INSTALLATION INSTRUCTIONS

⚠WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer or equivalent, service agency, or the gas supplier

Table Of Contents

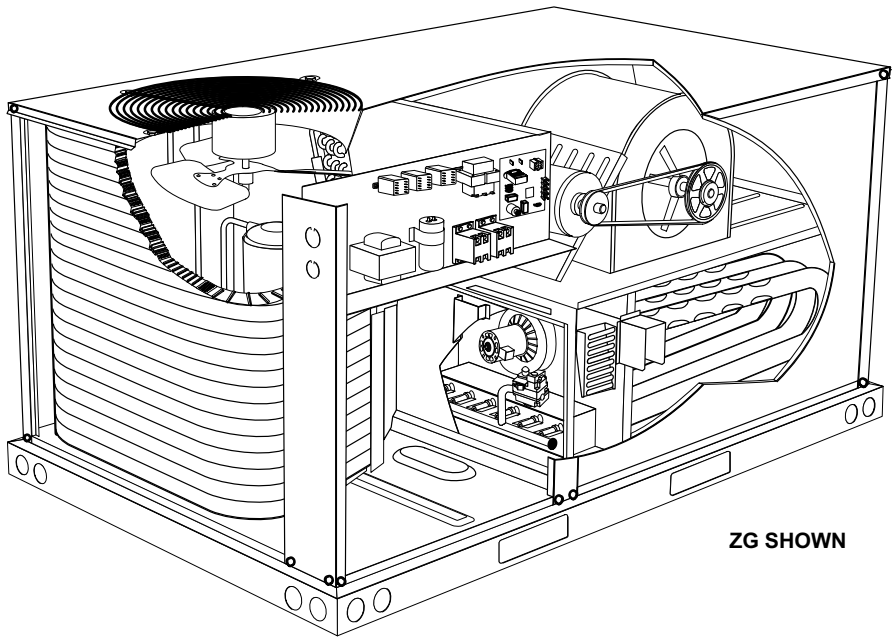
ZGB/ZCB036 3-Ton
ZGB/ZCB048 4-Ton
ZGB/ZCB060 5-Ton
ZGA/ZCA072 6-Ton
ZGB/ZCB074 6-Ton

GAS AND COOLING PACKAGED UNITS
507252-05
5/2019
Supersedes 507252-04

⚠CAUTION

As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

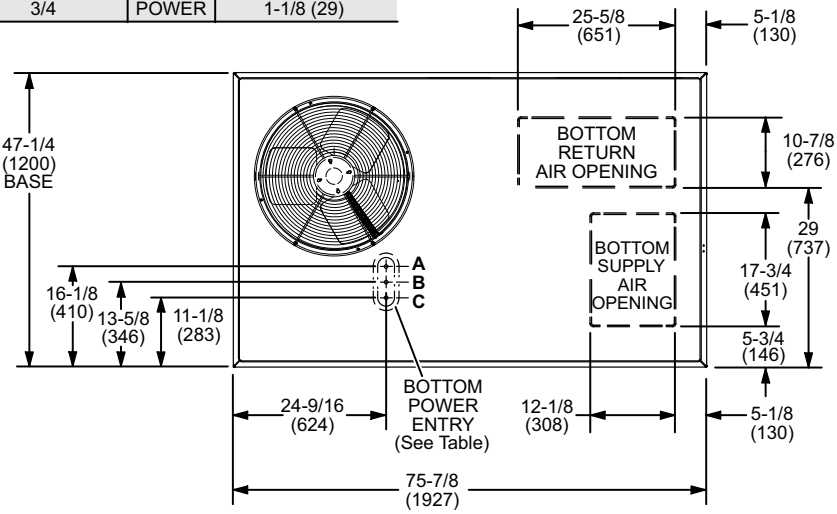


ZG SHOWN

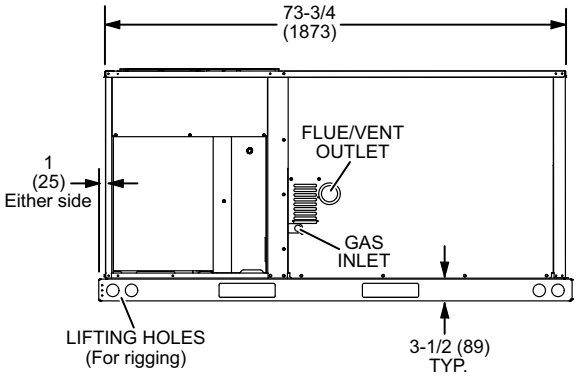
ZG/ZC 036, 048, 060, 072, 074 DIMENSIONS in. - Gas heat section shown

BOTTOM POWER ENTRY
Holes required for Optional Bottom Power Entry Kit

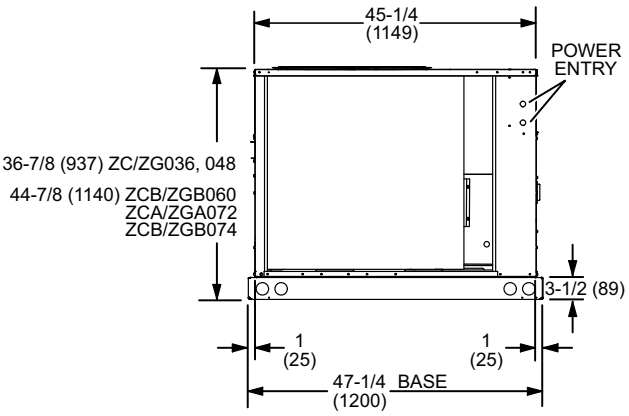
	Threaded Conduit Fittings (Provided in Kit)	Wire Use	Hole Diameter Required in Unit Base (Max.)
A	1/2	ACC.	7/8 (23)
B	1/2	24V	7/8 (23)
C	3/4	POWER	1-1/8 (29)



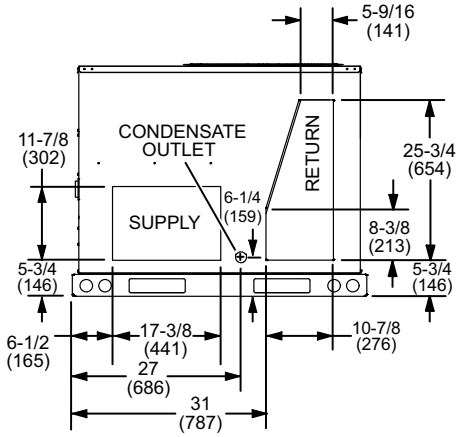
TOP VIEW (Base)



FRONT VIEW

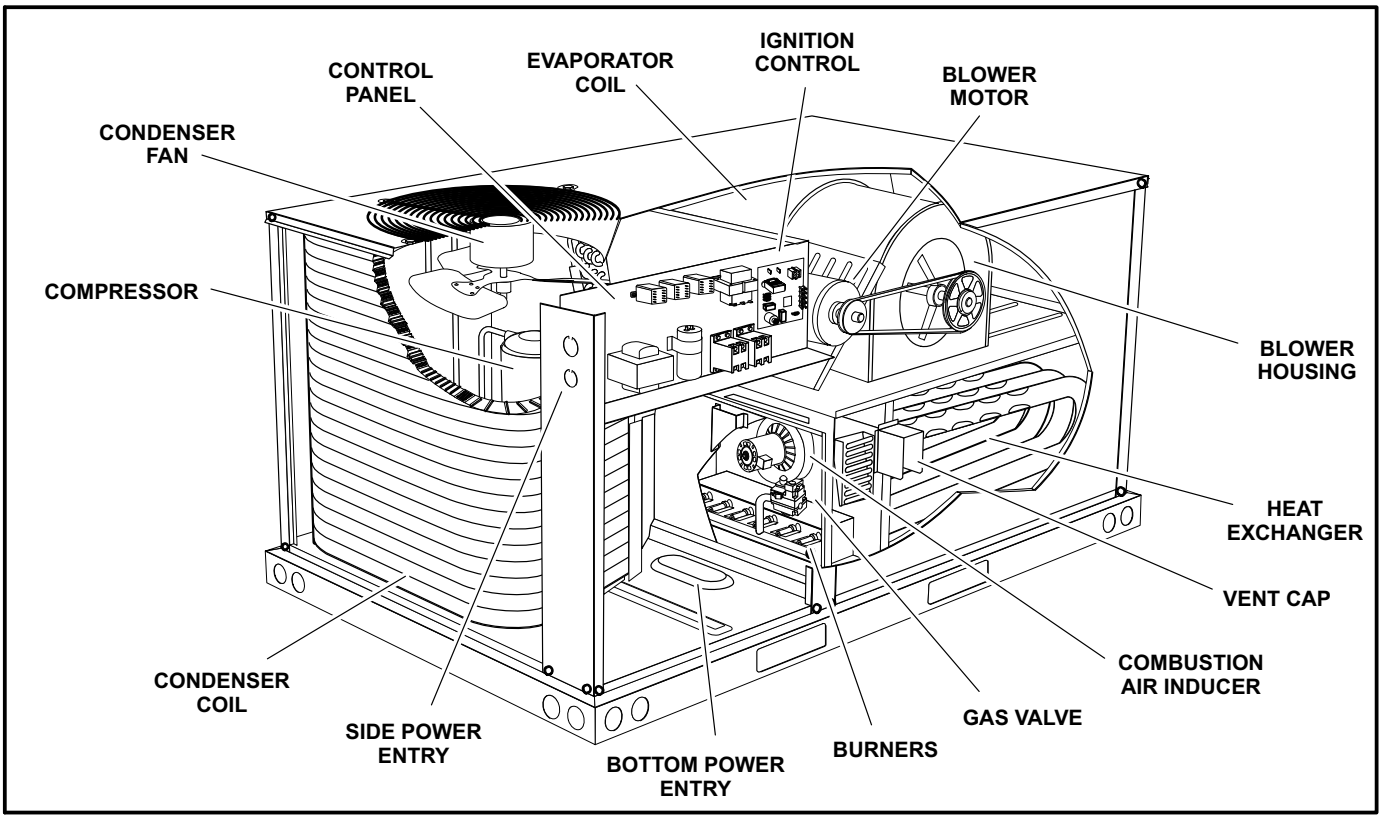


END VIEW

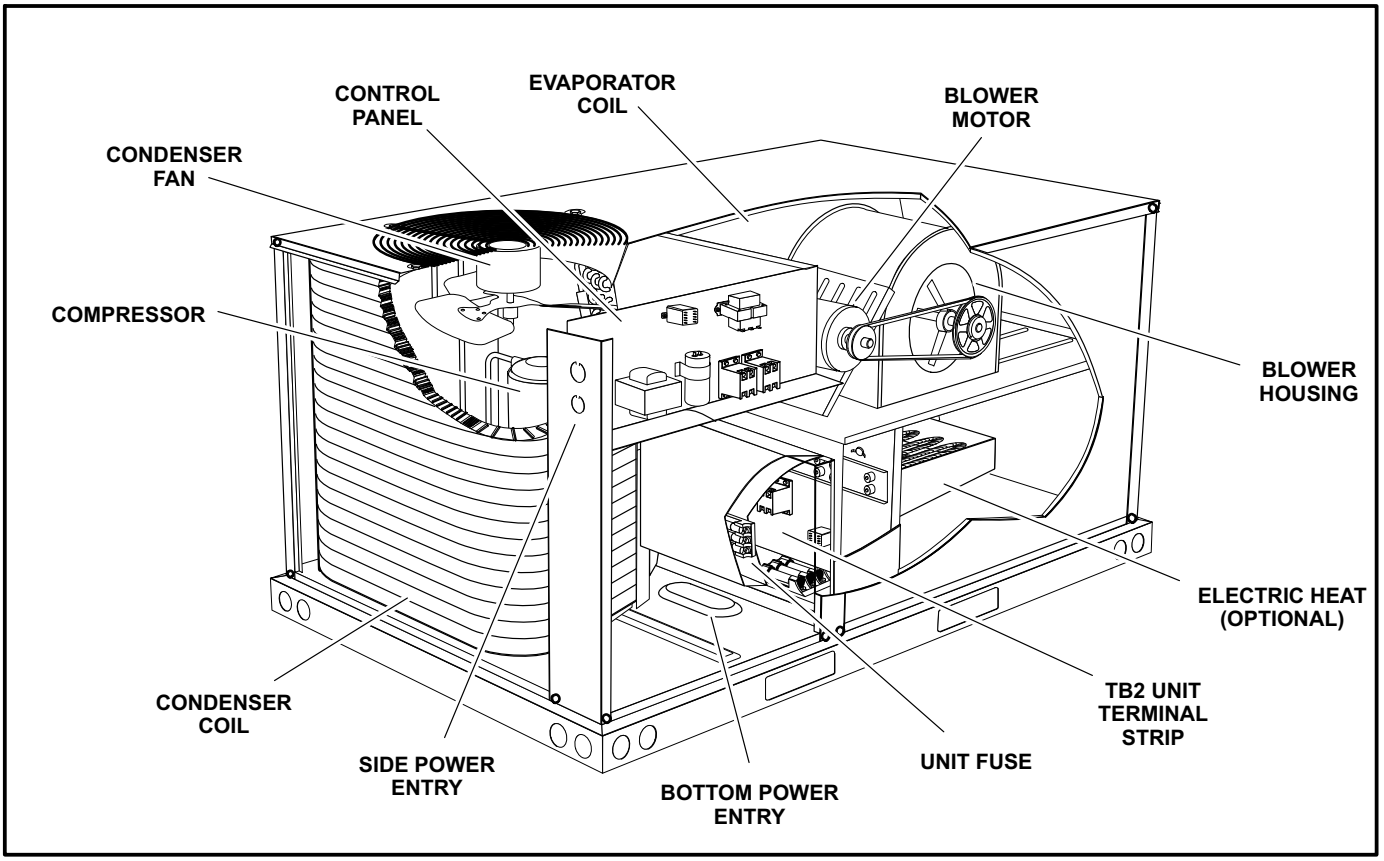


END VIEW

ZG 036, 048, 060, 072, 074 PARTS ARRANGEMENT



ZC 036, 048, 060, 072, 074 PARTS ARRANGEMENT



Shipping and Packing List

Package 1 of 1 contains:

1- Assembled unit

Check unit for shipping damage. Receiving party should contact last carrier immediately if shipping damage is found.

General

These instructions are intended as a general guide and do not supersede local codes in any way. Authorities having jurisdiction should be consulted before installation.

The ZG units are available in three heating inputs. The ZC cooling packaged rooftop unit is the same basic design as the ZG unit except for the heating section. Optional electric heat is available for ZC units. ZG and ZC units have identical refrigerant circuits with respective 3-, 4- 5- and 6-ton cooling capacities.

Availability of units and options varies by brand.

Requirements

See figure 1 for unit clearances.

⚠NOTICE

Roof Damage!
This system contains both refrigerant and oil. Some rubber roofing material may absorb oil, causing the rubber to swell. Bubbles in the rubber roofing material can cause leaks. Protect the roof surface to avoid exposure to refrigerant and oil during service and installation. Failure to follow this notice could result in damage to roof surface.

⚠WARNING

Electric shock hazard and danger of explosion. Can cause injury, death or product or property damage. Turn off gas and electrical power to unit before performing any maintenance or servicing operations on the unit. Follow lighting instructions attached to unit when putting unit back into operation and after service or maintenance.

⚠IMPORTANT

The Clean Air Act of 1990 bans the intentional venting of refrigerant (CFC's and HCFC's) as of July 1, 1992. Approved methods of recovery, recycling or reclaiming must be followed. Fines and/or incarceration may be levied for non-compliance.

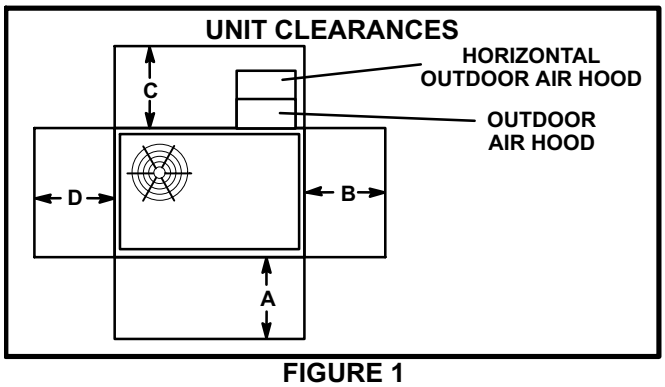


FIGURE 1

[1]Unit Clearance	A in.(mm)	B in.(mm)	C in.(mm)	D in.(mm)	Top Clearance
Service Clearance	36 (914)	36 (914)	36* (914)	36 (914)	Unob-structed
Clearance to Combustibles	36 (914)	1 (25)	1 (25)	1 (25)	Unob-structed
Minimum Opera-tion Clearance	36 (914)	36 (914)	36* (914)	36 (914)	Unob-structed

*Clearance is 60 in. (1524mm) in horizontal air flow applications.

Note - Entire perimeter of unit base requires support when elevated above mounting surface.

[1] **Service Clearance** - Required for removal of serviceable parts.
Clearance to Combustibles - Required clearance to combustible material (gas units).
Minimum Operation Clearance - Required clearance for proper unit operation.

Use of this unit as a construction heater or air conditioner is not recommended during any phase of construction. Very low return air temperatures, harmful vapors and operation of the unit with clogged or misplaced filters will damage the unit.

If this unit has been used for heating or cooling of buildings or structures under construction, the following conditions must be met or the warranty will be void:

- A room thermostat must control the unit. The use of fixed jumpers that will provide continuous heating or cooling is not allowed.
- A pre-filter must be installed at the entry to the return air duct.
- The return air duct must be provided and sealed to the unit.
- Return air temperature range between 55°F (13°C) and 80°F (27°C) must be maintained.
- Air filters must be replaced and pre-filters must be removed upon construction completion.
- The input rate and temperature rise must be set per the unit rating plate.
- The heat exchanger, components, duct system, air filters and evaporator coil must be thoroughly cleaned following final construction clean-up.
- The unit operating conditions (including airflow, cooling operation, ignition, input rate, temperature rise and venting) must be verified according to these installation instructions.

Unit Support

In downflow discharge installations, install the unit on a non-combustible surface only. Unit may be installed on combustible surfaces when used in horizontal discharge applications or in downflow discharge applications when installed on a Z1CURB roof mounting frame.

NOTE - Securely fasten roof frame to roof per local codes.

⚠CAUTION

To reduce the likelihood of supply / return air by-pass and promote a proper seal with the RTU, duct work / duct drops / diffuser assemblies must be supported independently to the building structure.

A-Downflow Discharge Application

Roof Mounting with Z1CURB

1- The Z1CURB roof mounting frame must be installed, flashed and sealed in accordance with the instructions provided with the frame.

2- The Z1CURB roof mounting frame should be square and level to 1/16” per linear foot (5mm per linear meter) in any direction.

3- Duct must be attached to the roof mounting frame and not to the unit; supply and return plenums must be installed before setting the unit.

Installer's Roof Mounting Frame

Many types of roof frames can be used to install the unit depending upon different roof structures. Items to keep in mind when using the building frame or supports are:

1- The base is fully enclosed and not insulated, so an enclosed, insulated frame is required.

2- The frames or supports must be constructed with non-combustible materials and should be square and level to 1/16” per linear foot (5mm per linear meter) in any direction.

3- Frame or supports must be high enough to prevent any form of moisture from entering unit. Recommended minimum frame height is 14” (356mm).

4- Duct must be attached to the roof mounting frame and not to the unit. Supply and return plenums must be installed before setting the unit.

5- Units require support along all four sides of unit base. Supports must be constructed of steel or suitably treated wood materials.

NOTE-When installing a unit on a combustible surface for downflow discharge applications, a Z1CURB roof mounting frame is required.

B-Horizontal Discharge Applications

1- Specified installation clearances must be maintained when installing units. Refer to figure 1.

2- Top of support slab should be approximately 4” (102mm) above the finished grade and located so no run-off water from higher ground can collect around the unit.

3- Units require support along all four sides of unit base. Supports must be constructed of steel or suitably treated wood materials.

Duct Connection

All exterior ducts, joints and openings in roof or building walls must be insulated and weather-proofed with flashing and sealing compounds in accordance with applicable codes. Any duct passing through an unconditioned space must be insulated.

⚠CAUTION

In downflow applications, do not drill or punch holes in base of unit. Leaking in roof may occur if unit base is punctured.

Rigging Unit For Lifting

Rig unit for lifting by attaching four cables to holes in unit base rail. See figure 2.

1- Connect rigging to the unit base using both holes in each corner.

2- All panels must be in place for rigging.

3- Place field-provided H-style pick in place just above top edge of unit. Frame must be of adequate strength and length. (H-style pick prevents damage to unit.)

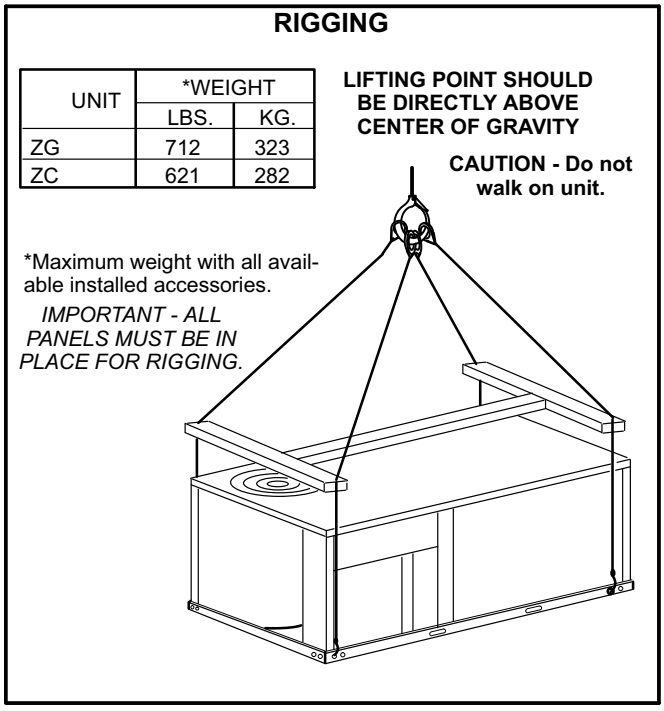


FIGURE 2

Horizontal Air Discharge

Unit is shipped with panels covering the horizontal supply and return air openings. See figure 3.

