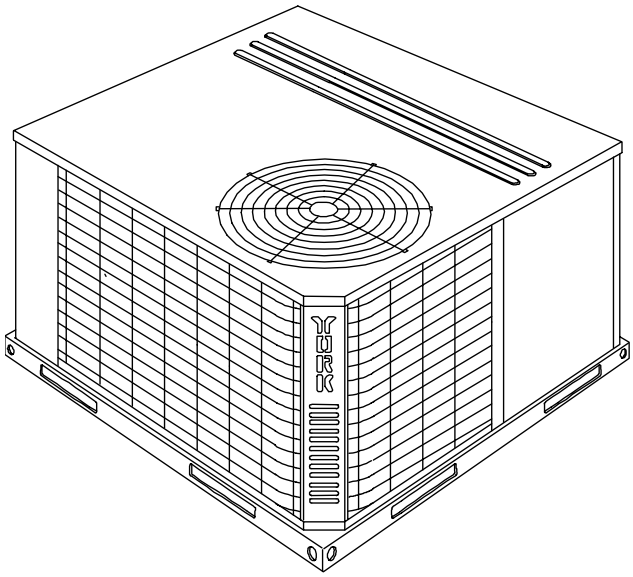
YORK®

Champion® Series

SINGLE PACKAGE HEAT PUMPS

B1HA018 THRU 060
1-1/2 THRU 5 NOMINAL TONS
10 SEER



DESCRIPTION

These packaged heat pumps are designed for outdoor installation. Only utility and duct connections are required at the point of installation.

Field-installed electric heater accessories are available to provide electric heat, if required.

STANDARD FEATURES / BENEFITS

OPERATING EFFICIENCY - All units provide high operating efficiencies of 10 SEER or greater, 3.0 COP or greater and up to 7.0 HSPF. All efficiencies exceed legislated minimum levels.

ON SITE FLEXIBILITY - All model sizes share a common, compact design cabinet with a single footprint. The installer has the flexibility of setting one curb or pad 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 and needs to carry 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 models are well under 500 pounds.

All units are completely wired, charged with R-22 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 manufacturing point. Vital run test statistics such as system pressure, motor currents, air velocity and temperature and unit vibration 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 - Electrical utility knockouts are provided through the bottom as well as the side of the unit. Utility connections can be made quickly and with a minimum amount of field labor. A field supplied and field installed electrical disconnect switch must be installed.

CONVERTIBLE AIRFLOW DESIGN - The bottom duct openings are covered when they leave the factory ready to be used for a side supply / side return application. If a bottom supply / bottom return application is desired, you simply remove the two panels from the bottom of the unit and place them in the side supply / side return duct openings. No panel cutting is required and no accessory panel is necessary. Convertible airflow design allows maximum field flexibility and minimum inventory.

CONDENSATE PAN - A non-corrosive, long-lasting, water-tight pan is positioned below the evaporator coil to collect and drain all condensate. Less collection of stagnate condensate will build-up. The condensate pan conforms to ASHRAE 62-89 standards (Ventilation for Acceptable Indoor Air Quality).

CONDENSATE DRAIN - The heavy duty, ¾ inch NPTI copper connection is more tolerable during installation and is more durable over time. The connection is rigidly mounted to assure proper fit and leak tight seal.

STANDARD FEATURES and BENEFITS - continued

DURABLE FINISH - With a heavy duty cabinet made of powder-painted, galvanized steel the neutral color blends into surrounding areas. The powered paint, provides a better paint to steel bond, which resists corrosion and rust creep. The special primer formulas and glossy earth tone finish insure less fading when exposed to sunlight and offers a more attractive on site appearance. This paint finish exceeds ASTM-B117 standards for 750 hours salt spray rating, the highest in the industry.

FULL PERIMETER BASE RAILS - The easily removable base rails provide a solid foundation for the entire unit and protects the unit during shipment. The rails provide fork lift access from all sides, and rigging holes are also provided so that an overhead crane can be used to place the units on a roof. On applications when 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 2 3/8 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 reduces insulation fibers into conditioned area.

TOP DISCHARGE - The top discharge condenser fan does not disrupt neighboring areas and does not 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.

OUTDOOR COIL GRILLE - A multi-piece totally enclosed, rigidly mounted outdoor coil grille provides protection from objects and personal after installation and provides protection during transit and 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 a 3-speed direct-drive fan motor. These units easily match all types of applications and provides greater on site flexibility to match comfort requirement.

SIMPLE CONTROL CIRCUIT - A low voltage printed circuit board contains a low voltage terminal strip. The electrical control box is not located in the compressor compartment. All wiring internal to the unit is color/number coded.

CONTROLS - Reliable time-temperature defrost control provides defrost including field selectable time periods between cycles (30, 60 and 90 minutes). factory set at 30 minutes. Defrost control also provides an "X" terminal to provide a 24 volt signal for room thermostat "LED" indication of unit lockout, plus built in 5 minute anti-short cycle protection.

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.

EXCLUSIVE COIL DESIGN - Grooved copper tubes and enhanced aluminum fin construction improves heat transfer for maximum efficiency and durability.

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 removed for cleaning 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.

EASY SERVICE ACCESS - A large, single hinged panel covers the electrical controls and 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 has no need to carry an inventory of unique parts or needs special training to replace any of the components parts for these units. All are easily obtained from Source 1 or other major part houses.

FIELD-INSTALLED ACCESSORIES

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.

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.***

UPGRADE PRESSURE PACKAGE - Contains screw in type High pressure, Low Pressure/Loss of Charge switch, freeze protection switch and lockout relay. Switches are placed onto existing scharder ports located in the unit by furnished adapters. When abnormal conditions are sensed through the pressure switches, the unit will lock out preventing any further operation until reset or problem is corrected. Package agency approved.

HAIL GUARD KIT - Kit contains protected grilles made of expanded aluminum grilles with full perimeter 1½ inch frame. Sloped hoods are also included to assure maximum protection.

FILTER / FRAME KIT (Single Phase only) - Kit contains the necessary hardware to field install return air filters into the base unit. Pre-cut filter racks and appropriate cleanable standard size filters are shipped in one kit. (1" filter is supplied) This kit is available for single phase horizontal or vertical duct application only. Standard in all 3 Phase models.

MOTORIZED FRESH AIR DAMPER - Designed for duct mounted side supply/return and unit mounted down supply/return applications. Damper capable of providing 0% thru 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 from15" square to 14" round.

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% thru 50% outdoor air capability (field adjustable). Designed for duct mounted side supply/return applications. Includes hood and screen assembly.

WALL THERMOSTAT - The units are designed to operate with 24-volt electronic and electro-mechanical thermostats. All units can operate with single stage heat / single stage cool thermostats - with or without the economizer.

LOW AMBIENT KIT - Kit provides necessary hardware to convert unit to operate in cooling cycle down to 0° F. Standard unit operation 45° F.

TRANSFORMER KIT (Single Phase only) - Kit provides necessary hardware to provide single phase models from factory furnished 40 VA transformer capability to 75 VA transformer capability.

ELECTRIC HEATERS - Each heater package provides easy installation of electric heat strips. Slide in design with plug in harness and agency approved. Heaters are available from 5.0 KW sizes and are designed for single and dual point connections.

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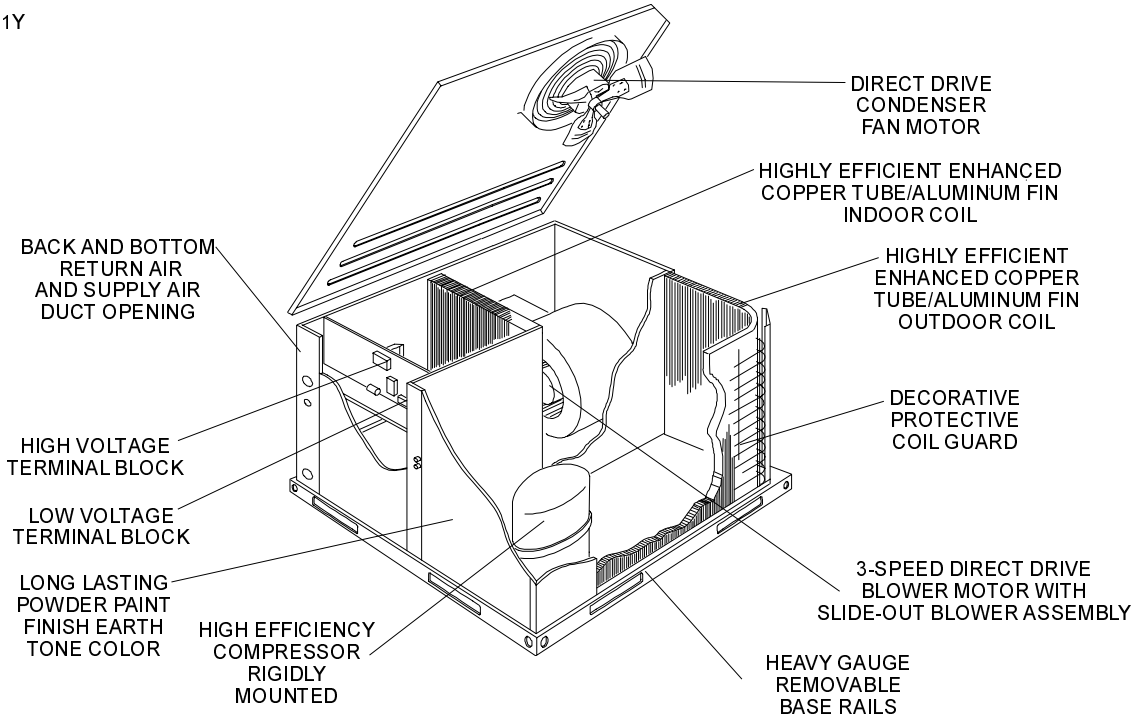


RATINGS

MODEL BHA	COOLING CAPACITY[1] 80 / 67-95°F		HSPF[1]	SOUND RATING[2] (dbels)	NET HEATING CAPACITY @ 47°F		NET HEATING CAPACITY @ 17°F		AVAILABLE ELECTRIC HEAT NOMINAL CAPACITY KW	
	MBH	SEER			MBH	COP	MBH	COP	SINGLE PHASE	THREE PHASE
018	18.5	10.2	6.6	77	18.5	3.0	9.3	2.0	5.0, 7.5	N / A
024	23.8	11.0	7.0	75	23.8	3.0	12.1	2.0	5.0. 7.5. 10.0	N / A
030	29.8	10.2	7.0	79	29.0	3.0	14.7	2.0	5.0, 7.5, 10.0, 15.0	N / A
036	36.0	10.6	7.0	83	36.0	3.0	19.2	2.0	5.0, 7.5, 10.0, 15.0	10.0, 15.0
042	41.0	10.2	7.0	83	41.5	3.0	20.8	2.0	5.0, 7.5, 10.0, 15.0	10.0, 15.0
048	48.0	10.0	7.0	79	47.0	3.0	22.0	2.0	10.0, 15.0, 20.0, 25.0	10.0, 15.0, 20.0, 25.0
060	57.5	10.0	7.0	79	58.5	3.0	35.0	2.0	10.0, 15.0, 20.0, 25.0	10.0, 15.0, 20.0, 25.0

SEER = Seasonal Energy Efficiency Ratio - the total cooling output in BTU's during a normal annual usage period for cooling divided by the total electric power input in watt-hours during the same period.

COP = Coefficient of Performance - the total heating capacity provided by the refrigeration system, including circulating fan heat but excluding supplementary resistance (BTU's per hour) divided by the total electric input (watts) x 3.412.

HSPF = Heating Seasonal Performance Factor - the total heating output during a normal annual usage period for heating divided by the total electric power input during the same period. (Based on Region IV minimum design heating requirement).

[1] Certified in accordance with the Unitary Small Equipment certification program, which is based on ARI Standard 210/240. [2] Rated in accordance with ARI Standard 270.

