



Heating and Air Conditioning

TECHNICAL GUIDE

R-410A

ZH/ZJ/ZR SERIES

3 - 12-1/2 TON

60 Hertz



ZH/ZJ/ZR 3 THROUGH 10 TON



ZH 12-1/2 TON



ZJ/ZR 12-1/2 TON



Description

ASHRAE 90.1 COMPLIANT

YORK® Predator® units are convertible single packages with a common footprint cabinet and common roof curb for all 3 through 12-1/2 ton models. All 6-1/2 through 12-1/2 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 Predator® 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.

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.

Predator® 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.

All units provide constant supply air volume. A variable air volume (VAV) option, featuring a variable frequency drive, is available on 6-1/2 through 12-1/2 ton ZH/ZJ models only.

Tested in accordance with:



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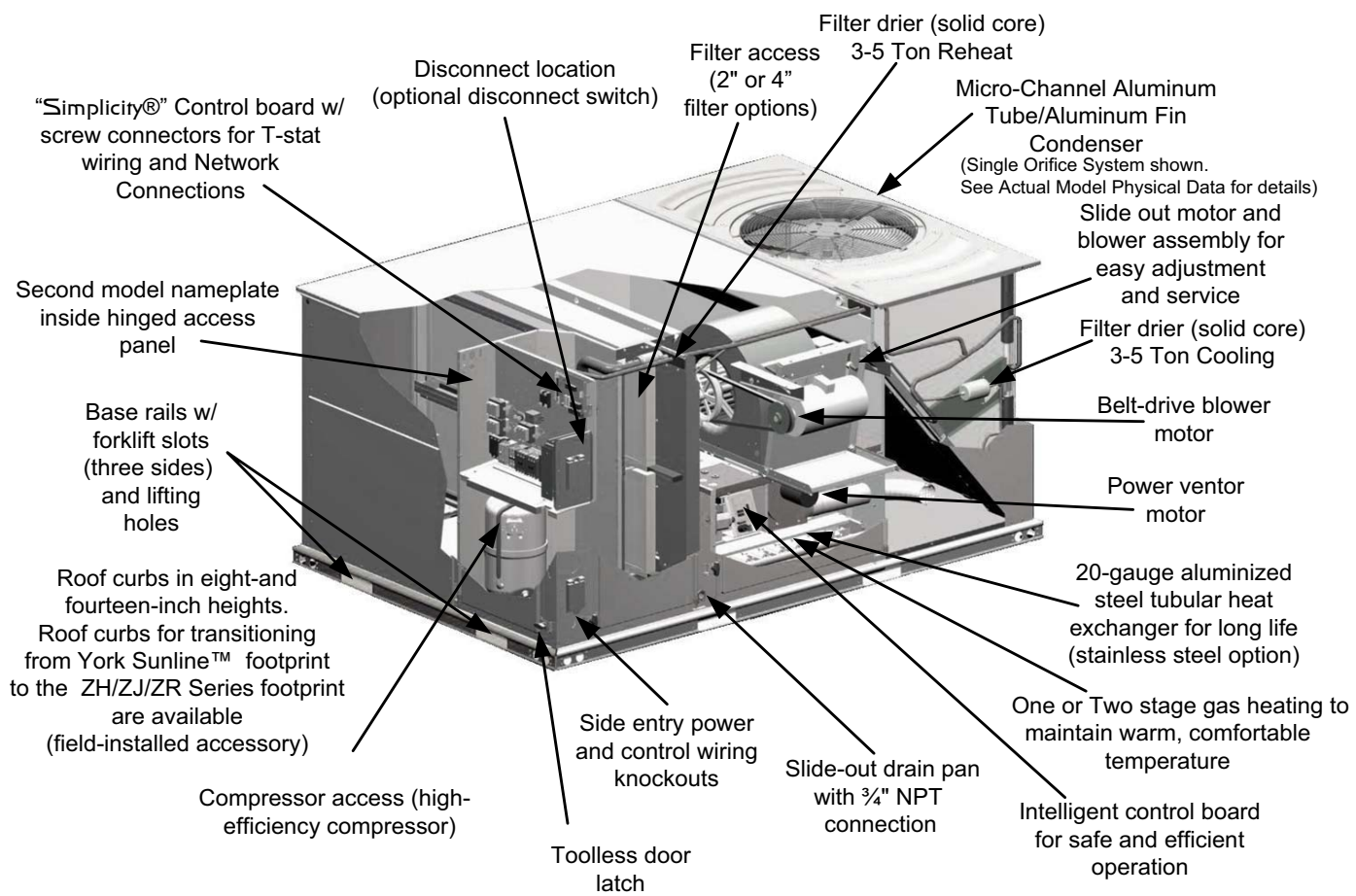
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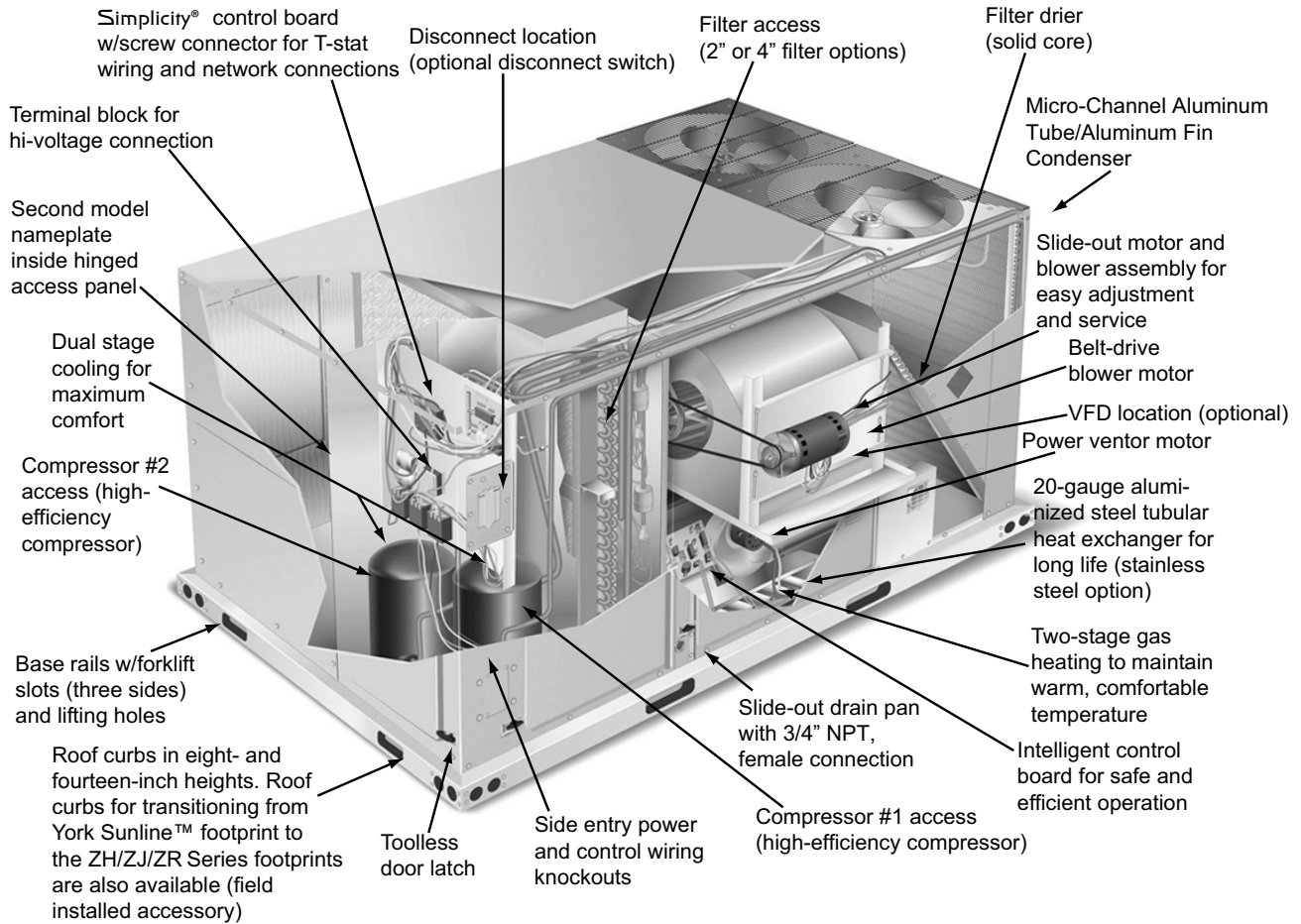
Economizer Options 204

Component Location

Cooling With Gas Heat (3 Through 5 Ton)



Cooling With Gas Heat (6 1/2 Through 10 Tons)



Nomenclature

3-12.5 Ton York® Model Number Nomenclature

Z H 090 N10 A 2 A AA 6 0 1 2 4 A											
Product Category Z = A/C, Single Pkg., R-410A			Product Style A = Style A B = Style B C = Style C								
Product Identifier H = 11.7-11.8 EER J = 12.2 EER R = Reheat			Configuration Options (not required for all units) These four digits will not be assigned until a quote is requested, or an order placed. ☐ SS Drain Pan ☐ CPC Controller, DFS, APS ☐ Johnson Controller UNT 1126 (N2 protocol), DFS, APS ☐ Honeywell Controller, DFS, APS ☐ Novar Controller, DFS, APS ☐ Simplicity IntelliComfort II Controller ☐ Simplicity IntelliComfort II Controller w/Simplicity@LINC ☐ York Commercial Comfort System (YCCS) Rtu Controller ☐ Hot Gas Bypass (Standard on VAV, Optional on CV) ☐ IntelliSpeed with VFD ☐ IntelliSpeed, VFD and Manual Bypass ☐ IntelliSpeed, VFD Ready (for customer-provided, field-installed drive) ☐ Variable Air Volume, VFD (not available with factory installed BAS options) ☐ Variable Air Volume, VFD with Simplicity@LINC (not available with factory installed BAS options) ☐ Variable Air Volume, VFD and Manual Bypass (not available with factory installed BAS options) ☐ Variable Air Volume, VFD and Manual Bypass with Simplicity@LINC (not available with factory installed BAS options) ☐ Variable Air Volume, VFD (BAS ready) ☐ Variable Air Volume, VFD and Manual Bypass (BAS ready) ☐ Variable Air Volume, VFD Ready (for customer-provided, field-installed drive) ☐ Variable Air Volume, VFD Ready with Simplicity@LINC (for customer-provided, field-installed drive) ☐ 2" Pleated Filters, MERV 7 ☐ 4" Pleated Filters, MERV 13 ☐ BAS Ready Economizer (2-10 V.D.C. Actuator without a Controller) ☐ Any Combination of Additional Options that Don't Have an Option Code Pre-assigned								
Nominal Cooling Capacity 037 = 3 Ton 049 = 4 Ton 061 = 5 Ton 078 = 6.5 Ton 090 = 7.5 Ton 102 = 8.5 Ton 120 = 10.0 Ton 150 = 12.5 Ton			Product Generation 6 = Sixth Generation								
Heat Type and Nominal Heat Capacity (Unit Size Allowed) C00 = Cooling Only. No heat installed Single Stage Natural Gas Heat Options A05 = 49 MBH Output Aluminized Steel, Single Stage (037, 049) A07 = 65 MBH Output Aluminized Steel, Single Stage (037, 049, 061) A09 = 97 MBH Output Aluminized Steel, Single Stage (037, 049, 061) A13 = 129 MBH Output Aluminized Steel, Single Stage (061) B05 = 49 MBH Output Stainless Steel, Single Stage (037, 049) B07 = 65 MBH Output Stainless Steel, Single Stage (037, 049, 061) B09 = 97 MBH Output Stainless Steel, Single Stage (037, 049, 061) B13 = 129 MBH Output Stainless Steel, Single Stage (061) Two Stage Natural Gas Heat Options N05 = 49 MBH Output Aluminized Steel, Two Stage (037, 049) N07 = 65 MBH Output Aluminized Steel, Two Stage (037, 049, 061) N09 = 97 MBH Output Aluminized Steel, Two Stage (037, 049, 061) N13 = 129 MBH Output Aluminized Steel, Two Stage (061) S05 = 49 MBH Output Stainless Steel, Two Stage (037, 049) S07 = 65 MBH Output Stainless Steel, Two Stage (037, 049, 061) S09 = 97 MBH Output Stainless Steel, Two Stage (037, 049, 061) S13 = 129 MBH Output Stainless Steel, Two Stage (061) N10 = 100 MBH Output Aluminized Steel, Two Stage (078, 090, 102) N15 = 150 MBH Output Aluminized Steel, Two Stage (078, 090, 102, 120, 150) N20 = 200 MBH Output Aluminized Steel, Two Stage (120, 150) S10 = 100 MBH Output Stainless Steel, Two Stage (078, 090, 102) S15 = 150 MBH Output Stainless Steel, Two Stage (078, 090, 102, 120, 150) S20 = 200 MBH Output Stainless Steel, Two Stage (120, 150)			Additional Options <table border="1"> <tr> <td> AA = None AB = Phase Monitor AC = Coil Guard AD = Dirty Filter Switch AE = Phase Monitor & Coil Guard AF = Phase Monitor & Dirty Filter Switch </td> <td> AG = Coil Guard & Dirty Filter Switch AH = Phase Monitor, Coil Guard & Dirty Filter Switch RC = Coil Guard, Shipping Bag & American Flag TJ = Technicoat Condenser Coil TS = Technicoat Evaporator & Condenser Coils EA = ElectroFin Condenser Coil EJ = ElectroFin Evaporator Coil ES = ElectroFin Cond & Evap Coils </td> </tr> </table> ZZ = If desired option combination is not listed above, ZZ will be assigned and configuration options will be located in digits 15-18.							AA = None AB = Phase Monitor AC = Coil Guard AD = Dirty Filter Switch AE = Phase Monitor & Coil Guard AF = Phase Monitor & Dirty Filter Switch	AG = Coil Guard & Dirty Filter Switch AH = Phase Monitor, Coil Guard & Dirty Filter Switch RC = Coil Guard, Shipping Bag & American Flag TJ = Technicoat Condenser Coil TS = Technicoat Evaporator & Condenser Coils EA = ElectroFin Condenser Coil EJ = ElectroFin Evaporator Coil ES = ElectroFin Cond & Evap Coils
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Electric Heat Options E03 = 3 KW (037) E06 = 6 KW (037, 049, 061) E08 = 9 KW (037, 049, 061) E09 = 9 KW (078, 090, 102) E15 = 15 KW (037, 049, 061) E18 = 18 KW (078, 090, 102, 120, 150) E20 = 20 KW (049, 061) E23 = 24 KW (061) E24 = 24 KW (078, 090, 102, 120, 150) E36 = 36 KW (078, 090, 102, 120, 150) E54 = 54 KW (120, 150)			Installation Options <table border="1"> <tr> <td> Voltage 2 = 208/230-3-60 4 = 460-3-60 5 = 575-3-60 </td> <td> A = No Options Installed B = Option 1 C = Option 2 D = Options 1 & 2 E = Option 3 F = Option 4 G = Options 1 & 3 H = Options 1 & 4 J = Options 1, 2 & 3 K = Options 1, 2, & 4 L = Options 1, 3 & 4 M = Options 1, 2, 3, & 4 N = Options 2 & 3 P = Options 2 & 4 Q = Options 2, 3, & 4 R = Options 3 & 4 S = Option 5 T = Options 1 & 5 U = Options 1, 3, & 5 V = Options 1, 4, & 5 W = Options 1, 3, 4, & 5 X = Options 3 & 5 Y = Options 4 & 5 Z = Options 3, 4 & 5 </td> </tr> </table>							Voltage 2 = 208/230-3-60 4 = 460-3-60 5 = 575-3-60	A = No Options Installed B = Option 1 C = Option 2 D = Options 1 & 2 E = Option 3 F = Option 4 G = Options 1 & 3 H = Options 1 & 4 J = Options 1, 2 & 3 K = Options 1, 2, & 4 L = Options 1, 3 & 4 M = Options 1, 2, 3, & 4 N = Options 2 & 3 P = Options 2 & 4 Q = Options 2, 3, & 4 R = Options 3 & 4 S = Option 5 T = Options 1 & 5 U = Options 1, 3, & 5 V = Options 1, 4, & 5 W = Options 1, 3, 4, & 5 X = Options 3 & 5 Y = Options 4 & 5 Z = Options 3, 4 & 5
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Features and Benefits

Standard Features

- **High Efficiency** – High efficiency units reach as high as 12.2 EER. Gas/electric units have electronic spark ignition and power vented combustion with steady state efficiencies of 80%. These efficiencies exceed all legislated minimum levels and provide low operating costs.

- **Service Friendly** – The Predator® incorporates a number of enhancements which improve 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.

Both the unit control board and ignition control board utilize flash codes to aid in diagnosis of unit malfunctions. Unique alarm codes quickly identify the source of the unit alarm.

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 Predator® 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 ZH/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. ZR037 thru 061 models utilize Micro-Channel condenser coils, ZR078 thru 150 models utilize copper tube/aluminum fin condenser coils.
- **Environmentally Aware** – For improved Indoor Air Quality, a combination of foil faced and elastometric rubber insulation is used exclusively throughout the units.
- **Balanced Heating** – The Predator® two stage gas heating offers “Ultimate Heating Comfort” with a balance between 1st and 2nd stage gas heating. The first stage of a gas heat Predator® unit provides 70% or 75% of the heating capacity 3 thru 5 tons and 60% heating capacity 6-1/2 thru 12-1/2 tons. Balanced heating allows the unit to better maintain desired temperatures.
- **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. Internal compressor protection is standard on all compressors. Scroll compressors do not require crankcase heaters. Phase Monitors are standard 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** - Simplicity® control boards have standardized a number of features previously available only as options or by utilizing additional controls.
- **Low Ambient** - An integrated low-ambient control allows all units to operate in the cooling mode down to 0°F outdoor ambient without additional assistance. Optionally, the control board can be programmed to lockout the compressors when the outdoor air temperature is low or when free cooling is available.

CAUTION

The Simplicity® 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 reference applications bulletin AE-011-07 or call the applications department for Unitary Products @ 1-877-UPG-SERV for guidance. Additional accessories may be needed for stable operation at temperatures below 30° F.

- **Anti-Short Cycle Protection** - To aid compressor life, an anti-short cycle delay is incorporated into the standard controls. 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 heat.
- **Safety Monitoring** - The control board monitors the high and low-pressure switches, the freezestats, the gas valve, if applicable, and the temperature limit switch on gas and electric heat units. The unit control

board will alarm on ignition failures, compressor lock-outs and repeated limit switch trips.

- **Nuisance Trip Protection and Strikes** - To prevent nuisance trouble calls, the control board uses a "three times, you're out" philosophy. The high and low-pressure switches and the freezestat must trip three times within two hours before the unit control board will lock out the associated compressor.
- **On Board Diagnostics** - Each alarm will energize a trouble light on the thermostat, if so equipped, and flash an alarm code on the control board LED. Each high and low-pressure switch alarm as well as each freezestat alarm has its own flash code. The control board saves the five most recent alarms in memory, and these alarms can be reviewed at any time. Alarms and programmed values are retained through the loss of power.
- **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 Predator® 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 1000 hour salt spray test.
- **Flexible Placement** – All models and configurations share the same cabinet/footprint and thus the same roof curb. You have the flexibility to set one curb and choose the correct tonnage size and heating option after the internal loads have been determined.
To further simplify planning and installation, Predator® cabinets are designed to fit your roof. With the optional roof curb, the unit ductwork is designed to fit around 24" on-center joists or between 48" on-center joists.
The drain pan can be rotated to drain to either the front or the rear of the unit. Additionally, the drain pan can be fitted to drain through the roof curb. As it is sometimes difficult to have a level installation, the drain pan features a generous slope to ensure proper drainage.
- **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 forklift access from 3 sides, and rigging holes are available 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. A clearly identified location is provided to mount a field supplied electrical disconnect switch. 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 indoor fan motors are belt-drive type providing maximum flexibility to handle most airflow requirements. For high static applications, factory installed alternate indoor fan motors are available. With the optional indoor fan motor, all units can supply nominal airflow at a minimum of 1.5" ESP.
A variable air volume (VAV) option using a variable frequency drive is available on 6-1/2 through 12-1/2 ton models for applications requiring a constant supply duct

pressure. A differential pressure transducer is used to monitor supply duct static pressure while a VAV control board provides a speed reference signal to the VFD to control the output of the indoor blower motor.

- **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 and stainless steel tubular heat exchangers carry a 10-year warranty.

Factory Installed Options

YORK® offers several equipment options factory installed, for the Predator® line.

- **Optional Factory Installed Economizers** - Predator units offer a variety of optional factory installed economizers with low leak dampers. The outdoor air enthalpy sensor enables economizer operation if the outdoor enthalpy is less than the setpoint of the economizer logic module. See economizer options section to determine the correct economizer for your application.
- **Downflow Economizer - (With barometric relief)** - The economizer is provided with a single enthalpy input. The economizer is 2% low leakage type, and is shipped installed and wired. The installer needs only to assemble the outdoor air hood, attach the enthalpy control to the hood and mount the hood to the unit (Hood and control are provided). 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 standard single enthalpy input. To meet regulated air standards, the economizer control accepts an optional CO₂ input for demand ventilation. With single enthalpy input, the economizer control monitors outdoor air. The dual enthalpy kit provides a second input used to monitor the return air. With a dual input kit installed, the economizer control compares the values of the two enthalpy or temperature inputs and positions the dampers to provide the maximum efficiency possible.
- **Horizontal Economizer - (Without barometric relief)** - All features of the downflow economizer exist except you must order the duct mount barometric relief separately.
You must order a 1EH0408 if you are installing a power exhaust. You can order a 1RD0411 Barometric Relief for horizontal flow economizers only.
- **BAS Ready Economizer - (With barometric relief)** - The economizer is provided with an actuator that requires a 2-10V DC input from an external source (i.e., field installed building automation system controller). Power exhaust options are available. The economizer is 2% low leakage type with spring return and fully modulating dampers capable of introducing up to 100% outside air. Also include 2" pleated filters. BAS ready actuators have an adjustable auxiliary end-switch for optional power exhaust control.
- **VAV or Simplicity® INTELLI-Comfort II™ control**, a factory-installed dry bulb sensor determines if outdoor air temperature is low enough to provide free-cooling

operation. (Field-installed humidity sensors for either outdoor air or outdoor & return air streams are available for single enthalpy and differential enthalpy configurations, respectively.)

- **Slab Economizer for Energy Recovery Ventilators (With barometric relief and Fresh Air Hood)** - The economizer is provided with a single enthalpy input. The economizer is 2% low leakage type, and is shipped installed and wired. 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 standard single enthalpy input. To meet regulated air standards, the economizer control accepts an optional CO₂ input for demand ventilation. With single enthalpy input, the economizer control monitors outdoor air. The dual enthalpy kit provides a second input used to monitor the return air. With a dual input kit installed, the economizer control compares the values of the two enthalpy or temperature inputs and positions the dampers to provide the maximum efficiency possible.
- **Power Exhaust (Downflow only)** - This accessory installs in the unit with a down flow economizer.
- **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.
- **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 (VAV; 6-1/2 through 12-1/2 ton, only)** - 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 pressure transducer and VAV control board are mounted inside the control box. 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.

Due to space limitations, VAV is not available with any of the factory-installed BAS options, but is available with 'BAS-ready' models. Terminal blocks are provided in the control box for field wiring of the customer-installed BAS. 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, section 6.4.3.10)** - Units configured with the *IntelliSpeed™* Supply Fan Option will contain a VFD for variable volume 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 by interrupting power to the control board if smoke is detected within the air compartment. Available for both the supply and/or return air configurations.
- **Filters** - 2" Pleated MERV 7 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. **(Standard on units with Scroll Compressors.)**
- **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.
- **Technicoat Condenser Coils** - The condenser coils are coated with a phenolic coating for protection against corrosion due to harsh environments.
- **Technicoat Evaporator Coil** - The evaporator coils are coated with a phenolic coating for protection against corrosion due to harsh environments.
- **ElectroFin® E-coat Condenser Coils** - The condenser coils are coated with an epoxy polymer coating to protect against corrosion.
- **ElectroFin® 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

- **Simplicity® INTELLI-Comfort II™ Control communicates on a MODBUS RTU protocol network** - The York® Simplicity® INTELLI-Comfort II™ control is factory installed. It includes a supply air sensor, a return air sensor, and an outside air sensor. There are provisions for a field installed dirty filter indicator switch, an air-proving switch, an Outside Air Humidity sensor, a Return Air Humidity sensor, an Inside IAQ sensor, and an Outside Air IAQ sensor. Construction mode operation, 365-day real time clock with 7 day programming plus holiday scheduling is built-in. Two different modes of demand ventilation are achieved through the INTELLI-Comfort II™ using CO₂ sensors. It uses an inside CO₂ sensor to perform Demand Ventilation. It can also use an Outside CO₂ sensor to perform Differential Demand Ventilation. It uses a Patented Comfort Ventilation algorithm to provide comfortable ventilation air temperature. The patented economizer-loading algorithm will protect the equipment when harsh operating conditions exist. Humidity in the occupied space or return duct can be monitored and controlled via humidity sensors and the on-board connection for hot gas re-heat system. It uses the INTELLI-Start™ algorithm to maximize energy savings by recovering the building from the Unoccupied Setpoints to the Occupied Setpoints just in time for the Occupied Time Period to begin. The Simplicity® INTELLI-Comfort II™ balances space temperature, ventilation air temperature, CO₂ and humidity for ultimate comfort.

- **Simplicity® INTELLI-Comfort II™ with Simplicity® LINC Control** - The York® Simplicity® INTELLI-Comfort II™ with Simplicity® LINC control is factory installed. It includes all the features of the INTELLI-Comfort II™ control with an additional control to translate communications from MODBUS to the BACnet MSTP protocol.
- **Novar® BAS Control** - The Novar® building automation system controller is factory installed. Includes supply air sensor, return air sensor, dirty filter indicator switch, and air proving switch.
- **Johnson Controls BAS Control** - The Johnson Control YK-UNT-1126 building automation system controller is factory installed. Includes supply air sensor, return air sensor, dirty filter indicator switch, and air proving switch.
- **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, 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, dirty filter indicator switch, and air proving switch.
- **York Commercial Comfort System (YCCS)** - Provides rooftop system integration for YCCS single zone and change-over bypass systems.

Field Installed Accessories

YORK® offers several equipment accessories for field installation, for the Predator® line.

- **Downflow Economizer - (With barometric relief)** - The economizer is provided with a single enthalpy input. The economizer is 2% low leakage type. 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 standard single enthalpy input. There is an optional input dual dry bulb sensor available. To meet regulated air standards, the economizer control accepts an optional CO₂ input for demand ventilation. With single enthalpy input, the economizer control monitors outdoor air. The dual enthalpy kit provides a second input used to monitor the return air. With a dual input kit installed, the economizer control compares the values of the two enthalpy or temperature inputs and positions the dampers to provide the maximum efficiency possible.
- **Horizontal Economizer - (Without barometric relief)** - All features of the downflow economizer exist except you must order the duct mount barometric relief separately. **You must order a 1EH0408 if you are installing a power exhaust. You can order a 1RD0411 Barometric Relief for horizontal flow economizer.**
- **Slab Economizer for Energy Recovery Ventilator- (Without barometric relief or Fresh Air Hood)** - The economizer is provided with a single enthalpy input. The economizer is 2% low leakage type. 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 standard single enthalpy input. There is an optional input dual dry bulb available. To meet regulated air standards, the economizer control accepts an optional CO₂ input for demand ventilation. With single enthalpy input, the economizer control monitors outdoor air. The dual enthalpy kit provides a second input used to monitor the return air. With a dual input kit installed, the economizer control compares the values of the two enthalpy or temperature inputs and positions the dampers to provide the maximum efficiency possible.

You can order 1EH0409 Barometric Relief/FA Hood for field installations without an ERV.

- **Dual Enthalpy Control, Accessory** - This kit contains the required components to convert a single enthalpy economizer to dual enthalpy.
- **Barometric Relief Damper** - Zero to 100% capacity barometric relief dampers for use with horizontal flow, or field installed slab economizers.
- **Power Exhaust** - This accessory installs in the unit with a down flow economizer. Power exhaust plugs into the connector in the unit bulkhead. **You must purchase 1EH0408 barometric relief when applying to a horizontal flow application.**
- **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.

- **-60°F Gas Heat Kit** - For installations which require gas heat units to perform in low ambient temperatures, a gas section heating kit is available. This kit provides electric heat in the gas heat controls section to ensure the gas valve and controls will continue to function properly at extremely low temperatures.
- **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.
- **Gas Piping Kit** - Contains pipe nipples, fittings and gas cock required for gas supply connection with external shut off.
- **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.
- **Low Limit / Compressor Lockout Kit**
 - **Compressor Lockout (CLO):** To prevent mechanical (compressorized) operation of the unit during cold outdoor conditions where there is a risk of returning liquid refrigerant back to the compressors.
 - **Low Limit Control (LLC):** To prevent the supply air from dropping below a specified setpoint by utilizing the units first stage heating means when there is a demand for cooling during cold outside conditions.
- **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 Predator® 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 ZH,ZJ units and all 3 thru 12.5 ton ZR 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" Tall Standard Cabinets
1CG0420	All	Coil Guard	(Gas / Electric Models), 50" Tall Standard Cabinets
1CG0427	All	Coil Guard	(Electric / Electric Models), 42" Tall Cabinets
1CG0428	All	Coil Guard	(Gas / Electric Models), 42" Tall Cabinets
1HG0411	All	Hail Guard Kit	All Tall (50") Standard Cabinets, (Excludes 12.5T "V" cabinets)
1HG0415	All	Hail Guard Kit	All Short (42") Standard Cabinets
1FE0412	All	Flue Exhaust Extension Kit	All Cabinets
1FF0414	All	2" only Metal Filter Frame Kit	All Tall 50" Cabinets
1FF0415	All	2" only Metal Filter Frame Kit	All Tall 42" Cabinets
1FL0402	All	Permanent 2" only Filter Kit Includes (4) Four Filters)	All Tall 50" Cabinets
1FL0423	All	Permanent 2" only Filter Kit (Includes (4) four Filters)	All Tall 42" Cabinets
1GP0405	All	Gas Piping Kit	All Cabinets
1HA0442	All	High Altitude Kit for Natural Gas	All 6 - 12T Cabinets
1HA0450	All	High Altitude Kit for Natural Gas	3 - 5T (80, 120 & 160 MBH Input)
1HA0451	All	High Altitude Kit for Natural Gas	3 - 4T (60 MBH Input)
1HA0443	All	High Altitude Kit for Propane	All 6 - 12T Cabinets
1HA0452	All	High Altitude Kit for Propane	3 - 5T (80, 120 & 160 MBH Input)
1HA0453	All	High Altitude Kit for Propane	3 - 4T (60 MBH Input)
1NP0442	All	Propane Conversion Kit	All 6 - 12T Cabinets
1NP0454	All	Propane Conversion Kit	3 - 5T (80, 120 & 160 MBH Input)
1NP0455	All	Propane Conversion Kit	3 - 4T (60 MBH Input)
1RC0470	All	Roof Curb, 8" Height	All Cabinets
1RC0471	All	Roof Curb, 14" Height	All Cabinets
1RC0472	All	Roof Curb, Transition (7.5 T thru 12.5T Sunline to Predator 3- 12T)	All Cabinets
1WC0412	All	Wooden Crate for extra protection during shipping and handling	Standard Cabinets Only (not applicable to units 119" in length)
1LN0407	All	Low NOx Kit	3 - 5T (80, 120 & 160 MBH Input)
1LN0408	All	Low NOx Kit	3 - 5T (60 MBH Input)

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
1EH0407	All	Barometric Relief Kit for Power Exhaust, Downflow Application (Includes Hood)	All Cabinets
1EH0408	All	Barometric Relief Kit for Power Exhaust, Horizontal Application	All Cabinets
1EH0409	All	Barometric Relief/Hood Kit - Required for field installed slab economizer without ERV	All Cabinets
1FA0413	All	Manual Outside Air Damper 0-35%, Downflow	All Cabinets
1FA0414	All	Manual Outside Air Damper 0-100%, Downflow	All Cabinets
1RD0411	All	Barometric Relief Kit for Horizontal Applications	All Cabinets
2EC04700924	All	Dual Enthalpy Control	All Cabinets
2EE04705724	All	Downflow Economizer, Slab type for ERV, (no Barometric Relief or FA hood)	All 50" Cabinets
2EE04705824	All	Downflow Economizer, Slab type for ERV, (no Barometric Relief or FA hood)	All 42" Cabinets
2EE04705924	All	Downflow Economizer with Barometric Relief	All Cabinets
2EE04706024	All	Horizontal Economizer without Barometric Relief	All Cabinets
2MD04703224	All	Motorized Damper, Downflow without Barometric Relief	All Cabinets
2MD04703724	All	Motorized Damper, Horizontal	All Cabinets
2PE04703225*	230	Power Exhaust 230V Downflow or Horizontal	All Cabinets
2PE04703246*	460	Power Exhaust 460V Downflow or Horizontal	All Cabinets
2PE04703258*	575	Power Exhaust 575V Downflow or Horizontal	All Cabinets

* Must be installed in return Duct on Horizontal Applications and a 1EH0408 is required.

Field Installed Accessories - Controls

MODEL	VOLTAGE	DESCRIPTION	WHERE USED
2AP0401	All	Air Proving Switch	All Units
2AQ04700324B	All	CO ² Space Accessory	All Units
2AQ04700424C	All	CO ² Unit Accessory	All Units
2DF0402	All	Dirty Air Switch	All Units
2DH04700024	All	Humidistat	All Units
2SD04700624	All	Smoke Detector for Supply or Return	All Gen 4 or older units with 2" Filter only capable Cabinets
2SD04700824	All	Smoke Detector for Supply	All Gen 5 units with 2" & 4" Filters
2SD04700924	All	Smoke Detector for Return	All Gen 5 units with 2" & 4" Filters
2SD04701024	All	Smoke Detector for Supply and Return	All Gen 5 units with 2" & 4" Filters

Field Installed Accessories - Electrical

MODEL	VOLTAGE	DESCRIPTION	WHERE USED
2BC04700106	230	Gas heat kit, -60°F	All Units
2BC04700151	460	Gas heat kit, -60°F	All Units
2BC04700154	575	Gas heat kit, -60°F	All Units
2LA04704632	All	Low Ambient Kit	All 3 - 10T units (excludes 12.5T "V" cabinets)

Guide Specifications**GENERAL**

Units shall be manufactured by Unitary Products in an ISO 9001 certified facility. YORK® Predator® units are convertible single packages with a common footprint cabinet and common roof curb for all 3 through 12-1/2 ton models. All 6-1/2 through 12-1/2 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 Predator® 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. Predator® 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 1000 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.
- g. Control board shall monitor each refrigerant safety switch

- 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 6-1/2 through 12-1/2 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:
 - Loss-of-charge/Low-pressure switch.
 - High-pressure switch.
 - Freeze-protection thermostat, evaporator coil. If any of the above safety devices trip, an LED (light-emitting diode) indicator shall flash a diagnostic code that indicates which safety switch has tripped.
- 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 code display.
- f. Standard controls shall include anti-short cycle and low voltage protection, and permit cooling operation down to 0 °F. independently.

- h. Control board shall retain last 5 fault codes in non-volatile memory, which will not be lost in the event of a power loss.

GAS HEATING SECTION (IF EQUIPPED)

Heat exchanger and exhaust system shall be constructed of aluminized steel and shall 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 (70% or 75% 1st stage, 100% 2nd stage) 3 through 5 ton and (60% 1st stage, 100% 2nd stage) 6-1/2 through 12-1/2 ton.

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

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

- **ELECTRONIC ENTHALPY 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 not exceed 2% when dampers are fully closed and operating against a pressure differential of 0.5 IWG. A unit-mounted potentiometer shall be provided to adjust the outdoor and return air damper assembly to take in outdoor air to meet the minimum ventilation requirement of the conditioned space during normal operation. During economizer operation, a mixed-air temperature control shall modulate the outdoor and return air damper assembly to prevent the supply air temperature from dropping below 55 °F. 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 or power exhaust.
- **MOTORIZED OUTDOOR AIR DAMPERS** – Outdoor and return air dampers that are interlocked and positioned by a 2-position, spring-return damper actuator. The maximum leakage rate for the outdoor air intake dampers shall not exceed 2% when dampers are fully closed and operating against a pressure differential of 0.5 IWG. 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 on 6-1/2 through 12-1/2 ton models 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 VAV 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** - 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.
- **-60°F GAS HEAT KIT** – Provides an electric heat kit for the gas compartment for use in extreme low ambient conditions.
- **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

ZH037-061 Single Stage Gas Physical Data

Component	Models								
	ZH037			ZH049			ZH061		
Nominal Tonnage	3.0			4.0			5.0		
AHRI COOLING PERFORMANCE									
Gross Capacity @ AHRI A point (MBh)	37000			50000			61000		
AHRI net capacity (MBh)	36000			48000			58000		
EER	11.8			11.8			11.8		
SEER	14			14			14		
IPLV	-			-			-		
Nominal CFM	1200			1600			2000		
System power (KW)	3.05			4.07			4.90		
Refrigerant type	R-410A			R-410A			R-410A		
Refrigerant charge (lb-oz)									
System 1	7-4			6-14			7-12		
System 2	-			-			-		
AHRI HEATING PERFORMANCE									
Heating model	A05	A07	A09	A05	A07	A09	A07	A09	A13
Heat input (K Btu)	60	80	120	60	80	120	80	120	160
Heat output (K Btu)	49	65	97	49	65	97	65	97	129
AFUE %	-		-	-		-	-		-
Steady state efficiency (%)	81.5	81	81	81.5	81	81	81	81	80.5
No. burners	4	4	6	4	4	6	4	6	8
No. stages	1	1	1	1	1	1	1	1	1
Temperature Rise Range (°F)	20-50°F	25-65°F	50-80°F	20-50°F	25-65°F	40-70°F	25-65°F	35-65°F	45-75°F
Gas Limit Setting (°F)	235°F	200°F	255°F	235°F	200°F	255°F	200°F	245°F	240°F
Gas piping connection (in.)	3/4	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 WT. (lbs.)	723			763			864		
COMPRESSORS									
Type	Recip			Recip			Recip		
Quantity	1			1			1		
Unit Capacity Steps (%)	100			100			100		
CONDENSER COIL DATA									
Face area (Sq. Ft.)	11.9			18.5			21.1		
Rows	1			1			1		
Fins per inch	23			23			23		
Tube diameter (in./MM)	1/25			.71/18			.71/18		
Circuitry Type	2-pass Microchannel			2-pass Microchannel			2-pass Microchannel		
EVAPORATOR COIL DATA									
Face area (Sq. Ft.)	8			8			10.6		
Rows	3			3			3		
Fins per inch	15			15			15		
Tube diameter	0.375			0.375			0.375		
Refrigerant control	TXV			TXV			TXV		

ZH037-061 Single Stage Gas Physical Data (Continued)

Component	Models								
	ZH037			ZH049			ZH061		
Nominal Tonnage	3.0			4.0			5.0		
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		
Nominal total CFM	3300			3700			6700		
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	1VP34		1VL44	1VP34		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) ^{1,2}			4 - (24 x 16 x 2) ^{1,2}			4 - (24 x 16 x 2) ^{1,2}		
	4 - (24 x 16 x 4) ³			4 - (24 x 16 x 4) ³			4 - (24 x 16 x 4) ³		

1. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value)
2. 2 In. Pleated, Optional, MERV 7.
3. 4 In. Pleated, Optional, MERV 13.

ZH037-061 Two Stage Gas Physical Data

Component	Models								
	ZH037			ZH049			ZH061		
Nominal Tonnage	3.0			4.0			5.0		
AHRI COOLING PERFORMANCE									
Gross Capacity @ AHRI A point (MBh)	37000			50000			61000		
AHRI net capacity (MBh)	36000			48000			58000		
EER	11.8			11.8			11.8		
SEER	14			14			14		
IPLV	-			-			-		
Nominal CFM	1200			1600			2000		
System power (KW)	3.05			4.07			4.90		
Refrigerant type	R-410A			R-410A			R-410A		
Refrigerant charge (lb-oz)									
System 1	7-4			6-14			7-12		
System 2	-			-			-		
AHRI HEATING PERFORMANCE									
Heating model	N05	N07	N09	N05	N07	N09	N07	N09	N13
Heat input (K Btu)	60	80	120	60	80	120	80	120	160
Heat output (K Btu)	49	65	97	49	65	97	65	97	129
AFUE %	-		-	-		-	-		-
Steady state efficiency (%)	81.5	81	81	81.5	81	81	81	81	80.5
No. burners	4	4	6	4	4	6	4	6	8
No. stages	2 ¹	2 ²	2 ²	2 ¹	2 ²	2 ²	2 ²	2 ²	2 ²
Temperature Rise Range (°F)	20-50°F	25-65°F	50-80°F	20-50°F	25-65°F	40-70°F	25-65°F	35-65°F	45-75°F
Gas Limit Setting (°F)	235°F	200°F	255°F	235°F	200°F	255°F	200°F	245°F	240°F
Gas piping connection (in.)	3/4	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 WT. (lbs.)	723			763			864		
COMPRESSORS									
Type	Recip			Recip			Recip		
Quantity	1			1			1		
Unit Capacity Steps (%)	100			100			100		
CONDENSER COIL DATA									
Face area (Sq. Ft.)	11.9			18.5			21.1		
Rows	1			1			1		
Fins per inch	23			23			23		
Tube diameter (in./MM)	1/25			.71/18			.71/18		
Circuitry Type	2-pass Microchannel			2-pass Microchannel			2-pass Microchannel		
EVAPORATOR COIL DATA									
Face area (Sq. Ft.)	8			8			10.6		
Rows	3			3			3		
Fins per inch	15			15			15		
Tube diameter	0.375			0.375			0.375		
Refrigerant control	TXV			TXV			TXV		

ZH037-061 Two Stage Gas Physical Data (Continued)

Component	Models								
	ZH037			ZH049			ZH061		
Nominal Tonnage	3.0			4.0			5.0		
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		
Nominal total CFM	3300			3700			6700		
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	1VP34		1VL44	1VP34		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) ^{3,4}			4 - (24 x 16 x 2) ^{3,4}			4 - (24 x 16 x 2) ^{3,4}		
	4 - (24 x 16 x 4) ⁵			4 - (24 x 16 x 4) ⁵			4 - (24 x 16 x 4) ⁵		

1. 1st Stage Capacity is 75% of Full Capacity.
2. 1st Stage Capacity is 70% of Full Capacity.
3. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value)
4. 2 In. Pleated, Optional, MERV 7.
5. 4 In. Pleated, Optional, MERV 13.

ZH078-150 Physical Data

Component	Models									
	ZH078		ZH090		ZH102		ZH120		ZH150	
Nominal Tonnage	6.5		7.5		8.5		10		12.5	
AHRI COOLING PERFORMANCE										
Gross Capacity @ AHRI A point (Btu)	81000		93000		107000		125000		155000	
AHRI net capacity (Btu)	78000		90000		102000		120000		150000	
EER	11.7 ¹ /11.5 ²		11.7 ¹ /11.5 ²		11.7 ¹ /11.5 ²		11.7		11.7	
SEER	-		-		-		-		-	
IEER	12.8 ¹ /12.6 ²		12.8 ¹ /12.6 ²		12.8 ¹ /12.6 ²		12		12.8	
IPLV	13.7		13		13.5		12.9		14.1	
Nominal CFM	2600		2700		3400		4000		4300	
System power (KW)	6.69		7.70		9.0		10.40		12.96	
Refrigerant type	R-410A		R-410A		R-410A		R-410A		R-410A	
Refrigerant charge (lb-oz)										
System 1	7-0		6-0		7-6		8-8		8-6	
System 2	6-0		6-0		7-2		7-7		8-0	
AHRI HEATING PERFORMANCE										
Heating model	10	15	10	15	10	15	15	20	15	20
Heat input (K Btu)	120	180	120	180	120	180	180	240	180	240
Heat output (K Btu)	96	144	96	144	96	144	144	192	144	192
AFUE %	-	-	-	-	-	-	-	-	-	-
Steady state efficiency (%)	80	80	80	80	80	80	80	80	80	80
No. burners	4	6	4	6	4	6	6	8	6	8
No. stages	2 ³	2 ³	2 ³	2 ³	2 ³	2 ³	2 ¹	2 ¹	2 ¹	2 ¹
Temperature Rise Range (°F)	20-50	35-65	15-45	30-60	10-40	25-55	20-50	35-65	10-40	25-55
Gas Limit Setting (°F)	165	165	165	165	215	195	195	160	195	160
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	42		42		50-3/4		50-3/4		50-3/4	
OPERATING WT. (lbs.)	910		910		1047		1090		1280	
COMPRESSORS										
Type	Recip		Recip		Recip		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.)	23.8		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)	1/25		1/25		1/25		1/25		.71/18	
Circuitry Type	2-pass Microchannel		2-pass Microchannel		2-pass Micro-channel		2-pass Microchannel		2-pass Microchannel	
EVAPORATOR COIL DATA										
Face area (Sq. Ft.)	10.6		10.6		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	

ZH078-150 Physical Data (Continued)

Component	Models									
	ZH078		ZH090		ZH102		ZH120		ZH150	
Nominal Tonnage	6.5		7.5		8.5		10		12.5	
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	
Nominal total CFM	6700		8600		9400		9400		14000	
BELT DRIVE EVAP FAN DATA										
Quantity	1		1		1		1		1	
Fan Size (Inch)	12 x 12		12 x 12		15 x 15		15 x 15		15 x 15	
Type	Centrifugal		Centrifugal		Centrifugal		Centrifugal		Centrifugal	
Motor Sheave	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VP56
Blower Sheave	AK74	AK64	AK74	AK61	AK94	AK74	AK84	AK74	AK74	BK77
Belt	A49	A49	A49	A49	A56	A54	A56	A54	A54	BX55
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 16 x 2) ^{4,5}		4 - (24 x 16 x 2) ^{4,5}		4 - (24 x 20 x 2) ^{4,5}		4 - (24 x 20 x 2) ^{2,3}		4 - (24 x 20 x 2) ^{2,3}	
	4 - (24 x 16 x 4) ⁶		4 - (24 x 16 x 4) ⁶		4 - (24 x 20 x 4) ⁶		4 - (24 x 20 x 4) ⁴		4 - (24 x 20 x 4) ⁴	

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

ZJ037-061 Single 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)	37000			50000			62000		
AHRI net capacity (MBh)	36000			48000			60000		
EER	12.2			12.2			12.2		
SEER	15			15			15		
IPLV	-			-			-		
Nominal CFM	1300			1600			2000		
System power (KW)	2.95			3.95			4.90		
Refrigerant type	R-410A			R-410A			R-410A		
Refrigerant charge (lb-oz)									
System 1	6-12			7-8			8-4		
System 2	-			-			-		
AHRI HEATING PERFORMANCE									
Heating model	A05	A07	A09	A05	A07	A09	A07	A09	A13
Heat input (K Btu)	60	80	120	60	80	120	80	120	160
Heat output (K Btu)	49	65	97	49	65	97	65	97	129
AFUE %	-		-	-		-	-		-
Steady state efficiency (%)	81.5	81	81	81.5	81	81	81	81	80.5
No. burners	4	4	6	4	4	6	4	6	8
No. stages	1	1	1	1	1	1	1	1	1
Temperature Rise Range (°F)	20-50°F	25-65°F	50-80°F	20-50°F	25-65°F	40-70°F	25-65°F	35-65°F	45-75°F
Gas Limit Setting (°F)	235°F	200°F	255°F	235°F	200°F	255°F	200°F	245°F	240°F
Gas piping connection (in.)	3/4	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 WT. (lbs.)	740			775			770		
COMPRESSORS									
Type	Recip			Recip			Recip		
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			10.5			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 Single Stage Gas Heat Physical Data (Continued)

Component	Models								
	ZJ037		ZJ049		ZJ061				
Nominal Tonnage	3.0		4.0		5.0				
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				
Nominal 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	1VP34		1VL44	1VP34		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) ^{1,2}		4 - (24 x 16 x 2) ^{1,2}		4 - (24 x 16 x 2) ^{1,2}				
	4 - (24 x 16 x 4) ³		4 - (24 x 16 x 4) ³		4 - (24 x 16 x 4) ³				

1. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value)
2. 2 In. Pleated, Optional, MERV 7.
3. 4 In. Pleated, Optional, MERV 13.

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)	37000			50000			62000		
AHRI net capacity (MBh)	36000			48000			60000		
EER	12.2			12.2			12.2		
SEER	15			15			15		
IPLV	-			-			-		
Nominal CFM	1300			1600			2000		
System power (KW)	2.95			3.95			4.90		
Refrigerant type	R-410A			R-410A			R-410A		
Refrigerant charge (lb-oz)									
System 1	6-12			7-8			8-4		
System 2	-			-			-		
AHRI HEATING PERFORMANCE									
Heating model	N05	N07	N09	N05	N07	N09	N07	N09	N13
Heat input (K Btu)	60	80	120	60	80	120	80	120	160
Heat output (K Btu)	49	65	97	49	65	97	65	97	129
AFUE %	-		-	-		-	-		-
Steady state efficiency (%)	81.5	81	81	81.5	81	81	81	81	80.5
No. burners	4	4	6	4	4	6	4	6	8
No. stages	2 ¹	2 ²	2 ²	2 ¹	2 ²	2 ²	2 ²	2 ²	2 ²
Temperature Rise Range (°F)	20-50°F	25-65°F	50-80°F	20-50°F	25-65°F	40-70°F	25-65°F	35-65°F	45-75°F
Gas Limit Setting (°F)	235°F	200°F	255°F	235°F	200°F	255°F	200°F	245°F	240°F
Gas piping connection (in.)	3/4	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 WT. (lbs.)	740			775			770		
COMPRESSORS									
Type	Recip			Recip			Recip		
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		
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		
Nominal 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	1VP34		1VL44	1VP34		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) ^{3,4}			4 - (24 x 16 x 2) ^{3,4}			4 - (24 x 16 x 2) ^{3,4}		
	4 - (24 x 16 x 4) ⁵			4 - (24 x 16 x 4) ⁵			4 - (24 x 16 x 4) ⁵		

1. 1st Stage Capacity is 75% of Full Capacity.
2. 1st Stage Capacity is 70% of Full Capacity.
3. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value)
4. 2 In. Pleated, Optional, MERV 7.
5. 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)	80000		93000		106000		124000		148000	
AHRI net capacity (Btu)	78000		90000		102000		120000		144000	
EER	12.2 ¹ /12.0 ²		12.2 ¹ /12.0 ²		12.2 ¹ /12.0 ²		12.0		12.2	
SEER	-		-		-		-		-	
IEER	14.0		13.1		12.2		12.2		14	
IPLV	14.9		14.18		13.6		13.4		14.1	
Nominal CFM	2600		2400		2800		3400		3500	
System power (KW)	6.40		7.38		8.30		9.80		12.00	
Refrigerant type	R-410A		R-410A		R-410A		R-410A		R-410A	
Refrigerant charge (lb-oz)										
System 1	5-10		7-12		8-8		7-14		10-8	
System 2	5-12		7-10		8-12		7-14		9-8	
AHRI HEATING PERFORMANCE										
Heating model	10	15	10	15	10	15	15	20	15	20
Heat input (K Btu)	120	180	120	180	120	180	180	240	180	240
Heat output (K Btu)	96	144	96	144	96	144	144	192	144	192
AFUE %	-	-	-	-	-	-	-	-	-	-
Steady state efficiency (%)	80	80	80	80	80	80	80	80	80	80
No. burners	4	6	4	6	4	6	6	8	6	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	35-65	15-45	30-60	10-40	25-55	20-50	35-65	10-40	25-55
Gas Limit Setting (°F)	165	165	165	165	215	195	195	160	195	160
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.)	1030		1050		1060		1070		1280	
COMPRESSORS										
Type	Recip		Recip		Recip		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		1/25	
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		4		4		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	
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	
Nominal 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	BX55
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) ^{4,5}		4 - (24 x 20 x 2) ^{4,5}		4 - (24 x 20 x 2) ^{4,5}		4 - (24 x 20 x 2) ^{4,5}		4 - (24 x 20 x 2) ^{4,5}	
	4 - (24 x 20 x 4) ⁶		4 - (24 x 20 x 4) ⁶		4 - (24 x 20 x 4) ⁶		4 - (24 x 20 x 4) ⁶		4 - (24 x 20 x 4) ⁶	

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

ZR037-061 Single Stage Gas Heat Physical Data

Component	Models								
	ZR037			ZR049			ZR061		
Nominal Tonnage	3			4			5		
AHRI COOLING PERFORMANCE									
Gross Capacity @ AHRI A point (Btu)	36500			49000			62000		
AHRI net capacity (Btu)	35500			47500			60000		
EER	12.2			12.2			12.2		
SEER	15			15			14.7		
IPLV	-			-			-		
Nominal CFM	1200			1600			2000		
System power (KW)	2.88			3.32			4.83		
Refrigerant type	R-410A			R-410A			R-410A		
Refrigerant charge (lb-oz)									
System 1	12-8			12-0			11-0		
System 2	-			-			-		
AHRI HEATING PERFORMANCE									
Heating model	A05	A07	A09	A05	A07	A09	A07	A09	A13
Heat input (K Btu)	60	80	120	60	80	120	80	120	160
Heat output (K Btu)	49	65	97	49	65	97	65	97	129
AFUE %	-		-	-		-	-		-
Steady state efficiency (%)	81.5	81	81	81.5	81	81	81	81	80.5
No. burners	4	4	6	4	4	6	4	6	8
No. stages	1	1	1	1	1	1	1	1	1
Temperature Rise Range (°F)	20-50°F	25-65°F	35-80°F	20-50°F	25-65°F	35-80°F	25-65°F	35-80°F	45-75°F
Gas Limit Setting (°F)	200°F	235°F	290°F	200°F	235°F	290°F	235°F	290°F	240°F
Gas piping connection (in.)	3/4	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 WT. (lbs.)									
867									
COMPRESSORS									
Type	Recip			Recip			Recip		
Quantity	1			1			1		
Unit Capacity Steps (%)	100			100			100		
CONDENSER COIL DATA									
Face area (Sq. Ft.)	11.9			11.9			11.9		
Rows	1			1			1		
Fins per inch	23			23			23		
Tube diameter (in./MM)	.98/25			.98/25			.71/18 - .98/25		
Circuitry Type	2-pass Microchannel			2-pass Microchannel			2-pass Microchannel		
EVAPORATOR COIL DATA									
Face area (Sq. Ft.)	10.56			10.56			10.56		
Rows	3			3			4		
Fins per inch	15			15			12		
Tube diameter	0.375			0.375			0.375		
Refrigerant control	TXV			TXV			TXV		
REHEAT COIL DATA									
Face area (Sq. Ft.)	8.9			8.9			8.9		
Rows	2			2			2		
Fins per inch	15			15			15		
Tube diameter	0.375			0.375			0.375		
Refrigerant control	Solenoid			Solenoid			Solenoid		

ZR037-061 Single Stage Gas Heat Physical Data (Continued)

Component	Models								
	ZR037			ZR049			ZR061		
Nominal Tonnage	3			4			5		
CONDENSER FAN DATA									
Quantity of fans	1			2			2		
Fan diameter (Inch)	24			24			24		
Type	Prop			Prop			Prop		
Drive type	Direct			Direct			Direct		
Quantity of motors	1			2			2		
Motor HP each	1/3			1/3			1/3		
No. speeds	Var.			Var.			Var.		
RPM (max.)	850			850			850		
Nominal total CFM	3500			7000			7000		
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	1VP34		1VL44	1VP34		1VL44	1VP34		1VL44
Blower Sheave	AK61		AK59	AK61		AK59	AK61		AK59
Belt	A47		A47	A47		A47	A47		A47
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 - (25 x 16 x 2) ^{1, 2}			4 - (25 x 16 x 2) ^{1, 2}			4 - (25 x 16 x 2) ^{1, 2}		
	4 - (25 x 16 x 4) ³			4 - (25 x 16 x 4) ³			4 - (25 x 16 x 4) ³		

1. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value)
2. 2 In. Pleated, Optional, MERV 7.
3. 4 In. Pleated, Optional, MERV 13.

ZR037-061 Two Stage Gas Heat Physical Data

Component	Models								
	ZR037			ZR049			ZR061		
Nominal Tonnage	3			4			5		
AHRI COOLING PERFORMANCE									
Gross Capacity @ AHRI A point (Btu)	36500			49000			62000		
AHRI net capacity (Btu)	35500			47500			60000		
EER	12.2			12.2			12.2		
SEER	15			15			14.7		
IPLV	-			-			-		
Nominal CFM	1200			1600			2000		
System power (KW)	2.88			3.32			4.83		
Refrigerant type	R-410A			R-410A			R-410A		
Refrigerant charge (lb-oz)									
System 1	12-8			12-0			11-0		
System 2	-			-			-		
AHRI HEATING PERFORMANCE									
Heating model	N05	N07	N09	N05	N07	N09	N07	N09	N13
Heat input (K Btu)	60	80	120	60	80	120	80	120	160
Heat output (K Btu)	49	65	97	49	65	97	65	97	129
AFUE %	-		-	-		-	-		-
Steady state efficiency (%)	81.5	81	81	81.5	81	81	81	81	80.5
No. burners	4	4	6	4	4	6	4	6	8
No. stages	2 ¹	2 ²	2 ²	2 ¹	2 ²	2 ²	2 ²	2 ²	2 ²
Temperature Rise Range (°F)	20-50°F	25-65°F	35-80°F	20-50°F	25-65°F	35-80°F	25-65°F	35-80°F	45-75°F
Gas Limit Setting (°F)	200°F	235°F	290°F	200°F	235°F	290°F	235°F	290°F	240°F
Gas piping connection (in.)	3/4	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 WT. (lbs.)	867			880			867		
COMPRESSORS									
Type	Recip			Recip			Recip		
Quantity	1			1			1		
Unit Capacity Steps (%)	100			100			100		
CONDENSER COIL DATA									
Face area (Sq. Ft.)	11.9			11.9			11.9		
Rows	1			1			1		
Fins per inch	23			23			23		
Tube diameter (in./MM)	.98/25			.98/25			.71/18 - .98/25		
Circuitry Type	2-pass Microchannel			2-pass Microchannel			2-pass Microchannel		
EVAPORATOR COIL DATA									
Face area (Sq. Ft.)	10.56			10.56			10.56		
Rows	3			3			4		
Fins per inch	15			15			12		
Tube diameter	0.375			0.375			0.375		
Refrigerant control	TXV			TXV			TXV		
REHEAT COIL DATA									
Face area (Sq. Ft.)	8.9			8.9			8.9		
Rows	2			2			2		
Fins per inch	15			15			15		
Tube diameter	0.375			0.375			0.375		
Refrigerant control	Solenoid			Solenoid			Solenoid		

ZR037-061 Two Stage Gas Heat Physical Data (Continued)

Component	Models								
	ZR037			ZR049			ZR061		
Nominal Tonnage	3			4			5		
CONDENSER FAN DATA									
Quantity of fans	1			2			2		
Fan diameter (Inch)	24			24			24		
Type	Prop			Prop			Prop		
Drive type	Direct			Direct			Direct		
Quantity of motors	1			2			2		
Motor HP each	1/3			1/3			1/3		
No. speeds	Var.			Var.			Var.		
RPM	850			850			850		
Nominal total CFM	3500			7000			7000		
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	1VP34		1VL44	1VP34		1VL44	1VP34		1VL44
Blower Sheave	AK61		AK59	AK61		AK59	AK61		AK59
Belt	A47		A47	A47		A47	A47		A47
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 - (25 x 16 x 2) ^{3,4}			4 - (25 x 16 x 2) ^{3,4}			4 - (25 x 16 x 2) ^{3,4}		
	4 - (25 x 16 x 4) ⁵			4 - (25 x 16 x 4) ⁵			4 - (25 x 16 x 4) ⁵		

1. 1st Stage Capacity is 75% of Full Capacity.
2. 1st Stage Capacity is 70% of Full Capacity.
3. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value)
4. 2 In. Pleated, Optional, MERV 7.
5. 4 In. Pleated, Optional, MERV 13.

ZR078-150 Physical Data

Component	Models									
	ZR078		ZR090		ZR102		ZR120		ZR150	
Nominal Tonnage	6.5		7.5		8.5		10		12.5	
AHRI COOLING PERFORMANCE										
Gross Capacity @ AHRI A point (Mbh)	80000		91000		106000		125000		156000	
AHRI net capacity (Mbh)	78000		88000		102000		120000		150000	
EER	11.2		11.2 ¹ /11.0 ²		11.2 ¹ /11.0 ²		11.2		11.0	
IEER	12.5 ¹ /12.3 ²		12.0		12.2		11.5		12.2	
IPLV	13.0		12.3		12.3		12.3		12.7	
Nominal CFM	2200		2800		3400		3900		3800	
System power (KW)	6.96		7.86		9.11		10.71		13.39	
Refrigerant type	R-410A		R-410A		R-410A		R-410A		R-410A	
Refrigerant charge (lb-oz)										
System 1	9-0		9-12		12-0		12-0		18-8	
System 2	5-8		8-8		11-0		10-8		18-8	
AHRI HEATING PERFORMANCE										
Heating model	10	15	10	15	10	15	15	20	15	20
Heat input (K Btu)	120	180	120	180	120	180	180	240	180	240
Heat output (K Btu)	96	144	96	144	96	144	144	192	144	192
AFUE %	-	-	-	-	-	-	-	-	-	-
Steady state efficiency (%)	80	80	80	80	80	80	80	80	80	80
No. burners	4	6	4	6	4	6	6	8	6	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	35-65	15-45	30-60	10-40	25-55	20-50	35-65	10-40	25-55
Gas Limit Setting (°F)	165	165	165	165	215	195	195	160	195	160
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		119-7/16	
Width	59		59		59		59		59	
Height	42		42		50-3/4		50-3/4		50-3/4	
OPERATING WT. (lbs.)	957		965		1200		1200		1465	
COMPRESSORS										
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.)	23.8		23.8		29.0		29.0		47.5	
Rows	2 / 1 ²		2		2		2		2	
Fins per inch	20		20		20		20		15	
Tube diameter (in.)	3/8		3/8		3/8		3/8		3/8	
Circuitry Type	Split-face		Split-face		Split-face		Split-face		Split-face	
EVAPORATOR COIL DATA										
Face area (Sq. Ft.)	10.6		10.6		13.2		13.2		13.2	
Rows	3		3		4		4		4	
Fins per inch	15		15		15		15		15	
Tube diameter	3/8		3/8		3/8		3/8		3/8	
Circuitry Type	Split-face		Split-face		Split-face		Split-face		Split-face	
Refrigerant control	TXV		TXV		TXV		TXV		TXV	

ZR078-150 Physical Data (Continued)

Component	Models									
	ZR078		ZR090		ZR102		ZR120		ZR150	
Nominal Tonnage	6.5		7.5		8.5		10		12.5	
REHEAT COIL DATA										
Face area (Sq. Ft.)	6.66		6.66		10		10		10	
Rows	2		2		2		2		2	
Fins per inch	13		13		13		13		13	
Tube diameter (in.)	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		1/3		1/3		1/3		1/3	
No. speeds	1		1		1		1		1	
RPM	850		850		850		850		850	
Nominal total CFM	6800		6800		6800		6800		14000	
BELT DRIVE EVAP FAN DATA										
Quantity	1		1		1		1		1	
Fan Size (Inch)	12 x 12		12 x 12		15 x 15		15 x 15		15 x 15	
Type	Centrifugal		Centrifugal		Centrifugal		Centrifugal		Centrifugal	
Motor Sheave	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VM50	1VP56
Blower Sheave	AK74	AK64	AK74	AK61	AK89	AK74	AK84	AK74	AK74	BK77
Belt	A49	A49	A49	A49	A56	A54	A56	A54	A54	BX55
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 16 x 2) ^{4,5}		4 - (24 x 16 x 2) ^{4,5}		4 - (24 x 20 x 2) ^{4,5}		4 - (24 x 20 x 2) ^{4,5}		4 - (24 x 20 x 2) ^{4,5}	
	4 - (24 x 16 x 4) ⁶		4 - (24 x 16 x 4) ⁶		4 - (24 x 20 x 4) ⁶		4 - (24 x 20 x 4) ⁶		4 - (24 x 20 x 4) ⁶	

1. Cooling Only or Cooling with Electric Heat Unit
2. Cooling with Gas Heat Unit
3. 1st Stage 60% of 2nd Stage
4. 2 In. Throwaway, Standard, MERV (Minimum Efficiency Reporting Value) 3.
5. 2 In. Pleated, Optional, MERV 7.
6. 4 In. Pleated, Optional, MERV 13.

ZH/ZJ/ZR078-150 Unit Limitations

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

Capacity Performance

ZH037-150 Cooling Capacities

ZH037 (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	49.1	2.3	20.2	16.8	13.4	-	-	-	46.5	2.5	19.1	15.7	12.4	-	-	-		
	72	44.4	2.2	25.1	21.7	18.4	15.0	-	-	41.7	2.5	23.9	20.5	17.2	13.8	-	-		
	67	39.6	2.2	30.0	26.6	23.3	19.9	16.5	-	36.9	2.5	28.7	25.3	22.0	18.6	15.2	-		
	62	35.4	2.3	35.4	32.8	27.8	24.5	21.1	17.8	32.6	2.5	32.6	31.3	26.3	22.9	19.6	16.2		
900	77	51.2	2.2	22.9	18.8	14.8	-	-	-	48.2	2.5	21.6	17.6	13.6	-	-	-		
	72	46.2	2.2	28.2	24.2	20.2	16.1	-	-	43.2	2.5	26.8	22.8	18.9	14.9	-	-		
	67	41.3	2.2	33.6	29.6	25.6	21.5	17.5	-	38.2	2.5	32.1	28.1	24.1	20.2	16.2	-		
	62	36.9	2.3	36.9	35.1	30.6	26.5	22.5	18.5	33.7	2.5	33.7	32.9	28.9	24.9	20.9	17.0		
	57	35.4	2.3	35.4	35.4	32.4	28.4	24.3	20.3	33.2	2.5	33.2	33.2	30.2	26.2	22.3	18.3		
1050	77	53.3	2.2	25.5	20.8	16.1	-	-	-	49.9	2.5	24.0	19.4	14.8	-	-	-		
	72	48.1	2.2	31.4	26.7	22.0	17.3	-	-	44.7	2.5	29.8	25.2	20.6	16.0	-	-		
	67	43.0	2.2	37.3	32.6	27.9	23.2	18.5	-	39.5	2.5	35.5	30.9	26.3	21.7	17.1	-		
	62	38.3	2.3	38.3	37.5	33.3	28.6	23.9	19.2	34.9	2.5	34.9	34.5	31.5	26.9	22.3	17.7		
	57	36.8	2.3	36.8	36.8	35.3	30.6	25.9	21.2	34.3	2.5	34.3	34.3	32.9	28.3	23.7	19.2		
1200	77	55.4	2.2	28.2	22.8	17.5	-	-	-	51.5	2.5	26.5	21.3	16.1	-	-	-		
	72	50.0	2.2	34.6	29.2	23.8	18.4	-	-	46.2	2.5	32.7	27.5	22.3	17.1	-	-		
	67	44.6	2.2	41.0	35.6	30.2	24.8	19.4	-	40.8	2.5	38.9	33.7	28.5	23.3	18.1	-		
	62	39.8	2.3	39.8	39.8	36.1	30.7	25.3	19.9	36.1	2.5	36.1	36.1	34.1	28.9	23.7	18.5		
	57	38.3	2.2	38.3	38.3	38.3	32.9	27.5	22.1	35.5	2.5	35.5	35.5	35.7	30.5	25.2	20.0		
1350	72	50.1	2.2	37.2	31.3	25.4	19.5	-	-	46.5	2.5	35.4	29.6	23.8	18.1	-	-		
	67	44.7	2.2	42.9	38.1	32.2	26.3	20.4	-	41.1	2.5	40.1	36.3	30.5	24.7	19.0	-		
	62	39.9	2.3	39.9	39.9	38.0	32.1	26.3	20.4	36.3	2.5	36.3	36.3	35.3	29.6	23.8	18.0		
	57	38.3	2.2	38.3	38.3	38.3	32.4	26.6	20.7	35.7	2.5	35.7	35.7	35.8	30.0	24.3	18.5		
1500	72	50.1	2.2	39.7	33.4	27.0	20.6	-	-	46.8	2.5	38.0	31.7	25.4	19.1	-	-		
	67	44.8	2.2	44.8	40.6	34.2	27.8	21.5	-	41.3	2.5	41.3	38.8	32.5	26.2	19.9	-		
	62	39.9	2.3	39.9	39.9	39.9	33.6	27.2	20.8	36.5	2.5	36.5	36.5	36.5	30.2	23.9	17.6		
	57	38.4	2.3	38.4	38.4	38.4	32.0	25.6	19.2	35.9	2.5	35.9	35.9	35.9	29.6	23.3	17.0		
				95°F						105°F									
750	77	44.0	2.7	18.0	14.7	11.3	-	-	-	40.2	3.0	15.8	13.5	10.2	-	-	-		
	72	39.0	2.7	22.7	19.3	16.0	12.6	-	-	35.5	2.9	21.2	18.0	14.7	11.4	-	-		
	67	34.1	2.7	27.4	24.0	20.7	17.3	13.9	-	30.8	2.9	26.6	22.4	19.2	15.9	12.7	-		
	62	29.8	2.6	29.8	29.8	24.7	21.4	18.0	14.7	27.0	2.8	27.0	27.0	23.2	20.0	16.7	13.5		
900	77	45.2	2.7	20.3	16.3	12.4	-	-	-	41.2	3.0	18.9	15.0	11.2	-	-	-		
	72	40.1	2.7	25.4	21.5	17.6	13.6	-	-	36.4	3.0	23.8	20.0	16.2	12.4	-	-		
	67	35.1	2.7	30.5	26.6	22.7	18.8	14.9	-	31.5	2.9	28.7	24.9	21.1	17.3	13.5	-		
	62	30.6	2.7	30.6	30.6	27.2	23.3	19.4	15.4	27.7	2.9	27.7	27.7	25.6	21.8	17.9	14.1		
	57	30.9	2.7	30.9	30.9	28.0	24.1	20.2	16.2	28.2	2.9	28.2	28.2	26.0	22.2	18.4	14.6		
1050	77	46.5	2.8	22.5	18.0	13.5	-	-	-	42.2	3.0	21.9	16.6	12.3	-	-	-		
	72	41.2	2.7	28.1	23.6	19.1	14.7	-	-	37.2	3.0	26.4	22.0	17.6	13.3	-	-		
	67	36.0	2.7	33.7	29.2	24.8	20.3	15.8	-	32.3	3.0	30.9	27.4	23.0	18.7	14.3	-		
	62	31.5	2.7	31.5	31.5	29.7	25.2	20.7	16.2	28.3	2.9	28.3	28.3	27.9	23.5	19.2	14.8		
	57	31.8	2.7	31.8	31.8	30.5	26.1	21.6	17.1	28.9	2.9	28.9	28.9	28.4	24.0	19.7	15.3		
1200	77	47.7	2.8	24.7	19.7	14.7	-	-	-	43.2	3.1	24.9	18.2	13.3	-	-	-		
	72	42.3	2.8	30.8	25.8	20.7	15.7	-	-	38.1	3.0	28.9	24.0	19.1	14.2	-	-		
	67	37.0	2.8	36.9	31.8	26.8	21.8	16.7	-	33.1	3.0	33.0	29.9	25.0	20.1	15.1	-		
	62	32.3	2.7	32.3	32.3	32.1	27.1	22.0	17.0	29.0	2.9	29.0	29.0	30.2	25.3	20.4	15.5		
	57	32.6	2.7	32.6	32.6	33.1	28.0	23.0	17.9	29.6	2.9	29.6	29.6	30.7	25.8	20.9	16.0		
1350	72	42.9	2.8	33.6	27.9	22.3	16.6	-	-	38.5	3.0	31.7	26.2	20.7	15.2	-	-		
	67	37.5	2.7	37.4	34.4	28.8	23.2	17.5	-	33.4	3.0	33.4	31.6	27.0	21.5	16.0	-		
	62	32.7	2.7	32.7	32.7	32.6	27.0	21.3	15.7	29.3	2.9	29.3	29.3	29.9	24.4	18.9	13.4		
	57	33.0	2.7	33.0	33.0	33.3	27.6	22.0	16.4	29.9	2.9	29.9	29.9	30.5	25.0	19.5	14.0		
1500	72	43.4	2.8	36.3	30.1	23.8	17.6	-	-	39.0	3.0	34.4	28.3	22.2	16.1	-	-		
	67	37.9	2.7	37.9	37.1	30.8	24.6	18.4	-	33.8	3.0	33.8	33.4	29.0	22.9	16.8	-		
	62	33.1	2.7	33.1	33.1	33.1	26.9	20.7	14.4	29.6	2.9	29.6	29.6	29.6	23.6	17.5	11.4		
	57	33.5	2.7	33.5	33.5	33.5	27.2	21.0	14.8	30.2	2.9	30.2	30.2	30.2	24.1	18.0	11.9		

ZH037 (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	36.4	3.3	13.7	12.3	9.1	-	-	-	32.6	3.5	12.4	10.7	8.1	-	-	-				
	72	31.9	3.2	19.7	16.6	13.4	10.3	-	-	28.4	3.4	18.2	15.2	12.2	9.1	-	-				
	67	27.4	3.1	25.8	20.9	17.7	14.6	11.4	-	24.1	3.4	24.1	19.3	16.3	13.2	10.2	-				
	62	24.2	3.0	24.2	24.2	21.7	18.6	15.4	12.3	21.4	3.2	21.4	21.4	21.4	17.2	14.1	11.1				
900	77	37.2	3.3	17.4	13.8	10.1	-	-	-	33.1	3.6	16.7	12.5	8.9	-	-	-				
	72	32.6	3.2	22.2	18.5	14.8	11.1	-	-	28.8	3.5	20.6	17.0	13.4	9.8	-	-				
	67	28.0	3.2	26.9	23.2	19.5	15.8	12.1	-	24.5	3.4	24.5	21.5	17.9	14.4	10.8	-				
	62	24.7	3.1	24.7	24.7	23.9	20.2	16.5	12.8	21.7	3.3	21.7	21.7	21.7	18.7	15.1	11.5				
	57	25.4	3.1	25.4	25.4	24.0	20.3	16.6	12.9	22.7	3.3	22.7	22.7	22.0	18.4	14.8	11.3				
1050	77	37.9	3.3	21.2	15.2	11.0	-	-	-	33.7	3.6	20.9	14.2	9.7	-	-	-				
	72	33.2	3.2	24.6	20.4	16.2	11.9	-	-	29.2	3.5	22.9	18.8	14.7	10.6	-	-				
	67	28.6	3.2	28.0	25.6	21.3	17.1	12.9	-	24.8	3.4	24.8	23.7	19.6	15.5	11.4	-				
	62	25.2	3.1	25.2	25.2	26.1	21.9	17.6	13.4	22.1	3.3	22.1	22.1	22.1	20.2	16.1	12.0				
	57	26.0	3.1	26.0	26.0	26.2	22.0	17.7	13.5	23.0	3.3	23.0	23.0	23.0	19.9	15.8	11.7				
1200	77	38.7	3.3	25.0	16.7	11.9	-	-	-	34.2	3.6	25.2	15.9	10.5	-	-	-				
	72	33.9	3.3	27.1	22.3	17.5	12.7	-	-	29.7	3.5	25.2	20.6	15.9	11.3	-	-				
	67	29.1	3.2	29.1	27.9	23.1	18.3	13.6	-	25.2	3.4	25.2	25.2	21.3	16.6	12.0	-				
	62	25.7	3.1	25.7	25.7	28.3	23.5	18.8	14.0	22.4	3.3	22.4	22.4	22.4	21.8	17.1	12.5				
	57	26.5	3.1	26.5	26.5	28.4	23.6	18.9	14.1	23.4	3.3	23.4	23.4	23.4	21.5	16.8	12.2				
1350	72	34.2	3.3	29.8	24.4	19.1	13.7	-	-	29.9	3.6	27.9	22.7	17.4	12.2	-	-				
	67	29.4	3.2	29.4	28.8	25.2	19.8	14.4	-	25.4	3.5	25.4	25.4	23.3	18.1	12.9	-				
	62	25.9	3.1	25.9	25.9	27.2	21.9	16.5	11.2	22.5	3.3	22.5	22.5	22.5	19.3	14.1	8.9				
	57	26.7	3.1	26.7	26.7	27.7	22.3	17.0	11.6	23.5	3.4	23.5	23.5	23.5	19.7	14.4	9.2				
1500	72	34.5	3.3	32.5	26.5	20.6	14.7	-	-	30.1	3.6	30.1	24.8	19.0	13.2	-	-				
	67	29.7	3.2	29.7	29.7	27.2	21.2	15.3	-	25.5	3.5	25.5	25.5	25.4	19.6	13.8	-				
	62	26.2	3.2	26.2	26.2	26.2	20.2	14.3	8.3	22.7	3.4	22.7	22.7	22.7	16.9	11.1	5.3				
	57	26.9	3.2	26.9	26.9	26.9	21.0	15.1	9.1	23.7	3.4	23.7	23.7	23.7	17.9	12.1	6.3				

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.