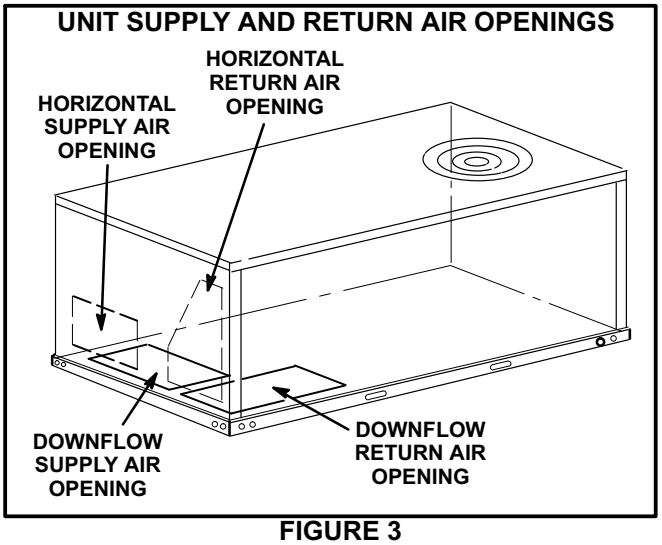


FIGURE 3

1- Remove horizontal covers and place a bead of silicone sealant on the underside of the duct cover flanges. See figure 4.

2- Position covers over downflow openings. Secure covers with self-drilling screws in at least two places on each cover. Drill through duct cover side into flange of base pan.

3- Place a bead of silicone between insulation and duct cover to seal in insulation edges. Let silicone dry before running gas or electric heat.

Units Equipped With An Optional Horizontal Economizer

1- Install the horizontal supply air cover over the down flow supply air opening as described above.

2- Leave the horizontal return air cover in place.

3- Locate the extra horizontal return cover that is included with the horizontal economizer kit. Install as described in previous section.

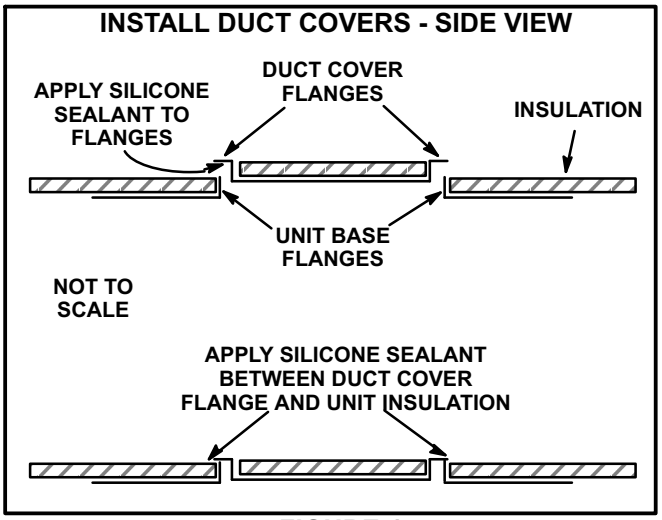


FIGURE 4

4- Install return air duct on the intake air side of the horizontal economizer. See figure 5.

5- Horizontal economizer and return air duct must be field-supported.

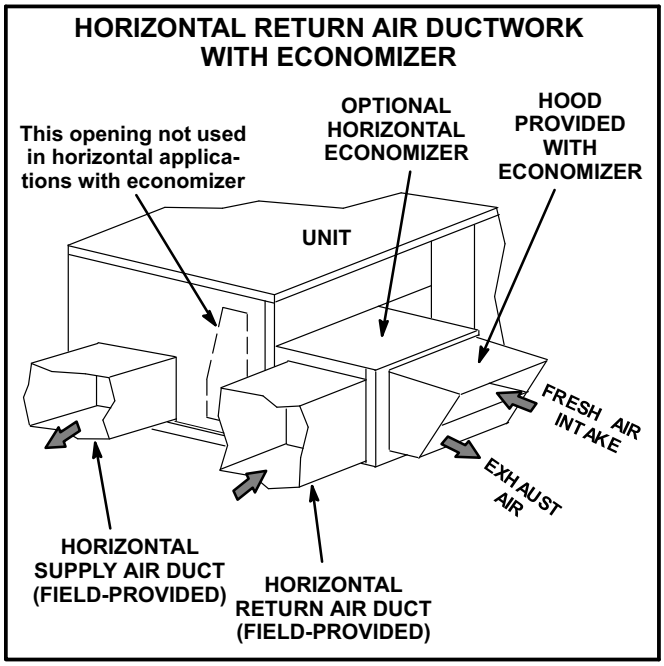


FIGURE 5

Condensate Drains

Make drain connection to the 1" N.P.T. drain coupling provided on unit.

Note - The drain pan is made with a glass reinforced engineered plastic capable of withstanding typical joint torque but can be damaged with excessive force. Tighten pipe nipple hand tight and turn an additional quarter turn.

A trap must be installed between drain connection and an open vent for proper condensate removal. See figure 6. It is sometimes acceptable to drain condensate onto the roof or grade; however, a tee should be fitted to the trap to direct condensate downward. The condensate line must be vented. Check local codes concerning condensate disposal. Refer to page 2 for condensate drain location.

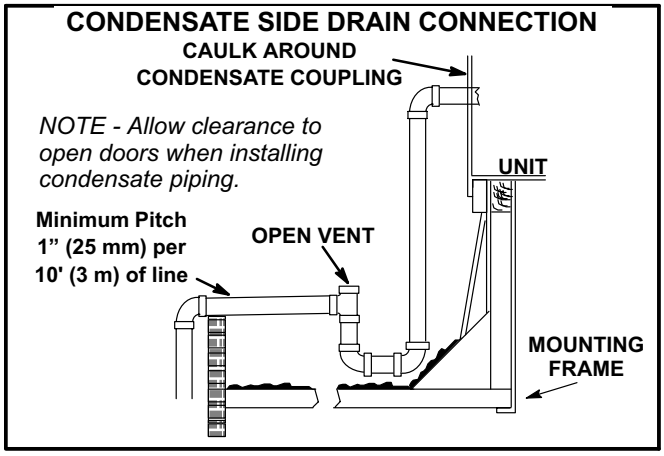


FIGURE 6

Connect Gas Piping (Gas Units)

Before connecting field-provided piping, check with gas company or authorities having jurisdiction for local code requirements. When installing gas supply piping, length of run from gas meter must be considered in determining pipe size for 0.5" w.c. (.12kPa) maximum pressure drop. Do not use supply pipe smaller than unit gas connection. Operating pressures at the unit gas connection must be as shown in table 1.

TABLE 1
OPERATING PRESSURE AT GAS CONNECTION "w.c.

	Natural Gas		LP / Propane Gas	
	Min.	Max.	Min.	Max.
036-074	4.5	10.5	11	13

When making piping connections a drip leg should be installed on vertical pipe runs to serve as a trap for sediment or condensate. A 1/8" N.P.T. plugged tap is located on gas valve for test gauge connection. Refer to Heating Start-Up section for tap location. Install a ground joint union between the gas control manifold and the main manual shut-off valve. See figure 7 for gas supply piping entering outside the unit. Piping must be installed according to figure 7 and 8 to allow the door to open properly.

Compounds used on threaded joints of gas piping shall be resistant to the action of liquified petroleum gases.

Pressure Test Gas Piping (Gas Units)

When pressure testing gas lines, the gas valve must be disconnected and isolated. Gas valves can be damaged if subjected to more than 0.5 psig (3.48kPa). See figure 9.

NOTE-Codes may require that manual main shut-off valve and union (furnished by installer) be installed in gas line external to unit. Union must be of the ground joint type.

After all connections have been made, check all piping connections for gas leaks. Also check existing unit gas connections up to the gas valve; loosening may occur during installation. Use a leak detection solution or other preferred means. Do not use matches candles or other sources of ignition to check for gas leaks.

⚠CAUTION

Some soaps used for leak detection are corrosive to certain metals. Carefully rinse piping thoroughly after leak test has been completed. Do not use matches, candles, flame or othe sources of ignition to check for gas leaks.

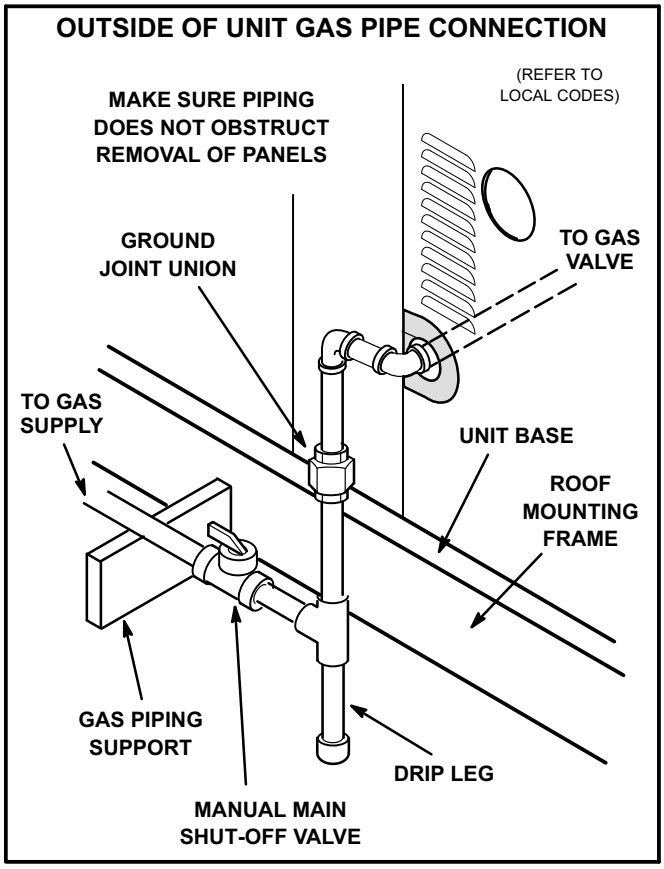


FIGURE 7

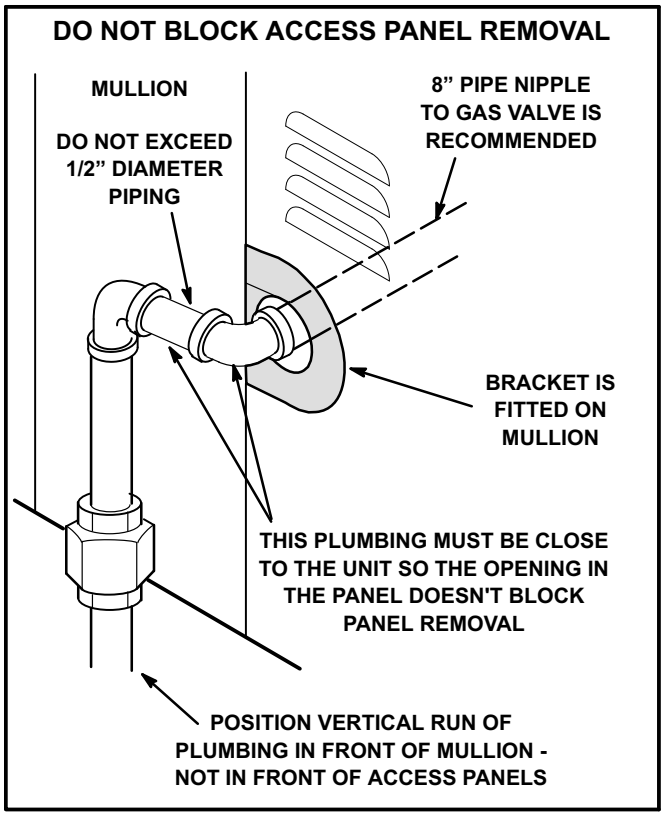


FIGURE 8

⚠WARNING

Danger of explosion. Can cause injury or product or property damage. Do not use matches, candles, flame or other sources of ignition to check for leaks.

NOTE-In case emergency shut down is required, turn off the main manual shut-off valve and disconnect main power to unit. These devices should be properly labeled by the installer.

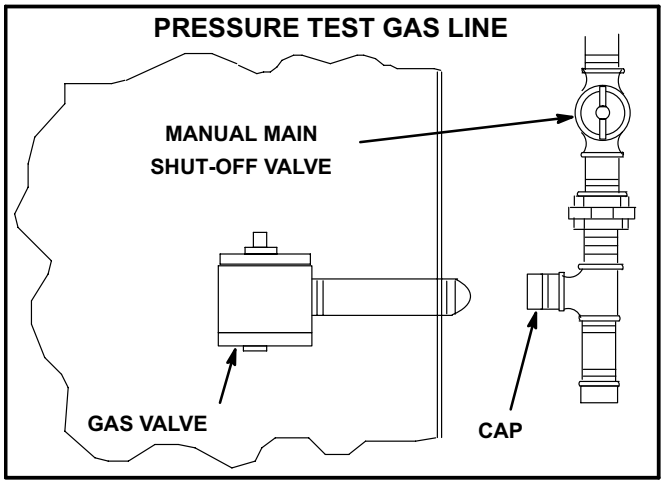


FIGURE 9

Install Vent Cap

Remove the vent cap from the shipping location and use existing screws to install the vent cap over the flue outlet. See figure 10. The installed vent cap is shown in the Parts Arrangement in the front of this manual.

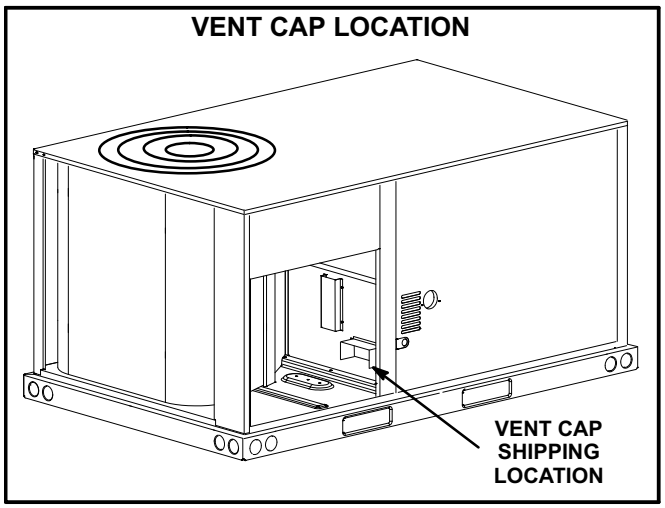


FIGURE 10

High Altitude Derate

Locate the high conversion sticker in the unit literature bag. Fill out the conversion sticker and affix next to the unit nameplate.

Refer to table 2 for high altitude adjustments.

TABLE 2
HIGH ALTITUDE DERATE

Altitude Ft.*	Gas Manifold Pressure
2000-4500	See Unit Nameplate
4500 And Above	Derate 2% / 1000 Ft. Above Sea Level

*Units installed at 0-2000 feet do not need to be modified.

NOTE - This is the only permissible derate for these units.

Electrical Connections

POWER SUPPLY

Do not apply power or close disconnect switch until installation is complete. Refer to start-up directions. Refer closely to unit wiring diagram.

Refer to unit nameplate for minimum circuit ampacity and maximum fuse size.

1- 1-Units are factory-wired for 230, 460, or 575 volt supply. **For 208V supply,** remove the insulated terminal cover from the 208V terminal on the control transformer. Move the wire from the transformer 240V terminal to the 208V terminal. Place the insulated terminal cover on the unused 240V terminal.

2- Route power through the side or bottom power entry area. For bottom power entry, a bottom power entry kit must be used. Connect power wiring to K1/K3 contactors in the control box. See figure 11 or 12. On ZC units equipped with electric heat, route power wiring to TB2; see parts arrangement for location. See unit wiring diagram.

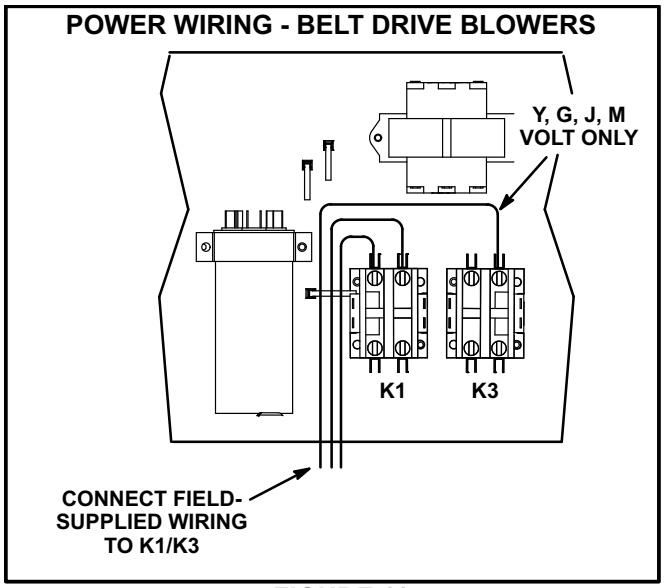


FIGURE 11

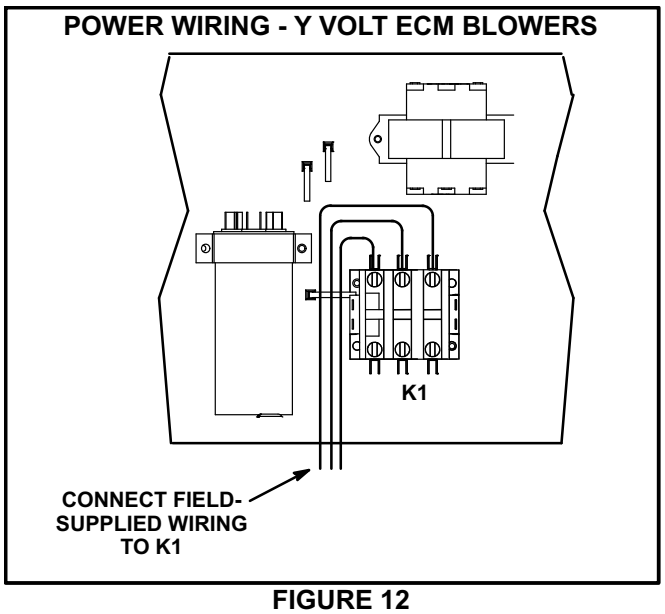


FIGURE 12

S4TCONTROL WIRING

A-Thermostat Location

Room thermostat mounts vertically on a standard 2" X 4" handy box or on any non-conductive flat surface.

Locate thermostat approximately 5 feet (1524mm) above the floor in an area with good air circulation at average temperature. Avoid locating the room thermostat where it might be affected by:

-drafts or dead spots behind doors and in corners

-hot or cold air from ducts

-radiant heat from sun or appliances

-concealed pipes and chimneys

B-Control Wiring

1- Route thermostat cable or wires from subbase to control panel (refer to unit dimensions to locate bottom and side power entry).

IMPORTANT - Unless field thermostat wires are rated for maximum unit voltage, they must be routed away from line voltage wiring.

Use18 AWG wire for all applications using remotely installed electro-mechanical and electronic thermostats.

2- Install thermostat assembly in accordance with instructions provided with thermostat.

3- Connect thermostat wiring to leads in control panel. Wire as shown in figure 13 for electro-mechanical and electronic thermostats. If using other temperature control devices or energy management systems see instructions and wiring diagram provided by manufacturer.

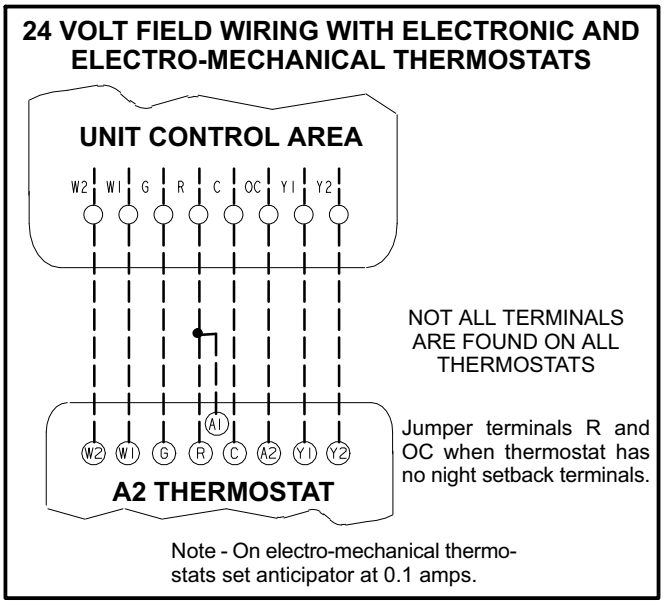


FIGURE 13

IMPORTANT-Terminal connections at the wall plate or subbase must be made securely. Loose control wire connections may allow unit to operate but not with proper response to room demand.

