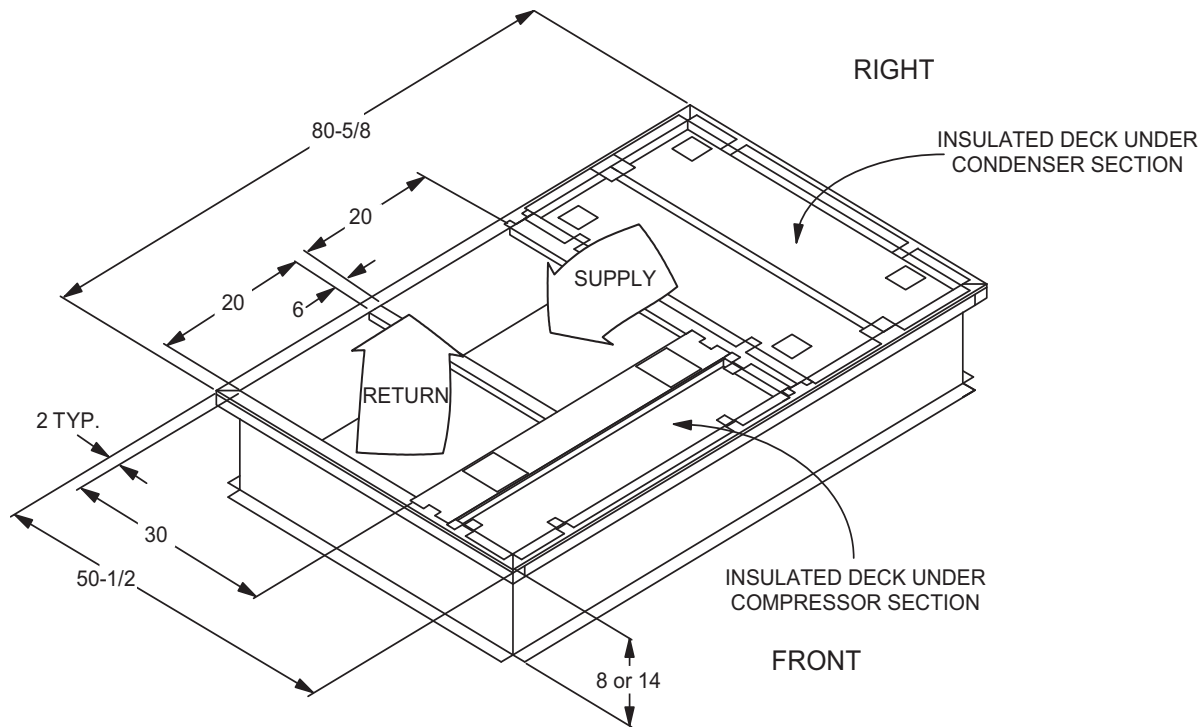
Unit Model Number	Dimension (in.)			
	A	B	C	D
ZJ037, 049, 061	27 3/4	12 1/16	27 1/2	16
ZJ078, 090, 102, 120	28 1/4	18 1/16	28 1/4	18 1/4
ZJ150	28 1/4	18 1/16	28 1/4	18 1/4

ZJ037-150 Unit Left/End Duct Opening**ZJ037-150 Left/End Duct Dimensions**

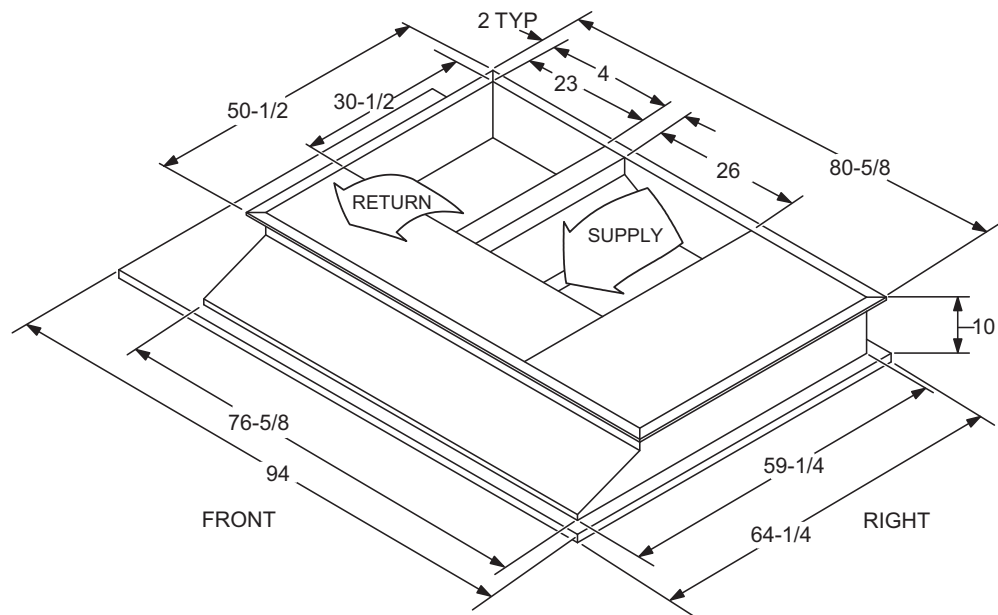
Unit Model Number	Dimension (in.)		
	A	B	C
ZJ037, 049, 061	30.357	13.365	22.516
ZJ078, 090, 102, 120	30.358	22.580	22.330
ZJ150	30.358	22.580	22.330

