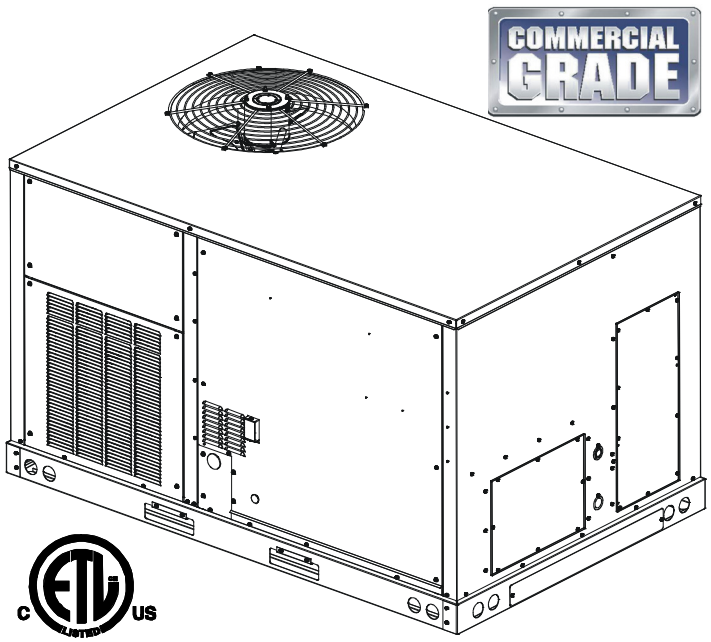
Packaged Gas / Electric Unit 3-6 Ton
High Efficiency Light Commercial DRG Models
Installation Instructions



⚠ WARNING

Only personnel that have been trained to install, adjust, service or repair (hereinafter, "service") the equipment specified in this manual should service the equipment. The manufacturer will not be responsible for any injury or property damage arising from improper service or service procedures. If you service this unit, you assume responsibility for any injury or property damage which may result. In addition, in jurisdictions that require one or more licenses to service the equipment specified in this manual, only licensed personnel should service the equipment. Improper installation, adjustment, servicing or repair of the equipment specified in this manual, or attempting to install, adjust, service or repair the equipment specified in this manual without proper training may result in product damage, property damage, personal injury or death.

PROP 65 WARNING
FOR CALIFORNIA CONSUMERS

⚠ WARNING

Cancer and Reproductive Harm -
www.P65Warnings.ca.gov

0140M00517-A

Intertek

AHRI CERTIFIED™ www.ahridirectory.org
Unitary Small AC
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

AHRI CERTIFIED™ www.ahridirectory.org
Unitary Small HP
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

This forced air central unit design complies with requirements embodied in The American National Standard / National Standard of Canada **ANSI Z21.47•CSA-2.3 Gas-fired central furnaces.**

IOD-1031E
07/2020

19001 Kermier Rd., Waller, TX 77484
www.daikincomfort.com

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REPLACEMENT PARTS

Ordering Parts

When reporting shortages or damages, or ordering repair parts, give the complete unit model and serial numbers as stamped on the unit's nameplate.

Replacement parts for this appliance are available through your contractor or local distributor. Location of your local distributor can be found at www.daikinac.com or contact:

EQUIPMENT SUPPORT
Daikin North America LLC
19001 Kermier Road
Waller, Texas 77484
855-770-5678

SAFETY INSTRUCTIONS

RECOGNIZE THIS SYMBOL AS A SAFETY PRECAUTION

These installation instructions cover the outdoor installation of single package heating and cooling units. See the Specification Sheet applicable to your model for information regarding accessories.

***NOTE: Please contact your distributor or our website for the applicable Specification Sheet referred to in this manual.**

To The Installer

Before installing this unit, please read this manual to familiarize yourself on the specific items which must be adhered to, including maximum external static pressure to unit, air temperature rise, minimum or maximum CFM and motor speed connections.

Keep this literature in a safe place for future reference.

WARNING

If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.
- do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS:
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. If you cannot reach your gas supplier, call the fire department.**

- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING

To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.

WARNING

Should overheating occur or the gas supply fail to shut off, turn off the manual gas shutoff valve external to the furnace before turning off the electrical supply.

CAUTION

Sheet metal parts, screws, clips and similar items inherently have sharp edges, and it is necessary that the installer and service personnel exercise caution.

WARNING

Do not connect to or use any device that is not design certified by the manufacturer for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.

WARNING

To avoid property damage, personal injury or death, do not use this unit if any part has been under water. Immediately call a qualified service technician to inspect the furnace and to replace any part of the control system and any gas control having been under water.

WARNING

This unit must not be used as a "construction heater" during the finishing phases of construction on a new structure. This type of use may result in premature failure of the unit due to extremely low return air temperature and exposure to corrosive or very dirty atmospheres.

WARNING

HIGH VOLTAGE!
Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death.

GENERAL INFORMATION

WARNING

TO PREVENT PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, DUE TO FIRE, EXPLOSIONS, SMOKE, SOOT, CONDENSATION, ELECTRIC SHOCK OR CARBON MONOXIDE, THIS UNIT MUST BE PROPERLY INSTALLED, REPAIRED, OPERATED, AND MAINTAINED.

This unit is approved for outdoor installation ONLY. Rated performance is achieved after 20 hours of operation. Rated performance is delivered at the specified airflow. See product specification sheet for light commercial models. Specification sheets can be found at www.daikinac.com for Daikin brand products. Within the website, please select the commercial products menu and then select the submenu for the type of product to be installed, such as air conditioners or heat pumps, to access a list of product pages that each contain links to that model's specification sheet.

To assure that your unit operates safely and efficiently, it must be installed, operated, and maintained in accordance with these installation and operating instructions, all local building codes and ordinances, or in their absence, with the latest edition of the National Fuel Gas Code NFPA54/ ANSI Z223.1 and National Standard of Canada CAN/CSA B149 Installation Codes.

EPA Regulations

IMPORTANT: THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) HAS ISSUED VARIOUS REGULATIONS REGARDING THE INTRODUCTION AND DISPOSAL OF REFRIGERANTS IN THIS UNIT. FAILURE TO FOLLOW THESE REGULATIONS MAY HARM THE ENVIRONMENT AND CAN LEAD TO THE IMPOSITION OF SUBSTANTIAL FINES. BECAUSE REGULATIONS MAY VARY DUE TO PASSAGE OF NEW LAWS, WE SUGGEST A CERTIFIED TECHNICIAN PERFORM ANY WORK DONE ON THIS UNIT. SHOULD YOU HAVE ANY QUESTIONS PLEASE CONTACT THE LOCAL OFFICE OF THE EPA.

National Codes

This product is designed and manufactured to permit installation in accordance with National Codes. It is the installer's responsibility to install the product in accordance with National Codes and/or prevailing local codes and regulations.

The heating and cooling capacities of the unit should be greater than or equal to the design heating and cooling loads of the area to be conditioned. The loads should be calculated by an approved method or in accordance with ASHRAE Guide or Manual J - Load Calculations published by the Air Conditioning Contractors of America.

Obtain from:
American National Standards Institute
www.ansi.org

System design and installation should also, where applicable, follow information presented in accepted industry guides such as the ASHRAE Handbooks. The manufacturer assumes no responsibility for equipment installed in violation of any code or regulation. The mechanical installation of the packaged roof top units consists of making final connections between the unit and building services; supply and return duct connections; and drain connections (if required). The internal systems of the unit are completely factory-installed and tested prior to shipment.

Units are generally installed on a steel roof mounting curb assembly which has been shipped to the job site for installation on the roof structure prior to the arrival of the unit. The model number shown on the unit's identification plate identifies the various components of the unit such as refrigeration tonnage, heating output and voltage.

Carefully inspect the unit for damage including damage to the cabinetry. Any bolts or screws which may have loosened in transit must be re-tightened.
In the event of damage, the receiver should:

1. Make notation on delivery receipt of any visible damage to shipment or container.
2. Notify carrier promptly and request an inspection.
3. In case of concealed damage, carrier should be notified as soon as possible-preferably within 5 days.
4. File the claim with the following supporting documents:
    a. Original Bill of Lading, certified copy, or indemnity bond.
    b. Original paid freight bill or indemnity in lieu thereof.
    c. Original invoice or certified copy thereof, showing trade and other discounts or reductions.
    d. Copy of the inspection report issued by carrier representative at the time damage is reported to the carrier. The carrier is responsible for making prompt inspection of damage and for a thorough investigation of each claim. The distributor or manufacturer will not accept claims from dealers for transportation damage.

NOTE: WHEN INSPECTING THE UNIT FOR TRANSPORTATION DAMAGE, REMOVE ALL PACKAGING MATERIALS. RECYCLE OR DISPOSE OF THE PACKAGING MATERIAL ACCORDING TO LOCAL CODES.

Pre-Installation Checks

Carefully read all instructions for the installation prior to installing unit. Ensure each step or procedure is understood and any special considerations are taken into account before starting installation. Assemble all tools, hardware and supplies needed to complete the installation. Some items may need to be purchased locally.

⚠ WARNING

To prevent possible equipment damage, property damage, personal injury or death, the following bullet points must be observed when installing the unit.

IMPORTANT NOTE: Remove wood shipping rails prior to installation of the unit.

All Installations:

Important Note: ***Unit should be energized 24 hours prior to compressor start up to ensure crankcase heater has sufficiently warmed the compressors. Compressor damage may occur if this step is not followed.***

NOTE: Appliance is shipped from factory for vertical duct application.

Proper installation of the unit ensures trouble-free operation. Improper installation can result in problems ranging from noisy operation to property or equipment damages, dangerous conditions that could result in injury or personal property damage and that are not covered by the warranty. Give this booklet to the user and explain it's provisions. The user should retain these instructions for future reference.

- For proper flame pattern within the heat exchanger and proper condensate drainage, the unit must be mounted level.
- The flue outlet must be at least 12 inches from any opening through which flue gases could enter a building, and at least three feet above any forced air inlet located within ten feet. The economizer/ manual fresh air intake/motorized fresh air intake and combustion air inlet mounted on the unit are not affected by this restriction.
- To avoid possible corrosion of the heat exchanger, do not locate the unit in an area where the outdoor air (i.e. combustion air for the unit) will be frequently contaminated by compounds containing chlorine or fluorine. Common sources of such compounds include swimming pool chemicals and chlorine bleaches, paint stripper, adhesives, paints, varnishes, sealers, waxes (which are not yet dried) and solvents used during construction and remodeling. Various commercial and industrial processes may also be sources of chlorine/fluorine compounds.
- The unit shall not be connected to a chimney flue serving a separate appliance designed to burn solid fuel.
- To avoid possible illness or death of the building occupants, do NOT locate outside air intake device (economizer, manual fresh air intake, motorized fresh air intake) too close to an exhaust outlet, gas vent termination, or plumbing vent outlet. For specific distances required, consult local codes.
- Allow minimum clearances from the enclosure for fire protection, proper operation, and service access (see unit clearances). These clearances must be permanently maintained.
- The combustion air inlet and flue outlet on the unit must never be obstructed. If used, do not allow the economizer/manual fresh air damper/ motorized fresh air damper to become blocked by snow or debris. In some climates or locations, it may be necessary to elevate the unit to avoid these problems.
- When the unit is heating, the temperature of the return air entering the unit must be a minimum of 55° F.

Ground Level Installations Only:

- When the unit is installed on the ground adjacent to the building, a level concrete (or equal) base is recommended. Prepare a base that is 3" larger than the package unit footprint and a minimum of 3" thick.
- The base should also be located where no runoff of water from higher ground can collect in the unit.

Roof top Installations Only:

- To avoid possible property damage or personal injury, the roof must have sufficient structural strength to carry the weight of the unit(s) and snow or water loads as required by local codes. Consult a structural engineer to determine the weight capabilities of the roof.
- The unit may be installed directly on wood floors or on Class A, Class B, or Class C roof covering material.
- To avoid possible personal injury, a safe, flat surface for service personnel should be provided.
- As indicated on the unit data plate, a minimum clearance of 36" to any combustible material is required on the furnace access side of the unit. All combustible materials must be kept out of this area.
- This 36" clearance must also be maintained to insure proper combustion air and flue gas flow. The combustion air intake and furnace flue discharge must not be blocked for any reason, including blockage by snow.
- Adequate clearances from the furnace flue discharge to any adjacent public walkways, adjacent buildings, building openings or openable windows must be maintained in accordance with the latest edition of the National Fuel Gas Code ANSI Z223.1/NFPA 54.
- Minimum horizontal clearance of 48" from the furnace flue discharge to any electric meters, gas meters, regulators and relief equipment is required.

Unit Precautions

- Do not stand or walk on the unit.
- Do not drill holes anywhere in panels or in the base frame of the unit except where indicated. Unit access panels provide structural support.
- Do not remove any access panels until unit has been installed on roof curb or field supplied structure.
- Do not roll unit across finished roof without prior approval of owner or architect.
- Do not skid or slide on any surface as this may damage unit base. The unit must be stored on a flat, level surface. Protect the condenser coil because it is easily damaged.

Roof Curb Installations Only:

Curb installations must comply with local codes and should be done in accordance with the established guidelines of the National Roofing Contractors Association.

Proper unit installation requires that the roof curb be firmly and permanently attached to the roof structure. Check for adequate fastening method prior to setting the unit on the curb.

Full perimeter roof curbs are available from the factory and are shipped unassembled. Field assembly, squaring, leveling and mounting on the roof structure are the responsibility of the installing contractor. All required hardware necessary for the assembly of the sheet metal curb is included in the curb accessory.

⚠ WARNING

To prevent possible equipment damage, property damage, personal injury or death, the following bullet points must be observed when installing the unit.

- Sufficient structural support must be determined prior to locating and mounting the curb and package unit.
- Ductwork must be constructed using industry guidelines. The duct work must be placed into the roof curb before mounting the package unit. Our full perimeter curbs include duct connection frames to be assembled with the curb. Cantilevered type curbs are not available from the factory.
- Curb insulation, cant strips, flashing and general roofing material are furnished by the contractor.
- The curbs must be supported on parallel sides by roof members.
- The roof members must not penetrate supply and return duct opening areas as damage to the unit might occur.

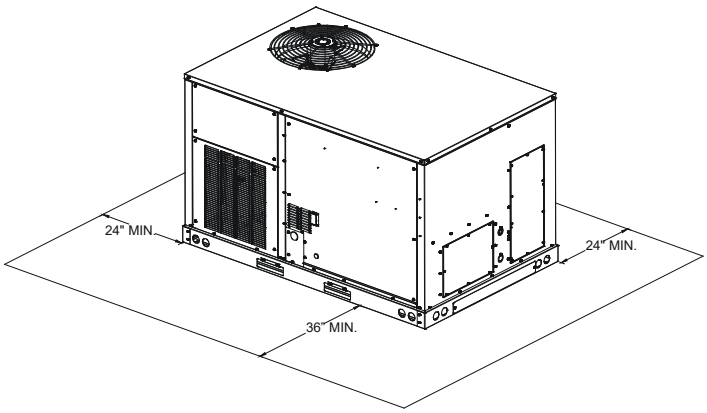
NOTE: The unit and curb accessories are designed to allow vertical duct installation <u>before</u> unit placement. Duct installation <u>after</u> unit placement is not recommended.

⚠ CAUTION

All curbs look similar. To avoid incorrect curb positioning, check job plans carefully and verify markings on curb assembly. Instructions may vary in curb styles and supersedes information shown.

See the manual shipped with the roof curb for assembly and installation instructions.

CLEARANCES



Unit Clearances

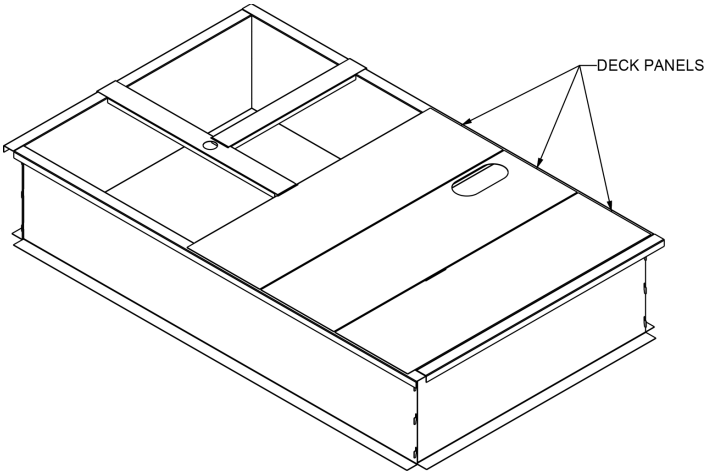
**In situations that have multiple units, a 36" minimum clearance is required between the condenser coils.*

Adequate clearance around the unit should be kept for safety, service, maintenance, and proper unit operation. A clearance of 48" is recommended on all sides of the unit to facilitate possible parts replacement, to allow service access and to insure proper ventilation and condenser airflow. The top of the unit should be completely unobstructed. If units are to be located under an overhang, there should be a minimum of 48" clearance and provisions made to deflect the warm discharge air out from the overhang. The unit should be installed remote from all building exhausts to inhibit ingestion of exhaust air into the unit fresh air intake.

NOTE: If the 36" minimum clearance is used on the control panel side of a DRG unit, a flue extension kit needs be to installed to prevent flue gas recirculation. See table below for the kit selection.

Model size	Kit part number
3 ton	HEFLUE036
4 & 5 ton	HEFLUE048060
6 ton	HEFLUE072

Flue Extension Kits



Roof Curb Installation

ROOF CURB POST-INSTALLATION CHECKS

After installation, check the top of the curb, duct connection frame and duct flanges to make sure gasket has been applied properly. Gasket should be firmly applied to the top of the curb perimeter, duct flanges and any exposed duct connection frame. If gasket is loose, re-apply using strong weather resistant adhesive.

Protrusion

Inspect curb to ensure that none of the utility services (electric) routed through the curb protrude above the curb.

CAUTION

If protrusions exist, do not attempt to set unit on curb.

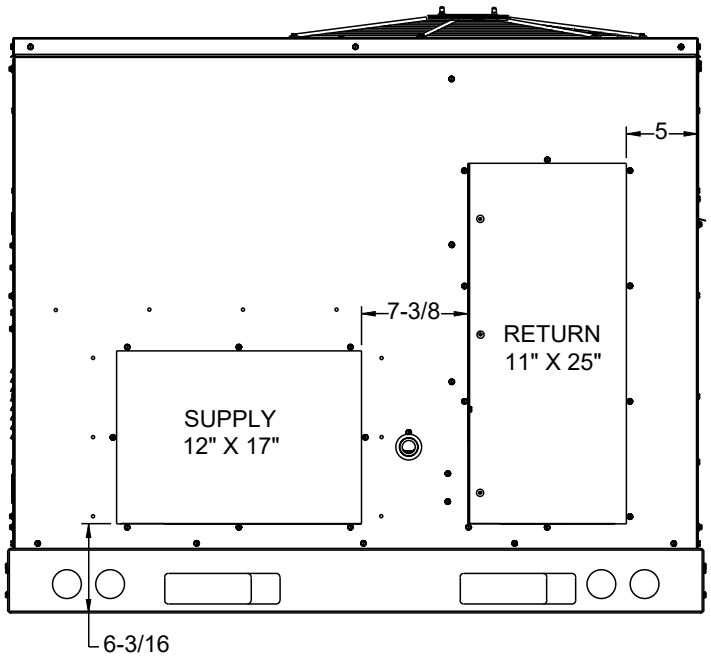
ROOF TOP DUCT CONNECTIONS

Install all duct connections on the unit before placing the unit on rooftop.

Horizontal Discharge

Refer to IOD-7082 included in the literature pack for installing horizontal duct covers.

Flexible duct connectors between the unit and ducts are recommended. Insulate and weatherproof all external ductwork and joints as required and in accordance with local codes.



Horizontal Discharge Duct Connections

RIGGING DETAILS

WARNING

To prevent property damage, the unit should remain in an upright position during all rigging and moving operations. To facilitate lifting and moving when a crane is used, place the unit in an adequate cable sling.

CAUTION

If units are lifted two at a time, the fork holes on the condenser end of the unit must not be used. Minimum fork length is 42" to prevent damage to the unit; however, 48" is recommended.

Provisions for forks have been included in the unit base frame. No other fork locations are approved.

WARNING

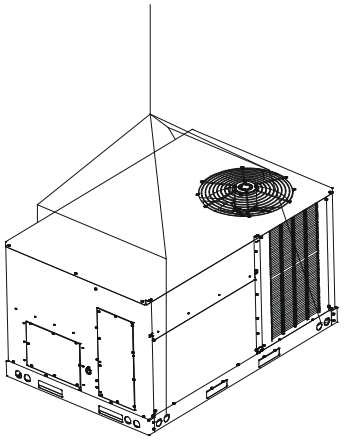
To prevent possible equipment damage, property damage, personal injury or death, the following bullet points must be observed when installing the unit.

- Unit must be lifted by the four lifting holes located at the base frame corners.
- Lifting cables should be attached to the unit with shackles.
- The distance between the crane hook and the top of the unit must not be less than 60".

- Two spreader bars must span over the unit to prevent damage to the cabinet by the lift cables. Spreader bars must be of sufficient length so that cables do not come in contact with the unit during transport. Remove wood struts mounted beneath unit base frame before setting unit on roof curb. These struts are intended to protect unit base frame from fork lift damage. Removal is accomplished by extracting the sheet metal retainers and pulling the struts through the base of the unit. Refer to rigging label on the unit.

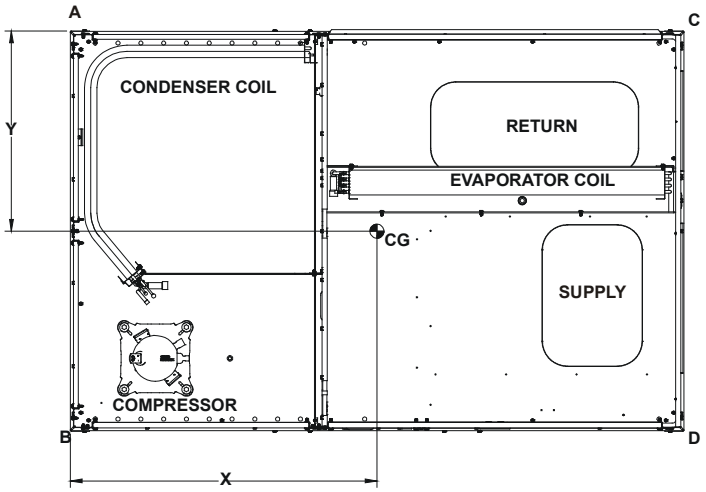
IMPORTANT: IF USING BOTTOM DISCHARGE WITH ROOF CURB, DUCTWORK SHOULD BE ATTACHED TO THE CURB PRIOR TO INSTALLING THE UNIT. DUCTWORK DIMENSIONS ARE SHOWN IN ROOF CURB INSTALLATION INSTRUCTIONS.

Refer to the Roof Curb Installation Instructions for proper curb installation. Curbing must be installed in compliance with the National Roofing Contractors Association Manual.



To assist in determining rigging requirements, unit weights and center of gravity are shown as follows:

WEIGHTS AND CENTER OF GRAVITY



CORNER AND CENTER OF GRAVITY LOCATIONS

NOTE: UNIT SHOULD BE LIFTED AT A POINT ABOVE CENTER OF GRAVITY.

Model	Shipping Weight (lb)	Operating Weight (lb)	Corner Weights (lb)				X (in)	Y (in)
			A	B	C	D		
DRG036	630	572	104	141	186	141	36.5	27.7
DRG048	705	647	118	231	180	118	36.3	27.9
DRG060	713	655	148	189	135	183	35.8	27.5
DRG072	763	705	122	246	180	157	35.3	27.7

THE NUMBERS MAY SLIGHTLY VARY DEPENDING ON INSTALLED OPTIONS.

CAUTION

TO PREVENT SEVERE DAMAGE TO THE BOTTOM OF THE UNIT, DO NOT FORK LIFT UNIT AFTER WOOD STRUTS HAVE BEEN REMOVED.

Bring condenser end of unit into alignment with the curb first. Lower unit carefully onto roof mounting curb. When a rectangular cantilever curb is used, care should be taken to center the unit. Check for proper alignment and orientation of supply and return openings with duct.

RIGGING REMOVAL

CAUTION

TO PREVENT DAMAGE TO THE UNIT, DO NOT ALLOW CRANE HOOKS AND SPREADER BARS TO REST ON THE ROOF OF THE UNIT.

Remove spreader bars, lifting cables and other rigging equipment.

ELECTRICAL WIRING

WARNING

HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

⚠ WARNING

HIGH VOLTAGE!

To avoid personal injury or death due to electrical shock, do not tamper with factory wiring. The internal power and control wiring of these units are factory-installed and have been thoroughly tested prior to shipment. Contact your local representative if assistance is required.

⚠ CAUTION

To prevent damage to the wiring, protect wiring from sharp edges. follow national electrical code and all local codes and ordinances. Do not route wires through removable access panels.

⚠ CAUTION

Conduit and fittings must be weather-tight to prevent water entry into the building.

For unit protection, use a fuse or HACR circuit breaker that is in excess of the circuit ampacity, but less than or equal to the maximum overcurrent protection device. DO NOT EXCEED THE MAXIMUM OVERCURRENT DEVICE SIZE SHOWN ON UNIT DATA PLATE.

All line voltage connections must be made through weatherproof fittings. All exterior power supply and ground wiring must be in approved weatherproof conduit.

The main power supply wiring to the unit and low voltage wiring to accessory controls must be done in accordance with these instructions, the latest edition of the National Electrical Code (ANSI/NFPA 70), and all local codes and ordinances.

The unit is factory wired for the voltage shown on the unit's data plate.

NOTE: If supply voltage is 208V, lead on primary of transformer(s) must be moved from the 230V to the 208V tap. Refer to wiring diagram on unit for details.

Main power wiring should be sized for the minimum circuit ampacity shown on the unit's dataplate. Size wires in accordance with the ampacity tables in Article 310 of the National Electrical Code. If long wires are required, it may be necessary to increase the wire size to prevent excessive voltage drop. Wires should be sized for a maximum of 3% voltage drop.

⚠ CAUTION

To avoid risk of property damage, personal injury or fire, use only copper conductors.

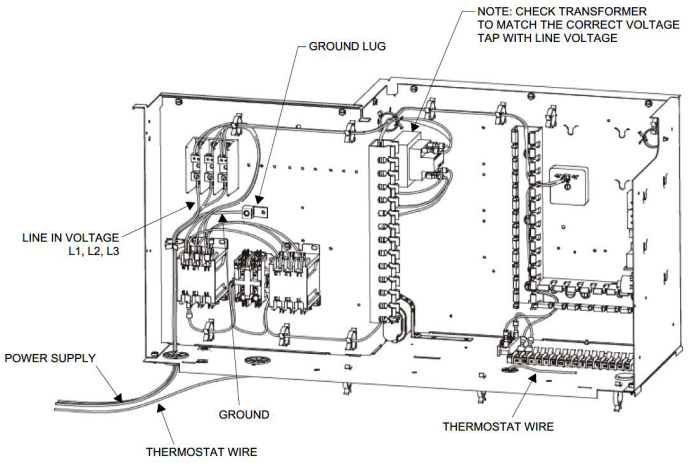
⚠ CAUTION

To prevent improper and dangerous operation due to wiring errors, label all wires prior to disconnection when servicing controls. Verify proper operation after servicing.