PHYSICAL DATA

MODELS		BHA 018	024	030	036	042	048	060
INDOOR BLOWER	CENTRIFUGAL BLOWER (Dia. x Wd. in.)	9 X 6	10 X 8	10 X 8	10 x 8	11 X 10	11 X 10	11 X 10
	FAN MOTOR HP (Three Speed)	½	½	½	¾	¾	¾	1
INDOOR COIL	ROWS DEEP	2	2	3	3	3	3	3
	FINS PER INCH	15	13	13	15	15	16	16
	FACE AREA (Sq. Ft.)	4.38	4.38	4.38	4.38	4.38	5.62	5.62
OUTDOOR FAN	PROPELLER DIA. (in.)	22	22	22	22	22	22	22
	FAN MOTOR HP	¼	¼	¼	¼	¼	¼	¼
	NOM. CFM TOTAL	1,800	1.800	1,800	2,400	2,400	2,800	2,800
OUTDOOR COIL	ROWS DEEP	1	1	1	1	1	1	1
	FINS PER INCH	20	20	20	20	20	16	20
	FACE AREA (Sq. Ft.)	8.3	11.7	11.7	11.7	11.7	16.4	16.4
CHARGE	REFRIGERANT 22 (lbs./oz.)	4 / 12	5 / 12	7 / 8	5 / 5	5 / 5	9 / 0	10 / 0
FILTER	FACE AREA (Sq. Ft. / Qty. / Size)	4.28 / 2 / 14" x 22"						
COMPRESSOR	HERMETIC Type, (Qty. = 1)	Recip	Recip	Recip	Recip	Recip	Scroll	Scroll

COOLING CAPACITIES - 1-1/2 TON (BHA018)

Temperature of Air on Outdoor Coil			Air On Indoor Coil																			
			450 CFM				525 CFM				600 CFM				675 CFM				750 CFM			
			WB°F				WB°F				WB°F				WB°F				WB°F			
			72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57
85 °F	Net Cap MBH		20.5	19.2	16.8	17.4	21.4	19.9	17.5	18.1	22.2	20.7	18.2	18.8	22.6	21.1	18.5	19.1	23.0	21.4	18.8	19.4
	Total Power Input kW		1.84	1.81	1.80	1.79	1.87	1.84	1.83	1.81	1.89	1.87	1.86	1.84	1.92	1.89	1.88	1.86	1.94	1.92	1.90	1.89
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	11.9	14.9	16.8	17.4	13.2	16.6	17.5	18.1	14.6	18.2	18.2	18.8	15.6	19.4	18.5	19.1	16.7	20.7	18.8	19.4
		83	10.6	13.6	16.0	16.4	11.7	15.0	17.1	17.6	12.8	16.4	18.2	18.8	13.6	17.4	18.5	19.1	14.4	18.4	18.8	19.4
		80	9.3	12.3	14.8	15.1	10.2	13.5	16.2	16.5	11.1	14.7	17.6	18.0	11.6	15.4	18.2	18.7	12.2	16.2	18.8	19.4
		77	8.0	11.1	13.5	13.8	8.7	12.0	14.7	15.0	9.3	12.9	15.8	16.2	9.6	13.5	16.2	16.7	10.0	14.0	16.6	17.2
		74	6.7	9.8	12.2	12.5	7.1	10.5	13.1	13.5	7.6	11.2	14.1	14.5	7.6	11.5	14.2	14.7	7.7	11.7	14.3	15.0
		71	-	8.5	10.9	11.3	-	9.0	11.6	12.0	-	9.4	12.3	12.7	-	9.5	12.2	12.7	-	9.5	12.1	12.7
		68	-	7.2	9.6	10.0	-	7.5	10.1	10.5	-	7.7	10.6	11.0	-	7.5	10.2	10.7	-	7.3	9.9	10.5
95 °F	Net Cap MBH		19.4	17.5	15.0	15.0	20.3	18.3	15.7	15.7	21.2	19.1	16.4	16.4	21.7	19.6	16.8	16.8	22.2	20.1	17.2	17.2
	Total Power Input kW		1.98	1.94	1.90	1.90	2.01	1.97	1.92	1.93	2.03	1.99	1.94	1.95	2.06	2.02	1.97	1.98	2.09	2.04	1.99	2.00
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	11.4	14.2	15.0	15.0	12.8	15.8	15.7	15.7	14.2	17.5	16.4	16.4	15.5	18.8	16.8	16.8	16.7	20.1	17.2	17.2
		83	10.1	12.9	14.8	14.8	11.3	14.3	15.6	15.6	12.5	15.8	16.4	16.4	13.5	17.0	16.8	16.8	14.5	18.3	17.2	17.2
		80	8.9	11.6	13.6	13.6	9.8	12.8	15.0	15.0	10.7	14.0	16.4	16.4	11.5	15.0	16.8	16.8	12.2	16.0	17.2	17.2
		77	7.6	10.3	12.3	12.3	8.3	11.3	13.4	13.5	9.0	12.3	14.6	14.6	9.5	13.0	14.8	14.8	10.0	13.8	14.9	15.0
		74	6.3	9.0	11.0	11.0	6.7	9.8	11.9	11.9	7.2	10.5	12.9	12.9	7.5	11.0	12.8	12.8	7.8	11.6	12.7	12.7
		71	-	7.7	9.7	9.7	-	8.3	10.4	10.4	-	8.8	11.1	11.1	-	9.0	10.8	10.8	-	9.3	10.5	10.5
		68	-	6.5	8.4	8.4	-	6.7	8.9	8.9	-	7.0	9.4	9.4	-	7.0	8.8	8.8	-	7.1	8.2	8.3
105 °F	Net Cap MBH		18.0	15.9	13.9	13.8	18.7	16.5	14.4	14.3	19.4	17.1	14.9	14.8	19.9	17.5	15.3	15.2	20.4	17.9	15.7	15.6
	Total Power Input KW		2.11	2.04	1.99	2.00	2.14	2.07	2.02	2.03	2.17	2.10	2.05	2.05	2.20	2.13	2.08	2.08	2.23	2.16	2.11	2.12
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	10.9	13.4	13.9	13.8	12.3	14.8	14.4	14.3	13.6	16.3	14.9	14.8	14.9	17.1	15.3	15.2	16.2	17.9	15.7	15.6
		83	9.6	12.1	13.6	13.5	10.7	13.5	14.3	14.2	11.9	14.9	14.9	14.8	12.9	16.0	15.3	15.2	13.9	17.0	15.7	15.6
		80	8.3	10.9	12.3	12.2	9.2	12.0	13.6	13.5	10.1	13.2	14.9	14.8	10.9	14.2	15.3	15.2	11.7	15.2	15.7	15.6
		77	7.0	9.6	11.0	10.9	7.7	10.5	12.1	12.0	8.4	11.4	13.2	13.1	8.9	12.2	13.3	13.2	9.5	13.0	13.4	13.3
		74	5.8	8.3	9.7	9.7	6.2	9.0	10.6	10.5	6.6	9.7	11.4	11.3	6.9	10.2	11.3	11.2	7.2	10.8	11.2	11.1
		71	-	7.0	8.5	8.4	-	7.5	9.1	9.0	-	7.9	9.7	9.6	-	8.2	9.3	9.2	-	8.5	9.0	8.9
		68	-	5.7	7.2	7.1	-	6.0	7.6	7.5	-	6.2	7.9	7.8	-	6.2	7.3	7.2	-	6.3	6.7	6.6
115 °F	Net Cap MBH		16.6	14.2	12.7	12.5	17.1	14.6	13.1	12.9	17.6	15.0	13.5	13.3	18.1	15.4	13.8	13.6	18.5	15.8	14.2	13.9
	Total Power Input kW		2.23	2.13	2.09	2.09	2.26	2.17	2.13	2.12	2.30	2.20	2.16	2.16	2.34	2.24	2.19	2.19	2.38	2.27	2.23	2.23
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	10.4	12.7	12.7	12.5	11.7	13.9	13.1	12.9	13.0	15.0	13.5	13.3	14.3	15.4	13.8	13.6	15.6	15.8	14.2	13.9
		83	9.1	11.4	12.4	12.2	10.2	12.8	12.9	12.7	11.3	14.1	13.5	13.3	12.3	14.9	13.8	13.6	13.4	15.8	14.2	13.9
		80	7.8	10.1	11.1	10.9	8.7	11.3	12.3	12.1	9.5	12.4	13.5	13.3	10.3	13.4	13.8	13.6	11.1	14.5	14.2	13.9
		77	6.5	8.9	9.8	9.6	7.1	9.7	10.8	10.6	7.8	10.6	11.8	11.5	8.3	11.4	11.8	11.6	8.9	12.2	11.9	11.7
		74	5.2	7.6	8.5	8.3	5.6	8.2	9.3	9.1	6.0	8.9	10.0	9.8	6.3	9.4	9.9	9.6	6.7	10.0	9.7	9.5
		71	-	6.3	7.2	7.0	-	6.7	7.7	7.5	-	7.1	8.3	8.0	-	7.4	7.9	7.6	-	7.8	7.5	7.2
		68	-	5.0	5.9	5.8	-	5.2	6.2	6.0	-	5.4	6.5	6.3	-	5.4	5.9	5.6	-	5.5	5.2	5.0
125 °F	Net Cap MBH		15.2	12.5	11.6	11.3	15.5	12.7	11.8	11.5	15.8	13.0	12.1	11.7	16.2	13.3	12.4	12.0	16.6	13.6	12.7	12.3
	Total Power Inputkw		2.4	2.2	2.2	2.2	2.4	2.3	2.2	2.2	2.4	2.3	2.3	2.3	2.5	2.3	2.3	2.3	2.5	2.4	2.4	2.3
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	9.8	12.0	11.6	11.3	11.1	12.9	11.8	11.5	12.4	13.8	12.1	11.7	13.7	13.7	12.4	12.0	15.0	13.6	12.7	12.3
		83	8.6	10.7	11.1	10.8	9.6	12.0	11.6	11.3	10.7	13.3	12.1	11.7	11.7	13.9	12.4	12.0	12.8	14.5	12.7	12.3
		80	7.3	9.4	9.8	9.6	8.1	10.5	10.9	10.6	8.9	11.6	12.1	11.7	9.8	12.6	12.4	12.0	10.6	13.7	12.7	12.3
		77	6.0	8.1	8.5	8.3	6.6	9.0	9.4	9.1	7.2	9.8	10.3	10.0	7.8	10.6	10.4	10.0	8.3	11.4	10.4	10.1
		74	4.7	6.8	7.3	7.0	5.1	7.4	7.9	7.6	5.4	8.1	8.6	8.2	5.8	8.6	8.4	8.0	6.1	9.2	8.2	7.8
		71	-	5.6	6.0	5.7	-	5.9	6.4	6.1	-	6.3	6.8	6.5	-	6.6	6.4	6.0	-	7.0	6.0	5.6
		68	-	4.3	4.7	4.4	-	4.4	4.9	4.6	-	4.6	5.1	4.7	-	4.6	4.4	4.1	-	4.7	3.7	3.4

[1] = These capacities are net capacities - indoor fan heat deducted.

ALL SENSIBLE CAPACITY

COOLING CAPACITIES - 2 TON (BHA024)