Blower Operation and Adjustments

Units are equipped with one of two factory-installed blower options. The ninth character in the model number identifies the blower as follows:

E= Three- , four- and five-ton units are equipped with a variable speed (ECM) direct drive blower.

B= Units are equipped with a single-stage belt drive blower

ZGB/ZCB074S4T units are equipped with two-stage blowers. The blower will operate at high speed with a Y2 thermostat demand and low speed with a Y1 thermostat demand. Low speed operation delivers approximately ⅔ of the air volume of high speed. Two-speed blower operation results in lower energy consumption.

⚠IMPORTANT

Three phase scroll compressors must be phased sequentially for correct compressor and blower rotation. Follow "COOLING START-UP" section of installation instructions to ensure proper compressor and blower operation.

A-Blower Operation

Initiate blower demand at thermostat according to instructions provided with thermostat. Unit will cycle on thermostat demand. The following steps apply to applications using a typical electro-mechanical thermostat.

1- Blower operation is manually set at the thermostat subbase fan switch. With fan switch in **ON** position, blowers will operate continuously.

2- With fan switch in **AUTO** position, the blowers will cycle with demand. Blowers and entire unit will be off when system switch is in **OFF** position.

B-Determining Unit CFM - Belt Drive Blowers

IMPORTANT - ZGB/ZCB074S4T blower (G thermostat) ***CFM MUST BE ADJUSTED IN HIGH SPEED***. Disconnect factory-installed J350 low speed connector from P350. Connectors are located near the bottom of the control box. Connect J351 high speed connector to P350. Once blower CFM is set, J350 can be reconnected to operate the blower on low during ventilation only demands. See table 3.

TABLE 3
TWO-SPEED BLOWER OPERATION
ZGB/ZCB074S4T UNITS

Thermostat	Blower Speed
G (P350/J350)*	Low
G (P350/J351)	High
W1	High
W2	High
Y1	Low
Y2	High

**Factory-installed jack/plug connection.*

1- The following measurements must be made with air filters in place.

2- With all access panels in place, measure static pressure external to unit (from supply to return). Blower performance data is based on static pressure readings taken in locations shown in figure 14.

Note - Static pressure readings can vary if not taken where shown.

3- Referring to belt drive blower tables, use static pressure and RPM readings to determine unit CFM. Use page 27 when installing units with any of the options or accessories listed. Refer to table 6 for minimum airflow when electric heat is installed.

4- The blower RPM can be adjusted at the motor pulley. Loosen Allen screw and turn adjustable pulley clockwise to increase CFM. Turn counterclockwise to decrease CFM. See figure 15. Do not exceed minimum and maximum number of pulley turns as shown in table 4.

TABLE 4
MINIMUM AND MAXIMUM PULLEY ADJUSTMENT

Belt	Min. Turns Open	Maxi. Turns Open
A Section	No minimum	5

5- *ZGB/ZCB074S4T Unit Only -*
If low speed during ventilation is desired, replace J351 connector with J350.

C-Determining Unit CFM - Direct Drive Blowers

1- Referring direct drive blower tables, use static pressure and RPM readings to determine unit CFM. Use page 27 when installing units with any of the options or accessories listed.

2- If the design CFM is too low, use figure 16 or 17 to move the control lead to a higher setting.

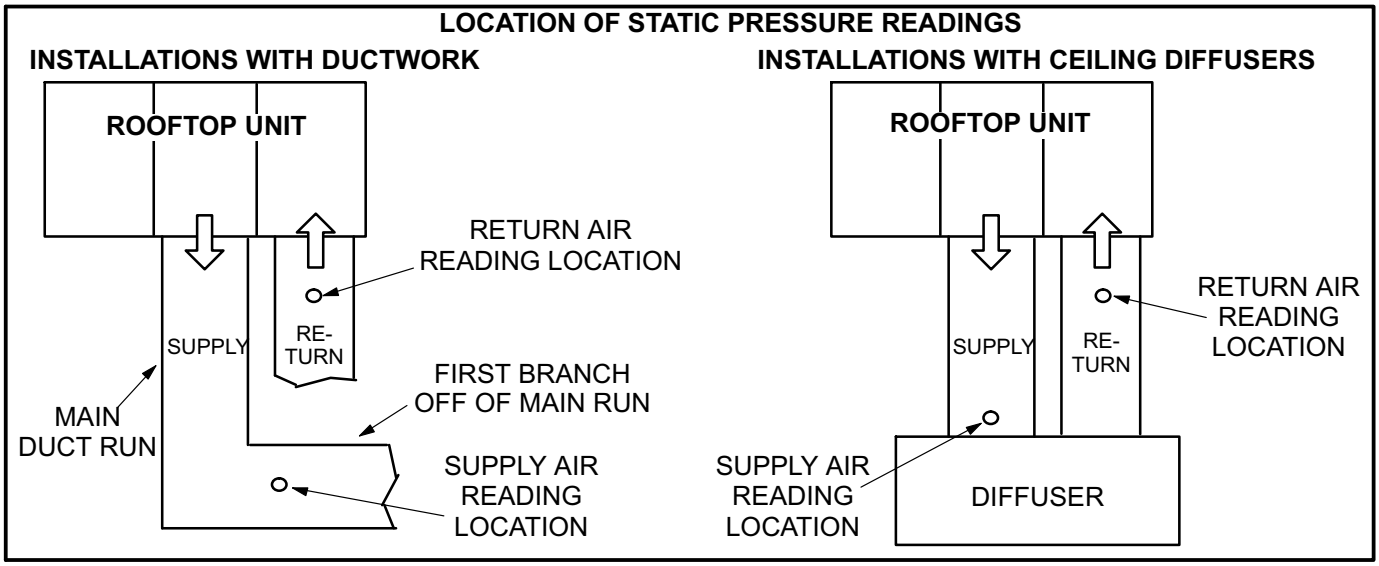


FIGURE 14

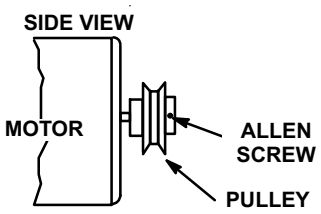
BLOWER ASSEMBLY

TO INCREASE BELT TENSION

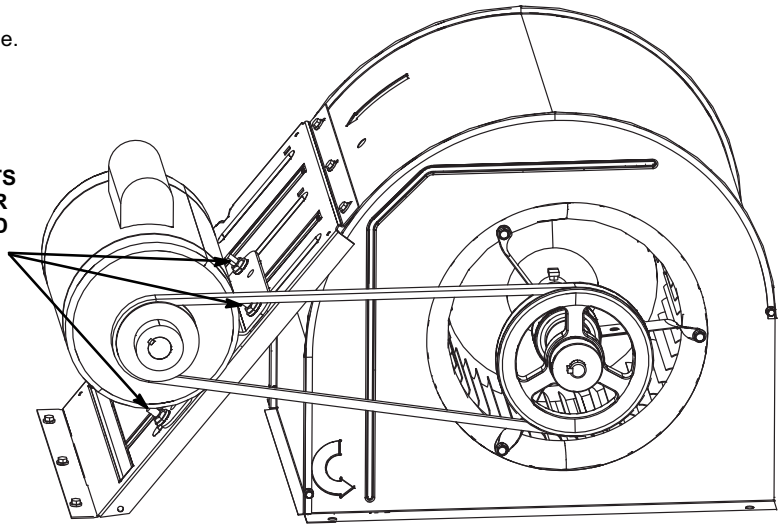
1-Loosen four bolts securing motor base to mounting frame.

2-Slide the motor downward to tighten the belt.

3-Tighten four bolts on motor base.



LOOSEN FOUR BOLTS AND SLIDE BLOWER MOTOR DOWNWARD TO TIGHTEN BELT

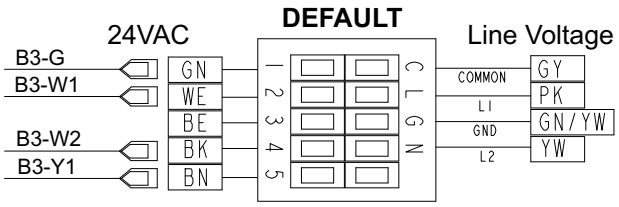


TO INCREASE CFM
LOOSEN ALLEN SCREW & TURN PULLEY CLOCKWISE

TO DECREASE CFM
TURN PULLEY COUNTERCLOCKWISE

FIGURE 15

DIRECT DRIVE BLOWER LEADS 1 PHASE



To increase the speed, move the lead labeled B3-W1 from the white (WE) wire to the blue (BE) wire.

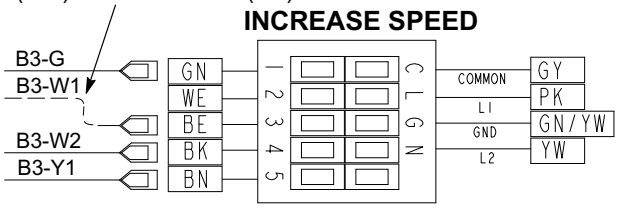
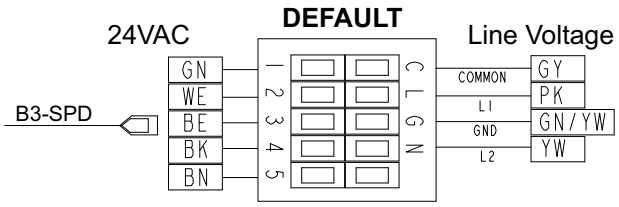


FIGURE 16

DIRECT DRIVE BLOWER LEADS 3 PHASE



To increase the speed, move lead labeled B3-SPD to the next highest terminal [from blue wire (BE) to black (BL) wire].

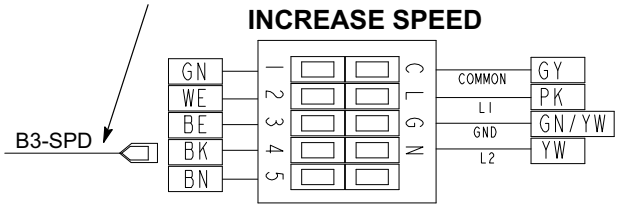


FIGURE 17

D-Blower Belt Adjustment

Maximum life and wear can be obtained from belts only if proper pulley alignment and belt tension are maintained. Tension new belts after a 24-48 hour period of operation. This will allow belt to stretch and seat into grooves. Make sure blower and motor pulley are aligned as shown in figure 18.

1- Loosen four bolts securing motor base to mounting frame. See figure 15.

2- *To increase belt tension -*
Slide blower motor downward to tighten the belt. This increases the distance between the blower motor and the blower housing.

3- *To loosen belt tension -*
Slide blower motor upward to loosen the belt. This decreases the distance between the blower motor and the blower housing.

4- Tighten four bolts securing motor base to the mounting frame.

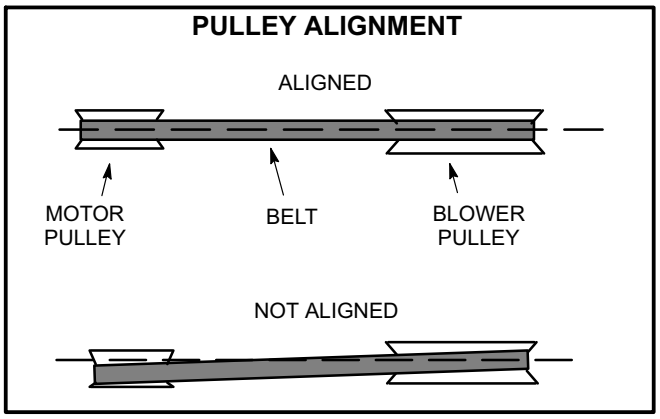


FIGURE 18

E-Check Belt Tension

Overtensioning belts shortens belt and bearing life. Check belt tension as follows:

1- Measure span length X. See figure 16.

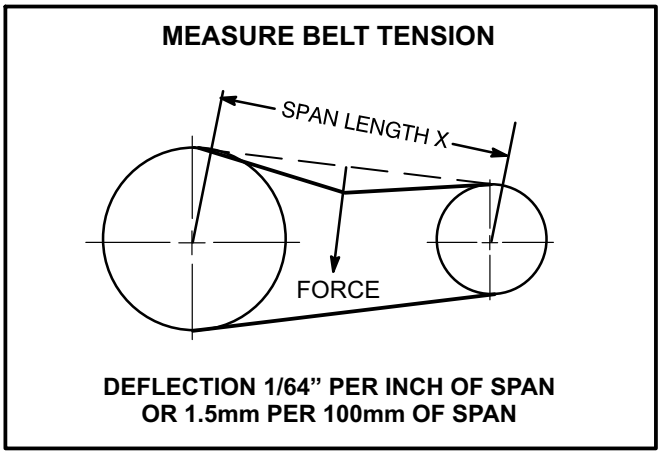


FIGURE 19

2- Apply perpendicular force to center of span (X) with enough pressure to deflect belt 1/64" for every inch of span length or 1.5mm per 100mm of span length.

Example: Deflection distance of a 40" span would be 40/64" or 5/8".

Example: Deflection distance of a 400mm span would be 6mm.

3- Measure belt deflection force. For a used belt, the deflection force should be 5 lbs. (35kPa). A new belt deflection force should be 7 lbs. (48kPa).

A force below these values indicates an undertensioned belt. A force above these values indicates an overtensioned belt.

F-Field-Furnished Blower Drives

For field-furnished blower drives, use belt drive blower tables to determine BHP and RPM required. Reference page 27 for additional air resistance and page 26 to determine the drive kit number. See table 5 for drive component manufacturers numbers.

BLOWER DATA - 3 TON DIRECT DRIVE - SINGLE PHASE

ZGB036S4 - BASE UNIT

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See Page 28 for wet coil and options/accessory air resistance data.

DOWNFLOW

External Static Press. in. w.g.	Blower Only			Low Speed						High Speed						Free Cooling		
	Low and High Speed: G (Pin 1)			1st Stage Heating: W1 (Pin 2) Cooling: Y1 (Pin 2 and 5)			2nd Stage Heating: W2 (Pin 2 and 4)			1st Stage Heating: W1 (Pin 3) 2nd Stage Heating: W2 (Pin 3 and 4)			Cooling: Y1 (Pin 3 and 5)			Low and High Speed: Y1 (Pin 1 and 5)		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	752	47	407	1127	142	623	1474	294	803	1664	404	887	1474	294	803	1474	294	803
0.1	694	53	482	1089	150	668	1445	304	835	1636	419	922	1445	304	835	1445	304	835
0.2	627	60	535	1049	158	713	1414	314	871	1613	430	949	1414	314	871	1414	314	871
0.3	560	66	602	1007	167	760	1389	323	898	1579	445	987	1389	323	898	1389	323	898
0.4	502	70	694	965	175	805	1350	335	940	1556	454	1011	1350	335	940	1350	335	940
0.5	- - -	- - -	- - -	923	183	849	1314	347	978	1522	466	1045	1314	347	978	1314	347	978
0.6	- - -	- - -	- - -	881	191	891	1287	356	1008	1488	475	1076	1287	356	1008	1287	356	1008
0.7	- - -	- - -	- - -	826	201	945	1251	367	1045	1442	485	1114	1251	367	1045	1251	367	1045
0.8	- - -	- - -	- - -	785	208	983	1219	377	1078	1408	490	1140	1219	377	1078	1219	377	1078
0.9	- - -	- - -	- - -	646	190	836	1181	389	1117	1363	494	1170	1181	389	1117	1181	389	1117
1.0	- - -	- - -	- - -	618	195	863	1147	400	1152	1317	494	1196	1147	400	1152	1147	400	1152

HORIZONTAL

External Static Press. in. w.g.	Blower Only			Low Speed						High Speed						Free Cooling		
	Low and High Speed: G (Pin 1)			1st Stage Heating: W1 (Pin 2) Cooling: Y1 (Pin 2 and 5)			2nd Stage Heating: W2 (Pin 2 and 4)			1st Stage Heating: W1 (Pin 3) 2nd Stage Heating: W2 (Pin 3 and 4)			Cooling: Y1 (Pin 3 and 5)			Low and High Speed: Y1 (Pin 1 and 5)		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	737	50	416	1255	179	671	1539	311	794	1666	386	850	1588	340	818	1539	311	794
0.1	676	56	485	1221	188	701	1509	321	827	1637	402	886	1560	350	849	1509	321	827
0.2	606	62	560	1179	199	749	1475	334	866	1614	414	914	1527	363	885	1475	334	866
0.3	536	68	628	1138	209	795	1446	344	896	1580	430	954	1493	376	921	1446	344	896
0.4	475	73	683	1096	219	840	1411	357	935	1545	445	991	1460	388	958	1411	357	935
0.5	- - -	- - -	- - -	1053	229	883	1375	369	972	1510	457	1027	1426	401	993	1375	369	972
0.6	- - -	- - -	- - -	1012	239	925	1341	381	1010	1475	468	1060	1393	413	1029	1341	381	1010
0.7	- - -	- - -	- - -	960	250	975	1305	393	1047	1441	478	1090	1359	426	1064	1305	393	1047
0.8	- - -	- - -	- - -	918	259	1012	1263	408	1090	1394	487	1128	1326	438	1100	1263	408	1090
0.9	- - -	- - -	- - -	873	268	1060	1216	423	1138	1360	492	1153	1281	454	1146	1216	423	1138
1.0	- - -	- - -	- - -	826	277	1094	1180	435	1173	1314	496	1183	1247	466	1181	1180	435	1173

BLOWER DATA - 4 TON DIRECT DRIVE - SINGLE PHASE

ZGB048S4 - BASE UNIT

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (heat section, economizer, etc.).

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See Page 28 for wet coil and options/accessory air resistance data.

DOWNFLOW

External Static Press. in. w.g.	Blower Only			Low Speed						High Speed						Free Cooling		
	Low and High Speed: G (Pin 1)			1st Stage Heating: W1 (Pin 2) Cooling: Y1 (Pin 2 and 5)			2nd Stage Heating: W2 (Pin 2 and 4)			1st Stage Heating: W1 (Pin 3) 2nd Stage Heating: W2 (Pin 3 and 4)			Cooling: Y1 (Pin 3 and 5)			Low and High Speed: Y1 (Pin 1 and 5)		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	933	82	507	1724	438	911	1514	294	779	1832	529	970	2051	754	1084	1884	579	998
0.1	884	90	568	1699	450	940	1477	306	820	1810	540	994	2017	750	1100	1864	591	1021
0.2	829	99	634	1672	462	970	1441	318	859	1784	553	1022	1976	746	1119	1838	606	1050
0.3	787	105	681	1636	478	1010	1406	329	897	1748	570	1060	1935	743	1138	1806	622	1084
0.4	732	113	739	1609	491	1040	1359	345	948	1722	583	1089	1894	739	1156	1779	636	1113
0.5	676	120	794	1582	503	1070	1324	356	985	1696	597	1117	1853	736	1174	1755	647	1138
0.6	621	127	844	1555	515	1099	1289	367	1022	1670	610	1146	1812	732	1192	1723	660	1169
0.7	552	134	901	1528	527	1128	1254	378	1058	1644	623	1174	1757	728	1214	1694	670	1195
0.8	510	138	932	1492	542	1167	1219	389	1093	1617	636	1203	1716	726	1231	1666	679	1219
0.9	- - -	- - -	- - -	1465	554	1195	1190	399	1122	1591	649	1231	1675	723	1247	1634	686	1245
1.0	- - -	- - -	- - -	1442	564	1219	1158	409	1155	1560	665	1265	1627	720	1265	1592	691	1273

HORIZONTAL

External Static Press. in. w.g.	Blower Only			Low Speed						High Speed						Free Cooling		
	Low and High Speed: G (Pin 1)			1st Stage Heating: W1 (Pin 2) Cooling: Y1 (Pin 2 and 5)			2nd Stage Heating: W2 (Pin 2 and 4)			1st Stage Heating: W1 (Pin 3) 2nd Stage Heating: W2 (Pin 3 and 4)			Cooling: Y1 (Pin 3 and 5)			Low and High Speed: Y1 (Pin 1 and 5)		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	935	82	508	1746	434	900	1524	292	794	1858	518	1043	2089	756	1068	1914	569	1030
0.1	886	90	572	1724	445	927	1497	302	825	1834	532	988	2066	754	1081	1893	582	1007
0.2	845	97	624	1697	458	960	1465	314	863	1807	546	939	2021	750	1102	1865	600	996
0.3	803	104	673	1669	472	993	1433	326	901	1781	560	908	1976	746	1123	1841	614	989
0.4	748	112	733	1642	485	1025	1402	337	938	1754	574	897	1946	744	1144	1812	629	997
0.5	692	119	789	1606	502	1068	1370	349	974	1728	588	904	1887	739	1165	1784	643	1014
0.6	637	126	839	1579	515	1099	1338	360	1011	1701	602	930	1857	737	1194	1755	655	1041
0.7	554	135	905	1552	528	1130	1295	376	1059	1666	620	995	1797	733	1215	1722	668	1089
0.8	505	139	937	1515	545	1171	1263	387	1095	1640	633	1065	1752	730	1236	1694	678	1138
0.9	- - -	- - -	- - -	1488	558	1202	1232	398	1130	1613	646	1153	1692	726	1264	1652	684	1204
1.0	- - -	- - -	- - -	1466	568	1227	1200	410	1165	1582	661	1281	1632	723	1288	1619	689	1283

BLOWER DATA - 5 TON DIRECT DRIVE - SINGLE PHASE

ZGB060S4 - BASE UNIT

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (heat section, economizer, etc.).