NOTE: A weather-tight disconnect switch, properly sized for the unit total load, must be field or factory installed. An external field supplied disconnect may be mounted on the exterior panel.

Ensure the data plate is not covered by the field-supplied disconnect switch.

- Some disconnect switches are not fused. Protect the power leads at the point of distribution in accordance with the unit data plate.
- The unit must be electrically grounded in accordance with local codes or, in the absence of local codes, with the latest edition of the National Electrical Code ANSI/NFPA 70, and/or the Canadian Electrical Code, CSA C22.1, Part 1. A ground lug is provided for this purpose. Do not use the ground lug for connecting a neutral conductor.
- Connect power wiring to the electrical power block located within the main control box.



Gas Control box

NOTE: Depending on the options installed, the location of the components may vary in some models

WARNING

Operating the unit with an improper line voltage or with excessive phase unbalance can cause damage to or failure of the unit. Such damage or failure is not covered under the unit's warranty.

Areas Without Convenience Outlet

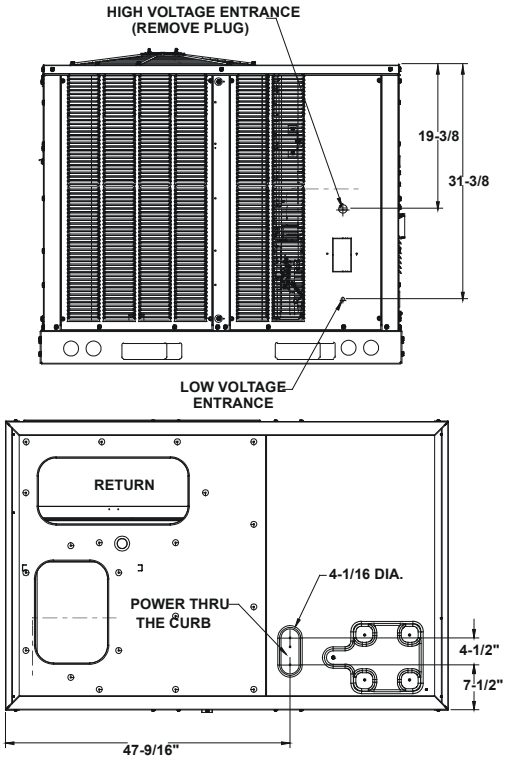
It is recommended that an independent 115V power source be brought to the vicinity of the roof top unit for portable lights and tools used by the service mechanic.

NOTE: Refer to local codes for requirements. These outlets can also be factory installed.

Units installed on Roof Tops

Main power and low voltage wiring may enter the unit through the condenser end of unit or through the roof curb. Install conduit connectors at the desired entrance locations. External connectors must be weatherproof. All holes in the unit base must be sealed (including those around conduit nuts) to prevent water leakage into building. All required conduit and fittings are to be field supplied.

Supply voltage to roof top unit must not vary by more than 10% of the value indicated on the unit data plate. Phase voltage unbalance must not exceed 2%. Contact your local power company for correction of improper voltage or phase unbalance.



ELECTRICAL ENTRANCE AND THRU CURB (BOTTOM VIEW OF UNIT)

Low Voltage Control Wiring

1. A 24V thermostat must be installed for unit operation.
2. Locate thermostat or remote sensor in the conditioned space where it will sense average temperature. Do not locate the device where it may be directly exposed to supply air, sunlight or other sources of heat. Follow installation instructions packaged with the installed device.
3. Use #18 AWG wire for 24V control wiring runs not exceeding 75 feet. Use #16 AWG wire for 24V control wiring runs not exceeding 125 feet. Use #14 AWG wire for 24V control wiring runs not exceeding 200 feet. Low voltage wiring may be National Electrical Code (NEC) Class 2 where permitted by local codes.
4. Route the low voltage control wires from sub-base terminals to the unit. Control wiring should enter through the condenser panel opening or through curb indicated in "Electrical Entrance" figure. Connect thermostat and any accessory wiring to low voltage terminal block TB1 in the main control box.
5. For two-stage heating operation, remove the factory installed jumper connecting W1 and W2 terminals on terminal block.

NOTE: Field-supplied conduit may need to be installed depending on unit/curb configuration. Use #18 AWG solid conductor wire whenever connecting thermostat wires to terminals on sub-base. DO NOT use larger than #18 AWG wire. A transition to #18 AWG wire may be required before entering thermostat sub-base.

NOTE: Refer to unit wiring diagrams for thermostat or remote sensor connections.

GAS SUPPLY PIPING

WARNING

To prevent personal injury or death due to improper installation, adjustment, alteration, service or maintenance, refer to this manual. For additional assistance or information, consult a qualified installer, servicer agency or the gas supplier.

IMPORTANT NOTE: This unit is factory set to operate on natural gas at the altitudes shown on the rating plate.

⚠ WARNING

To avoid property damage, personal injury or death when either using propane gas alone or at higher altitudes, obtain and install the proper conversion kit(s). Failure to do so can result in unsatisfactory operation and/or equipment damage. High altitude kits are for U.S. installations only and are not approved for use in Canada.

The rating plate is stamped with the model number, type of gas and gas input rating. Make sure the unit is equipped to operate on the type of gas available. Conversion to propane (LP) gas is permitted with the use of the factory authorized conversion kit (see the unit Technical Manual for the appropriate kit). For High Altitude derates, refer to the latest edition of the National Fuel Gas Code NFPA 54/ANSI Z223.1 or National Standard of Canada, Natural Gas and Propane Installation Code, CSA B149.1.

INLET GAS PRESSURE	
NATURAL	Min. 5.0" W.C., Max. 10.0" W.C.
PROPANE	Min. 11.0" W.C., Max. 14.0" W.C.

INLETGASPRESSUREMUSTNOTEXCEEDMAXIMUMVALUESHOWNIN TABLE ABOVE.

The minimum supply pressure should not vary from that shown in the table above because this could prevent the unit from having dependable ignition. In addition, gas input to the burners must not exceed the rated input shown on the rating plate. Overfiring of the unit could result in premature heat exchanger failure.

Piping

IMPORTANT NOTE: To avoid possible unsatisfactory operation or equipment damage due to under firing of equipment, do not undersize the natural/ propane gas piping from the meter/tank to the unit. When sizing a trunk line, include all appliances on that line that could be operated simultaneously.

The gas line installation must comply with local codes, or in the absence of local codes, with the latest edition of the National Fuel Gas Code NFPA 54 / ANSI Z223.1.

Natural Gas Connection

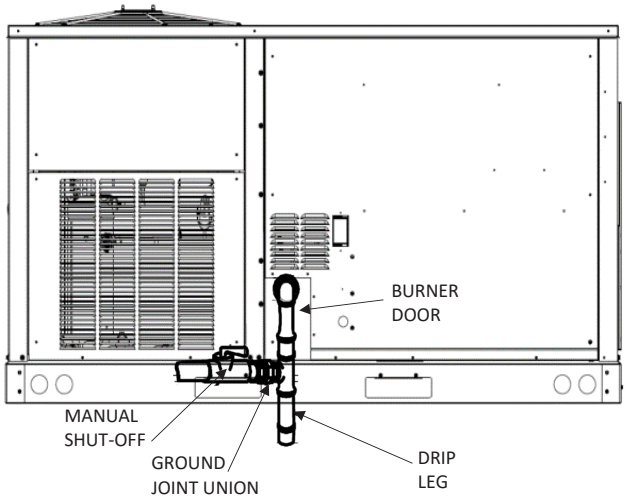
Natural Gas Capacity of Pipe in Cubic Feet of Gas Per Hour (CFH)					
Length of Pipe in Feet	Nominal Black Pipe Size (inches)				
	1/2	3/4	1	1 1/4	1 1/2
10	132	278	520	1050	1600
20	92	190	350	730	1100
30	73	152	285	590	980
40	63	130	245	500	760
50	56	115	215	440	670
60	50	105	195	400	610
70	46	96	180	370	560
80	43	90	170	350	530
90	40	84	160	320	490
100	38	79	150	305	460

Pressure= .50 PSIG or less and Pressure Drop of 0.3" W.C.
(Based on 0.60 Specific Gravity Gas)

$$\text{CFH} = \frac{\text{BTUH Furnace Input}}{\text{Heating Value of Gas (BTU/Cubic Foot}}$$

Refer to the Proper Piping Practice drawing for the general layout at the unit. The following rules apply:

1. Use black iron pipe and fittings for the supply piping. The use of a flex connector and/or copper piping is permitted as long as it is in agreement with local codes.
2. Use pipe joint compound on male threads only. Pipe joint compound must be resistant to the action of the fuel used.
3. Use ground joint unions.
4. Install a drip leg to trap dirt and moisture before it can enter the gas valve. The drip leg must be a minimum of three inches long.
5. Use two pipe wrenches when making connection to the gas valve to keep it from turning.
6. Install a manual shut-off valve in a convenient location (within six feet of unit) between the meter and the unit.
7. Tighten all joints securely.
8. The unit must be connected to the building piping by one of the following methods:
   - Rigid metallic pipe and fittings
   - Semirigid metallic tubing and metallic fittings (Aluminum alloy tubing must not be used in exterior locations).
   - Listed gas appliance connectors used in accordance with the terms of their listing that are completely in the same room as the equipment. Always use a new listed connector.
   - In the prior two methods above the connector or tubing must be protected from physical and thermal damage. Aluminum alloy tubing and connectors must be coated to protect against external corrosion when in contact with masonry, plaster or insulation or are subject to repeated wettings by liquids (water - not rain water, detergents or sewage).



Proper piping practice

NOTE: The unit gas supply entrance is factory sealed with plugs. Keep plugs in place until gas supply is ready to be installed. Once ready, replace the plugs with the supplied grommets and install gas supply line.

Gas Piping Checks

CAUTION

To prevent property damage or personal injury due to fire, the following instructions must be preformed regarding gas connections and pressure testing:

- **The unit and its gas connections must be leak tested before placing in operation. Because of the danger of explosion or fire, never use a match or open flame to test for leaks. Never exceed specified pressures for testing. Higher pressure may damage gas valve and cause overfiring which may result in premature heat exchange failure.**
- **This unit and its shut-off valve must be disconnected from the gas supply during any pressure testing of that system at test pressures in excess of ½ PSIG (3.48 kPa).**
- **This unit must be isolated from the gas supply system by closing its manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ PSIG (3.48 kPa).**

WARNING

To avoid property damage or personal injury, be sure there is <u>no open flame</u> in the vicinity during air bleeding.

There will be air in the gas supply line after testing for leaks on a new installation. Therefore, the air must be bled from the line by loosening the ground joint union until pure gas is expelled. Tighten union and wait for five minutes until all gas has been dissipated in the air. Be certain there is no open flame in the vicinity during air bleeding procedure. The unit is placed in operation by closing the main electrical disconnect switch for the unit.

PROPANE GAS INSTALLATIONS

WARNING

To avoid property damage, personal injury or death due to fire or explosion caused by a propane gas leak, install a gas detecting warning device. Since rust can reduce the level of odorant in propane gas, a gas detecting warning device is the only reliable way to detect a propane gas leak. Contact a local propane gas supplier about installing a gas detecting warning device.

IMPORTANT NOTE: Propane gas conversion kits must be installed to convert units to propane gas. NOx screens must be removed before converting to LP. Remove burner assembly and pull NOx screens from each burner tube. When all the screens are out, reassemble the burner assembly without the screens.

All propane gas equipment must conform to the safety standards of NFPA 58 - Liquefied Petroleum Gas Code.

For satisfactory operation, propane gas pressure must be within 9.7 - 10.3 inches w.c. for high fire at the manifold with all gas appliances in operation. Maintaining proper gas pressure depends on three main factors:

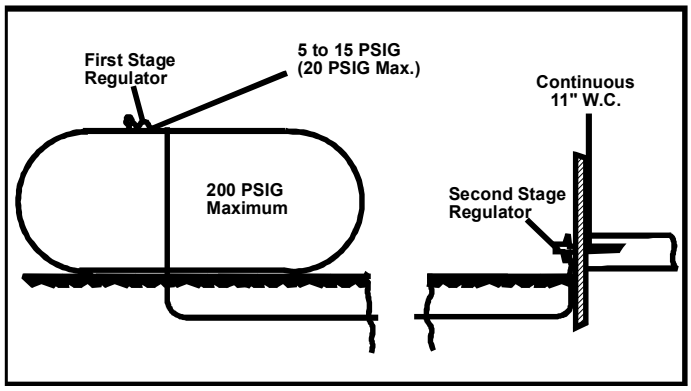
1. Vaporization rate, which depends on (a) temperature of the liquid, and (b) wetted surface area of the container or containers.
2. Proper pressure regulation.
3. Pressure drop in lines between regulators, and between second stage regulator and the appliance. Pipe size required will depend on length of pipe run and total load of all appliances.

Tanks and Piping

Complete information regarding tank sizing for vaporization, recommended regulator settings and pipe sizing is available from most regulator manufacturers and propane gas suppliers.

Since propane gas will quickly dissolve white lead or most standard commercial compounds, special pipe dope must be used. Shellac base compounds resistant to the actions of liquefied petroleum gases such as Gasolac®, Stalactic®, Clyde's® or John Crane® are satisfactory.

See the following figure for typical propane gas piping.



Typical propane gas piping

Roof Top Location and Installation

The gas supply piping location and installation for roof top units must be in accordance with local codes or, in the absence of locals codes, with ordinances of the latest edition of the National Fuel Gas Code ANSI Z223.1/NFPA 54.

A manual gas shut off valve must be field installed external to the roof top unit. In addition, a drip leg must be installed near the inlet connection. A ground joint union connection is required between the external shut off valve and the unit connection to the gas valve to permit removal of the burner assembly for servicing.

1. Route gas piping to unit so that it does not interfere with the removal of access panels. Support and align piping to prevent strains or misalignment of the manifold assembly.
2. All units are furnished with standard female 1/2" NPT pipe connections. The size of the gas supply piping to the unit must be based on length of run, number of units on the system, gas characteristics, BTU requirement and available supply pressure. All piping must be done in accordance with local codes or, in the absence of local codes, with the latest edition of the National Fuel Gas Code ANSI Z223.1/NFPA 54.

NOTE: The gas connection size at the unit does NOT establish the size of the supply line.

3. These units are designed for either natural or propane (LP) gas and are specifically constructed at the factory for only one of these fuels. The fuels are NOT interchangeable. However, the furnace can be converted in the field from natural gas to LP gas with the appropriate factory kit (see unit Technical Manual for the appropriate kit). Only a qualified contractor, experienced with natural and propane gas systems, should attempt conversion. Kit instructions must be followed closely to assure safe and reliable unit operation.
4. With all units on a common line operating under full fire, natural gas main supply pressure should be adjusted to approximately 7.0" w.c., measured at the unit gas valve. If the gas pressure at the unit is greater than 10.0" w.c., the contractor must furnish and install an external type positive shut off service pressure regulator. The unit will not function satisfactorily if supply gas pressure is less than 5.0" w.c. or greater than 10.0" w.c..

NOTE: A minimum horizontal distance of 48" between the regulator and the furnace flue discharge is required.

5. With all units on a common line operating under full LP gas main supply pressure should be at least 11.0" w.c. and must be no greater than 13.0" w.c., measured at the unit gas valve. Unit will not function satisfactorily if supply gas pressure is less than 11.0" w.c. or greater than 13.0" w.c..
6. All pipe connections should be sealed with a pipe thread compound, which is resistant to the fuel used with the furnace. A soapy water solution should be used to check all joints for leaks. A tap is located on the entering side of the gas valve for test gauge connection to measure supply (main) gas pressure. Another tap is provided on the manifold side of the gas valve for checking manifold pressure.

⚠ WARNING

This unit and its individual shutoff valve must be DISCONNECTED from the gas supply system during any pressure testing of that system at test pressures in excess of ½ PSIG (13.8" w.c.).

⚠ CAUTION

This unit must be ISOLATED from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing equal to or less than ½ PSIG.

7. There must be no obstruction to prevent the flow of combustion and ventilating air. A vent stack is not required and must never be used. The power venter will supply an adequate amount of combustion air as long as the air passageways are kept free of any obstructions and the recommended external unit clearances are maintained.

CIRCULATING AIR AND FILTERS

Ductwork

The supply duct from the unit through a wall may be installed without clearance. However, minimum unit clearances must be maintained (see “Clearances” section). The supply duct should be provided with an access panel large enough to inspect the air chamber downstream of the heat exchanger. A cover should be tightly attached to prevent air leaks.

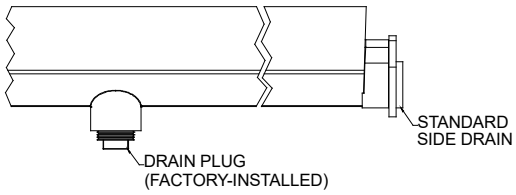
Ductwork dimensions are shown in the roof curb installation manual.

If desired, supply and return duct connections to the unit may be made with flexible connections to reduce possible unit operating sound transmission.

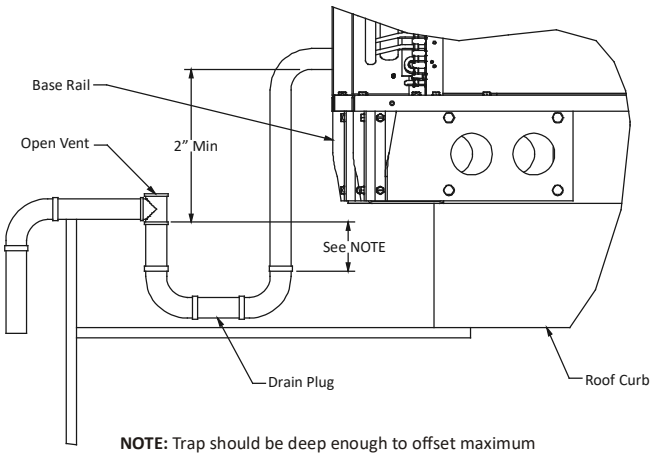
CONDENSATE DRAIN CONNECTION

Condensate Drain Connection

A 3/4” female NPT drain connection is supplied on the end of the unit and bottom of the drain pan for condensate piping. An external trap must be installed for proper condensate drainage. Hand tighten drain fitting to the drain connection.



Drain Pan (Side View)



NOTE: Trap should be deep enough to offset maximum unit static difference. A minimum 4” trap is recommended.

DRAIN CONNECTION

Install condensate drain trap as shown. Use 3/4” drain line and fittings or larger. Do not operate without trap.

Horizontal Drain

Drainage of condensate directly onto the roof may be acceptable; refer to local code. It is recommended that a small drip pad of either stone, mortar, wood or metal be provided to prevent any possible damage to the roof.

Vertical Drain

To use the bottom drain connection, remove the drain plug from the bottom connection and install it in the horizontal connection.

Cleaning

Due to the fact that drain pans in any air conditioning unit will have some moisture in them, algae and fungus will grow due to airborne bacteria and spores. Periodic cleaning is necessary to prevent this build-up from plugging the drain.

STARTUP, ADJUSTMENTS, AND CHECKS

WARNING

HIGH VOLTAGE!

To avoid personal injury or death due to electrical shock, bond the frame of this unit to the building electrical ground by use of the grounding terminal provided or other acceptable means. Disconnect all power before servicing or installing this unit.

Pre-Startup Instructions - General

CAUTION

To prevent property damage or personal injury, do not start the unit until all necessary pre-checks and tests have been performed.

Prior to the beginning of Startup, Adjustments, and Checks procedures, the following steps should be completed in the building.

WARNING

MOVING MACHINERY HAZARD!

To prevent possible personal injury or death, disconnect power to the unit and padlock in the “OFF” position before servicing fans.

CAUTION

To prevent property damage or personal injury, do not start the unit until all necessary pre-checks and tests have been performed.

This unit is equipped with an electronic ignition device to automatically light the main burners. It also has a power vent blower to exhaust combustion products.

On new installations, or if a major component has been replaced, the operation of the unit must be checked.

Check unit operation as outlined in the following instructions. If any sparking, odors, or unusual sounds are encountered, shut off electrical power and recheck for wiring errors, or obstructions in or near the blower motors. **Duct covers must be removed before operating unit.**

The Startup, Adjustments, and Checks procedure provides a step-by-step sequence which, if followed, will assure the proper startup of the equipment in the minimum amount of time. Air balancing of duct system is not considered part of this procedure. However, it is an important phase of any air conditioning system startup and should be performed upon completion of the Startup, Adjustments, and Checks procedure. The Startup, Adjustments, and Checks procedure at outside ambients below 55°F should be limited to a readiness check of the refrigeration system with the required final check and calibration left to be completed when the outside ambient rises above 55°F.

Temporary Heating Or Cooling

If the unit is to be used for temporary heating or cooling, a "Startup, Adjustments, and Checks" must first be performed in accordance with this manual. Damage or repairs due to failure to comply with these requirments are not covered under the warranty. **After** the machines are used for temporary heating or cooling, inspect the coils, fans, and motors for unacceptable levels of construction dust and dirt and install new filters.

Contractor Responsibility

The installing contractor must be certain that:

- All supply and return air ductwork is in place, properly sealed, and corresponds with installation instructions.
- All thermostats and sensors are mounted and wired in accordance with installation instructions.
- All electric power, all gas, hot water or steam line connections, and the condensate drain installation have been made to each unit on the job. These main supply lines must be functional and capable of operating all units simultaneously.
- Requirements are met for venting and combustion air.
- Air filters are in place.
- Input rate and temperature rise are adjusted per rating plate.

Roof Curb Installation Check

Inspect the roof curb for correct installation. The unit and curb assembly should be level. Inspect the flashing of the roof mounting curb to the roof, especially at the corners, for good workmanship. Also check for leaks around gaskets. Note any deficiencies in a separate report and forward to the contractor.

Obstructions, Fan Clearance and Wiring

Remove any extraneous construction and shipping materials that may be found during this procedure. Rotate all fans manually to check for proper clearances and that they rotate freely. Check for bolts and screws that may have jarred loose during shipment to the job site. Re-tighten if necessary. Re-tighten all electrical connections.

Field Duct Connections

Verify that all duct connections are tight and that there is no air bypass between supply and return.

Filter Section Check

Remove filter section access panels and check that filters are properly installed. Note airflow arrows on filter frames.

Pre-startup Precautions

It is important to your safety that the unit has been properly grounded during installation. Check ground lug connection in main control box for tightness prior to closing circuit breaker or disconnect switch. Verify that supply voltage on line side of disconnect agrees with voltage on unit identification plate and is within the utilization voltage range as indicated in Appendix B Electrical Data.

System Voltage - That nominal voltage value assigned to a circuit or system for the purpose of designating its voltage class.

Nameplate Voltage - That voltage assigned to a piece of equipment for the purpose of designating its voltage class and for the purpose of defining the minimum and maximum voltage at which the equipment will operate.

Utilization Voltage - The voltage of the line terminals of the equipment at which the equipment must give fully satisfactory performance. Once it is established that supply voltage will be maintained within the utilization range under all system conditions, check and calculate if an unbalanced condition exists between phases. Calculate percent voltage unbalance as follows.

Three Phase Models Only

$$\text{3) PERCENT VOLTAGE UNBALANCE} = 100 \times \frac{\text{2) MAXIMUM VOLTAGE DEVIATIONS FROM AVERAGE VOLTAGE}}{\text{1) AVERAGE VOLTAGE}}$$

HOW TO USE THE FORMULA:

EXAMPLE: Line to neutral voltage of 220, 216, and 213

1) Average Voltage = 220 + 216 + 213 = 649 / 3 = 216

2) Maximum Voltage Deviations from Average Voltage = 220 - 216 = 4

3) Percent Voltage Unbalance = $100 \times \frac{4}{216} = \frac{400}{216} = 1.8\%$

Percent voltage unbalance MUST NOT exceed 2%.

AIR FLOW ADJUSTMENTS

When the final adjustments are complete, the current draw of the motor should be checked and compared to the full load current rating of the motor. The amperage must not exceed the service factor stamped on the motor nameplate. The total airflow must not be less than that required for operation of the furnace.

If an economizer is installed, check the unit operating balance with the economizer at full outside air and at minimum outside air.

NOTE: Never run high stage CFM below 300 CFM per ton evaporator freezing or poor unit performance is possible.

Standard Static Drive Motor

Adjust the CFM for the unit by changing the position of the low voltage leads on the terminal block TB1. Refer to Appendix A for blower performance at each speed tap. Refer to Appendix D for maximum and minimum allowed airflow for heating and cooling.

Fan speed for G (GR), is fixed at TB1-T1 and cannot be moved.

Low Cool Y1, Yellow (YL) is movable and set to TB1-T1

Low Heat W1, White (WH) is movable and set to TB1-T2

High Cool Y2, Purple (PU) is movable and set to TB1-T3

High Heat W2, Brown (BR) is movable and set to TB1-T3

These wires can be moved together or separately and placed on any unoccupied terminal.

NOTE: YL can be moved to taps T2-T3 as long as YL does not share the tap with PU. WH can be moved to tap T3 as long as WH does not share the tap with BR.

Purple wire Y2 (High Cool) and Brown wire W2 (High Heat) are connected to TB1-T3. These wires can be moved together or separately and placed on unoccupied terminal T4 or T5.

High Static Drive Motor

These motors offer a higher flexibility in making airflow adjustments. Depending on the application the motor is set up to use motor speed taps T1 to T5 or T6 to T10. When heat is called speed taps T6 to T10 take the place of speed taps T1 to T5. Refer to Appendix A for blower performance at each speed tap. Refer to Appendix D for minimum and maximum airflow required for heating and cooling.

Fan speed for G (GR), is fixed at TB1-T1 and cannot be moved.

Low Cool Y1, Yellow (YL) is movable and set to TB1-T1

Low Heat W1, White (WH) is movable and set to TB1-T6

High Cool Y2, Purple (PU) is movable and set to TB1-T3

High Heat W2, Brown (BR) is movable and set to TB1-T8

These wires can be moved together or separately and placed on any unoccupied terminal.

Note: YL can be moved to taps T2 to T3 as long as YL does not share the tap with PU. WH can be moved to tap T7 as long as WH does not share the tap with BR. When Heat is called TB1-W1 will also call TB1-DH, activating the second set of taps T6 to T10. If cooling and heating is called at the same time heating will take priority and taps T6 to T10 will be chosen by default.

NOTE: IF MORE THAN ONE LEAD IS ENERGIZED SIMULTANEOUSLY, THE MOTOR WILL RUN AT THE HIGHER NUMERICAL SPEED TAP FOR BOTH STANDARD STATIC AND HIGH STATIC DRIVE MOTORS. FOR PROPER OPERATION **Y2** AND **W2** SHOULD HAVE A HIGHER SPEED SETTING THAN **G**, **Y1** AND **W1** FOR BOTH STANDARD STATIC AND HIGH STATIC DRIVE MOTORS.

