Heating and Air Conditioning

TECHNICAL GUIDE
R-410A
AFFINITY™ SERIES
DHQ MODELS
2 - 5 TON
60 Hertz

Description

These York® Affinity™ packaged dual fuel heat pumps are designed for outdoor installation. Only utility and duct connections are required at the point of installation.

The 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:

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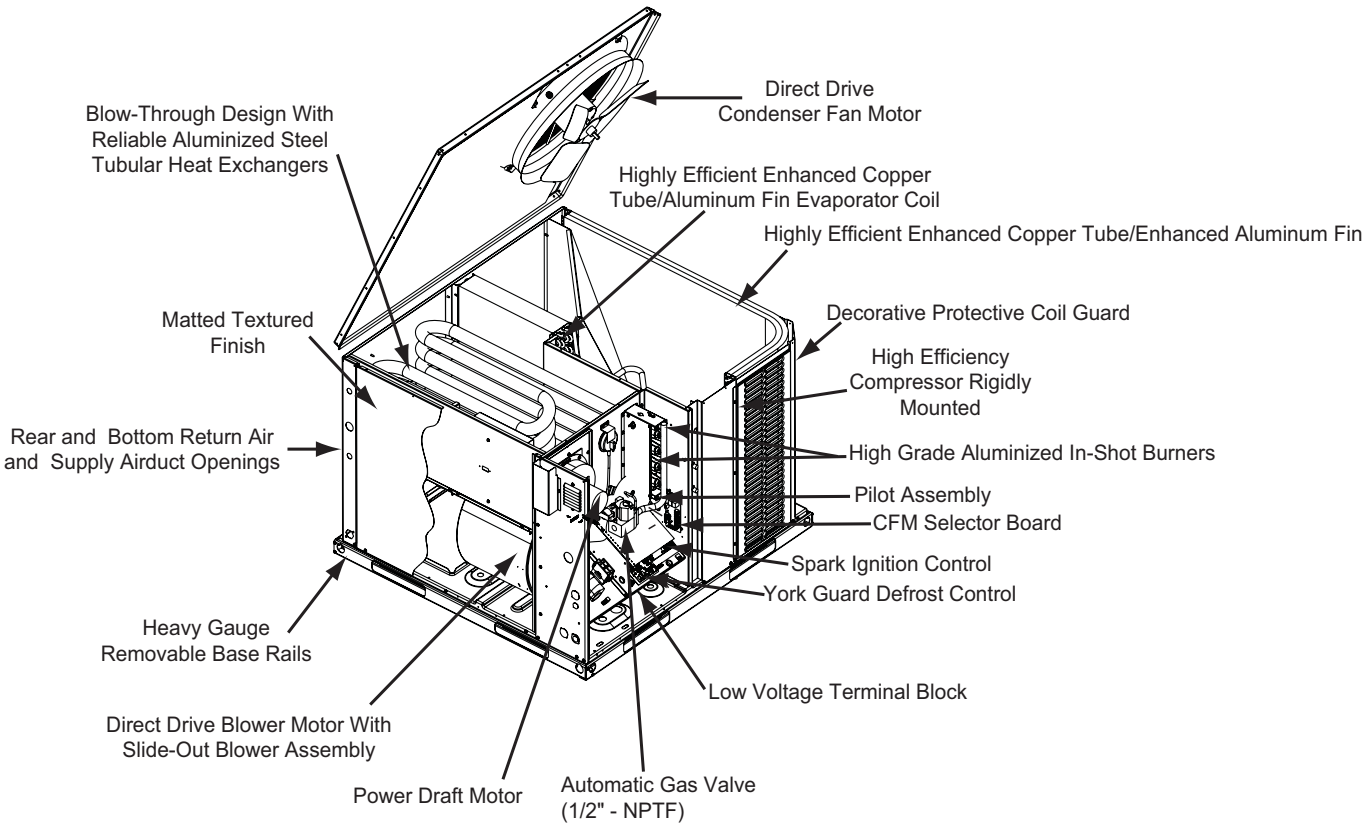
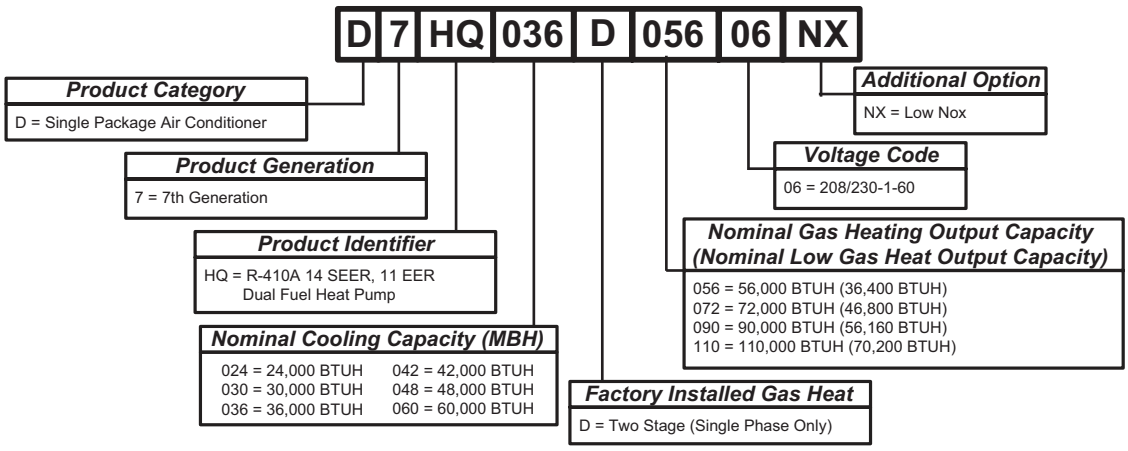
Component Location

Dual Fuel Heat Pump



Nomenclature

Cooling/Gas Unit



Features and Benefits

Standard Features

- **Operating Efficiency** - All dual fuel heat pumps provide operating efficiencies of 14 SEER, 11 EER, 81 AFUE and 8.0 HSPF. 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 3/4 inch NPTF connection is rigidly mounted to assure proper fit and leak tight seal.
- **Durable Finish** - The cabinet is made of pre-painted steel. The pre-treated galvanized steel provides a better paint to steel bond, which resists corrosion and rust creep. Special primer formulas and matted-textured finish insure less fading when exposed to sunlight.
- **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** - All models utilize a stamped “Louvered” design which provides superior impact protection against smaller objects during transit and after installation.
- **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 it's 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.
- **Low NOx** -Factory installed to reduce emissions to less than 40 nanogram per Joule. California requirement on single phase models only.

Field Installed Accessories

- **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.
- **Filter/Frame Kit** - 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.
  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.

Guide Specifications

General

Units shall be manufactured by Unitary Products 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 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 AHRI 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 G-90, pre-paint textured steel, certified at 500 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" NPTF 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 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.

c. Condenser coils shall have aluminum plate fins mechanically bonded to seamless internally enhanced copper tubes with all joints brazed.

d. Condenser coil shall be draw through design.

Refrigerant Circuit and Refrigerant Safety Components shall include:

a. Independent thermal expansion devices.

b. Filter/strainer to eliminate any foreign matter.

Gas Heating Section

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 ºF. 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.

Physical Data

DHQ024-060 Two Stage Gas Heat

Component	Models					
	DHQ024	DHQ030	DHQ036	DHQ042	DHQ048	DHQ060
Nominal Tonnage	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**	**5.0**
AHRI COOLING PERFORMANCE						
Gross Capacity @ AHRI A point (MBH)	23.7	30.1	37.2	43.5	47.7	55.0
AHRI net capacity (MBH)	22.8	29.0	34.6	41.0	45.5	52.5
EER	11.0	11.0	11.0	11.0	11.0	11.0
SEER	14.0	14.0	14.0	14.0	14.0	14.0
Nominal CFM	850	950	1050	1400	1400	1550
System power (KW)	2.1	2.6	3.2	3.8	4.2	4.8
Refrigerant type	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (lb-oz)	10-10	9-0	9-6	12-4	12-14	12-14
AHRI HEAT PUMP PERFORMANCE						
47ºF capacity rating (MBH)	21.0	26.5	30.5	38.0	44.4	51.4
System power (KW) / COP	3.30	3.30	3.15	3.30	3.20	3.10
17ºF capacity rating (MBH)	11.5	15.0	18.5	21.6	23.6	31.0
System power (KW) / COP	2.15	2.10	2.15	2.15	2.10	2.15
HSPF (Btu/Watts-hr)	8.0	8.0	8.0	8.0	8.0	8.0
AHRI GAS HEAT PERFORMANCE						
Heating model	D056	D056	D056	D072	D090	D090	D110	D090	D110
Heat input (K Btu)	70/45.5	70/45.5	70/45.5	90/58.5	108/70.2	108/70.2	135/87.8	108/70.2	135/87.8
Heat output (K Btu)	56/36.4	56/36.4	56/36.4	72/46.8	87/56.2	87/56.2	108/70.2	87/56.2	108/70.2
AFUE[1]	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0
No. burners	3	3	3	4	4	4	5	4	5
No. stages	2	2	2	2	2	2	2	2	2
Temperature Rise Range (ºF)	30-60	30-60	25-55	30-60	45-75	35-65	45-75	35-65	45-75
Max. Outlet Air Temp. (ºF)	175	175	175	175	175	175	175	175	175
Gas Limit Setting (ºF)	160	160	160	160	175	175	170	175	170
Gas piping connection (in.)	1/2	1/2	1/2		1/2	1/2		1/2	
DIMENSIONS (inches)									
Length	49 1/8	49 1/8	49 1/8		49 1/8	49 1/8		49 1/8	
Width	47 1/4	47 1/4	47 1/4		47 1/4	47 1/4		47 1/4	
Height	33 1/2	33 1/2	33 1/2		41 1/2	41 1/2		41 1/2	
OPERATING WT. (lbs.)									
Unit Weight (lbs.)	413	426	433		514	540		549	
COMPRESSOR									
Type	Scroll 2-speeds	Scroll 2-speeds	Scroll 2-speeds		Scroll 2-speeds	Scroll 2-speeds		Scroll 2-speeds	
CONDENSER COIL DATA									
Face area (Sq. Ft.)	11.9	11.9	11.9		15	15		15	
Rows	2	2	2		2	2		3	
Fins per inch	16	16	16		16	16		13	
Tube diameter	3/8	3/8	3/8		3/8	3/8		3/8	
Circuitry Type	Interlaced	Interlaced	Interlaced		Interlaced	Interlaced		Interlaced	
EVAPORATOR COIL DATA									
Face area (Sq. Ft.)	3.4	3.4	3.4		4.4	4.4		4.4	
Rows	4	4	4		4	4		4	
Fins per inch	13	13	13		13	13		13	
Tube diameter	3/8	3/8	3/8		3/8	3/8		3/8	
Circuitry Type	Interlaced	Interlaced	Interlaced		Interlaced	Interlaced		Interlaced	
Refrigerant control	TXV	TXV	TXV		TXV	TXV		TXV	
CONDENSER FAN DATA									
Fan diameter (Inch)	22	22	22		22	22		22	
Type	Prop	Prop	Prop		Prop	Prop		Prop	
Drive type	Direct	Direct	Direct		Direct	Direct		Direct	
No. speeds	1	2	2		2	2		2	
Motor HP	1/3	1/3	1/3		1/3	1/3		1/3	
RPM	850	1100	1100		1100	1100		1100	
Nominal total CFM	2000	2400	2400		3200	3200		3200	
DIRECT DRIVE EVAP FAN DATA									
Fan Size (Inch)	10 x 8	10 x 8	11 x 10		12 x 11	12 x 11		12 x 11	
Type	Centrifugal	Centrifugal	Centrifugal		Centrifugal	Centrifugal		Centrifugal	
Motor HP	1/2	3/4	3/4		1	1		1	
RPM	Variable	Variable	Variable		Variable	Variable		Variable	
Frame size	48	48	48		48	48		48	
FILTERS									
Quantity - Size	1 - 20 x 20 x 1	1 - 20 x 20 x 1	1 - 20 x 20 x 1		2 - 20 x 12 x 1	2 - 20 x 12 x 1		2 - 20 x 12 x 1	

1. 208/230 volt single phase only.

DHQ Unit Limitations

Model (Tons)	Unit Voltage	Unit Limitations		
		Applied Voltage		Outdoor DB Temp
		Min	Max	Max (°F)
DHQ024 (2.0)	208/230-1-60	187	252	125
DHQ030 (2.5)	208/230-1-60	187	252	125
DHQ036 (3.0)	208/230-1-60	187	252	125
DHQ042 (3.5)	208/230-1-60	187	252	125
DHQ048 (4.0)	208/230-1-60	187	252	125
DHQ060 (5.0)	208/230-1-60	187	252	125

Capacity Performance

DHQ024 (2.0 Ton) Cooling Performance Data

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)					
CFM	WB (°F)			Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								**85°F**							
470	77	21.8	1.4	18.6	15.6	13.4	-	-	-	23.5	1.6	13.9	13.0	10.7	-	-	-
	72	23.1	1.4	18.8	16.6	14.4	12.2	-	-	23.1	1.6	17.3	15.1	12.9	10.6	-	-
	67	24.5	1.4	20.6	17.7	15.5	13.3	11.0	-	22.7	1.6	20.7	17.2	15.0	12.8	10.5	-
	62	22.8	1.4	22.8	22.8	19.0	16.8	14.6	12.4	21.1	1.6	21.1	21.1	17.8	15.5	13.3	11.1
600	77	22.4	1.4	20.3	17.6	14.8	-	-	-	24.2	1.6	17.4	14.6	11.8	-	-	-
	72	23.8	1.4	21.5	18.7	15.9	13.1	-	-	23.8	1.6	19.8	17.0	14.2	11.4	-	-
	67	25.2	1.4	22.6	19.9	17.1	14.3	11.5	-	23.4	1.6	22.1	19.3	16.5	13.7	10.9	-
	62	23.5	1.4	23.5	23.5	21.0	18.2	15.4	12.6	21.8	1.6	21.8	21.8	19.6	16.8	14.0	11.2
	57	23.6	1.4	23.6	23.6	20.8	18.0	15.2	12.4	22.1	1.6	22.1	22.1	19.7	16.8	14.0	11.2
735	77	23.1	1.5	22.0	19.5	16.2	-	-	-	25.0	1.7	20.9	16.3	12.9	-	-	-
	72	24.5	1.4	24.1	20.8	17.4	14.1	-	-	24.6	1.6	22.2	18.9	15.5	12.1	-	-
	67	26.0	1.4	24.7	22.0	18.7	15.3	12.0	-	24.2	1.6	23.5	21.4	18.0	14.7	11.3	-
	62	24.2	1.4	24.2	24.2	22.9	19.6	16.2	12.9	22.5	1.6	22.5	22.5	21.4	18.0	14.6	11.3
	57	24.3	1.4	24.3	24.3	22.7	19.4	16.0	12.7	22.8	1.6	22.8	22.8	21.5	18.1	14.7	11.3
870	77	23.7	1.5	23.7	21.5	17.5	-	-	-	25.8	1.7	24.5	18.0	14.0	-	-	-
	72	25.3	1.4	25.3	22.9	18.9	15.0	-	-	25.4	1.6	24.7	20.7	16.8	12.8	-	-
	67	26.8	1.4	26.8	24.2	20.3	16.4	12.5	-	24.9	1.6	24.9	23.5	19.6	15.6	11.7	-
	62	24.9	1.4	24.9	24.9	24.9	21.0	17.1	13.2	23.2	1.6	23.2	23.2	23.2	19.2	15.3	11.3
	57	25.0	1.4	25.0	25.0	24.7	20.8	16.9	12.9	23.5	1.6	23.5	23.5	23.3	19.3	15.4	11.4
900	72	25.7	1.4	25.7	24.0	19.8	15.7	-	-	25.8	1.6	25.5	21.9	17.7	13.5	-	-
	67	27.2	1.4	27.2	25.9	21.3	17.1	13.0	-	25.4	1.6	25.4	24.7	20.6	16.4	12.3	-
	62	25.3	1.4	25.3	25.3	25.3	21.2	17.1	12.9	23.6	1.6	23.6	23.6	23.6	19.4	15.3	11.1
	57	25.4	1.4	25.4	25.4	25.3	21.1	17.0	12.9	24.0	1.6	24.0	24.0	23.8	19.6	15.5	11.3
1000	72	26.1	1.5	26.1	25.1	20.8	16.4	-	-	26.2	1.6	26.2	23.0	18.6	14.2	-	-
	67	27.6	1.4	27.6	27.6	22.2	17.9	13.5	-	25.8	1.6	25.8	25.8	21.6	17.2	12.8	-
	62	25.7	1.4	25.7	25.7	25.7	21.4	17.1	12.7	24.0	1.6	24.0	24.0	24.0	19.6	15.2	10.8
	57	25.8	1.4	25.8	25.8	25.8	21.5	17.1	12.8	24.4	1.6	24.4	24.4	24.4	20.0	15.6	11.2
		95°F								**105°F**							
470	77	25.2	1.8	10.8	10.3	8.1	-	-	-	23.2	2.1	11.0	9.1	7.4	-	-	-
	72	23.0	1.8	15.8	13.6	11.3	9.0	-	-	21.2	2.1	15.1	12.9	10.6	8.4	-	-
	67	20.9	1.8	20.9	16.8	14.5	12.3	10.0	-	19.2	2.0	19.2	16.6	13.9	11.6	9.4	-
	62	19.4	1.8	19.4	19.4	16.6	14.3	12.0	9.8	18.2	2.0	18.2	18.2	15.3	13.0	10.8	8.5
600	77	26.1	1.9	14.5	11.7	8.9	-	-	-	24.0	2.1	14.9	11.0	8.1	-	-	-
	72	23.8	1.8	18.1	15.2	12.4	9.6	-	-	21.9	2.1	17.4	14.5	11.7	8.9	-	-
	67	21.6	1.8	21.6	18.8	16.0	13.1	10.3	-	19.8	2.0	19.8	18.1	15.2	12.4	9.6	-
	62	20.1	1.8	20.1	20.1	18.2	15.4	12.5	9.7	18.7	2.0	18.7	18.7	16.8	14.0	11.2	8.3
	57	20.7	1.8	20.7	20.7	18.5	15.7	12.9	10.0	19.3	2.0	19.3	19.3	17.2	14.3	11.5	8.7
735	77	26.9	1.9	18.3	13.1	9.7	-	-	-	24.7	2.1	18.7	12.8	8.9	-	-	-
	72	24.6	1.8	20.3	16.9	13.5	10.1	-	-	22.6	2.1	19.6	16.2	12.8	9.3	-	-
	67	22.4	1.8	22.4	20.8	17.4	14.0	10.6	-	20.5	2.1	20.5	19.5	16.6	13.2	9.8	-
	62	20.8	1.8	20.8	20.8	19.8	16.4	13.0	9.6	19.3	2.0	19.3	19.3	18.4	14.9	11.5	8.1
	57	21.4	1.8	21.4	21.4	20.2	16.8	13.4	10.0	19.9	2.0	19.9	19.9	18.7	15.3	11.9	8.5
870	77	27.8	1.9	22.1	14.4	10.5	-	-	-	25.4	2.1	22.6	14.7	9.6	-	-	-
	72	25.5	1.8	22.6	18.6	14.6	10.7	-	-	23.3	2.1	21.8	17.8	13.8	9.8	-	-
	67	23.1	1.8	23.1	22.8	18.8	14.8	10.9	-	21.1	2.1	21.1	20.9	18.0	14.0	10.0	-
	62	21.5	1.8	21.5	21.5	21.5	17.5	13.5	9.5	19.9	2.0	19.9	19.9	19.9	15.9	11.9	7.9
	57	22.1	1.8	22.1	22.1	21.9	17.9	13.9	9.9	20.5	2.0	20.5	20.5	20.3	16.3	12.3	8.3
900	72	25.9	1.8	24.0	19.7	15.5	11.3	-	-	23.7	2.1	22.7	18.9	14.7	10.4	-	-
	67	23.5	1.8	23.5	23.4	19.9	15.7	11.5	-	21.5	2.1	21.5	21.4	19.1	14.9	10.6	-
	62	21.9	1.8	21.9	21.9	21.9	17.7	13.4	9.2	20.3	2.0	20.3	20.3	20.3	16.0	11.7	7.5
	57	22.5	1.8	22.5	22.5	22.4	18.2	13.9	9.7	20.9	2.0	20.9	20.9	20.8	16.5	12.2	8.0
1000	72	26.4	1.8	25.3	20.8	16.4	11.9	-	-	24.1	2.1	23.6	20.1	15.5	11.0	-	-
	67	24.0	1.8	24.0	24.0	21.1	16.6	12.1	-	21.9	2.1	21.9	21.9	20.3	15.7	11.2	-
	62	22.3	1.8	22.3	22.3	22.3	17.8	13.4	8.9	20.6	2.0	20.6	20.6	20.6	16.1	11.6	7.1
	57	22.9	1.8	22.9	22.9	22.9	18.5	14.0	9.5	21.3	2.0	21.3	21.3	21.3	16.7	12.2	7.7