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See Page 28 wet coil and options/accessory air resistance data.

DOWNFLOW

External Static Press. in. w.g.	Blower Only			Low Speed									High Speed									Free Cooling		
	Low and High Speed: G (Pin 1)			1st Stage Heating: W1 (Pin 2)			2nd Stage Heating: W2 (Pin 2 and 4)			Cooling: Y1 (Pin 2 and 5)			1st Stage Heating: W1 (Pin 3)			2nd Stage Heating: W2 (Pin 3 and 4)			Cooling: Y1 (Pin 3 and 5)			Low and High Speed: Y1 (Pin 1 and 5)		
	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts
0	1076	108	495	1708	387	602	1938	553	860	1846	469	781	1708	387	602	2263	916	1027	2108	746	964	2108	746	964
0.1	1017	118	551	1677	398	680	1910	566	884	1818	481	816	1677	398	680	2230	928	1048	2082	760	987	2082	760	987
0.2	966	126	598	1642	411	758	1879	581	912	1785	495	855	1642	411	758	2190	942	1073	2054	776	1012	2054	776	1012
0.3	915	135	644	1602	425	831	1837	601	949	1742	513	900	1602	425	831	2150	952	1096	2018	797	1045	2018	797	1045
0.4	847	145	703	1573	436	885	1815	612	970	1719	523	926	1573	436	885	2110	960	1118	1990	812	1069	1990	812	1069
0.5	796	153	745	1532	451	939	1775	630	1004	1676	541	967	1532	451	939	2070	966	1139	1962	828	1093	1962	828	1093
0.6	745	160	786	1497	463	979	1743	644	1031	1643	555	998	1497	463	979	2030	969	1158	1934	843	1117	1934	843	1117
0.7	694	167	825	1456	478	1014	1712	658	1058	1609	569	1027	1456	478	1014	1990	969	1176	1906	858	1140	1906	858	1140
0.8	643	174	863	1415	492	1038	1670	677	1093	1565	587	1061	1415	492	1038	1950	968	1192	1870	877	1171	1870	877	1171
0.9	592	180	900	1381	505	1047	1639	691	1120	1533	601	1085	1381	505	1047	1897	961	1212	1842	892	1194	1842	892	1194
1.0	558	184	923	1345	517	1042	1612	703	1141	1503	612	1102	1345	517	1042	1857	953	1225	1819	904	1213	1819	904	1213

HORIZONTAL

External Static Press. in. w.g.	Blower Only			Low Speed									High Speed									Free Cooling		
	Low and High Speed: G (Pin 1)			1st Stage Heating: W1 (Pin 2)			2nd Stage Heating: W2 (Pin 2 and 4)			Cooling: Y1 (Pin 2 and 5)			1st Stage Heating: W1 (Pin 3)			2nd Stage Heating: W2 (Pin 3 and 4)			Cooling: Y1 (Pin 3 and 5)			Low and High Speed: Y1 (Pin 1 and 5)		
	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts	CFM	Watts
0	1061	111	507	1693	386	764	1926	555	862	1825	472	820	1693	386	764	2244	870	992	2131	739	945	2131	739	945
0.1	1015	119	551	1662	398	792	1897	568	887	1796	484	846	1662	398	792	2224	885	1012	2097	753	970	2097	753	970
0.2	965	127	597	1627	410	822	1866	581	913	1764	498	874	1627	410	822	2189	909	1043	2068	765	992	2068	765	992
0.3	915	135	642	1581	427	863	1827	598	947	1722	516	912	1581	427	863	2166	922	1062	2038	778	1015	2038	778	1015
0.4	865	143	685	1552	437	888	1802	609	968	1699	525	931	1552	437	888	2131	940	1089	2000	797	1046	2000	797	1046
0.5	798	153	741	1512	452	923	1763	627	1001	1658	542	967	1512	452	923	2097	953	1114	1970	812	1070	1970	812	1070
0.6	765	157	767	1478	465	953	1733	641	1028	1626	556	995	1478	465	953	2062	963	1136	1941	827	1095	1941	827	1095
0.7	698	167	819	1443	477	983	1701	655	1055	1593	569	1023	1443	477	983	2027	968	1156	1912	844	1120	1912	844	1120
0.8	648	173	855	1397	494	1023	1663	673	1088	1551	587	1060	1397	494	1023	1981	970	1178	1882	860	1146	1882	860	1146
0.9	598	180	891	1369	504	1047	1632	687	1115	1520	600	1086	1369	504	1047	1923	963	1199	1853	878	1172	1853	878	1172
1.0	539	187	930	1334	516	1077	1606	700	1138	1492	611	1110	1334	516	1077	1883	951	1210	1829	893	1195	1829	893	1195

BLOWER DATA - 3 TON DIRECT DRIVE - THREE PHASE

ZGB036S4 - BASE UNIT

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See Page 28 for wet coil and options/accessory air resistance data.

DOWNFLOW

External Static Press. in. w.g.	Tap 1: Pin 1			Tap 2: Pin 2			Tap 3: Pin 3			Tap 4: Pin 4			Tap 5: Pin 5		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	1086	130	601	1127	142	623	1182	157	653	1474	294	803	1664	404	887
0.1	1046	138	649	1089	150	668	1146	165	694	1445	304	835	1636	419	922
0.2	1006	146	695	1049	158	713	1107	174	738	1414	314	871	1613	430	949
0.3	962	154	745	1007	167	760	1068	183	781	1389	323	898	1579	445	987
0.4	918	162	792	965	175	805	1029	192	823	1350	335	940	1556	454	1011
0.5	873	170	838	923	183	849	990	200	864	1314	347	978	1522	466	1045
0.6	829	178	882	881	191	891	951	208	905	1287	356	1008	1488	475	1076
0.7	771	187	935	826	201	945	899	219	957	1251	367	1045	1442	485	1114
0.8	729	194	973	785	208	983	860	227	995	1219	377	1078	1408	490	1140
0.9	525	154	679	646	190	836	808	237	1045	1181	389	1117	1363	494	1170
1.0	502	159	701	618	195	863	772	244	1078	1147	400	1152	1317	494	1196

HORIZONTAL

External Static Press. in. w.g.	Tap 1: Pin 1			Tap 2: Pin 2			Tap 3: Pin 3			Tap 4: Pin 4			Tap 5: Pin 5		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	1218	166	651	1255	179	671	1305	195	698	1539	311	794	1666	386	850
0.1	1183	175	684	1221	188	701	1272	205	723	1509	321	827	1637	402	886
0.2	1140	186	733	1179	199	749	1232	216	769	1475	334	866	1614	414	914
0.3	1097	196	781	1138	209	795	1192	227	814	1446	344	896	1580	430	954
0.4	1054	206	828	1096	219	840	1152	237	857	1411	357	935	1545	445	991
0.5	1010	215	872	1053	229	883	1111	247	898	1375	369	972	1510	457	1027
0.6	967	225	915	1012	239	925	1071	257	938	1341	381	1010	1475	468	1060
0.7	916	236	964	960	250	975	1018	270	989	1305	393	1047	1441	478	1090
0.8	873	244	1003	918	259	1012	978	279	1025	1263	408	1090	1394	487	1128
0.9	825	253	1052	873	268	1060	938	288	1070	1216	423	1138	1360	492	1153
1.0	777	262	1087	826	277	1094	891	298	1103	1180	435	1173	1314	496	1183

BLOWER DATA - 4 TON DIRECT DRIVE - THREE PHASE

ZGB048S4 - BASE UNIT

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See Page 28 for wet coil and options/accessory air resistance data.

DOWNFLOW

External Static Press. in. w.g.	Tap 1: Pin 1			Tap 2: Pin 2			Tap 3: Pin 3			Tap 4: Pin 4			Tap 5: Pin 5		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	1455	258	741	1514	294	779	1724	438	911	1884	579	998	2051	754	1084
0.1	1417	270	786	1477	306	820	1699	450	940	1864	591	1021	2017	750	1100
0.2	1379	282	828	1441	318	859	1672	462	970	1838	606	1050	1976	746	1119
0.3	1342	293	869	1406	329	897	1636	478	1010	1806	622	1084	1935	743	1138
0.4	1292	309	923	1359	345	948	1609	491	1040	1779	636	1113	1894	739	1156
0.5	1254	320	963	1324	356	985	1582	503	1070	1755	647	1138	1853	736	1174
0.6	1217	331	1001	1289	367	1022	1555	515	1099	1723	660	1169	1812	732	1192
0.7	1180	342	1040	1254	378	1058	1528	527	1128	1694	670	1195	1757	728	1214
0.8	1142	352	1077	1219	389	1093	1492	542	1167	1666	679	1219	1716	726	1231
0.9	1114	361	1104	1190	399	1122	1465	554	1195	1634	686	1245	1675	723	1247
1.0	1079	371	1139	1158	409	1155	1442	564	1219	1592	691	1273	1627	720	1265

HORIZONTAL

External Static Press. in. w.g.	Tap 1: Pin 1			Tap 2: Pin 2			Tap 3: Pin 3			Tap 4: Pin 4			Tap 5: Pin 5		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	1453	259	761	1524	292	794	1746	434	900	1914	569	1030	2089	756	1068
0.1	1425	269	795	1497	302	825	1724	445	927	1893	582	1007	2066	754	1081
0.2	1391	281	835	1465	314	863	1697	458	960	1865	600	996	2021	750	1102
0.3	1358	292	874	1433	326	901	1669	472	993	1841	614	989	1976	746	1123
0.4	1325	303	913	1402	337	938	1642	485	1025	1812	629	997	1946	744	1144
0.5	1292	314	951	1370	349	974	1606	502	1068	1784	643	1014	1887	739	1165
0.6	1258	325	989	1338	360	1011	1579	515	1099	1755	655	1041	1857	737	1194
0.7	1214	340	1038	1295	376	1059	1552	528	1130	1722	668	1089	1797	733	1215
0.8	1181	350	1075	1263	387	1095	1515	545	1171	1694	678	1138	1752	730	1236
0.9	1148	361	1110	1232	398	1130	1488	558	1202	1652	684	1204	1692	726	1264
1.0	1112	372	1148	1200	410	1165	1466	568	1227	1619	689	1283	1632	723	1288

BLOWER DATA - 5 TON DIRECT DRIVE - THREE PHASE

ZGB060S4 - BASE UNIT

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See Page 28 for wet coil and options/accessory air resistance data.

DOWNFLOW

External Static Press. in. w.g.	Tap 1: Pin 1			Tap 2: Pin 2			Tap 3: Pin 3			Tap 4: Pin 4			Tap 5: Pin 5		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	1795	438	714	1846	469	781	1938	553	860	2108	746	964	2263	916	1027
0.1	1765	450	765	1818	481	816	1910	566	884	2082	760	987	2230	928	1048
0.2	1732	463	818	1785	495	855	1879	581	912	2054	776	1012	2190	942	1073
0.3	1689	480	874	1742	513	900	1837	601	949	2018	797	1045	2150	952	1096
0.4	1664	490	911	1719	523	926	1815	612	970	1990	812	1069	2110	960	1118
0.5	1622	507	957	1676	541	967	1775	630	1004	1962	828	1093	2070	966	1139
0.6	1588	521	991	1643	555	998	1743	644	1031	1934	843	1117	2030	969	1158
0.7	1551	535	1022	1609	569	1027	1712	658	1058	1906	858	1140	1990	969	1176
0.8	1509	552	1052	1565	587	1061	1670	677	1093	1870	877	1171	1950	968	1192
0.9	1476	565	1071	1533	601	1085	1639	691	1120	1842	892	1194	1897	961	1212
1.0	1444	577	1080	1503	612	1102	1612	703	1141	1819	904	1213	1857	953	1225

HORIZONTAL

External Static Press. in. w.g.	Tap 1: Pin 1			Tap 2: Pin 2			Tap 3: Pin 3			Tap 4: Pin 4			Tap 5: Pin 5		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0	1776	440	799	1825	472	820	1926	555	862	2131	739	945	2244	870	992
0.1	1746	452	826	1796	484	846	1897	568	887	2097	753	970	2224	885	1012
0.2	1713	465	855	1764	498	874	1866	581	913	2068	765	992	2189	909	1043
0.3	1669	482	893	1722	516	912	1827	598	947	2038	778	1015	2166	922	1062
0.4	1644	492	915	1699	525	931	1802	609	968	2000	797	1046	2131	940	1089
0.5	1603	509	951	1658	542	967	1763	627	1001	1970	812	1070	2097	953	1114
0.6	1570	522	979	1626	556	995	1733	641	1028	1941	827	1095	2062	963	1136
0.7	1537	535	1008	1593	569	1023	1701	655	1055	1912	844	1120	2027	968	1156
0.8	1494	552	1046	1551	587	1060	1663	673	1088	1882	860	1146	1981	970	1178
0.9	1463	564	1072	1520	600	1086	1632	687	1115	1853	878	1172	1923	963	1199
1.0	1433	576	1098	1492	611	1110	1606	700	1138	1829	893	1195	1883	951	1210

BLOWER DATA - BELT DRIVE - ZGA072, ZGB074

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (heat section, economizer, wet coil, etc.).

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 27 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furn.		Kit ZAA02													
1900	600	0.51	637	0.55	676	0.6	714	0.65	752	0.69	788	0.75	823	0.80	856	0.86
2000	627	0.57	663	0.62	701	0.67	738	0.72	775	0.77	810	0.82	844	0.88	875	0.94
2100	654	0.64	690	0.69	727	0.74	763	0.79	798	0.85	832	0.9	864	0.96	894	1.03
2200	682	0.71	717	0.76	753	0.82	788	0.87	822	0.93	854	0.99	885	1.06	914	1.12
2300	709	0.79	744	0.85	779	0.9	813	0.96	846	1.02	877	1.09	906	1.15	934	1.22
2400	737	0.87	771	0.93	805	0.99	838	1.06	870	1.12	899	1.19	928	1.26	954	1.33
2500	766	0.97	799	1.03	832	1.09	864	1.16	894	1.23	922	1.30	950	1.38	976	1.45
2600	794	1.07	827	1.14	859	1.21	889	1.28	918	1.35	946	1.43	972	1.50	997	1.58
2700	823	1.18	855	1.25	885	1.33	915	1.40	943	1.48	969	1.56	995	1.64	1019	1.71
2800	852	1.30	882	1.38	912	1.46	940	1.54	967	1.62	993	1.70	1018	1.78	1041	1.86
2900	881	1.44	911	1.52	939	1.60	967	1.68	992	1.76	1017	1.85	1041	1.93	1064	2.01

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZAA03															
1900	886	0.92	914	0.99	940	1.06	965	1.12	991	1.19	1017	1.25	1043	1.32	1070	1.38
2000	904	1.01	930	1.08	956	1.15	981	1.21	1006	1.28	1032	1.35	1058	1.41	1084	1.47
2100	922	1.10	948	1.17	973	1.24	997	1.31	1022	1.38	1047	1.44	1073	1.51	1099	1.57
2200	941	1.20	966	1.27	990	1.34	1015	1.41	1039	1.48	1064	1.55	1089	1.61	1114	1.68
2300	960	1.30	984	1.37	1008	1.45	1032	1.52	1056	1.59	1081	1.66	1106	1.72	1131	1.79
2400	980	1.41	1004	1.49	1027	1.56	1051	1.63	1075	1.7	1099	1.77	1123	1.84	1148	1.91
2500	1000	1.53	1023	1.60	1046	1.68	1070	1.75	1093	1.83	1117	1.90	1142	1.97	1166	2.04
2600	1021	1.66	1043	1.73	1066	1.81	1089	1.88	1113	1.96	1137	2.03	1161	2.10	1185	2.17
2700	1042	1.79	1064	1.87	1087	1.95	1110	2.02	1133	2.09	1157	2.17	1181	2.24	1205	2.32
2800	1063	1.94	1086	2.01	1108	2.09	1131	2.17	1154	2.24	1177	2.32	1201	2.39	1225	2.47
2900	1086	2.09	1107	2.17	1130	2.24	1152	2.32	1175	2.40	1198	2.48	1222	2.55	1245	2.62

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZAA02											
1900	555	0.41	593	0.47	633	0.52	673	0.57	713	0.63	752	0.68	789	0.74	824	0.80
2000	573	0.46	612	0.52	652	0.58	692	0.63	731	0.69	769	0.75	805	0.81	839	0.87
2100	592	0.52	632	0.58	671	0.64	711	0.70	750	0.76	787	0.82	822	0.88	855	0.95
2200	613	0.59	652	0.65	692	0.71	731	0.77	769	0.83	804	0.89	838	0.96	870	1.03
2300	635	0.66	674	0.72	713	0.79	751	0.85	788	0.91	823	0.97	855	1.04	887	1.12
2400	658	0.73	697	0.80	735	0.86	772	0.93	808	0.99	841	1.06	873	1.13	903	1.21
2500	682	0.81	720	0.88	757	0.95	793	1.01	827	1.08	859	1.15	890	1.23	919	1.31
2600	706	0.90	743	0.97	779	1.04	814	1.11	847	1.18	878	1.25	907	1.33	936	1.41
2700	731	0.99	767	1.06	802	1.13	835	1.21	866	1.28	896	1.36	925	1.44	953	1.52
2800	756	1.09	790	1.16	824	1.24	856	1.31	886	1.39	915	1.47	943	1.56	970	1.64
2900	780	1.19	814	1.27	846	1.35	876	1.43	906	1.51	934	1.59	961	1.68	987	1.77

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	ZAA02		Kit ZAA03													
1900	857	0.87	889	0.93	919	1.00	949	1.06	977	1.13	1003	1.20	1029	1.26	1054	1.33
2000	872	0.94	903	1.01	932	1.08	961	1.15	988	1.21	1015	1.28	1040	1.35	1064	1.42
2100	886	1.02	917	1.09	946	1.16	974	1.23	1000	1.30	1026	1.37	1051	1.44	1074	1.51
2200	901	1.11	931	1.18	959	1.25	987	1.32	1013	1.40	1038	1.46	1062	1.53	1085	1.60
2300	917	1.19	945	1.27	973	1.35	1000	1.42	1026	1.49	1050	1.56	1074	1.63	1096	1.70
2400	932	1.29	960	1.37	987	1.44	1014	1.52	1039	1.60	1063	1.67	1085	1.74	1107	1.81
2500	948	1.39	975	1.47	1002	1.55	1027	1.63	1052	1.70	1075	1.78	1098	1.85	1119	1.92
2600	964	1.49	991	1.58	1017	1.66	1041	1.74	1065	1.82	1088	1.89	1110	1.97	1131	2.04
2700	980	1.61	1006	1.69	1031	1.78	1056	1.86	1079	1.94	1102	2.02	1123	2.09	1144	2.16
2800	996	1.73	1022	1.82	1047	1.90	1071	1.99	1093	2.07	1115	2.15	1136	2.22	1157	2.29
2900	1013	1.86	1038	1.95	1062	2.03	1086	2.12	1108	2.20	1129	2.28	1150	2.36	1171	2.43

BLOWER DATA - BELT DRIVE - ZGB036

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, wet coil, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).
See page 27 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZA01											
900	573	0.16	639	0.18	707	0.19	776	0.21	844	0.23	908	0.25	967	0.27	1022	0.30
1000	600	0.18	665	0.20	733	0.22	802	0.23	868	0.25	930	0.28	986	0.31	1038	0.33
1100	628	0.21	695	0.22	762	0.24	829	0.26	893	0.29	953	0.31	1007	0.35	1057	0.38
1200	660	0.23	727	0.25	794	0.27	859	0.29	921	0.32	977	0.36	1029	0.39	1077	0.42
1300	695	0.26	761	0.28	827	0.31	890	0.33	949	0.37	1003	0.40	1053	0.44	1099	0.47
1400	734	0.30	799	0.32	862	0.35	923	0.38	978	0.41	1030	0.45	1078	0.49	1122	0.53
1500	775	0.34	837	0.37	898	0.40	955	0.43	1009	0.46	1058	0.50	1104	0.54	1147	0.58

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA04															
900	1072	0.32	1120	0.35	1166	0.38	1210	0.41	1252	0.44	1292	0.47	1331	0.5	1370	0.54
1000	1087	0.36	1134	0.39	1179	0.42	1222	0.45	1263	0.48	1303	0.51	1341	0.55	1379	0.58
1100	1104	0.40	1150	0.43	1194	0.46	1236	0.49	1277	0.53	1315	0.56	1353	0.60	1390	0.64
1200	1123	0.45	1167	0.48	1210	0.51	1251	0.55	1291	0.58	1330	0.62	1367	0.66	1403	0.70
1300	1143	0.50	1186	0.54	1228	0.57	1268	0.60	1308	0.64	1346	0.68	1382	0.72	1418	0.76
1400	1165	0.56	1206	0.59	1247	0.63	1287	0.67	1326	0.70	1363	0.75	1399	0.79	1435	0.83
1500	1188	0.62	1229	0.66	1269	0.69	1308	0.73	1346	0.77	1382	0.82	1418	0.86	1453	0.90

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZA01											
900	573	0.14	642	0.16	712	0.18	780	0.21	846	0.23	909	0.26	967	0.28	1022	0.31
1000	599	0.16	668	0.18	737	0.21	804	0.23	868	0.26	928	0.29	984	0.32	1037	0.35
1100	626	0.18	695	0.21	764	0.24	830	0.26	892	0.29	950	0.32	1003	0.36	1053	0.39
1200	656	0.21	726	0.24	794	0.27	858	0.30	918	0.33	973	0.37	1024	0.40	1072	0.43
1300	691	0.25	761	0.28	827	0.31	889	0.34	945	0.38	998	0.41	1047	0.45	1093	0.48
1400	731	0.29	798	0.32	862	0.35	920	0.39	974	0.42	1024	0.46	1071	0.49	1115	0.53
1500	773	0.34	838	0.37	898	0.40	952	0.44	1004	0.47	1051	0.51	1096	0.55	1139	0.58