For gas heat units, the airflow must be adjusted so that the air temperature rise falls within the ranges given stated on Data Plate.

Electrical Input Check

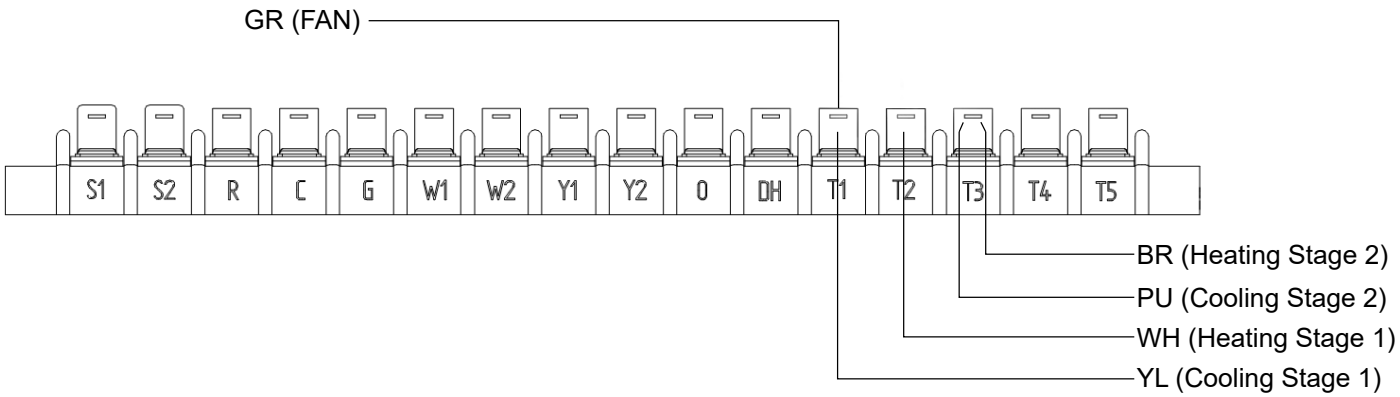
Make preliminary check of evaporator fan ampere draw and verify that motor nameplate amps are not exceeded. A final check of amp draw should be made upon completion of air balancing of the duct system (see Appendix B).

GAS SYSTEM CHECK

Pre-Operation Checks

1. Close the manual gas valve external to the unit.
2. Turn off the electrical power supply to the unit.
3. Change heating setpoint to its lowest possible setting.
4. Remove the heat exchanger door on the side of the unit by removing screws.
5. This unit is equipped with an ignition device which automatically lights the main burner. DO NOT try to light burner by any other method.
6. Move the gas control valve switch to the OFF position.
7. Wait five minutes to clear out any gas.
8. Smell for gas, including near the ground. This is important because some types of gas are heavier than air. If you have waited five minutes and you do smell gas, immediately follow the warning WHAT TO DO IF YOU SMELL GAS on page 2 of this manual. If having waited for five minutes and no gas smell is noted, move the gas control valve switch to the ON position.
9. Replace the heat exchanger door on the side of the unit.
10. Open the manual gas valve external to the unit.
11. Turn on the electrical power supply to the unit.
12. Change heating setpoint to desired setting.

DRG Model Wiring (Standard Static)



* Move YELLOW (YL) wire from TB1-T1 to T2 or T3 to change blower speed during cooling stage 1 operation. (Do not move wires YL and PU to the same taps)
* Move WHITE (WH) wire from TB1-T2 to T3 to change blower speed during heating stage 1 operation. (Do not move wires WH and BR to the same taps)
* Move PURPLE (PU) wire from TB1-T3 to T4 or T5 to change blower speed during cooling stage 2 operation. (Do not move wires YL and PU to the same taps)
* Move BROWN (BR) wire from TB1-T3 to T4 or T5 to change blower speed during heating stage 2 operation. (Do not move wires WH and BR to the same taps)

DRG OPERATION AND WIRE RANGE CHART (STANDARD STATIC)

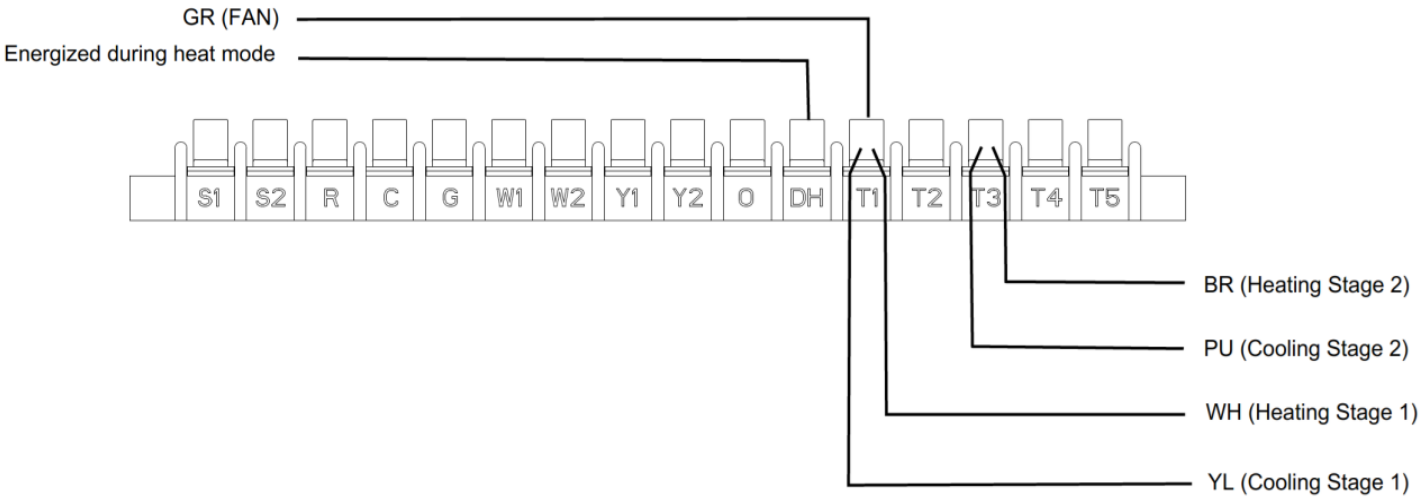
DRG OPERATIONS						WIRE RANGE				
GAS	**G**	**Y1**	**Y2**	**W1**	**W2**	**T1**	**T2**	**T3**	**T4**	**T5**
FAN ONLY	X					GR				
COOLING MODE LO	X	X				●	YL →			
COOLING MODE HI	X	X	X					●	PU →	
HEATING MODE LO	X			X			● WH →			
HEATING MODE HI	X			X	X			●	BR →	

X = 24V SIGNAL

● ——→ RANGE OF AVAILABLE TAPS

FOR WIRE COLOR INFORMATION AND PLACEMENT VIEW DRG MODEL WIRING ABOVE

DRG Model Wiring (High Static)



** TB1-DH is energized when the unit is in heat mode. When TB1-DH is energized, the blower motor operates at a new group of programmed speeds, T6 - T10, in place of T1 -T5.

* Move YELLOW (YL) wire from TB1-T1 to T2 or T3 to change blower speed during cooling stage 1 operation. (Do not move wires YL and PU to the same taps)

* Move WHITE (WH) wire from TB1-T6 to T7 to change blower speed during heating stage 1 operation. (Do not move wires WH and BR to the same taps)

* Move PURPLE (PU) wire from TB1-T3 to T4 or T5 to change blower speed during cooling stage 2 operation. (Do not move wires YL and PU to the same taps)

* Move BROWN (BR) wire from TB1-T8 to T9 or T10 to change blower speed during heating stage 2 operation. (Do not move wires WH and BR to the same taps)

DRG OPERATION AND WIRE RANGE CHART (HI STATIC)

DRG OPERATIONS							WIRE RANGE									
GAS	G	Y1	Y2	W1	W2	DH	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
FAN ONLY	X						GR									
COOLING MODE LO	X	X					●	YL	→							
COOLING MODE HI	X	X	X						●	PU	→					
HEATING MODE LO	X			X		X						●	WH	→		
HEATING MODE HI	X			X	X	X								●	BR	→

X = 24V SIGNAL

● ——— → RANGE OF AVAILABLE TAPS

FOR WIRE COLOR INFORMATION AND PLACEMENT VIEW DRC/DRH MODEL ABOVE.

Gas Supply Pressures & Regulator Adjustments

WARNING

Should overheating occur or the gas supply fail to shut off, turn off the manual gas shutoff valve external to the unit before turning off the electrical supply.

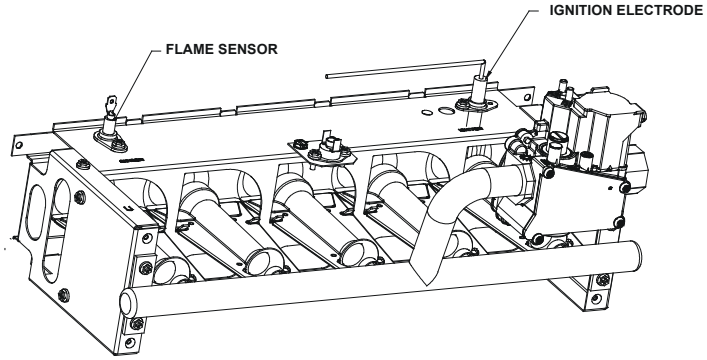
WARNING

To avoid property damage, personal injury or death, do not fire gas unit with flue box cover removed.

NOTE: Except during brief periods when gas pressures are being measured by qualified service personnel, the furnace access panel must always be secured in place when the furnace is in operation. An inspection port in the access panel is provided to monitor the flame.

The first step in checking out the gas-fired furnace is to test the gas supply piping to the unit for tightness and purge the system of air using methods outlined in the latest edition of the National Fuel Gas Code ANSI Z223.1 / NFPA 54. Verify that the disconnect switch is in the "OFF" position. A soapy water solution should be used to check for gas leaks. Since the unit is subject to considerable jarring during shipment, it is extremely important that all gas connections and joints be tested for tightness. Gas piping downstream from the unit inlet should be checked for leaks during the subsequent sequence check.
The supply gas pressure should be adjusted to 7.0" w.c. on natural gas and 11" to 13.0" w.c. on LP gas with the gas burners operating. If there is more than one unit on a common gas line, the pressures should be checked with all units under full fire. A supply pressure tap is provided on the upstream side of the gas valve. A manifold pressure tap is provided on the manifold side of the gas valve. The normal manifold pressure for High fire is 3.5" w.c. on natural gas and 10.0" w.c. for propane gas. Low fire natural gas 2.0" w.c., 6.0" w.c. low fire propane gas. Minimum gas supply pressure is 5.0" w.c. for natural gas and 11.0" w.c. for propane gas.

Do not attempt adjustment of the built-in pressure regulator unless the supply pressure is at least 5.0" w.c. on natural gas or 11.0" w.c. on propane gas.



FLAME SENSOR AND IGNITION ELECTRODE LOCATION

Ton	High Fire Rate	Number of Burners	NG Orifice	LP Orifice
3	45,000	2	43	55
	70,000	3	43	55
	115,000	6	45	56
4	70,000	3	43	55
	115,000	5	43	55
	140,000	6	43	55
5	70,000	3	43	55
	115,000	5	43	55
	140,000	6	41	55
6	70,000	3	43	55
	125,000	5	41	54
	150,000	6	41	54

HEAT EXCHANGER AND BURNER ORIFICE SPECIFICATIONS

NOTE: Gas appliances located more than 2000 feet above sea level must be derated 4% per 1000 feet of total elevation and that variance in gas heating value and specific gravity require change in manifold pressure to obtain rating, it is mandatory that the input be adjusted at the installation site. All installations should be made as outlined in the latest edition of the National Fuel Gas Code ANSI Z223.1,section "Procedures To Be Followed To Place An Appliance in Operation". Refer also to the "User's Information Manual" supplied with the unit for additional information on the gas furnace.

Gas Supply And Manifold Check

Gas supply pressure and manifold pressure with the burners operating must be as specified on the rating plate.

Gas Inlet Pressure Check

Gas inlet pressure must be checked and adjusted in accordance to the type of fuel being consumed.

With Power And Gas Off:

1. Connect a manometer to the inlet pressure tap of the gas valve.

Inlet gas pressure can also be measured by removing the cap from the dripleg and installing a predrilled cap with a hose fitting.

With Power And Gas On:

2. Put unit into heating cycle and turn on all other gas consuming appliances.

INLET GAS PRESSURE	
NATURAL	Min. 5.0" W.C., Max. 10.0" W.C.
PROPANE	Min. 11.0" W.C., Max. 13.0" W.C.

NOTE: Inlet gas pressure must be within limits shown above.

If operating pressures differ from above, make necessary pressure regulator adjustments, check piping size, etc., and/or consult with local utility.

Manifold Pressure Check and Adjustment

The gas valve has a pressure tap to facilitate measurement of the manifold pressure. The manifold pressure must be measured with the burners operating.

1. With disconnect switch open, remove field connected thermostat wire from terminal R, W1 and W2 on TB1. Place jumper wire between R, W1 and W2 to engage high stage heat.
2. See Figure in gas input check section for gas valve adjustment.

To adjust the pressure regulator, remove the adjustment screw cover on the gas valve. Turn the adustment screw out (counterclockwise) to decrease pressure, turn in (clockwise) to increase pressure. Only small variations in gas flow should be made by means of the pressure regulator adjustment. Any major changes in flow should be made by changing the size of the burner orifices. The measured input rate to the furnace must not exceed the rating specified on the unit rating plate.

For natural gas, the high stage manifold pressure must be between 3.2 and 3.8 inches water column (3.5 nominal). Low stage manifold pressure must be between 1.7 to 2.3 inches water column (2.0 nominal).

3. To set low fire rate, open disconnect switch and remove jumper from R to W2. To set low fire manifold pressure, repeat steps above. Refer to Figure in gas input check section for location of high and low stage pressure adjustment.

For propane gas, the manifold pressure must be between 9.7 and 10.3 inches water column (10.0 nominal). Low stage manifold must be between 5.7 and 6.3 inches water column (6.0 nominal).

Gas Input (Natural Gas Only) Check

It is the responsibility of the contractor to adjust the gas input to the unit.

To measure the gas input use a gas meter and proceed as follows:

1. Turn off gas supply to all other appliances except the unit.
2. With the unit operating, time the smallest dial on the meter for one complete revolution. If this is a 2 cubic foot dial, divide the seconds by 2; if it is a 1 cubic foot dial, use the seconds as is. This gives the seconds per cubic foot of gas being delivered to the unit.
3. INPUT=GAS HTG VALUE x 3600 / SEC. PER CUBIC FOOT

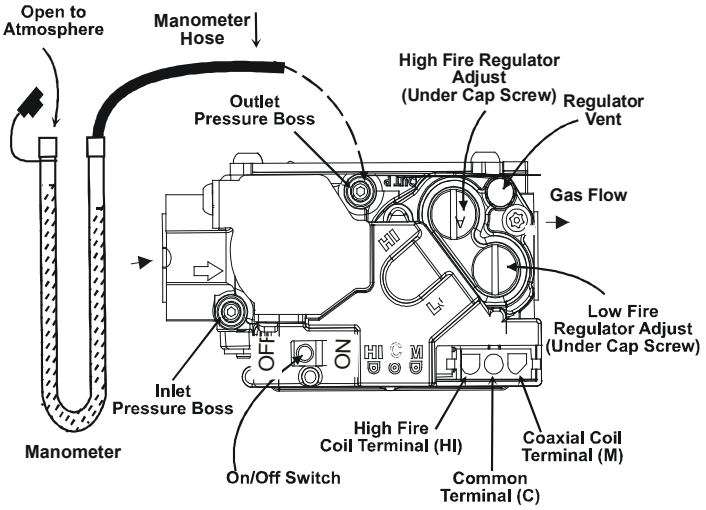
Example: Natural gas with a heating value of 1000 BTU per cubic foot and 34 seconds per cubic foot as determined by Step 2, then:

Input = 1000 x 3600 / 34 = 106,000 BTU per Hour.

NOTE: BTU content of the gas should be obtained from the gas supplier. This measured input must not be greater than shown on the unit rating plate.

Adjust input rate by varying the adjustment of the gas pressure regulator on the gas valve. All adjustments must be made with furnace operating at high fire and at normal operating temperature. A manometer should be connected to the gas valve to verify pressure is within the specified range (see following figures for manometer connections). Clockwise rotation of the pressure regulator screw increases pressure and gas flow rate. Turn screw counterclockwise to decrease pressure and gas flow rate. After adjustment the furnace temperature rise must be within the range specified on the unit data plate.

NOTE: Thermal efficiency of the furnace is a product efficiency rating determined under continuous operating conditions independent of any installed system.



White-Rodgers (2-Stage) Gas Control Valve Connected to Manometer Pressure Adjustments

To connect manometer to gas valve:

1. Back outlet pressure tap screw (inside inlet pressure boss) out one turn (counterclockwise, not more than

one turn).
2. Attach a hose and manometer to the outlet pressure boss of the valve.

To remove manometer from gas valve:
1. Remove manometer hose from outlet pressure boss.
2. Turn outlet pressure tap screw in to seal pressure port (clockwise, 7 in-lb. minimum).
3. Turn on electrical power and gas supply to the system.
4. Turn on system power and energize valve.
5. Using a leak detection solution or soap suds, check for leaks at pressure boss screw. Bubbles forming indicate a leak. SHUT OFF GAS AND FIX ALL LEAKS IMMEDIATELY.

⚠ CAUTION

TO PREVENT UNRELIABLE OPERATION OR EQUIPMENT DAMAGE, THE GAS MANIFOLD PRESSURE MUST BE AS SPECIFIED ON THE UNIT RATING PLATE. ONLY MINOR ADJUSTMENTS SHOULD BE MADE BY ADJUSTING THE GAS VALVE PRESSURE REGULATOR.

6. Relight all other appliances turned off in step 1 of gas input check. Be sure all pilot burners are operating.

Main Burner Flame Check
Flames should be stable, soft and blue (dust may cause orange tips but they must not be yellow) and extending directly outward from the burner without curling, floating or lifting off.

NOx Screen Check
Verify that the alignment of the NOx screens is at 6 o' clock. In jurisdictions that do not require low NOx emissions, NOx screens may be removed.

Temperature Rise Check
Check the temperature rise through the unit by placing thermometers in supply and return air registers as close to the unit as possible. Thermometers must not be able to sample temperature directly from the unit heat exchangers, or false readings could be obtained.
1. All registers must be open; all duct dampers must be in their final (fully or partially open) position and the unit operated for 15 minutes before taking readings
2. The temperature rise must be within the range specified on the rating plate.

NOTE: AIR TEMPERATURE RISE IS THE TEMPERATURE DIFFERENCE BETWEEN SUPPLY AND RETURN AIR.
With a properly designed system, the proper amount of temperature rise will normally be obtained when the unit is operated at rated input with the recommended blower speed.

If the correct amount of temperature rise is not obtained, it may be necessary to change the blower speed. A higher blower speed will lower the temperature rise. A slower blower speed will increase the temperature rise.

NOTE: BLOWER SPEED MUST BE SET TO GIVE THE CORRECT AIR TEMPERATURE RISE THROUGH THE UNIT AS MARKED ON THE RATING PLATE.

NORMAL SEQUENCE OF OPERATION

Heating

This unit has one (RS) Manual Reset Limit Control Switch. Check the limit to make sure it has not tripped. The limit may arrive at the job site tripped as a result of shipping shock.

If the venter motor comes on, but the unit does not attempt ignition, check if the ALS (Auxiliary High Limit Control Switch) requires resetting.
1. With electricity and gas turned on, the system switch in the "HEAT" or "AUTO" position and the fan switch in the "AUTO" position, the thermostat will close the circuit between unit terminals R and W (R-W) when the temperature falls below the thermostat setting.
2. D1 on IIC energizes venter motor contactor.
3. Venter motor contactor energizes the venter motor.
4. Operation of the venter motor closes the pressure switch PS located in the burner compartment. Unless excessive temperatures or shipping shock have opened high limit control ALS, power is fed to the integrated ignition control, which then initiates a 15-second pre-purge time delay. During this period, the venter fan will clear the combustion chamber of any residual gas.
5. After the pre-purge period, the ignition control energizes the WI-C gas valve and simultaneously initiates a "three (3)-try" spark ignition sequence.
6. When the burners are ignited, a minimum one (1) micro-amp DC current will flow through the flame between the sensor electrode and the grounded burner.
7. When the controller proves that the flame has been established, it will keep the gas valve energized and discontinue the ignition spark.
8. If the control is unable to ignite the burners after its initial attempt, it will initiate another purge and spark sequence. A third purge and spark sequence will be initiated if the second attempt is unsuccessful. If the third attempt is unsuccessful, the controller will close the gas valve and lock itself out. It may be reset by momentarily interrupting power. This may be accomplished by briefly lowering the room thermostat set-point below room temperature, or by shutting off the main power to the unit.
9. Integrated ignition control will close its normally open contacts after a delay of approximately 30 seconds. This action energizes the blower motor contactor and starts the supply fan motor. Operation of the supply

fan circulates air across the heat exchanger and delivers heated air to the conditioned space.

10. When the space temperature rises, the thermostat will open R-W. Opening R-W will cause the gas valve to close, and the furnace to shut down.
11. The furnace has three high temperature limit controls, which can shut down the burner. They do not shut down the venter motor.

Unit Shutdown

1. Set the room heating setpoint to lowest setting.
2. Turn off the electrical power supply to the unit.
3. Remove the heat exchanger door on the side of the unit by removing screws.
4. Move the gas control valve switch to the OFF position.
5. Close manual gas shut off valve external to the unit.
6. Replace the heat exchanger door on the unit.
7. If cooling and/or air circulation will be desired, turn ON gas control valve switch and the electrical power.

Automatic Reset High Limit Control (LS)

Located in the burner compartment on the heat exchanger, its sensing element projects through the blower section bulkhead and senses the temperature at the rear of the furnace. It will cycle the furnace off if the temperature exceeds 100°F plus maximum rise.

Auxiliary High Limit Control (ALS)

Located in the blower compartment on the blower housing, it senses air temperature within the blower compartment and protects the filters from excessive temperature. It will shut down the furnace if it senses excessive temperatures.

Elevated temperatures at the control are normally caused by blower failure. The reason for the shut down should be determined and repaired prior to resetting.

Manual Reset Flame Rollout Control (RS)

Located in the burner compartment at the top of the burner assembly, it senses high temperature that could occur if the heat exchanger tubes were plugged and the flame was rolling out instead of entering the tubes. It has a manual push-button reset that cannot be actuated until the limit control has cooled.

The reason for elevated temperatures at the control should be determined and repaired prior to resetting this manual reset control.

WARNING

To avoid property damage, personal injury or death due to fire or explosion, a qualified servicer must investigate the reason for the rollout protection device to open before manually resetting the rollout protection device.

Refrigeration System Checks

This unit is equipped with thermal expansion valves.

Ensure the hold-down bolts on the compressor are secure and have not vibrated loose during shipment. Check that the vibration grommets have been installed and visually check all piping for damage and leaks and repair if necessary. The entire system has been factory charged and tested, making it unnecessary to field charge. Factory refrigerant charge is shown on the unit's nameplate.

To confirm charge levels or, if a leak occurs and charge needs to be added to the system, it is recommended to evacuate the system and recharge refrigerant to the unit's nameplate specifications. This unit has been rated in the cooling mode at the AHRI rated conditions of: indoor (80°F db/67°F wb) and outdoor (95°F db). While operating at this condition, the superheat should range from 9°F to 11°F for each refrigeration circuit measured at the suction service port located near the compressor.

Start-Up Procedure and Checklist

Begin with power turned off at all disconnects.

1. Turn thermostat system switch to "Cool," and fan switch to "Auto" and turn temperature setting as high as it will go.
2. Inspect all registers and set them to the normal open position.
3. Turn on the electrical supply at the disconnect.
4. Turn the fan switch to the "ON" position. The blower should operate after a 7 second delay.
5. Turn the fan switch to "Auto" position. The blower should stop after a 60 second delay.
6. Slowly lower the cooling temperature until the unit starts. The compressor, blower and fan should now be operating. Allow the unit to run 10 minutes, make sure cool air is being supplied by the unit.
7. Turn the temperature setting to the highest position, stopping the unit. The indoor blower will continue to run for 60 seconds.

Turn the thermostat system switch to "OFF" and disconnect all power when servicing the unit.

Refrigeration Sequence Check

1. 24VAC control voltage is provided by the control transformer to terminal XS. The control voltage is passed through any installed safety shutdown devices such as the smoke detector before providing 24VAC to terminals ES and R.
2. To simulate a mechanical call for cooling lower the room cooling setpoint to a value below the current room temperature. The cooling is energized when the room temperature is above the setpoint for cooling.
3. **UNIT WITH ECONOMIZER OPTION:** The compressor circuit is interlocked through the economizer module. If the outdoor air enthalpy (temperature and humidity) is not suitable for cooling, the economizer will permit the compressor to be

energized.
4. The blower motor is operated to provide cool supply air to the space.
5. Compressor contactor closes its contacts to provide power to the compressor motor. In addition, the condenser fan motor is energized through the compressor contactor.

WARNING

BURN HAZARD!
DO NOT TOUCH! DISCHARGE LINE MAY BE HOT!

6. Check that the compressor is operating correctly. The scroll compressors in these units MUST operate in the proper rotation. To ensure the compressor is operating in the correct direction, check the compressor discharge line pressure or temperature after the compressor is started.

The discharge pressure and discharge line temperature should increase. If this does not occur and the compressor is producing an exceptional amount of noise, perform the following checks.

- If the compressor is operating backward, disconnect the unit power supply and lock it in the "OFF" position. Switch two leads of the power supply at the unit Single Point Power Block. Reconnect power and check for compressor and condenser fan motor operation.

7. With all safety devices closed, the system will continue cooling operation until the room temperature is satisfied.
8. Increasing the room cooling setpoint to a value above the current room temperature will simulate a satisfied thermostat. The compressor and the supply fan will cycle off.
9. After a time delay of approximately 3 minutes, the compressor control circuits will be ready to respond to a subsequent call for cooling.

Refrigeration Performance Check

Check that compressor RLA corresponds to values shown in Appendix B. RLA draw can be much lower than values listed at low load conditions and low ambient condensing temperatures. Values in Appendix B can slightly exceed at high load conditions and high ambient condensing temperatures.

Final System Checks

1. Check to see if all supply and return air grilles are adjusted and the air distribution system is balanced for the best compromise between heating and cooling.
2. Check for air leaks in the ductwork. See Sections on Air Flow Adjustments.
3. Make sure the unit is free of "rattles", and the tubing in the unit is free from excessive vibration. Also make sure tubes or lines are not rubbing against each other or sheet metal surfaces or edges. If so, correct the trouble.
4. Set the thermostat at the appropriate setting for cooling and heating or automatic changeover for normal use.
5. Be sure the Owner is instructed on the unit operation, filter, servicing, correct thermostat operation, etc.

MAINTENANCE

WARNING

ELECTRICAL SHOCK, FIRE OR EXPLOSION HAZARD
Failure to follow safety warnings exactly could result in dangerous operation, serious injury, death or property damage.
Improper servicing could result in dangerous operation, serious injury, death or property damage.