DHQ024 (2.0 Ton) Cooling Performance Data (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)					
CFM	WB (°F)			90	85	80	75	70	65			90	85	80	75	70	65
		115°F								**125°F**							
470	77	21.3	2.3	11.3	7.9	6.7	-	-	-	19.4	2.6	12.9	7.1	6.1	-	-	-
	72	19.4	2.3	14.4	12.2	10.0	7.7	-	-	17.7	2.5	13.7	11.5	9.3	7.1	-	-
	67	17.6	2.3	17.6	16.5	13.2	11.0	8.7	-	15.9	2.5	15.9	15.9	12.5	10.3	8.1	-
	62	16.9	2.2	16.9	16.9	14.0	11.8	9.5	7.3	15.6	2.4	15.6	15.6	12.7	10.5	8.3	6.1
600	77	21.9	2.4	15.2	10.3	7.4	-	-	-	19.8	2.6	15.5	9.9	6.7	-	-	-
	72	20.0	2.3	16.6	13.8	11.0	8.2	-	-	18.1	2.6	15.9	13.1	10.3	7.4	-	-
	67	18.1	2.3	18.1	17.4	14.5	11.7	8.9	-	16.3	2.5	16.3	16.3	13.8	11.0	8.2	-
	62	17.4	2.2	17.4	17.4	15.4	12.6	9.8	7.0	16.0	2.5	16.0	16.0	14.1	11.2	8.4	5.6
	57	17.9	2.2	17.9	17.9	15.8	12.9	10.1	7.3	16.6	2.5	16.6	16.6	14.4	11.6	8.7	5.9
735	77	22.5	2.4	19.1	12.6	8.1	-	-	-	20.2	2.6	18.1	12.6	7.3	-	-	-
	72	20.5	2.3	18.8	15.4	12.0	8.6	-	-	18.5	2.6	18.1	14.7	11.2	7.8	-	-
	67	18.6	2.3	18.6	18.2	15.9	12.5	9.0	-	16.7	2.5	16.7	16.7	15.1	11.7	8.3	-
	62	17.8	2.3	17.8	17.8	16.9	13.5	10.0	6.6	16.3	2.5	16.3	16.3	15.4	12.0	8.5	5.1
	57	18.4	2.3	18.4	18.4	17.2	13.8	10.4	7.0	16.9	2.5	16.9	16.9	15.8	12.3	8.9	5.5
870	77	23.1	2.4	23.0	15.0	8.8	-	-	-	20.7	2.7	20.7	15.4	8.0	-	-	-
	72	21.1	2.4	21.0	17.0	13.0	9.0	-	-	18.9	2.6	18.9	16.2	12.2	8.2	-	-
	67	19.1	2.3	19.1	19.1	17.2	13.2	9.2	-	17.0	2.6	17.0	17.0	16.4	12.4	8.4	-
	62	18.3	2.3	18.3	18.3	18.3	14.3	10.3	6.3	16.7	2.5	16.7	16.7	16.7	12.7	8.7	4.6
	57	18.9	2.3	18.9	18.9	18.7	14.7	10.7	6.7	17.3	2.5	17.3	17.3	17.1	13.1	9.1	5.0
900	72	21.4	2.4	21.4	18.2	13.9	9.6	-	-	19.2	2.6	19.2	17.4	13.0	8.7	-	-
	67	19.4	2.3	19.4	19.4	18.3	14.0	9.8	-	17.3	2.6	17.3	17.3	17.3	13.2	8.9	-
	62	18.6	2.3	18.6	18.6	18.6	14.3	10.0	5.7	17.0	2.5	17.0	17.0	17.0	12.7	8.3	4.0
	57	19.2	2.3	19.2	19.2	19.1	14.8	10.5	6.3	17.6	2.5	17.6	17.6	17.5	13.2	8.8	4.5
1000	72	21.8	2.4	21.8	19.3	14.7	10.1	-	-	19.5	2.6	19.5	18.5	13.9	9.2	-	-
	67	19.7	2.3	19.7	19.7	19.5	14.9	10.3	-	17.6	2.6	17.6	17.6	17.6	14.0	9.4	-
	62	19.0	2.3	19.0	19.0	19.0	14.4	9.8	5.2	17.3	2.5	17.3	17.3	17.3	12.7	8.0	3.4
	57	19.6	2.3	19.6	19.6	19.6	15.0	10.4	5.8	17.9	2.5	17.9	17.9	17.9	13.3	8.6	4.0

1. These capacities are Net Capacities.
2. These ratings include the compressor, condenser fan and supply air blower motors.

DHQ030 (2.5 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)					
CFM	WB (°F)			Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								**85°F**							
680	77	38.9	2.1	19.9	16.1	12.8	-	-	-	35.5	2.2	18.2	14.9	11.6	-	-	-
	72	35.5	2.0	23.6	20.3	16.9	13.5	-	-	32.7	2.1	22.4	19.1	15.8	12.5	-	-
	67	32.1	1.9	27.3	24.4	21.0	17.6	14.3	-	29.9	2.1	26.6	23.3	20.0	16.7	13.4	-
	62	30.1	1.9	30.1	30.1	25.4	22.1	18.7	15.3	27.8	2.0	27.8	27.8	24.1	20.7	17.4	14.1
750	77	39.5	2.1	20.7	17.1	13.5	-	-	-	36.3	2.1	19.5	15.9	12.3	-	-	-
	72	36.0	2.0	25.1	21.5	17.8	14.2	-	-	33.4	2.1	23.9	20.4	16.8	13.2	-	-
	67	32.6	1.8	29.4	25.8	22.2	18.6	15.0	-	30.5	2.1	28.4	24.8	21.2	17.6	14.1	-
	62	30.6	1.9	30.6	30.6	26.8	23.2	19.6	16.0	28.4	2.0	28.4	28.4	25.5	22.0	18.4	14.8
	57	30.0	1.9	30.0	30.0	27.8	24.2	20.6	17.0	28.2	2.0	28.2	28.2	26.0	22.4	18.8	15.3
850	77	40.1	2.0	21.5	18.1	14.2	-	-	-	37.0	2.1	20.8	16.9	13.1	-	-	-
	72	36.6	1.9	26.5	22.6	18.8	14.9	-	-	34.1	2.1	25.4	21.6	17.8	13.9	-	-
	67	33.1	1.8	31.5	27.2	23.4	19.5	15.7	-	31.2	2.1	30.1	26.3	22.4	18.6	14.8	-
	62	31.1	1.8	31.1	31.1	28.3	24.4	20.6	16.7	29.0	2.0	29.0	29.0	27.0	23.2	19.3	15.5
	57	30.5	1.8	30.5	30.5	29.3	25.5	21.6	17.8	28.8	2.0	28.8	28.8	27.5	23.7	19.8	16.0
950	77	40.7	2.0	22.3	19.0	14.9	-	-	-	37.8	2.1	22.1	17.9	13.8	-	-	-
	72	37.1	1.9	27.9	23.8	19.8	15.7	-	-	34.8	2.1	27.0	22.8	18.7	14.6	-	-
	67	33.6	1.7	33.6	28.7	24.6	20.5	16.4	-	31.8	2.0	31.8	27.8	23.7	19.6	15.5	-
	62	31.5	1.8	31.5	31.5	29.7	25.6	21.5	17.4	29.6	2.0	29.6	29.6	28.5	24.4	20.3	16.2
	57	30.9	1.8	30.9	30.9	30.8	26.7	22.6	18.5	29.4	2.0	29.4	29.4	29.0	24.9	20.8	16.7
1050	72	38.2	1.9	30.5	25.9	21.3	16.7	-	-	35.6	2.1	29.5	24.9	20.2	15.6	-	-
	67	34.6	1.8	34.6	31.6	26.5	21.9	17.3	-	32.5	2.1	32.5	30.2	25.6	21.0	16.3	-
	62	32.5	1.8	32.5	32.5	31.6	27.0	22.4	17.8	30.2	2.0	30.2	30.2	29.7	25.1	20.4	15.8
	57	31.8	1.8	31.8	31.8	31.8	27.2	22.6	18.0	30.0	2.0	30.0	30.0	29.8	25.2	20.6	16.0
1250	72	39.4	2.0	33.1	28.0	22.8	17.7	-	-	36.3	2.1	32.0	26.9	21.8	16.6	-	-
	67	35.6	1.8	35.6	34.5	28.4	23.3	18.2	-	33.2	2.1	33.2	32.7	27.5	22.4	17.2	-
	62	33.4	1.9	33.4	33.4	33.4	28.3	23.2	18.1	30.9	2.0	30.9	30.9	30.9	25.7	20.6	15.5
	57	32.8	1.9	32.8	32.8	32.8	27.7	22.6	17.4	30.7	2.0	30.7	30.7	30.7	25.5	20.4	15.2
		95°F								**105°F**							
680	77	32.1	2.2	16.5	13.7	10.5	-	-	-	30.2	2.6	16.1	13.1	9.8	-	-	-
	72	29.9	2.2	21.2	18.0	14.7	11.5	-	-	27.9	2.6	20.5	17.2	14.0	10.7	-	-
	67	27.7	2.2	26.0	22.2	19.0	15.7	12.4	-	25.6	2.5	24.8	21.3	18.1	14.8	11.6	-
	62	25.4	2.1	25.4	25.4	22.7	19.4	16.2	12.9	23.5	2.5	23.5	23.5	20.8	17.6	14.3	11.1
750	77	33.0	2.2	18.3	14.7	11.2	-	-	-	30.9	2.6	18.2	14.0	10.5	-	-	-
	72	30.7	2.3	22.8	19.3	15.7	12.2	-	-	28.5	2.6	22.0	18.4	14.9	11.4	-	-
	67	28.5	2.3	27.3	23.8	20.2	16.7	13.1	-	26.2	2.6	25.7	22.8	19.3	15.8	12.2	-
	62	26.2	2.2	26.2	26.2	24.2	20.7	17.1	13.6	24.1	2.5	24.1	24.1	22.2	18.7	15.1	11.6
	57	26.4	2.2	26.4	26.4	24.2	20.6	17.1	13.5	24.9	2.5	24.9	24.9	22.5	19.0	15.4	11.9
850	77	34.0	2.3	20.1	15.7	11.9	-	-	-	31.6	2.6	20.3	14.9	11.1	-	-	-
	72	31.6	2.3	24.4	20.6	16.7	12.9	-	-	29.2	2.6	23.4	19.6	15.8	12.0	-	-
	67	29.3	2.3	28.7	25.4	21.5	17.7	13.8	-	26.8	2.6	26.5	24.3	20.5	16.7	12.9	-
	62	26.9	2.2	26.9	26.9	25.8	21.9	18.1	14.2	24.6	2.5	24.6	24.6	23.6	19.8	16.0	12.2
	57	27.1	2.2	27.1	27.1	25.7	21.9	18.0	14.2	25.4	2.5	25.4	25.4	23.9	20.1	16.3	12.5
950	77	34.9	2.3	21.9	16.7	12.6	-	-	-	32.3	2.6	22.5	15.9	11.8	-	-	-
	72	32.5	2.3	26.0	21.8	17.7	13.6	-	-	29.8	2.6	24.9	20.8	16.8	12.7	-	-
	67	30.1	2.3	30.1	26.9	22.8	18.7	14.5	-	27.4	2.6	27.4	25.8	21.7	17.6	13.5	-
	62	27.7	2.2	27.7	27.7	27.3	23.2	19.0	14.9	25.2	2.5	25.2	25.2	25.0	20.9	16.8	12.7
	57	27.9	2.2	27.9	27.9	27.2	23.1	19.0	14.8	26.0	2.5	26.0	26.0	25.3	21.2	17.1	13.0
1050	72	32.9	2.3	28.5	23.8	19.2	14.5	-	-	30.3	2.6	27.3	22.8	18.2	13.6	-	-
	67	30.4	2.3	30.4	28.9	24.7	20.1	15.4	-	27.8	2.6	27.8	27.0	23.6	19.0	14.3	-
	62	28.0	2.2	28.0	28.0	27.8	23.2	18.5	13.9	25.5	2.5	25.5	25.5	25.5	20.8	16.2	11.6
	57	28.2	2.2	28.2	28.2	27.9	23.2	18.6	13.9	26.4	2.5	26.4	26.4	26.0	21.4	16.8	12.1
1250	72	33.3	2.3	31.0	25.8	20.7	15.5	-	-	30.7	2.6	29.6	24.8	19.7	14.5	-	-
	67	30.8	2.3	30.8	30.8	26.6	21.5	16.3	-	28.2	2.6	28.2	28.2	25.5	20.3	15.1	-
	62	28.3	2.2	28.3	28.3	28.3	23.2	18.0	12.8	25.9	2.5	25.9	25.9	25.9	20.7	15.6	10.4
	57	28.5	2.2	28.5	28.5	28.5	23.4	18.2	13.0	26.8	2.5	26.8	26.8	26.8	21.6	16.4	11.2

DHQ030 (2.5 Ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)					
CFM	WB (°F)			90	85	80	75	70	65			90	85	80	75	70	65
		115°F								**125°F**							
680	77	28.3	2.9	15.7	12.4	9.2	-	-	-	26.3	3.3	16.2	11.0	8.5	-	-	-
	72	25.9	2.9	19.7	16.4	13.2	10.0	-	-	24.0	3.2	18.9	15.7	12.4	9.2	-	-
	67	23.6	2.8	23.6	20.5	17.2	14.0	10.8	-	21.6	3.1	21.6	19.9	16.4	13.1	9.9	-
	62	21.6	2.8	21.6	21.6	18.9	15.7	12.5	9.2	19.7	3.1	19.7	19.7	17.1	13.8	10.6	7.4
750	77	28.7	2.9	18.2	13.3	9.8	-	-	-	26.6	3.3	18.7	12.5	9.0	-	-	-
	72	26.4	2.9	21.1	17.6	14.1	10.6	-	-	24.2	3.2	20.2	16.7	13.2	9.7	-	-
	67	24.0	2.8	24.0	21.9	18.4	14.9	11.3	-	21.8	3.1	21.8	20.9	17.4	13.9	10.4	-
	62	22.0	2.8	22.0	22.0	20.2	16.7	13.2	9.7	19.9	3.1	19.9	19.9	18.2	14.7	11.2	7.7
	57	23.4	2.8	23.4	23.4	20.8	17.3	13.8	10.3	21.8	3.2	21.8	21.8	19.1	15.6	12.1	8.7
850	77	29.2	2.9	20.6	14.2	10.4	-	-	-	26.8	3.3	21.2	14.1	9.6	-	-	-
	72	26.8	2.9	22.5	18.7	14.9	11.1	-	-	24.4	3.2	21.6	17.8	14.0	10.3	-	-
	67	24.4	2.8	24.4	23.3	19.5	15.7	11.9	-	21.9	3.1	21.9	21.9	18.5	14.7	11.0	-
	62	22.3	2.8	22.3	22.3	21.4	17.6	13.9	10.1	20.0	3.1	20.0	20.0	19.3	15.5	11.8	8.0
	57	23.7	2.8	23.7	23.7	22.1	18.3	14.5	10.7	22.0	3.1	22.0	22.0	20.3	16.5	12.8	9.0
950	77	29.6	2.9	23.1	15.0	11.0	-	-	-	27.0	3.3	23.7	15.6	10.2	-	-	-
	72	27.2	2.9	23.9	19.9	15.8	11.7	-	-	24.5	3.2	22.9	18.9	14.8	10.8	-	-
	67	24.8	2.8	24.8	24.7	20.6	16.6	12.5	-	22.1	3.1	22.1	22.1	19.5	15.5	11.5	-
	62	22.7	2.8	22.7	22.7	22.7	18.6	14.6	10.5	20.2	3.1	20.2	20.2	20.2	16.3	12.3	8.3
	57	24.1	2.8	24.1	24.1	23.4	19.3	15.3	11.2	22.2	3.1	22.2	22.2	21.5	17.4	13.4	9.4
1050	72	27.7	2.9	26.1	21.8	17.2	12.6	-	-	25.1	3.2	24.8	20.8	16.2	11.6	-	-
	67	25.2	2.9	25.2	25.2	22.5	17.9	13.2	-	22.6	3.1	22.6	22.6	21.4	16.8	12.2	-
	62	23.1	2.8	23.1	23.1	23.1	18.5	13.9	9.2	20.7	3.1	20.7	20.7	20.7	16.1	11.5	6.9
	57	24.5	2.9	24.5	24.5	24.2	19.6	14.9	10.3	22.7	3.2	22.7	22.7	22.3	17.7	13.1	8.5
1250	72	28.2	2.9	28.2	23.8	18.6	13.5	-	-	25.7	3.2	25.7	22.8	17.6	12.4	-	-
	67	25.7	2.9	25.7	25.7	24.3	19.2	14.0	-	23.1	3.2	23.1	23.1	23.1	18.0	12.8	-
	62	23.5	2.8	23.5	23.5	23.5	18.3	13.2	8.0	21.1	3.2	21.1	21.1	21.1	15.9	10.7	5.6
	57	25.0	2.9	25.0	25.0	25.0	19.8	14.6	9.4	23.2	3.2	23.2	23.2	23.2	18.0	12.8	7.7

1. These capacities are Net Capacities.
2. These ratings include the compressor, condenser fan and supply air blower motors.