Temperature of Air on Outdoor Coil			Air On Indoor Coil																			
			600 CFM				700 CFM				800 CFM				900 CFM				1,000 CFM			
			WB°F				WB°F				WB°F				WB°F				WB°F			
			72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57
85 °F	Net Cap MBH		25.3	23.1	20.8	20.8	26.4	24.1	21.7	21.6	27.4	25.0	22.5	22.5	28.1	25.6	23.1	23.0	28.7	26.2	23.6	23.5
	Total Power Input kW		2.21	2.18	2.14	2.12	2.26	2.23	2.18	2.16	2.30	2.27	2.22	2.20	2.33	2.30	2.25	2.22	2.35	2.32	2.27	2.25
	Sensible Capacity[1] MBH / Entering Dry Bulb,°F	86	15.1	18.8	20.8	20.8	16.7	20.9	21.7	21.6	18.4	22.9	22.5	22.5	19.9	24.5	23.1	23.0	21.4	26.2	23.6	23.5
		83	13.4	17.1	20.1	20.6	14.7	18.8	21.3	21.5	16.1	20.6	22.5	22.5	17.3	22.0	23.1	23.0	18.5	23.5	23.6	23.5
		80	11.6	15.4	18.4	18.9	12.7	16.8	20.0	20.6	13.8	18.2	21.7	22.3	14.6	19.4	22.6	22.9	15.5	20.5	23.6	23.5
		77	9.9	13.7	16.7	17.2	10.7	14.8	18.0	18.6	11.4	15.9	19.4	20.0	12.0	16.7	20.0	20.3	12.5	17.5	20.6	20.5
		74	8.2	12.0	14.9	15.4	8.7	12.8	16.0	16.5	9.1	13.6	17.1	17.6	9.3	14.0	17.3	17.6	9.5	14.5	17.6	17.6
		71	-	10.3	13.2	13.7	-	10.8	14.0	14.5	-	11.2	14.7	15.3	-	11.4	14.7	14.9	-	11.5	14.6	14.6
		68	-	8.6	11.5	12.0	-	8.7	12.0	12.5	-	8.9	12.4	13.0	-	8.7	12.0	12.3	-	8.6	11.7	11.6
95 °F	Net Cap MBH		24.3	21.6	19.3	19.3	25.2	22.4	20.0	20.0	26.0	23.2	20.6	20.7	26.5	23.6	21.0	21.1	26.9	24.0	21.4	21.4
	Total Power Input kW		2.37	2.32	2.26	2.24	2.42	2.37	2.31	2.29	2.47	2.42	2.36	2.34	2.50	2.44	2.38	2.36	2.53	2.47	2.40	2.39
	Sensible Capacity[1] MBH / Entering Dry Bulb,°F	86	14.7	18.2	19.3	19.3	16.3	20.2	20.0	20.0	18.0	22.2	20.6	20.7	19.4	23.1	21.0	21.1	20.9	24.0	21.4	21.4
		83	13.0	16.5	19.1	19.2	14.3	18.2	19.9	20.0	15.6	19.8	20.6	20.7	16.8	21.2	21.0	21.1	17.9	22.6	21.4	21.4
		80	11.3	14.8	17.4	17.5	12.3	16.2	19.0	19.1	13.3	17.5	20.5	20.7	14.1	18.5	20.9	21.1	14.9	19.6	21.4	21.4
		77	9.6	13.1	15.7	15.8	10.3	14.1	16.9	17.1	11.0	15.2	18.2	18.3	11.4	15.9	18.3	18.4	11.9	16.6	18.4	18.5
		74	7.9	11.4	14.0	14.1	8.2	12.1	14.9	15.1	8.6	12.8	15.9	16.0	8.8	13.2	15.6	15.7	8.9	13.6	15.4	15.5
		71	-	9.7	12.3	12.4	-	10.1	12.9	13.0	-	10.5	13.5	13.7	-	10.6	13.0	13.1	-	10.7	12.4	12.5
		68	-	8.0	10.6	10.7	-	8.1	10.9	11.0	-	8.2	11.2	11.3	-	7.9	10.3	10.4	-	7.7	9.4	9.5
105 °F	Net Cap MBH		22.2	19.5	17.9	17.9	23.0	20.2	18.5	18.4	23.7	20.8	19.1	19.0	24.1	21.2	19.4	19.4	24.6	21.6	19.8	19.8
	Total Power Input kW		2.53	2.45	2.41	2.39	2.58	2.51	2.46	2.44	2.64	2.56	2.51	2.49	2.67	2.59	2.54	2.52	2.70	2.62	2.57	2.54
	Sensible Capacity[1] MBH / Entering Dry Bulb,°F	86	13.9	17.3	17.9	17.9	15.5	18.8	18.5	18.4	17.1	20.3	19.1	19.0	18.6	21.0	19.4	19.4	20.1	21.6	19.8	19.8
		83	12.2	15.6	17.6	17.6	13.5	17.3	18.4	18.3	14.8	19.0	19.1	19.0	16.0	19.9	19.4	19.4	17.1	20.9	19.8	19.8
		80	10.4	13.9	15.9	15.9	11.5	15.3	17.5	17.5	12.5	16.6	19.0	19.0	13.3	17.7	19.4	19.4	14.1	18.8	19.8	19.8
		77	8.7	12.2	14.2	14.2	9.4	13.2	15.4	15.4	10.1	14.3	16.7	16.7	10.6	15.1	16.8	16.7	11.1	15.8	16.8	16.8
		74	7.0	10.5	12.5	12.5	7.4	11.2	13.4	13.4	7.8	12.0	14.4	14.3	8.0	12.4	14.1	14.1	8.2	12.9	13.9	13.8
		71	-	8.8	10.8	10.8	-	9.2	11.4	11.4	-	9.6	12.0	12.0	-	9.8	11.4	11.4	-	9.9	10.9	10.8
		68	-	7.1	9.1	9.1	-	7.2	9.4	9.4	-	7.3	9.7	9.7	-	7.1	8.8	8.8	-	6.9	7.9	7.8
115 °F	Net Cap MBH		20.2	17.4	16.6	16.4	20.8	17.9	17.0	16.9	21.3	18.4	17.5	17.3	21.8	18.8	17.9	17.7	22.3	19.2	18.3	18.1
	Total Power Input kW		2.69	2.59	2.56	2.53	2.75	2.64	2.61	2.58	2.80	2.70	2.67	2.64	2.84	2.73	2.70	2.67	2.87	2.77	2.73	2.70
	Sensible Capacity[1] MBH / Entering Dry Bulb,°F	86	13.0	16.4	16.6	16.4	14.7	17.4	17.0	16.9	16.3	18.4	17.5	17.3	17.8	18.8	17.9	17.7	19.3	19.2	18.3	18.1
		83	11.3	14.7	16.2	16.0	12.7	16.4	16.8	16.7	14.0	18.1	17.5	17.3	15.2	18.7	17.9	17.7	16.3	19.2	18.3	18.1
		80	9.6	13.0	14.4	14.3	10.6	14.4	16.0	15.8	11.7	15.8	17.5	17.3	12.5	16.9	17.9	17.7	13.4	18.0	18.3	18.1
		77	7.9	11.3	12.7	12.6	8.6	12.4	14.0	13.8	9.3	13.4	15.2	15.0	9.9	14.2	15.2	15.1	10.4	15.1	15.3	15.1
		74	6.2	9.6	11.0	10.9	6.6	10.3	11.9	11.8	7.0	11.1	12.8	12.7	7.2	11.6	12.6	12.4	7.4	12.1	12.3	12.1
		71	-	7.9	9.3	9.2	-	8.3	9.9	9.8	-	8.8	10.5	10.3	-	8.9	9.9	9.7	-	9.1	9.3	9.2
		68	-	6.2	7.6	7.5	-	6.3	7.9	7.7	-	6.4	8.2	8.0	-	6.3	7.3	7.1	-	6.1	6.4	6.2
125 °F	Net Cap MBH		18.1	15.4	15.2	14.9	18.5	15.7	15.6	15.3	19.0	16.1	16.0	15.7	19.4	16.5	16.3	16.0	19.9	16.9	16.7	16.4
	Total Power Input kW		2.8	2.7	2.7	2.7	2.9	2.8	2.8	2.7	3.0	2.8	2.8	2.8	3.0	2.9	2.9	2.8	3.0	2.9	2.9	2.9
	Sensible Capacity[1] MBH / Entering Dry Bulb,°F	86	12.2	15.5	15.2	14.9	13.9	16.0	15.6	15.3	15.5	16.6	16.0	15.7	17.0	16.7	16.3	16.0	18.5	16.9	16.7	16.4
		83	10.5	13.8	14.7	14.4	11.8	15.5	15.3	15.0	13.2	17.2	16.0	15.7	14.4	17.4	16.3	16.0	15.6	17.6	16.7	16.4
		80	8.8	12.1	13.0	12.7	9.8	13.5	14.5	14.2	10.8	14.9	16.0	15.7	11.7	16.1	16.4	16.0	12.6	17.3	16.7	16.4
		77	7.1	10.4	11.3	11.0	7.8	11.5	12.5	12.2	8.5	12.6	13.7	13.3	9.1	13.4	13.7	13.4	9.6	14.3	13.8	13.4
		74	5.4	8.7	9.5	9.3	5.8	9.4	10.4	10.1	6.2	10.2	11.3	11.0	6.4	10.8	11.1	10.7	6.6	11.3	10.8	10.5
		71	-	7.0	7.8	7.6	-	7.4	8.4	8.1	-	7.9	9.0	8.7	-	8.1	8.4	8.1	-	8.3	7.8	7.5
		68	-	5.2	6.1	5.8	-	5.4	6.4	6.1	-	5.6	6.7	6.3	-	5.5	5.7	5.4	-	5.3	4.8	4.5

[1] = These capacities are net capacities - indoor fan heat deducted.

ALL SENSIBLE CAPACITY

COOLING CAPACITIES - 2-1/2 TON (BHA030)

Temperature of Air on Outdoor Coil			Air On Indoor Coil																			
			750 CFM				875 CFM				1,000 CFM				1,125 CFM				1,250 CFM			
			WB°F				WB°F				WB°F				WB°F				WB°F			
			72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57
85 °F	Net Cap MBH		32.5	29.3	26.4	26.0	33.4	30.2	27.1	26.7	34.4	31.1	27.9	27.5	35.7	32.3	29.0	28.6	37.1	33.5	30.1	29.7
	Total Power Input kW		2.94	2.85	2.76	2.74	3.02	2.93	2.84	2.81	3.11	3.02	2.92	2.89	3.15	3.06	2.96	2.93	3.20	3.10	3.01	2.98
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	19.5	23.9	26.4	26.0	21.4	26.2	27.1	26.7	23.4	28.4	27.9	27.5	25.7	31.0	29.0	28.6	28.1	33.5	30.1	29.7
		83	17.4	21.8	25.7	26.0	18.9	23.6	26.8	26.7	20.4	25.5	27.9	27.5	22.4	28.0	29.0	28.6	24.4	30.4	30.1	29.7
		80	15.2	19.6	23.5	23.9	16.4	21.1	25.3	25.7	17.5	22.6	27.1	27.5	19.1	24.6	28.6	28.6	20.7	26.7	30.1	29.7
		77	13.1	17.5	21.4	21.7	13.9	18.6	22.8	23.2	14.6	19.7	24.2	24.6	15.8	21.3	25.3	25.3	16.9	22.9	26.4	26.0
		74	10.9	15.4	19.2	19.6	11.3	16.1	20.2	20.6	11.7	16.8	21.2	21.7	12.5	18.0	22.0	22.0	13.2	19.2	22.7	22.2
		71	-	13.2	17.1	17.5	-	13.5	17.7	18.1	-	13.9	18.3	18.8	-	14.7	18.6	18.6	-	15.5	19.0	18.5
		68	-	11.1	15.0	15.3	-	11.0	15.2	15.6	-	10.9	15.4	15.8	-	11.3	15.3	15.3	-	11.8	15.2	14.8
95 °F	Net Cap MBH		30.9	27.3	24.3	24.5	31.7	27.9	24.9	25.1	32.4	28.6	25.5	25.7	33.0	29.2	26.0	26.2	33.7	29.7	26.5	26.7
	Total Power Input kW		3.14	3.02	2.92	2.94	3.22	3.09	3.00	3.01	3.29	3.17	3.07	3.09	3.36	3.23	3.13	3.15	3.43	3.30	3.19	3.21
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	18.4	23.0	24.3	24.5	20.3	25.3	24.9	25.1	22.2	27.5	25.5	25.7	24.2	28.6	26.0	26.2	26.2	29.7	26.5	26.7
		83	16.3	20.9	24.2	24.3	17.8	22.7	24.9	25.0	19.3	24.6	25.5	25.7	20.9	26.6	26.0	26.2	22.5	28.5	26.5	26.7
		80	14.2	18.7	22.0	22.2	15.3	20.2	23.8	23.9	16.4	21.7	25.5	25.7	17.6	23.3	26.0	26.2	18.8	24.8	26.5	26.7
		77	12.0	16.6	19.9	20.1	12.8	17.7	21.3	21.4	13.5	18.8	22.6	22.8	14.3	19.9	22.7	22.9	15.1	21.1	22.8	22.9
		74	9.9	14.5	17.8	17.9	10.2	15.2	18.7	18.9	10.6	15.9	19.7	19.9	11.0	16.6	19.4	19.5	11.3	17.4	19.0	19.2
		71	-	12.3	15.6	15.8	-	12.6	16.2	16.4	-	12.9	16.8	17.0	-	13.3	16.1	16.2	-	13.6	15.3	15.5
		68	-	10.2	13.5	13.6	-	10.1	13.7	13.8	-	10.0	13.9	14.0	-	10.0	12.7	12.9	-	9.9	11.6	11.8
105 °F	Net Cap MBH		28.5	24.8	22.5	22.6	29.1	25.3	23.0	23.0	29.7	25.9	23.5	23.5	30.3	26.4	23.9	24.0	30.8	26.9	24.4	24.4
	Total Power Input kW		3.31	3.17	3.08	3.10	3.40	3.25	3.16	3.17	3.48	3.33	3.23	3.25	3.54	3.39	3.29	3.31	3.60	3.44	3.35	3.36
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	17.6	21.9	22.5	22.6	19.5	23.6	23.0	23.0	21.5	25.3	23.5	23.5	23.5	26.1	23.9	24.0	25.5	26.9	24.4	24.4
		83	15.5	19.8	22.2	22.3	17.0	21.7	22.8	22.9	18.5	23.5	23.5	23.5	20.1	24.9	23.9	24.0	21.7	26.3	24.4	24.4
		80	13.4	17.6	20.1	20.1	14.5	19.1	21.8	21.8	15.6	20.6	23.5	23.5	16.8	22.2	23.9	24.0	18.0	23.8	24.4	24.4
		77	11.2	15.5	17.9	18.0	12.0	16.6	19.2	19.3	12.7	17.7	20.6	20.6	13.5	18.9	20.6	20.6	14.3	20.0	20.6	20.7
		74	9.1	13.4	15.8	15.8	9.4	14.1	16.7	16.8	9.8	14.8	17.6	17.7	10.2	15.6	17.3	17.3	10.6	16.3	16.9	17.0
		71	-	11.2	13.7	13.7	-	11.6	14.2	14.2	-	11.9	14.7	14.8	-	12.2	14.0	14.0	-	12.6	13.2	13.2
		68	-	9.1	11.5	11.6	-	9.0	11.7	11.7	-	9.0	11.8	11.9	-	8.9	10.6	10.7	-	8.9	9.5	9.5
115 °F	Net Cap MBH		26.1	22.4	20.7	20.6	26.5	22.7	21.1	21.0	27.0	23.1	21.4	21.3	27.5	23.6	21.8	21.8	28.0	24.0	22.2	22.2
	Total Power Input kW		3.49	3.32	3.24	3.25	3.57	3.40	3.32	3.33	3.66	3.48	3.40	3.41	3.71	3.54	3.45	3.46	3.77	3.59	3.50	3.51
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	16.8	20.8	20.7	20.6	18.7	22.0	21.1	21.0	20.7	23.1	21.4	21.3	22.7	23.6	21.8	21.8	24.7	24.0	22.2	22.2
		83	14.7	18.7	20.2	20.2	16.2	20.6	20.8	20.8	17.8	22.5	21.4	21.3	19.4	23.2	21.8	21.8	20.9	24.0	22.2	22.2
		80	12.5	16.5	18.1	18.0	13.7	18.1	19.8	19.7	14.8	19.6	21.4	21.3	16.0	21.1	21.8	21.8	17.2	22.7	22.2	22.2
		77	10.4	14.4	16.0	15.9	11.2	15.5	17.2	17.2	11.9	16.7	18.5	18.4	12.7	17.8	18.5	18.4	13.5	19.0	18.5	18.4
		74	8.3	12.3	13.8	13.8	8.6	13.0	14.7	14.6	9.0	13.7	15.6	15.5	9.4	14.5	15.2	15.1	9.8	15.3	14.8	14.7
		71	-	10.1	11.7	11.6	-	10.5	12.2	12.1	-	10.8	12.7	12.6	-	11.2	11.9	11.8	-	11.5	11.1	11.0
		68	-	8.0	9.6	9.5	-	7.9	9.6	9.6	-	7.9	9.7	9.7	-	7.9	8.5	8.5	-	7.8	7.3	7.3
125 °F	Net Cap MBH		23.7	19.9	18.9	18.7	24.0	20.1	19.1	18.9	24.2	20.4	19.4	19.2	24.7	20.8	19.7	19.5	25.2	21.2	20.1	19.9
	Total Power Input kW		3.7	3.5	3.4	3.4	3.8	3.6	3.5	3.5	3.8	3.6	3.6	3.6	3.9	3.7	3.6	3.6	3.9	3.7	3.7	3.7
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	16.0	19.7	18.9	18.7	17.9	20.3	19.1	18.9	19.9	20.9	19.4	19.2	21.9	21.1	19.7	19.5	23.9	21.2	20.1	19.9
		83	13.9	17.6	18.3	18.1	15.4	19.5	18.8	18.6	17.0	21.4	19.4	19.2	18.6	21.6	19.7	19.5	20.2	21.7	20.1	19.9
		80	11.7	15.5	16.1	16.0	12.9	17.0	17.7	17.6	14.0	18.5	19.4	19.2	15.2	20.1	19.7	19.5	16.4	21.7	20.1	19.9
		77	9.6	13.3	14.0	13.8	10.4	14.5	15.2	15.0	11.1	15.6	16.4	16.2	11.9	16.8	16.4	16.2	12.7	17.9	16.4	16.2
		74	7.5	11.2	11.9	11.7	7.8	11.9	12.7	12.5	8.2	12.7	13.5	13.3	8.6	13.4	13.1	12.9	9.0	14.2	12.6	12.4
		71	-	9.0	9.7	9.6	-	9.4	10.2	10.0	-	9.8	10.6	10.4	-	10.1	9.8	9.6	-	10.5	8.9	8.7
		68	-	6.9	7.6	7.4	-	6.9	7.6	7.5	-	6.8	7.7	7.5	-	6.8	6.4	6.2	-	6.8	5.2	5.0