ZH049 (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	46.0	4.3	16.4	14.3	10.4	-	-	-	41.4	4.7	13.7	12.1	8.7	-	-	-
	72	40.8	4.2	24.6	20.6	16.7	12.7	-	-	36.3	4.5	22.4	18.6	14.8	11.0	-	-
	67	35.6	4.1	32.8	26.9	23.0	19.0	15.1	-	31.2	4.3	31.2	24.7	20.9	17.1	13.2	-
	62	33.1	4.0	33.1	33.1	28.0	24.1	20.1	16.2	29.9	4.3	29.9	29.9	25.1	21.3	17.5	13.7
1200	77	47.4	4.4	20.8	16.2	11.5	-	-	-	42.3	4.7	19.1	14.2	9.7	-	-	-
	72	42.0	4.2	27.8	23.1	18.5	13.8	-	-	37.1	4.5	25.5	21.0	16.5	11.9	-	-
	67	36.7	4.1	34.8	30.1	25.5	20.8	16.2	-	31.9	4.4	31.9	27.8	23.3	18.7	14.2	-
	62	34.0	4.0	34.0	34.0	31.1	26.4	21.8	17.1	30.6	4.3	30.6	30.6	28.0	23.5	19.0	14.4
	57	33.6	4.0	33.6	33.6	30.2	25.5	20.8	16.2	30.1	4.3	30.1	30.1	26.6	22.0	17.5	13.0
1400	77	48.7	4.4	25.3	18.0	12.6	-	-	-	43.2	4.8	24.6	16.2	10.7	-	-	-
	72	43.2	4.3	31.0	25.7	20.3	14.9	-	-	37.9	4.6	28.6	23.4	18.1	12.9	-	-
	67	37.8	4.1	36.8	33.3	28.0	22.6	17.2	-	32.5	4.4	32.5	30.8	25.6	20.4	15.2	-
	62	35.0	4.1	35.0	35.0	34.1	28.8	23.4	18.0	31.3	4.3	31.3	31.3	30.9	25.6	20.4	15.2
	57	34.6	4.1	34.6	34.6	33.1	27.8	22.4	17.0	30.7	4.3	30.7	30.7	29.3	24.1	18.8	13.6
1600	77	50.1	4.4	29.7	19.9	13.8	-	-	-	44.1	4.8	30.1	18.3	11.7	-	-	-
	72	44.4	4.3	34.3	28.2	22.1	16.0	-	-	38.7	4.6	31.7	25.7	19.8	13.9	-	-
	67	38.8	4.2	38.8	36.5	30.5	24.4	18.3	-	33.2	4.4	33.2	33.2	28.0	22.1	16.2	-
	62	36.0	4.1	36.0	36.0	37.2	31.1	25.0	19.0	31.9	4.4	31.9	31.9	31.9	27.8	21.9	16.0
	57	35.5	4.1	35.5	35.5	36.1	30.0	23.9	17.9	31.4	4.4	31.4	31.4	31.4	26.1	20.2	14.2
1800	72	45.6	4.4	37.5	30.7	24.0	17.2	-	-	39.7	4.7	34.8	28.2	21.6	15.0	-	-
	67	39.9	4.2	39.9	38.7	33.0	26.3	19.6	-	34.1	4.5	34.1	34.1	30.5	23.9	17.3	-
	62	37.0	4.1	37.0	37.0	37.6	30.8	24.1	17.4	32.8	4.4	32.8	32.8	32.8	27.1	20.5	13.9
	57	36.5	4.1	36.5	36.5	36.8	30.0	23.3	16.5	32.2	4.4	32.2	32.2	32.2	25.9	19.3	12.7
2000	72	46.8	4.4	40.6	33.2	25.8	18.4	-	-	40.7	4.8	38.0	30.7	23.4	16.2	-	-
	67	40.9	4.3	40.9	40.9	35.6	28.2	20.8	-	35.0	4.6	35.0	35.0	33.0	25.8	18.5	-
	62	37.9	4.2	37.9	37.9	37.9	30.5	23.1	15.7	33.6	4.5	33.6	33.6	33.6	26.4	19.1	11.8
	57	37.4	4.2	37.4	37.4	37.4	30.0	22.6	15.2	33.1	4.5	33.1	33.1	33.1	25.8	18.5	11.2

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.

ZH061 (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	82.5	3.4	36.6	30.6	25.1	-	-	-	75.9	3.9	32.9	27.4	21.9	-	-	-		
	72	74.3	3.4	43.9	38.3	32.8	27.3	-	-	68.3	3.8	40.9	35.3	29.8	24.3	-	-		
	67	66.2	3.4	51.1	46.0	40.5	35.0	29.4	-	60.7	3.8	48.8	43.3	37.8	32.3	26.8	-		
	62	59.3	3.4	59.3	59.3	49.5	43.9	38.4	32.9	54.5	3.8	54.5	54.5	46.2	40.7	35.2	29.7		
1500	77	84.7	3.4	40.0	33.6	27.1	-	-	-	78.2	3.9	36.6	30.2	23.8	-	-	-		
	72	76.3	3.4	48.4	41.9	35.4	29.0	-	-	70.4	3.9	45.3	38.9	32.4	26.0	-	-		
	67	68.0	3.4	56.7	50.2	43.8	37.3	30.8	-	62.5	3.8	54.0	47.5	41.1	34.6	28.2	-		
	62	60.9	3.4	60.9	60.9	53.4	47.0	40.5	34.1	56.1	3.8	56.1	56.1	50.2	43.8	37.4	30.9		
	57	61.6	3.4	61.6	61.6	54.9	48.4	41.9	35.5	55.2	3.8	55.2	55.2	50.6	44.1	37.7	31.2		
1750	77	86.9	3.4	43.5	36.5	29.1	-	-	-	80.5	3.9	40.4	33.0	25.7	-	-	-		
	72	78.4	3.4	52.8	45.5	38.1	30.7	-	-	72.4	3.9	49.8	42.4	35.0	27.6	-	-		
	67	69.8	3.4	62.2	54.4	47.0	39.6	32.2	-	64.4	3.8	59.1	51.7	44.4	37.0	29.6	-		
	62	62.5	3.4	62.5	62.5	57.4	50.0	42.6	35.2	57.8	3.8	57.8	57.8	54.3	46.9	39.5	32.1		
	57	63.3	3.4	63.3	63.3	58.9	51.6	44.2	36.8	56.8	3.8	56.8	56.8	54.6	47.2	39.8	32.5		
2000	77	89.2	3.4	47.0	39.5	31.2	-	-	-	82.7	3.9	44.2	35.9	27.6	-	-	-		
	72	80.4	3.4	57.3	49.0	40.7	32.4	-	-	74.5	3.9	54.2	45.9	37.6	29.3	-	-		
	67	71.6	3.4	67.7	58.6	50.3	41.9	33.6	-	66.2	3.8	64.3	56.0	47.7	39.3	31.0	-		
	62	64.1	3.4	64.1	64.1	61.4	53.1	44.7	36.4	59.4	3.8	59.4	59.4	58.3	50.0	41.7	33.4		
	57	64.9	3.4	64.9	64.9	63.0	54.7	46.4	38.1	58.5	3.8	58.5	58.5	58.6	50.3	42.0	33.7		
2250	72	83.6	3.4	61.7	52.7	43.6	34.5	-	-	76.2	3.9	58.5	49.3	40.2	31.1	-	-		
	67	74.5	3.4	72.5	62.9	53.8	44.7	35.7	-	67.7	3.8	66.8	60.1	51.0	41.9	32.7	-		
	62	66.7	3.4	66.7	66.7	65.3	56.3	47.2	38.1	60.8	3.8	60.8	60.8	60.2	51.1	42.0	32.8		
	57	67.5	3.4	67.5	67.5	66.5	57.5	48.4	39.3	59.8	3.8	59.8	59.8	59.9	50.8	41.7	32.5		
	57	67.5	3.4	67.5	67.5	66.5	57.5	48.4	39.3	59.8	3.8	59.8	59.8	59.9	50.8	41.7	32.5		
2500	72	86.9	3.4	66.1	56.3	46.5	36.6	-	-	77.9	3.9	62.7	52.8	42.8	32.9	-	-		
	67	77.3	3.4	77.3	67.3	57.3	47.5	37.7	-	69.3	3.8	69.3	64.2	54.3	44.4	34.4	-		
	62	69.3	3.4	69.3	69.3	69.3	59.5	49.6	39.8	62.2	3.8	62.2	62.2	62.2	52.2	42.3	32.3		
	57	70.0	3.4	70.0	70.0	70.0	60.2	50.4	40.5	61.2	3.8	61.2	61.2	61.2	51.2	41.3	31.3		
	57	70.0	3.4	70.0	70.0	70.0	60.2	50.4	40.5	61.2	3.8	61.2	61.2	61.2	51.2	41.3	31.3		
		95°F										105°F							
1250	77	69.3	4.3	29.2	24.1	18.6	-	-	-	62.5	4.7	25.5	21.7	16.3	-	-	-		
	72	62.3	4.3	37.9	32.4	26.9	21.4	-	-	55.9	4.6	35.3	29.9	24.5	19.0	-	-		
	67	55.2	4.2	46.5	40.6	35.1	29.6	24.1	-	49.4	4.6	45.0	38.1	32.6	27.2	21.8	-		
	62	49.7	4.1	49.7	49.7	43.0	37.5	32.0	26.5	44.7	4.5	44.7	44.7	40.1	34.7	29.3	23.8		
1500	77	71.7	4.3	33.3	26.8	20.4	-	-	-	64.8	4.8	31.0	24.3	17.9	-	-	-		
	72	64.4	4.3	42.3	35.8	29.4	23.0	-	-	58.0	4.7	39.6	33.3	26.9	20.5	-	-		
	67	57.1	4.2	51.3	44.8	38.4	32.0	25.6	-	51.1	4.6	48.2	42.3	35.9	29.5	23.2	-		
	62	51.4	4.2	51.4	51.4	47.1	40.6	34.2	27.8	46.3	4.5	46.3	46.3	44.2	37.8	31.4	25.1		
	57	48.8	4.2	48.8	48.8	46.3	39.8	33.4	27.0	44.1	4.5	44.1	44.1	42.1	35.7	29.4	23.0		
1750	77	74.0	4.3	37.3	29.5	22.2	-	-	-	67.1	4.8	36.5	26.8	19.5	-	-	-		
	72	66.5	4.3	46.7	39.3	31.9	24.6	-	-	60.0	4.7	44.0	36.7	29.3	22.0	-	-		
	67	58.9	4.2	56.0	49.1	41.7	34.4	27.0	-	52.9	4.6	51.5	46.5	39.2	31.8	24.5	-		
	62	53.0	4.2	53.0	53.0	51.1	43.8	36.4	29.0	47.9	4.5	47.9	47.9	48.3	40.9	33.6	26.3		
	57	50.4	4.2	50.4	50.4	50.2	42.9	35.5	28.2	45.7	4.5	45.7	45.7	45.9	38.6	31.3	23.9		
2000	77	76.3	4.4	41.4	32.2	23.9	-	-	-	69.3	4.8	42.0	29.4	21.1	-	-	-		
	72	68.6	4.3	51.1	42.8	34.5	26.2	-	-	62.0	4.7	48.4	40.1	31.8	23.5	-	-		
	67	60.8	4.2	60.8	53.3	45.0	36.8	28.5	-	54.7	4.6	54.7	50.7	42.4	34.1	25.9	-		
	62	54.7	4.2	54.7	54.7	55.2	46.9	38.6	30.3	49.6	4.5	49.6	49.6	52.4	44.1	35.8	27.5		
	57	52.0	4.2	52.0	52.0	54.2	45.9	37.7	29.4	47.2	4.5	47.2	47.2	49.7	41.4	33.2	24.9		
2250	72	68.8	4.3	55.2	46.0	36.9	27.7	-	-	62.0	4.7	52.4	43.2	34.0	24.9	-	-		
	67	61.0	4.2	61.0	57.3	48.2	39.0	29.8	-	54.7	4.6	54.7	52.7	45.5	36.3	27.1	-		
	62	54.9	4.2	54.9	54.9	55.1	45.9	36.7	27.6	49.5	4.5	49.5	49.5	50.9	41.8	32.6	23.4		
	57	52.2	4.2	52.2	52.2	53.3	44.1	34.9	25.7	47.2	4.6	47.2	47.2	48.5	39.3	30.1	21.0		
2500	72	69.0	4.3	59.4	49.3	39.2	29.2	-	-	62.0	4.7	56.4	46.4	36.3	26.3	-	-		
	67	61.2	4.2	61.2	61.2	51.3	41.2	31.1	-	54.7	4.6	54.7	54.7	48.5	38.5	28.4	-		
	62	55.0	4.2	55.0	55.0	55.0	45.0	34.9	24.8	49.5	4.5	49.5	49.5	49.5	39.5	29.4	19.4		
	57	52.3	4.2	52.3	52.3	52.3	42.3	32.2	22.1	47.2	4.6	47.2	47.2	47.2	37.1	27.1	17.0		

ZH061 (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	55.7	5.2	21.9	19.2	13.9	-	-	-	48.9	5.6	22.6	15.3	11.5	-	-	-
	72	49.6	5.0	32.7	27.4	22.0	16.7	-	-	43.3	5.4	30.1	24.9	19.6	14.4	-	-
	67	43.5	4.9	43.5	35.5	30.2	24.9	19.5	-	37.6	5.3	37.6	33.4	27.7	22.5	17.3	-
	62	39.7	4.8	39.7	39.7	37.2	31.8	26.5	21.2	34.7	5.1	34.7	34.7	34.7	29.0	23.8	18.5
1500	77	57.9	5.2	28.8	21.7	15.4	-	-	-	51.1	5.6	29.5	19.1	12.9	-	-	-
	72	51.6	5.1	37.0	30.7	24.4	18.1	-	-	45.2	5.5	34.4	28.1	21.9	15.6	-	-
	67	45.2	4.9	45.2	39.7	33.4	27.1	20.8	-	39.2	5.3	39.2	37.1	30.9	24.6	18.4	-
	62	41.3	4.8	41.3	41.3	41.3	35.0	28.7	22.3	36.2	5.2	36.2	36.2	36.2	32.1	25.9	19.6
	57	39.4	4.9	39.4	39.4	37.9	31.6	25.3	19.0	34.7	5.2	34.7	34.7	33.8	27.5	21.3	15.0
1750	77	60.1	5.2	35.7	24.1	16.8	-	-	-	53.2	5.7	36.4	22.9	14.2	-	-	-
	72	53.5	5.1	41.3	34.0	26.7	19.4	-	-	47.1	5.5	38.6	31.4	24.1	16.9	-	-
	67	46.9	5.0	46.9	43.9	36.6	29.3	22.0	-	40.9	5.3	40.9	40.9	34.1	26.8	19.5	-
	62	42.8	4.9	42.8	42.8	45.4	38.1	30.8	23.5	37.8	5.2	37.8	37.8	37.8	35.3	28.0	20.7
	57	40.9	4.9	40.9	40.9	41.6	34.3	27.0	19.7	36.2	5.3	36.2	36.2	36.2	30.0	22.7	15.5
2000	77	62.3	5.3	42.7	26.6	18.3	-	-	-	55.4	5.7	43.3	26.7	15.5	-	-	-
	72	55.5	5.1	45.6	37.4	29.1	20.8	-	-	49.0	5.5	42.9	34.6	26.4	18.1	-	-
	67	48.6	5.0	48.6	48.1	39.8	31.5	23.3	-	42.5	5.4	42.5	42.5	37.2	28.9	20.7	-
	62	44.4	4.9	44.4	44.4	49.5	41.2	33.0	24.7	39.3	5.2	39.3	39.3	39.3	38.4	30.1	21.9
	57	42.4	4.9	42.4	42.4	45.2	36.9	28.7	20.4	37.6	5.3	37.6	37.6	37.6	32.4	24.2	15.9
2250	72	55.2	5.1	49.5	40.4	31.2	22.1	-	-	48.4	5.6	46.7	37.6	28.4	19.3	-	-
	67	48.4	5.0	48.4	48.1	42.8	33.6	24.5	-	42.1	5.4	42.1	42.1	40.1	31.0	21.8	-
	62	44.2	4.9	44.2	44.2	46.7	37.6	28.4	19.3	38.9	5.3	38.9	38.9	38.9	33.4	24.3	15.1
	57	42.2	4.9	42.2	42.2	43.6	34.5	25.3	16.2	37.2	5.3	37.2	37.2	37.2	29.6	20.5	11.4
2500	72	54.9	5.2	53.5	43.4	33.4	23.4	-	-	47.9	5.6	47.9	40.5	30.5	20.5	-	-
	67	48.2	5.0	48.2	48.2	45.7	35.7	25.7	-	41.6	5.4	41.6	41.6	41.6	33.0	23.0	-
	62	44.0	4.9	44.0	44.0	44.0	34.0	23.9	13.9	38.5	5.3	38.5	38.5	38.5	28.4	18.4	8.4
	57	42.0	5.0	42.0	42.0	42.0	32.0	22.0	11.9	36.9	5.4	36.9	36.9	36.9	26.8	16.8	6.8

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.

ZH078 (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	78.3	7.0	31.2	26.7	19.5	-	-	-	69.4	7.5	24.9	23.7	17.5	-	-	-				
	72	70.7	6.8	44.7	37.4	30.1	22.9	-	-	63.1	7.3	40.9	34.3	27.8	21.3	-	-				
	67	63.2	6.7	58.1	48.0	40.8	33.5	26.2	-	56.8	7.1	56.8	44.7	38.1	31.6	25.1	-				
	62	55.8	6.5	55.8	55.8	51.1	43.9	36.6	29.3	48.6	6.9	48.6	48.6	48.6	41.9	35.4	28.9				
1950	77	80.3	7.0	37.9	29.7	21.4	-	-	-	71.3	7.6	36.4	27.6	19.3	-	-	-				
	72	72.5	6.9	49.6	41.4	33.2	24.9	-	-	64.8	7.4	47.3	39.0	30.7	22.3	-	-				
	67	64.7	6.7	61.4	53.1	44.9	36.7	28.5	-	58.3	7.2	58.3	50.4	42.1	33.7	25.4	-				
	62	57.2	6.6	57.2	57.2	56.3	48.1	39.9	31.6	49.9	6.9	49.9	49.9	49.9	45.1	36.8	28.5				
	57	61.4	6.6	61.4	61.3	53.1	44.9	36.7	28.4	55.7	7.1	55.7	55.7	48.0	39.7	31.4	23.1				
2275	77	82.2	7.1	44.6	32.6	23.4	-	-	-	73.1	7.6	47.8	31.5	21.1	-	-	-				
	72	74.2	6.9	54.6	45.4	36.2	27.0	-	-	66.4	7.4	53.8	43.6	33.5	23.4	-	-				
	67	66.3	6.8	64.6	58.2	49.1	39.9	30.7	-	59.7	7.3	59.7	56.1	46.0	35.9	25.7	-				
	62	58.6	6.6	58.6	58.6	61.5	52.3	43.1	34.0	51.2	7.0	51.2	51.2	51.2	48.3	38.2	28.0				
	57	62.9	6.7	62.9	62.9	58.0	48.8	39.6	30.5	57.1	7.1	57.1	57.1	52.5	42.4	32.3	22.1				
2600	77	84.1	7.1	51.3	35.5	25.4	-	-	-	74.9	7.7	59.3	35.4	22.9	-	-	-				
	72	76.0	7.0	59.6	49.4	39.3	29.1	-	-	68.1	7.5	60.2	48.3	36.4	24.5	-	-				
	67	67.9	6.8	67.9	63.3	53.2	43.1	32.9	-	61.2	7.3	61.2	61.2	49.9	38.0	26.0	-				
	62	60.0	6.6	60.0	60.0	66.7	56.6	46.4	36.3	52.4	7.1	52.4	52.4	52.4	51.5	39.6	27.6				
	57	64.4	6.7	64.4	64.4	62.9	52.8	42.6	32.5	58.5	7.2	58.5	58.5	57.0	45.1	33.1	21.2				
2925	72	77.4	7.0	64.4	53.3	42.1	31.0	-	-	68.5	7.5	63.2	51.2	39.2	27.2	-	-				
	67	69.1	6.8	69.1	66.8	57.0	45.9	34.8	-	61.6	7.3	61.6	61.6	53.7	41.7	29.7	-				
	62	61.1	6.7	61.1	61.1	64.4	53.3	42.2	31.0	52.7	7.1	52.7	52.7	52.7	46.2	34.2	22.1				
	57	65.6	6.7	65.6	65.6	64.8	53.7	42.5	31.4	58.9	7.2	58.9	58.9	58.2	46.1	34.1	22.1				
3250	72	78.8	7.0	69.2	57.1	45.0	32.9	-	-	68.9	7.6	66.2	54.1	42.0	29.9	-	-				
	67	70.3	6.9	70.3	70.3	60.9	48.8	36.6	-	62.0	7.4	62.0	62.0	57.6	45.5	33.3	-				
	62	62.2	6.7	62.2	62.2	62.2	50.0	37.9	25.8	53.0	7.1	53.0	53.0	53.0	40.9	28.8	16.7				
	57	66.7	6.8	66.7	66.7	66.7	54.6	42.5	30.3	59.3	7.2	59.3	59.3	59.3	47.2	35.1	23.0				

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.

ZH090 (7.5 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																	
		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	113.8	5.8	49.0	41.0	33.1	-	-	-	112.1	6.5	46.6	38.6	30.6	-	-	-		
	72	106.0	5.8	62.6	54.6	46.7	38.7	-	-	102.9	6.4	59.9	51.9	43.9	35.9	-	-		
	67	98.1	5.8	76.2	68.3	60.3	52.3	44.4	-	93.8	6.4	73.2	65.2	57.2	49.2	41.2	-		
	62	86.5	5.8	86.5	80.4	71.9	64.0	56.0	48.1	83.9	6.4	83.9	79.0	68.5	60.5	52.5	44.4		
2250	77	121.4	5.8	54.8	45.5	36.3	-	-	-	116.8	6.5	51.9	42.7	33.5	-	-	-		
	72	112.9	5.8	69.7	60.4	51.2	41.9	-	-	107.3	6.4	66.5	57.2	48.0	38.8	-	-		
	67	104.5	5.8	84.6	75.3	66.1	56.8	47.5	-	97.7	6.4	81.0	71.8	62.6	53.3	44.1	-		
	62	92.2	5.8	92.2	88.1	78.8	69.6	60.3	51.0	87.5	6.4	87.5	84.1	74.9	65.7	56.5	47.3		
	57	90.4	5.8	90.4	91.7	85.4	76.2	66.9	57.6	87.7	6.4	87.7	87.7	80.0	70.7	61.5	52.3		
2625	77	128.9	5.8	60.6	50.0	39.4	-	-	-	121.5	6.5	57.2	46.8	36.3	-	-	-		
	72	119.9	5.8	76.8	66.2	55.6	45.0	-	-	111.6	6.5	73.0	62.6	52.1	41.7	-	-		
	67	110.9	5.9	93.0	82.4	71.9	61.3	50.7	-	101.7	6.4	88.8	78.4	67.9	57.5	47.1	-		
	62	97.9	5.9	97.9	95.8	85.7	75.1	64.5	54.0	91.0	6.4	91.0	89.3	81.4	70.9	60.5	50.1		
	57	96.1	5.8	96.1	96.8	92.9	82.3	71.7	61.1	91.2	6.4	91.2	91.2	86.8	76.4	66.0	55.5		
3000	77	136.5	5.8	66.4	54.5	42.6	-	-	-	126.2	6.5	62.5	50.8	39.2	-	-	-		
	72	126.9	5.8	83.9	72.0	60.1	48.2	-	-	115.9	6.5	79.5	67.9	56.3	44.6	-	-		
	67	117.3	5.9	101.4	89.5	77.6	65.7	53.8	-	105.6	6.5	96.6	85.0	73.3	61.7	50.0	-		
	62	103.6	5.9	103.6	103.6	92.6	80.7	68.8	56.9	94.5	6.4	94.5	94.5	87.8	76.1	64.5	52.9		
	57	101.8	5.9	101.8	101.8	100.4	88.5	76.6	64.6	94.8	6.4	94.8	94.8	93.7	82.1	70.4	58.8		
3375	72	128.9	5.8	88.3	75.7	63.2	50.6	-	-	118.6	6.5	84.9	72.3	59.8	47.2	-	-		
	67	119.1	5.8	110.1	94.1	81.6	69.0	56.4	-	108.1	6.5	103.0	90.4	77.9	65.3	52.8	-		
	62	105.2	5.9	105.2	105.2	99.6	87.0	74.4	61.8	96.7	6.4	96.7	96.7	93.2	80.7	68.1	55.6		
	57	103.4	5.8	103.4	103.4	102.6	90.1	77.5	64.9	96.9	6.4	96.9	96.9	96.4	83.9	71.3	58.8		
3750	72	130.9	5.8	92.7	79.5	66.2	53.0	-	-	121.2	6.5	90.2	76.7	63.3	49.8	-	-		
	67	121.0	5.8	118.7	98.7	85.5	72.2	59.0	-	110.5	6.5	109.4	95.9	82.4	69.0	55.5	-		
	62	106.8	5.8	106.8	106.8	106.5	93.2	80.0	66.7	98.9	6.4	98.9	98.9	98.7	85.2	71.8	58.3		
	57	104.9	5.8	104.9	104.9	104.9	91.7	78.4	65.2	99.1	6.4	99.1	99.1	99.1	85.7	72.2	58.7		
		95°F								105°F									
1875	77	110.3	7.1	44.2	36.2	28.1	-	-	-	103.5	7.7	38.5	33.2	25.2	-	-	-		
	72	99.9	7.0	57.2	49.2	41.1	33.0	-	-	93.1	7.6	54.2	46.2	38.2	30.3	-	-		
	67	89.5	7.0	70.2	62.2	54.1	46.0	37.9	-	82.7	7.5	69.8	59.2	51.2	43.3	35.3	-		
	62	81.3	6.9	81.3	77.5	65.0	57.0	48.9	40.8	78.3	7.4	78.3	75.8	62.2	54.2	46.2	38.3		
2250	77	112.2	7.1	49.0	39.8	30.7	-	-	-	103.5	7.8	45.5	36.5	27.4	-	-	-		
	72	101.6	7.1	63.2	54.0	44.9	35.7	-	-	93.1	7.7	59.6	50.6	41.5	32.5	-	-		
	67	91.0	7.0	77.4	68.2	59.1	49.9	40.7	-	82.7	7.5	73.7	64.7	55.7	46.6	37.6	-		
	62	82.7	6.9	82.7	80.2	71.0	61.8	52.7	43.5	78.2	7.4	78.2	76.6	67.5	58.5	49.5	40.4		
	57	84.9	6.9	84.9	83.7	74.5	65.3	56.1	47.0	80.0	7.4	80.0	78.7	69.7	60.7	51.6	42.6		
2625	77	114.1	7.2	53.8	43.5	33.2	-	-	-	103.5	7.8	52.4	39.7	29.6	-	-	-		
	72	103.3	7.1	69.2	58.9	48.6	38.4	-	-	93.1	7.7	65.0	54.9	44.8	34.7	-	-		
	67	92.5	7.0	84.6	74.3	64.0	53.8	43.5	-	82.7	7.6	77.6	70.2	60.1	50.0	39.9	-		
	62	84.1	6.9	84.1	82.8	77.0	66.7	56.4	46.2	78.2	7.5	78.2	77.4	72.9	62.8	52.7	42.6		
	57	86.3	6.9	86.3	85.7	80.8	70.5	60.2	49.9	79.9	7.5	79.9	79.3	75.2	65.1	55.0	44.9		
3000	77	115.9	7.2	58.6	47.2	35.8	-	-	-	103.4	7.9	59.4	43.0	31.8	-	-	-		
	72	105.0	7.1	75.2	63.8	52.4	41.0	-	-	93.1	7.7	70.5	59.3	48.1	37.0	-	-		
	67	94.0	7.1	91.7	80.4	69.0	57.6	46.3	-	82.7	7.6	81.6	75.7	64.5	53.3	42.1	-		
	62	85.5	7.0	85.5	85.5	83.0	71.6	60.2	48.8	78.1	7.5	78.1	78.1	78.2	67.1	55.9	44.7		
	57	87.8	7.0	87.8	87.8	87.0	75.7	64.3	52.9	79.9	7.5	79.9	79.9	80.8	69.6	58.4	47.2		
3375	72	108.3	7.1	81.4	68.9	56.4	43.8	-	-	97.2	7.8	76.7	64.4	52.1	39.8	-	-		
	67	97.0	7.1	95.9	86.7	74.2	61.7	49.1	-	86.4	7.6	85.8	81.1	69.8	57.5	45.2	-		
	62	88.2	7.0	88.2	88.2	86.9	74.4	61.9	49.3	81.6	7.5	81.6	81.6	81.7	69.4	57.1	44.8		
	57	90.5	7.0	90.5	90.5	90.2	77.7	65.1	52.6	83.5	7.5	83.5	83.5	83.9	71.6	59.3	47.0		
3750	72	111.6	7.2	87.7	74.0	60.3	46.6	-	-	101.3	7.8	82.8	69.4	56.0	42.6	-	-		
	67	100.0	7.1	100.0	93.1	79.4	65.7	52.0	-	90.0	7.7	90.0	86.6	75.0	61.6	48.2	-		
	62	90.9	7.0	90.9	90.9	90.9	77.2	63.5	49.9	85.1	7.5	85.1	85.1	85.1	71.7	58.3	44.9		
	57	93.3	7.0	93.3	93.3	93.3	79.7	66.0	52.3	87.0	7.5	87.0	87.0	87.0	73.6	60.2	46.8		

ZH090 (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	96.7	8.4	32.9	30.3	22.4	-	-	-	89.9	9.0	27.0	24.2	19.6	-	-	-
	72	86.3	8.2	51.1	43.3	35.4	27.5	-	-	79.5	8.8	48.1	40.3	32.5	24.8	-	-
	67	75.9	8.0	69.4	56.2	48.4	40.5	32.6	-	69.1	8.5	69.1	53.3	45.5	37.8	30.0	-
	62	75.3	7.9	75.3	74.0	59.3	51.5	43.6	35.7	72.2	8.4	72.2	72.2	56.5	48.7	40.9	33.2
2250	77	94.8	8.4	42.0	33.1	24.2	-	-	-	86.1	9.1	38.7	29.7	20.9	-	-	-
	72	84.6	8.2	56.0	47.1	38.2	29.3	-	-	76.1	8.8	52.4	43.7	34.9	26.1	-	-
	67	74.4	8.1	70.0	61.1	52.2	43.3	34.4	-	66.1	8.6	66.1	57.6	48.8	40.1	31.3	-
	62	73.8	7.9	73.8	73.0	64.1	55.2	46.3	37.4	69.3	8.4	69.3	69.3	60.6	51.8	43.1	34.3
	57	75.0	7.9	75.0	73.8	64.9	56.0	47.1	38.2	70.1	8.5	70.1	68.9	60.1	51.3	42.6	33.8
2625	77	92.9	8.5	51.1	35.9	26.0	-	-	-	82.3	9.1	50.5	35.2	22.3	-	-	-
	72	82.9	8.3	60.9	51.0	41.0	31.1	-	-	72.7	8.9	56.8	47.0	37.2	27.5	-	-
	67	72.9	8.1	70.7	66.0	56.1	46.2	36.2	-	63.1	8.6	63.1	61.9	52.1	42.4	32.6	-
	62	72.3	8.0	72.3	71.9	68.8	58.9	48.9	39.0	66.4	8.5	66.4	66.4	64.7	54.9	45.2	35.4
	57	73.5	8.0	73.5	72.9	69.7	59.8	49.8	39.9	67.1	8.5	67.1	66.5	64.2	54.4	44.6	34.8
3000	77	91.0	8.5	60.2	38.7	27.8	-	-	-	78.5	9.2	62.2	40.6	23.7	-	-	-
	72	81.2	8.3	65.8	54.8	43.9	32.9	-	-	69.3	8.9	61.2	50.4	39.6	28.8	-	-
	67	71.4	8.2	71.4	70.9	60.0	49.0	38.0	-	60.1	8.7	60.1	60.1	55.5	44.7	33.9	-
	62	70.8	8.0	70.8	70.8	73.5	62.6	51.6	40.6	63.5	8.5	63.5	63.5	63.5	58.1	47.3	36.5
	57	72.0	8.0	72.0	72.0	74.5	63.5	52.5	41.6	64.1	8.6	64.1	64.1	64.1	57.5	46.7	35.9
3375	72	86.1	8.4	71.9	59.9	47.8	35.7	-	-	75.0	9.0	67.2	55.3	43.5	31.7	-	-
	67	75.7	8.2	75.7	75.5	65.3	53.3	41.2	-	65.1	8.7	65.1	65.1	60.9	49.1	37.2	-
	62	75.1	8.1	75.1	75.1	76.5	64.4	52.3	40.3	68.6	8.6	68.6	68.6	68.6	59.4	47.5	35.7
	57	76.4	8.1	76.4	76.4	77.6	65.5	53.5	41.4	69.3	8.6	69.3	69.3	69.3	59.5	47.6	35.8
3750	72	91.0	8.4	78.0	64.9	51.7	38.5	-	-	80.7	9.0	73.2	60.3	47.4	34.5	-	-
	67	80.1	8.2	80.1	80.1	70.7	57.5	44.4	-	70.1	8.8	70.1	70.1	66.3	53.4	40.5	-
	62	79.4	8.1	79.4	79.4	79.4	66.2	53.1	39.9	73.6	8.6	73.6	73.6	73.6	60.7	47.8	34.9
	57	80.7	8.1	80.7	80.7	80.7	67.6	54.4	41.2	74.4	8.6	74.4	74.4	74.4	61.5	48.6	35.7

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.

ZH102 (8.5 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																	
		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	136.4	6.4	58.7	49.1	39.5	-	-	-	134.8	7.0	57.4	47.9	38.4	-	-	-		
	72	127.5	6.3	74.7	65.1	55.5	45.9	-	-	122.9	7.0	72.2	62.7	53.1	43.6	-	-		
	67	118.6	6.3	90.7	81.1	71.5	61.9	52.3	-	111.0	6.9	86.9	77.4	67.9	58.4	48.9	-		
	62	103.1	6.3	103.1	94.8	83.2	73.6	64.0	54.4	99.3	6.9	99.3	92.9	80.2	70.6	61.1	51.6		
2550	77	142.1	6.4	65.3	54.2	43.1	-	-	-	138.4	7.1	63.5	52.6	41.6	-	-	-		
	72	132.8	6.3	82.7	71.6	60.6	49.5	-	-	126.2	7.0	79.5	68.5	57.5	46.5	-	-		
	67	123.4	6.3	100.2	89.1	78.0	66.9	55.8	-	114.0	6.9	95.5	84.5	73.5	62.5	51.5	-		
	62	107.3	6.4	107.3	101.8	90.7	79.6	68.6	57.5	102.0	6.9	102.0	97.8	86.8	75.8	64.8	53.8		
	57	103.7	6.3	103.7	103.7	95.2	84.1	73.1	62.0	98.6	6.9	98.6	98.6	89.8	78.8	67.8	56.8		
2975	77	147.8	6.4	71.8	59.3	46.7	-	-	-	142.1	7.1	69.7	57.2	44.7	-	-	-		
	72	138.0	6.4	90.7	78.1	65.6	53.0	-	-	129.5	7.0	86.9	74.4	61.9	49.4	-	-		
	67	128.1	6.3	109.6	97.0	84.5	71.9	59.4	-	117.0	7.0	104.0	91.6	79.1	66.6	54.1	-		
	62	111.6	6.4	111.6	108.8	98.3	85.7	73.2	60.6	104.7	7.0	104.7	102.6	93.4	80.9	68.4	55.9		
	57	107.8	6.3	107.8	107.8	103.1	90.6	78.0	65.5	101.2	6.9	101.2	101.2	96.7	84.2	71.7	59.2		
3400	77	153.6	6.4	78.4	64.3	50.3	-	-	-	145.7	7.1	75.8	61.8	47.9	-	-	-		
	72	143.2	6.4	98.7	84.7	70.6	56.6	-	-	132.8	7.1	94.2	80.2	66.3	52.3	-	-		
	67	132.9	6.3	119.0	105.0	91.0	76.9	62.9	-	120.0	7.0	112.6	98.6	84.7	70.7	56.8	-		
	62	115.8	6.4	115.8	115.8	105.8	91.8	77.7	63.7	107.4	7.0	107.4	107.4	100.0	86.0	72.0	58.1		
	57	111.9	6.3	111.9	111.9	111.0	97.0	83.0	68.9	103.8	7.0	103.8	103.8	103.5	89.5	75.6	61.6		
3825	72	145.4	6.4	105.1	89.8	74.5	59.1	-	-	135.6	7.1	101.0	85.8	70.5	55.2	-	-		
	67	135.0	6.3	128.0	111.2	95.9	80.6	65.3	-	122.5	7.0	118.8	105.3	90.1	74.8	59.6	-		
	62	117.5	6.4	117.5	117.5	112.6	97.2	81.9	66.6	109.6	7.0	109.6	109.6	105.9	90.7	75.4	60.1		
	57	113.5	6.3	113.5	113.5	113.1	97.8	82.5	67.2	106.0	7.0	106.0	106.0	105.8	90.6	75.3	60.0		
4250	72	147.6	6.4	111.5	94.9	78.3	61.7	-	-	138.4	7.1	107.8	91.3	74.7	58.2	-	-		
	67	137.0	6.3	137.0	117.5	100.9	84.2	67.6	-	124.9	7.0	124.9	112.0	95.5	78.9	62.4	-		
	62	119.3	6.4	119.3	119.3	119.3	102.7	86.1	69.5	111.8	7.0	111.8	111.8	111.8	95.3	78.7	62.2		
	57	115.2	6.3	115.2	115.2	115.2	98.6	82.0	65.4	108.1	7.0	108.1	108.1	108.1	91.6	75.0	58.5		
		95°F								105°F									
2125	77	133.1	7.7	56.1	46.7	37.3	-	-	-	116.2	8.5	48.4	41.1	31.9	-	-	-		
	72	118.2	7.6	69.6	60.2	50.8	41.4	-	-	104.5	8.3	63.9	54.7	45.5	36.2	-	-		
	67	103.3	7.6	83.1	73.7	64.3	54.9	45.5	-	92.7	8.2	79.5	68.3	59.0	49.8	40.5	-		
	62	95.6	7.4	95.6	91.1	77.1	67.7	58.3	48.9	84.7	8.0	84.7	82.5	69.4	60.1	50.9	41.6		
2550	77	134.7	7.7	61.8	50.9	40.0	-	-	-	118.6	8.5	56.1	45.3	34.6	-	-	-		
	72	119.6	7.7	76.3	65.4	54.5	43.6	-	-	106.6	8.4	70.9	60.1	49.3	38.5	-	-		
	67	104.5	7.6	90.8	79.9	69.0	58.1	47.2	-	94.6	8.2	85.7	74.9	64.1	53.3	42.5	-		
	62	96.7	7.5	96.7	93.7	82.8	71.9	61.0	50.1	86.5	8.1	86.5	85.0	75.3	64.5	53.7	42.9		
	57	93.6	7.5	93.6	93.6	84.4	73.5	62.6	51.7	84.8	8.1	84.8	84.8	76.0	65.2	54.4	43.6		
2975	77	136.3	7.8	67.5	55.1	42.7	-	-	-	121.0	8.6	63.9	49.6	37.3	-	-	-		
	72	121.0	7.7	83.0	70.6	58.2	45.8	-	-	108.8	8.4	77.9	65.5	53.2	40.9	-	-		
	67	105.8	7.7	98.5	86.1	73.7	61.3	48.9	-	96.5	8.3	91.9	81.5	69.2	56.8	44.5	-		
	62	97.8	7.5	97.8	96.3	88.5	76.1	63.7	51.3	88.3	8.1	88.3	87.5	81.2	68.9	56.5	44.2		
	57	94.7	7.6	94.7	94.7	90.2	77.8	65.4	53.0	86.5	8.2	86.5	86.5	82.0	69.6	57.3	45.0		
3400	77	137.9	7.8	73.2	59.4	45.5	-	-	-	123.4	8.6	71.6	53.8	39.9	-	-	-		
	72	122.4	7.8	89.7	75.8	62.0	48.1	-	-	110.9	8.5	84.8	71.0	57.1	43.2	-	-		
	67	107.0	7.7	106.2	92.3	78.4	64.5	50.7	-	98.5	8.3	98.1	88.1	74.2	60.3	46.5	-		
	62	99.0	7.6	99.0	99.0	94.1	80.2	66.4	52.5	90.0	8.2	90.0	90.0	87.1	73.2	59.4	45.5		
	57	95.8	7.6	95.8	95.8	95.9	82.1	68.2	54.3	88.3	8.2	88.3	88.3	87.9	74.1	60.2	46.3		
3825	72	125.8	7.8	96.9	81.7	66.6	51.4	-	-	112.9	8.5	91.2	76.2	61.1	46.1	-	-		
	67	109.9	7.7	109.5	99.4	84.2	69.1	53.9	-	100.2	8.4	100.0	93.4	79.5	64.4	49.4	-		
	62	101.7	7.6	101.7	101.7	99.3	84.1	68.9	53.7	91.6	8.2	91.6	91.6	90.1	75.1	60.0	45.0		
	57	98.4	7.6	98.4	98.4	98.5	83.3	68.1	52.9	89.8	8.3	89.8	89.8	89.6	74.6	59.5	44.5		
4250	72	129.2	7.8	104.1	87.6	71.2	54.7	-	-	114.8	8.6	97.6	81.4	65.2	49.0	-	-		
	67	112.9	7.8	112.9	106.6	90.1	73.6	57.1	-	101.9	8.4	101.9	98.7	84.7	68.5	52.3	-		
	62	104.4	7.6	104.4	104.4	104.4	87.9	71.4	54.9	93.1	8.3	93.1	93.1	93.1	76.9	60.7	44.5		
	57	101.0	7.7	101.0	101.0	101.0	84.5	68.0	51.5	91.3	8.3	91.3	91.3	91.3	75.1	58.9	42.7		

ZH102 (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	99.3	9.3	40.7	35.5	26.4	-	-	-	82.4	10.1	33.8	29.9	21.0	-	-	-
	72	90.7	9.0	58.3	49.2	40.1	31.0	-	-	76.9	9.7	52.6	43.7	34.8	25.9	-	-
	67	82.0	8.8	75.8	62.9	53.8	44.7	35.6	-	71.4	9.4	71.4	57.5	48.5	39.6	30.7	-
	62	73.9	8.6	73.9	73.9	61.6	52.5	43.4	34.3	63.1	9.2	63.1	63.1	53.8	44.9	35.9	27.0
2550	77	102.5	9.4	50.5	39.8	29.1	-	-	-	86.4	10.2	45.4	34.2	23.7	-	-	-
	72	93.6	9.1	65.5	54.8	44.1	33.5	-	-	80.6	9.8	60.1	49.5	39.0	28.4	-	-
	67	84.7	8.8	80.5	69.9	59.2	48.5	37.8	-	74.8	9.4	74.8	64.9	54.3	43.7	33.2	-
	62	76.3	8.7	76.3	76.3	67.7	57.1	46.4	35.7	66.1	9.3	66.1	66.1	60.2	49.7	39.1	28.5
	57	76.1	8.7	76.1	76.1	67.6	56.9	46.2	35.6	67.3	9.3	67.3	67.3	59.2	48.6	38.0	27.5
2975	77	105.7	9.4	60.2	44.0	31.8	-	-	-	90.4	10.2	57.1	38.5	26.3	-	-	-
	72	96.5	9.1	72.7	60.5	48.2	35.9	-	-	84.3	9.8	67.6	55.4	43.2	30.9	-	-
	67	87.3	8.9	85.3	76.9	64.6	52.3	40.0	-	78.1	9.5	78.1	72.3	60.0	47.8	35.6	-
	62	78.7	8.7	78.7	78.7	73.9	61.7	49.4	37.1	69.1	9.3	69.1	69.1	66.7	54.4	42.2	30.0
	57	78.4	8.8	78.4	78.4	73.8	61.5	49.2	36.9	70.3	9.4	70.3	70.3	65.5	53.3	41.1	28.9
3400	77	108.9	9.5	69.9	48.3	34.4	-	-	-	94.4	10.3	68.7	42.8	28.9	-	-	-
	72	99.4	9.2	79.9	66.1	52.2	38.3	-	-	87.9	9.9	75.1	61.2	47.3	33.5	-	-
	67	90.0	8.9	90.0	83.9	70.0	56.1	42.3	-	81.5	9.5	81.5	79.6	65.8	51.9	38.1	-
	62	81.1	8.8	81.1	81.1	80.1	66.2	52.4	38.5	72.1	9.4	72.1	72.1	72.1	59.2	45.4	31.5
	57	80.8	8.8	80.8	80.8	79.9	66.0	52.2	38.3	73.3	9.4	73.3	73.3	71.9	58.0	44.2	30.3
3825	72	99.9	9.3	85.5	70.6	55.7	40.8	-	-	87.0	10.0	79.8	65.0	50.3	35.6	-	-
	67	90.4	9.0	90.4	87.4	74.7	59.8	44.9	-	80.6	9.6	80.6	80.6	69.9	55.2	40.5	-
	62	81.5	8.9	81.5	81.5	81.0	66.1	51.2	36.3	71.4	9.5	71.4	71.4	71.4	57.1	42.4	27.6
	57	81.2	8.9	81.2	81.2	80.8	65.9	51.0	36.1	72.6	9.6	72.6	72.6	71.9	57.2	42.4	27.7
4250	72	100.4	9.4	91.0	75.1	59.2	43.3	-	-	86.0	10.1	84.5	68.9	53.3	37.6	-	-
	67	90.8	9.1	90.8	90.8	79.4	63.5	47.6	-	79.8	9.8	79.8	79.8	74.1	58.5	42.9	-
	62	81.9	9.0	81.9	81.9	81.9	66.0	50.1	34.2	70.6	9.6	70.6	70.6	70.6	55.0	39.4	23.8
	57	81.6	9.0	81.6	81.6	81.6	65.7	49.8	33.9	71.9	9.7	71.9	71.9	71.9	56.3	40.7	25.1

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.

ZH120 (10 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																	
		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	148.4	7.2	37.9	39.0	40.1	-	-	-	145.3	7.9	35.2	36.6	38.0	-	-	-		
	72	138.6	7.0	56.2	57.2	58.3	59.4	-	-	134.2	7.7	53.1	54.5	55.9	57.3	-	-		
	67	128.8	6.7	74.4	75.5	76.5	77.6	78.7	-	123.2	7.6	70.9	72.3	73.7	75.1	76.5	-		
	62	119.6	6.7	103.4	95.5	94.1	95.2	96.2	97.3	115.1	7.6	100.5	93.0	90.7	92.1	93.5	94.9		
3000	77	155.1	7.2	54.6	49.4	44.1	-	-	-	150.7	7.9	51.9	46.8	41.8	-	-	-		
	72	144.8	7.0	74.7	69.4	64.2	59.0	-	-	139.3	7.8	71.5	66.5	61.4	56.4	-	-		
	67	134.6	6.7	94.8	89.5	84.3	79.0	73.8	-	127.8	7.6	91.1	86.1	81.0	76.0	71.0	-		
	62	124.9	6.7	114.1	108.9	103.6	98.4	93.2	87.9	119.5	7.6	109.7	104.7	99.7	94.6	89.6	84.5		
	57	122.1	6.7	116.9	111.7	106.4	101.2	95.9	90.7	116.7	7.6	111.4	106.3	101.3	96.3	91.2	86.2		
3500	77	161.8	7.2	71.2	59.7	48.2	-	-	-	156.2	7.9	68.5	57.1	45.6	-	-	-		
	72	151.1	6.9	93.2	81.6	70.1	58.6	-	-	144.3	7.8	89.9	78.5	67.0	55.5	-	-		
	67	140.3	6.7	115.1	103.6	92.0	80.5	68.9	-	132.5	7.6	111.3	99.8	88.4	76.9	65.4	-		
	62	130.3	6.7	124.9	122.3	113.2	101.6	90.1	78.6	123.8	7.6	118.9	116.4	108.7	97.2	85.7	74.2		
	57	127.3	6.7	124.7	122.1	116.2	104.7	93.1	81.6	121.0	7.6	118.3	115.8	110.4	99.0	87.5	76.0		
4000	77	168.5	7.2	87.9	70.1	52.2	-	-	-	161.7	7.9	85.2	67.3	49.4	-	-	-		
	72	157.3	6.9	111.7	93.8	76.0	58.2	-	-	149.4	7.8	108.4	90.4	72.5	54.6	-	-		
	67	146.1	6.7	135.4	117.6	99.8	81.9	64.1	-	137.1	7.7	131.5	113.6	95.7	77.8	59.9	-		
	62	135.7	6.6	135.7	135.7	122.7	104.9	87.0	69.2	128.2	7.6	128.2	128.2	117.7	99.8	81.8	63.9		
	57	132.6	6.6	132.6	132.6	126.0	108.1	90.3	72.5	125.2	7.6	125.2	125.2	119.6	101.7	83.8	65.8		
4500	72	157.8	7.0	102.0	89.8	77.6	65.4	-	-	150.2	7.8	98.7	86.5	74.4	62.3	-	-		
	67	146.6	6.8	126.3	114.1	101.9	89.7	77.5	-	137.9	7.7	122.4	110.3	98.2	86.0	73.9	-		
	62	136.1	6.8	136.1	136.1	125.3	113.1	100.9	88.7	128.9	7.6	128.9	128.9	120.7	108.6	96.5	84.3		
	57	133.0	6.8	133.0	133.0	128.9	116.7	104.5	92.3	125.9	7.6	125.9	125.9	122.7	110.6	98.4	86.3		
5000	72	158.3	7.2	92.4	85.8	79.3	72.7	-	-	151.1	7.9	89.0	82.6	76.3	69.9	-	-		
	67	147.1	6.9	117.2	110.6	104.1	97.5	91.0	-	138.6	7.8	113.3	107.0	100.6	94.3	87.9	-		
	62	136.6	6.9	136.6	136.6	128.0	121.4	114.9	108.3	129.6	7.7	129.6	129.6	123.8	117.4	111.1	104.7		
	57	133.4	6.9	133.4	133.4	131.8	125.2	118.6	112.1	126.6	7.7	126.6	126.6	125.8	119.4	113.1	106.7		
		95°F									105°F								
2500	77	142.1	8.5	32.5	34.3	36.0	-	-	-	130.2	9.7	26.3	30.7	32.7	-	-	-		
	72	129.8	8.5	50.0	51.7	53.4	55.2	-	-	120.3	9.7	46.3	48.4	50.4	52.5	-	-		
	67	117.5	8.5	67.4	69.2	70.9	72.6	74.4	-	110.4	9.7	66.3	66.1	68.2	70.2	72.3	-		
	62	110.7	8.4	97.7	90.5	87.2	88.9	90.7	92.4	104.5	9.6	92.5	85.6	82.2	84.3	86.3	88.4		
3000	77	146.4	8.5	49.2	44.3	39.5	-	-	-	133.8	9.8	45.2	40.5	35.9	-	-	-		
	72	133.7	8.5	68.3	63.5	58.7	53.8	-	-	123.6	9.7	64.6	59.9	55.3	50.6	-	-		
	67	121.1	8.6	87.5	82.7	77.8	73.0	68.1	-	113.4	9.7	84.0	79.3	74.7	70.0	65.4	-		
	62	114.0	8.5	105.4	100.5	95.7	90.8	86.0	81.2	107.3	9.6	99.4	94.7	90.1	85.4	80.8	76.1		
	57	111.4	8.5	105.8	101.0	96.2	91.3	86.5	81.6	104.7	9.6	99.7	95.1	90.4	85.8	81.1	76.5		
3500	77	150.6	8.5	65.8	54.4	43.0	-	-	-	137.3	9.8	64.0	50.3	39.0	-	-	-		
	72	137.6	8.6	86.7	75.3	63.9	52.4	-	-	126.9	9.8	82.8	71.4	60.1	48.7	-	-		
	67	124.6	8.6	107.6	96.1	84.7	73.3	61.9	-	116.5	9.7	101.6	92.5	81.2	69.8	58.5	-		
	62	117.3	8.5	113.0	110.6	104.2	92.8	81.3	69.9	110.2	9.7	106.2	103.9	97.9	86.6	75.2	63.9		
	57	114.6	8.5	111.9	109.4	104.7	93.3	81.9	70.4	107.4	9.6	105.0	102.6	98.3	87.0	75.6	64.3		
4000	77	154.9	8.6	82.5	64.5	46.5	-	-	-	140.9	9.8	82.8	60.2	42.1	-	-	-		
	72	141.5	8.6	105.1	87.1	69.1	51.1	-	-	130.2	9.8	101.0	83.0	64.9	46.8	-	-		
	67	128.1	8.6	127.6	109.6	91.6	73.6	55.6	-	119.5	9.8	119.2	105.7	87.7	69.6	51.6	-		
	62	120.7	8.5	120.7	120.7	112.7	94.7	76.7	58.7	113.0	9.7	113.0	113.0	105.8	87.7	69.7	51.6		
	57	117.9	8.5	117.9	117.9	113.2	95.2	77.2	59.2	110.2	9.6	110.2	110.2	106.2	88.1	70.1	52.0		
4500	72	142.7	8.6	95.3	83.2	71.2	59.1	-	-	131.2	9.8	91.1	79.1	67.1	55.1	-	-		
	67	129.1	8.6	118.5	106.5	94.4	82.3	70.3	-	120.4	9.8	112.4	102.7	90.7	78.7	66.7	-		
	62	121.6	8.5	121.6	121.6	116.1	104.0	92.0	79.9	113.9	9.7	113.9	113.9	109.4	97.4	85.4	73.5		
	57	118.8	8.5	118.8	118.8	116.5	104.5	92.4	80.3	111.0	9.6	111.0	111.0	109.0	97.1	85.1	73.1		
5000	72	143.8	8.6	85.5	79.4	73.3	67.1	-	-	132.2	9.8	81.2	75.3	69.4	63.4	-	-		
	67	130.2	8.6	109.4	103.3	97.2	91.1	84.9	-	121.3	9.8	105.5	99.6	93.7	87.8	81.9	-		
	62	122.6	8.5	122.6	122.6	119.5	113.4	107.3	101.1	114.8	9.7	114.8	114.8	113.0	107.1	101.2	95.3		
	57	119.8	8.5	119.8	119.8	119.8	113.7	107.5	101.4	111.9	9.6	111.9	111.9	111.9	106.0	100.1	94.2		

ZH120 (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	118.3	11.0	20.1	27.1	29.5	-	-	-	106.4	12.3	13.8	23.5	26.2	-	-	-
	72	110.8	10.9	42.7	45.0	47.4	49.8	-	-	101.3	12.2	39.0	41.7	44.4	47.1	-	-
	67	103.3	10.9	65.2	63.0	65.4	67.8	70.2	-	96.2	12.0	64.1	59.9	62.6	65.4	68.1	-
	62	98.3	10.8	87.3	80.7	77.2	79.6	82.0	84.4	92.1	12.0	82.1	75.7	72.3	75.0	77.7	80.4
3000	77	121.2	11.0	41.1	36.7	32.2	-	-	-	108.6	12.3	37.1	32.8	28.6	-	-	-
	72	113.5	10.9	60.8	56.3	51.9	47.4	-	-	103.4	12.1	57.0	52.7	48.5	44.2	-	-
	67	105.8	10.9	80.4	76.0	71.5	67.1	62.6	-	98.2	12.0	76.9	72.6	68.4	64.1	59.8	-
	62	100.7	10.8	93.4	88.9	84.5	80.0	75.6	71.1	94.0	12.0	87.3	83.1	78.8	74.6	70.3	66.1
	57	97.9	10.7	93.6	89.1	84.7	80.2	75.8	71.3	91.2	11.8	87.5	83.2	79.0	74.7	70.4	66.2
3500	77	124.0	11.0	62.1	46.3	35.0	-	-	-	110.7	12.3	60.4	42.2	31.0	-	-	-
	72	116.2	10.9	78.9	67.6	56.3	45.0	-	-	105.5	12.1	75.0	63.7	52.5	41.3	-	-
	67	108.3	10.9	95.6	88.9	77.6	66.3	55.0	-	100.2	12.0	89.7	85.3	74.1	62.8	51.6	-
	62	103.0	10.8	99.4	97.2	91.7	80.4	69.1	57.8	95.9	12.0	92.6	90.4	85.4	74.2	63.0	51.8
	57	100.2	10.7	98.1	95.8	91.9	80.6	69.4	58.1	93.0	11.8	91.2	89.1	85.5	74.3	63.1	51.9
4000	77	126.9	11.0	83.1	55.8	37.7	-	-	-	112.9	12.3	83.6	51.5	33.3	-	-	-
	72	118.9	11.0	97.0	78.8	60.7	42.6	-	-	107.5	12.1	92.9	74.7	56.6	38.4	-	-
	67	110.8	10.9	110.8	101.8	83.7	65.6	47.5	-	102.2	12.0	102.2	98.0	79.8	61.6	43.4	-
	62	105.4	10.8	105.4	105.4	98.9	80.8	62.6	44.5	97.8	12.0	97.8	97.8	92.0	73.8	55.6	37.4
	57	102.5	10.7	102.5	102.5	99.2	81.0	62.9	44.8	94.9	11.8	94.9	94.9	92.1	73.9	55.8	37.6
4500	72	119.7	10.9	86.9	75.0	63.1	51.2	-	-	108.2	12.1	82.7	70.9	59.1	47.2	-	-
	67	111.6	10.9	106.2	98.9	87.0	75.1	63.2	-	102.8	12.0	100.1	95.1	83.3	71.4	59.6	-
	62	106.2	10.8	106.2	106.2	102.7	90.8	78.9	67.0	98.4	12.0	98.4	98.4	96.0	84.2	72.4	60.6
	57	103.3	10.7	103.3	103.3	101.6	89.7	77.8	65.9	95.5	11.8	95.5	95.5	94.1	82.3	70.5	58.6
5000	72	120.5	10.9	76.8	71.1	65.5	59.8	-	-	108.9	12.1	72.5	67.0	61.5	56.1	-	-
	67	112.4	10.9	101.6	95.9	90.2	84.6	78.9	-	103.5	12.0	97.7	92.2	86.8	81.3	75.8	-
	62	106.9	10.8	106.9	106.9	106.6	100.9	95.2	89.5	99.0	12.0	99.0	99.0	99.0	94.6	89.2	83.7
	57	104.0	10.7	104.0	104.0	104.0	98.3	92.6	86.9	96.1	11.8	96.1	96.1	96.1	90.6	85.2	79.7

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.

ZH150 (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	154.9	14.0	68.4	53.9	39.4	-	-	-	144.0	15.5	61.3	49.7	35.2	-	-	-
	72	141.0	13.9	87.6	73.1	58.6	44.1	-	-	130.4	15.3	82.3	67.8	53.2	38.6	-	-
	67	127.1	13.7	106.8	92.3	77.8	63.3	48.9	-	116.7	15.1	100.4	85.8	71.2	56.6	42.0	-
	62	117.6	13.5	117.6	115.4	95.2	80.7	66.2	51.7	109.4	15.0	109.4	109.3	87.3	72.7	58.1	43.5
3750	77	160.4	14.1	75.7	59.4	43.0	-	-	-	148.8	15.6	71.9	55.4	38.9	-	-	-
	72	145.9	14.0	96.7	80.4	64.0	47.6	-	-	134.7	15.4	91.8	75.3	58.8	42.3	-	-
	67	131.5	13.8	117.7	101.3	85.0	68.6	52.2	-	120.5	15.2	111.7	95.2	78.7	62.2	45.7	-
	62	121.8	13.6	121.8	120.2	103.9	87.5	71.2	54.8	113.0	15.0	113.0	112.9	96.4	79.9	63.4	46.9
	57	123.2	13.6	123.2	116.9	100.5	84.2	67.8	51.4	115.0	15.0	115.0	107.6	91.1	74.6	58.1	41.6
4375	77	165.8	14.2	83.1	64.9	46.6	-	-	-	153.5	15.7	82.5	61.0	42.6	-	-	-
	72	150.9	14.1	105.9	87.6	69.4	51.1	-	-	138.9	15.5	101.2	82.8	64.4	45.9	-	-
	67	136.0	13.9	128.6	110.3	92.1	73.8	55.6	-	124.4	15.3	123.0	104.5	86.1	67.7	49.3	-
	62	125.9	13.7	125.9	125.1	112.6	94.3	76.1	57.8	116.6	15.1	116.6	116.5	105.6	87.1	68.7	50.3
	57	127.4	13.6	127.4	124.2	109.0	90.7	72.5	54.2	118.7	15.0	118.7	115.0	99.8	81.3	62.9	44.5
5000	77	171.2	14.3	90.5	70.4	50.2	-	-	-	158.2	15.7	93.0	66.6	46.3	-	-	-
	72	155.8	14.2	115.0	94.9	74.7	54.6	-	-	143.2	15.6	110.6	90.3	70.0	49.6	-	-
	67	140.4	14.0	139.5	119.4	99.2	79.1	58.9	-	128.2	15.4	128.2	113.9	93.6	73.3	52.9	-
	62	130.0	13.8	130.0	130.0	121.3	101.2	81.0	60.9	120.2	15.2	120.2	120.2	114.7	94.4	74.0	53.7
	57	131.5	13.7	131.5	131.5	117.4	97.3	77.1	57.0	122.4	15.1	122.4	122.4	108.5	88.1	67.8	47.4
5625	72	158.5	14.1	122.1	100.4	78.8	57.1	-	-	145.8	15.6	117.3	95.5	73.8	52.0	-	-
	67	142.9	14.0	142.4	126.2	104.6	82.9	61.3	-	130.5	15.4	130.5	120.5	98.7	77.0	55.2	-
	62	132.3	13.8	132.3	132.3	127.9	106.2	84.6	63.0	122.3	15.2	122.3	122.3	121.0	99.2	77.5	55.7
	57	133.8	13.7	133.8	133.8	123.8	102.1	80.5	58.8	124.6	15.1	124.6	124.6	114.4	92.6	70.9	49.1
6250	72	161.3	14.1	129.1	106.0	82.8	59.7	-	-	148.4	15.6	124.0	100.8	77.6	54.4	-	-
	67	145.3	14.0	145.3	133.1	110.0	86.8	63.7	-	132.8	15.4	132.8	127.0	103.8	80.7	57.5	-
	62	134.5	13.8	134.5	134.5	134.5	111.3	88.2	65.0	124.5	15.2	124.5	124.5	124.5	104.1	80.9	57.7
	57	136.1	13.7	136.1	136.1	130.1	107.0	83.8	60.7	126.8	15.1	126.8	126.8	120.3	97.1	74.0	50.8

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.

ZJ037-150 Cooling 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															
750	77	49.2	2.1	19.7	16.4	13.1	-	-	-	45.1	2.3	18.0	14.8	11.6	-	-	-		
	72	43.8	2.0	24.5	21.2	17.9	14.6	-	-	40.2	2.3	22.8	19.6	16.4	13.2	-	-		
	67	38.4	2.0	29.4	26.1	22.8	19.5	16.2	-	35.2	2.2	27.5	24.3	21.1	17.9	14.7	-		
	62	33.2	2.0	33.2	33.2	27.2	23.9	20.6	17.3	30.4	2.2	30.4	30.4	25.3	22.0	18.8	15.6		
900	77	51.6	2.0	22.2	18.3	14.5	-	-	-	47.4	2.3	20.6	16.8	13.0	-	-	-		
	72	45.9	2.0	27.6	23.7	19.8	15.9	-	-	42.2	2.3	25.9	22.1	18.3	14.4	-	-		
	67	40.3	2.0	33.0	29.1	25.2	21.3	17.4	-	37.0	2.2	31.1	27.3	23.5	19.7	15.9	-		
	62	34.8	2.0	34.8	34.8	30.1	26.2	22.3	18.4	31.9	2.2	31.9	31.9	28.2	24.4	20.6	16.8		
	57	29.4	2.0	29.4	29.4	31.7	27.8	23.9	20.0	28.9	2.2	28.9	28.9	28.9	25.1	21.3	17.5		
1050	77	54.0	2.0	24.8	20.3	15.8	-	-	-	49.7	2.3	23.1	18.7	14.3	-	-	-		
	72	48.1	2.0	30.7	26.2	21.7	17.3	-	-	44.2	2.3	28.9	24.5	20.1	15.7	-	-		
	67	42.2	2.0	36.6	32.1	27.6	23.2	18.7	-	38.7	2.2	34.8	30.4	26.0	21.6	17.2	-		
	62	36.4	2.0	36.4	36.4	33.0	28.5	24.0	19.5	33.5	2.2	33.5	33.5	31.1	26.7	22.3	17.9		
	57	30.8	2.0	30.8	30.8	38.9	32.1	29.9	25.4	30.3	2.2	30.3	30.3	33.9	28.4	25.1	20.7		
1200	77	56.4	2.0	27.4	22.3	17.2	-	-	-	52.0	2.3	25.6	20.6	15.6	-	-	-		
	72	50.2	2.0	33.8	28.7	23.7	18.6	-	-	46.3	2.3	32.0	27.0	22.0	17.0	-	-		
	67	44.1	2.0	40.2	35.2	30.1	25.0	19.9	-	40.5	2.2	38.4	33.4	28.4	23.4	18.4	-		
	62	38.1	2.0	38.1	38.1	35.9	30.8	25.7	20.6	35.0	2.2	35.0	35.0	34.0	29.0	24.0	19.0		
	57	32.2	2.0	32.2	32.2	46.0	36.4	35.8	30.7	31.7	2.2	31.7	31.7	38.9	31.7	28.9	23.9		
1350	72	51.5	2.0	36.7	31.0	25.4	19.7	-	-	47.2	2.3	34.8	29.2	23.6	18.1	-	-		
	67	45.1	2.0	43.2	37.9	32.3	26.6	20.9	-	41.3	2.2	40.3	36.1	30.5	24.9	19.4	-		
	62	39.0	2.0	39.0	39.0	37.9	32.2	26.6	20.9	35.7	2.2	35.7	35.7	35.2	29.6	24.1	18.5		
	57	33.0	2.0	33.0	33.0	39.9	31.9	28.6	22.9	32.3	2.2	32.3	32.3	35.9	29.3	24.8	19.3		
1500	72	52.7	2.0	39.6	33.3	27.1	20.9	-	-	48.1	2.3	37.5	31.4	25.3	19.2	-	-		
	67	46.2	2.0	46.2	40.7	34.4	28.2	22.0	-	42.2	2.2	42.2	38.7	32.6	26.5	20.4	-		
	62	39.9	2.0	39.9	39.9	39.9	33.7	27.4	21.2	36.4	2.2	36.4	36.4	36.4	30.3	24.2	18.1		
	57	33.8	2.0	33.8	33.8	33.8	27.5	21.3	15.0	32.9	2.2	32.9	32.9	32.9	26.8	20.7	14.6		
				95°F															
750	77	41.1	2.6	16.4	13.3	10.2	-	-	-	36.8	2.8	13.8	11.6	8.6	-	-	-		
	72	36.5	2.5	21.0	17.9	14.8	11.7	-	-	32.9	2.7	19.3	16.3	13.3	10.3	-	-		
	67	31.9	2.4	25.6	22.5	19.4	16.3	13.2	-	28.9	2.7	24.9	21.0	18.0	15.0	12.0	-		
	62	27.6	2.4	27.6	27.6	23.3	20.2	17.1	14.0	24.9	2.6	24.9	24.9	21.8	18.8	15.8	12.8		
900	77	43.3	2.6	18.9	15.2	11.5	-	-	-	38.6	2.8	16.9	13.3	9.7	-	-	-		
	72	38.5	2.5	24.1	20.4	16.7	13.0	-	-	34.5	2.7	22.2	18.6	15.0	11.4	-	-		
	67	33.6	2.4	29.3	25.6	21.9	18.1	14.4	-	30.3	2.7	27.6	24.0	20.4	16.8	13.2	-		
	62	29.0	2.4	29.0	29.0	26.2	22.5	18.8	15.1	26.1	2.6	26.1	26.1	24.6	21.0	17.4	13.8		
	57	28.3	2.4	28.3	28.3	26.0	22.3	18.6	14.9	25.5	2.6	25.5	25.5	23.6	20.0	16.4	12.8		
1050	77	45.4	2.6	21.4	17.1	12.7	-	-	-	40.4	2.8	20.0	15.0	10.8	-	-	-		
	72	40.4	2.5	27.2	22.8	18.5	14.2	-	-	36.1	2.8	25.1	20.9	16.8	12.6	-	-		
	67	35.3	2.5	32.9	28.6	24.3	20.0	15.7	-	31.7	2.7	30.2	26.9	22.7	18.5	14.3	-		
	62	30.5	2.4	30.5	30.5	29.1	24.8	20.5	16.2	27.3	2.6	27.3	27.3	27.4	23.3	19.1	14.9		
	57	29.7	2.4	29.7	29.7	29.0	24.6	20.3	16.0	26.7	2.6	26.7	26.7	26.4	22.2	18.0	13.8		
1200	77	47.6	2.6	23.9	19.0	14.0	-	-	-	42.2	2.9	23.1	16.7	11.9	-	-	-		
	72	42.3	2.5	30.2	25.3	20.4	15.5	-	-	37.7	2.8	28.0	23.3	18.5	13.7	-	-		
	67	37.0	2.5	36.6	31.7	26.8	21.8	16.9	-	33.1	2.7	32.9	29.8	25.0	20.3	15.5	-		
	62	32.0	2.4	32.0	32.0	32.1	27.2	22.2	17.3	28.5	2.6	28.5	28.5	30.3	25.5	20.7	15.9		
	57	31.2	2.4	31.2	31.2	31.9	27.0	22.0	17.1	27.9	2.7	27.9	27.9	29.1	24.3	19.5	14.7		
1350	72	43.0	2.5	32.8	27.4	21.9	16.5	-	-	38.2	2.8	30.5	25.2	19.9	14.6	-	-		
	67	37.6	2.5	37.4	34.2	28.7	23.3	17.9	-	33.6	2.7	33.5	31.6	27.0	21.7	16.4	-		
	62	32.4	2.4	32.4	32.4	32.5	27.1	21.6	16.2	28.9	2.7	28.9	28.9	29.8	24.5	19.2	13.9		
	57	31.6	2.4	31.6	31.6	32.0	26.6	21.1	15.7	28.3	2.7	28.3	28.3	28.9	23.6	18.3	13.0		
1500	72	43.6	2.5	35.4	29.4	23.4	17.5	-	-	38.7	2.8	32.9	27.1	21.3	15.5	-	-		
	67	38.1	2.5	38.1	36.7	30.7	24.8	18.8	-	34.0	2.7	34.0	33.3	28.9	23.0	17.2	-		
	62	32.9	2.4	32.9	32.9	32.9	27.0	21.0	15.1	29.3	2.7	29.3	29.3	29.3	23.5	17.6	11.8		
	57	32.1	2.4	32.1	32.1	32.1	26.2	20.2	14.2	28.7	2.7	28.7	28.7	28.7	22.9	17.0	11.2		

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	32.6	3.1	11.2	9.9	7.0	-	-	-	28.3	3.3	9.2	7.9	5.4	-	-	-				
	72	29.2	3.0	17.7	14.8	11.8	8.9	-	-	25.6	3.2	16.0	13.2	10.3	7.5	-	-				
	67	25.9	2.9	24.2	19.6	16.6	13.7	10.8	-	22.9	3.1	22.9	18.1	15.3	12.4	9.6	-				
	62	22.2	2.8	22.2	22.2	20.3	17.4	14.4	11.5	19.5	3.0	19.5	19.5	19.5	16.0	13.1	10.3				
900	77	34.0	3.1	14.9	11.4	7.9	-	-	-	29.4	3.4	13.4	9.6	6.2	-	-	-				
	72	30.5	3.0	20.4	16.9	13.4	9.9	-	-	26.5	3.2	18.6	15.2	11.8	8.4	-	-				
	67	27.0	2.9	25.9	22.4	18.9	15.4	11.9	-	23.7	3.1	23.7	20.8	17.4	14.0	10.6	-				
	62	23.1	2.8	23.1	23.1	23.0	19.5	16.0	12.5	20.2	3.0	20.2	20.2	20.2	18.0	14.7	11.3				
	57	22.8	2.8	22.8	22.8	21.2	17.8	14.3	10.8	20.0	3.1	20.0	20.0	18.8	15.5	12.1	8.7				
1050	77	35.4	3.1	18.7	12.9	8.9	-	-	-	30.4	3.4	17.6	11.3	7.0	-	-	-				
	72	31.8	3.0	23.1	19.1	15.0	10.9	-	-	27.5	3.3	21.1	17.2	13.2	9.3	-	-				
	67	28.1	2.9	27.5	25.2	21.1	17.0	13.0	-	24.5	3.1	24.5	23.4	19.5	15.6	11.7	-				
	62	24.1	2.8	24.1	24.1	25.7	21.7	17.6	13.6	20.9	3.0	20.9	20.9	20.9	20.1	16.2	12.2				
	57	23.7	2.9	23.7	23.7	23.8	19.7	15.6	11.6	20.7	3.1	20.7	20.7	20.7	17.2	13.3	9.4				
1200	77	36.8	3.1	22.4	14.5	9.8	-	-	-	31.4	3.4	21.9	12.9	7.7	-	-	-				
	72	33.0	3.0	25.8	21.2	16.6	12.0	-	-	28.4	3.3	23.6	19.1	14.7	10.2	-	-				
	67	29.2	2.9	29.2	28.0	23.3	18.7	14.1	-	25.4	3.1	25.4	25.4	21.6	17.2	12.7	-				
	62	25.0	2.8	25.0	25.0	28.5	23.8	19.2	14.6	21.6	3.0	21.6	21.6	21.6	21.6	17.7	13.2				
	57	24.7	2.9	24.7	24.7	26.3	21.6	17.0	12.4	21.4	3.1	21.4	21.4	21.4	19.0	14.5	10.0				
1350	72	33.4	3.0	28.2	23.0	17.9	12.7	-	-	28.6	3.3	25.9	20.9	15.9	10.9	-	-				
	67	29.6	2.9	29.6	28.9	25.2	20.0	14.9	-	25.6	3.2	25.6	25.6	23.4	18.4	13.4	-				
	62	25.3	2.9	25.3	25.3	27.0	21.9	16.7	11.6	21.8	3.1	21.8	21.8	21.8	19.3	14.3	9.3				
	57	24.9	2.9	24.9	24.9	25.7	20.6	15.4	10.3	21.6	3.1	21.6	21.6	21.6	17.6	12.6	7.6				
1500	72	33.8	3.1	30.5	24.8	19.2	13.5	-	-	28.9	3.3	28.1	22.6	17.0	11.5	-	-				
	67	29.9	3.0	29.9	29.9	27.0	21.3	15.6	-	25.8	3.2	25.8	25.8	25.1	19.6	14.0	-				
	62	25.6	2.9	25.6	25.6	25.6	19.9	14.3	8.6	22.0	3.1	22.0	22.0	22.0	16.4	10.9	5.4				
	57	25.2	2.9	25.2	25.2	25.2	19.6	13.9	8.2	21.8	3.2	21.8	21.8	21.8	16.2	10.7	5.2				

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) (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	45.4	4.2	14.8	14.2	10.4	-	-	-	41.7	4.6	12.4	9.6	7.9	-	-	-
	72	39.8	4.1	24.2	20.2	16.3	12.3	-	-	36.1	4.4	21.4	17.5	13.6	9.8	-	-
	67	34.3	4.0	33.7	26.3	22.1	18.1	14.1	-	30.5	4.3	30.5	23.8	19.4	15.5	11.6	-
	62	31.6	3.9	31.6	31.6	26.1	22.1	18.1	14.2	29.4	4.2	29.4	29.4	22.3	18.4	14.5	10.6
1200	77	46.9	4.3	21.7	16.8	11.9	-	-	-	42.3	4.6	20.6	14.1	9.3	-	-	-
	72	41.2	4.1	28.4	23.5	18.6	13.7	-	-	36.6	4.5	25.7	20.9	16.0	11.1	-	-
	67	35.5	4.0	35.1	30.1	25.2	20.3	15.4	-	30.9	4.3	30.9	27.6	22.7	17.8	12.9	-
	62	32.7	3.9	32.7	32.7	29.8	24.9	20.0	15.1	29.9	4.2	29.9	29.9	26.0	21.1	16.3	11.4
	57	32.6	3.9	32.6	32.6	29.6	24.7	19.8	14.9	30.0	4.2	30.0	30.0	26.0	21.1	16.2	11.3
1400	77	48.5	4.3	28.7	19.5	13.4	-	-	-	43.0	4.7	28.8	18.7	10.7	-	-	-
	72	42.6	4.2	32.6	26.7	20.9	15.0	-	-	37.1	4.5	30.1	24.2	18.3	12.4	-	-
	67	36.7	4.1	36.4	34.0	28.4	22.5	16.7	-	31.3	4.3	31.3	31.3	25.9	20.0	14.1	-
	62	33.8	4.0	33.8	33.8	33.5	27.7	21.8	16.0	30.3	4.3	30.3	30.3	29.8	23.9	18.0	12.1
	57	33.7	4.0	33.7	33.7	33.3	27.4	21.6	15.7	30.5	4.3	30.5	30.5	29.7	23.9	18.0	12.1
1600	77	50.1	4.3	35.7	22.1	14.9	-	-	-	43.6	4.7	37.0	23.2	12.0	-	-	-
	72	43.9	4.2	36.8	30.0	23.2	16.4	-	-	37.7	4.5	34.4	27.5	20.6	13.7	-	-
	67	37.8	4.1	37.8	37.8	31.5	24.7	17.9	-	31.8	4.4	31.8	31.8	29.2	22.3	15.4	-
	62	34.9	4.0	34.9	34.9	37.3	30.5	23.7	16.9	30.8	4.3	30.8	30.8	30.8	26.7	19.8	12.9
	57	34.8	4.0	34.8	34.8	37.0	30.2	23.4	16.6	31.0	4.3	31.0	31.0	31.0	26.6	19.7	12.8
1800	72	43.2	4.2	39.6	32.5	25.0	17.4	-	-	36.5	4.6	36.5	29.9	22.3	14.7	-	-
	67	37.2	4.1	37.2	37.2	33.9	26.4	18.9	-	30.7	4.4	30.7	30.7	30.7	23.9	16.3	-
	62	34.3	4.0	34.3	34.3	35.5	27.9	20.4	12.9	29.9	4.3	29.9	29.9	29.9	23.6	15.9	8.3
	57	34.2	4.0	34.2	34.2	35.3	27.8	20.2	12.7	30.1	4.3	30.1	30.1	30.1	23.7	16.0	8.4
2000	72	42.4	4.3	42.4	35.0	26.7	18.5	-	-	35.2	4.6	35.2	32.4	24.0	15.6	-	-
	67	36.5	4.1	36.5	36.5	36.3	28.1	19.8	-	29.7	4.4	29.7	29.7	29.7	25.5	17.1	-
	62	33.7	4.0	33.7	33.7	33.7	25.4	17.2	8.9	28.9	4.4	28.9	28.9	28.9	20.5	12.1	3.7
	57	33.6	4.0	33.6	33.6	33.6	25.3	17.0	8.8	29.1	4.4	29.1	29.1	29.1	20.7	12.3	3.9

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.