DHQ036 (3.0 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)					
CFM	WB (°F)			Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		75°F								**85°F**							
800	77	45.0	2.2	22.7	18.3	14.7	-	-	-	42.2	2.5	20.7	17.1	13.5	-	-	-
	72	41.4	2.2	26.9	23.3	19.7	16.0	-	-	38.9	2.5	25.8	22.2	18.6	15.0	-	-
	67	37.8	2.2	31.1	28.3	24.6	21.0	17.4	-	35.7	2.5	30.9	27.4	23.8	20.2	16.6	-
	62	36.0	2.2	36.0	36.0	30.6	26.9	23.3	19.7	33.8	2.5	33.8	33.8	28.7	25.2	21.6	18.0
900	77	46.1	2.3	23.5	19.5	15.6	-	-	-	43.1	2.6	22.3	18.3	14.4	-	-	-
	72	42.4	2.2	28.8	24.8	20.8	16.9	-	-	39.8	2.5	27.8	23.8	19.8	15.8	-	-
	67	38.7	2.2	34.0	30.1	26.1	22.1	18.2	-	36.4	2.5	33.2	29.2	25.3	21.3	17.3	-
	62	36.9	2.2	36.9	36.9	32.4	28.4	24.4	20.5	34.5	2.5	34.5	34.5	30.6	26.6	22.6	18.6
	57	36.6	2.1	36.6	36.6	32.8	28.9	24.9	20.9	34.7	2.4	34.7	34.7	30.8	26.8	22.8	18.8
1000	77	47.2	2.3	24.3	20.8	16.4	-	-	-	44.0	2.6	23.9	19.6	15.2	-	-	-
	72	43.4	2.2	30.6	26.3	22.0	17.7	-	-	40.6	2.5	29.7	25.3	21.0	16.6	-	-
	67	39.6	2.2	37.0	31.9	27.6	23.2	18.9	-	37.2	2.5	35.4	31.1	26.7	22.4	18.0	-
	62	37.8	2.2	37.8	37.8	34.2	29.9	25.6	21.3	35.3	2.5	35.3	35.3	32.4	28.0	23.7	19.3
	57	37.4	2.1	37.4	37.4	34.7	30.4	26.0	21.7	35.4	2.5	35.4	35.4	32.6	28.2	23.9	19.5
1100	77	48.3	2.3	25.1	22.0	17.3	-	-	-	45.0	2.6	25.5	20.8	16.1	-	-	-
	72	44.4	2.2	32.5	27.8	23.2	18.5	-	-	41.5	2.5	31.6	26.9	22.1	17.4	-	-
	67	40.6	2.2	39.9	33.7	29.0	24.4	19.7	-	38.0	2.5	37.7	33.0	28.2	23.5	18.8	-
	62	38.6	2.2	38.6	38.6	36.0	31.4	26.7	22.0	36.0	2.5	36.0	36.0	34.2	29.4	24.7	20.0
	57	38.3	2.1	38.3	38.3	36.5	31.9	27.2	22.5	36.2	2.5	36.2	36.2	34.4	29.7	24.9	20.2
1250	72	45.0	2.3	34.7	29.6	24.5	19.4	-	-	42.0	2.5	33.6	28.5	23.3	18.2	-	-
	67	41.1	2.2	40.8	35.8	30.7	25.6	20.6	-	38.5	2.5	38.4	34.9	29.8	24.6	19.5	-
	62	39.1	2.3	39.1	39.1	37.9	32.8	27.7	22.6	36.5	2.5	36.5	36.5	35.6	30.5	25.3	20.2
	57	38.8	2.2	38.8	38.8	37.9	32.8	27.8	22.7	36.7	2.5	36.7	36.7	35.8	30.7	25.5	20.4
1350	72	45.6	2.3	36.9	31.4	25.9	20.4	-	-	42.6	2.6	35.5	30.0	24.5	19.0	-	-
	67	41.7	2.3	41.7	37.9	32.4	26.9	21.4	-	39.0	2.5	39.0	36.8	31.3	25.8	20.3	-
	62	39.7	2.3	39.7	39.7	39.7	34.2	28.7	23.2	37.0	2.5	37.0	37.0	37.0	31.5	26.0	20.5
	57	39.3	2.2	39.3	39.3	39.3	33.8	28.3	22.8	37.1	2.5	37.1	37.1	37.1	31.6	26.1	20.6
		95°F								**105°F**							
800	77	39.3	2.8	18.7	15.9	12.3	-	-	-	42.0	2.5	20.0	17.1	13.5	-	-	-
	72	36.4	2.8	24.7	21.2	17.6	14.0	-	-	36.5	2.8	24.8	21.2	17.7	14.1	-	-
	67	33.5	2.8	30.8	26.5	22.9	19.3	15.8	-	30.9	3.1	29.6	25.4	21.8	18.3	14.7	-
	62	31.5	2.7	31.5	31.5	26.9	23.4	19.8	16.2	29.4	3.1	29.4	29.4	25.2	21.6	18.1	14.5
900	77	40.1	2.8	21.1	17.1	13.2	-	-	-	42.8	2.5	22.8	18.3	14.4	-	-	-
	72	37.1	2.8	26.7	22.8	18.8	14.8	-	-	37.2	2.8	26.7	22.8	18.8	14.9	-	-
	67	34.1	2.8	32.4	28.4	24.4	20.4	16.5	-	31.5	3.1	30.6	27.2	23.3	19.3	15.4	-
	62	32.1	2.7	32.1	32.1	28.7	24.7	20.8	16.8	29.9	3.1	29.9	29.9	26.8	22.9	18.9	15.0
	57	32.8	2.8	32.8	32.7	28.7	24.7	20.7	16.8	30.2	3.1	30.2	30.2	26.6	22.6	18.7	14.7
1000	77	40.9	2.9	23.5	18.4	14.0	-	-	-	43.6	2.5	25.7	19.6	15.3	-	-	-
	72	37.8	2.8	28.7	24.3	20.0	15.6	-	-	37.9	2.8	28.7	24.3	20.0	15.6	-	-
	67	34.8	2.8	33.9	30.3	25.9	21.5	17.2	-	32.1	3.1	31.6	29.0	24.7	20.3	16.0	-
	62	32.8	2.7	32.8	32.8	30.5	26.1	21.7	17.4	30.5	3.1	30.5	30.5	28.5	24.1	19.8	15.4
	57	33.4	2.8	33.4	33.4	30.5	26.1	21.7	17.3	30.8	3.2	30.8	30.8	28.2	23.9	19.5	15.2
1100	77	41.6	2.9	26.0	19.6	14.8	-	-	-	44.4	2.5	28.6	20.9	16.2	-	-	-
	72	38.5	2.8	30.7	25.9	21.1	16.3	-	-	38.5	2.8	30.6	25.9	21.1	16.4	-	-
	67	35.5	2.8	35.5	32.2	27.4	22.7	17.9	-	32.7	3.1	32.7	30.8	26.1	21.3	16.6	-
	62	33.4	2.7	33.4	33.4	32.3	27.5	22.7	17.9	31.1	3.1	31.1	31.1	30.1	25.4	20.6	15.9
	57	34.1	2.8	34.1	34.1	32.3	27.5	22.7	17.9	31.4	3.2	31.4	31.4	29.8	25.1	20.3	15.6
1250	72	39.1	2.8	32.5	27.3	22.2	17.0	-	-	39.1	2.8	32.5	27.4	22.2	17.1	-	-
	67	35.9	2.8	35.9	33.9	28.8	23.6	18.5	-	33.1	3.1	33.1	32.0	27.5	22.3	17.2	-
	62	33.9	2.7	33.9	33.9	33.3	28.2	23.0	17.9	31.5	3.1	31.5	31.5	31.0	25.9	20.8	15.6
	57	34.5	2.8	34.5	34.5	33.6	28.5	23.3	18.2	31.8	3.2	31.8	31.8	31.0	25.9	20.8	15.6
1350	72	39.6	2.8	34.2	28.7	23.2	17.7	-	-	39.6	2.8	34.4	28.9	23.4	17.9	-	-
	67	36.4	2.8	36.4	35.6	30.1	24.6	19.1	-	33.6	3.1	33.6	33.2	28.8	23.3	17.8	-
	62	34.3	2.7	34.3	34.3	34.3	28.8	23.3	17.8	31.9	3.1	31.9	31.9	31.9	26.4	20.9	15.4
	57	35.0	2.8	35.0	35.0	35.0	29.5	24.0	18.5	32.2	3.2	32.2	32.2	32.2	26.7	21.2	15.7

DHQ036 (3.0 Ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)					
CFM	WB (°F)			Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F								**125°F**							
800	77	44.8	2.2	21.3	18.2	14.7	-	-	-	47.5	1.8	23.9	18.9	15.9	-	-	-
	72	36.6	2.8	24.8	21.3	17.7	14.2	-	-	36.6	2.8	24.9	21.3	17.8	14.3	-	-
	67	28.3	3.4	28.3	24.3	20.8	17.2	13.7	-	25.8	3.8	25.8	23.3	19.7	16.2	12.7	-
	62	27.2	3.5	27.2	27.2	23.4	19.9	16.4	12.8	25.1	3.9	25.1	25.1	21.7	18.2	14.6	11.1
900	77	45.6	2.2	24.6	19.6	15.6	-	-	-	48.3	1.8	27.2	20.8	16.9	-	-	-
	72	37.2	2.8	26.7	22.8	18.9	14.9	-	-	37.3	2.8	26.7	22.8	18.9	15.0	-	-
	67	28.9	3.4	28.9	26.0	22.1	18.2	14.3	-	26.2	3.8	26.2	24.9	21.0	17.1	13.2	-
	62	27.7	3.5	27.7	27.7	24.9	21.0	17.1	13.1	25.5	3.9	25.5	25.5	23.0	19.1	15.2	11.3
	57	27.7	3.5	27.7	27.7	24.5	20.6	16.6	12.7	25.1	3.9	25.1	25.1	22.4	18.5	14.6	10.7
1000	77	46.4	2.2	27.9	20.9	16.6	-	-	-	49.2	1.8	30.5	22.6	17.9	-	-	-
	72	37.9	2.8	28.6	24.3	20.0	15.7	-	-	37.9	2.8	28.6	24.3	20.0	15.7	-	-
	67	29.4	3.5	29.4	27.7	23.4	19.1	14.8	-	26.7	3.8	26.7	26.5	22.2	17.9	13.6	-
	62	28.2	3.5	28.2	28.2	26.4	22.1	17.8	13.5	26.0	3.9	26.0	26.0	24.4	20.1	15.8	11.5
	57	28.2	3.5	28.2	28.2	25.9	21.6	17.3	13.0	25.6	3.9	25.6	25.6	23.7	19.4	15.1	10.9
1100	77	47.2	2.2	31.2	22.2	17.5	-	-	-	50.0	1.8	33.8	24.5	18.9	-	-	-
	72	38.5	2.8	30.5	25.8	21.1	16.4	-	-	38.5	2.8	30.4	25.8	21.1	16.5	-	-
	67	29.9	3.5	29.9	29.4	24.7	20.0	15.3	-	27.1	3.8	27.1	27.1	23.4	18.7	14.1	-
	62	28.7	3.5	28.7	28.7	27.9	23.2	18.5	13.8	26.4	3.9	26.4	26.4	25.7	21.0	16.4	11.7
	57	28.7	3.5	28.7	28.7	27.4	22.7	18.0	13.3	26.0	3.9	26.0	26.0	25.0	20.3	15.7	11.0
1250	72	39.1	2.8	32.5	27.4	22.3	17.2	-	-	39.1	2.8	32.6	27.5	22.4	17.3	-	-
	67	30.3	3.5	30.3	30.1	26.2	21.1	16.0	-	27.5	3.8	27.5	27.5	24.8	19.8	14.7	-
	62	29.1	3.5	29.1	29.1	28.7	23.6	18.5	13.4	26.7	3.9	26.7	26.7	26.4	21.3	16.3	11.2
	57	29.1	3.5	29.1	29.1	28.4	23.3	18.2	13.1	26.3	3.9	26.3	26.3	25.8	20.8	15.7	10.6
1350	72	39.6	2.8	34.5	29.0	23.5	18.0	-	-	39.6	2.8	34.7	29.2	23.7	18.2	-	-
	67	30.7	3.5	30.7	30.7	27.6	22.1	16.6	-	27.8	3.8	27.8	27.8	26.3	20.8	15.3	-
	62	29.5	3.5	29.5	29.5	29.5	24.0	18.5	13.0	27.1	3.9	27.1	27.1	27.1	21.6	16.1	10.6
	57	29.4	3.5	29.4	29.4	29.4	23.9	18.4	13.0	26.7	3.9	26.7	26.7	26.7	21.2	15.7	10.2

1. These capacities are Net Capacities.
2. These ratings include the compressor, condenser fan and supply air blower motors.

DHQ042 (3.0 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)					
CFM	WB (°F)			90	85	80	75	70	65			90	85	80	75	70	65
		75°F								**85°F**							
870	77	50.8	2.8	23.5	19.6	15.8	-	-	-	48.7	3.0	22.2	18.9	15.0	-	-	-
	72	47.0	2.7	29.1	25.2	21.4	17.5	-	-	45.0	2.9	28.3	24.4	20.5	16.6	-	-
	67	43.3	2.5	34.7	30.9	27.0	23.2	19.3	-	41.4	2.9	34.5	30.0	26.1	22.2	18.2	-
	62	38.5	2.6	38.5	35.7	30.0	26.2	22.3	18.5	37.1	2.9	37.1	35.4	29.2	25.3	21.4	17.5
1050	77	53.0	2.7	26.7	22.2	17.7	-	-	-	50.5	3.0	25.8	21.3	16.8	-	-	-
	72	49.1	2.6	33.1	28.6	24.1	19.6	-	-	46.7	2.9	32.0	27.5	23.0	18.5	-	-
	67	45.1	2.5	39.4	34.9	30.4	25.9	21.4	-	42.8	2.9	38.3	33.7	29.2	24.7	20.2	-
	62	40.2	2.6	40.2	38.3	33.8	29.3	24.8	20.3	38.4	2.9	38.4	37.3	32.8	28.2	23.7	19.2
	57	40.4	2.5	40.4	40.4	35.9	31.4	26.9	22.4	39.3	2.8	39.3	39.1	34.6	30.0	25.5	21.0
1200	77	55.2	2.7	29.9	24.8	19.7	-	-	-	52.2	3.0	29.4	23.7	18.6	-	-	-
	72	51.1	2.6	37.0	31.9	26.7	21.6	-	-	48.3	2.9	35.7	30.6	25.5	20.3	-	-
	67	47.0	2.5	44.1	38.9	33.8	28.7	23.5	-	44.3	2.9	42.0	37.5	32.4	27.2	22.1	-
	62	41.9	2.6	41.9	40.9	37.6	32.4	27.3	22.1	39.7	2.9	39.7	39.2	36.3	31.2	26.0	20.9
	57	42.1	2.5	42.1	42.1	39.9	34.7	29.6	24.5	40.6	2.8	40.6	40.5	38.3	33.2	28.0	22.9
1400	77	57.4	2.7	33.1	27.5	21.7	-	-	-	54.0	3.0	33.0	26.1	20.4	-	-	-
	72	53.1	2.6	41.0	35.2	29.4	23.6	-	-	49.9	2.9	39.4	33.7	27.9	22.2	-	-
	67	48.9	2.5	48.9	43.0	37.2	31.4	25.6	-	45.8	2.9	45.8	41.3	35.5	29.8	24.0	-
	62	43.5	2.5	43.5	43.5	41.3	35.6	29.8	24.0	41.1	2.9	41.1	41.1	39.8	34.1	28.3	22.6
	57	43.8	2.5	43.8	43.8	43.8	38.1	32.3	26.5	42.0	2.8	42.0	42.0	42.0	36.3	30.5	24.8
1500	72	50.1	3.0	41.3	35.1	29.0	22.8	-	-	48.5	3.1	40.4	34.3	28.1	22.0	-	-
	67	46.1	2.8	46.1	42.8	36.6	30.4	24.3	-	44.5	3.0	44.5	41.9	35.8	29.6	23.5	-
	62	41.1	2.9	41.1	41.1	40.0	33.8	27.6	21.5	39.9	3.0	39.9	39.9	39.3	33.1	27.0	20.9
	57	41.3	2.9	41.3	41.3	41.3	35.1	29.0	22.8	40.8	3.0	40.8	40.8	40.8	34.7	28.5	22.4
1650	72	47.1	3.3	41.6	35.1	28.5	22.0	-	-	47.1	3.3	41.4	34.9	28.3	21.8	-	-
	67	43.4	3.2	43.4	42.6	36.0	29.5	22.9	-	43.2	3.2	43.2	42.6	36.0	29.5	22.9	-
	62	38.6	3.2	38.6	38.6	38.6	32.0	25.5	18.9	38.7	3.2	38.7	38.7	38.7	32.2	25.6	19.1
	57	38.7	3.2	38.7	38.7	38.7	32.2	25.6	19.1	39.6	3.2	39.6	39.6	39.6	33.1	26.5	20.0
		95°F								**105°F**							
870	77	46.6	3.2	20.9	18.1	14.2	-	-	-	41.8	3.8	18.6	16.4	12.6	-	-	-
	72	43.0	3.2	27.6	23.6	19.6	15.7	-	-	38.9	3.7	26.0	22.1	18.1	14.1	-	-
	67	39.4	3.2	34.3	29.1	25.1	21.1	17.2	-	36.0	3.6	33.4	27.7	23.6	19.6	15.6	-
	62	35.6	3.1	35.6	35.1	28.4	24.5	20.5	16.5	33.2	3.6	33.2	33.0	26.4	22.4	18.5	14.5
1050	77	47.9	3.2	24.9	20.4	15.8	-	-	-	43.2	3.8	23.5	18.7	14.2	-	-	-
	72	44.2	3.2	31.0	26.5	21.9	17.4	-	-	40.2	3.7	29.5	24.9	20.4	15.8	-	-
	67	40.6	3.2	37.1	32.6	28.0	23.5	18.9	-	37.2	3.6	35.5	31.1	26.6	22.0	17.5	-
	62	36.6	3.1	36.6	36.3	31.7	27.2	22.6	18.1	34.3	3.6	34.3	34.2	29.7	25.2	20.6	16.1
	57	38.1	3.1	38.1	37.8	33.2	28.7	24.1	19.6	34.9	3.6	34.9	34.8	30.3	25.8	21.3	16.7
1200	77	49.2	3.3	28.9	22.6	17.4	-	-	-	44.6	3.8	28.3	21.0	15.8	-	-	-
	72	45.5	3.2	34.4	29.3	24.2	19.1	-	-	41.5	3.7	32.9	27.8	22.7	17.5	-	-
	67	41.7	3.2	40.0	36.1	30.9	25.8	20.7	-	38.4	3.6	37.5	34.6	29.6	24.4	19.3	-
	62	37.6	3.2	37.6	37.4	35.0	29.9	24.8	19.7	35.5	3.6	35.5	35.4	33.1	28.0	22.8	17.7
	57	39.2	3.2	39.2	39.0	36.7	31.6	26.4	21.3	36.1	3.6	36.1	36.0	33.8	28.6	23.5	18.4
1400	77	50.6	3.3	33.0	24.8	19.1	-	-	-	45.9	3.8	33.1	23.3	17.3	-	-	-
	72	46.7	3.2	37.9	32.2	26.5	20.8	-	-	42.8	3.7	36.4	30.7	25.0	19.2	-	-
	67	42.8	3.2	42.8	39.5	33.8	28.1	22.4	-	39.6	3.6	39.6	38.0	32.6	26.9	21.1	-
	62	38.6	3.2	38.6	38.6	38.3	32.6	26.9	21.2	36.6	3.6	36.6	36.6	36.4	30.7	25.0	19.3
	57	40.2	3.2	40.2	40.2	40.1	34.4	28.7	23.0	37.2	3.6	37.2	37.2	37.2	31.5	25.7	20.0
1500	72	46.8	3.2	39.5	33.4	27.3	21.2	-	-	42.8	3.7	37.9	31.8	25.7	19.6	-	-
	67	42.9	3.2	42.9	41.0	34.9	28.8	22.7	-	39.6	3.6	39.6	38.7	33.5	27.4	21.3	-
	62	38.7	3.2	38.7	38.7	38.6	32.5	26.4	20.2	36.6	3.6	36.6	36.6	36.5	30.4	24.3	18.2
	57	40.4	3.2	40.4	40.4	40.3	34.2	28.1	22.0	37.2	3.6	37.2	37.2	37.2	31.1	25.0	18.8
1650	72	47.0	3.2	41.2	34.7	28.1	21.6	-	-	42.9	3.7	39.5	33.0	26.4	19.9	-	-
	67	43.1	3.2	43.1	42.5	36.0	29.5	22.9	-	39.7	3.6	39.7	39.4	34.5	27.9	21.4	-
	62	38.9	3.1	38.9	38.9	38.9	32.3	25.8	19.3	36.7	3.6	36.7	36.7	36.7	30.1	23.6	17.0
	57	40.5	3.2	40.5	40.5	40.5	34.0	27.4	20.9	37.3	3.6	37.3	37.3	37.3	30.7	24.2	17.7

DHQ042 (3.0 Ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)					
CFM	WB (°F)			Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F								**125°F**							
870	77	36.9	4.4	16.4	14.7	11.0	-	-	-	32.1	5.0	16.7	12.2	9.4	-	-	-
	72	34.7	4.2	24.5	20.5	16.5	12.6	-	-	30.6	4.7	22.9	18.9	15.0	11.0	-	-
	67	32.5	4.1	32.5	26.3	22.1	18.1	14.1	-	29.1	4.5	29.1	24.9	20.5	16.6	12.6	-
	62	30.9	4.0	30.9	30.9	24.4	20.4	16.4	12.5	28.5	4.5	28.5	28.5	22.3	18.4	14.4	10.4
1050	77	38.4	4.4	22.0	17.1	12.5	-	-	-	33.6	5.0	22.3	15.5	10.9	-	-	-
	72	36.1	4.2	27.9	23.4	18.8	14.3	-	-	32.0	4.7	26.4	21.8	17.3	12.7	-	-
	67	33.8	4.1	33.8	29.7	25.1	20.6	16.0	-	30.5	4.5	30.5	28.2	23.7	19.1	14.6	-
	62	32.1	4.0	32.1	32.1	27.8	23.2	18.7	14.1	29.8	4.5	29.8	29.8	25.8	21.2	16.7	12.1
	57	31.8	4.0	31.8	31.8	27.5	22.9	18.4	13.8	28.6	4.4	28.6	28.6	24.6	20.0	15.5	10.9
1200	77	39.9	4.4	27.7	19.5	14.1	-	-	-	35.2	4.9	27.9	18.8	12.4	-	-	-
	72	37.5	4.2	31.4	26.3	21.1	16.0	-	-	33.5	4.7	29.9	24.7	19.6	14.5	-	-
	67	35.1	4.0	35.1	33.0	28.2	23.1	17.9	-	31.8	4.5	31.8	31.5	26.8	21.7	16.6	-
	62	33.3	4.0	33.3	33.3	31.1	26.0	20.9	15.8	31.2	4.4	31.2	31.2	29.2	24.1	18.9	13.8
	57	33.0	4.0	33.0	33.0	30.8	25.7	20.6	15.4	29.9	4.4	29.9	29.9	27.9	22.8	17.6	12.5
1400	77	41.3	4.4	33.3	21.9	15.6	-	-	-	36.7	4.9	33.5	22.1	13.9	-	-	-
	72	38.9	4.2	34.9	29.1	23.4	17.7	-	-	35.0	4.7	33.3	27.6	21.9	16.2	-	-
	67	36.4	4.0	36.4	36.4	31.3	25.6	19.9	-	33.2	4.4	33.2	33.2	30.0	24.3	18.6	-
	62	34.5	4.0	34.5	34.5	34.5	28.8	23.1	17.4	32.5	4.4	32.5	32.5	32.5	26.9	21.2	15.5
	57	34.2	4.0	34.2	34.2	34.2	28.5	22.8	17.1	31.2	4.4	31.2	31.2	31.2	25.5	19.8	14.1
1500	72	38.8	4.2	36.3	30.2	24.1	18.0	-	-	34.8	4.7	34.8	28.6	22.5	16.3	-	-
	67	36.4	4.0	36.4	36.4	32.1	26.0	19.9	-	33.1	4.4	33.1	33.1	30.7	24.6	18.5	-
	62	34.5	4.0	34.5	34.5	34.5	28.4	22.2	16.1	32.4	4.4	32.4	32.4	32.4	26.3	20.2	14.0
	57	34.1	4.0	34.1	34.1	34.1	28.0	21.9	15.7	31.0	4.4	31.0	31.0	31.0	24.9	18.8	12.6
1650	72	38.8	4.2	37.8	31.3	24.7	18.2	-	-	34.6	4.7	34.6	29.6	23.0	16.5	-	-
	67	36.3	4.0	36.3	36.3	33.0	26.4	19.9	-	32.9	4.4	32.9	32.9	31.5	24.9	18.4	-
	62	34.4	4.0	34.4	34.4	34.4	27.9	21.3	14.8	32.2	4.4	32.2	32.2	32.2	25.7	19.1	12.5
	57	34.1	4.0	34.1	34.1	34.1	27.5	21.0	14.4	30.9	4.4	30.9	30.9	30.9	24.3	17.7	11.2

1. These capacities are Net Capacities.
2. These ratings include the compressor, condenser fan and supply air blower motors.