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA04															
900	1074	0.33	1123	0.36	1171	0.39	1216	0.41	1260	0.44	1301	0.47	1340	0.49	1378	0.52
1000	1087	0.37	1135	0.40	1181	0.42	1226	0.45	1269	0.48	1310	0.51	1350	0.54	1388	0.57
1100	1101	0.41	1148	0.44	1193	0.47	1237	0.49	1279	0.52	1321	0.55	1360	0.59	1398	0.62
1200	1118	0.46	1163	0.48	1208	0.51	1251	0.54	1293	0.58	1334	0.61	1375	0.64	1414	0.68
1300	1137	0.51	1181	0.53	1224	0.57	1267	0.60	1309	0.63	1350	0.67	1391	0.71	1432	0.75
1400	1158	0.56	1200	0.59	1242	0.62	1284	0.66	1326	0.70	1367	0.74	1407	0.79	1448	0.83
1500	1180	0.61	1222	0.65	1263	0.69	1304	0.73	1345	0.77	1386	0.82	1427	0.87	1467	0.92

BLOWER DATA - BELT DRIVE - ZGB048

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, wet coil, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).
See page 27 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit ZA02									
1200	660	0.23	727	0.25	794	0.27	859	0.29	921	0.32	977	0.36	1029	0.39	1077	0.42
1300	695	0.26	761	0.28	827	0.31	890	0.33	949	0.37	1003	0.40	1053	0.44	1099	0.47
1400	734	0.30	799	0.32	862	0.35	923	0.38	978	0.41	1030	0.45	1078	0.49	1122	0.53
1500	775	0.34	837	0.37	898	0.40	955	0.43	1009	0.46	1058	0.50	1104	0.54	1147	0.58
1600	817	0.39	877	0.42	935	0.45	989	0.48	1040	0.52	1087	0.56	1131	0.60	1173	0.65
1700	859	0.44	917	0.47	972	0.50	1023	0.54	1071	0.58	1117	0.62	1159	0.67	1199	0.71
1800	902	0.49	957	0.53	1008	0.56	1057	0.60	1103	0.64	1147	0.69	1188	0.74	1227	0.79
1900	944	0.56	996	0.59	1045	0.63	1092	0.68	1136	0.72	1178	0.77	1218	0.82	1257	0.87
2000	986	0.63	1035	0.67	1083	0.71	1127	0.76	1170	0.81	1210	0.86	1249	0.91	1287	0.97

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA02						Kit ZA05									
1200	1123	0.45	1167	0.48	1210	0.51	1251	0.55	1291	0.58	1330	0.62	1367	0.66	1403	0.70
1300	1143	0.50	1186	0.54	1228	0.57	1268	0.60	1308	0.64	1346	0.68	1382	0.72	1418	0.76
1400	1165	0.56	1206	0.59	1247	0.63	1287	0.67	1326	0.70	1363	0.75	1399	0.79	1435	0.83
1500	1188	0.62	1229	0.66	1269	0.69	1308	0.73	1346	0.77	1382	0.82	1418	0.86	1453	0.90
1600	1213	0.69	1252	0.73	1292	0.77	1330	0.81	1367	0.85	1403	0.89	1438	0.94	1472	0.98
1700	1239	0.76	1278	0.80	1316	0.84	1354	0.89	1390	0.93	1425	0.98	1459	1.02	1492	1.07
1800	1266	0.83	1304	0.88	1342	0.93	1378	0.98	1414	1.02	1448	1.07	1481	1.12	1514	1.16
1900	1294	0.92	1332	0.97	1369	1.02	1404	1.07	1439	1.12	1472	1.17	1504	1.21	1536	1.26
2000	1324	1.02	1360	1.07	1396	1.13	1431	1.18	1465	1.23	1497	1.27	1529	1.32	1560	1.37

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit ZA02									
1200	656	0.21	726	0.24	794	0.27	858	0.30	918	0.33	973	0.37	1024	0.40	1072	0.43
1300	691	0.25	761	0.28	827	0.31	889	0.34	945	0.38	998	0.41	1047	0.45	1093	0.48
1400	731	0.29	798	0.32	862	0.35	920	0.39	974	0.42	1024	0.46	1071	0.49	1115	0.53
1500	773	0.34	838	0.37	898	0.40	952	0.44	1004	0.47	1051	0.51	1096	0.55	1139	0.58
1600	817	0.39	878	0.42	934	0.46	985	0.49	1034	0.53	1080	0.56	1123	0.60	1164	0.64
1700	861	0.45	918	0.48	970	0.51	1018	0.55	1065	0.58	1108	0.62	1150	0.66	1190	0.70
1800	904	0.51	957	0.54	1006	0.57	1052	0.61	1096	0.65	1138	0.69	1178	0.73	1217	0.78
1900	946	0.57	996	0.61	1042	0.64	1086	0.68	1128	0.72	1168	0.76	1207	0.81	1245	0.86
2000	988	0.64	1035	0.68	1079	0.72	1120	0.76	1161	0.81	1199	0.85	1237	0.90	1275	0.96

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA02						Kit ZA05									
1200	1118	0.46	1163	0.48	1208	0.51	1251	0.54	1293	0.58	1334	0.61	1375	0.64	1414	0.68
1300	1137	0.51	1181	0.53	1224	0.57	1267	0.60	1309	0.63	1350	0.67	1391	0.71	1432	0.75
1400	1158	0.56	1200	0.59	1242	0.62	1284	0.66	1326	0.70	1367	0.74	1407	0.79	1448	0.83
1500	1180	0.61	1222	0.65	1263	0.69	1304	0.73	1345	0.77	1386	0.82	1427	0.87	1467	0.92
1600	1204	0.68	1245	0.72	1285	0.76	1325	0.80	1366	0.85	1406	0.90	1447	0.96	1487	1.02
1700	1229	0.75	1269	0.79	1309	0.84	1348	0.89	1388	0.94	1428	1.00	1468	1.06	1508	1.12
1800	1256	0.83	1295	0.88	1334	0.93	1373	0.98	1412	1.04	1451	1.10	1490	1.16	1529	1.23
1900	1283	0.92	1322	0.97	1360	1.03	1398	1.09	1436	1.15	1474	1.21	1511	1.27	1549	1.34
2000	1312	1.02	1350	1.07	1387	1.13	1424	1.20	1461	1.26	1498	1.32	1535	1.38	1571	1.45

BLOWER DATA - BELT DRIVE - ZGB060

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, wet coil, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).
See page 27 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZA03											
1600	848	0.48	905	0.53	961	0.57	1015	0.61	1064	0.66	1107	0.69	1148	0.73	1189	0.76
1700	898	0.56	952	0.60	1005	0.65	1054	0.69	1099	0.73	1140	0.77	1180	0.80	1221	0.83
1800	948	0.63	998	0.68	1047	0.73	1093	0.78	1136	0.82	1175	0.85	1214	0.88	1255	0.91
1900	996	0.72	1042	0.77	1088	0.82	1132	0.86	1173	0.90	1211	0.94	1250	0.97	1290	1.00
2000	1041	0.81	1084	0.86	1128	0.91	1170	0.95	1210	0.99	1249	1.03	1287	1.06	1326	1.10
2100	1084	0.91	1126	0.95	1168	1.00	1209	1.04	1249	1.08	1287	1.12	1324	1.17	1362	1.21
2200	1128	1.01	1169	1.05	1210	1.10	1250	1.14	1288	1.19	1326	1.23	1363	1.28	1399	1.34
2300	1173	1.11	1214	1.16	1253	1.20	1292	1.25	1329	1.30	1366	1.36	1402	1.42	1437	1.48
2400	1220	1.23	1259	1.28	1297	1.33	1335	1.38	1371	1.44	1406	1.50	1442	1.57	1476	1.63

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA03								Kit ZA06							
1600	1232	0.79	1274	0.82	1316	0.86	1356	0.90	1395	0.94	1433	0.99	1470	1.04	1506	1.09
1700	1263	0.86	1304	0.90	1344	0.94	1383	0.99	1421	1.04	1458	1.09	1494	1.14	1530	1.19
1800	1295	0.95	1335	0.99	1374	1.04	1412	1.09	1448	1.14	1484	1.20	1520	1.25	1556	1.30
1900	1329	1.04	1368	1.09	1405	1.15	1441	1.20	1477	1.26	1513	1.31	1548	1.37	1583	1.42
2000	1364	1.15	1401	1.21	1437	1.27	1472	1.33	1507	1.38	1543	1.44	1578	1.49	1613	1.54
2100	1399	1.27	1435	1.33	1470	1.40	1505	1.46	1539	1.51	1574	1.56	1609	1.61	1645	1.66
2200	1435	1.40	1470	1.47	1504	1.53	1538	1.59	1573	1.65	1608	1.70	1642	1.74	1678	1.79
2300	1472	1.54	1506	1.61	1540	1.67	1574	1.73	1608	1.78	1642	1.83	1677	1.88	1712	1.93
2400	1510	1.7	1544	1.76	1577	1.82	1610	1.88	1644	1.93	1678	1.97	1713	2.02	1748	2.07

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit ZA03									
1600	761	0.43	820	0.47	879	0.52	937	0.56	994	0.61	1045	0.65	1090	0.69	1132	0.72
1700	803	0.49	861	0.53	918	0.58	973	0.63	1025	0.67	1072	0.72	1114	0.75	1155	0.78
1800	846	0.56	901	0.60	955	0.65	1008	0.70	1056	0.75	1099	0.79	1140	0.82	1181	0.85
1900	889	0.63	941	0.68	993	0.73	1042	0.78	1087	0.83	1129	0.87	1168	0.90	1209	0.93
2000	933	0.71	981	0.76	1030	0.81	1076	0.86	1119	0.91	1159	0.95	1198	0.98	1238	1.01
2100	974	0.79	1020	0.85	1065	0.90	1109	0.96	1151	1.00	1190	1.04	1229	1.07	1268	1.11
2200	1013	0.89	1057	0.94	1100	0.99	1143	1.05	1183	1.09	1222	1.13	1261	1.17	1299	1.21
2300	1050	0.99	1093	1.04	1135	1.09	1177	1.14	1217	1.18	1255	1.23	1293	1.27	1331	1.32
2400	1088	1.09	1129	1.14	1170	1.19	1211	1.23	1250	1.28	1289	1.33	1326	1.38	1363	1.44

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA03												Kit ZA06			
1600	1175	0.76	1218	0.79	1260	0.82	1302	0.85	1343	0.89	1383	0.93	1421	0.98	1458	1.03
1700	1198	0.82	1241	0.85	1283	0.89	1324	0.93	1364	0.97	1402	1.02	1439	1.07	1476	1.12
1800	1223	0.89	1265	0.92	1307	0.96	1347	1.01	1386	1.06	1423	1.11	1459	1.16	1495	1.21
1900	1250	0.96	1292	1.01	1332	1.05	1371	1.10	1408	1.15	1445	1.21	1481	1.27	1516	1.32
2000	1279	1.05	1319	1.10	1358	1.15	1396	1.20	1432	1.26	1468	1.32	1504	1.38	1539	1.44
2100	1308	1.15	1347	1.20	1385	1.26	1421	1.32	1457	1.38	1493	1.44	1528	1.50	1563	1.56
2200	1338	1.26	1376	1.31	1412	1.38	1448	1.45	1483	1.51	1518	1.57	1553	1.63	1588	1.68
2300	1368	1.37	1405	1.44	1441	1.51	1476	1.58	1510	1.64	1545	1.70	1580	1.76	1615	1.81
2400	1400	1.50	1435	1.57	1470	1.65	1505	1.72	1539	1.78	1573	1.84	1608	1.89	1643	1.94

BLOWER DATA - BELT DRIVE - ZCA072, ZCB074

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, wet coil, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).
See page 27 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZAA02											
1900	578	0.44	610	0.49	643	0.54	678	0.60	714	0.65	749	0.70	785	0.76	819	0.82
2000	600	0.50	632	0.56	665	0.61	699	0.66	734	0.71	769	0.77	803	0.83	837	0.9
2100	623	0.57	655	0.62	688	0.68	721	0.73	755	0.79	789	0.84	822	0.91	854	0.98
2200	647	0.65	678	0.70	711	0.75	743	0.81	776	0.86	809	0.93	841	1.00	872	1.06
2300	671	0.73	702	0.78	734	0.83	766	0.89	798	0.95	829	1.02	860	1.09	890	1.16
2400	696	0.81	726	0.87	757	0.92	788	0.98	819	1.04	850	1.11	880	1.19	909	1.26
2500	720	0.90	750	0.95	780	1.01	811	1.07	841	1.14	871	1.22	900	1.30	929	1.37
2600	745	0.99	774	1.05	804	1.11	834	1.17	864	1.25	893	1.33	921	1.41	949	1.49
2700	770	1.09	799	1.15	828	1.21	858	1.28	887	1.36	916	1.44	943	1.53	969	1.61
2800	795	1.19	824	1.25	853	1.33	882	1.40	911	1.48	939	1.56	965	1.65	990	1.73
2900	820	1.30	849	1.37	878	1.45	907	1.53	935	1.61	962	1.70	988	1.78	1012	1.86

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZAA03															
1900	853	0.88	885	0.94	915	0.99	944	1.05	971	1.11	996	1.17	1021	1.23	1045	1.29
2000	869	0.96	899	1.01	929	1.07	957	1.13	984	1.19	1009	1.25	1033	1.31	1058	1.38
2100	885	1.04	915	1.10	944	1.15	971	1.22	997	1.28	1022	1.34	1046	1.40	1070	1.46
2200	902	1.13	931	1.19	959	1.24	986	1.31	1012	1.37	1036	1.43	1060	1.50	1084	1.56
2300	920	1.23	948	1.29	975	1.35	1001	1.41	1027	1.47	1051	1.53	1075	1.60	1098	1.66
2400	938	1.33	965	1.39	992	1.45	1017	1.52	1042	1.58	1066	1.64	1090	1.70	1113	1.77
2500	956	1.44	983	1.51	1009	1.57	1034	1.63	1059	1.69	1082	1.75	1105	1.82	1128	1.88
2600	975	1.56	1001	1.63	1026	1.69	1051	1.75	1075	1.81	1098	1.87	1121	1.93	1143	2.00
2700	995	1.68	1020	1.75	1044	1.81	1069	1.87	1092	1.93	1114	1.99	1136	2.06	1158	2.13
2800	1015	1.81	1039	1.87	1063	1.94	1086	2.00	1109	2.06	1131	2.12	1152	2.19	1174	2.26
2900	1035	1.94	1058	2.00	1081	2.07	1104	2.13	1126	2.19	1147	2.26	1168	2.33	1189	2.40

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZAA02											
1900	581	0.44	618	0.49	655	0.54	692	0.59	729	0.64	765	0.69	800	0.75	833	0.80
2000	602	0.50	639	0.55	676	0.61	713	0.66	749	0.71	784	0.76	818	0.82	850	0.88
2100	625	0.57	661	0.62	698	0.67	735	0.73	770	0.78	804	0.84	837	0.90	868	0.96
2200	648	0.64	685	0.69	721	0.75	757	0.80	791	0.86	824	0.92	856	0.98	886	1.05
2300	673	0.71	709	0.77	745	0.83	780	0.88	813	0.94	845	1.01	876	1.08	905	1.15
2400	699	0.79	734	0.85	769	0.91	803	0.97	835	1.04	866	1.11	896	1.18	924	1.25
2500	725	0.88	759	0.94	793	1.00	826	1.07	857	1.14	887	1.21	916	1.28	944	1.36
2600	752	0.97	785	1.04	818	1.10	850	1.17	880	1.25	909	1.32	937	1.40	964	1.48
2700	779	1.07	811	1.14	843	1.21	873	1.29	902	1.37	931	1.44	958	1.52	984	1.60
2800	805	1.18	837	1.26	868	1.33	897	1.41	925	1.49	952	1.57	979	1.66	1004	1.74
2900	832	1.30	863	1.38	892	1.46	921	1.54	948	1.63	974	1.71	1000	1.80	1024	1.88

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	ZAA02		Kit ZAA03													
1900	864	0.87	895	0.93	924	0.99	953	1.06	980	1.12	1007	1.18	1032	1.25	1056	1.31
2000	881	0.95	911	1.01	940	1.08	967	1.14	994	1.21	1020	1.27	1044	1.34	1068	1.40
2100	898	1.03	927	1.10	955	1.17	982	1.23	1008	1.30	1033	1.37	1057	1.43	1080	1.50
2200	916	1.12	944	1.19	971	1.26	998	1.33	1023	1.40	1047	1.47	1071	1.54	1093	1.60
2300	934	1.22	961	1.29	988	1.36	1014	1.43	1038	1.50	1062	1.58	1085	1.65	1107	1.71
2400	952	1.32	979	1.40	1005	1.47	1030	1.54	1054	1.62	1077	1.69	1099	1.76	1121	1.83
2500	971	1.43	997	1.51	1022	1.59	1046	1.66	1069	1.74	1092	1.81	1114	1.88	1135	1.95
2600	990	1.55	1015	1.63	1039	1.71	1063	1.79	1086	1.86	1108	1.94	1129	2.01	1150	2.07
2700	1009	1.68	1034	1.76	1057	1.84	1080	1.92	1102	1.99	1124	2.07	1145	2.14	1166	2.21
2800	1028	1.82	1052	1.9	1075	1.98	1097	2.06	1119	2.13	1140	2.21	1161	2.28	1182	2.34
2900	1048	1.96	1071	2.04	1093	2.12	1115	2.20	1136	2.28	1157	2.35	1177	2.42	1198	2.48

BLOWER DATA - BELT DRIVE - ZCB036

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, wet coil, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).
See page 27 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZA01											
900	562	0.16	629	0.18	699	0.19	771	0.20	840	0.22	904	0.24	962	0.26	1015	0.29
1000	586	0.18	654	0.20	725	0.21	796	0.23	864	0.25	927	0.27	983	0.30	1034	0.33
1100	612	0.20	681	0.22	752	0.24	823	0.26	890	0.28	950	0.31	1004	0.34	1054	0.37
1200	641	0.23	711	0.25	783	0.27	852	0.29	917	0.32	975	0.35	1027	0.39	1074	0.42
1300	673	0.25	744	0.28	815	0.30	882	0.33	944	0.36	1000	0.40	1050	0.44	1096	0.48
1400	709	0.29	779	0.32	849	0.34	914	0.37	973	0.41	1026	0.45	1074	0.49	1118	0.53
1500	747	0.33	816	0.36	883	0.39	945	0.42	1001	0.46	1052	0.51	1098	0.55	1141	0.59

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA04															
900	1065	0.32	1112	0.35	1158	0.38	1202	0.41	1243	0.44	1284	0.48	1323	0.52	1364	0.55
1000	1082	0.36	1128	0.39	1173	0.42	1216	0.45	1257	0.49	1297	0.53	1336	0.57	1375	0.60
1100	1100	0.40	1145	0.44	1189	0.47	1231	0.51	1272	0.54	1311	0.58	1349	0.62	1388	0.66
1200	1119	0.45	1163	0.49	1206	0.52	1247	0.56	1287	0.60	1326	0.64	1364	0.68	1402	0.72
1300	1139	0.51	1182	0.55	1224	0.58	1265	0.62	1304	0.66	1342	0.71	1379	0.75	1416	0.79
1400	1160	0.57	1202	0.61	1243	0.65	1283	0.69	1322	0.73	1359	0.78	1396	0.82	1432	0.87
1500	1182	0.64	1223	0.68	1263	0.72	1303	0.76	1341	0.81	1378	0.85	1414	0.90	1449	0.94

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZA01										Kit ZA04	
900	580	0.14	649	0.17	721	0.19	794	0.22	868	0.24	938	0.27	998	0.30	1045	0.33
1000	612	0.17	681	0.19	752	0.22	825	0.25	897	0.27	963	0.30	1017	0.33	1061	0.37
1100	647	0.20	717	0.23	788	0.26	858	0.28	926	0.31	986	0.34	1036	0.38	1077	0.41
1200	687	0.23	757	0.26	826	0.29	893	0.32	955	0.35	1008	0.39	1054	0.42	1095	0.46
1300	730	0.27	798	0.30	864	0.33	926	0.37	982	0.40	1030	0.44	1073	0.47	1116	0.51
1400	775	0.31	840	0.34	902	0.38	959	0.42	1009	0.46	1054	0.50	1096	0.53	1140	0.56
1500	820	0.36	881	0.40	939	0.44	993	0.49	1039	0.53	1082	0.56	1124	0.59	1168	0.62

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA04															
900	1091	0.36	1140	0.38	1188	0.40	1232	0.43	1272	0.46	1309	0.49	1346	0.53	1383	0.57
1000	1105	0.40	1154	0.42	1201	0.45	1245	0.47	1284	0.50	1321	0.54	1357	0.58	1394	0.62
1100	1121	0.44	1169	0.47	1216	0.49	1259	0.52	1298	0.56	1335	0.60	1370	0.64	1406	0.69
1200	1139	0.49	1187	0.52	1234	0.54	1276	0.58	1314	0.62	1350	0.66	1385	0.71	1421	0.75
1300	1161	0.54	1208	0.57	1254	0.60	1295	0.64	1332	0.69	1366	0.73	1401	0.78	1436	0.83
1400	1185	0.59	1232	0.63	1276	0.67	1315	0.71	1351	0.76	1384	0.81	1419	0.86	1454	0.90
1500	1212	0.66	1257	0.70	1299	0.74	1337	0.79	1371	0.84	1404	0.89	1438	0.94	1473	0.99