- Before servicing, disconnect all electrical power to furnace.
- When servicing controls, label all wires prior to disconnecting. Reconnect wires correctly.
- Verify proper operation after servicing.

WARNING

HIGH VOLTAGE!
Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death.

WARNING

To prevent personal injury or death due to improper installation, adjustment, alteration, service or maintenance, refer to this manual. For additional assistance or information, consult a qualified installer, servicer agency or the gas supplier.

CAUTION

Sheet metal parts, screws, clips and similar items inherently have sharp edges, and it is necessary that the installer and service personnel exercise caution.

Preventive maintenance is the best way to avoid unnecessary expense and inconvenience. Have this system inspected at regular intervals by qualified service personnel, at least twice a year. Routine maintenance should cover the following items:

1. Tighten all set screws, and wire connections.
2. Clean evaporator and condenser coils mechanically or with cold water, if necessary. Usually any fouling is only matted on the entering air face of the coil and can be removed by brushing.
3. Replace filters as needed (see below).
4. Check for blockage of condensate drain.
5. Check power and control voltages.
6. Check running amperage.
7. Check operating temperatures and pressures.
8. Check and adjust temperature and pressure controls.
9. Check and adjust damper linkages.
10. Check operation of all safety controls.
11. Examine gas furnaces (see below and the User's Information Manual).
12. Check condenser fans and tighten set screws.

Filters

CAUTION

To prevent property damage due to fire and loss of equipment efficiency or equipment damage due to dust and lint build up on internal parts, never operate unit without an air filter installed in the return air system.

Every application may require a different frequency of replacement of dirty filters. Filters must be replaced at least every three (3) months during operating seasons.

Dirty filters are the most common cause of inadequate heating or cooling performance. Filter inspection should be made at least every two months; more often if necessary because of local conditions and usage.

Dirty throwaway filters should be discarded and replaced with a new, clean filter.

Disposable return air filters are supplied with this unit. See the unit Specification Sheet or Technical Manual for the correct size and part number. To remove the filters, remove the filter access panel on return side of the unit.

Cabinet Finish Maintenance

Use a fine grade automotive wax on the cabinet finish to maintain the finish's original high luster. This is especially important in installations with extended periods of direct sunlight.

Clean Outside Coil (Qualified Servicer Only)

The coil with the outside air flowing over it should be inspected annually and cleaned as frequently as necessary to keep the finned areas free of lint, hair and debris.

Condenser And Induced Draft Motors

Bearings on the condenser fan motors and the combustion fan motor are permanently lubricated. No additional oiling is required.

Flame Sensor (Qualified Servicer Only)

A drop in the flame current can be caused by a nearly invisible coating on the flame sensor. This coating, created by the fuel or combustion air supply, can be removed by carefully cleaning the flame sensor with steel wool.

NOTE: After cleaning, the microamp signal should be stable and in the range of 4 - 6 microamps DC.

Flue Passages (Qualified Servicer Only)

At the start of each heating season, inspect and, if necessary, clean the unit flue passage.

Lubrication

The fan shaft bearings, the supply fan motors, the condenser fan motors and compressors are permanently lubricated.

Inspection & Cleaning

All flue product carrying areas of the furnace, its vent system, and main burners should be examined by a qualified service agency, and cleaned if necessary, before the start of each heating season. This examination is necessary for continued safe operation. Particular attention should be given to deterioration from corrosion or other sources. This examination is accomplished in the following manner.

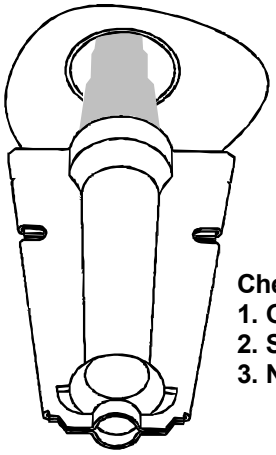
1. Disconnect power to the unit and remove furnace section access panel.
2. Remove burner assembly:
   a. Disconnect the wires from the gas valve after noting which wires are connected to each terminal.
   b. Disconnect wires from the flame rod and ignition electrode.
   c. Disconnect the gas piping at the union.
   d. The entire burner assembly can now be removed from the unit.

NOTE: Use all screws that were removed; they are necessary for safe and proper operation of the unit.

3. Inspect and periodically clean the vent outlet (bird screen) on the access panel.

NOTE: Periodic observation of the flame and a log of $C0_2$ measurements are recommended. This will aid in determining whether the furnace is operating efficiently or if the furnace requires cleaning.

Flames should be stable, soft and blue (dust may cause orange tips but must not be yellow). The flames must extend directly outward from the burner without curling, floating or lifting off.



Check the burner flames for:
1. Good adjustment
2. Stable, soft and blue
3. Not curling, floating, or lifting off.

BURNER FLAME

WARNING

TO AVOID PERSONAL INJURY OR DEATH DUE TO ELECTRIC SHOCK, DO NOT REMOVE ANY INTERNAL COMPARTMENT COVERS OR ATTEMPT ANY ADJUSTMENT. CONTACT A QUALIFIED SERVICER AT ONCE IF AN ABNORMAL FLAME SHOULD DEVELOP.

At least once a year, prior to or during the heating season, make a visual check of the burner flames.

NOTE: THIS WILL INVOLVE REMOVING AND REINSTALLING THE HEAT EXCHANGER DOOR ON THE UNIT, WHICH IS HELD BY TWO SCREWS. IF YOU ARE UNCERTAIN ABOUT YOUR ABILITY TO DO THIS, CONTACT A QUALIFIED SERVICER.

If a strong wind is blowing, it may alter the airflow pattern within the unit enough that an inspection of the burner flames is not possible.

FUNCTIONAL PARTS

Refer to the unit Parts Catalog for a list of functional parts. Parts are available from your distributor.

TROUBLESHOOTING

IGNITION CONTROL ERROR CODES

The following presents probable causes of questionable unit operation. Refer to *Diagnostic Indicator Chart* for an interpretation of the signal and to this section for an explanation.

Remove the control box access panel and note the number of diagnostic LED flashes.

INTERNAL CONTROL FAILURE

If the integrated ignition control in this unit encounters an internal fault, it will go into a “hard” lockout and turn off the diagnostic LED. If diagnostic LED indicates an internal fault, check power supply to unit for proper voltage, check all fuses, circuit breakers and wiring. Disconnect electric power for five seconds. If LED remains off after restoring power, replace control.

ABNORMAL OPERATION - HEATING CODES

EXTERNAL LOCKOUT (1 FLASH CODE)

An external lockout occurs if the integrated ignition control determines that a measurable combustion cannot be established within three (3) consecutive ignition attempts. If flame is not established within the seven (7) second trial for ignition, the gas valve is deenergized, 15 second inter-purge cycle is completed, and ignition is reattempted. The control will repeat this routine three times if a measurable combustion is not established. The control will then shut off the induced draft blower and go into a lockout state.

If flame is established but lost, the control will energize the circulator blower at the heat speed and then begin a new ignition sequence. If flame is established then lost on subsequent attempts, the control will recycle for four (4) consecutive ignition attempts (five attempts total) before locking out.

The diagnostic fault code is 1 flash for a lockout due to failed ignition attempts or flame dropouts. The integrated control will automatically reset after one hour, or it can be reset by removing the thermostat signal or disconnecting the electrical power supply for over five seconds. If the diagnostic LED indicates an external lockout, perform the following checks:

- *Check the supply and manifold gas pressures*
- *Check the gas orifices for debris*
- *Check gas valve for proper operation*
- *Check secondary limit*

A dirty filter, excessive duct static, insufficient air flow, a faulty limit, or a failed circulator blower can cause this limit to open. Check filters, total external duct static, circulator blower motor, blower motor speed tap (see wiring diagram) and limit. An interruption in electrical power during a heating cycle may also cause the auxiliary limit to open. The automatic reset secondary limit is located on top of the circulator blower assembly.

- *Check rollout limit*

If the burner flames are not properly drawn into the heat exchanger, the flame rollout protection device will open. Possible causes are restricted or blocked flue passages, blocked or cracked heat exchanger, a failed induced draft blower, or insufficient combustion air. The rollout protection device is a manual reset limit located on the burner bracket. The cause of the flame rollout must be determined and corrected before resetting the limit.

- *Check flame sensor*

A drop in flame signal can be caused by nearly invisible coating on the sensor. Remove the sensor and carefully

clean with steel wool.

- *Check wiring*

Check wiring for opens/shorts and miswiring.

IMPORTANT: If you have to frequently reset your gas/electric package unit, it means that a problem exists that should be corrected. Contact a qualified servicer for further information.

Pressure Switch Stuck Open (2 FLASH CODE)
IA pressure switch stuck open can be caused by a faulty pressure switch, faulty wiring, a disconnected or damaged hose, a blocked or restricted flue, or a faulty induced draft blower. If the control senses an open pressure switch during the pre-purge cycle, the induced draft blower only will be energized.

If the pressure switch opens after ignition has begun the gas valve is deenergized, the circulator blower heat off cycle begins, and the induced draft blower remains on. The diagnostic fault code is two flashes.

Pressure Switch Stuck Closed (3 FLASH CODE)
A stuck closed pressure switch can be caused by a faulty pressure switch or faulty wiring. If the control encounters a pressure switch stuck closed, the induced draft blower remains off. The diagnostic LED code for this fault is three (3) flashes.

Open Thermal Protection Device (4 FLASH CODE)
If the primary limit switch opens, the gas valve is immediately deenergized, the induced draft and air circulating blowers are energized. The induced draft and air circulator blowers remain energized until the limit switch recloses. The diagnostic fault code for an open limit is four (4) flashes.

A primary limit will open due to excessive supply air temperatures. This can be caused by a dirty filter, excessive duct static, insufficient air flow, or a faulty limit. Check filters, total external duct static, blower motor, blower motor speed tap (see wiring diagram), and limit. This limit will automatically reset once the temperature falls below a preset level.

Flame Detected with Gas Valve Closed (5 FLASH CODE)
If flame is detected with the gas valve deenergized, the combustion and air circulator blowers are energized. The diagnostic fault code is five (5) flashes for this condition. The control can be reset by removing the power supply to the unit or it will automatically reset after one hour. Miswiring is the probable cause for this fault.

Abnormal Operation - Cooling Codes

Short Cycle Compressor Delay (6 FLASH CODE)
The automatic ignition control has a built-in feature that prevents damage to the compressor in short cycling situations. In the event of intermittent power losses or intermittent thermostat operation, the ignition control will delay output to the compressor contactor for three minutes from the time power is restored. (Compressor is off a total of three minutes). The diagnostic LED will flash six (6) times to indicate the compressor contactor output is being delayed.

NOTE: Some electronic thermostats also have a built-in compressor short cycle timer that may be longer than the three minute delay given above. If you are using an electronic thermostat and the compressor has not started after three minutes, wait an additional five minutes to allow the thermostat to complete its short cycle delay time.

APPENDIX A BLOWER PERFORMANCE DATA

3 Ton
Models: DRG0361D and DRG0363D
Standard Static Drive
Burners High Fire Input: 45,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	738	526	0.02	T1	0.2	753	559	0.02
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
T2	0.2	892	569	0.12	T2	0.2	910	605	0.13
	0.4	750	655	0.14		0.4	766	696	0.15
	0.6	604	723	0.15		0.6	617	768	0.16
	0.8	466	782	0.17		0.8	476	831	0.18
	1.0	358	846	0.18		1.0	366	899	0.19
T3	0.2	892	569	0.12	T3	0.2	910	605	0.13
	0.4	750	655	0.14		0.4	766	696	0.15
	0.6	604	723	0.15		0.6	617	768	0.16
	0.8	466	782	0.17		0.8	476	831	0.18
	1.0	358	846	0.18		1.0	366	899	0.19
T4	0.2	1157	644	0.20	T4	0.2	1181	684	0.21
	0.4	1028	727	0.23		0.4	1049	772	0.24
	0.6	905	791	0.25		0.6	924	840	0.26
	0.8	792	843	0.26		0.8	808	896	0.28
	1.0	676	901	0.28		1.0	690	957	0.30
T5	0.2	1409	729	0.32	T5	0.2	1437	775	0.34
	0.4	1313	792	0.35		0.4	1339	842	0.37
	0.6	1197	860	0.38		0.6	1222	914	0.40
	0.8	1101	919	0.41		0.8	1124	976	0.43
	1.0	1007	944	0.42		1.0	1027	1003	0.44

Shaded area indicates airflow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

3 Ton
Models: DRG0361D and DRG0363D
Standard Static Drive
Burners High Fire Input: 70,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	738	526	0.02	T1	0.2	753	559	0.02
	0.4	134	527	0.02		0.4	137	560	0.02
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
T2	0.2	1294	689	0.26	T2	0.2	1320	732	0.28
	0.4	1180	760	0.29		0.4	1204	808	0.31
	0.6	1062	826	0.31		0.6	1083	878	0.33
	0.8	957	879	0.33		0.8	976	934	0.35
	1.0	852	936	0.35		1.0	869	995	0.38
T3	0.2	896	570	0.12	T3	0.2	914	606	0.13
	0.4	756	655	0.14		0.4	772	696	0.15
	0.6	610	723	0.15		0.6	623	768	0.16
	0.8	467	780	0.17		0.8	477	829	0.18
	1.0	360	842	0.18		1.0	367	895	0.19
T4	0.2	1409	729	0.32	T4	0.2	1437	775	0.34
	0.4	1313	792	0.35		0.4	1339	842	0.37
	0.6	1197	860	0.38		0.6	1222	914	0.40
	0.8	1101	919	0.41		0.8	1124	976	0.43
	1.0	1007	944	0.42		1.0	1027	1003	0.44
T5	0.2	-	-	-	T5	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	1494	1092	0.78		1.0	-	-	-

Shaded area indicates airflow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

APPENDIX A BLOWER PERFORMANCE DATA

3 Ton
Models: DRG0361D and DRG0363D
Standard Static Drive
Burners High Fire Input: 115,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	739	526	0.02	T1	0.2	754	559	0.02
	0.4	153	527	0.02		0.4	156	560	0.02
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
T2	0.2	1416	730	0.32	T2	0.2	1445	776	0.34
	0.4	1320	797	0.35		0.4	1347	847	0.37
	0.6	1197	867	0.38		0.6	1221	921	0.41
	0.8	1103	921	0.41		0.8	1125	979	0.43
	1.0	1005	968	0.43		1.0	1026	1029	0.46
T3	0.2	896	570	0.12	T3	0.2	914	606	0.13
	0.4	756	655	0.14		0.4	772	696	0.15
	0.6	610	723	0.15		0.6	623	768	0.16
	0.8	467	780	0.17		0.8	477	829	0.18
	1.0	360	842	0.18		1.0	367	895	0.19
T4	0.2	1416	730	0.32	T4	0.2	1445	776	0.34
	0.4	1320	797	0.35		0.4	1347	847	0.37
	0.6	1197	867	0.38		0.6	1221	921	0.41
	0.8	1103	921	0.41		0.8	1125	979	0.43
	1.0	1005	968	0.43		1.0	1026	1029	0.46
T5	0.2	-	-	-	T5	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	1494	1092	0.78		1.0	-	-	-

Shaded area indicates airflow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

4 Ton
Models: DRG0481D and DRG0483D
Standard Static Drive
Burners High Fire Input: 70,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	796	526	0.05	T1	0.2	813	558	0.05
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
T2	0.2	1058	604	0.16	T2	0.2	1080	642	0.17
	0.4	914	687	0.18		0.4	933	730	0.19
	0.6	779	756	0.20		0.6	794	804	0.21
	0.8	649	824	0.22		0.8	662	876	0.23
	1.0	515	877	0.23		1.0	526	932	0.25
T3	0.2	1173	638	0.20	T3	0.2	1197	678	0.21
	0.4	1048	713	0.22		0.4	1069	757	0.24
	0.6	912	782	0.25		0.6	931	831	0.26
	0.8	794	842	0.26		0.8	810	895	0.28
	1.0	676	909	0.29		1.0	690	966	0.30
T4	0.2	1391	706	0.30	T4	0.2	1420	751	0.31
	0.4	1287	766	0.32		0.4	1313	814	0.34
	0.6	1171	841	0.35		0.6	1195	894	0.37
	0.8	1053	897	0.38		0.8	1075	953	0.40
	1.0	949	954	0.40		1.0	969	1014	0.42
T5	0.2	1808	841	0.56	T5	0.2	1845	894	0.60
	0.4	1721	892	0.59		0.4	1756	947	0.63
	0.6	1637	941	0.63		0.6	1670	999	0.67
	0.8	1554	991	0.66		0.8	1585	1053	0.70
	1.0	1462	1045	0.70		1.0	1492	1110	0.74

Shaded area indicates airflow below 1200 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

APPENDIX A BLOWER PERFORMANCE DATA

4 Ton

Models: DRG0481D and DRG0483D

Standard Static Drive

Burners High Fire Input: 115,000 and 140,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	796	526	0.05	T1	0.2	813	558	0.05
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
T2	0.2	1173	638	0.20	T2	0.2	1197	678	0.21
	0.4	1048	713	0.22		0.4	1069	757	0.24
	0.6	912	782	0.25		0.6	931	831	0.26
	0.8	794	842	0.26		0.8	810	895	0.28
	1.0	676	909	0.29		1.0	690	966	0.30
T3	0.2	1391	706	0.30	T3	0.2	1420	751	0.31
	0.4	1287	766	0.32		0.4	1313	814	0.34
	0.6	1171	841	0.35		0.6	1195	894	0.37
	0.8	1053	897	0.38		0.8	1075	953	0.40
	1.0	949	954	0.40		1.0	969	1014	0.42
T4	0.2	1600	774	0.43	T4	0.2	1632	822	0.46
	0.4	1504	829	0.46		0.4	1535	880	0.49
	0.6	1404	891	0.49		0.6	1433	947	0.52
	0.8	1303	944	0.52		0.8	1330	1003	0.55
	1.0	1206	1000	0.55		1.0	1230	1062	0.58
T5	0.2	1808	841	0.56	T5	0.2	1845	894	0.60
	0.4	1721	892	0.59		0.4	1756	947	0.63
	0.6	1637	941	0.63		0.6	1670	999	0.67
	0.8	1554	991	0.66		0.8	1585	1053	0.70
	1.0	1462	1045	0.70		1.0	1492	1110	0.74

Shaded area indicates airflow below 1200 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

5 Ton

Models: DRG0601D and DRG0603D

Standard Static Drive

Burners High Fire Input: 70,000

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	993	570	0.14	T1	0.2	1014	605	0.14
	0.4	834	661	0.16		0.4	851	702	0.17
	0.6	706	736	0.18		0.6	720	782	0.19
	0.8	574	808	0.19		0.8	586	858	0.20
	1.0	-	-	-		1.0	-	-	-
T2	0.2	1186	626	0.20	T2	0.2	1210	665	0.21
	0.4	1063	702	0.22		0.4	1085	746	0.23
	0.6	919	782	0.25		0.6	938	831	0.26
	0.8	808	843	0.26		0.8	825	896	0.28
	1.0	694	902	0.28		1.0	708	959	0.30
T3	0.2	1309	670	0.25	T3	0.2	1336	712	0.26
	0.4	1197	731	0.27		0.4	1221	776	0.29
	0.6	1059	816	0.30		0.6	1081	867.3	0.32
	0.8	949	875	0.33		0.8	969	930	0.35
	1.0	846	936	0.35		1.0	863	995	0.37
T4	0.2	1788	825	0.53	T4	0.2	1825	876	0.57
	0.4	1697	875	0.57		0.4	1732	930	0.60
	0.6	1608	925	0.60		0.6	1641	983	0.64
	0.8	1523	977	0.63		0.8	1554	1038	0.67
	1.0	1409	1045	0.68		1.0	1438	1110	0.72
T5	0.2	2149	959	0.91	T5	0.2	2193	1019	0.97
	0.4	2070	994	0.95		0.4	2112	1056	1.01
	0.6	1986	1037	0.99		0.6	2026	1102	1.05
	0.8	1908	1078	1.03		0.8	1947	1146	1.09
	1.0	1821	1120	1.07		1.0	1858	1190	1.13

Shaded area indicates airflow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

APPENDIX A BLOWER PERFORMANCE DATA

5 Ton
Models: DRG0601D and DRG0603D
Standard Static Drive
Burners High Fire Input: 115,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	993	570	0.14	T1	0.2	1014	605	0.14
	0.4	834	661	0.16		0.4	851	702	0.17
	0.6	706	736	0.18		0.6	720	782	0.19
	0.8	574	808	0.19		0.8	586	858	0.20
	1.0	-	-	-		1.0	-	-	-
T2	0.2	1186	626	0.20	T2	0.2	1210	665	0.21
	0.4	1063	702	0.22		0.4	1085	746	0.23
	0.6	919	782	0.25		0.6	938	831	0.26
	0.8	808	843	0.26		0.8	825	896	0.28
	1.0	694	902	0.28		1.0	708	959	0.30
T3	0.2	1788	825	0.53	T3	0.2	1825	876	0.57
	0.4	1697	875	0.57		0.4	1732	930	0.60
	0.6	1608	925	0.60		0.6	1641	983	0.64
	0.8	1523	977	0.63		0.8	1554	1038	0.67
	1.0	1409	1045	0.68		1.0	1438	1110	0.72
T4	0.2	1862	859	0.62	T4	0.2	1901	912	0.66
	0.4	1787	909	0.66		0.4	1824	966	0.70
	0.6	1702	955	0.69		0.6	1737	1014	0.73
	0.8	1625	1005	0.73		0.8	1658	1067	0.77
	1.0	1536	1056	0.76		1.0	1567	1122	0.81
T5	0.2	2149	959	0.91	T5	0.2	2193	1019	0.97
	0.4	2070	994	0.95		0.4	2112	1056	1.01
	0.6	1986	1037	0.99		0.6	2026	1102	1.05
	0.8	1908	1078	1.03		0.8	1947	1146	1.09
	1.0	1821	1120	1.07		1.0	1858	1190	1.13

Shaded area indicates airflow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

5 Ton
Models: DRG0601D and DRG0603D
Standard Static Drive
Burners High Fire Input: 140,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	983	570	0.14	T1	0.2	1003	606	0.14
	0.4	833	659	0.16		0.4	850	701	0.17
	0.6	703	739	0.18		0.6	718	785	0.19
	0.8	574	808	0.19		0.8	586	858	0.20
	1.0	-	-	-		1.0	-	-	-
T2	0.2	1862	859	0.62	T2	0.2	1901	912	0.66
	0.4	1787	909	0.66		0.4	1824	966	0.70
	0.6	1702	955	0.69		0.6	1737	1014	0.73
	0.8	1625	1005	0.73		0.8	1658	1067	0.77
	1.0	1536	1056	0.76		1.0	1567	1122	0.81
T3	0.2	1770	825	0.53	T3	0.2	1806	876	0.57
	0.4	1684	875	0.57		0.4	1718	930	0.60
	0.6	1595	926	0.60		0.6	1627	984	0.64
	0.8	1513	975	0.63		0.8	1544	1036	0.67
	1.0	1401	1039	0.67		1.0	1429	1104	0.71
T4	0.2	1862	859	0.62	T4	0.2	1901	912	0.66
	0.4	1787	909	0.66		0.4	1824	966	0.70
	0.6	1702	955	0.69		0.6	1737	1014	0.73
	0.8	1625	1005	0.73		0.8	1658	1067	0.77
	1.0	1536	1056	0.76		1.0	1567	1122	0.81
T5	0.2	2132	954	0.91	T5	0.2	2175	1014	0.97
	0.4	2056	993	0.95		0.4	2098	1055	1.00
	0.6	1986	1038	0.99		0.6	2026	1102	1.05
	0.8	1899	1079	1.03		0.8	1938	1146	1.09
	1.0	1828	1113	1.06		1.0	1865	1183	1.13

Shaded area indicates airflow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

APPENDIX A BLOWER PERFORMANCE DATA

6 Ton
Models: DRG0723D, DRG0724D and DRG0727D
Standard Static Drive
Burners High Fire Input: 70,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	1342	623	0.22	T1	0.2	1369	662	0.24
	0.4	1212	695	0.25		0.4	1237	738	0.26
	0.6	1083	773	0.28		0.6	1105	821	0.29
	0.8	948	843	0.30		0.8	967	895	0.32
	1.0	817	914	0.33		1.0	834	972	0.35
T2	0.2	1342	623	0.22	T2	0.2	1369	662	0.24
	0.4	1212	695	0.25		0.4	1237	738	0.26
	0.6	1083	773	0.28		0.6	1105	821	0.29
	0.8	948	843	0.30		0.8	967	895	0.32
	1.0	817	914	0.33		1.0	834	972	0.35
T3	0.2	1994	811	0.56	T3	0.2	2035	861	0.59
	0.4	1890	862	0.59		0.4	1929	916	0.63
	0.6	1791	913	0.63		0.6	1828	970	0.67
	0.8	1693	965	0.67		0.8	1727	1025	0.71
	1.0	1599	1023	0.71		1.0	1632	1087	0.75
T4	0.2	2216	882	0.73	T4	0.2	2261	937	0.78
	0.4	2135	929	0.77		0.4	2179	987	0.82
	0.6	2037	975	0.81		0.6	2079	1036	0.86
	0.8	1944	1020	0.85		0.8	1984	1084	0.90
	1.0	1849	1067	0.89		1.0	1887	1133	0.94
T5	0.2	2370	931	0.89	T5	0.2	2419	990	0.94
	0.4	2297	975	0.93		0.4	2344	1036	0.99
	0.6	2204	1020	0.97		0.6	2249	1083	1.03
	0.8	2119	1060	1.01		0.8	2162	1126	1.07
	1.0	2010	1102	1.05		**1.0**	2051	1171	1.11

Shaded area indicates airflow below 1800 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

6 Ton
Models: DRG0723D, DRG0724D and DRG0727D
Standard Static Drive
Burners High Fire Input: 125,000 and 150,000 BTU/HR

Down Flow					Horizontal Flow				
Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	1342	623	0.22	T1	0.2	1369	662	0.24
	0.4	1212	695	0.25		0.4	1237	738	0.26
	0.6	1083	773	0.28		0.6	1105	821	0.29
	0.8	948	843	0.30		0.8	967	895	0.32
	1.0	817	914	0.33		1.0	834	972	0.35
T2	0.2	2216	882	0.73	T2	0.2	2261	937	0.78
	0.4	2135	929	0.77		0.4	2179	987	0.82
	0.6	2037	975	0.81		0.6	2079	1036	0.86
	0.8	1944	1020	0.85		0.8	1984	1084	0.90
	1.0	1849	1067	0.89		1.0	1887	1133	0.94
T3	0.2	2216	882	0.73	T3	0.2	2261	937	0.78
	0.4	2135	929	0.77		0.4	2179	987	0.82
	0.6	2037	975	0.81		0.6	2079	1036	0.86
	0.8	1944	1020	0.85		0.8	1984	1084	0.90
	1.0	1849	1067	0.89		1.0	1887	1133	0.94
T4	0.2	2293	907	0.81	T4	0.2	2340	963	0.86
	0.4	2216	952	0.85		0.4	2262	1011	0.90
	0.6	2121	997	0.89		0.6	2164	1059	0.95
	0.8	2032	1040	0.93		0.8	2073	1105	0.99
	1.0	1930	1084	0.97		1.0	1969	1152	1.03
T5	0.2	2370	931	0.89	T5	0.2	2419	990	0.94
	0.4	2297	975	0.93		0.4	2344	1036	0.99
	0.6	2204	1020	0.97		0.6	2249	1083	1.03
	0.8	2119	1060	1.01		0.8	2162	1126	1.07
	1.0	2010	1102	1.05		1.0	2051	1171	1.11

Shaded area indicates airflow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating.

