



Heating and Air Conditioning

## TECHNICAL GUIDE

**R-410A**

**AFFINITY™ SERIES**

**DNX, DNY, DNZ MODELS**

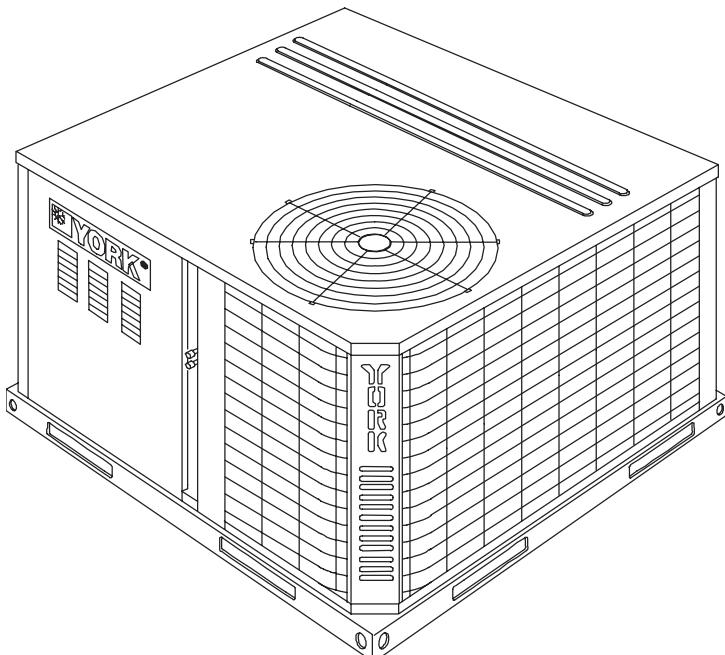
**2 - 5 TON**

**60 Hertz**

### Description

These York® Affinity™ packaged cooling/heating air conditioners are designed for outdoor installation. Only utility and duct connections are required at the point of installation.

The single or two stage gas-fired heaters have aluminized steel tubular heat exchangers and spark to pilot ignition. They are available in natural gas with field conversion to propane.



Tested in accordance with:



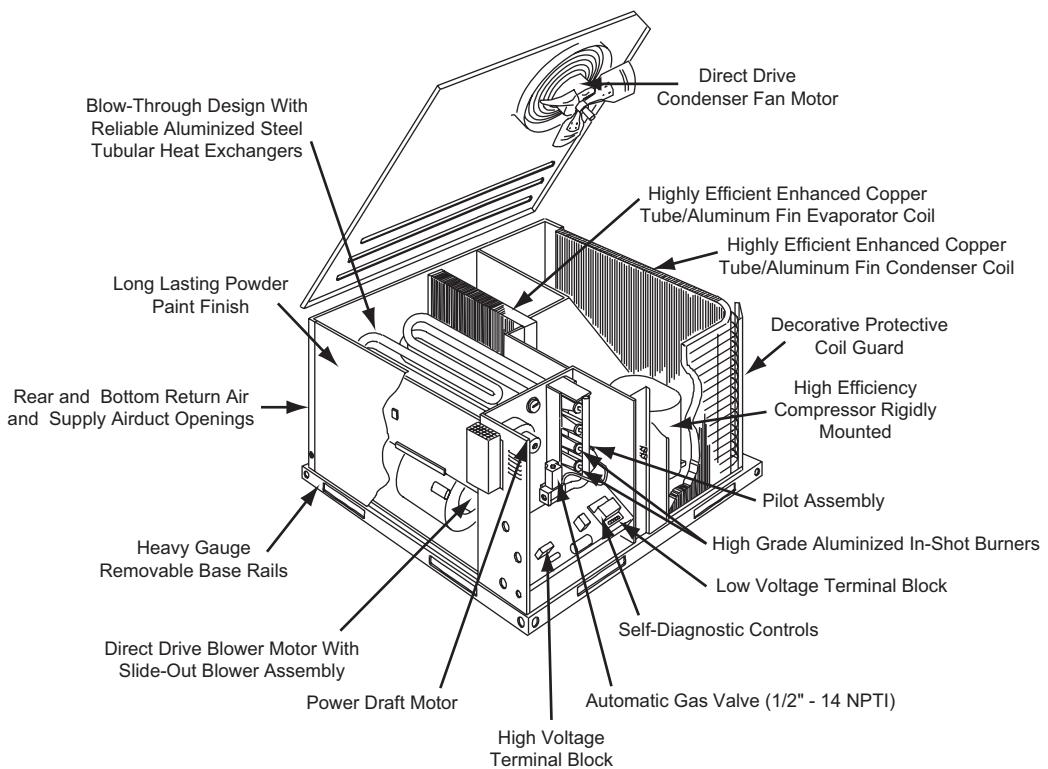
ISO 9001  
Certified Quality  
Management System

## Table of Contents

<b>Description</b>	1
<b>Table of Contents</b>	2
<b>Component Location</b>	2
<b>Nomenclature</b>	3
<b>Features and Benefits</b>	3
<b>Guide Specifications</b>	5
<b>Physical Data</b>	7
<b>Capacity Performance</b>	14
<b>Airflow Performance</b>	33
<b>Sound Performance</b>	41
<b>Electrical Data</b>	42
<b>Weights and Dimensions</b>	61

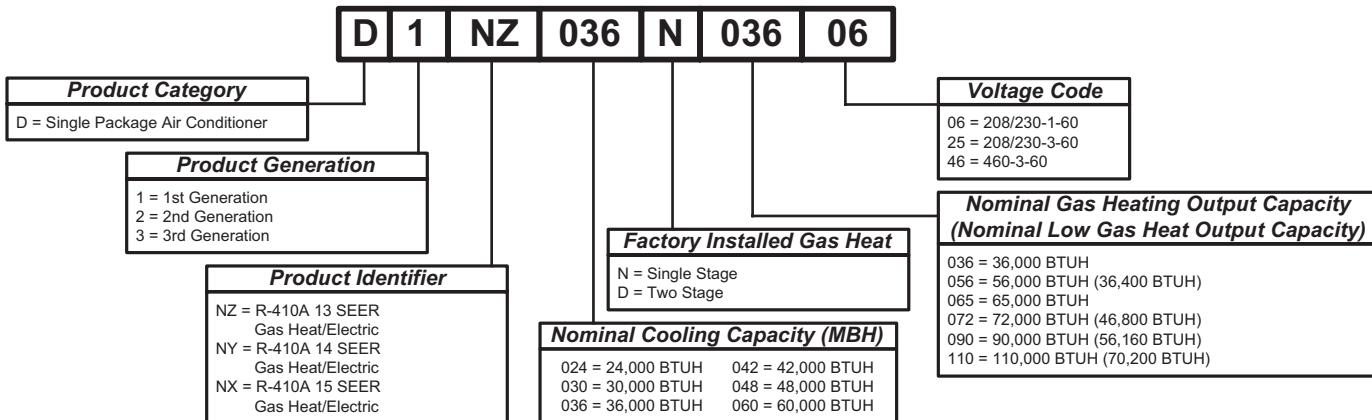
## Component Location

### Cooling/Gas Unit



## Nomenclature

### Cooling/Gas Unit



## Features and Benefits

### Standard Features

- Operating Efficiency** - All gas units provide a minimum AFUE of 80% and SEERS of 13.0 to 16.5. All efficiencies exceed legislated minimum levels.
- On Site Flexibility** - All model sizes share a common, compact design cabinet in a single footprint. The installer has the flexibility of setting one curb and placing the proper tonnage unit on that curb after the internal load has been determined. Field convertible duct connections from side shot to down shot allows the installer to have greater flexibility with less inventory.
- Lower Installation Cost** - Installation time and costs are reduced by easy power and control wiring connections. The small base dimension means less space is required on the ground or roof, plus, the installer can fit this unit between the wheel wells of full size pick-up truck.  
  
All units are completely wired, charged with R-410A and tested prior to shipment. Unique test stations using a new state of the art computerized process system are used to insure product quality. Refrigerant charge and component part numbers are verified via computers at assembly. Vital run test statistics such as system pressure, motor currents, air velocity and temperature, unit vibration, and gas system safeties are monitored and recorded by the system to insure unit performance.
- Equal size, side supply and return duct connections allows easy hook-up of ducts to match low crawl spaces without transition pieces.
- Utility Connections Made Easy** - Gas and electric utility knockouts are provided through the bottom as well as the side of the unit. Utility connections can be made quickly and with a minimum amount of field labor. A field supplied and field installed electrical disconnect switch must be installed.
- Convertible Airflow Design** - The bottom duct openings are covered when they leave the factory ready to be used

for a side supply/side return application. If a bottom supply/bottom return application is desired, you simply remove the two panels from the bottom of the unit and place them in the side supply/side return duct openings. No panel cutting is required and no accessory panel is necessary. Convertible airflow design allows maximum field flexibility and minimum inventory.

- Condensate Pan** - A non-corrosive, long-lasting, water-tight pan is positioned below the evaporator coil to collect and drain all condensate. Less collection of stagnate condensate will build-up. The condensate pan conforms to ASHRAE 62-89 standards (Ventilation for Acceptable Indoor Air Quality).
- Condensate Drain** - The heavy duty, 3/4 inch NPTI copper connection is more durable over time. The connection is rigidly mounted to assure proper fit and leak tight seal.
- Durable Finish** - With a heavy duty cabinet made of powder-painted, galvanized steel the neutral color blends into surrounding areas. The powdered paint provides a better paint to steel bond, which resists corrosion and rust creep. The special primer formulas and glossy finish insures less fading when exposed to sunlight and offers a more attractive on site appearance. This paint finish meets ASTM-B117 standards for 1000 hours salt spray rating. The highest in the industry.
- Full Perimeter Base Rails** - The easily removable base rails provide a solid foundation for the entire unit and protects the unit during shipment. The rails provide fork lift access from all sides, and rigging holes are also provided so that an overhead crane can be used to place the units on a roof. On applications where the unit is placed on a pad, the base will keep the unit off the pad to deter corrosion. On applications where height is limited, the inch high base rails may be removed on location.
- More Attractive Appearance** - A single piece Water Shed top cover containing a top discharge condenser fan arrangement requires less square footage on installation and provides a wider variety of installations. The one

piece design adds greater water integrity. Rounded corners with water drip edges add to the attractive appearance. The cabinet panels have a non-fibrous insulation that will not release insulation fibers into conditioned area.

- **Top Discharge** - The top discharge condenser fan does not disrupt neighboring areas or dry-out vegetation surrounding the unit. The warm air from the top mounted fan is blown up away from the structure and any landscaping. This allows compact location on multi-unit applications.
- **Condenser Coil Grille** - A multi-piece totally enclosed, rigidly mounted condenser coil grille provides protection from objects after installation and provides protection during transit.
- **Low Operating Sound Level** - The upward air flow carries the normal operating noise up and away from the living area. The rigid top panel effectively isolates any motor sound. Isolator mounted compressor and the rippled fins of the condenser coil muffle the normal fan motor and compressor operating sounds. The unique formed base pan also aids in sound alterations with its Super-Structure design. This design strategically places embossments in the pan for optimum strength and rigidity.
- **Fan System** - All models operate over a wide range of design conditions with an electrically commutated fan motor. These units easily match all types of applications and provide greater on site flexibility to match comfort requirement. The cooling speed is factory set and can be field adjusted to a second speed. The heating speed is factory set to maintain mid point rise at the units heating input, but can be field adjusted. This allows maximum comfort conditions.
- **Simple Control Circuit** - A low voltage printed circuit board contains a diagnostic indicator light and a low voltage terminal strip. An additional set of pin connectors is also provided to simplify the field interface of external controls. Mate-n-lock plug connectors are used. The electrical control box is not located in the compressor compartment. The controls are mounted on a Control-Tilt control panel to allow the access cover to be removed for trouble shooting and maintenance without affecting the normal system operating pressures. All wiring internal to the unit is color/number coded.
- **Protected Compressor** - The compressor is internally protected against high pressure and temperature. This is accomplished by the simultaneous operation of high pressure relief valve and a temperature sensor which protect the compressor if undesirable operating conditions occur.
- **Pressure Switches** - High pressure and low pressure/loss of charge switches standard in all units. When abnormal conditions are sensed through the pressure switches, the unit will lock out preventing any further operation until reset or problem is corrected.
- **Exclusive Coil Design** - Grooved copper tubes and enhanced aluminum fin construction improves heat transfer for maximum efficiency and durability.

- **Heat Exchangers** - Are corrosion-resistant, aluminized-steel tubular construction to provide long-life, trouble-free operation. The unique blow-through design also assures that condensate does not collect in humid areas when in the cooling cycle. This adds to longer heat exchanger life and higher long term efficiencies.
- **Post Purge Induced Draft Combustion** - Exhausts combustion products from the heat exchanger upon completion of the heating cycle to prolong the heat exchanger life.
- **Self Diagnostic Fan Control Module** - Due to this self diagnostic control, less on site time is required to trouble shoot these units.
- **Spark To Pilot Ignition** - Provides faster heat delivery. This ignition is highly reliable, durable and eliminates nuisance lockouts.
- **Multi Port In-shot Burners** - No field adjustment is required to mix the air and gas. These burners are constructed of high-grade corrosion-resistant, aluminized-steel.
- **Low Maintenance** - Long life, permanently lubricated condenser and evaporator fan motor bearings need no annual maintenance adding greater reliability to the unit. Blower assembly can be easily cleaned by the unique Slip- Track slide-out blower assembly.
- **Secured Service Access Ports** - Protected, externally mounted, re-usable service access ports are provided on both the high and low lines for ease of evacuating and charging the system. No final field mounting required.
- **Easy Service Access** - A large, single panel covers the electrical and gas controls makes servicing easy. The blower compartment has an additional large panel with a built-in handle tab. Removing this panel will allow the blower assembly to slide-out for easy removal for maintenance and ease of trouble shooting.
- **Replacement Parts** - The installer requires no special training to replace any of the components of these units and does not need to maintain an inventory of unique parts.
- **System Integration** - Each unit has the internal ability to integrate an electronic air cleaner or humidifier to work in conjunction with the base unit.

## Field Installed Accessories

- **Low NOx Kit** - Kit includes all the necessary hardware and instructions to field convert units to reduce emissions to less than 40 nanogram per Joule. California requirement on single phase models only.
- **Propane Conversion Kit** - Kit includes burner orifices, gas valve conversion and installation instructions necessary to field convert unit from natural gas to propane.
- **High Altitude Conversion Kit (Natural Gas/Propane)** - Kit includes all necessary labels and instructions to field alter units with natural gas/propane for installations above 2000 feet. Burner orifices must be obtained from Source 1 Parts. Propane Conversion Kit must be obtained separately.

- **Economizer Down Discharge/Supply Kit** - Modulating integrated economizer provides simultaneous operation between the mechanical cooling and economizer operation. Independent blade design insures proper control and less than 1% leak rate. Includes hood and mesh bird screen filter integrated into the hood, dry bulb sensor and relief damper. Separate field accessories of single enthalpy and dual enthalpy are also available. A built-in barometric relief of 25% is provided.
- **Single Enthalpy Sensor** - Sensor replaces dry bulb sensor standard in economizer kit. Provides improved economizer operation by sensing the dry bulb temperature from outdoors plus the enthalpy content of the outdoor air.
- **Dual Enthalpy Sensor** - Additional sensor to single enthalpy sensor. Sensor senses both the return air temperature dry bulb and humidity in conjunction with the single enthalpy to determine the most economical mix. Single Enthalpy sensor also required.
- **Hail Guard Kit** - Kit contains protective grilles made of expanded aluminum with full perimeter frame. Sloped hoods are also included to assure maximum protection.
- **Anti Short Cycle Timer (DNZ Units Only)** - Automatically prevents the compressor from restarting for 5 minutes after cycled off. Not required if Thermostat 2ET07700224 and 2ET04700224 are used. Standard in all DNX and DNY units.
- **Filter/Frame Kit (Single Phase Only)** - Kit contains the necessary hardware to field install return air filters into the base unit. Pre-cut filter racks and appropriate cleanable standard size filters are shipped in one kit. The filter rack is suitable for either 1" or 2" filters. (1" filter is supplied) This kit is available for single phase horizontal or vertical duct application only. Standard in all 3 Phase models.
- **Motorized Fresh Air Damper** - Designed for duct mounted side supply/return and unit mounted down supply/return applications. Damper capable of providing 0% through 50% of outdoor air (field supplied). Closes on power loss, includes hood and screen assembly.
- **Rectangle To Round Adapters** - Kit includes one supply and one return air rectangle to round duct adapter. Adapters are preformed and designed to fit over current duct openings on the base unit. Transition is from side square duct opening to 14" round duct opening.
- **Roof Curbs** - NRCA approved curbs provide proper fit to base unit for rooftop installations. Curbs are designed to be assembled through hinge pins in each corner. Kit also provides seal strip to assure a water tight seal. 8 and 14 inch high roof curbs are available.
- **Manual Outdoor Damper** - Provides 0% through 50% outdoor air capability (field adjustable). Designed for duct mounted side supply/return applications. Includes hood and screen assembly.
- **Wall Thermostat** - The units are designed to operate with 24-volt electronic and electro-mechanical thermostats. All units can operate with single stage heat/single stage cool thermostats - with or without the economizer.

- **Low Ambient Kit** - Kit provides necessary hardware to convert unit to operate in cooling cycle down to 0° F. Standard unit operation 45° F.
- **Transformer Kit** - Kit provides necessary hardware to provide single phase models from factory furnished 40 VA transformer capability to 75 VA transformer capability. (Required on installations with economizer or motorized damper.)