ZJ061 (5.0 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																	
		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	79.8	3.1	35.0	28.5	22.5	-	-	-	74.2	3.6	32.0	26.2	20.4	-	-	-		
	72	72.2	3.1	42.9	36.9	30.9	24.9	-	-	67.2	3.6	40.3	34.4	28.6	22.8	-	-		
	67	64.6	3.2	50.8	45.3	39.3	33.2	27.2	-	60.1	3.6	48.5	42.7	36.9	31.1	25.3	-		
	62	57.1	3.1	57.1	57.1	47.4	41.4	35.4	29.4	53.6	3.5	53.6	53.6	44.7	38.9	33.0	27.2		
1500	77	83.4	3.1	38.6	31.7	24.8	-	-	-	77.3	3.6	36.0	29.3	22.5	-	-	-		
	72	75.5	3.2	47.8	40.9	34.0	27.1	-	-	70.0	3.6	45.1	38.4	31.6	24.9	-	-		
	67	67.5	3.2	57.1	50.1	43.2	36.3	29.3	-	62.7	3.6	54.3	47.5	40.8	34.0	27.3	-		
	62	59.7	3.1	59.7	59.7	52.2	45.2	38.3	31.4	55.9	3.5	55.9	55.9	49.4	42.6	35.9	29.1		
	57	59.9	3.2	59.9	59.9	55.9	49.0	42.0	35.1	54.8	3.6	54.8	54.8	50.3	43.6	36.9	30.1		
1750	77	87.0	3.2	42.3	34.9	27.0	-	-	-	80.4	3.7	40.0	32.3	24.7	-	-	-		
	72	78.8	3.2	52.8	44.9	37.1	29.2	-	-	72.8	3.7	50.0	42.3	34.7	27.0	-	-		
	67	70.5	3.2	63.3	55.0	47.1	39.3	31.4	-	65.2	3.6	60.0	52.3	44.7	37.0	29.3	-		
	62	62.3	3.1	62.3	62.3	56.9	49.1	41.2	33.4	58.1	3.6	58.1	58.1	54.1	46.4	38.7	31.0		
	57	62.4	3.2	62.4	62.4	61.0	53.2	45.3	37.5	57.0	3.6	57.0	57.0	55.1	47.5	39.8	32.1		
2000	77	90.6	3.2	45.9	38.0	29.3	-	-	-	83.5	3.7	44.0	35.4	26.8	-	-	-		
	72	82.0	3.2	57.7	48.9	40.2	31.4	-	-	75.6	3.7	54.9	46.3	37.7	29.1	-	-		
	67	73.4	3.2	69.5	59.8	51.1	42.3	33.6	-	67.7	3.7	65.7	57.1	48.5	39.9	31.3	-		
	62	64.9	3.2	64.9	64.9	61.7	52.9	44.2	35.4	60.4	3.6	60.4	60.4	58.8	50.2	41.5	32.9		
	57	65.0	3.2	65.0	65.0	66.1	57.4	48.6	39.9	59.2	3.6	59.2	59.2	59.9	51.3	42.7	34.1		
2250	72	84.2	3.2	62.2	52.6	43.0	33.4	-	-	77.4	3.7	59.3	49.9	40.4	30.9	-	-		
	67	75.4	3.2	73.4	64.3	54.7	45.1	35.5	-	69.3	3.7	68.3	61.5	52.0	42.6	33.1	-		
	62	66.6	3.2	66.6	66.6	65.0	55.4	45.8	36.2	61.8	3.6	61.8	61.8	61.0	51.5	42.1	32.6		
	57	66.8	3.2	66.8	66.8	67.3	57.7	48.1	38.5	60.7	3.6	60.7	60.7	61.0	51.5	42.1	32.6		
2500	72	86.4	3.2	66.8	56.3	45.9	35.5	-	-	79.2	3.7	63.7	53.4	43.1	32.8	-	-		
	67	77.3	3.2	77.3	68.8	58.3	47.9	37.5	-	70.9	3.7	70.9	65.9	55.6	45.2	34.9	-		
	62	68.4	3.2	68.4	68.4	68.4	57.9	47.5	37.1	63.2	3.6	63.2	63.2	63.2	52.9	42.6	32.3		
	57	68.5	3.2	68.5	68.5	68.5	58.1	47.6	37.2	62.1	3.6	62.1	62.1	62.1	51.8	41.5	31.1		
		95°F								105°F									
1250	77	68.5	4.1	29.0	23.9	18.2	-	-	-	63.5	4.5	25.6	22.1	16.6	-	-	-		
	72	62.1	4.1	37.6	32.0	26.4	20.8	-	-	57.3	4.4	35.7	30.1	24.6	19.1	-	-		
	67	55.7	4.0	46.2	40.1	34.5	28.9	23.3	-	51.0	4.4	45.7	38.1	32.6	27.1	21.5	-		
	62	50.1	4.0	50.1	50.1	41.9	36.3	30.7	25.1	46.7	4.3	46.7	46.7	38.4	32.8	27.3	21.8		
1500	77	71.1	4.1	33.4	26.8	20.3	-	-	-	65.8	4.5	31.5	25.0	18.5	-	-	-		
	72	64.5	4.1	42.4	35.9	29.3	22.7	-	-	59.3	4.5	40.4	33.9	27.4	20.9	-	-		
	67	57.8	4.1	51.5	44.9	38.3	31.8	25.2	-	52.8	4.4	49.3	42.8	36.3	29.8	23.3	-		
	62	52.0	4.0	52.0	52.0	46.6	40.0	33.4	26.9	48.4	4.3	48.4	48.4	42.7	36.2	29.7	23.2		
	57	49.8	4.0	49.8	49.8	44.8	38.2	31.7	25.1	46.4	4.3	46.4	46.4	41.7	35.2	28.7	22.2		
1750	77	73.7	4.2	37.8	29.8	22.3	-	-	-	68.1	4.6	37.3	27.8	20.4	-	-	-		
	72	66.8	4.1	47.3	39.7	32.2	24.7	-	-	61.4	4.5	45.1	37.7	30.2	22.7	-	-		
	67	59.9	4.1	56.7	49.7	42.2	34.7	27.2	-	54.7	4.5	52.9	47.5	40.0	32.5	25.1	-		
	62	53.9	4.0	53.9	53.9	51.2	43.7	36.2	28.7	50.1	4.4	50.1	50.1	47.1	39.6	32.1	24.7		
	57	51.6	4.0	51.6	51.6	49.3	41.8	34.2	26.7	48.1	4.4	48.1	48.1	45.9	38.5	31.0	23.5		
2000	77	76.3	4.2	42.2	32.8	24.3	-	-	-	70.4	4.6	43.1	30.7	22.3	-	-	-		
	72	69.2	4.1	52.1	43.6	35.2	26.7	-	-	63.5	4.5	49.8	41.4	33.0	24.6	-	-		
	67	62.0	4.1	62.0	54.5	46.0	37.5	29.1	-	56.5	4.5	56.5	52.1	43.7	35.3	26.9	-		
	62	55.8	4.0	55.8	55.8	55.9	47.4	38.9	30.5	51.8	4.4	51.8	51.8	51.4	43.0	34.6	26.2		
	57	53.4	4.0	53.4	53.4	53.7	45.3	36.8	28.4	49.7	4.4	49.7	49.7	50.2	41.7	33.3	24.9		
2250	72	70.6	4.2	56.4	47.1	37.7	28.4	-	-	64.6	4.6	54.1	44.8	35.5	26.2	-	-		
	67	63.3	4.1	63.3	58.7	49.4	40.1	30.7	-	57.6	4.5	57.6	55.0	47.0	37.8	28.5	-		
	62	57.0	4.0	57.0	57.0	57.0	47.7	38.3	29.0	52.8	4.4	52.8	52.8	52.6	43.3	34.0	24.7		
	57	54.5	4.0	54.5	54.5	54.7	45.4	36.0	26.7	50.6	4.4	50.6	50.6	50.8	41.6	32.3	23.0		
2500	72	72.0	4.2	60.7	50.5	40.3	30.1	-	-	65.8	4.6	58.3	48.2	38.0	27.9	-	-		
	67	64.6	4.1	64.6	63.0	52.8	42.6	32.4	-	58.6	4.5	58.6	57.8	50.4	40.2	30.1	-		
	62	58.1	4.0	58.1	58.1	58.1	48.0	37.8	27.6	53.7	4.4	53.7	53.7	53.7	43.6	33.4	23.3		
	57	55.7	4.0	55.7	55.7	55.7	45.5	35.3	25.1	51.5	4.4	51.5	51.5	51.5	41.4	31.2	21.1		

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	4.9	22.3	20.4	14.9	-	-	-	53.4	5.3	21.9	17.7	13.3	-	-	-
	72	52.4	4.8	33.7	28.3	22.8	17.4	-	-	47.6	5.2	31.8	26.4	21.0	15.6	-	-
	67	46.3	4.7	45.1	36.1	30.7	25.2	19.8	-	41.7	5.1	41.7	34.1	28.7	23.4	18.0	-
	62	43.3	4.7	43.3	43.3	34.8	29.3	23.9	18.4	40.0	5.0	40.0	40.0	31.2	25.8	20.5	15.1
1500	77	60.5	4.9	29.6	23.1	16.7	-	-	-	55.1	5.3	29.6	21.3	14.9	-	-	-
	72	54.2	4.9	38.3	31.9	25.5	19.0	-	-	49.1	5.3	36.3	29.9	23.6	17.2	-	-
	67	47.9	4.8	47.1	40.7	34.3	27.8	21.4	-	43.0	5.2	43.0	38.6	32.2	25.8	19.5	-
	62	44.8	4.7	44.8	44.8	38.9	32.4	26.0	19.6	41.2	5.1	41.2	41.2	35.0	28.6	22.3	15.9
	57	43.1	4.7	43.1	43.1	38.5	32.1	25.7	19.2	39.7	5.1	39.7	39.7	35.4	29.0	22.6	16.3
1750	77	62.5	5.0	36.8	25.9	18.4	-	-	-	56.8	5.4	37.4	24.8	16.5	-	-	-
	72	56.0	4.9	43.0	35.6	28.1	20.7	-	-	50.6	5.3	40.8	33.5	26.1	18.7	-	-
	67	49.5	4.8	49.1	45.3	37.8	30.4	23.0	-	44.3	5.2	44.3	43.0	35.7	28.3	20.9	-
	62	46.3	4.7	46.3	46.3	42.9	35.5	28.1	20.7	42.5	5.1	42.5	42.5	38.8	31.4	24.1	16.7
	57	44.5	4.7	44.5	44.5	42.6	35.1	27.7	20.3	40.9	5.1	40.9	40.9	39.2	31.8	24.5	17.1
2000	77	64.5	5.0	44.1	28.6	20.2	-	-	-	58.5	5.5	45.1	28.4	18.1	-	-	-
	72	57.8	5.0	47.6	39.2	30.8	22.4	-	-	52.1	5.4	45.4	37.0	28.6	20.3	-	-
	67	51.1	4.9	51.1	49.8	41.4	33.0	24.6	-	45.6	5.3	45.6	45.6	39.2	30.8	22.4	-
	62	47.8	4.8	47.8	47.8	47.0	38.6	30.2	21.8	43.8	5.2	43.8	43.8	42.6	34.2	25.9	17.5
	57	45.9	4.8	45.9	45.9	46.6	38.2	29.8	21.4	42.2	5.2	42.2	42.2	42.2	34.7	26.3	17.9
2250	72	58.7	5.0	51.8	42.5	33.3	24.0	-	-	52.7	5.4	49.5	40.2	31.0	21.8	-	-
	67	51.9	4.9	51.9	51.3	44.7	35.5	26.2	-	46.2	5.3	46.2	46.2	42.4	33.1	23.9	-
	62	48.6	4.8	48.6	48.6	48.2	38.9	29.6	20.4	44.3	5.2	44.3	44.3	43.7	34.5	25.3	16.1
	57	46.7	4.8	46.7	46.7	47.0	37.7	28.5	19.2	42.7	5.2	42.7	42.7	42.7	33.9	24.7	15.5
2500	72	59.6	5.0	55.9	45.8	35.7	25.6	-	-	53.4	5.4	53.4	43.4	33.4	23.3	-	-
	67	52.7	4.9	52.7	52.7	48.0	37.9	27.7	-	46.8	5.3	46.8	46.8	45.6	35.5	25.4	-
	62	49.3	4.8	49.3	49.3	49.3	39.2	29.1	19.0	44.9	5.2	44.9	44.9	44.9	34.8	24.7	14.6
	57	47.4	4.8	47.4	47.4	47.4	37.3	27.1	17.0	43.3	5.2	43.3	43.3	43.3	33.2	23.1	13.0

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	106.7	4.6	46.4	38.6	31.0	-	-	-	98.2	5.1	42.4	35.0	27.6	-	-	-
	72	97.0	4.5	57.0	49.4	41.7	34.1	-	-	89.3	5.0	53.2	45.8	38.4	31.0	-	-
	67	87.2	4.5	67.6	60.1	52.4	44.8	37.2	-	80.3	5.0	63.9	56.5	49.1	41.7	34.3	-
	62	78.3	4.6	78.3	71.0	62.1	54.4	46.8	39.1	72.1	5.0	72.1	67.6	57.7	50.3	42.9	35.5
1950	77	109.7	4.6	50.9	42.2	33.4	-	-	-	101.0	5.1	47.1	38.5	30.0	-	-	-
	72	99.7	4.6	62.4	53.7	45.0	36.2	-	-	91.8	5.1	58.7	50.2	41.7	33.2	-	-
	67	89.6	4.5	73.9	65.2	56.5	47.8	39.1	-	82.6	5.0	70.4	61.9	53.3	44.8	36.3	-
	62	80.4	4.6	80.4	75.6	66.9	58.1	49.4	40.7	74.1	5.0	74.1	71.1	62.6	54.1	45.6	37.1
	57	83.1	4.6	83.1	83.1	72.0	63.2	54.5	45.8	74.2	5.0	74.2	74.2	66.9	58.4	49.9	41.4
2275	77	112.6	4.6	55.3	45.7	35.9	-	-	-	103.8	5.1	51.7	42.0	32.4	-	-	-
	72	102.3	4.6	67.8	58.0	48.2	38.4	-	-	94.4	5.1	64.2	54.6	45.0	35.4	-	-
	67	92.1	4.5	80.3	70.4	60.6	50.8	41.0	-	84.9	5.0	76.8	67.2	57.6	47.9	38.3	-
	62	82.6	4.6	82.6	80.2	71.7	61.9	52.1	42.3	76.2	5.0	76.2	74.7	67.6	58.0	48.3	38.7
	57	85.3	4.6	85.3	85.3	77.1	67.3	57.5	47.7	76.3	5.0	76.3	76.3	72.2	62.6	53.0	43.4
2600	77	115.6	4.6	59.8	49.2	38.3	-	-	-	106.6	5.2	56.3	45.5	34.8	-	-	-
	72	105.0	4.6	73.2	62.3	51.4	40.6	-	-	96.9	5.1	69.8	59.0	48.3	37.6	-	-
	67	94.5	4.5	86.6	75.5	64.6	53.7	42.9	-	87.2	5.1	83.3	72.5	61.8	51.1	40.3	-
	62	84.8	4.6	84.8	84.8	76.5	65.6	54.7	43.8	78.2	5.1	78.2	78.2	72.6	61.8	51.1	40.3
	57	87.6	4.6	87.6	87.6	82.3	71.4	60.6	49.7	78.4	5.0	78.4	78.4	77.6	66.8	56.1	45.3
2925	72	107.5	4.6	78.5	66.6	54.8	43.0	-	-	99.1	5.1	74.7	63.0	51.4	39.7	-	-
	67	96.7	4.6	92.7	80.7	68.8	57.0	45.2	-	89.2	5.1	87.2	77.4	65.7	54.1	42.5	-
	62	86.7	4.6	86.7	86.7	82.6	70.8	58.9	47.1	80.0	5.1	80.0	80.0	77.2	65.5	53.9	42.2
	57	89.6	4.6	89.6	89.6	87.0	75.2	63.3	51.5	80.1	5.1	80.1	80.1	79.7	68.1	56.4	44.8
3250	72	109.9	4.6	83.7	70.9	58.2	45.4	-	-	101.3	5.1	79.5	67.0	54.5	41.9	-	-
	67	98.8	4.6	98.8	85.8	73.1	60.3	47.5	-	91.2	5.1	91.2	82.2	69.7	57.2	44.6	-
	62	88.7	4.6	88.7	88.7	88.7	75.9	63.2	50.4	81.8	5.1	81.8	81.8	81.8	69.2	56.7	44.1
	57	91.6	4.6	91.6	91.6	91.6	78.9	66.1	53.3	81.9	5.1	81.9	81.9	81.9	69.3	56.8	44.3
		95°F								105°F							
1625	77	89.6	5.6	38.5	31.4	24.3	-	-	-	80.9	6.2	33.0	28.4	21.5	-	-	-
	72	81.5	5.5	49.3	42.2	35.0	27.9	-	-	73.1	6.1	45.5	38.6	31.8	25.0	-	-
	67	73.4	5.5	60.2	52.9	45.8	38.6	31.5	-	65.3	6.0	57.9	48.9	42.1	35.2	28.4	-
	62	65.8	5.4	65.8	64.2	53.3	46.1	39.0	31.8	58.3	5.9	58.3	57.5	47.9	41.1	34.2	27.4
1950	77	92.3	5.6	43.2	34.9	26.6	-	-	-	83.8	6.2	40.0	31.9	23.9	-	-	-
	72	84.0	5.6	55.0	46.7	38.4	30.1	-	-	75.7	6.1	51.4	43.3	35.3	27.2	-	-
	67	75.6	5.5	66.8	58.5	50.2	41.9	33.6	-	67.7	6.0	62.8	54.7	46.7	38.6	30.5	-
	62	67.8	5.5	67.8	66.7	58.4	50.1	41.8	33.5	60.4	5.9	60.4	59.9	53.1	45.0	37.0	28.9
	57	65.4	5.4	65.4	65.4	61.9	53.6	45.3	37.0	61.0	5.9	61.0	61.0	55.7	47.7	39.6	31.6
2275	77	95.0	5.7	48.0	38.4	29.0	-	-	-	86.7	6.3	46.9	35.5	26.2	-	-	-
	72	86.4	5.6	60.7	51.2	41.8	32.3	-	-	78.4	6.1	57.2	48.0	38.7	29.4	-	-
	67	77.8	5.5	73.4	64.0	54.6	45.1	35.7	-	70.1	6.0	67.6	60.5	51.2	42.0	32.7	-
	62	69.8	5.5	69.8	69.2	63.5	54.1	44.6	35.2	62.5	5.9	62.5	62.2	58.3	49.0	39.7	30.5
	57	67.2	5.5	67.2	67.2	67.3	57.9	48.4	39.0	63.2	6.0	63.2	63.2	61.2	51.9	42.6	33.4
2600	77	97.6	5.7	52.7	41.9	31.3	-	-	-	89.7	6.3	53.8	39.0	28.5	-	-	-
	72	88.8	5.6	66.4	55.8	45.1	34.5	-	-	81.0	6.2	63.1	52.6	42.2	31.7	-	-
	67	80.0	5.6	80.0	69.6	59.0	48.4	37.8	-	72.4	6.1	72.4	66.3	55.8	45.3	34.8	-
	62	71.7	5.5	71.7	71.7	68.7	58.1	47.5	36.8	64.6	6.0	64.6	64.6	63.5	53.0	42.5	32.0
	57	69.1	5.5	69.1	69.1	72.8	62.2	51.6	40.9	65.3	6.0	65.3	65.3	66.6	56.1	45.7	35.2
2925	72	90.7	5.7	70.9	59.4	47.9	36.5	-	-	82.6	6.2	67.2	55.9	44.7	33.4	-	-
	67	81.7	5.6	81.7	74.1	62.7	51.2	39.7	-	73.8	6.1	73.8	69.5	59.1	47.8	36.6	-
	62	73.3	5.5	73.3	73.3	71.7	60.3	48.8	37.4	65.9	6.0	65.9	65.9	65.3	54.0	42.7	31.5
	57	70.6	5.5	70.6	70.6	72.5	61.0	49.5	38.1	66.6	6.0	66.6	66.6	67.2	55.9	44.7	33.4
3250	72	92.7	5.7	75.4	63.1	50.7	38.4	-	-	84.2	6.2	71.3	59.2	47.2	35.1	-	-
	67	83.5	5.6	83.5	78.6	66.3	54.0	41.7	-	75.2	6.1	75.2	72.8	62.4	50.4	38.3	-
	62	74.8	5.5	74.8	74.8	74.8	62.5	50.2	37.9	67.1	6.0	67.1	67.1	67.1	55.1	43.0	30.9
	57	72.1	5.5	72.1	72.1	72.1	59.8	47.5	35.2	67.8	6.0	67.8	67.8	67.8	55.7	43.7	31.6

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	72.1	6.8	27.6	25.3	18.8	-	-	-	63.3	7.3	26.5	21.1	16.1	-	-	-
	72	64.6	6.6	41.6	35.1	28.6	22.1	-	-	56.2	7.1	37.8	31.6	25.4	19.2	-	-
	67	57.2	6.4	55.6	44.9	38.4	31.9	25.4	-	49.1	6.9	49.1	40.9	34.7	28.5	22.3	-
	62	50.7	6.3	50.7	50.7	42.5	36.0	29.5	23.0	43.2	6.8	43.2	43.2	37.2	31.0	24.8	18.6
1950	77	75.3	6.8	36.7	28.9	21.1	-	-	-	66.8	7.4	36.3	25.9	18.4	-	-	-
	72	67.5	6.6	47.7	39.9	32.1	24.3	-	-	59.3	7.2	44.1	36.5	29.0	21.4	-	-
	67	59.8	6.5	58.7	50.9	43.1	35.3	27.5	-	51.8	7.0	51.8	47.1	39.6	32.1	24.5	-
	62	53.0	6.4	53.0	53.0	47.8	40.0	32.2	24.4	45.6	6.8	45.6	45.6	42.5	34.9	27.4	19.8
	57	56.6	6.4	56.6	56.6	49.6	41.8	34.0	26.2	52.3	6.9	52.3	52.3	43.4	35.9	28.4	20.8
2275	77	78.5	6.8	45.8	32.5	23.4	-	-	-	70.2	7.4	46.1	30.7	20.7	-	-	-
	72	70.4	6.7	53.8	44.7	35.6	26.6	-	-	62.4	7.2	50.3	41.5	32.6	23.7	-	-
	67	62.3	6.5	61.8	56.9	47.8	38.8	29.7	-	54.6	7.0	54.6	53.4	44.5	35.6	26.7	-
	62	55.3	6.4	55.3	55.3	53.0	43.9	34.9	25.8	48.0	6.8	48.0	48.0	47.8	38.9	30.0	21.1
	57	59.1	6.4	59.1	59.1	55.0	46.0	36.9	27.8	55.0	6.9	55.0	55.0	48.9	40.0	31.1	22.2
2600	77	81.7	6.9	54.9	36.1	25.7	-	-	-	73.7	7.5	56.0	35.5	23.0	-	-	-
	72	73.3	6.7	59.9	49.5	39.2	28.8	-	-	65.5	7.2	56.6	46.4	36.2	25.9	-	-
	67	64.9	6.6	64.9	62.9	52.6	42.2	31.9	-	57.3	7.0	57.3	57.3	49.4	39.1	28.9	-
	62	57.5	6.4	57.5	57.5	58.3	47.9	37.5	27.2	50.4	6.9	50.4	50.4	50.4	42.8	32.6	22.3
	57	61.5	6.5	61.5	61.5	60.5	50.1	39.7	29.4	57.6	7.0	57.6	57.6	54.3	44.1	33.8	23.6
2925	72	74.5	6.7	63.6	52.5	41.4	30.3	-	-	66.4	7.3	59.9	49.0	38.1	27.2	-	-
	67	65.9	6.6	65.9	65.0	55.6	44.5	33.4	-	58.0	7.1	58.0	58.0	52.0	41.1	30.2	-
	62	58.5	6.5	58.5	58.5	58.8	47.7	36.6	25.5	51.1	6.9	51.1	51.1	51.1	41.5	30.6	19.6
	57	62.5	6.5	62.5	62.5	62.0	50.9	39.8	28.7	58.4	7.0	58.4	58.4	56.8	45.8	34.9	24.0
3250	72	75.7	6.8	67.3	55.4	43.6	31.8	-	-	67.2	7.3	63.2	51.6	40.0	28.4	-	-
	67	67.0	6.6	67.0	67.0	58.5	46.7	34.9	-	58.8	7.1	58.8	58.8	54.7	43.1	31.5	-
	62	59.4	6.5	59.4	59.4	59.4	47.6	35.8	23.9	51.7	7.0	51.7	51.7	51.7	40.1	28.5	16.9
	57	63.5	6.5	63.5	63.5	63.5	51.7	39.8	28.0	59.2	7.1	59.2	59.2	59.2	47.6	36.0	24.4

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																	
		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	125.0	5.7	53.1	44.4	35.6	-	-	-	116.4	6.3	49.2	40.5	31.7	-	-	-		
	72	113.1	5.6	65.8	57.1	48.3	39.5	-	-	105.3	6.2	62.2	53.5	44.7	36.0	-	-		
	67	101.1	5.6	78.5	69.8	61.0	52.2	43.5	-	94.3	6.1	75.2	66.5	57.7	49.0	40.3	-		
	62	88.8	5.5	88.8	88.8	73.3	64.6	55.8	47.0	83.0	6.1	83.0	83.0	70.3	61.5	52.8	44.0		
2250	77	131.0	5.7	59.5	49.2	39.0	-	-	-	121.4	6.4	55.1	45.0	34.8	-	-	-		
	72	118.5	5.7	73.4	63.2	52.9	42.7	-	-	109.8	6.3	69.4	59.2	49.0	38.8	-	-		
	67	106.0	5.6	87.3	77.1	66.8	56.6	46.4	-	98.3	6.2	83.6	73.4	63.3	53.1	42.9	-		
	62	93.1	5.6	93.1	93.1	80.4	70.2	59.9	49.7	86.5	6.1	86.5	86.5	77.0	66.8	56.6	46.4		
	57	93.6	5.5	93.6	93.6	87.2	77.0	66.8	56.5	87.3	6.1	87.3	87.3	79.8	69.6	59.4	49.2		
2625	77	137.0	5.7	65.8	54.1	42.4	-	-	-	126.3	6.4	61.1	49.4	37.8	-	-	-		
	72	123.9	5.7	80.9	69.3	57.6	45.9	-	-	114.3	6.3	76.5	64.9	53.3	41.7	-	-		
	67	110.8	5.6	96.1	84.4	72.7	61.0	49.3	-	102.3	6.2	92.0	80.4	68.8	57.1	45.5	-		
	62	97.3	5.6	97.3	97.3	87.5	75.8	64.1	52.4	90.0	6.1	90.0	90.0	83.7	72.0	60.4	48.8		
	57	97.8	5.6	97.8	97.8	94.9	83.2	71.5	59.8	90.9	6.1	90.9	90.9	86.8	75.1	63.5	51.9		
3000	77	142.9	5.8	72.1	59.0	45.8	-	-	-	131.3	6.5	67.0	53.9	40.8	-	-	-		
	72	129.3	5.7	88.5	75.4	62.2	49.1	-	-	118.8	6.4	83.7	70.6	57.6	44.5	-	-		
	67	115.7	5.7	104.9	91.7	78.6	65.4	52.3	-	106.3	6.3	100.4	87.4	74.3	61.2	48.1	-		
	62	101.6	5.6	101.6	101.6	94.5	81.3	68.2	55.0	93.6	6.2	93.6	93.6	90.4	77.3	64.2	51.2		
	57	102.1	5.6	102.1	102.1	102.5	89.4	76.2	63.1	94.5	6.2	94.5	94.5	93.7	80.6	67.6	54.5		
3375	72	132.4	5.7	95.5	80.9	66.2	51.6	-	-	121.6	6.4	90.7	76.2	61.6	47.0	-	-		
	67	118.4	5.7	113.0	98.3	83.7	69.0	54.4	-	108.8	6.3	105.8	94.1	79.5	65.0	50.4	-		
	62	104.0	5.6	104.0	104.0	100.5	85.8	71.2	56.6	95.7	6.2	95.7	95.7	94.1	79.6	65.0	50.5		
	57	104.6	5.6	104.6	104.6	104.8	90.1	75.5	60.9	96.7	6.2	96.7	96.7	96.3	81.7	67.2	52.6		
3750	72	135.5	5.7	102.5	86.4	70.3	54.2	-	-	124.3	6.4	97.7	81.7	65.7	49.6	-	-		
	67	121.2	5.7	121.2	104.8	88.7	72.7	56.6	-	111.2	6.3	111.2	100.8	84.7	68.7	52.7	-		
	62	106.4	5.6	106.4	106.4	106.4	90.3	74.2	58.2	97.9	6.2	97.9	97.9	97.9	81.9	65.8	49.8		
	57	107.0	5.6	107.0	107.0	107.0	90.9	74.8	58.7	98.8	6.2	98.8	98.8	98.8	82.8	66.8	50.7		
		95°F								105°F									
1875	77	107.8	7.0	45.3	36.6	27.9	-	-	-	99.1	7.6	39.5	33.4	24.8	-	-	-		
	72	97.6	6.9	58.6	49.9	41.2	32.5	-	-	89.4	7.5	55.1	46.5	37.9	29.3	-	-		
	67	87.4	6.7	71.9	63.2	54.5	45.8	37.1	-	79.6	7.3	70.7	59.6	51.0	42.4	33.8	-		
	62	77.1	6.6	77.1	77.1	67.2	58.4	49.7	41.0	70.5	7.1	70.5	70.5	63.1	54.5	45.9	37.3		
2250	77	111.8	7.1	50.8	40.7	30.5	-	-	-	102.3	7.7	47.3	37.3	27.3	-	-	-		
	72	101.2	6.9	65.4	55.2	45.1	35.0	-	-	92.2	7.5	61.7	51.7	41.7	31.6	-	-		
	67	90.6	6.8	79.9	69.8	59.7	49.5	39.4	-	82.2	7.3	76.1	66.0	56.0	46.0	36.0	-		
	62	79.9	6.7	79.9	79.9	73.5	63.4	53.2	43.1	72.7	7.2	72.7	72.7	69.3	59.3	49.3	39.3		
	57	81.1	6.6	81.1	81.1	72.4	62.2	52.1	42.0	75.0	7.2	75.0	75.0	66.9	56.9	46.9	36.9		
2625	77	115.7	7.1	56.3	44.7	33.2	-	-	-	105.4	7.8	55.1	41.1	29.7	-	-	-		
	72	104.8	7.0	72.1	60.6	49.0	37.4	-	-	95.1	7.6	68.3	56.8	45.4	34.0	-	-		
	67	93.8	6.8	88.0	76.4	64.8	53.3	41.7	-	84.7	7.4	81.4	72.5	61.1	49.6	38.2	-		
	62	82.8	6.7	82.8	82.8	79.9	68.3	56.8	45.2	75.0	7.2	75.0	75.0	75.5	64.1	52.7	41.2		
	57	84.0	6.7	84.0	84.0	78.6	67.1	55.5	43.9	77.3	7.2	77.3	77.3	72.9	61.5	50.1	38.6		
3000	77	119.7	7.2	61.8	48.8	35.8	-	-	-	108.6	7.8	62.9	45.0	32.2	-	-	-		
	72	108.3	7.0	78.9	65.9	52.9	39.9	-	-	97.9	7.6	74.8	62.0	49.1	36.3	-	-		
	67	97.0	6.9	96.0	83.0	70.0	57.0	44.0	-	87.3	7.4	86.7	79.0	66.1	53.3	40.4	-		
	62	85.6	6.8	85.6	85.6	86.3	73.3	60.3	47.3	77.2	7.3	77.2	77.2	81.8	68.9	56.0	43.2		
	57	86.8	6.7	86.8	86.8	84.9	71.9	58.9	45.9	79.6	7.3	79.6	79.6	78.9	66.1	53.2	40.4		
3375	72	110.7	7.0	86.0	71.5	57.0	42.5	-	-	99.7	7.7	81.7	67.4	53.0	38.6	-	-		
	67	99.2	6.9	98.6	89.9	75.4	60.9	46.4	-	88.9	7.5	88.6	83.6	71.3	57.0	42.6	-		
	62	87.5	6.8	87.5	87.5	87.8	73.3	58.8	44.3	78.7	7.3	78.7	78.7	80.9	66.6	52.2	37.9		
	57	88.8	6.7	88.8	88.8	87.8	73.3	58.8	44.3	81.1	7.3	81.1	81.1	80.7	66.4	52.0	37.7		
3750	72	113.1	7.0	93.0	77.0	61.0	45.0	-	-	101.6	7.7	88.6	72.8	56.9	41.0	-	-		
	67	101.3	6.9	101.3	96.7	80.7	64.7	48.7	-	90.5	7.5	90.5	88.2	76.5	60.7	44.8	-		
	62	89.4	6.8	89.4	89.4	89.4	73.4	57.4	41.4	80.1	7.3	80.1	80.1	80.1	64.3	48.4	32.5		
	57	90.7	6.8	90.7	90.7	90.7	74.7	58.7	42.7	82.5	7.3	82.5	82.5	82.5	66.7	50.8	34.9		

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	90.4	8.3	33.6	30.2	21.8	-	-	-	81.7	8.9	32.0	25.5	18.7	-	-	-
	72	81.1	8.0	51.6	43.1	34.6	26.2	-	-	72.9	8.6	48.1	39.7	31.4	23.0	-	-
	67	71.9	7.8	69.5	56.0	47.5	39.0	30.6	-	64.1	8.3	64.1	52.4	44.0	35.7	27.3	-
	62	63.9	7.6	63.9	63.9	59.0	50.5	42.0	33.6	57.3	8.1	57.3	57.3	57.3	46.5	38.2	29.8
2250	77	92.7	8.3	43.8	33.9	24.0	-	-	-	83.2	9.0	43.2	30.5	20.7	-	-	-
	72	83.2	8.1	58.0	48.1	38.2	28.3	-	-	74.3	8.7	54.3	44.5	34.8	25.0	-	-
	67	73.7	7.9	72.2	62.3	52.4	42.5	32.6	-	65.3	8.4	65.3	58.5	48.8	39.0	29.3	-
	62	65.6	7.7	65.6	65.6	65.1	55.2	45.3	35.4	58.4	8.2	58.4	58.4	58.4	51.1	41.3	31.6
	57	68.8	7.7	68.8	68.8	61.5	51.6	41.7	31.8	62.7	8.3	62.7	62.7	56.0	46.3	36.5	26.8
2625	77	95.1	8.4	53.9	37.5	26.3	-	-	-	84.8	9.1	54.4	35.5	22.8	-	-	-
	72	85.4	8.2	64.4	53.1	41.8	30.5	-	-	75.7	8.8	60.5	49.3	38.2	27.0	-	-
	67	75.6	7.9	74.8	68.6	57.3	46.0	34.7	-	66.5	8.5	66.5	64.7	53.5	42.4	31.2	-
	62	67.2	7.7	67.2	67.2	71.2	59.9	48.6	37.3	59.5	8.2	59.5	59.5	59.5	55.6	44.5	33.3
	57	70.6	7.8	70.6	70.6	67.2	55.9	44.6	33.3	63.9	8.4	63.9	63.9	61.5	50.4	39.2	28.0
3000	77	97.5	8.5	64.0	41.2	28.5	-	-	-	86.4	9.1	65.7	40.5	24.8	-	-	-
	72	87.5	8.2	70.8	58.1	45.4	32.6	-	-	77.1	8.8	66.7	54.1	41.6	29.0	-	-
	67	77.5	8.0	77.5	74.9	62.2	49.5	36.8	-	67.8	8.6	67.8	67.8	58.3	45.8	33.2	-
	62	68.9	7.8	68.9	68.9	77.2	64.5	51.8	39.1	60.6	8.3	60.6	60.6	60.6	60.2	47.6	35.0
	57	72.3	7.9	72.3	72.3	73.0	60.3	47.6	34.8	65.1	8.4	65.1	65.1	65.1	54.4	41.9	29.3
3375	72	88.7	8.3	77.5	63.3	49.1	34.8	-	-	77.7	8.9	73.3	59.2	45.1	31.0	-	-
	67	78.6	8.0	78.6	77.3	67.3	53.1	38.8	-	68.3	8.6	68.3	68.3	63.3	49.2	35.1	-
	62	69.9	7.8	69.9	69.9	74.1	59.8	45.6	31.4	61.1	8.4	61.1	61.1	61.1	53.1	39.0	24.9
	57	73.4	7.9	73.4	73.4	73.7	59.5	45.2	31.0	65.7	8.5	65.7	65.7	65.7	52.5	38.4	24.3
3750	72	90.0	8.3	84.3	68.5	52.8	37.0	-	-	78.4	8.9	78.4	64.3	48.6	33.0	-	-
	67	79.7	8.1	79.7	79.7	72.4	56.6	40.9	-	68.9	8.6	68.9	68.9	68.2	52.6	37.0	-
	62	70.9	7.9	70.9	70.9	70.9	55.1	39.4	23.6	61.6	8.4	61.6	61.6	61.6	46.0	30.4	14.8
	57	74.4	7.9	74.4	74.4	74.4	58.7	42.9	27.2	66.3	8.5	66.3	66.3	66.3	50.6	35.0	19.4

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.

ZJ102 (8.5 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil																	
		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	136.0	6.1	61.5	49.5	38.6	-	-	-	127.6	6.8	56.3	45.7	35.0	-	-	-		
	72	124.0	6.0	74.1	63.2	52.4	41.5	-	-	116.0	6.7	70.2	59.6	48.9	38.3	-	-		
	67	112.1	5.9	86.7	77.0	66.1	55.3	44.4	-	104.3	6.6	84.1	73.5	62.8	52.2	41.5	-		
	62	99.3	6.2	99.3	95.1	77.6	66.8	55.9	45.0	91.6	6.7	91.6	89.5	74.0	63.3	52.7	42.0		
2550	77	141.0	6.1	67.2	54.7	42.3	-	-	-	132.1	6.8	63.0	50.7	38.4	-	-	-		
	72	128.6	6.0	82.2	69.8	57.4	44.9	-	-	120.0	6.7	78.2	65.9	53.6	41.3	-	-		
	67	116.2	5.9	97.3	84.9	72.5	60.0	47.6	-	107.9	6.6	93.5	81.2	68.9	56.6	44.3	-		
	62	102.9	6.2	102.9	100.1	85.0	72.6	60.1	47.7	94.8	6.7	94.8	93.4	81.1	68.8	56.5	44.2		
	57	99.4	8.7	99.4	99.4	91.2	78.7	66.3	53.8	93.6	6.5	93.6	93.6	85.3	73.0	60.7	48.4		
2975	77	146.0	6.1	72.8	60.0	46.0	-	-	-	136.5	6.8	69.7	55.7	41.8	-	-	-		
	72	133.1	6.0	90.4	76.4	62.4	48.4	-	-	124.0	6.7	86.3	72.3	58.4	44.4	-	-		
	67	120.3	5.9	107.9	92.8	78.8	64.8	50.8	-	111.6	6.6	102.9	88.9	75.0	61.0	47.0	-		
	62	106.5	6.1	106.5	105.1	92.4	78.4	64.4	50.4	98.0	6.7	98.0	97.3	88.3	74.3	60.4	46.4		
	57	102.9	8.7	102.9	102.9	99.1	85.1	71.1	57.1	96.7	6.5	96.7	96.7	92.9	78.9	65.0	51.0		
3400	77	151.0	6.0	78.5	65.2	49.7	-	-	-	141.0	6.8	76.4	60.8	45.2	-	-	-		
	72	137.7	5.9	98.5	82.9	67.4	51.8	-	-	128.1	6.7	94.3	78.7	63.1	47.5	-	-		
	67	124.4	5.8	118.5	100.6	85.1	69.5	53.9	-	115.2	6.6	112.3	96.6	81.0	65.4	49.8	-		
	62	110.2	6.1	110.2	110.2	99.8	84.3	68.7	53.1	101.2	6.8	101.2	101.2	95.4	79.8	64.2	48.6		
	57	106.5	8.7	106.5	106.5	107.0	91.5	75.9	60.3	99.9	6.5	99.9	99.9	100.4	84.8	69.2	53.6		
3825	72	141.1	6.0	105.2	88.2	71.1	54.0	-	-	131.1	6.7	101.2	84.1	67.1	50.0	-	-		
	67	127.5	5.9	124.6	106.8	89.8	72.7	55.6	-	117.9	6.6	116.4	103.2	86.1	69.1	52.0	-		
	62	112.9	6.2	112.9	112.9	107.7	90.6	73.6	56.5	103.5	6.8	103.5	103.5	100.7	83.6	66.5	49.5		
	57	109.1	8.7	109.1	109.1	109.4	92.3	75.2	58.2	102.2	6.6	102.2	102.2	102.4	85.4	68.3	51.3		
4250	72	144.5	6.1	112.0	93.4	74.8	56.3	-	-	134.0	6.8	108.0	89.5	71.0	52.5	-	-		
	67	130.6	6.0	130.6	113.0	94.5	75.9	57.3	-	120.6	6.7	120.6	109.7	91.2	72.7	54.2	-		
	62	115.6	6.2	115.6	115.6	115.6	97.0	78.4	59.9	105.9	6.8	105.9	105.9	105.9	87.4	68.9	50.4		
	57	111.7	8.8	111.7	111.7	111.7	93.2	74.6	56.0	104.5	6.6	104.5	104.5	104.5	86.0	67.5	49.0		
		95°F								105°F									
2125	77	119.3	7.4	51.1	41.8	31.4	-	-	-	108.3	8.2	44.7	38.5	28.3	-	-	-		
	72	107.9	7.3	66.3	55.9	45.4	35.0	-	-	97.7	8.0	62.2	52.0	41.8	31.6	-	-		
	67	96.5	7.2	81.5	69.9	59.5	49.1	38.6	-	87.1	7.8	79.6	65.5	55.3	45.1	34.9	-		
	62	84.0	7.3	84.0	84.0	70.3	59.9	49.5	39.1	77.3	7.9	77.3	77.3	65.1	54.9	44.7	34.5		
2550	77	123.1	7.5	58.8	46.7	34.5	-	-	-	111.8	8.2	55.2	43.2	31.2	-	-	-		
	72	111.4	7.4	74.2	62.1	49.9	37.7	-	-	100.9	8.1	70.1	58.1	46.2	34.2	-	-		
	67	99.7	7.2	89.7	77.5	65.3	53.1	41.0	-	90.0	7.9	85.0	73.0	61.1	49.1	37.2	-		
	62	86.7	7.3	86.7	86.7	77.2	65.1	52.9	40.7	79.8	7.9	79.8	79.8	71.9	60.0	48.0	36.1		
	57	87.7	7.1	87.7	87.7	79.5	67.4	55.2	43.0	80.7	7.8	80.7	80.7	72.5	60.5	48.6	36.6		
2975	77	127.0	7.5	66.6	51.5	37.6	-	-	-	115.3	8.3	65.6	47.9	34.2	-	-	-		
	72	114.9	7.4	82.2	68.3	54.4	40.5	-	-	104.1	8.1	78.0	64.3	50.6	36.9	-	-		
	67	102.8	7.3	97.8	85.1	71.2	57.2	43.3	-	92.8	7.9	90.3	80.6	66.9	53.2	39.5	-		
	62	89.5	7.4	89.5	89.5	84.1	70.2	56.3	42.4	82.3	7.9	82.3	82.3	78.8	65.1	51.4	37.6		
	57	90.5	7.2	90.5	90.5	86.6	72.7	58.8	44.9	83.2	7.8	83.2	83.2	79.4	65.7	51.9	38.2		
3400	77	130.9	7.6	74.3	56.3	40.7	-	-	-	118.9	8.3	76.1	52.6	37.2	-	-	-		
	72	118.5	7.4	90.2	74.5	58.8	43.2	-	-	107.3	8.1	85.9	70.4	55.0	39.5	-	-		
	67	106.0	7.3	106.0	92.7	77.0	61.3	45.7	-	95.7	8.0	95.7	88.2	72.7	57.3	41.8	-		
	62	92.2	7.4	92.2	92.2	91.0	75.4	59.7	44.1	84.8	8.0	84.8	84.8	85.6	70.2	54.7	39.2		
	57	93.3	7.2	93.3	93.3	93.8	78.1	62.4	46.8	85.8	7.8	85.8	85.8	86.3	70.8	55.3	39.9		
3825	72	121.0	7.5	97.1	80.1	63.0	46.0	-	-	109.5	8.2	92.8	75.9	59.0	42.1	-	-		
	67	108.3	7.3	108.3	99.5	82.5	65.4	48.4	-	97.7	8.0	97.7	92.9	78.1	61.2	44.3	-		
	62	94.2	7.4	94.2	94.2	93.6	76.5	59.5	42.5	86.6	8.0	86.6	86.6	87.0	70.1	53.2	36.3		
	57	95.3	7.2	95.3	95.3	95.5	78.5	61.4	44.4	87.5	7.9	87.5	87.5	87.8	70.9	54.0	37.1		
4250	72	123.5	7.5	104.1	85.6	67.2	48.8	-	-	111.7	8.2	99.6	81.3	63.0	44.7	-	-		
	67	110.5	7.4	110.5	106.4	87.9	69.5	51.1	-	99.6	8.0	99.6	97.6	83.4	65.1	46.8	-		
	62	96.2	7.5	96.2	96.2	96.2	77.7	59.3	40.8	88.4	8.0	88.4	88.4	88.4	70.1	51.7	33.4		
	57	97.3	7.3	97.3	97.3	97.3	78.8	60.4	41.9	89.3	7.9	89.3	89.3	89.3	71.0	52.7	34.4		

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	97.3	9.0	38.3	35.1	25.1	-	-	-	86.3	9.7	39.4	29.5	21.9	-	-	-
	72	87.5	8.7	58.0	48.0	38.1	28.1	-	-	77.4	9.4	53.9	44.1	34.4	24.6	-	-
	67	77.8	8.5	77.8	61.0	51.1	41.1	31.1	-	68.4	9.1	68.4	56.6	46.8	37.1	27.4	-
	62	70.6	8.4	70.6	70.6	59.8	49.8	39.8	29.9	63.9	9.0	63.9	63.9	54.5	44.8	35.0	25.3
2550	77	100.5	9.0	51.5	39.7	28.0	-	-	-	89.1	9.8	52.8	36.2	24.7	-	-	-
	72	90.4	8.8	65.9	54.1	42.4	30.7	-	-	79.9	9.5	61.7	50.2	38.7	27.1	-	-
	67	80.3	8.5	80.3	68.6	56.9	45.1	33.4	-	70.6	9.2	70.6	64.2	52.6	41.1	29.6	-
	62	72.9	8.4	72.9	72.9	66.6	54.9	43.1	31.4	66.0	9.0	66.0	66.0	61.3	49.8	38.2	26.7
	57	73.6	8.4	73.6	73.6	65.4	53.7	41.9	30.2	66.6	10.4	66.6	66.6	58.3	46.8	35.3	23.8
2975	77	103.6	9.1	64.7	44.3	30.8	-	-	-	91.9	9.8	66.2	42.9	27.4	-	-	-
	72	93.2	8.8	73.7	60.2	46.7	33.2	-	-	82.4	9.5	69.5	56.2	42.9	29.6	-	-
	67	82.8	8.6	82.8	76.2	62.7	49.2	35.7	-	72.8	9.2	72.8	71.7	58.4	45.2	31.9	-
	62	75.2	8.5	75.2	75.2	73.4	59.9	46.4	32.9	68.0	9.0	68.0	68.0	68.0	54.7	41.5	28.2
	57	75.9	8.4	75.9	75.9	72.1	58.6	45.1	31.6	68.7	10.4	68.7	68.7	64.8	51.5	38.2	24.9
3400	77	106.8	9.1	77.9	48.9	33.7	-	-	-	94.7	9.9	79.6	49.5	30.2	-	-	-
	72	96.1	8.9	81.6	66.3	51.1	35.8	-	-	84.9	9.6	77.3	62.3	47.2	32.1	-	-
	67	85.3	8.6	85.3	83.8	68.5	53.2	38.0	-	75.0	9.3	75.0	75.0	64.2	49.2	34.1	-
	62	77.5	8.5	77.5	77.5	80.2	64.9	49.7	34.4	70.1	9.1	70.1	70.1	70.1	59.7	44.7	29.6
	57	78.3	8.4	78.3	78.3	78.8	63.5	48.2	33.0	70.7	10.5	70.7	70.7	70.7	56.2	41.1	26.1
3825	72	98.0	8.9	88.4	71.7	55.0	38.2	-	-	86.5	9.6	84.0	67.5	50.9	34.4	-	-
	67	87.0	8.7	87.0	86.3	73.7	57.0	40.3	-	76.4	9.3	76.4	76.4	69.3	52.8	36.2	-
	62	79.0	8.6	79.0	79.0	80.4	63.7	46.9	30.2	71.4	9.1	71.4	71.4	71.4	57.2	40.7	24.1
	57	79.8	8.5	79.8	79.8	80.1	63.4	46.6	29.9	72.1	10.5	72.1	72.1	72.1	55.8	39.2	22.7
4250	72	99.9	8.9	95.2	77.0	58.8	40.7	-	-	88.1	9.7	88.1	72.7	54.7	36.6	-	-
	67	88.8	8.7	88.8	88.8	78.9	60.7	42.5	-	77.9	9.4	77.9	77.9	74.4	56.3	38.3	-
	62	80.6	8.6	80.6	80.6	80.6	62.4	44.2	26.0	72.8	9.2	72.8	72.8	72.8	54.7	36.7	18.6
	57	81.4	8.5	81.4	81.4	81.4	63.2	45.0	26.9	73.5	10.6	73.5	73.5	73.5	55.4	37.4	19.3

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.

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) (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	157.8	13.8	69.3	54.9	40.4	-	-	-	146.2	15.1	64.0	51.1	36.7	-	-	-
	72	144.0	13.7	89.8	75.3	60.8	46.4	-	-	133.1	15.0	85.3	70.9	56.4	42.0	-	-
	67	130.2	13.5	110.2	95.7	81.3	66.8	52.3	-	120.1	14.9	105.1	90.6	76.2	61.7	47.2	-
	62	119.8	13.4	119.8	119.8	100.7	86.2	71.7	57.3	110.4	14.7	110.4	110.4	95.3	80.8	66.4	51.9
3750	77	160.7	13.9	74.9	58.8	42.8	-	-	-	148.3	15.2	70.9	54.9	38.9	-	-	-
	72	146.6	13.7	96.5	80.5	64.4	48.4	-	-	135.0	15.0	91.9	75.8	59.8	43.8	-	-
	67	132.5	13.6	118.2	102.1	86.1	70.0	54.0	-	121.7	14.9	112.8	96.8	80.7	64.7	48.6	-
	62	122.0	13.4	122.0	122.0	106.6	90.6	74.5	58.5	112.0	14.8	112.0	112.0	101.0	85.0	68.9	52.9
	57	122.2	13.5	122.2	119.3	103.3	87.2	71.2	55.1	113.2	14.9	113.2	110.5	94.4	78.4	62.3	46.3
4375	77	163.5	13.9	80.4	62.8	45.2	-	-	-	150.3	15.2	77.9	58.7	41.1	-	-	-
	72	149.2	13.8	103.3	85.6	68.0	50.4	-	-	136.9	15.1	98.4	80.8	63.2	45.6	-	-
	67	134.9	13.6	126.1	108.5	90.9	73.2	55.6	-	123.4	15.0	120.5	102.9	85.3	67.7	50.1	-
	62	124.1	13.5	124.1	124.1	112.6	94.9	77.3	59.7	113.5	14.8	113.5	113.5	106.7	89.1	71.5	53.9
	57	124.4	13.5	124.4	122.9	109.0	91.4	73.8	56.1	114.8	14.9	114.8	113.4	99.8	82.1	64.5	46.9
5000	77	166.3	14.0	86.0	66.8	47.6	-	-	-	152.4	15.3	84.9	62.5	43.3	-	-	-
	72	151.7	13.8	110.1	90.8	71.6	52.4	-	-	138.7	15.1	105.0	85.8	66.6	47.4	-	-
	67	137.2	13.7	134.1	114.9	95.7	76.5	57.2	-	125.1	15.0	125.1	109.1	89.9	70.7	51.5	-
	62	126.3	13.5	126.3	126.3	118.5	99.3	80.1	60.9	115.1	14.9	115.1	115.1	112.4	93.2	74.0	54.8
	57	126.6	13.6	126.6	126.6	114.8	95.6	76.4	57.1	116.4	15.0	116.4	116.4	105.1	85.9	66.7	47.5
5625	72	155.7	13.9	117.2	96.4	75.5	54.6	-	-	142.3	15.2	112.0	91.1	70.2	49.3	-	-
	67	140.8	13.7	139.3	121.7	100.8	80.0	59.1	-	128.3	15.0	128.3	115.7	94.8	73.9	53.0	-
	62	129.6	13.6	129.6	129.6	124.9	104.1	83.2	62.3	118.0	14.9	118.0	118.0	118.0	97.7	76.8	55.9
	57	129.9	13.6	129.9	129.9	121.0	100.2	79.3	58.4	119.3	15.0	119.3	119.3	110.8	90.0	69.1	48.2
6250	72	159.7	13.9	124.4	101.9	79.4	56.8	-	-	145.9	15.2	119.0	96.4	73.8	51.2	-	-
	67	144.4	13.7	144.4	128.5	106.0	83.5	61.0	-	131.5	15.1	131.5	122.3	99.7	77.1	54.5	-
	62	132.9	13.6	132.9	132.9	131.3	108.8	86.3	63.8	121.0	14.9	121.0	121.0	121.0	102.1	79.5	56.9
	57	133.2	13.6	133.2	133.2	127.2	104.7	82.2	59.7	122.3	15.0	122.3	122.3	116.6	94.0	71.4	48.8

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.

ZR037-150 Cooling and Reheat Capacities

ZR037 (3.0 Ton) Cooling

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	48.2	0.2	20.1	16.2	13.0	-	-	-	43.5	1.6	17.0	13.9	10.7	-	-	-		
	72	43.9	0.8	24.6	21.3	18.1	14.9	-	-	39.8	1.8	22.2	19.1	16.0	12.8	-	-		
	67	39.6	1.3	29.0	26.5	23.3	20.1	16.8	-	36.0	2.0	27.5	24.3	21.2	18.1	14.9	-		
	62	35.5	1.1	35.5	32.6	28.4	25.1	21.9	18.7	31.4	1.9	31.4	29.6	24.7	21.6	18.4	15.3		
900	77	50.4	0.5	22.1	18.2	14.3	-	-	-	45.5	1.7	19.7	15.9	12.1	-	-	-		
	72	45.9	1.1	27.8	23.9	20.0	16.1	-	-	41.6	1.9	25.6	21.8	18.0	14.2	-	-		
	67	41.4	1.6	33.4	29.5	25.6	21.7	17.8	-	37.6	2.1	31.5	27.7	23.9	20.1	16.3	-		
	62	37.1	1.4	37.1	35.2	31.3	27.4	23.5	19.6	32.8	2.0	32.8	31.6	27.8	24.0	20.2	16.4		
	57	33.3	1.3	33.3	33.4	30.5	26.6	22.7	18.8	29.7	1.9	29.7	29.7	26.4	22.6	18.8	15.0		
1050	77	52.7	0.8	24.1	20.3	15.7	-	-	-	47.4	1.8	22.3	17.9	13.4	-	-	-		
	72	47.9	1.3	31.0	26.4	21.8	17.2	-	-	43.3	2.0	28.9	24.4	20.0	15.5	-	-		
	67	43.2	1.9	37.8	32.5	27.9	23.4	18.8	-	39.2	2.1	35.4	31.0	26.5	22.1	17.6	-		
	62	38.7	1.7	38.7	37.8	34.2	29.6	25.0	20.5	34.2	2.1	34.2	33.6	30.9	26.4	21.9	17.5		
	57	34.7	1.6	34.7	34.8	33.3	28.8	24.2	19.6	31.0	1.9	31.0	31.0	29.3	24.9	20.4	15.9		
1200	77	54.9	1.0	26.1	22.3	17.0	-	-	-	49.4	1.9	25.0	19.9	14.8	-	-	-		
	72	50.0	1.6	34.2	28.9	23.6	18.4	-	-	45.1	2.1	32.2	27.1	22.0	16.8	-	-		
	67	45.1	2.2	42.2	35.5	30.3	25.0	19.8	-	40.9	2.2	39.4	34.3	29.2	24.0	18.9	-		
	62	40.4	2.0	40.4	40.4	37.1	31.8	26.6	21.3	35.6	2.2	35.6	35.6	34.0	28.8	23.7	18.6		
	57	36.2	1.8	36.2	36.2	36.2	30.9	25.7	20.4	32.3	2.0	32.3	32.3	32.3	27.1	22.0	16.9		
1350	72	50.0	1.4	36.8	31.0	25.2	19.5	-	-	45.0	2.0	34.6	28.9	23.2	17.5	-	-		
	67	45.0	2.0	43.6	38.2	32.3	26.6	20.8	-	40.8	2.1	40.1	36.5	30.8	25.1	19.4	-		
	62	40.4	1.8	40.4	40.4	38.7	33.0	27.2	21.5	35.5	2.1	35.5	35.5	34.7	29.0	23.3	17.6		
	57	36.2	1.6	36.2	36.2	36.2	30.4	24.7	18.9	32.2	1.9	32.2	32.2	32.2	26.5	20.8	15.1		
1500	72	49.9	1.2	39.3	33.1	26.8	20.6	-	-	45.0	1.9	36.9	30.6	24.4	18.1	-	-		
	67	45.0	1.8	45.0	40.9	34.4	28.2	21.9	-	40.7	2.1	40.7	38.6	32.4	26.1	19.9	-		
	62	40.3	1.6	40.3	40.3	40.3	34.1	27.8	21.6	35.5	2.0	35.5	35.5	35.5	29.2	23.0	16.7		
	57	36.2	1.5	36.2	36.2	36.2	29.9	23.7	17.4	32.1	1.9	32.1	32.1	32.1	25.9	19.6	13.4		
		95°F									105°F								
750	77	38.8	3.1	13.9	11.6	8.5	-	-	-	36.4	2.7	12.7	11.2	8.3	-	-	-		
	72	35.6	2.8	19.9	16.9	13.8	10.8	-	-	32.8	2.7	19.0	16.1	13.1	10.2	-	-		
	67	32.5	2.6	25.9	22.2	19.1	16.1	13.0	-	29.2	2.6	25.3	20.9	17.9	15.0	12.1	-		
	62	27.3	2.7	27.3	26.6	21.0	18.0	14.9	11.9	25.0	2.6	25.0	24.7	19.5	16.5	13.6	10.7		
900	77	40.5	3.0	17.2	13.5	9.8	-	-	-	37.5	2.7	16.5	13.0	9.4	-	-	-		
	72	37.2	2.7	23.4	19.7	16.0	12.3	-	-	33.8	2.7	22.0	18.4	14.9	11.3	-	-		
	67	33.9	2.5	29.5	25.8	22.1	18.4	14.7	-	30.1	2.6	27.5	23.9	20.3	16.8	13.2	-		
	62	28.5	2.7	28.5	28.0	24.3	20.6	16.9	13.2	25.8	2.6	25.8	25.5	22.1	18.5	14.9	11.4		
	57	26.2	2.4	26.2	26.0	22.3	18.6	14.9	11.2	24.9	2.4	24.9	24.9	21.4	17.8	14.2	10.6		
1050	77	42.2	2.8	20.6	15.5	11.2	-	-	-	38.6	2.7	20.4	14.7	10.5	-	-	-		
	72	38.7	2.6	26.8	22.5	18.1	13.8	-	-	34.8	2.7	25.0	20.8	16.6	12.4	-	-		
	67	35.3	2.4	33.1	29.4	25.1	20.7	16.4	-	31.0	2.6	29.7	26.9	22.7	18.5	14.3	-		
	62	29.7	2.6	29.7	29.4	27.6	23.2	18.9	14.5	26.5	2.6	26.5	26.4	24.7	20.5	16.3	12.1		
	57	27.2	2.3	27.2	27.2	25.3	21.0	16.6	12.3	25.6	2.5	25.6	25.6	23.9	19.6	15.4	11.2		
1200	77	43.9	2.7	23.9	17.5	12.5	-	-	-	39.7	2.7	24.2	16.4	11.6	-	-	-		
	72	40.3	2.5	30.3	25.3	20.3	15.3	-	-	35.8	2.7	28.0	23.2	18.4	13.5	-	-		
	67	36.7	2.3	36.7	33.1	28.1	23.1	18.1	-	31.9	2.6	31.9	30.0	25.1	20.3	15.4	-		
	62	30.8	2.5	30.8	30.8	30.8	25.8	20.8	15.8	27.3	2.6	27.3	27.3	27.3	22.5	17.6	12.8		
	57	28.3	2.2	28.3	28.3	28.3	23.3	18.3	13.3	26.4	2.5	26.4	26.4	26.4	21.5	16.7	11.8		
1350	72	40.1	2.5	32.4	26.7	21.1	15.5	-	-	35.8	2.6	30.4	24.9	19.5	14.0	-	-		
	67	36.5	2.3	36.5	34.7	29.2	23.6	17.9	-	31.9	2.6	31.9	30.9	26.7	21.2	15.7	-		
	62	30.7	2.5	30.7	30.7	30.7	25.1	19.5	13.8	27.3	2.5	27.3	27.3	27.3	21.9	16.4	10.9		
	57	28.2	2.2	28.2	28.2	28.2	22.6	17.0	11.3	26.4	2.4	26.4	26.4	26.4	20.9	15.5	10.0		
1500	72	40.0	2.5	34.4	28.2	21.9	15.6	-	-	35.8	2.6	32.7	26.7	20.6	14.5	-	-		
	67	36.4	2.3	36.4	36.4	30.3	24.1	17.8	-	31.9	2.5	31.9	31.9	28.2	22.1	16.0	-		
	62	30.6	2.5	30.6	30.6	30.6	24.3	18.1	11.8	27.3	2.5	27.3	27.3	27.3	21.2	15.2	9.1		
	57	28.1	2.2	28.1	28.1	28.1	21.8	15.6	9.3	26.4	2.4	26.4	26.4	26.4	20.3	14.2	8.2		

ZR037 (3.0 Ton) Cooling (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	34.0	2.4	11.6	10.9	8.1	-	-	-	31.5	2.1	11.5	9.9	7.9	-	-	-
	72	30.0	2.5	18.1	15.3	12.4	9.6	-	-	27.2	2.3	17.2	14.5	11.7	9.0	-	-
	67	26.0	2.6	24.6	19.6	16.8	13.9	11.1	-	22.8	2.6	22.8	18.3	15.6	12.9	10.1	-
	62	22.8	2.4	22.8	22.8	18.0	15.1	12.3	9.5	20.5	2.2	20.5	20.5	16.5	13.7	11.0	8.3
900	77	34.5	2.5	15.9	12.4	9.0	-	-	-	31.4	2.3	15.9	11.8	8.5	-	-	-
	72	30.4	2.6	20.7	17.2	13.8	10.3	-	-	27.1	2.5	19.3	16.0	12.7	9.3	-	-
	67	26.4	2.7	25.5	22.0	18.6	15.1	11.7	-	22.7	2.8	22.7	20.1	16.8	13.5	10.2	-
	62	23.1	2.5	23.1	23.1	19.9	16.5	13.0	9.6	20.4	2.4	20.4	20.4	17.7	14.4	11.1	7.7
	57	23.7	2.5	23.7	23.7	20.4	17.0	13.5	10.1	22.5	2.5	22.5	22.5	19.5	16.2	12.8	9.5
1050	77	35.0	2.6	20.1	13.9	9.8	-	-	-	31.3	2.5	20.3	13.7	9.2	-	-	-
	72	30.9	2.7	23.2	19.2	15.1	11.0	-	-	26.9	2.8	21.4	17.5	13.6	9.7	-	-
	67	26.8	2.8	26.3	24.4	20.4	16.3	12.2	-	22.6	3.0	22.6	21.9	18.0	14.1	10.2	-
	62	23.4	2.6	23.4	23.4	21.8	17.8	13.7	9.6	20.3	2.6	20.3	20.3	19.0	15.0	11.1	7.2
	57	24.0	2.6	24.0	24.0	22.4	18.3	14.3	10.2	22.5	2.7	22.5	22.5	21.0	17.0	13.1	9.2
1200	77	35.4	2.7	24.4	15.4	10.7	-	-	-	31.2	2.7	24.7	15.6	9.8	-	-	-
	72	31.3	2.8	25.8	21.1	16.4	11.8	-	-	26.8	3.0	23.6	19.0	14.5	10.0	-	-
	67	27.2	2.9	27.2	26.9	22.2	17.5	12.8	-	22.4	3.3	22.4	22.4	19.2	14.7	10.2	-
	62	23.8	2.7	23.8	23.8	23.8	19.1	14.4	9.7	20.2	2.8	20.2	20.2	20.2	15.7	11.2	6.7
	57	24.4	2.7	24.4	24.4	24.4	19.7	15.0	10.3	22.4	2.9	22.4	22.4	22.4	17.9	13.4	8.9
1350	72	31.5	2.7	28.4	23.1	17.9	12.6	-	-	27.1	2.9	26.5	21.4	16.3	11.2	-	-
	67	27.3	2.9	27.3	27.1	24.1	18.8	13.6	-	22.7	3.1	22.7	22.7	21.6	16.5	11.4	-
	62	23.9	2.6	23.9	23.9	23.9	18.6	13.3	8.1	20.5	2.7	20.5	20.5	20.5	15.4	10.3	5.2
	57	24.5	2.6	24.5	24.5	24.5	19.2	14.0	8.7	22.7	2.8	22.7	22.7	22.7	17.6	12.5	7.4
1500	72	31.6	2.7	31.1	25.2	19.3	13.4	-	-	27.4	2.7	27.4	23.7	18.0	12.3	-	-
	67	27.4	2.8	27.4	27.4	26.0	20.2	14.3	-	23.0	3.0	23.0	23.0	23.0	18.2	12.6	-
	62	24.0	2.5	24.0	24.0	24.0	18.1	12.3	6.4	20.7	2.6	20.7	20.7	20.7	15.0	9.3	3.7
	57	24.6	2.5	24.6	24.6	24.6	18.8	12.9	7.0	22.9	2.7	22.9	22.9	22.9	17.2	11.5	5.9

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.

ZR037 (3.0 Ton) Reheat

Air on Evaporator Coil		Temperature of Air on Condenser Coil					
		Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh) (- indicates heating)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh) (- indicates heating)
				Return Dry Bulb (°F)			Return Dry Bulb (°F)
				75			75
CFM	WB (°F)	40 °F			50 °F		
1050	62.5	14.1	1.3	8.9	19.7	2.0	8.9
	64	15.3	1.3	8.1	21.3	2.0	7.5
	65.3	17.0	1.4	7.1	22.5	2.0	6.2
1200	62.5	14.9	1.3	9.7	20.3	2.0	9.8
	64	15.6	1.3	8.7	21.2	2.0	8.3
	65.3	16.1	1.3	7.8	23.1	2.0	7.1
1350	62.5	21.7	1.9	11.1	21.6	2.0	10.9
	64	22.3	1.9	9.3	23.1	2.0	9.7
	65.3	22.5	1.8	8.0	24.7	2.0	8.2
		60 °F			70 °F		
1050	62.5	18.5	2.0	8.1	17.0	2.1	6.8
	64	19.7	2.0	6.6	18.4	2.1	5.5
	65.3	20.9	2.0	5.4	19.6	2.1	4.4
1200	62.5	19.2	2.0	9.0	17.0	2.1	7.9
	64	20.3	2.0	7.6	18.5	2.1	6.6
	65.3	22.2	2.0	6.3	19.9	2.1	5.5
1350	62.5	19.8	2.0	9.8	16.1	2.1	8.4
	64	21.1	2.0	8.4	17.3	2.1	6.8
	62	22.3	2.0	7.2	18.8	2.1	5.7
		75 °F			80 °F		
1050	62.5	16.3	2.1	7.2	15.0	2.1	5.9
	64	17.6	2.1	5.5	16.2	2.1	4.5
	65.3	18.8	2.1	4.0	16.6	2.1	3.6
1200	62.5	16.6	2.1	7.4	14.9	2.1	6.7
	64	18.0	2.1	6.1	16.1	2.1	5.5
	65.3	18.9	2.1	5.0	17.2	2.1	3.9
1350	62.5	15.8	2.1	7.8	14.4	2.1	7.1
	64	17.3	2.1	6.7	15.6	2.1	5.8
	65.3	18.5	2.1	5.2	16.7	2.1	4.4
		85 °F			95 °F		
1050	62.5	12.0	2.2	4.5	7.5	2.3	1.7
	64	12.5	2.2	3.1	8.5	2.3	0.5
	65.3	13.4	2.2	1.9	9.3	2.4	-0.9
1200	62.5	11.8	2.2	5.0	8.8	2.3	-0.6
	64	12.9	2.2	3.7	8.0	2.3	0.6
	65.3	13.9	2.2	2.3	8.2	2.4	-0.9
1350	62.5	11.7	2.2	5.6	6.0	2.3	1.9
	64	12.6	2.2	4.0	6.7	2.3	0.6
	62	13.6	2.2	2.7	7.7	2.3	-0.7

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.

ZR049 (4.0 Ton) Cooling (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	50.4	4.0	17.7	16.3	12.1	-	-	-	49.5	3.7	16.5	12.8	10.1	-	-	-		
	72	43.0	3.9	26.2	22.0	17.8	13.6	-	-	40.5	3.9	24.0	19.9	15.8	11.7	-	-		
	67	35.6	3.8	34.6	27.7	23.5	19.3	15.2	-	31.5	4.0	31.5	25.6	21.5	17.4	13.3	-		
	62	30.3	3.7	30.3	30.3	24.6	20.5	16.3	12.1	26.5	3.6	26.5	26.5	20.0	15.9	11.8	7.7		
1200	77	51.2	4.0	23.0	18.1	13.3	-	-	-	49.6	3.9	22.4	15.9	11.2	-	-	-		
	72	43.7	3.9	29.3	24.4	19.5	14.7	-	-	40.6	4.0	26.9	22.2	17.4	12.7	-	-		
	67	36.1	3.8	35.5	30.7	25.8	20.9	16.1	-	31.5	4.1	31.5	28.4	23.7	18.9	14.2	-		
	62	30.8	3.7	30.8	30.8	27.0	22.1	17.3	12.4	26.5	3.8	26.5	26.5	22.1	17.4	12.6	7.8		
	57	31.9	3.8	31.9	31.9	28.0	23.2	18.3	13.4	28.1	3.8	28.1	28.1	23.6	18.8	14.1	9.3		
1400	77	52.0	4.0	28.3	20.0	14.5	-	-	-	49.7	4.0	28.4	19.0	12.2	-	-	-		
	72	44.4	3.9	32.3	26.8	21.3	15.7	-	-	40.6	4.1	29.9	24.5	19.0	13.6	-	-		
	67	36.7	3.8	36.4	33.6	28.1	22.5	17.0	-	31.4	4.2	31.4	31.3	25.9	20.5	15.1	-		
	62	31.3	3.7	31.3	31.3	29.4	23.8	18.3	12.8	26.4	3.9	26.4	26.4	24.2	18.8	13.4	8.0		
	57	32.4	3.8	32.4	32.4	30.5	24.9	19.4	13.8	28.1	3.9	28.1	28.1	25.8	20.4	15.0	9.6		
1600	77	52.9	4.0	33.6	21.9	15.6	-	-	-	49.9	4.2	34.3	22.2	13.3	-	-	-		
	72	45.1	3.9	35.4	29.2	23.0	16.8	-	-	40.6	4.3	32.8	26.8	20.7	14.6	-	-		
	67	37.3	3.8	37.3	36.6	30.3	24.1	17.9	-	31.3	4.3	31.3	31.3	28.1	22.0	15.9	-		
	62	31.8	3.8	31.8	31.8	31.8	25.5	19.3	13.1	26.3	4.0	26.3	26.3	26.3	20.2	14.2	8.1		
	57	32.9	3.8	32.9	32.9	32.9	26.7	20.5	14.3	28.0	4.1	28.0	28.0	28.0	22.0	15.9	9.8		
1800	72	45.7	3.9	38.8	31.9	24.9	18.0	-	-	41.6	4.2	36.2	29.4	22.6	15.7	-	-		
	67	37.8	3.9	37.8	37.5	32.9	26.0	19.0	-	32.2	4.3	32.2	32.2	30.6	23.8	17.0	-		
	62	32.2	3.8	32.2	32.2	32.2	25.3	18.4	11.4	27.0	3.9	27.0	27.0	27.0	20.2	13.4	6.6		
	57	33.5	3.8	33.5	33.5	33.5	26.5	19.6	12.6	28.8	4.0	28.8	28.8	28.8	21.9	15.1	8.3		
2000	72	46.4	4.0	42.2	34.6	26.9	19.3	-	-	42.6	4.1	39.5	32.0	24.4	16.9	-	-		
	67	38.4	3.9	38.4	38.4	35.5	27.9	20.2	-	33.0	4.2	33.0	33.0	33.0	25.6	18.1	-		
	62	32.7	3.8	32.7	32.7	32.7	25.1	17.4	9.8	27.7	3.8	27.7	27.7	27.7	20.1	12.6	5.0		
	57	34.0	3.8	34.0	34.0	34.0	26.3	18.6	11.0	29.5	3.9	29.5	29.5	29.5	21.9	14.4	6.8		

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.

ZR049 (4.0 Ton) Reheat

Air on Evaporator Coil		Temperature of Air on Condenser Coil					
		Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh) (- indicates heating)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh) (- indicates heating)
				Return Dry Bulb (°F)			Return Dry Bulb (°F)
CFM	WB (°F)			75			75
		40 °F			50 °F		
1200	62.5	24.5	2.5	9.1	22.9	2.6	8.0
	64	25.7	2.5	7.4	26.9	2.7	7.2
	65.3	26.6	2.5	6.1	27.1	2.6	5.5
1600	62.5	24.0	2.5	12.4	24.5	2.6	11.2
	64	25.8	2.5	10.0	26.7	2.6	9.2
	65.3	27.1	2.5	8.3	28.5	2.6	7.7
2000	62.5	24.3	2.5	12.9	22.7	2.6	11.6
	64	26.2	2.5	11.1	24.7	2.6	10.0
	65.3	27.1	2.5	9.2	26.5	2.6	8.5
		60 °F			70 °F		
1200	62.5	21.8	2.6	7.1	19.8	2.7	6.2
	64	25.3	2.7	6.3	23.0	2.8	0.0
	65.3	26.9	2.7	4.8	23.5	2.7	2.9
1600	62.5	22.7	2.7	9.9	20.6	2.7	8.8
	64	25.4	2.7	8.8	22.4	2.8	6.8
	65.3	26.9	2.7	7.5	24.4	2.8	5.9
2000	62.5	20.1	2.6	10.2	18.2	2.7	8.9
	64	22.3	2.6	8.6	20.5	2.7	7.7
	62	23.7	2.6	6.9	21.4	2.7	5.3
		75 °F			80 °F		
1200	62.5	19.0	2.7	5.5	17.6	2.8	4.7
	64	21.5	2.8	5.1	20.9	2.9	3.7
	65.3	22.2	2.8	2.8	21.5	2.9	2.3
1600	62.5	19.3	2.8	8.1	17.9	2.9	7.5
	64	21.3	2.8	6.3	19.9	2.9	5.7
	65.3	22.6	2.8	4.7	21.1	2.9	4.1
2000	62.5	16.9	2.7	7.9	15.1	2.8	7.1
	64	18.2	2.7	6.3	16.7	2.8	5.6
	65.3	19.9	2.8	4.8	18.3	2.8	4.0
		85 °F			95 °F		
1200	62.5	17.7	2.9	5.0	12.8	3.1	3.5
	64	19.0	2.9	3.4	13.8	3.2	-0.2
	65.3	20.4	2.9	2.1	14.0	3.1	-1.5
1600	62.5	16.2	2.9	6.4	9.7	3.1	2.4
	64	18.2	3.0	5.0	10.8	3.2	1.0
	65.3	19.6	3.0	3.1	12.2	3.2	-0.7
2000	62.5	13.3	2.9	6.6	6.2	3.0	1.4
	64	14.8	2.9	4.7	7.2	3.0	-0.1
	62	15.8	2.9	3.1	8.0	3.0	-1.5

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.