APPENDIX A BLOWER PERFORMANCE DATA

3 Ton - High Static Drive
Models: DRG0363W, DRG0364W, DRG0367W
45,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	949	541	0.12	T1H	0.2	1200	613	0.16
	0.4	792	635	0.14		0.4	1096	688	0.18
	0.6	647	716	0.15		0.6	953	768	0.20
	0.8	495	779	0.17		0.8	848	836	0.22
	1.0	385	843	0.18		1.0	735	897	0.23
	1.2	-	-	-		1.2	608	949	0.25
	1.4	-	-	-		1.4	515	1002	0.26
	1.6	-	-	-		1.6	400	1042	0.27
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1200	613	0.16	T2H	0.2	-	-	-
	0.4	1096	688	0.18		0.4	1472	793	0.45
	0.6	953	768	0.20		0.6	1389	851	0.49
	0.8	848	836	0.22		0.8	1289	917	0.52
	1.0	735	897	0.23		1.0	1179	978	0.56
	1.2	608	949	0.25		1.2	1089	1027	0.59
	1.4	515	1002	0.26		1.4	996	1086	0.62
	1.6	400	1042	0.27		1.6	913	1129	0.64
	1.8	-	-	-		1.8	820	1174	0.67
	2.0	-	-	-		2.0	722	1214	0.69
T3C	0.2	-	-	-	T3H	0.2	1448	681	0.27
	0.4	-	-	-		0.4	1351	744	0.29
	0.6	1483	874	0.54		0.6	1245	812	0.32
	0.8	1397	934	0.58		0.8	1119	881	0.35
	1.0	1287	998	0.62		1.0	1018	938	0.37
	1.2	1195	1047	0.65		1.2	910	996	0.39
	1.4	1108	1093	0.68		1.4	813	1045	0.41
	1.6	1023	1147	0.71		1.6	704	1093	0.43
	1.8	940	1190	0.74		1.8	616	1140	0.45
	2.0	841	1233	0.76		2.0	521	1178	0.46
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	1483	874	0.54
	0.8	-	-	-		0.8	1397	934	0.58
	1.0	1473	1021	0.85		1.0	1287	998	0.62
	1.2	1365	1079	0.90		1.2	1195	1047	0.65
	1.4	1277	1125	0.94		1.4	1108	1093	0.68
	1.6	1195	1168	0.97		1.6	1023	1147	0.71
	1.8	1113	1221	1.02		1.8	940	1190	0.74
	2.0	1044	1263	1.05		2.0	841	1233	0.76
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	1468	1100	1.05		1.2	1468	1100	1.05
	1.4	1378	1148	1.09		1.4	1378	1148	1.09
	1.6	1298	1191	1.13		1.6	1298	1191	1.13
	1.8	1219	1232	1.17		1.8	1219	1232	1.17
	2.0	1139	1280	1.22		2.0	1139	1280	1.22

Shaded area indicates air flow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

Max BH

3 Ton - High Static Drive
Models: DRG0363W, DRG0364W, DRG0367W
45,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1344	684	0.20	T1H	0.2	1224	652	0.17
	0.4	1246	759	0.23		0.4	1118	731	0.19
	0.6	1105	842	0.25		0.6	972	817	0.21
	0.8	990	909	0.27		0.8	865	889	0.23
	1.0	876	978	0.29		1.0	750	954	0.25
	1.2	774	1033	0.31		1.2	620	1010	0.26
	1.4	647	1087	0.32		1.4	526	1066	0.28
	1.6	562	1140	0.34		1.6	408	1109	0.29
	1.8	460	1182	0.35		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	-	-	-	T2H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	1477	906	0.52		0.6	1477	906	0.52
	0.8	1372	976	0.56		0.8	1372	976	0.56
	1.0	1254	1041	0.59		1.0	1254	1041	0.59
	1.2	1159	1092	0.62		1.2	1159	1092	0.62
	1.4	1060	1155	0.66		1.4	1060	1155	0.66
	1.6	972	1201	0.69		1.6	972	1201	0.69
	1.8	872	1249	0.71		1.8	872	1249	0.71
	2.0	768	1291	0.74		2.0	768	1291	0.74
T3C	0.2	-	-	-	T3H	0.2	1477	724	0.28
	0.4	-	-	-		0.4	1378	792	0.31
	0.6	-	-	-		0.6	1271	864	0.34
	0.8	1487	993	0.61		0.8	1142	937	0.37
	1.0	1369	1062	0.66		1.0	1039	998	0.39
	1.2	1271	1114	0.69		1.2	929	1060	0.42
	1.4	1179	1163	0.72		1.4	829	1112	0.44
	1.6	1088	1220	0.76		1.6	718	1163	0.46
	1.8	1000	1266	0.78		1.8	628	1213	0.48
	2.0	895	1312	0.81		2.0	532	1253	0.49
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	1487	993	0.61
	1.0	-	-	-		1.0	1369	1062	0.66
	1.2	1452	1148	0.96		1.2	1271	1114	0.69
	1.4	1359	1197	1.00		1.4	1179	1163	0.72
	1.6	1272	1243	1.04		1.6	1088	1220	0.76
	1.8	1184	1299	1.08		1.8	1000	1266	0.78
	2.0	1111	1344	1.12		2.0	895	1312	0.81
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	-	-	-		1.2	-	-	-
	1.4	1466	1222	1.16		1.4	1466	1222	1.16
	1.6	1380	1267	1.21		1.6	1380	1267	1.21
	1.8	1297	1310	1.25		1.8	1297	1310	1.25
	2.0	1212	1361	1.30		2.0	1212	1361	1.30

Shaded area indicates air flow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

Max BHP 1.2

APPENDIX A BLOWER PERFORMANCE DATA

3 Ton - High Static Drive
Models: DRG0363W, DRG0364W, DRG0367W
70,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	949	541	0.12	T1H	0.2	1200	613	0.16
	0.4	792	635	0.14		0.4	1096	688	0.18
	0.6	647	716	0.15		0.6	953	768	0.20
	0.8	495	779	0.17		0.8	848	836	0.22
	1.0	385	843	0.18		1.0	735	897	0.23
	1.2	-	-	-		1.2	608	949	0.25
	1.4	-	-	-		1.4	515	1002	0.26
	1.6	-	-	-		1.6	400	1042	0.27
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1200	613	0.16	T2H	0.2	-	-	-
	0.4	1096	688	0.18		0.4	-	-	-
	0.6	953	768	0.20		0.6	1483	874	0.54
	0.8	848	836	0.22		0.8	1397	934	0.58
	1.0	735	897	0.23		1.0	1287	998	0.62
	1.2	608	949	0.25		1.2	1195	1047	0.65
	1.4	515	1002	0.26		1.4	1108	1093	0.68
	1.6	400	1042	0.27		1.6	1023	1147	0.71
	1.8	-	-	-		1.8	940	1190	0.74
	2.0	-	-	-		2.0	841	1233	0.76
T3C	0.2	-	-	-	T3H	0.2	-	-	-
	0.4	-	-	-		0.4	1446	768	0.48
	0.6	1483	874	0.54		0.6	1351	832	0.51
	0.8	1397	934	0.58		0.8	1223	901	0.56
	1.0	1287	998	0.62		1.0	1119	957	0.59
	1.2	1195	1047	0.65		1.2	1028	1010	0.63
	1.4	1108	1093	0.68		1.4	925	1064	0.66
	1.6	1023	1147	0.71		1.6	832	1110	0.69
	1.8	940	1190	0.74		1.8	722	1155	0.71
	2.0	841	1233	0.76		2.0	647	1200	0.74
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	1486	950	0.42
	1.0	1473	1021	0.85		1.0	1376	1012	0.45
	1.2	1365	1079	0.90		1.2	1280	1066	0.47
	1.4	1277	1125	0.94		1.4	1198	1112	0.49
	1.6	1195	1168	0.97		1.6	1113	1158	0.51
	1.8	1113	1221	1.02		1.8	1031	1205	0.53
	2.0	1044	1263	1.05		2.0	947	1244	0.55
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	1468	1100	1.05		1.2	1468	1100	1.05
	1.4	1378	1148	1.09		1.4	1378	1148	1.09
	1.6	1298	1191	1.13		1.6	1298	1191	1.13
	1.8	1219	1232	1.17		1.8	1219	1232	1.17
	2.0	1139	1280	1.22		2.0	1139	1280	1.22

Shaded area indicates air flow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

Max BHP 1.2

3 Ton - High Static Drive
Models: DRG0363W, DRG0364W, DRG0367W
70,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1344	684	0.20	T1H	0.2	1224	652	0.17
	0.4	1246	759	0.23		0.4	1118	731	0.19
	0.6	1105	842	0.25		0.6	972	817	0.21
	0.8	990	909	0.27		0.8	865	889	0.23
	1.0	876	978	0.29		1.0	750	954	0.25
	1.2	774	1033	0.31		1.2	620	1010	0.26
	1.4	647	1087	0.32		1.4	526	1066	0.28
	1.6	562	1140	0.34		1.6	408	1109	0.29
	1.8	460	1182	0.35		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	-	-	-	T2H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	1477	906	0.52		0.6	-	-	-
	0.8	1372	976	0.56		0.8	1487	993	0.61
	1.0	1254	1041	0.59		1.0	1369	1062	0.66
	1.2	1159	1092	0.62		1.2	1271	1114	0.69
	1.4	1060	1155	0.66		1.4	1179	1163	0.72
	1.6	972	1201	0.69		1.6	1088	1220	0.76
	1.8	872	1249	0.71		1.8	1000	1266	0.78
	2.0	768	1291	0.74		2.0	895	1312	0.81
T3C	0.2	-	-	-	T3H	0.2	-	-	-
	0.4	-	-	-		0.4	1475	817	0.51
	0.6	-	-	-		0.6	1379	885	0.55
	0.8	1487	993	0.61		0.8	1248	958	0.59
	1.0	1369	1062	0.66		1.0	1142	1019	0.63
	1.2	1271	1114	0.69		1.2	1049	1075	0.67
	1.4	1179	1163	0.72		1.4	944	1132	0.70
	1.6	1088	1220	0.76		1.6	849	1181	0.73
	1.8	1000	1266	0.78		1.8	737	1229	0.76
	2.0	895	1312	0.81		2.0	660	1277	0.79
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	1464	1077	0.47
	1.2	1452	1148	0.96		1.2	1362	1134	0.50
	1.4	1359	1197	1.00		1.4	1275	1183	0.52
	1.6	1272	1243	1.04		1.6	1184	1232	0.54
	1.8	1184	1299	1.08		1.8	1096	1282	0.56
	2.0	1111	1344	1.12		2.0	1007	1323	0.58
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	-	-	-		1.2	-	-	-
	1.4	1466	1222	1.16		1.4	1466	1222	1.16
	1.6	1380	1267	1.21		1.6	1380	1267	1.21
	1.8	1297	1310	1.25		1.8	1297	1310	1.25
	2.0	1212	1361	1.30		2.0	1212	1361	1.30

Shaded area indicates air flow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

Max BHP 1.2

APPENDIX A BLOWER PERFORMANCE DATA

3 Ton - High Static Drive
Models: DRG0363W, DRG0364W, DRG0367W
115,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	949	541	0.12	T1H	0.2	-	-	-
	0.4	792	635	0.14		0.4	1446	768	0.48
	0.6	647	716	0.15		0.6	1351	832	0.51
	0.8	495	779	0.17		0.8	1223	901	0.56
	1.0	385	843	0.18		1.0	1119	957	0.59
	1.2	-	-	-		1.2	1028	1010	0.63
	1.4	-	-	-		1.4	925	1064	0.66
	1.6	-	-	-		1.6	832	1110	0.69
	1.8	-	-	-		1.8	722	1155	0.71
	2.0	-	-	-		2.0	647	1200	0.74
T2C	0.2	1200	613	0.16	T2H	0.2	-	-	-
	0.4	1096	688	0.18		0.4	-	-	-
	0.6	953	768	0.20		0.6	1483	874	0.54
	0.8	848	836	0.22		0.8	1397	934	0.58
	1.0	735	897	0.23		1.0	1287	998	0.62
	1.2	608	949	0.25		1.2	1195	1047	0.65
	1.4	515	1002	0.26		1.4	1108	1093	0.68
	1.6	400	1042	0.27		1.6	1023	1147	0.71
	1.8	-	-	-		1.8	940	1190	0.74
	2.0	-	-	-		2.0	841	1233	0.76
T3C	0.2	-	-	-	T3H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	1483	874	0.54		0.6	-	-	-
	0.8	1397	934	0.58		0.8	1486	950	0.68
	1.0	1287	998	0.62		1.0	1376	1012	0.72
	1.2	1195	1047	0.65		1.2	1280	1066	0.76
	1.4	1108	1093	0.68		1.4	1198	1112	0.79
	1.6	1023	1147	0.71		1.6	1113	1158	0.83
	1.8	940	1190	0.74		1.8	1031	1205	0.86
	2.0	841	1233	0.76		2.0	947	1244	0.89
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	1473	1021	0.85		1.0	1473	1021	0.85
	1.2	1365	1079	0.90		1.2	1365	1079	0.90
	1.4	1277	1125	0.94		1.4	1277	1125	0.94
	1.6	1195	1168	0.97		1.6	1195	1168	0.97
	1.8	1113	1221	1.02		1.8	1113	1221	1.02
	2.0	1044	1263	1.05		2.0	1044	1263	1.05
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	1468	1100	1.05		1.2	1468	1100	1.05
	1.4	1378	1148	1.09		1.4	1378	1148	1.09
	1.6	1298	1191	1.13		1.6	1298	1191	1.13
	1.8	1219	1232	1.17		1.8	1219	1232	1.17
	2.0	1139	1280	1.22		2.0	1139	1280	1.22

Shaded area indicates air flow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

Max BHP 1.2

3 Ton - High Static Drive
Models: DRG0363W, DRG0364W, DRG0367W
115,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1344	684	0.20	T1H	0.2	-	-	-
	0.4	1246	759	0.23		0.4	1475	817	0.51
	0.6	1105	842	0.25		0.6	1379	885	0.55
	0.8	990	909	0.27		0.8	1248	958	0.59
	1.0	876	978	0.29		1.0	1142	1019	0.63
	1.2	774	1033	0.31		1.2	1049	1075	0.67
	1.4	647	1087	0.32		1.4	944	1132	0.70
	1.6	562	1140	0.34		1.6	849	1181	0.73
	1.8	460	1182	0.35		1.8	737	1229	0.76
	2.0	-	-	-		2.0	660	1277	0.79
T2C	0.2	-	-	-	T2H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	1477	906	0.52		0.6	-	-	-
	0.8	1372	976	0.56		0.8	1487	993	0.61
	1.0	1254	1041	0.59		1.0	1369	1062	0.66
	1.2	1159	1092	0.62		1.2	1271	1114	0.69
	1.4	1060	1155	0.66		1.4	1179	1163	0.72
	1.6	972	1201	0.69		1.6	1088	1220	0.76
	1.8	872	1249	0.71		1.8	1000	1266	0.78
	2.0	768	1291	0.74		2.0	895	1312	0.81
T3C	0.2	-	-	-	T3H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	1487	993	0.61		0.8	-	-	-
	1.0	1369	1062	0.66		1.0	1464	1077	0.77
	1.2	1271	1114	0.69		1.2	1362	1134	0.81
	1.4	1179	1163	0.72		1.4	1275	1183	0.84
	1.6	1088	1220	0.76		1.6	1184	1232	0.88
	1.8	1000	1266	0.78		1.8	1096	1282	0.92
	2.0	895	1312	0.81		2.0	1007	1323	0.94
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	1452	1148	0.96		1.2	1452	1148	0.96
	1.4	1359	1197	1.00		1.4	1359	1197	1.00
	1.6	1272	1243	1.04		1.6	1272	1243	1.04
	1.8	1184	1299	1.08		1.8	1184	1299	1.08
	2.0	1111	1344	1.12		2.0	1111	1344	1.12
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	-	-	-		1.2	-	-	-
	1.4	1466	1222	1.16		1.4	1466	1222	1.16
	1.6	1380	1267	1.21		1.6	1380	1267	1.21
	1.8	1297	1310	1.25		1.8	1297	1310	1.25
	2.0	1212	1361	1.30		2.0	1212	1361	1.30

Shaded area indicates air flow below 900 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

Max BHP 1.2

APPENDIX A BLOWER PERFORMANCE DATA

4 Ton - High Static Drive
Models: DRG0483W, DRH0484W, DRH0487W
70,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1433	679	0.52	T1H	0.2	1357	657	0.40
	0.4	1326	744	0.58		0.4	1255	720	0.44
	0.6	1192	822	0.64		0.6	1110	804	0.49
	0.8	1092	875	0.68		0.8	1015	856	0.52
	1.0	1007	927	0.72		1.0	924	914	0.55
	1.2	880	991	0.77		1.2	791	978	0.59
	1.4	789	1042	0.81		1.4	700	1028	0.62
	1.6	692	1090	0.84		1.6	600	1079	0.65
	1.8	612	1134	0.88		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1764	765	0.73	T2H	0.2	1433	679	0.29
	0.4	1673	827	0.79		0.4	1326	744	0.32
	0.6	1589	879	0.84		0.6	1192	822	0.35
	0.8	1510	928	0.88		0.8	1092	875	0.37
	1.0	1369	995	0.95		1.0	1007	927	0.40
	1.2	1285	1040	0.99		1.2	880	991	0.42
	1.4	1202	1085	1.03		1.4	789	1042	0.45
	1.6	1130	1133	1.08		1.6	692	1090	0.47
	1.8	1044	1178	1.12		1.8	612	1134	0.49
	2.0	918	1233	1.17		2.0	-	-	-
T3C	0.2	-	-	-	T3H	0.2	1581	711	0.36
	0.4	1940	898	0.35		0.4	1476	779	0.39
	0.6	1854	949	0.37		0.6	1391	832	0.42
	0.8	1782	993	0.39		0.8	1250	905	0.45
	1.0	1711	1034	0.41		1.0	1160	953	0.48
	1.2	1576	1102	0.43		1.2	1081	1001	0.50
	1.4	1494	1143	0.45		1.4	1000	1045	0.52
	1.6	1419	1183	0.46		1.6	909	1099	0.55
	1.8	1349	1225	0.48		1.8	783	1153	0.58
	2.0	1282	1266	0.50		2.0	686	1199	0.60
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	1940	898	0.69
	0.6	1992	986	0.49		0.6	1854	949	0.73
	0.8	1921	1026	0.51		0.8	1782	993	0.77
	1.0	1848	1066	0.53		1.0	1711	1034	0.80
	1.2	1742	1123	0.56		1.2	1576	1102	0.85
	1.4	1640	1174	0.59		1.4	1494	1143	0.88
	1.6	1580	1214	0.61		1.6	1419	1183	0.91
	1.8	1504	1251	0.63		1.8	1349	1225	0.95
	2.0	1440	1289	0.64		2.0	1282	1266	0.98
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	1978	1096	1.04		1.0	1978	1096	1.04
	1.2	1909	1136	1.08		1.2	1909	1136	1.08
	1.4	1786	1196	1.14		1.4	1786	1196	1.14
	1.6	1698	1239	1.18		1.6	1698	1239	1.18
	1.8	1622	1277	1.22		1.8	1622	1277	1.22
	2.0	1550	1311	1.25		2.0	1550	1311	1.25

Shaded area indicates air flow below 1200 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating
MAX BHP 1.2

4 Ton High Static Drive
Models: DRG0483W, DRH0484W, DRH0487W
70,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1462	722	0.56	T1H	0.2	1385	699	0.42
	0.4	1353	791	0.61		0.4	1281	766	0.46
	0.6	1216	874	0.68		0.6	1133	855	0.52
	0.8	1114	931	0.72		0.8	1036	911	0.55
	1.0	1028	986	0.76		1.0	943	972	0.59
	1.2	898	1054	0.82		1.2	807	1040	0.63
	1.4	805	1109	0.86		1.4	714	1094	0.66
	1.6	706	1160	0.90		1.6	612	1148	0.70
	1.8	624	1206	0.93		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1800	814	0.77	T2H	0.2	1462	722	0.31
	0.4	1707	880	0.84		0.4	1353	791	0.34
	0.6	1621	935	0.89		0.6	1216	874	0.37
	0.8	1541	987	0.94		0.8	1114	931	0.40
	1.0	1397	1058	1.01		1.0	1028	986	0.42
	1.2	1311	1106	1.05		1.2	898	1054	0.45
	1.4	1227	1154	1.10		1.4	805	1109	0.48
	1.6	1153	1205	1.15		1.6	706	1160	0.50
	1.8	1065	1253	1.19		1.8	624	1206	0.52
	2.0	937	1312	1.25		2.0	-	-	-
T3C	0.2	-	-	-	T3H	0.2	1613	756	0.38
	0.4	1980	955	0.38		0.4	1506	829	0.41
	0.6	1892	1010	0.40		0.6	1419	885	0.44
	0.8	1818	1056	0.41		0.8	1276	963	0.48
	1.0	1746	1100	0.43		1.0	1184	1014	0.51
	1.2	1608	1172	0.46		1.2	1103	1065	0.53
	1.4	1524	1216	0.48		1.4	1020	1112	0.56
	1.6	1448	1258	0.49		1.6	928	1169	0.58
	1.8	1377	1303	0.51		1.8	799	1227	0.61
	2.0	1308	1347	0.53		2.0	700	1276	0.64
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	1980	955	0.74
	0.6	-	-	-		0.6	1892	1010	0.78
	0.8	1960	1092	0.55		0.8	1818	1056	0.82
	1.0	1886	1134	0.57		1.0	1746	1100	0.85
	1.2	1778	1195	0.60		1.2	1608	1172	0.91
	1.4	1673	1249	0.62		1.4	1524	1216	0.94
	1.6	1612	1291	0.65		1.6	1448	1258	0.97
	1.8	1535	1331	0.67		1.8	1377	1303	1.01
	2.0	1469	1371	0.69		2.0	1308	1347	1.04
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	1948	1208	1.15		1.2	1948	1208	1.15
	1.4	1822	1272	1.21		1.4	1822	1272	1.21
	1.6	1733	1318	1.25		1.6	1733	1318	1.25
	1.8	1655	1358	1.29		1.8	1655	1358	1.29
	2.0	1582	1395	1.33		2.0	1582	1395	1.33

Shaded area indicates air flow below 1200 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating
Max BHP 1.2

APPENDIX A BLOWER PERFORMANCE DATA

4 Ton - High Static Drive
Models: DRG0483W, DRH0484W, DRH0487W
115,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1433	679	0.29	T1H	0.2	1433	679	0.29
	0.4	1326	744	0.32		0.4	1326	744	0.32
	0.6	1192	822	0.35		0.6	1192	822	0.35
	0.8	1092	875	0.37		0.8	1092	875	0.37
	1.0	1007	927	0.40		1.0	1007	927	0.40
	1.2	880	991	0.42		1.2	880	991	0.42
	1.4	789	1042	0.45		1.4	789	1042	0.45
	1.6	692	1090	0.47		1.6	692	1090	0.47
	1.8	612	1134	0.49		1.8	612	1134	0.49
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1764	765	0.46	T2H	0.2	1764	765	0.46
	0.4	1673	827	0.50		0.4	1673	827	0.50
	0.6	1589	879	0.53		0.6	1589	879	0.53
	0.8	1510	928	0.56		0.8	1510	928	0.56
	1.0	1369	995	0.60		1.0	1369	995	0.60
	1.2	1285	1040	0.63		1.2	1285	1040	0.63
	1.4	1202	1085	0.66		1.4	1202	1085	0.66
	1.6	1130	1133	0.69		1.6	1130	1133	0.69
	1.8	1044	1178	0.71		1.8	1044	1178	0.71
	2.0	918	1233	0.75		2.0	918	1233	0.75
T3C	0.2	-	-	-	T3H	0.2	-	-	-
	0.4	1940	898	0.69		0.4	1940	898	0.69
	0.6	1854	949	0.73		0.6	1854	949	0.73
	0.8	1782	993	0.77		0.8	1782	993	0.77
	1.0	1711	1034	0.80		1.0	1711	1034	0.80
	1.2	1576	1102	0.85		1.2	1576	1102	0.85
	1.4	1494	1143	0.88		1.4	1494	1143	0.88
	1.6	1419	1183	0.91		1.6	1419	1183	0.91
	1.8	1349	1225	0.95		1.8	1349	1225	0.95
	2.0	1282	1266	0.98		2.0	1282	1266	0.98
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	1992	986	0.86		0.6	1992	986	0.86
	0.8	1921	1026	0.89		0.8	1921	1026	0.89
	1.0	1848	1066	0.93		1.0	1848	1066	0.93
	1.2	1742	1123	0.98		1.2	1742	1123	0.98
	1.4	1640	1174	1.02		1.4	1640	1174	1.02
	1.6	1580	1214	1.05		1.6	1580	1214	1.05
	1.8	1504	1251	1.09		1.8	1504	1251	1.09
	2.0	1440	1289	1.12		2.0	1440	1289	1.12
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	1978	1096	1.04		1.0	1978	1096	1.04
	1.2	1909	1136	1.08		1.2	1909	1136	1.08
	1.4	1786	1196	1.14		1.4	1786	1196	1.14
	1.6	1698	1239	1.18		1.6	1698	1239	1.18
	1.8	1622	1277	1.22		1.8	1622	1277	1.22
	2.0	1550	1311	1.25		2.0	1550	1311	1.25

Shaded area indicates air flow below 1200 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating
Max BHP 1.2