## Guide Specifications

### General

Units shall be manufactured by York International Unitary Products Group in an ISO 9001 certified facility. YORK's Affinity™ package units give you the flexibility and choices you need in today's market. These packaged cooling/heating air conditioners are designed for outdoor installation. Only utility and duct connections are required at the point of installation. The single or two stage gas fired heaters have aluminized steel tubular heat exchangers and spark to pilot ignition. They are available in natural gas with field conversion to propane.

### Description

Units shall be factory-assembled, single packaged, Electric Cooling/Gas Heating units, designed for outdoor mounted installation. For SEER ratings, refer to technical literature. They shall have built in, equal size, field convertible duct connections for down discharge supply/return or horizontal discharge supply/return. The units shall be factory wired, piped, charged with R-410A Refrigerant and factory tested prior to shipment. All unit wiring shall be both numbered and color coded. All units shall be manufactured in a facility certified to ISO 9001 standards, and the cooling performance shall be rated in accordance with DOE and ARI test procedures. The heating performance shall be rated to DOE and GAMA test procedures. Units shall be CSA listed and classified to ANSI Z21.47/CAN/CSA 2.3 standards and UL 1995/CAN/CSA No. 236-M90 conditions.

### Unit Cabinet

Unit cabinet shall be constructed of G90 galvanized steel, with exterior surfaces coated with a non-chalking, powdered paint finish, certified at 1000 hours salt spray test per ASTM-B117 standards. The unit top shall be a single piece "Water Shed" design, with drip edges and no-seam corners to provide optimum water integrity. Unit shall have a rigidly mounted condenser coil guard to provide protection from objects and personnel after installation. Indoor blower section shall be insulated with up to 3/4" thick, aluminum, foil faced insulation, fastened to prevent insulation from entering the air stream. Cabinet panels shall be "large" size, easily removable for servicing and maintenance, with built-in lift handles. Unit shall be built on a formed, "Super-Structure" design base pan, with embossments at critical points to add strength, rigidity and aid in minimizing sound. Full perimeter base rails shall be provided to assure reliable transit of equipment, overhead rigging, for truck access and proper sealing on roof curb applications. Base

rails shall be removable, when required, to lower unit height. Filters shall be furnished and be accessible through a removable access door, sealed airtight. Units vertical discharge and return duct configuration shall be designed to fit between standard 24" O.C. beams without modification to building structure, duct work and base unit. Condensate pan shall be internally sloped and conform to ASHRAE 62-89 self-draining standards, with 3/4" NPTI copper, ridged mount connection.

### **Indoor (Evaporator) Fan Assembly**

Fan shall be direct drive design. Fan wheel shall be double-inlet type with forward-curved blades, dynamically balanced to operate smoothly throughout the entire range of operation. Airflow design shall be constant air volume. Bearings shall be sealed and permanently lubricated for longer life and no maintenance. Fan assembly shall be "Slip Track" (slide-out) design for easy removal and cleaning.

### **Outdoor (Condenser) Fan Assembly**

The outdoor fan shall be of the direct-driven propeller type, discharge air vertically, have aluminum blades riveted to corrosion resistant steel spider bracket and shall be statically balanced for smooth operation. The outdoor fan motor shall be totally enclosed with permanently lubricated bearings and internally protected against overload conditions.

### **Refrigerant Components**

#### Compressors:

- a. Shall be fully hermetic type, direct drive, internally protected with internal high-pressure relief and over temperature protection. The hermetic motor shall be suction gas cooled and have a voltage range of +/- 10% of the unit nameplate voltage.
- b. Shall have internal isolation and sound muffling to minimize vibration and noise, and be externally isolated on a dedicated, independent mounting.

#### Coils:

- a. Evaporator and condenser coils shall have aluminum plate fins mechanically bonded to seamless internally enhanced copper tubes with all joints brazed.
- b. Evaporator coil shall be of the direct expansion, blow through design, while condenser coil shall be draw through design.

Refrigerant Circuit and Refrigerant Safety Components shall include:

- a. Shall include independent fixed orifice expansion devices.
- b. Shall include filter,strainer to eliminate any foreign matter.

### **Gas Heating Section (If Equipped)**

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

- a. Primary and auxiliary high-temperature limit switches.
- b. Induced draft pressure sensor.
- c. Flame roll out switch (manual reset).
- d. Flame proving controls.

**DNX024-048 Single Stage Gas Heat**

Component	Models					
	DNX024	DNX036	DNX048			
<b>Nominal Tonnage</b>	2.0	3.0	4.0			
<b>ARI COOLING PERFORMANCE</b>						
Gross Capacity @ ARI A point (Btu)	24.6	38.4	50.0			
ARI net capacity (Btu)	24.0	37.0	48.0			
EER	11.5	12.3	11.2			
SEER	15.0	16.5	15.0			
Nominal CFM	800	1275	1550			
System power (KW)	2.1	3.0	4.3			
Refrigerant type	R-410A	R-410A	R-410A			
Refrigerant charge (lb-oz)	7-8	9-12	9-8			
<b>ARI HEATING PERFORMANCE</b>						
Heating model	36	56	65	90	65	90
Heat input (K Btu)	45	70	80	108	80	108
Heat output (K Btu)	36	56	64	87	64	87
AFUE %	80.0	80.0	80.0	80.0	80.0	80.0
Steady state efficiency (%)	80	80	80	80	80	80
No. burners	2	3	3	4	3	4
No. stages	1	1	1	1	1	1
Temperature Rise Range (°F)	25-55	30-60	25-55	45-75	25-55	35-65
Gas Limit Setting (°F)	140	160	140	160	150	170
Gas piping connection (in.)	1/2		1/2		1/2	
<b>DIMENSIONS (inches)</b>						
Length	49 1/8		49 1/8		49 1/8	
Width	47 1/4		47 1/4		47 1/4	
Height	33 1/2		41 1/2		41 1/2	
<b>OPERATING WT. (lbs.)</b>	440		480		500	
<b>COMPRESSORS</b>						
Type	Scroll 2-spd		Scroll 2-spd		Scroll 2-spd	
Quantity	1		1		1	
<b>CONDENSER COIL DATA</b>						
Face area (Sq. Ft.)	11.7		14.7		14.7	
Rows	2		2		2	
Fins per inch	20		20		20	
Tube diameter (in.)	3/8		3/8		3/8	
Circuitry Type	Interlaced		Interlaced		Interlaced	
<b>EVAPORATOR COIL DATA</b>						
Face area (Sq. Ft.)	3.4		4.4		4.4	
Rows	2		3		3	
Fins per inch	15		16		16	
Tube diameter	3/8		3/8		3/8	
Circuitry Type	Interlaced		Interlaced		Interlaced	
Refrigerant control	TXV		TXV		TXV	
<b>CONDENSER FAN DATA</b>						
Quantity	1		1		1	
Fan diameter (Inch)	22		22		22	
Type	Prop		Prop		Prop	
Drive type	Direct		Direct		Direct	
No. speeds	1		2		2	
Number of motors	1		1		1	
Motor HP each	1/4		1/3		1/3	
RPM	1100		900/1100		900/1100	
Nominal total CFM	2400		2400		3000	
<b>DIRECT DRIVE EVAP FAN DATA</b>						
Quantity	1		1		1	
Fan Size (Inch)	10 x 8		11 x 10		11 x 10	
Type	Centrifugal		Centrifugal		Centrifugal	
Motor HP each	1/2		1		1	
RPM	Variable		Variable		Variable	
Frame size	48		48		48	
<b>FILTERS</b>						
Quantity - Size	1 - 20 x 20 x 1		2 - 20 x 12 x 1		2 - 20 x 12 x 1	

**DNX024-048 Two Stage Gas Heat**

Component	Models		
	DNX024	DNX036	DNX048
Nominal Tonnage	2.0	3.0	4.0
<b>ARI COOLING PERFORMANCE</b>			
Gross Capacity @ ARI A point (Btu)	24.6	38.4	50.0
ARI net capacity (Btu)	24.0	37.0	48.0
EER	11.5	12.3	11.2
SEER	15.0	16.5	15.0
Nominal CFM	800	1275	1550
System power (KW)	2.1	3.0	4.3
Refrigerant type	R-410A	R-410A	R-410A
Refrigerant charge (lb-oz)	7-8	9-12	9-8
<b>ARI HEATING PERFORMANCE</b>			
Heating model	56	90	90
Heat input (K Btu)	70/45.5	108/70.2	108/70.2
Heat output (K Btu)	56/36.4	87/56.2	87/56.2
AFUE %	80.0	80.0	80.0
Steady state efficiency (%)	80	80	80
No. burners	3	4	4
No. stages	2	2	2
Temperature Rise Range (°F)	30-60	45-75	35-65
Gas Limit Setting (°F)	160	175	170
Gas piping connection (in.)	1/2	1/2	1/2
<b>DIMENSIONS (inches)</b>			
Length	49 1/8	49 1/8	49 1/8
Width	47 1/4	47 1/4	47 1/4
Height	33 1/2	41 1/2	41 1/2
<b>OPERATING WT. (lbs.)</b>			
<b>COMPRESSORS</b>			
Type	Scroll 2-spd	Scroll 2-spd	Scroll 2-spd
Quantity	1	1	1
<b>CONDENSER COIL DATA</b>			
Face area (Sq. Ft.)	11.7	14.7	14.7
Rows	2	2	2
Fins per inch	20	20	20
Tube diameter (in.)	3/8	3/8	3/8
Circuitry Type	Interlaced	Interlaced	Interlaced
<b>EVAPORATOR COIL DATA</b>			
Face area (Sq. Ft.)	3.4	4.4	4.4
Rows	2	3	3
Fins per inch	15	16	16
Tube diameter	3/8	3/8	3/8
Circuitry Type	Interlaced	Interlaced	Interlaced
Refrigerant control	TXV	TXV	TXV
<b>CONDENSER FAN DATA</b>			
Quantity	1	1	1
Fan diameter (Inch)	22	22	22
Type	Prop	Prop	Prop
Drive type	Direct	Direct	Direct
No. speeds	1	2	2
Number of motors	1	1	1
Motor HP each	1/4	1/3	1/3
RPM	1100	900/1100	900/1100
Nominal total CFM	2400	2400	3000
<b>DIRECT DRIVE EVAP FAN DATA</b>			
Quantity	1	1	1
Fan Size (Inch)	10 x 8	11 x 10	11 x 10
Type	Centrifugal	Centrifugal	Centrifugal
Motor HP each	1/2	1	1
RPM	Variable	Variable	Variable
Frame size	48	48	48
<b>FILTERS</b>			
Quantity - Size	1 - 20 x 20 x 1	2 - 20 x 12 x 1	2 - 20 x 12 x 1

**DNZ, DNY and DNX Unit Limitations**

Size (Tons)	Model	Unit Voltage	Unit Limitations		
			Applied Voltage		Outdoor DB Temp
			Min	Max	
024 (2.0)	DNZ	208/230-1-60	187	252	125
	DNY DNX	208/230-1-60	187	252	115
030 (2.5)	DNZ	208/230-1-60	187	252	125
		208/230-3-60	187	252	125
		460-3-60	432	504	125
036 (3.0)	DNZ	208/230-1-60	187	252	125
		208/230-3-60	187	252	125
		460-3-60	432	504	125
	DNY DNX	208/230-1-60	187	252	115
		208/230-3-60	187	252	115
		460-3-60	432	504	115
042 (3.5)	DNZ	208/230-1-60	187	252	125
		208/230-3-60	187	252	125
		460-3-60	432	504	125
048 (4.0)	DNZ	208/230-1-60	187	252	125
		208/230-3-60	187	252	125
		460-3-60	432	504	125
	DNY DNX	208/230-1-60	187	252	115
		208/230-3-60	187	252	115
		460-3-60	432	504	115
060 (5.0)	DNZ	208/230-1-60	187	252	125
		208/230-3-60	187	252	125
		460-3-60	432	504	125
	DNY	208/230-1-60	187	252	115
		208/230-3-60	187	252	115
		460-3-60	432	504	115

**DNX024-048 Cooling Capacities****DNX024 (2.0 Ton)**

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity <sup>1</sup> (MBh)	Total Input (kW) <sup>2</sup>	Sensible Capacity (MBh)						Net Capacity <sup>1</sup> (MBh)	Total Input (kW) <sup>2</sup>	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)									Return Dry Bulb (°F)				
		75°F														85°F	
600	77	24.9	1.2	11.4	8.7	9.0	-	-	-	23.6	1.3	11.9	10.1	8.3	-	-	-
	72	22.8	1.1	16.1	13.0	11.8	9.7	-	-	21.4	1.3	15.6	13.4	11.2	9.0	-	-
	67	20.8	1.1	20.8	17.3	14.7	12.1	9.5	-	19.2	1.3	19.2	16.7	14.0	11.4	8.7	-
	62	18.3	1.1	18.3	18.3	17.7	13.7	9.8	5.8	17.2	1.3	17.2	17.2	16.9	12.8	8.8	4.7
	57	19.5	1.0	19.5	19.4	15.1	10.9	6.6	-	17.8	1.2	17.8	17.8	17.7	13.5	9.3	5.1
800	77	32.1	1.8	15.1	13.3	10.8	-	-	-	30.6	2.0	15.6	12.9	10.3	-	-	-
	72	29.8	1.8	21.1	18.2	15.3	12.4	-	-	28.2	1.9	20.6	17.6	14.6	11.6	-	-
	67	27.4	1.7	27.1	23.0	19.7	16.5	13.2	-	25.7	1.9	25.5	22.2	18.9	15.7	12.4	-
	62	25.0	1.7	25.0	25.0	24.2	20.8	17.4	14.0	23.6	1.8	23.6	23.6	23.1	19.7	16.2	12.8
	57	25.6	1.7	25.6	25.6	25.6	21.9	18.1	14.3	23.9	1.9	23.9	23.9	23.7	20.1	16.5	12.9
		95°F														105°F	
600	77	22.3	1.5	12.5	11.4	7.6	-	-	-	20.1	1.7	13.0	8.7	6.8	-	-	-
	72	19.9	1.5	15.1	13.7	10.5	8.2	-	-	18.0	1.7	14.5	11.4	9.8	7.4	-	-
	67	17.6	1.4	17.6	16.0	13.4	10.7	8.0	-	15.9	1.6	15.9	14.1	12.7	9.1	5.6	-
	62	16.1	1.4	16.1	16.1	16.1	11.9	7.7	3.6	14.6	1.6	14.6	14.6	15.1	10.8	5.9	2.3
	57	16.1	1.4	16.1	16.1	15.9	11.8	7.7	3.6	14.9	1.6	14.9	14.7	14.6	11.2	7.8	4.3
800	77	29.2	2.1	16.1	12.5	9.8	-	-	-	26.9	2.4	17.0	11.9	9.0	-	-	-
	72	26.6	2.1	20.1	17.0	14.0	10.9	-	-	24.4	2.3	19.4	16.3	13.2	10.0	-	-
	67	24.0	2.1	24.0	21.5	18.2	14.8	11.5	-	21.9	2.3	21.9	20.7	17.3	13.9	10.5	-
	62	22.2	2.0	22.2	22.2	22.1	18.6	15.1	11.5	20.3	2.3	20.3	20.3	21.0	17.4	13.8	10.1
	57	22.2	2.0	22.2	22.2	21.7	18.3	14.9	11.5	20.7	2.3	20.7	20.7	20.7	20.1	16.6	13.1
		115°F															
600	77	18.0	1.9	13.5	6.0	6.0	-	-	-								
	72	16.1	1.9	13.9	9.0	9.0	6.6	-	-								
	67	14.3	1.8	14.3	12.1	12.1	7.6	3.1	-								
	62	13.1	1.8	13.1	13.1	14.1	9.7	4.1	1.0								
	57	13.8	1.8	13.8	13.3	13.3	10.5	7.8	5.1								
800	77	24.5	2.6	17.8	11.4	8.3	-	-	-								
	72	22.2	2.6	18.8	15.6	12.4	9.1	-	-								
	67	19.8	2.5	19.8	19.8	16.5	13.0	9.4	-								
	62	18.5	2.5	18.5	18.5	19.9	16.2	12.5	8.7								
	57	19.2	2.5	19.2	19.2	18.5	14.9	11.3	7.6								