DHQ048 (4.0 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)					
CFM	WB (°F)			90	85	80	75	70	65			90	85	80	75	70	65
		75°F								**85°F**							
970	77	56.1	2.9	20.2	17.5	13.2	-	-	-	53.3	3.3	22.9	20.1	15.9	-	-	-
	72	51.5	2.9	29.3	25.0	20.8	16.6	-	-	49.1	3.3	30.6	26.5	22.3	18.1	-	-
	67	46.8	2.8	38.4	32.6	28.4	24.1	19.9	-	44.8	3.2	38.4	32.9	28.7	24.5	20.4	-
	62	42.6	2.7	42.6	42.4	31.7	27.5	23.3	19.0	41.4	3.2	41.4	41.3	33.8	29.6	25.5	21.3
1200	77	58.3	3.0	25.6	20.6	15.6	-	-	-	55.0	3.4	27.7	22.7	17.7	-	-	-
	72	53.4	2.9	34.3	29.3	24.3	19.2	-	-	50.6	3.3	34.8	29.8	24.8	19.9	-	-
	67	48.5	2.8	43.0	37.9	32.9	27.9	22.9	-	46.2	3.2	41.9	37.0	32.0	27.0	22.0	-
	62	44.2	2.8	44.2	44.1	37.0	32.0	27.0	21.9	42.7	3.2	42.7	42.6	37.6	32.6	27.7	22.7
	57	46.1	2.8	46.1	44.3	37.6	32.6	27.6	22.5	43.8	3.2	43.8	42.9	37.9	33.0	28.0	23.0
1450	77	60.4	3.0	31.0	23.7	17.9	-	-	-	56.7	3.4	32.5	25.3	19.5	-	-	-
	72	55.4	2.9	39.3	33.5	27.7	21.9	-	-	52.2	3.3	39.0	33.2	27.4	21.6	-	-
	67	50.3	2.9	47.5	43.3	37.5	31.7	25.9	-	47.6	3.3	45.5	41.0	35.2	29.4	23.6	-
	62	45.8	2.8	45.8	45.8	42.2	36.4	30.7	24.9	44.0	3.2	44.0	44.0	41.5	35.7	29.9	24.1
	57	47.7	2.8	47.7	46.8	42.9	37.1	31.3	25.5	45.2	3.2	45.2	44.7	41.8	36.0	30.2	24.4
1650	77	62.5	3.0	36.4	26.8	20.3	-	-	-	58.4	3.4	37.3	28.0	21.3	-	-	-
	72	57.3	3.0	44.3	37.7	31.2	24.6	-	-	53.7	3.3	43.2	36.6	29.9	23.3	-	-
	67	52.1	2.9	52.1	48.6	42.0	35.5	28.9	-	49.1	3.3	49.1	45.1	38.5	31.9	25.3	-
	62	47.5	2.8	47.5	47.5	47.5	40.9	34.4	27.8	45.3	3.2	45.3	45.3	45.3	38.7	32.1	25.4
	57	49.4	2.9	49.4	49.4	48.2	41.6	35.1	28.5	46.5	3.2	46.5	46.5	45.7	39.1	32.4	25.8
1800	72	57.6	3.0	45.7	38.6	31.6	24.5	-	-	53.8	3.3	45.5	38.4	31.3	24.2	-	-
	67	52.4	2.9	52.4	50.7	42.7	35.7	28.6	-	49.2	3.3	49.2	47.2	40.3	33.1	26.0	-
	62	47.8	2.8	47.8	47.8	47.8	40.7	33.6	26.6	45.4	3.2	45.4	45.4	45.4	38.3	31.2	24.1
	57	49.7	2.9	49.7	49.7	49.1	42.0	35.0	27.9	46.6	3.3	46.6	46.6	46.2	39.1	32.0	24.9
1950	72	58.0	3.0	47.1	39.5	32.0	24.4	-	-	53.9	3.4	47.8	40.2	32.6	25.0	-	-
	67	52.7	2.9	52.7	52.7	43.4	35.8	28.3	-	49.3	3.3	49.3	49.3	42.0	34.4	26.8	-
	62	48.0	2.8	48.0	48.0	48.0	40.5	32.9	25.4	45.5	3.2	45.5	45.5	45.5	37.9	30.3	22.7
	57	50.0	2.9	50.0	50.0	50.0	42.5	34.9	27.3	46.7	3.3	46.7	46.7	46.7	39.1	31.5	23.9
		95°F								**105°F**							
970	77	50.5	3.7	25.6	22.7	18.6	-	-	-	47.0	4.3	22.0	19.4	15.9	-	-	-
	72	46.6	3.7	32.0	27.9	23.8	19.7	-	-	43.2	4.2	29.7	25.6	21.5	17.4	-	-
	67	42.8	3.7	38.4	33.1	29.0	25.0	20.9	-	39.5	4.2	37.3	31.7	27.1	23.0	18.9	-
	62	40.1	3.6	40.1	40.1	35.8	31.7	27.7	23.6	37.6	4.2	37.6	37.4	31.6	27.5	23.5	19.4
1200	77	51.8	3.8	29.8	24.8	19.9	-	-	-	48.0	4.3	27.8	22.3	17.4	-	-	-
	72	47.8	3.7	35.4	30.4	25.4	20.5	-	-	44.2	4.2	33.3	28.4	23.5	18.5	-	-
	67	43.9	3.7	40.9	36.0	31.0	26.1	21.1	-	40.4	4.2	38.9	34.5	29.6	24.6	19.7	-
	62	41.1	3.6	41.1	41.1	38.3	33.3	28.4	23.4	38.5	4.2	38.5	38.3	34.5	29.5	24.6	19.6
	57	41.6	3.6	41.6	41.6	38.3	33.3	28.4	23.4	38.7	4.2	38.7	38.6	34.5	29.5	24.6	19.7
1450	77	53.0	3.8	34.0	27.0	21.1	-	-	-	49.1	4.3	33.5	25.2	18.8	-	-	-
	72	49.0	3.7	38.7	32.9	27.1	21.2	-	-	45.2	4.2	37.0	31.2	25.4	19.6	-	-
	67	44.9	3.7	43.5	38.8	33.0	27.2	21.3	-	41.3	4.2	40.5	37.2	32.0	26.2	20.4	-
	62	42.1	3.6	42.1	42.1	40.7	34.9	29.1	23.2	39.3	4.2	39.3	39.2	37.3	31.5	25.7	19.9
	57	42.6	3.6	42.6	42.6	40.7	34.9	29.1	23.2	39.6	4.2	39.6	39.5	37.3	31.5	25.7	19.9
1650	77	54.3	3.8	38.2	29.1	22.4	-	-	-	50.1	4.3	39.2	28.1	20.2	-	-	-
	72	50.2	3.7	42.1	35.4	28.7	22.0	-	-	46.1	4.2	40.7	34.0	27.4	20.7	-	-
	67	46.0	3.7	46.0	41.7	35.0	28.3	21.6	-	42.2	4.2	42.2	40.0	34.5	27.9	21.2	-
	62	43.2	3.6	43.2	43.2	43.2	36.5	29.8	23.1	40.1	4.2	40.1	40.1	40.1	33.5	26.8	20.2
	57	43.6	3.6	43.6	43.6	43.2	36.5	29.8	23.1	40.4	4.2	40.4	40.4	40.2	33.5	26.9	20.2
1800	72	50.0	3.7	45.3	38.2	31.0	23.8	-	-	46.0	4.2	42.9	36.2	29.1	21.9	-	-
	67	45.9	3.7	45.9	43.7	37.8	30.6	23.5	-	42.0	4.2	42.0	40.9	36.6	29.5	22.3	-
	62	43.0	3.7	43.0	43.0	43.0	35.9	28.7	21.5	40.0	4.2	40.0	40.0	40.0	32.9	25.7	18.6
	57	43.5	3.6	43.5	43.5	43.3	36.1	28.9	21.8	40.3	4.2	40.3	40.3	40.2	33.0	25.9	18.7
1950	72	49.9	3.7	48.6	41.0	33.3	25.7	-	-	45.9	4.3	45.2	38.4	30.8	23.1	-	-
	67	45.8	3.7	45.8	45.8	40.6	33.0	25.3	-	41.9	4.2	41.9	41.9	38.7	31.1	23.5	-
	62	42.9	3.7	42.9	42.9	42.9	35.3	27.7	20.0	39.9	4.2	39.9	39.9	39.9	32.3	24.6	17.0
	57	43.4	3.7	43.4	43.4	43.4	35.8	28.1	20.5	40.2	4.2	40.2	40.2	40.2	32.5	24.9	17.3

DHQ048 (4.0 Ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)					
CFM	WB (°F)			Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F								**125°F**							
970	77	43.4	4.8	18.4	16.2	13.3	-	-	-	39.9	5.3	17.1	11.8	10.6	-	-	-
	72	39.8	4.8	27.3	23.3	19.2	15.1	-	-	36.4	5.3	25.0	20.9	16.9	12.8	-	-
	67	36.2	4.7	36.2	30.4	25.1	21.0	17.0	-	32.9	5.3	32.9	29.1	23.2	19.1	15.0	-
	62	35.1	4.7	35.1	34.8	27.4	23.3	19.2	15.2	32.6	5.2	32.6	32.1	23.2	19.1	15.0	11.0
1200	77	44.3	4.8	25.7	19.8	14.9	-	-	-	40.5	5.3	25.2	17.3	12.4	-	-	-
	72	40.6	4.8	31.3	26.4	21.5	16.6	-	-	37.0	5.3	29.3	24.4	19.5	14.6	-	-
	67	36.9	4.7	36.9	33.0	28.1	23.2	18.3	-	33.5	5.3	33.5	31.5	26.6	21.7	16.8	-
	62	35.8	4.7	35.8	35.6	30.6	25.7	20.8	15.9	33.1	5.2	33.1	32.8	26.8	21.9	17.0	12.1
	57	35.8	4.7	35.8	35.6	30.7	25.8	20.8	15.9	33.0	5.3	33.0	32.6	26.9	22.0	17.1	12.2
1450	77	45.1	4.8	33.0	23.4	16.4	-	-	-	41.2	5.3	33.2	22.7	14.1	-	-	-
	72	41.4	4.7	35.3	29.5	23.8	18.0	-	-	37.6	5.3	33.6	27.9	22.1	16.4	-	-
	67	37.6	4.7	37.6	35.7	31.1	25.3	19.5	-	34.0	5.2	34.0	34.0	30.1	24.4	18.6	-
	62	36.5	4.7	36.5	36.3	33.9	28.1	22.3	16.6	33.6	5.2	33.6	33.4	30.5	24.7	19.0	13.2
	57	36.5	4.7	36.5	36.4	33.9	28.2	22.4	16.6	33.5	5.3	33.5	33.3	30.5	24.8	19.0	13.3
1650	77	46.0	4.8	40.3	27.0	18.0	-	-	-	41.8	5.3	41.3	28.1	15.8	-	-	-
	72	42.1	4.7	39.3	32.7	26.0	19.4	-	-	38.1	5.3	37.9	31.3	24.7	18.1	-	-
	67	38.3	4.7	38.3	38.3	34.1	27.4	20.8	-	34.5	5.2	34.5	34.5	33.6	27.0	20.4	-
	62	37.1	4.7	37.1	37.1	37.1	30.5	23.9	17.3	34.1	5.2	34.1	34.1	34.1	27.5	20.9	14.4
	57	37.2	4.7	37.2	37.2	37.2	30.6	23.9	17.3	34.0	5.3	34.0	34.0	34.0	27.6	21.0	14.4
1800	72	42.0	4.8	40.6	34.2	27.1	20.0	-	-	37.9	5.3	37.9	32.3	25.2	18.1	-	-
	67	38.2	4.7	38.2	38.2	35.5	28.4	21.2	-	34.3	5.2	34.3	34.3	34.3	27.2	20.1	-
	62	37.0	4.7	37.0	37.0	37.0	29.9	22.8	15.6	34.0	5.2	34.0	34.0	34.0	26.9	19.8	12.7
	57	37.0	4.7	37.0	37.0	37.0	29.9	22.8	15.7	33.8	5.3	33.8	33.8	33.8	26.8	19.7	12.7
1950	72	41.8	4.8	41.8	35.8	28.2	20.6	-	-	37.8	5.3	37.8	33.2	25.6	18.0	-	-
	67	38.0	4.7	38.0	38.0	36.9	29.3	21.7	-	34.1	5.3	34.1	34.1	34.1	27.4	19.8	-
	62	36.8	4.7	36.8	36.8	36.8	29.2	21.6	14.0	33.8	5.2	33.8	33.8	33.8	26.2	18.6	11.0
	57	36.9	4.8	36.9	36.9	36.9	29.3	21.7	14.1	33.7	5.3	33.7	33.7	33.7	26.1	18.5	10.9

1. These capacities are Net Capacities.
2. These ratings include the compressor, condenser fan and supply air blower motors.

DHQ060 (5.0 Ton)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh) Return Dry Bulb (°F)					
CFM	WB (°F)			90	85	80	75	70	65			90	85	80	75	70	65
		75°F								**85°F**							
1450	77	62.2	3.5	22.1	17.4	11.2	-	-	-	62.4	4.0	30.6	25.2	19.3	-	-	-
	72	59.1	3.5	35.1	29.0	22.9	16.7	-	-	58.7	3.9	40.0	34.1	28.1	22.1	-	-
	67	56.0	3.4	48.0	40.6	34.5	28.4	22.2	-	54.9	3.8	49.5	42.9	36.9	31.0	25.0	-
	62	51.8	3.4	51.8	48.3	35.1	29.0	22.8	16.7	52.1	3.8	52.1	50.4	42.4	36.4	30.4	24.5
1550	77	64.9	3.6	27.0	20.7	14.4	-	-	-	63.8	4.0	33.4	27.1	20.9	-	-	-
	72	61.7	3.5	40.1	33.8	27.5	21.2	-	-	59.9	3.9	42.9	36.7	30.4	24.2	-	-
	67	58.4	3.4	53.2	46.9	40.6	34.3	28.0	-	56.1	3.9	52.5	46.2	40.0	33.8	27.5	-
	62	54.1	3.4	54.1	51.8	42.1	35.8	29.5	23.2	53.3	3.8	53.3	52.1	45.9	39.6	33.4	27.2
	57	53.4	3.4	53.4	51.5	41.6	35.4	29.1	22.8	52.6	3.8	52.6	51.7	45.4	39.2	32.9	26.7
1650	77	67.7	3.6	31.8	24.0	17.6	-	-	-	65.1	4.0	36.2	29.0	22.5	-	-	-
	72	64.3	3.5	45.0	38.6	32.1	25.7	-	-	61.2	3.9	45.8	39.3	32.8	26.3	-	-
	67	60.9	3.5	58.3	53.1	46.7	40.2	33.8	-	57.3	3.9	55.5	49.6	43.1	36.5	30.0	-
	62	56.4	3.4	56.4	55.2	49.1	42.6	36.2	29.7	54.4	3.8	54.4	53.8	49.4	42.9	36.4	29.8
	57	55.7	3.4	55.7	54.7	48.6	42.1	35.7	29.2	53.7	3.8	53.7	53.3	48.9	42.4	35.9	29.3
1750	77	70.4	3.6	36.6	27.3	20.7	-	-	-	66.5	4.0	39.0	30.9	24.1	-	-	-
	72	66.8	3.6	49.9	43.4	36.8	30.2	-	-	62.5	4.0	48.7	41.9	35.1	28.3	-	-
	67	63.3	3.5	63.3	59.4	52.8	46.2	39.6	-	58.5	3.9	58.5	52.9	46.1	39.3	32.5	-
	62	58.7	3.4	58.7	58.7	56.0	49.4	42.8	36.3	55.5	3.8	55.5	55.5	52.9	46.1	39.3	32.5
	57	58.0	3.4	58.0	58.0	55.5	48.9	42.3	35.7	54.9	3.8	54.9	54.9	52.4	45.6	38.8	32.0
1875	72	66.0	3.6	47.9	40.7	33.6	26.5	-	-	62.4	4.0	49.1	41.9	34.7	27.4	-	-
	67	62.5	3.5	62.5	56.1	49.0	41.9	34.8	-	58.4	3.9	58.4	52.8	45.5	38.3	31.1	-
	62	57.9	3.4	57.9	57.9	52.8	45.7	38.6	31.5	55.4	3.9	55.4	55.4	52.2	45.0	37.8	30.5
	57	57.2	3.4	57.2	57.2	52.3	45.2	38.1	31.0	54.8	3.9	54.8	54.8	51.7	44.5	37.3	30.0
2000	72	65.1	3.6	45.8	38.1	30.5	22.9	-	-	62.3	4.0	49.5	41.9	34.2	26.6	-	-
	67	61.7	3.5	61.7	52.8	45.2	37.6	29.9	-	58.3	3.9	58.3	52.6	44.9	37.3	29.6	-
	62	57.1	3.5	57.1	57.1	49.5	41.9	34.3	26.7	55.4	3.9	55.4	55.4	51.6	43.9	36.2	28.6
	57	56.4	3.4	56.4	56.4	49.1	41.5	33.9	26.3	54.7	3.9	54.7	54.7	51.0	43.4	35.7	28.1
		95°F								**105°F**							
1450	77	62.7	4.4	38.9	33.1	27.3	-	-	-	55.4	4.9	34.0	27.3	21.7	-	-	-
	72	58.2	4.3	44.9	39.1	33.3	27.6	-	-	52.1	4.8	40.7	34.8	28.8	22.9	-	-
	67	53.8	4.3	50.9	45.1	39.3	33.6	27.8	-	48.8	4.7	47.4	42.2	36.0	30.1	24.2	-
	62	52.5	4.2	52.5	52.5	49.6	43.8	38.0	32.3	47.7	4.7	47.7	47.6	42.1	36.2	30.3	24.4
1550	77	62.6	4.4	39.7	33.6	27.4	-	-	-	55.9	4.9	36.5	28.6	22.3	-	-	-
	72	58.2	4.3	45.8	39.6	33.4	27.2	-	-	52.5	4.8	42.3	36.1	29.9	23.6	-	-
	67	53.7	4.3	51.8	45.6	39.4	33.2	27.0	-	49.2	4.8	48.2	43.6	37.4	31.2	24.9	-
	62	52.4	4.2	52.4	52.4	49.7	43.5	37.3	31.1	48.1	4.7	48.1	48.1	43.5	37.3	31.1	24.8
	57	51.8	4.2	51.8	51.8	49.2	43.0	36.8	30.6	47.7	4.8	47.7	47.6	43.1	36.9	30.7	24.5
1650	77	62.6	4.4	40.6	34.0	27.4	-	-	-	56.3	4.9	38.9	29.9	23.0	-	-	-
	72	58.1	4.4	46.6	40.0	33.4	26.8	-	-	53.0	4.8	44.0	37.4	30.9	24.3	-	-
	67	53.7	4.3	52.6	46.0	39.4	32.8	26.2	-	49.6	4.8	49.1	45.0	38.8	32.2	25.7	-
	62	52.4	4.2	52.4	52.4	49.7	43.1	36.5	29.9	48.5	4.7	48.5	48.5	45.0	38.4	31.9	25.3
	57	51.8	4.3	51.8	51.8	49.2	42.6	36.1	29.5	48.1	4.8	48.1	48.1	44.6	38.0	31.5	24.9
1750	77	62.5	4.4	41.4	34.4	27.4	-	-	-	56.7	4.9	41.4	31.1	23.7	-	-	-
	72	58.1	4.4	47.5	40.5	33.5	26.4	-	-	53.4	4.8	45.7	38.8	31.9	25.0	-	-
	67	53.6	4.3	53.5	46.5	39.5	32.5	25.5	-	50.0	4.8	49.9	46.4	40.1	33.3	26.4	-
	62	52.3	4.3	52.3	52.3	49.8	42.8	35.8	28.8	48.9	4.7	48.9	48.9	46.4	39.6	32.7	25.8
	57	51.7	4.3	51.7	51.7	49.3	42.3	35.3	28.3	48.5	4.8	48.5	48.5	46.0	39.2	32.3	25.4
1875	72	58.8	4.4	50.4	43.0	35.7	28.3	-	-	53.7	4.8	47.6	40.3	33.0	25.7	-	-
	67	54.3	4.3	54.2	49.4	42.1	34.7	27.4	-	50.3	4.8	50.3	47.9	41.4	34.2	26.9	-
	62	53.0	4.3	53.0	53.0	51.7	44.3	37.0	29.6	49.2	4.7	49.2	49.2	47.4	40.1	32.8	25.5
	57	52.4	4.3	52.4	52.4	51.1	43.8	36.4	29.1	48.8	4.8	48.8	48.8	46.9	39.7	32.4	25.1
2000	72	59.5	4.4	53.3	45.6	37.9	30.2	-	-	54.1	4.8	49.5	41.8	34.1	26.4	-	-
	67	54.9	4.3	54.9	52.4	44.7	37.0	29.3	-	50.6	4.8	50.6	49.4	42.7	35.0	27.3	-
	62	53.6	4.3	53.6	53.6	53.6	45.9	38.2	30.5	49.5	4.7	49.5	49.5	48.3	40.6	32.9	25.2
	57	53.0	4.3	53.0	53.0	53.0	45.3	37.6	29.9	49.1	4.8	49.1	49.1	47.9	40.2	32.5	24.8