ZJ037-150 Unit Accessory Dimensions

ZJ037-150 Roof Curb



ZJ037-150 Transition Roof Curb



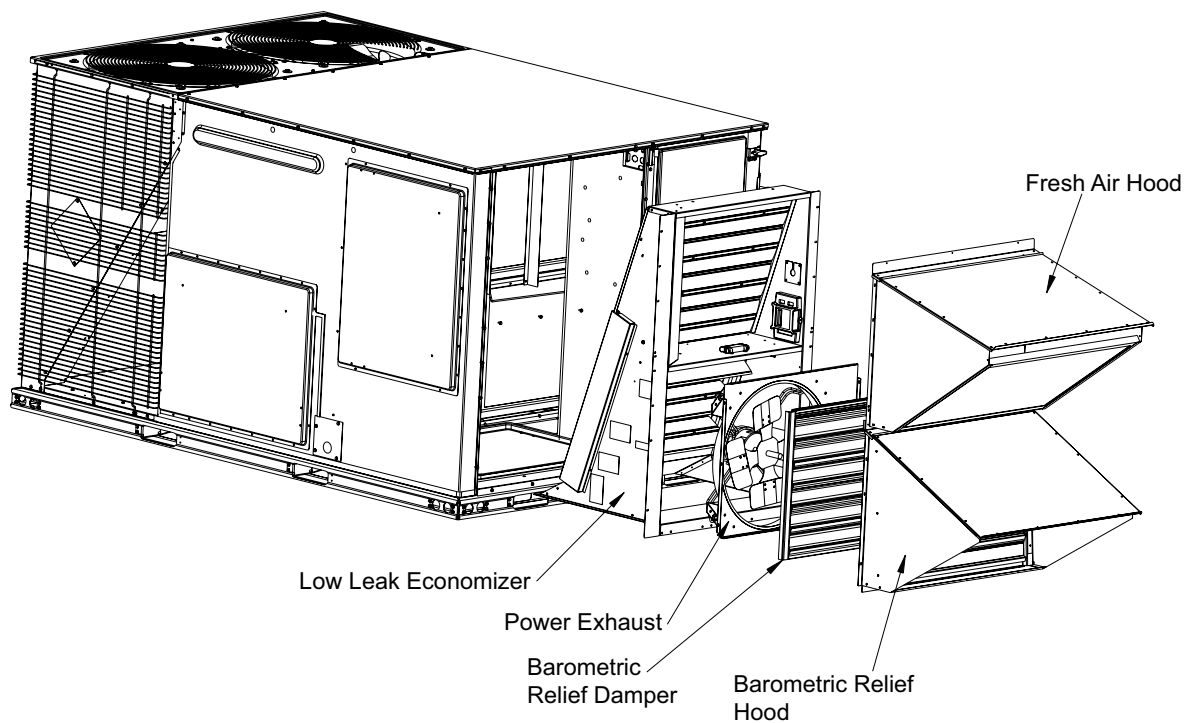
Economizer Options

Application	Cabinet Height	Description	Model
Side Return	All	Horizontal economizer without barometric relief	2EE04706924 ¹
Downflow, End Return Horizontal or Bottom Return Vertical	42 in.	Economizer, 42 in. tall cabinet	2EE04717425 ²
		Economizer, 42 in. tall cabinet, BAS Ready	2EE04709725 ²
	50 in.	Economizer, 50 in. tall cabinet	2EE04717625 ²
		Economizer, 50 in. tall cabinet, BAS Ready	2EE04709825 ²