[1] = These capacities are net capacities - indoor fan heat deducted.

ALL SENSIBLE CAPACITY

COOLING CAPACITIES - 3 TON (BHA036)

Temperature of Air on Outdoor Coil			Air On Indoor Coil																			
			900 CFM				1,050 CFM				1,200 CFM				1,350 CFM				1,500 CFM			
			WB°F				WB°F				WB°F				WB°F				WB°F			
			72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57
85 °F	Net Cap MBH		37.1	33.9	30.2	29.4	39.8	36.4	32.4	31.5	42.5	38.9	34.6	33.7	44.4	40.6	36.1	35.2	46.3	42.3	37.7	36.6
	Total Power Input kW		3.62	3.49	3.41	3.40	3.67	3.54	3.46	3.45	3.72	3.59	3.51	3.49	3.78	3.65	3.57	3.55	3.84	3.71	3.62	3.61
	Sensible Capacity MBH[1]	Entering Dry Bulb,°F 86	22.5	28.4	30.2	29.4	25.3	31.9	32.4	31.5	28.2	35.4	34.6	33.7	30.7	38.5	36.1	35.2	33.3	41.5	37.7	36.6
		83	19.9	25.8	30.2	29.4	22.3	28.9	32.4	31.5	24.7	31.9	34.6	33.7	26.8	34.5	36.1	35.2	28.8	37.1	37.7	36.6
		80	17.3	23.2	27.6	27.5	19.3	25.8	30.7	30.6	21.2	28.4	33.8	33.7	22.8	30.5	35.7	35.2	24.3	32.6	37.7	36.6
		77	14.8	20.7	25.0	25.0	16.2	22.8	27.7	27.6	17.7	24.9	30.3	30.2	18.8	26.5	31.7	31.2	19.9	28.1	33.2	32.2
		74	12.2	18.1	22.5	22.4	13.2	19.8	24.6	24.5	14.2	21.4	26.8	26.7	14.8	22.6	27.8	27.2	15.4	23.7	28.7	27.7
		71	-	15.5	19.9	19.8	-	16.7	21.6	21.5	-	17.9	23.3	23.2	-	18.6	23.8	23.2	-	19.2	24.3	23.2
		68	-	13.0	17.3	17.3	-	13.7	18.6	18.5	-	14.4	19.8	19.7	-	14.6	19.8	19.2	-	14.7	19.8	18.8
95 °F	Net Cap MBH		36.3	31.3	27.5	26.9	38.8	33.5	29.4	28.8	41.4	35.7	31.4	30.7	43.1	37.2	32.7	32.0	44.9	38.7	34.1	33.3
	Total Power Input kW		3.84	3.70	3.62	3.62	3.88	3.75	3.67	3.66	3.93	3.80	3.71	3.71	4.00	3.86	3.77	3.77	4.06	3.92	3.83	3.83
	Sensible Capacity MBH[1]	Entering Dry Bulb,°F 86	22.6	27.1	27.5	26.9	25.5	30.5	29.4	28.8	28.4	34.0	31.4	30.7	31.2	36.3	32.7	32.0	34.0	38.7	34.1	33.3
		83	20.0	24.5	27.5	26.9	22.5	27.5	29.4	28.8	24.9	30.5	31.4	30.7	27.2	33.3	32.7	32.0	29.5	36.0	34.1	33.3
		80	17.4	22.0	25.5	25.0	19.4	24.5	28.4	27.8	21.4	27.0	31.4	30.7	23.2	29.3	32.7	32.0	25.1	31.6	34.1	33.3
		77	14.9	19.4	23.0	22.4	16.4	21.4	25.4	24.8	17.9	23.5	27.9	27.2	19.3	25.3	28.7	28.0	20.6	27.1	29.6	28.8
		74	12.3	16.8	20.4	19.9	13.4	18.4	22.4	21.8	14.4	20.0	24.4	23.7	15.3	21.3	24.7	24.0	16.1	22.6	25.1	24.4
		71	-	14.3	17.8	17.3	-	15.4	19.4	18.7	-	16.5	20.9	20.2	-	17.3	20.7	20.0	-	18.2	20.6	19.9
		68	-	11.7	15.3	14.7	-	12.3	16.3	15.7	-	13.0	17.4	16.7	-	13.3	16.8	16.1	-	13.7	16.2	15.4
105 °F	Net Cap MBH		32.4	27.9	25.1	23.7	34.8	29.9	27.0	25.5	37.1	32.0	28.8	27.2	38.7	33.3	30.0	28.3	40.2	34.6	31.2	29.5
	Total Power Input kW		4.06	3.90	3.85	3.84	4.10	3.95	3.89	3.89	4.15	3.99	3.94	3.93	4.22	4.06	4.00	4.00	4.29	4.13	4.07	4.07
	Sensible Capacity MBH[1]	Entering Dry Bulb,°F 86	21.0	25.8	25.1	23.7	23.9	28.4	27.0	25.5	26.9	31.1	28.8	27.2	29.5	32.9	30.0	28.3	32.1	34.6	31.2	29.5
		83	18.5	23.2	25.1	23.7	20.9	26.2	27.0	25.5	23.4	29.3	28.8	27.2	25.5	31.3	30.0	28.3	27.6	33.3	31.2	29.5
		80	15.9	20.6	23.1	21.8	17.9	23.2	26.0	24.5	19.9	25.8	28.8	27.2	21.5	27.9	30.0	28.3	23.2	30.1	31.2	29.5
		77	13.3	18.1	20.5	19.2	14.8	20.2	22.9	21.5	16.4	22.3	25.3	23.7	17.5	24.0	26.0	24.3	18.7	25.6	26.7	25.0
		74	10.8	15.5	18.0	16.7	11.8	17.2	19.9	18.4	12.9	18.8	21.8	20.2	13.5	20.0	22.0	20.4	14.2	21.2	22.3	20.5
		71	-	12.9	15.4	14.1	-	14.1	16.9	15.4	-	15.3	18.3	16.7	-	16.0	18.1	16.4	-	16.7	17.8	16.0
		68	-	10.4	12.8	11.5	-	11.1	13.8	12.4	-	11.8	14.8	13.2	-	12.0	14.1	12.4	-	12.2	13.3	11.6
115 °F	Net Cap MBH		28.5	24.5	22.8	20.5	30.7	26.4	24.5	22.1	32.9	28.3	26.3	23.7	34.3	29.4	27.3	24.7	35.6	30.5	28.4	25.6
	Total Power Input kW		4.27	4.10	4.07	4.07	4.32	4.14	4.12	4.12	4.37	4.19	4.16	4.16	4.44	4.26	4.23	4.23	4.52	4.33	4.30	4.30
	Sensible Capacity MBH[1]	Entering Dry Bulb,°F 86	19.5	24.5	22.8	20.5	22.4	26.4	24.5	22.1	25.3	28.3	26.3	23.7	27.8	29.4	27.3	24.7	30.2	30.5	28.4	25.6
		83	16.9	21.9	22.8	20.5	19.4	25.0	24.5	22.1	21.8	28.1	26.3	23.7	23.8	29.3	27.3	24.7	25.7	30.5	28.4	25.6
		80	14.4	19.3	20.6	18.6	16.3	22.0	23.5	21.2	18.3	24.6	26.3	23.7	19.8	26.6	27.3	24.7	21.3	28.6	28.4	25.6
		77	11.8	16.8	18.1	16.1	13.3	18.9	20.4	18.1	14.8	21.1	22.8	20.2	15.8	22.6	23.3	20.7	16.8	24.2	23.9	21.1
		74	9.2	14.2	15.5	13.5	10.3	15.9	17.4	15.1	11.3	17.6	19.3	16.7	11.8	18.7	19.4	16.7	12.3	19.7	19.4	16.7
		71	-	11.6	12.9	10.9	-	12.9	14.4	12.1	-	14.1	15.8	13.2	-	14.7	15.4	12.7	-	15.2	14.9	12.2
		68	-	9.1	10.4	8.4	-	9.8	11.3	9.0	-	10.6	12.3	9.7	-	10.7	11.4	8.7	-	10.7	10.5	7.7
125 °F	Net Cap MBH		24.7	21.1	20.4	17.4	26.7	22.8	22.1	18.8	28.7	24.5	23.7	20.2	29.8	25.5	24.6	21.0	30.9	26.4	25.5	21.7
	Total Power Input kW		4.5	4.3	4.3	4.3	4.5	4.3	4.3	4.3	4.6	4.4	4.4	4.4	4.7	4.5	4.5	4.5	4.7	4.5	4.5	4.5
	Sensible Capacity MBH[1]	Entering Dry Bulb,°F 86	18.0	23.2	20.4	17.4	20.8	24.3	22.1	18.8	23.7	25.4	23.7	20.2	26.0	25.9	24.6	21.0	28.3	26.4	25.5	21.7
		83	15.4	20.6	20.4	17.4	17.8	23.8	22.1	18.8	20.2	26.9	23.7	20.2	22.0	27.3	24.6	21.0	23.8	27.7	25.5	21.7
		80	12.8	18.0	18.2	15.5	14.8	20.7	21.0	17.8	16.7	23.4	23.7	20.2	18.0	25.3	24.6	21.0	19.4	27.2	25.5	21.7
		77	10.3	15.5	15.6	12.9	11.7	17.7	17.9	14.8	13.2	19.9	20.2	16.7	14.1	21.3	20.6	17.0	14.9	22.7	21.0	17.3
		74	7.7	12.9	13.1	10.3	8.7	14.7	14.9	11.8	9.7	16.4	16.7	13.2	10.1	17.3	16.7	13.0	10.4	18.2	16.6	12.8
		71	-	10.3	10.5	7.8	-	11.6	11.9	8.8	-	12.9	13.2	9.7	-	13.3	12.7	9.0	-	13.8	12.1	8.3
		68	-	7.8	7.9	5.2	-	8.6	8.8	5.7	-	9.4	9.7	6.2	-	9.4	8.7	5.0	-	9.3	7.6	3.9