DHQ060 (5.0 Ton) (Continued)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)						Net Capacity[1] (MBh)	Total Input (kW)[2]	Sensible Capacity (MBh)					
CFM	WB (°F)			Return Dry Bulb (°F)								Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
		115°F								**125°F**							
1450	77	48.2	5.3	29.1	21.5	16.0	-	-	-	40.9	5.8	25.6	13.8	10.3	-	-	-
	72	46.0	5.3	36.4	30.4	24.4	18.3	-	-	39.9	5.7	32.2	26.0	19.9	13.7	-	-
	67	43.8	5.2	43.8	39.3	32.7	26.7	20.6	-	38.8	5.7	38.8	38.1	29.4	23.2	17.0	-
	62	43.0	5.2	43.0	42.8	34.6	28.5	22.5	16.4	38.2	5.7	38.2	38.0	27.1	20.9	14.7	8.5
1550	77	49.1	5.3	33.2	23.6	17.3	-	-	-	42.3	5.8	30.9	18.6	12.3	-	-	-
	72	46.9	5.3	38.9	32.6	26.4	20.1	-	-	41.2	5.7	35.5	29.2	22.8	16.5	-	-
	67	44.6	5.2	44.6	41.7	35.4	29.1	22.8	-	40.1	5.7	40.1	39.7	33.4	27.1	20.8	-
	62	43.8	5.2	43.8	43.7	37.4	31.1	24.9	18.6	39.5	5.7	39.5	39.3	31.3	25.0	18.6	12.3
	57	43.6	5.3	43.6	43.4	37.1	30.8	24.6	18.3	39.5	5.8	39.5	39.2	31.1	24.7	18.4	12.1
1650	77	50.0	5.3	37.3	25.7	18.6	-	-	-	43.8	5.8	36.1	23.4	14.2	-	-	-
	72	47.8	5.3	41.4	34.9	28.4	21.9	-	-	42.6	5.7	38.8	32.3	25.8	19.4	-	-
	67	45.5	5.2	45.5	44.0	38.1	31.6	25.1	-	41.4	5.7	41.4	41.4	37.4	31.0	24.5	-
	62	44.6	5.2	44.6	44.6	40.3	33.7	27.2	20.7	40.7	5.7	40.7	40.7	35.5	29.1	22.6	16.1
	57	44.5	5.3	44.5	44.3	39.9	33.4	26.9	20.4	40.8	5.8	40.8	40.6	35.3	28.8	22.3	15.9
1750	77	51.0	5.3	41.3	27.9	19.9	-	-	-	45.2	5.8	41.4	28.1	16.2	-	-	-
	72	48.7	5.3	43.8	37.1	30.4	23.6	-	-	43.9	5.7	42.0	35.4	28.8	22.2	-	-
	67	46.3	5.2	46.3	46.3	40.8	34.0	27.3	-	42.7	5.7	42.7	42.7	41.4	34.8	28.2	-
	62	45.5	5.2	45.5	45.5	43.1	36.4	29.6	22.9	42.0	5.7	42.0	42.0	39.8	33.2	26.6	19.9
	57	45.3	5.3	45.3	45.3	42.7	36.0	29.3	22.5	42.1	5.8	42.1	42.1	39.5	32.9	26.3	19.7
1875	72	48.7	5.3	44.8	37.6	30.4	23.1	-	-	43.6	5.7	42.0	34.9	27.7	20.6	-	-
	67	46.3	5.2	46.3	46.3	40.8	33.6	26.3	-	42.4	5.7	42.4	42.4	40.1	33.0	25.8	-
	62	45.5	5.2	45.5	45.5	43.1	35.9	28.7	21.4	41.7	5.7	41.7	41.7	38.8	31.7	24.5	17.3
	57	45.3	5.3	45.3	45.3	42.7	35.5	28.3	21.1	41.7	5.8	41.7	41.7	38.6	31.4	24.2	17.1
2000	72	48.7	5.3	45.8	38.1	30.4	22.7	-	-	43.3	5.7	42.0	34.3	26.6	18.9	-	-
	67	46.3	5.2	46.3	46.3	40.8	33.1	25.4	-	42.1	5.7	42.1	42.1	38.8	31.1	23.4	-
	62	45.5	5.2	45.5	45.5	43.1	35.4	27.7	20.0	41.4	5.7	41.4	41.4	37.9	30.2	22.5	14.7
	57	45.3	5.3	45.3	45.3	42.7	35.0	27.3	19.6	41.4	5.8	41.4	41.4	37.6	29.9	22.2	14.5

1. These capacities are Net Capacities.
2. These ratings include the compressor, condenser fan and supply air blower motors.

DHQ024-060 Heating Performance Data

Model	Air Over Evaporator Coil		Capacity[1] & kW	Outdoor Temperature (ºF @ 72% RH)							
	CFM	DB (ºF)		-10	0	10	20	30	40	50	60
DHQ024 (2.0)	700	55	MBH	7.49	8.79	10.33	12.16	14.36	16.97	20.08	23.80
			KW	0.80	0.84	0.97	1.11	1.25	1.39	1.52	1.66
		70	MBH	6.71	8.00	9.54	11.38	13.57	16.19	19.30	23.02
			KW	1.07	1.11	1.24	1.38	1.52	1.65	1.79	1.93
		80	MBH	5.43	6.73	8.27	10.10	12.30	14.91	18.02	21.74
			KW	1.23	1.27	1.41	1.54	1.68	1.82	1.95	2.09
	900	55	MBH	7.72	9.12	10.81	12.85	15.32	18.30	21.91	26.25
			KW	0.85	0.89	1.01	1.12	1.24	1.36	1.47	1.59
		70	MBH	6.74	8.14	9.83	11.88	14.35	17.33	20.93	25.28
			KW	1.13	1.17	1.29	1.41	1.52	1.64	1.75	1.87
		80	MBH	5.95	7.36	9.05	11.09	13.56	16.54	20.14	24.49
			KW	1.23	1.28	1.39	1.51	1.62	1.74	1.86	1.97
DHQ030 (2.5)	1050	55	MBH	10.69	12.39	14.38	16.73	19.50	22.76	26.60	31.12
			KW	2.33	2.46	2.60	2.75	2.90	3.07	3.24	3.41
		70	MBH	9.52	11.21	13.20	15.55	18.32	21.58	25.42	29.94
			KW	2.93	3.06	3.20	3.35	3.50	3.67	3.84	4.01
		80	MBH	8.57	10.27	12.26	14.61	17.38	20.64	24.48	29.00
			KW	3.37	3.50	3.64	3.79	3.94	4.11	4.28	4.45
	1250	55	MBH	10.92	12.77	14.98	17.59	20.70	24.40	28.80	34.03
			KW	2.44	2.56	2.68	2.81	2.94	3.08	3.22	3.37
		70	MBH	9.81	11.66	13.87	16.48	19.60	23.30	27.69	32.92
			KW	2.97	3.09	3.21	3.34	3.47	3.61	3.75	3.90
		80	MBH	8.92	10.77	12.97	15.59	18.70	22.40	26.80	32.03
			KW	3.47	3.59	3.71	3.84	3.97	4.11	4.25	4.40
DHQ036 (3.0)	1150	55	MBH	12.48	14.51	16.93	19.81	23.24	27.33	32.20	38.00
			KW	2.33	2.46	2.60	2.75	2.90	3.07	3.24	3.41
		70	MBH	10.61	12.64	15.06	17.94	21.37	25.46	30.33	36.13
			KW	2.93	3.06	3.20	3.35	3.50	3.67	3.84	4.01
		80	MBH	9.18	11.21	13.63	16.51	19.94	24.03	28.90	34.70
			KW	3.37	3.50	3.64	3.79	3.94	4.11	4.28	4.45
	1350	55	MBH	13.42	15.48	17.92	20.80	24.20	28.22	32.97	38.58
			KW	2.44	2.56	2.68	2.81	2.94	3.08	3.22	3.37
		70	MBH	11.37	13.43	15.87	18.75	22.15	26.17	30.92	36.53
			KW	2.97	3.09	3.21	3.34	3.47	3.61	3.75	3.90
		80	MBH	10.02	12.08	14.52	17.40	20.80	24.82	29.57	35.18
			KW	3.47	3.59	3.71	3.84	3.97	4.11	4.25	4.40
DHQ042 (3.5)	1400	55	MBH	15.55	18.10	21.13	24.76	29.08	34.24	40.40	47.75
			KW	2.33	2.46	2.60	2.75	2.90	3.07	3.24	3.41
		70	MBH	13.17	15.72	18.75	22.38	26.70	31.86	38.02	45.37
			KW	2.93	3.06	3.20	3.35	3.50	3.67	3.84	4.01
		80	MBH	12.07	14.62	17.65	21.28	25.60	30.76	36.92	44.27
			KW	3.37	3.50	3.64	3.79	3.94	4.11	4.28	4.45
	1650	55	MBH	16.66	19.24	22.30	25.93	30.22	35.30	41.31	48.44
			KW	2.44	2.56	2.68	2.81	2.94	3.08	3.22	3.37
		70	MBH	14.05	16.63	19.69	23.32	27.61	32.69	38.70	45.83
			KW	2.97	3.09	3.21	3.34	3.47	3.61	3.75	3.90
		80	MBH	12.43	15.01	18.07	21.70	25.99	31.07	37.08	44.21
			KW	3.47	3.59	3.71	3.84	3.97	4.11	4.25	4.40
DHQ048 (4.0)	1600	55	MBH	19.24	21.99	25.23	29.03	33.51	38.76	44.95	52.21
			KW	2.33	2.46	2.60	2.75	2.90	3.07	3.24	3.41
		70	MBH	15.67	18.42	21.66	25.46	29.94	35.19	41.38	48.64
			KW	2.93	3.06	3.20	3.35	3.50	3.67	3.84	4.01
		80	MBH	15.57	18.32	21.56	25.36	29.84	35.09	41.28	48.54
			KW	3.37	3.50	3.64	3.79	3.94	4.11	4.28	4.45
	1950	55	MBH	20.50	23.29	26.55	30.35	34.79	39.97	46.03	53.09
			KW	2.44	2.56	2.68	2.81	2.94	3.08	3.22	3.37
		70	MBH	16.65	19.44	22.70	26.50	30.94	36.13	42.18	49.24
			KW	2.97	3.09	3.21	3.34	3.47	3.61	3.75	3.90
		80	MBH	16.01	18.80	22.05	25.86	30.30	35.48	41.53	48.60
			KW	3.47	3.59	3.71	3.84	3.97	4.11	4.25	4.40
DHQ060 (5.0)	1800	55	MBH	21.60	24.96	28.89	33.48	38.85	45.12	52.45	61.02
			KW	2.33	2.46	2.60	2.75	2.90	3.07	3.24	3.41
		70	MBH	19.88	23.24	27.16	31.75	37.12	43.39	50.73	59.30
			KW	2.93	3.06	3.20	3.35	3.50	3.67	3.84	4.01
		80	MBH	18.11	21.47	25.39	29.98	35.35	41.62	48.96	57.53
			KW	3.37	3.50	3.64	3.79	3.94	4.11	4.28	4.45
	2000	55	MBH	23.04	26.41	30.32	34.87	40.14	46.25	53.35	61.58
			KW	2.44	2.56	2.68	2.81	2.94	3.08	3.22	3.37
		70	MBH	21.05	24.42	28.33	32.88	38.15	44.26	51.36	59.59
			KW	2.97	3.09	3.21	3.34	3.47	3.61	3.75	3.90
		80	MBH	18.57	21.94	25.85	30.40	35.67	41.78	48.88	57.11
			KW	3.47	3.59	3.71	3.84	3.97	4.11	4.25	4.40

1. These Capacities are net capacities - the indoor motor heat has been added.
2. These power inputs are total power inputs - the indoor motor watts have been added.

Airflow Performance

Bottom Duct Application

DHQ024-060

Model (Tons)	Mode		Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)								
						0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
						Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts
DHQ024 (2.0)	Cool	Low	Y1+O	COOL-A	580	89	112	134	159	184	206	229	252	276
			Y1+O	COOL-B	400	43	62	81	101	121	137	153	173	192
			Y1+O	COOL-C	600	96	119	142	167	193	216	239	263	287
			Y1+O	COOL-D	667	120	145	170	198	225	250	275	301	328
		High	Y1+Y2+O	COOL-A	870	215	248	281	315	349	380	410	444	477
			Y1+Y2+O	COOL-B	600	95	119	142	167	193	216	239	263	287
			Y1+Y2+O	COOL-C	900	232	266	301	335	370	402	434	468	503
			Y1+Y2+O	COOL-D	1000	292	332	371	410	448	482	516	555	594
	Heat Pump	Low	Y1	COOL-A	600	96	119	142	167	193	216	239	263	287
			Y1	COOL-B	500	65	86	107	130	152	172	192	213	235
			Y1	COOL-C	467	57	77	97	119	141	159	178	199	220
			Y1	COOL-D	667	120	145	170	198	225	250	275	301	328
		High	Y1+Y2	COOL-A	900	232	266	301	335	370	402	434	468	503
			Y1+Y2	COOL-B	750	155	183	211	241	271	299	326	355	384
			Y1+Y2	COOL-C	700	133	159	186	214	243	269	295	322	349
			Y1+Y2	COOL-D	1000	292	332	371	410	448	482	516	555	594
	Heat	D056	W1	HEAT-A	670	121	146	172	199	227	-	-	-	-
			W1	HEAT-B	690	129	155	181	209	237	-	-	-	-
			W1	HEAT-C	710	137	164	191	219	248	-	-	-	-
			W1	HEAT-D	750	155	183	211	241	271	-	-	-	-
			W1+W2	HEAT-A	940	255	291	328	364	400	-	-	-	-
			W1+W2	HEAT-B	970	273	311	349	386	424	-	-	-	-
			W1+W2	HEAT-C	1000	292	332	371	410	448	-	-	-	-
			W1+W2	HEAT-D	1050	326	368	410	450	490	-	-	-	-
DHQ030 (2.5)	Cool	Low	Y1+O	COOL-A	634	119	142	164	192	220	245	269	294	319
			Y1+O	COOL-B	500	98	118	137	160	182	203	224	244	264
			Y1+O	COOL-C	700	136	160	185	215	245	272	298	325	351
			Y1+O	COOL-D	834	183	212	242	275	308	339	369	397	425
		High	Y1+Y2+O	COOL-A	950	239	273	308	342	377	410	444	472	500
			Y1+Y2+O	COOL-B	750	151	178	204	235	267	295	323	350	377
			Y1+Y2+O	COOL-C	1050	298	337	376	411	446	482	519	546	573
			Y1+Y2+O	COOL-D	1250	446	496	547	580	613	655	697	718	739
	Heat Pump	Low	Y1	COOL-A	700	136	160	185	215	245	272	298	325	351
			Y1	COOL-B	634	119	142	164	192	220	245	269	294	319
			Y1	COOL-C	767	157	184	211	243	275	303	331	359	387
			Y1	COOL-D	834	183	212	242	275	308	339	369	397	425
		High	Y1+Y2	COOL-A	1050	298	337	376	411	446	482	519	546	573
			Y1+Y2	COOL-B	950	239	273	308	342	377	410	444	472	500
			Y1+Y2	COOL-C	1150	367	411	456	490	525	564	603	628	652
			Y1+Y2	COOL-D	1250	446	496	547	580	613	655	697	718	739
	Heat	D056	W1	HEAT-A	680	130	154	178	208	237	-	-	-	-
			W1	HEAT-B	735	146	172	198	229	260	-	-	-	-
			W1	HEAT-C	790	166	193	221	253	286	-	-	-	-
			W1	HEAT-D	840	186	215	245	278	312	-	-	-	-
			W1+W2	HEAT-A	1050	298	337	376	411	446	-	-	-	-
			W1+W2	HEAT-B	1135	356	399	443	478	512	-	-	-	-
			W1+W2	HEAT-C	1220	421	470	519	552	585	-	-	-	-
			W1+W2	HEAT-D	1300	489	543	597	629	660	-	-	-	-

DHQ024-060 (Continued)

Model (Tons)	Mode		Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)								
						0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
						Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts
DHQ036 (3.0)	Cool	Low	Y1+O	COOL-A	734	123	158	194	229	264	298	331	365	398
			Y1+O	COOL-B	600	78	113	147	179	210	238	265	291	315
			Y1+O	COOL-C	834	165	202	238	276	313	350	388	426	465
			Y1+O	COOL-D	900	197	235	273	311	350	390	430	471	512
		High	Y1+Y2+O	COOL-A	1100	314	355	396	439	482	526	571	617	663
			Y1+Y2+O	COOL-B	900	197	235	273	311	350	390	430	471	512
			Y1+Y2+O	COOL-C	1250	422	466	510	555	601	647	694	741	788
			Y1+Y2+O	COOL-D	1350	503	550	597	643	690	737	783	830	876
	Heat Pump	Low	Y1	COOL-A	767	136	172	208	244	279	315	350	385	420
			Y1	COOL-B	834	165	202	238	276	313	350	388	426	465
			Y1	COOL-C	900	197	235	273	311	350	390	430	471	512
			Y1	COOL-D	967	233	271	310	350	391	432	474	517	561
		High	Y1+Y2	COOL-A	1150	348	390	432	476	520	564	610	657	704
			Y1+Y2	COOL-B	1250	422	466	510	555	601	647	694	741	788
			Y1+Y2	COOL-C	1350	503	550	597	643	690	737	783	830	876
			Y1+Y2	COOL-D	1450	591	642	691	739	787	834	880	925	969
	Heat	D056	W1	HEAT-A	680	103	139	173	207	240	-	-	-	-
			W1	HEAT-B	735	123	159	194	229	264	-	-	-	-
			W1	HEAT-C	790	145	182	218	254	290	-	-	-	-
			W1	HEAT-D	840	168	204	241	279	316	-	-	-	-
			W1+W2	HEAT-A	1050	282	322	362	404	446	-	-	-	-
			W1+W2	HEAT-B	1140	341	383	425	468	512	-	-	-	-
			W1+W2	HEAT-C	1220	399	442	486	531	576	-	-	-	-
			W1+W2	HEAT-D	1300	461	507	552	598	645	-	-	-	-
		D072	W1	HEAT-A	790	145	182	218	254	-	-	-	-	-
			W1	HEAT-B	855	175	212	249	286	-	-	-	-	-
			W1	HEAT-C	920	207	245	283	322	-	-	-	-	-
			W1	HEAT-D	975	237	276	315	355	-	-	-	-	-
			W1+W2	HEAT-A	1200	384	427	470	514	-	-	-	-	-
			W1+W2	HEAT-B	1300	461	507	552	598	-	-	-	-	-
			W1+W2	HEAT-C	1400	546	595	643	690	-	-	-	-	-
			W1+W2	HEAT-D	1480	619	671	721	770	-	-	-	-	-
DHQ042 (3.5)	Cool	Low	Y1+O	COOL-A	934	225	253	281	317	352	384	415	447	479
			Y1+O	COOL-B	800	208	233	258	277	297	331	351	374	398
			Y1+O	COOL-C	1000	239	268	298	341	384	414	451	487	523
			Y1+O	COOL-D	1100	266	298	330	383	437	466	510	552	594
		High	Y1+Y2+O	COOL-A	1400	396	435	473	551	629	663	725	782	839
			Y1+Y2+O	COOL-B	1200	301	335	369	432	495	525	575	623	670
			Y1+Y2+O	COOL-C	1500	455	496	537	622	706	743	808	870	931
			Y1+Y2+O	COOL-D	1650	560	604	648	740	832	876	946	1013	1081
	Heat Pump	Low	Y1	COOL-A	934	225	253	281	317	352	384	415	447	479
			Y1	COOL-B	867	214	241	268	295	323	356	381	409	437
			Y1	COOL-C	1000	239	268	298	341	384	414	451	487	523
			Y1	COOL-D	1100	266	298	330	383	437	466	510	552	594
		High	Y1+Y2	COOL-A	1400	396	435	473	551	629	663	725	782	839
			Y1+Y2	COOL-B	1300	345	381	417	488	559	591	647	699	752
			Y1+Y2	COOL-C	1500	455	496	537	622	706	743	808	870	931
			Y1+Y2	COOL-D	1650	560	604	648	740	832	876	946	1013	1081
	Heat	D090	W1	HEAT-A	870	215	241	268	296	325	357	-	-	-
			W1	HEAT-B	920	222	250	278	312	346	378	-	-	-
			W1	HEAT-C	985	235	264	293	335	376	407	-	-	-
			W1	HEAT-D	1050	251	282	313	361	409	439	-	-	-
			W1+W2	HEAT-A	1330	359	396	433	506	580	612	-	-	-
			W1+W2	HEAT-B	1400	396	435	473	551	629	663	-	-	-
			W1+W2	HEAT-C	1500	455	496	537	622	706	743	-	-	-
			W1+W2	HEAT-D	1600	523	566	609	699	788	830	-	-	-