1. These capacities are Net Capacities.

2. These ratings include the compressor, condenser fan and supply air blower motors.

**DNX036 (3.0 Ton)**

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity <sup>1</sup> (MBh)	Total Input (kW) <sup>2</sup>	Sensible Capacity (MBh)						Net Capacity <sup>1</sup> (MBh)	Total Input (kW) <sup>2</sup>	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)									Return Dry Bulb (°F)				
		75°F														85°F	
925	77	35.2	1.5	20.9	13.3	11.6	-	-	-	33.3	1.7	21.2	15.1	11.3	-	-	-
	72	32.3	1.5	25.2	20.0	17.0	12.9	-	-	30.4	1.7	24.4	20.3	16.3	12.3	-	-
	67	29.5	1.5	29.5	26.8	22.4	18.1	13.8	-	27.5	1.7	27.5	25.5	21.4	17.2	13.0	-
	62	26.8	1.5	26.8	26.8	27.2	22.5	17.8	13.2	25.1	1.7	25.1	25.1	20.8	16.5	12.2	
	57	28.2	1.6	28.2	28.2	25.4	21.2	17.0	12.8	25.9	1.8	25.9	25.9	24.2	20.0	15.9	11.7
1275	77	48.7	2.8	23.8	19.3	14.7	-	-	-	46.5	3.0	25.5	19.4	14.7	-	-	-
	72	45.7	2.6	33.3	28.3	23.2	18.2	-	-	43.2	2.9	32.7	27.6	22.5	17.3	-	-
	67	42.8	2.5	42.8	37.2	31.7	26.1	20.6	-	39.9	2.8	39.9	35.8	30.2	24.6	19.0	-
	62	38.0	2.3	38.0	38.0	34.6	29.8	24.9	20.0	36.7	2.6	36.7	36.7	34.0	28.7	23.5	18.3
	57	38.4	2.5	38.4	38.4	35.9	30.3	24.7	19.1	36.7	2.8	36.7	36.7	34.4	28.8	23.1	17.5
		95°F														105°F	
925	77	31.5	1.9	21.5	17.0	11.0	-	-	-	29.0	2.2	21.9	13.1	10.1	-	-	-
	72	28.5	1.9	23.6	20.7	15.6	11.7	-	-	26.2	2.2	22.7	17.3	14.8	10.9	-	-
	67	25.6	1.9	25.6	24.3	20.3	16.2	12.2	-	23.4	2.2	23.4	21.5	19.5	15.4	11.3	-
	62	23.4	1.9	23.4	23.4	23.0	19.1	15.1	11.2	21.5	2.2	21.5	21.5	21.3	17.3	12.3	9.4
	57	23.6	1.9	23.6	23.6	22.9	18.8	14.8	10.7	22.3	2.2	22.3	21.6	21.3	17.2	13.2	9.2
1275	77	44.4	3.2	27.2	19.4	14.7	-	-	-	41.3	3.5	27.9	18.8	13.7	-	-	-
	72	40.7	3.1	32.1	26.9	21.7	16.5	-	-	37.8	3.4	31.1	25.9	20.7	15.4	-	-
	67	37.0	3.1	37.0	34.3	28.7	23.1	17.4	-	34.3	3.4	34.3	33.0	27.6	22.0	16.3	-
	62	35.4	2.9	35.4	35.4	33.3	27.7	22.1	16.5	32.4	3.3	32.4	32.4	31.4	25.6	19.8	14.1
	57	35.0	3.0	35.0	35.0	32.9	27.2	21.6	15.9	33.0	3.3	33.0	33.0	31.1	25.4	19.6	13.9
		115°F															
925	77	26.5	2.4	22.3	9.2	9.2	-	-	-								
	72	23.9	2.4	21.8	14.0	14.0	10.1	-	-								
	67	21.3	2.4	21.3	18.7	18.7	14.6	10.4	-								
	62	19.6	2.4	19.6	19.6	19.6	15.6	9.6	7.7								
	57	21.0	2.4	21.0	19.7	19.7	15.7	11.7	7.6								
1275	77	38.3	3.8	28.6	18.1	12.8	-	-	-								
	72	35.0	3.8	30.2	24.9	19.6	14.4	-	-								
	67	31.7	3.7	31.7	31.7	26.5	20.8	15.2	-								
	62	29.5	3.6	29.5	29.5	29.5	23.5	17.6	11.6								
	57	30.9	3.6	30.9	30.9	29.4	23.5	17.7	11.8								

1. These capacities are Net Capacities.

2. These ratings include the compressor, condenser fan and supply air blower motors.

**DNX048 (4.0 Ton)**

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity <sup>1</sup> (MBh)	Total Input (kW) <sup>2</sup>	Sensible Capacity (MBh)						Net Capacity <sup>1</sup> (MBh)	Total Input (kW) <sup>2</sup>	Sensible Capacity (MBh)					
				Return Dry Bulb (°F)									Return Dry Bulb (°F)				
		75°F														85°F	
1000	77	45.3	2.2	23.2	17.3	14.8	-	-	-	42.8	2.5	22.7	18.4	14.2	-	-	-
	72	42.0	2.2	29.7	24.2	20.6	16.0	-	-	39.6	2.5	28.9	24.3	19.8	15.2	-	-
	67	38.8	2.2	36.3	31.1	26.3	21.5	16.7	-	36.4	2.5	35.1	30.2	25.3	20.5	15.6	-
	62	34.4	2.2	34.4	34.4	31.7	27.3	22.8	18.4	32.4	2.5	32.4	32.4	30.7	26.2	21.7	17.2
	57	33.6	2.2	33.6	33.6	33.0	28.4	23.8	19.2	31.7	2.4	31.7	31.7	31.2	26.6	21.9	17.3
1550	77	64.7	3.9	31.1	26.6	20.8	-	-	-	60.7	4.2	31.0	25.2	19.4	-	-	-
	72	59.6	3.8	42.0	35.7	29.4	23.2	-	-	56.0	4.1	40.7	34.4	28.1	21.7	-	-
	67	54.5	3.7	52.9	44.9	38.1	31.2	24.4	-	51.2	4.0	50.4	43.6	36.8	29.9	23.1	-
	62	50.3	3.5	50.3	50.3	46.3	39.4	32.4	25.5	47.6	3.8	47.6	47.6	44.4	37.5	30.5	23.6
	57	48.8	3.5	48.8	48.8	48.3	41.5	34.7	27.9	46.5	3.7	46.5	46.5	46.3	39.3	32.3	25.4
		95°F														105°F	
1000	77	40.4	2.8	22.2	19.6	13.5	-	-	-	37.5	3.1	23.2	15.4	12.4	-	-	-
	72	37.2	2.8	28.1	24.4	18.9	14.4	-	-	34.3	3.1	27.2	20.6	17.9	13.2	-	-
	67	34.0	2.8	34.0	29.3	24.4	19.4	14.4	-	31.1	3.1	31.1	25.8	23.3	18.6	13.8	-
	62	30.5	2.7	30.5	30.5	29.6	25.0	20.5	15.9	28.0	3.1	28.0	28.0	27.7	23.1	18.1	13.8
	57	29.8	2.7	29.8	29.8	29.4	24.7	20.0	15.4	28.0	3.0	28.0	27.9	27.7	22.8	17.9	13.0
1550	77	56.8	4.5	30.9	23.8	17.9	-	-	-	52.1	4.9	32.0	22.7	16.7	-	-	-
	72	52.4	4.4	39.4	33.1	26.7	20.3	-	-	48.4	4.7	38.4	31.9	25.5	19.0	-	-
	67	48.0	4.3	48.0	42.3	35.5	28.6	21.8	-	44.8	4.6	44.8	41.2	34.2	27.2	20.2	-
	62	44.8	4.1	44.8	44.8	42.6	35.6	28.6	21.6	42.0	4.4	42.0	42.0	40.4	33.4	26.4	19.3
	57	44.3	4.0	44.3	44.3	44.3	37.1	30.0	22.8	41.9	4.4	41.9	41.9	41.0	33.9	26.7	19.6
		115°F															
1000	77	34.7	3.5	24.2	11.2	11.2	-	-	-								
	72	31.5	3.5	26.2	16.8	16.8	12.0	-	-								
	67	28.2	3.4	28.2	22.3	22.3	17.8	13.3	-								
	62	25.4	3.4	25.4	25.4	25.8	21.1	15.8	11.7								
	57	26.3	3.4	26.3	25.9	25.9	20.9	15.8	10.7								
1550	77	47.4	5.3	33.2	21.6	15.5	-	-	-								
	72	44.5	5.1	37.4	30.8	24.2	17.6	-	-								
	67	41.6	5.0	41.6	40.0	32.9	25.8	18.7	-								
	62	39.2	4.8	39.2	39.2	38.2	31.2	24.1	17.0								
	57	39.4	4.8	39.4	39.4	37.8	30.6	23.5	16.3								

1. These capacities are Net Capacities.

2. These ratings include the compressor, condenser fan and supply air blower motors.

## Airflow Performance

### Side Duct Application

#### DNX/DNY024-060

Size (Tons)	Model	Mode		Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)									
							0.2 Watts	0.3 Watts	0.4 Watts	0.5 Watts	0.6 Watts	0.7 Watts	0.8 Watts	0.9 Watts	1.0 Watts	
024 (2.0)	DNX DNY	Cool	Low	Y1	COOL-A	600	100	122	145	169	194	221	249	279	310	
				Y1	COOL-B	450	65	81	100	122	147	176	208	243	281	
			High	Y1	COOL-C	530	81	100	121	145	170	197	226	258	291	
				Y1	COOL-D	680	127	151	176	202	228	256	284	313	342	
		Heat	N036	Y1+Y2	COOL-A	800	177	204	232	261	290	320	350	382	414	
				Y1+Y2	COOL-B	600	100	122	145	169	194	221	249	279	310	
				Y1+Y2	COOL-C	700	134	159	184	211	238	265	293	323	352	
				Y1+Y2	COOL-D	900	229	258	288	319	351	385	420	457	494	
			N056	W1	HEAT-A	670	123	147	172	197	224	251	-	-	-	
				W1	HEAT-B	730	146	172	198	225	252	280	-	-	-	
				W1	HEAT-C	790	173	199	227	255	284	314	-	-	-	
				W1	HEAT-D	850	202	230	259	289	319	351	-	-	-	
		D056	W1	W1	HEAT-A	940	253	281	312	344	378	-	-	-	-	
				W1	HEAT-B	975	274	303	334	368	403	-	-	-	-	
				W1	HEAT-C	1000	290	319	351	385	422	-	-	-	-	
				W1	HEAT-D	1050	324	353	386	422	461	-	-	-	-	
			W1+W2	W1+W2	HEAT-A	940	253	281	312	344	378	-	-	-	-	
				W1+W2	HEAT-B	970	271	300	331	364	400	-	-	-	-	
				W1+W2	HEAT-C	1000	290	319	351	385	422	-	-	-	-	
				W1+W2	HEAT-D	1050	324	353	386	422	461	-	-	-	-	
036 (3.0)	DNY	Cool	Low	Y1	COOL-A	800	200	239	278	317	356	394	432	470	507	
				Y1	COOL-B	700	169	203	237	270	303	336	367	398	429	
			High	Y1	COOL-C	770	189	227	265	302	339	376	412	448	483	
				Y1	COOL-D	900	243	286	329	373	417	461	505	549	594	
		Heat	N036	Y1+Y2	COOL-A	1200	439	489	541	595	652	710	771	835	900	
				Y1+Y2	COOL-B	1050	328	375	424	474	524	576	629	684	738	
				Y1+Y2	COOL-C	1150	399	448	499	552	607	664	722	783	844	
				Y1+Y2	COOL-D	1350	576	626	680	737	798	863	932	1005	-	
			W1	W1	HEAT-A	670	162	194	227	258	289	320	-	-	-	
				W1	HEAT-B	730	177	213	248	283	318	352	-	-	-	
				W1	HEAT-C	790	196	235	274	312	350	388	-	-	-	
				W1	HEAT-D	850	220	261	303	344	385	426	-	-	-	
			N056	W1	HEAT-A	1050	328	375	424	474	524	-	-	-	-	
				W1	HEAT-B	1135	388	437	488	540	594	-	-	-	-	
				W1	HEAT-C	1220	456	506	558	613	670	-	-	-	-	
				W1	HEAT-D	1300	528	578	631	687	747	-	-	-	-	
		D056	W1	W1	HEAT-A	680	164	197	230	262	294	-	-	-	-	
				W1	HEAT-B	735	178	215	250	286	321	-	-	-	-	
			W1+W2	W1	HEAT-C	790	196	235	274	312	350	-	-	-	-	
				W1+W2	HEAT-D	840	216	257	297	338	379	-	-	-	-	
		N072	W1	W1+W2	HEAT-A	1050	328	375	424	474	524	-	-	-	-	
				W1+W2	HEAT-B	1140	392	441	491	544	598	-	-	-	-	
			W1+W2	W1+W2	HEAT-C	1220	456	506	558	613	670	-	-	-	-	
				W1+W2	HEAT-D	1300	528	578	631	687	747	-	-	-	-	
		D072	W1	W1	HEAT-A	1200	439	489	541	595	-	-	-	-	-	
				W1	HEAT-B	1300	528	578	631	687	-	-	-	-	-	
			W1+W2	W1	HEAT-C	1400	628	677	731	789	-	-	-	-	-	
				W1+W2	HEAT-D	1480	716	764	818	877	-	-	-	-	-	

## DNX/DNY024-060 (Continued)

Size (Tons)	Model	Mode	Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)									
						0.2 Watts	0.3 Watts	0.4 Watts	0.5 Watts	0.6 Watts	0.7 Watts	0.8 Watts	0.9 Watts	1.0 Watts	
036 (3.0)	DNX	Cool	Low	Y1	COOL-A	900	198	233	272	313	358	406	458	512	569
				Y1	COOL-B	760	166	190	222	262	310	366	431	503	584
				Y1	COOL-C	830	180	210	245	286	332	384	441	503	571
				Y1	COOL-D	970	221	260	302	344	388	434	481	530	579
			High	Y1+Y2	COOL-A	1250	361	408	454	501	548	594	640	687	733
				Y1+Y2	COOL-B	1050	253	296	340	384	428	472	516	561	605
				Y1+Y2	COOL-C	1150	302	348	394	439	484	528	571	615	657
				Y1+Y2	COOL-D	1350	429	475	522	570	620	671	723	777	831
		Heat	N065	W1	HEAT-A	1200	330	377	423	469	515	560	-	-	-
				W1	HEAT-B	1300	394	440	487	535	583	631	-	-	-
				W1	HEAT-C	1400	467	511	558	607	659	713	-	-	-
				W1	HEAT-D	1500	550	590	635	686	743	804	-	-	-
			N090	W1	HEAT-A	1150	302	348	394	439	484	528	-	-	-
				W1	HEAT-B	1225	345	392	439	485	531	577	-	-	-
				W1	HEAT-C	1275	377	424	471	518	565	612	-	-	-
				W1	HEAT-D	1350	429	475	522	570	620	671	-	-	-
		D090	D090	W1	HEAT-A	740	163	185	216	255	304	362	-	-	-
				W1	HEAT-B	785	170	196	230	270	317	372	-	-	-
				W1	HEAT-C	825	178	208	243	284	330	382	-	-	-
				W1	HEAT-D	870	189	223	260	301	347	396	-	-	-
			W1+W2	W1+W2	HEAT-A	1150	302	348	394	439	484	528	-	-	-
				W1+W2	HEAT-B	1220	342	389	436	482	528	573	-	-	-
				W1+W2	HEAT-C	1280	380	427	474	521	568	616	-	-	-
				W1+W2	HEAT-D	1350	429	475	522	570	620	671	-	-	-
048 (4.0)	DNX DNY	Cool	Low	Y1	COOL-A	1030	237	280	323	367	411	455	499	543	588
				Y1	COOL-B	930	192	237	282	326	369	413	455	497	539
				Y1	COOL-C	1070	257	300	343	386	430	475	520	565	611
				Y1	COOL-D	1130	289	332	375	419	463	509	555	602	649
			High	Y1+Y2	COOL-A	1550	586	640	696	752	810	869	929	991	1053
				Y1+Y2	COOL-B	1400	466	513	561	611	663	715	770	826	882
				Y1+Y2	COOL-C	1600	630	687	745	804	864	926	988	1052	1116
				Y1+Y2	COOL-D	1700	723	787	851	916	982	1049	1116	1185	-
		Heat	N065	W1	HEAT-A	1200	330	373	416	461	507	554	-	-	-
				W1	HEAT-B	1300	394	439	484	531	579	629	-	-	-
				W1	HEAT-C	1400	466	513	561	611	663	715	-	-	-
				W1	HEAT-D	1500	544	596	648	702	758	815	-	-	-
			N090	W1	HEAT-A	1325	412	456	503	550	599	649	-	-	-
				W1	HEAT-B	1400	466	513	561	611	663	715	-	-	-
				W1	HEAT-C	1500	544	596	648	702	758	815	-	-	-
				W1	HEAT-D	1600	630	687	745	804	864	926	-	-	-
		D090	D090	W1	HEAT-A	870	168	215	261	306	350	393	-	-	-
				W1	HEAT-B	920	188	233	278	322	366	409	-	-	-
				W1	HEAT-C	985	216	260	303	347	391	434	-	-	-
				W1	HEAT-D	1050	247	290	333	376	420	464	-	-	-
			N110	W1+W2	HEAT-A	1330	415	460	506	554	603	653	-	-	-
				W1+W2	HEAT-B	1400	466	513	561	611	663	715	-	-	-
				W1+W2	HEAT-C	1500	544	596	648	702	758	815	-	-	-
				W1+W2	HEAT-D	1600	630	687	745	804	864	926	-	-	-
		D110	D110	W1	HEAT-A	1450	504	553	604	656	-	-	-	-	-
				W1	HEAT-B	1500	544	596	648	702	-	-	-	-	-
				W1	HEAT-C	1600	630	687	745	804	-	-	-	-	-
				W1	HEAT-D	1700	723	787	851	916	-	-	-	-	-
			W1+W2	W1+W2	HEAT-A	1450	504	553	604	656	-	-	-	-	-
				W1+W2	HEAT-B	1500	544	596	648	702	-	-	-	-	-
				W1+W2	HEAT-C	1600	630	687	745	804	-	-	-	-	-
				W1+W2	HEAT-D	1700	723	787	851	916	-	-	-	-	-