[1] = These capacities are net capacities - indoor fan heat deducted.

ALL SENSIBLE CAPACITY

COOLING CAPACITIES - 3-1/2 TON (BHA042)

Temperature of Air on Outdoor Coil			Air On Indoor Coil																			
			1,050 CFM				1,225 CFM				1,400 CFM				1,575 CFM				1,750 CFM			
			WB°F				WB°F				WB°F				WB°F				WB°F			
			72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57
85 °F	Net Cap MBH		39.6	36.8	33.1	30.6	43.3	40.3	36.2	33.4	46.9	43.7	39.2	36.3	47.7	44.4	39.9	36.8	48.4	45.1	40.5	37.4
	Total Power Input kW		4.15	4.05	3.98	4.01	4.17	4.07	4.00	4.03	4.19	4.09	4.02	4.05	4.33	4.22	4.14	4.18	4.46	4.35	4.27	4.30
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	24.9	30.8	33.1	30.6	28.4	35.0	36.2	33.4	31.9	39.3	39.2	36.3	34.4	42.2	39.9	36.8	37.0	45.1	40.5	37.4
		83	21.9	27.8	32.7	30.6	24.9	31.5	36.0	33.4	27.8	35.2	39.2	36.3	29.8	37.6	39.9	36.8	31.8	40.0	40.5	37.4
		80	18.9	24.8	29.7	28.9	21.3	28.0	33.5	32.6	23.8	31.1	37.3	36.3	25.1	33.0	38.9	36.8	26.5	34.8	40.5	37.4
		77	15.9	21.8	26.7	25.9	17.8	24.4	30.0	29.0	19.7	27.0	33.2	32.2	20.5	28.3	34.3	32.2	21.3	29.6	35.3	32.2
		74	12.9	18.8	23.8	22.9	14.3	20.9	26.5	25.5	15.6	23.0	29.2	28.1	15.9	23.7	29.6	27.5	16.1	24.3	30.1	27.0
		71	-	15.8	20.8	19.9	-	17.3	22.9	22.0	-	18.9	25.1	24.0	-	19.0	25.0	22.9	-	19.1	24.9	21.8
		68	-	12.8	17.8	16.9	-	13.8	19.4	18.4	-	14.8	21.0	19.9	-	14.4	20.3	18.2	-	13.9	19.6	16.5
95 °F	Net Cap MBH		38.5	34.6	30.5	28.0	41.6	37.4	33.0	30.2	44.8	40.3	35.4	32.5	45.5	40.9	36.0	33.0	46.2	41.5	36.5	33.5
	Total Power Input kW		4.34	4.25	4.15	4.18	4.40	4.31	4.20	4.24	4.46	4.37	4.26	4.30	4.58	4.49	4.38	4.42	4.71	4.61	4.50	4.54
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	24.6	30.7	30.5	28.0	27.6	34.3	33.0	30.2	30.6	38.0	35.4	32.5	33.1	39.7	36.0	33.0	35.6	41.5	36.5	33.5
		83	21.6	27.7	30.5	28.0	24.0	30.8	33.0	30.2	26.5	33.9	35.4	32.5	28.4	36.2	36.0	33.0	30.4	38.6	36.5	33.5
		80	18.6	24.7	29.4	26.9	20.5	27.2	32.4	29.7	22.4	29.8	35.4	32.5	23.8	31.6	36.0	33.0	25.2	33.4	36.5	33.5
		77	15.6	21.7	26.4	23.9	17.0	23.7	28.9	26.2	18.4	25.7	31.4	28.4	19.1	27.0	31.3	28.4	19.9	28.2	31.3	28.3
		74	12.6	18.7	23.4	21.0	13.4	20.2	25.3	22.7	14.3	21.6	27.3	24.4	14.5	22.3	26.7	23.7	14.7	23.0	26.1	23.1
		71	-	15.7	20.4	18.0	-	16.6	21.8	19.1	-	17.5	23.2	20.3	-	17.7	22.0	19.1	-	17.8	20.9	17.9
		68	-	12.7	17.4	15.0	-	13.1	18.3	15.6	-	13.5	19.1	16.2	-	13.0	17.4	14.4	-	12.5	15.7	12.7
105 °F	Net Cap MBH		35.6	31.0	27.9	25.3	38.4	33.5	30.1	27.3	41.2	35.9	32.3	29.3	41.7	36.4	32.7	29.7	42.3	36.9	33.1	30.1
	Total Power Input kW		4.62	4.50	4.42	4.46	4.68	4.56	4.47	4.51	4.74	4.61	4.53	4.57	4.87	4.74	4.66	4.70	5.01	4.88	4.79	4.83
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	23.4	29.0	27.9	25.3	26.5	31.9	30.1	27.3	29.6	34.8	32.3	29.3	32.0	35.8	32.7	29.7	34.4	36.9	33.1	30.1
		83	20.4	26.0	27.9	25.3	23.0	29.2	30.1	27.3	25.5	32.3	32.3	29.3	27.3	33.9	32.7	29.7	29.2	35.5	33.1	30.1
		80	17.4	23.0	26.3	23.9	19.4	25.6	29.3	26.6	21.4	28.2	32.3	29.3	22.7	29.9	32.7	29.7	24.0	31.6	33.1	30.1
		77	14.4	20.0	23.3	20.9	15.9	22.1	25.8	23.1	17.3	24.2	28.2	25.2	18.0	25.3	28.1	25.1	18.7	26.4	27.9	24.9
		74	11.5	17.0	20.3	17.9	12.3	18.6	22.2	19.5	13.2	20.1	24.1	21.1	13.4	20.6	23.4	20.4	13.5	21.2	22.7	19.7
		71	-	14.1	17.4	14.9	-	15.0	18.7	16.0	-	16.0	20.0	17.1	-	16.0	18.8	15.8	-	16.0	17.5	14.5
		68	-	11.1	14.4	11.9	-	11.5	15.1	12.5	-	11.9	15.9	13.0	-	11.3	14.1	11.1	-	10.8	12.3	9.2
115 °F	Net Cap MBH		32.6	27.4	25.3	22.7	35.1	29.5	27.2	24.4	37.5	31.6	29.1	26.1	38.0	31.9	29.4	26.4	38.4	32.3	29.7	26.7
	Total Power Input kW		4.91	4.75	4.69	4.73	4.96	4.80	4.74	4.79	5.02	4.86	4.80	4.84	5.17	5.00	4.94	4.98	5.32	5.15	5.08	5.13
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	22.3	27.4	25.3	22.7	25.4	29.5	27.2	24.4	28.5	31.6	29.1	26.1	30.8	31.9	29.4	26.4	33.2	32.3	29.7	26.7
		83	19.3	24.4	25.3	22.7	21.9	27.6	27.2	24.4	24.4	30.8	29.1	26.1	26.2	31.5	29.4	26.4	28.0	32.3	29.7	26.7
		80	16.3	21.4	23.3	20.9	18.3	24.1	26.2	23.5	20.3	26.7	29.1	26.1	21.5	28.3	29.4	26.4	22.7	29.9	29.7	26.7
		77	13.3	18.4	20.3	17.9	14.8	20.5	22.7	20.0	16.3	22.6	25.0	22.0	16.9	23.6	24.8	21.7	17.5	24.6	24.5	21.5
		74	10.3	15.4	17.3	14.9	11.2	17.0	19.1	16.4	12.2	18.5	20.9	17.9	12.2	19.0	20.1	17.1	12.3	19.4	19.3	16.3
		71	-	12.4	14.3	11.9	-	13.4	15.6	12.9	-	14.5	16.8	13.9	-	14.3	15.5	12.4	-	14.2	14.1	11.0
		68	-	9.4	11.3	8.9	-	9.9	12.0	9.4	-	10.4	12.8	9.8	-	9.7	10.8	7.8	-	9.0	8.9	5.8
125 °F	Net Cap MBH		29.7	23.8	22.7	20.0	31.8	25.5	24.3	21.5	33.9	27.2	25.9	22.9	34.2	27.4	26.1	23.1	34.5	27.7	26.3	23.3
	Total Power Input kW		5.2	5.0	5.0	5.0	5.2	5.1	5.0	5.1	5.3	5.1	5.1	5.1	5.5	5.3	5.2	5.3	5.6	5.4	5.4	5.4
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	21.1	25.7	22.7	20.0	24.3	27.1	24.3	21.5	27.5	28.4	25.9	22.9	29.7	28.0	26.1	23.1	32.0	27.7	26.3	23.3
		83	18.1	22.7	22.7	20.0	20.8	26.0	24.3	21.5	23.4	29.3	25.9	22.9	25.1	29.2	26.1	23.1	26.7	29.1	26.3	23.3
		80	15.2	19.8	20.3	17.9	17.2	22.5	23.1	20.4	19.3	25.2	25.9	22.9	20.4	26.6	26.1	23.1	21.5	28.1	26.3	23.3
		77	12.2	16.8	17.3	14.9	13.7	18.9	19.6	16.9	15.2	21.1	21.8	18.8	15.8	22.0	21.5	18.4	16.3	22.9	21.1	18.0
		74	9.2	13.8	14.3	11.9	10.2	15.4	16.0	13.3	11.1	17.0	17.8	14.7	11.1	17.3	16.8	13.8	11.1	17.6	15.9	12.8
		71	-	10.8	11.3	8.9	-	11.8	12.5	9.8	-	12.9	13.7	10.7	-	12.7	12.2	9.1	-	12.4	10.7	7.6
		68	-	7.8	8.3	5.9	-	8.3	8.9	6.2	-	8.8	9.6	6.6	-	8.0	7.5	4.5	-	7.2	5.5	2.4

[1] = These capacities are net capacities - indoor fan heat deducted.