DHQ024-060 (Continued)

Model (Tons)	Mode		Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)								
						0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
						Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts
DHQ048 (4.0)	Cool	Low	Y1+O	COOL-A	967	231	260	289	328	368	398	432	467	501
			Y1+O	COOL-B	800	208	233	258	277	297	331	351	374	398
			Y1+O	COOL-C	1101	266	298	330	383	437	466	510	552	594
			Y1+O	COOL-D	1301	345	381	418	489	560	591	647	700	752
		High	Y1+Y2+O	COOL-A	1450	425	464	504	586	667	702	766	825	885
			Y1+Y2+O	COOL-B	1200	301	335	369	432	495	525	575	623	670
			Y1+Y2+O	COOL-C	1650	560	604	648	740	832	876	946	1013	1081
			Y1+Y2+O	COOL-D	1950	822	873	924	1024	1124	1189	1262	1339	1416
	Heat Pump	Low	Y1	COOL-A	1067	256	287	318	368	418	448	490	530	570
			Y1	COOL-B	1000	239	268	298	341	384	414	451	487	523
			Y1	COOL-C	1134	277	310	342	399	455	485	531	575	619
			Y1	COOL-D	1301	345	381	418	489	560	591	647	700	752
		High	Y1+Y2	COOL-A	1600	523	566	609	699	788	830	898	964	1030
			Y1+Y2	COOL-B	1500	455	496	537	622	706	743	808	870	931
			Y1+Y2	COOL-C	1700	598	644	689	783	877	924	995	1064	1133
			Y1+Y2	COOL-D	1950	822	873	924	1024	1124	1189	1262	1339	1416
	Heat	D090	W1	HEAT-A	870	215	241	268	296	325	357	383	411	439
			W1	HEAT-B	920	222	250	278	312	346	378	408	439	470
			W1	HEAT-C	985	235	264	293	335	376	407	442	478	513
			W1	HEAT-D	1050	251	282	313	361	409	439	479	519	558
			W1+W2	HEAT-A	1330	359	396	433	506	580	612	670	723	777
			W1+W2	HEAT-B	1400	396	435	473	551	629	663	725	782	839
			W1+W2	HEAT-C	1500	455	496	537	622	706	743	808	870	931
			W1+W2	HEAT-D	1600	523	566	609	699	788	830	898	964	1030
	Heat	D110	W1	HEAT-A	940	226	254	282	319	-	-	-	-	-
			W1	HEAT-B	970	232	261	290	329	-	-	-	-	-
			W1	HEAT-C	1050	251	282	313	361	-	-	-	-	-
			W1	HEAT-D	1100	266	298	329	383	-	-	-	-	-
			W1+W2	HEAT-A	1450	425	464	504	586	-	-	-	-	-
			W1+W2	HEAT-B	1500	455	496	537	622	-	-	-	-	-
			W1+W2	HEAT-C	1600	523	566	609	699	-	-	-	-	-
			W1+W2	HEAT-D	1700	598	644	689	783	-	-	-	-	-
DHQ060 (5.0)	Cool	Low	Y1+O	COOL-A	1034	247	277	307	354	401	431	470	508	546
			Y1+O	COOL-B	1101	266	298	330	383	437	466	510	552	594
			Y1+O	COOL-C	1167	289	322	355	415	475	505	553	599	645
			Y1+O	COOL-D	1334	361	398	435	509	582	615	673	727	781
		High	Y1+Y2+O	COOL-A	1550	488	530	572	659	746	786	853	916	980
			Y1+Y2+O	COOL-B	1650	560	604	648	740	832	876	946	1013	1081
			Y1+Y2+O	COOL-C	1750	639	685	732	828	923	974	1045	1116	1187
			Y1+Y2+O	COOL-D	2000	872	925	977	1077	1178	1248	1320	1398	1476
	Heat Pump	Low	Y1	COOL-A	1167	289	322	355	415	475	505	553	599	645
			Y1	COOL-B	1234	315	350	385	450	516	546	599	648	697
			Y1	COOL-C	1301	345	381	418	489	560	591	647	700	752
			Y1	COOL-D	1334	361	398	435	509	582	615	673	727	781
		High	Y1+Y2	COOL-A	1750	639	685	732	828	923	974	1045	1116	1187
			Y1+Y2	COOL-B	1850	726	775	824	922	1021	1078	1150	1224	1298
			Y1+Y2	COOL-C	1950	822	873	924	1024	1124	1189	1262	1339	1416
			Y1+Y2	COOL-D	2000	872	925	977	1077	1178	1248	1320	1398	1476
	Heat	D090	W1	HEAT-A	870	215	241	268	296	325	357	-	-	-
			W1	HEAT-B	920	222	250	278	312	346	378	-	-	-
			W1	HEAT-C	985	235	264	293	335	376	407	-	-	-
			W1	HEAT-D	1050	251	282	313	361	409	439	-	-	-
			W1+W2	HEAT-A	1330	359	396	433	506	580	612	-	-	-
			W1+W2	HEAT-B	1400	396	435	473	551	629	663	-	-	-
			W1+W2	HEAT-C	1500	455	496	537	622	706	743	-	-	-
			W1+W2	HEAT-D	1600	523	566	609	699	788	830	-	-	-
	Heat	D110	W1	HEAT-A	940	226	254	282	319	355	386	-	-	-
			W1	HEAT-B	985	235	264	293	335	376	407	-	-	-
			W1	HEAT-C	1035	247	277	308	355	401	431	-	-	-
			W1	HEAT-D	1100	266	298	329	383	436	466	-	-	-
			W1+W2	HEAT-A	1450	425	464	504	586	667	702	-	-	-
			W1+W2	HEAT-B	1500	455	496	537	622	706	743	-	-	-
			W1+W2	HEAT-C	1600	523	566	609	699	788	830	-	-	-
			W1+W2	HEAT-D	1700	598	644	689	783	877	924	-	-	-

Side Duct Application

DHQ024-060

Model (Tons)	Mode		Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)								
						0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
						Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts
DHQ024 (2.0)	Cool	Low	Y1+O	COOL-A	580	89	112	134	159	184	206	229	252	276
			Y1+O	COOL-B	400	43	62	81	101	121	137	153	173	192
			Y1+O	COOL-C	600	96	119	142	167	193	216	239	263	287
			Y1+O	COOL-D	667	120	145	170	198	225	250	275	301	328
		High	Y1+Y2+O	COOL-A	870	215	248	281	315	349	380	410	444	477
			Y1+Y2+O	COOL-B	600	95	119	142	167	193	216	239	263	287
			Y1+Y2+O	COOL-C	900	232	266	301	335	370	402	434	468	503
			Y1+Y2+O	COOL-D	1000	292	332	371	410	448	482	516	555	594
	Heat Pump	Low	Y1	COOL-A	600	96	119	142	167	193	216	239	263	287
			Y1	COOL-B	500	65	86	107	130	152	172	192	213	235
			Y1	COOL-C	467	57	77	97	119	141	159	178	199	220
			Y1	COOL-D	667	120	145	170	198	225	250	275	301	328
		High	Y1+Y2	COOL-A	900	232	266	301	335	370	402	434	468	503
			Y1+Y2	COOL-B	750	155	183	211	241	271	299	326	355	384
			Y1+Y2	COOL-C	700	133	159	186	214	243	269	295	322	349
			Y1+Y2	COOL-D	1000	292	332	371	410	448	482	516	555	594
	Heat	D056	W1	HEAT-A	670	121	146	172	199	227	-	-	-	-
			W1	HEAT-B	690	129	155	181	209	237	-	-	-	-
			W1	HEAT-C	710	137	164	191	219	248	-	-	-	-
			W1	HEAT-D	750	155	183	211	241	271	-	-	-	-
			W1+W2	HEAT-A	940	255	291	328	364	400	-	-	-	-
			W1+W2	HEAT-B	970	273	311	349	386	424	-	-	-	-
			W1+W2	HEAT-C	1000	292	332	371	410	448	-	-	-	-
			W1+W2	HEAT-D	1050	326	368	410	450	490	-	-	-	-
DHQ030 (2.5)	Cool	Low	Y1+O	COOL-A	634	119	142	164	192	220	245	269	294	319
			Y1+O	COOL-B	500	98	118	137	160	182	203	224	244	264
			Y1+O	COOL-C	700	136	160	185	215	245	272	298	325	351
			Y1+O	COOL-D	834	183	212	242	275	308	339	369	397	425
		High	Y1+Y2+O	COOL-A	950	239	273	308	342	377	410	444	472	500
			Y1+Y2+O	COOL-B	750	151	178	204	235	267	295	323	350	377
			Y1+Y2+O	COOL-C	1050	298	337	376	411	446	482	519	546	573
			Y1+Y2+O	COOL-D	1250	446	496	547	580	613	655	697	718	739
	Heat Pump	Low	Y1	COOL-A	700	136	160	185	215	245	272	298	325	351
			Y1	COOL-B	634	119	142	164	192	220	245	269	294	319
			Y1	COOL-C	767	157	184	211	243	275	303	331	359	387
			Y1	COOL-D	834	183	212	242	275	308	339	369	397	425
		High	Y1+Y2	COOL-A	1050	298	337	376	411	446	482	519	546	573
			Y1+Y2	COOL-B	950	239	273	308	342	377	410	444	472	500
			Y1+Y2	COOL-C	1150	367	411	456	490	525	564	603	628	652
			Y1+Y2	COOL-D	1250	446	496	547	580	613	655	697	718	739
	Heat	D056	W1	HEAT-A	680	130	154	178	208	237	-	-	-	-
			W1	HEAT-B	735	146	172	198	229	260	-	-	-	-
			W1	HEAT-C	790	166	193	221	253	286	-	-	-	-
			W1	HEAT-D	840	186	215	245	278	312	-	-	-	-
			W1+W2	HEAT-A	1050	298	337	376	411	446	-	-	-	-
			W1+W2	HEAT-B	1135	356	399	443	478	512	-	-	-	-
			W1+W2	HEAT-C	1220	421	470	519	552	585	-	-	-	-
			W1+W2	HEAT-D	1300	489	543	597	629	660	-	-	-	-

DHQ024-060 (Continued)

Model (Tons)	Mode		Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)								
						0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
						Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts
DHQ036 (3.0)	Cool	Low	Y1+O	COOL-A	734	123	158	194	229	264	298	331	365	398
			Y1+O	COOL-B	600	78	113	147	179	210	238	265	291	315
			Y1+O	COOL-C	834	165	202	238	276	313	350	388	426	465
			Y1+O	COOL-D	900	197	235	273	311	350	390	430	471	512
		High	Y1+Y2+O	COOL-A	1100	314	355	396	439	482	526	571	617	663
			Y1+Y2+O	COOL-B	900	197	235	273	311	350	390	430	471	512
			Y1+Y2+O	COOL-C	1250	422	466	510	555	601	647	694	741	788
			Y1+Y2+O	COOL-D	1350	503	550	597	643	690	737	783	830	876
	Heat Pump	Low	Y1	COOL-A	767	136	172	208	244	279	315	350	385	420
			Y1	COOL-B	834	165	202	238	276	313	350	388	426	465
			Y1	COOL-C	900	197	235	273	311	350	390	430	471	512
			Y1	COOL-D	967	233	271	310	350	391	432	474	517	561
		High	Y1+Y2	COOL-A	1150	348	390	432	476	520	564	610	657	704
			Y1+Y2	COOL-B	1250	422	466	510	555	601	647	694	741	788
			Y1+Y2	COOL-C	1350	503	550	597	643	690	737	783	830	876
			Y1+Y2	COOL-D	1450	591	642	691	739	787	834	880	925	969
	Heat	D056	W1	HEAT-A	680	103	139	173	207	240	-	-	-	-
			W1	HEAT-B	735	123	159	194	229	264	-	-	-	-
			W1	HEAT-C	790	145	182	218	254	290	-	-	-	-
			W1	HEAT-D	840	168	204	241	279	316	-	-	-	-
			W1+W2	HEAT-A	1050	282	322	362	404	446	-	-	-	-
			W1+W2	HEAT-B	1140	341	383	425	468	512	-	-	-	-
			W1+W2	HEAT-C	1220	399	442	486	531	576	-	-	-	-
			W1+W2	HEAT-D	1300	461	507	552	598	645	-	-	-	-
		D072	W1	HEAT-A	790	145	182	218	254	-	-	-	-	-
			W1	HEAT-B	855	175	212	249	286	-	-	-	-	-
			W1	HEAT-C	920	207	245	283	322	-	-	-	-	-
			W1	HEAT-D	975	237	276	315	355	-	-	-	-	-
			W1+W2	HEAT-A	1200	384	427	470	514	-	-	-	-	-
			W1+W2	HEAT-B	1300	461	507	552	598	-	-	-	-	-
			W1+W2	HEAT-C	1400	546	595	643	690	-	-	-	-	-
			W1+W2	HEAT-D	1480	619	671	721	770	-	-	-	-	-
DHQ042 (3.5)	Cool	Low	Y1+O	COOL-A	934	225	253	281	317	352	384	415	447	479
			Y1+O	COOL-B	800	208	233	258	277	297	331	351	374	398
			Y1+O	COOL-C	1000	239	268	298	341	384	414	451	487	523
			Y1+O	COOL-D	1100	266	298	330	383	437	466	510	552	594
		High	Y1+Y2+O	COOL-A	1400	396	435	473	551	629	663	725	782	839
			Y1+Y2+O	COOL-B	1200	301	335	369	432	495	525	575	623	670
			Y1+Y2+O	COOL-C	1500	455	496	537	622	706	743	808	870	931
			Y1+Y2+O	COOL-D	1650	560	604	648	740	832	876	946	1013	1081
	Heat Pump	Low	Y1	COOL-A	934	225	253	281	317	352	384	415	447	479
			Y1	COOL-B	867	214	241	268	295	323	356	381	409	437
			Y1	COOL-C	1000	239	268	298	341	384	414	451	487	523
			Y1	COOL-D	1100	266	298	330	383	437	466	510	552	594
		High	Y1+Y2	COOL-A	1400	396	435	473	551	629	663	725	782	839
			Y1+Y2	COOL-B	1300	345	381	417	488	559	591	647	699	752
			Y1+Y2	COOL-C	1500	455	496	537	622	706	743	808	870	931
			Y1+Y2	COOL-D	1650	560	604	648	740	832	876	946	1013	1081
	Heat	D090	W1	HEAT-A	870	215	241	268	296	325	357	-	-	-
			W1	HEAT-B	920	222	250	278	312	346	378	-	-	-
			W1	HEAT-C	985	235	264	293	335	376	407	-	-	-
			W1	HEAT-D	1050	251	282	313	361	409	439	-	-	-
			W1+W2	HEAT-A	1330	359	396	433	506	580	612	-	-	-
			W1+W2	HEAT-B	1400	396	435	473	551	629	663	-	-	-
			W1+W2	HEAT-C	1500	455	496	537	622	706	743	-	-	-
			W1+W2	HEAT-D	1600	523	566	609	699	788	830	-	-	-

DHQ024-060 (Continued)

Model (Tons)	Mode		Thermostat Input	Speed Tap	CFM	External Static Pressure (Inch Water Gauge)								
						0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
						Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts	Watts
DHQ048 (4.0)	Cool	Low	Y1+O	COOL-A	967	231	260	289	328	368	398	432	467	501
			Y1+O	COOL-B	800	208	233	258	277	297	331	351	374	398
			Y1+O	COOL-C	1101	266	298	330	383	437	466	510	552	594
			Y1+O	COOL-D	1301	345	381	418	489	560	591	647	700	752
		High	Y1+Y2+O	COOL-A	1450	425	464	504	586	667	702	766	825	885
			Y1+Y2+O	COOL-B	1200	301	335	369	432	495	525	575	623	670
			Y1+Y2+O	COOL-C	1650	560	604	648	740	832	876	946	1013	1081
			Y1+Y2+O	COOL-D	1950	822	873	924	1024	1124	1189	1262	1339	1416
	Heat Pump	Low	Y1	COOL-A	1067	256	287	318	368	418	448	490	530	570
			Y1	COOL-B	1000	239	268	298	341	384	414	451	487	523
			Y1	COOL-C	1134	277	310	342	399	455	485	531	575	619
			Y1	COOL-D	1301	345	381	418	489	560	591	647	700	752
		High	Y1+Y2	COOL-A	1600	523	566	609	699	788	830	898	964	1030
			Y1+Y2	COOL-B	1500	455	496	537	622	706	743	808	870	931
			Y1+Y2	COOL-C	1700	598	644	689	783	877	924	995	1064	1133
			Y1+Y2	COOL-D	1950	822	873	924	1024	1124	1189	1262	1339	1416
	Heat	D090	W1	HEAT-A	870	215	241	268	296	325	357	383	411	439
			W1	HEAT-B	920	222	250	278	312	346	378	408	439	470
			W1	HEAT-C	985	235	264	293	335	376	407	442	478	513
			W1	HEAT-D	1050	251	282	313	361	409	439	479	519	558
			W1+W2	HEAT-A	1330	359	396	433	506	580	612	670	723	777
			W1+W2	HEAT-B	1400	396	435	473	551	629	663	725	782	839
			W1+W2	HEAT-C	1500	455	496	537	622	706	743	808	870	931
			W1+W2	HEAT-D	1600	523	566	609	699	788	830	898	964	1030
	Heat	D110	W1	HEAT-A	940	226	254	282	319	-	-	-	-	-
			W1	HEAT-B	970	232	261	290	329	-	-	-	-	-
			W1	HEAT-C	1050	251	282	313	361	-	-	-	-	-
			W1	HEAT-D	1100	266	298	329	383	-	-	-	-	-
			W1+W2	HEAT-A	1450	425	464	504	586	-	-	-	-	-
			W1+W2	HEAT-B	1500	455	496	537	622	-	-	-	-	-
			W1+W2	HEAT-C	1600	523	566	609	699	-	-	-	-	-
			W1+W2	HEAT-D	1700	598	644	689	783	-	-	-	-	-
DHQ060 (5.0)	Cool	Low	Y1+O	COOL-A	1034	247	277	307	354	401	431	470	508	546
			Y1+O	COOL-B	1101	266	298	330	383	437	466	510	552	594
			Y1+O	COOL-C	1167	289	322	355	415	475	505	553	599	645
			Y1+O	COOL-D	1334	361	398	435	509	582	615	673	727	781
		High	Y1+Y2+O	COOL-A	1550	488	530	572	659	746	786	853	916	980
			Y1+Y2+O	COOL-B	1650	560	604	648	740	832	876	946	1013	1081
			Y1+Y2+O	COOL-C	1750	639	685	732	828	923	974	1045	1116	1187
			Y1+Y2+O	COOL-D	2000	872	925	977	1077	1178	1248	1320	1398	1476
	Heat Pump	Low	Y1	COOL-A	1167	289	322	355	415	475	505	553	599	645
			Y1	COOL-B	1234	315	350	385	450	516	546	599	648	697
			Y1	COOL-C	1301	345	381	418	489	560	591	647	700	752
			Y1	COOL-D	1334	361	398	435	509	582	615	673	727	781
		High	Y1+Y2	COOL-A	1750	639	685	732	828	923	974	1045	1116	1187
			Y1+Y2	COOL-B	1850	726	775	824	922	1021	1078	1150	1224	1298
			Y1+Y2	COOL-C	1950	822	873	924	1024	1124	1189	1262	1339	1416
			Y1+Y2	COOL-D	2000	872	925	977	1077	1178	1248	1320	1398	1476
	Heat	D090	W1	HEAT-A	870	215	241	268	296	325	357	-	-	-
			W1	HEAT-B	920	222	250	278	312	346	378	-	-	-
			W1	HEAT-C	985	235	264	293	335	376	407	-	-	-
			W1	HEAT-D	1050	251	282	313	361	409	439	-	-	-
			W1+W2	HEAT-A	1330	359	396	433	506	580	612	-	-	-
			W1+W2	HEAT-B	1400	396	435	473	551	629	663	-	-	-
			W1+W2	HEAT-C	1500	455	496	537	622	706	743	-	-	-
			W1+W2	HEAT-D	1600	523	566	609	699	788	830	-	-	-
	Heat	D110	W1	HEAT-A	940	226	254	282	319	355	386	-	-	-
			W1	HEAT-B	985	235	264	293	335	376	407	-	-	-
			W1	HEAT-C	1035	247	277	308	355	401	431	-	-	-
			W1	HEAT-D	1100	266	298	329	383	436	466	-	-	-
			W1+W2	HEAT-A	1450	425	464	504	586	667	702	-	-	-
			W1+W2	HEAT-B	1500	455	496	537	622	706	743	-	-	-
			W1+W2	HEAT-C	1600	523	566	609	699	788	830	-	-	-
			W1+W2	HEAT-D	1700	598	644	689	783	877	924	-	-	-