## DNX/DNY024-060 (Continued)

Size (Tons)	Model	Mode	Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)									
						0.2 Watts	0.3 Watts	0.4 Watts	0.5 Watts	0.6 Watts	0.7 Watts	0.8 Watts	0.9 Watts	1.0 Watts	
060 (5.0)	DNY	Cool	Low	Y1	COOL-A	1200	330	373	416	461	507	554	602	651	700
				Y1	COOL-B	1060	252	295	338	381	425	470	514	559	605
				Y1	COOL-C	1130	289	332	375	419	463	509	555	602	649
				Y1	COOL-D	1270	374	418	463	509	556	605	655	706	758
		High	Y1+Y2	COOL-A	1700	723	787	851	916	982	1049	1116	1185	1253	
				COOL-B	1500	544	596	648	702	758	815	873	932	993	
				COOL-C	1600	630	687	745	804	864	926	988	1052	1116	
				COOL-D	1800	823	895	967	1039	1112	1185	1257	-	-	
		Heat	N065	W1	HEAT-A	1200	330	373	416	461	507	554	-	-	-
				W1	HEAT-B	1300	394	439	484	531	579	629	-	-	-
				W1	HEAT-C	1400	466	513	561	611	663	715	-	-	-
				W1	HEAT-D	1500	544	596	648	702	758	815	-	-	-
			N090	W1	HEAT-A	1325	412	456	503	550	599	649	-	-	-
				W1	HEAT-B	1400	466	513	561	611	663	715	-	-	-
				W1	HEAT-C	1500	544	596	648	702	758	815	-	-	-
				W1	HEAT-D	1600	630	687	745	804	864	926	-	-	-
		D090	D090	W1	HEAT-A	870	168	215	261	306	350	393	-	-	-
				W1	HEAT-B	920	188	233	278	322	366	409	-	-	-
				W1	HEAT-C	985	216	260	303	347	391	434	-	-	-
				W1	HEAT-D	1050	247	290	333	376	420	464	-	-	-
			W1+W2	HEAT-A	1330	415	460	506	554	603	653	-	-	-	
				HEAT-B	1400	466	513	561	611	663	715	-	-	-	
				HEAT-C	1500	544	596	648	702	758	815	-	-	-	
				HEAT-D	1600	630	687	745	804	864	926	-	-	-	
		N110	W1	HEAT-A	1450	504	553	604	656	709	763	-	-	-	
			W1	HEAT-B	1500	544	596	648	702	758	815	-	-	-	
			W1	HEAT-C	1600	630	687	745	804	864	926	-	-	-	
			W1	HEAT-D	1700	723	787	851	916	982	1049	-	-	-	
		D110	W1	HEAT-A	940	196	241	285	329	373	416	-	-	-	
			W1	HEAT-B	985	216	260	303	347	391	434	-	-	-	
			W1	HEAT-C	1035	239	282	326	369	413	457	-	-	-	
			W1	HEAT-D	1100	273	315	358	402	446	491	-	-	-	
			W1+W2	HEAT-A	1450	504	553	604	656	709	763	-	-	-	
				HEAT-B	1500	544	596	648	702	758	815	-	-	-	
				HEAT-C	1600	630	687	745	804	864	926	-	-	-	
				HEAT-D	1700	723	787	851	916	982	1049	-	-	-	

## DNZ024-060

Size (Tons)	Model	Unit Speed	External Static Pressure (Inch Water Gauge)												
			0.2			0.4			0.6			0.8			
			SCFM	W	RPM	SCFM	W	RPM	SCFM	W	RPM	SCFM	W	RPM	
024 (2.0)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	719	115	752	617	130	858	-	-	-	-	-	-	
			781	137	789	691	155	891	-	-	-	-	-	-	
			902	187	858	824	207	949	734	223	1037	622	230	1116	
			-	-	-	937	258	998	845	270	1075	722	271	1146	
			-	-	-	-	-	933	316	1104	796	307	1162	-	
030 (2.5)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	827	163	825	759	187	919	-	-	-	-	-	-	
			988	251	914	916	269	992	831	282	1067	-	-	-	
			1113	322	984	1035	333	1047	941	337	1108	818	329	1162	
			1233	394	1050	1145	394	1099	1040	388	1145	901	367	1184	
			-	-	-	-	-	1078	425	1164	867	353	1173	-	
036 (3.0)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	1032	236	789	921	258	853	-	-	-	-	-	-	
			1185	317	859	1089	347	924	985	373	991	-	-	-	
			1304	395	913	1214	424	978	1114	448	1040	994	462	1098	
			1445	515	976	1357	532	1041	1252	542	1097	1117	537	1140	
			-	-	-	1498	708	1108	1363	665	1157	1179	599	1178	-
042 (3.5)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	1114	176	642	-	-	-	-	-	-	-	-	-	
			1223	230	679	1056	264	773	492	942	1187	518	997	1101	540
			1641	404	751	1418	460	872	1288	492	942	1187	518	1030	1203
			-	-	-	1535	547	904	1398	582	976	1292	606	1067	1304
			-	-	-	1665	664	940	1514	701	1045	1399	720	1067	1106
048 (4.0)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	1379	310	749	1209	343	840	-	-	-	-	-	-	
			1414	331	763	1253	366	851	-	-	-	-	-	-	
			1713	544	872	1604	587	940	1484	624	1005	1343	653	1067	-
			1882	703	931	1786	740	987	1671	769	1044	1522	783	1099	1231
			-	-	-	1972	946	1037	1851	949	1078	1689	927	1118	1306
060 (5.0)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	1556	416	802	-	-	-	-	-	-	-	-	-	
			1648	489	843	1522	529	917	-	-	-	-	-	-	
			1767	595	892	1664	633	954	1546	668	1015	-	-	-	
			1913	739	946	1819	769	996	1702	791	1049	1550	800	1102	1122
			2103	952	1007	1990	957	1047	1855	948	1086	1674	912	1122	-

## Bottom Duct Application

### DNX/DNY024-060

Size (Tons)	Model	Mode	Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)									
						0.2		0.3		0.4		0.5		0.6	
						Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts
024 (2.0)	DNX DNY	Cool	Y1	COOL-A	600	100	122	145	169	194	221	249	279	310	
			Y1	COOL-B	450	65	81	100	122	147	176	208	243	281	
			Y1	COOL-C	530	81	100	121	145	170	197	226	258	291	
			Y1	COOL-D	680	127	151	176	202	228	256	284	313	342	
		High	Y1+Y2	COOL-A	800	177	204	232	261	290	320	350	382	414	
			Y1+Y2	COOL-B	600	100	122	145	169	194	221	249	279	310	
			Y1+Y2	COOL-C	700	134	159	184	211	238	265	293	323	352	
			Y1+Y2	COOL-D	900	229	258	288	319	351	385	420	457	494	
		Heat	N036	W1	HEAT-A	670	123	147	172	197	224	251	-	-	-
				W1	HEAT-B	730	146	172	198	225	252	280	-	-	-
				W1	HEAT-C	790	173	199	227	255	284	314	-	-	-
				W1	HEAT-D	850	202	230	259	289	319	351	-	-	-
			N056	W1	HEAT-A	940	253	281	312	344	378	-	-	-	-
				W1	HEAT-B	975	274	303	334	368	403	-	-	-	-
				W1	HEAT-C	1000	290	319	351	385	422	-	-	-	-
				W1	HEAT-D	1050	324	353	386	422	461	-	-	-	-
		D056	W1	W1	HEAT-A	670	123	147	172	197	224	-	-	-	-
				W1	HEAT-B	690	130	155	180	206	233	-	-	-	-
				W1	HEAT-C	710	138	163	189	215	242	-	-	-	-
				W1	HEAT-D	750	155	181	207	235	262	-	-	-	-
			W1+W2	W1+W2	HEAT-A	940	253	281	312	344	378	-	-	-	-
				W1+W2	HEAT-B	970	271	300	331	364	400	-	-	-	-
				W1+W2	HEAT-C	1000	290	319	351	385	422	-	-	-	-
				W1+W2	HEAT-D	1050	324	353	386	422	461	-	-	-	-
036 (3.0)	DNY	Cool	Y1	COOL-A	800	200	239	278	317	356	394	432	470	507	
			Y1	COOL-B	700	169	203	237	270	303	336	367	398	429	
			Y1	COOL-C	770	189	227	265	302	339	376	412	448	483	
			Y1	COOL-D	900	243	286	329	373	417	461	505	549	594	
		High	Y1+Y2	COOL-A	1200	439	489	541	595	652	710	771	835	900	
			Y1+Y2	COOL-B	1050	328	375	424	474	524	576	629	684	738	
			Y1+Y2	COOL-C	1150	399	448	499	552	607	664	722	783	844	
			Y1+Y2	COOL-D	1350	576	626	680	737	798	863	932	1005	-	
		Heat	N036	W1	HEAT-A	670	162	194	227	258	289	320	-	-	-
				W1	HEAT-B	730	177	213	248	283	318	352	-	-	-
				W1	HEAT-C	790	196	235	274	312	350	388	-	-	-
				W1	HEAT-D	850	220	261	303	344	385	426	-	-	-
			N056	W1	HEAT-A	1050	328	375	424	474	524	-	-	-	-
				W1	HEAT-B	1135	388	437	488	540	594	-	-	-	-
				W1	HEAT-C	1220	456	506	558	613	670	-	-	-	-
				W1	HEAT-D	1300	528	578	631	687	747	-	-	-	-
		D056	W1	W1	HEAT-A	680	164	197	230	262	294	-	-	-	-
				W1	HEAT-B	735	178	215	250	286	321	-	-	-	-
				W1	HEAT-C	790	196	235	274	312	350	-	-	-	-
				W1	HEAT-D	840	216	257	297	338	379	-	-	-	-
			N072	W1+W2	HEAT-A	1050	328	375	424	474	524	-	-	-	-
				W1+W2	HEAT-B	1140	392	441	491	544	598	-	-	-	-
				W1+W2	HEAT-C	1220	456	506	558	613	670	-	-	-	-
				W1+W2	HEAT-D	1300	528	578	631	687	747	-	-	-	-
		D072	W1	HEAT-A	1200	439	489	541	595	-	-	-	-	-	-
			W1	HEAT-B	1300	528	578	631	687	-	-	-	-	-	-
			W1	HEAT-C	1400	628	677	731	789	-	-	-	-	-	-
			W1	HEAT-D	1475	710	759	812	871	-	-	-	-	-	-
		D072	W1	HEAT-A	790	196	235	274	312	-	-	-	-	-	-
			W1	HEAT-B	855	222	264	305	347	-	-	-	-	-	-
			W1	HEAT-C	920	252	296	341	385	-	-	-	-	-	-
			W1	HEAT-D	975	282	328	374	421	-	-	-	-	-	-
			W1+W2	W1+W2	HEAT-A	1200	439	489	541	595	-	-	-	-	-
				W1+W2	HEAT-B	1300	528	578	631	687	-	-	-	-	-
				W1+W2	HEAT-C	1400	628	677	731	789	-	-	-	-	-
				W1+W2	HEAT-D	1480	716	764	818	877	-	-	-	-	-

## DNX/DNY024-060 (Continued)

Size (Tons)	Model	Mode	Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)									
						0.2 Watts	0.3 Watts	0.4 Watts	0.5 Watts	0.6 Watts	0.7 Watts	0.8 Watts	0.9 Watts	1.0 Watts	
036 (3.0)	DNX	Cool	Low	Y1	COOL-A	900	198	233	272	313	358	406	458	512	569
				Y1	COOL-B	760	166	190	222	262	310	366	431	503	584
				Y1	COOL-C	830	180	210	245	286	332	384	441	503	571
				Y1	COOL-D	970	221	260	302	344	388	434	481	530	579
			High	Y1+Y2	COOL-A	1250	361	408	454	501	548	594	640	687	733
				Y1+Y2	COOL-B	1050	253	296	340	384	428	472	516	561	605
				Y1+Y2	COOL-C	1150	302	348	394	439	484	528	571	615	657
				Y1+Y2	COOL-D	1350	429	475	522	570	620	671	723	777	831
		Heat	N065	W1	HEAT-A	1200	330	377	423	469	515	560	-	-	-
				W1	HEAT-B	1300	394	440	487	535	583	631	-	-	-
				W1	HEAT-C	1400	467	511	558	607	659	713	-	-	-
				W1	HEAT-D	1500	550	590	635	686	743	804	-	-	-
			N090	W1	HEAT-A	1150	302	348	394	439	484	528	-	-	-
				W1	HEAT-B	1225	345	392	439	485	531	577	-	-	-
				W1	HEAT-C	1275	377	424	471	518	565	612	-	-	-
				W1	HEAT-D	1350	429	475	522	570	620	671	-	-	-
		D090	D090	W1	HEAT-A	740	163	185	216	255	304	362	-	-	-
				W1	HEAT-B	785	170	196	230	270	317	372	-	-	-
				W1	HEAT-C	825	178	208	243	284	330	382	-	-	-
				W1	HEAT-D	870	189	223	260	301	347	396	-	-	-
			W1+W2	W1+W2	HEAT-A	1150	302	348	394	439	484	528	-	-	-
				W1+W2	HEAT-B	1220	342	389	436	482	528	573	-	-	-
				W1+W2	HEAT-C	1280	380	427	474	521	568	616	-	-	-
				W1+W2	HEAT-D	1350	429	475	522	570	620	671	-	-	-
048 (4.0)	DNX DNY	Cool	Low	Y1	COOL-A	1030	237	280	323	367	411	455	499	543	588
				Y1	COOL-B	930	192	237	282	326	369	413	455	497	539
				Y1	COOL-C	1070	257	300	343	386	430	475	520	565	611
				Y1	COOL-D	1130	289	332	375	419	463	509	555	602	649
			High	Y1+Y2	COOL-A	1550	586	640	696	752	810	869	929	991	1053
				Y1+Y2	COOL-B	1400	466	513	561	611	663	715	770	826	882
				Y1+Y2	COOL-C	1600	630	687	745	804	864	926	988	1052	1116
				Y1+Y2	COOL-D	1700	723	787	851	916	982	1049	1116	1185	-
		Heat	N065	W1	HEAT-A	1200	330	373	416	461	507	554	-	-	-
				W1	HEAT-B	1300	394	439	484	531	579	629	-	-	-
				W1	HEAT-C	1400	466	513	561	611	663	715	-	-	-
				W1	HEAT-D	1500	544	596	648	702	758	815	-	-	-
			N090	W1	HEAT-A	1325	412	456	503	550	599	649	-	-	-
				W1	HEAT-B	1400	466	513	561	611	663	715	-	-	-
				W1	HEAT-C	1500	544	596	648	702	758	815	-	-	-
				W1	HEAT-D	1600	630	687	745	804	864	926	-	-	-
		D090	D090	W1	HEAT-A	870	168	215	261	306	350	393	-	-	-
				W1	HEAT-B	920	188	233	278	322	366	409	-	-	-
				W1	HEAT-C	985	216	260	303	347	391	434	-	-	-
				W1	HEAT-D	1050	247	290	333	376	420	464	-	-	-
			N110	W1+W2	HEAT-A	1330	415	460	506	554	603	653	-	-	-
				W1+W2	HEAT-B	1400	466	513	561	611	663	715	-	-	-
				W1+W2	HEAT-C	1500	544	596	648	702	758	815	-	-	-
				W1+W2	HEAT-D	1600	630	687	745	804	864	926	-	-	-
		D110	D110	W1	HEAT-A	1450	504	553	604	656	-	-	-	-	-
				W1	HEAT-B	1500	544	596	648	702	-	-	-	-	-
				W1	HEAT-C	1600	630	687	745	804	-	-	-	-	-
				W1	HEAT-D	1700	723	787	851	916	-	-	-	-	-

## DNX/DNY024-060 (Continued)

Size (Tons)	Model	Mode	Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)									
						0.2 Watts	0.3 Watts	0.4 Watts	0.5 Watts	0.6 Watts	0.7 Watts	0.8 Watts	0.9 Watts	1.0 Watts	
060 (5.0)	DNY	Cool	Low	Y1	COOL-A	1200	330	373	416	461	507	554	602	651	700
				Y1	COOL-B	1060	252	295	338	381	425	470	514	559	605
				Y1	COOL-C	1130	289	332	375	419	463	509	555	602	649
				Y1	COOL-D	1270	374	418	463	509	556	605	655	706	758
		High	Y1+Y2	COOL-A	1700	723	787	851	916	982	1049	1116	1185	1253	
				COOL-B	1500	544	596	648	702	758	815	873	932	993	
				COOL-C	1600	630	687	745	804	864	926	988	1052	1116	
				COOL-D	1800	823	895	967	1039	1112	1185	1257	-	-	
		Heat	N065	W1	HEAT-A	1200	330	373	416	461	507	554	-	-	-
				W1	HEAT-B	1300	394	439	484	531	579	629	-	-	-
				W1	HEAT-C	1400	466	513	561	611	663	715	-	-	-
				W1	HEAT-D	1500	544	596	648	702	758	815	-	-	-
			N090	W1	HEAT-A	1325	412	456	503	550	599	649	-	-	-
				W1	HEAT-B	1400	466	513	561	611	663	715	-	-	-
				W1	HEAT-C	1500	544	596	648	702	758	815	-	-	-
				W1	HEAT-D	1600	630	687	745	804	864	926	-	-	-
		D090	D090	W1	HEAT-A	870	168	215	261	306	350	393	-	-	-
				W1	HEAT-B	920	188	233	278	322	366	409	-	-	-
				W1	HEAT-C	985	216	260	303	347	391	434	-	-	-
				W1	HEAT-D	1050	247	290	333	376	420	464	-	-	-
			W1+W2	HEAT-A	1330	415	460	506	554	603	653	-	-	-	
				HEAT-B	1400	466	513	561	611	663	715	-	-	-	
				HEAT-C	1500	544	596	648	702	758	815	-	-	-	
				HEAT-D	1600	630	687	745	804	864	926	-	-	-	
		N110	W1	HEAT-A	1450	504	553	604	656	709	763	-	-	-	
			W1	HEAT-B	1500	544	596	648	702	758	815	-	-	-	
			W1	HEAT-C	1600	630	687	745	804	864	926	-	-	-	
			W1	HEAT-D	1700	723	787	851	916	982	1049	-	-	-	
		D110	W1	HEAT-A	940	196	241	285	329	373	416	-	-	-	
			W1	HEAT-B	985	216	260	303	347	391	434	-	-	-	
			W1	HEAT-C	1035	239	282	326	369	413	457	-	-	-	
			W1	HEAT-D	1100	273	315	358	402	446	491	-	-	-	
			W1+W2	HEAT-A	1450	504	553	604	656	709	763	-	-	-	
				HEAT-B	1500	544	596	648	702	758	815	-	-	-	
				HEAT-C	1600	630	687	745	804	864	926	-	-	-	
				HEAT-D	1700	723	787	851	916	982	1049	-	-	-	