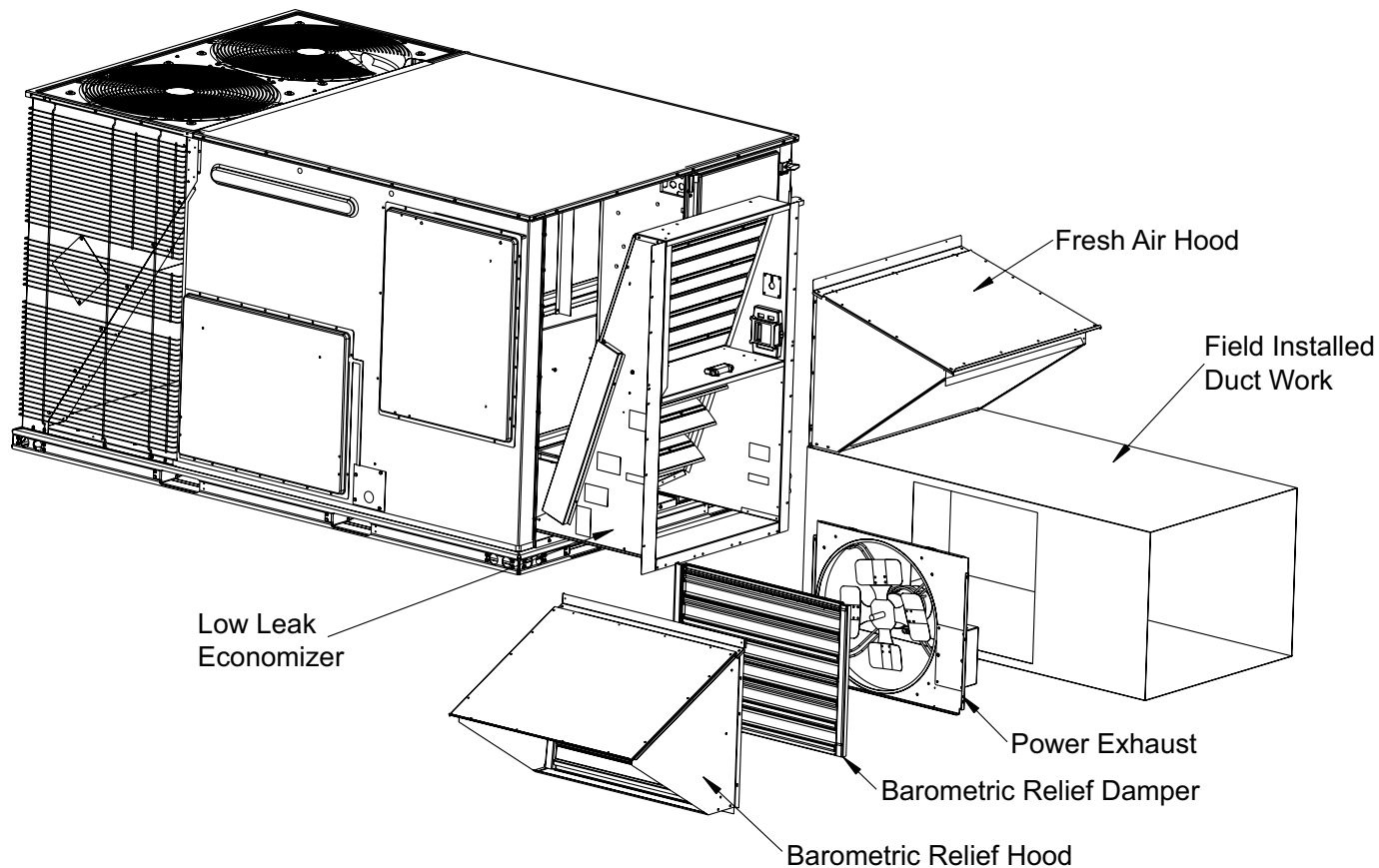
1. Barometric relief must be ordered separately and installed in duct work.

2. Includes fresh air hood, exhaust hood and barometric relief.

Economizer Downflow W/Power Exhaust



Economizer End Return W/Power Exhaust



Field Installed Horizontal Economizer W/Power Exhaust