4 Ton High Static Drive
Models: DRG0483W, DRH0484W, DRH0487W
115,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1462	722	0.31	T1H	0.2	1462	722	0.31
	0.4	1353	791	0.34		0.4	1353	791	0.34
	0.6	1216	874	0.37		0.6	1216	874	0.37
	0.8	1114	931	0.40		0.8	1114	931	0.40
	1.0	1028	986	0.42		1.0	1028	986	0.42
	1.2	898	1054	0.45		1.2	898	1054	0.45
	1.4	805	1109	0.48		1.4	805	1109	0.48
	1.6	706	1160	0.50		1.6	706	1160	0.50
	1.8	624	1206	0.52		1.8	624	1206	0.52
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1800	814	0.49	T2H	0.2	1800	814	0.49
	0.4	1707	880	0.53		0.4	1707	880	0.53
	0.6	1621	935	0.57		0.6	1621	935	0.57
	0.8	1541	987	0.60		0.8	1541	987	0.60
	1.0	1397	1058	0.64		1.0	1397	1058	0.64
	1.2	1311	1106	0.67		1.2	1311	1106	0.67
	1.4	1227	1154	0.70		1.4	1227	1154	0.70
	1.6	1153	1205	0.73		1.6	1153	1205	0.73
	1.8	1065	1253	0.76		1.8	1065	1253	0.76
	2.0	937	1312	0.80		2.0	937	1312	0.80
T3C	0.2	-	-	-	T3H	0.2	-	-	-
	0.4	1980	955	0.74		0.4	1980	955	0.74
	0.6	1892	1010	0.78		0.6	1892	1010	0.78
	0.8	1818	1056	0.82		0.8	1818	1056	0.82
	1.0	1746	1100	0.85		1.0	1746	1100	0.85
	1.2	1608	1172	0.91		1.2	1608	1172	0.91
	1.4	1524	1216	0.94		1.4	1524	1216	0.94
	1.6	1448	1258	0.97		1.6	1448	1258	0.97
	1.8	1377	1303	1.01		1.8	1377	1303	1.01
	2.0	1308	1347	1.04		2.0	1308	1347	1.04
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	1960	1092	0.95		0.8	1960	1092	0.95
	1.0	1886	1134	0.99		1.0	1886	1134	0.99
	1.2	1778	1195	1.04		1.2	1778	1195	1.04
	1.4	1673	1249	1.09		1.4	1673	1249	1.09
	1.6	1612	1291	1.12		1.6	1612	1291	1.12
	1.8	1535	1331	1.16		1.8	1535	1331	1.16
	2.0	1469	1371	1.19		2.0	1469	1371	1.19
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	1948	1208	1.15		1.2	1948	1208	1.15
	1.4	1822	1272	1.21		1.4	1822	1272	1.21
	1.6	1733	1318	1.25		1.6	1733	1318	1.25
	1.8	1655	1358	1.29		1.8	1655	1358	1.29
	2.0	1582	1395	1.33		2.0	1582	1395	1.33

Shaded area indicates air flow below 1200 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating
Max BHP 1.2

APPENDIX A BLOWER PERFORMANCE DATA

4 Ton - High Static Drive
Models: DRG0483W, DRH0484W, DRH0487W
140,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1433	679	0.29	T1H	0.2	1357	657	0.26
	0.4	1326	744	0.32		0.4	1255	720	0.28
	0.6	1192	822	0.35		0.6	1110	804	0.32
	0.8	1092	875	0.37		0.8	1015	856	0.34
	1.0	1007	927	0.40		1.0	924	914	0.36
	1.2	880	991	0.42		1.2	791	978	0.38
	1.4	789	1042	0.45		1.4	700	1028	0.40
	1.6	692	1090	0.47		1.6	600	1079	0.42
	1.8	612	1134	0.49		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1764	765	0.46	T2H	0.2	1433	679	0.29
	0.4	1673	827	0.50		0.4	1326	744	0.32
	0.6	1589	879	0.53		0.6	1192	822	0.35
	0.8	1510	928	0.56		0.8	1092	875	0.37
	1.0	1369	995	0.60		1.0	1007	927	0.40
	1.2	1285	1040	0.63		1.2	880	991	0.42
	1.4	1202	1085	0.66		1.4	789	1042	0.45
	1.6	1130	1133	0.69		1.6	692	1090	0.47
	1.8	1044	1178	0.71		1.8	612	1134	0.49
	2.0	918	1233	0.75		2.0	-	-	-
T3C	0.2	-	-	-	T3H	0.2	1764	765	0.46
	0.4	1940	898	0.69		0.4	1673	827	0.50
	0.6	1854	949	0.73		0.6	1589	879	0.53
	0.8	1782	993	0.77		0.8	1510	928	0.56
	1.0	1711	1034	0.80		1.0	1369	995	0.60
	1.2	1576	1102	0.85		1.2	1285	1040	0.63
	1.4	1494	1143	0.88		1.4	1202	1085	0.66
	1.6	1419	1183	0.91		1.6	1130	1133	0.69
	1.8	1349	1225	0.95		1.8	1044	1178	0.71
	2.0	1282	1266	0.98		2.0	918	1233	0.75
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	1992	986	0.86		0.6	1992	986	0.86
	0.8	1921	1026	0.89		0.8	1921	1026	0.89
	1.0	1848	1066	0.93		1.0	1848	1066	0.93
	1.2	1742	1123	0.98		1.2	1742	1123	0.98
	1.4	1640	1174	1.02		1.4	1640	1174	1.02
	1.6	1580	1214	1.05		1.6	1580	1214	1.05
	1.8	1504	1251	1.09		1.8	1504	1251	1.09
	2.0	1440	1289	1.12		2.0	1440	1289	1.12
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	1978	1096	1.04		1.0	1978	1096	1.04
	1.2	1909	1136	1.08		1.2	1909	1136	1.08
	1.4	1786	1196	1.14		1.4	1786	1196	1.14
	1.6	1698	1239	1.18		1.6	1698	1239	1.18
	1.8	1622	1277	1.22		1.8	1622	1277	1.22
	2.0	1550	1311	1.25		2.0	1550	1311	1.25

Shaded area indicates air flow below 1200 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating
Max BHP 1.2

4 Ton High Static Drive
Models: DRG0483W, DRH0484W, DRH0487W
140,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1462	722	0.31	T1H	0.2	1385	699	0.27
	0.4	1353	791	0.34		0.4	1281	766	0.30
	0.6	1216	874	0.37		0.6	1133	855	0.34
	0.8	1114	931	0.40		0.8	1036	911	0.36
	1.0	1028	986	0.42		1.0	943	972	0.38
	1.2	898	1054	0.45		1.2	807	1040	0.41
	1.4	805	1109	0.48		1.4	714	1094	0.43
	1.6	706	1160	0.50		1.6	612	1148	0.45
	1.8	624	1206	0.52		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1800	814	0.49	T2H	0.2	1462	722	0.31
	0.4	1707	880	0.53		0.4	1353	791	0.34
	0.6	1621	935	0.57		0.6	1216	874	0.37
	0.8	1541	987	0.60		0.8	1114	931	0.40
	1.0	1397	1058	0.64		1.0	1028	986	0.42
	1.2	1311	1106	0.67		1.2	898	1054	0.45
	1.4	1227	1154	0.70		1.4	805	1109	0.48
	1.6	1153	1205	0.73		1.6	706	1160	0.50
	1.8	1065	1253	0.76		1.8	624	1206	0.52
	2.0	937	1312	0.80		2.0	-	-	-
T3C	0.2	-	-	-	T3H	0.2	-	-	-
	0.4	1980	955	0.74		0.4	1980	955	0.74
	0.6	1892	1010	0.78		0.6	1892	1010	0.78
	0.8	1818	1056	0.82		0.8	1818	1056	0.82
	1.0	1746	1100	0.85		1.0	1746	1100	0.85
	1.2	1608	1172	0.91		1.2	1608	1172	0.91
	1.4	1524	1216	0.94		1.4	1524	1216	0.94
	1.6	1448	1258	0.97		1.6	1448	1258	0.97
	1.8	1377	1303	1.01		1.8	1377	1303	1.01
	2.0	1308	1347	1.04		2.0	1308	1347	1.04
T4C	0.2	-	-	-	T4H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	1960	1092	0.95		0.8	1960	1092	0.95
	1.0	1886	1134	0.99		1.0	1886	1134	0.99
	1.2	1778	1195	1.04		1.2	1778	1195	1.04
	1.4	1673	1249	1.09		1.4	1673	1249	1.09
	1.6	1612	1291	1.12		1.6	1612	1291	1.12
	1.8	1535	1331	1.16		1.8	1535	1331	1.16
	2.0	1469	1371	1.19		2.0	1469	1371	1.19
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	-	-	-		0.8	-	-	-
	1.0	-	-	-		1.0	-	-	-
	1.2	1948	1208	1.15		1.2	1948	1208	1.15
	1.4	1822	1272	1.21		1.4	1822	1272	1.21
	1.6	1733	1318	1.25		1.6	1733	1318	1.25
	1.8	1655	1358	1.29		1.8	1655	1358	1.29
	2.0	1582	1395	1.33		2.0	1582	1395	1.33

Shaded area indicates air flow below 1200 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

APPENDIX A BLOWER PERFORMANCE DATA

5 Ton - High Static Drive
Models: DRG0603W, DRG0604W, DRG0607W
70,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	1177	589	0.17	T6	0.2	1177	589	0.17
	0.4	1034	666	0.19		0.4	1034	666	0.19
	0.6	931	737	0.21		0.6	931	737	0.21
	0.8	819	806	0.23		0.8	819	806	0.23
	1.0	680	873	0.25		1.0	680	873	0.25
	1.2	584	929	0.27		1.2	584	929	0.27
	1.4	-	-	-		1.4	-	-	-
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2	0.2	1793	767	0.82	T7	0.2	1931	786	0.99
	0.4	1706	825	0.88		0.4	1842	840	1.06
	0.6	1634	879	0.94		0.6	1762	894	1.13
	0.8	1551	930	1.00		0.8	1680	957	1.21
	1.0	1455	980	1.05		1.0	1591	1006	1.27
	1.2	1367	1033	1.11		1.2	1500	1055	1.33
	1.4	1290	1080	1.16		1.4	1424	1101	1.39
	1.6	1213	1126	1.21		1.6	1348	1147	1.45
	1.8	1136	1172	1.26		1.8	1275	1193	1.50
	2.0	1079	1205	1.29		2.0	1208	1231	1.55
T3	0.2	2298	924	0.62	T8	0.2	2109	861	0.25
	0.4	2231	968	0.65		0.4	2035	914	0.26
	0.6	2166	1011	0.67		0.6	1962	960	0.27
	0.8	2098	1052	0.70		0.8	1895	1004	0.29
	1.0	2036	1095	0.73		1.0	1829	1047	0.30
	1.2	1971	1136	0.76		1.2	1746	1093	0.31
	1.4	1887	1180	0.79		1.4	1654	1140	0.33
	1.6	1805	1221	0.81		1.6	1580	1184	0.34
	1.8	1755	1252	0.83		1.8	1506	1225	0.35
	2.0	1660	1305	0.87		2.0	1451	1268	0.36
T4	0.2	2429	972	0.79	T9	0.2	-	-	-
	0.4	2361	1013	0.82		0.4	-	-	-
	0.6	2296	1055	0.85		0.6	-	-	-
	0.8	2236	1094	0.89		0.8	2446	1157	1.82
	1.0	2175	1133	0.92		1.0	2390	1193	1.87
	1.2	2117	1171	0.95		1.2	2331	1230	1.93
	1.4	2048	1211	0.98		1.4	2273	1266	1.99
	1.6	1958	1252	1.01		1.6	2207	1303	2.05
	1.8	1880	1293	1.05		1.8	2116	1351	2.12
	2.0	1843	1321	1.07		2.0	2037	1390	2.18
T5	0.2	-	-	-	T10	0.2	2946	1156	1.82
	0.4	-	-	-		0.4	2878	1188	1.87
	0.6	-	-	-		0.6	2798	1229	1.93
	0.8	2446	1157	1.82		0.8	2719	1270	2.00
	1.0	2390	1193	1.87		1.0	2644	1305	2.05
	1.2	2331	1230	1.93		1.2	2581	1339	2.10
	1.4	2273	1266	1.99		1.4	2513	1378	2.16
	1.6	2207	1303	2.05		1.6	2460	1417	2.23
	1.8	2116	1351	2.12		1.8	2391	1456	2.29
	2.0	2037	1390	2.18		2.0	2328	1500	2.36

Shaded area indicates air flow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

5 Ton - High Static Drive
Models: DRG0603W, DRG0604W, DRG0607W
70,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	1201	626	0.18	T6	0.2	1201	626	0.18
	0.4	1055	709	0.20		0.4	1055	709	0.20
	0.6	950	784	0.22		0.6	950	784	0.22
	0.8	836	857	0.24		0.8	836	857	0.24
	1.0	694	929	0.27		1.0	694	929	0.27
	1.2	596	989	0.28		1.2	596	989	0.28
	1.4	-	-	-		1.4	-	-	-
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2	0.2	1830	816	0.87	T7	0.2	1970	836	1.05
	0.4	1741	878	0.94		0.4	1880	894	1.13
	0.6	1667	935	1.00		0.6	1798	951	1.20
	0.8	1583	989	1.06		0.8	1714	1018	1.28
	1.0	1485	1043	1.12		1.0	1623	1070	1.35
	1.2	1395	1099	1.18		1.2	1531	1122	1.42
	1.4	1316	1149	1.23		1.4	1453	1171	1.48
	1.6	1238	1198	1.28		1.6	1375	1220	1.54
	1.8	1159	1247	1.34		1.8	1301	1269	1.60
	2.0	1101	1282	1.37		2.0	1233	1310	1.65
T3	0.2	2345	983	0.65	T8	0.2	2152	916	0.26
	0.4	2277	1030	0.69		0.4	2077	972	0.28
	0.6	2210	1075	0.72		0.6	2002	1021	0.29
	0.8	2141	1119	0.75		0.8	1934	1068	0.31
	1.0	2078	1165	0.78		1.0	1866	1114	0.32
	1.2	2011	1208	0.81		1.2	1782	1163	0.33
	1.4	1925	1255	0.84		1.4	1688	1213	0.35
	1.6	1842	1299	0.87		1.6	1612	1260	0.36
	1.8	1791	1332	0.89		1.8	1537	1303	0.37
	2.0	1694	1388	0.92		2.0	1481	1349	0.39
T4	0.2	2479	1034	0.84	T9	0.2	-	-	-
	0.4	2409	1078	0.87		0.4	-	-	-
	0.6	2343	1122	0.91		0.6	-	-	-
	0.8	2282	1164	0.94		0.8	2496	1231	1.93
	1.0	2219	1205	0.98		1.0	2439	1269	1.99
	1.2	2160	1246	1.01		1.2	2379	1308	2.05
	1.4	2090	1288	1.04		1.4	2319	1347	2.12
	1.6	1998	1332	1.08		1.6	2252	1386	2.18
	1.8	1918	1376	1.11		1.8	2159	1437	2.26
	2.0	1881	1405	1.14		2.0	2079	1479	2.32
T5	0.2	-	-	-	T10	0.2	3006	1180	1.85
	0.4	-	-	-		0.4	2937	1212	1.90
	0.6	-	-	-		0.6	2855	1254	1.97
	0.8	2496	1231	1.93		0.8	2774	1296	2.04
	1.0	2439	1269	1.99		1.0	2698	1332	2.09
	1.2	2379	1308	2.05		1.2	2633	1366	2.15
	1.4	2319	1347	2.12		1.4	2564	1406	2.21
	1.6	2252	1386	2.18		1.6	2511	1446	2.27
	1.8	2159	1437	2.26		1.8	2440	1486	2.33
	2.0	2079	1479	2.32		2.0	2375	1531	2.40

Shaded area indicates air flow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

APPENDIX A BLOWER PERFORMANCE DATA

5 Ton - High Static Drive
Models: DRG0603W, DRG0604W, DRG0607W
115,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1177	589	0.17	T1H	0.2	1177	589	0.17
	0.4	1034	666	0.19		0.4	1034	666	0.19
	0.6	931	737	0.21		0.6	931	737	0.21
	0.8	819	806	0.23		0.8	819	806	0.23
	1.0	680	873	0.25		1.0	680	873	0.25
	1.2	584	929	0.27		1.2	584	929	0.27
	1.4	-	-	-		1.4	-	-	-
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1793	767	0.82	T2H	0.2	1728	748	0.71
	0.4	1706	825	0.88		0.4	1637	809	0.77
	0.6	1634	879	0.94		0.6	1567	863	0.82
	0.8	1551	930	1.00		0.8	1475	916	0.87
	1.0	1455	980	1.05		1.0	1379	967	0.92
	1.2	1367	1033	1.11		1.2	1293	1021	0.97
	1.4	1290	1080	1.16		1.4	1218	1068	1.02
	1.6	1213	1126	1.21		1.6	1134	1120	1.07
	1.8	1136	1172	1.26		1.8	1017	1173	1.12
	2.0	1079	1205	1.29		2.0	938	1218	1.16
T3C	0.2	2298	924	0.62	T3H	0.2	1728	748	0.71
	0.4	2231	968	0.65		0.4	1637	809	0.77
	0.6	2166	1011	0.67		0.6	1567	863	0.82
	0.8	2098	1052	0.70		0.8	1475	916	0.87
	1.0	2036	1095	0.73		1.0	1379	967	0.92
	1.2	1971	1136	0.76		1.2	1293	1021	0.97
	1.4	1887	1180	0.79		1.4	1218	1068	1.02
	1.6	1805	1221	0.81		1.6	1134	1120	1.07
	1.8	1755	1252	0.83		1.8	1017	1173	1.12
	2.0	1660	1305	0.87		2.0	938	1218	1.16
T4C	0.2	2429	972	0.79	T4H	0.2	2109	861	0.25
	0.4	2361	1013	0.82		0.4	2035	914	0.26
	0.6	2296	1055	0.85		0.6	1962	960	0.27
	0.8	2236	1094	0.89		0.8	1895	1004	0.29
	1.0	2175	1133	0.92		1.0	1829	1047	0.30
	1.2	2117	1171	0.95		1.2	1746	1093	0.31
	1.4	2048	1211	0.98		1.4	1654	1140	0.33
	1.6	1958	1252	1.01		1.6	1580	1184	0.34
	1.8	1880	1293	1.05		1.8	1506	1225	0.35
	2.0	1843	1321	1.07		2.0	1451	1268	0.36
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	2446	1157	1.82		0.8	2446	1157	1.82
	1.0	2390	1193	1.87		1.0	2390	1193	1.87
	1.2	2331	1230	1.93		1.2	2331	1230	1.93
	1.4	2273	1266	1.99		1.4	2273	1266	1.99
	1.6	2207	1303	2.05		1.6	2207	1303	2.05
	1.8	2116	1351	2.12		1.8	2116	1351	2.12
	2.0	2037	1390	2.18		2.0	2037	1390	2.18

Shaded area indicates air flow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

5 Ton - High Static Drive
Models: DRG0603W, DRG0604W, DRG0607W
115,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1201	626	0.18	T1H	0.2	1201	626	0.18
	0.4	1055	709	0.20		0.4	1055	709	0.20
	0.6	950	784	0.22		0.6	950	784	0.22
	0.8	836	857	0.24		0.8	836	857	0.24
	1.0	694	929	0.27		1.0	694	929	0.27
	1.2	596	989	0.28		1.2	596	989	0.28
	1.4	-	-	-		1.4	-	-	-
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	1830	816	0.87	T2H	0.2	1763	796	0.76
	0.4	1741	878	0.94		0.4	1670	860	0.82
	0.6	1667	935	1.00		0.6	1599	918	0.87
	0.8	1583	989	1.06		0.8	1505	974	0.93
	1.0	1485	1043	1.12		1.0	1407	1029	0.98
	1.2	1395	1099	1.18		1.2	1319	1086	1.03
	1.4	1316	1149	1.23		1.4	1243	1136	1.08
	1.6	1238	1198	1.28		1.6	1157	1191	1.13
	1.8	1159	1247	1.34		1.8	1038	1248	1.19
	2.0	1101	1282	1.37		2.0	957	1296	1.23
T3C	0.2	2345	983	0.65	T3H	0.2	1763	796	0.76
	0.4	2277	1030	0.69		0.4	1670	860	0.82
	0.6	2210	1075	0.72		0.6	1599	918	0.87
	0.8	2141	1119	0.75		0.8	1505	974	0.93
	1.0	2078	1165	0.78		1.0	1407	1029	0.98
	1.2	2011	1208	0.81		1.2	1319	1086	1.03
	1.4	1925	1255	0.84		1.4	1243	1136	1.08
	1.6	1842	1299	0.87		1.6	1157	1191	1.13
	1.8	1791	1332	0.89		1.8	1038	1248	1.19
	2.0	1694	1388	0.92		2.0	957	1296	1.23
T4C	0.2	2479	1034	0.84	T4H	0.2	2152	916	0.26
	0.4	2409	1078	0.87		0.4	2077	972	0.28
	0.6	2343	1122	0.91		0.6	2002	1021	0.29
	0.8	2282	1164	0.94		0.8	1934	1068	0.31
	1.0	2219	1205	0.98		1.0	1866	1114	0.32
	1.2	2160	1246	1.01		1.2	1782	1163	0.33
	1.4	2090	1288	1.04		1.4	1688	1213	0.35
	1.6	1998	1332	1.08		1.6	1612	1260	0.36
	1.8	1918	1376	1.11		1.8	1537	1303	0.37
	2.0	1881	1405	1.14		2.0	1481	1349	0.39
T5C	0.2	-	-	-	T5H	0.2	-	-	-
	0.4	-	-	-		0.4	-	-	-
	0.6	-	-	-		0.6	-	-	-
	0.8	2496	1231	1.93		0.8	2496	1231	1.93
	1.0	2439	1269	1.99		1.0	2439	1269	1.99
	1.2	2379	1308	2.05		1.2	2379	1308	2.05
	1.4	2319	1347	2.12		1.4	2319	1347	2.12
	1.6	2252	1386	2.18		1.6	2252	1386	2.18
	1.8	2159	1437	2.26		1.8	2159	1437	2.26
	2.0	2079	1479	2.32		2.0	2079	1479	2.32

Shaded area indicates air flow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

APPENDIX A BLOWER PERFORMANCE DATA

5 Ton - High Static Drive
Models: DRG0603W, DRG0604W, DRG0607W
140,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1177	589	0.17	T1H	0.2	2109	861	0.25
	0.4	1034	666	0.19		0.4	2035	914	0.26
	0.6	931	737	0.21		0.6	1962	960	0.27
	0.8	819	806	0.23		0.8	1895	1004	0.29
	1.0	680	873	0.25		1.0	1829	1047	0.30
	1.2	584	929	0.27		1.2	1746	1093	0.31
	1.4	-	-	-		1.4	1654	1140	0.33
	1.6	-	-	-		1.6	1580	1184	0.34
	1.8	-	-	-		1.8	1506	1225	0.35
	2.0	-	-	-		2.0	1451	1268	0.36
T2C	0.2	1793	767	0.82	T2H	0.2	2429	972	0.79
	0.4	1706	825	0.88		0.4	2361	1013	0.82
	0.6	1634	879	0.94		0.6	2296	1055	0.85
	0.8	1551	930	1.00		0.8	2236	1094	0.89
	1.0	1455	980	1.05		1.0	2175	1133	0.92
	1.2	1367	1033	1.11		1.2	2117	1171	0.95
	1.4	1290	1080	1.16		1.4	2048	1211	0.98
	1.6	1213	1126	1.21		1.6	1958	1252	1.01
	1.8	1136	1172	1.26		1.8	1880	1293	1.05
	2.0	1079	1205	1.29		2.0	1843	1321	1.07
T3C	0.2	2298	924	0.62	T3H	0.2	2858	1135	1.63
	0.4	2231	968	0.65		0.4	2795	1171	1.69
	0.6	2166	1011	0.67		0.6	2717	1204	1.73
	0.8	2098	1052	0.70		0.8	2635	1245	1.79
	1.0	2036	1095	0.73		1.0	2569	1279	1.84
	1.2	1971	1136	0.76		1.2	2502	1319	1.90
	1.4	1887	1180	0.79		1.4	2432	1356	1.95
	1.6	1805	1221	0.81		1.6	2371	1397	2.01
	1.8	1755	1252	0.83		1.8	2293	1446	2.08
	2.0	1660	1305	0.87		2.0	2197	1507	2.17
T4C	0.2	2429	972	0.79	T4H	0.2	-	-	-
	0.4	2361	1013	0.82		0.4	-	-	-
	0.6	2296	1055	0.85		0.6	-	-	-
	0.8	2236	1094	0.89		0.8	2446	1157	1.82
	1.0	2175	1133	0.92		1.0	2390	1193	1.87
	1.2	2117	1171	0.95		1.2	2331	1230	1.93
	1.4	2048	1211	0.98		1.4	2273	1266	1.99
	1.6	1958	1252	1.01		1.6	2207	1303	2.05
	1.8	1880	1293	1.05		1.8	2116	1351	2.12
	2.0	1843	1321	1.07		2.0	2037	1390	2.18
T5C	0.2	-	-	-	T5H	0.2	2946	1156	1.82
	0.4	-	-	-		0.4	2878	1188	1.87
	0.6	-	-	-		0.6	2798	1229	1.93
	0.8	2446	1157	1.82		0.8	2719	1270	2.00
	1.0	2390	1193	1.87		1.0	2644	1305	2.05
	1.2	2331	1230	1.93		1.2	2581	1339	2.10
	1.4	2273	1266	1.99		1.4	2513	1378	2.16
	1.6	2207	1303	2.05		1.6	2460	1417	2.23
	1.8	2116	1351	2.12		1.8	2391	1456	2.29
	2.0	2037	1390	2.18		2.0	2328	1500	2.36

Shaded area indicates air flow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

5 Ton - High Static Drive
Models: DRG0603W, DRG0604W, DRG0607W
140,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1201	626	0.18	T1H	0.2	2152	916	0.26
	0.4	1055	709	0.20		0.4	2077	972	0.28
	0.6	950	784	0.22		0.6	2002	1021	0.29
	0.8	836	857	0.24		0.8	1934	1068	0.31
	1.0	694	929	0.27		1.0	1866	1114	0.32
	1.2	596	989	0.28		1.2	1782	1163	0.33
	1.4	-	-	-		1.4	1688	1213	0.35
	1.6	-	-	-		1.6	1612	1260	0.36
	1.8	-	-	-		1.8	1537	1303	0.37
	2.0	-	-	-		2.0	1481	1349	0.39
T2C	0.2	1830	816	0.87	T2H	0.2	2479	1034	0.84
	0.4	1741	878	0.94		0.4	2409	1078	0.87
	0.6	1667	935	1.00		0.6	2343	1122	0.91
	0.8	1583	989	1.06		0.8	2282	1164	0.94
	1.0	1485	1043	1.12		1.0	2219	1205	0.98
	1.2	1395	1099	1.18		1.2	2160	1246	1.01
	1.4	1316	1149	1.23		1.4	2090	1288	1.04
	1.6	1238	1198	1.28		1.6	1998	1332	1.08
	1.8	1159	1247	1.34		1.8	1918	1376	1.11
	2.0	1101	1282	1.37		2.0	1881	1405	1.14
T3C	0.2	2345	983	0.65	T3H	0.2	2916	1158	1.67
	0.4	2277	1030	0.69		0.4	2852	1195	1.72
	0.6	2210	1075	0.72		0.6	2772	1229	1.77
	0.8	2141	1119	0.75		0.8	2689	1270	1.83
	1.0	2078	1165	0.78		1.0	2622	1305	1.88
	1.2	2011	1208	0.81		1.2	2553	1346	1.94
	1.4	1925	1255	0.84		1.4	2482	1384	1.99
	1.6	1842	1299	0.87		1.6	2420	1426	2.05
	1.8	1791	1332	0.89		1.8	2340	1475	2.12
	2.0	1694	1388	0.92		2.0	2242	1538	2.21
T4C	0.2	2479	1034	0.84	T4H	0.2		-	-
	0.4	2409	1078	0.87		0.4		-	-
	0.6	2343	1122	0.91		0.6		-	-
	0.8	2282	1164	0.94		0.8	2496	1231	1.93
	1.0	2219	1205	0.98		1.0	2439	1269	1.99
	1.2	2160	1246	1.01		1.2	2379	1308	2.05
	1.4	2090	1288	1.04		1.4	2319	1347	2.12
	1.6	1998	1332	1.08		1.6	2252	1386	2.18
	1.8	1918	1376	1.11		1.8	2159	1437	2.26
	2.0	1881	1405	1.14		2.0	2079	1479	2.32
T5C	0.2	-	-	-	T5H	0.2	3006	1180	1.85
	0.4	-	-	-		0.4	2937	1212	1.90
	0.6	-	-	-		0.6	2855	1254	1.97
	0.8	2496	1231	1.93		0.8	2774	1296	2.04
	1.0	2439	1269	1.99		1.0	2698	1332	2.09
	1.2	2379	1308	2.05		1.2	2633	1366	2.15
	1.4	2319	1347	2.12		1.4	2564	1406	2.21
	1.6	2252	1386	2.18		1.6	2511	1446	2.27
	1.8	2159	1437	2.26		1.8	2440	1486	2.33
	2.0	2079	1479	2.32		2.0	2375	1531	2.40