BLOWER DATA - BELT DRIVE - ZCB048

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, wet coil, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).
See page 27 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit ZA02									
1200	641	0.23	711	0.25	783	0.27	852	0.29	917	0.32	975	0.35	1027	0.39	1074	0.42
1300	673	0.25	744	0.28	815	0.30	882	0.33	944	0.36	1000	0.40	1050	0.44	1096	0.48
1400	709	0.29	779	0.32	849	0.34	914	0.37	973	0.41	1026	0.45	1074	0.49	1118	0.53
1500	747	0.33	816	0.36	883	0.39	945	0.42	1001	0.46	1052	0.51	1098	0.55	1141	0.59
1600	787	0.38	854	0.41	918	0.44	976	0.48	1030	0.52	1078	0.56	1123	0.61	1164	0.66
1700	827	0.43	892	0.46	952	0.49	1007	0.53	1058	0.58	1105	0.63	1148	0.68	1189	0.73
1800	868	0.48	929	0.52	986	0.55	1038	0.59	1087	0.64	1132	0.69	1174	0.75	1214	0.80
1900	907	0.54	966	0.58	1019	0.62	1069	0.66	1116	0.71	1160	0.77	1200	0.82	1240	0.88
2000	946	0.60	1001	0.65	1053	0.69	1101	0.74	1146	0.79	1188	0.85	1228	0.91	1267	0.98

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA02						Kit ZA05									
1200	1119	0.45	1163	0.49	1206	0.52	1247	0.56	1287	0.60	1326	0.64	1364	0.68	1402	0.72
1300	1139	0.51	1182	0.55	1224	0.58	1265	0.62	1304	0.66	1342	0.71	1379	0.75	1416	0.79
1400	1160	0.57	1202	0.61	1243	0.65	1283	0.69	1322	0.73	1359	0.78	1396	0.82	1432	0.87
1500	1182	0.64	1223	0.68	1263	0.72	1303	0.76	1341	0.81	1378	0.85	1414	0.9	1449	0.94
1600	1205	0.70	1245	0.75	1284	0.79	1323	0.84	1361	0.88	1397	0.93	1432	0.98	1467	1.03
1700	1228	0.78	1268	0.82	1307	0.87	1345	0.92	1382	0.97	1417	1.02	1452	1.07	1486	1.11
1800	1253	0.85	1292	0.91	1331	0.96	1368	1.01	1404	1.06	1439	1.11	1473	1.16	1506	1.21
1900	1279	0.94	1317	1.00	1355	1.05	1392	1.10	1427	1.16	1461	1.21	1494	1.26	1527	1.31
2000	1305	1.04	1343	1.10	1380	1.15	1416	1.21	1450	1.26	1484	1.32	1516	1.37	1549	1.42

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished				Kit ZA02											
1200	687	0.23	757	0.26	826	0.29	893	0.32	955	0.35	1008	0.39	1054	0.42	1095	0.46
1300	730	0.27	798	0.30	864	0.33	926	0.37	982	0.40	1030	0.44	1073	0.47	1116	0.51
1400	775	0.31	840	0.34	902	0.38	959	0.42	1009	0.46	1054	0.50	1096	0.53	1140	0.56
1500	820	0.36	881	0.40	939	0.44	993	0.49	1039	0.53	1082	0.56	1124	0.59	1168	0.62
1600	864	0.42	921	0.46	976	0.51	1027	0.56	1072	0.6	1113	0.63	1155	0.66	1198	0.69
1700	907	0.48	961	0.53	1013	0.58	1061	0.63	1105	0.67	1146	0.70	1187	0.73	1230	0.77
1800	948	0.56	999	0.61	1049	0.66	1096	0.71	1139	0.75	1180	0.78	1221	0.82	1262	0.86
1900	987	0.64	1037	0.69	1086	0.74	1132	0.79	1174	0.83	1214	0.86	1255	0.90	1295	0.95
2000	1028	0.73	1076	0.78	1123	0.83	1168	0.87	1210	0.91	1250	0.96	1289	1.00	1328	1.06

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA02				Kit ZA05											
1200	1139	0.49	1187	0.52	1234	0.54	1276	0.58	1314	0.62	1350	0.66	1385	0.71	1421	0.75
1300	1161	0.54	1208	0.57	1254	0.60	1295	0.64	1332	0.69	1366	0.73	1401	0.78	1436	0.83
1400	1185	0.59	1232	0.63	1276	0.67	1315	0.71	1351	0.76	1384	0.81	1419	0.86	1454	0.90
1500	1212	0.66	1257	0.70	1299	0.74	1337	0.79	1371	0.84	1404	0.89	1438	0.94	1473	0.99
1600	1242	0.73	1284	0.77	1324	0.82	1360	0.88	1394	0.93	1426	0.99	1460	1.04	1495	1.08
1700	1272	0.81	1312	0.86	1350	0.92	1385	0.98	1418	1.04	1451	1.09	1485	1.14	1519	1.19
1800	1302	0.90	1341	0.96	1377	1.02	1411	1.08	1444	1.15	1477	1.20	1510	1.25	1544	1.30
1900	1334	1.01	1371	1.07	1406	1.13	1439	1.20	1471	1.26	1504	1.32	1537	1.37	1571	1.41
2000	1365	1.12	1401	1.19	1435	1.25	1468	1.32	1500	1.38	1532	1.44	1565	1.49	1598	1.53

BLOWER DATA - BELT DRIVE - ZCB060

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.

FOR ALL UNITS ADD:
1 - Any factory installed options air resistance (heat section, economizer, wet coil, etc.).
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).
See page 27 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit ZA03									
1600	764	0.46	823	0.51	882	0.56	940	0.60	997	0.65	1048	0.69	1094	0.72	1140	0.75
1700	806	0.53	863	0.58	919	0.62	975	0.67	1028	0.71	1075	0.75	1119	0.78	1164	0.81
1800	849	0.60	903	0.65	957	0.69	1010	0.74	1058	0.78	1102	0.82	1145	0.85	1189	0.88
1900	892	0.68	944	0.72	995	0.77	1045	0.82	1089	0.86	1131	0.89	1174	0.92	1217	0.95
2000	935	0.76	984	0.81	1033	0.86	1079	0.91	1122	0.95	1163	0.97	1204	1.00	1247	1.03
2100	977	0.85	1024	0.90	1070	0.95	1114	1.00	1155	1.03	1196	1.06	1237	1.09	1278	1.12
2200	1018	0.95	1063	0.99	1107	1.04	1149	1.09	1190	1.12	1230	1.15	1270	1.18	1310	1.22
2300	1057	1.04	1100	1.09	1143	1.14	1185	1.18	1225	1.22	1264	1.25	1303	1.29	1342	1.33
2400	1096	1.14	1137	1.18	1179	1.23	1220	1.27	1260	1.31	1299	1.35	1337	1.40	1375	1.45

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA03										Kit ZA06					
1600	1185	0.79	1229	0.81	1271	0.84	1313	0.86	1354	0.90	1393	0.94	1431	0.98	1468	1.03
1700	1208	0.84	1252	0.87	1294	0.90	1335	0.94	1375	0.98	1413	1.02	1449	1.07	1485	1.12
1800	1233	0.91	1276	0.94	1318	0.98	1358	1.02	1397	1.06	1434	1.11	1469	1.16	1504	1.21
1900	1261	0.98	1303	1.02	1343	1.06	1382	1.11	1420	1.16	1455	1.21	1490	1.26	1525	1.31
2000	1289	1.07	1330	1.11	1370	1.16	1407	1.21	1444	1.27	1478	1.32	1513	1.37	1547	1.42
2100	1319	1.16	1359	1.21	1397	1.27	1433	1.32	1468	1.38	1502	1.44	1536	1.49	1570	1.53
2200	1350	1.27	1388	1.32	1424	1.38	1459	1.45	1494	1.51	1527	1.56	1561	1.61	1594	1.65
2300	1380	1.38	1417	1.45	1452	1.51	1486	1.58	1520	1.63	1553	1.68	1587	1.73	1620	1.78
2400	1411	1.51	1446	1.58	1480	1.65	1514	1.71	1547	1.77	1580	1.81	1614	1.86	1648	1.90

HORIZONTAL

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Field Furnished						Kit ZA03									
1600	752	0.40	818	0.45	882	0.50	943	0.55	999	0.59	1050	0.62	1097	0.66	1142	0.69
1700	792	0.46	855	0.52	917	0.56	975	0.61	1028	0.64	1077	0.68	1123	0.72	1166	0.75
1800	832	0.53	894	0.58	952	0.63	1007	0.67	1058	0.70	1105	0.74	1149	0.78	1192	0.82
1900	873	0.60	932	0.65	988	0.69	1040	0.73	1088	0.77	1134	0.81	1177	0.85	1219	0.90
2000	914	0.67	970	0.72	1023	0.76	1073	0.80	1120	0.85	1163	0.89	1205	0.94	1246	0.99
2100	955	0.74	1009	0.79	1059	0.84	1107	0.89	1152	0.93	1194	0.98	1235	1.03	1275	1.09
2200	995	0.83	1047	0.88	1095	0.93	1141	0.98	1184	1.03	1225	1.08	1265	1.14	1304	1.20
2300	1036	0.92	1085	0.97	1132	1.02	1175	1.08	1217	1.13	1257	1.19	1296	1.26	1334	1.32
2400	1077	1.01	1124	1.07	1168	1.13	1210	1.19	1251	1.25	1290	1.32	1328	1.39	1365	1.46

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
	Kit ZA03										Kit ZA06					
1600	1185	0.72	1228	0.75	1270	0.79	1310	0.83	1349	0.88	1387	0.93	1423	0.98	1459	1.03
1700	1209	0.78	1251	0.82	1292	0.87	1331	0.92	1370	0.97	1407	1.02	1443	1.07	1478	1.12
1800	1234	0.86	1275	0.91	1315	0.96	1354	1.01	1391	1.06	1428	1.11	1463	1.17	1498	1.22
1900	1260	0.95	1300	1.00	1340	1.05	1377	1.11	1414	1.16	1450	1.22	1485	1.27	1519	1.32
2000	1287	1.04	1326	1.10	1365	1.16	1402	1.21	1437	1.27	1472	1.33	1507	1.38	1541	1.43
2100	1314	1.15	1353	1.21	1391	1.27	1427	1.33	1462	1.39	1496	1.44	1530	1.50	1564	1.55
2200	1343	1.26	1381	1.33	1417	1.39	1453	1.45	1487	1.51	1521	1.56	1555	1.62	1589	1.67
2300	1372	1.39	1409	1.45	1445	1.52	1480	1.58	1513	1.64	1547	1.69	1580	1.75	1614	1.80
2400	1402	1.52	1438	1.59	1473	1.65	1507	1.71	1541	1.77	1574	1.83	1607	1.88	1641	1.93

DRIVE KIT SPECIFICATIONS

Model No.	Blower Motor Choice (HP)						Drive Kit No.	RPM Range
	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum		
036	1	1.15	1.5	1.7	-	-	ZA01	678 - 1035
							ZA04	964 - 1471
048	1	1.15	1.5	1.7	-	-	ZA02	803 - 1226
							[1] ZA05	1098 - 1490
060	1	1.15	1.5	1.7	-	-	ZA03	906 - 1383
							[1] ZA06	1262 - 1634
072 **074**	1	1.5	1.5	1.7	2	2.3	ZAA02	632 - 875
							[1]ZAA03	798 - 1105
							[2]ZAA04	921 - 1228

NOTE - Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor hp required. Maximum usable hp of motors furnished are shown. In Canada, nominal motor hp is also maximum usable motor hp. If motors of comparable hp are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

[1] 1.5 hp motor is required with ZA05, ZA06 and ZAA03 drive kits.

[2] 2 hp blower motor is required with ZAA04 drive kit.

POWER EXHAUST FAN PERFORMANCE

Return Air System Static Pressure - in. w.g.	Air Volume Exhausted cfm
0.00	1865
0.05	1785
0.10	1710
0.15	1630
0.20	1545
0.25	1450
0.30	1350
0.35	1240

OPTIONS / ACCESSORIES AIR RESISTANCE - in. w.g.

Air Volume cfm	Wet Indoor Coil		Gas Heat Exchanger		Electric Heat	Economizer	
	ZGB/ZCB036 ZGB/ZCB048	ZGB/ZCB060, ZGA/ZCA072, ZGB/ZCB074	Medium	High		Downflow	Horizontal
900	0.01	- - -	0.05	0.06	0.05	0.03	0.04
1000	0.02	- - -	0.06	0.06	0.06	0.03	0.05
1100	0.02	- - -	0.06	0.07	0.08	0.04	0.05
1200	0.02	- - -	0.06	0.07	0.09	0.05	0.06
1300	0.03	- - -	0.07	0.07	0.12	0.05	0.07
1400	0.03	- - -	0.07	0.08	0.17	0.06	0.08
1500	0.04	- - -	0.07	0.08	0.22	0.07	0.08
1600	0.04	0.03	0.07	0.08	0.26	0.08	0.09
1700	0.05	0.03	0.07	0.08	0.30	0.09	0.10
1800	0.05	0.03	0.06	0.08	0.33	0.10	0.11
1900	0.06	0.04	0.06	0.08	0.33	0.11	0.12
2000	0.06	0.04	0.07	0.09	0.31	0.12	0.13
2100	- - -	0.05	0.08	0.10	0.27	0.13	0.14
2200	- - -	0.05	0.10	0.12	0.29	0.14	0.15
2300	- - -	0.05	0.11	0.14	0.31	0.15	0.16
2400	- - -	0.06	0.11	0.13	0.32	0.16	0.18
2500	- - -	0.06	0.11	0.15	0.34	0.18	0.19
2600	- - -	0.07	0.13	0.16	0.38	0.19	0.20
2700	- - -	0.07	0.15	0.18	0.42	0.20	0.21
2800	- - -	0.07	0.13	0.16	0.45	0.22	0.23
2900	- - -	0.08	0.13	0.18	0.49	0.23	0.24

TABLE 5
DRIVE COMPONENT MANUFACTURER'S NUMBERS

Drive No.	DRIVE COMPONENT PART NUMBERS					
	Motor Pulley		Blower Pulley		Belts	
	Browning	OEM	Browning	OEM	Browning	OEM
Z01	1VP34 X 7/8	31K6901	AK54 X 5/8	100244-30	A40	100245-17
Z02	1VP34 X 7/8	31K6901	AK46 X 5/8	100244-31	A39	100245-16
Z03	1VP34 X 7/8	31K6901	AK41 X 5/8	100244-28	A39	100245-16
Z04	1VP34 X 7/8	31K6901	AK39 X 5/8	100244-32	A38	100245-15
Z05	1VP44 X 7/8	P-8-1488	AK49 X 5/8	100244-26	A41	100245-18
Z06	1VP50 X 7/8	53J1501	AK51 X 5/8	100244-29	A42	100245-19
ZAA02	1VP40 X 7/8	79J03	BK80H	100788-03	A53	100245-40
ZAA03	1VP40 X 7/8	79J03	AK59 X 1	31K68	A50	100245-29
ZAA04	1VP44 X 7/8	P-8-1488	AK59 X 1	31K68	AX51	13H01

TABLE 6
MINIMUM AIRFLOW
ZC UNITS WITH ELECTRIC HEAT

kW	CFM - Downflow and Horizontal	
	036-060	072, 074
5	960	NA
7.5	960	1500
10	960	1500
15	960	1500
22.5	1280	1500
30	NA	2100

Units with electric heat (5-30kW) can operate up to 1.6"w.g. maximum static pressure.

Cooling Start-Up

⚠IMPORTANT

This unit is equipped with a crankcase heater. Make sure heater is energized 24 hours before unit start-up to prevent compressor damage as a result of slugging.

A-Operation

1- Initiate first and second stage cooling demands according to instructions provided with thermostat. See table 7 for operation.

Note - ZG/ZC 074 units are equipped with two-stage compressors.

2- Units contain one refrigerant circuit or stage.

3- Unit is charged with R-410A refrigerant. See unit rating plate for correct amount of charge.

4- Refer to Refrigerant Charge and Check section for proper method to check refrigerant charge.

TABLE 7
COOLING OPERATION

T'Stat Demand	Energized	
024-072 No Economizer or Outdoor Air Unsuitable		
Y1	Compressor	Condenser Fan
Y2	Compressor	Condenser Fan
024-072 Unit Equipped With An Economizer		
Y1	Economizer	na
Y2	Economizer + Compressor	Condenser Fan
074 No Economizer or Outdoor Air Unsuitable		
Y1	Compressor Low Speed*	Condenser Fan
Y2	Compressor High Speed**	Condenser Fan
074 Unit Equipped With An Economizer		
Y1	Economizer	na
Y2	Economizer + Compressor Low Speed*	Condenser Fan

*67% of full capacity **100% of full capacity

B-Three Phase Scroll Compressor Voltage Phasing

Three phase scroll compressors must be phased sequentially to ensure correct compressor and blower rotation and operation. Compressor and blower are wired in phase at the factory. Power wires are color-coded as follows: line 1-red, line 2-yellow, line 3-blue.

1- Observe suction and discharge pressures and blower rotation on unit start-up.

2- Suction pressure must drop, discharge pressure must rise and blower rotation must match rotation marking.

If pressure differential is not observed or blower rotation is not correct:

3- Disconnect all remote electrical power supplies.

4- Reverse any two field-installed wires connected to the line side of K1 contactor. Do not reverse wires at blower contactor.

5- Make sure the connections are tight.

Discharge and suction pressures should operate at their normal start-up ranges.

C-Refrigerant Charge and Check

WARNING-Do not exceed nameplate charge under any condition.

This unit is factory charged and should require no further adjustment. If the system requires additional refrigerant, *reclaim the charge, evacuate the system,* and *add required nameplate charge.*

*NOTE - System charging is not recommended below 60°F (15°C). In temperatures below 60°F (15°C), the charge **must** be weighed into the system.*

If weighing facilities are not available, or to check the charge, use the following procedure:

IMPORTANT - Charge unit in standard cooling mode high stage only.

1- Make sure outdoor coil is clean. Attach gauge manifolds and operate unit at full CFM in cooling mode with economizer disabled until system stabilizes (approximately five minutes). Make sure all outdoor air dampers are closed.

2- Compare the normal operating pressures (see tables 8 - 12) to the pressures obtained from the gauges. Check unit components if there are significant differences.

3- Measure the outdoor ambient temperature and the suction pressure. Refer to the appropriate circuit charging curve to determine a target liquid temperature.

Note - Pressures are listed for sea level applications.

4- Use the same thermometer to accurately measure the liquid temperature (in the outdoor section).

- If measured liquid temperature is higher than the target liquid temperature, add refrigerant to the system.
- If measured liquid temperature is lower than the target liquid temperature, recover some refrigerant from the system.

5- Add or remove charge in increments. Allow the system to stabilize each time refrigerant is added or removed.

6- Continue the process until measured liquid temperature agrees with the target liquid temperature. Do not go below the target liquid temperature when adjusting charge. Note that suction pressure can change as charge is adjusted.

7- Example ZGB/ZCB036: At 95°F outdoor ambient and a measured suction pressure of 130psig, the target liquid temperature is 103°F. For a measured liquid temperature of 106°F, add charge in increments until measured liquid temperature agrees with the target liquid temperature.