## DNZ024-060

Size (Tons)	Model	Unit Speed	External Static Pressure (Inch Water Gauge)												
			0.2			0.4			0.6			0.8			
			SCFM	W	RPM	SCFM	W	RPM	SCFM	W	RPM	SCFM	W	RPM	
024 (2.0)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	719	115	752	617	130	858	-	-	-	-	-	-	
			781	137	789	691	155	891	-	-	-	-	-	-	
			902	187	858	824	207	949	734	223	1037	622	230	1116	
			-	-	-	937	258	998	845	270	1075	722	271	1146	
			-	-	-	-	-	933	316	1104	796	307	1162	-	
030 (2.5)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	827	163	825	759	187	919	-	-	-	-	-	-	
			988	251	914	916	269	992	831	282	1067	-	-	-	
			1113	322	984	1035	333	1047	941	337	1108	818	329	1162	
			1233	394	1050	1145	394	1099	1040	388	1145	901	367	1184	
			-	-	-	-	-	1078	425	1164	867	353	1173	-	
036 (3.0)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	1032	236	789	921	258	853	-	-	-	-	-	-	
			1185	317	859	1089	347	924	985	373	991	-	-	-	
			1304	395	913	1214	424	976	1114	448	1040	994	462	1098	
			1445	515	976	1357	532	1041	1252	542	1097	1117	537	1140	
			-	-	-	1498	708	1108	1363	665	1157	1179	599	1178	-
042 (3.5)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	1114	176	642	-	-	-	-	-	-	-	-	-	
			1223	230	679	1056	264	773	1288	492	942	1187	518	997	1101
			1641	404	751	1418	460	872	1484	624	1005	1343	653	1067	1044
			-	-	-	1535	547	904	1398	582	976	1292	606	1030	1203
			-	-	-	1665	664	940	1514	701	1015	1399	720	1067	1304
048 (4.0)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	1378	310	749	1209	343	840	-	-	-	-	-	-	
			1414	331	763	1253	366	851	-	-	-	-	-	-	
			1713	544	872	1604	587	940	1484	624	1005	1343	653	1067	-
			1882	703	931	1786	740	987	1671	769	1044	1522	783	1099	1231
			-	-	-	1972	946	1037	1851	949	1078	1689	927	1148	1142
060 (5.0)	DNZ	Low (1) Low/Medium (2) Medium (3) Medium/High (4) High (5)	1556	416	802	-	-	-	-	-	-	-	-	-	
			1648	489	843	1522	529	917	-	-	-	-	-	-	
			1767	595	892	1664	633	954	1546	668	1015	-	-	-	
			1913	739	946	1819	769	996	1702	791	1049	1550	800	1102	-
			2103	952	1007	1990	957	1047	1855	948	1086	1674	912	1122	-

**Additional Static Resistance**

<b>Size (Tons)</b>	<b>Model</b>	<b>CFM</b>	<b>Wet Indoor Coil</b>	<b>Economizer<sup>1</sup></b>	<b>Filter/Frame Kit</b>	<b>Electric Heat</b>
024 (2.0)	DNZ DNY DNX	500	0.01	0.00	0.01	-
		600	0.01	0.00	0.02	-
		700	0.01	0.00	0.04	-
		800	0.02	0.01	0.06	-
		900	0.03	0.01	0.08	-
		1000	0.04	0.01	0.10	-
		1100	0.05	0.01	0.13	-
		1200	0.06	0.02	0.16	-
030 (2.5)	DNZ	700	0.01	0.00	0.04	-
		800	0.02	0.01	0.06	-
		900	0.03	0.01	0.08	-
		1000	0.04	0.01	0.10	-
		1100	0.05	0.01	0.13	-
		1200	0.06	0.02	0.16	-
		1300	0.07	0.03	0.17	-
		700	0.01	0.00	0.04	-
036 (3.0)	DNZ DNY DNX	800	0.02	0.01	0.06	-
		900	0.03	0.01	0.08	-
		1000	0.04	0.01	0.10	-
		1100	0.05	0.01	0.13	-
		1200	0.06	0.02	0.16	-
		1300	0.07	0.03	0.17	-
		1400	0.08	0.04	0.18	-
		1100	0.02	0.02	0.04	-
042 (3.5)	DNZ	1200	0.03	0.02	0.04	-
		1300	0.04	0.02	0.05	-
		1400	0.05	0.03	0.05	-
		1500	0.06	0.04	0.06	-
		1600	0.07	0.04	0.07	-
		1700	0.07	0.04	0.08	-
		1800	0.08	0.04	0.09	-
		1900	0.09	0.05	0.10	-
		2000	0.09	0.05	0.11	-
		1100	0.02	0.02	0.04	-
		1200	0.03	0.02	0.04	-
		1300	0.04	0.02	0.05	-
048 (4.0)	DNZ DNY DNX	1400	0.05	0.03	0.05	-
		1500	0.06	0.04	0.06	-
		1600	0.07	0.04	0.07	-
		1700	0.07	0.04	0.08	-
		1800	0.08	0.04	0.09	-
		1900	0.09	0.05	0.10	-
		2000	0.09	0.05	0.11	-
		1100	0.02	0.02	0.04	-
		1200	0.03	0.02	0.04	-
		1300	0.04	0.02	0.05	-
		1400	0.05	0.03	0.05	-
		1500	0.06	0.04	0.06	-
		1600	0.07	0.04	0.07	-
060 (5.0)	DNZ DNY	1700	0.07	0.04	0.08	-
		1800	0.08	0.04	0.09	-
		1900	0.09	0.05	0.10	-
		2000	0.09	0.05	0.11	-
		1100	0.02	0.02	0.04	-
		1200	0.03	0.02	0.04	-
		1300	0.04	0.02	0.05	-
		1400	0.05	0.03	0.05	-
		1500	0.06	0.04	0.06	-
		1600	0.07	0.04	0.07	-

1. The pressure drop through the economizer is greater for 100% outdoor air than for 100% return air. If the resistance of the return air duct is less than 0.25 IWG, the unit will deliver less CFM during full economizer operation.

**Gas Heat Minimum Supply Air**

Size (Tons)	Model	Heat Size	Supply Air (CFM)			
			Cooling		Heating	
			Min	Max	Min	Max
024 (2.0)	DNZ	N036	600	1000	610	1330
		D056	600	1000	860	1730
	DNY	N036	450	900	610	1330
		N056	450	900	860	1730
		D056	450	900	860	1730
	DNX	N036	450	900	610	1330
		N056	450	900	860	1730
		D056	450	900	860	1730
030 (2.5)	DNZ	N036	750	1250	610	1330
		N056	750	1250	860	1730
		D056	750	1250	860	1730
036 (3.0)	DNZ	N036	1200	1500	610	1330
		N056	1200	1500	940	2070
		D056	1200	1500	940	2070
		N072	1200	1500	1110	2220
		D072	1200	1500	1110	2220
	DNY	N036	700	1350	610	1330
		N056	700	1350	940	2070
		D056	700	1350	940	2070
		N072	700	1350	1110	2220
		D072	700	1350	1110	2220
	DNX	N065	685	1350	1080	2370
		N090	685	1350	1070	1780
		D090	685	1350	1070	1780
042 (3.5)	DNZ	N065	1050	1750	1080	2370
		N090	1050	1750	1070	1780
		D090	1050	1750	1070	1780
048 (4.0)	DNZ	N065	1200	2000	1080	2370
		N090	1200	2000	1230	2290
		D090	1200	2000	1230	2290
		N110	1200	2000	1330	2220
		D110	1200	2000	1330	2220
	DNY	N065	930	1700	1080	2370
		N090	930	1700	1230	2290
		D090	930	1700	1230	2290
		N110	930	1700	1330	2220
		D110	930	1700	1330	2220
	DNX	N065	930	1700	1080	2370
		N090	930	1700	1230	2290
		D090	930	1700	1230	2290
		N110	930	1700	1330	2220
		D110	930	1700	1330	2220
060 (5.0)	DNZ	N065	1500	2100	1080	2370
		N090	1500	2100	1230	2290
		D090	1500	2100	1230	2290
		N110	1500	2100	1330	2220
		D110	1500	2100	1330	2220
	DNY	N065	1060	1800	1080	2370
		N090	1060	1800	1230	2290
		D090	1060	1800	1230	2290
		N110	1060	1800	1330	2220
		D110	1060	1800	1330	2220

### Indoor Blower Specifications

Size (Tons)	Model	Motor				
		HP	RPM	Eff.	SF	Frame
024 (2.0)	DNZ DNY DNX	1/2	Variable	0.8	1.0	48
030 (2.5)	DNZ	1/2	Variable	0.8	1.0	48
036 (3.0)	DNZ DNY	3/4	Variable	0.8	1.0	48
	DNX	1	Variable	0.8	1.0	48
042 (3.5)	DNZ	1	Variable	0.8	1.0	48
048 (4.0)	DNZ DNY DNX	1	Variable	0.8	1.0	48
060 (5.0)	DNZ DNY	1	Variable	0.8	1.0	48

### Electric Heat Multipliers

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

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

### Sound Performance

#### Outdoor Sound Power Levels

Size (Tons)	Model	Sound Rating <sup>1</sup> dB (A)	Octave Band Centerline Frequency (Hz)						
			125	250	500	1000	2000	4000	8000
024 (2.0)	DNZ	77	64	65.5	68	72.5	64.5	60.5	48.5
	DNY	80	66	70.5	74	74.5	72.5	67.5	64.5
	DNX	80	66	70.5	74	74.5	72.5	67.5	64.5
030 (2.5)	DNZ	74	63.5	64.5	66.5	67	63	57.5	51.5
036 (3.0)	DNZ	74	66.5	66.5	69.5	68	63	59	49.5
	DNY	79.5	69	71.5	74	74	70.5	67	61
	DNX	80	70.5	71	74.5	74	71	67.5	64
042 (3.5)	DNZ	79	70	70.5	73.5	73	69.5	67	66
048 (4.0)	DNZ	79	70.5	71	73.5	73	70	66	66
	DNY	80	71.5	71.5	73.5	74	69.5	65	63.5
	DNX	81	72.5	73	76	75.5	71	67.5	65
060 (5.0)	DNZ	80	73	71.5	74.5	75	70.5	67	62.5
	DNY	81	73.5	73	76	75.5	71	66.5	61.5

1. Rated in accordance with ARI 270 standard.

## Electrical Data

### DNZ024-060 Gas Heat

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	MCA <sup>1</sup> (Amps)	Max Fuse <sup>2</sup> / Breaker <sup>3</sup> Size (Amps)
		RLA	LRA	MCC				
024 (2.0)	208/230-1-60	12.8	60	20	1.2	4.1	21.3	30
030 (2.5)	208/230-1-60	14.7	73	23	1.2	6.0	25.6	35
	208/230-3-60	10.4	60	16	1.2	6.0	20.7	25
	460-3-60	4.5	31	7	0.6	3.0	9.2	15
036 (3.0)	208/230-1-60	15.4	83	24	1.2	6.0	26.5	35
	208/230-3-60	11.5	77	18	1.2	6.0	21.6	30
	460-3-60	5.1	35	8	0.8	3.0	10.1	15
042 (3.5)	208/230-1-60	18.6	105	29	1.2	7.6	32.1	40
	208/230-3-60	13.4	88	21	1.2	7.6	25.6	35
	460-3-60	6.4	39	10	0.8	3.8	12.6	15
048 (4.0)	208/230-1-60	20.5	109	32	1.7	7.6	34.9	45
	208/230-3-60	14.5	91	23	1.7	7.6	27.4	35
	460-3-60	7.0	46	11	1.0	3.8	13.6	20
060 (5.0)	208/230-1-60	26.4	134	41	1.8	7.6	42.4	60
	208/230-3-60	15.9	110	25	1.8	7.6	29.3	40
	460-3-60	7.7	52	12	0.9	3.8	14.3	20

- 1. Minimum Circuit Ampacity.
- 2. Maximum Over Current Protection per standard UL 1995.
- 3. Fuse or HACR circuit breaker size installed at factory or field installed.

### DNY024-060 Gas Heat

Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	MCA <sup>1</sup> (Amps)	Max Fuse <sup>2</sup> / Breaker <sup>3</sup> Size (Amps)
		RLA	LRA	MCC				
024 (2.0)	208/230-1-60	10.2	52	16	1.4	4.3	18.5	25
036 (3.0)	208/230-1-60	16.6	82	26	1.4	6.8	28	35
	208/230-3-60	11.1	58	17	1.4	6.8	22.1	30
	460-3-60	4.5	29	7	0.8	3.4	9.8	15
048 (4.0)	208/230-1-60	21.1	96	33	1.7	9.1	37.2	45
	208/230-3-60	13.4	88	21	1.7	9.1	27.6	35
	460-3-60	6.4	41	10	0.9	4.6	13.5	15
060 (5.0)	208/230-1-60	25.6	118	40	1.8	9.1	42.9	60
	208/230-3-60	17.6	135	28	1.8	9.1	32.9	40
	460-3-60	9.0	62	14	0.9	4.6	16.8	25

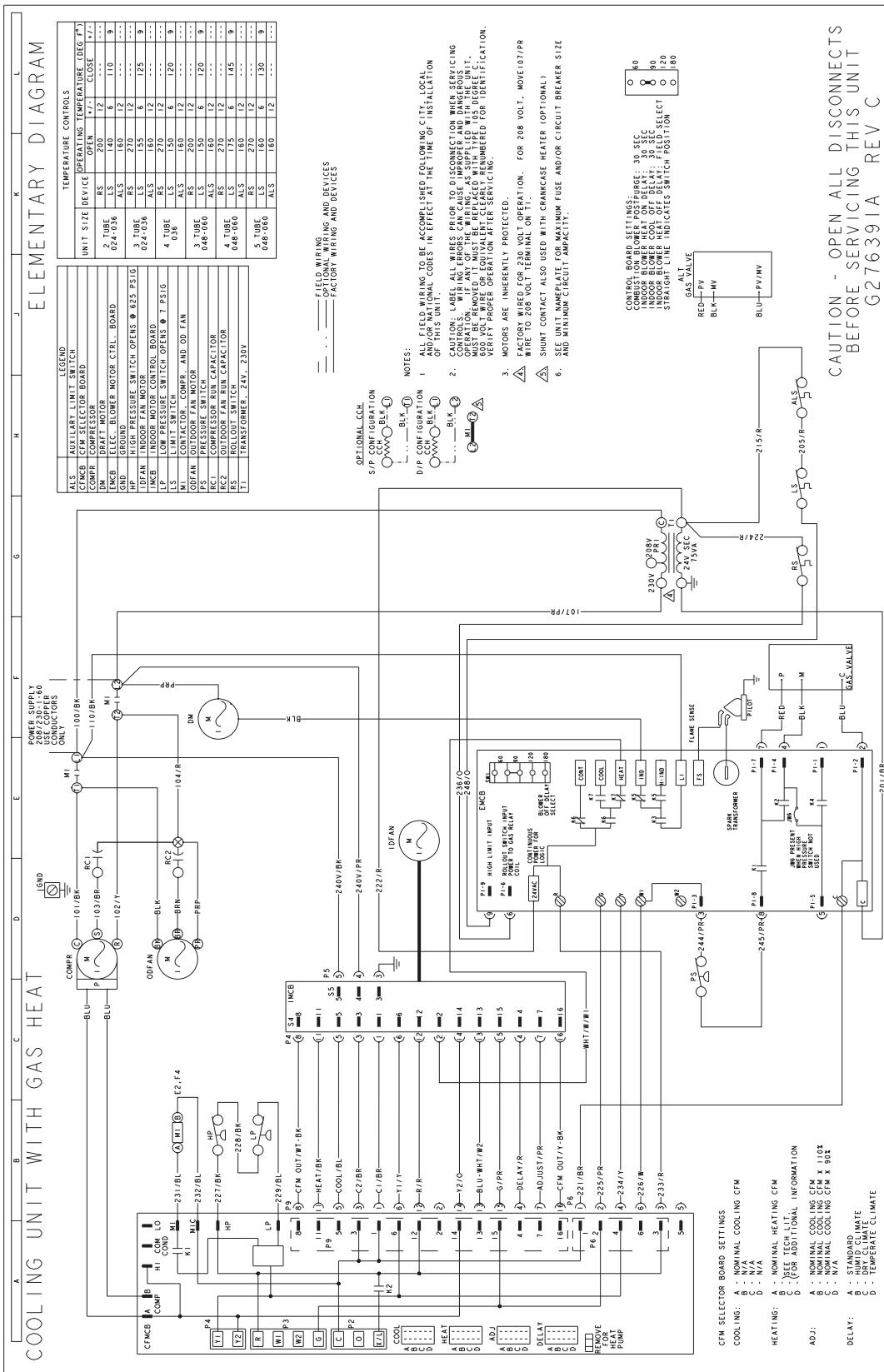
- 1. Minimum Circuit Ampacity.
- 2. Maximum Over Current Protection per standard UL 1995.
- 3. Fuse or HACR circuit breaker size installed at factory or field installed.