ZR061 (5.0 Ton) Cooling

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	81.7	5.9	33.6	27.7	21.9	-	-	-	76.2	4.8	32.2	26.5	20.8	-	-	-		
	72	72.8	5.0	41.9	36.1	30.2	24.3	-	-	67.8	4.3	40.1	34.3	28.6	22.9	-	-		
	67	64.0	4.0	50.2	44.4	38.5	32.6	26.7	-	59.4	3.8	47.9	42.1	36.4	30.7	25.0	-		
	62	57.0	3.6	57.0	57.0	45.7	39.9	33.9	28.1	52.5	3.8	52.5	52.5	43.6	37.8	32.1	26.4		
1500	77	85.0	5.4	37.9	31.1	24.3	-	-	-	79.0	4.6	36.2	29.6	23.0	-	-	-		
	72	75.8	4.5	47.1	40.4	33.6	26.8	-	-	70.3	4.1	44.8	38.2	31.6	25.0	-	-		
	67	66.6	3.6	56.4	49.6	42.9	36.1	29.3	-	61.6	3.7	53.4	46.8	40.2	33.6	27.0	-		
	62	59.3	3.2	59.3	59.3	50.9	44.1	37.4	30.6	54.5	3.6	54.5	54.5	48.1	41.4	34.8	28.2		
1750	77	88.3	4.9	42.1	34.4	26.8	-	-	-	81.9	4.3	40.1	32.6	25.1	-	-	-		
	72	78.7	4.1	52.3	44.6	37.0	29.4	-	-	72.9	3.9	49.5	42.0	34.5	27.0	-	-		
	67	69.2	3.2	62.5	54.8	47.2	39.5	31.9	-	63.9	3.5	59.0	51.5	43.9	36.4	28.9	-		
	62	61.6	2.8	61.6	61.6	56.0	48.4	40.7	33.1	56.4	3.4	56.4	56.4	52.5	45.0	37.5	30.0		
2000	77	91.6	4.4	46.3	37.8	29.3	-	-	-	84.7	4.1	44.0	35.6	27.2	-	-	-		
	72	81.7	3.6	57.5	48.9	40.4	31.9	-	-	75.4	3.7	54.3	45.9	37.5	29.1	-	-		
	67	71.8	2.8	68.6	60.1	51.5	43.0	34.5	-	66.1	3.3	64.5	56.1	47.7	39.3	30.9	-		
	62	63.9	2.5	63.9	63.9	61.2	52.7	44.1	35.6	58.4	3.2	58.4	58.4	57.0	48.6	40.2	31.8		
2250	77	82.5	3.9	60.8	51.6	42.4	33.2	-	-	75.9	3.9	57.9	48.8	39.7	30.6	-	-		
	72	72.5	3.0	70.9	63.3	54.1	44.9	35.8	-	66.5	3.5	65.7	59.6	50.5	41.4	32.3	-		
	67	64.5	2.6	64.5	64.5	63.2	54.0	44.8	35.6	58.8	3.5	58.8	58.8	58.1	49.0	39.9	30.8		
	62	63.3	3.5	63.3	63.3	63.3	54.1	44.9	35.7	58.2	3.9	58.2	58.2	58.2	49.1	39.9	30.8		
2500	77	83.4	4.2	64.2	54.3	44.5	34.6	-	-	76.4	4.1	61.6	51.7	41.9	32.1	-	-		
	72	73.2	3.3	73.2	66.6	56.7	46.9	37.1	-	66.9	3.7	66.9	63.2	53.4	43.5	33.7	-		
	67	65.2	2.8	65.2	65.2	65.2	55.3	45.5	35.6	59.2	3.7	59.2	59.2	59.2	49.3	39.5	29.7		
	62	63.9	3.7	63.9	63.9	63.9	54.0	44.2	34.4	58.5	4.1	58.5	58.5	58.5	48.7	38.9	29.1		
				95°F										105°F					
1250	77	70.7	3.7	30.8	25.3	19.7	-	-	-	65.8	4.9	25.3	21.7	16.5	-	-	-		
	72	62.8	3.7	38.2	32.6	27.0	21.5	-	-	57.8	4.6	35.2	29.7	24.3	18.9	-	-		
	67	54.8	3.7	45.5	39.9	34.3	28.8	23.2	-	49.8	4.3	45.1	37.8	32.1	26.6	21.2	-		
	62	48.1	4.0	48.1	48.1	41.4	35.8	30.3	24.7	43.0	4.6	43.0	43.0	35.7	30.3	24.8	19.4		
1500	77	73.1	3.8	34.5	28.0	21.6	-	-	-	67.2	4.8	31.0	24.5	18.1	-	-	-		
	72	64.9	3.7	42.5	36.0	29.5	23.1	-	-	59.0	4.5	39.4	33.0	26.6	20.2	-	-		
	67	56.7	3.7	50.5	44.0	37.5	31.1	24.6	-	50.8	4.3	47.7	41.5	35.1	28.7	22.3	-		
	62	49.7	4.0	49.7	49.7	45.2	38.8	32.3	25.8	43.9	4.6	43.9	43.9	39.1	32.7	26.3	19.9		
1750	77	75.5	3.8	38.2	30.8	23.4	-	-	-	68.6	4.7	36.8	27.3	19.7	-	-	-		
	72	67.0	3.7	46.8	39.4	32.1	24.7	-	-	60.3	4.5	43.6	36.2	28.9	21.6	-	-		
	67	58.5	3.7	55.4	48.1	40.7	33.3	26.0	-	51.9	4.2	50.4	45.2	38.1	30.8	23.5	-		
	62	51.3	4.0	51.3	51.3	49.1	41.7	34.3	27.0	44.9	4.5	44.9	44.9	42.5	35.1	27.8	20.4		
2000	77	77.9	3.8	41.8	33.5	25.2	-	-	-	70.0	4.7	42.5	30.0	21.2	-	-	-		
	72	69.1	3.8	51.1	42.8	34.6	26.3	-	-	61.5	4.4	47.8	39.5	31.2	22.9	-	-		
	67	60.4	3.7	60.4	52.2	43.9	35.6	27.3	-	53.0	4.1	53.0	48.9	41.2	32.9	24.6	-		
	62	52.9	4.0	52.9	52.9	52.9	44.6	36.4	28.1	45.8	4.4	45.8	45.8	45.8	37.5	29.2	21.0		
2250	77	77.9	3.8	41.8	33.5	25.2	-	-	-	70.0	4.7	42.5	30.0	21.2	-	-	-		
	72	69.1	3.8	51.1	42.8	34.6	26.3	-	-	61.5	4.4	47.8	39.5	31.2	22.9	-	-		
	67	60.4	3.7	60.4	52.2	43.9	35.6	27.3	-	53.0	4.1	53.0	48.9	41.2	32.9	24.6	-		
	62	52.9	4.0	52.9	52.9	52.9	44.6	36.4	28.1	45.8	4.4	45.8	45.8	45.8	37.5	29.2	21.0		
2500	77	77.9	3.8	41.8	33.5	25.2	-	-	-	70.0	4.7	42.5	30.0	21.2	-	-	-		
	72	69.1	3.8	51.1	42.8	34.6	26.3	-	-	61.5	4.4	47.8	39.5	31.2	22.9	-	-		
	67	60.4	3.7	60.4	52.2	43.9	35.6	27.3	-	53.0	4.1	53.0	48.9	41.2	32.9	24.6	-		
	62	52.9	4.0	52.9	52.9	52.9	44.6	36.4	28.1	45.8	4.4	45.8	45.8	45.8	37.5	29.2	21.0		
2500	77	69.4	4.1	58.9	49.1	39.4	29.6	-	-	61.6	4.8	55.3	45.5	35.6	25.8	-	-		
	72	60.7	4.1	60.7	59.8	50.0	40.2	30.4	-	53.1	4.5	53.1	52.7	47.0	37.2	27.3	-		
	67	53.2	4.5	53.2	53.2	53.2	43.4	33.6	23.8	45.9	4.8	45.9	45.9	45.9	36.1	26.2	16.4		
	62	53.2	4.5	53.2	53.2	53.2	43.4	33.6	23.8	46.9	4.9	46.9	46.9	46.9	37.1	27.2	17.4		

ZR061 (5.0 Ton) Cooling (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	60.8	6.1	19.8	18.1	13.3	-	-	-	55.9	7.3	18.9	12.5	10.1	-	-	-
	72	52.8	5.6	32.2	26.9	21.6	16.2	-	-	47.8	6.5	29.2	24.0	18.8	13.6	-	-
	67	44.7	5.0	44.7	35.7	29.8	24.5	19.1	-	39.6	5.7	39.6	34.3	27.5	22.3	17.1	-
	62	37.9	5.3	37.9	37.9	30.0	24.7	19.4	14.0	32.9	5.9	32.9	32.9	24.3	19.1	13.9	8.7
1500	77	61.3	5.9	27.6	20.9	14.6	-	-	-	55.4	7.0	27.2	17.4	11.1	-	-	-
	72	53.2	5.4	36.3	30.0	23.6	17.3	-	-	47.3	6.2	33.2	27.0	20.7	14.4	-	-
	67	45.0	4.8	45.0	39.0	32.7	26.4	20.0	-	39.2	5.4	39.2	36.5	30.3	24.0	17.8	-
	62	38.2	5.1	38.2	38.2	32.9	26.6	20.3	14.0	32.5	5.7	32.5	32.5	26.8	20.5	14.3	8.0
	57	40.1	5.2	40.1	40.1	34.6	28.3	22.0	15.6	35.4	5.8	35.4	35.4	29.3	23.0	16.8	10.5
1750	77	61.7	5.7	35.4	23.8	15.9	-	-	-	54.8	6.7	35.6	22.3	12.2	-	-	-
	72	53.5	5.2	40.4	33.1	25.7	18.4	-	-	46.8	5.9	37.2	29.9	22.6	15.3	-	-
	67	45.3	4.7	45.3	42.3	35.6	28.3	20.9	-	38.8	5.2	38.8	38.8	33.0	25.7	18.4	-
	62	38.5	4.9	38.5	38.5	35.8	28.5	21.2	13.9	32.1	5.4	32.1	32.1	29.2	21.9	14.7	7.4
	57	40.4	5.0	40.4	40.4	37.7	30.3	23.0	15.7	35.0	5.5	35.0	35.0	31.9	24.7	17.4	10.1
2000	77	62.2	5.5	43.2	26.6	17.2	-	-	-	54.3	6.4	43.9	27.2	13.2	-	-	-
	72	53.9	5.0	44.4	36.1	27.8	19.5	-	-	46.3	5.7	41.1	32.8	24.5	16.1	-	-
	67	45.7	4.5	45.7	45.7	38.5	30.1	21.8	-	38.3	4.9	38.3	38.3	35.7	27.4	19.1	-
	62	38.8	4.8	38.8	38.8	38.8	30.4	22.1	13.8	31.7	5.1	31.7	31.7	31.7	23.4	15.0	6.7
	57	40.7	4.8	40.7	40.7	40.7	32.4	24.1	15.8	34.6	5.2	34.6	34.6	34.6	26.3	18.0	9.6
2250	72	53.9	5.2	48.1	38.9	29.8	20.7	-	-	46.2	5.9	44.6	35.4	26.3	17.1	-	-
	67	45.6	4.7	45.6	45.6	41.2	32.1	23.0	-	38.2	5.1	38.2	38.2	38.2	29.3	20.1	-
	62	38.7	5.0	38.7	38.7	38.7	29.6	20.5	11.4	31.6	5.4	31.6	31.6	31.6	22.4	13.3	4.1
	57	40.7	5.1	40.7	40.7	40.7	31.6	22.5	13.4	34.5	5.5	34.5	34.5	34.5	25.3	16.2	7.1
2500	72	53.8	5.5	51.7	41.8	31.9	22.0	-	-	46.0	6.1	46.0	38.1	28.1	18.2	-	-
	67	45.6	4.9	45.6	45.6	44.0	34.1	24.2	-	38.1	5.3	38.1	38.1	38.1	31.1	21.2	-
	62	38.7	5.2	38.7	38.7	38.7	28.8	18.9	9.0	31.5	5.6	31.5	31.5	31.5	21.5	11.5	1.6
	57	40.6	5.3	40.6	40.6	40.6	30.7	20.8	10.9	34.4	5.7	34.4	34.4	34.4	24.4	14.5	4.5

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.

ZR061 (5.0 Ton) Reheat

Air on Evaporator Coil		Temperature of Air on Condenser Coil					
		Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh) (- indicates heating)	Total Capacity ¹ (MBh)	Total Input (kW) ²	Sensible Capacity (MBh) (- indicates heating)
				Return Dry Bulb (°F)			Return Dry Bulb (°F)
				75			75
CFM	WB (°F)						
		40 °F			50 °F		
1750	62.5	26.8	3.1	8.4	29.3	3.2	10.7
	64	28.9	3.1	6.4	32.4	3.2	9.2
	65.3	30.0	3.1	4.8	34.7	3.2	7.3
2000	62.5	29.2	3.1	11.0	30.3	3.2	11.9
	64	30.8	3.1	8.6	32.3	3.2	9.9
	65.3	31.4	3.1	5.8	35.3	3.2	8.4
2250	62.5	29.8	3.1	10.5	29.6	3.2	11.1
	64	31.2	3.1	7.6	32.1	3.2	8.5
	65.3	31.4	3.1	6.0	34.5	3.2	6.2
		60 °F			70 °F		
1750	62.5	26.7	3.3	9.2	24.5	3.4	8.0
	64	28.9	3.3	6.9	27.0	3.4	6.4
	65.3	31.6	3.3	5.4	28.7	3.4	4.3
2000	62.5	27.9	3.3	10.9	25.0	3.4	9.0
	64	31.0	3.3	8.4	27.3	3.4	6.9
	65.3	32.9	3.3	6.7	29.6	3.4	4.9
2250	62.5	26.8	3.3	9.5	23.6	3.4	7.3
	64	29.5	3.3	6.9	26.1	3.4	4.7
	62	31.7	3.3	4.5	28.2	3.4	2.7
		75 °F			80 °F		
1750	62.5	22.8	3.5	7.1	21.3	3.5	6.3
	64	25.5	3.5	5.1	23.9	3.5	4.6
	65.3	27.8	3.5	3.3	25.8	3.5	2.7
2000	62.5	23.2	3.5	8.0	21.3	3.5	7.3
	64	25.7	3.5	5.9	23.7	3.5	5.3
	65.3	27.8	3.5	4.3	25.7	3.5	3.6
2250	62.5	21.6	3.4	6.8	19.5	3.5	5.6
	64	23.8	3.5	4.5	22.0	3.5	3.1
	65.3	26.1	3.5	1.9	24.1	3.5	1.0
		85 °F			95 °F		
1750	62.5	17.4	3.5	3.9	8.3	3.8	-1.8
	64	19.7	3.6	2.0	9.8	3.8	-3.9
	65.3	21.6	3.6	-0.3	11.2	3.9	-5.3
2000	62.5	17.3	3.6	5.0	7.1	3.8	-0.9
	64	19.4	3.6	2.5	8.8	3.8	-3.0
	65.3	20.9	3.6	0.5	10.3	3.9	-5.2
2250	62.5	16.0	3.5	3.5	5.0	3.8	-3.3
	64	18.0	3.6	0.4	6.1	3.8	-6.2
	62	19.4	3.6	-1.7	8.3	3.9	-8.0

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.

ZR078 (6.5 Ton) Cooling (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	72.6	8.1	27.5	24.0	18.0	-	-	-	68.3	9.0	24.0	21.5	15.8	-	-	-
	72	65.6	8.1	40.7	34.7	28.6	22.5	-	-	60.4	8.9	38.3	32.2	26.2	20.2	-	-
	67	58.6	8.1	54.0	45.3	39.2	33.1	27.1	-	52.6	8.9	52.6	42.6	36.6	30.6	24.6	-
	62	53.8	8.0	53.8	53.8	45.6	39.5	33.4	27.4	48.2	8.8	48.2	48.2	41.2	35.2	29.2	23.1
1950	77	76.5	8.2	34.8	27.5	20.2	-	-	-	71.2	9.1	33.0	25.0	17.8	-	-	-
	72	69.1	8.2	46.7	39.4	32.1	24.8	-	-	63.0	9.0	43.9	36.6	29.4	22.2	-	-
	67	61.8	8.2	58.7	51.4	44.0	36.7	29.4	-	54.7	9.0	54.7	48.3	41.1	33.9	26.7	-
	62	56.7	8.1	56.7	56.7	51.2	43.9	36.6	29.3	50.2	8.9	50.2	50.2	46.3	39.1	31.9	24.7
	57	60.1	8.1	60.1	59.7	52.4	45.1	37.7	30.4	58.7	8.9	58.7	58.0	49.3	42.1	34.8	27.6
2275	77	80.4	8.4	42.1	31.0	22.4	-	-	-	74.1	9.2	42.0	28.4	19.7	-	-	-
	72	72.7	8.3	52.7	44.2	35.6	27.1	-	-	65.5	9.2	49.4	41.0	32.6	24.2	-	-
	67	64.9	8.3	63.4	57.4	48.9	40.3	31.8	-	56.9	9.1	56.9	54.0	45.6	37.2	28.8	-
	62	59.6	8.2	59.6	59.6	56.8	48.3	39.7	31.2	52.2	9.0	52.2	52.2	51.4	43.0	34.6	26.2
	57	63.2	8.2	63.2	63.0	58.1	49.6	41.0	32.5	61.2	9.0	61.2	60.8	54.7	46.3	37.9	29.5
2600	77	84.3	8.5	49.4	34.4	24.6	-	-	-	77.1	9.3	51.0	31.8	21.6	-	-	-
	72	76.2	8.4	58.8	49.0	39.2	29.4	-	-	68.1	9.3	55.0	45.4	35.9	26.3	-	-
	67	68.1	8.4	68.1	63.5	53.7	43.9	34.1	-	59.1	9.2	59.1	59.1	50.1	40.5	30.9	-
	62	62.5	8.3	62.5	62.5	62.5	52.7	42.9	33.1	54.2	9.1	54.2	54.2	54.2	46.8	37.2	27.7
	57	66.3	8.3	66.3	66.3	63.9	54.1	44.3	34.5	63.6	9.1	63.6	63.6	60.0	50.5	40.9	31.3
2925	72	75.4	8.3	61.1	50.8	40.6	30.3	-	-	67.6	9.2	57.5	47.4	37.4	27.3	-	-
	67	67.3	8.3	67.3	65.0	55.7	45.4	35.1	-	58.7	9.2	58.7	58.7	52.2	42.1	32.1	-
	62	61.8	8.2	61.8	61.8	61.8	51.5	41.3	31.0	53.8	9.0	53.8	53.8	53.8	44.9	34.9	24.8
	57	65.5	8.2	65.5	65.5	64.3	54.1	43.8	33.6	63.2	9.0	63.2	63.2	61.4	51.3	41.3	31.2
3250	72	74.5	8.3	63.4	52.7	42.0	31.3	-	-	67.2	9.1	59.9	49.4	38.9	28.3	-	-
	67	66.6	8.2	66.6	66.6	57.6	46.9	36.2	-	58.4	9.1	58.4	58.4	54.3	43.7	33.2	-
	62	61.1	8.1	61.1	61.1	61.1	50.4	39.7	28.9	53.5	8.9	53.5	53.5	53.5	43.0	32.5	22.0
	57	64.8	8.1	64.8	64.8	64.8	54.1	43.4	32.7	62.7	9.0	62.7	62.7	62.7	52.2	41.7	31.2

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.

ZR078 (6.5 Ton) Reheat

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)						
				85	80	75	70	65			85	80	75	70	65		
		35°F								45°F							
1625	72	31.6	4.5	1.6	1.5	1.5	-	-	34.9	5.1	-	-	-	-	-		
	67	32.2	4.6	1.5	1.5	1.4	1.4	-	35.2	4.9	2.5	2.2	1.9	1.7	-		
	62	28.5	4.4	1.6	1.6	1.5	1.5	1.4	32.0	4.9	5.2	4.9	4.6	4.4	4.1		
1950	72	36.1	4.3	2.2	1.6	0.9	-	-	37.2	4.9	-	-	-	-	-		
	67	36.7	4.5	6.6	5.9	5.3	4.6	-	37.6	4.7	6.2	5.6	4.9	4.2	-		
	62	32.6	4.3	10.8	10.1	9.4	8.8	8.1	34.2	4.7	13.0	12.4	11.7	11.1	10.4		
	57	34.2	4.4	17.1	16.4	15.8	15.1	14.5	34.5	4.7	18.2	17.6	16.9	16.3	15.6		
2275	72	40.5	4.2	2.9	1.7	0.4	-	-	39.6	4.7	-	-	-	-	-		
	67	41.2	4.3	11.6	10.4	9.1	7.8	-	39.9	4.5	9.9	8.9	7.9	6.8	-		
	62	36.7	4.2	19.9	18.6	17.4	16.1	14.8	36.3	4.5	20.9	19.8	18.8	17.8	16.7		
	57	38.3	4.2	29.8	29.5	28.2	26.9	25.7	36.6	4.5	28.5	28.2	27.2	26.1	25.1		
2600	72	45.0	4.1	3.6	1.7	-0.1	-	-	41.9	4.5	-	-	-	-	-		
	67	45.7	4.2	16.7	14.8	12.9	11.1	-	42.3	4.3	13.7	12.3	10.8	9.4	-		
	62	40.8	4.0	29.0	27.1	25.3	23.4	21.6	38.4	4.3	28.7	27.3	25.9	24.5	23.1		
	57	42.5	4.1	42.5	42.5	40.6	38.7	36.9	38.8	4.4	38.8	38.8	37.4	36.0	34.5		
2925	72	42.5	4.0	4.6	2.8	1.0	-	-	40.8	4.6	-	-	-	-	-		
	67	43.2	4.1	17.5	15.7	13.9	12.1	-	41.1	4.4	15.2	13.7	12.2	10.8	-		
	62	38.5	4.0	31.6	29.1	27.3	25.5	23.7	37.4	4.4	32.0	30.5	29.1	27.6	26.1		
	57	40.2	4.0	40.2	40.2	38.3	36.5	34.7	37.7	4.4	37.7	37.7	36.2	34.8	33.3		
3250	72	40.0	3.9	5.7	3.9	2.1	-	-	39.6	4.6	-	-	-	-	-		
	67	40.6	4.0	18.4	16.6	14.8	13.0	-	40.0	4.4	16.7	15.2	13.6	12.1	-		
	62	36.2	3.9	34.2	31.1	29.3	27.5	25.8	36.3	4.4	35.3	33.8	32.3	30.7	29.2		
	57	37.9	4.0	37.9	37.9	36.1	34.3	32.5	36.7	4.5	36.7	36.7	35.1	33.6	32.0		
		55°F								65°F							
1625	72	38.2	5.7	-	-	-	-	-	36.3	5.7	-	-	-	-	-		
	67	38.2	5.1	3.4	2.9	2.4	1.9	-	36.2	5.3	2.4	2.1	1.8	1.5	-		
	62	35.5	5.3	8.8	8.3	7.8	7.3	6.7	33.1	5.2	6.5	6.2	5.9	5.6	5.3		
1950	72	38.4	5.5	-	-	-	-	-	36.8	5.6	-	-	-	-	-		
	67	38.4	4.9	5.8	5.2	4.5	3.9	-	36.7	5.2	4.9	4.3	3.8	3.2	-		
	62	35.7	5.1	15.3	14.7	14.0	13.3	12.7	33.5	5.0	13.9	13.3	12.7	12.2	11.6		
	57	34.7	5.1	19.4	18.7	18.1	17.4	16.8	32.9	5.0	17.0	16.5	15.9	15.3	14.8		
2275	72	38.6	5.2	-	-	-	-	-	37.3	5.4	-	-	-	-	-		
	67	38.6	4.7	8.3	7.5	6.6	5.8	-	37.2	5.0	7.4	6.6	5.8	5.0	-		
	62	35.9	4.9	21.9	21.0	20.2	19.4	18.6	34.0	4.9	21.2	20.4	19.6	18.8	18.0		
	57	34.9	4.8	27.2	26.9	26.1	25.3	24.5	33.4	4.9	25.4	25.2	24.3	23.5	22.7		
2600	72	38.8	5.0	-	-	-	-	-	37.8	5.3	-	-	-	-	-		
	67	38.9	4.4	10.7	9.7	8.8	7.8	-	37.7	4.9	9.9	8.9	7.8	6.8	-		
	62	36.1	4.6	28.4	27.4	26.5	25.5	24.6	34.4	4.8	28.5	27.5	26.4	25.3	24.3		
	57	35.1	4.6	35.1	35.1	34.1	33.2	32.2	33.8	4.8	33.8	33.8	32.8	31.7	30.7		
2925	72	39.0	5.2	-	-	-	-	-	38.0	5.4	-	-	-	-	-		
	67	39.1	4.6	12.9	11.7	10.6	9.5	-	38.0	5.0	12.2	10.9	9.7	8.4	-		
	62	36.3	4.8	32.4	32.0	30.8	29.7	28.6	34.6	4.9	31.7	31.2	29.9	28.7	27.4		
	57	35.3	4.8	35.3	35.3	34.2	33.0	31.9	34.1	4.9	34.1	34.1	32.8	31.6	30.3		
3250	72	39.2	5.3	-	-	-	-	-	38.2	5.5	-	-	-	-	-		
	67	39.3	4.8	15.0	13.7	12.5	11.2	-	38.2	5.0	14.4	13.0	11.6	10.1	-		
	62	36.5	5.0	36.5	36.5	35.2	33.9	32.6	34.8	4.9	34.8	34.8	33.4	32.0	30.5		
	57	35.5	5.0	35.5	35.5	34.2	32.9	31.6	34.3	4.9	34.3	34.3	32.8	31.4	29.9		

ZR078 (6.5 Ton) Reheat (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)						
				85	80	75	70	65			85	80	75	70	65		
		75°F								85°F							
1625	72	34.3	5.7	-	-	-	-	-	32.4	5.6	-	-	-	-	-		
	67	34.2	5.4	1.3	1.2	1.1	1.0	-	32.2	5.6	0.3	0.4	0.5	0.6	-		
	62	30.6	5.0	4.3	4.2	4.1	4.0	3.9	28.2	4.8	2.1	2.2	2.2	2.3	2.4		
1950	72	35.1	5.7	-	-	-	-	-	33.5	5.8	-	-	-	-	-		
	67	35.0	5.4	4.0	3.5	3.0	2.6	-	33.3	5.7	3.0	2.7	2.3	1.9	-		
	62	31.3	5.0	12.4	12.0	11.5	11.0	10.6	29.1	4.9	11.0	10.6	10.3	9.9	9.5		
	57	31.2	5.0	14.6	14.2	13.7	13.3	12.8	29.4	4.9	12.2	11.9	11.5	11.2	10.8		
2275	72	35.9	5.7	-	-	-	-	-	34.5	5.9	-	-	-	-	-		
	67	35.8	5.4	6.6	5.8	5.0	4.2	-	34.4	5.8	5.7	4.9	4.1	3.3	-		
	62	32.0	5.0	20.5	19.7	18.9	18.1	17.3	30.1	5.1	19.9	19.1	18.3	17.4	16.6		
	57	31.9	5.0	23.6	23.4	22.6	21.8	21.0	30.4	5.0	21.8	21.6	20.8	20.0	19.2		
2600	72	36.7	5.7	-	-	-	-	-	35.6	6.0	-	-	-	-	-		
	67	36.6	5.4	9.2	8.1	6.9	5.7	-	35.5	5.9	8.5	7.2	6.0	4.7	-		
	62	32.7	5.0	28.7	27.5	26.3	25.2	24.0	31.0	5.2	28.8	27.5	26.3	25.0	23.8		
	57	32.6	5.0	32.6	32.6	31.4	30.3	29.1	31.3	5.2	31.3	31.3	30.1	28.8	27.6		
2925	72	37.0	5.6	-	-	-	-	-	35.9	5.8	-	-	-	-	-		
	67	36.9	5.4	11.5	10.2	8.8	7.4	-	35.8	5.8	10.9	9.4	7.9	6.4	-		
	62	33.0	4.9	30.9	30.4	29.0	27.6	26.2	31.3	5.0	30.2	29.6	28.0	26.5	25.0		
	57	32.8	4.9	32.8	32.8	31.5	30.1	28.7	31.6	5.0	31.6	31.6	30.1	28.6	27.1		
3250	72	37.2	5.6	-	-	-	-	-	36.2	5.7	-	-	-	-	-		
	67	37.1	5.3	13.9	12.3	10.7	9.1	-	36.1	5.6	13.3	11.5	9.8	8.0	-		
	62	33.2	4.9	33.2	33.2	31.6	30.0	28.4	31.6	4.9	31.6	31.6	29.8	28.1	26.3		
	57	33.1	4.9	33.1	33.1	31.5	29.9	28.3	31.9	4.9	31.9	31.9	30.1	28.4	26.6		

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.

ZR090 (7.5 Ton) Cooling (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	87.0	8.8	31.8	27.6	20.5	-	-	-	80.5	9.7	27.4	25.2	18.3	-	-	-
	72	79.6	8.7	47.8	40.7	33.6	26.5	-	-	73.1	9.6	45.1	38.1	31.2	24.2	-	-
	67	72.2	8.7	63.8	53.7	46.6	39.5	32.4	-	65.8	9.6	62.5	51.1	44.1	37.1	30.1	-
	62	66.5	8.6	66.5	66.5	54.1	47.0	39.9	32.8	60.5	9.5	60.5	60.5	49.8	42.8	35.8	28.9
2250	77	89.0	8.9	39.5	31.1	22.7	-	-	-	82.0	9.7	36.6	28.4	20.2	-	-	-
	72	81.5	8.8	53.9	45.5	37.1	28.7	-	-	74.5	9.7	50.9	42.6	34.4	26.2	-	-
	67	74.0	8.7	68.4	60.0	51.6	43.2	34.8	-	67.0	9.6	65.1	56.9	48.7	40.4	32.2	-
	62	68.1	8.6	68.1	68.1	59.8	51.4	43.0	34.6	61.6	9.5	61.6	61.6	55.0	46.7	38.5	30.3
	57	70.0	8.7	70.0	68.4	60.0	51.6	43.2	34.8	64.6	9.6	64.6	63.0	54.8	46.6	38.3	30.1
2625	77	91.1	8.9	47.2	34.5	24.8	-	-	-	83.6	9.8	45.8	31.5	22.0	-	-	-
	72	83.4	8.8	60.0	50.3	40.6	31.0	-	-	76.0	9.7	56.6	47.1	37.6	28.2	-	-
	67	75.7	8.8	72.9	66.2	56.5	46.8	37.1	-	68.3	9.6	67.8	62.7	53.2	43.8	34.3	-
	62	69.7	8.7	69.7	69.7	65.5	55.9	46.2	36.5	62.8	9.6	62.8	62.8	60.1	50.7	41.2	31.7
	57	71.6	8.7	71.6	70.8	65.8	56.1	46.4	36.7	65.8	9.6	65.8	65.0	60.0	50.5	41.0	31.5
3000	77	93.2	8.9	54.9	38.0	27.0	-	-	-	85.2	9.8	55.1	34.7	23.9	-	-	-
	72	85.3	8.9	66.1	55.2	44.2	33.2	-	-	77.4	9.7	62.3	51.6	40.9	30.2	-	-
	67	77.4	8.8	77.4	72.4	61.4	50.4	39.4	-	69.6	9.7	69.6	68.6	57.8	47.1	36.4	-
	62	71.2	8.7	71.2	71.2	71.2	60.3	49.3	38.3	63.9	9.6	63.9	63.9	63.9	54.6	43.9	33.1
	57	73.2	8.8	73.2	73.2	71.5	60.5	49.5	38.6	67.1	9.6	67.1	67.1	65.1	54.4	43.7	32.9
3375	72	86.6	8.9	70.2	58.6	47.0	35.3	-	-	79.0	9.7	67.1	55.5	43.9	32.4	-	-
	67	78.6	8.8	78.6	76.1	65.2	53.6	42.0	-	71.1	9.7	71.1	71.1	62.1	50.5	39.0	-
	62	72.3	8.7	72.3	72.3	72.3	60.7	49.1	37.5	65.3	9.6	65.3	65.3	65.3	54.4	42.9	31.3
	57	74.4	8.8	74.4	74.4	73.5	61.9	50.2	38.6	68.5	9.6	68.5	68.5	67.5	55.9	44.4	32.8
3750	72	87.9	8.8	74.3	62.0	49.7	37.5	-	-	80.7	9.7	71.8	59.4	47.0	34.6	-	-
	67	79.8	8.8	79.8	79.8	69.1	56.8	44.6	-	72.6	9.6	72.6	72.6	66.4	54.0	41.6	-
	62	73.4	8.7	73.4	73.4	73.4	61.2	48.9	36.6	66.7	9.6	66.7	66.7	66.7	54.3	41.9	29.5
	57	75.5	8.7	75.5	75.5	75.5	63.2	50.9	38.7	69.9	9.6	69.9	69.9	69.9	57.5	45.1	32.7

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.

ZR090 (7.5 Ton) Reheat

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)						
				85	80	75	70	65			85	80	75	70	65		
		35°F								45°F							
1875	72	38.6	5.0	5.2	5.1	5.0	-	-	42.1	5.3	-	-	-	-	-		
	67	37.9	4.8	0.6	0.5	0.4	0.3	-	41.3	5.1	3.0	2.6	2.3	2.0	-		
	62	35.4	5.6	-	-	-	-	-	39.5	5.4	6.2	5.9	5.5	5.2	4.9		
2250	72	43.5	4.7	6.3	5.6	4.8	-	-	44.5	5.1	-	-	-	-	-		
	67	42.8	4.6	7.8	7.0	6.3	5.5	-	43.8	5.0	7.4	6.7	5.9	5.1	-		
	62	40.1	5.3	8.3	7.6	6.8	6.1	5.3	41.7	5.2	15.5	14.8	14.0	13.2	12.5		
	57	41.4	5.0	14.3	13.6	12.8	12.0	11.3	41.4	5.1	21.6	20.8	20.0	19.3	18.5		
2625	72	48.5	4.4	7.5	6.0	4.6	-	-	47.0	4.9	-	-	-	-	-		
	67	47.7	4.3	15.0	13.6	12.1	10.7	-	46.2	4.8	11.9	10.7	9.4	8.2	-		
	62	44.8	5.0	21.7	20.3	18.8	17.4	15.9	44.0	5.0	24.9	23.7	22.5	21.3	20.0		
	57	46.1	4.7	32.5	32.1	30.7	29.2	27.8	43.6	4.9	33.7	33.4	32.1	30.9	29.7		
3000	72	53.5	4.1	8.6	6.5	4.3	-	-	49.4	4.8	-	-	-	-	-		
	67	52.6	4.0	22.3	20.1	18.0	15.9	-	48.6	4.6	16.3	14.7	13.0	11.4	-		
	62	49.5	4.7	35.1	33.0	30.8	28.7	26.5	46.3	4.8	34.2	32.6	30.9	29.3	27.6		
	57	50.7	4.4	50.7	50.7	48.5	46.4	44.2	45.9	4.7	45.9	45.9	44.3	42.6	41.0		
3375	72	50.5	4.1	10.5	8.4	6.2	-	-	48.1	4.8	-	-	-	-	-		
	67	49.6	4.0	23.9	21.8	19.6	17.5	-	47.3	4.6	18.2	16.5	14.7	13.0	-		
	62	46.7	4.7	38.1	35.2	33.1	30.9	28.8	45.1	4.8	38.3	36.6	34.9	33.1	31.4		
	57	47.9	4.4	47.9	47.9	45.8	43.7	41.5	44.7	4.7	44.7	44.7	42.9	41.2	39.5		
3750	72	47.6	4.1	12.4	10.3	8.2	-	-	46.8	4.7	-	-	-	-	-		
	67	46.7	4.0	25.5	23.4	21.3	19.1	-	46.0	4.6	20.1	18.3	16.5	14.6	-		
	62	43.9	4.7	41.1	37.4	35.3	33.2	31.0	43.9	4.8	42.5	40.6	38.8	37.0	35.2		
	57	45.2	4.4	45.2	45.2	43.1	40.9	38.8	43.5	4.7	43.5	43.5	41.6	39.8	38.0		
		55°F								65°F							
1875	72	45.6	5.6	-	-	-	-	-	43.5	5.9	-	-	-	-	-		
	67	44.8	5.4	5.4	4.8	4.2	3.6	-	42.6	5.7	3.6	3.2	2.8	2.5	-		
	62	43.5	5.2	17.4	16.8	16.3	15.7	15.1	40.6	5.5	11.6	11.2	10.8	10.4	10.1		
2250	72	45.5	5.5	-	-	-	-	-	43.7	5.9	-	-	-	-	-		
	67	44.7	5.4	7.0	6.3	5.5	4.7	-	42.8	5.7	5.9	5.3	4.6	3.9	-		
	62	43.4	5.1	22.7	22.0	21.2	20.4	19.6	40.8	5.4	18.9	18.2	17.6	16.9	16.2		
	57	41.3	5.1	28.8	28.0	27.3	26.5	25.7	39.3	5.4	23.3	22.6	21.9	21.3	20.6		
2625	72	45.4	5.5	-	-	-	-	-	44.0	5.8	-	-	-	-	-		
	67	44.7	5.3	8.7	7.7	6.8	5.8	-	43.0	5.6	8.3	7.3	6.4	5.4	-		
	62	43.3	5.1	28.0	27.1	26.1	25.2	24.2	41.0	5.4	26.2	25.3	24.3	23.3	22.4		
	57	41.2	5.0	35.0	34.6	33.6	32.7	31.7	39.5	5.3	31.5	31.2	30.2	29.2	28.3		
3000	72	45.4	5.4	-	-	-	-	-	44.2	5.8	-	-	-	-	-		
	67	44.6	5.3	10.3	9.2	8.0	6.9	-	43.3	5.6	10.6	9.4	8.1	6.9	-		
	62	43.2	5.0	33.3	32.2	31.0	29.9	28.7	41.2	5.3	33.5	32.3	31.0	29.8	28.6		
	57	41.1	5.0	41.1	41.1	40.0	38.8	37.7	39.7	5.3	39.7	39.7	38.5	37.2	36.0		
3375	72	45.7	5.4	-	-	-	-	-	44.6	5.8	-	-	-	-	-		
	67	44.9	5.2	12.5	11.2	9.9	8.5	-	43.7	5.5	13.0	11.6	10.1	8.6	-		
	62	43.5	5.0	38.6	38.0	36.7	35.3	34.0	41.6	5.3	37.8	37.2	35.7	34.2	32.8		
	57	41.4	4.9	41.4	41.4	40.1	38.7	37.4	40.1	5.3	40.1	40.1	38.6	37.2	35.7		
3750	72	46.0	5.3	-	-	-	-	-	45.1	5.7	-	-	-	-	-		
	67	45.2	5.2	14.7	13.2	11.7	10.1	-	44.1	5.5	15.4	13.7	12.1	10.4	-		
	62	43.9	4.9	43.9	43.9	42.3	40.8	39.3	42.0	5.3	42.0	42.0	40.4	38.7	37.0		
	57	41.7	4.9	41.7	41.7	40.2	38.7	37.1	40.5	5.2	40.5	40.5	38.8	37.1	35.4		

ZR090 (7.5 Ton) Reheat (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)				
				85	80	75	70	65			85	80	75	70	65
		75°F							85°F						
1875	72	41.4	6.3	-	-	-	-	-	39.2	6.7	-	-	-	-	-
	67	40.3	6.0	1.8	1.7	1.5	1.3	-	38.0	6.3	-	-	-	-	-
	62	37.7	5.8	5.8	5.6	5.4	5.2	5.0	34.9	6.0	-	-	-	-	-
2250	72	41.9	6.3	-	-	-	-	-	40.1	6.6	-	-	-	-	-
	67	40.9	6.0	4.9	4.3	3.7	3.2	-	38.9	6.3	3.8	3.3	2.8	2.4	-
	62	38.2	5.7	15.1	14.5	13.9	13.4	12.8	35.7	6.0	11.3	10.8	10.3	9.9	9.4
	57	37.3	5.7	17.7	17.2	16.6	16.0	15.5	35.3	6.0	12.2	11.7	11.3	10.8	10.3
2625	72	42.5	6.2	-	-	-	-	-	41.0	6.6	-	-	-	-	-
	67	41.4	5.9	7.9	6.9	6.0	5.0	-	39.8	6.2	7.5	6.5	5.6	4.6	-
	62	38.8	5.7	24.4	23.4	22.5	21.5	20.6	36.5	6.0	22.6	21.6	20.7	19.7	18.8
	57	37.8	5.7	28.0	27.7	26.8	25.8	24.9	36.1	6.0	24.6	24.3	23.4	22.4	21.5
3000	72	43.1	6.2	-	-	-	-	-	41.9	6.6	-	-	-	-	-
	67	42.0	5.9	10.9	9.6	8.2	6.9	-	40.7	6.2	11.2	9.8	8.3	6.9	-
	62	39.3	5.6	33.7	32.4	31.0	29.7	28.4	37.3	5.9	33.9	32.5	31.0	29.6	28.2
	57	38.3	5.6	38.3	38.3	37.0	35.6	34.3	36.9	5.9	36.9	36.9	35.5	34.1	32.6
3375	72	43.6	6.2	-	-	-	-	-	42.5	6.5	-	-	-	-	-
	67	42.5	5.9	13.5	11.9	10.3	8.7	-	41.2	6.2	14.0	12.3	10.6	8.9	-
	62	39.7	5.6	37.0	36.3	34.7	33.1	31.5	37.9	5.9	36.1	35.4	33.7	32.0	30.3
	57	38.8	5.6	38.8	38.8	37.2	35.6	34.0	37.4	5.9	37.4	37.4	35.7	34.0	32.3
3750	72	44.1	6.1	-	-	-	-	-	43.1	6.5	-	-	-	-	-
	67	43.0	5.8	16.1	14.3	12.4	10.6	-	41.8	6.2	16.8	14.8	12.8	10.8	-
	62	40.2	5.6	40.2	40.2	38.4	36.5	34.7	38.4	5.9	38.4	38.4	36.4	34.4	32.4
	57	39.2	5.6	39.2	39.2	37.4	35.5	33.7	37.9	5.9	37.9	37.9	36.0	34.0	32.0

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.

ZR102 (8.5 Ton) Cooling

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	121.9	6.4	54.3	43.2	32.9	-	-	-	118.7	7.4	52.3	42.1	32.0	-	-	-
	72	118.1	6.4	71.1	60.8	50.5	40.2	-	-	112.8	7.3	69.0	58.8	48.6	38.5	-	-
	67	114.3	6.3	87.8	78.4	68.1	57.8	47.5	-	106.9	7.2	85.6	75.4	65.3	55.1	45.0	-
	62	105.8	6.2	105.8	98.7	83.7	73.4	63.1	52.8	98.9	7.0	98.9	95.3	80.2	70.1	59.9	49.8
2550	77	126.3	6.5	59.7	47.9	36.1	-	-	-	122.9	7.4	58.7	46.9	35.2	-	-	-
	72	122.4	6.4	79.1	67.3	55.5	43.7	-	-	116.8	7.3	77.0	65.3	53.5	41.8	-	-
	67	118.4	6.4	98.4	86.6	74.8	63.0	51.2	-	110.7	7.2	95.3	83.6	71.9	60.1	48.4	-
	62	109.7	6.2	109.7	104.9	92.0	80.2	68.4	56.6	102.4	7.1	102.4	100.1	88.3	76.6	64.9	53.1
	57	107.0	6.3	107.0	107.0	97.1	85.3	73.5	61.7	99.6	7.1	99.6	99.6	90.0	78.3	66.5	54.8
2975	77	130.7	6.5	65.1	52.7	39.4	-	-	-	127.2	7.4	65.0	51.7	38.4	-	-	-
	72	126.6	6.4	87.0	73.7	60.5	47.2	-	-	120.9	7.3	85.0	71.7	58.4	45.1	-	-
	67	122.6	6.4	108.9	94.8	81.5	68.2	54.9	-	114.6	7.2	105.1	91.7	78.4	65.1	51.8	-
	62	113.5	6.3	113.5	111.1	100.2	86.9	73.6	60.3	106.0	7.1	106.0	104.8	96.4	83.1	69.8	56.5
	57	110.8	6.3	110.8	110.8	105.8	92.5	79.2	65.9	103.0	7.2	103.0	103.0	98.2	84.9	71.6	58.3
3400	77	135.1	6.5	70.6	57.4	42.6	-	-	-	131.4	7.4	71.4	56.5	41.7	-	-	-
	72	130.9	6.5	95.0	80.2	65.4	50.6	-	-	124.9	7.3	93.1	78.2	63.3	48.4	-	-
	67	126.7	6.4	119.5	103.0	88.2	73.4	58.6	-	118.4	7.2	114.8	99.9	85.0	70.1	55.2	-
	62	117.3	6.3	117.3	117.3	108.5	93.7	78.9	64.1	109.5	7.1	109.5	109.5	104.5	89.6	74.7	59.8
	57	114.5	6.4	114.5	114.5	114.5	99.7	84.9	70.1	106.5	7.2	106.5	106.5	106.5	91.6	76.7	61.8
3825	72	130.9	6.5	99.4	84.1	68.8	53.5	-	-	125.4	7.4	98.3	82.6	66.9	51.2	-	-
	67	126.8	6.4	123.1	108.1	92.8	77.5	62.2	-	118.8	7.3	117.0	105.4	89.7	74.0	58.4	-
	62	117.4	6.3	117.4	117.4	112.9	97.6	82.3	67.0	109.9	7.1	109.9	109.9	107.4	91.7	76.0	60.3
	57	114.5	6.4	114.5	114.5	114.5	99.2	83.9	68.6	106.9	7.2	106.9	106.9	106.9	91.2	75.5	59.8
4250	72	131.0	6.5	103.7	87.9	72.1	56.3	-	-	125.9	7.4	103.4	86.9	70.4	53.9	-	-
	67	126.8	6.5	126.8	113.1	97.3	81.5	65.7	-	119.3	7.3	119.3	111.0	94.5	78.0	61.5	-
	62	117.4	6.3	117.4	117.4	117.4	101.6	85.8	70.0	110.4	7.2	110.4	110.4	110.4	93.8	77.3	60.8
	57	114.6	6.4	114.6	114.6	114.6	98.8	83.0	67.2	107.3	7.2	107.3	107.3	107.3	90.7	74.2	57.7
		95°F								105°F							
2125	77	115.5	8.3	50.3	41.1	31.1	-	-	-	108.8	9.3	44.7	38.2	28.2	-	-	-
	72	107.5	8.1	66.9	56.8	46.8	36.8	-	-	100.5	9.1	63.5	53.6	43.7	33.8	-	-
	67	99.5	8.0	83.4	72.5	62.5	52.5	42.4	-	92.1	9.0	82.4	69.0	59.1	49.2	39.3	-
	62	91.9	7.9	91.9	91.9	76.8	66.8	56.7	46.7	85.2	8.9	85.2	85.2	70.3	60.4	50.5	40.6
2550	77	119.5	8.3	57.6	46.0	34.3	-	-	-	112.4	9.3	54.4	42.9	31.3	-	-	-
	72	111.3	8.2	75.0	63.3	51.6	39.9	-	-	103.8	9.2	71.5	60.0	48.4	36.8	-	-
	67	103.0	8.0	92.3	80.6	68.9	57.2	45.6	-	95.1	9.0	88.6	77.1	65.5	53.9	42.3	-
	62	95.2	7.9	95.2	95.2	84.7	73.0	61.3	49.7	88.0	8.9	88.0	88.0	77.9	66.3	54.7	43.1
	57	92.1	7.9	92.1	92.1	82.9	71.2	59.6	47.9	85.8	9.0	85.8	85.8	76.4	64.9	53.3	41.7
2975	77	123.6	8.3	64.9	50.8	37.5	-	-	-	115.9	9.4	64.2	47.5	34.3	-	-	-
	72	115.1	8.2	83.1	69.7	56.4	43.1	-	-	107.0	9.2	79.5	66.3	53.1	39.8	-	-
	67	106.5	8.0	101.2	88.7	75.3	62.0	48.7	-	98.1	9.0	94.9	85.1	71.8	58.6	45.4	-
	62	98.5	7.9	98.5	98.5	92.6	79.3	65.9	52.6	90.8	8.9	90.8	90.8	85.4	72.2	58.9	45.7
	57	95.2	8.0	95.2	95.2	90.7	77.3	64.0	50.7	88.5	9.0	88.5	88.5	83.8	70.6	57.4	44.1
3400	77	127.7	8.4	72.3	55.6	40.7	-	-	-	119.5	9.4	74.0	52.2	37.3	-	-	-
	72	118.9	8.2	91.2	76.2	61.2	46.3	-	-	110.3	9.2	87.6	72.7	57.8	42.9	-	-
	67	110.1	8.1	110.1	96.7	81.8	66.8	51.8	-	101.2	9.1	101.2	93.1	78.2	63.3	48.4	-
	62	101.7	8.0	101.7	101.7	100.5	85.5	70.6	55.6	93.6	8.9	93.6	93.6	93.0	78.1	63.2	48.3
	57	98.4	8.0	98.4	98.4	98.4	83.4	68.5	53.5	91.2	9.0	91.2	91.2	91.2	76.4	61.5	46.6
3825	72	119.8	8.3	97.1	81.0	64.9	48.8	-	-	111.2	9.3	93.4	77.4	61.3	45.3	-	-
	67	110.9	8.1	110.9	102.8	86.7	70.6	54.5	-	102.0	9.1	102.0	97.2	83.0	67.0	51.0	-
	62	102.5	8.0	102.5	102.5	101.9	85.8	69.7	53.6	94.3	9.0	94.3	94.3	94.0	78.0	61.9	45.9
	57	99.2	8.0	99.2	99.2	99.2	83.1	67.0	50.9	92.0	9.1	92.0	92.0	92.0	75.9	59.9	43.9
4250	72	120.8	8.3	103.1	85.9	68.6	51.4	-	-	112.1	9.3	99.2	82.1	64.9	47.7	-	-
	67	111.8	8.1	111.8	108.9	91.7	74.4	57.2	-	102.8	9.1	102.8	101.3	87.8	70.7	53.5	-
	62	103.3	8.0	103.3	103.3	103.3	86.1	68.9	51.6	95.1	9.0	95.1	95.1	95.1	77.9	60.7	43.5
	57	99.9	8.1	99.9	99.9	99.9	82.7	65.5	48.3	92.7	9.1	92.7	92.7	92.7	75.5	58.4	41.2

ZR102 (8.5 Ton) Cooling (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	102.2	10.3	39.0	35.2	25.4	-	-	-	95.6	11.4	36.2	31.0	22.6	-	-	-
	72	93.5	10.1	60.2	50.4	40.6	30.8	-	-	86.5	11.1	56.8	47.1	37.5	27.8	-	-
	67	84.8	10.0	81.3	65.5	55.8	46.0	36.2	-	77.4	10.9	77.4	62.1	52.4	42.7	33.1	-
	62	78.5	9.9	78.5	78.5	63.8	54.0	44.2	34.4	71.8	10.8	71.8	71.8	57.3	47.7	38.0	28.3
2550	77	105.2	10.4	51.2	39.7	28.3	-	-	-	98.0	11.4	49.9	36.6	25.3	-	-	-
	72	96.2	10.2	68.1	56.6	45.2	33.7	-	-	88.7	11.2	64.7	53.3	41.9	30.6	-	-
	67	87.3	10.0	85.0	73.5	62.0	50.6	39.1	-	79.4	11.0	79.4	70.0	58.6	47.3	35.9	-
	62	80.8	9.9	80.8	80.8	71.0	59.6	48.1	36.6	73.6	10.9	73.6	73.6	64.2	52.8	41.5	30.1
	57	79.6	10.0	79.6	79.6	69.9	58.5	47.0	35.5	73.3	11.0	73.3	73.3	63.4	52.1	40.7	29.3
2975	77	108.2	10.4	63.4	44.3	31.1	-	-	-	100.5	11.4	63.7	42.3	28.0	-	-	-
	72	99.0	10.2	76.0	62.9	49.7	36.6	-	-	90.9	11.2	72.5	59.5	46.4	33.4	-	-
	67	89.8	10.0	88.6	81.5	68.3	55.2	42.1	-	81.4	11.0	81.4	77.9	64.8	51.8	38.7	-
	62	83.1	9.9	83.1	83.1	78.2	65.1	51.9	38.8	75.4	10.9	75.4	75.4	71.0	58.0	44.9	31.9
	57	81.8	10.0	81.8	81.8	77.0	63.9	50.7	37.6	75.1	11.0	75.1	75.1	70.2	57.1	44.1	31.0
3400	77	111.2	10.4	75.7	48.8	34.0	-	-	-	102.9	11.4	77.4	47.9	30.7	-	-	-
	72	101.7	10.2	84.0	69.1	54.3	39.5	-	-	93.1	11.2	80.4	65.6	50.9	36.1	-	-
	67	92.3	10.0	92.3	89.5	74.6	59.8	45.0	-	83.3	11.0	83.3	83.3	71.1	56.3	41.6	-
	62	85.4	9.9	85.4	85.4	85.4	70.6	55.8	41.0	77.3	10.9	77.3	77.3	77.3	63.1	48.4	33.6
	57	84.1	10.0	84.1	84.1	84.1	69.3	54.5	39.6	77.0	11.0	77.0	77.0	77.0	62.2	47.5	32.7
3825	72	102.6	10.3	89.7	73.7	57.7	41.8	-	-	93.9	11.3	86.0	70.1	54.1	38.2	-	-
	67	93.0	10.1	93.0	91.6	79.3	63.3	47.4	-	84.0	11.1	84.0	84.0	75.6	59.7	43.8	-
	62	86.1	10.0	86.1	86.1	86.1	70.1	54.2	38.2	77.9	11.0	77.9	77.9	77.9	62.3	46.4	30.5
	57	84.8	10.1	84.8	84.8	84.8	68.8	52.8	36.9	77.6	11.1	77.6	77.6	77.6	61.7	45.8	29.8
4250	72	103.4	10.3	95.4	78.3	61.1	44.0	-	-	94.7	11.4	91.6	74.5	57.4	40.3	-	-
	67	93.8	10.1	93.8	93.8	84.0	66.9	49.7	-	84.7	11.1	84.7	84.7	80.2	63.1	46.0	-
	62	86.8	10.0	86.8	86.8	86.8	69.7	52.6	35.4	78.6	11.1	78.6	78.6	78.6	61.5	44.4	27.3
	57	85.5	10.1	85.5	85.5	85.5	68.3	51.2	34.1	78.2	11.2	78.2	78.2	78.2	61.2	44.1	27.0

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.

ZR102 (8.5 Ton) Reheat

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)				
				85	80	75	70	65			85	80	75	70	65
		35°F							45°F						
2125	72	72.0	5.0	8.5	7.1	5.7	-	-	62.7	5.5	3.5	2.4	1.3	-	-
	67	74.0	4.9	11.6	10.2	8.8	7.3	-	61.5	5.3	9.5	8.4	7.2	6.1	-
	62	61.6	5.1	21.8	20.4	18.9	17.5	16.1	53.9	5.3	18.2	17.1	16.0	14.9	13.8
2550	72	73.3	4.9	13.4	11.3	9.2	-	-	64.8	5.5	5.6	3.8	2.1	-	-
	67	75.3	4.8	17.9	15.8	13.7	11.6	-	63.6	5.3	14.9	13.2	11.4	9.7	-
	62	62.6	5.0	33.6	31.5	29.4	27.3	25.2	55.8	5.2	28.7	26.9	25.2	23.4	21.7
	57	58.2	4.7	37.4	35.3	33.2	31.2	29.1	50.7	5.0	33.0	31.2	29.5	27.7	26.0
2975	72	74.5	4.8	18.2	15.5	12.7	-	-	66.9	5.4	7.6	5.2	2.8	-	-
	67	76.7	4.7	24.1	21.4	18.7	15.9	-	65.7	5.2	20.4	18.0	15.6	13.2	-
	62	63.6	5.0	45.3	42.6	39.9	37.1	34.4	57.6	5.2	39.2	36.8	34.4	32.0	29.6
	57	59.2	4.7	48.8	47.8	45.0	42.3	39.6	52.4	5.0	43.5	42.6	40.2	37.8	35.4
3400	72	75.7	4.7	23.0	19.6	16.2	-	-	69.1	5.3	9.7	6.6	3.6	-	-
	67	78.1	4.6	30.4	27.0	23.6	20.2	-	67.8	5.1	25.8	22.8	19.7	16.7	-
	62	64.7	4.9	57.1	53.7	50.4	47.0	43.6	59.5	5.1	49.7	46.6	43.6	40.5	37.5
	57	60.2	4.6	60.2	60.2	56.8	53.5	50.1	54.0	4.9	54.0	54.0	51.0	47.9	44.9
3825	72	73.9	4.7	25.8	22.4	18.9	-	-	70.1	5.3	10.9	7.5	4.2	-	-
	67	76.5	4.6	33.7	30.2	26.8	23.3	-	68.7	5.1	29.2	25.8	22.5	19.1	-
	62	63.0	4.9	62.0	60.1	56.7	53.2	49.8	60.3	5.1	55.4	52.9	49.5	46.1	42.8
	57	58.8	4.6	58.8	58.8	55.4	51.9	48.4	54.8	4.9	54.8	54.8	51.4	48.1	44.7
4250	72	72.0	4.7	28.7	25.1	21.6	-	-	71.0	5.3	12.1	8.4	4.7	-	-
	67	75.0	4.6	37.0	33.5	29.9	26.4	-	69.7	5.1	32.5	28.9	25.2	21.5	-
	62	61.4	4.9	61.4	61.4	61.4	59.5	55.9	61.2	5.1	61.2	59.1	55.4	51.7	48.0
	57	57.4	4.6	57.4	57.4	53.9	50.4	46.8	55.6	4.9	55.6	55.6	51.9	48.2	44.5
		55°F							65°F						
2125	72	53.3	6.1	-	-	-	-	-	48.0	6.2	-	-	-	-	-
	67	49.0	5.8	7.3	6.5	5.7	4.9	-	42.2	6.1	4.4	4.0	3.5	3.1	-
	62	46.3	5.4	14.6	13.9	13.1	12.3	11.5	39.1	5.8	9.5	9.1	8.6	8.2	7.7
2550	72	56.3	6.0	-	-	-	-	-	53.6	6.1	-	-	-	-	-
	67	51.8	5.7	11.9	10.5	9.1	7.7	-	47.0	6.1	9.1	8.0	6.9	5.8	-
	62	49.0	5.4	23.8	22.4	21.0	19.6	18.1	43.5	5.7	20.2	19.1	18.0	16.9	15.8
	57	43.2	5.3	28.6	27.1	25.7	24.3	22.9	36.3	5.7	22.6	21.5	20.4	19.3	18.2
2975	72	59.4	6.0	-	-	-	-	-	59.2	6.1	-	-	-	-	-
	67	54.6	5.7	16.6	14.5	12.5	10.4	-	51.7	6.0	13.7	12.0	10.2	8.5	-
	62	51.6	5.4	33.0	31.0	28.9	26.8	24.8	47.8	5.7	30.9	29.1	27.4	25.7	23.9
	57	45.5	5.3	38.2	37.5	35.4	33.4	31.3	39.8	5.6	33.0	32.4	30.7	28.9	27.2
3400	72	62.4	6.0	-	-	-	-	-	64.8	6.1	-	-	-	-	-
	67	57.4	5.7	21.3	18.5	15.8	13.1	-	56.5	6.0	18.3	15.9	13.6	11.2	-
	62	54.3	5.3	42.2	39.5	36.8	34.1	31.4	52.2	5.7	41.6	39.2	36.8	34.4	32.0
	57	47.9	5.2	47.9	47.9	45.2	42.4	39.7	43.3	5.6	43.3	43.3	41.0	38.6	36.2
3825	72	66.2	5.9	-	-	-	-	-	67.4	6.0	-	-	-	-	-
	67	60.9	5.6	24.7	21.4	18.1	14.9	-	58.8	6.0	22.2	19.2	16.3	13.3	-
	62	57.6	5.3	48.8	45.6	42.3	39.0	35.8	54.4	5.6	47.7	45.5	42.6	39.6	36.6
	57	50.8	5.2	50.8	50.8	47.5	44.3	41.0	45.2	5.6	45.2	45.2	42.2	39.3	36.3
4250	72	70.1	5.9	-	-	-	-	-	70.0	6.0	-	-	-	-	-
	67	64.5	5.6	28.1	24.2	20.4	16.6	-	61.1	5.9	26.0	22.5	19.0	15.4	-
	62	60.9	5.3	55.5	51.6	47.8	44.0	40.2	56.5	5.6	53.8	51.9	48.3	44.8	41.2
	57	53.7	5.2	53.7	53.7	49.9	46.1	42.3	47.1	5.5	47.1	47.1	43.5	40.0	36.4

ZR102 (8.5 Ton) Reheat (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)					
					85	80	75	70	65			85	80	75	70	65	
		75°F								85°F							
2125	72	42.8	6.3	-	-	-	-	-	37.6	6.4	-	-	-	-	-		
	67	35.4	6.5	1.6	1.5	1.4	1.2	-	28.6	6.8	-	-	-	-	-		
	62	31.9	6.2	4.4	4.3	4.2	4.1	4.0	24.7	6.5	-	-	-	-	-		
2550	72	50.9	6.2	-	-	-	-	-	48.3	6.4	-	-	-	-	-		
	67	42.1	6.4	6.2	5.4	4.7	3.9	-	37.3	6.8	3.3	2.9	2.5	2.0	-		
	62	38.0	6.1	16.6	15.8	15.0	14.3	13.5	32.5	6.5	13.0	12.5	12.1	11.6	11.2		
	57	29.4	6.1	16.6	15.8	15.0	14.3	13.5	22.5	6.4	10.6	10.1	9.7	9.3	8.8		
2975	72	59.1	6.2	-	-	-	-	-	58.9	6.3	-	-	-	-	-		
	67	48.9	6.4	10.8	9.4	8.0	6.6	-	46.0	6.7	7.9	6.8	5.7	4.6	-		
	62	44.0	6.1	28.7	27.3	25.9	24.5	23.1	40.2	6.4	26.6	25.5	24.4	23.3	22.2		
	57	34.1	6.0	27.7	27.3	25.9	24.5	23.1	28.4	6.4	22.4	22.2	21.1	20.0	19.0		
3400	72	67.2	6.2	-	-	-	-	-	69.6	6.3	-	-	-	-	-		
	67	55.6	6.3	15.4	13.3	11.3	9.2	-	54.7	6.7	12.5	10.7	9.0	7.3	-		
	62	50.1	6.0	40.9	38.8	36.8	34.7	32.6	48.0	6.4	40.2	38.5	36.7	35.0	33.3		
	57	38.8	6.0	38.8	38.8	36.8	34.7	32.6	34.3	6.3	34.3	34.3	32.6	30.8	29.1		
3825	72	68.6	6.1	-	-	-	-	-	69.7	6.2	-	-	-	-	-		
	67	56.7	6.3	19.7	17.0	14.4	11.7	-	54.6	6.6	17.2	14.9	12.5	10.2	-		
	62	51.1	6.0	46.5	45.5	42.8	40.1	37.5	47.9	6.3	45.3	45.4	43.1	40.7	38.3		
	57	39.6	5.9	39.6	39.6	36.9	34.3	31.6	34.0	6.3	34.0	34.0	31.6	29.3	26.9		
4250	72	69.9	6.1	-	-	-	-	-	69.8	6.2	-	-	-	-	-		
	67	57.8	6.3	24.0	20.8	17.5	14.2	-	54.5	6.6	22.0	19.0	16.0	13.1	-		
	62	52.1	5.9	52.1	52.1	48.8	45.6	42.3	47.7	6.3	47.7	47.7	47.7	46.4	43.4		
	57	40.4	5.9	40.4	40.4	37.1	33.9	30.6	33.7	6.2	33.7	33.7	30.7	27.8	24.8		

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.

ZR120 (10 Ton) Cooling

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	145.9	7.7	59.8	48.6	37.5	-	-	-	140.4	8.5	59.0	47.8	36.6	-	-	-
	72	139.2	7.5	79.5	68.3	57.1	46.0	-	-	131.7	8.3	77.8	66.6	55.4	44.2	-	-
	67	132.5	7.3	99.2	88.0	76.8	65.6	54.5	-	122.9	8.2	96.7	85.5	74.3	63.1	51.9	-
	62	114.8	7.2	114.8	114.7	92.8	81.6	70.4	59.2	108.0	8.1	108.0	108.0	89.9	78.7	67.5	56.3
3000	77	152.7	7.7	68.3	55.1	41.9	-	-	-	146.7	8.5	66.8	53.7	40.5	-	-	-
	72	145.7	7.5	90.3	77.1	63.9	50.7	-	-	137.5	8.4	87.8	74.6	61.5	48.3	-	-
	67	138.6	7.3	112.4	99.1	85.9	72.7	59.5	-	128.4	8.2	108.7	95.5	82.4	69.3	56.1	-
	62	120.2	7.2	120.2	120.1	103.8	90.6	77.4	64.2	112.9	8.1	112.9	112.8	99.7	86.5	73.4	60.3
	57	121.9	7.2	121.9	121.9	107.9	94.6	81.4	68.2	113.8	8.1	113.8	113.8	102.4	89.2	76.1	63.0
3500	77	159.5	7.7	76.8	61.6	46.3	-	-	-	152.9	8.6	74.7	59.6	44.5	-	-	-
	72	152.1	7.5	101.2	85.9	70.7	55.5	-	-	143.4	8.4	97.7	82.6	67.5	52.4	-	-
	67	144.8	7.3	125.5	110.3	95.1	79.8	64.6	-	133.8	8.3	120.7	105.6	90.5	75.4	60.4	-
	62	125.5	7.2	125.5	125.4	114.8	99.6	84.3	69.1	117.7	8.2	117.7	117.6	109.5	94.4	79.3	64.2
	57	127.3	7.2	127.3	127.3	119.3	104.0	88.8	73.6	118.7	8.1	118.7	118.7	112.4	97.4	82.3	67.2
4000	77	166.2	7.7	85.3	68.0	50.8	-	-	-	159.2	8.6	82.6	65.6	48.5	-	-	-
	72	158.6	7.5	112.0	94.7	77.5	60.2	-	-	149.2	8.4	107.6	90.6	73.6	56.6	-	-
	67	150.9	7.3	138.7	121.4	104.2	86.9	69.7	-	139.3	8.3	132.7	115.7	98.6	81.6	64.6	-
	62	130.8	7.2	130.8	130.8	125.8	108.5	91.3	74.0	122.5	8.2	122.5	122.5	119.3	102.3	85.2	68.2
	57	132.7	7.2	132.7	132.7	130.7	113.4	96.2	78.9	123.5	8.2	123.5	123.5	122.5	105.5	88.5	71.5
4500	72	159.9	7.5	118.5	100.0	81.5	62.9	-	-	150.4	8.5	114.3	96.0	77.7	59.4	-	-
	67	152.2	7.3	146.0	128.1	109.5	91.0	72.5	-	140.3	8.3	137.0	122.4	104.2	85.9	67.6	-
	62	131.9	7.3	131.9	131.9	129.4	110.8	92.3	73.8	123.4	8.2	123.4	123.4	121.8	103.5	85.2	66.9
	57	133.8	7.3	133.8	133.8	132.8	114.2	95.7	77.2	124.4	8.2	124.4	124.4	123.9	105.6	87.4	69.1
5000	72	161.2	7.6	125.1	105.3	85.5	65.6	-	-	151.5	8.5	120.9	101.4	81.8	62.3	-	-
	67	153.4	7.4	153.4	134.7	114.9	95.1	75.3	-	141.4	8.4	141.4	129.2	109.7	90.2	70.6	-
	62	133.0	7.4	133.0	133.0	133.0	113.1	93.3	73.5	124.3	8.3	124.3	124.3	124.3	104.7	85.2	65.7
	57	134.9	7.3	134.9	134.9	134.9	115.0	95.2	75.4	125.3	8.2	125.3	125.3	125.3	105.8	86.3	66.7
		95°F								105°F							
2500	77	134.9	9.3	58.1	46.9	35.7	-	-	-	124.8	10.5	50.8	42.5	31.6	-	-	-
	72	124.1	9.2	76.1	64.9	53.7	42.5	-	-	114.8	10.4	71.4	60.4	49.5	38.6	-	-
	67	113.3	9.1	94.2	83.0	71.8	60.6	49.3	-	104.7	10.3	91.9	78.4	67.4	56.5	45.6	-
	62	101.3	9.0	101.3	101.3	86.9	75.7	64.5	53.3	94.7	10.1	94.7	94.7	80.1	69.1	58.2	47.3
3000	77	140.7	9.4	65.3	52.3	39.2	-	-	-	129.8	10.5	60.5	47.7	34.9	-	-	-
	72	129.4	9.3	85.2	72.1	59.0	46.0	-	-	119.3	10.4	80.3	67.5	54.7	41.9	-	-
	67	118.1	9.2	105.0	91.9	78.9	65.8	52.7	-	108.9	10.3	100.1	87.3	74.5	61.7	48.9	-
	62	105.6	9.1	105.6	105.6	95.6	82.5	69.4	56.3	98.4	10.1	98.4	98.4	88.5	75.7	62.8	50.0
	57	105.7	9.0	105.7	105.7	96.9	83.8	70.7	57.7	96.9	10.3	96.9	96.9	87.7	74.8	62.0	49.2
3500	77	146.4	9.4	72.6	57.7	42.7	-	-	-	134.8	10.6	70.2	52.9	38.2	-	-	-
	72	134.6	9.3	94.2	79.3	64.4	49.4	-	-	123.9	10.5	89.3	74.6	59.9	45.2	-	-
	67	122.9	9.3	115.9	100.9	86.0	71.1	56.1	-	113.0	10.4	108.4	96.3	81.6	66.9	52.2	-
	62	109.9	9.1	109.9	109.9	104.2	89.2	74.3	59.4	102.2	10.2	102.2	102.2	96.9	82.2	67.5	52.8
	57	110.1	9.1	110.1	110.1	105.6	90.7	75.8	60.8	100.6	10.3	100.6	100.6	96.0	81.3	66.6	51.9
4000	77	152.1	9.5	79.8	63.1	46.3	-	-	-	139.7	10.7	79.9	58.1	41.5	-	-	-
	72	139.9	9.4	103.3	86.5	69.7	52.9	-	-	128.5	10.5	98.3	81.7	65.1	48.5	-	-
	67	127.7	9.3	126.7	109.9	93.1	76.3	59.5	-	117.2	10.4	116.7	105.3	88.7	72.1	55.5	-
	62	114.2	9.2	114.2	114.2	112.8	96.0	79.2	62.4	106.0	10.3	106.0	106.0	105.3	88.7	72.1	55.5
	57	114.4	9.1	114.4	114.4	114.4	97.6	80.8	64.0	104.3	10.4	104.3	104.3	104.3	87.7	71.1	54.5
4500	72	140.8	9.4	110.0	92.0	73.9	55.9	-	-	128.8	10.5	104.6	86.8	69.1	51.3	-	-
	67	128.5	9.3	128.0	116.8	98.8	80.8	62.7	-	117.5	10.4	117.2	110.1	94.1	76.4	58.6	-
	62	114.9	9.2	114.9	114.9	114.2	96.2	78.1	60.1	106.2	10.3	106.2	106.2	105.9	88.1	70.4	52.6
	57	115.1	9.1	115.1	115.1	115.1	97.1	79.0	61.0	104.6	10.4	104.6	104.6	104.6	86.8	69.0	51.3
5000	72	141.7	9.4	116.7	97.5	78.2	58.9	-	-	129.1	10.6	110.9	92.0	73.1	54.1	-	-
	67	129.3	9.3	129.3	123.8	104.5	85.2	66.0	-	117.8	10.4	117.8	115.0	99.6	80.6	61.7	-
	62	115.6	9.2	115.6	115.6	115.6	96.3	77.1	57.8	106.5	10.3	106.5	106.5	106.5	87.6	68.6	49.7
	57	115.8	9.1	115.8	115.8	115.8	96.5	77.3	58.0	104.8	10.4	104.8	104.8	104.8	85.9	67.0	48.0

ZR120 (10 Ton) Cooling (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	114.7	11.7	43.6	38.1	27.5	-	-	-	104.7	12.9	36.1	33.8	23.4	-	-	-				
	72	105.4	11.5	66.6	55.9	45.3	34.6	-	-	96.1	12.7	61.8	51.4	41.1	30.7	-	-				
	67	96.1	11.4	89.6	73.7	63.1	52.4	41.8	-	87.5	12.5	87.5	69.1	58.7	48.4	38.0	-				
	62	88.1	11.2	88.1	88.1	73.2	62.5	51.9	41.2	81.5	12.3	81.5	81.5	66.3	55.9	45.6	35.2				
3000	77	118.9	11.7	55.7	43.1	30.6	-	-	-	108.1	12.9	50.9	38.6	26.2	-	-	-				
	72	109.3	11.6	75.5	62.9	50.3	37.8	-	-	99.2	12.7	70.6	58.3	46.0	33.7	-	-				
	67	99.6	11.4	95.3	82.7	70.1	57.6	45.0	-	90.4	12.6	90.4	78.1	65.8	53.4	41.1	-				
	62	91.3	11.2	91.3	91.3	81.4	68.8	56.3	43.7	84.2	12.3	84.2	84.2	74.3	62.0	49.7	37.3				
	57	88.0	11.5	88.0	88.0	78.4	65.9	53.3	40.7	79.2	12.8	79.2	79.2	69.2	56.9	44.6	32.2				
3500	77	123.1	11.8	67.8	48.1	33.6	-	-	-	111.5	13.0	65.7	43.4	29.1	-	-	-				
	72	113.1	11.6	84.4	69.9	55.4	40.9	-	-	102.4	12.8	79.5	65.2	50.9	36.7	-	-				
	67	103.1	11.5	101.0	91.7	77.2	62.7	48.2	-	93.3	12.6	93.3	87.1	72.8	58.5	44.3	-				
	62	94.6	11.3	94.6	94.6	89.6	75.1	60.6	46.1	86.9	12.4	86.9	86.9	82.3	68.0	53.8	39.5				
	57	91.1	11.6	91.1	91.1	86.3	71.8	57.4	42.9	81.7	12.8	81.7	81.7	76.7	62.4	48.2	33.9				
4000	77	127.3	11.8	79.9	53.1	36.7	-	-	-	114.9	13.0	80.5	48.2	31.9	-	-	-				
	72	117.0	11.7	93.3	76.9	60.5	44.1	-	-	105.5	12.8	88.3	72.1	55.9	39.7	-	-				
	67	106.7	11.5	106.7	100.7	84.3	67.9	51.5	-	96.1	12.6	96.1	96.0	79.8	63.6	47.4	-				
	62	97.8	11.3	97.8	97.8	97.8	81.4	65.0	48.6	89.6	12.4	89.6	89.6	89.6	74.1	57.9	41.6				
	57	94.2	11.6	94.2	94.2	94.2	77.8	61.4	45.0	84.2	12.9	84.2	84.2	84.2	68.0	51.7	35.5				
4500	72	116.8	11.7	99.2	81.7	64.2	46.7	-	-	104.7	12.8	93.8	76.6	59.4	42.1	-	-				
	67	106.4	11.5	106.4	103.4	89.5	72.0	54.5	-	95.4	12.7	95.4	95.4	84.8	67.5	50.3	-				
	62	97.6	11.3	97.6	97.6	97.6	80.1	62.6	45.1	88.9	12.4	88.9	88.9	88.9	72.0	54.8	37.6				
	57	94.0	11.6	94.0	94.0	94.0	76.5	59.0	41.5	83.5	12.9	83.5	83.5	83.5	66.3	49.0	31.8				
5000	72	116.5	11.7	105.2	86.6	68.0	49.4	-	-	104.0	12.8	99.4	81.1	62.8	44.6	-	-				
	67	106.2	11.5	106.2	106.2	94.7	76.1	57.5	-	94.7	12.7	94.7	94.7	89.7	71.5	53.2	-				
	62	97.4	11.3	97.4	97.4	97.4	78.8	60.2	41.6	88.3	12.4	88.3	88.3	88.3	70.0	51.7	33.5				
	57	93.9	11.6	93.9	93.9	93.9	75.3	56.7	38.1	82.9	12.9	82.9	82.9	82.9	64.6	46.3	28.1				

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.

ZR120 (10 Ton) Reheat

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)						
				85	80	75	70	65			85	80	75	70	65		
		35°F								45°F							
2500	72	68.3	5.0	7.6	5.1	2.5	-	-	69.9	6.2	1.6	-	-	-	-		
	67	71.7	4.7	21.5	19.0	16.5	14.0	-	67.4	5.9	15.4	13.6	11.8	10.1	-		
	62	62.7	5.1	25.5	23.0	20.5	17.9	15.4	62.2	5.9	28.1	26.3	24.6	22.8	21.0		
3000	72	71.8	5.2	9.4	6.3	3.1	-	-	72.9	6.2	2.1	-	-	-	-		
	67	75.3	4.9	28.0	24.8	21.6	18.5	-	70.2	5.9	19.9	17.6	15.3	13.0	-		
	62	65.9	5.2	34.1	30.9	27.7	24.6	21.4	64.8	5.9	36.3	34.0	31.7	29.4	27.1		
	57	65.7	5.0	52.1	48.9	45.7	42.6	39.4	63.6	5.7	49.7	47.4	45.1	42.8	40.5		
3500	72	75.3	5.4	11.3	7.5	3.7	-	-	75.9	6.1	2.6	-	-	-	-		
	67	78.9	5.1	34.5	30.7	26.8	23.0	-	73.1	5.9	24.3	21.5	18.7	15.9	-		
	62	69.1	5.4	42.7	38.9	35.0	31.2	27.4	67.5	5.9	44.4	41.6	38.8	35.9	33.1		
	57	68.9	5.2	62.1	61.1	57.3	53.5	49.7	66.1	5.7	59.2	58.1	55.3	52.4	49.6		
4000	72	78.9	5.6	13.2	8.7	4.3	-	-	78.8	6.1	3.1	-	-	-	-		
	67	82.5	5.3	41.0	36.5	32.0	27.5	-	75.9	5.9	28.8	25.4	22.1	18.8	-		
	62	72.4	5.6	51.3	46.8	42.3	37.8	33.3	70.1	5.9	52.5	49.2	45.9	42.5	39.2		
	57	72.1	5.4	72.1	72.1	68.9	64.4	59.9	68.7	5.7	68.7	68.7	65.4	62.0	58.7		
4500	72	76.8	5.6	17.2	12.8	8.4	-	-	79.6	6.1	3.5	-	-	-	-		
	67	80.8	5.3	40.7	36.3	31.9	27.5	-	76.7	5.9	32.3	28.5	24.8	21.0	-		
	62	70.6	5.6	53.9	47.4	43.0	38.6	34.2	70.8	5.9	59.0	55.2	51.4	47.6	43.9		
	57	70.4	5.4	70.4	70.4	66.6	62.2	57.8	69.4	5.7	69.4	69.4	65.7	61.9	58.1		
5000	72	74.7	5.6	21.2	16.9	12.5	-	-	80.4	6.1	3.9	-	-	-	-		
	67	79.0	5.3	40.4	36.0	31.7	27.4	-	77.5	5.9	35.8	31.6	27.4	23.2	-		
	62	68.8	5.6	56.5	48.1	43.8	39.4	35.1	71.5	5.9	65.4	61.2	57.0	52.7	48.5		
	57	68.7	5.4	68.7	68.7	64.4	60.1	55.7	70.1	5.7	70.1	70.1	65.9	61.7	57.5		
		55°F								65°F							
2500	72	71.6	7.3	-	-	-	-	-	65.4	7.9	-	-	-	-	-		
	67	63.1	7.2	9.3	8.3	7.2	6.2	-	58.4	7.6	4.2	3.8	3.4	2.9	-		
	62	61.7	6.8	30.8	29.7	28.7	27.6	26.6	55.4	7.2	14.3	13.9	13.4	13.0	12.5		
3000	72	74.0	7.1	-	-	-	-	-	68.3	7.6	-	-	-	-	-		
	67	65.2	6.9	11.7	10.3	8.9	7.5	-	61.0	7.3	8.6	7.5	6.5	5.4	-		
	62	63.7	6.6	38.4	37.0	35.6	34.2	32.7	57.8	7.0	26.5	25.5	24.4	23.4	22.3		
	57	61.5	6.4	47.4	46.0	44.5	43.1	41.7	56.2	6.8	32.4	31.4	30.3	29.2	28.2		
3500	72	76.4	6.9	-	-	-	-	-	71.2	7.4	-	-	-	-	-		
	67	67.3	6.7	14.1	12.3	10.5	8.7	-	63.7	7.1	13.0	11.3	9.6	7.9	-		
	62	65.8	6.4	46.1	44.3	42.5	40.7	38.9	60.3	6.8	38.8	37.1	35.5	33.8	32.1		
	57	63.4	6.2	56.4	55.0	53.2	51.4	49.6	58.5	6.6	46.7	45.5	43.8	42.1	40.4		
4000	72	78.7	6.7	-	-	-	-	-	74.1	7.1	-	-	-	-	-		
	67	69.4	6.5	16.6	14.4	12.2	10.0	-	66.3	6.9	17.3	15.0	12.7	10.4	-		
	62	67.8	6.2	53.8	51.6	49.4	47.2	45.0	62.7	6.5	51.1	48.8	46.5	44.2	41.9		
	57	65.4	6.0	65.4	64.1	61.9	59.7	57.5	60.9	6.4	60.9	59.6	57.3	55.0	52.7		
4500	72	82.5	6.7	-	-	-	-	-	76.5	7.1	-	-	-	-	-		
	67	72.7	6.5	23.9	20.8	17.6	14.5	-	68.5	6.9	22.9	19.9	16.8	13.8	-		
	62	71.0	6.2	64.0	62.9	59.8	56.6	53.5	64.9	6.5	59.0	57.9	54.8	51.8	48.7		
	57	68.5	6.0	68.5	67.8	64.7	61.5	58.4	63.0	6.4	63.0	62.3	59.3	56.2	53.2		
5000	72	86.2	6.6	-	-	-	-	-	79.0	7.1	-	-	-	-	-		
	67	76.0	6.5	31.3	27.2	23.1	19.0	-	70.7	6.9	28.5	24.7	20.9	17.1	-		
	62	74.2	6.2	74.2	74.2	70.1	66.0	62.0	67.0	6.5	67.0	67.0	63.2	59.4	55.6		
	57	71.6	6.0	71.6	71.6	67.5	63.4	59.3	65.0	6.4	65.0	65.0	61.2	57.4	53.6		

ZR120 (10 Ton) Reheat (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)					
					85	80	75	70	65			85	80	75	70	65	
		75°F								85°F							
2500	72	59.1	8.4	0.6	0.7	0.9	-	-	52.8	8.9	3.0	3.8	4.5	-	-		
	67	53.8	8.0	-	-	-	-	-	49.1	8.4	-	-	-	-	-		
	62	49.1	7.6	-	-	-	-	-	42.8	8.0	-	-	-	-	-		
3000	72	62.5	8.1	-	-	-	-	-	56.8	8.6	-	-	-	-	-		
	67	56.9	7.7	5.5	4.8	4.1	3.4	-	52.7	8.1	2.3	2.0	1.7	1.4	-		
	62	52.0	7.4	14.7	14.0	13.3	12.6	11.9	46.1	7.8	2.8	2.4	2.1	1.8	1.5		
	57	50.9	7.3	17.4	16.8	16.1	15.4	14.7	45.6	7.7	2.5	2.1	1.8	1.5	1.2		
3500	72	65.9	7.9	-	-	-	-	-	60.7	8.4	-	-	-	-	-		
	67	60.0	7.5	11.8	10.2	8.7	7.1	-	56.4	7.9	10.6	9.2	7.8	6.4	-		
	62	54.8	7.1	31.5	30.0	28.4	26.9	25.3	49.3	7.5	24.2	22.8	21.4	19.9	18.5		
	57	53.7	7.0	37.0	35.9	34.4	32.8	31.3	48.8	7.5	27.2	26.4	25.0	23.6	22.1		
4000	72	69.4	7.6	-	-	-	-	-	64.7	8.1	-	-	-	-	-		
	67	63.1	7.2	18.1	15.7	13.3	10.9	-	60.0	7.6	18.9	16.4	13.9	11.4	-		
	62	57.7	6.9	48.4	46.0	43.5	41.1	38.7	52.6	7.3	45.6	43.1	40.6	38.1	35.6		
	57	56.5	6.8	56.5	55.1	52.7	50.3	47.9	52.0	7.2	52.0	50.6	48.1	45.6	43.1		
4500	72	70.6	7.6	-	-	-	-	-	64.7	8.1	-	-	-	-	-		
	67	64.3	7.2	21.9	19.0	16.0	13.0	-	60.0	7.6	20.9	18.1	15.2	12.3	-		
	62	58.7	6.9	54.0	52.8	49.9	46.9	43.9	52.5	7.3	49.1	47.8	44.9	42.1	39.2		
	57	57.5	6.8	57.5	56.8	53.8	50.9	47.9	52.0	7.2	52.0	51.3	48.4	45.6	42.7		
5000	72	71.9	7.6	-	-	-	-	-	64.7	8.1	-	-	-	-	-		
	67	65.4	7.2	25.8	22.2	18.7	15.2	-	60.1	7.6	23.0	19.8	16.5	13.3	-		
	62	59.7	6.9	59.7	59.7	56.2	52.7	49.2	52.5	7.3	52.5	52.5	49.2	46.0	42.8		
	57	58.5	6.8	58.5	58.5	55.0	51.5	47.9	52.0	7.2	52.0	52.0	48.7	45.5	42.3		

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.