Shaded area indicates air flow below 1500 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

APPENDIX A BLOWER PERFORMANCE DATA

6 Ton - High Static Drive
Models: DRG0723W, DRG0724W, DRG0727W
70,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1 C	0.2	1397	640	0.23	T1 H	0.2	1397	640	0.23
	0.4	1291	706	0.25		0.4	1291	706	0.25
	0.6	1134	794	0.28		0.6	1134	794	0.28
	0.8	1035	849	0.30		0.8	1035	849	0.30
	1.0	925	910	0.32		1.0	925	910	0.32
	1.2	-	-	-		1.2	-	-	-
	1.4	-	-	-		1.4	-	-	-
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2 C	0.2	2019	823	0.58	T2 H	0.2	1858	775	0.47
	0.4	1934	875	0.61		0.4	1770	831	0.50
	0.6	1863	923	0.65		0.6	1695	883	0.54
	0.8	1796	967	0.68		0.8	1589	944	0.57
	1.0	1718	1024	0.72		1.0	1505	996	0.60
	1.2	1578	1090	0.77		1.2	1395	1054	0.64
	1.4	1506	1135	0.80		1.4	1316	1101	0.67
	1.6	1431	1176	0.83		1.6	1215	1155	0.70
	1.8	1360	1220	0.86		1.8	1130	1206	0.73
	2.0	1281	1261	0.89		2.0	1041	1255	0.76
T3 C	0.2	2769	1057	1.40	T3 H	0.2	1696	728	0.37
	0.4	2710	1095	1.45		0.4	1607	787	0.40
	0.6	2647	1136	1.50		0.6	1527	842	0.43
	0.8	2582	1172	1.55		0.8	1381	921	0.47
	1.0	2528	1207	1.59		1.0	1293	968	0.50
	1.2	2479	1240	1.64		1.2	1211	1018	0.52
	1.4	2422	1277	1.69		1.4	1125	1068	0.55
	1.6	2367	1314	1.74		1.6	-	-	-
	1.8	2305	1355	1.79		1.8	-	-	-
	2.0	2224	1402	1.85		2.0	-	-	-
T4 C	0.2	2845	1079	1.52	T4 H	0.2	2019	823	0.58
	0.4	2785	1114	1.56		0.4	1934	875	0.61
	0.6	2723	1157	1.62		0.6	1863	923	0.65
	0.8	2661	1191	1.67		0.8	1796	967	0.68
	1.0	2612	1225	1.72		1.0	1718	1024	0.72
	1.2	2560	1261	1.77		1.2	1578	1090	0.77
	1.4	2509	1294	1.82		1.4	1506	1135	0.80
	1.6	2454	1331	1.87		1.6	1431	1176	0.83
	1.8	2393	1369	1.92		1.8	1360	1220	0.86
	2.0	2331	1412	1.98		2.0	1281	1261	0.89
T5 C	0.2	2939	1109	1.67	T5 H	0.2	2845	1079	1.52
	0.4	2881	1143	1.72		0.4	2785	1114	1.56
	0.6	2820	1183	1.78		0.6	2723	1157	1.62
	0.8	2764	1220	1.84		0.8	2661	1191	1.67
	1.0	2707	1254	1.89		1.0	2612	1225	1.72
	1.2	2661	1291	1.94		1.2	2560	1261	1.77
	1.4	2616	1322	1.99		1.4	2509	1294	1.82
	1.6	2573	1357	2.04		1.6	2454	1331	1.87
	1.8	2528	1398	2.10		1.8	2393	1369	1.92
	2.0	2483	1435	2.16		2.0	2331	1412	1.98

6 Ton - High Static Drive
Models: DRG0723W, DRG0724W, DRG0727W
70,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1425	681	0.24	T1H	0.2	1425	681	0.24
	0.4	1317	751	0.27		0.4	1317	751	0.27
	0.6	1157	845	0.30		0.6	1157	845	0.30
	0.8	1056	903	0.32		0.8	1056	903	0.32
	1.0	944	968	0.35		1.0	944	968	0.35
	1.2	-	-	-		1.2	-	-	-
	1.4	-	-	-		1.4	-	-	-
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	2060	875	0.61	T2H	0.2	1896	825	0.50
	0.4	1973	931	0.65		0.4	1807	884	0.54
	0.6	1901	982	0.69		0.6	1730	939	0.57
	0.8	1833	1029	0.72		0.8	1621	1005	0.61
	1.0	1753	1089	0.76		1.0	1536	1060	0.64
	1.2	1610	1160	0.81		1.2	1423	1122	0.68
	1.4	1537	1207	0.85		1.4	1343	1172	0.71
	1.6	1460	1251	0.88		1.6	1248	1229	0.75
	1.8	1388	1298	0.91		1.8	1162	1283	0.78
	2.0	1307	1342	0.94		2.0	1071	1336	0.81
T3C	0.2	2826	1124	1.48	T3H	0.2	1731	774	0.40
	0.4	2765	1165	1.54		0.4	1640	837	0.43
	0.6	2701	1209	1.60		0.6	1558	896	0.46
	0.8	2635	1247	1.65		0.8	1409	980	0.50
	1.0	2580	1284	1.70		1.0	1319	1030	0.53
	1.2	2530	1319	1.74		1.2	1236	1083	0.55
	1.4	2471	1358	1.79		1.4	1148	1136	0.58
	1.6	2415	1398	1.85		1.6	-	-	-
	1.8	2352	1442	1.90		1.8	-	-	-
	2.0	2269	1491	1.97		2.0	-	-	-
T4C	0.2	2903	1148	1.61	T4H	0.2	2060	875	0.61
	0.4	2842	1185	1.66		0.4	1973	931	0.65
	0.6	2779	1231	1.73		0.6	1901	982	0.69
	0.8	2715	1267	1.78		0.8	1833	1029	0.72
	1.0	2665	1303	1.83		1.0	1753	1089	0.76
	1.2	2612	1341	1.88		1.2	1610	1160	0.81
	1.4	2560	1377	1.93		1.4	1537	1207	0.85
	1.6	2504	1416	1.99		1.6	1460	1251	0.88
	1.8	2442	1456	2.04		1.8	1388	1298	0.91
	2.0	-	-	-		2.0	1307	1342	0.94
T5C	0.2	2999	1180	1.78	T5H	0.2	2903	1148	1.61
	0.4	2940	1216	1.83		0.4	2842	1185	1.66
	0.6	2878	1258	1.89		0.6	2779	1231	1.73
	0.8	2820	1298	1.95		0.8	2715	1267	1.78
	1.0	2762	1334	2.01		1.0	2665	1303	1.83
	1.2	2715	1373	2.07		1.2	2612	1341	1.88
	1.4	2669	1406	2.12		1.4	2560	1377	1.93
	1.6	2626	1444	2.17		1.6	2504	1416	1.99
	1.8	2580	1487	2.24		1.8	2442	1456	2.04
	2.0	-	-	-		2.0	-	-	-

Shaded area indicates air flow below 1800 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

APPENDIX A BLOWER PERFORMANCE DATA

6 Ton - High Static Drive
Models: DRG0723W, DRG0724W, DRG0727W
125,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1 C	0.2	1397	640	0.23	T1 H	0.2	1696	728	0.37
	0.4	1291	706	0.25		0.4	1607	787	0.40
	0.6	1134	794	0.28		0.6	1527	842	0.43
	0.8	1035	849	0.30		0.8	1381	921	0.47
	1.0	925	910	0.32		1.0	1293	968	0.50
	1.2	-	-	-		1.2	1211	1018	0.52
	1.4	-	-	-		1.4	1125	1068	0.55
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2 C	0.2	2019	823	0.58	T2 H	0.2	2019	823	0.58
	0.4	1934	875	0.61		0.4	1934	875	0.61
	0.6	1863	923	0.65		0.6	1863	923	0.65
	0.8	1796	967	0.68		0.8	1796	967	0.68
	1.0	1718	1024	0.72		1.0	1718	1024	0.72
	1.2	1578	1090	0.77		1.2	1578	1090	0.77
	1.4	1506	1135	0.80		1.4	1506	1135	0.80
	1.6	1431	1176	0.83		1.6	1431	1176	0.83
	1.8	1360	1220	0.86		1.8	1360	1220	0.86
	2.0	1281	1261	0.89		2.0	1281	1261	0.89
T3 C	0.2	2769	1057	1.40	T3 H	0.2	2467	958	0.99
	0.4	2710	1095	1.45		0.4	2399	1003	1.04
	0.6	2647	1136	1.50		0.6	2327	1046	1.08
	0.8	2582	1172	1.55		0.8	2270	1084	1.12
	1.0	2528	1207	1.59		1.0	2215	1122	1.16
	1.2	2479	1240	1.64		1.2	2150	1161	1.20
	1.4	2422	1277	1.69		1.4	2083	1203	1.25
	1.6	2367	1314	1.74		1.6	1985	1260	1.30
	1.8	2305	1355	1.79		1.8	1856	1308	1.35
	2.0	2224	1402	1.85		2.0	1798	1345	1.39
T4 C	0.2	2845	1079	1.52	T4 H	0.2	2845	1079	1.52
	0.4	2785	1114	1.56		0.4	2785	1114	1.56
	0.6	2723	1157	1.62		0.6	2723	1157	1.62
	0.8	2661	1191	1.67		0.8	2661	1191	1.67
	1.0	2612	1225	1.72		1.0	2612	1225	1.72
	1.2	2560	1261	1.77		1.2	2560	1261	1.77
	1.4	2509	1294	1.82		1.4	2509	1294	1.82
	1.6	2454	1331	1.87		1.6	2454	1331	1.87
	1.8	2393	1369	1.92		1.8	2393	1369	1.92
	2.0	2331	1412	1.98		2.0	2331	1412	1.98
T5 C	0.2	2939	1109	1.67	T5 H	0.2	2939	1109	1.67
	0.4	2881	1143	1.72		0.4	2881	1143	1.72
	0.6	2820	1183	1.78		0.6	2820	1183	1.78
	0.8	2764	1220	1.84		0.8	2764	1220	1.84
	1.0	2707	1254	1.89		1.0	2707	1254	1.89
	1.2	2661	1291	1.94		1.2	2661	1291	1.94
	1.4	2616	1322	1.99		1.4	2616	1322	1.99
	1.6	2573	1357	2.04		1.6	2573	1357	2.04
	1.8	2528	1398	2.10		1.8	2528	1398	2.10
	2.0	2483	1435	2.16		2.0	2483	1435	2.16

6 Ton - High Static Drive
Models: DRG0723W, DRG0724W, DRG0727W
125,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1	0.2	1425	681	0.24	T6	0.2	1731	774	0.40
	0.4	1317	751	0.27		0.4	1640	837	0.43
	0.6	1157	845	0.30		0.6	1558	896	0.46
	0.8	1056	903	0.32		0.8	1409	980	0.50
	1.0	944	968	0.35		1.0	1319	1030	0.53
	1.2	-	-	-		1.2	1236	1083	0.55
	1.4	-	-	-		1.4	1148	1136	0.58
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2	0.2	2060	875	0.61	T7	0.2	2060	875	0.61
	0.4	1973	931	0.65		0.4	1973	931	0.65
	0.6	1901	982	0.69		0.6	1901	982	0.69
	0.8	1833	1029	0.72		0.8	1833	1029	0.72
	1.0	1753	1089	0.76		1.0	1753	1089	0.76
	1.2	1610	1160	0.81		1.2	1610	1160	0.81
	1.4	1537	1207	0.85		1.4	1537	1207	0.85
	1.6	1460	1251	0.88		1.6	1460	1251	0.88
	1.8	1388	1298	0.91		1.8	1388	1298	0.91
	2.0	1307	1342	0.94		2.0	1307	1342	0.94
T3	0.2	2826	1124	1.48	T8	0.2	2517	1019	1.05
	0.4	2765	1165	1.54		0.4	2448	1067	1.10
	0.6	2701	1209	1.60		0.6	2374	1113	1.15
	0.8	2635	1247	1.65		0.8	2316	1153	1.19
	1.0	2580	1284	1.70		1.0	2260	1194	1.24
	1.2	2530	1319	1.74		1.2	2194	1235	1.28
	1.4	2471	1358	1.79		1.4	2126	1280	1.33
	1.6	2415	1398	1.85		1.6	2026	1340	1.39
	1.8	2352	1442	1.90		1.8	1894	1392	1.44
	2.0	2269	1491	1.97		2.0	1835	1431	1.48
T4	0.2	2903	1148	1.61	T9	0.2	2903	1148	1.61
	0.4	2842	1185	1.66		0.4	2842	1185	1.66
	0.6	2779	1231	1.73		0.6	2779	1231	1.73
	0.8	2715	1267	1.78		0.8	2715	1267	1.78
	1.0	2665	1303	1.83		1.0	2665	1303	1.83
	1.2	2612	1341	1.88		1.2	2612	1341	1.88
	1.4	2560	1377	1.93		1.4	2560	1377	1.93
	1.6	2504	1416	1.99		1.6	2504	1416	1.99
	1.8	2442	1456	2.04		1.8	2442	1456	2.04
	2.0	-	-	-		2.0	-	-	-
T5	0.2	2999	1180	1.78	T10	0.2	2999	1180	1.78
	0.4	2940	1216	1.83		0.4	2940	1216	1.83
	0.6	2878	1258	1.89		0.6	2878	1258	1.89
	0.8	2820	1298	1.95		0.8	2820	1298	1.95
	1.0	2762	1334	2.01		1.0	2762	1334	2.01
	1.2	2715	1373	2.07		1.2	2715	1373	2.07
	1.4	2669	1406	2.12		1.4	2669	1406	2.12
	1.6	2626	1444	2.17		1.6	2626	1444	2.17
	1.8	2580	1487	2.24		1.8	2580	1487	2.24
	2.0	-	-	-		2.0	-	-	-

Shaded area indicates air flow below 1800 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

APPENDIX A BLOWER PERFORMANCE DATA

6 Ton - High Static Drive
Models: DRG0723W, DRG0724W, DRG0727W
150,000 BTU
Down Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1 C	0.2	1397	640	0.23	T1 H	0.2	1696	728	0.37
	0.4	1291	706	0.25		0.4	1607	787	0.40
	0.6	1134	794	0.28		0.6	1527	842	0.43
	0.8	1035	849	0.30		0.8	1381	921	0.47
	1.0	925	910	0.32		1.0	1293	968	0.50
	1.2	-	-	-		1.2	1211	1018	0.52
	1.4	-	-	-		1.4	1125	1068	0.55
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2 C	0.2	2019	823	0.58	T2 H	0.2	2467	958	0.99
	0.4	1934	875	0.61		0.4	2399	1003	1.04
	0.6	1863	923	0.65		0.6	2327	1046	1.08
	0.8	1796	967	0.68		0.8	2270	1084	1.12
	1.0	1718	1024	0.72		1.0	2215	1122	1.16
	1.2	1578	1090	0.77		1.2	2150	1161	1.20
	1.4	1506	1135	0.80		1.4	2083	1203	1.25
	1.6	1431	1176	0.83		1.6	1985	1260	1.30
	1.8	1360	1220	0.86		1.8	1856	1308	1.35
	2.0	1281	1261	0.89		2.0	1798	1345	1.39
T3 C	0.2	2769	1057	1.40	T3 H	0.2	2467	958	0.99
	0.4	2710	1095	1.45		0.4	2399	1003	1.04
	0.6	2647	1136	1.50		0.6	2327	1046	1.08
	0.8	2582	1172	1.55		0.8	2270	1084	1.12
	1.0	2528	1207	1.59		1.0	2215	1122	1.16
	1.2	2479	1240	1.64		1.2	2150	1161	1.20
	1.4	2422	1277	1.69		1.4	2083	1203	1.25
	1.6	2367	1314	1.74		1.6	1985	1260	1.30
	1.8	2305	1355	1.79		1.8	1856	1308	1.35
	2.0	2224	1402	1.85		2.0	1798	1345	1.39
T4 C	0.2	2845	1079	1.52	T4 H	0.2	2845	1079	1.52
	0.4	2785	1114	1.56		0.4	2785	1114	1.56
	0.6	2723	1157	1.62		0.6	2723	1157	1.62
	0.8	2661	1191	1.67		0.8	2661	1191	1.67
	1.0	2612	1225	1.72		1.0	2612	1225	1.72
	1.2	2560	1261	1.77		1.2	2560	1261	1.77
	1.4	2509	1294	1.82		1.4	2509	1294	1.82
	1.6	2454	1331	1.87		1.6	2454	1331	1.87
	1.8	2393	1369	1.92		1.8	2393	1369	1.92
	2.0	2331	1412	1.98		2.0	2331	1412	1.98
T5 C	0.2	2939	1109	1.67	T5 H	0.2	2939	1109	1.67
	0.4	2881	1143	1.72		0.4	2881	1143	1.72
	0.6	2820	1183	1.78		0.6	2820	1183	1.78
	0.8	2764	1220	1.84		0.8	2764	1220	1.84
	1.0	2707	1254	1.89		1.0	2707	1254	1.89
	1.2	2661	1291	1.94		1.2	2661	1291	1.94
	1.4	2616	1322	1.99		1.4	2616	1322	1.99
	1.6	2573	1357	2.04		1.6	2573	1357	2.04
	1.8	2528	1398	2.10		1.8	2528	1398	2.10
	2.0	2483	1435	2.16		2.0	2483	1435	2.16

6 Ton - High Static Drive
Models: DRG0723W, DRG0724W, DRG0727W
150,000 BTU
Horizontal Flow

Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP	Speed Tap	External Static Pressure (ESP), in w.c.	SCFM	RPM	BHP
T1C	0.2	1425	681	0.24	T1H	0.2	1731	774	0.40
	0.4	1317	751	0.27		0.4	1640	837	0.43
	0.6	1157	845	0.30		0.6	1558	896	0.46
	0.8	1056	903	0.32		0.8	1409	980	0.50
	1.0	944	968	0.35		1.0	1319	1030	0.53
	1.2	-	-	-		1.2	1236	1083	0.55
	1.4	-	-	-		1.4	1148	1136	0.58
	1.6	-	-	-		1.6	-	-	-
	1.8	-	-	-		1.8	-	-	-
	2.0	-	-	-		2.0	-	-	-
T2C	0.2	2060	875	0.61	T2H	0.2	2517	1019	1.05
	0.4	1973	931	0.65		0.4	2448	1067	1.10
	0.6	1901	982	0.69		0.6	2374	1113	1.15
	0.8	1833	1029	0.72		0.8	2316	1153	1.19
	1.0	1753	1089	0.76		1.0	2260	1194	1.24
	1.2	1610	1160	0.81		1.2	2194	1235	1.28
	1.4	1537	1207	0.85		1.4	2126	1280	1.33
	1.6	1460	1251	0.88		1.6	2026	1340	1.39
	1.8	1388	1298	0.91		1.8	1894	1392	1.44
	2.0	1307	1342	0.94		2.0	1835	1431	1.48
T3C	0.2	2826	1124	1.48	T3H	0.2	2517	1019	1.05
	0.4	2765	1165	1.54		0.4	2448	1067	1.10
	0.6	2701	1209	1.60		0.6	2374	1113	1.15
	0.8	2635	1247	1.65		0.8	2316	1153	1.19
	1.0	2580	1284	1.70		1.0	2260	1194	1.24
	1.2	2530	1319	1.74		1.2	2194	1235	1.28
	1.4	2471	1358	1.79		1.4	2126	1280	1.33
	1.6	2415	1398	1.85		1.6	2026	1340	1.39
	1.8	2352	1442	1.90		1.8	1894	1392	1.44
	2.0	2269	1491	1.97		2.0	1835	1431	1.48
T4C	0.2	2903	1148	1.61	T4H	0.2	2903	1148	1.61
	0.4	2842	1185	1.66		0.4	2842	1185	1.66
	0.6	2779	1231	1.73		0.6	2779	1231	1.73
	0.8	2715	1267	1.78		0.8	2715	1267	1.78
	1.0	2665	1303	1.83		1.0	2665	1303	1.83
	1.2	2612	1341	1.88		1.2	2612	1341	1.88
	1.4	2560	1377	1.93		1.4	2560	1377	1.93
	1.6	2504	1416	1.99		1.6	2504	1416	1.99
	1.8	2442	1456	2.04		1.8	2442	1456	2.04
	2.0	-	-	-		2.0	-	-	-
T5C	0.2	2999	1180	1.78	T5H	0.2	2999	1180	1.78
	0.4	2940	1216	1.83		0.4	2940	1216	1.83
	0.6	2878	1258	1.89		0.6	2878	1258	1.89
	0.8	2820	1298	1.95		0.8	2820	1298	1.95
	1.0	2762	1334	2.01		1.0	2762	1334	2.01
	1.2	2715	1373	2.07		1.2	2715	1373	2.07
	1.4	2669	1406	2.12		1.4	2669	1406	2.12
	1.6	2626	1444	2.17		1.6	2626	1444	2.17
	1.8	2580	1487	2.24		1.8	2580	1487	2.24
	2.0	-	-	-		2.0	-	-	-

Shaded area indicates air flow below 1800 SCFM (300 SCFM/ton) that is not recommended for High Stage cooling or heating

APPENDIX B ELECTRICAL DATA

ELECTRICAL DATA

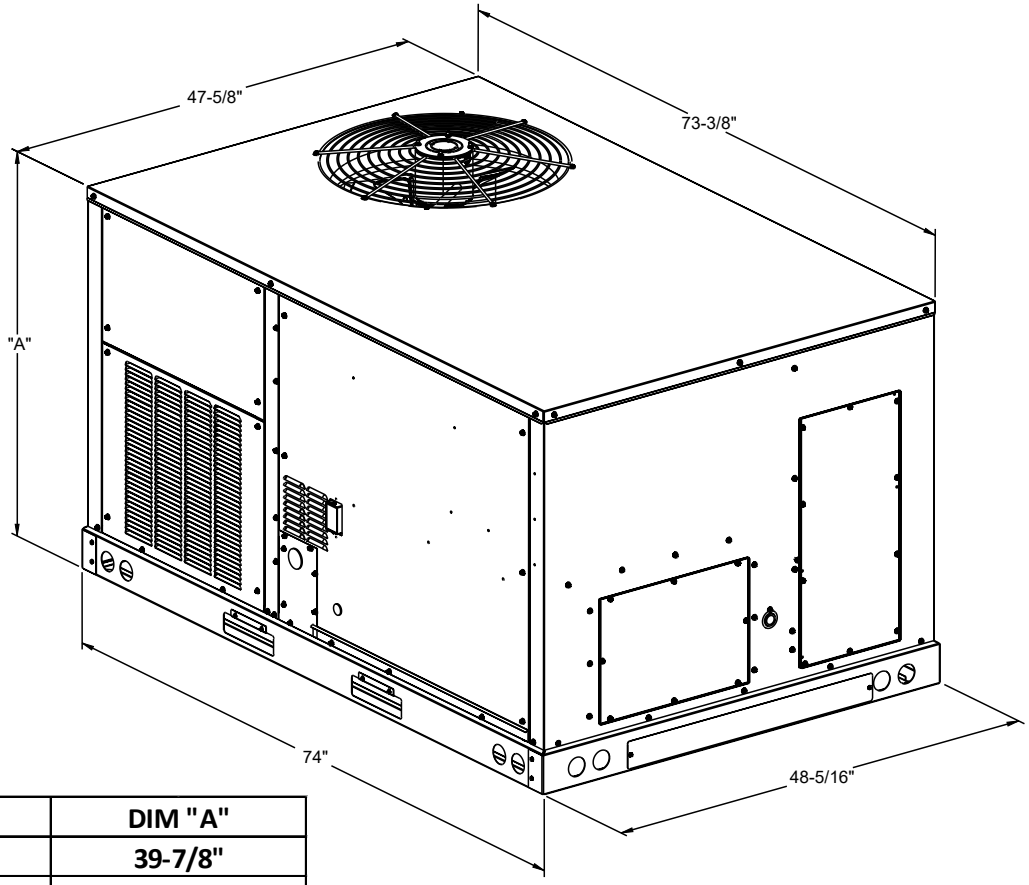
Model Number	Electrical Rating	Compressor			Outdoor Fan Motor			Indoor Fan Motor			Optional Electric Heat			Optional Powered Convienience	Optional Power	Power Supply	
		QTY	RLA	LRA	QTY	HP	FLA	Type	HP	FLA	Part #	KW*	FLA	FLA	FLA	MCA	MOP
DRG0361D	08/230/1/6	1	15.3	83	1	0.17	0.95	Direct Drive Standard	0.75	5.7	-	-	-	-	-	25.7/25.7	40/40
											-	-	-	9.6/8.7	-	35.3/34.4	50/45
											-	-	-	-	1.7/1.5	27.4/27.2	40/40
								Static			-	-	-	9.6/8.7	1.7/1.5	37.0/35.9	50/45
DRG0363D	08/230/3/6	1	11.6	73	1	0.17	0.95	Direct Drive Standard	0.75	5.7	-	-	-	-	-	21.2/21.2	30/30
											-	-	-	9.6/8.7	-	30.8/29.9	40/40
											-	-	-	-	1.7/1.5	22.9/22.7	30/30
								Static			-	-	-	9.6/8.7	1.7/1.5	32.5/31.4	40/40
DRG0363W	08/230/3/6	1	11.6	73	1	0.17	0.95	Direct Drive High Static	1.2	5	-	-	-	-	-	20.5/20.5	30/30
											-	-	-	9.6/8.7	-	30.1/29.2	40/40
											-	-	-	-	1.7/1.5	22.2/22.0	30/30
											-	-	-	9.6/8.7	1.7/1.5	31.8/30.7	40/40
DRG0364D	460/3/60	1	5.7	38	1	0.17	0.48	Direct Drive Standard	1.2	2.5	-	-	-	-	-	10.1	15
											-	-	-	4.3	-	14.4	20
											-	-	-	-	0.5	10.6	15
								Static			-	-	-	4.3	0.5	14.9	20
DRG0364W	460/3/60	1	5.7	38	1	0.17	0.48	Direct Drive High Static	1.2	2.5	-	-	-	-	-	10.1	15
											-	-	-	4.3	-	14.4	20
											-	-	-	-	0.5	10.6	15
											-	-	-	4.3	0.5	14.9	20
DRG0367D	575/3/60	1	4	25.6	1	0.17	0.39	Direct Drive Standard	1.2	2	-	-	-	-	-	7.36	15
											-	-	-	3.5	-	10.9	15
											-	-	-	-	0.6	7.96	15
								Static			-	-	-	3.5	0.6	11.5	15
DRG0367W	575/3/60	1	4	25.6	1	0.17	0.39	Direct Drive High Static	1.2	2	-	-	-	-	-	7.36	15
											-	-	-	3.5	-	10.9	15
											-	-	-	-	0.6	7.96	15
											-	-	-	3.5	0.6	11.5	15
DRG0481D	08/230/1/6	1	21.2	104	1	0.17	0.95	Direct Drive Standard	1	6.9	-	-	-	-	-	34.3/34.3	50/50
											-	-	-	9.6/8.7	-	43.9/43.0	60/60
											-	-	-	-	1.7/1.5	36.0/35.8	50/50
								Static			-	-	-	9.6/8.7	1.7/1.5	45.6/44.5	60/60
DRG0483D	08/230/3/6	1	14	83.1	1	0.17	0.95	Direct Drive Standard	1	6.9	-	-	-	-	-	25.4/25.4	35/35
											-	-	-	9.6/8.7	-	35.0/34.1	45/45
											-	-	-	-	1.7/1.5	27.1/26.9	35/35
								Static			-	-	-	9.6/8.7	1.7/1.5	36.7/35.6	45/45
DRG0483W	08/230/3/6	1	14	83.1	1	0.17	0.95	Direct Drive High Static	1.2	5	-	-	-	-	-	23.5/23.5	35/35
											-	-	-	9.6/8.7	-	33.1/32.2	45/45
											-	-	-	-	1.7/1.5	25.2/25.0	35/35
											-	-	-	9.6/8.7	1.7/1.5	34.8/33.7	45/45
DRG0484D	460/3/60	1	6.4	41	1	0.17	0.48	Direct Drive Standard	1.2	2.5	-	-	-	-	-	11	15
											-	-	-	4.3	-	15.3	20
											-	-	-	-	0.5	11.5	15
								Static			-	-	-	4.3	0.5	15.8	20
DRG0484W	460/3/60	1	6.4	41	1	0.17	0.48	Direct Drive High Static	1.2	2.5	-	-	-	-	-	11	15
											-	-	-	4.3	-	15.3	20
											-	-	-	-	0.5	11.5	15
											-	-	-	4.3	0.5	15.8	20
DRG0487D	575/3/60	1	4.6	33	1	0.17	0.39	Direct Drive Standard	1.2	2	-	-	-	-	-	8.08	15
											-	-	-	3.5	-	11.6	15
											-	-	-	-	0.6	8.68	15
								Static			-	-	-	3.5	0.6	12.2	15