Additional Static Resistance

Model (Tons)	CFM	Wet Indoor Coil	Economizer[1]	Filter/Frame Kit	Electric Heat
DHQ024 (2.0)	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	-
DHQ030 (2.5)	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	-
DHQ036 (3.0)	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	-
	1400	0.08	0.04	0.18	-
DHQ042 (3.5)	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	-
	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	-
DHQ048 (4.0)	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	-
	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	-
DHQ060 (5.0)	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	-
	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	-

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

Model (Tons)	Heat Size	Supply Air (CFM)			
		Cooling		Heating	
		Min	Max	Min	Max
DHQ024 (2.0)	D056	400	1000	860	1730
DHQ030 (2.5)	D056	500	1250	860	1730
DHQ036 (3.0)	D056	600	1350	940	2070
	D072	600	1350	1110	2220
DHQ042 (3.5)	D090	800	1650	1070	1780
DHQ048 (4.0)	D090	800	1950	1230	2290
	D110	800	1950	1330	2220
DHQ060 (5.0)	D090	1000	2000	1230	2290
	D110	1000	2000	1330	2220

Indoor Blower Specifications

Model (Tons)	Motor				
	HP	RPM	Eff.	SF	Frame
DHQ024 (2.0)	1/2	1050	0.8	1.0	48
DHQ030 (2.5)	3/4	1050	0.8	1.0	48
DHQ036 (3.0)	3/4	1050	0.8	1.0	48
DHQ042 (3.5)	1	1050	0.8	1.0	48
DHQ048 (4.0)	1	1050	0.8	1.0	48
DHQ060 (5.0)	1	1050	0.8	1.0	48

Sound Performance

Outdoor Sound Power Levels

Model (Tons)	Sound Rating[1] dB (A)	Octave Band Centerline Frequency (Hz)						
		125	250	500	1000	2000	4000	8000
DHQ024 (2.0)	76	66	70.5	74	74.5	72.5	67.5	64.5
DHQ030 (2.5)	79	70.5	71	73.5	73	70	66	66
DHQ036 (3.0)	79.5	69	71.5	74	74	70.5	67	61
DHQ042 (3.5)	80	71.5	71.5	73.5	74	69.5	65	63.5
DHQ048 (4.0)	80	71.5	71.5	73.5	74	69.5	65	63.5
DHQ060 (5.0)	81	73.5	73	76	75.5	71	66.5	61.5

1. Rated in accordance with AHRI 270 standard.

Electrical Data

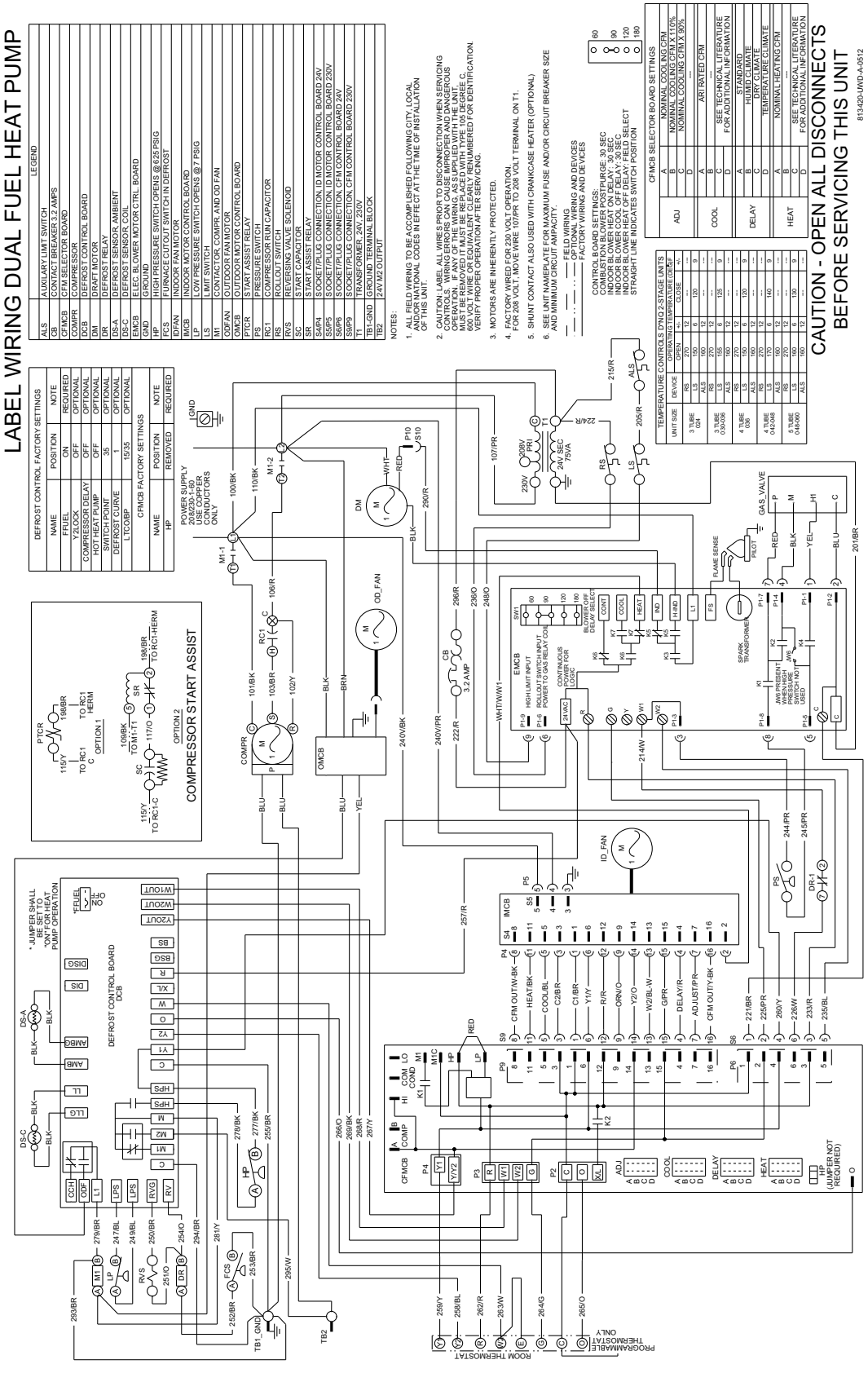
DHQ024-060 Dual Fuel Heat Pump

Model (Tons)	Volt	Compressors (each)			OD Fan Motors (each)	Supply Blower Motor	MCA[1] (Amps)	Max Fuse[2]/ Breaker[3] Size (Amps)
		RLA	LRA	MCC	FLA	FLA		
DHQ024 (2.0)	208/230-1-60	11.6	58	18	2.8	4.3	21.6	30
DHQ030 (2.5)	208/230-1-60	13.1	73	20	2.8	6.8	26	35
DHQ036 (3.0)	208/230-1-60	15.2	83	24	2.8	6.8	28.6	35
DHQ042 (3.5)	208/230-1-60	17.9	96	28	2.8	9.1	34.3	45
DHQ048 (4.0)	208/230-1-60	21.1	104	33	2.8	9.1	38.3	50
DHQ060 (5.0)	208/230-1-60	28.8	153	45	2.8	9.1	47.9	60

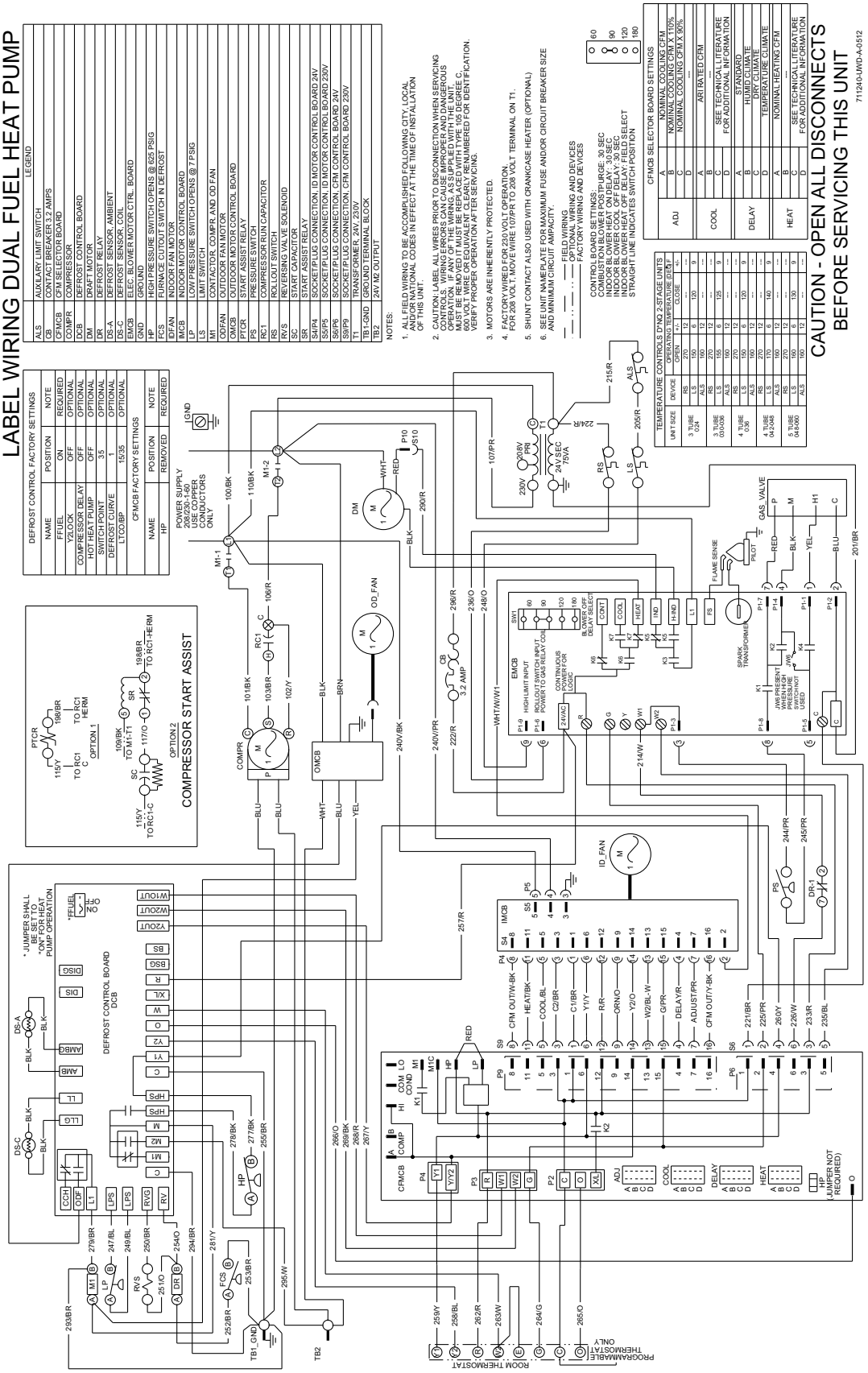
1. Minimum Circuit Ampacity.
2. Maximum Over Current Protection per standard UL 1995.
3. Fuse or HACR circuit breaker size installed at factory or field installed.

Typical DHQ024-060 Wiring Diagrams

Typical DHQ024 Heat Pump with Two Stage Gas Heat 208/230-1-60 volt Wiring Diagram



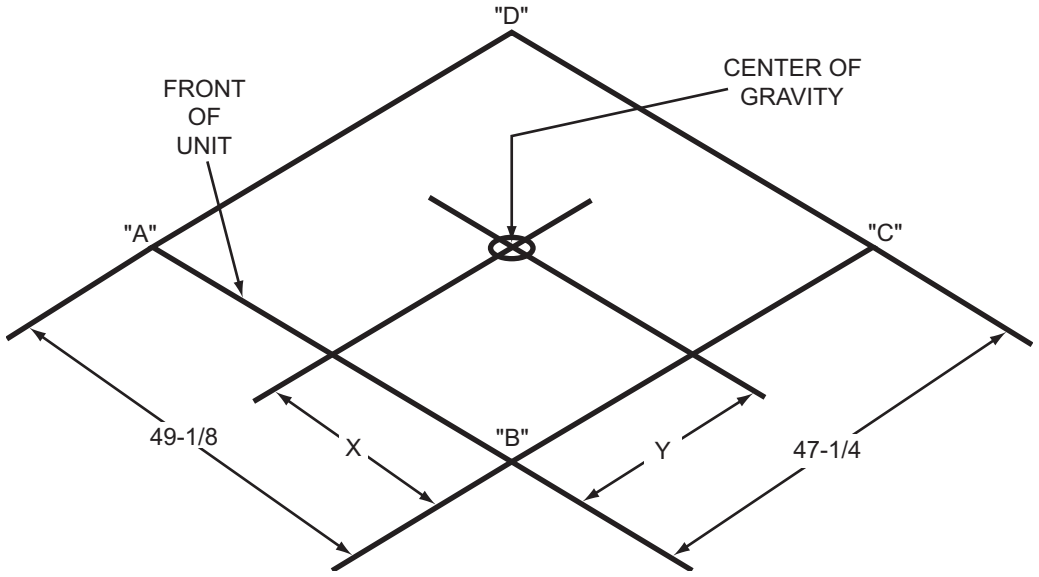
Typical DHQ030-060 Heat Pump with Two Stage Gas Heat 208/230-1-60 volt Wiring Diagram



Weights and Dimensions

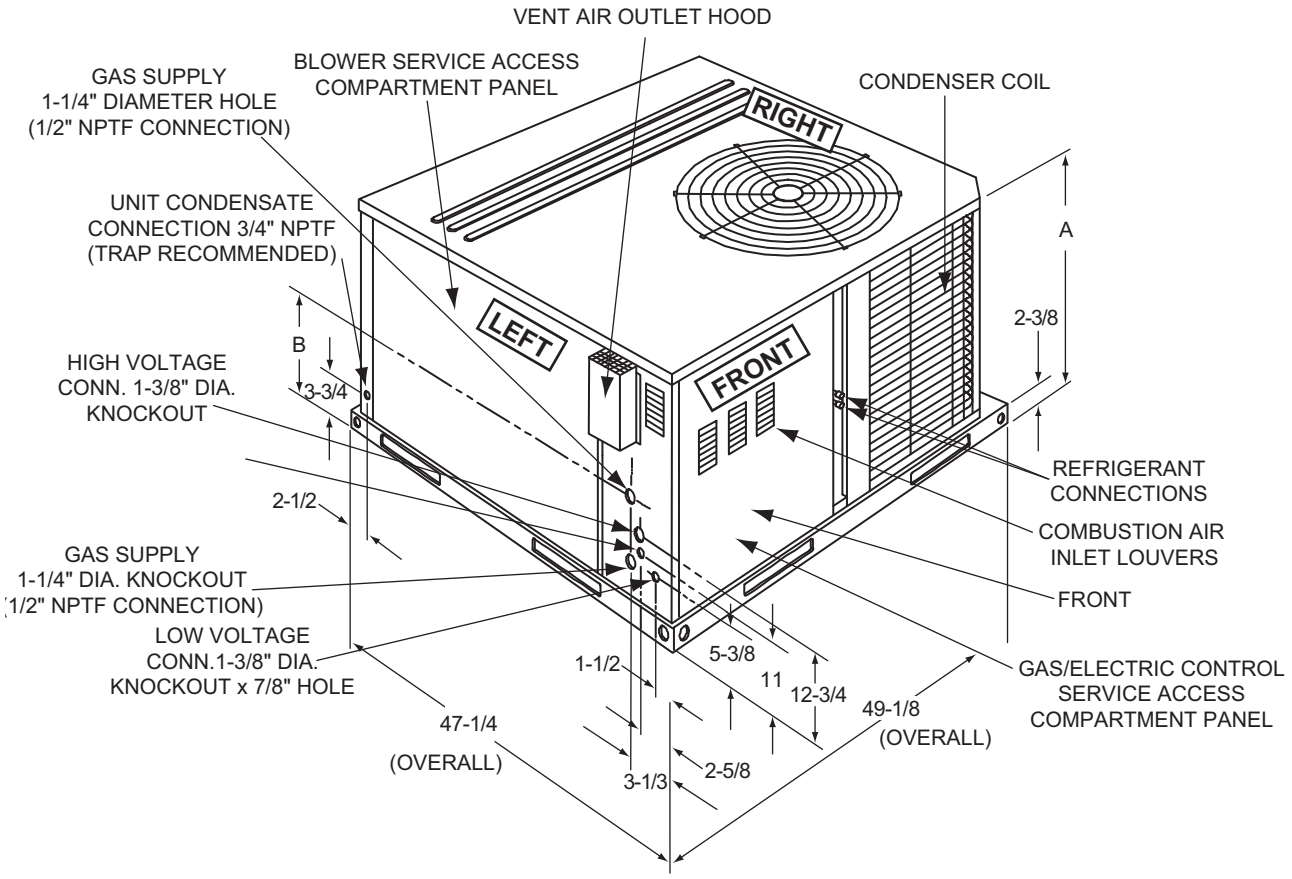
DHQ Unit Weights

Unit 4 Point Load Weight



Model (Tons)	Weight (lbs.)		Center of Gravity		4 Point Load Location (lbs.)			
	Shipping	Operating	X	Y	A	B	C	D
DHQ024 (2.0)	418	413	25	20.1	81	88	128	116
DHQ030 (2.5)	431	426	24.4	20.1	85	89	129	123
DHQ036 (3.0)	438	433	24.6	20.1	86	91	132	124
DHQ042 (3.5)	519	514	25.1	20.4	101	112	158	143
DHQ048 (4.0)	545	540	25.3	20.8	107	121	165	146
DHQ060 (5.0)	554	549	25.5	20.5	107	122	171	149

Heat Pump Dimensions



Heat Pump Dimensions

Model	Dimensions	
	"A"	"B"
DHQ 024, 030, 036	33-1/2	18-1/4
DHQ 042, 048, 060	41-1/2	23-1/8

Heat Pump Clearances[1] [2]

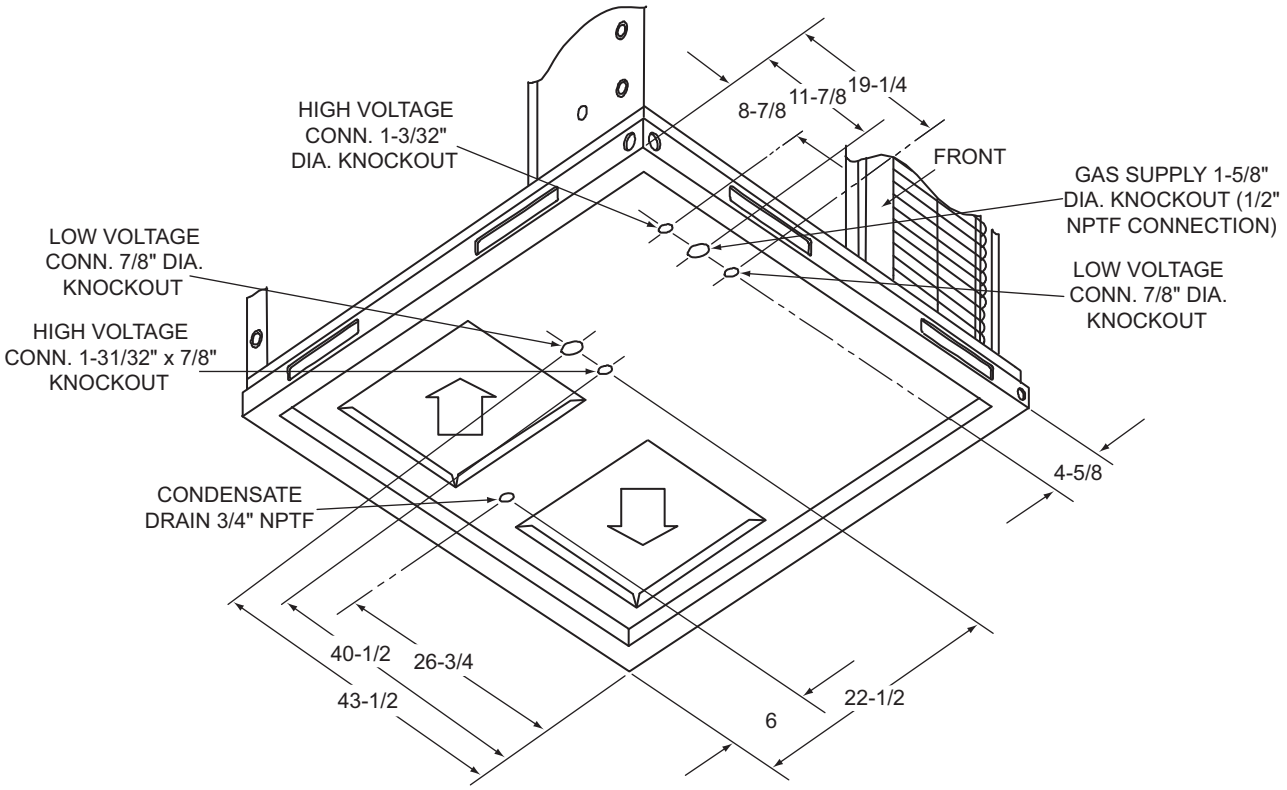
Direction	Distance (in.)	Direction	Distance (in.)
Top[3]	36	Right	12
Front	36	Left	24
Rear	0	Bottom[4]	0

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.