### DNX024-048 Gas Heat

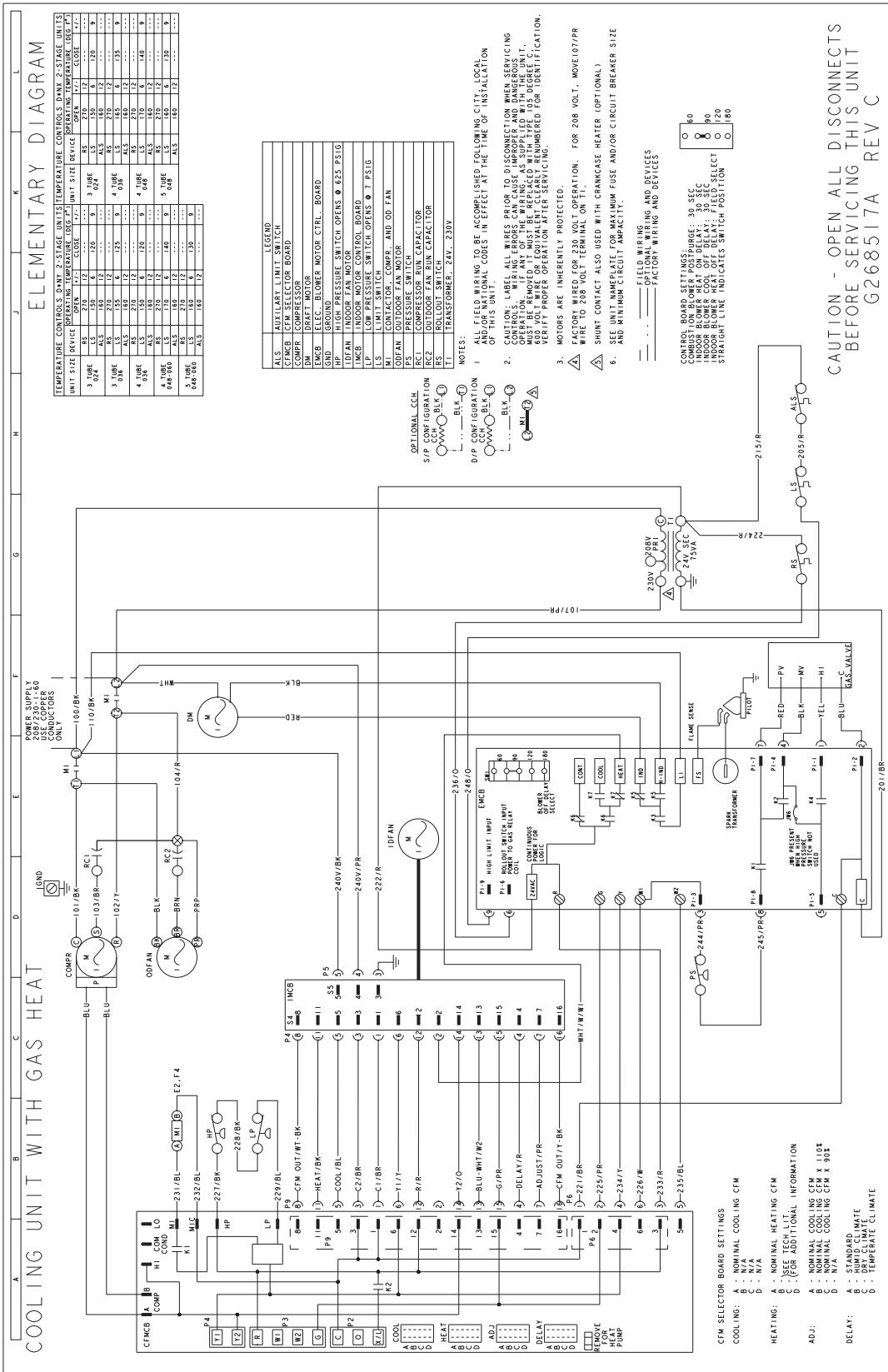
Size (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	MCA <sup>1</sup> (Amps)	Max Fuse <sup>2</sup> / Breaker <sup>3</sup> Size (Amps)
		RLA	LRA	MCC				
024 (2.0)	208/230-1-60	10.2	52	16	1.4	4.3	18.1	25
036 (3.0)	208/230-1-60	16.6	82	26	0.9	9.1	30.7	40
	208/230-3-60	11.1	58	17	0.9	9.1	23.8	30
	460-3-60	4.5	29	7	0.5	4.6	10.7	15
048 (4.0)	208/230-1-60	21.1	96	33	1.8	9.1	36.3	45
	208/230-3-60	13.4	88	21	1.8	9.1	26.7	35
	460-3-60	6.4	41	10	0.9	4.6	13.0	15

- 1. Minimum Circuit Ampacity.
- 2. Maximum Over Current Protection per standard UL 1995.
- 3. Fuse or HACR circuit breaker size installed at factory or field installed.

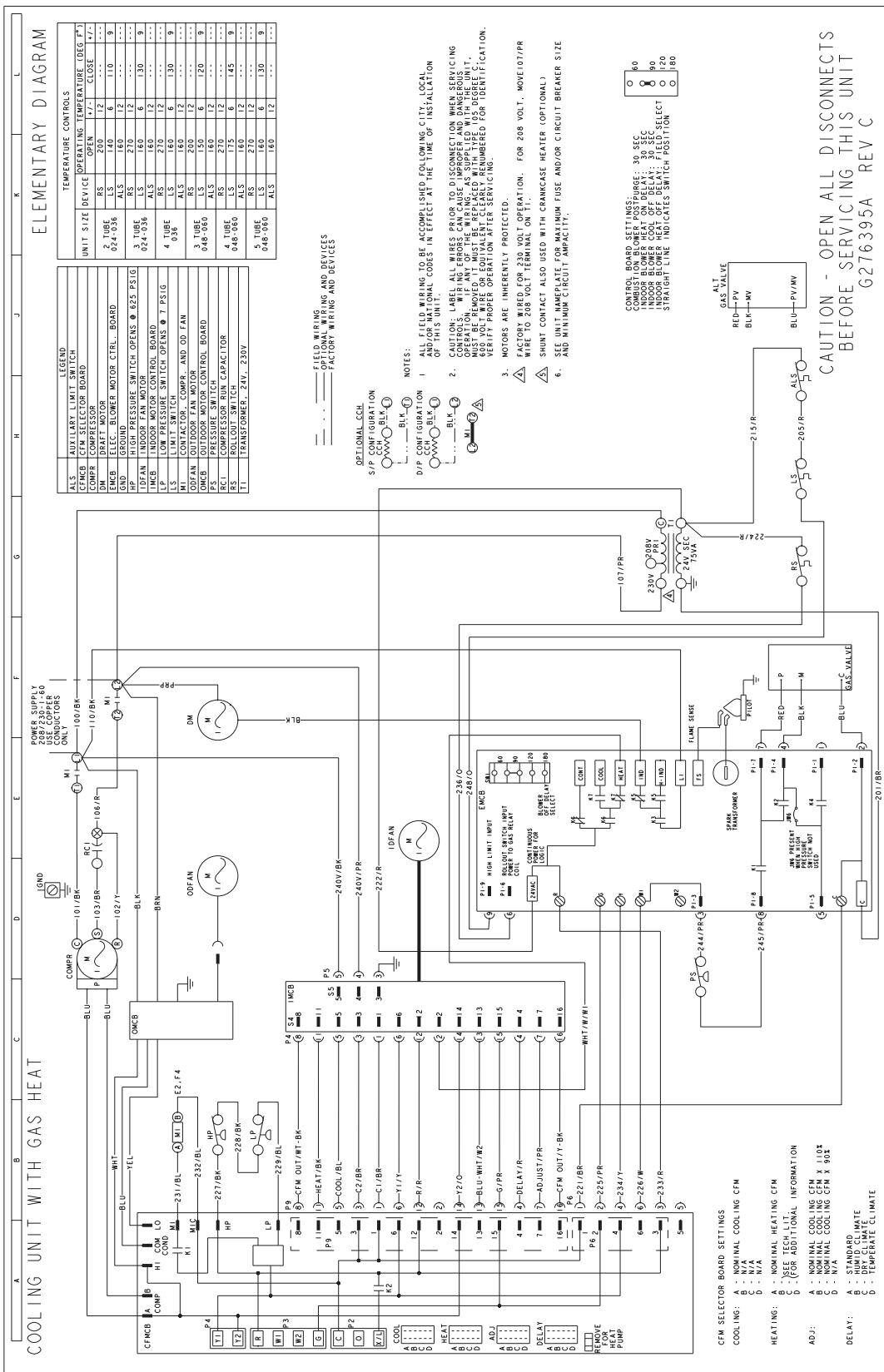
#### **Typical DNX024/DNY024-048 Cooling Unit with Single Stage Gas Heat 208/230-1-60 volt Wiring Diagram**



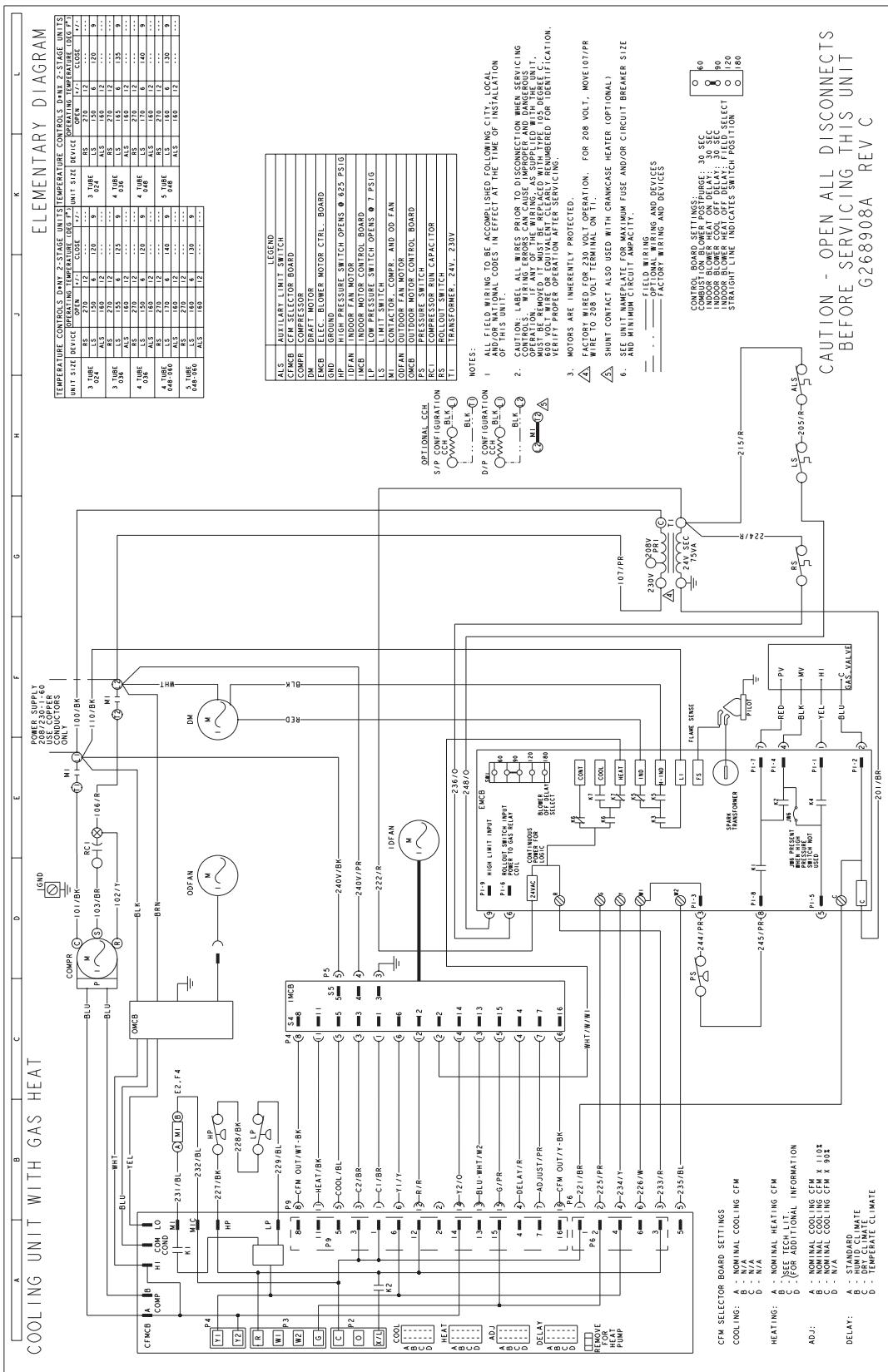
## Typical DNX024/DNY024-048 Cooling Unit with Two Stage Gas Heat 208/230-1-60 volt Wiring Diagram



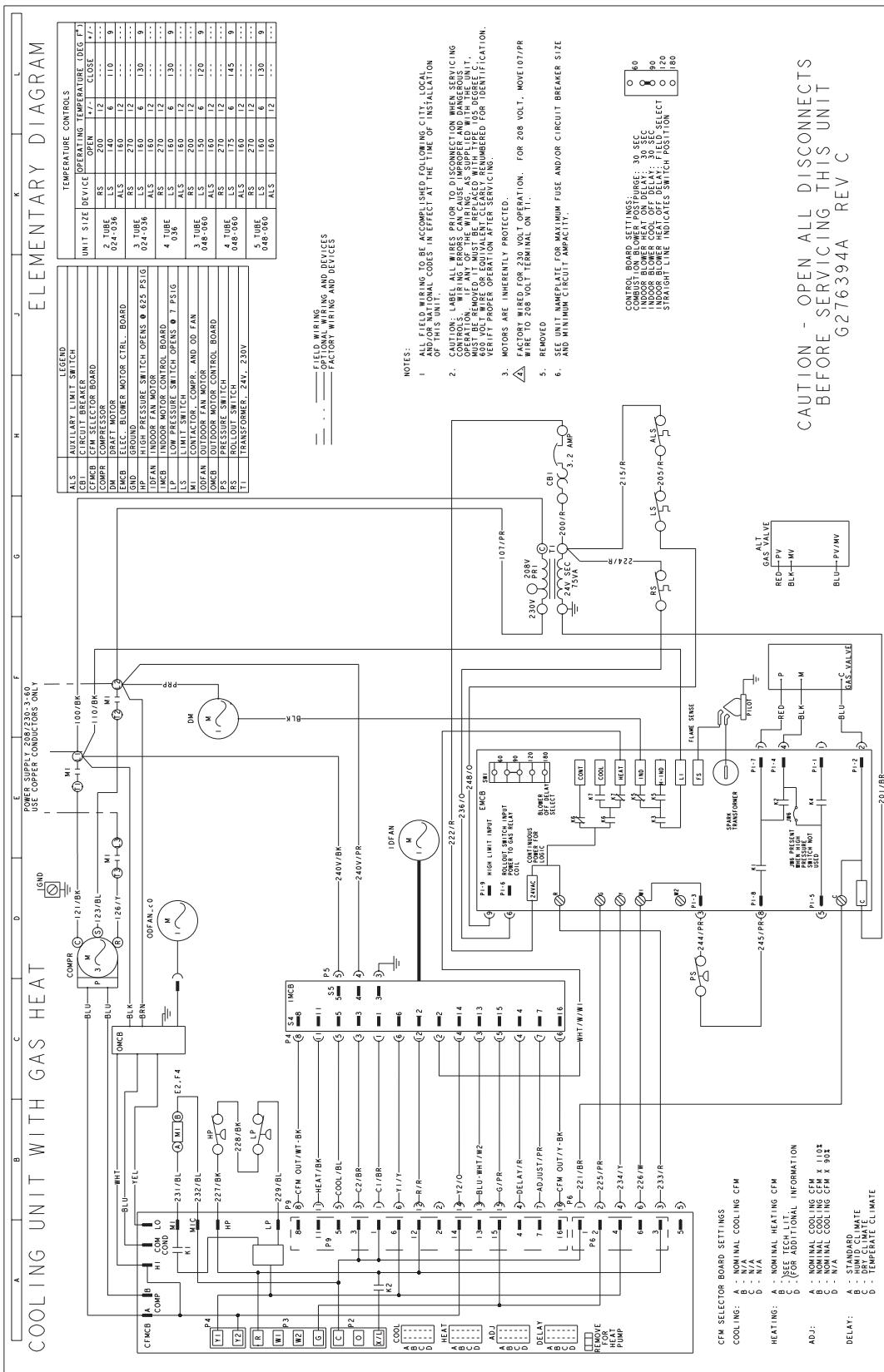
## Typical DNX036-048/DNY060 Cooling Unit with Single Stage Gas Heat 208/230-1-60 volt Wiring Diagram