TABLE 8
ZGB/ZCB036 NORMAL OPERATING PRESSURES - ALL-ALUMINUM COIL

Outdoor Coil Entering Air Temperature											
65 °F		75 °F		85 °F		95 °F		105 °F		115 °F	
Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)
116	231	119	269	122	311	126	356	129	405	132	458
123	234	127	271	130	313	133	359	137	408	140	462
140	245	144	280	147	321	151	368	155	417	159	171
156	261	160	297	167	338	170	383	173	433	178	489

TABLE 9
ZGB/ZCB048 NORMAL OPERATING PRESSURES - ALL-ALUMINUM COIL

Outdoor Coil Entering Air Temperature											
65 °F		75 °F		85 °F		95 °F		105 °F		115 °F	
Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)
112	244	115	283	118	326	121	373	124	423	127	480
118	248	122	288	126	331	130	379	133	429	136	177
135	258	138	298	142	341	145	389	150	441	153	496
149	272	154	311	158	355	162	402	166	455	171	193

TABLE 10
ZGB/ZCB060 NORMAL OPERATING PRESSURES - ALL-ALUMINUM COIL

Outdoor Coil Entering Air Temperature											
65 °F		75 °F		85 °F		95 °F		105 °F		115 °F	
Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)
106	248	110	288	114	331	118	378	123	428	126	483
114	254	118	292	122	336	125	384	129	435	133	493
130	267	134	308	138	353	142	401	146	455	151	511
147	290	151	329	155	372	159	420	164	477	169	533

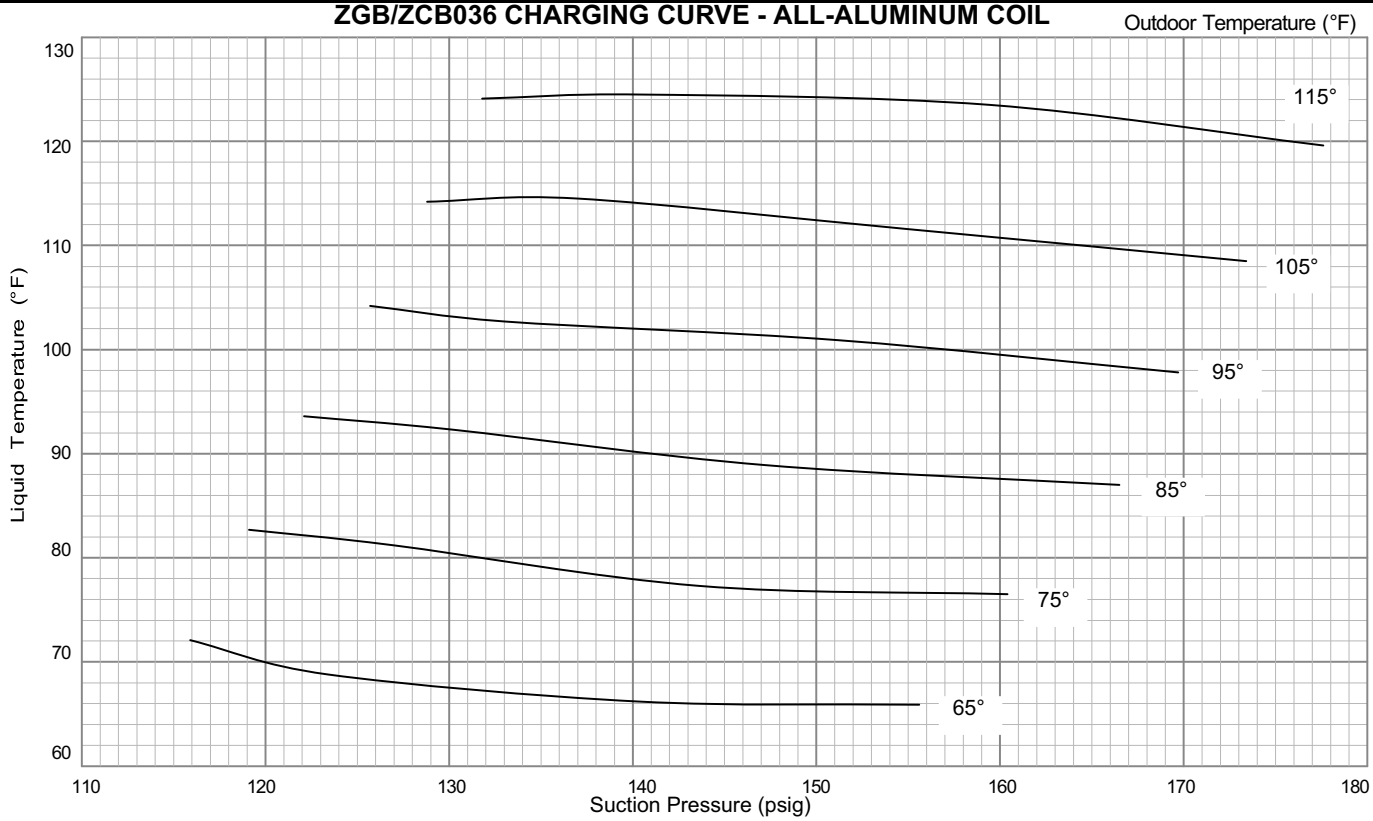
TABLE 11
ZGA/ZCA072 NORMAL OPERATING PRESSURES - ALL-ALUMINUM COIL

Outdoor Coil Entering Air Temperature											
65 °F		75 °F		85 °F		95 °F		105 °F		115 °F	
Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)
108	259	111	299	116	134	118	391	120	440	123	498
114	266	119	306	123	351	126	397	129	448	131	508
129	283	134	323	138	368	142	415	145	465	148	516
145	302	151	344	155	390	159	436	163	490	167	543

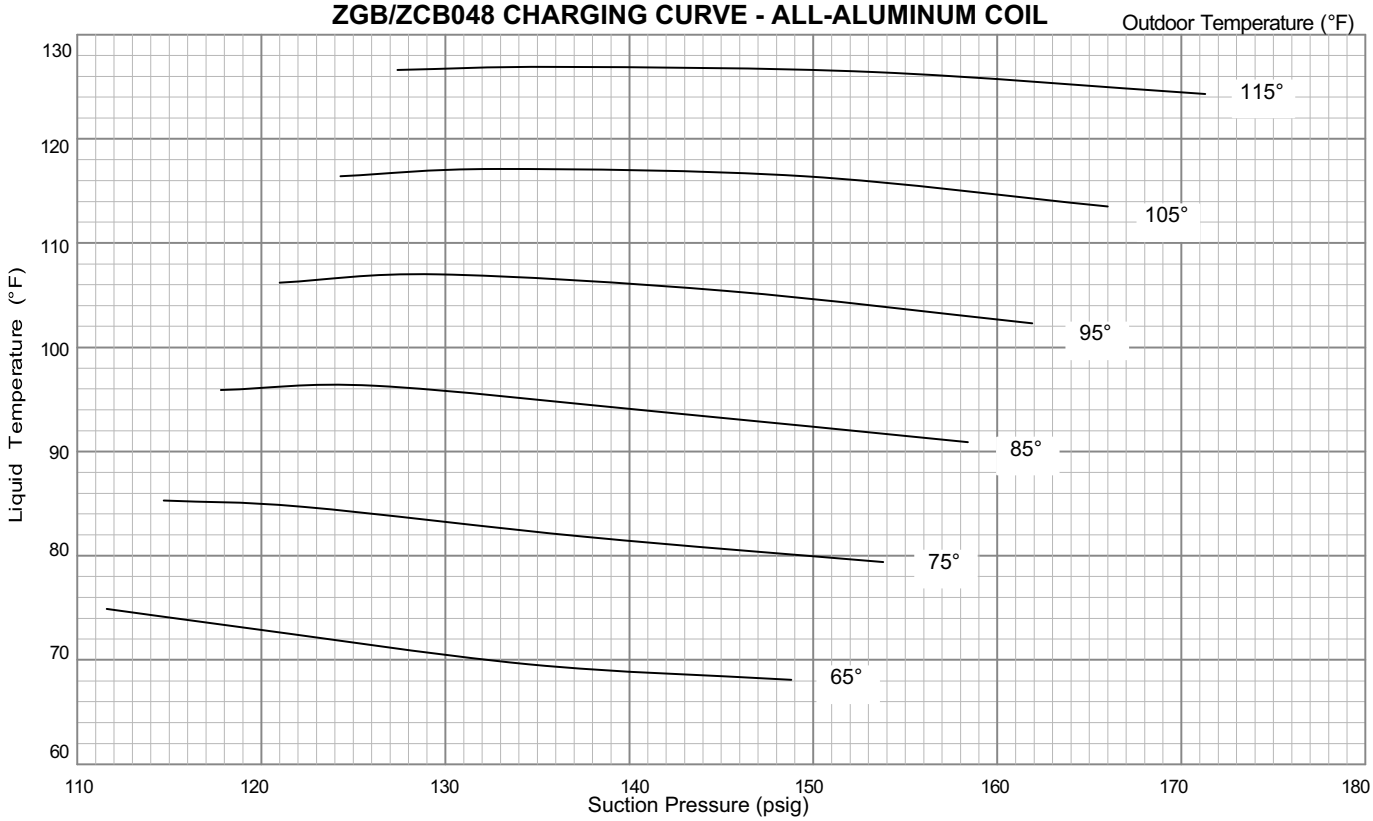
TABLE 12
ZGB/ZCB074 NORMAL OPERATING PRESSURES - ALL-ALUMINUM COIL

Outdoor Coil Entering Air Temperature											
65 °F		75 °F		85 °F		95 °F		105 °F		115 °F	
Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)	Suct (psig)	Disc (psig)
113	255	116	295	119	340	121	386	125	438	127	493
121	260	124	301	127	345	130	394	133	446	136	502
136	271	140	311	143	353	147	403	150	455	154	512
151	288	157	327	162	372	166	422	169	474	174	540

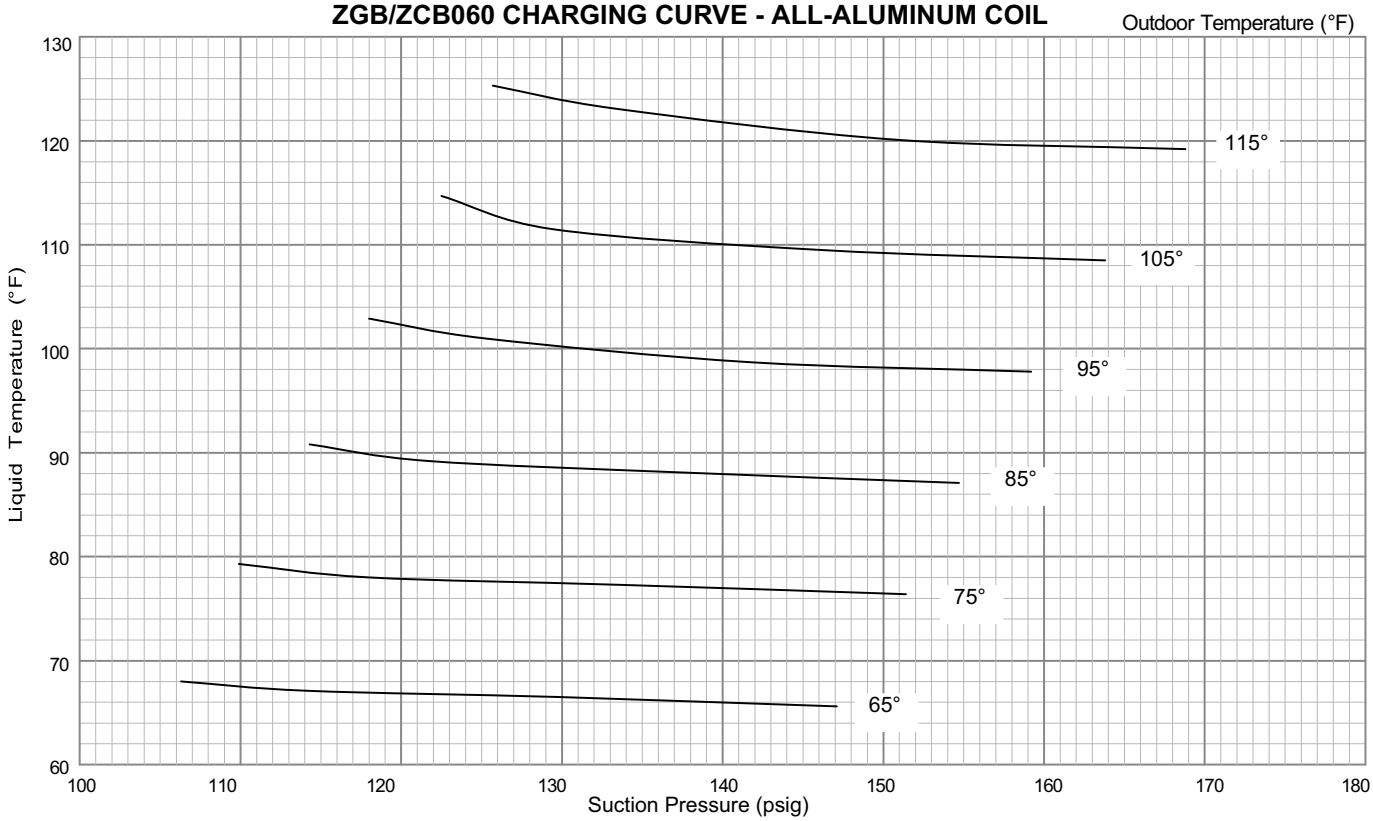
ZGB/ZCB036 CHARGING CURVE - ALL-ALUMINUM COIL



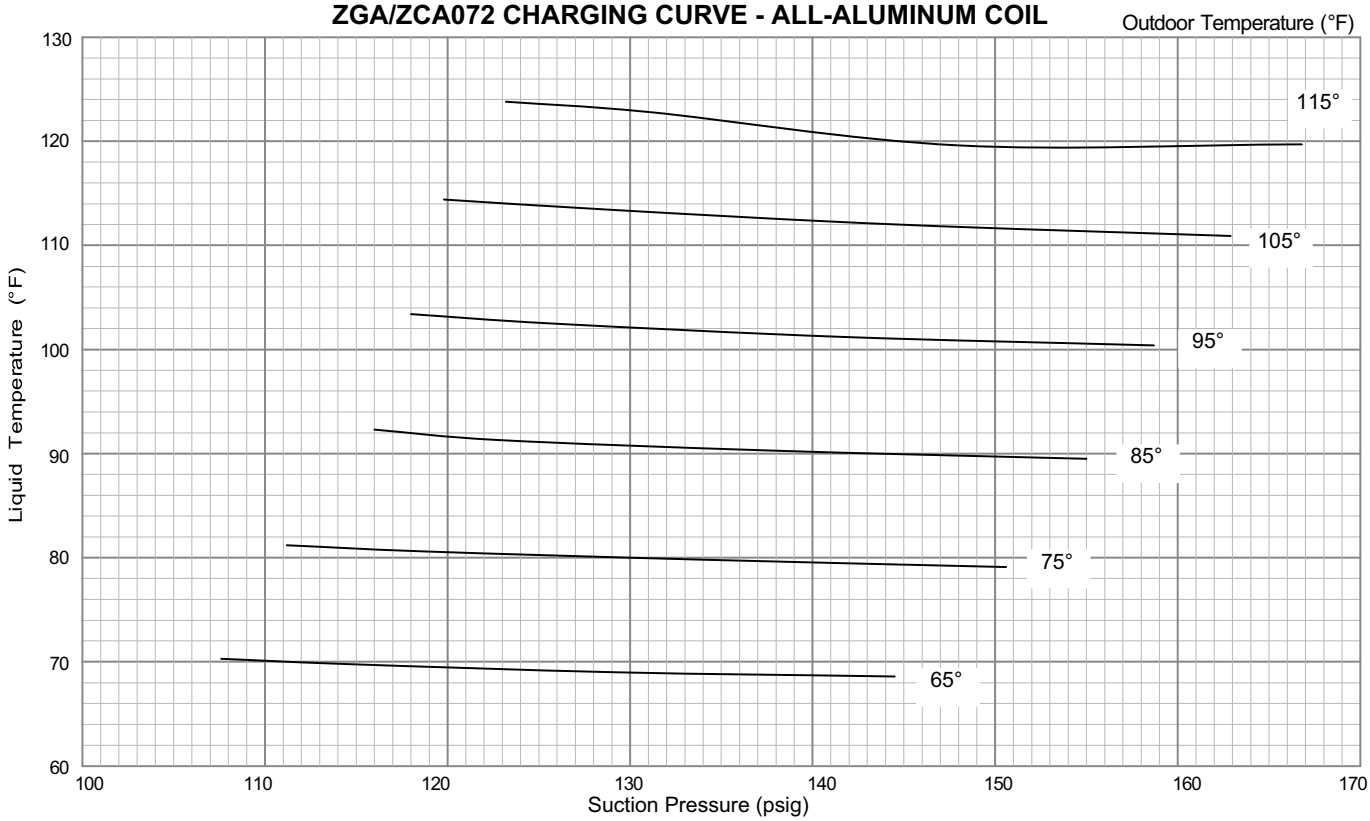
ZGB/ZCB048 CHARGING CURVE - ALL-ALUMINUM COIL



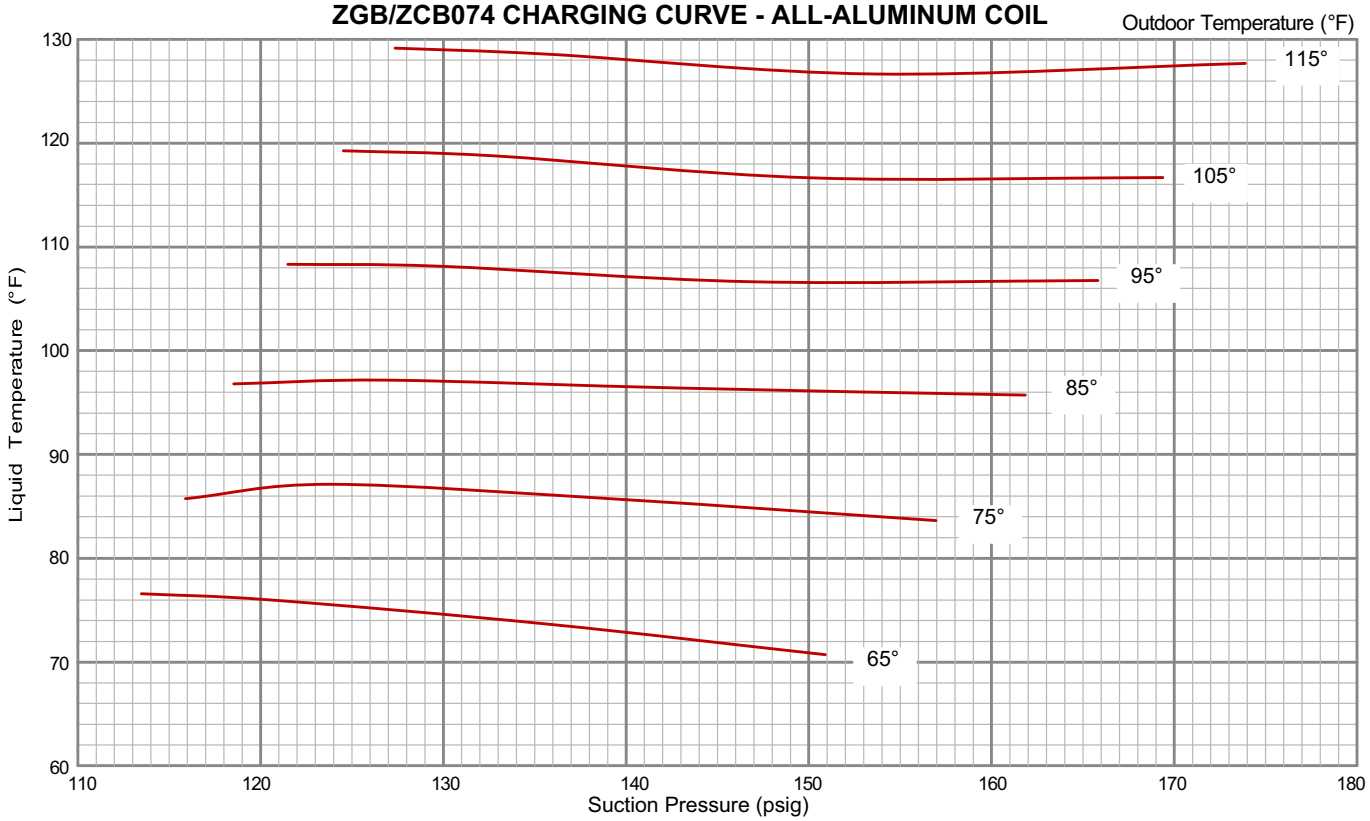
ZGB/ZCB060 CHARGING CURVE - ALL-ALUMINUM COIL



ZGA/ZCA072 CHARGING CURVE - ALL-ALUMINUM COIL



ZGB/ZCB074 CHARGING CURVE - ALL-ALUMINUM COIL



D-Compressor Controls

See unit wiring diagram to determine which controls are used on each unit. Optional controls are identified on wiring diagrams by arrows at junction points.

1- High Pressure Switch (S4)
The high pressure switch is an auto-reset SPST N.C. switch which opens on a pressure rise.

S4 is located in the compressor discharge line and is wired in series with the compressor contactor coil.

When discharge pressure rises to 640±10psig (4412±69kPa), indicating a problem with the system, the switch opens. The respective compressor is de-energized but the economizer can continue to operate. Auto-reset switches close at 475±20psig (3275±138kPa).

2- Compressor High Temperature Limit (S5)
The temperature limit switch S5 is located on the top of Interlink compressors and is wired in series with the high pressure switch S4.

Gas Heat Start-Up (Gas Units)

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠WARNING

Electric shock hazard. Can cause injury or death. Do not use this unit if any part has been under water. Immediately call a qualified service technician to inspect the unit and to replace any part of the control system and any gas control which has been under water.

⚠WARNING

Danger of explosion. Can cause injury or product or property damage. If overheating occurs or if gas supply fails to shut off, shut off the manual gas valve to the appliance before shutting off electrical supply.

⚠WARNING

Electric shock hazard. Can cause injury or death. Before attempting to perform any service or maintenance, turn the electrical power to unit OFF at disconnect switch(es). Unit may have multiple power supplies.

⚠WARNING

SMOKE POTENTIAL

The heat exchanger in this unit could be a source of smoke on initial firing. Take precautions with respect to building occupants and property. Vent initial supply air outside when possible.

BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

The gas valve may be equipped with either a gas control lever or gas control knob. Use only your hand to push the lever or turn the gas control knob. Never use tools. If the the lever will not move or the knob will not push in or turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.

⚠WARNING

Danger of explosion. Can cause injury or death. Do not attempt to light manually. Unit has a direct spark ignition system.