ZR150 (12.5 Ton) Cooling (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	156.3	14.6	67.9	54.8	40.9	-	-	-	144.5	16.0	60.9	51.5	37.9	-	-	-
	72	142.6	14.5	90.8	77.0	63.1	49.3	-	-	131.3	15.9	86.6	73.0	59.4	45.8	-	-
	67	128.8	14.4	113.7	99.1	85.3	71.5	57.6	-	118.1	15.7	110.3	94.4	80.8	67.2	53.6	-
	62	118.4	14.2	118.4	118.4	105.7	91.8	78.0	64.1	108.8	15.6	108.8	108.8	102.4	87.6	74.0	60.4
3750	77	162.8	14.7	75.9	60.2	44.5	-	-	-	150.2	16.0	72.3	56.7	41.2	-	-	-
	72	148.5	14.6	100.0	84.3	68.6	52.9	-	-	136.4	15.9	95.5	80.0	64.4	48.9	-	-
	67	134.1	14.4	124.1	108.4	92.7	77.0	61.3	-	122.7	15.8	118.8	103.2	87.7	72.1	56.6	-
	62	123.3	14.3	123.3	123.3	114.8	99.1	83.4	67.7	113.0	15.6	113.0	113.0	109.8	94.3	78.7	63.2
	57	121.1	14.3	121.1	121.1	108.4	92.7	77.0	61.3	112.0	15.7	112.0	112.0	99.7	84.2	68.6	53.1
4375	77	169.3	14.7	83.9	65.6	48.0	-	-	-	155.8	16.1	83.6	61.9	44.4	-	-	-
	72	154.4	14.6	109.2	91.6	74.1	56.5	-	-	141.5	16.0	104.5	87.0	69.5	52.0	-	-
	67	139.5	14.5	134.5	117.6	100.1	82.5	65.0	-	127.2	15.8	127.2	112.0	94.5	77.0	59.5	-
	62	128.2	14.3	128.2	128.2	124.0	106.4	88.8	71.3	117.3	15.7	117.3	117.3	117.3	100.9	83.4	65.9
	57	126.0	14.4	126.0	126.0	117.1	99.5	81.9	64.4	116.2	15.7	116.2	116.2	107.5	90.0	72.6	55.1
5000	77	175.8	14.8	91.9	71.0	51.6	-	-	-	161.4	16.2	95.0	67.0	47.6	-	-	-
	72	160.3	14.7	118.4	98.9	79.5	60.1	-	-	146.6	16.0	113.4	93.9	74.5	55.1	-	-
	67	144.9	14.5	144.9	126.9	107.5	88.1	68.6	-	131.8	15.9	131.8	120.8	101.4	82.0	62.5	-
	62	133.1	14.4	133.1	133.1	133.1	113.7	94.3	74.9	121.5	15.7	121.5	121.5	121.5	107.6	88.1	68.7
	57	130.8	14.4	130.8	130.8	125.7	106.3	86.9	67.5	120.4	15.8	120.4	120.4	115.4	95.9	76.5	57.0
5625	72	163.7	14.7	128.0	107.1	86.2	65.3	-	-	148.9	16.0	122.7	102.0	81.2	60.4	-	-
	67	147.9	14.5	147.9	137.4	116.5	95.6	74.7	-	133.9	15.9	133.9	131.3	110.5	89.7	69.0	-
	62	135.9	14.4	135.9	135.9	135.9	115.0	94.1	73.2	123.4	15.7	123.4	123.4	123.4	105.4	84.6	63.9
	57	133.5	14.4	133.5	133.5	131.0	110.1	89.2	68.3	122.3	15.8	122.3	122.3	119.8	99.0	78.3	57.5
6250	72	167.0	14.7	137.7	115.3	92.9	70.5	-	-	151.2	16.0	132.0	110.0	87.9	65.8	-	-
	67	150.9	14.5	150.9	147.9	125.5	103.1	80.7	-	135.9	15.8	135.9	135.9	119.6	97.5	75.4	-
	62	138.6	14.4	138.6	138.6	138.6	116.3	93.9	71.5	125.3	15.7	125.3	125.3	125.3	103.2	81.1	59.0
	57	136.2	14.4	136.2	136.2	136.2	113.9	91.5	69.1	124.2	15.7	124.2	124.2	124.2	102.1	80.0	58.0

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.

ZR150 (12.5 Ton) Reheat

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)						
				85	80	75	70	65			85	80	75	70	65		
		35°F								45°F							
3125	72	87.0	7.7	6.6	4.8	3.1	-	-	85.9	8.3	5.6	3.9	2.2	-	-		
	67	84.6	7.3	14.4	12.7	11.0	9.2	-	83.3	8.0	11.8	10.1	8.4	6.7	-		
	62	82.9	7.3	20.3	18.6	16.9	15.2	13.5	80.8	7.7	17.7	16.0	14.3	12.6	10.9		
3750	72	89.0	7.4	11.5	9.2	6.9	-	-	88.9	8.0	10.7	8.3	5.9	-	-		
	67	86.5	7.1	26.3	24.0	21.7	19.5	-	86.2	7.7	24.1	21.7	19.3	17.0	-		
	62	84.8	7.1	36.7	34.4	32.1	29.8	27.5	83.6	7.4	36.6	34.2	31.9	29.5	27.1		
	57	82.2	7.7	43.1	40.9	38.6	36.3	34.0	79.1	8.2	40.8	38.4	36.0	33.7	31.3		
4375	72	90.9	7.2	16.4	13.5	10.7	-	-	91.8	7.7	15.8	12.7	9.7	-	-		
	67	88.4	6.9	38.3	35.4	32.5	29.7	-	89.1	7.4	36.3	33.3	30.2	27.2	-		
	62	86.6	6.8	53.1	50.2	47.4	44.5	41.6	86.4	7.2	55.5	52.5	49.4	46.4	43.3		
	57	84.0	7.4	63.2	60.0	57.1	54.2	51.4	81.8	7.9	61.9	58.9	55.8	52.8	49.7		
5000	72	92.8	6.9	21.3	17.9	14.4	-	-	94.8	7.4	20.9	17.2	13.4	-	-		
	67	90.3	6.6	50.2	46.8	43.3	39.9	-	91.9	7.1	48.6	44.9	41.1	37.4	-		
	62	88.5	6.6	69.5	66.0	62.6	59.1	55.7	89.2	6.9	74.5	70.7	67.0	63.3	59.5		
	57	85.9	7.1	83.2	79.1	75.6	72.2	68.7	84.4	7.6	83.1	79.4	75.6	71.9	68.2		
5625	72	94.1	7.5	15.2	12.5	9.9	-	-	96.7	7.8	16.3	13.1	9.9	-	-		
	67	91.5	7.1	35.5	32.8	30.2	27.5	-	93.8	7.6	37.4	34.2	31.0	27.8	-		
	62	89.7	7.1	48.0	45.4	42.7	40.1	37.4	91.0	7.3	57.1	53.9	50.7	47.5	44.3		
	57	87.1	7.7	58.0	55.0	52.4	49.7	47.1	86.1	8.0	63.7	60.5	57.3	54.1	50.8		
6250	72	95.4	8.0	9.1	7.2	5.4	-	-	98.6	8.3	11.7	9.0	6.3	-	-		
	67	92.8	7.7	20.7	18.9	17.0	15.2	-	95.6	8.0	26.2	23.5	20.8	18.1	-		
	62	91.0	7.6	26.6	24.7	22.9	21.0	19.2	92.8	7.8	39.8	37.1	34.4	31.7	29.0		
	57	88.3	8.3	32.9	31.0	29.2	27.3	25.5	87.8	8.5	44.3	41.6	38.9	36.2	33.5		
		55°F								65°F							
3125	72	84.8	8.9	4.6	2.9	1.2	-	-	84.2	9.3	-	-	-	-	-		
	67	81.9	8.7	9.3	7.6	5.9	4.2	-	79.1	8.9	10.4	8.9	7.3	5.8	-		
	62	78.7	8.2	15.1	13.4	11.7	10.0	8.3	74.6	8.4	24.9	23.4	21.8	20.3	18.7		
3750	72	88.8	8.6	9.9	7.4	5.0	-	-	87.3	9.2	-	-	-	-	-		
	67	85.8	8.3	21.9	19.4	16.9	14.5	-	82.0	8.8	18.2	16.0	13.9	11.8	-		
	62	82.5	7.8	36.5	34.1	31.6	29.1	26.7	77.4	8.3	40.0	37.9	35.8	33.7	31.5		
	57	76.1	8.7	38.4	36.0	33.5	31.0	28.6	72.6	9.0	44.1	42.0	39.9	37.8	35.6		
4375	72	92.8	8.2	15.2	11.9	8.7	-	-	90.4	9.1	-	-	-	-	-		
	67	89.7	8.0	34.4	31.2	27.9	24.7	-	85.0	8.7	25.9	23.2	20.5	17.8	-		
	62	86.2	7.5	58.0	54.7	51.5	48.3	45.0	80.2	8.2	55.1	52.4	49.8	47.1	44.4		
	57	79.5	8.3	60.7	57.8	54.6	51.3	48.1	75.2	8.9	60.3	57.7	55.1	52.4	49.7		
5000	72	96.8	7.8	20.5	16.5	12.4	-	-	93.5	9.0	1.1	-	-	-	-		
	67	93.6	7.6	47.0	42.9	38.9	34.9	-	87.9	8.6	33.6	30.4	27.1	23.8	-		
	62	89.9	7.1	79.4	75.4	71.4	67.4	63.4	83.0	8.1	70.3	67.0	63.7	60.4	57.2		
	57	83.0	8.0	83.0	79.6	75.6	71.6	67.6	77.8	8.8	76.4	73.5	70.2	66.9	63.7		
5625	72	99.3	8.2	17.4	13.6	9.8	-	-	97.7	9.2	-	-	-	-	-		
	67	96.0	8.0	39.3	35.5	31.8	28.0	-	91.8	8.8	31.7	28.3	25.0	21.6	-		
	62	92.2	7.5	66.2	62.4	58.7	54.9	51.1	86.6	8.3	69.4	66.0	62.6	59.3	55.9		
	57	85.1	8.4	69.3	65.9	62.1	58.4	54.6	81.2	9.0	72.7	70.3	66.9	63.6	60.2		
6250	72	101.8	8.6	14.3	10.8	7.3	-	-	101.9	9.5	-	-	-	-	-		
	67	98.4	8.4	31.7	28.1	24.6	21.1	-	95.7	9.1	29.8	26.3	22.8	19.4	-		
	62	94.6	7.9	53.0	49.4	45.9	42.4	38.8	90.3	8.6	68.5	65.0	61.6	58.1	54.6		
	57	87.2	8.8	55.7	52.2	48.7	45.1	41.6	84.7	9.3	68.9	67.1	63.7	60.2	56.8		

ZR150 (12.5 Ton) Reheat (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)					
					85	80	75	70	65			85	80	75	70	65	
		75°F								85°F							
3125	72	83.6	9.7	-	-	-	-	-	83.0	10.2	-	-	-	-	-		
	67	76.2	9.2	11.5	10.1	8.7	7.3	-	73.4	9.4	12.6	11.4	10.1	8.8	-		
	62	70.5	8.7	34.8	33.4	32.0	30.6	29.2	66.4	8.9	44.7	43.4	42.1	40.9	39.6		
3750	72	85.8	9.9	-	-	-	-	-	84.3	10.5	-	-	-	-	-		
	67	78.2	9.3	14.5	12.7	10.9	9.1	-	74.4	9.7	10.8	9.3	7.9	6.4	-		
	62	72.3	8.8	43.6	41.8	40.0	38.2	36.4	67.3	9.3	47.1	45.6	44.2	42.7	41.3		
	57	69.0	9.3	49.8	48.1	46.3	44.5	42.7	65.5	9.7	55.5	54.1	52.7	51.2	49.8		
4375	72	88.0	10.0	-	-	-	-	-	85.5	10.9	-	-	-	-	-		
	67	80.2	9.4	17.4	15.2	13.1	10.9	-	75.5	10.1	8.9	7.2	5.6	4.0	-		
	62	74.2	8.9	52.3	50.2	48.0	45.8	43.7	68.2	9.6	49.5	47.9	46.2	44.6	43.0		
	57	70.8	9.5	59.9	57.7	55.5	53.4	51.2	66.4	10.0	59.4	57.6	56.0	54.4	52.8		
5000	72	90.1	10.1	-	-	-	-	-	86.8	11.3	-	-	-	-	-		
	67	82.2	9.5	20.3	17.8	15.2	12.7	-	76.5	10.5	7.0	5.2	3.4	1.6	-		
	62	76.0	9.0	61.1	58.5	56.0	53.5	50.9	69.1	10.0	51.9	50.1	48.3	46.5	44.7		
	57	72.6	9.6	69.9	67.3	64.8	62.3	59.7	67.4	10.4	63.3	61.2	59.4	57.6	55.8		
5625	72	96.1	10.3	-	-	-	-	-	94.4	11.3	-	-	-	-	-		
	67	87.6	9.6	24.1	21.1	18.1	15.2	-	83.4	10.5	16.4	13.9	11.3	8.8	-		
	62	81.0	9.1	72.5	69.6	66.6	63.7	60.7	75.4	9.9	75.4	73.1	70.6	68.0	65.5		
	57	77.3	9.7	76.0	74.7	71.8	68.8	65.8	73.4	10.4	73.4	73.4	73.4	73.4	71.5		
6250	72	102.0	10.4	-	-	-	-	-	102.0	11.3	-	-	-	-	-		
	67	93.0	9.8	27.8	24.5	21.1	17.7	-	90.3	10.4	25.9	22.6	19.3	16.0	-		
	62	86.0	9.2	84.0	80.6	77.2	73.8	70.5	81.7	9.9	81.7	81.7	81.7	81.7	81.7		
	57	82.1	9.8	82.1	82.1	78.7	75.3	71.9	79.5	10.3	79.5	79.5	79.5	79.5	79.5		

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.

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.

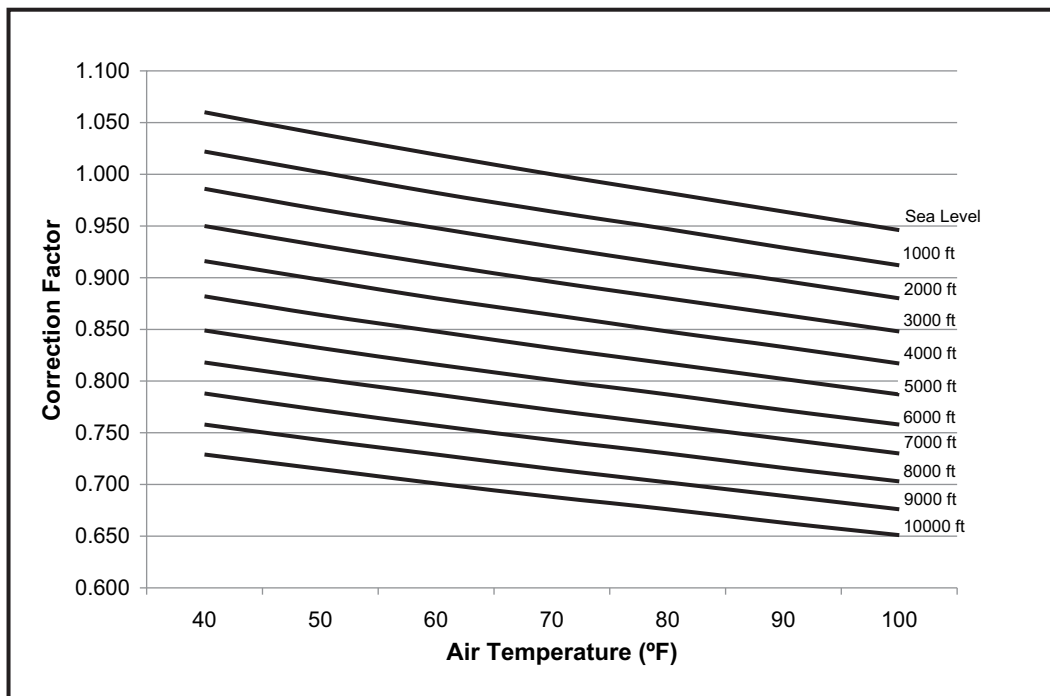
The air flow rates listed in the standard blower performance tables are based on standard air at sea level. As the altitude or temperature increases, the density of air decreases. In order to

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 14 and Figure 27.

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, Table 13 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. Table 15 shows the correction factor to be 0.832.

$$\text{Corrected static pressure} = 1.5 \times 0.832 = 1.248 \text{ IWC}$$

$$\text{Corrected BHP} = 4.0 \times 0.832 = 3.328$$

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.

$$\text{Sea level static pressure} = 1.5 / .832 = 1.80"$$

Enter the blower table at 6000 sCFM 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)	ZH	Std.	1-1/2	1725	0.8	1.15	56	2.0 - 3.0	7/8	1VP34	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)	ZH	Std.	1-1/2	1725	0.8	1.15	56	2.0 - 3.0	7/8	1VP34	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)	ZH	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)	ZH	Std.	1-1/2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	7.0	1	AK74	A49
		H. Static	2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	6.0	1	AK64	A49
090 (7.5)	ZH	Std.	1-1/2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	7.0	1	AK74	A49
		H. Static	3	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	5.7	1	AK61	A49
102 (8.5)	ZH	Std.	2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	9.0	1	AK94	A56
		H. Static	3	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	7.0	1	AK74	A54
120 (10)	ZH	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)	ZH	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
037 (3)	ZJ	Std.	1-1/2	1725	0.8	1.15	56	2.0 - 3.0	7/8	1VP34	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	1VP34	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
037 (3)	ZR	Std.	1-1/2	1725	0.8	1.15	56	1.2 - 2.9	7/8	1VP34	5.7	1	AK61	A47
		H. Static	1-1/2	1725	0.8	1.15	56	3.0 - 4.0	7/8	1VL44	5.5	1	AK59	A47
049 (4)	ZR	Std.	1-1/2	1725	0.8	1.15	56	1.2 - 2.9	7/8	1VP34	5.7	1	AK61	A47
		H. Static	1-1/2	1725	0.8	1.15	56	3.0 - 4.0	7/8	1VL44	5.5	1	AK59	A47
061 (5)	ZR	Std.	1-1/2	1725	0.8	1.15	56	1.2 - 2.9	7/8	1VP34	5.7	1	AK61	A47
		H. Static	2	1725	0.8	1.15	56	3.0 - 4.0	7/8	1VL44	5.5	1	AK59	A47
078 (6.5)	ZR	Std.	1-1/2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	7.0	1	AK74	A49
		H. Static	2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	6.0	1	AK64	A49
090 (7.5)	ZR	Std.	1-1/2	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	7.0	1	AK74	A49
		H. Static	3	1725	0.8	1.15	56	3.4 - 4.4	7/8	1VM50	5.7	1	AK61	A49
102 (8.5)	ZR	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)	ZR	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)	ZR	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			Motor			Fuse Size	CFM @ 0.1 ESP
		HP	RPM ¹	QTY	LRA	FLA	MCA		
2PE04703225	208/230-1-60	3/4	1075	1	7.8	5	6.3	10	3800
2PE04703246	460-1-60	3/4	1075	1	3.4	2.2	2.8	5	3800
2PE04703258	575-1-60	3/4	1050	1	2.9	1.5	1.9	4	3800

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)	ZH	Std.	1.5	1.5	1VP34	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)	ZH	Std.	1.5	1.5	1VP34	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)	ZH	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)	ZH	Std.	1.5	1.73	1VM50	AK74	N/A	887	936	986	1035	1084	1134
		H. Static	2	2.30	1VM50	AK64	N/A	1039	1094	1150	1207	1256	1308
090 (7.5)	ZH	Std.	1.5	1.73	1VM50	AK74	N/A	887	936	986	1035	1084	1134
		H. Static	3	3.45	1VM50	AK61	N/A	1088	1147	1205	1265	1312	1365
102 (8.5)	ZH	Std.	2	2.30	1VM50	AK94	N/A	690	728	767	805	843	882
		H. Static	3	3.45	1VM50	AK74	N/A	887	936	986	1035	1084	1134
120 (10)	ZH	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)	ZH	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
037 (3)	ZJ	Std.	1.5	1.5	1VP34	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	1VP34	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
037 (3.0)	ZR	Std.	1.5	1.5	1VP34	AK61	N/A	575	636	696	757	817	878
		H. Static	1.5	1.5	1VL44	AK59	N/A	878	941	1004	1066	1129	1192
049 (4.0)	ZR	Std.	1.5	1.5	1VP34	AK61	N/A	575	636	696	757	817	878
		H. Static	1.5	1.5	1VL44	AK59	N/A	878	941	1004	1066	1129	1192
061 (5.0)	ZR	Std.	1.5	1.5	1VP34	AK61	N/A	575	636	696	757	817	878
		H. Static	2	2	1VL44	AK59	N/A	878	941	1004	1066	1129	1192
078 (6.5)	ZR	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
090 (7.5)	ZR	Std.	1.5	1.73	1VM50	AK74	N/A	897	945	991	1035	1079	1126
		H. Static	3	3.45	1VM50	AK61	N/A	1088	1147	1205	1265	1312	1365
102 (8.5)	ZR	Std.	2	2.30	1VM50	AK89	N/A	735	775	815	851	889	930
		H. Static	3	3.45	1VM50	AK74	N/A	880	928	972	1016	1067	1110
120 (10)	ZR	Std.	2	2.30	1VM50	AK84	N/A	785	821	858	901	940	980
		H. Static	3	3.45	1VM50	AK74	N/A	880	928	972	1016	1067	1110
150 (12.5)	ZR	Std.	3	3.45	1VM50	AK74	N/A	880	928	972	1016	1067	1110
		H. Static	5	5.75	1VP56	BK77	1052	1095	1136	1175	1216	1272	N/A

Additional Static Resistance - ZH037 thru 061

Size (Tons)	Model	CFM	Cooling Only ¹	Economizer ^{2 3}	4" Pleated Filter ²	Electric Heat kW ²					
						3	6	9	15	20	24
037 (3) 049 (4)	ZH	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
		1400	0.03	0.03	0.07	0.02	0.02	0.02	0.03	0.03	0.03
		1500	0.03	0.04	0.08	0.02	0.02	0.02	0.04	0.04	0.04
		1600	0.02	0.06	0.09	0.02	0.02	0.02	0.04	0.04	0.04
		1700	0.02	0.07	0.10	0.03	0.03	0.03	0.05	0.05	0.05
		1800	0.01	0.08	0.11	0.03	0.03	0.03	0.05	0.05	0.05
		1900	0.01	0.10	0.13	0.04	0.04	0.04	0.06	0.06	0.06
		2000	0.00	0.11	0.14	0.04	0.04	0.04	0.07	0.07	0.07
061 (5)	ZH	1500	-0.01	0.13	0.07	0.02	0.02	0.02	0.04	0.04	0.04
		1600	-0.01	0.14	0.08	0.02	0.02	0.02	0.04	0.04	0.04
		1700	-0.01	0.15	0.08	0.03	0.03	0.03	0.05	0.05	0.05
		1800	-0.02	0.16	0.09	0.03	0.03	0.03	0.05	0.05	0.05
		1900	-0.02	0.17	0.10	0.04	0.04	0.04	0.06	0.06	0.06
		2000	-0.02	0.18	0.10	0.04	0.04	0.04	0.07	0.07	0.07
		2100	-0.03	0.19	0.11	0.05	0.05	0.05	0.07	0.07	0.07
		2200	-0.03	0.20	0.12	0.06	0.06	0.06	0.08	0.08	0.08
		2300	-0.04	0.21	0.12	0.06	0.06	0.06	0.09	0.09	0.09
		2400	-0.04	0.22	0.13	0.07	0.07	0.07	0.10	0.10	0.10
		2500	-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 - ZJ/ZR037 thru 061

Size (Tons)	Model	CFM	Cooling Only ¹	Economizer ^{2 3}	4" Pleated Filter ²	Electric Heat kW ²					
						3	6	9	15	20	24
037 (3)	ZJ/ZR	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
		1400	0.03	0.03	0.07	0.02	0.02	0.02	0.03	0.03	0.03
		1500	0.03	0.04	0.08	0.02	0.02	0.02	0.04	0.04	0.04
049 (4) 061 (5)	ZJ/ZR	1200	-0.01	0.10	0.05	0.01	0.01	0.01	0.02	0.02	0.02
		1300	-0.01	0.11	0.06	0.01	0.01	0.01	0.03	0.03	0.03
		1400	-0.01	0.12	0.06	0.02	0.02	0.02	0.03	0.03	0.03
		1500	-0.01	0.13	0.07	0.02	0.02	0.02	0.04	0.04	0.04
		1600	-0.01	0.14	0.08	0.02	0.02	0.02	0.04	0.04	0.04
		1700	-0.01	0.15	0.08	0.03	0.03	0.03	0.05	0.05	0.05
		1800	-0.02	0.16	0.09	0.03	0.03	0.03	0.05	0.05	0.05
		1900	-0.02	0.17	0.10	0.04	0.04	0.04	0.06	0.06	0.06
		2000	-0.02	0.18	0.10	0.04	0.04	0.04	0.07	0.07	0.07
		2100	-0.03	0.19	0.11	0.05	0.05	0.05	0.07	0.07	0.07
		2200	-0.03	0.20	0.12	0.06	0.06	0.06	0.08	0.08	0.08
		2300	-0.04	0.21	0.12	0.06	0.06	0.06	0.09	0.09	0.09
		2400	-0.04	0.22	0.13	0.07	0.07	0.07	0.10	0.10	0.10
		2500	-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 - ZH/ZR078 thru 150

Size (Tons)	Model	CFM	Cooling Only ¹	Economizer ^{2 3}	4" Filter ²	Electric Heat kW ²				
						09	18	24	36	54
078 (6.5) 090 (7.5)	ZH/ZR	1900	0.00	0.07	0.10	0.05	0.06	0.07	0.08	0.10
		2100	-0.01	0.09	0.11	0.06	0.07	0.08	0.09	0.11
		2300	-0.01	0.11	0.12	0.07	0.08	0.09	0.10	0.13
		2500	-0.02	0.13	0.14	0.08	0.09	0.10	0.11	0.14
		2700	-0.03	0.16	0.15	0.09	0.10	0.12	0.13	0.16
		2900	-0.04	0.18	0.16	0.10	0.11	0.13	0.14	0.18
		3100	-0.05	0.20	0.18	0.12	0.13	0.15	0.16	0.20
		3300	-0.06	0.22	0.19	0.13	0.14	0.17	0.18	0.22
		3500	-0.07	0.24	0.20	0.15	0.16	0.19	0.20	0.24
		3700	-0.08	0.27	0.21	0.17	0.18	0.21	0.22	0.26
		3900	-0.09	0.29	0.23	0.19	0.20	0.23	0.24	0.28
		4100	-0.09	0.31	0.24	0.21	0.22	0.25	0.26	0.31
		4300	-0.10	0.30	0.25	0.23	0.24	0.28	0.29	0.34
		4500	-0.11	0.35	0.26	0.25	0.26	0.30	0.31	0.37
102 (8.5) 120 (10) 150 (12.5)	ZH/ZR	1900	0.06	0.02	0.12	0.05	0.06	0.07	0.08	0.10
		2100	0.07	0.02	0.13	0.06	0.07	0.08	0.09	0.11
		2300	0.08	0.04	0.14	0.07	0.08	0.09	0.10	0.13
		2500	0.09	0.11	0.16	0.08	0.09	0.10	0.11	0.14
		2700	0.11	0.18	0.17	0.09	0.10	0.12	0.13	0.16
		2900	0.12	0.25	0.19	0.10	0.11	0.13	0.14	0.18
		3100	0.14	0.31	0.20	0.12	0.13	0.15	0.16	0.20
		3300	0.16	0.37	0.22	0.13	0.14	0.17	0.18	0.22
		3500	0.18	0.43	0.25	0.15	0.16	0.19	0.20	0.24
		3700	0.20	0.49	0.27	0.17	0.18	0.21	0.22	0.26
		3900	0.23	0.54	0.29	0.19	0.20	0.23	0.24	0.28
		4100	0.25	0.58	0.32	0.21	0.22	0.25	0.26	0.31
		4300	0.28	0.65	0.35	0.23	0.24	0.28	0.29	0.34
		4500	0.30	0.69	0.38	0.25	0.26	0.30	0.31	0.37
		4700	0.33	0.74	0.41	0.28	0.29	0.33	0.34	0.40
		4900	0.36	0.78	0.44	0.30	0.31	0.35	0.37	0.43
		5100	0.39	0.82	0.47	0.33	0.34	0.38	0.40	0.46
		5300	0.42	0.86	0.51	0.35	0.37	0.41	0.43	0.49
		5500	0.45	0.89	0.56	0.38	0.40	0.44	0.46	0.53
		5700	0.48	0.93	0.58	0.41	0.43	0.47	0.49	0.56
		5900	0.52	0.96	0.62	0.44	0.46	0.50	0.53	0.59
		6100	0.56	0.98	0.67	0.47	0.49	0.53	0.56	0.62
		6300	0.60	1.01	0.71	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.

Additional Static Resistance - ZJ078-150

Size (Tons)	Model	CFM	Cooling Only ¹	Economizer ^{2,3}	4" Filter ²	Electric Heat kW ²				
						9	18	24	36	54
078 (6.5) 090 (7.5) 102 (8.5) 120 (10) 150 (12.5)	ZJ	1900	0.06	0.02	0.12	0.05	0.06	0.07	0.08	0.10
		2100	0.07	0.02	0.13	0.06	0.07	0.08	0.09	0.11
		2300	0.08	0.04	0.14	0.07	0.08	0.09	0.10	0.13
		2500	0.09	0.11	0.16	0.08	0.09	0.10	0.11	0.14
		2700	0.11	0.18	0.17	0.09	0.10	0.12	0.13	0.16
		2900	0.12	0.25	0.19	0.10	0.11	0.13	0.14	0.18
		3100	0.14	0.31	0.20	0.12	0.13	0.15	0.16	0.20
		3300	0.16	0.37	0.22	0.13	0.14	0.17	0.18	0.22
		3500	0.18	0.43	0.26	0.15	0.16	0.19	0.20	0.24
		3700	0.20	0.49	0.27	0.17	0.18	0.21	0.22	0.26
		3900	0.23	0.54	0.29	0.19	0.20	0.23	0.24	0.28
		4100	0.25	0.58	0.32	0.21	0.22	0.25	0.26	0.31
		4300	0.28	0.65	0.35	0.23	0.24	0.28	0.29	0.34
		4500	0.30	0.69	0.38	0.25	0.26	0.30	0.31	0.37
		4700	0.33	0.74	0.41	0.28	0.29	0.33	0.34	0.40
		4900	0.36	0.78	0.44	0.30	0.31	0.35	0.37	0.43
		5100	0.39	0.82	0.47	0.33	0.34	0.38	0.40	0.46
		5300	0.42	0.86	0.51	0.35	0.37	0.41	0.43	0.49
		5500	0.45	0.89	0.55	0.38	0.40	0.44	0.46	0.53
		5700	0.48	0.93	0.58	0.41	0.43	0.47	0.49	0.56
		5900	0.52	0.96	0.62	0.44	0.46	0.50	0.53	0.59
		6100	0.56	0.98	0.67	0.47	0.49	0.53	0.56	0.62
		6300	0.60	1.01	0.71	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)	ZH/ZJ/ZR	A05 / N05	890	2220
		A07 / N07	915	2370
		A09 / N09	1130	1800
049 (4)	ZH/ZJ/ZR	A05 / N05	890	2220
		A07 / N07	915	2370
		A09 / N09	1290	2250
061 (5)	ZH/ZJ/ZR	A07 / N07	915	2370
		A09 / N09	1380	2570
		A13 / N13	1580	2630
078 (6.5)	ZH/ZJ/ZR	10	1950	3250
		15	1950	3250
090 (7.5)	ZH/ZJ/ZR	10	2250	3750
		15	2250	3750
102 (8.5)	ZH/ZJ/ZR	10	2550	4250
		15	2550	4250
120 (10)	ZH/ZJ/ZR	15	3000	5000
		20	3000	5000
150 (12.5)	ZH/ZJ/ZR	15	3750	6250
		20	3750	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)	ZH/ZJ/ZR	208/230-3-60	960	960	1020	1020	-	-
		460-3-60	980	960	960	960	-	-
		600-3-60	-	-	960	960	-	-
049 (4)	ZH/ZJ/ZR	208/230-3-60	-	1280	1420	1420	1420	-
		460-3-60	-	1400	1400	1400	1400	-
		600-3-60	-	-	1400	1400	1400	-
061 (5)	ZH/ZJ/ZR	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)	ZH/ZJ/ZR	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)	ZH/ZJ/ZR	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)	ZH/ZJ/ZR	208/230-3-60	2550	2550	2550	2550	-
		460-3-60	2550	2550	2550	2550	-
		600-3-60	2550	2550	2550	2550	-
120 (10)	ZH/ZJ/ZR	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)	ZH/ZJ/ZR	208/230-3-60	-	3750	3750	3750	4000
		460-3-60	-	3750	3750	3750	3750
		600-3-60	-	3750	3750	3750	3750

Airflow Performance

ZH037-150 Side Duct Application

ZH037 (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		1.6	
	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	560	0.29	628	0.35	695	0.42	760	0.51	823	0.61	886	0.72	949	0.82	1011	0.92
1000	582	0.29	650	0.34	716	0.42	781	0.51	845	0.61	908	0.71	970	0.82	1032	0.92
1100	601	0.30	670	0.35	736	0.43	801	0.52	864	0.62	927	0.72	990	0.83	1052	0.93
1200	620	0.32	688	0.37	754	0.45	819	0.54	883	0.64	946	0.74	1008	0.85	1070	0.95
1300	638	0.35	706	0.40	772	0.48	837	0.57	901	0.67	964	0.77	1026	0.88	1088	0.98
1400	655	0.39	724	0.44	790	0.51	855	0.60	918	0.70	981	0.81	1044	0.91	1106	1.01
1500	673	0.43	741	0.48	807	0.56	872	0.65	936	0.75	999	0.85	1061	0.96	1124	1.06
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.

ZH049 (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		1.6	
	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	620	0.32	688	0.37	754	0.45	819	0.54	883	0.64	946	0.74	1008	0.85	1070	0.95
1300	638	0.35	706	0.40	772	0.48	837	0.57	901	0.67	964	0.77	1026	0.88	1088	0.98
1400	655	0.39	724	0.44	790	0.51	855	0.60	918	0.70	981	0.81	1044	0.91	1106	1.01
1500	673	0.43	741	0.48	807	0.56	872	0.65	936	0.75	999	0.85	1061	0.96	1124	1.06
1600	691	0.48	759	0.54	825	0.61	890	0.70	954	0.80	1017	0.90	1079	1.01	1141	1.11
1700	709	0.54	777	0.59	843	0.67	908	0.76	972	0.86	1035	0.96	1097	1.07	1160	1.17
1800	728	0.60	796	0.66	862	0.73	927	0.82	991	0.92	1053	1.03	1116	1.13	1178	1.23
1900	747	0.67	815	0.73	881	0.80	946	0.89	1010	0.99	1073	1.09	1135	1.20	1197	1.30
2000	766	0.75	834	0.80	901	0.87	966	0.96	1029	1.06	1092	1.17	1155	1.27	1217	1.37

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.

ZH061 (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		1.6	
	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	659	0.35	719	0.46	780	0.57	843	0.67	905	0.77	964	0.87	1020	0.97	1071	1.07
1600	675	0.38	735	0.50	796	0.60	859	0.71	920	0.81	980	0.91	1036	1.01	1087	1.11
1700	691	0.42	751	0.54	812	0.64	875	0.75	936	0.85	996	0.95	1052	1.05	1103	1.15
1800	707	0.47	767	0.58	829	0.69	891	0.79	953	0.90	1012	0.99	1069	1.09	1120	1.20
1900	724	0.53	784	0.64	846	0.75	908	0.85	970	0.95	1029	1.05	1085	1.15	1137	1.25
2000	741	0.59	801	0.70	863	0.81	925	0.91	987	1.01	1047	1.11	1103	1.21	1154	1.31
2100	759	0.65	819	0.77	881	0.87	943	0.98	1005	1.08	1065	1.18	1121	1.28	1172	1.38
2200	778	0.73	838	0.84	900	0.95	962	1.05	1024	1.15	1083	1.25	1139	1.35	1191	1.45
2300	797	0.81	857	0.92	919	1.03	981	1.13	1043	1.23	1103	1.33	1159	1.43	1210	1.53
2400	817	0.90	877	1.01	939	1.12	1002	1.22	1063	1.32	1123	1.42	1179	1.52	1230	1.62
2500	838	1.00	898	1.11	960	1.22	1022	1.32	1084	1.42	1144	1.52	1200	1.62	1251	1.72
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.

ZH078 (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
	Field Supplied Drive						Standard 1.5 HP & Drive						Hi Static 2 HP & Drive							
1800	751	0.22	813	0.43	872	0.62	929	0.78	985	0.93	1040	1.07	1095	1.20	1150	1.33	1206	1.46	1265	1.59
2000	776	0.35	838	0.56	897	0.75	954	0.92	1010	1.07	1064	1.20	1119	1.33	1175	1.46	1231	1.59	1289	1.72
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	-	-
3000	945	1.25	1007	1.46	1066	1.65	1123	1.81	1179	1.96	1234	2.10	1288	2.23	-	-	-	-	-	-
3200	987	1.48	1048	1.69	1107	1.88	1165	2.04	1220	2.19	-	-	-	-	-	-	-	-	-	-
3400	1030	1.73	1092	1.94	1151	2.12	1208	2.29	-	-	-	-	-	-	-	-	-	-	-	-
	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.

ZH090 (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	776	0.35	838	0.56	897	0.75	954	0.92	1010	1.07	1064	1.20	1119	1.33	1175	1.46	1231	1.59	1289	1.72
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	1419	2.40
3000	945	1.25	1007	1.46	1066	1.65	1123	1.81	1179	1.96	1234	2.10	1288	2.23	1344	2.36	1400	2.48	1458	2.62
3200	987	1.48	1048	1.69	1107	1.88	1165	2.04	1220	2.19	1275	2.33	1330	2.46	1385	2.59	1442	2.71	1500	2.85
3400	1030	1.73	1092	1.94	1151	2.12	1208	2.29	1264	2.44	1319	2.58	1374	2.71	1429	2.84	1485	2.96	1544	3.10
3600	1076	1.99	1138	2.20	1197	2.39	1254	2.56	1310	2.71	1364	2.84	1419	2.97	1475	3.10	1531	3.23	1589	3.36
3800	1124	2.27	1185	2.48	1245	2.67	1302	2.84	1357	2.99	1412	3.12	1467	3.25	1522	3.38	-	-	-	-
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.

ZH102 (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											
2600	628	0.56	678	0.76	730	0.93	781	1.09	833	1.25	883	1.41	933	1.59	980	1.80	1025	2.05	1068	2.35		
2800	648	0.67	698	0.87	750	1.04	801	1.20	853	1.36	903	1.52	953	1.70	1000	1.91	1046	2.16	1088	2.46		
3000	666	0.80	717	1.00	768	1.17	820	1.33	871	1.49	922	1.65	971	1.83	1019	2.04	1064	2.29	1106	2.59		
3200	684	0.95	735	1.15	786	1.32	838	1.48	889	1.63	940	1.80	989	1.98	1037	2.19	1082	2.44	1124	2.74		
3400	702	1.11	753	1.31	804	1.48	856	1.64	907	1.79	958	1.96	1007	2.14	1055	2.35	1100	2.60	1142	2.90		
3600	721	1.28	772	1.48	824	1.65	875	1.81	927	1.97	977	2.13	1027	2.31	1074	2.52	1119	2.77	-	-		
3800	742	1.47	793	1.67	844	1.84	896	2.00	947	2.15	998	2.32	1047	2.50	1095	2.71	1140	2.96	-	-		
4000	765	1.67	815	1.86	867	2.04	918	2.19	970	2.35	1020	2.51	1070	2.70	1117	2.91	-	-	-	-		
4200	789	1.87	840	2.07	891	2.24	943	2.40	995	2.56	1045	2.72	1094	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.

ZH120 (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	
	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
2800	686	0.63	738	0.84	787	1.04	835	1.23	881	1.41	925	1.58
3000	699	0.75	750	0.96	800	1.16	847	1.34	893	1.52	938	1.70
3200	713	0.88	764	1.09	814	1.28	861	1.47	907	1.65	952	1.83
3400	728	1.02	779	1.23	829	1.43	877	1.61	923	1.79	967	1.97
3600	745	1.18	796	1.39	846	1.59	893	1.77	939	1.95	984	2.13
3800	763	1.36	815	1.57	864	1.76	912	1.95	958	2.13	1002	2.31
4000	783	1.55	835	1.76	884	1.96	932	2.15	978	2.33	1022	2.50
4200	805	1.77	856	1.98	906	2.17	953	2.36	999	2.54	1044	2.72
4400	828	2.00	879	2.21	929	2.41	976	2.59	1022	2.77	1067	2.95
4600	852	2.25	904	2.46	953	2.66	1001	2.85	1047	3.03	1092	3.20
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.

ZH150 (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	
	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	713	0.88	764	1.09	814	1.28	861	1.47	907	1.65	952	1.83
3400	728	1.02	779	1.23	829	1.43	877	1.61	923	1.79	967	1.97
3600	745	1.18	796	1.39	846	1.59	893	1.77	939	1.95	984	2.13
3800	763	1.36	815	1.57	864	1.76	912	1.95	958	2.13	1002	2.31
4000	783	1.55	835	1.76	884	1.96	932	2.15	978	2.33	1022	2.50
4200	805	1.77	856	1.98	906	2.17	953	2.36	999	2.54	1044	2.72
4400	828	2.00	879	2.21	929	2.41	976	2.59	1022	2.77	1067	2.95
4600	852	2.25	904	2.46	953	2.66	1001	2.85	1047	3.03	1092	3.20
4800	879	2.52	930	2.73	980	2.93	1027	3.12	1073	3.30	1118	3.47
5000	906	2.81	958	3.02	1007	3.22	1055	3.41	1101	3.59	1146	3.76
5200	936	3.12	987	3.33	1037	3.53	1084	3.72	1130	3.90	1175	4.07
5400	966	3.45	1018	3.66	1067	3.86	1115	4.05	1161	4.23	1206	4.40
5600	999	3.80	1050	4.01	1100	4.20	1147	4.39	1193	4.57	1238	4.75
5800	1032	4.16	1084	4.37	1133	4.57	1181	4.75	1227	4.93	1271	5.11
6000	1067	4.54	1119	4.75	1168	4.95	1216	5.13	1262	5.31	1306	5.49
6200	1103	4.94	1155	5.15	1204	5.34	1252	5.53	1298	5.71	-	-
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.

ZH037-150 Bottom Duct Application**ZH037 (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	
	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
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
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
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
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
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
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
	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.

ZH049 (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	
	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	651	0.30	717	0.39	784	0.49	850	0.58	915	0.68	979	0.77	1041	0.87	1100	0.96
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
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
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
1600	714	0.47	780	0.57	846	0.66	913	0.76	978	0.86	1042	0.95	1103	1.04	1163	1.14
1700	732	0.53	798	0.63	864	0.73	930	0.82	996	0.92	1059	1.01	1121	1.10	1181	1.20
1800	751	0.60	817	0.70	883	0.79	950	0.89	1015	0.98	1079	1.08	1140	1.17	1200	1.26
1900	771	0.68	837	0.77	904	0.87	970	0.96	1035	1.06	1099	1.15	1161	1.25	1220	1.34
2000	793	0.75	859	0.85	925	0.95	991	1.04	1056	1.14	1120	1.23	1182	1.32	1242	1.42

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.

ZH061 (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	
	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
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
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
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
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
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
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
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
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
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
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
	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.

ZH078 (6.5 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	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Supplied Drive				Standard 1.5 HP & Drive				Hi Static 2 HP & Drive					
1800	775	0.31	850	0.53	924	0.72	998	0.89	1072	1.05	1147	1.20	1224	1.35
2000	803	0.45	878	0.67	952	0.86	1026	1.03	1100	1.19	1175	1.34	1252	1.49
2200	838	0.60	913	0.82	986	1.01	1060	1.19	1134	1.34	1210	1.49	1286	1.65
2400	878	0.78	953	1.00	1027	1.19	1100	1.36	1174	1.52	1250	1.67	1327	1.82
2600	923	0.98	997	1.20	1071	1.39	1145	1.56	1219	1.72	1294	1.87	1371	2.02
2800	971	1.20	1046	1.42	1119	1.61	1193	1.78	1267	1.94	1343	2.09	1419	2.24
3000	1023	1.44	1097	1.66	1171	1.85	1245	2.03	1319	2.18	-	-	-	-
3200	1077	1.71	1151	1.93	1225	2.12	1299	2.29	-	-	-	-	-	-
3400	1133	1.99	1208	2.21	-	-	-	-	-	-	-	-	-	-

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.

ZH090 (7.5 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	
	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	803	0.45	878	0.67	952	0.86	1026	1.03	1100	1.19	1175	1.34	1252	1.49
2200	838	0.60	913	0.82	986	1.01	1060	1.19	1134	1.34	1210	1.49	1286	1.65
2400	878	0.78	953	1.00	1027	1.19	1100	1.36	1174	1.52	1250	1.67	1327	1.82
2600	923	0.98	997	1.20	1071	1.39	1145	1.56	1219	1.72	1294	1.87	1371	2.02
2800	971	1.20	1046	1.42	1119	1.61	1193	1.78	1267	1.94	1343	2.09	1419	2.24
3000	1023	1.44	1097	1.66	1171	1.85	1245	2.03	1319	2.18	1394	2.33	1471	2.49
3200	1077	1.71	1151	1.93	1225	2.12	1299	2.29	1373	2.45	1448	2.60	1525	2.75
3400	1133	1.99	1208	2.21	1282	2.41	1356	2.58	1430	2.73	1505	2.88	1582	3.04
3600	1192	2.30	1267	2.52	1341	2.71	1414	2.88	1489	3.04	1564	3.19	1641	3.34
3800	1253	2.63	1327	2.85	1401	3.04	1475	3.21	1549	3.37	-	-	-	-

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.

ZH102 (8.5 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	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	FS ⁴				Standard 2 HP & Drive				Hi Static 3 HP & Drive					
2600	674	0.71	731	0.88	786	1.05	838	1.24	887	1.42	933	1.59	974	1.74
2800	689	0.86	746	1.02	801	1.20	854	1.38	903	1.56	948	1.73	989	1.88
3000	707	1.01	764	1.17	819	1.35	872	1.53	921	1.71	966	1.88	1007	2.03
3200	728	1.17	785	1.33	840	1.51	892	1.69	941	1.87	987	2.04	1028	2.20
3400	751	1.34	808	1.51	863	1.68	915	1.87	964	2.05	1010	2.22	1051	2.37
3600	776	1.53	833	1.70	888	1.87	941	2.06	990	2.24	1035	2.41	1076	2.56
3800	804	1.74	861	1.90	916	2.08	969	2.26	1018	2.44	1063	2.61	1104	2.77
4000	835	1.97	892	2.13	947	2.31	999	2.49	1048	2.67	1094	2.84	1135	2.99
4200	867	2.21	924	2.37	979	2.55	1032	2.73	1081	2.91	1127	3.08	-	-

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.

ZH120 (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																				

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.

ZH150 (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																			

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 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
900	Standard 1.5 HP & Drive						Hi Static 1.5 HP & Drive							
	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
1200	Standard 1.5 HP & Drive						Hi Static 1.5 HP & Drive							
	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
1500	1.5 HP & Field Supplied Drive						Standard 1.5 HP & Drive					Hi Static 2 HP & Drive		
	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							

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
	FS ⁴				Standard 1.5 HP & Drive								Hi Static 3 HP & Drive							
2000	-	-	656	0.24	711	0.48	768	0.73	826	0.96	886	1.19	945	1.41	1003	1.61	1058	1.79	1110	1.95
2200	619	0.07	670	0.32	724	0.57	781	0.81	840	1.04	899	1.27	959	1.49	1016	1.69	1072	1.87	1124	2.04
2400	631	0.16	682	0.41	736	0.66	793	0.90	852	1.14	911	1.36	970	1.58	1028	1.78	1084	1.97	1136	2.13
2600	642	0.27	692	0.52	747	0.76	804	1.01	862	1.24	922	1.47	981	1.69	1039	1.89	1094	2.07	1146	2.24
2800	652	0.39	703	0.64	757	0.88	814	1.13	873	1.36	932	1.59	992	1.81	1049	2.01	1105	2.19	1157	2.36
3000	663	0.53	714	0.77	768	1.02	825	1.26	884	1.50	943	1.73	1003	1.94	1060	2.14	1116	2.33	1168	2.49
3200	675	0.68	726	0.92	780	1.17	837	1.41	896	1.65	955	1.88	1014	2.09	1072	2.29	1128	2.48	1180	2.64
3400	688	0.84	739	1.09	793	1.34	850	1.58	909	1.82	968	2.04	1027	2.26	1085	2.46	1141	2.65	1193	2.81
3600	703	1.03	753	1.28	807	1.52	864	1.76	923	2.00	983	2.23	1042	2.44	1100	2.64	1155	2.83	-	-
3800	718	1.23	769	1.47	823	1.72	880	1.96	939	2.20	998	2.43	1058	2.64	1115	2.84	1171	3.03	-	-

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.

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	654	0.32	706	0.53	755	0.73	803	0.92	849	1.10	893	1.27	937	1.44	979	1.62	1020	1.79	1061	1.96
2400	664	0.43	716	0.64	765	0.83	813	1.02	859	1.20	904	1.38	947	1.55	989	1.72	1030	1.89	1071	2.07
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
													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) Side Duct

Air Flow (CFM)	Available External Static Pressure - IWG ¹											
	0.2		0.4		0.6		0.8		1.0		1.2	
	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
2800	686	0.63	738	0.84	787	1.04	835	1.23	881	1.41	925	1.58
3000	699	0.75	750	0.96	800	1.16	847	1.34	893	1.52	938	1.70
3200	713	0.88	764	1.09	814	1.28	861	1.47	907	1.65	952	1.83
3400	728	1.02	779	1.23	829	1.43	877	1.61	923	1.79	967	1.97
3600	745	1.18	796	1.39	846	1.59	893	1.77	939	1.95	984	2.13
3800	763	1.36	815	1.57	864	1.76	912	1.95	958	2.13	1002	2.31
4000	783	1.55	835	1.76	884	1.96	932	2.15	978	2.33	1022	2.50
4200	805	1.77	856	1.98	906	2.17	953	2.36	999	2.54	1044	2.72
4400	828	2.00	879	2.21	929	2.41	976	2.59	1022	2.77	1067	2.95
4600	852	2.25	904	2.46	953	2.66	1001	2.85	1047	3.03	1092	3.20
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	
	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	713	0.88	764	1.09	814	1.28	861	1.47	907	1.65	952	1.83
3400	728	1.02	779	1.23	829	1.43	877	1.61	923	1.79	967	1.97
3600	745	1.18	796	1.39	846	1.59	893	1.77	939	1.95	984	2.13
3800	763	1.36	815	1.57	864	1.76	912	1.95	958	2.13	1002	2.31
4000	783	1.55	835	1.76	884	1.96	932	2.15	978	2.33	1022	2.50
4200	805	1.77	856	1.98	906	2.17	953	2.36	999	2.54	1044	2.72
4400	828	2.00	879	2.21	929	2.41	976	2.59	1022	2.77	1067	2.95
4600	852	2.25	904	2.46	953	2.66	1001	2.85	1047	3.03	1092	3.20
4800	879	2.52	930	2.73	980	2.93	1027	3.12	1073	3.30	1118	3.47
5000	906	2.81	958	3.02	1007	3.22	1055	3.41	1101	3.59	1146	3.76
5200	936	3.12	987	3.33	1037	3.53	1084	3.72	1130	3.90	1175	4.07
5400	966	3.45	1018	3.66	1067	3.86	1115	4.05	1161	4.23	1206	4.40
5600	999	3.80	1050	4.01	1100	4.20	1147	4.39	1193	4.57	1238	4.75
5800	1032	4.16	1084	4.37	1133	4.57	1181	4.75	1227	4.93	1271	5.11
6000	1067	4.54	1119	4.75	1168	4.95	1216	5.13	1262	5.31	1306	5.49
6200	1103	4.94	1155	5.15	1204	5.34	1252	5.53	1298	5.71	-	-

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.

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. $\text{kW} = \text{BHP} \times 0.932$.
4. Field Supplied Drive.

ZJ090 (7.5 Ton) Bottom Duct

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. $kW = BHP \times 0.932$.
4. Field Supplied Drive.

ZJ102 (8.5 Ton) Bottom Duct

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. $kW = BHP \times 0.932$.
4. Field Supplied Drive.

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	
	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
2800	744	0.97	798	1.12	850	1.26	900	1.39	949	1.52	995	1.64	1041	1.76
3000	769	1.13	823	1.28	875	1.42	925	1.55	974	1.68	1020	1.80	1066	1.92
3200	797	1.32	851	1.46	903	1.60	953	1.74	1001	1.86	1048	1.99	1093	2.11
3400	828	1.52	882	1.67	934	1.81	983	1.94	1032	2.07	1078	2.19	1124	2.32
3600	861	1.75	915	1.90	967	2.04	1017	2.17	1065	2.30	1112	2.42	1157	2.54
3800	897	2.00	951	2.15	1002	2.29	1052	2.42	1101	2.55	1147	2.67	1193	2.80
4000	935	2.27	989	2.42	1041	2.56	1091	2.69	1139	2.82	1186	2.95	1231	3.07
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														

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	
	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
3400	828	1.52	882	1.67	934	1.81	983	1.94	1032	2.07	1078	2.19	1124	2.32
3600	861	1.75	915	1.90	967	2.04	1017	2.17	1065	2.30	1112	2.42	1157	2.54
3800	897	2.00	951	2.15	1002	2.29	1052	2.42	1101	2.55	1147	2.67	1193	2.80
4000	935	2.27	989	2.42	1041	2.56	1091	2.69	1139	2.82	1186	2.95	1231	3.07
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	1270	3.55	1315	3.67
4600	1065	3.22	1119	3.36	1171	3.50	1221	3.64	1269	3.76	1316	3.89	1361	4.01
4800	1113	3.57	1167	3.72	1219	3.86	1269	3.99	1317	4.12	1364	4.24	1409	4.36
5000	1163	3.94	1217	4.09	1269	4.23	1319	4.36	1367	4.49	1414	4.62	1459	4.74
5200	1216	4.34	1270	4.48	1321	4.62	1371	4.76	1420	4.88	1466	5.01	1512	5.13
5400	1270	4.75	1324	4.89	1376	5.03	1426	5.17	1474	5.29	1521	5.42	1566	5.54
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														

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.

ZR037-150 Side Duct Application**ZR037 (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		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							
900	480	0.4	582	0.4	673	0.5	756	0.5	830	0.6	898	0.7	960	0.8	1018	0.9	1072	1.0	1124	1.1
1000	489	0.4	591	0.4	682	0.5	764	0.6	839	0.6	907	0.7	969	0.8	1026	0.9	1080	1.0	1132	1.1
1100	500	0.4	602	0.4	693	0.5	776	0.6	850	0.6	918	0.7	980	0.8	1038	0.9	1092	1.0	1144	1.1
1200	513	0.4	614	0.5	706	0.5	788	0.6	863	0.7	931	0.8	993	0.8	1050	0.9	1104	1.0	1156	1.1
1300	525	0.4	627	0.5	719	0.6	801	0.6	876	0.7	943	0.8	1005	0.9	1063	1.0	1117	1.1	1169	1.2
1400	537	0.5	639	0.5	731	0.6	813	0.7	888	0.7	955	0.8	1017	0.9	1075	1.0	1129	1.1	1181	1.2
1500	549	0.5	650	0.6	742	0.6	824	0.7	899	0.8	966	0.9	1028	0.9	1086	1.0	1140	1.1	1192	1.2

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.

ZR049 (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		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 1.5 HP & Drive									
1200	513	0.4	614	0.5	706	0.5	788	0.6	863	0.7	931	0.8	993	0.8	1050	0.9	1104	1.0	1156	1.1
1300	525	0.4	627	0.5	719	0.6	801	0.6	876	0.7	943	0.8	1005	0.9	1063	1.0	1117	1.1	1169	1.2
1400	537	0.5	639	0.5	731	0.6	813	0.7	888	0.7	955	0.8	1017	0.9	1075	1.0	1129	1.1	1181	1.2
1500	549	0.5	650	0.6	742	0.6	824	0.7	899	0.8	966	0.9	1028	0.9	1086	1.0	1140	1.1	1192	1.2
1600	558	0.6	660	0.6	752	0.7	834	0.8	909	0.8	976	0.9	1038	1.0	1096	1.1	1150	1.2	1202	1.3
1700	566	0.6	668	0.7	760	0.7	842	0.8	917	0.9	984	1.0	1046	1.1	1104	1.1	1158	1.2	1210	1.4
1800	573	0.7	675	0.7	766	0.8	849	0.9	923	1.0	991	1.0	1053	1.1	1110	1.2	1164	1.3	1216	1.4
1900	577	0.8	679	0.8	771	0.9	853	1.0	928	1.0	995	1.1	1057	1.2	1115	1.3	1169	1.4	1221	1.5
2000	580	0.8	682	0.9	773	1.0	856	1.0	930	1.1	998	1.2	1060	1.3	1117	1.4	1172	1.5	1224	1.6
	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.

ZR061 (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		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 2 HP & Drive											
1500	616	0.5	685	0.6	766	0.7	833	0.8	905	0.9	975	1.0	1035	1.0	1101	1.1	1163	1.2	1229	1.3
1600	638	0.6	707	0.7	781	0.7	848	0.8	920	0.9	990	1.0	1050	1.1	1104	1.1	1166	1.2	1232	1.3
1700	655	0.6	724	0.7	796	0.8	863	0.9	935	1.0	1005	1.1	1064	1.1	1109	1.2	1172	1.3	1238	1.4
1800	670	0.7	739	0.8	810	0.8	877	0.9	949	1.0	1018	1.1	1078	1.2	1117	1.2	1179	1.3	1245	1.5
1900	686	0.7	755	0.8	823	0.9	890	1.0	962	1.1	1032	1.2	1091	1.2	1125	1.3	1187	1.4	1253	1.5
2000	702	0.8	772	0.9	836	1.0	903	1.1	975	1.2	1045	1.3	1078	1.3	1135	1.4	1197	1.5	1263	1.6
2100	722	0.9	791	1.0	849	1.0	916	1.1	988	1.2	1058	1.3	1089	1.4	1147	1.5	1209	1.6	1275	1.7
2200	745	0.9	814	1.0	861	1.1	928	1.2	1000	1.3	1050	1.4	1102	1.5	1159	1.6	1221	1.7	1287	1.8
2300	772	1.0	841	1.1	874	1.2	941	1.3	1013	1.4	1064	1.5	1115	1.6	1173	1.7	1235	1.8	-	-
2400	804	1.1	832	1.2	886	1.3	953	1.4	1033	1.4	1078	1.6	1130	1.7	1188	1.8	-	-	-	-
2500	841	1.2	844	1.3	898	1.4	965	1.5	1049	1.5	1094	1.7	-	-	-	-	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.

ZR078-150 Side Duct Application**ZR078 (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
	1.5 HP & Field Supplied Drive						Standard 1.5 HP & Drive						Hi Static 2 HP & Drive							
1800	778	0.37	838	0.56	895	0.73	951	0.88	1005	1.01	1059	1.13	1112	1.25	1166	1.36	1221	1.47	1278	1.59
2000	803	0.50	864	0.69	921	0.85	977	1.00	1031	1.14	1085	1.26	1138	1.37	1192	1.49	1247	1.60	1304	1.72
2200	833	0.64	893	0.83	951	1.00	1006	1.14	1061	1.28	1114	1.40	1168	1.51	1221	1.63	1276	1.74	1333	1.86
2400	866	0.80	926	0.99	984	1.15	1039	1.30	1094	1.43	1147	1.56	1201	1.67	1254	1.78	1309	1.90	1366	2.02
2600	902	0.97	962	1.16	1020	1.33	1076	1.47	1130	1.61	1183	1.73	1237	1.85	1291	1.96	1346	2.07	1402	2.19
2800	941	1.16	1002	1.35	1059	1.52	1115	1.67	1169	1.80	1222	1.92	1276	2.04	1330	2.15	1385	2.26	-	-
3000	983	1.37	1043	1.56	1101	1.73	1157	1.88	1211	2.01	1264	2.13	1318	2.25	-	-	-	-	-	-
3200	1028	1.60	1088	1.79	1145	1.95	1201	2.10	1255	2.24	-	-	-	-	-	-	-	-	-	-
3400	1074	1.84	1134	2.03	1192	2.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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.

ZR090 (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		
	1.5 HP & Field Supplied Drive				Standard 1.5 HP & Drive								Hi Static 3 HP & Drive									
2000	803	0.50	864	0.69	921	0.85	977	1.00	1031	1.14	1085	1.26	1138	1.37	1192	1.49	1247	1.60	1304	1.72		
2200	833	0.64	893	0.83	951	1.00	1006	1.14	1061	1.28	1114	1.40	1168	1.51	1221	1.63	1276	1.74	1333	1.86		
2400	866	0.80	926	0.99	984	1.15	1039	1.30	1094	1.43	1147	1.56	1201	1.67	1254	1.78	1309	1.90	1366	2.02		
2600	902	0.97	962	1.16	1020	1.33	1076	1.47	1130	1.61	1183	1.73	1237	1.85	1291	1.96	1346	2.07	1402	2.19		
2800	941	1.16	1002	1.35	1059	1.52	1115	1.67	1169	1.80	1222	1.92	1276	2.04	1330	2.15	1385	2.26	1442	2.38		
3000	983	1.37	1043	1.56	1101	1.73	1157	1.88	1211	2.01	1264	2.13	1318	2.25	1372	2.36	1427	2.47	1483	2.59		
3200	1028	1.60	1088	1.79	1145	1.95	1201	2.10	1255	2.24	1309	2.36	1362	2.47	1416	2.59	1471	2.70	1528	2.82		
3400	1074	1.84	1134	2.03	1192	2.20	1248	2.35	1302	2.48	1355	2.60	1409	2.72	1463	2.83	1518	2.94	1574	3.06		
3600	1123	2.10	1183	2.29	1241	2.46	1297	2.61	1351	2.74	1404	2.86	1458	2.98	1512	3.09	1567	3.21	1623	3.32		
3800	1174	2.38	1234	2.57	1292	2.74	1348	2.88	1402	3.02	1455	3.14	1509	3.26	1562	3.37	-	-	-	-		
	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.

ZR102 (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
	2 HP & Field Supplied Drive		Standard 2 HP & Drive										Hi Static 3 HP & Drive							
2200	684	0.48	735	0.67	783	0.84	829	1.01	874	1.17	918	1.32	960	1.48	1001	1.63	1041	1.78	1081	1.94
2400	695	0.58	745	0.76	793	0.94	840	1.11	885	1.27	928	1.42	970	1.57	1011	1.73	1052	1.88	1091	2.04
2600	706	0.67	756	0.86	805	1.04	851	1.20	896	1.36	939	1.52	981	1.67	1023	1.82	1063	1.98	1103	2.13
2800	719	0.78	769	0.96	817	1.14	863	1.31	908	1.47	952	1.62	994	1.78	1035	1.93	1075	2.08	1115	2.24
3000	732	0.89	782	1.08	831	1.25	877	1.42	922	1.58	965	1.74	1007	1.89	1049	2.04	1089	2.19	1128	2.35
3200	747	1.02	797	1.21	846	1.38	892	1.55	937	1.71	980	1.86	1023	2.02	1064	2.17	1104	2.32	1144	2.48
3400	764	1.16	814	1.35	862	1.53	909	1.69	954	1.85	997	2.01	1039	2.16	1080	2.31	1121	2.47	1160	2.62
3600	783	1.33	833	1.51	881	1.69	927	1.86	972	2.02	1016	2.17	1058	2.32	1099	2.48	1139	2.63	1179	2.79
3800	803	1.51	853	1.69	901	1.87	948	2.04	992	2.20	1036	2.35	1078	2.50	1119	2.66	1159	2.81	1199	2.97
4000	825	1.71	875	1.89	923	2.07	970	2.23	1014	2.39	1058	2.55	1100	2.70	1141	2.86	1181	3.01	1221	3.16
4200	849	1.92	899	2.11	947	2.29	993	2.45	1038	2.61	1082	2.77	1124	2.92	1165	3.07	1205	3.23	1245	3.38
	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.

ZR120 (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	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	2 HP & Field Supplied Drive				Standard 2 HP & Drive				Hi Static 3 HP & Drive			
2600	706	0.67	756	0.86	805	1.04	851	1.20	896	1.36	939	1.52
2800	719	0.78	769	0.96	817	1.14	863	1.31	908	1.47	952	1.62
3000	732	0.89	782	1.08	831	1.25	877	1.42	922	1.58	965	1.74
3200	747	1.02	797	1.21	846	1.38	892	1.55	937	1.71	980	1.86
3400	764	1.16	814	1.35	862	1.53	909	1.69	954	1.85	997	2.01
3600	783	1.33	833	1.51	881	1.69	927	1.86	972	2.02	1016	2.17
3800	803	1.51	853	1.69	901	1.87	948	2.04	992	2.20	1036	2.35
4000	825	1.71	875	1.89	923	2.07	970	2.23	1014	2.39	1058	2.55
4200	849	1.92	899	2.11	947	2.29	993	2.45	1038	2.61	1082	2.77
4400	874	2.16	924	2.35	972	2.52	1019	2.69	1064	2.85	1107	3.01
4600	901	2.42	952	2.61	1000	2.78	1046	2.95	1091	3.11	1134	3.26
4800	930	2.70	981	2.88	1029	3.06	1075	3.23	1120	3.39	-	-
5000	961	2.99	1011	3.18	1059	3.35	-	-	-	-	-	-

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.

ZR150 (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	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	3 HP & Field Supplied Drive				Standard 3 HP & Drive				Hi Static 5 HP & Drive			
3200	747	1.02	797	1.21	846	1.38	892	1.55	937	1.71	980	1.86
3400	764	1.16	814	1.35	862	1.53	909	1.69	954	1.85	997	2.01
3600	783	1.33	833	1.51	881	1.69	927	1.86	972	2.02	1016	2.17
3800	803	1.51	853	1.69	901	1.87	948	2.04	992	2.20	1036	2.35
4000	825	1.71	875	1.89	923	2.07	970	2.23	1014	2.39	1058	2.55
4200	849	1.92	899	2.11	947	2.29	993	2.45	1038	2.61	1082	2.77
4400	874	2.16	924	2.35	972	2.52	1019	2.69	1064	2.85	1107	3.01
4600	901	2.42	952	2.61	1000	2.78	1046	2.95	1091	3.11	1134	3.26
4800	930	2.70	981	2.88	1029	3.06	1075	3.23	1120	3.39	1163	3.54
5000	961	2.99	1011	3.18	1059	3.35	1106	3.52	1151	3.68	1194	3.84
5200	993	3.31	1043	3.49	1092	3.67	1138	3.84	1183	4.00	1226	4.15
5400	1027	3.64	1077	3.83	1126	4.00	1172	4.17	1217	4.33	1260	4.48
5600	1063	3.99	1113	4.18	1161	4.35	1207	4.52	1252	4.68	1296	4.84
5800	1100	4.36	1150	4.55	1198	4.72	1244	4.89	1289	5.05	1333	5.20
6000	1138	4.75	1188	4.93	1237	5.11	1283	5.28	1328	5.44	1371	5.59
6200	1178	5.15	1228	5.34	1277	5.51	1323	5.68	-	-	-	-

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.

ZR037-150 Bottom Duct Application**ZR037 (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
	FS ⁴		Standard 1.5 HP & Drive								Hi Static 1.5 HP & Drive									
900	544	0.4	632	0.5	708	0.5	774	0.6	834	0.7	889	0.8	941	0.9	993	1.0	1047	1.1	1104	1.2
1000	549	0.4	637	0.5	713	0.5	779	0.6	839	0.7	894	0.8	946	0.9	998	1.0	1052	1.1	1109	1.2
1100	562	0.4	649	0.5	725	0.6	792	0.6	852	0.7	906	0.8	959	0.9	1010	1.0	1064	1.1	1121	1.2
1200	579	0.5	666	0.5	742	0.6	809	0.6	868	0.7	923	0.8	975	0.9	1027	1.0	1081	1.1	1138	1.2
1300	598	0.5	685	0.5	761	0.6	828	0.7	887	0.8	942	0.8	994	0.9	1046	1.0	1100	1.2	1157	1.3
1400	617	0.5	705	0.6	781	0.6	847	0.7	907	0.8	962	0.9	1014	1.0	1066	1.1	1119	1.2	1177	1.3
1500	637	0.6	724	0.6	800	0.7	867	0.8	927	0.8	981	0.9	1034	1.0	1085	1.1	1139	1.2	1196	1.4
	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.

ZR049 (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
	Standard 1.5 HP & Drive									Hi Static 1.5 HP & Drive										
1200	579	0.5	666	0.5	742	0.6	809	0.6	868	0.7	923	0.8	975	0.9	1027	1.0	1081	1.1	1138	1.2
1300	598	0.5	685	0.5	761	0.6	828	0.7	887	0.8	942	0.8	994	0.9	1046	1.0	1100	1.2	1157	1.3
1400	617	0.5	705	0.6	781	0.6	847	0.7	907	0.8	962	0.9	1014	1.0	1066	1.1	1119	1.2	1177	1.3
1500	637	0.6	724	0.6	800	0.7	867	0.8	927	0.8	981	0.9	1034	1.0	1085	1.1	1139	1.2	1196	1.4
1600	655	0.6	743	0.7	819	0.7	885	0.8	945	0.9	1000	1.0	1052	1.1	1104	1.2	1158	1.3	1215	1.4
1700	672	0.7	760	0.7	836	0.8	902	0.9	962	1.0	1017	1.0	1069	1.1	1121	1.2	1175	1.3	1232	1.5
1800	687	0.7	775	0.8	851	0.9	918	0.9	977	1.0	1032	1.1	1084	1.2	1136	1.3	1190	1.4	1247	1.5
1900	700	0.8	788	0.9	864	0.9	930	1.0	990	1.1	1045	1.2	1097	1.3	1149	1.4	1202	1.5	1260	1.6
2000	711	0.9	798	0.9	874	1.0	941	1.1	1000	1.2	1055	1.2	1107	1.3	1159	1.4	1213	1.6	1270	1.7
	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.

ZR061 (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
	Standard 1.5 HP & Drive						Hi Static 2 HP & Drive													
1500	613	0.5	684	0.6	759	0.7	831	0.7	928	0.8	984	0.9	1042	1.0	1093	1.1	1149	1.2	1201	1.3
1600	629	0.6	700	0.6	775	0.7	847	0.8	929	0.8	985	0.9	1043	1.0	1098	1.1	1154	1.2	1206	1.3
1700	646	0.6	717	0.7	793	0.8	864	0.8	934	0.9	990	1.0	1048	1.1	1106	1.2	1161	1.3	1214	1.4
1800	666	0.7	737	0.7	812	0.8	884	0.9	943	1.0	999	1.1	1057	1.2	1116	1.3	1172	1.4	1224	1.5
1900	687	0.7	758	0.8	833	0.9	905	0.9	954	1.0	1010	1.1	1068	1.2	1128	1.3	1184	1.4	1236	1.5
2000	710	0.8	781	0.9	856	0.9	927	1.0	968	1.1	1024	1.2	1082	1.3	1142	1.4	1198	1.5	1250	1.6
2100	733	0.8	804	0.9	879	1.0	951	1.1	983	1.2	1039	1.3	1097	1.4	1157	1.5	1213	1.6	1265	1.7
2200	758	0.9	828	1.0	904	1.1	947	1.2	1000	1.3	1056	1.4	1116	1.5	1174	1.6	1229	1.7	1281	1.8
2300	783	1.0	854	1.1	929	1.1	964	1.3	1018	1.4	1075	1.5	1133	1.6	1191	1.7	1246	1.8	-	-
2400	809	1.1	879	1.2	932	1.3	983	1.4	1037	1.5	1094	1.6	1152	1.7	1209	1.8	-	-	-	-
2500	835	1.1	906	1.2	951	1.4	1001	1.5	1055	1.6	1112	1.7	1170	1.8	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.

ZR078-150 Bottom Duct Application**ZR078 (6.5 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
	1.5 HP & Field Supplied Drive				Standard 1.5 HP & Drive						Hi Static 2 HP & Drive									
1800	801	0.45	874	0.65	946	0.82	1018	0.97	1090	1.11	1163	1.25	1238	1.38	1315	1.52	1395	1.68	1477	1.86
2000	831	0.59	903	0.78	975	0.95	1047	1.10	1119	1.24	1193	1.38	1267	1.51	1344	1.66	1424	1.81	1507	1.99
2200	867	0.74	940	0.93	1012	1.10	1084	1.25	1156	1.39	1229	1.53	1304	1.66	1381	1.81	1461	1.96	1543	2.14
2400	910	0.91	983	1.10	1055	1.27	1126	1.43	1199	1.57	1272	1.70	1347	1.84	1424	1.98	1503	2.14	-	-
2600	957	1.10	1030	1.30	1102	1.47	1174	1.62	1246	1.76	1320	1.89	1394	2.03	1471	2.17	-	-	-	-
2800	1009	1.32	1082	1.51	1154	1.69	1225	1.84	1298	1.98	1371	2.11	1446	2.25	-	-	-	-	-	-
3000	1064	1.56	1137	1.75	1208	1.92	1280	2.08	1353	2.22	-	-	-	-	-	-	-	-	-	-
3200	1122	1.82	1194	2.02	1266	2.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3400	1182	2.10	1254	2.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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.

ZR090 (7.5 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		
	1.5 HP & Field Supplied Drive		Standard 1.5 HP & Drive								Hi Static 3 HP & Drive											
2000	831	0.59	903	0.78	975	0.95	1047	1.10	1119	1.24	1193	1.38	1267	1.51	1344	1.66	1424	1.81	1507	1.99		
2200	867	0.74	940	0.93	1012	1.10	1084	1.25	1156	1.39	1229	1.53	1304	1.66	1381	1.81	1461	1.96	1543	2.14		
2400	910	0.91	983	1.10	1055	1.27	1126	1.43	1199	1.57	1272	1.70	1347	1.84	1424	1.98	1503	2.14	1586	2.31		
2600	957	1.10	1030	1.30	1102	1.47	1174	1.62	1246	1.76	1320	1.89	1394	2.03	1471	2.17	1551	2.33	1634	2.51		
2800	1009	1.32	1082	1.51	1154	1.69	1225	1.84	1298	1.98	1371	2.11	1446	2.25	1523	2.39	1602	2.55	1685	2.73		
3000	1064	1.56	1137	1.75	1208	1.92	1280	2.08	1353	2.22	1426	2.35	1501	2.49	1578	2.63	1657	2.79	1740	2.96		
3200	1122	1.82	1194	2.02	1266	2.19	1338	2.34	1410	2.48	1484	2.61	1559	2.75	1636	2.89	1715	3.05	1798	3.23		
3400	1182	2.10	1254	2.30	1326	2.47	1398	2.62	1471	2.76	1544	2.90	1619	3.03	1696	3.17	1775	3.33	-	-		
3600	1244	2.41	1317	2.60	1389	2.77	1461	2.93	1533	3.07	1606	3.20	1681	3.33	-	-	-	-	-	-		
3800	1308	2.73	1381	2.93	1453	3.10	1525	3.25	1597	3.39	-	-	-	-	-	-	-	-	-	-		
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.