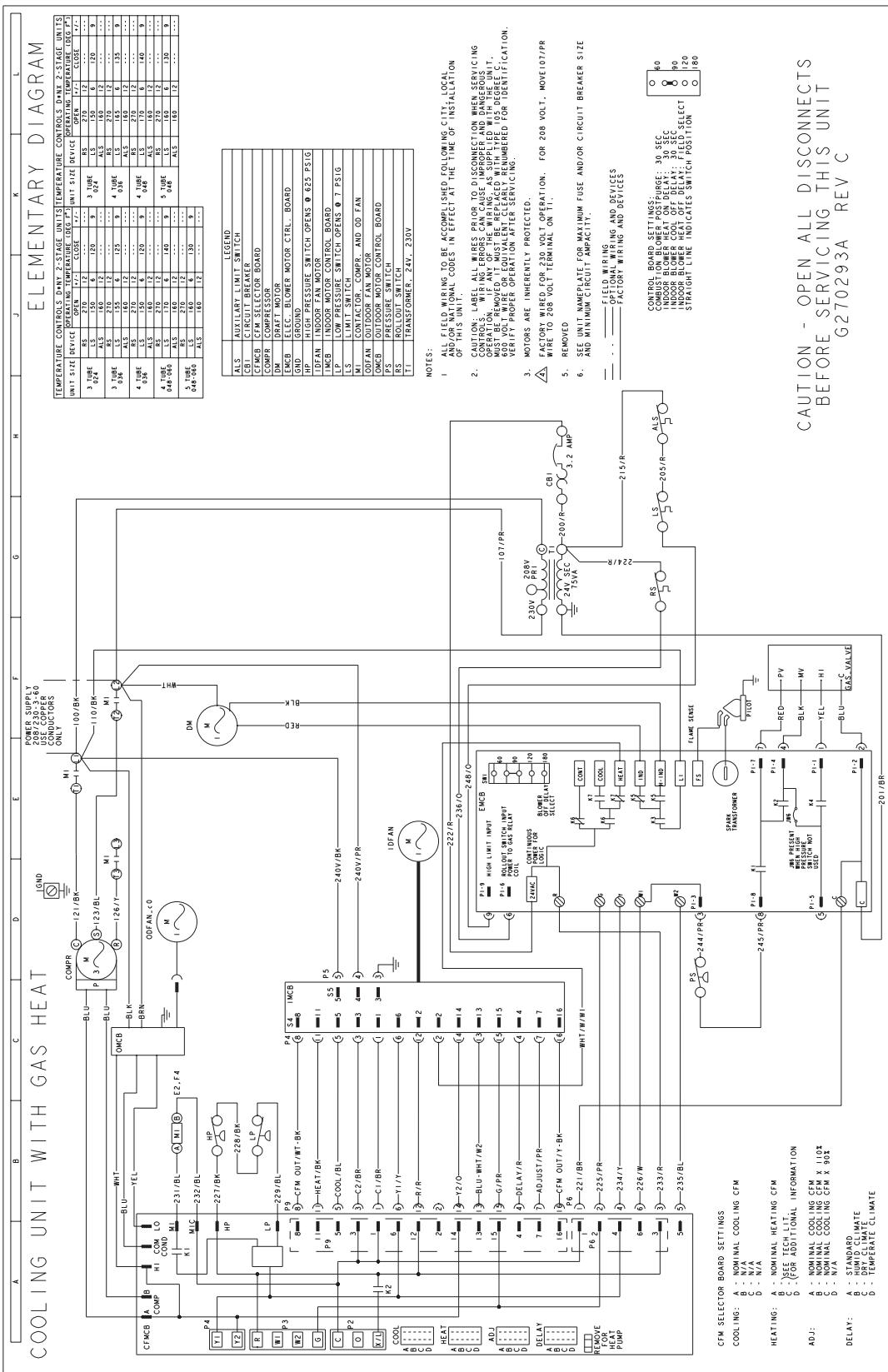
## Typical DNX036-048/DNY060 Cooling Unit with Two Stage Gas Heat 208/230-1-60 volt Wiring Diagram



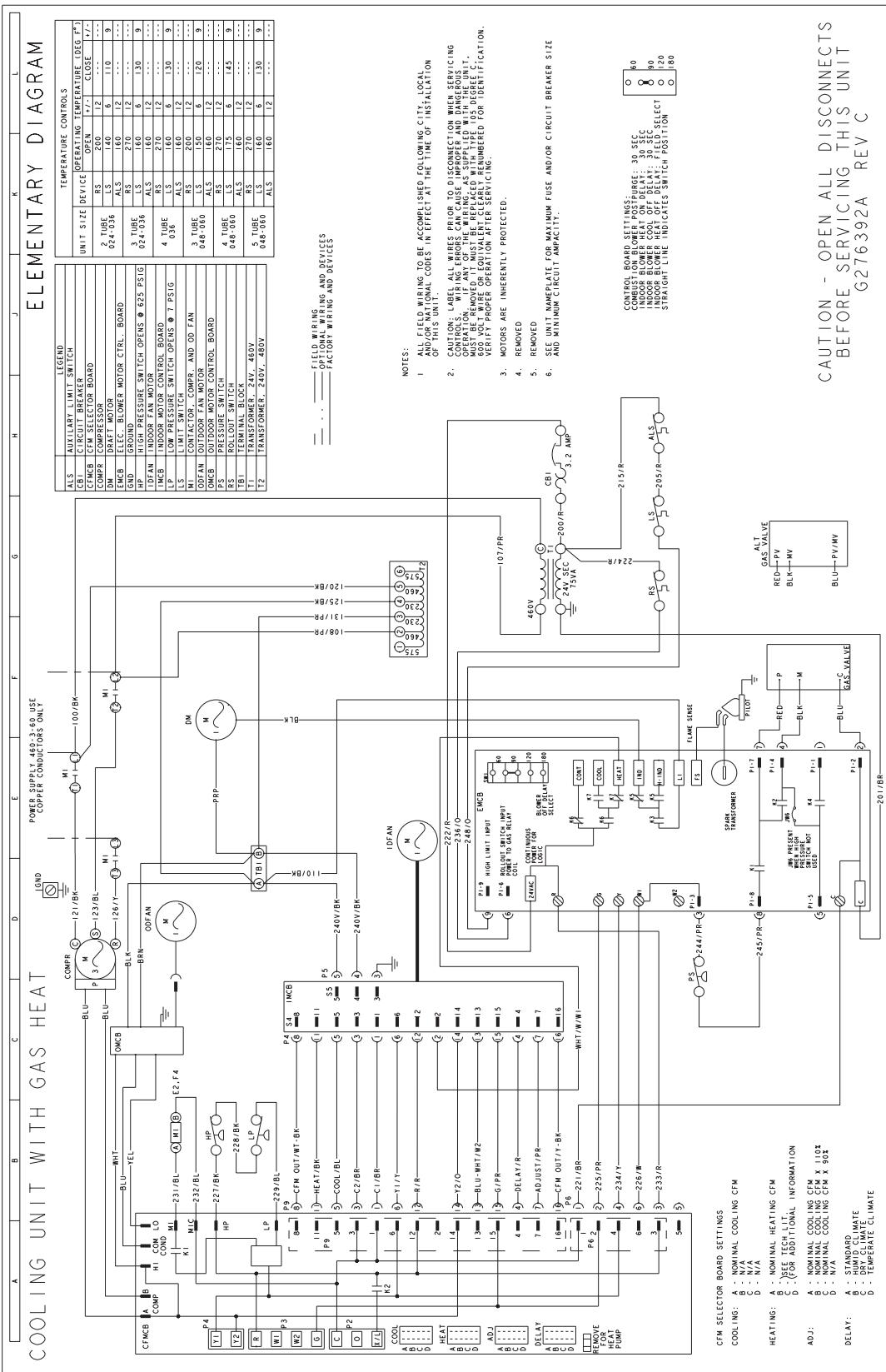
## Typical DNX036-048/DNY060 Cooling Unit with Single Stage Gas Heat 208/230-3-60 volt Wiring Diagram



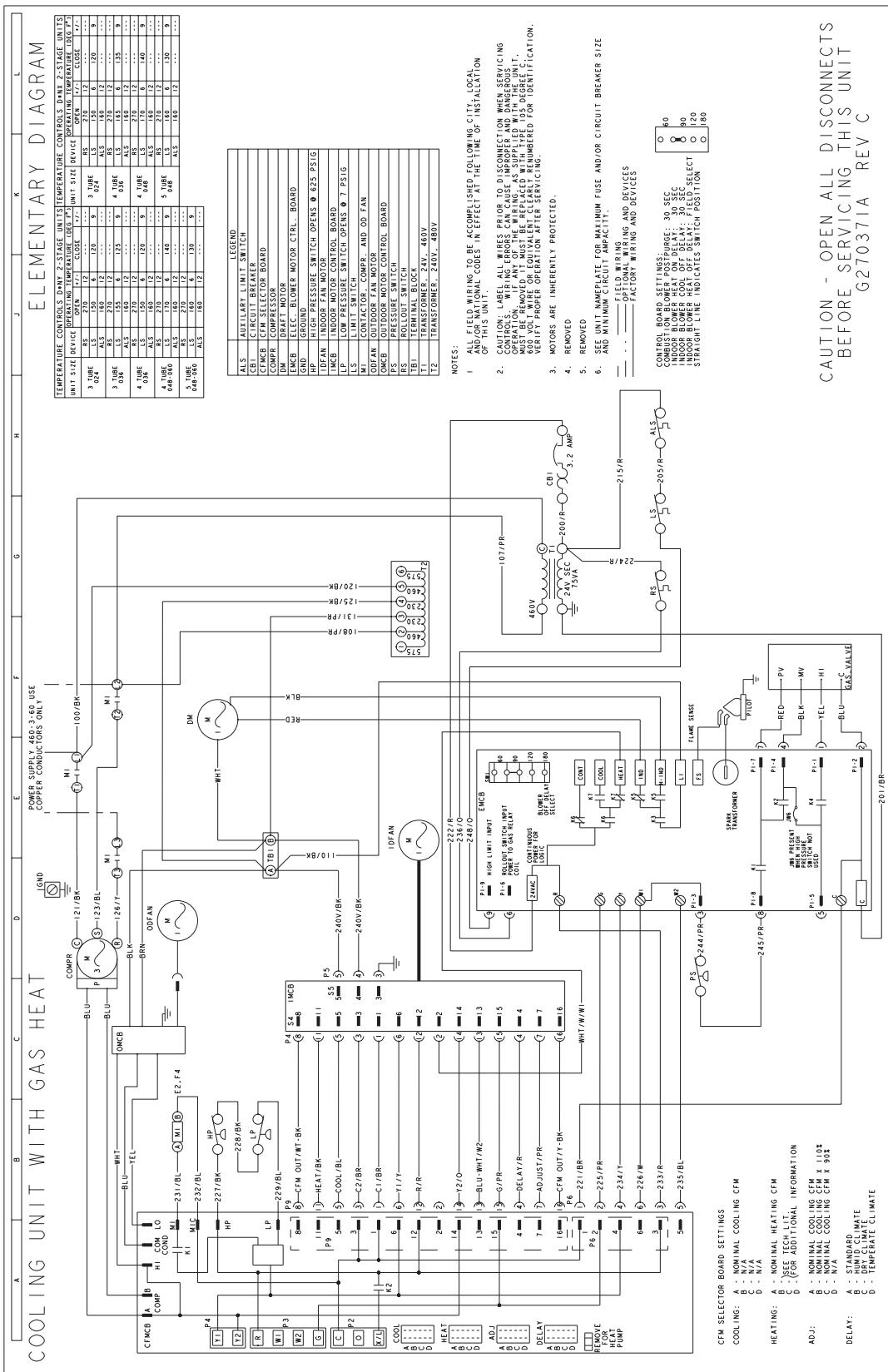
## Typical DNX036-048/DNY060 Cooling Unit with Two Stage Gas Heat 208/230-3-60 volt Wiring Diagram



#### **Typical DNX036-048/DNY060 Cooling Unit with Single Stage Gas Heat 460-3-60 volt Wiring Diagram**



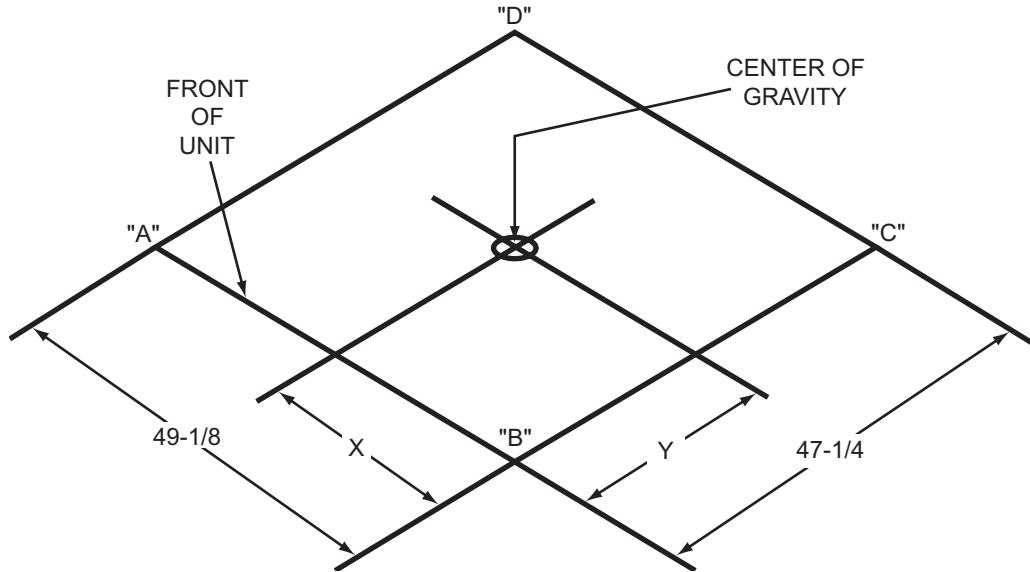
## Typical DNX036-048/DNY060 Cooling Unit with Two Stage Gas Heat 460-3-60 volt Wiring Diagram



## Weights and Dimensions

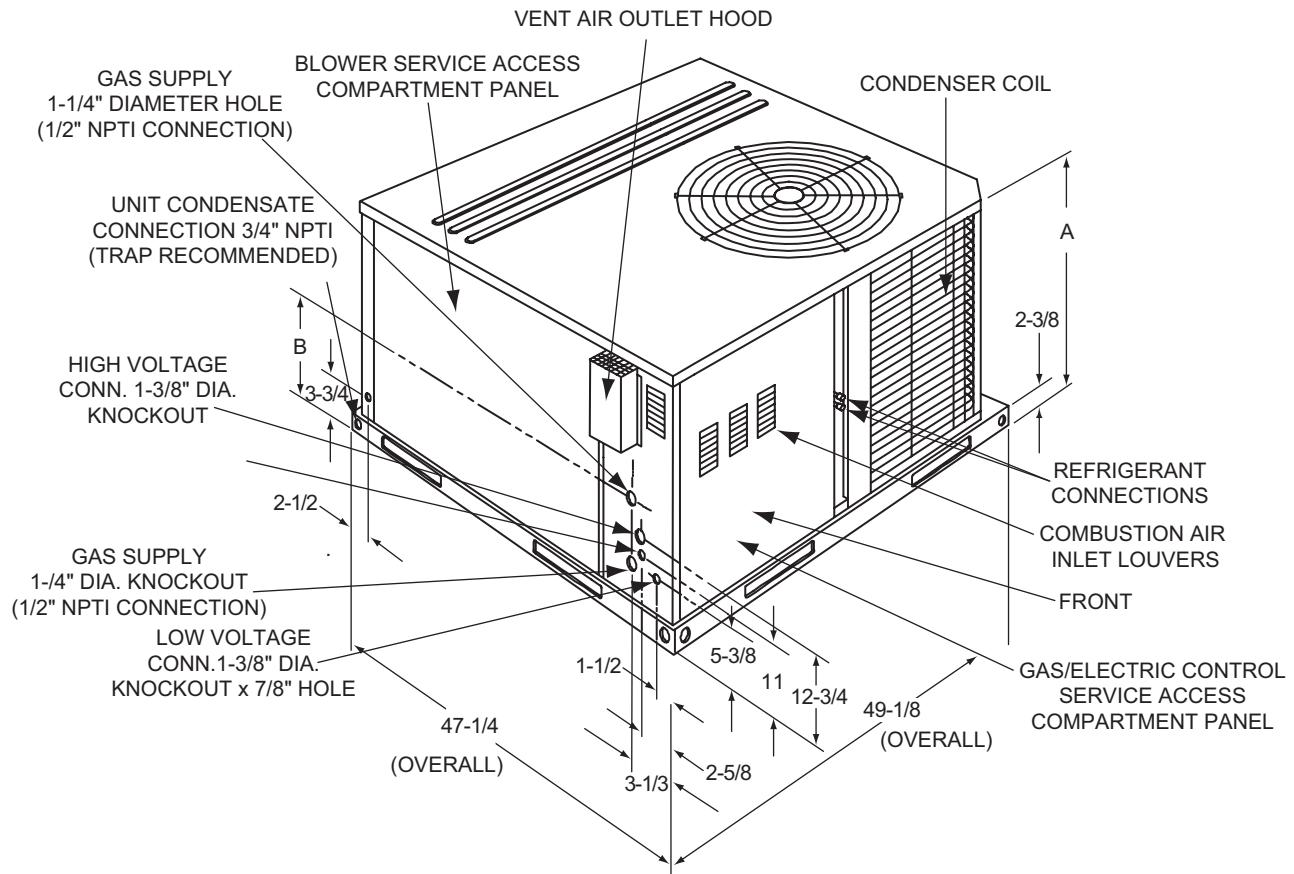
### DNX, DNY and DNZ Unit Weights

#### Unit 4 Point Load Weight



Size (Tons)	Model	Weight (lbs.)		Center of Gravity		4 Point Load Location (lbs.)			
		Shipping	Operating	X	Y	A	B	C	D
024 (2.0)	DNZ	365	360	24	25	91	92	89	88
	DNY	405	400	20	24.5	116	84	84	117
	DNX	445	440	20	24.5	127	93	93	127
030 (2.5)	DNZ	395	390	24	24.75	98	99	97	96
036 (3.0)	DNZ	400	395	24	25	100	101	98	96
	DNY	445	440	20	24.25	126	91	93	129
	DNX	485	480	20	24	136	98	103	143
042 (3.5)	DNZ	470	465	21	24.8	131	103	101	129
048 (4.0)	DNZ	475	470	21	24.8	133	104	102	130
	DNY	505	500	20	24	142	102	107	149
	DNX	505	500	20	24	142	102	107	149
060 (5.0)	DNZ	545	540	20	24	153	110	116	161
	DNY	545	540	20	24	153	110	116	161

## Gas Unit Dimensions



## Gas Unit Dimensions

Unit Size	Dimensions	
	"A"	"B"
024, 030, 036 <sup>1</sup>	33-1/2	18-1/4
036 <sup>2</sup> , 042, 048, 060	41-1/2	23-1/8