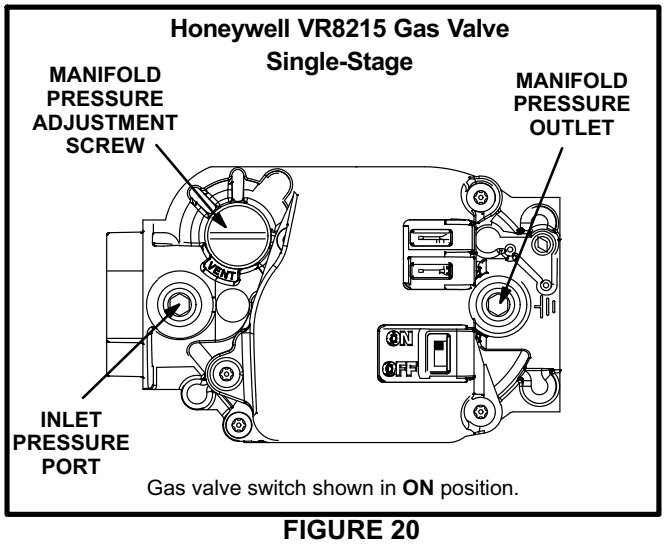
This unit is equipped with an automatic spark ignition system. There is no pilot. In case of a safety shutdown, move thermostat switch to **OFF** and return the thermostat switch to **HEAT** to reset ignition control.

A-Placing Unit In Operation

⚠WARNING

Danger of explosion and fire. Can cause injury or product or property damage. You must follow these instructions exactly.

Gas Valve Operation (figure 20 and 21)



Gas valve switch shown in **ON** position.

FIGURE 20

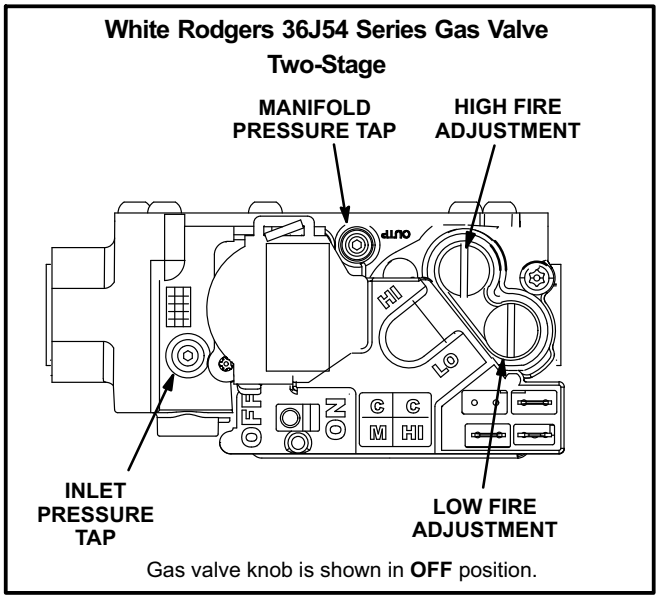


FIGURE 21

1- Set thermostat to lowest setting.

2- Turn off all electrical power to appliance.

3- This appliance is equipped with an ignition device which automatically lights the burner. Do **not** try to light the burner by hand.

4- Open or remove the heat section access panel.

5- *Honeywell VR8215 Gas Valve* - Switch gas valve lever to **OFF**. See figure 20.
White Rodgers 36J54 Gas Valve - Turn knob on gas valve clockwise ↷ to **OFF**. Do not force. See figure 21.

6- Wait five (5) minutes to clear out any gas. If you then smell gas, **STOP!** Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. If you do not smell gas, go to the next step.

7- *Honeywell VR8215 Gas Valve* - Switch gas valve lever to **ON**. See figure 20.
White Rodgers 36J54 Gas Valve - Turn knob on gas valve counterclockwise ↶ to **ON**. Do not force. See figure 21.

8- Close or replace the heat section access panel.

9- Turn on all electrical power to appliance.

10- Set thermostat to desired setting.

NOTE - When unit is initially started, steps 1 through 9 may need to be repeated to purge air from gas line.

11- The ignition sequence will start.

12- If the furnace does not light the first time (gas line not fully purged), it will attempt up to two more ignitions before locking out.

13- If lockout occurs, repeat steps 1 through 10.

14- If the appliance will not operate, follow the instructions “Turning Off Gas to Appliance” and call your service technician or gas supplier.

Turning Off Gas to Unit

1- If using an electromechanical thermostat, set to the lowest setting.

2- Before performing any service, turn off all electrical power to the appliance.

3- Open or remove the heat section access panel.

4- *Honeywell VR8215 Gas Valve* - Switch gas valve lever to **OFF**.
White Rodgers 36J54 Gas Valve - Turn knob on gas valve clockwise ↷ to **OFF**. Do not force.

5- Close or replace the heat section access panel.

⚠WARNING

Danger of explosion. Can cause injury or death. Do not attempt to light manually. Unit has a direct spark ignition system.

Heating Operation and Adjustments

(Gas Units)

A-Heating Sequence of Operation

1- On a heating demand the combustion air inducer starts immediately.

2- Combustion air pressure switch proves inducer operation. After a 30-second pre-purge, power is allowed to ignition control. Switch is factory set and requires no adjustment.

3- Spark ignitor energizes and gas valve solenoid opens.

4- Spark ignites gas, ignition sensor proves the flame and combustion continues.

5- If flame is not detected after first ignition trial, ignition control will repeat steps 3 and 4 two more times before locking out the gas valve.

6- For troubleshooting purposes, an ignition attempt after lock out may be re-established manually. Move thermostat to “OFF” and return thermostat switch to “HEAT” position.

B-Ignition Control Diagnostic LED's

TABLE 13
IGNITION CONTROL HEARTBEAT LED STATUS

LED Flashes	Indicates
Slow	Normal operation. No call for heat.
Fast	Normal operation. Call for heat.
Steady Off	Internal control fault OR no power to control OR Gas Valve Relay Fault.
Steady On	Control internal failure.
2	Lockout. Failed to detect or sustain flame.
3	Prove switch open or closed or rollout switch open.
4	Limit switch is open and/or high limit has opened three times.
5	Flame sensed but gas valve solenoid not energized.

C-Limit Controls

Limit controls are factory-set and are not adjustable. The primary limit is located to the right of the combustion air inducer. See figure 27.

If the primary limit trips three times in the same heating cycle, heating operation will de-energize. Heating will automatically restart after one hour if a heating demand is present. To initiate heating during the one hour timed-off interval, reset the thermostat.

D-Heating Adjustment

Main burners are factory-set and do not require adjustment.

The following manifold pressures are listed on the gas valve.

Natural Gas Units - Low Fire - 2.0” w.c.
Natural Gas Units - High Fire - 3.5” w.c.
LP Gas Units - Low Fire - 5.9” w.c.
LP Gas Units - High Fire - 10.5” w.c.

Electric Heat Start-Up (ZC Units)

Optional electric heat will stage on and cycle with thermostat demand. See electric heat wiring diagram on unit for sequence of operation.

Service

The unit should be inspected once a year by a qualified service technician.

⚠CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

A-Filters

Units are equipped with temporary filters which must be replaced prior to building occupation. See table 14 for correct filter size. Refer to local codes or appropriate jurisdiction for approved filters.

TABLE 14
UNIT FILTERS

Unit	Filter Size - inches (mm)
ZCB/ZGB036, 048	4 - 14 X 20 X 2 (352 X 508 X 51)
ZCB/ZGB060 ZCA/ZGA072 ZCB/ZGB074	2 - 16 X 20 X 2 (406 X 508 X 51) 2 - 20 X 20 X 2 (508 X 508 X 51)

To change filters, open filter access panel on back side of unit. See figure 22. Lift filter stop to remove filters. See figure 23.

⚠WARNING

Units are shipped from the factory with temporary filters. Replace filters before building is occupied. Damage to unit could result if filters are not replaced with approved filters. Refer to appropriate codes.

Approved filters should be checked monthly and replaced when necessary. Take note of air flow direction marking on filter frame when reinstalling filters. See figure 23.

NOTE-Filters must be U.L.C. certified or equivalent for use in Canada.

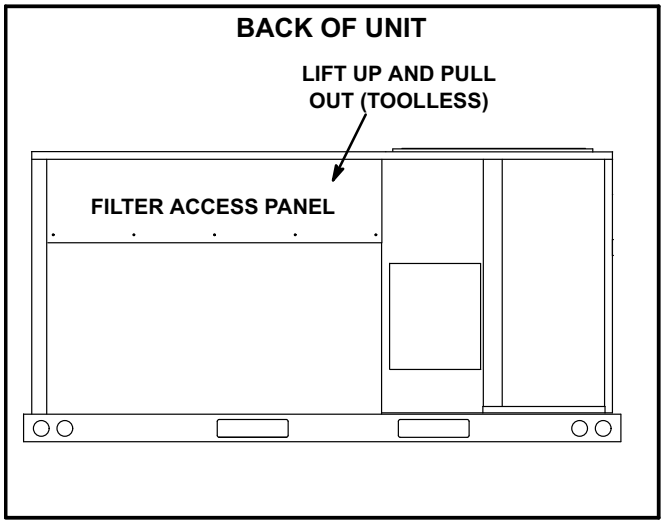


FIGURE 22

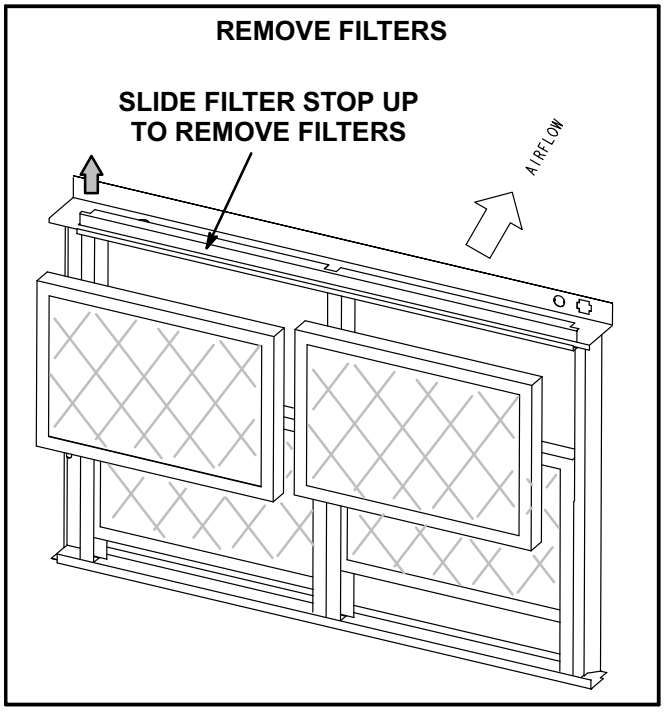


FIGURE 23

B-Lubrication

All motors are lubricated at the factory. No further lubrication is required.

C-Burners (Gas Units)

Periodically examine burner flames for proper appearance during the heating season. Before each heating season examine the burners for any deposits or blockage which may have occurred.

Clean burners as follows:

1- Turn off both electrical power and gas supply to unit.

2- Remove burner compartment access panel.

3- Remove top burner box panel.

4- Remove screws securing burners to burner support and lift the individual burners or the entire burner assembly from the orifices. See figure 24. Clean as necessary.

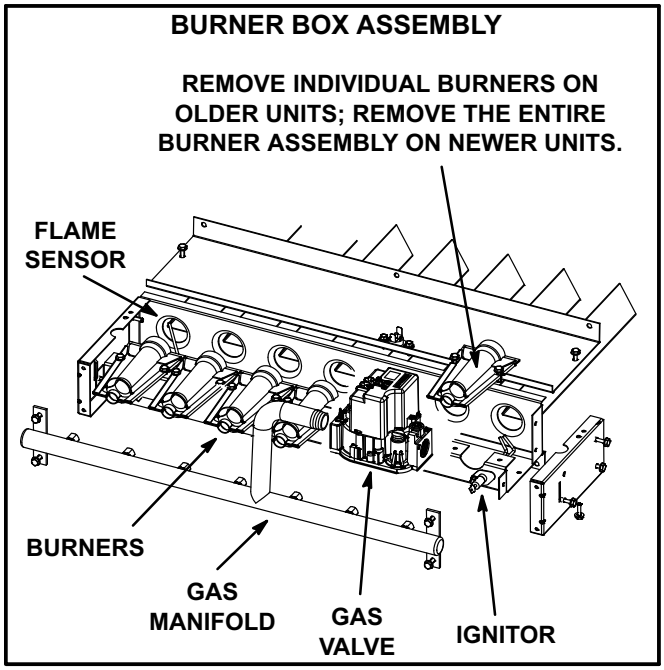


FIGURE 24

5- Locate the ignitor under the right burner. Check ignitor spark gap with appropriately sized twist drills or feeler gauges. See figure 25.

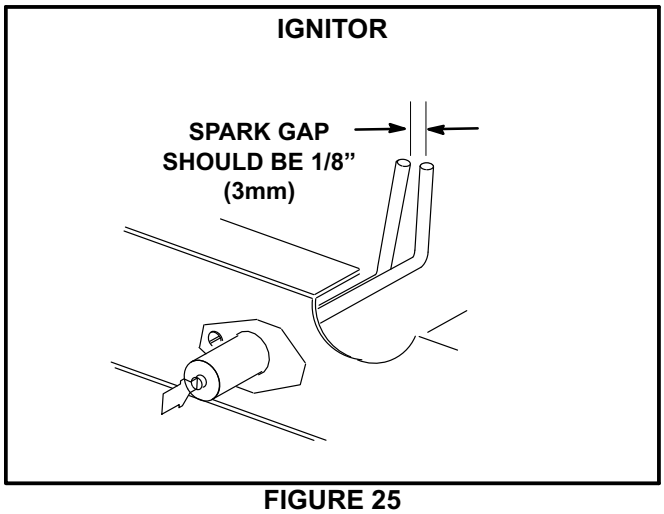


FIGURE 25

6- Replace burners and screws securing burner. See figure 26.

⚠WARNING

Danger of explosion. Can cause injury or death. Do not overtighten main burner mounting screws. Snug tighten only.

7- Replace access panel.

8- Restore electrical power and gas supply. Follow lighting instructions attached to unit and use inspection port in access panel to check flame.

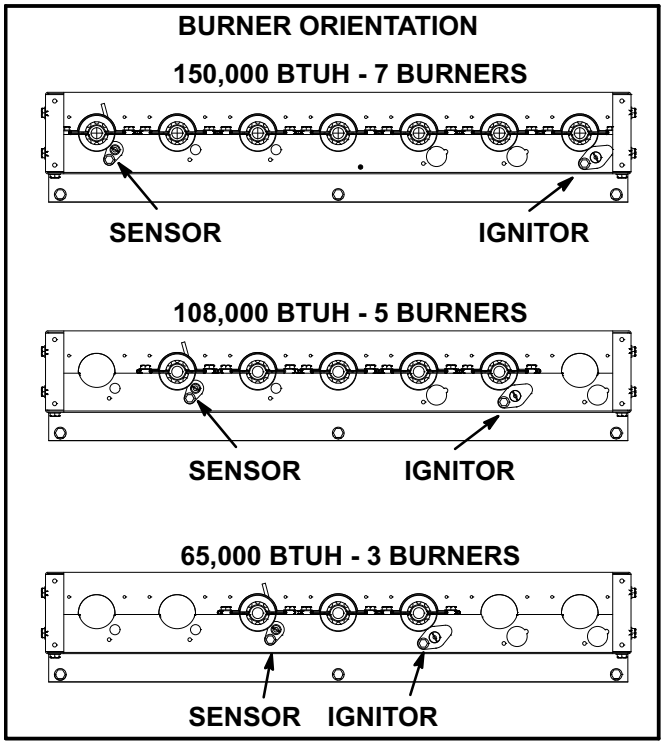


FIGURE 26

D-Combustion Air Inducer (Gas Units)

A combustion air proving switch checks combustion air inducer operation before allowing power to the gas controller. Gas controller will not operate if inducer is obstructed.

Under normal operating conditions, the combustion air inducer wheel should be checked and cleaned prior to the heating season. However, it should be examined periodically during the heating season to establish an ideal cleaning schedule.

Clean combustion air inducer as follows:

1- Shut off power supply and gas to unit.

2- Remove the access panel located on the right side of the outdoor section under the control box.

3- Remove and retain screws securing combustion air inducer to flue box. Remove vent connector. See figure 27.

4- Clean inducer wheel blades with a small brush and wipe off any dust from housing. Take care not to damage exposed fan blades. Clean accumulated dust from front of flue box cover.

5- Return combustion air inducer motor and vent connector to original location and secure with retained screws. It is recommended that gaskets be replaced during reassembly.

6- Replace the access panel.

7- Clean combustion air inlet louvers on heat access panel using a small brush.

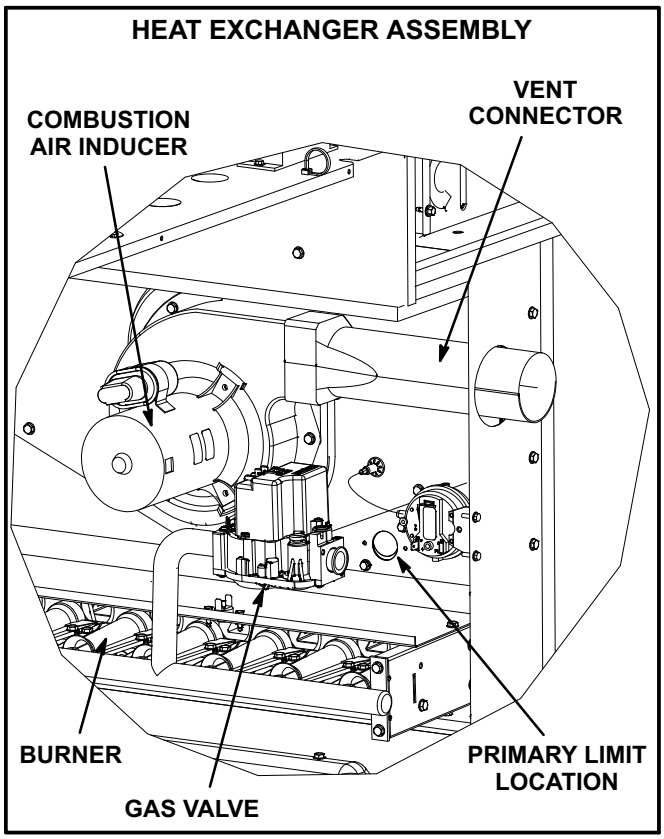


FIGURE 27

E-Flue Box (Gas Units)

Remove flue box cover only when necessary for equipment repair. Clean inside of flue box cover and heat exchanger tubes with a wire brush when flue box cover has to be removed. Install a new flue box cover gasket and replace cover. Make sure edges around flue box cover are tightly sealed.

F-Evaporator Coil

Inspect and clean coil at beginning of each cooling season. Clean using mild detergent or commercial coil cleaner. Flush coil and condensate drain with water taking care not to get insulation, filters and return air ducts wet.

G-Condenser Coil

Clean condenser coil annually with water and inspect monthly during the cooling season.

Clean the all-aluminum coil by spraying the coil steadily and uniformly from top to bottom. Do not exceed 900 psi or a 45 degree angle; nozzle must be at least 12 inches from the coil face. Take care not to fracture the braze between the fins and refrigerant tubes. Reduce pressure and work cautiously to prevent damage.

H-Compressor

If Interlink compressor replacement is necessary, call 1-800-4-LENNOX (1-800-453-6669).

⚠IMPORTANT

Some scroll compressors have an internal vacuum protector that will unload scrolls when suction pressure goes below 20 psig. A hissing sound will be heard when the compressor is running unloaded. Protector will reset when low pressure in system rises above 40 psig. DO NOT REPLACE COMPRESSOR.

J-Supply Air Blower Wheel

Annually inspect supply air blower wheel for accumulated dirt or dust. Turn off power before attempting to remove access panel or to clean blower wheel.

START-UP REPORT

Job Name:_____

Store No._____Start-Up Date:_____

Address:_____

City:_____State:_____

Start-Up Contractor:_____

Technician:_____

Model No.:_____

Serial No.:_____

RTU No.:_____ Catalog No.:_____

Inspections and Checks

Damage? Yes No R22 ☐ R410A ☐

If yes, reported to:_____

_____

Verify factory and field-installed accessories.

Check electrical connections. Tighten if necessary.

Supply voltage: L1-L2_____L1-L3_____L2-L3_____

If unit contains a 208-230/240 volt transformer:
Check primary transformer tap ☐
Transformer secondary voltage: _____

Cooling Checks

Compressor Rotation ☐ Ambient Temp._____Return Air Temp._____ Supply Air Temp._____

	Compressor Amps			Compressor Volts			Pressures		Condenser Fan Amps			CC Heater Amps
	L1	L2	L3	L1-L2	L1-L3	L2-L3	Disch.	Suct.	L1	L2	L3	L1
1												
2												
3												
4												

Blower Checks

Pulley/Belt Alignment ☐ Blower Rotation ☐

Set Screws Tight ☐ Belt Tension ☐

Nameplate Amps:_____ Volts:_____

Motor	Amps	Volts
	L1_____	L1-L2_____
	L2_____	L1-L3_____
	L3_____	L2-L3_____

Heating Checks - Gas

Fuel type: Nat. ☐ LP ☐ Inlet Pressure:_____in. w.c.

Return Air Temp.:_____ Supply Air Temp.:_____

Altitude:_____ Primary Limits Operate: ☐

Gas Valve	Manifold Pressure	
	Low Fire	High Fire
GV1		
GV2		

Control Type

Heating Checks - Electric

Return Air Temp.:_____ Supply Air Temp.:_____

Limits Operate: ☐

	Amps						
	L1	L2	L3		L1	L2	L3
1				10			
2				11			
3				12			
4				13			
5				14			
6				15			
7				16			
8				17			
9				18			

Accessory Checks

Power Exhaust Amps

1 _____ 2 _____ None ☐

Economizer Operation

Min. Pos. ☐ Motor travel full open/close ☐