ZR102 (8.5 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
	2 HP & Field Supplied Drive		Standard 2 HP & Drive								Hi Static 3 HP & Drive									
2200	715	0.72	768	0.85	818	0.98	867	1.09	914	1.21	960	1.32	1004	1.43	1047	1.53	1089	1.64	1131	1.75
2400	734	0.83	786	0.96	837	1.08	886	1.20	933	1.31	978	1.42	1022	1.53	1066	1.64	1108	1.75	1150	1.86
2600	755	0.95	808	1.08	858	1.20	907	1.32	954	1.44	1000	1.55	1044	1.65	1087	1.76	1129	1.87	1171	1.98
2800	779	1.09	832	1.22	882	1.35	931	1.46	978	1.58	1024	1.69	1068	1.80	1111	1.90	1153	2.01	1195	2.12
3000	806	1.25	859	1.38	910	1.51	958	1.63	1005	1.74	1051	1.85	1095	1.96	1138	2.07	1181	2.17	1222	2.28
3200	837	1.44	889	1.57	940	1.69	989	1.81	1036	1.93	1081	2.04	1125	2.14	1168	2.25	1211	2.36	1252	2.47
3400	870	1.65	922	1.78	973	1.90	1022	2.02	1069	2.13	1114	2.24	1158	2.35	1202	2.46	1244	2.57	1286	2.68
3600	906	1.88	959	2.01	1009	2.13	1058	2.25	1105	2.36	1150	2.47	1195	2.58	1238	2.69	1280	2.80	1322	2.91
3800	945	2.13	998	2.26	1048	2.38	1097	2.50	1144	2.61	1190	2.72	1234	2.83	1277	2.94	1319	3.05	1361	3.16
4000	987	2.40	1040	2.53	1090	2.66	1139	2.78	1186	2.89	1231	3.00	1276	3.11	1319	3.21	1361	3.32	1403	3.43
4200	1032	2.70	1084	2.83	1135	2.95	1184	3.07	1231	3.18	1276	3.29	1320	3.40	-	-	-	-	-	-
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.

ZR120 (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
	2 HP & Field Supplied Drive		Standard 2 HP & Drive								Hi Static 3 HP & Drive									
2600	755	0.95	808	1.08	858	1.20	907	1.32	954	1.44	1000	1.55	1044	1.65	1087	1.76	1129	1.87	1171	1.98
2800	779	1.09	832	1.22	882	1.35	931	1.46	978	1.58	1024	1.69	1068	1.80	1111	1.90	1153	2.01	1195	2.12
3000	806	1.25	859	1.38	910	1.51	958	1.63	1005	1.74	1051	1.85	1095	1.96	1138	2.07	1181	2.17	1222	2.28
3200	837	1.44	889	1.57	940	1.69	989	1.81	1036	1.93	1081	2.04	1125	2.14	1168	2.25	1211	2.36	1252	2.47
3400	870	1.65	922	1.78	973	1.90	1022	2.02	1069	2.13	1114	2.24	1158	2.35	1202	2.46	1244	2.57	1286	2.68
3600	906	1.88	959	2.01	1009	2.13	1058	2.25	1105	2.36	1150	2.47	1195	2.58	1238	2.69	1280	2.80	1322	2.91
3800	945	2.13	998	2.26	1048	2.38	1097	2.50	1144	2.61	1190	2.72	1234	2.83	1277	2.94	1319	3.05	1361	3.16
4000	987	2.40	1040	2.53	1090	2.66	1139	2.78	1186	2.89	1231	3.00	1276	3.11	1319	3.21	1361	3.32	1403	3.43
4200	1032	2.70	1084	2.83	1135	2.95	1184	3.07	1231	3.18	1276	3.29	1320	3.40	-	-	-	-	-	-
4400	1079	3.01	1132	3.15	1182	3.27	1231	3.39	-	-	-	-	-	-	-	-	-	-	-	-
4600	1129	3.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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.

ZR150 (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
	3 HP & Field Supplied Drive		Standard 3 HP & Drive										Hi Static 5 HP & Drive							
3200	837	1.44	889	1.57	940	1.69	989	1.81	1036	1.93	1081	2.04	1125	2.14	1168	2.25	1211	2.36	1252	2.47
3400	870	1.65	922	1.78	973	1.90	1022	2.02	1069	2.13	1114	2.24	1158	2.35	1202	2.46	1244	2.57	1286	2.68
3600	906	1.88	959	2.01	1009	2.13	1058	2.25	1105	2.36	1150	2.47	1195	2.58	1238	2.69	1280	2.80	1322	2.91
3800	945	2.13	998	2.26	1048	2.38	1097	2.50	1144	2.61	1190	2.72	1234	2.83	1277	2.94	1319	3.05	1361	3.16
4000	987	2.40	1040	2.53	1090	2.66	1139	2.78	1186	2.89	1231	3.00	1276	3.11	1319	3.21	1361	3.32	1403	3.43
4200	1032	2.70	1084	2.83	1135	2.95	1184	3.07	1231	3.18	1276	3.29	1320	3.40	1364	3.51	1406	3.62	1447	3.73
4400	1079	3.01	1132	3.15	1182	3.27	1231	3.39	1278	3.50	1324	3.61	1368	3.72	1411	3.83	1453	3.93	1495	4.05
4600	1129	3.35	1182	3.48	1232	3.61	1281	3.72	1328	3.84	1374	3.95	1418	4.06	1461	4.16	1503	4.27	1545	4.38
4800	1182	3.71	1235	3.84	1285	3.96	1334	4.08	1381	4.20	1426	4.31	1471	4.41	1514	4.52	1556	4.63	1598	4.74
5000	1237	4.08	1290	4.22	1340	4.34	1389	4.46	1436	4.57	1481	4.68	1526	4.79	1569	4.90	1611	5.01	1653	5.12
5200	1294	4.48	1347	4.61	1398	4.74	1446	4.85	1493	4.97	1539	5.08	1583	5.19	1626	5.29	1669	5.40	1710	5.51
5400	1354	4.89	1407	5.03	1457	5.15	1506	5.27	1553	5.38	1599	5.49	1643	5.60	1686	5.71	-	-	-	-
5600	1416	5.33	1469	5.46	1519	5.58	1568	5.70	-	-	-	-	-	-	-	-	-	-	-	-
5800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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.

Sound Performance

Indoor Sound Power Levels (3 thru 5 Ton)

Indoor Sound Power Levels (Horizontal Ducted Inlet, Standard Static Belt Drive)

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR037 / 3 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Horizontal (Side Return) Ducted Inlet			
Indoor Blower Speed (RPM)	612 - 3 Turns Open Equivalent		709 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.5		0.4	
Airflow (CFM)	850		1300	
Blower Motor BHP	0.37		0.40	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	73	77	73	77
125	61	70	66	71
250	56	63	60	64
500	51	56	55	57
1000	44	48	51	52
2000	41	44	48	49
4000	44	47	47	48
8000	42	44	43	44

1. Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.

- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR049 / 4 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Horizontal (Side Return) Ducted Inlet			
Indoor Blower Speed (RPM)	612 - 3 Turns Open Equivalent		709 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.5		0.4	
Airflow (CFM)	850		1300	
Blower Motor BHP	0.37		0.40	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	73	77	73	77
125	61	70	66	71
250	56	63	60	64
500	51	56	55	57
1000	44	48	51	52
2000	41	44	48	49
4000	44	47	47	48
8000	42	44	43	44

1. Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.

- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR061 / 5 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Horizontal (Side Return) Ducted Inlet			
Indoor Blower Speed (RPM)	814 - 3 Turns Open Equivalent		918 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.6		0.8	
Airflow (CFM)	1700		1950	
Blower Motor BHP	0.42		0.88	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	77	81	85	82
125	71	80	68	81
250	63	67	64	68
500	58	60	60	61
1000	56	57	58	59
2000	52	53	55	55
4000	51	51	54	54
8000	47	47	48	48

1. Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.

- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

Indoor Sound Power Levels (Horizontal Ducted Discharge, Standard Static Belt Drive)

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR037 / 3 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Horizontal (Side Supply) Ducted Discharge			
Indoor Blower Speed (RPM)	610 - 3 Turns Open Equivalent		710 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.5		0.6	
Airflow (CFM)	850		950	
Blower Motor BHP	0.37		0.42	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	77	78	79	79
125	74	75	75	76
250	66	68	70	70
500	61	61	65	64
1000	60	62	65	66
2000	52	52	58	58
4000	52	52	59	60
8000	44	44	50	50

1. Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.

- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR049 / 4 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Horizontal (Side Supply) Ducted Discharge			
Indoor Blower Speed (RPM)	610 - 3 Turns Open Equivalent		710 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.5		0.6	
Airflow (CFM)	850		950	
Blower Motor BHP	0.37		0.42	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	77	78	79	79
125	74	75	75	76
250	66	68	70	70
500	61	61	65	64
1000	60	62	65	66
2000	52	52	58	58
4000	52	52	59	60
8000	44	44	50	50

- Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR061 / 5 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Horizontal (Side Supply) Ducted Discharge			
Indoor Blower Speed (RPM)	810 - 3 Turns Open Equivalent		918 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.4		0.8	
Airflow (CFM)	2050		1950	
Blower Motor BHP	0.73		0.88	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	85	83	83	83
125	78	79	76	79
250	69	70	69	70
500	68	68	68	68
1000	64	64	65	65
2000	63	63	64	64
4000	64	64	64	64
8000	59	59	59	60

- Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

Indoor Sound Power Levels (Vertical Ducted Inlet, Standard Static Belt Drive)

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR037 / 3 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Vertical (Bottom Return) Ducted Inlet			
Indoor Blower Speed (RPM)	609 - 3 Turns Open Equivalent		708 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.4		0.4	
Airflow (CFM)	850		1150	
Blower Motor BHP	0.32		0.38	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	76	76	74	76
125	63	70	66	70
250	55	62	59	62
500	54	55	58	59
1000	48	48	53	53
2000	44	44	48	48
4000	41	44	45	46
8000	42	43	43	44

1. Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR049 / 4 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Vertical (Bottom Return) Ducted Inlet			
Indoor Blower Speed (RPM)	609 - 3 Turns Open Equivalent		708 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.4		0.4	
Airflow (CFM)	850		1150	
Blower Motor BHP	0.32		0.38	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	76	76	74	76
125	63	70	66	70
250	55	62	59	62
500	54	55	58	59
1000	48	48	53	53
2000	44	44	48	48
4000	41	44	45	46
8000	42	43	43	44

1. Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR061 / 5 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Vertical (Bottom Return) Ducted Inlet			
Indoor Blower Speed (RPM)	812 - 3 Turns Open Equivalent		915- 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.6		0.8	
Airflow (CFM)	1575		1800	
Blower Motor BHP	0.64		0.83	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	75	78	80	80
125	66	80	69	81
250	59	66	62	65
500	60	60	63	63
1000	57	57	60	60
2000	52	53	55	55
4000	49	50	53	53
8000	44	45	47	47

1. Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

Indoor Sound Power Levels (Vertical Ducted Discharge, Standard Static Belt Drive)

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR037 / 3 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Vertical (Bottom Supply) Ducted Discharge			
Indoor Blower Speed (RPM)	609 - 3 Turns Open Equivalent		712 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.4		0.6	
Airflow (CFM)	850		950	
Blower Motor BHP	0.32		0.42	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	76	77	81	81
125	68	68	72	72
250	55	65	57	57
500	56	57	57	57
1000	51	57	52	56
2000	49	49	50	50
4000	48	48	49	51
8000	46	46	47	48

1. Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR049 / 4 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Vertical (Bottom Supply) Ducted Discharge			
Indoor Blower Speed (RPM)	609 - 3 Turns Open Equivalent		712 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.4		0.6	
Airflow (CFM)	850		950	
Blower Motor BHP	0.32		0.42	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	76	77	81	81
125	68	68	72	72
250	55	65	57	57
500	56	57	57	57
1000	51	57	52	56
2000	49	49	50	50
4000	48	48	49	51
8000	46	46	47	48

1. Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR061 / 5 Ton / Standard Static Belt Drive			
TEST CONFIGURATION	Vertical (Bottom Supply) Ducted Discharge			
Indoor Blower Speed (RPM)	809 - 3 Turns Open Equivalent		914 - 1 Turn Open Equivalent	
External Static Pressure (IWG)	0.5		0.8	
Airflow (CFM)	1700		1800	
Blower Motor BHP	0.64		0.83	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	81	81	79	79
125	75	75	75	76
250	65	65	63	63
500	67	67	67	67
1000	63	63	63	63
2000	61	62	61	61
4000	62	62	61	61
8000	57	57	56	56

1. Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

Indoor Sound Power Levels (Horizontal Ducted Inlet, High Static Belt Drive)

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR037 / 3 Ton / High Static Belt Drive					
TEST CONFIGURATION	Horizontal (Side Return) Ducted Inlet					
Indoor Blower Speed (RPM)	876 - 4 Turns Open Equivalent		1,064 - 1/2 Turn Open Equivalent		1,190 - 2.5 Turns Open Equivalent ¹	
External Static Pressure (IWG)	1.0		1.6		2.0 ¹	
Nominal Airflow (CFM)	1,200		1,100		1,000	
Blower Motor BHP	0.64		0.93		1.08	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ² (dB)	ID Blower Only (dB)	Cooling Operation ² (dB)	ID Blower Only (dB)	Cooling Operation ² (dB)
63	75	80	81	81	81	83
125	69	71	71	73	73	75
250	62	68	66	71	68	70
500	54	56	57	59	59	60
1000	52	56	56	58	58	60
2000	47	49	52	52	54	56
4000	43	45	48	49	51	53
8000	43	45	45	46	47	48

- Requires driven pulley #AK-56, normal high static pulley is an #AK-69.
- Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.
 - Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR049 / 4 Ton / High Static Belt Drive					
TEST CONFIGURATION	Horizontal (Side Return) Ducted Inlet					
Indoor Blower Speed (RPM)	965 - 5.5 Turns Open Equivalent		1,088 - 4 Turns Open Equivalent		1,186 - 2.5 Turns Open Equivalent	
External Static Pressure (IWG)	1.0		1.6		2.0	
Nominal Airflow (CFM)	1,600		1,400		1,200	
Blower Motor BHP	0.86		1.03		1.13	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	74	80	77	80	81	81
125	69	74	72	75	75	76
250	68	68	68	69	70	71
500	62	62	60	61	61	63
1000	60	61	58	58	59	60
2000	57	57	53	54	55	56
4000	56	56	49	50	51	52
8000	54	54	45	47	47	48

- Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.
 - Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR061 / 5 Ton / High Static Belt Drive					
TEST CONFIGURATION	Horizontal (Side Return) Ducted Inlet					
Indoor Blower Speed (RPM)	1,012- 5.5 Turns Open Equivalent		1,134 - 3 Turns Open Equivalent		1,174 - 2 Turns Open Equivalent	
External Static Pressure (IWG)	1.0		1.6		2.0	
Nominal Airflow (CFM)	2,000		1,800		1,600	
Blower Motor BHP	1.04		1.25		1.39	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	76	78	78	79	79	81
125	70	73	73	76	74	77
250	68	70	68	69	69	70
500	61	62	61	62	60	62
1000	61	62	61	62	58	60
2000	57	58	57	58	54	56
4000	56	56	55	56	52	53
8000	50	50	50	50	47	48

- Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

Indoor Sound Power Levels (Horizontal Ducted Discharge, High Static Belt Drive)

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR037 / 3 Ton / High Static Belt Drive					
TEST CONFIGURATION	Horizontal (Side Supply) Ducted Discharge					
Indoor Blower Speed (RPM)	896 - 3.5 Turns Open Equivalent		1,072 - Fully Closed Equivalent		1,170 - 2.5 Turns Open Equivalent ¹	
External Static Pressure (IWG)	1.0		1.6		2.0 ¹	
Nominal Airflow (CFM)	1,200		1,100		1,000	
Blower Motor BHP	0.64		0.93		1.08	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ² (dB)	ID Blower Only (dB)	Cooling Operation ² (dB)	ID Blower Only (dB)	Cooling Operation ² (dB)
63	77	81	83	84	83	84
125	74	76	76	77	80	80
250	67	68	70	70	72	73
500	65	66	67	67	67	68
1000	61	62	67	67	66	69
2000	58	60	63	63	63	64
4000	57	59	62	62	62	63
8000	51	53	56	57	56	58

- Requires driven pulley #AK-56, normal high static pulley is an #AK-69.
- Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR049 / 4 Ton / High Static Belt Drive					
TEST CONFIGURATION	Horizontal (Side Supply) Ducted Discharge					
Indoor Blower Speed (RPM)	922 - 6 Turns Open Equivalent		1,069 - 4 Turns Open Equivalent		1,165 - 2.5 Turns Open Equivalent	
External Static Pressure (IWG)	1.0		1.6		2.0	
Nominal Airflow (CFM)	1,600		1,400		1,200	
Blower Motor BHP	0.86		1.03		1.13	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	80	82	82	83	84	84
125	76	77	76	77	78	79
250	71	72	72	72	74	74
500	69	69	69	69	70	70
1000	65	65	69	69	70	70
2000	64	64	64	64	65	65
4000	63	63	63	63	64	64
8000	58	58	58	58	59	59

1. Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.

- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR061 / 5 Ton / High Static Belt Drive					
TEST CONFIGURATION	Horizontal (Side Supply) Ducted Discharge					
Indoor Blower Speed (RPM)	1,009- 5.5 Turns Open Equivalent		1,131 - 3 Turns Open Equivalent		1,184 - 2 Turns Open Equivalent	
External Static Pressure (IWG)	1.0		1.6		2.0	
Nominal Airflow (CFM)	2,000		1,800		1,600	
Blower Motor BHP	1.04		1.25		1.39	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	84	85	82	83	82	83
125	78	79	79	79	78	79
250	75	75	74	75	73	73
500	71	71	70	71	69	69
1000	69	69	71	71	71	72
2000	66	67	67	67	66	66
4000	66	66	66	67	66	66
8000	61	62	61	62	60	60

1. Cooling Operation – ID blower, compressor and outdoor fan operating at 230 VAC.

- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

Indoor Sound Power Levels (Vertical Ducted Inlet, High Static Belt Drive)

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR037 / 3 Ton / High Static Belt Drive					
TEST CONFIGURATION	Vertical (Bottom Return) Ducted Inlet					
Indoor Blower Speed (RPM)	927 - 3 Turns Open Equivalent		1,085 - 1/2 Turn Open Equivalent		1,190 - 2.5 Turns Open Equivalent ¹	
External Static Pressure (IWG)	1.0		1.6		2.0 ¹	
Nominal Airflow (CFM)	1,200		1,100		1,000	
Blower Motor BHP	0.68		0.93		1.09	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ² (dB)	ID Blower Only (dB)	Cooling Operation ² (dB)	ID Blower Only (dB)	Cooling Operation ² (dB)
63	77	79	82	83	79	81
125	68	69	70	71	72	73
250	60	67	62	69	64	67
500	58	58	63	63	62	63
1000	54	55	60	60	60	60
2000	48	49	56	56	55	55
4000	43	44	48	49	51	51
8000	44	44	45	46	47	47

- Requires driven pulley #AK-56, normal high static pulley is an #AK-69.
- Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
 - Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR049 / 4 Ton / High Static Belt Drive					
TEST CONFIGURATION	Vertical (Bottom Return) Ducted Inlet					
Indoor Blower Speed (RPM)	968 - 5.5 Turns Open Equivalent		1,120 - 3.5 Turns Open Equivalent		1,218 - 2.0 Turns Open Equivalent	
External Static Pressure (IWG)	1.0		1.6		2.0	
Nominal Airflow (CFM)	1,600		1,400		1,200	
Blower Motor BHP	0.86		1.03		1.13	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	77	79	78	78	81	81
125	69	73	71	73	73	74
250	63	63	63	64	66	66
500	63	64	62	63	64	64
1000	59	59	59	59	61	61
2000	54	54	53	54	56	56
4000	49	49	48	48	50	51
8000	45	46	45	46	47	47

- Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
 - Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR061 / 5 Ton / High Static Belt Drive					
TEST CONFIGURATION	Vertical (Bottom Return) Ducted Inlet					
Indoor Blower Speed (RPM)	1,039 - 5 Turns Open Equivalent		1,143 - 3 Turns Open Equivalent		1,201 - 2 Turns Open Equivalent	
External Static Pressure (IWG)	1.0		1.6		2.0	
Nominal Airflow (CFM)	2,000		1,800		1,600	
Blower Motor BHP	1.11		1.25		1.39	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	79	80	77	77	81	81
125	74	75	71	73	73	74
250	63	65	63	64	63	65
500	62	63	64	64	62	62
1000	61	61	61	61	59	59
2000	55	56	55	56	54	55
4000	52	52	50	51	50	50
8000	47	47	46	46	46	46

- Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

Indoor Sound Power Levels (Vertical Ducted Discharge, High Static Belt Drive)

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR037 / 3 Ton / High Static Belt Drive					
TEST CONFIGURATION	Vertical (Bottom Supply) Ducted Discharge					
Indoor Blower Speed (RPM)	920 - 3.0 Turns Open Equivalent		1,074 - Fully Closed Equivalent		1,189 - 2.0 Turns Open Equivalent ¹	
External Static Pressure (IWG)	1.0		1.6		2.0 ¹	
Nominal Airflow (CFM)	1,200		1,100		1,000	
Blower Motor BHP	0.68		0.93		1.09	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ² (dB)	ID Blower Only (dB)	Cooling Operation ² (dB)	ID Blower Only (dB)	Cooling Operation ² (dB)
63	81	82	81	81	82	82
125	78	78	78	78	81	81
250	69	70	70	71	74	74
500	67	68	68	69	71	71
1000	62	63	67	68	70	71
2000	60	61	62	63	65	66
4000	61	61	63	63	66	66
8000	54	55	57	57	60	61

- Requires driven pulley #AK-56, normal high static pulley is an #AK-69.
- Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
- Testing datum includes effect of standard inlet air filters.
- Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
- Test duct termination is flush with reverberant room wall.
- Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR049 / 4 Ton / High Static Belt Drive					
TEST CONFIGURATION	Vertical (Bottom Supply) Ducted Discharge					
Indoor Blower Speed (RPM)	962 - 5.5 Turns Open Equivalent		1,092 - 3.5 Turns Open Equivalent		1,190 - 2.0 Turns Open Equivalent	
External Static Pressure (IWG)	1.0		1.6		2.0	
Nominal Airflow (CFM)	1,600		1,400		1,200	
Blower Motor BHP	0.86		1.03		1.13	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	83	84	82	82	83	83
125	80	81	79	80	80	81
250	75	75	74	75	75	75
500	71	72	70	71	71	72
1000	66	67	70	71	72	72
2000	63	64	64	64	65	65
4000	64	64	64	64	65	66
8000	58	59	59	59	60	60

1. Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

UNIT DESCRIPTION / MODEL	ZH/ZJ/ZR061 / 5 Ton / High Static Belt Drive					
TEST CONFIGURATION	Vertical (Bottom Supply) Ducted Discharge					
Indoor Blower Speed (RPM)	1,033 - 5.5 Turns Open Equivalent		1,135 - 3 turns Open Equivalent		1,175 - 2.5 Turns Open Equivalent	
External Static Pressure (IWG)	1.0		1.6		2.0	
Nominal Airflow (CFM)	2,000		1,135		1,175	
Blower Motor BHP	1.11		1.25		1.39	
Octave Center Freq. Hz	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)	ID Blower Only (dB)	Cooling Operation ¹ (dB)
63	83	83	83	83	85	86
125	84	84	82	82	79	81
250	79	80	77	78	66	66
500	73	73	70	71	65	66
1000	69	70	69	70	61	65
2000	67	67	65	66	60	61
4000	67	68	66	67	61	62
8000	62	63	60	61	54	54

1. Differentials for Cooling Operation (IDB, COMP, & ODF) are logarithmically calculated from the horizontal flow sound test.
- Tested in accordance with AHRI Standard 260-2001. Refer to 2001 Standard for Sound Rating of Ducted Air Moving and Conditioning Equipment.
 - Testing datum includes effect of standard inlet air filters.
 - Test duct dimension: 18 in. wide x 28 in. high x 8 ft. long, no elbows.
 - Test duct termination is flush with reverberant room wall.
 - Duct end (sound reflection) corrections included: (7.2, 3.4, 1.2, 0.4, 0.1, 0, 0, 0) dB at (63, 125, 250, 500, 1k, 2k, 4k, 8k) Hz respectively.

Indoor Sound Power Levels (6.5 thru 12.5 Ton)

Size (Tons)	Model	CFM	ESP (IWG)	Blower		Sound Power, dB (10 ⁻¹²) Watts								
						Sound Rating ¹ dB (A)	Octave Band Centerline Frequency (Hz)							
				RPM	BHP		63	125	250	500	1000	2000	4000	8000
078 (6.5)	ZH/ZJ/ZR	2600	0.6	812	1.14	74	71	73	73	71	69	65	65	60
090 (7.5)	ZH/ZJ/ZR	3000	0.6	854	1.47	77	74	76	76	74	72	68	68	63
102 (8.5)	ZH/ZJ/ZR	3400	0.6	872	1.65	80	77	79	79	77	75	71	71	66
120 (10)	ZH/ZJ/ZR	4000	0.6	959	2.29	83	80	82	82	80	78	74	74	69
150 (12.5)	ZH/ZJ/ZR	5000	0.6	1132	3.74	87	84	86	86	84	82	78	78	73

1. These values have been accessed using a model of sound propagation from a point source into the hemispheric/free field. The dBA values provided are to be used for reference only. Calculation of dBA values cover matters of system design and the fan manufacture has no way of knowing the details of each system. This constitutes an exception to any specification or guarantee requiring a dBA value of sound data in any other form than sound power level ratings.

Outdoor Sound Power Levels
ZH/ZJ/ZR037-150

Size (Tons)	Model	Sound Rating ¹ dB (A)	Octave Band Centerline Frequency (Hz)							
			63	125	250	500	1000	2000	4000	8000
037 (3)	ZH	81	82.5	86.5	78.0	75.5	76.5	68.5	63.0	56.5
049 (4)	ZH	78	82.0	86.0	78.5	75.5	73.0	68.0	63.0	56.0
061 (5)	ZH	84	81.0	91.0	82.5	80.5	79.0	73.5	69.5	64.5
078 (6.5)	ZH	87	89.0	88.5	84.5	84.5	82.0	76.5	72.0	66.5
090 (7.5)	ZH	92	93.0	92.0	90.5	88.0	86.5	83.0	77.5	73.5
102 (8.5)	ZH	92	97.0	94.0	93.5	90.5	87.0	81.5	76.0	69.0
120 (10)	ZH	91	99.5	91.5	91.5	89.0	86.0	80.5	76.5	71.0
150 (12.5)	ZH	86	89.5	91.0	85.5	84.0	81.0	76.5	71.0	62.5
037 (3)	ZJ	77	82.0	83.5	80.0	73.0	70.0	65.5	60.5	55.5
049 (4)	ZJ	80	80.0	87.0	77.0	75.5	75.0	70.5	65.5	62.0
061 (5)	ZJ	84	86.5	87.0	86.0	79.0	76.5	71.5	68.0	64.0
078 (6.5)	ZJ	85	87.5	85.0	84.0	82.0	80.0	75.5	71.5	67.0
090 (7.5)	ZJ	90	90.0	93.0	90.5	86.0	83.5	81.5	78.0	75.0
102 (8.5)	ZJ	92	97.0	94.0	93.5	90.5	87.0	81.5	76.0	69.0
120 (10)	ZJ	91	99.5	91.5	91.5	89.0	86.0	80.5	76.5	71.0
150 (12.5)	ZJ	85	89.0	88.0	83.5	83.5	78.5	74.0	69.5	64.5
037 (3)	ZR	77	82.0	83.5	80.0	73.0	70.0	65.5	60.5	55.5
049 (4)	ZR	81	87.5	88.5	83.0	77.5	73.5	70.5	67.0	62.0
61 (5)	ZR	84	86.5	87.0	86.0	79.0	76.5	71.5	68.0	64.0
078 (6.5)	ZR	83	~	88.0	82.5	81.5	78.0	73.0	69.0	62.0
090 (7.5)	ZR	83	~	89.5	83.5	82.0	78.0	72.5	68.0	60.5
102 (8.5)	ZR	83	~	89.0	84.5	81.5	78.0	72.5	68.5	70.5
120 (10)	ZR	83	~	89.5	83.5	81.0	78.0	72.0	68.5	70.5
150 (12.5)	ZR	84	~	90.0	84.5	81.5	77.5	72.0	68.5	61.5

1. Rated in accordance with AHRI 270 standard.

Electrical Data

ZH037-061 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	FLA	FLA	FLA	FLA	Model	kW	Stages	Amps				
037 (3)	208	9.1	68	14.2	1.5	6.0	5.5	0.0	None	-	-	-	18.9	24.4	25	30
									E03	2.3	1	6.4	18.9	24.4	25	30
									E06	4.5	1	12.5	23.1	30	25	30
									E08	6.8	1	18.9	31.1	38	35	40
									E15	11.3	2	31.4	46.7	53.6	50	60
	230	9.1	68	14.2	1.5	6.0	5.5	0.0	None	-	-	-	18.9	24.4	25	30
									E03	3	1	7.2	18.9	24.4	25	30
									E06	6	1	14.4	25.5	32.4	30	35
									E08	9	1	21.7	34.6	41.4	35	45
									E15	15	2	36.1	52.6	59.5	60	60
	460	4.5	34	7	0.8	3.0	2.2	0.0	None	-	-	-	9.4	11.6	15	15
									E03	3	1	3.6	9.4	11.6	15	15
									E06	6	1	7.2	12.8	15.5	15	20
									E08	9	1	10.8	17.3	20	20	20
									E15	15	2	18.0	26.3	29.1	30	30
	575	3.8	28	6	0.6	2.4	1.8	0.0	None	-	-	-	7.8	9.6	15	15
									E08	9	1	8.7	13.8	16.1	15	20
									E15	15	2	14.4	21	23.3	25	25
049 (4)	208	11.2	88	17.5	1.5	6.0	5.5	0.0	None	-	-	-	21.5	27	30	35
									E06	4.5	1	12.5	23.1	30	30	35
									E08	6.8	1	18.9	31.1	38	35	40
									E15	11.3	2	31.4	46.7	53.6	50	60
									E20	15	2	41.6	59.5	66.4	60	70
	230	11.2	88	17.5	1.5	6.0	5.5	0.0	None	-	-	-	21.7	27	30	35
									E06	6	1	14.4	25.5	32.4	30	35
									E08	9	1	21.7	34.6	41.4	35	45
									E15	15	2	36.1	52.6	59.5	60	60
									E20	20	2	48.1	67.6	74.5	70	80
	460	5.6	44	8.0	0.8	3.0	2.2	0.0	None	-	-	-	10.8	13	15	15
									E06	6	1	7.2	12.8	15.5	15	20
									E08	9	1	10.8	17.3	20	20	20
									E15	15	2	18.0	26.3	29.1	30	30
									E20	20	2	24.1	33.8	36.6	35	40
	575	4.5	36	7.0	0.6	2.4	1.8	0.0	None	-	-	-	8.6	10.4	15	15
									E08	9	1	8.7	13.8	16.1	15	20
									E15	15	2	14.4	21	23.3	25	25
E20									20	2	19.2	27.1	29.3	30	30	
061 (5)	208	14.1	88	22	1.5	6.0	5.5	0.0	None	-	-	-	26.6	32.1	35	45
									E06	4.5	1	12.5	26.6	32.1	35	45
									E08	6.8	1	18.9	31.1	38	40	45
									E15	11.3	2	31.4	46.7	53.6	50	60
									E20	15	2	41.6	59.5	66.4	60	70
	230	14.1	88	22	1.5	6.0	5.5	0.0	E23	18	2	50.0	70	76.8	70	80
									None	-	-	-	26.6	32.1	35	45
									E06	6	1	14.4	26.6	32.4	35	45
									E08	9	1	21.7	34.6	41.4	40	45
									E15	15	2	36.1	52.6	59.5	60	60
	460	7.7	55	12	0.8	3.0	2.2	0.0	E20	20	2	48.1	67.6	74.5	70	80
									E23	24	2	57.7	79.7	86.5	80	90
									None	-	-	-	14.2	16.4	20	20
									E06	6	1	7.2	14.2	16.4	20	20
									E08	9	1	10.8	17.3	20	20	20
	575	5.1	36	7.5	0.6	2.4	1.8	0.0	E15	15	2	18.0	26.3	29.1	30	30
									E20	20	2	24.1	33.8	36.6	35	40
									E23	24	2	28.9	39.8	42.6	40	45
None									-	-	-	10	11.8	15	15	

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

ZH078-150 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 (6.5)	208	9.3	68	14.5	1.5	6.0	5.5	0.0	None	-	-	-	29.9	35.4	35	40
									E09	6.8	1	18.9	31.1	38	35	40
									E18	13.5	2	37.5	54.3	61.2	60	70
									E24	18	2	50.0	70	76.8	70	80
									E36	25.5	2	70.8	96	102.9	100	110
	230	9.3	68	14.5	1.5	6.0	5.5	0.0	None	-	-	-	29.9	35.4	35	40
									E09	9	1	21.7	34.6	41.4	35	45
									E18	18	2	43.3	61.6	68.5	70	70
									E24	24	2	57.7	79.7	86.5	80	90
									E36	34	2	81.8	109.7	116.6	110	125
	460	4.9	34	7.7	0.8	3.0	2.2	0.0	None	-	-	-	15.6	17.8	20	20
									E09	9	1	10.8	17.3	20	20	20
									E18	18	2	21.7	30.8	33.6	35	35
									E24	24	2	28.9	39.8	42.6	40	45
									E36	34	2	40.9	54.9	57.6	60	60
	575	3.8	28	6	0.6	2.4	1.8	0.0	None	-	-	-	12.2	14	15	15
									E09	9	1	8.7	13.8	16.1	15	20
									E18	18	2	17.3	24.7	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	11.9	88	18.5	3.5	6.0	5.5	0.0	None	-	-	-	39.8	45.3	50	50
									E09	6.8	1	18.9	39.8	45.3	50	50
									E18	13.5	2	37.5	54.3	61.2	60	70
									E24	18	2	50.0	70	76.8	70	80
									E36	25.5	2	70.8	96	102.9	100	110
	230	11.9	88	18.5	3.5	6.0	5.5	0.0	None	-	-	-	39.8	45.3	50	50
									E09	9	1	21.7	39.8	45.3	50	50
									E18	18	2	43.3	61.6	68.5	70	70
									E24	24	2	57.7	79.7	86.5	80	90
									E36	34	2	81.8	109.7	116.6	110	125
	460	5.2	44	8.1	1.6	3.0	2.2	0.0	None	-	-	-	17.9	20.1	20	25
									E09	9	1	10.8	17.9	20.1	20	25
									E18	18	2	21.7	30.8	33.6	35	35
									E24	24	2	28.9	39.8	42.6	40	45
									E36	34	2	40.9	54.9	57.6	60	60
	575	4.8	36	7.5	1.3	2.4	1.8	0.0	None	-	-	-	15.8	17.6	20	20
									E09	9	1	8.7	15.8	17.6	20	20
									E18	18	2	17.3	24.7	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
102 (8.5)	208	12.2	88	19	3.5	6.8	5.5	0.0	None	-	-	-	41.3	46.8	50	50
									E09	6.8	1	18.9	41.3	46.8	50	50
									E18	13.5	2	37.5	55.3	62.2	60	70
									E24	18	2	50.0	71	77.8	80	80
									E36	25.5	2	70.8	97	103.9	100	110
	230	12.2	88	19	3.5	6.8	5.5	0.0	None	-	-	-	41.3	46.8	50	50
									E09	9	1	21.7	41.3	46.8	50	50
									E18	18	2	43.3	62.6	69.5	70	70
									E24	24	2	57.7	80.7	87.5	90	90
									E36	34	2	81.8	110.7	117.6	125	125
	460	5.8	44	9	1.6	3.4	2.2	0.0	None	-	-	-	19.7	21.9	25	25
									E09	9	1	10.8	19.7	21.9	25	25
									E18	18	2	21.7	31.3	34.1	35	35
									E24	24	2	28.9	40.3	43.1	45	45
									E36	34	2	40.9	55.4	58.1	60	60
	575	4.4	36	5.5	1.3	2.7	1.8	0.0	None	-	-	-	15.2	17	20	20
									E09	9	1	8.7	15.2	17	20	20
									E18	18	2	17.3	25	27.3	25	30
									E24	24	2	23.1	32.2	34.5	35	35
									E36	34	2	32.7	44.3	46.5	45	50

ZH078-150 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	16.0	110.0	24.9	3.5	6.8	5.5	0.0	None	-	-	-	49.8	55.3	60	70
									E18	13.5	2	37.5	55.3	62.2	60	70
									E24	18.0	2	50.0	71.0	77.8	80	80
									E36	25.5	2	70.8	97.0	103.9	100	110
									E54	40.6	2	112.7	149.4	156.2	150	175
	230	16.0	110.0	24.9	3.5	6.8	5.5	0.0	None	-	-	-	49.8	55.3	60	70
									E18	18.0	2	43.3	62.6	69.5	70	70
									E24	24.0	2	57.7	80.7	87.5	90	90
									E36	34.0	2	81.8	110.7	117.6	125	125
									E54	54.0	2	129.9	138.4	145.3	150	175
	460	7.8	52.0	12.1	1.6	3.4	2.2	0.0	None	-	-	-	24.2	26.4	30	30
									E18	18.0	2	21.7	31.3	34.1	35	35
									E24	24.0	2	28.9	40.3	43.1	45	45
									E36	34.0	2	40.9	55.4	58.1	60	60
									E54	54.0	2	65.0	69.2	72.0	80	80
	575	5.7	38.9	8.9	1.3	2.7	1.8	0.0	None	-	-	-	18.1	19.9	20	25
									E18	18.0	2	17.3	25.0	27.3	25	30
									E24	24.0	2	23.1	32.2	34.5	35	35
									E36	34.0	2	32.7	44.3	46.5	45	50
									E54	54.0	2	52.0	55.3	57.6	60	60
150 (12.5)	208	22.4	149.0	35.0	1.5	9.6	5.5	0.0	None	-	-	-	66.0	71.5	80	90
									E18	13.5	2	37.5	66.0	71.5	80	90
									E24	18.0	2	50.0	74.5	81.3	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
									E54	40.6	2	112.7	152.9	159.7	175	175
	230	22.4	149.0	35.0	1.5	9.6	5.5	0.0	None	-	-	-	66.0	71.5	80	90
									E18	18.0	2	43.3	66.1	73.0	80	90
									E24	24.0	2	57.7	84.2	91.0	90	100
									E36	34.0	2	81.8	114.2	121.1	125	125
									E54	54.0	2	129.9	141.9	148.8	175	175
	460	10.6	75.0	16.5	0.8	4.8	2.2	0.0	None	-	-	-	31.9	34.1	40	40
									E18	18.0	2	21.7	33.1	35.8	40	40
									E24	24.0	2	28.9	42.1	44.8	45	45
									E36	34.0	2	40.9	57.1	59.9	60	60
									E54	54.0	2	65.0	71.0	73.7	80	80
	575	7.7	54.0	12.0	0.6	3.9	1.8	0.0	None	-	-	-	23.6	25.4	30	30
									E18	18.0	2	17.3	26.5	28.8	30	30
									E24	24.0	2	23.1	33.7	36.0	35	40
									E36	34.0	2	32.7	45.8	48.0	50	50
									E54	54.0	2	52.0	56.8	59.1	70	70

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

ZH078-150 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					Model	kW	Stages	Amps				
120 (10)	208	16.0	110.0	24.9	3.5	9.6	5.5	0.0	None	-	-	-	52.6	58.1	60	70
									E18	13.5	2	37.5	58.8	65.7	60	70
									E24	18.0	2	50.0	74.5	81.3	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
									E54	40.6	2	112.7	152.9	159.7	175	175
	230	16.0	110.0	24.9	3.5	9.6	5.5	0.0	None	-	-	-	52.6	58.1	60	70
									E18	18.0	2	43.3	66.1	73.0	70	80
									E24	24.0	2	57.7	84.2	91.0	90	100
									E36	34.0	2	81.8	114.2	121.1	125	125
									E54	54.0	2	129.9	141.9	148.8	175	175
	460	7.8	52.0	12.1	1.6	4.8	2.2	0.0	None	-	-	-	25.6	27.8	30	35
									E18	18.0	2	21.7	33.1	35.8	35	40
									E24	24.0	2	28.9	42.1	44.8	45	45
									E36	34.0	2	40.9	57.1	59.9	60	60
									E54	54.0	2	65.0	71.0	73.7	80	80
	575	5.7	38.9	8.9	1.3	3.9	1.8	0.0	None	-	-	-	19.3	21.1	25	25
									E18	18.0	2	17.3	26.5	28.8	30	30
									E24	24.0	2	23.1	33.7	36.0	35	40
									E36	34.0	2	32.7	45.8	48.0	50	50
									E54	54.0	2	52.0	56.8	59.1	70	70
150 (12.5)	208	22.4	149.0	35.0	1.5	15.2	5.5	0.0	None	-	-	-	71.6	77.1	90	90
									E18	13.5	2	37.5	71.6	77.1	90	90
									E24	18.0	2	50.0	81.5	88.3	90	90
									E36	25.5	2	70.8	107.5	114.4	110	125
									E54	40.6	2	112.7	159.9	166.7	175	175
	230	22.4	149.0	35.0	1.5	15.2	5.5	0.0	None	-	-	-	71.6	77.1	90	90
									E18	18.0	2	43.3	73.1	80.0	90	90
									E24	24.0	2	57.7	91.2	98.0	100	100
									E36	34.0	2	81.8	121.2	128.1	125	150
									E54	54.0	2	129.9	148.9	155.8	175	175
	460	10.6	75.0	16.5	0.8	7.6	2.2	0.0	None	-	-	-	34.7	36.9	45	45
									E18	18.0	2	21.7	36.6	39.3	45	45
									E24	24.0	2	28.9	45.6	48.3	50	50
									E36	34.0	2	40.9	60.6	63.4	70	70
									E54	54.0	2	65.0	74.5	77.2	90	90
	575	7.7	54.0	12.0	0.6	6.1	1.8	0.0	None	-	-	-	25.8	27.6	30	35
									E18	18.0	2	17.3	29.3	31.5	30	35
									E24	24.0	2	23.1	36.5	38.7	40	40
									E36	34.0	2	32.7	48.5	50.8	50	60
									E54	54.0	2	52.0	59.6	61.8	70	70

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

ZH078-150 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	16.0	110.0	24.9	3.5	6.8	5.5	10.0	None	-	-	-	59.8	65.3	70	80
									E18	13.5	2	37.5	67.8	74.7	70	80
									E24	18.0	2	50.0	83.5	90.3	90	100
									E36	25.5	2	70.8	109.5	116.4	110	125
									E54	40.6	2	112.7	161.9	168.7	175	175
	230	16.0	110.0	24.9	3.5	6.8	5.5	10.0	None	-	-	-	59.8	65.3	70	80
									E18	18.0	2	43.3	75.1	82.0	80	90
									E24	24.0	2	57.7	93.2	100.0	100	100
									E36	34.0	2	81.8	123.2	130.1	125	150
									E54	54.0	2	129.9	150.9	157.8	175	175
	460	7.8	52.0	12.1	1.6	3.4	2.2	5.0	None	-	-	-	29.2	31.4	35	35
									E18	18.0	2	21.7	37.6	40.3	40	45
									E24	24.0	2	28.9	46.6	49.3	50	50
									E36	34.0	2	40.9	61.6	64.4	70	70
									E54	54.0	2	65.0	75.5	78.2	80	90
	575	5.7	38.9	8.9	1.3	2.7	1.8	4.0	None	-	-	-	22.1	23.9	25	25
									E18	18.0	2	17.3	30.0	32.3	30	35
									E24	24.0	2	23.1	37.2	39.5	40	40
									E36	34.0	2	32.7	49.3	51.5	50	60
									E54	54.0	2	52.0	60.3	62.6	70	70
150 (12.5)	208	22.4	149.0	35.0	1.5	9.6	5.5	10.0	None	-	-	-	76.0	81.5	90	100
									E18	13.5	2	37.5	76.0	81.5	90	100
									E24	18.0	2	50.0	87.0	93.8	90	100
									E36	25.5	2	70.8	113.0	119.9	125	125
									E54	40.6	2	112.7	165.4	172.2	175	175
	230	22.4	149.0	35.0	1.5	9.6	5.5	10.0	None	-	-	-	76.0	81.5	90	100
									E18	18.0	2	43.3	78.6	85.5	90	100
									E24	24.0	2	57.7	96.7	103.5	100	110
									E36	34.0	2	81.8	126.7	133.6	150	150
									E54	54.0	2	129.9	154.4	161.3	175	175
	460	10.6	75.0	16.5	0.8	4.8	2.2	5.0	None	-	-	-	36.9	39.1	45	45
									E18	18.0	2	21.7	39.3	42.1	45	45
									E24	24.0	2	28.9	48.3	51.1	50	60
									E36	34.0	2	40.9	63.4	66.1	70	70
									E54	54.0	2	65.0	77.2	80.0	90	90
	575	7.7	54.0	12.0	0.6	3.9	1.8	4.0	None	-	-	-	27.6	29.4	35	35
									E18	18.0	2	17.3	31.5	33.8	35	35
									E24	24.0	2	23.1	38.7	41.0	40	45
									E36	34.0	2	32.7	50.8	53.0	60	60
									E54	54.0	2	52.0	61.8	64.1	70	70

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

ZH078-150 Hi Static 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	16.0	110.0	24.9	3.5	9.6	5.5	10.0	None	-	-	-	62.6	68.1	70	80
									E18	13.5	2	37.5	71.3	78.2	80	80
									E24	18.0	2	50.0	87.0	93.8	90	100
									E36	25.5	2	70.8	113.0	119.9	125	125
									E54	40.6	2	112.7	165.4	172.2	175	175
	230	16.0	110.0	24.9	3.5	9.6	5.5	10.0	None	-	-	-	62.6	68.1	70	80
									E18	18.0	2	43.3	78.6	85.5	80	90
									E24	24.0	2	57.7	96.7	103.5	100	110
									E36	34.0	2	81.8	126.7	133.6	150	150
									E54	54.0	2	129.9	154.4	161.3	175	175
	460	7.8	52.0	12.1	1.6	4.8	2.2	5.0	None	-	-	-	30.6	32.8	35	40
									E18	18.0	2	21.7	39.3	42.1	40	45
									E24	24.0	2	28.9	48.3	51.1	50	60
									E36	34.0	2	40.9	63.4	66.1	70	70
									E54	54.0	2	65.0	77.2	80.0	90	90
	575	5.7	38.9	8.9	1.3	3.9	1.8	4.0	None	-	-	-	23.3	25.1	25	30
									E18	18.0	2	17.3	31.5	33.8	35	35
									E24	24.0	2	23.1	38.7	41.0	40	45
									E36	34.0	2	32.7	50.8	53.0	60	60
									E54	54.0	2	52.0	61.8	64.1	70	70
150 (12.5)	208	22.4	149.0	35.0	1.5	15.2	5.5	10.0	None	-	-	-	81.6	87.1	100	100
									E18	13.5	2	37.5	81.6	87.1	100	100
									E24	18.0	2	50.0	94.0	100.8	100	110
									E36	25.5	2	70.8	120.0	126.9	125	150
									E54	40.6	2	112.7	172.4	179.2	175	200
	230	22.4	149.0	35.0	1.5	15.2	5.5	10.0	None	-	-	-	81.6	87.1	100	100
									E18	18.0	2	43.3	85.6	92.5	100	100
									E24	24.0	2	57.7	103.7	110.5	110	125
									E36	34.0	2	81.8	133.7	140.6	150	150
									E54	54.0	2	129.9	161.4	168.3	175	175
	460	10.6	75.0	16.5	0.8	7.6	2.2	5.0	None	-	-	-	39.7	41.9	50	50
									E18	18.0	2	21.7	42.8	45.6	50	50
									E24	24.0	2	28.9	51.8	54.6	60	60
									E36	34.0	2	40.9	66.9	69.6	70	70
									E54	54.0	2	65.0	80.7	83.5	90	90
	575	7.7	54.0	12.0	0.6	6.1	1.8	4.0	None	-	-	-	29.8	31.6	35	35
									E18	18.0	2	17.3	34.3	36.5	35	40
									E24	24.0	2	23.1	41.5	43.7	45	45
									E36	34.0	2	32.7	53.5	55.8	60	60
									E54	54.0	2	52.0	64.6	66.8	70	70

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

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	8.7	68	13.5	1.5	6.0	5.5	0.0	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	23.1	30	25	30
									E08	6.8	1	18.9	31.1	38	35	40
									E15	11.3	2	31.4	46.7	53.6	50	60
	230	8.7	68	13.5	1.5	6.0	5.5	0.0	None	-	-	-	18.4	23.9	25	30
									E03	3	1	7.2	18.4	23.9	25	30
									E06	6	1	14.4	25.5	32.4	30	35
									E08	9	1	21.7	34.6	41.4	35	45
									E15	15	2	36.1	52.6	59.5	60	60
	460	4.6	34	7.1	0.8	3.0	2.2	0.0	None	-	-	-	9.6	11.8	15	15
									E03	3	1	3.6	9.6	11.8	15	15
									E06	6	1	7.2	12.8	15.5	15	20
									E08	9	1	10.8	17.3	20	20	20
									E15	15	2	18.0	26.3	29.1	30	30
	575	3.5	28	5.5	0.6	2.4	1.8	0.0	None	-	-	-	7.4	9.2	15	15
									E08	9	1	8.7	13.8	16.1	15	20
									E15	15	2	14.4	21	23.3	25	25
									None	-	-	-	21.5	27	30	35
									E06	4.5	1	12.5	23.1	30	30	35
049 (4)	208	11.2	88	17.5	1.5	6.0	5.5	0.0	E08	6.8	1	18.9	31.1	38	35	40
									E15	11.3	2	31.4	46.7	53.6	50	60
									E20	15	2	41.6	59.5	66.4	60	70
									None	-	-	-	21.7	27	30	35
									E06	6	1	14.4	25.5	32.4	30	35
	230	11.2	88	17.5	1.5	6.0	5.5	0.0	E08	9	1	21.7	34.6	41.4	35	45
									E15	15	2	36.1	52.6	59.5	60	60
									E20	20	2	48.1	67.6	74.5	70	80
									None	-	-	-	10.8	13	15	15
									E06	6	1	7.2	12.8	15.5	15	20
	460	5.6	44	8.0	0.8	3.0	2.2	0.0	E08	9	1	10.8	17.3	20	20	20
									E15	15	2	18.0	26.3	29.1	30	30
									E20	20	2	24.1	33.8	36.6	35	40
									None	-	-	-	8.6	10.4	15	15
									E08	9	1	8.7	13.8	16.1	15	20
	575	4.5	36	7.0	0.6	2.4	1.8	0.0	E15	15	2	14.4	21	23.3	25	25
									E20	20	2	19.2	27.1	29.3	30	30
									None	-	-	-	26.6	32.1	35	45
									E06	4.5	1	12.5	26.6	32.1	35	45
									E08	6.8	1	18.9	31.1	38	40	45
061 (5)	208	14.1	88	22	1.5	6.0	5.5	0.0	E15	11.3	2	31.4	46.7	53.6	50	60
									E20	15	2	41.6	59.5	66.4	60	70
									E23	18	2	50.0	70	76.8	70	80
									None	-	-	-	26.6	32.1	35	45
									E06	6	1	14.4	26.6	32.4	35	45
	230	14.1	88	22	1.5	6.0	5.5	0.0	E08	9	1	21.7	34.6	41.4	40	45
									E15	15	2	36.1	52.6	59.5	60	60
									E20	20	2	48.1	67.6	74.5	70	80
									E23	24	2	57.7	79.7	86.5	80	90
									None	-	-	-	14.2	16.4	20	20
	460	7.7	55	12	0.8	3.0	2.2	0.0	E06	6	1	7.2	14.2	16.4	20	20
									E08	9	1	10.8	17.3	20	20	20
									E15	15	2	18.0	26.3	29.1	30	30
									E20	20	2	24.1	33.8	36.6	35	40
									E23	24	2	28.9	39.8	42.6	40	45
	575	5.1	36	7.5	0.6	2.4	1.8	0.0	None	-	-	-	10	11.8	15	15
									E08	9	1	8.7	13.8	16.1	15	20
									E15	15	2	14.4	21	23.3	25	25
									E20	20	2	19.2	27.1	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 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	16	110	24.9	3.5	6.8	5.5	0.0	None	-	-	-	49.8	55.3	60	70
									E18	13.5	2	37.5	55.3	62.2	60	70
									E24	18	2	50.0	71	77.8	80	80
									E36	25.5	2	70.8	97	103.9	100	110
									E54	40.6	2	112.7	149.4	156.2	150	175
	230	16	110	24.9	3.5	6.8	5.5	0.0	None	-	-	-	49.8	55.3	60	70
									E18	18	2	43.3	62.6	69.5	70	70
									E24	24	2	57.7	80.7	87.5	90	90
									E36	34	2	81.8	110.7	117.6	125	125
									E54	54	2	129.9	138.4	145.3	150	175
	460	7.8	52	12.1	1.6	3.4	2.2	0.0	None	-	-	-	24.2	26.4	30	30
									E18	18	2	21.7	31.3	34.1	35	35
									E24	24	2	28.9	40.3	43.1	45	45
									E36	34	2	40.9	55.4	58.1	60	60
									E54	54	2	65.0	69.2	72	80	80
	575	5.7	38.9	8.9	1.3	2.7	1.8	0.0	None	-	-	-	18.1	19.9	20	25
									E18	18	2	17.3	25	27.3	25	30
									E24	24	2	23.1	32.2	34.5	35	35
									E36	34	2	32.7	44.3	46.5	45	50
									E54	54	2	52.0	55.3	57.6	60	60
150 (12.5)	208	22.4	149	35.0	1.5	9.6	5.5	0.0	None	-	-	-	66	71.5	80	90
									E18	13.5	2	37.5	66	71.5	80	90
									E24	18	2	50.0	74.5	81.3	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
									E54	40.6	2	112.7	152.9	159.7	175	175
	230	22.4	149	35.0	1.5	9.6	5.5	0.0	None	-	-	-	66	71.5	80	90
									E18	18	2	43.3	66.1	73	80	90
									E24	24	2	57.7	84.2	91	90	100
									E36	34	2	81.8	114.2	121.1	125	125
									E54	54	2	129.9	141.9	148.8	175	175
	460	10.6	75	16.5	0.8	4.8	2.2	0.0	None	-	-	-	31.9	34.1	40	40
									E18	18	2	21.7	33.1	35.8	40	40
									E24	24	2	28.9	42.1	44.8	45	45
									E36	34	2	40.9	57.1	59.9	60	60
									E54	54	2	65.0	71	73.7	80	80
	575	7.7	54	12.0	0.6	3.9	1.8	0.0	None	-	-	-	23.6	25.4	30	30
									E18	18	2	17.3	26.5	28.8	30	30
									E24	24	2	23.1	33.7	36	35	40
									E36	34	2	32.7	45.8	48	50	50
									E54	54	2	52.0	56.8	59.1	70	70

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 (6.5)	208	9.3	68	14.5	1.5	6.8	5.5	0.0	None	-	-	-	30.7	36.2	40	45
									E09	6.8	1	18.9	32.1	39	40	45
									E18	13.5	2	37.5	55.3	62.2	60	70
									E24	18	2	50.0	71	77.8	80	80
									E36	25.5	2	70.8	97	103.9	100	110
	230	9.3	68	14.5	1.5	6.8	5.5	0.0	None	-	-	-	30.7	36.2	40	45
									E09	9	1	21.7	35.6	42.4	40	45
									E18	18	2	43.3	62.6	69.5	70	70
									E24	24	2	57.7	80.7	87.5	90	90
									E36	34	2	81.8	110.7	117.6	125	125
	460	4.9	34	7.6	0.8	3.4	2.2	0.0	None	-	-	-	16	18.2	20	20
									E09	9	1	10.8	17.8	20.5	20	25
									E18	18	2	21.7	31.3	34.1	35	35
									E24	24	2	28.9	40.3	43.1	45	45
									E36	34	2	40.9	55.4	58.1	60	60
	575	3.8	28	6	0.6	2.7	1.8	0.0	None	-	-	-	12.5	14.3	15	15
									E09	9	1	8.7	14.2	16.5	15	20
									E18	18	2	17.3	25	27.3	25	30
									E24	24	2	23.1	32.2	34.5	35	35
									E36	34	2	32.7	44.3	46.5	45	50
090 (7.5)	208	11.9	88	18.5	3.5	9.6	5.5	0.0	None	-	-	-	43.4	48.9	50	60
									E09	6.8	1	18.9	43.4	48.9	50	60
									E18	13.5	2	37.5	58.8	65.7	60	70
									E24	18	2	50.0	74.5	81.3	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
	230	11.9	88	18.5	3.5	9.6	5.5	0.0	None	-	-	-	43.4	48.9	50	60
									E09	9	1	21.7	43.4	48.9	50	60
									E18	18	2	43.3	66.1	73	70	80
									E24	24	2	57.7	84.2	91	90	100
									E36	34	2	81.8	114.2	121.1	125	125
	460	5.2	44	8.1	1.6	4.8	2.2	0.0	None	-	-	-	19.7	21.9	20	25
									E09	9	1	10.8	19.7	22.3	20	25
									E18	18	2	21.7	33.1	35.8	35	40
									E24	24	2	28.9	42.1	44.8	45	45
									E36	34	2	40.9	57.1	59.9	60	60
	575	4.8	36	7.5	1.3	3.9	1.8	0.0	None	-	-	-	17.3	19.1	20	20
									E09	9	1	8.7	17.3	19.1	20	20
									E18	18	2	17.3	26.5	28.8	30	30
									E24	24	2	23.1	33.7	36	35	40
									E36	34	2	32.7	45.8	48	50	50
102 (8.5)	208	12.2	88	19	3.5	9.6	5.5	0.0	None	-	-	-	44.1	49.6	50	60
									E09	6.8	1	18.9	44.1	49.6	50	60
									E18	13.5	2	37.5	58.8	65.7	60	70
									E24	18	2	50.0	74.5	81.3	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
	230	12.2	88	19	3.5	9.6	5.5	0.0	None	-	-	-	44.1	49.6	50	60
									E09	9	1	21.7	44.1	49.6	50	60
									E18	18	2	43.3	66.1	73	70	80
									E24	24	2	57.7	84.2	91	90	100
									E36	34	2	81.8	114.2	121.1	125	125
	460	5.8	44	9	1.6	4.8	2.2	0.0	None	-	-	-	21.1	23.3	25	25
									E09	9	1	10.8	21.1	23.3	25	25
									E18	18	2	21.7	33.1	35.8	35	40
									E24	24	2	28.9	42.1	44.8	45	45
									E36	34	2	40.9	57.1	59.9	60	60
	575	4.4	36	5.5	1.3	3.9	1.8	0.0	None	-	-	-	16.4	18.2	20	20
									E09	9	1	8.7	16.4	18.2	20	20
									E18	18	2	17.3	26.5	28.8	30	30
									E24	24	2	23.1	33.7	36	35	40
									E36	34	2	32.7	45.8	48	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					Model	kW	Stages	Amps				
120 (10)	208	16	110	24.9	3.5	9.6	5.5	0.0	None	-	-	-	52.6	58.1	60	70
									E18	13.5	2	37.5	58.8	65.7	60	70
									E24	18	2	50.0	74.5	81.3	80	90
									E36	25.5	2	70.8	100.5	107.4	110	110
	230	16	110	24.9	3.5	9.6	5.5	0.0	E54	40.6	2	112.7	152.9	159.7	175	175
									None	-	-	-	52.6	58.1	60	70
									E18	18	2	43.3	66.1	73	70	80
									E24	24	2	57.7	84.2	91	90	100
	460	7.8	52	12.1	1.6	4.8	2.2	0.0	E36	34	2	81.8	114.2	121.1	125	125
									E54	54	2	129.9	141.9	148.8	175	175
									None	-	-	-	25.6	27.8	30	35
									E18	18	2	21.7	33.1	35.8	35	40
	575	5.7	38.9	8.9	1.3	3.9	1.8	0.0	E24	24	2	28.9	42.1	44.8	45	45
									E36	34	2	40.9	57.1	59.9	60	60
									E54	54	2	65.0	71	73.7	80	80
									None	-	-	-	19.3	21.1	25	25
150 (12.5)	208	22.4	149	35.0	1.5	15.2	5.5	0.0	E18	18	2	17.3	26.5	28.8	30	30
									E24	24	2	23.1	33.7	36	35	40
									E36	34	2	32.7	45.8	48	50	50
									E54	54	2	52.0	56.8	59.1	70	70
	230	22.4	149	35.0	1.5	15.2	5.5	0.0	None	-	-	-	71.6	77.1	90	90
									E18	13.5	2	37.5	71.6	77.1	90	90
									E24	18	2	50.0	81.5	88.3	90	90
									E36	25.5	2	70.8	107.5	114.4	110	125
	460	10.6	75	16.5	0.8	7.6	2.2	0.0	E54	40.6	2	112.7	159.9	166.7	175	175
									None	-	-	-	71.6	77.1	90	90
									E18	18	2	43.3	73.1	80	90	90
									E24	24	2	57.7	91.2	98	100	100
	575	7.7	54	12.0	0.6	6.1	1.8	0.0	E36	34	2	81.8	121.2	128.1	125	150
									E54	54	2	129.9	148.9	155.8	175	175
									None	-	-	-	34.7	36.9	45	45
									E18	18	2	21.7	36.6	39.3	45	45
	575	7.7	54	12.0	0.6	6.1	1.8	0.0	E24	24	2	28.9	45.6	48.3	50	50
									E36	34	2	40.9	60.6	63.4	70	70
									E54	54	2	65.0	74.5	77.2	90	90
									None	-	-	-	25.8	27.6	30	35
	575	7.7	54	12.0	0.6	6.1	1.8	0.0	E18	18	2	17.3	29.3	31.5	30	35
									E24	24	2	23.1	36.5	38.7	40	40
									E36	34	2	32.7	48.5	50.8	50	60
									E54	54	2	52.0	59.6	61.8	70	70

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					FLA	FLA	FLA	FLA				
078 (6.5)	208	9.3	68	14.5	1.5	6.0	5.5	10.0	None	-	-	-	40.1	45.6	50	50
									E09	6.8	1	18.9	43.6	50.5	50	60
									E18	13.5	2	37.5	66.8	73.7	70	80
									E24	18	2	50.0	82.5	89.3	90	90
									E36	25.5	2	70.8	108.5	115.4	110	125
	230	9.3	68	14.5	1.5	6.0	5.5	10.0	None	-	-	-	40.1	45.6	50	50
									E09	9	1	21.7	47.1	53.9	50	60
									E18	18	2	43.3	74.1	81	80	90
									E24	24	2	57.7	92.2	99	100	100
									E36	34	2	81.8	122.2	129.1	125	150
	460	4.9	34	7.6	0.8	3.0	2.2	5.0	None	-	-	-	20.7	22.9	25	25
									E09	9	1	10.8	23.5	26.3	25	30
									E18	18	2	21.7	37.1	39.8	40	40
									E24	24	2	28.9	46.1	48.8	50	50
									E36	34	2	40.9	61.1	63.9	70	70
	575	3.8	28	6	0.6	2.4	1.8	4.0	None	-	-	-	16.2	18	20	20
									E09	9	1	8.7	18.8	21.1	20	25
									E18	18	2	17.3	29.7	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	11.9	88	18.5	3.5	6.0	5.5	10.0	None	-	-	-	49.8	55.3	60	60
									E09	6.8	1	18.9	49.8	55.3	60	60
									E18	13.5	2	37.5	66.8	73.7	70	80
									E24	18	2	50.0	82.5	89.3	90	90
									E36	25.5	2	70.8	108.5	115.4	110	125
	230	11.9	88	18.5	3.5	6.0	5.5	10.0	None	-	-	-	49.8	55.3	60	60
									E09	9	1	21.7	49.8	55.3	60	60
									E18	18	2	43.3	74.1	81	80	90
									E24	24	2	57.7	92.2	99	100	100
									E36	34	2	81.8	122.2	129.1	125	150
	460	5.2	44	8.1	1.6	3.0	2.2	5.0	None	-	-	-	22.9	25.1	25	30
									E09	9	1	10.8	23.5	26.3	25	30
									E18	18	2	21.7	37.1	39.8	40	40
									E24	24	2	28.9	46.1	48.8	50	50
									E36	34	2	40.9	61.1	63.9	70	70
	575	4.8	36	7.5	1.3	2.4	1.8	4.0	None	-	-	-	19.8	21.6	20	25
									E09	9	1	8.7	19.8	21.6	20	25
									E18	18	2	17.3	29.7	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
102 (8.5)	208	12.2	88	19	3.5	6.8	5.5	10.0	None	-	-	-	51.3	56.8	60	60
									E09	6.8	1	18.9	51.3	56.8	60	60
									E18	13.5	2	37.5	67.8	74.7	70	80
									E24	18	2	50.0	83.5	90.3	90	100
									E36	25.5	2	70.8	109.5	116.4	110	125
	230	12.2	88	19	3.5	6.8	5.5	10.0	None	-	-	-	51.3	56.8	60	60
									E09	9	1	21.7	51.3	56.8	60	60
									E18	18	2	43.3	75.1	82	80	90
									E24	24	2	57.7	93.2	100	100	100
									E36	34	2	81.8	123.2	130.1	125	150
	460	5.8	44	9	1.6	3.4	2.2	5.0	None	-	-	-	24.7	26.9	30	30
									E09	9	1	10.8	24.7	26.9	30	30
									E18	18	2	21.7	37.6	40.3	40	45
									E24	24	2	28.9	46.6	49.3	50	50
									E36	34	2	40.9	61.6	64.4	70	70
	575	4.4	36	5.5	1.3	2.7	1.8	4.0	None	-	-	-	19.2	21	20	25
									E09	9	1	8.7	19.2	21.5	20	25
									E18	18	2	17.3	30	32.3	30	35
									E24	24	2	23.1	37.2	39.5	40	40
									E36	34	2	32.7	49.3	51.5	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	16	110	24.9	3.5	6.8	5.5	10.0	None	-	-	-	59.8	65.3	70	80
									E18	13.5	2	37.5	67.8	74.7	70	80
									E24	18	2	50.0	83.5	90.3	90	100
									E36	25.5	2	70.8	109.5	116.4	110	125
									E54	40.6	2	112.7	161.9	168.7	175	175
	230	16	110	24.9	3.5	6.8	5.5	10.0	None	-	-	-	59.8	65.3	70	80
									E18	18	2	43.3	75.1	82	80	90
									E24	24	2	57.7	93.2	100	100	100
									E36	34	2	81.8	123.2	130.1	125	150
									E54	54	2	129.9	150.9	157.8	175	175
	460	7.8	52	12.1	1.6	3.4	2.2	5.0	None	-	-	-	29.2	31.4	35	35
									E18	18	2	21.7	37.6	40.3	40	45
									E24	24	2	28.9	46.6	49.3	50	50
									E36	34	2	40.9	61.6	64.4	70	70
									E54	54	2	65.0	75.5	78.2	80	90
	575	5.7	38.9	8.9	1.3	2.7	1.8	4.0	None	-	-	-	22.1	23.9	25	25
									E18	18	2	17.3	30	32.3	30	35
									E24	24	2	23.1	37.2	39.5	40	40
									E36	34	2	32.7	49.3	51.5	50	60
									E54	54	2	52.0	60.3	62.6	70	70
150 (12.5)	208	22.4	149	35.0	1.5	9.6	5.5	10.0	None	-	-	-	76	81.5	90	100
									E18	13.5	2	37.5	76	81.5	90	100
									E24	18	2	50.0	87	93.8	90	100
									E36	25.5	2	70.8	113	119.9	125	125
									E54	40.6	2	112.7	165.4	172.2	175	175
	230	22.4	149	35.0	1.5	9.6	5.5	10.0	None	-	-	-	76	81.5	90	100
									E18	18	2	43.3	78.6	85.5	90	100
									E24	24	2	57.7	96.7	103.5	100	110
									E36	34	2	81.8	126.7	133.6	150	150
									E54	54	2	129.9	154.4	161.3	175	175
	460	10.6	75	16.5	0.8	4.8	2.2	5.0	None	-	-	-	36.9	39.1	45	45
									E18	18	2	21.7	39.3	42.1	45	45
									E24	24	2	28.9	48.3	51.1	50	60
									E36	34	2	40.9	63.4	66.1	70	70
									E54	54	2	65.0	77.2	80	90	90
	575	7.7	54	12.0	0.6	3.9	1.8	4.0	None	-	-	-	27.6	29.4	35	35
									E18	18	2	17.3	31.5	33.8	35	35
									E24	24	2	23.1	38.7	41	40	45
									E36	34	2	32.7	50.8	53	60	60
									E54	54	2	52.0	61.8	64.1	70	70

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

ZJ078-150 Hi Static 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 (6.5)	208	9.3	68	14.5	1.5	6.8	5.5	10.0	None	-	-	-	40.9	46.4	50	50
									E09	6.8	1	18.9	44.6	51.5	50	60
									E18	13.5	2	37.5	67.8	74.7	70	80
									E24	18	2	50.0	83.5	90.3	90	100
									E36	25.5	2	70.8	109.5	116.4	110	125
	230	9.3	68	14.5	1.5	6.8	5.5	10.0	None	-	-	-	40.9	46.4	50	50
									E09	9	1	21.7	48.1	54.9	50	60
									E18	18	2	43.3	75.1	82	80	90
									E24	24	2	57.7	93.2	100	100	100
									E36	34	2	81.8	123.2	130.1	125	150
	460	4.9	34	7.6	0.8	3.4	2.2	5.0	None	-	-	-	21.1	23.3	25	25
									E09	9	1	10.8	24	26.8	25	30
									E18	18	2	21.7	37.6	40.3	40	45
									E24	24	2	28.9	46.6	49.3	50	50
									E36	34	2	40.9	61.6	64.4	70	70
	575	3.8	28	6	0.6	2.7	1.8	4.0	None	-	-	-	16.5	18.3	20	20
									E09	9	1	8.7	19.2	21.5	20	25
									E18	18	2	17.3	30	32.3	30	35
									E24	24	2	23.1	37.2	39.5	40	40
									E36	34	2	32.7	49.3	51.5	50	60
090 (7.5)	208	11.9	88	18.5	3.5	9.6	5.5	10.0	None	-	-	-	53.4	58.9	60	70
									E09	6.8	1	18.9	53.4	58.9	60	70
									E18	13.5	2	37.5	71.3	78.2	80	80
									E24	18	2	50.0	87	93.8	90	100
									E36	25.5	2	70.8	113	119.9	125	125
	230	11.9	88	18.5	3.5	9.6	5.5	10.0	None	-	-	-	53.4	58.9	60	70
									E09	9	1	21.7	53.4	58.9	60	70
									E18	18	2	43.3	78.6	85.5	80	90
									E24	24	2	57.7	96.7	103.5	100	110
									E36	34	2	81.8	126.7	133.6	150	150
	460	5.2	44	8.1	1.6	4.8	2.2	5.0	None	-	-	-	24.7	26.9	25	30
									E09	9	1	10.8	25.8	28.5	30	30
									E18	18	2	21.7	39.3	42.1	40	45
									E24	24	2	28.9	48.3	51.1	50	60
									E36	34	2	40.9	63.4	66.1	70	70
	575	4.8	36	7.5	1.3	3.9	1.8	4.0	None	-	-	-	21.3	23.1	25	25
									E09	9	1	8.7	21.3	23.1	25	25
									E18	18	2	17.3	31.5	33.8	35	35
									E24	24	2	23.1	38.7	41	40	45
									E36	34	2	32.7	50.8	53	60	60
102 (8.5)	208	12.2	88	19	3.5	9.6	5.5	10.0	None	-	-	-	54.1	59.6	60	70
									E09	6.8	1	18.9	54.1	59.6	60	70
									E18	13.5	2	37.5	71.3	78.2	80	80
									E24	18	2	50.0	87	93.8	90	100
									E36	25.5	2	70.8	113	119.9	125	125
	230	12.2	88	19	3.5	9.6	5.5	10.0	None	-	-	-	54.1	59.6	60	70
									E09	9	1	21.7	54.1	59.6	60	70
									E18	18	2	43.3	78.6	85.5	80	90
									E24	24	2	57.7	96.7	103.5	100	110
									E36	34	2	81.8	126.7	133.6	150	150
	460	5.8	44	9	1.6	4.8	2.2	5.0	None	-	-	-	26.1	28.3	30	30
									E09	9	1	10.8	26.1	28.5	30	30
									E18	18	2	21.7	39.3	42.1	40	45
									E24	24	2	28.9	48.3	51.1	50	60
									E36	34	2	40.9	63.4	66.1	70	70
	575	4.4	36	5.5	1.3	3.9	1.8	4.0	None	-	-	-	20.4	22.2	25	25
									E09	9	1	8.7	20.7	23	25	25
									E18	18	2	17.3	31.5	33.8	35	35
									E24	24	2	23.1	38.7	41	40	45
									E36	34	2	32.7	50.8	53	60	60

ZJ078-150 Hi Static 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	16	110	24.9	3.5	9.6	5.5	10.0	None	-	-	-	62.6	68.1	70	80
									E18	13.5	2	37.5	71.3	78.2	80	80
									E24	18	2	50.0	87	93.8	90	100
									E36	25.5	2	70.8	113	119.9	125	125
	230	16	110	24.9	3.5	9.6	5.5	10.0	E54	40.6	2	112.7	165.4	172.2	175	175
									None	-	-	-	62.6	68.1	70	80
									E18	18	2	43.3	78.6	85.5	80	90
									E24	24	2	57.7	96.7	103.5	100	110
	460	7.8	52	12.1	1.6	4.8	2.2	5.0	E36	34	2	81.8	126.7	133.6	150	150
									E54	54	2	129.9	154.4	161.3	175	175
									None	-	-	-	30.6	32.8	35	40
									E18	18	2	21.7	39.3	42.1	40	45
	575	5.7	38.9	8.9	1.3	3.9	1.8	4.0	E24	24	2	28.9	48.3	51.1	50	60
									E36	34	2	40.9	63.4	66.1	70	70
									E54	54	2	65.0	77.2	80	90	90
									None	-	-	-	23.3	25.1	25	30
150 (12.5)	208	22.4	149	35.0	1.5	15.2	5.5	10.0	E18	18	2	17.3	31.5	33.8	35	35
									E24	24	2	23.1	38.7	41	40	45
									E36	34	2	32.7	50.8	53	60	60
									E54	54	2	52.0	61.8	64.1	70	70
	230	22.4	149	35.0	1.5	15.2	5.5	10.0	None	-	-	-	81.6	87.1	100	100
									E18	13.5	2	37.5	81.6	87.1	100	100
									E24	18	2	50.0	94	100.8	100	110
									E36	25.5	2	70.8	120	126.9	125	150
	460	10.6	75	16.5	0.8	7.6	2.2	5.0	E54	40.6	2	112.7	172.4	179.2	175	200
									None	-	-	-	81.6	87.1	100	100
									E18	18	2	43.3	85.6	92.5	100	100
									E24	24	2	57.7	103.7	110.5	110	125
	575	7.7	54	12.0	0.6	6.1	1.8	4.0	E36	34	2	81.8	133.7	140.6	150	150
									E54	54	2	129.9	161.4	168.3	175	175
									None	-	-	-	39.7	41.9	50	50
									E18	18	2	21.7	42.8	45.6	50	50
	575	7.7	54	12.0	0.6	6.1	1.8	4.0	E24	24	2	28.9	51.8	54.6	60	60
									E36	34	2	40.9	66.9	69.6	70	70
									E54	54	2	65.0	80.7	83.5	90	90
									None	-	-	-	29.8	31.6	35	35
	575	7.7	54	12.0	0.6	6.1	1.8	4.0	E18	18	2	17.3	34.3	36.5	35	40
									E24	24	2	23.1	41.5	43.7	45	45
									E36	34	2	32.7	53.5	55.8	60	60
									E54	54	2	52.0	64.6	66.8	70	70

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

ZR037-061 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	8.7	68	13.5	1.5	6.0	5.5	0.0	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	23.1	30.0	25	30
									E08	6.8	1	18.9	31.1	38.0	35	40
									E15	11.3	2	31.4	46.7	53.6	50	60
	230	8.7	68	13.5	1.5	6.0	5.5	0.0	None	-	-	-	18.4	23.9	25	30
									E03	3	1	7.2	18.4	23.9	25	30
									E06	6	1	14.4	25.5	32.4	30	35
									E08	9	1	21.7	34.6	41.4	35	45
									E15	15	2	36.1	52.6	59.5	60	60
	460	4.6	34	7.1	0.8	3.0	2.2	0.0	None	-	-	-	9.6	11.8	15	15
									E03	3	1	3.6	9.6	11.8	15	15
									E06	6	1	7.2	12.8	15.5	15	20
									E08	9	1	10.8	17.3	20.0	20	20
									E15	15	2	18.0	26.3	29.1	30	30
	575	3.5	28	5.5	0.6	2.4	1.8	0.0	None	-	-	-	7.4	9.2	15	15
									E08	9	1	8.7	13.8	16.1	15	20
									E15	15	2	14.4	21.0	23.3	25	25
049 (4)	208	11.9	88	18.5	1.5	6.0	5.5	0.0	None	-	-	-	23.9	29.4	30	40
									E06	4.5	1	12.5	23.9	30.0	30	40
									E08	6.8	1	18.9	31.1	38.0	35	40
									E15	11.3	2	31.4	46.7	53.6	50	60
									E20	15	2	41.6	59.5	66.4	60	70
	230	11.9	88	18.5	1.5	6.0	5.5	0.0	None	-	-	-	23.9	29.4	30	40
									E06	6	1	14.4	25.5	32.4	35	40
									E08	9	1	21.7	34.6	41.4	35	45
									E15	15	2	36.1	52.6	59.5	60	60
									E20	20	2	48.1	67.6	74.5	70	80
	460	5.2	44	8.1	0.8	3.0	2.2	0.0	None	-	-	-	11.1	13.3	15	15
									E06	6	1	7.2	12.8	15.5	15	20
									E08	9	1	10.8	17.3	20.0	20	20
									E15	15	2	18.0	26.3	29.1	30	30
									E20	20	2	24.1	33.8	36.6	35	40
	575	4.8	36	7.5	0.6	2.4	1.8	0.0	None	-	-	-	9.6	11.4	15	15
									E08	9	1	8.7	13.8	16.1	15	20
									E15	15	2	14.4	21.0	23.3	25	25
									E20	20	2	19.2	27.1	29.3	30	30
061 (4)	208	14.1	88	22.0	1.5	4.3	5.5	0.0	None	-	-	-	26.6	32.1	35	45
									E06	4.5	1	12.5	26.6	32.1	35	45
									E08	6.8	1	18.9	31.1	38.0	40	45
									E15	11.3	2	31.4	46.7	53.6	50	60
									E20	15	2	41.6	59.5	66.4	60	70
	230	14.1	88	22.0	1.5	4.3	5.5	0.0	E23	18	2	50.0	70.0	76.8	70	80
									None	-	-	-	26.6	32.1	35	45
									E06	6	1	14.4	26.6	32.4	35	45
									E08	9	1	21.7	34.6	41.4	40	45
									E15	15	2	36.1	52.6	59.5	60	60
	460	7.7	55	12.0	0.8	2.1	2.2	0.0	E20	20	2	48.1	67.6	74.5	70	80
									E23	24	2	57.7	79.7	86.5	80	90
									None	-	-	-	14.2	16.4	20	20
									E06	6	1	7.2	14.2	16.4	20	20
									E08	9	1	10.8	17.3	20.0	20	20
061 (4)	460	7.7	55	12.0	0.8	2.1	2.2	0.0	E15	15	2	18.0	26.3	29.1	30	30
									E20	20	2	24.1	33.8	36.6	35	40
									E23	24	2	28.9	39.8	42.6	40	45
									None	-	-	-	10.0	11.8	15	15
									E08	9	1	8.7	13.8	16.1	15	20
	575	5.1	36	7.5	0.6	2.0	1.8	0.0	E15	15	2	14.4	21.0	23.3	25	25
									E20	20	2	19.2	27.1	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.