1. DNY, DNZ Models.  
2. DNX Models.

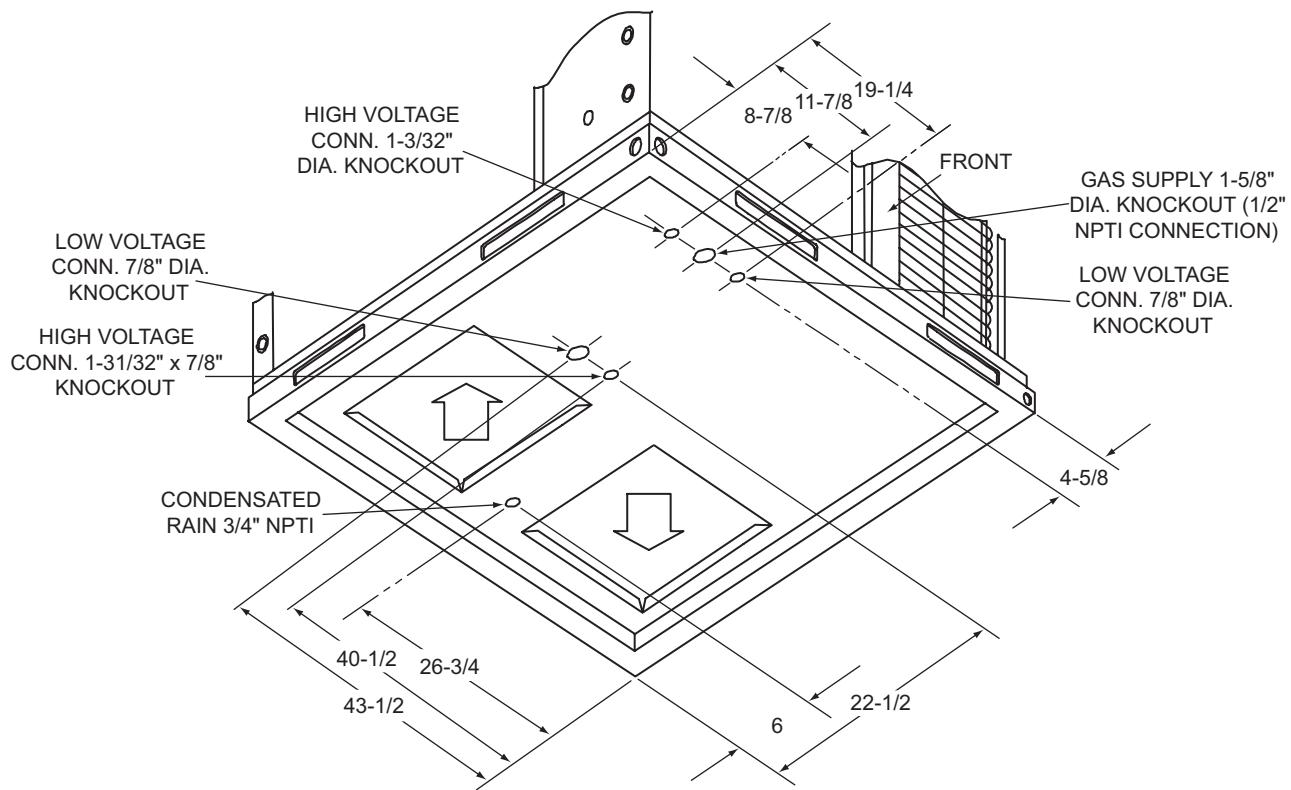
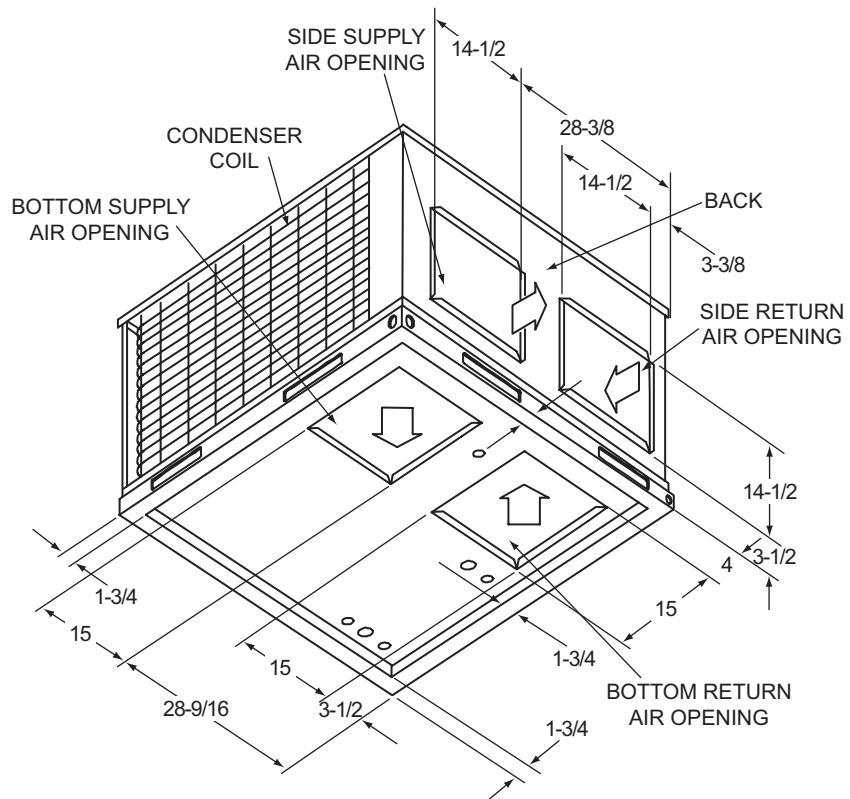
## Gas Unit Clearances<sup>1,2</sup>

Direction	Distance (in.)	Direction	Distance (in.)
Top <sup>3</sup>	36	Right	12
Front	36	Left	24
Rear	0	Bottom <sup>4</sup>	0

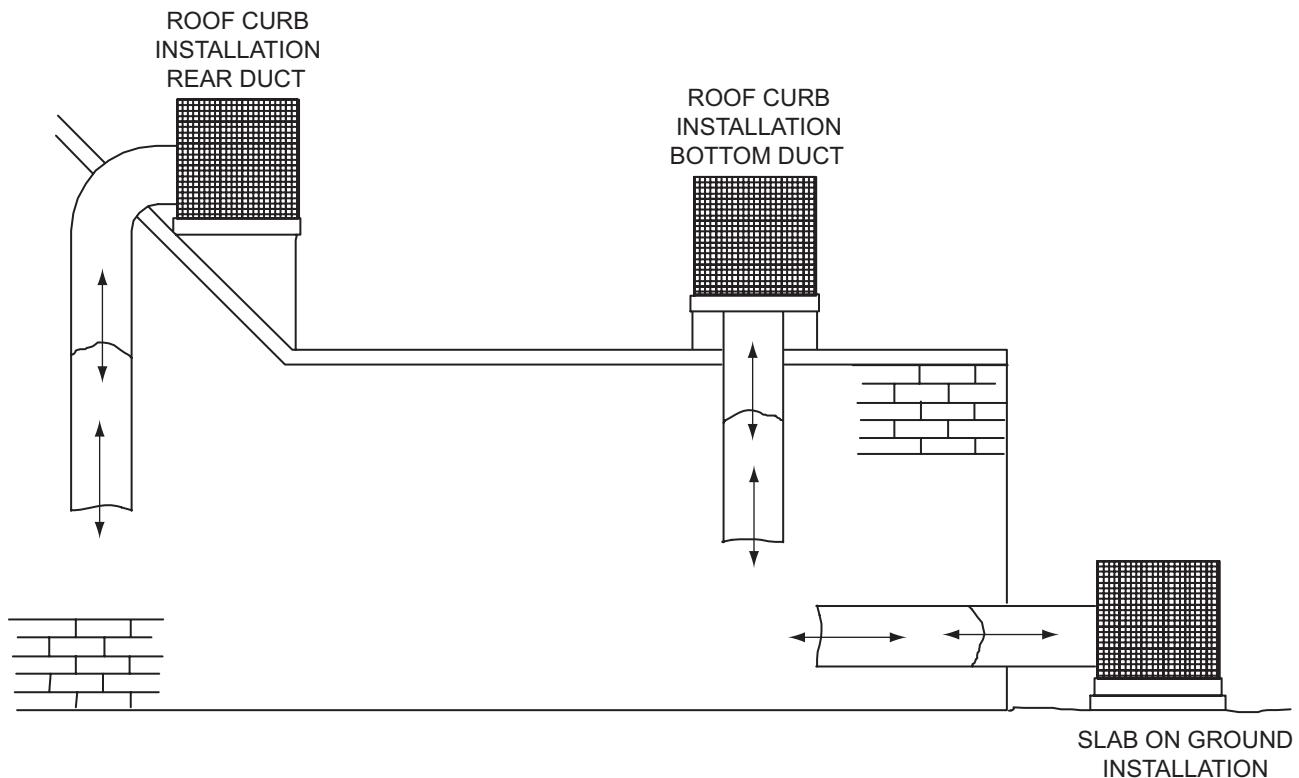
1. A 1" clearance must be provided between any combustible material and the supply air duct work.
2. The products of combustion must not be allowed to accumulate within a confined space and recirculate.
3. Units must be installed outdoors. Over hanging structure or shrubs should not obscure condenser air discharge outlet.
4. Units may be installed on combustable floors made from wood or class A, B or C roof covering materials.

## Unit Accessory Weights

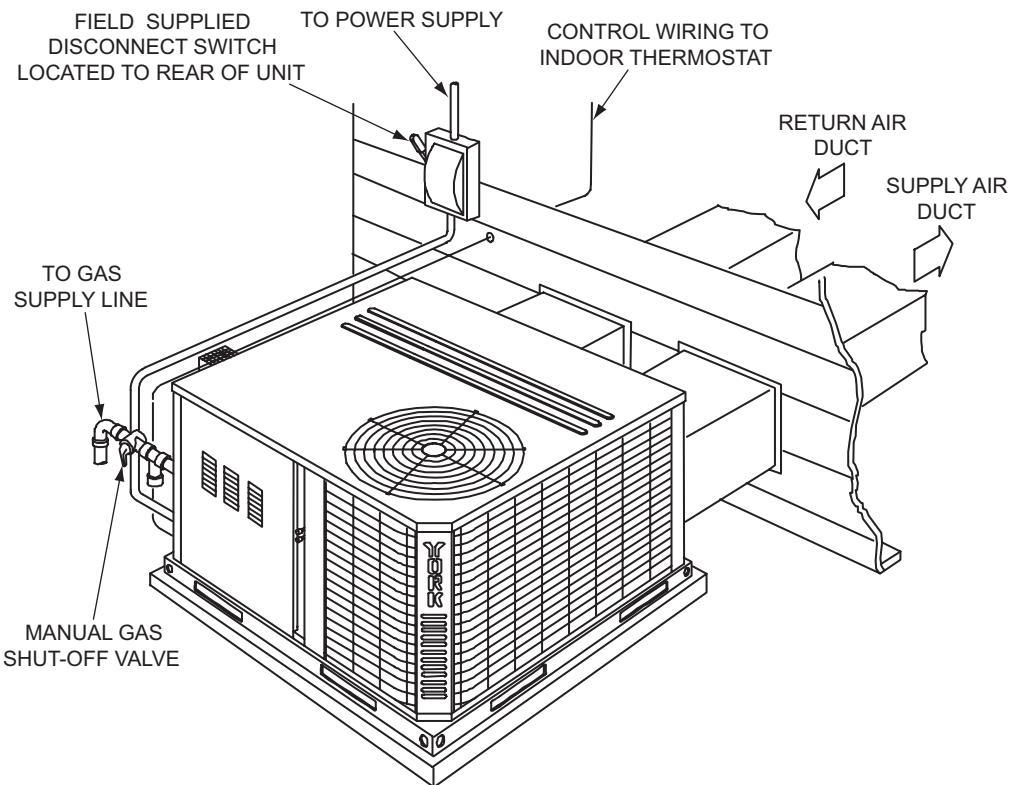
Unit Accessory	Model	Weight (lbs.)	
		Shipping	Operating
Add Economizer	All	45	40

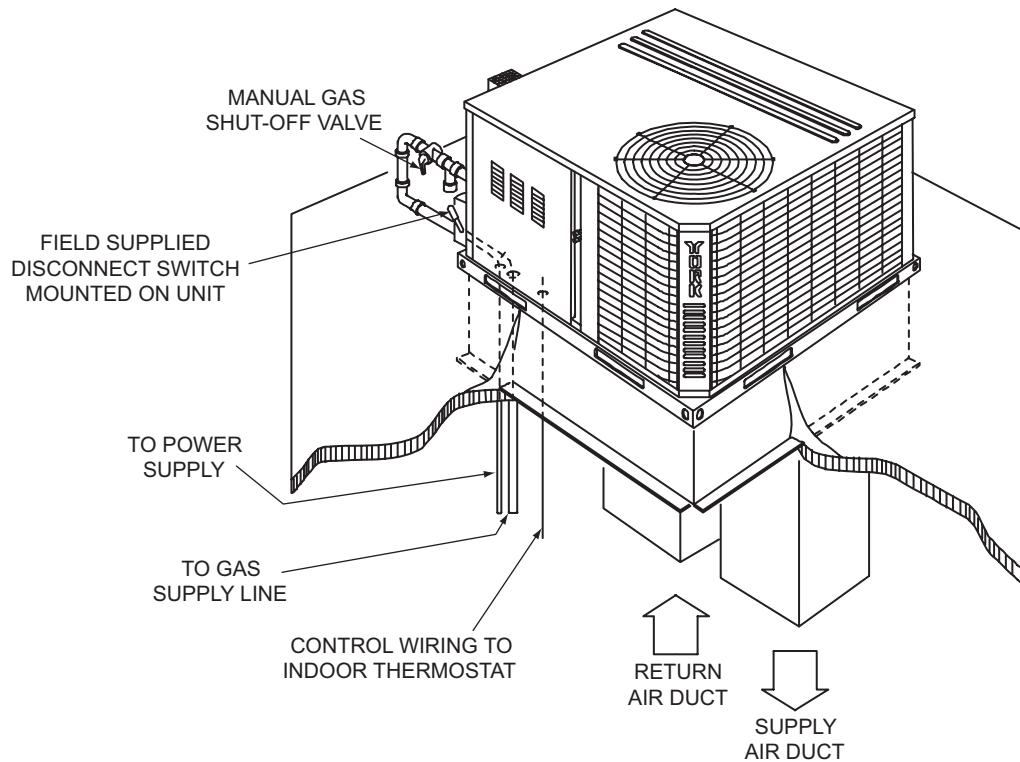
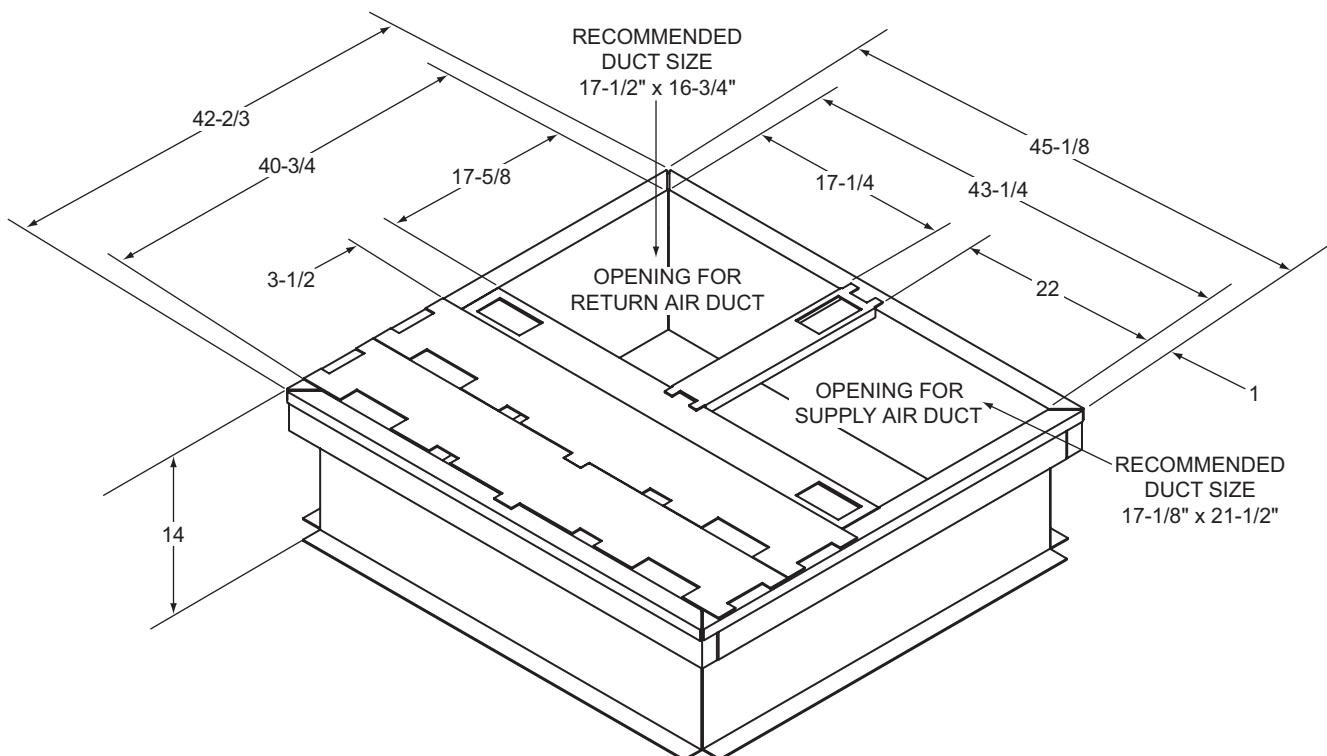
**Unit Dimensions Front and Bottom****Unit Dimensions Back and Bottom**

## Unit Typical Duct Applications



## Unit Typical Slab on Ground Installation (Gas Model Shown)



**Unit Typical Roof Curb Installation (Gas Model Shown)****Unit Accessory Dimensions****Roof Curb<sup>1</sup>**

1. 8" Roof Curb also available.

**Roof Curb Cross Section**