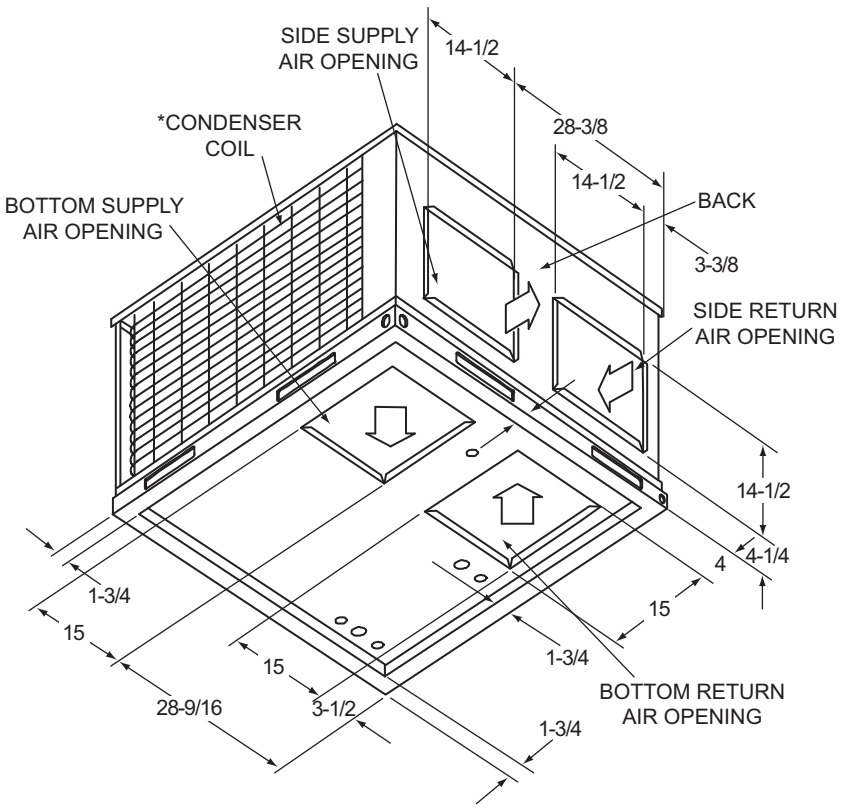
Unit Accessory Weights

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

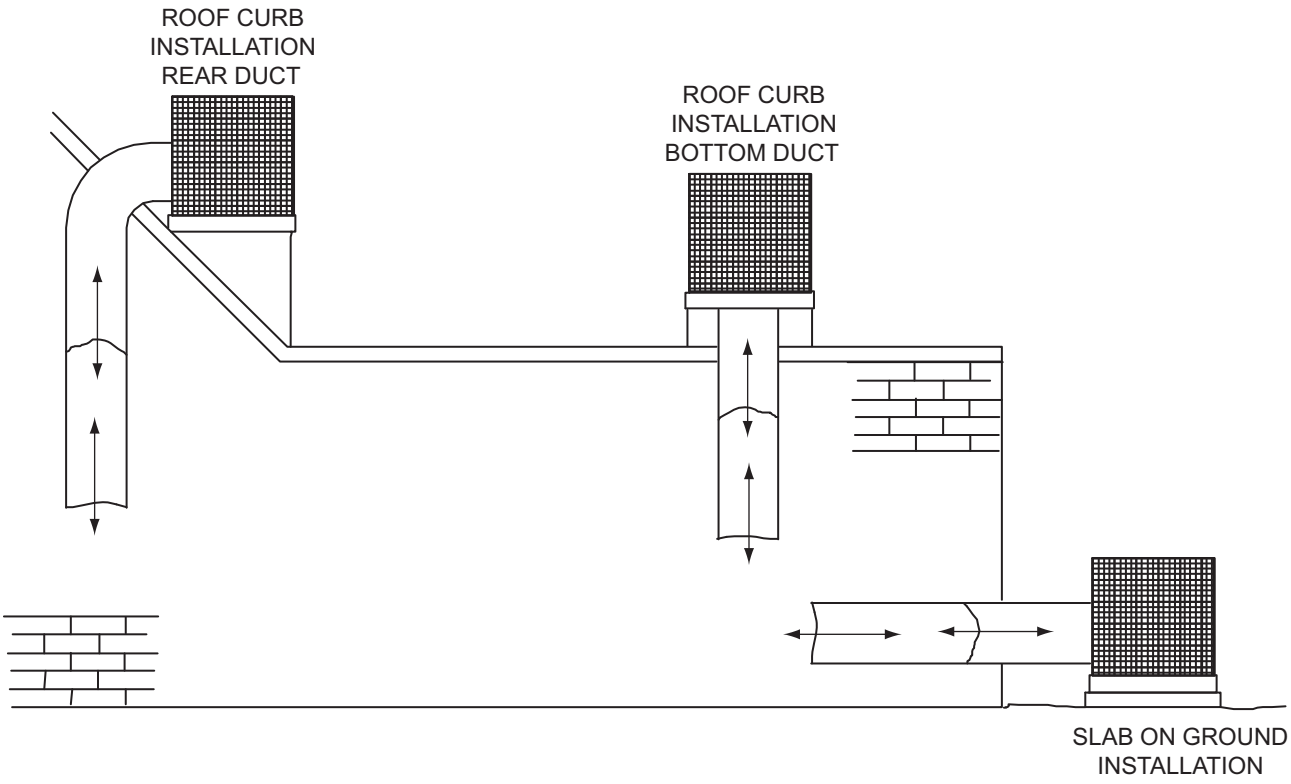
Unit Dimensions Front and Bottom



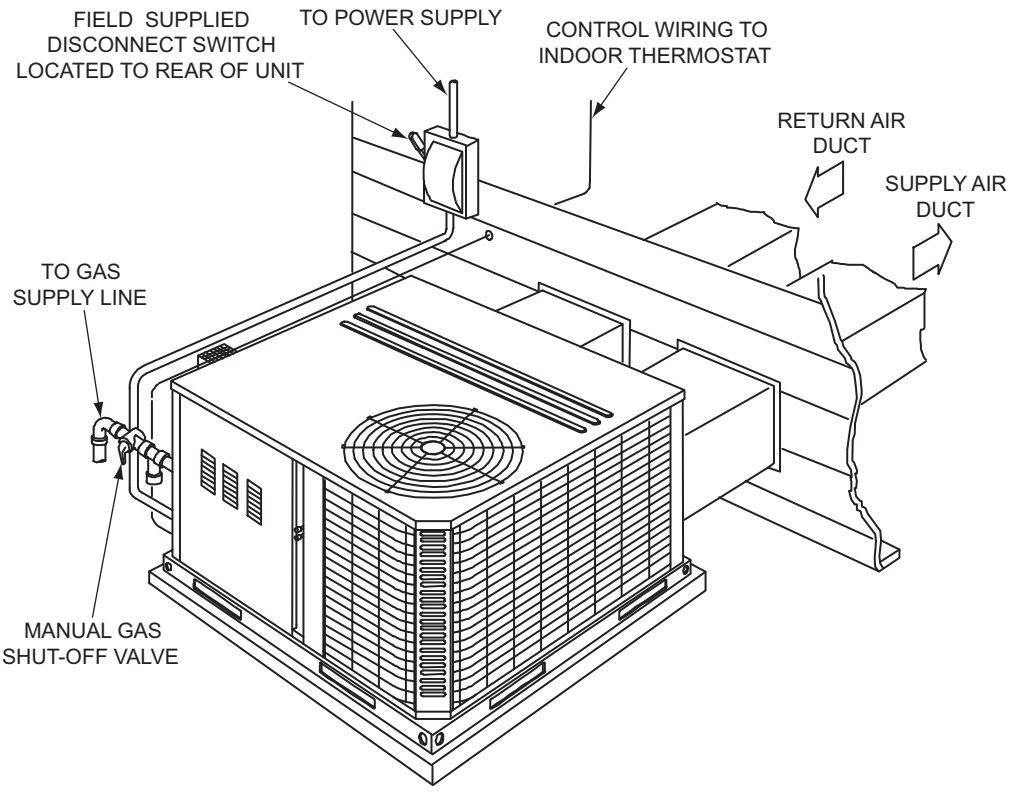
Unit Dimensions Back and Bottom



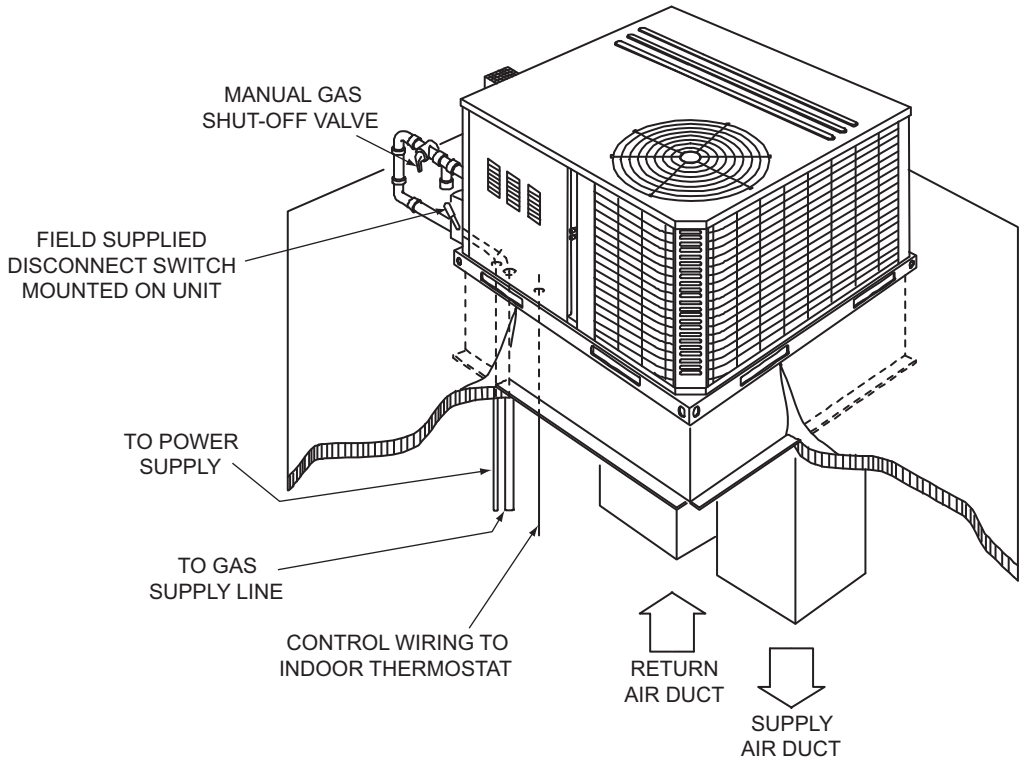
Unit Typical Duct Applications



Unit Typical Slab on Ground Installation

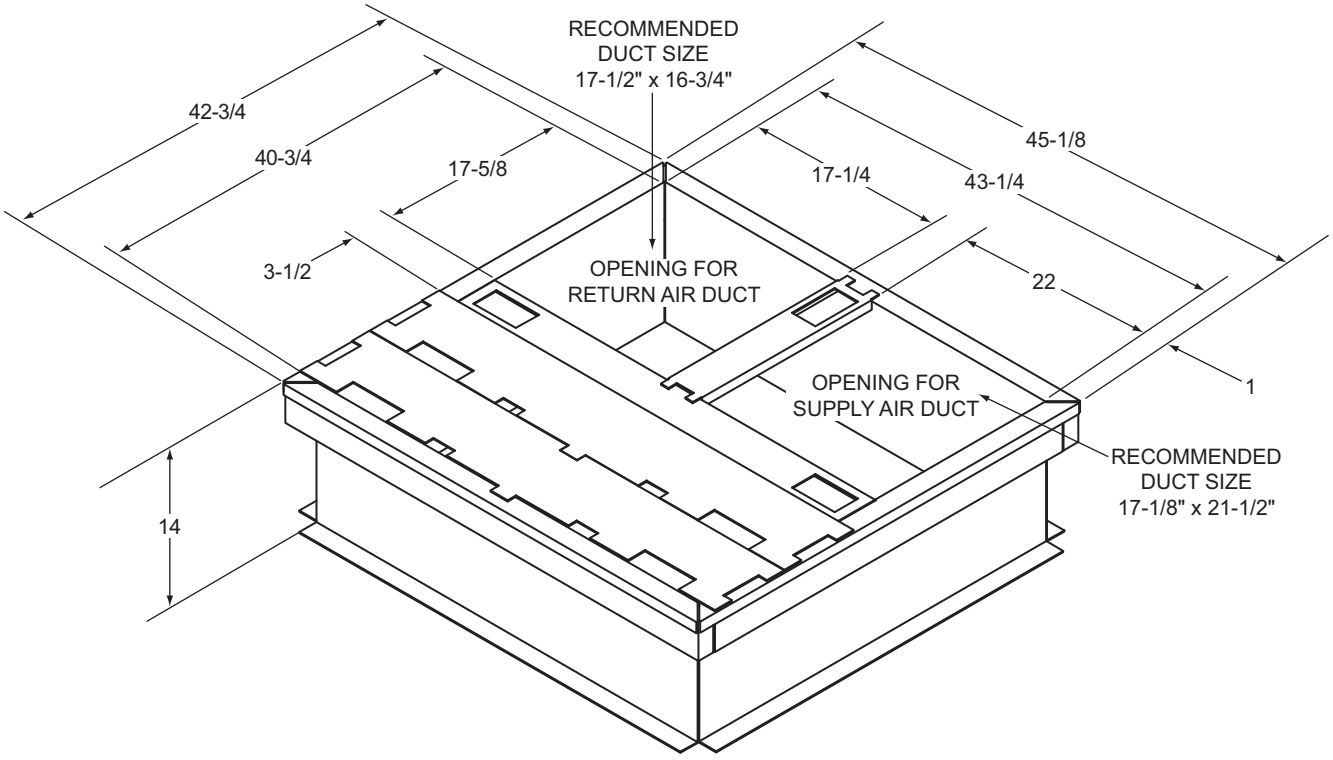


Unit Typical Roof Curb Installation



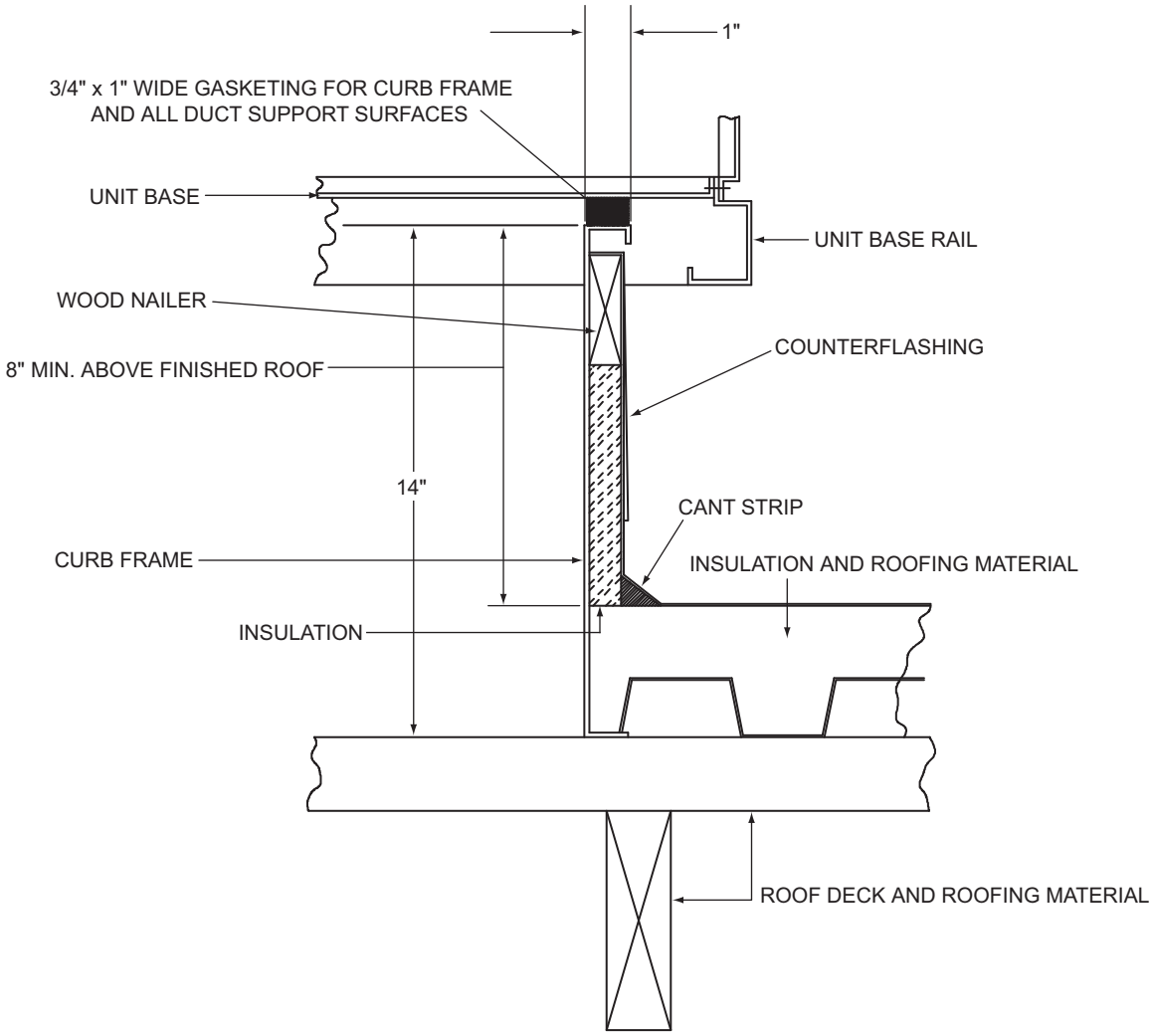
Unit Accessory Dimensions

Roof Curb[1]



1. 8” Roof Curb also available.

Roof Curb Cross Section



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Supersedes: 832144-YTG-G-0314

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