ZR078-150 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					FLA	FLA	FLA	FLA					Model
120 (10)	208	17.9	120	28.0	1.5	8.2	5.5	0.0	None	-	-	-	51.5	57.0	60	70	
									E18	13.5	2	37.5	57.1	64.0	60	70	
									E24	18	2	50.0	72.7	79.6	80	80	
									E36	25.5	2	70.8	98.7	105.6	100	110	
	230	17.9	120	28.0	1.5	8.2	5.5	0.0	E54	40.6	2	112.7	151.1	158.0	175	175	
									None	-	-	-	51.5	57.0	60	70	
									E18	18	2	43.3	64.4	71.3	70	80	
									E24	24	2	57.7	82.4	89.3	90	90	
	460	9.6	70	15.0	0.8	4.1	2.2	0.0	E36	34	2	81.8	112.5	119.4	125	125	
									E54	54	2	129.9	140.2	147.0	150	175	
									None	-	-	-	27.3	29.5	35	35	
									E18	18	2	21.7	32.2	34.9	35	35	
	575	7.4	53	11.5	0.6	3.6	1.8	0.0	E24	24	2	28.9	41.2	44.0	45	45	
									E36	34	2	40.9	56.2	59.0	60	60	
									E54	54	2	65.0	70.1	72.8	80	80	
									None	-	-	-	21.5	23.3	25	30	
	150 (12.5)	208	23.1	160	36.0	1.5	10.9	5.5	0.0	E18	18	2	17.3	26.2	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	52.0	56.5	58.7	70	70
230		23.1	160	36.0	1.5	10.9	5.5	0.0	None	-	-	-	68.9	74.4	90	90	
									E18	18	2	43.3	68.9	74.6	90	90	
									E24	24	2	57.7	85.8	92.7	90	100	
									E36	34	2	81.8	115.9	122.7	125	125	
460		12.2	87	19.0	0.8	5.3	2.2	0.0	E54	54	2	129.9	143.5	150.4	175	175	
									None	-	-	-	36.0	38.2	45	50	
									E18	18	2	21.7	36.0	38.2	45	50	
									E24	24	2	28.9	42.7	45.5	45	50	
575		8.7	62	13.5	0.6	4.1	1.8	0.0	E36	34	2	40.9	57.7	60.5	60	70	
									E54	54	2	65.0	71.6	74.3	80	80	
									None	-	-	-	26.1	27.9	30	35	
									E18	18	2	17.3	26.8	29.0	30	35	

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

ZR078-150 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					Model	kW	Stages	Amps				
120 (10)	208	17.9	120	28.0	1.5	10.9	5.5	0.0	None	-	-	-	54.2	59.7	70	70
									E18	13.5	2	37.5	60.5	67.3	70	70
									E24	18	2	50.0	76.1	83.0	80	90
									E36	25.5	2	70.8	102.1	109.0	110	110
									E54	40.6	2	112.7	154.5	161.4	175	175
	230	17.9	120	28.0	1.5	10.9	5.5	0.0	None	-	-	-	54.2	59.7	70	70
									E18	18	2	43.3	67.8	74.6	70	80
									E24	24	2	57.7	85.8	92.7	90	100
									E36	34	2	81.8	115.9	122.7	125	125
									E54	54	2	129.9	143.5	150.4	175	175
	460	9.6	70	15.0	0.8	5.3	2.2	0.0	None	-	-	-	28.5	30.7	35	40
									E18	18	2	21.7	33.7	36.4	35	40
									E24	24	2	28.9	42.7	45.5	45	50
									E36	34	2	40.9	57.7	60.5	60	70
									E54	54	2	65.0	71.6	74.3	80	80
	575	7.4	53	11.5	0.6	4.1	1.8	0.0	None	-	-	-	22.0	23.8	25	30
									E18	18	2	17.3	26.8	29.0	30	30
									E24	24	2	23.1	34.0	36.2	35	40
									E36	34	2	32.7	46.0	48.3	50	50
									E54	54	2	52.0	57.1	59.3	70	70
150 (12.5)	208	23.1	160	36.0	1.5	16.1	5.5	0.0	None	-	-	-	74.1	79.6	90	100
									E18	13.5	2	37.5	74.1	79.6	90	100
									E24	18	2	50.0	82.6	89.5	90	100
									E36	25.5	2	70.8	108.6	115.5	110	125
									E54	40.6	2	112.7	161.0	167.9	175	175
	230	23.1	160	36.0	1.5	16.1	5.5	0.0	None	-	-	-	74.1	79.6	90	100
									E18	18	2	43.3	74.3	81.1	90	100
									E24	24	2	57.7	92.3	99.2	100	100
									E36	34	2	81.8	122.4	129.2	125	150
									E54	54	2	129.9	150.0	156.9	175	175
	460	12.2	87	19.0	0.8	8.1	2.2	0.0	None	-	-	-	38.8	41.0	50	50
									E18	18	2	21.7	38.8	41.0	50	50
									E24	24	2	28.9	46.2	49.0	50	50
									E36	34	2	40.9	61.2	64.0	70	70
									E54	54	2	65.0	75.1	77.8	90	90
	575	8.7	62	13.5	0.6	6.0	1.8	0.0	None	-	-	-	28.0	29.8	35	35
									E18	18	2	17.3	29.2	31.4	35	35
									E24	24	2	23.1	36.4	38.6	40	40
									E36	34	2	32.7	48.4	50.6	50	60
									E54	54	2	52.0	59.5	61.7	70	70

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

ZR078-150 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 (6.5)	208	13.5	88.0	21.1	1.5	6.2	5.5	10.0	None	-	-	-	49.6	55.1	60	60
									E09	6.8	1	18.9	49.6	55.1	60	60
									E18	13.5	2	37.5	67.1	74.0	70	80
									E24	18.0	2	50.0	82.7	89.6	90	90
									E36	25.5	2	70.8	108.7	115.6	110	125
	230	13.5	88.0	21.1	1.5	6.2	5.5	10.0	None	-	-	-	49.6	55.1	60	60
									E09	9.0	1	21.7	49.6	55.1	60	60
									E18	18.0	2	43.3	74.4	81.3	80	90
									E24	24.0	2	57.7	92.4	99.3	100	100
									E36	34.0	2	81.8	122.5	129.4	125	150
	460	6.0	44.0	9.3	0.8	3.1	2.2	5.0	None	-	-	-	23.2	25.4	25	30
									E09	9.0	1	10.8	23.7	26.4	25	30
									E18	18.0	2	21.7	37.2	39.9	40	40
									E24	24.0	2	28.9	46.2	49.0	50	50
									E36	34.0	2	40.9	61.2	64.0	70	70
	575	4.9	34.0	7.7	0.6	2.4	1.8	4.0	None	-	-	-	18.6	20.4	20	25
									E09	9.0	1	8.7	18.8	21.1	20	25
									E18	18.0	2	17.3	29.7	31.9	30	35
									E24	24.0	2	23.1	36.9	39.1	40	40
									E36	34.0	2	32.7	48.9	51.1	50	60
090 (7.5)	208	14.7	115	23.0	1.5	6.2	5.5	10.0	None	-	-	-	52.3	57.8	60	70
									E09	6.8	1	18.9	52.3	57.8	60	70
									E18	13.5	2	37.5	67.1	74.0	70	80
									E24	18	2	50.0	82.7	89.6	90	90
									E36	25.5	2	70.8	108.7	115.6	110	125
	230	14.7	115	23.0	1.5	6.2	5.5	10.0	None	-	-	-	52.3	57.8	60	70
									E09	9	1	21.7	52.3	57.8	60	70
									E18	18	2	43.3	74.4	81.3	80	90
									E24	24	2	57.7	92.4	99.3	100	100
									E36	34	2	81.8	122.5	129.4	125	150
	460	7.7	50	12.0	0.8	3.1	2.2	5.0	None	-	-	-	27.0	29.2	30	35
									E09	9	1	10.8	27.0	29.2	30	35
									E18	18	2	21.7	37.2	39.9	40	40
									E24	24	2	28.9	46.2	49.0	50	50
									E36	34	2	40.9	61.2	64.0	70	70
	575	6.4	40	10.0	0.6	2.4	1.8	4.0	None	-	-	-	22.0	23.8	25	30
									E09	9	1	8.7	22.0	23.8	25	30
									E18	18	2	17.3	29.7	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
102 (8.5)	208	16.7	120	26.0	1.5	8.2	5.5	10.0	None	-	-	-	58.8	64.3	70	80
									E09	6.8	1	18.9	58.8	64.3	70	80
									E18	13.5	2	37.5	69.6	76.5	70	80
									E24	18	2	50.0	85.2	92.1	90	100
									E36	25.5	2	70.8	111.2	118.1	125	125
	230	16.7	120	26.0	1.5	8.2	5.5	10.0	None	-	-	-	58.8	64.3	70	80
									E09	9	1	21.7	58.8	64.3	70	80
									E18	18	2	43.3	76.9	83.8	80	90
									E24	24	2	57.7	94.9	101.8	100	110
									E36	34	2	81.8	125.0	131.9	125	150
	460	8.7	60	13.5	0.8	4.1	2.2	5.0	None	-	-	-	30.3	32.5	35	40
									E09	9	1	10.8	30.3	32.5	35	40
									E18	18	2	21.7	38.4	41.2	40	45
									E24	24	2	28.9	47.5	50.2	50	60
									E36	34	2	40.9	62.5	65.2	70	70
	575	6.7	42	10.5	0.6	3.6	1.8	4.0	None	-	-	-	23.9	25.7	30	30
									E09	9	1	8.7	23.9	25.7	30	30
									E18	18	2	17.3	31.2	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

ZR078-150 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	17.9	120	28.0	1.5	8.2	5.5	10.0	None	-	-	-	61.5	67.0	70	80
									E18	13.5	2	37.5	69.6	76.5	70	80
									E24	18	2	50.0	85.2	92.1	90	100
									E36	25.5	2	70.8	111.2	118.1	125	125
									E54	40.6	2	112.7	163.6	170.5	175	175
	230	17.9	120	28.0	1.5	8.2	5.5	10.0	None	-	-	-	61.5	67.0	70	80
									E18	18	2	43.3	76.9	83.8	80	90
									E24	24	2	57.7	94.9	101.8	100	110
									E36	34	2	81.8	125.0	131.9	125	150
									E54	54	2	129.9	152.7	159.5	175	175
	460	9.6	70	15.0	0.8	4.1	2.2	5.0	None	-	-	-	32.3	34.5	40	40
									E18	18	2	21.7	38.4	41.2	40	45
									E24	24	2	28.9	47.5	50.2	50	60
									E36	34	2	40.9	62.5	65.2	70	70
									E54	54	2	65.0	76.3	79.1	90	90
	575	7.4	53	11.5	0.6	3.6	1.8	4.0	None	-	-	-	25.5	27.3	30	30
									E18	18	2	17.3	31.2	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	52.0	61.5	63.7	70	70
150 (12.5)	208	23.1	160	36.0	1.5	10.9	5.5	10.0	None	-	-	-	78.9	84.4	100	100
									E18	13.5	2	37.5	78.9	84.4	100	100
									E24	18	2	50.0	88.6	95.5	100	100
									E36	25.5	2	70.8	114.6	121.5	125	125
									E54	40.6	2	112.7	167.0	173.9	175	175
	230	23.1	160	36.0	1.5	10.9	5.5	10.0	None	-	-	-	78.9	84.4	100	100
									E18	18	2	43.3	80.3	87.1	100	100
									E24	24	2	57.7	98.3	105.2	100	110
									E36	34	2	81.8	128.4	135.2	150	150
									E54	54	2	129.9	156.0	162.9	175	175
	460	12.2	87	19.0	0.8	5.3	2.2	5.0	None	-	-	-	41.0	43.2	50	50
									E18	18	2	21.7	41.0	43.2	50	50
									E24	24	2	28.9	49.0	51.7	50	60
									E36	34	2	40.9	64.0	66.7	70	70
									E54	54	2	65.0	77.8	80.6	90	90
	575	8.7	62	13.5	0.6	4.1	1.8	4.0	None	-	-	-	30.1	31.9	35	40
									E18	18	2	17.3	31.8	34.0	35	40
									E24	24	2	23.1	39.0	41.2	40	45
									E36	34	2	32.7	51.0	53.3	60	60
									E54	54	2	52.0	62.1	64.3	70	70

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

ZR037-061 Hi Static 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	8.7	68	13.5	1.5	6.0	5.5	10.0	None	-	-	-	28.7	34.2	35	40
									E03	2.3	1	6.4	28.7	34.9	35	40
									E06	4.5	1	12.5	35.6	42.5	40	45
									E08	6.8	1	18.9	43.6	50.5	45	60
									E15	11.3	2	31.4	59.2	66.1	60	70
	230	8.7	68	13.5	1.5	6.0	5.5	10.0	None	-	-	-	28.7	34.2	35	40
									E03	3	1	7.2	29.0	35.9	35	40
									E06	6	1	14.4	38.0	44.9	40	45
									E08	9	1	21.7	47.1	53.9	50	60
									E15	15	2	36.1	65.1	72.0	70	80
	460	4.6	34	7.1	0.8	3.0	2.2	5.0	None	-	-	-	14.7	16.9	15	20
									E03	3	1	3.6	14.7	17.3	15	20
									E06	6	1	7.2	19.0	21.8	20	25
									E08	9	1	10.8	23.5	26.3	25	30
									E15	15	2	18.0	32.6	35.3	35	40
	575	3.5	28	5.5	0.6	2.4	1.8	4.0	None	-	-	-	11.5	13.3	15	15
									E08	9	1	8.7	18.8	21.1	20	25
									E15	15	2	14.4	26.0	28.3	30	30
049 (4)	208	11.9	88	18.5	1.5	6.0	5.5	10.0	None	-	-	-	33.9	39.4	45	50
									E06	4.5	1	12.5	35.6	42.5	45	50
									E08	6.8	1	18.9	43.6	50.5	45	60
									E15	11.3	2	31.4	59.2	66.1	60	70
									E20	15	2	41.6	72.0	78.9	80	80
	230	11.9	88	18.5	1.5	6.0	5.5	10.0	None	-	-	-	33.9	39.4	45	50
									E06	6	1	14.4	38.0	44.9	45	50
									E08	9	1	21.7	47.1	53.9	50	60
									E15	15	2	36.1	65.1	72.0	70	80
									E20	20	2	48.1	80.1	87.0	90	90
	460	5.2	44	8.1	0.8	3.0	2.2	5.0	None	-	-	-	16.1	18.3	20	20
									E06	6	1	7.2	19.0	21.8	20	25
									E08	9	1	10.8	23.5	26.3	25	30
									E15	15	2	18.0	32.6	35.3	35	40
									E20	20	2	24.1	40.1	42.8	45	45
	575	4.8	36	7.5	0.6	2.4	1.8	4.0	None	-	-	-	13.6	15.4	15	20
									E08	9	1	8.7	18.8	21.1	20	25
									E15	15	2	14.4	26.0	28.3	30	30
									E20	20	2	19.2	32.1	34.3	35	35
061 (5)	208	14.1	88	22.0	1.5	4.3	5.5	10.0	None	-	-	-	37.4	42.9	50	50
									E06	4.5	1	12.5	37.4	43.5	50	50
									E08	6.8	1	18.9	44.6	51.5	50	60
									E15	11.3	2	31.4	60.2	67.1	70	70
									E20	15	2	41.6	73.0	79.9	80	80
									E23	18	2	50.0	83.5	90.3	90	100
	230	14.1	88	22.0	1.5	4.3	5.5	10.0	None	-	-	-	37.4	42.9	50	50
									E06	6	1	14.4	39.0	45.9	50	50
									E08	9	1	21.7	48.1	54.9	50	60
									E15	15	2	36.1	66.1	73.0	70	80
									E20	20	2	48.1	81.1	88.0	90	90
									E23	24	2	57.7	93.2	100.0	100	100
	460	7.7	55	12.0	0.8	2.1	2.2	5.0	None	-	-	-	19.6	21.8	25	25
									E06	6	1	7.2	19.6	22.3	25	25
									E08	9	1	10.8	24.0	26.8	25	30
									E15	15	2	18.0	33.1	35.8	35	40
									E20	20	2	24.1	40.6	43.3	45	45
									E23	24	2	28.9	46.6	49.3	50	50
	575	5.1	36	7.5	0.6	2.0	1.8	4.0	None	-	-	-	14.3	16.1	15	20
									E08	9	1	8.7	19.2	21.5	20	25
									E15	15	2	14.4	26.4	28.7	30	30
									E20	20	2	19.2	32.4	34.7	35	35
									E23	24	2	23.1	37.2	39.5	40	40

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

ZR078-150 Hi Static 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 (6.5)	208	13.5	88.0	21.1	1.5	8.2	5.5	10.0	None	-	-	-	51.6	57.1	60	70
									E09	6.8	1	18.9	51.6	57.1	60	70
									E18	13.5	2	37.5	69.6	76.5	70	80
									E24	18.0	2	50.0	85.2	92.1	90	100
									E36	25.5	2	70.8	111.2	118.1	125	125
	230	13.5	88.0	21.1	1.5	8.2	5.5	10.0	None	-	-	-	51.6	57.1	60	70
									E09	9.0	1	21.7	51.6	57.1	60	70
									E18	18.0	2	43.3	76.9	83.8	80	90
									E24	24.0	2	57.7	94.9	101.8	100	110
									E36	34.0	2	81.8	125.0	131.9	125	150
	460	6.0	44.0	9.3	0.8	4.1	2.2	5.0	None	-	-	-	24.2	26.4	30	30
									E09	9.0	1	10.8	24.9	27.7	30	30
									E18	18.0	2	21.7	38.4	41.2	40	45
									E24	24.0	2	28.9	47.5	50.2	50	60
									E36	34.0	2	40.9	62.5	65.2	70	70
	575	4.9	34.0	7.7	0.6	3.6	1.8	4.0	None	-	-	-	19.8	21.6	20	25
									E09	9.0	1	8.7	20.3	22.6	25	25
									E18	18.0	2	17.3	31.2	33.4	35	35
									E24	24.0	2	23.1	38.4	40.6	40	45
									E36	34.0	2	32.7	50.4	52.6	60	60
090 (7.5)	208	14.7	115	23.0	1.5	10.9	5.5	10.0	None	-	-	-	57.0	62.5	70	70
									E09	6.8	1	18.9	57.0	62.5	70	70
									E18	13.5	2	37.5	73.0	79.8	80	80
									E24	18	2	50.0	88.6	95.5	90	100
									E36	25.5	2	70.8	114.6	121.5	125	125
	230	14.7	115	23.0	1.5	10.9	5.5	10.0	None	-	-	-	57.0	62.5	70	70
									E09	9	1	21.7	57.0	62.5	70	70
									E18	18	2	43.3	80.3	87.1	90	90
									E24	24	2	57.7	98.3	105.2	100	110
									E36	34	2	81.8	128.4	135.2	150	150
	460	7.7	50	12.0	0.8	5.3	2.2	5.0	None	-	-	-	29.2	31.4	35	35
									E09	9	1	10.8	29.2	31.4	35	35
									E18	18	2	21.7	39.9	42.7	40	45
									E24	24	2	28.9	49.0	51.7	50	60
									E36	34	2	40.9	64.0	66.7	70	70
	575	6.4	40	10.0	0.6	4.1	1.8	4.0	None	-	-	-	23.7	25.5	30	30
									E09	9	1	8.7	23.7	25.5	30	30
									E18	18	2	17.3	31.8	34.0	35	35
									E24	24	2	23.1	39.0	41.2	40	45
									E36	34	2	32.7	51.0	53.3	60	60
102 (8.5)	208	16.7	120	26.0	1.5	10.9	5.5	10.0	None	-	-	-	61.5	67.0	70	80
									E09	6.8	1	18.9	61.5	67.0	70	80
									E18	13.5	2	37.5	73.0	79.8	80	80
									E24	18	2	50.0	88.6	95.5	90	100
									E36	25.5	2	70.8	114.6	121.5	125	125
	230	16.7	120	26.0	1.5	10.9	5.5	10.0	None	-	-	-	61.5	67.0	70	80
									E09	9	1	21.7	61.5	67.0	70	80
									E18	18	2	43.3	80.3	87.1	90	90
									E24	24	2	57.7	98.3	105.2	100	110
									E36	34	2	81.8	128.4	135.2	150	150
	460	8.7	60	13.5	0.8	5.3	2.2	5.0	None	-	-	-	31.5	33.7	40	40
									E09	9	1	10.8	31.5	33.7	40	40
									E18	18	2	21.7	39.9	42.7	40	45
									E24	24	2	28.9	49.0	51.7	50	60
									E36	34	2	40.9	64.0	66.7	70	70
	575	6.7	42	10.5	0.6	4.1	1.8	4.0	None	-	-	-	24.4	26.2	30	30
									E09	9	1	8.7	24.4	26.2	30	30
									E18	18	2	17.3	31.8	34.0	35	35
									E24	24	2	23.1	39.0	41.2	40	45
									E36	34	2	32.7	51.0	53.3	60	60

ZR078-150 Hi Static 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					FLA	FLA	FLA	FLA				
120 (10)	208	17.9	120	28.0	1.5	10.9	5.5	10.0	None	-	-	-	64.2	69.7	80	80
									E18	13.5	2	37.5	73.0	79.8	80	80
									E24	18	2	50.0	88.6	95.5	90	100
									E36	25.5	2	70.8	114.6	121.5	125	125
									E54	40.6	2	112.7	167.0	173.9	175	175
	230	17.9	120	28.0	1.5	10.9	5.5	10.0	None	-	-	-	64.2	69.7	80	80
									E18	18	2	43.3	80.3	87.1	90	90
									E24	24	2	57.7	98.3	105.2	100	110
									E36	34	2	81.8	128.4	135.2	150	150
									E54	54	2	129.9	156.0	162.9	175	175
	460	9.6	70	15.0	0.8	5.3	2.2	5.0	None	-	-	-	33.5	35.7	40	45
									E18	18	2	21.7	39.9	42.7	40	45
									E24	24	2	28.9	49.0	51.7	50	60
									E36	34	2	40.9	64.0	66.7	70	70
									E54	54	2	65.0	77.8	80.6	90	90
	575	7.4	53	11.5	0.6	4.1	1.8	4.0	None	-	-	-	26.0	27.8	30	35
									E18	18	2	17.3	31.8	34.0	35	35
									E24	24	2	23.1	39.0	41.2	40	45
									E36	34	2	32.7	51.0	53.3	60	60
									E54	54	2	52.0	62.1	64.3	70	70
150 (12.5)	208	23.1	160	36.0	1.5	16.1	5.5	10.0	None	-	-	-	84.1	89.6	100	110
									E18	13.5	2	37.5	84.1	89.6	100	110
									E24	18	2	50.0	95.1	102.0	100	110
									E36	25.5	2	70.8	121.1	128.0	125	150
									E54	40.6	2	112.7	173.5	180.4	175	200
	230	23.1	160	36.0	1.5	16.1	5.5	10.0	None	-	-	-	84.1	89.6	100	110
									E18	18	2	43.3	86.8	93.6	100	110
									E24	24	2	57.7	104.8	111.7	110	125
									E36	34	2	81.8	134.9	141.7	150	150
									E54	54	2	129.9	162.5	169.4	175	175
	460	12.2	87	19.0	0.8	8.1	2.2	5.0	None	-	-	-	43.8	46.0	50	50
									E18	18	2	21.7	43.8	46.2	50	50
									E24	24	2	28.9	52.5	55.2	60	60
									E36	34	2	40.9	67.5	70.2	70	80
									E54	54	2	65.0	81.3	84.1	90	90
	575	8.7	62	13.5	0.6	6.0	1.8	4.0	None	-	-	-	32.0	33.8	40	40
									E18	18	2	17.3	34.2	36.4	40	40
									E24	24	2	23.1	41.4	43.6	45	45
									E36	34	2	32.7	53.4	55.6	60	60
									E54	54	2	52.0	64.5	66.7	70	70

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

Electric Heat Multipliers

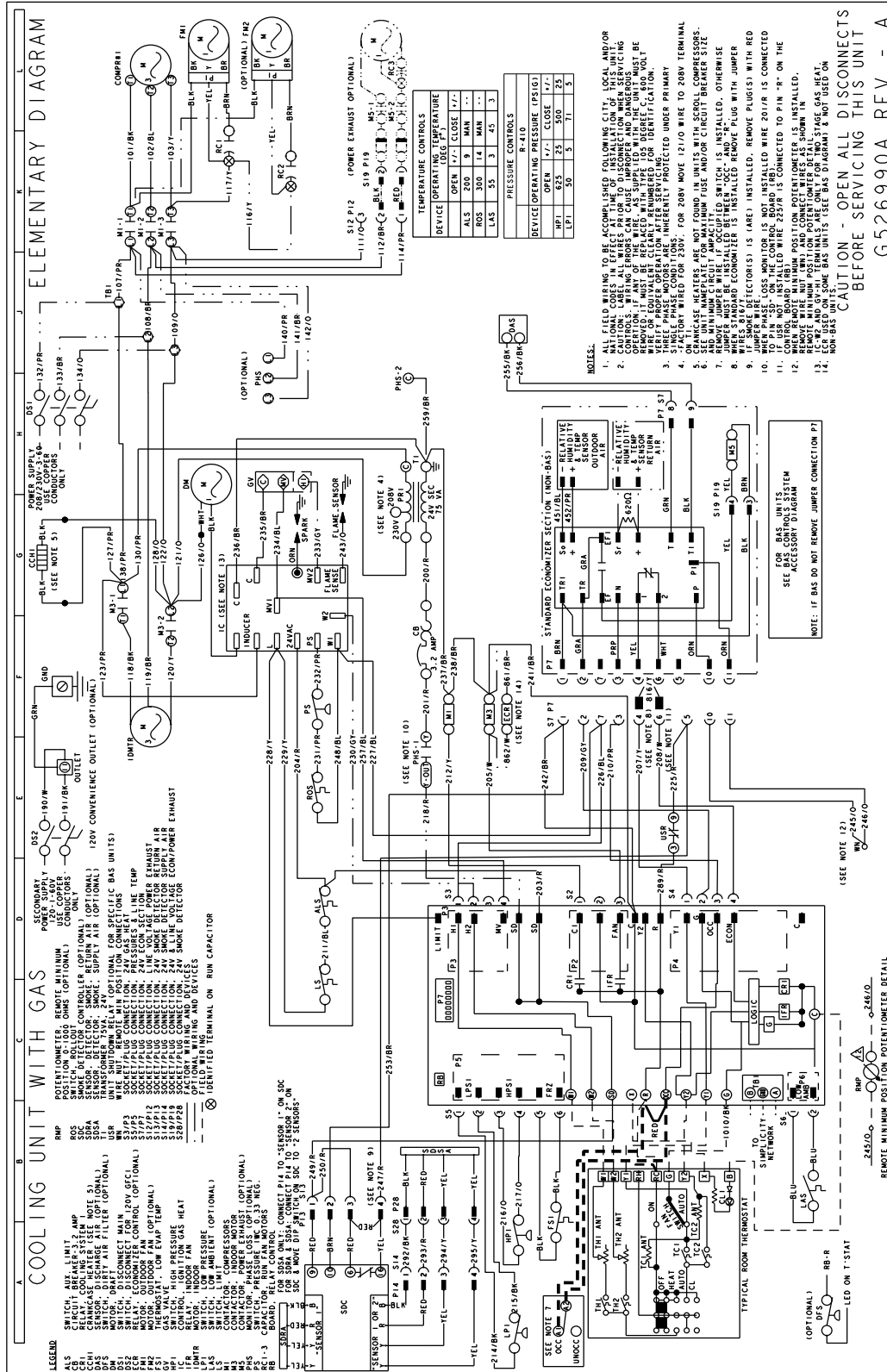
Voltage		kW Capacity Multipliers ¹
Nominal	Applied	
240	208	0.75
	230	0.92
480	460	0.92
600	575	0.92

1. Electric heaters are rated at nominal voltage. Use this table to determine the electric heat capacity for heaters applied at lower voltages.

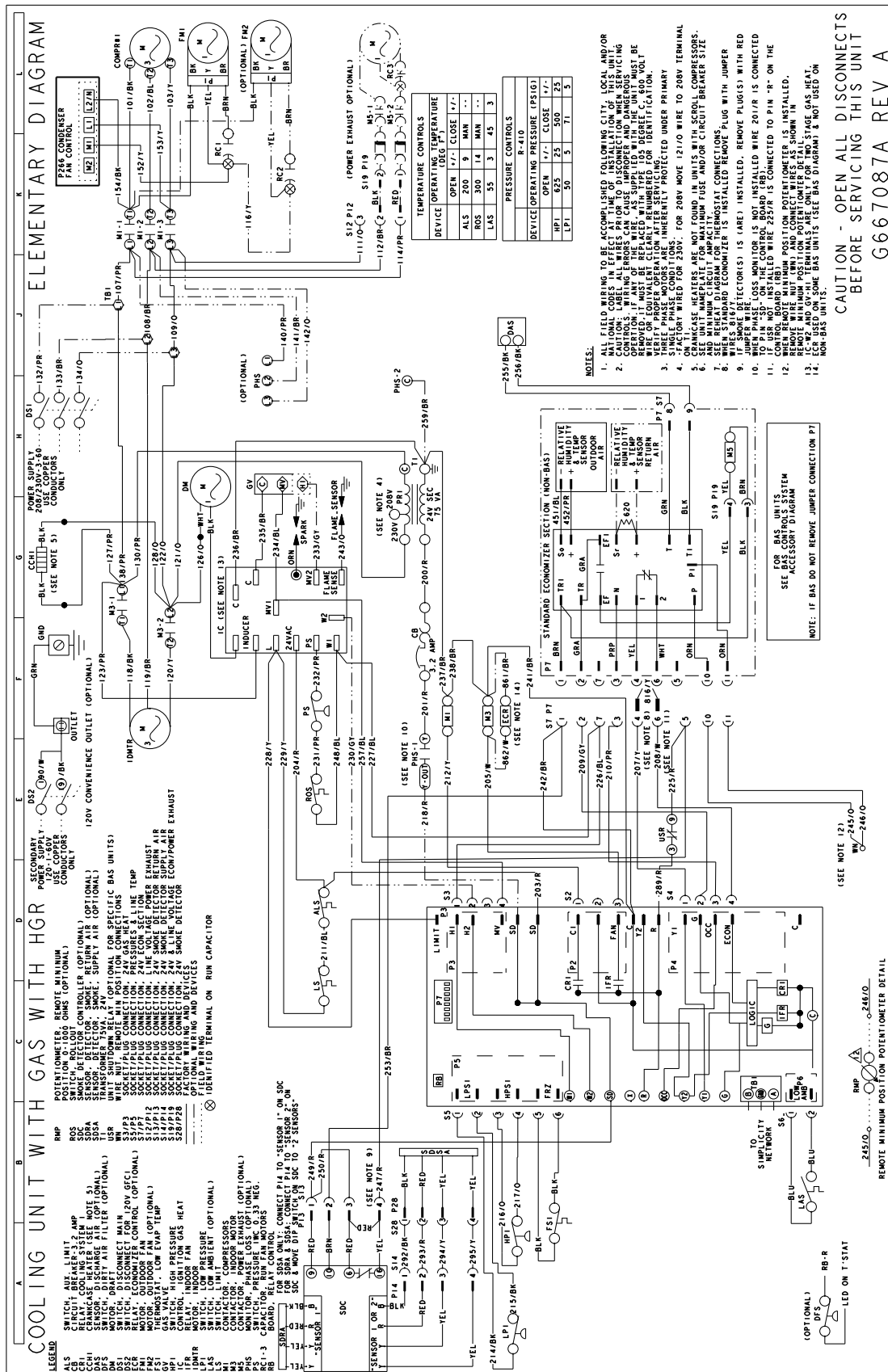
Typical Wiring Diagrams

ZH/ZJ037-150 Typical Wiring Diagrams

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



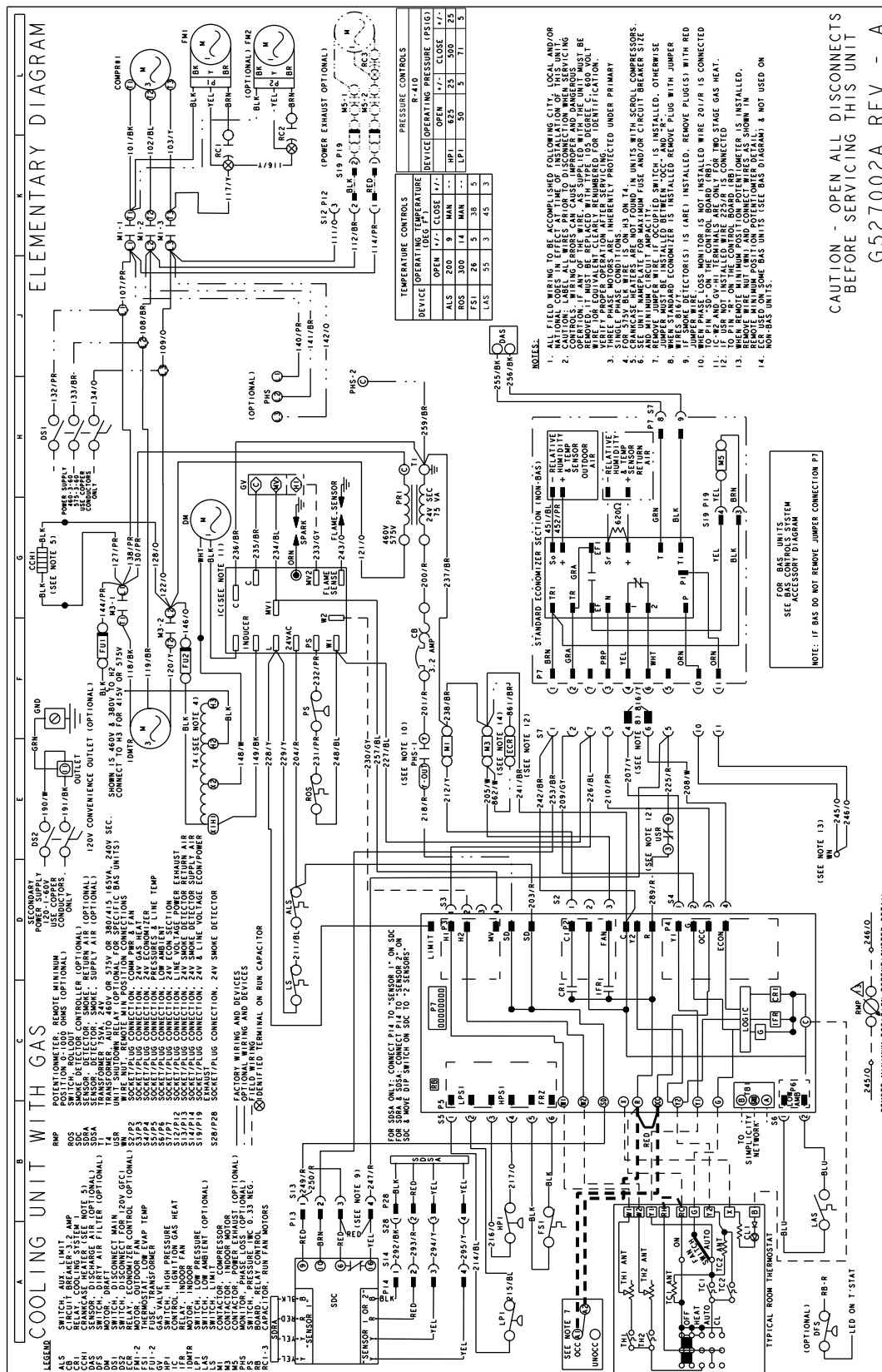
Typical ZR037-061 Reheat Unit with Gas Heat 230 Volt Wiring Diagram



CAUTION - OPEN ALL DISCONNECTS
BEFORE SERVICING THIS UNIT

G667087A REV A

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

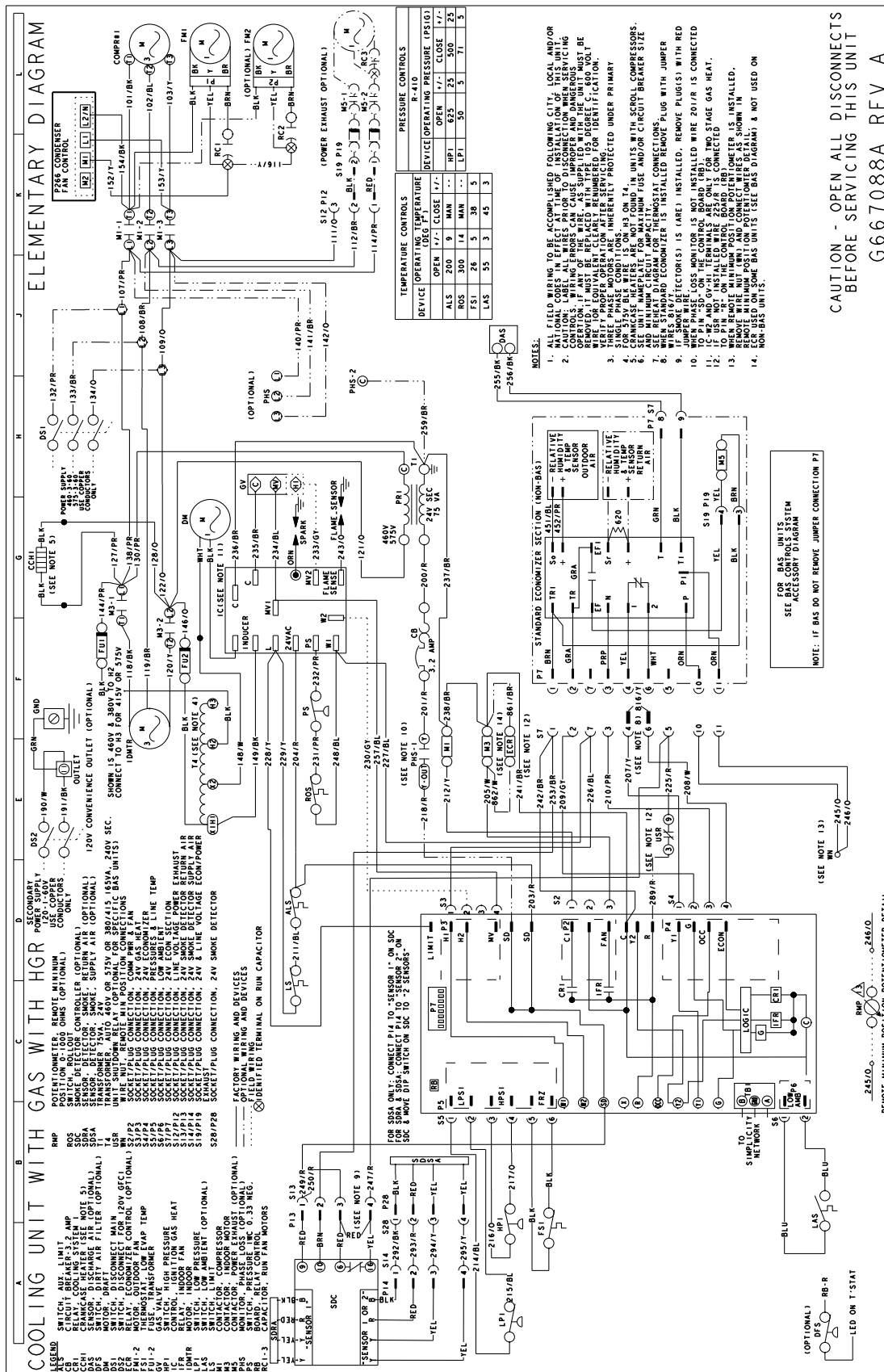


CAUTION - OPEN ALL DISCONNECTS
BEFORE SERVICING THIS UNIT

G527002A REV - A

G527002A REV - A

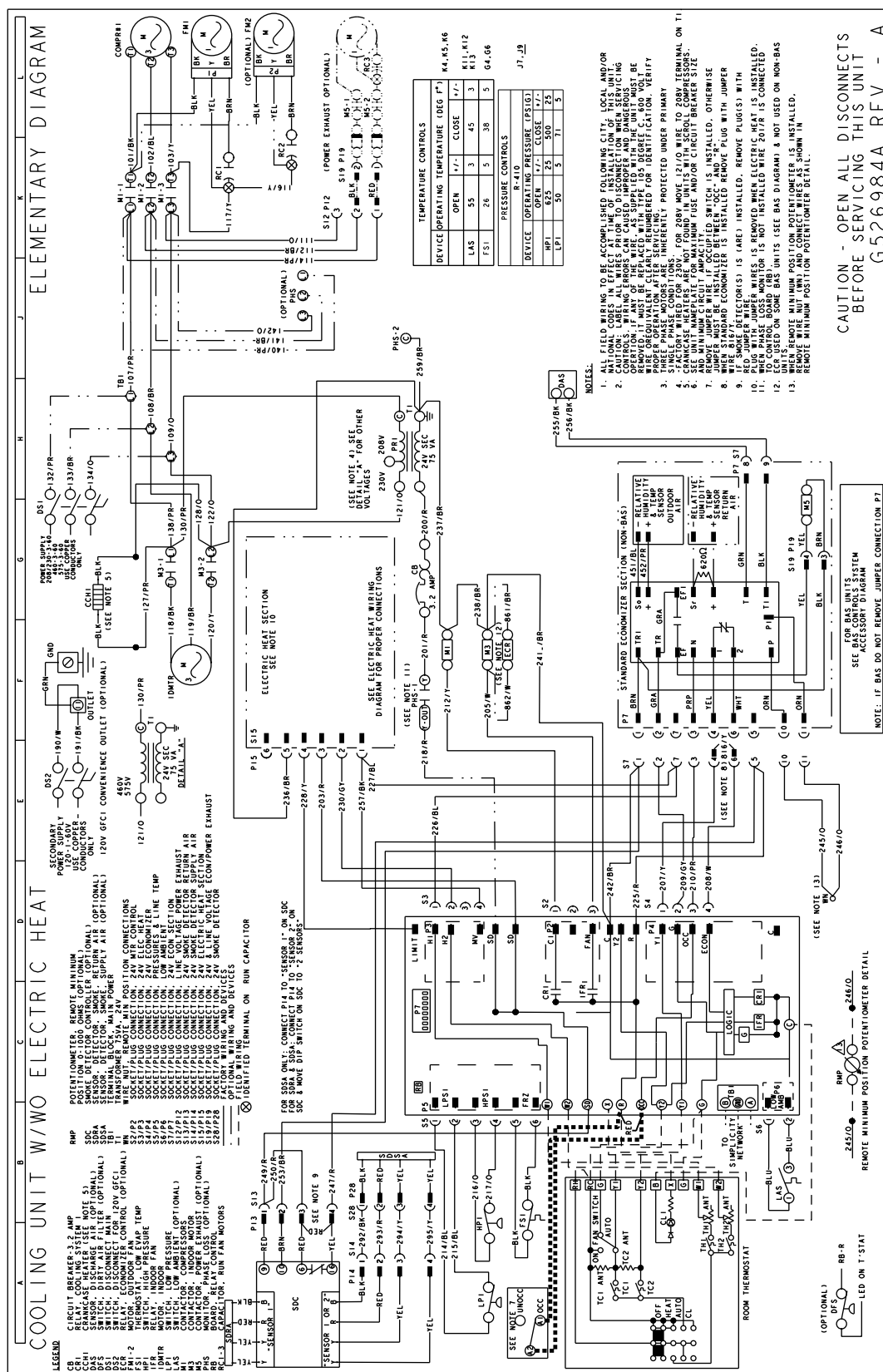
Typical ZR037-061 Reheat Unit with Gas Heat 460/575 Volt Wiring Diagram



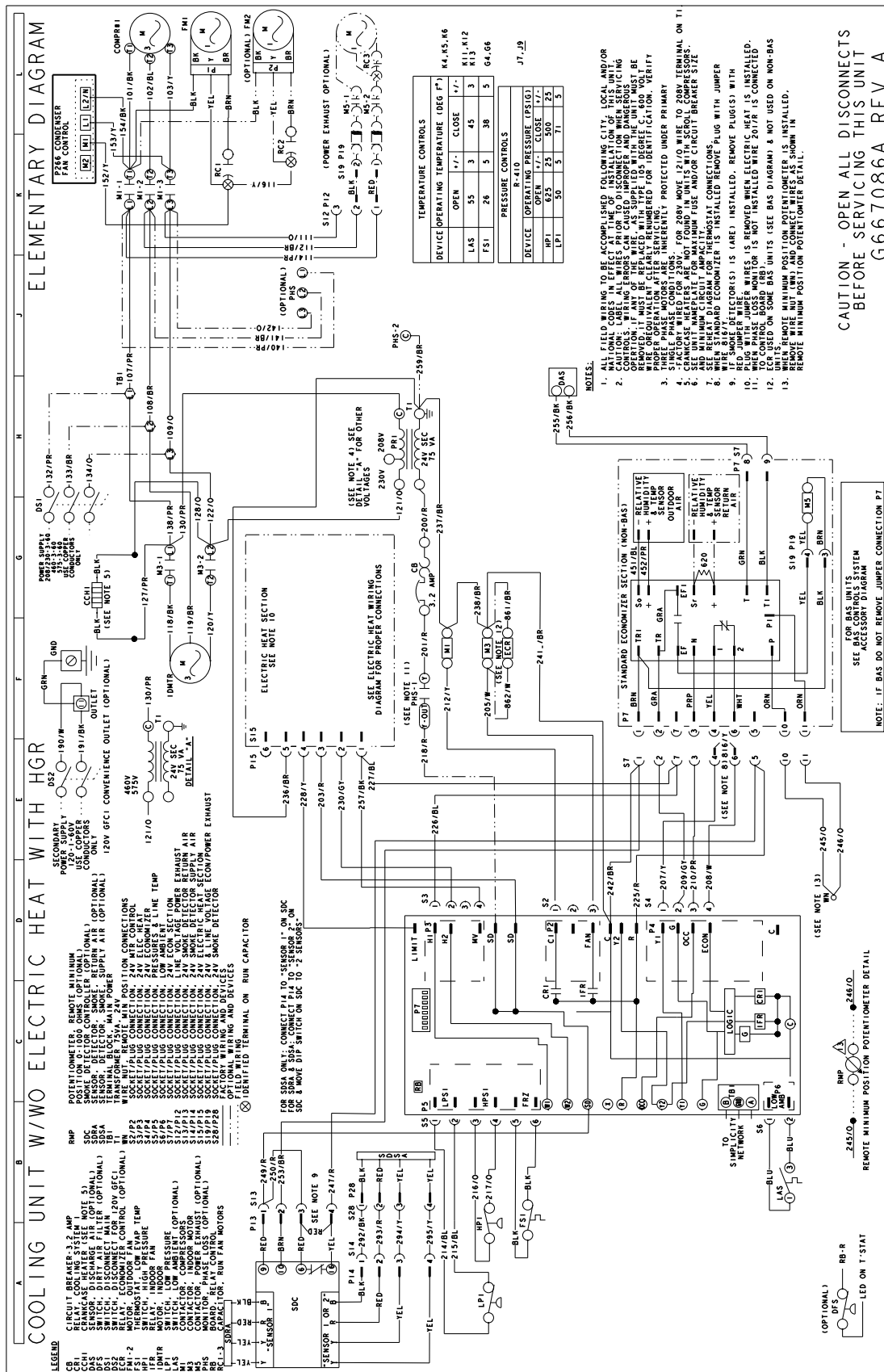
CAUTION - OPEN ALL DISCONNECTS
BEFORE SERVICING THIS UNIT

G667088A REV A

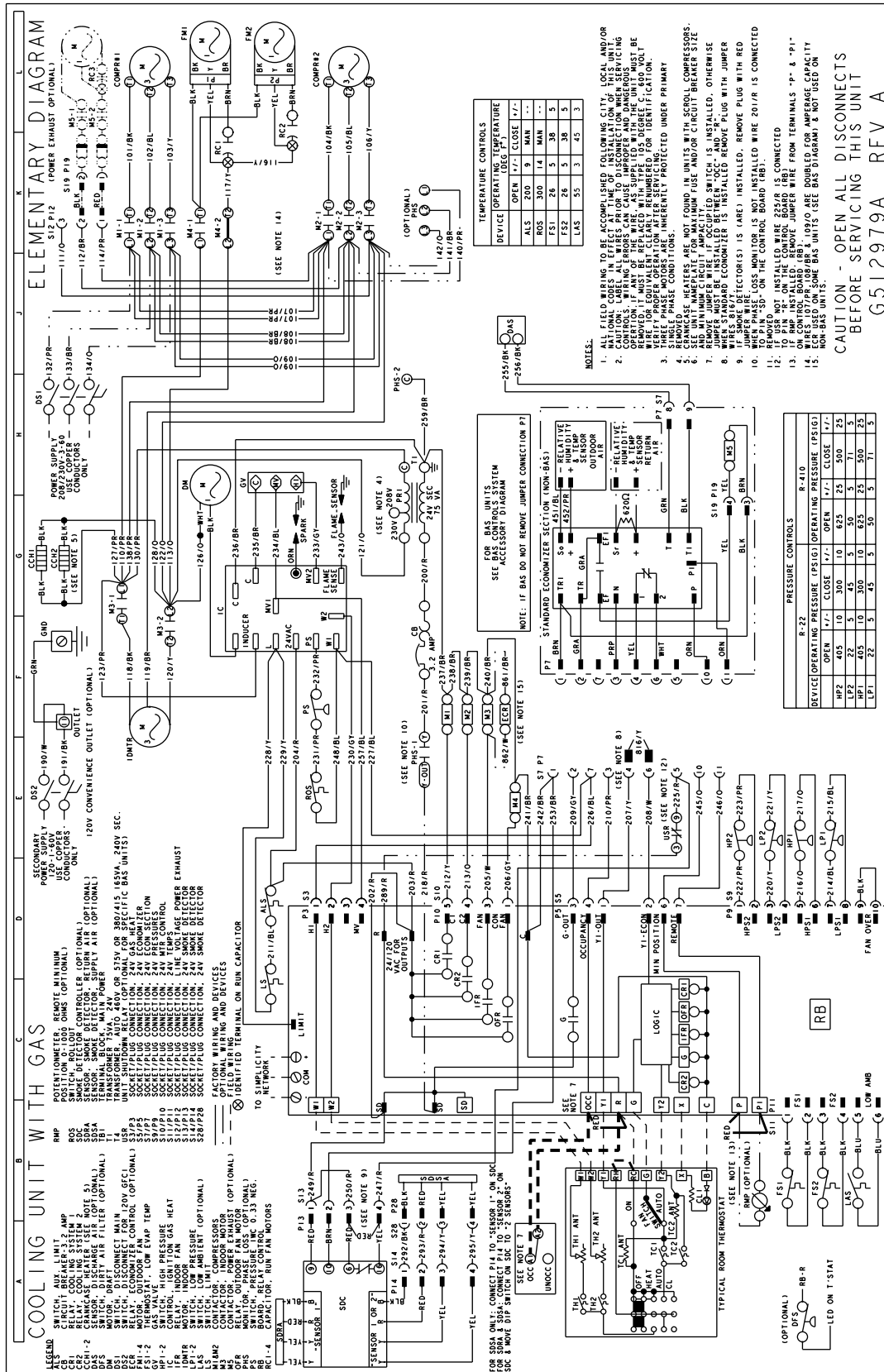
Johnson Controls Unitary Products

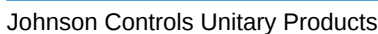


Typical ZR037-061 Reheat Unit with/without Electric Heat Wiring Diagram

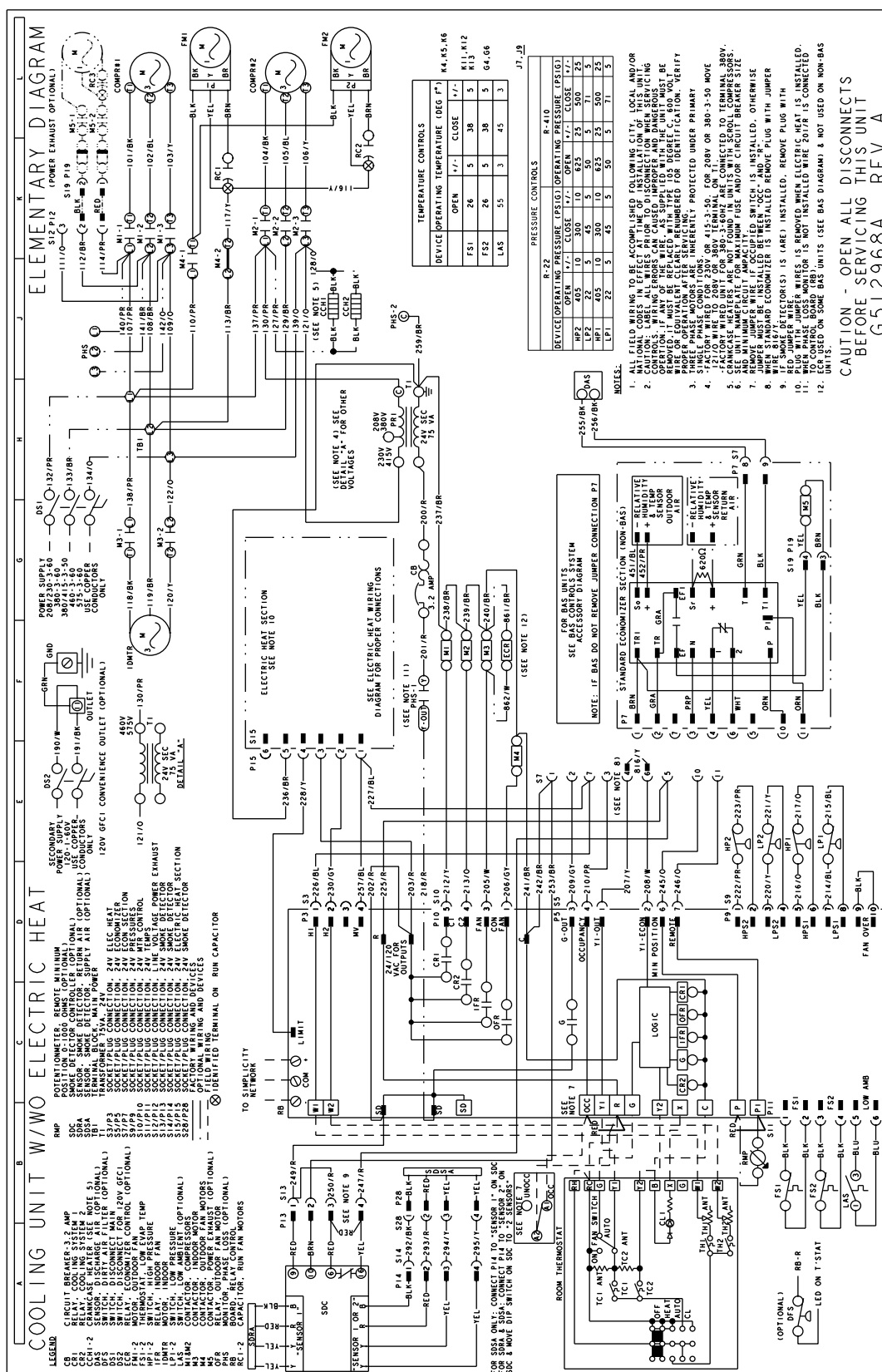


Typical ZH/ZJ/ZR078-120 Cooling Unit with Gas Heat 230 Volt Wiring Diagram

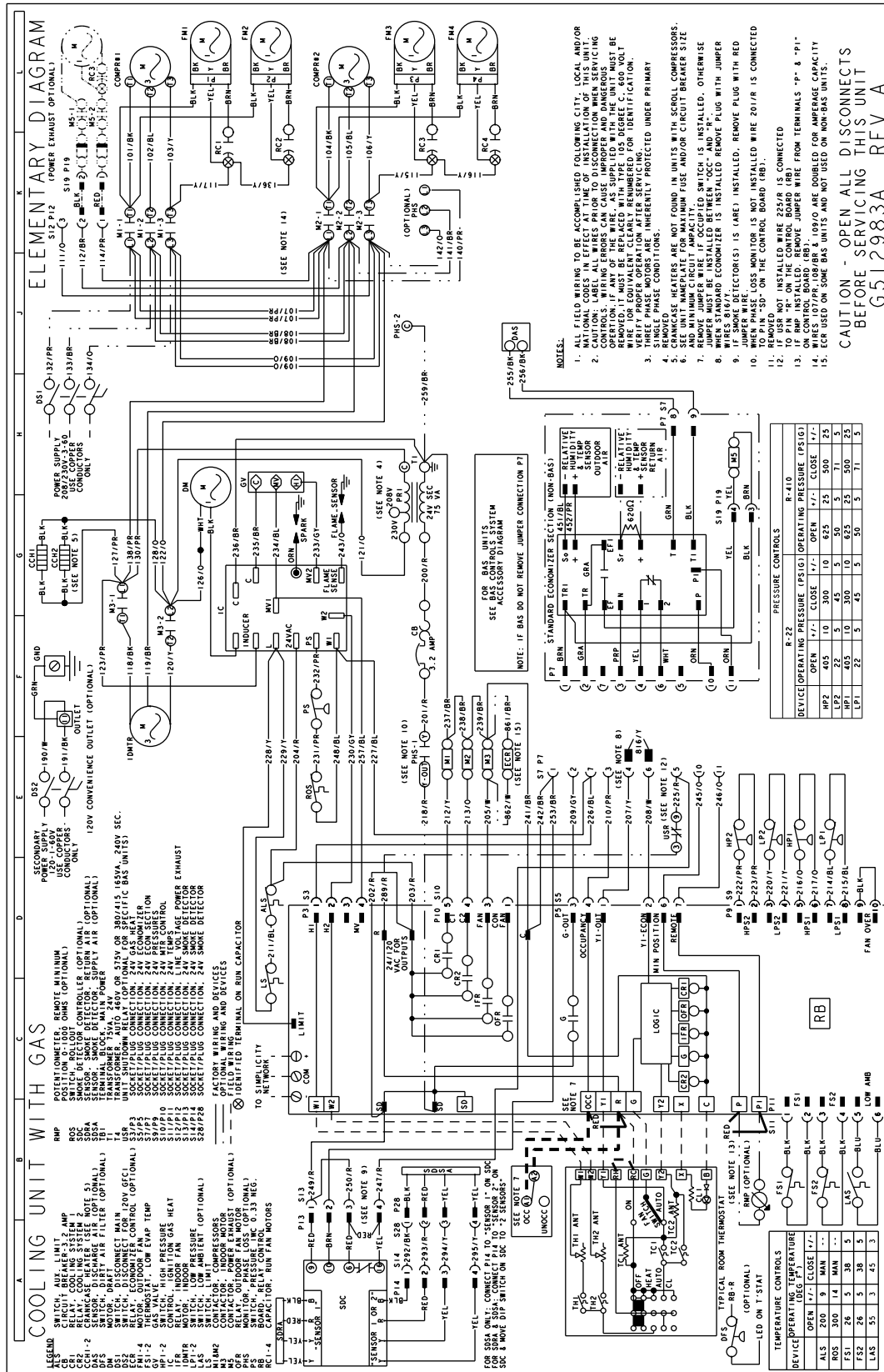




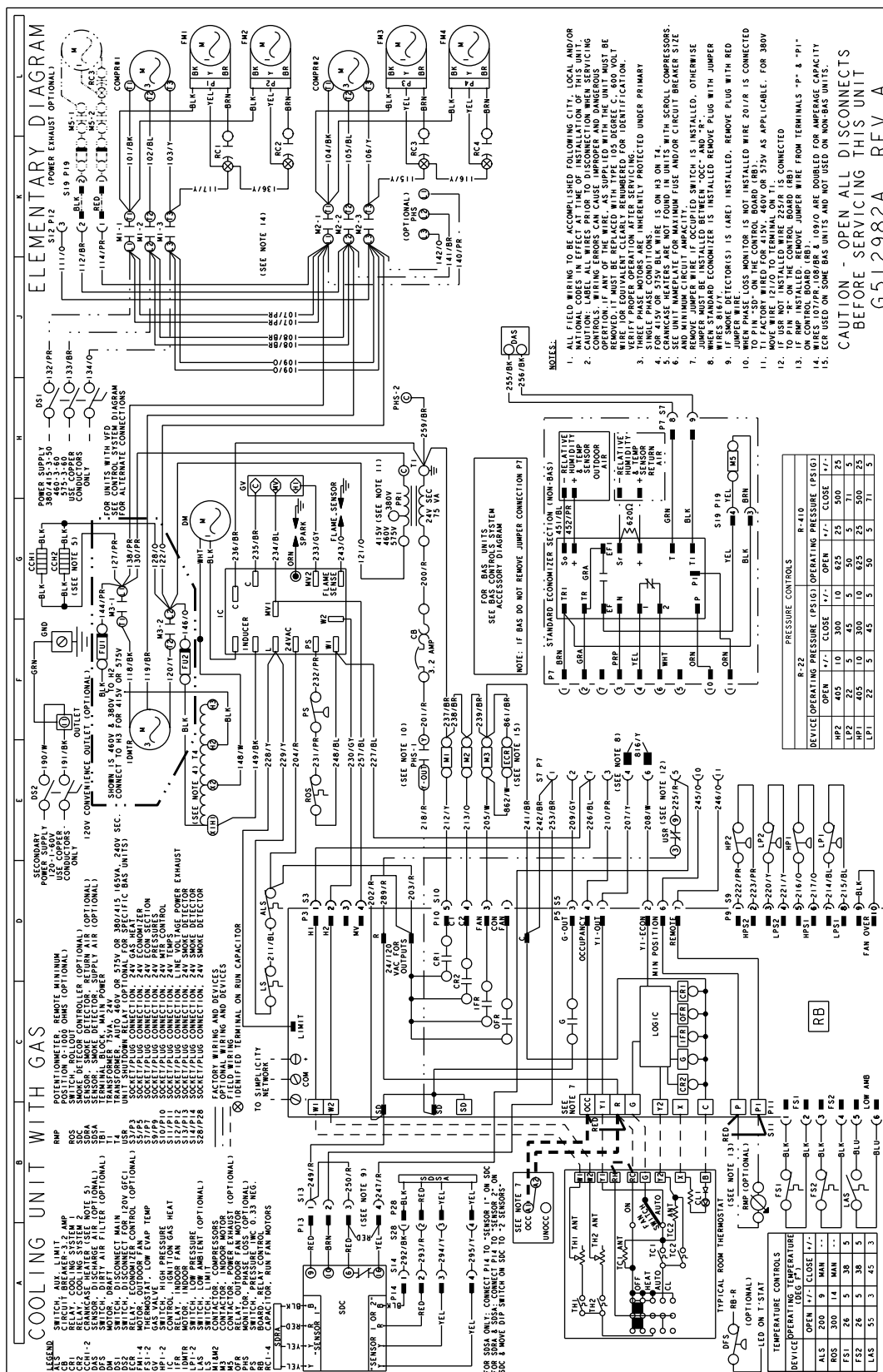
Johnson Controls Unitary Products



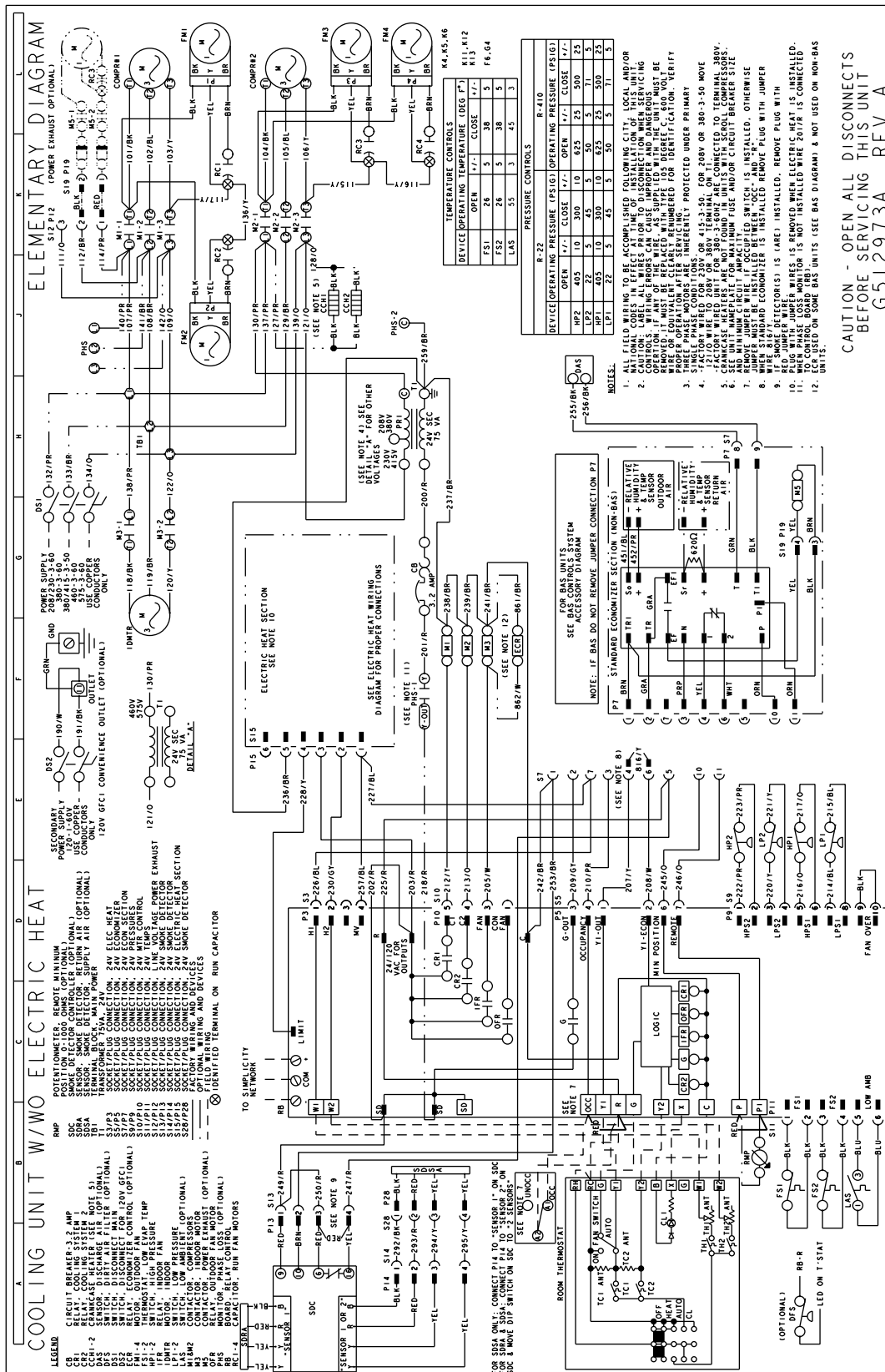
Typical ZH/ZJ/ZR150 Cooling Unit with Gas Heat 230 Volt Wiring Diagram