ALL SENSIBLE CAPACITY

COOLING CAPACITIES - 4 TON (BHA048)

Temperature of Air on Outdoor Coil			Air On Indoor Coil																			
			1200 CFM				1400 CFM				1600 CFM				1800 CFM				2000 CFM			
			WB°F				WB°F				WB°F				WB°F				WB°F			
			72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57
85 °F	Net Cap MBH		53.1	48.6	44.5	43.1	54.8	50.1	45.9	44.5	56.4	51.6	47.4	45.9	57.7	52.8	48.4	46.9	58.9	53.9	49.4	47.8
	Total Power Input KW		4.76	4.68	4.55	4.56	4.89	4.81	4.67	4.69	5.03	4.94	4.80	4.82	5.12	5.03	4.89	4.91	5.21	5.13	4.98	5.00
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	31.3	38.8	44.5	43.1	34.7	42.8	45.9	44.5	38.1	46.8	47.4	45.9	41.5	50.3	48.4	46.9	44.9	53.9	49.4	47.8
		83	27.9	35.4	41.7	41.9	30.7	38.8	44.5	43.9	33.4	42.2	47.4	45.9	36.2	45.6	48.4	46.9	39.0	49.1	49.4	47.8
		80	24.5	32.0	38.3	38.5	26.6	34.7	41.6	41.8	28.7	37.5	44.9	45.2	30.9	40.3	47.1	46.5	33.0	43.1	49.4	47.8
		77	21.1	28.5	34.8	35.1	22.6	30.7	37.5	37.8	24.1	32.8	40.2	40.5	25.6	35.0	41.8	41.2	27.1	37.1	43.4	41.9
		74	17.6	25.1	31.4	31.7	18.5	26.6	33.5	33.8	19.4	28.2	35.6	35.9	20.2	29.7	36.5	35.9	21.1	31.2	37.5	35.9
		71	-	21.7	28.0	28.2	-	22.6	29.4	29.7	-	23.5	30.9	31.2	-	24.4	31.2	30.6	-	25.2	31.5	30.0
		68	-	18.3	24.6	24.8	-	18.6	25.4	25.7	-	18.8	26.2	26.5	-	19.0	25.9	25.3	-	19.2	25.5	24.0
95 °F	Net Cap MBH		49.6	45.3	41.4	40.0	51.4	47.0	42.9	41.4	53.3	48.7	44.4	42.9	54.5	49.8	45.5	43.9	55.8	51.0	46.6	45.0
	Total Power Input KW		5.12	4.98	4.90	4.88	5.27	5.12	5.04	5.03	5.42	5.27	5.19	5.18	5.53	5.38	5.30	5.28	5.64	5.49	5.40	5.39
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	29.4	36.9	41.4	40.0	32.8	41.1	42.9	41.4	36.3	45.3	44.4	42.9	39.7	48.2	45.5	43.9	43.1	51.0	46.6	45.0
		83	25.9	33.5	38.8	38.8	28.8	37.1	41.6	40.8	31.6	40.6	44.4	42.9	34.4	44.1	45.5	43.9	37.1	47.6	46.6	45.0
		80	22.5	30.1	35.3	35.3	24.7	33.0	38.8	38.8	26.9	36.0	42.3	42.3	29.1	38.8	44.4	43.6	31.2	41.6	46.6	45.0
		77	19.1	26.6	31.9	31.9	20.7	29.0	34.8	34.8	22.3	31.3	37.6	37.6	23.8	33.5	39.1	38.3	25.2	35.7	40.6	39.0
		74	15.7	23.2	28.5	28.5	16.6	24.9	30.7	30.7	17.6	26.6	33.0	33.0	18.4	28.2	33.8	33.0	19.3	29.7	34.6	33.0
		71	-	19.8	25.1	25.1	-	20.9	26.7	26.7	-	22.0	28.3	28.3	-	22.9	28.5	27.7	-	23.7	28.7	27.1
		68	-	16.4	21.7	21.7	-	16.8	22.6	22.7	-	17.3	23.6	23.6	-	17.5	23.2	22.4	-	17.8	22.7	21.1
105 °F	Net Cap MBH		46.0	41.9	38.8	36.8	47.5	43.3	40.0	38.0	49.0	44.6	41.3	39.2	50.0	45.6	42.1	40.0	51.0	46.5	43.0	40.9
	Total Power Input KW		5.60	5.43	5.32	5.27	5.76	5.58	5.47	5.42	5.91	5.74	5.62	5.56	6.02	5.84	5.73	5.67	6.13	5.95	5.83	5.77
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	28.3	35.7	38.8	36.8	31.6	39.3	40.0	38.0	34.9	43.0	41.3	39.2	38.2	44.7	42.1	40.0	41.4	46.5	43.0	40.9
		83	24.8	32.3	36.9	36.0	27.5	35.7	39.1	37.6	30.2	39.1	41.3	39.2	32.8	42.0	42.1	40.0	35.4	44.8	43.0	40.9
		80	21.4	28.9	33.4	32.6	23.5	31.7	36.7	35.8	25.6	34.5	39.9	38.9	27.5	37.1	41.5	39.9	29.5	39.7	43.0	40.9
		77	18.0	25.4	30.0	29.2	19.5	27.6	32.6	31.7	20.9	29.8	35.3	34.2	22.2	31.8	36.2	34.6	23.5	33.7	37.0	34.9
		74	14.6	22.0	26.6	25.7	15.4	23.6	28.6	27.7	16.2	25.1	30.6	29.6	16.9	26.4	30.8	29.3	17.5	27.8	31.1	28.9
		71	-	18.6	23.2	22.3	-	19.5	24.6	23.6	-	20.5	25.9	24.9	-	21.1	25.5	23.9	-	21.8	25.1	23.0
		68	-	15.2	19.8	18.9	-	15.5	20.5	19.6	-	15.8	21.3	20.3	-	15.8	20.2	18.6	-	15.8	19.2	17.0
115 °F	Net Cap MBH		42.4	38.5	36.2	33.7	43.6	39.6	37.2	34.6	44.7	40.6	38.1	35.5	45.5	41.3	38.8	36.1	46.3	42.0	39.4	36.7
	Total Power Input KW		6.08	5.89	5.75	5.65	6.24	6.04	5.90	5.80	6.40	6.20	6.05	5.95	6.51	6.30	6.15	6.05	6.62	6.41	6.25	6.15
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	27.2	34.5	36.2	33.7	30.4	37.6	37.2	34.6	33.5	40.6	38.1	35.5	36.6	41.3	38.8	36.1	39.7	42.0	39.4	36.7
		83	23.8	31.1	35.0	33.3	26.3	34.4	36.5	34.4	28.9	37.6	38.1	35.5	31.3	39.8	38.8	36.1	33.7	42.0	39.4	36.7
		80	20.3	27.7	31.5	29.8	22.3	30.3	34.6	32.7	24.2	32.9	37.6	35.5	26.0	35.4	38.5	36.1	27.8	37.8	39.4	36.7
		77	16.9	24.2	28.1	26.4	18.2	26.3	30.5	28.6	19.5	28.3	32.9	30.9	20.7	30.0	33.2	30.8	21.8	31.8	33.5	30.8
		74	13.5	20.8	24.7	23.0	14.2	22.2	26.5	24.6	14.9	23.6	28.2	26.2	15.4	24.7	27.9	25.5	15.8	25.9	27.5	24.8
		71	-	17.4	21.3	19.6	-	18.2	22.4	20.5	-	19.0	23.6	21.5	-	19.4	22.6	20.2	-	19.9	21.6	18.9
		68	-	14.0	17.9	16.1	-	14.1	18.4	16.5	-	14.3	18.9	16.9	-	14.1	17.2	14.9	-	13.9	15.6	12.9
125 °F	Net Cap MBH		38.9	35.1	33.6	30.6	39.7	35.9	34.3	31.2	40.5	36.6	35.0	31.8	41.0	37.1	35.4	32.2	41.5	37.5	35.9	32.6
	Total Power Input KW		6.6	6.3	6.2	6.0	6.7	6.5	6.3	6.2	6.9	6.7	6.5	6.3	7.0	6.8	6.6	6.4	7.1	6.9	6.7	6.5
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	26.1	33.3	33.6	30.6	29.1	35.8	34.3	31.2	32.2	36.6	35.0	31.8	35.1	37.1	35.4	32.2	38.0	37.5	35.9	32.6
		83	22.7	29.9	33.1	30.5	25.1	33.0	34.0	31.2	27.5	36.1	35.0	31.8	29.7	37.1	35.4	32.2	32.0	37.5	35.9	32.6
		80	19.2	26.5	29.6	27.1	21.0	29.0	32.4	29.6	22.8	31.4	35.0	31.8	24.4	33.6	35.4	32.2	26.0	35.9	35.9	32.6
		77	15.8	23.1	26.2	23.7	17.0	24.9	28.4	25.6	18.2	26.8	30.5	27.5	19.1	28.3	30.2	27.1	20.1	29.9	29.9	26.7
		74	12.4	19.6	22.8	20.2	12.9	20.9	24.3	21.5	13.5	22.1	25.9	22.8	13.8	23.0	24.9	21.8	14.1	23.9	24.0	20.7
		71	-	16.2	19.4	16.8	-	16.8	20.3	17.5	-	17.4	21.2	18.1	-	17.7	19.6	16.4	-	18.0	18.0	14.7
		68	-	12.8	16.0	13.4	-	12.8	16.2	13.4	-	12.8	16.5	13.5	-	12.4	14.3	11.1	-	12.0	12.0	8.8

[1] = These capacities are net capacities - indoor fan heat deducted.

ALL SENSIBLE CAPACITY

COOLING CAPACITIES - 5 TON (BHA060)