APPENDIX B ELECTRICAL DATA

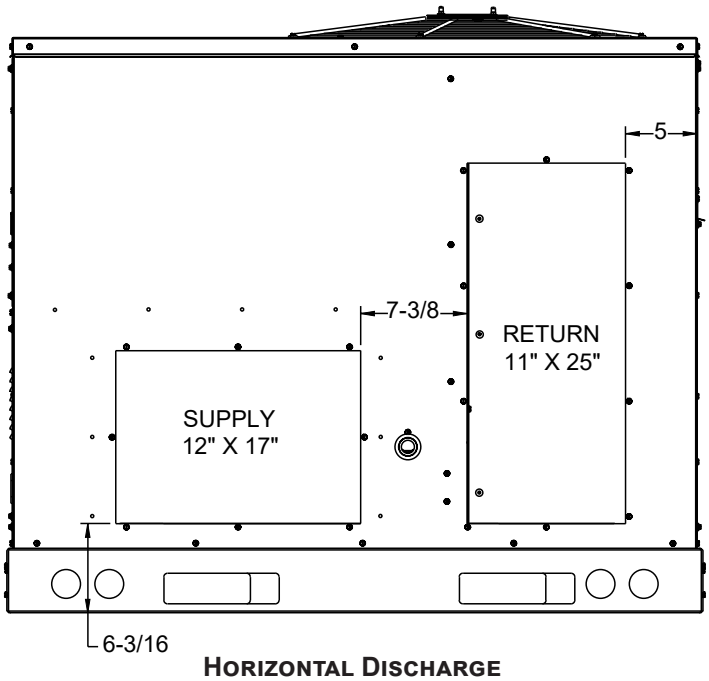
ELECTRICAL DATA

Model Number	Electrical Rating	Compressor			Outdoor Fan Motor			Indoor Fan Motor			Optional Electric Heat			Optional Powered Convienience	Optional Power	Power Supply	
		QTY	RLA	LRA	QTY	HP	FLA	Type	HP	FLA	Part #	KW*	FLA	FLA	FLA	MCA	MOP
DRG0487W	575/3/60	1	4.6	33	1	0.17	0.39	Direct	1.2	2	-	-	-	-	-	8.08	15
								Drive			-	-	-	3.5	-	11.6	15
								High			-	-	-	-	0.6	8.68	15
								Static			-	-	-	3.5	0.6	12.2	15
DRG0601D	08/230/1/6	1	26.9	139.9	1	0.33	2.6	Direct	1	6.9	-	-	-	-	-	43.2/43.2	70/70
								Drive			-	-	-	9.6/8.7	-	52.8/51.9	70/70
								Standard			-	-	-	-	1.7/1.5	44.9/44.7	70/70
								Static			-	-	-	9.6/8.7	1.7/1.5	54.5/53.4	70/70
DRG0603D	08/230/3/6	1	16.2	110	1	0.33	2.6	Direct	1	6.9	-	-	-	-	-	29.8/29.8	45/45
								Drive			-	-	-	9.6/8.7	-	39.4/38.5	50/50
								Standard			-	-	-	-	1.7/1.5	31.5/31.3	45/45
								Static			-	-	-	9.6/8.7	1.7/1.5	41.1/40.0	50/50
DRG0603W	08/230/3/6	1	16.2	110	1	0.33	2.6	Direct	2.3	7.7	-	-	-	-	-	30.6/30.6	45/45
								Drive			-	-	-	9.6/8.7	-	40.2/39.3	50/50
								High			-	-	-	-	1.7/1.5	32.3/32.1	45/45
								Static			-	-	-	9.6/8.7	1.7/1.5	41.9/40.8	50/50
DRG0604D	460/3/60	1	7.6	52	1	0.33	1.6	Direct	1.2	2.5	-	-	-	-	-	13.6	20
								Drive			-	-	-	4.3	-	17.9	25
								Standard			-	-	-	-	0.5	14.1	20
								Static			-	-	-	4.3	0.5	18.4	25
DRG0604W	460/3/60	1	7.6	52	1	0.33	1.6	Direct	2.3	4.5	-	-	-	-	-	15.6	20
								Drive			-	-	-	4.3	-	19.9	25
								High			-	-	-	-	0.5	16.1	20
								Static			-	-	-	4.3	0.5	20.4	25
DRG0607D	575/3/60	1	5.3	38.9	1	0.33	2.6	Direct	1.2	2	-	-	-	-	-	11.3	15
								Drive			-	-	-	3.5	-	14.8	20
								Standard			-	-	-	-	0.6	11.9	15
								Static			-	-	-	3.5	0.6	15.4	20
DRG0607W	575/3/60	1	5.3	38.9	1	0.33	2.6	Direct	2.3	3.8	-	-	-	-	-	13.1	15
								Drive			-	-	-	3.5	-	16.6	20
								High			-	-	-	-	0.6	13.7	15
								Static			-	-	-	3.5	0.6	17.2	20
DRG0723D	08/230/3/6	1	17.6	136	1	0.33	2	Direct	1.2	5	-	-	-	-	-	29.0/29.0	45/45
								Drive			-	-	-	9.6/8.7	-	38.6/37.7	50/50
								Standard			-	-	-	-	1.7/1.5	30.7/30.5	45/45
								Static			-	-	-	9.6/8.7	1.7/1.5	40.3/39.2	50/50
DRG0723W	08/230/3/6	1	17.6	136	1	0.33	2	Direct	2.3	7.7	-	-	-	-	-	31.7/31.7	45/45
								Drive			-	-	-	9.6/8.7	-	41.3/40.4	50/50
								High			-	-	-	-	1.7/1.5	33.4/33.2	45/45
								Static			-	-	-	9.6/8.7	1.7/1.5	43.0/41.9	50/50
DRG0724D	460/3/60	1	8.5	66.1	1	0.33	0.85	Direct	1.2	2.5	-	-	-	-	-	13.9	20
								Drive			-	-	-	4.3	-	18.2	25
								Standard			-	-	-	-	0.5	14.4	20
								Static			-	-	-	4.3	0.5	18.7	25
DRG0724W	460/3/60	1	8.5	66.1	1	0.33	0.85	Direct	2.3	4.5	-	-	-	-	-	15.9	20
								Drive			-	-	-	4.3	-	20.2	25
								High			-	-	-	-	0.5	16.4	20
								Static			-	-	-	4.3	0.5	20.7	25
DRG0727D	575/3/60	1	6.3	55.3	1	0.33	0.67	Direct	1.2	2	-	-	-	-	-	10.6	15
								Drive			-	-	-	3.5	-	14.1	20
								Standard			-	-	-	-	0.6	11.2	15
								Static			-	-	-	3.5	0.6	14.7	20
DRG0727W	575/3/60	1	6.3	55.3	1	0.33	0.67	Direct	2.3	3.8	-	-	-	-	-	12.4	15
								Drive			-	-	-	3.5	-	15.9	20
								High			-	-	-	-	0.6	13	15
								Static			-	-	-	3.5	0.6	16.5	20

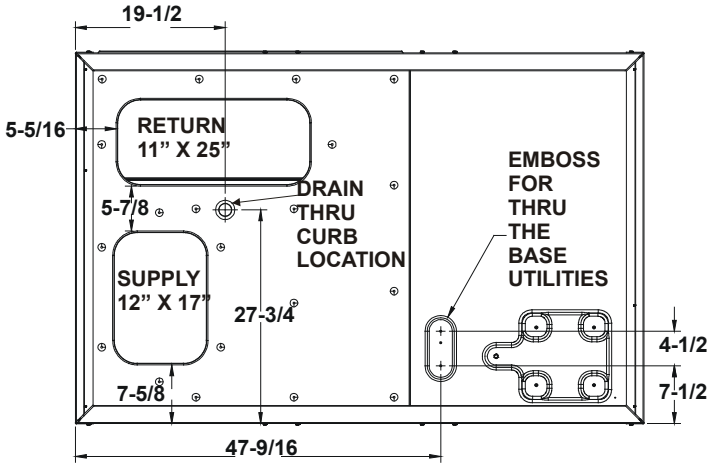
APPENDIX C UNIT DIMENSIONS



MODEL SIZE	DIM "A"
3 TON	39-7/8"
4 & 5 TON	43-1/2"
6 TON	53-3/4"



HORIZONTAL DISCHARGE



BOTTOM VIEW OF UNIT

VERTICAL DISCHARGE

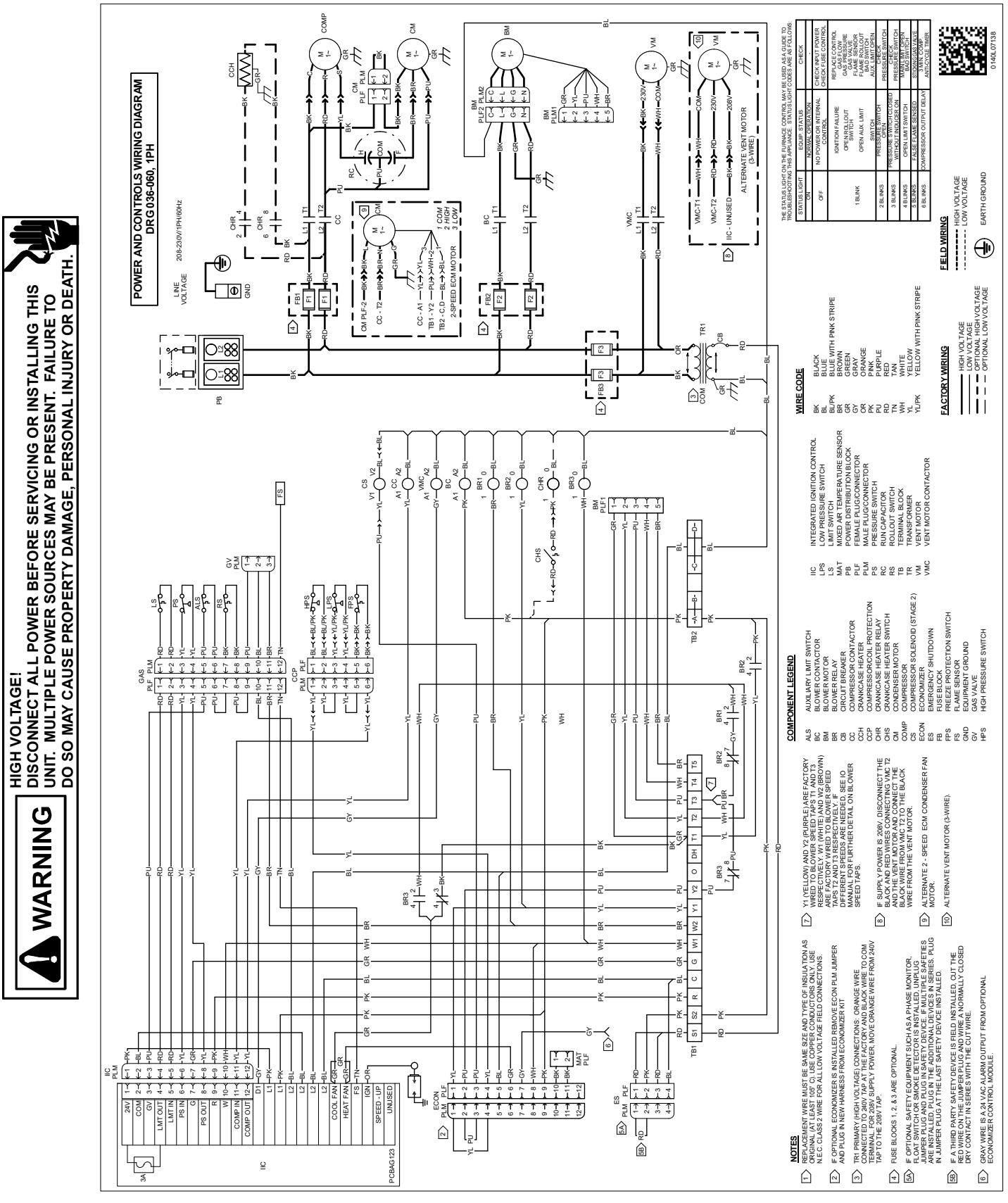
NOTE: REFER TO IOD-7082 INCLUDED IN THE LITERATURE PACK FOR INSTALLING HORIZONTAL DUCT COVERS.

APPENDIX D MIN-MAX AIRFLOW

AIR FLOW RANGE FOR HIGH STAGE

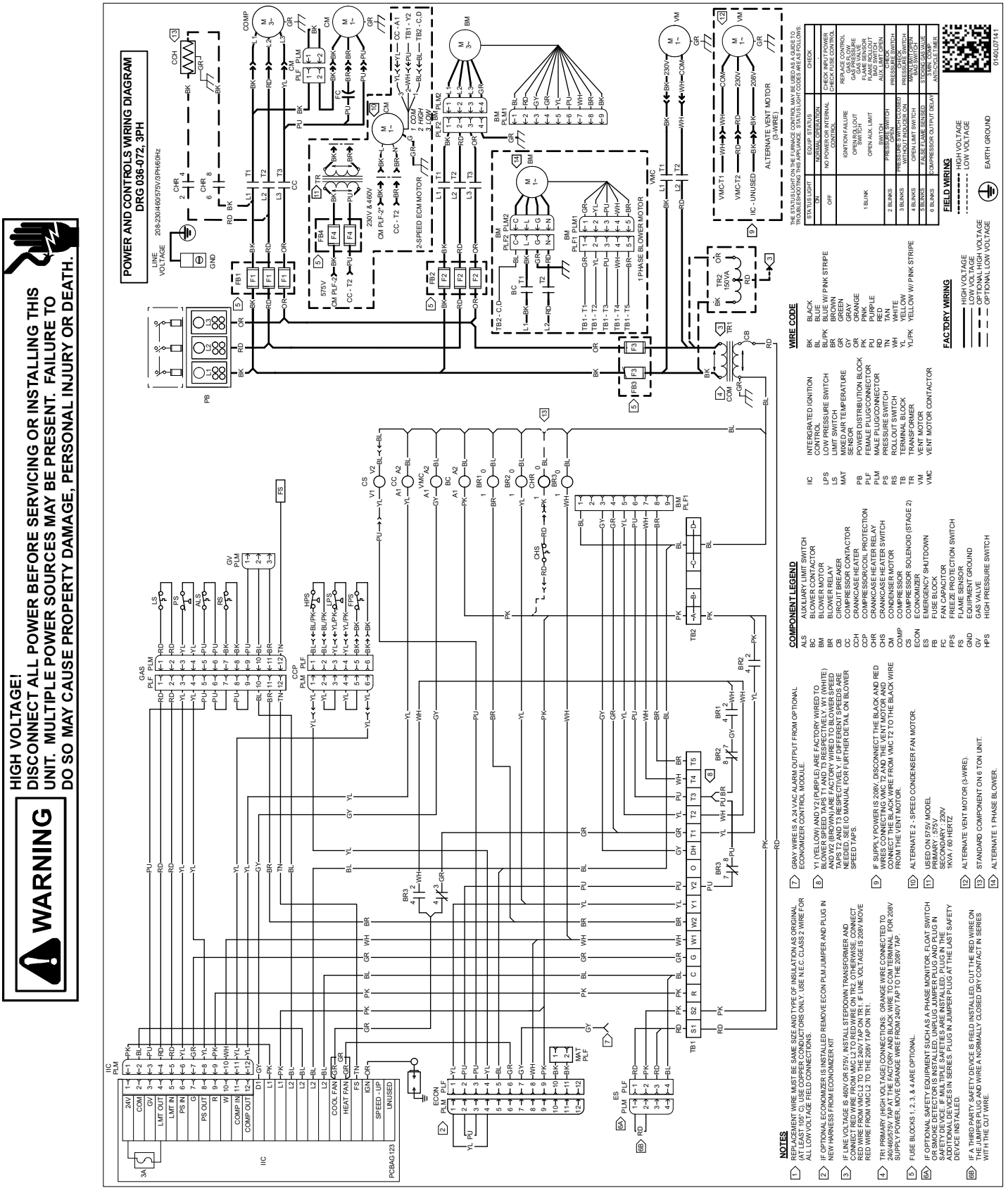
UNIT	HEAT RANGE	HIGH FIRE RATE BTU/HR	HEATING MINIMUM SCFM	COOLING MINIMUM SCFM	MAXIMUM SCFM
DRG036	LOW	45,000	750	900	1500
	MEDIUM	70,000	950		
	HIGH	115,000	1150		
DRG048	LOW	70,000	950	1200	2000
	MEDIUM	115,000	1325		
	HIGH	140,000	1500		
DRG060	LOW	70,000	950	1500	2500
	MEDIUM	115,000	1150		
	HIGH	140,000	1615		
DRG072	LOW	70,000	950	1800	3000
	MEDIUM	125,000	1565		
	HIGH	150,000	1730		

DRG 1 PHASE WIRING DIAGRAM



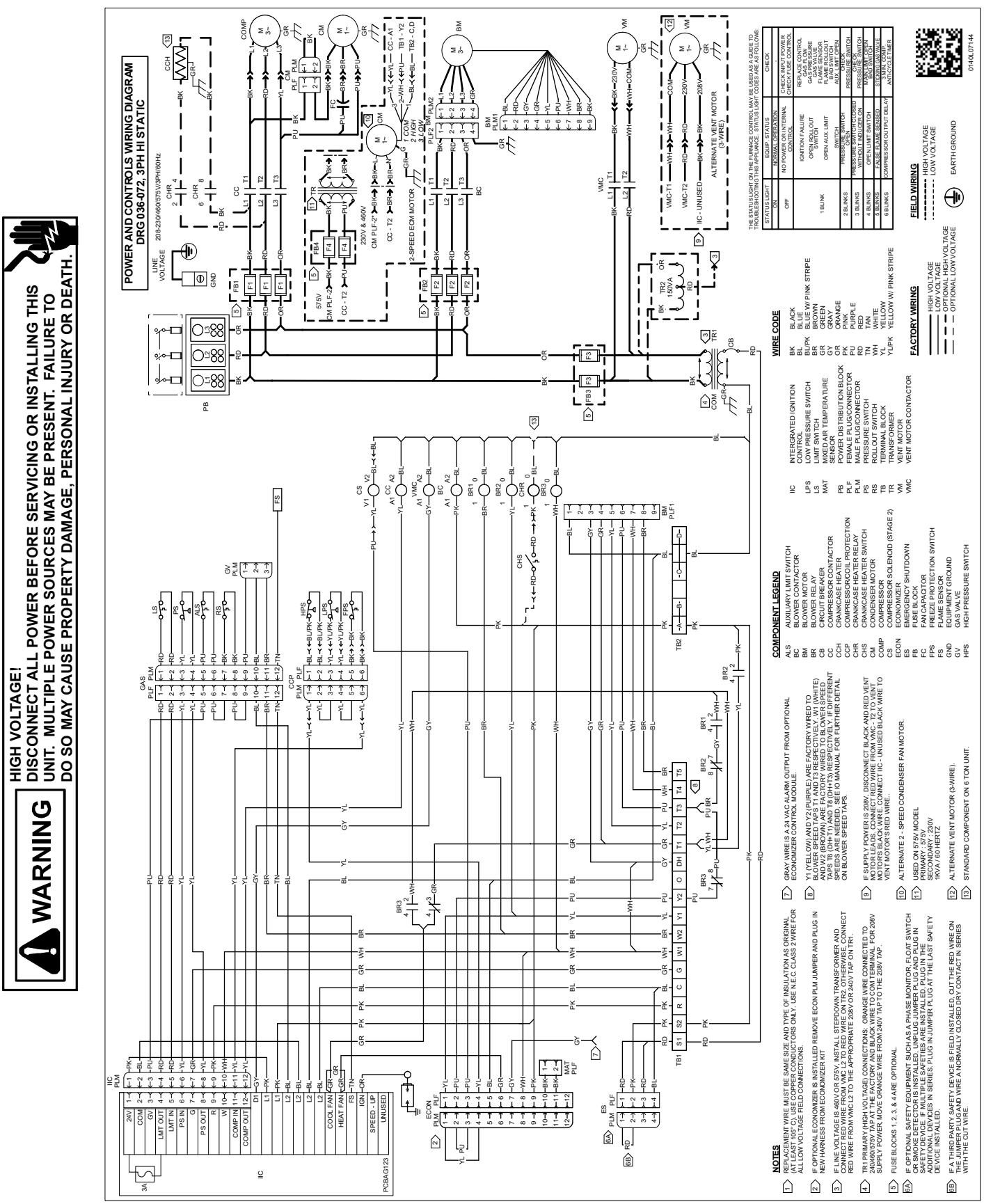
Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

DRG 3 PHASE WIRING DIAGRAM



Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

DRG 3 PHASE WIRING DIAGRAM



Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

Start-up Checklist

**Store in job file*

Date: _____ Location: _____

Model Number: _____ _____

Serial Number: _____ _____

Technician: _____ Unit #: _____

Pre Start-Up

(Check each item as completed)

- ☐ Verify all packaging material has been removed.
- ☐ Remove all shipping brackets per installation instructions.
- ☐ Verify the job site voltage agrees with the unit serial plate.
- ☐ Verify condensate connection is installed per installation instructions.
- ☐ Verify proper clearance around the unit for safety, service, maintenance and proper unit operation.
- ☐ Verify proper weatherproofing of all ductwork, roof curbs and electrical connections.
- ☐ Check that the flue screen is in place.
- ☐ Check gas piping for leaks.
- ☐ Verify gas pressure to the unit is within the range specified on the serial plate.
- ☐ Check to ensure that all fans, pulleys and wheels are secure.
- ☐ Check for proper belt tension and alignment per installation instructions.
- ☐ Check refrigerant piping for rubbing and leaks. *Repair if necessary.*
- ☐ Check unit wiring to ensure it is not in contact with refrigerant piping or sharp metal edges.
- ☐ Check all electrical connections and terminals. *Tighten as needed.*
- ☐ Verify that the crankcase heaters have been energized for 24 hours.
- ☐ Verify the scroll compressor(s) are rotating in the right direction.
- ☐ Verify all accessories are installed and operating correctly.
- ☐ Check filters and replace if necessary.
- ☐ Verify the installation of the thermostat.

9/2014

Start-up Checklist

Start-Up

(Insert the values as each item is completed.)

ELECTRICAL

Supply Voltage	L1 - L2	_____	L2 - L3	_____	L3 - L1	_____	
Circuit 1 Compressor Amps	L1	_____	L2	_____	L3	_____	
Circuit 2 Compressor Amps	L1	_____	L2	_____	L3	_____	
Blower Amps	L1	_____	L2	_____	L3	_____	
Condenser Fan Amps	Fan 1	_____	Fan 2	_____	Fan 3	_____	

BLOWER EXTERNAL STATIC PRESSURE

Return Air Static Pressure	_____	IN. W.C.
Supply Air Static Pressure	_____	IN. W.C.
Total External Static Pressure	_____	IN. W.C.
Blower Wheel RPM	_____	RPM

TEMPERATURES

Outdoor Air Temperature	_____	DB	_____	WB
Return Air Temperature	_____	DB	_____	WB
Cooling Supply Air Temperature	_____	DB	_____	WB
Heating Supply Air Temperature	_____	DB		

PRESSURES

Gas Inlet Pressure	_____	IN. W.C.		
Gas Manifold Pressure	_____	IN. W.C. (Low Fire)	_____	IN. W.C. (High Fire)
Suction Circuit 1	_____	PSIG	_____	°F
Superheat (Orifice System)			_____	°F
Suction Circuit 2	_____	PSIG	_____	°F
Superheat (Orifice System)			_____	°F
Discharge Circuit 1	_____	PSIG	_____	°F
Subcooling (TXV System)			_____	°F
Discharge Circuit 2	_____	PSIG	_____	°F
Subcooling (TXV System)			_____	°F

(HEAT PUMP ONLY)

Suction Circuit 1	_____	PSIG	_____	°F
Suction Circuit 2	_____	PSIG	_____	°F
Discharge Circuit 1	_____	PSIG	_____	°F
Discharge Circuit 2	_____	PSIG	_____	°F

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CUSTOMER FEEDBACK
Daikin is very interested in all product comments.
Please fill out the feedback form on the following link:
https://daikincomfort.com/contact-us
You can also scan the QR code on the right to be directed to the feedback page.

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