Johnson Controls Unitary Products

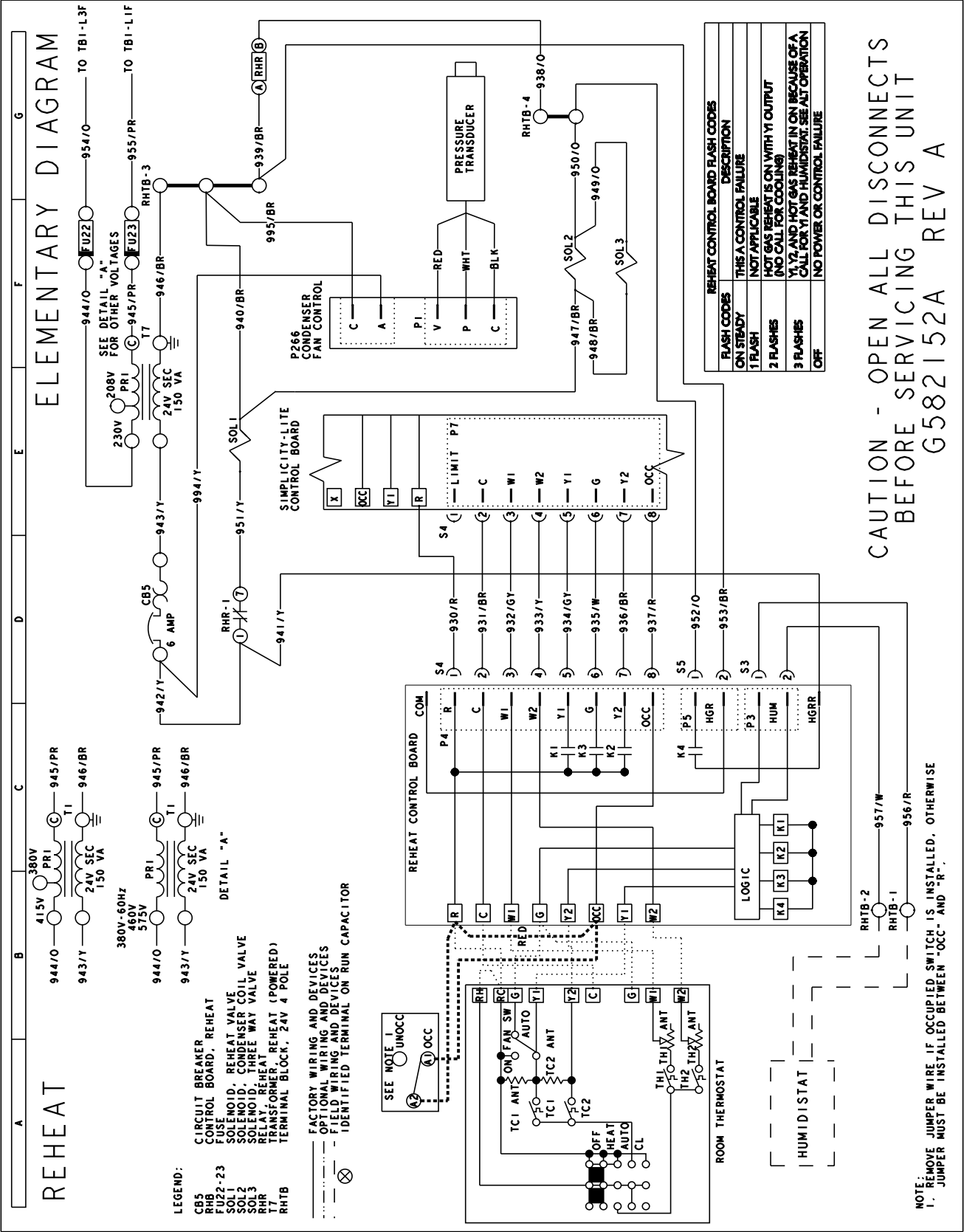


Typical ZH/ZJ/ZR150 Cooling Unit with/without Electric Heat Wiring Diagram

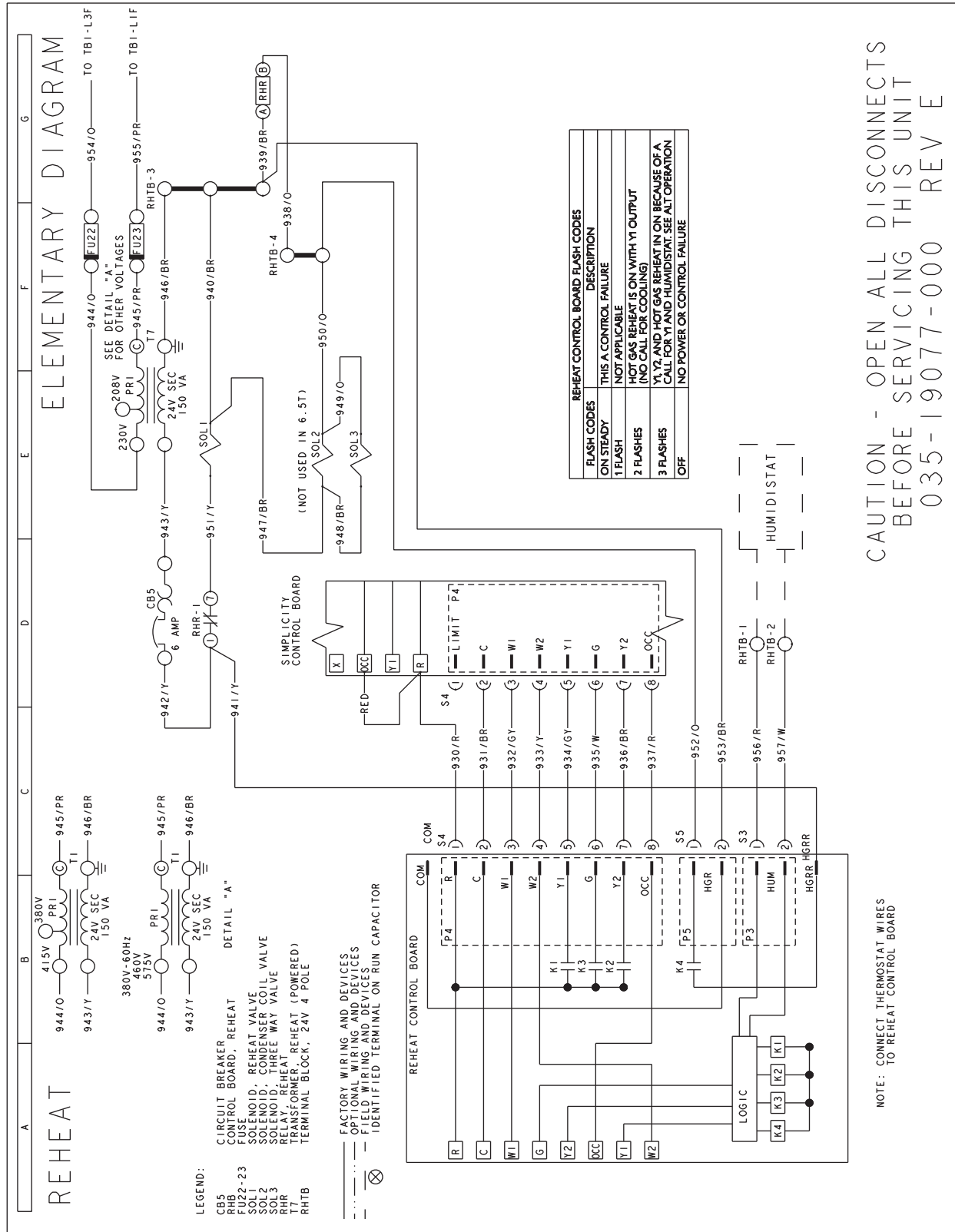


CAUTION - OPEN ALL DISCONNECTS
BEFORE SERVICING THIS UNIT
G512973A REV A

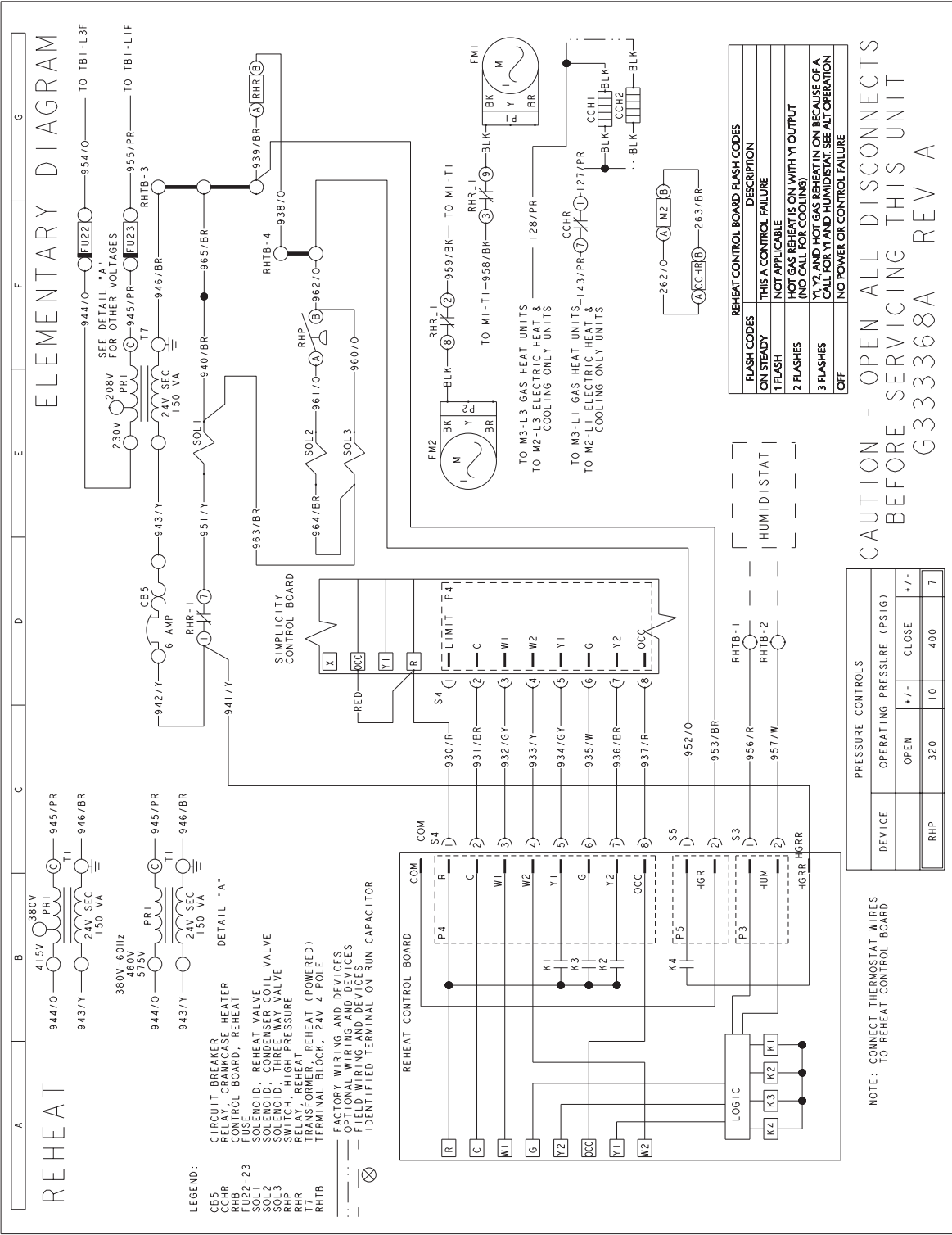
Typical ZR037-061 Reheat Wiring Diagram



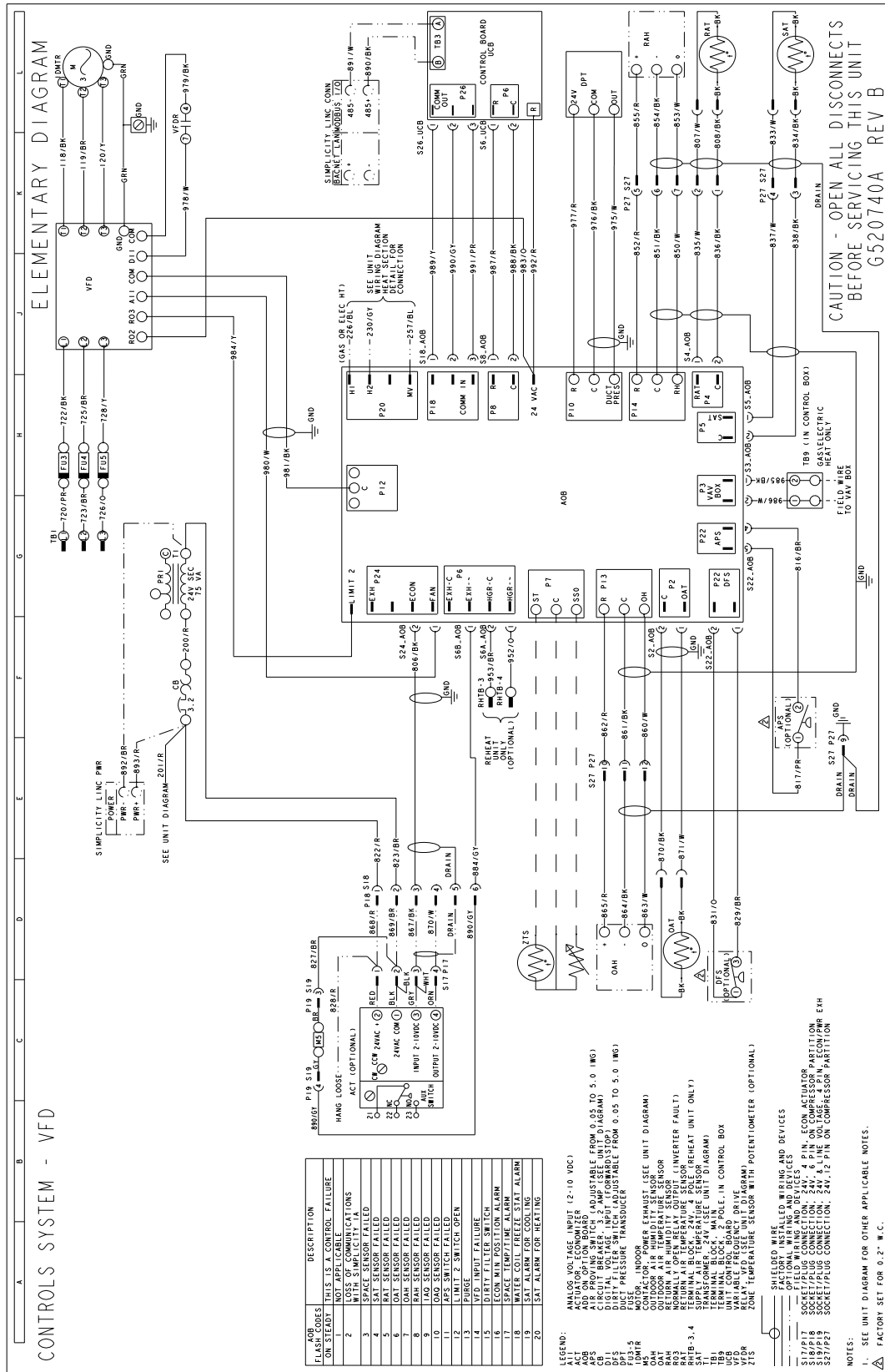
Typical ZR078-120 Reheat Wiring Diagram



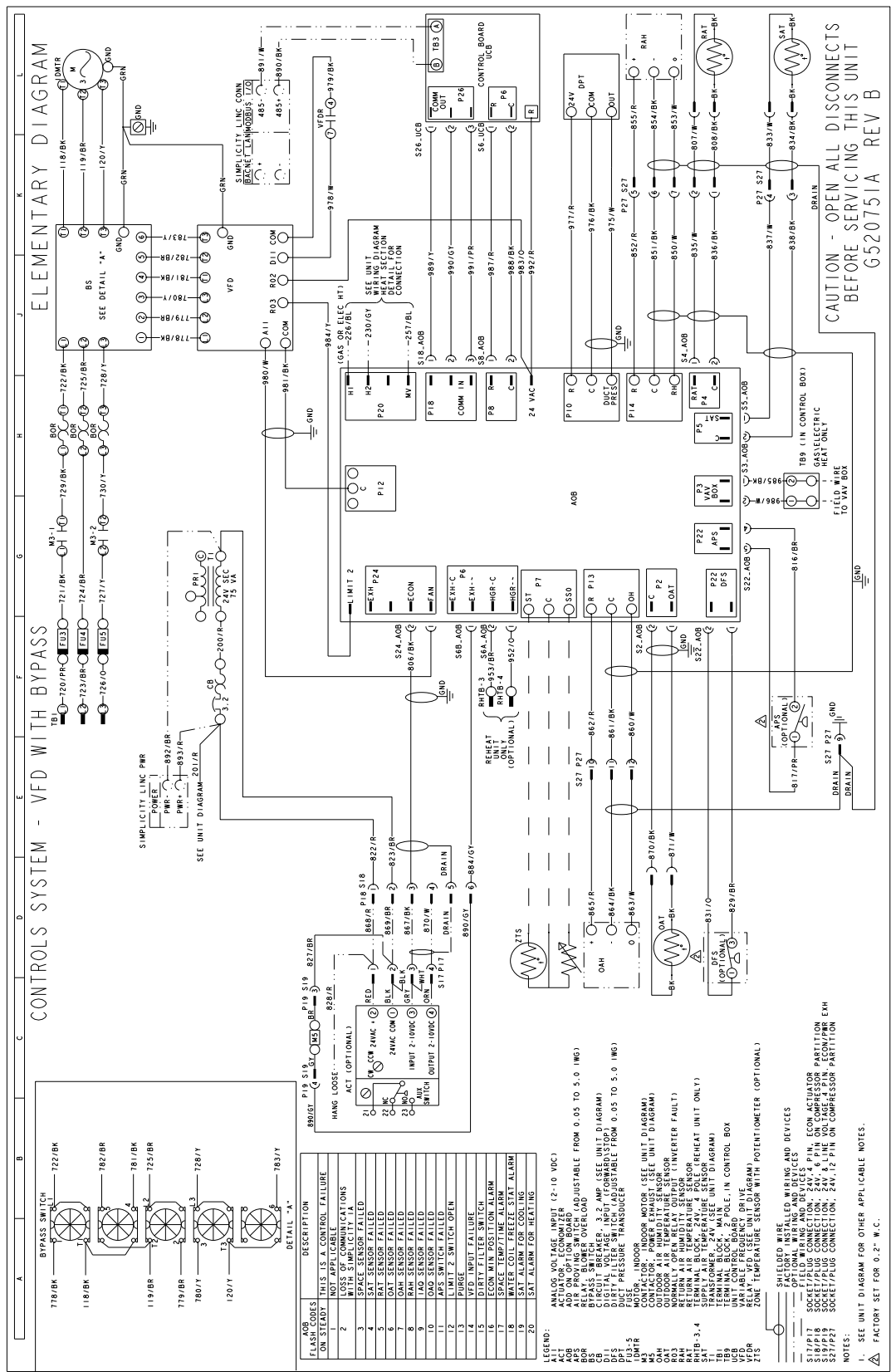
Typical ZR150 Reheat Wiring Diagram



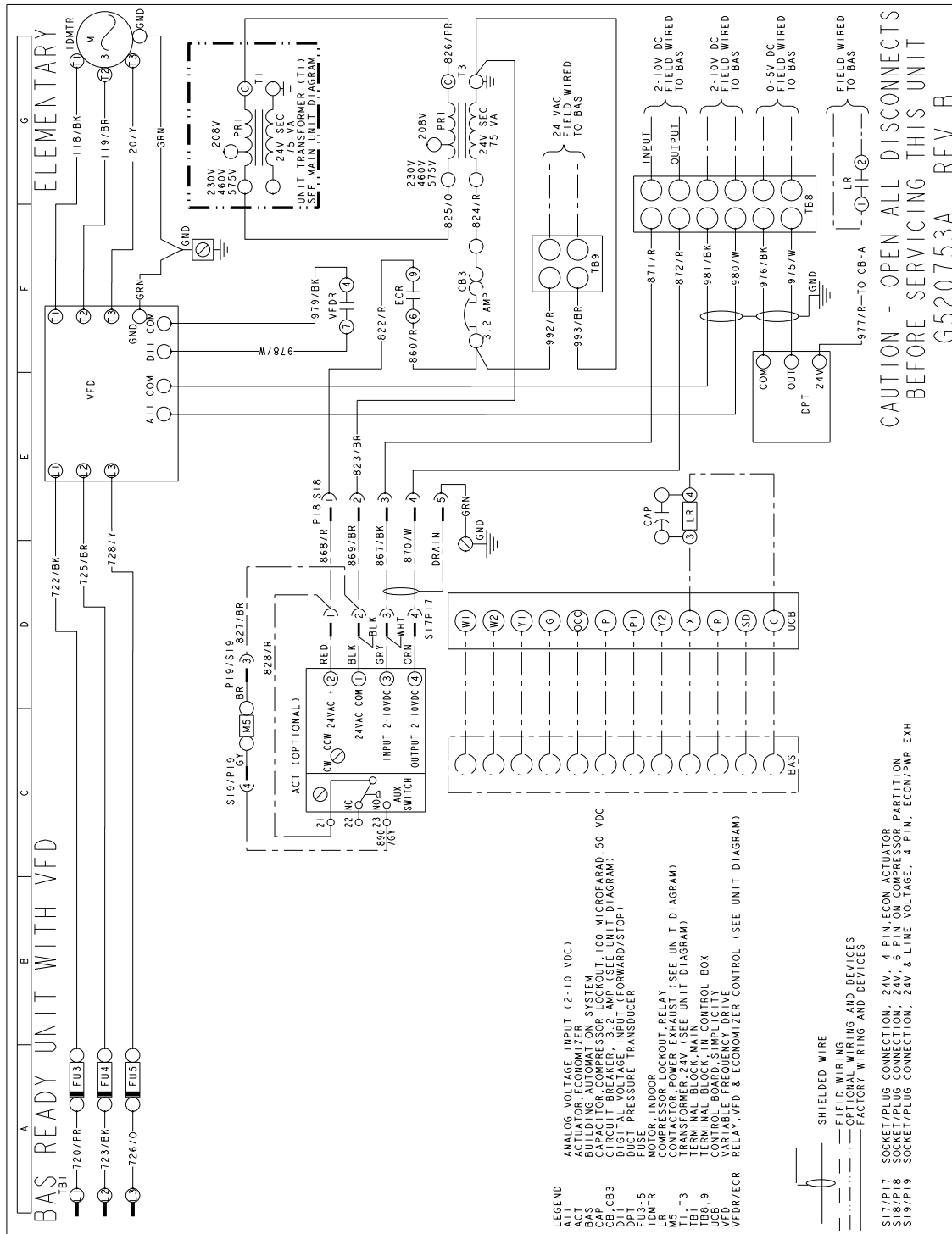
Typical ZH/ZJ078-150 Factory Installed VFD (Option)



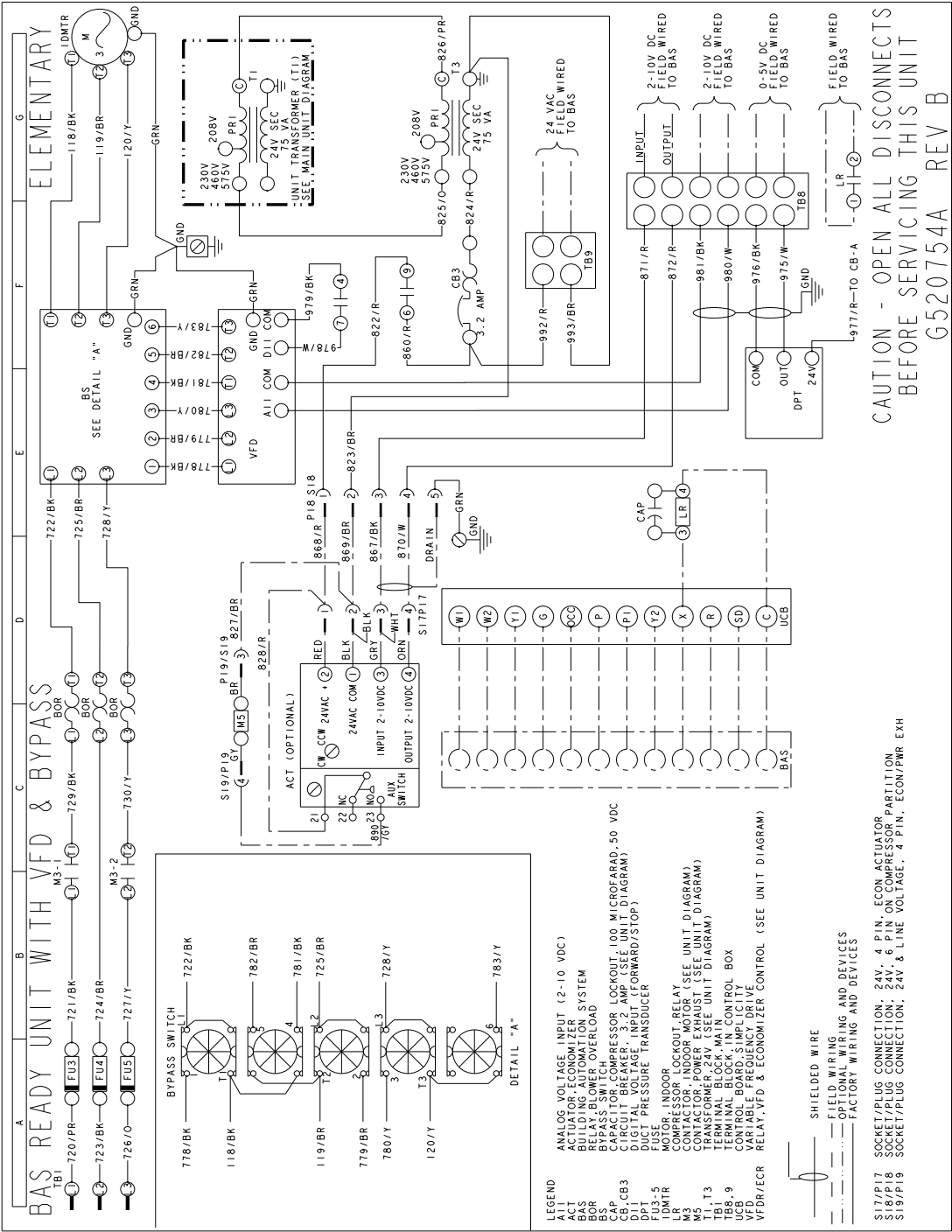
Typical ZH/ZJ078-150 Factory Installed VFD with Manual Bypass (Option)



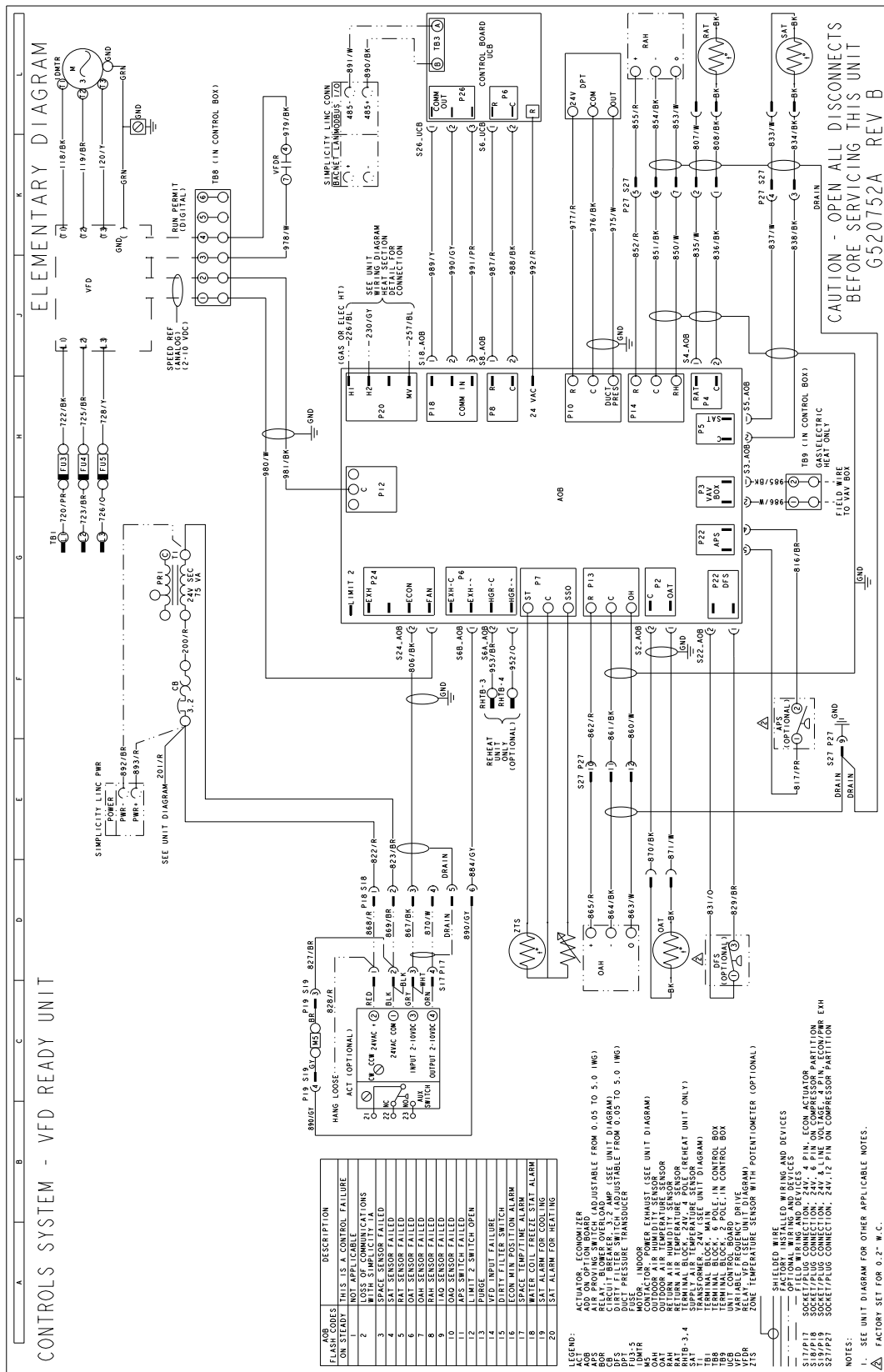
Typical ZH/ZJ078-150 BAS Ready Unit with Factory Installed VFD (Option)



Typical ZH/ZJ078-150 BAS Ready Unit with Factory Installed VFD and Manual Bypass (Option)



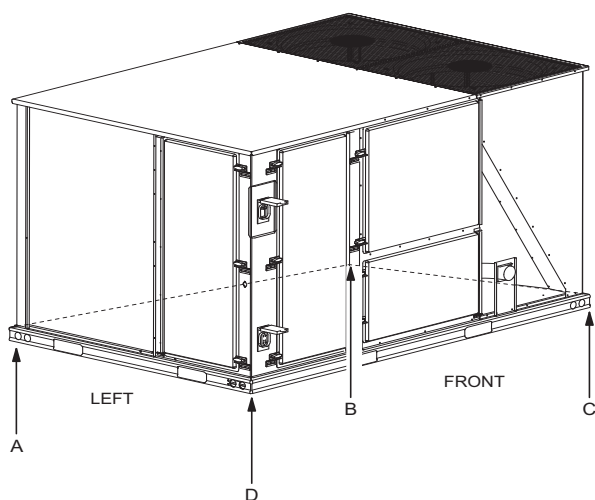
Typical ZH/ZJ078-150 VFD Ready Unit (Option)



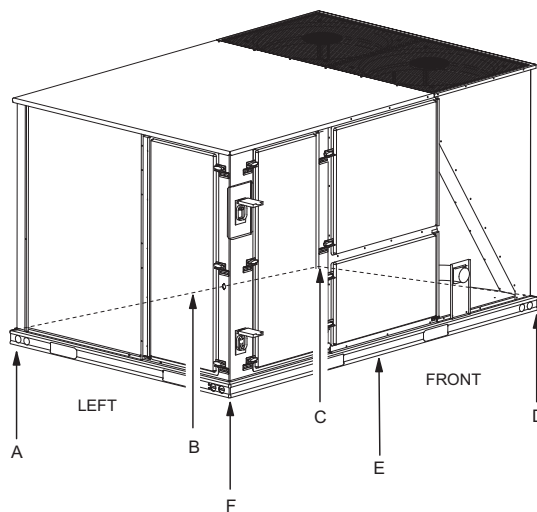
Weights and Dimensions

ZH/ZJ037-150 Unit Weights

Unit 4 Point Load Weight



Unit 6 Point Load Weight

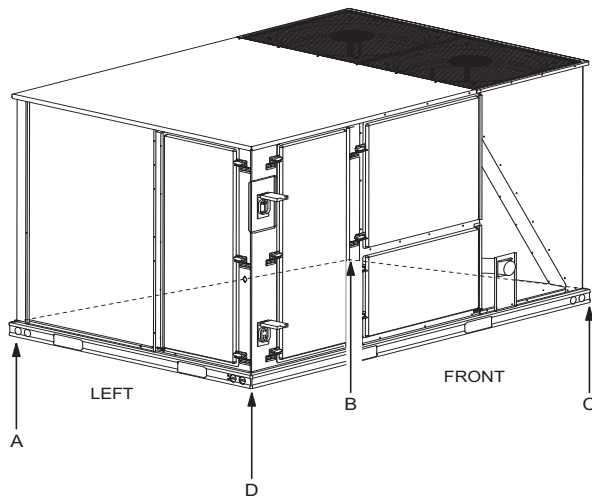


Size (Tons)	Model	Weight (lbs.)		Center of Gravity		4 Point Load Location (lbs.)				6 Point Load Location (lbs.)					
		Shipping	Operating	X	Y	A	B	C	D	A	B	C	D	E	F
037 (3)	ZH	728	723	40	26	175	143	182	223	121	105	92	117	134	154
049 (4)	ZH	768	763	40	26	185	151	192	235	128	111	97	124	141	162
061 (5)	ZH	869	864	40	26	210	171	217	266	145	126	110	140	160	184
078 (6.5)	ZH	915	910	38	24	212	158	230	309	149	121	100	147	177	217
090 (7.5)	ZH	915	910	38	24	212	158	230	309	149	121	100	147	177	217
102 (8.5)	ZH	1052	1047	38	24	244	182	265	356	171	139	116	169	203	249
120 (10)	ZH	1095	1090	38	24	254	189	276	371	178	145	120	176	211	260
150 (12.5)	ZH	1220	1215	46	26	259	277	351	328	171	178	187	237	226	216
037 (3)	ZJ	745	740	40	26	180	147	186	228	124	108	95	120	137	157
049 (4)	ZJ	780	775	40	24	174	142	207	253	120	104	91	133	152	175
061 (5)	ZJ	775	770	40	24	172	141	205	251	119	103	91	132	151	174
078 (6.5)	ZJ	1035	1030	39	25	245	191	260	333	170	144	122	167	195	232
090 (7.5)	ZJ	1055	1050	39	25	250	195	265	340	174	146	125	170	199	236
102 (8.5)	ZJ	1065	1060	38	24	247	184	268	360	173	141	117	171	206	253
120 (10)	ZJ	1075	1070	39	24	245	191	278	357	170	143	122	178	209	248
150 (12.5)	ZJ	1285	1280	48	24	240	281	410	350	156	173	192	280	252	227

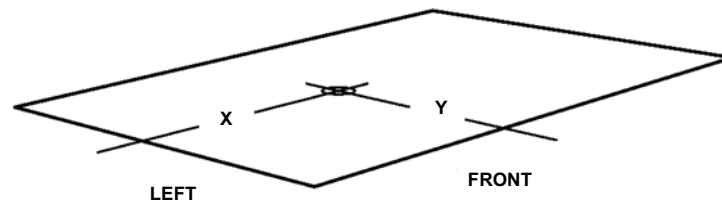
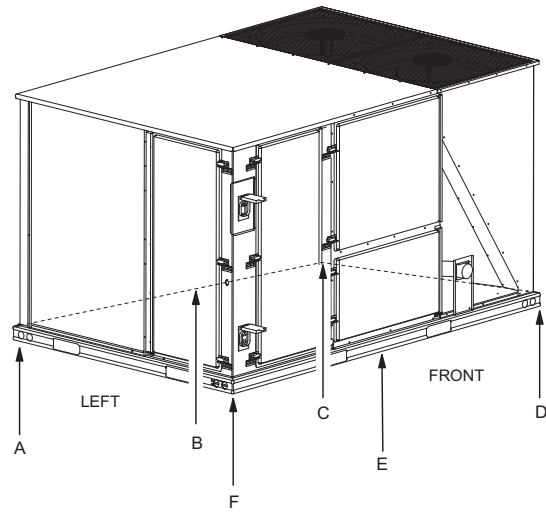
Weights and Dimensions

ZR037-150 Unit Weights

Unit 4 Point Load Weight



Unit 6 Point Load Weight



Size (Tons)	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)	ZR	872	867	40.3	25.5	205	170	223	269	141	124	110	144	163	185
049 (4)	ZR	885	880	40.9	25.1	202	172	232	273	139	124	112	151	168	187
061 (5)	ZR	872	867	41	25	198	169	230	269	136	122	110	150	166	184
078 (6.5)	ZR	962	957	38	23	214	159	249	335	150	122	101	159	191	234
090 (7.5)	ZR	970	965	38	23	216	161	251	337	151	123	102	160	193	236
102 (8.5)	ZR	1205	1200	38	25.5	297	221	291	390	208	170	141	185	223	274
120 (10)	ZR	1205	1200	38	25.5	297	221	291	390	208	170	141	185	223	274
150 (12.5)	ZR	1470	1465	51	25.5	270	363	477	355	172	207	254	334	272	226

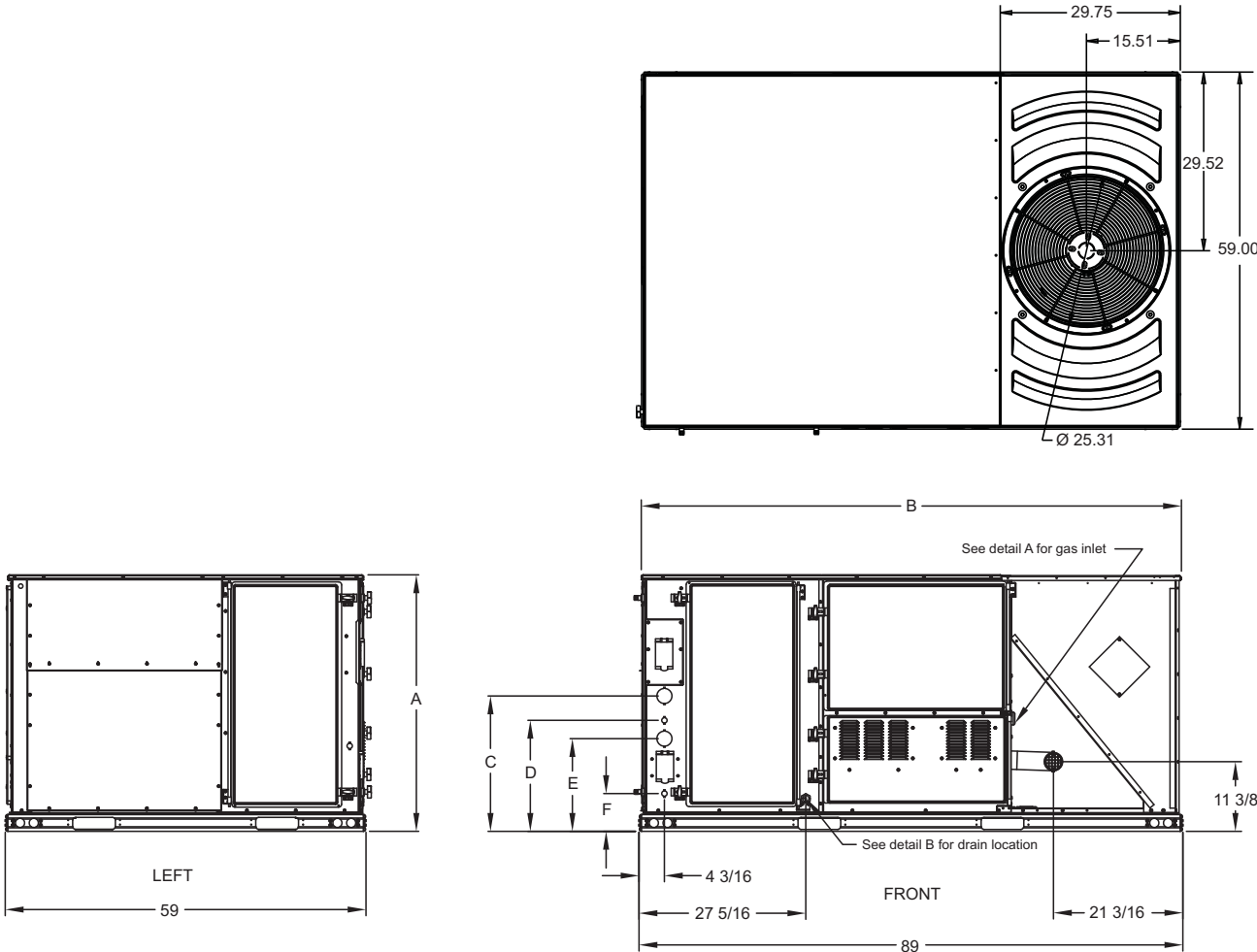
ZH/ZJ/ZR037-150 Unit Accessory Weights

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

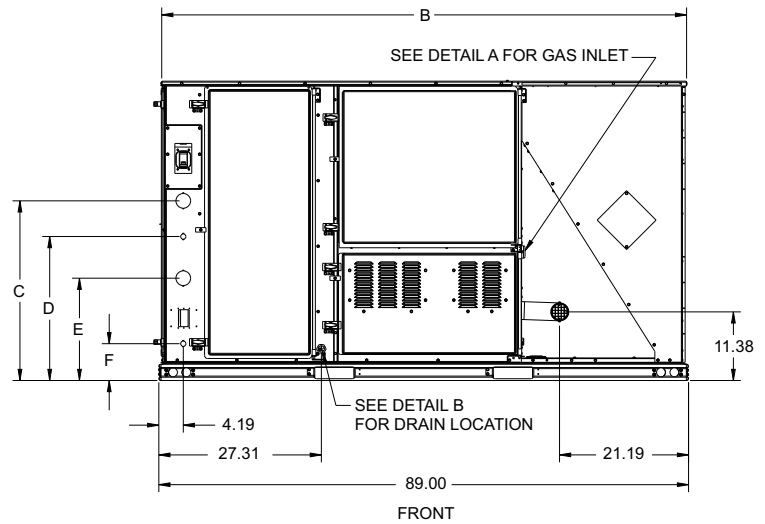
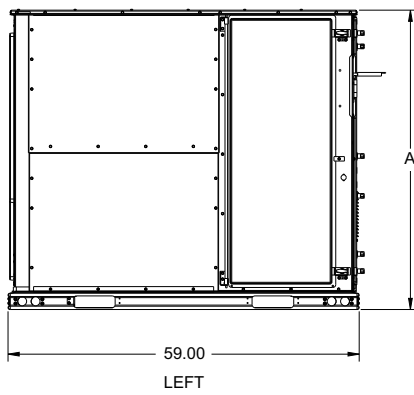
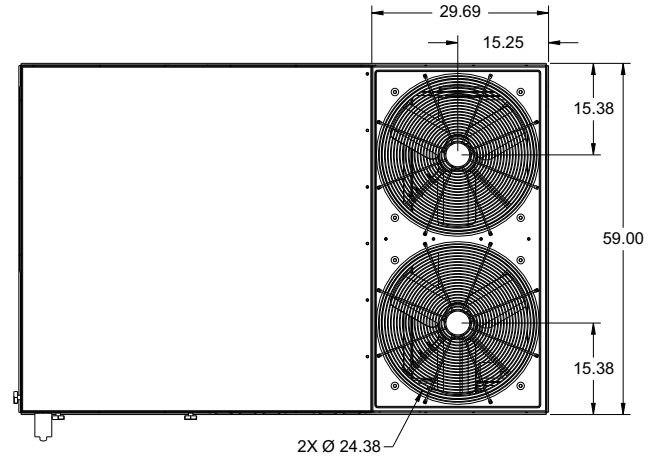
- 1. Weight given is for the maximum heater size available (54KW).
- 2. Weight given is for the maximum number of tube heat exchangers available (8 tube).
- 3. Weight includes mounting hardware, controls and manual bypass option (6-1/2 to 12-1/2 ton only).

ZH/ZJ/ZR037-150 Unit Dimensions

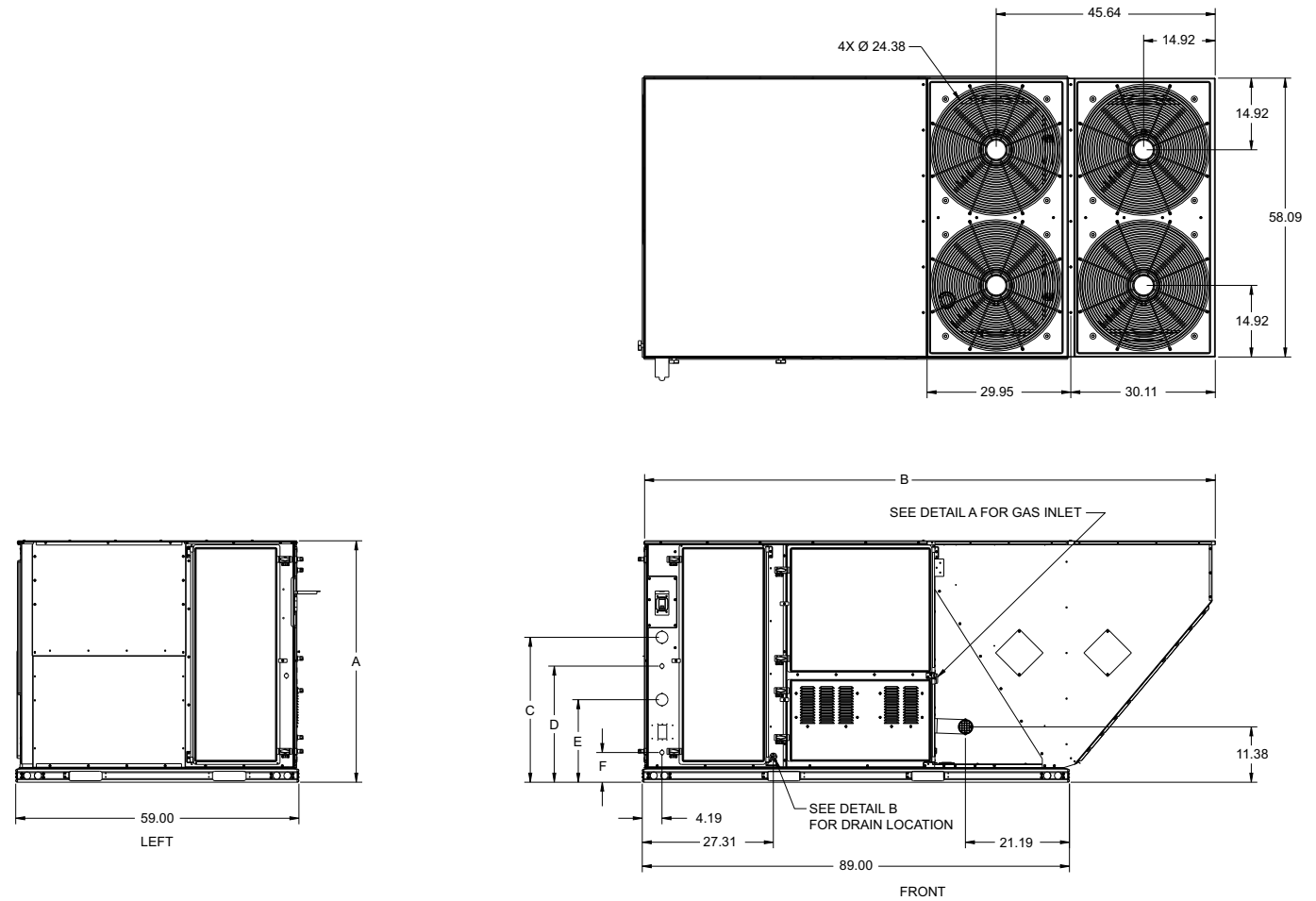
ZH/ZJ037-049 and ZR037



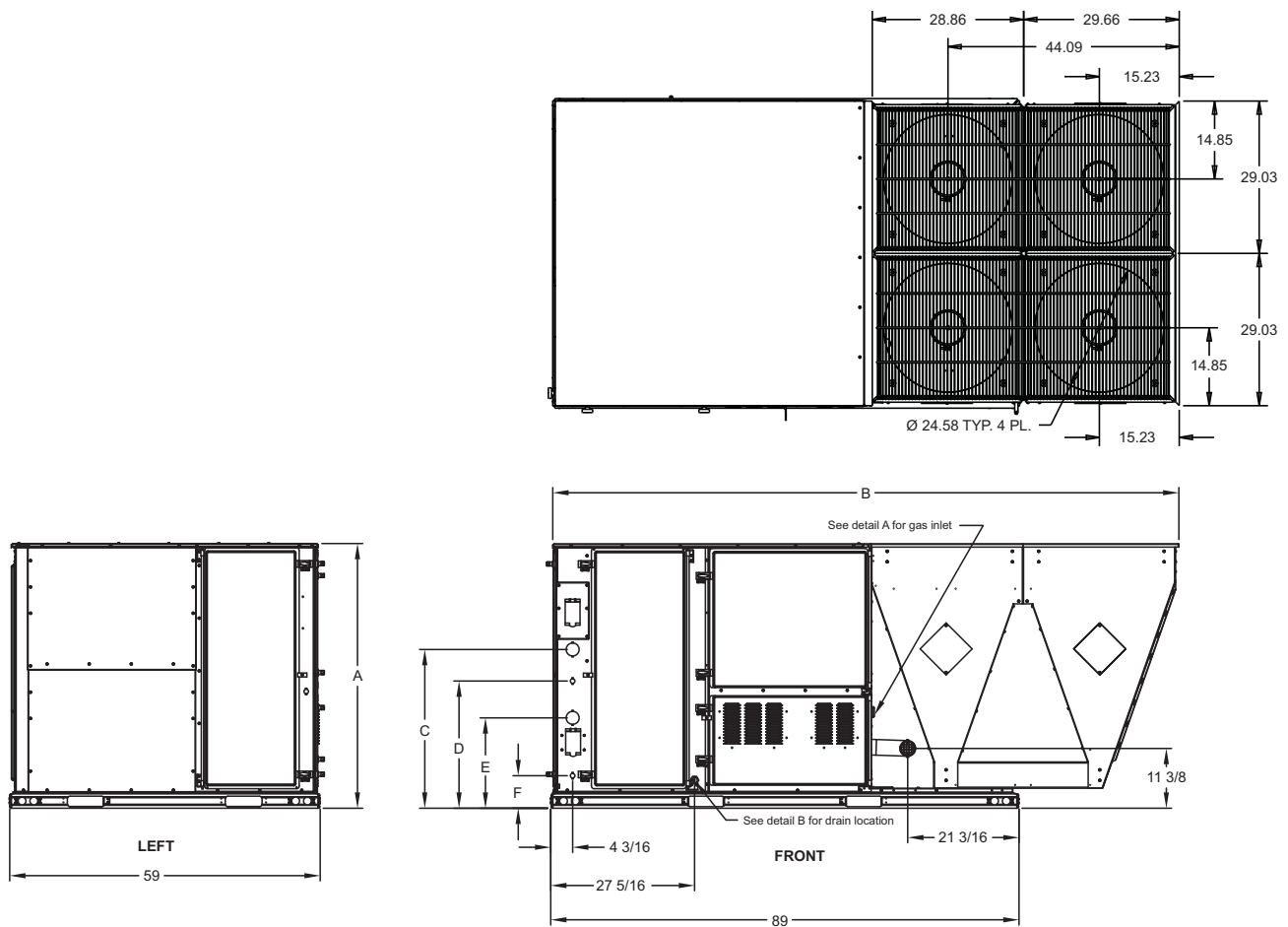
ZH/ZJ 061, ZR049 - 061 and ZH/ZJ/ZR078 thru 120



ZH150



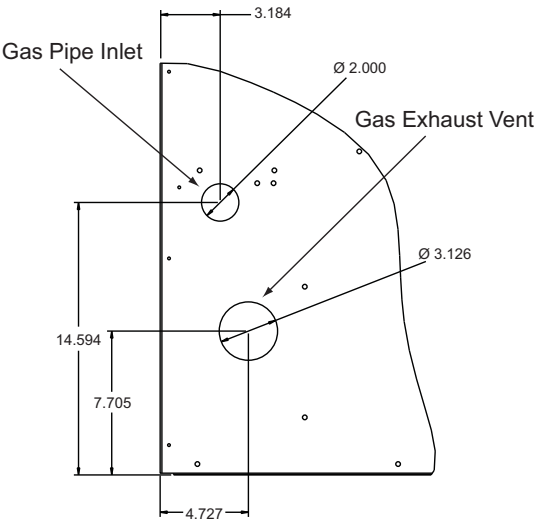
ZJ/ZR150



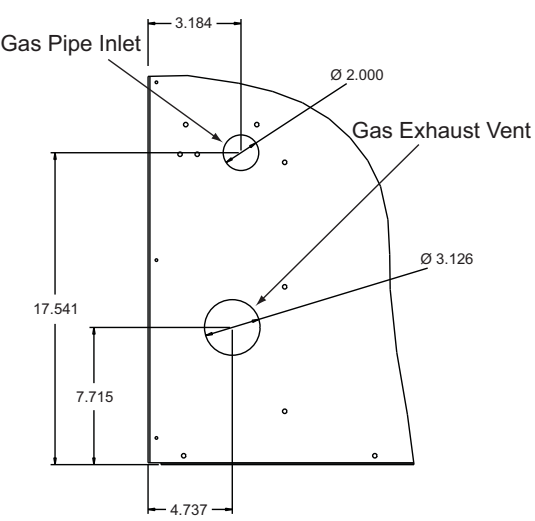
ZH/ZJ/ZR037-150 Unit Physical Dimensions

Unit Model Number	Dimension (in.)					
	A	B	C	D	E	F
ZH037, 049, 061, 078, 090	42	89	22 1/8	18 3/16	15 3/16	6 3/16
ZH102, 120	50 3/4	89	30 3/16	24 3/16	17 3/16	6 3/16
ZH150	50 3/4	119 1/2	30 3/16	24 3/16	17 3/16	6 3/16
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
ZR037, 049, 061	42	89	22 1/8	18 3/16	15 3/16	6 3/16
ZR078, 090	42	89	22 1/8	18 3/16	15 3/16	6 3/16
ZR102, 120	50 3/4	89	30 3/16	24 3/16	17 3/16	6 3/16
ZR150	50 3/4	119 1/2	30 3/16	24 3/16	17 3/16	6 3/16

Detail A

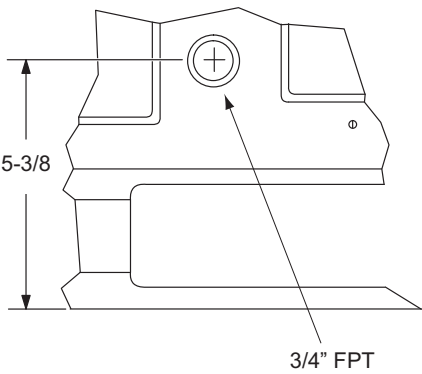


42" CABINET



50 3/4" CABINET

Detail B

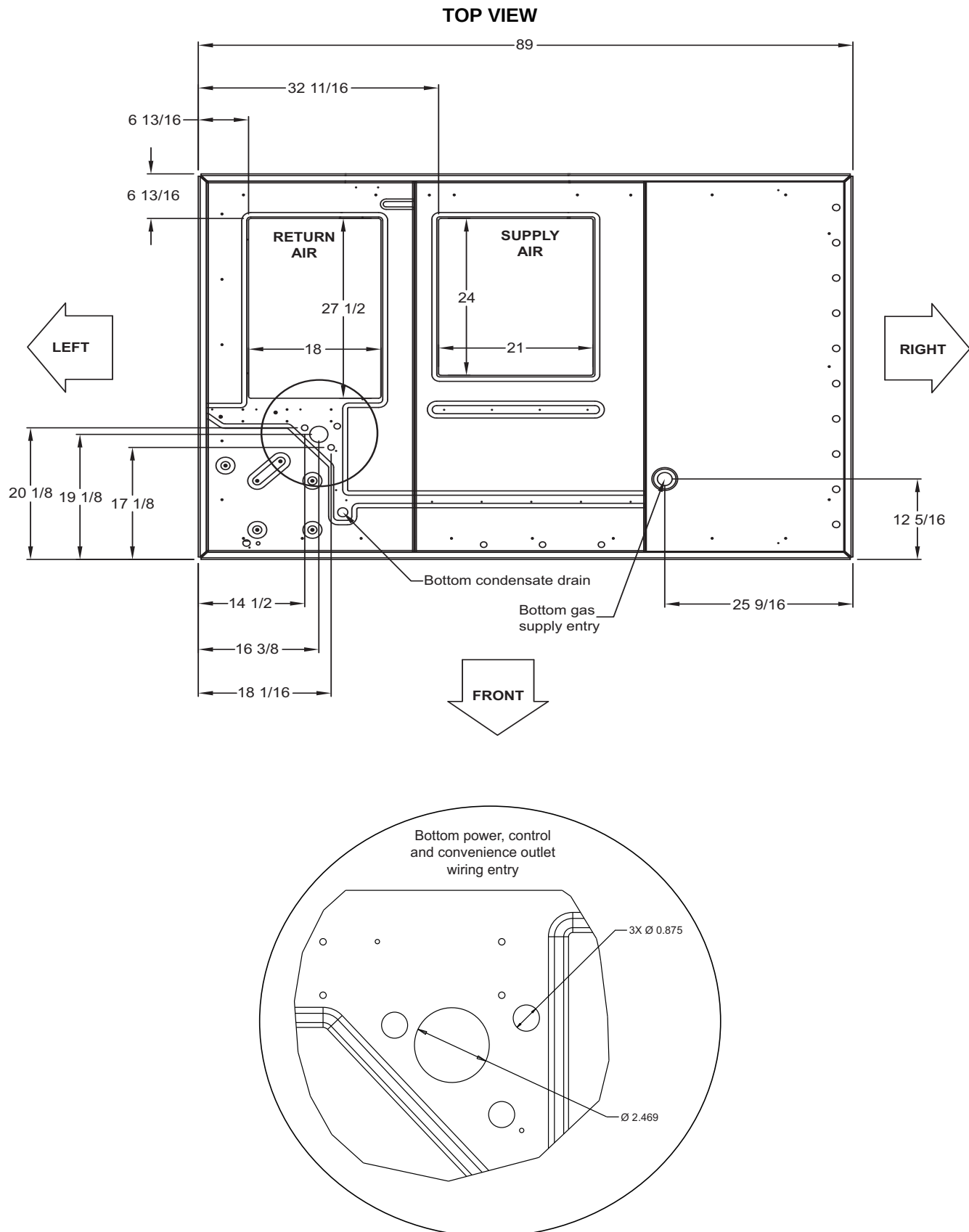


ZH/ZJ/ZR037-150 Unit Clearances

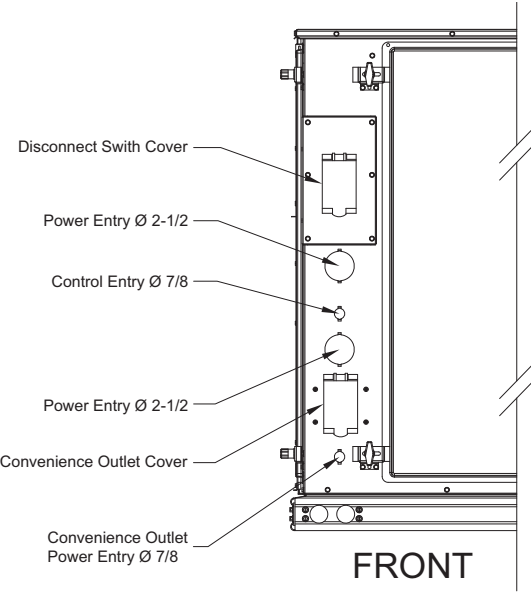
Direction	Distance (in.)	Direction	Distance (in.)
Top ¹	72	Right	12
Front	36	Left	36
Rear	36	Bottom ²	0

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.

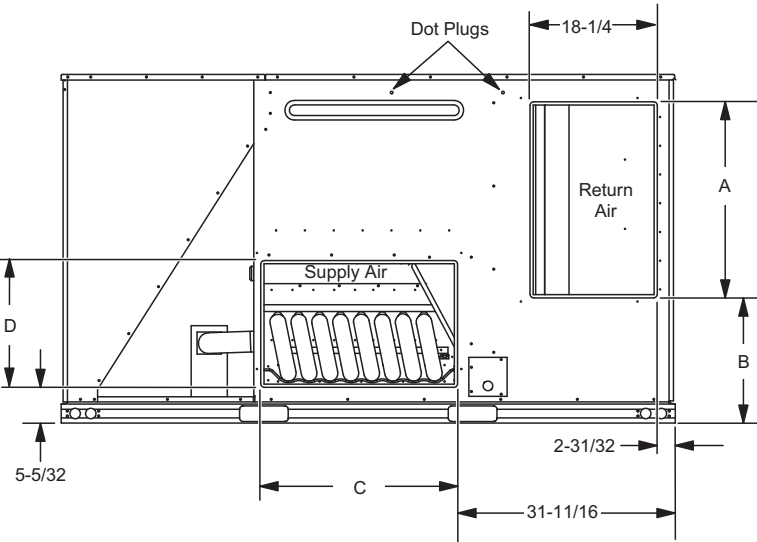
ZH/ZJ/ZR037-150 Unit Bottom Duct Openings

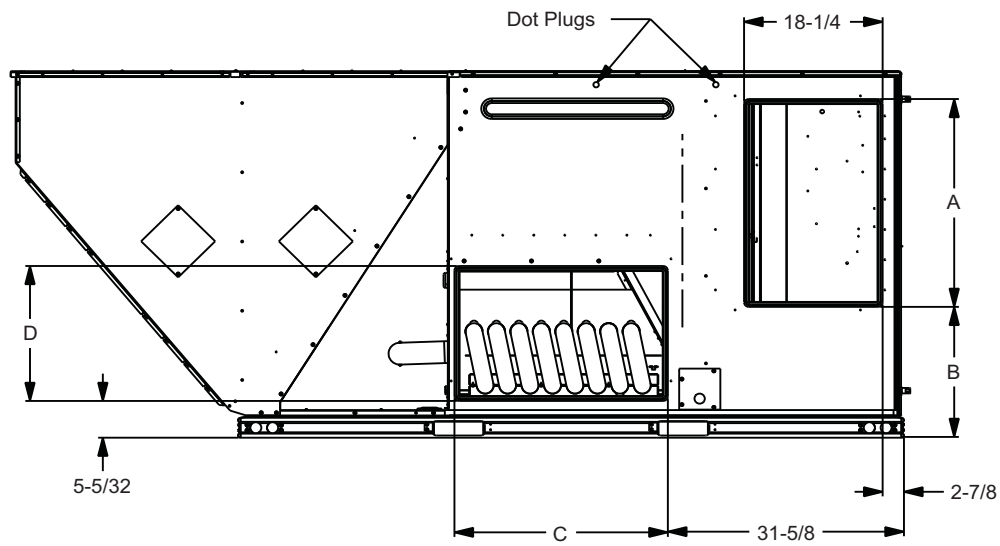
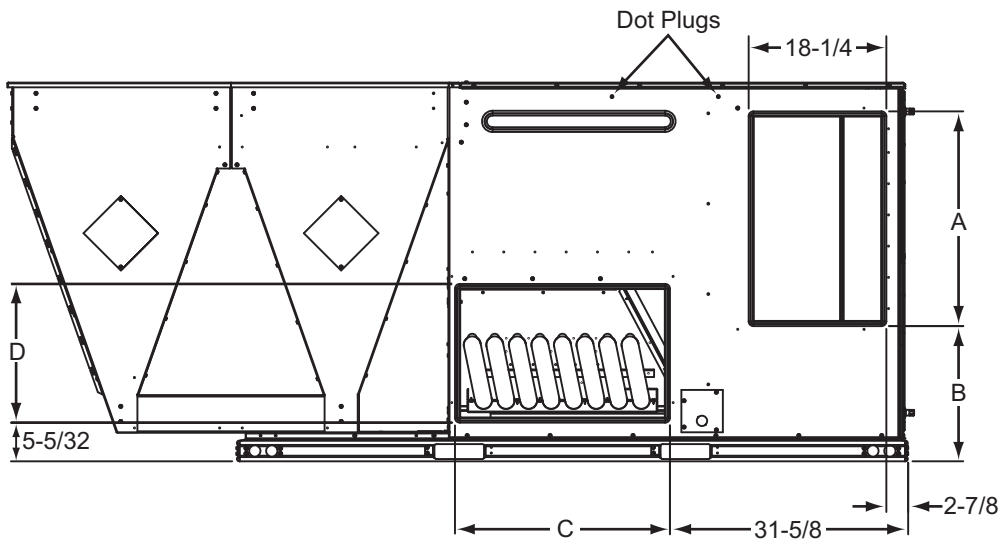


ZH/ZJ/ZR037-150 Unit Electrical Entry



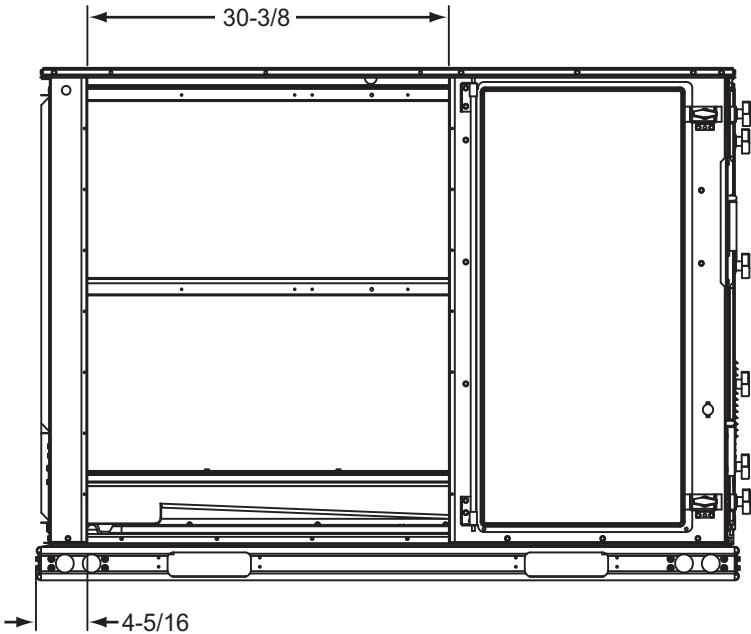
ZH/ZJ/ZR037-120 Unit Side Duct Openings



ZH150 Unit Side Duct Openings**ZJ/ZR150 Unit Side Duct Openings****ZH/ZJ/ZR037-150 Side Duct Dimensions**

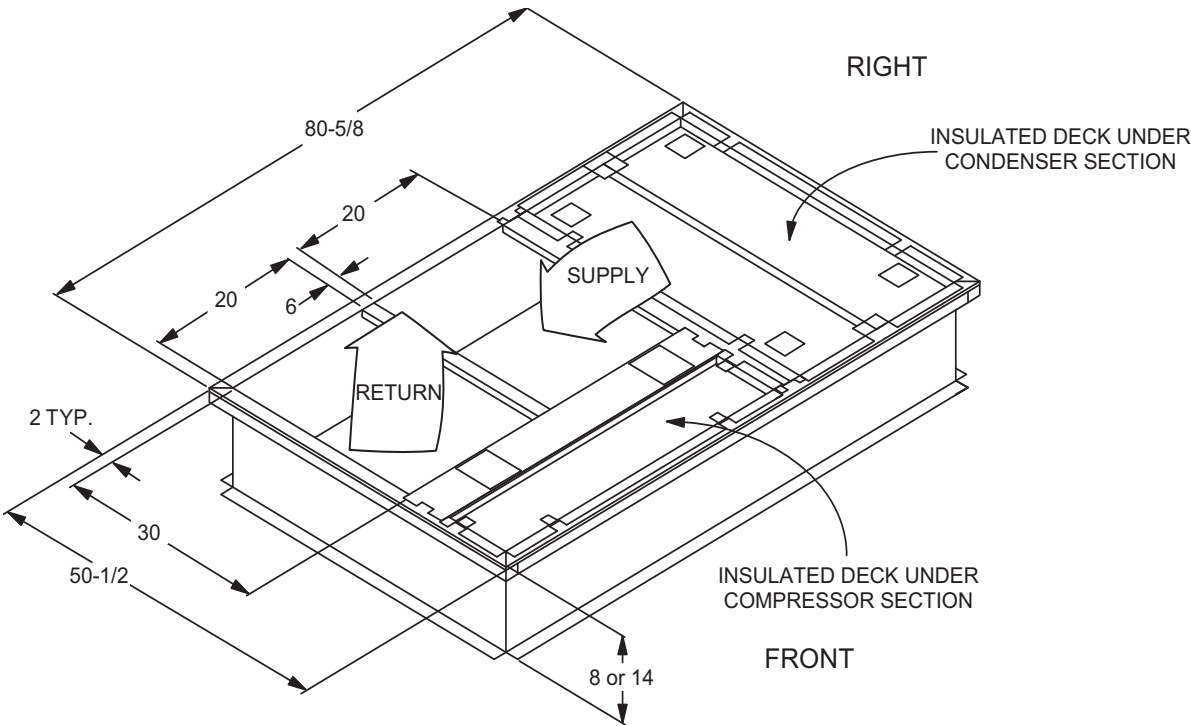
Unit Model Number	Dimension (in.)			
	A	B	C	D
ZH037, 049, 061, 078, 090	27 3/4	12 1/16	27 1/2	16
ZH102, 120	28 1/4	18 1/16	28 1/4	18 1/4
ZH150	28 1/4	18 1/16	28 1/4	18 1/4
ZJ037, 049, 061	27 3/4	12 1/16	27 1/2	16
ZJ078, 090, 102, 120	28 1/4	18 1/16	28 1/4	18 1/4
ZJ150	28 1/4	18 1/16	28 1/4	18 1/4
ZR037, 049, 061	27 3/4	12 1/16	27 1/2	16
ZR078, 090	27 3/4	12 1/16	27 1/2	16
ZR102, 120	28 1/4	18 1/16	28 1/4	18 1/4
ZR150	28 1/4	18 1/16	28 1/4	18 1/4

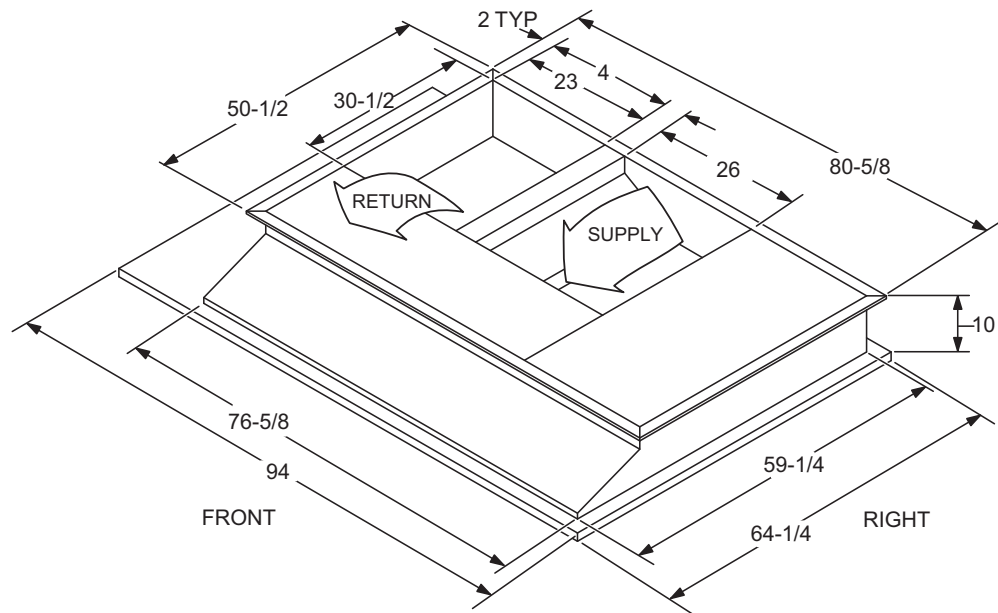
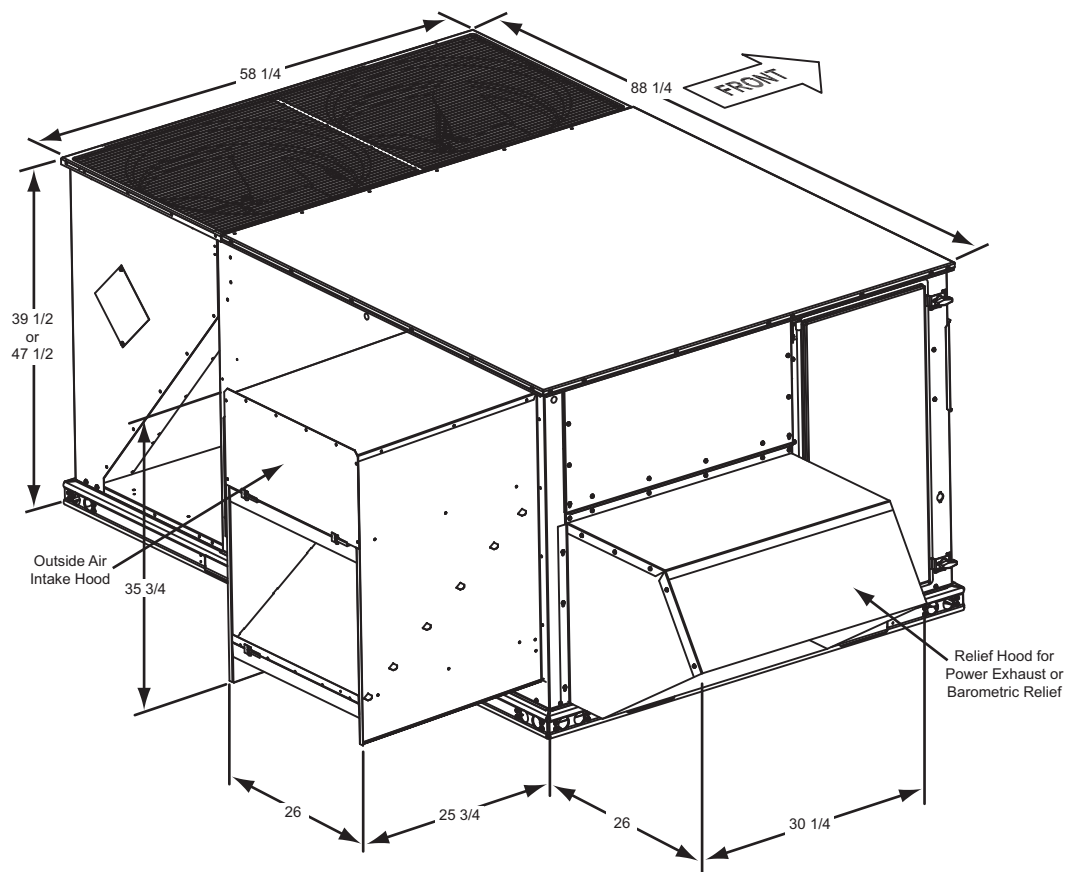
ZH/ZJ/ZR037-150 Unit Left Duct Opening



ZH/ZJ/ZR037-150 Unit Accessory Dimensions

ZH/ZJ/ZR037-150 Roof Curb



ZH/ZJ/ZR037-150 Transition Roof Curb**ZH/ZJ/ZR037-150 Economizer Assembly**

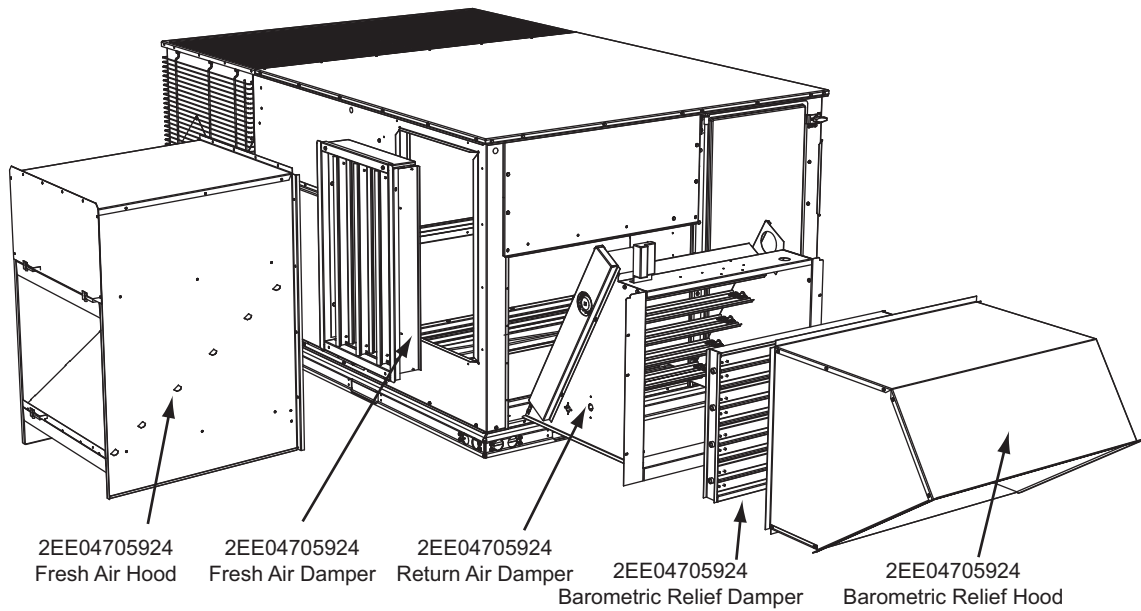
Economizer Options

Economizer Usage

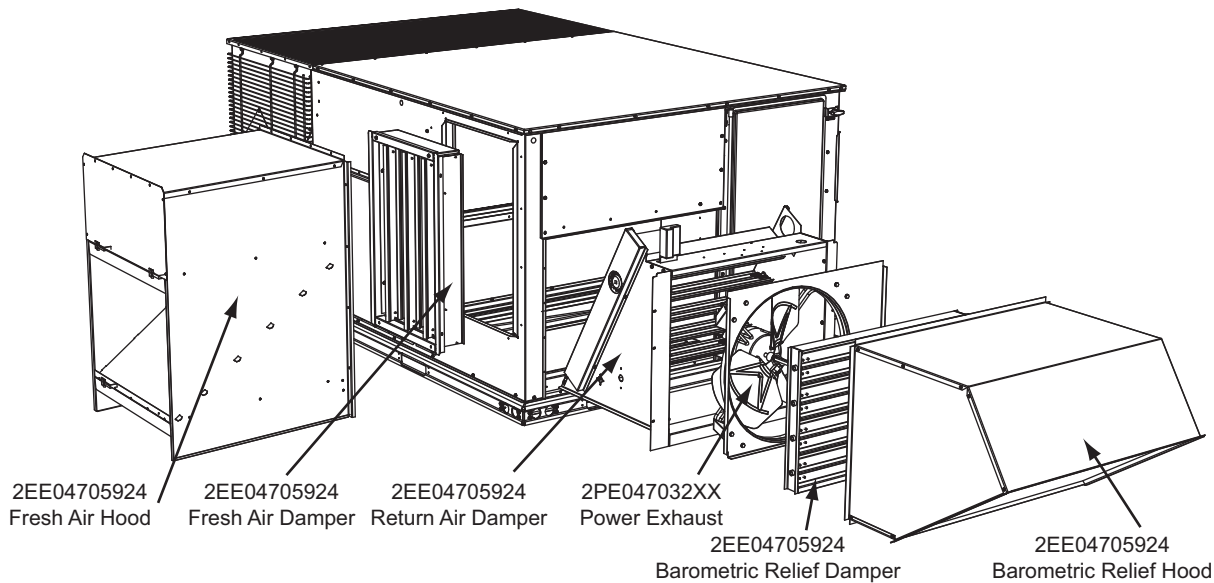
Application	Cabinet Height	Description	Model
Bottom Return	All	Downflow economizer with barometric relief	2EE04705924
Side Return	All	Horizontal economizer without barometric relief	2EE04706024 ¹
ERV or End Return	42"	Slab Economizer, 42" tall cabinet	2EE04705824 ²
	50"	Slab Economizer, 50" tall cabinet	2EE04705724 ²

- 1. Barometric relief must be ordered separately and installed in duct work.
- 2. Barometric relief or fresh air hood not included. Must be ordered separately.

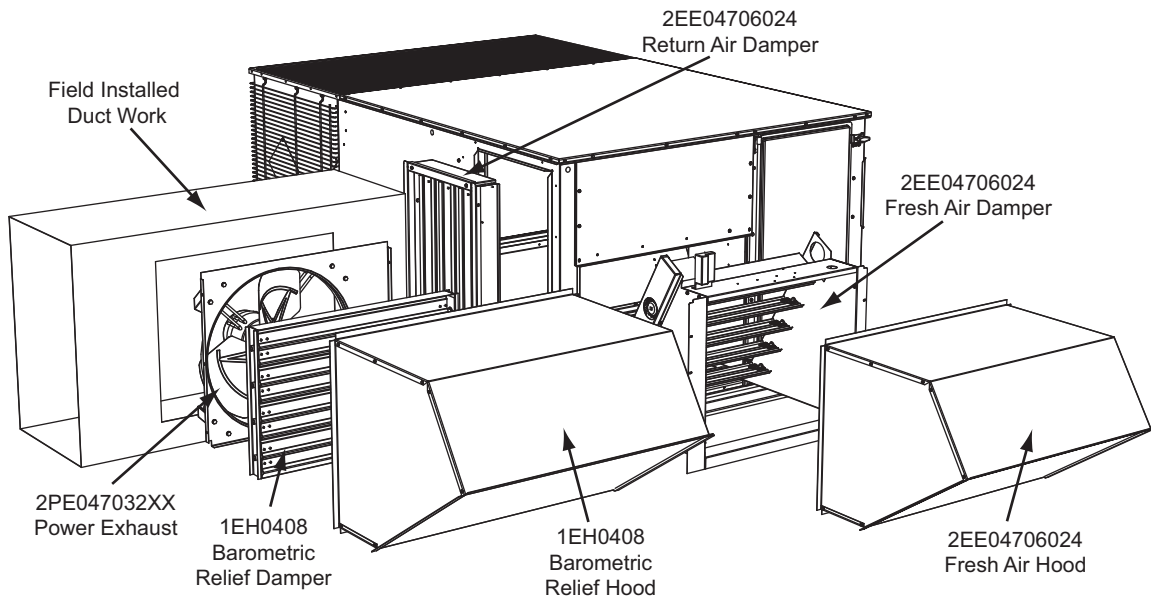
Factory Installed Downflow Economizer



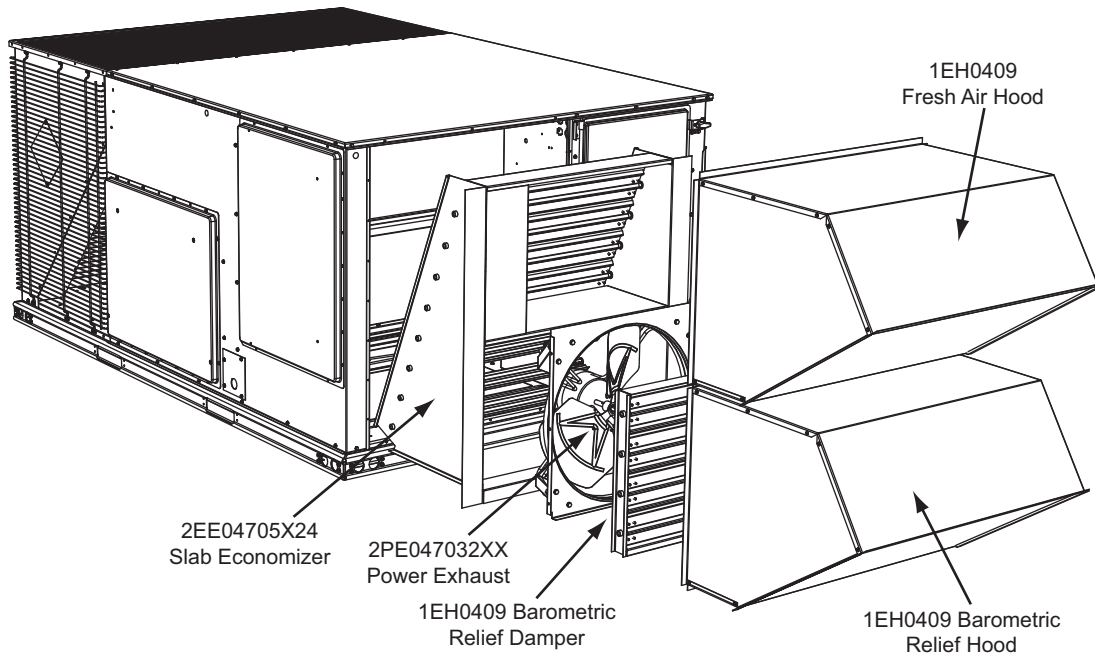
Field Installed Downflow Economizer W/Power Exhaust



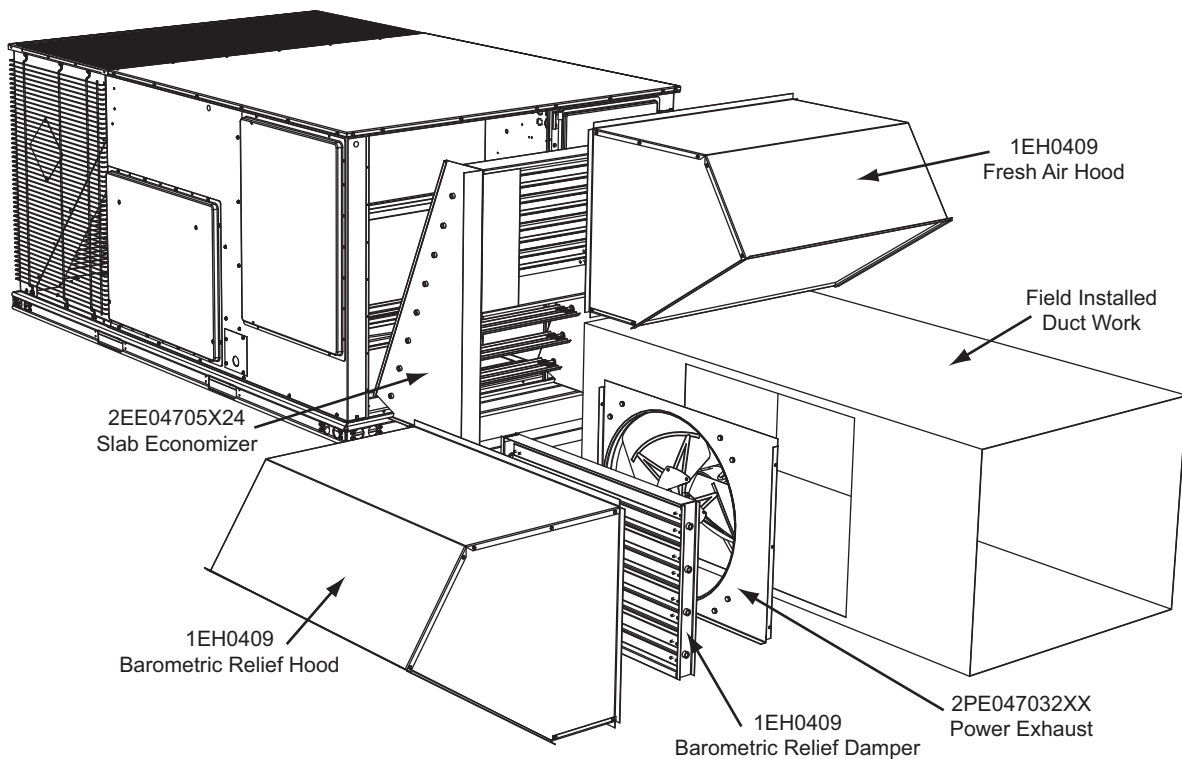
Field Installed Horizontal Economizer W/Power Exhaust



Slab Economizer Downflow W/Power Exhaust



Slab Economizer End Return W/Power Exhaust



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