Temperature of Air on Outdoor Coil			Air On Indoor Coil																			
			1500 CFM				1750 CFM				2000 CFM				2100 CFM				2200 CFM			
			WB°F				WB°F				WB°F				WB°F				WB°F			
			72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57	72	67	62	57
85 °F	Net Cap MBH		64.1	58.6	52.4	52.6	65.4	59.8	53.5	53.6	66.7	60.9	54.5	54.7	66.0	60.3	54.0	54.1	65.3	59.7	53.4	53.5
	Total Power Input KW		5.52	5.49	5.37	5.44	5.68	5.65	5.52	5.60	5.84	5.81	5.68	5.75	5.95	5.92	5.79	5.87	6.06	6.03	5.90	5.98
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	37.2	47.6	52.4	52.6	41.0	52.3	53.5	53.6	44.9	57.0	54.5	54.7	46.0	58.3	54.0	54.1	47.1	59.5	53.4	53.5
		83	32.9	43.4	50.7	41.3	36.0	47.3	52.6	53.0	39.0	51.2	54.5	54.7	39.8	52.1	54.0	54.1	40.5	53.0	53.4	53.5
		80	28.6	39.1	46.4	47.1	30.9	42.2	50.1	50.9	33.2	45.4	53.9	54.7	33.6	45.9	53.6	54.1	34.0	46.4	53.4	53.5
		77	24.3	34.8	42.1	42.8	25.9	37.2	45.1	45.8	27.4	39.6	48.0	48.8	27.4	39.7	47.4	47.9	27.4	39.8	46.8	47.0
		74	20.0	30.5	37.8	38.5	20.8	32.1	40.0	40.8	21.5	33.7	42.2	43.0	21.2	33.5	41.2	41.7	20.8	33.3	40.3	40.4
		71	-	26.2	33.6	34.2	-	27.1	35.0	35.7	-	27.9	36.4	37.2	-	27.3	35.0	35.5	-	26.7	33.7	33.8
		68	-	22.0	29.3	30.0	-	22.0	29.9	30.6	-	22.1	30.5	31.3	-	21.1	28.8	29.3	-	20.2	27.2	27.3
95 °F	Net Cap MBH		60.1	54.6	50.2	49.2	61.5	55.8	51.4	50.3	63.0	57.1	52.6	51.5	63.9	58.0	53.4	52.3	64.9	58.9	54.2	53.0
	Total Power Input KW		6.00	5.90	5.81	5.77	6.19	6.09	5.99	5.95	6.37	6.27	6.17	6.12	6.49	6.38	6.28	6.24	6.60	6.50	6.39	6.35
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	35.5	46.0	50.2	49.2	39.5	51.1	51.4	50.3	43.6	56.1	52.6	51.5	45.1	57.5	53.4	52.3	46.6	58.9	54.2	53.0
		83	31.2	41.8	48.6	47.7	34.5	46.0	50.6	49.6	37.8	50.3	52.6	51.5	38.9	51.7	53.4	52.3	40.0	53.2	54.2	53.0
		80	26.9	37.5	44.3	43.4	29.4	41.0	48.4	47.4	31.9	44.5	52.6	51.5	32.7	45.5	53.4	52.3	33.5	46.6	54.2	53.0
		77	22.6	33.2	40.0	39.1	24.4	35.9	43.4	42.4	26.1	38.6	46.7	45.6	26.5	39.3	47.2	46.1	26.9	40.1	47.6	46.5
		74	18.4	28.9	35.8	34.8	19.3	30.9	38.3	37.3	20.3	32.8	40.9	39.8	20.3	33.2	41.0	39.9	20.4	33.5	41.1	39.9
		71	-	24.6	31.5	30.6	-	25.8	33.3	32.3	-	27.0	35.1	34.0	-	27.0	34.8	33.7	-	27.0	34.5	33.4
		68	-	20.4	27.2	26.3	-	20.7	28.2	27.2	-	21.1	29.2	28.2	-	20.8	28.6	27.5	-	20.4	27.9	26.8
105 °F	Net Cap MBH		56.1	50.2	46.6	45.4	57.5	51.4	47.8	46.5	58.9	52.7	48.9	47.6	59.7	53.4	49.6	48.3	60.5	54.1	50.3	48.9
	Total Power Input KW		6.56	6.43	6.35	6.32	6.75	6.62	6.53	6.51	6.94	6.80	6.71	6.69	7.06	6.92	6.83	6.80	7.18	7.04	6.94	6.92
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	34.5	44.3	46.6	45.4	38.4	48.2	47.8	46.5	42.3	52.2	48.9	47.6	43.7	53.1	49.6	48.3	45.1	54.1	50.3	48.9
		83	30.3	40.0	45.7	44.6	33.4	44.1	47.3	46.1	36.5	48.1	48.9	47.6	37.5	49.3	49.6	48.3	38.5	50.6	50.3	48.9
		80	26.0	35.8	41.5	40.4	28.3	39.0	45.2	44.0	30.7	42.2	48.9	47.6	31.3	43.1	49.6	48.3	32.0	44.0	50.3	48.9
		77	21.7	31.5	37.2	36.1	23.3	33.9	40.1	38.9	24.8	36.4	43.1	41.8	25.1	36.9	43.4	42.1	25.4	37.4	43.7	42.4
		74	17.4	27.2	32.9	31.8	18.2	28.9	35.1	33.9	19.0	30.6	37.3	36.0	18.9	30.7	37.2	35.9	18.8	30.9	37.2	35.8
		71	-	22.9	28.6	27.5	-	23.8	30.0	28.8	-	24.7	31.5	30.2	-	24.5	31.0	29.7	-	24.3	30.6	29.3
		68	-	18.7	24.3	23.2	-	18.8	25.0	23.8	-	18.9	25.6	24.3	-	18.3	24.8	23.5	-	17.8	24.0	22.7
115 °F	Net Cap MBH		52.0	45.8	43.1	41.6	53.4	47.0	44.2	42.7	54.8	48.2	45.3	43.8	55.4	48.8	45.9	44.3	56.1	49.3	46.4	44.8
	Total Power Input KW		7.13	6.96	6.89	6.88	7.32	7.15	7.07	7.06	7.51	7.34	7.26	7.25	7.64	7.46	7.38	7.37	7.76	7.58	7.50	7.49
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	33.6	42.6	43.1	41.6	37.3	45.4	44.2	42.7	41.1	48.2	45.3	43.8	42.3	48.8	45.9	44.3	43.5	49.3	46.4	44.8
		83	29.3	38.3	42.9	41.6	32.3	42.1	44.1	42.7	35.2	45.8	45.3	43.8	36.1	46.9	45.9	44.3	37.0	47.9	46.4	44.8
		80	25.0	34.1	38.6	37.3	27.2	37.0	42.0	40.6	29.4	40.0	45.3	43.8	29.9	40.7	45.9	44.3	30.4	41.4	46.4	44.8
		77	20.8	29.8	34.3	33.0	22.2	32.0	36.9	35.5	23.6	34.2	39.5	38.0	23.7	34.5	39.7	38.1	23.9	34.8	39.8	38.3
		74	16.5	25.5	30.0	28.8	17.1	26.9	31.9	30.5	17.7	28.3	33.7	32.2	17.5	28.3	33.5	31.9	17.3	28.3	33.3	31.7
		71	-	21.2	25.8	24.5	-	21.9	26.8	25.4	-	22.5	27.8	26.3	-	22.1	27.3	25.7	-	21.7	26.7	25.2
		68	-	16.9	21.5	20.2	-	16.8	21.7	20.3	-	16.7	22.0	20.5	-	15.9	21.1	19.6	-	15.2	20.2	18.6
125 °F	Net Cap MBH		48.0	41.4	39.5	37.8	49.3	42.6	40.6	38.9	50.7	43.7	41.7	40.0	51.2	44.1	42.1	40.4	51.6	44.5	42.5	40.7
	Total Power Input KW		7.69	7.49	7.42	7.43	7.89	7.68	7.61	7.62	8.08	7.87	7.80	7.81	8.21	8.00	7.92	7.93	8.34	8.12	8.05	8.06
	Sensible Capacity MBH[1] Entering Dry Bulb,°F	86	32.7	40.9	39.5	37.8	36.2	42.6	40.6	38.9	39.8	43.7	41.7	40.0	40.9	44.1	42.1	40.4	42.0	44.5	42.5	40.7
		83	28.4	36.6	39.5	37.8	31.2	40.1	40.6	38.9	34.0	43.6	41.7	40.0	34.7	44.1	42.1	40.4	35.5	44.5	42.5	40.7
		80	24.1	32.3	35.7	34.3	26.1	35.1	38.7	37.1	28.2	37.8	41.7	40.0	28.5	38.3	42.1	40.4	28.9	38.8	42.5	40.7
		77	19.8	28.1	31.4	30.0	21.1	30.0	33.7	32.1	22.3	31.9	35.9	34.2	22.3	32.1	35.9	34.2	22.3	32.2	35.9	34.2
		74	15.5	23.8	27.2	25.7	16.0	25.0	28.6	27.0	16.5	26.1	30.0	28.3	16.1	25.9	29.7	28.0	15.8	25.6	29.4	27.6
		71	-	19.5	22.9	21.4	-	19.9	23.6	22.0	-	20.3	24.2	22.5	-	19.7	23.5	21.8	-	19.1	22.8	21.1
		68	-	15.2	18.6	17.1	-	14.8	18.5	16.9	-	14.5	18.4	16.7	-	13.5	17.3	15.6	-	12.5	16.3	14.5

[1] = These capacities are net capacities - indoor fan heat deducted.

ALL SENSIBLE CAPACITY

HEATING CAPACITIES - 1-1/2 TON (BHA018)

CFM	RETURN AIR °F	CAP[1] & KW	OUTDOOR AIR TEMPERATURE, °F (72% RH)							
			-10	0	10	20	30	40	50	60
450	55	MBH	5.024	6.289	7.836	9.728	12.041	14.869	18.326	22.553
		KW	1.062	1.160	1.257	1.354	1.451	1.548	1.645	1.742
	70	MBH	4.297	5.562	7.109	9.001	11.314	14.142	17.599	21.826
		KW	1.199	1.297	1.394	1.491	1.588	1.685	1.782	1.879
	80	MBH	3.080	4.345	5.892	7.784	10.097	12.925	16.382	20.609
		KW	1.261	1.359	1.456	1.553	1.650	1.747	1.844	1.941
600	55	MBH	6.412	7.677	9.224	11.116	13.429	16.257	19.714	23.941
		KW	1.072	1.170	1.267	1.364	1.461	1.558	1.655	1.752
	70	MBH	5.685	6.950	8.497	10.389	12.702	15.530	18.987	23.214
		KW	1.209	1.307	1.404	1.501	1.598	1.695	1.792	1.889
	80	MBH	4.468	5.733	7.280	9.172	11.485	14.313	17.770	21.997
		KW	1.271	1.369	1.466	1.563	1.660	1.757	1.854	1.951
750	55	MBH	7.000	8.265	9.812	11.704	14.017	16.845	20.302	24.529
		KW	1.066	1.164	1.261	1.358	1.455	1.552	1.649	1.746
	70	MBH	6.273	7.538	9.085	10.977	13.290	16.118	19.575	23.802
		KW	1.203	1.301	1.398	1.495	1.592	1.689	1.786	1.883
	80	MBH	5.056	6.321	7.868	9.760	12.073	14.901	18.358	22.585
		KW	1.265	1.363	1.460	1.557	1.654	1.751	1.848	1.945

HEATING CAPACITIES - 2 TON (BHA024)

CFM	RETURN AIR °F	CAP[1] & KW	OUTDOOR AIR TEMPERATURE, °F (72% RH)							
			-10	0	10	20	30	40	50	60
600	55	MBH	6.195	7.735	9.640	11.996	14.910	18.513	22.970	28.481
		KW	1.227	1.380	1.532	1.685	1.837	1.989	2.142	2.294
	70	MBH	4.898	6.438	8.343	10.699	13.613	17.216	21.673	27.184
		KW	1.342	1.495	1.647	1.800	1.952	2.104	2.257	2.409
	80	MBH	3.414	4.954	6.859	9.215	12.129	15.732	20.189	25.700
		KW	1.402	1.555	1.707	1.860	2.012	2.164	2.317	2.469
800	55	MBH	7.803	9.343	11.248	13.604	16.518	20.121	24.578	30.089
		KW	1.233	1.386	1.538	1.691	1.843	1.995	2.148	2.300
	70	MBH	6.506	8.046	9.951	12.307	15.221	18.824	23.281	28.792
		KW	1.348	1.501	1.653	1.806	1.958	2.110	2.263	2.415
	80	MBH	5.022	6.562	8.467	10.823	13.737	17.340	21.797	27.308
		KW	1.408	1.561	1.713	1.866	2.018	2.170	2.323	2.475
1,000	55	MBH	9.523	11.063	12.968	15.324	18.238	21.841	26.298	31.809
		KW	1.253	1.406	1.558	1.711	1.863	2.015	2.168	2.320
	70	MBH	8.226	9.766	11.671	14.027	16.941	20.544	25.001	30.512
		KW	1.368	1.521	1.673	1.826	1.978	2.130	2.283	2.435
	80	MBH	6.742	8.282	10.187	12.543	15.457	19.060	23.517	29.028
		KW	1.428	1.581	1.733	1.886	2.038	2.190	2.343	2.495

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

HEATING CAPACITIES - 2-1/2 TON (BHA030)

CFM	RETURN AIR °F	CAP[1] & KW	OUTDOOR AIR TEMPERATURE, °F (72% RH)							
			-10	0	10	20	30	40	50	60
750	55	MBH	8.239	10.151	12.469	15.280	18.687	22.817	27.824	33.893
		KW	1.515	1.673	1.832	1.990	2.148	2.306	2.465	2.623
	70	MBH	7.038	8.950	11.268	14.079	17.486	21.616	26.623	32.692
		KW	1.690	1.848	2.007	2.165	2.323	2.481	2.640	2.798
	80	MBH	5.302	7.214	9.532	12.343	15.750	19.880	24.887	30.956
		KW	1.802	1.960	2.119	2.277	2.435	2.593	2.752	2.910
1,000	55	MBH	10.209	12.121	14.439	17.250	20.657	24.787	29.794	35.863
		KW	1.530	1.688	1.847	2.005	2.163	2.321	2.480	2.638
	70	MBH	9.008	10.920	13.238	16.049	19.456	23.586	28.593	34.662
		KW	1.705	1.863	2.022	2.180	2.338	2.496	2.655	2.813
	80	MBH	7.272	9.184	11.502	14.313	17.720	21.850	26.857	32.926
		KW	1.817	1.975	2.134	2.292	2.450	2.608	2.767	2.925
1,250	55	MBH	11.402	13.314	15.632	18.443	21.850	25.980	30.987	37.056
		KW	1.552	1.710	1.869	2.027	2.185	2.343	2.502	2.660
	70	MBH	10.201	12.113	14.431	17.242	20.649	24.779	29.786	35.855
		KW	1.727	1.885	2.044	2.202	2.360	2.518	2.677	2.835
	80	MBH	8.465	10.377	12.695	15.506	18.913	23.043	28.050	34.119
		KW	1.839	1.997	2.156	2.314	2.472	2.630	2.789	2.947

HEATING CAPACITIES - 3 TON (BHA036)

CFM	RETURN AIR °F	CAP[1] & KW	OUTDOOR AIR TEMPERATURE, °F (72% RH)							
			-10	0	10	20	30	40	50	60
900	55	MBH	9.144	11.465	14.209	17.452	21.284	25.814	31.167	37.494
		KW	2.186	2.314	2.442	2.570	2.698	2.826	2.955	3.083
	70	MBH	8.834	11.155	13.899	17.142	20.974	25.504	30.857	37.184
		KW	2.451	2.579	2.707	2.835	2.963	3.091	3.220	3.348
	80	MBH	7.285	9.606	12.35	15.593	19.425	23.955	29.308	35.635
		KW	2.596	2.724	2.852	2.980	3.108	3.236	3.365	3.493
1,200	55	MBH	13.075	15.396	18.14	21.383	25.215	29.745	35.098	41.425
		KW	2.156	2.284	2.412	2.540	2.668	2.796	2.925	3.053
	70	MBH	12.765	15.086	17.83	21.073	24.905	29.435	34.788	41.115
		KW	2.421	2.549	2.677	2.805	2.933	3.061	3.190	3.318
	80	MBH	11.216	13.537	16.281	19.524	23.356	27.886	33.239	39.566
		KW	2.566	2.694	2.822	2.950	3.078	3.206	3.335	3.463
1,500	55	MBH	15.343	17.664	20.408	23.651	27.483	32.013	37.366	43.693
		KW	2.156	2.284	2.412	2.540	2.668	2.796	2.925	3.053
	70	MBH	15.033	17.354	20.098	23.341	27.173	31.703	37.056	43.383
		KW	2.421	2.549	2.677	2.805	2.933	3.061	3.190	3.318
	80	MBH	13.484	15.805	18.549	21.792	25.624	30.154	35.507	41.834
		KW	2.566	2.694	2.822	2.950	3.078	3.206	3.335	3.463

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

HEATING CAPACITIES - 3-1/2 TON (BHA042)

CFM	RETURN AIR °F	CAP[1] & KW	OUTDOOR AIR TEMPERATURE, °F (72% RH)							
			-10	0	10	20	30	40	50	60
1,050	55	MBH	9.904	12.549	15.725	19.537	24.114	29.608	36.204	44.121
		KW	2.419	2.565	2.711	2.858	3.004	3.150	3.296	3.443
	70	MBH	8.570	11.215	14.391	18.203	22.780	28.274	34.870	42.787
		KW	2.700	2.846	2.992	3.139	3.285	3.431	3.577	3.724
	80	MBH	6.102	8.747	11.923	15.735	20.312	25.806	32.402	40.319
		KW	2.904	3.050	3.196	3.343	3.489	3.635	3.781	3.928
1,400	55	MBH	14.531	17.176	20.352	24.164	28.741	34.235	40.831	48.748
		KW	2.415	2.561	2.707	2.854	3.000	3.146	3.292	3.439
	70	MBH	13.197	15.842	19.018	22.830	27.407	32.901	39.497	47.414
		KW	2.696	2.842	2.988	3.135	3.281	3.427	3.573	3.720
	80	MBH	10.729	13.374	16.550	20.362	24.939	30.433	37.029	44.946
		KW	2.900	3.046	3.192	3.339	3.485	3.631	3.777	3.924
1,750	55	MBH	15.133	17.778	20.954	24.766	29.343	34.837	41.433	49.350
		KW	2.562	2.708	2.854	3.001	3.147	3.293	3.439	3.586
	70	MBH	13.799	16.444	19.620	23.432	28.009	33.503	40.099	48.016
		KW	2.843	2.989	3.135	3.282	3.428	3.574	3.720	3.867
	80	MBH	11.331	13.976	17.152	20.964	25.541	31.035	37.631	45.548
		KW	3.047	3.193	3.339	3.486	3.632	3.778	3.924	4.071

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

HEATING CAPACITIES - 4 TON (BHA048)

CFM	RETURN AIR °F	CAP[1] & KW	OUTDOOR AIR TEMPERATURE, °F (72% RH)							
			-10	0	10	20	30	40	50	60
1,200	55	MBH	17.108	20.080	23.566	27.654	32.449	38.073	44.669	52.406
		KW	3.178	3.283	3.388	3.493	3.598	3.702	3.807	3.912
	70	MBH	15.640	18.612	22.098	26.186	30.981	36.605	43.201	50.938
		KW	3.687	3.792	3.897	4.002	4.107	4.211	4.316	4.421
	80	MBH	14.678	17.650	21.136	25.224	30.019	35.643	42.239	49.976
		KW	3.982	4.087	4.192	4.297	4.402	4.506	4.611	4.716
1,600	55	MBH	18.660	21.632	25.118	29.206	34.001	39.625	46.221	53.958
		KW	3.077	3.182	3.287	3.392	3.497	3.601	3.706	3.811
	70	MBH	17.192	20.164	23.650	27.738	32.533	38.157	44.753	52.490
		KW	3.586	3.691	3.796	3.901	4.006	4.110	4.215	4.320
	80	MBH	16.230	19.202	22.688	26.776	31.571	37.195	43.791	51.528
		KW	3.881	3.986	4.091	4.196	4.301	4.405	4.510	4.615
2,000	55	MBH	21.227	24.199	27.685	31.773	36.568	42.192	48.788	56.525
		KW	3.138	3.243	3.348	3.453	3.558	3.662	3.767	3.872
	70	MBH	19.759	22.731	26.217	30.305	35.100	40.724	47.320	55.057
		KW	3.647	3.752	3.857	3.962	4.067	4.171	4.276	4.381
	80	MBH	18.797	21.769	25.255	29.343	34.138	39.762	46.358	54.095
		KW	3.942	4.047	4.152	4.257	4.362	4.466	4.571	4.676

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

HEATING CAPACITIES - 5 TON (BHA060)

CFM	RETURN AIR °F	CAP[1] & KW	OUTDOOR AIR TEMPERATURE, °F (72% RH)							
			-10	0	10	20	30	40	50	60
1,500	55	MBH	19.316	23.261	27.902	33.364	39.79	47.351	56.247	66.714
		KW	3.57	3.829	4.088	4.347	4.606	4.865	5.124	5.383
	70	MBH	18.491	22.436	27.077	32.539	38.965	46.526	55.422	65.889
		KW	4.061	4.32	4.579	4.838	5.097	5.356	5.615	5.874
	80	MBH	15.362	19.307	23.948	29.41	35.836	43.397	52.293	62.76
		KW	4.358	4.617	4.876	5.135	5.394	5.653	5.912	6.171
2,000	55	MBH	23.164	27.109	31.75	37.212	43.638	51.199	60.095	70.562
		KW	3.624	3.883	4.142	4.401	4.66	4.919	5.178	5.437
	70	MBH	22.339	26.284	30.925	36.387	42.813	50.374	59.27	69.737
		KW	4.115	4.374	4.633	4.892	5.151	5.41	5.669	5.928
	80	MBH	19.21	23.155	27.796	33.258	39.684	47.245	56.141	66.608
		KW	4.412	4.671	4.93	5.189	5.448	5.707	5.966	6.225
2,500	55	MBH	24.796	28.741	33.382	38.844	45.27	52.831	61.727	72.194
		KW	3.754	4.013	4.272	4.531	4.79	5.049	5.308	5.567
	70	MBH	23.971	27.916	32.557	38.019	44.445	52.006	60.902	71.369
		KW	4.245	4.504	4.763	5.022	5.281	5.54	5.799	6.058
	80	MBH	20.842	24.787	29.428	34.89	41.316	48.877	57.773	68.24
		KW	4.542	4.801	5.06	5.319	5.578	5.837	6.096	6.355

APPLICATION DATA

MODEL		BHA						
		018	024	030	036	042	048	060
MINIMUM AIR FLOW (CFM)	COOLING	450	600	750	900	1,050	1,200	1,500
	HEATING	450	600	750	900	1,050	1,200	1,500
MAXIMUM AIR FLOW (CFM)	COOLING	750	1,000	1,250	1,500	1,750	2,000	2,500
	HEATING	750	1,000	1,250	1,500	1,750	2,000	2,500
MINIMUM OPERATING TEMPERATURE IN COOLING MODE (AMBIENT, °F)		45	45	45	45	45	45	45
MINIMUM MIXED AIR IN COOLING MODE (RETURN AIR, DB°F/WB°F)		68 / 57	68 / 57	68 / 57	68 / 57	68 / 57	68 / 57	68 / 57
MINIMUM MIXED AIR IN HEATING MODE (RETURN AIR, °F)		55	55	55	55	55	55	55

ADDITIONAL STATIC PRESSURE RESISTANCE

DISCRIPTION	RESISTANCE, IWG															
	CFM															
	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000
Wet Indoor coil	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.07
Economizer	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.07	0.08	0.08
Filter/Frame Kit	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.06	0.06	0.07
Electric Heat	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.01	0.11	0.11	0.12

NOTE: 1. Deduct these resistance values from the available external static pressure shown in the respective Blower Performance Table.

2. The pressure thru the economizer is greater for 100% outdoor air then for 100% return air. If the resistance of the return air duct system is less then 0.25 IWG, the unit will deliver less CFM during full economizer operation.

SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE

230/460/575 volts

MODEL NO. BHA	MOTOR SPEED	EXTERNAL STATIC PRESSURE - IWG																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		1.10	
		CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS
018	HI	-	-	-	-	-	-	-	-	-	-	668	401	652	386	-	-	-	-	-	-	-	-
	MED	-	-	-	-	-	-	-	-	654	233	541	209	-	-	-	-	-	-	-	-	-	-
	LOW	-	-	-	-	702	220	641	206	536	183	-	-	-	-	-	-	-	-	-	-	-	-
024	HI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	987	507	873	493	760	480	-	-
	MED	-	-	-	-	-	-	-	-	935	338	867	322	800	304	733	286	867	268	-	-	-	-
	LOW	900	290	850	287	800	243	760	220	697	238	843	183	-	-	-	-	-	-	-	-	-	-
030	HI	-	-	-	-	-	-	-	-	-	-	1200	640	1100	620	987	507	873	493	760	480	-	-
	MED	1200	390	1134	397	1068	368	1002	367	936	339	897	322	800	304	-	-	-	-	-	-	-	-
	LOW	900	280	850	267	800	243	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
036	HI	-	-	-	-	-	-	-	-	1414	617	1317	688	1219	660	1116	533	1013	507	910	480	-	-
	MED	-	-	-	-	1472	647	1394	626	1297	495	1199	465	1102	435	985	397	-	-	-	-	-	-
	LOW	1462	526	1400	506	1337	486	1275	467	1167	440	1100	414	1012	387	-	-	-	-	-	-	-	-
042	HI	-	-	-	-	-	-	-	-	1697	740	1580	706	1463	672	1339	640	1216	608	1092	576	-	-
	MED	-	-	-	-	-	-	1673	830	1566	594	1439	558	1322	522	1182	476	-	-	-	-	-	-
	LOW	-	-	1680	607	1608	584	1630	660	1425	528	1320	496	1214	464	1050	420	-	-	-	-	-	-
048	HI	-	-	-	-	-	-	1947	882	1867	857	1786	832	1706	807	1637	782	1569	757	1500	732	-	-
	MED	1876	792	1829	772	1783	753	1736	733	1668	706	1599	680	1531	653	1434	622	1337	591	1240	560	-	-
	LOW	1544	620	1508	610	1472	600	1436	590	1375	573	1313	557	1252	540	-	-	-	-	-	-	-	-
060	HI	-	-	-	-	-	-	2499	1290	2391	1233	2283	1177	2175	1120	2067	1080	1958	1040	1850	1000	-	-
	MED	-	-	2454	1163	2387	1117	2320	1070	2229	1023	2137	977	2046	930	1950	887	1854	843	1758	800	-	-
	LOW	2242	1090	2201	1053	2161	1017	2120	980	2041	927	1962	873	1883	820	1797	787	1711	753	1625	720	-	-

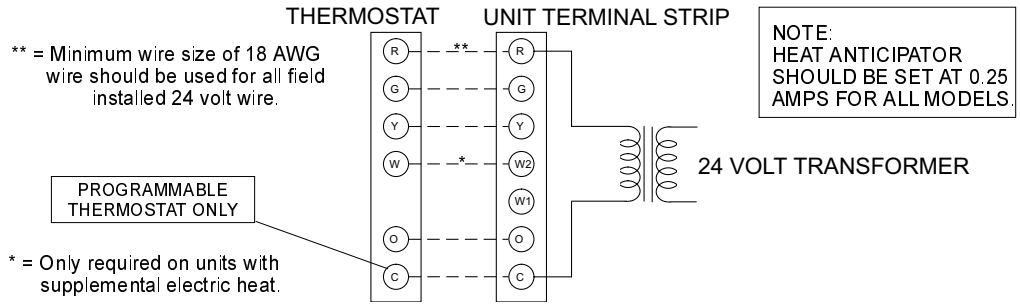
NOTE: Above data includes allowances for a dry indoor coil and no filters. For additional pressure drops, refer to the "Additional Static Pressure Resistance" table.

208 volts

MODEL NO. BHA	MOTOR SPEED	EXTERNAL STATIC PRESSURE - IWG																					
		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.00		1.10	
		CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS
018	HI	-	-	-	-	-	-	-	-	689	374	593	361	497	347	-	-	-	-	-	-	-	-
	MED	-	-	-	-	-	-	690	231	659	210	487	188	-	-	-	-	-	-	-	-	-	-
	LOW	741	226	686	212	632	198	577	185	453	165	-	-	-	-	-	-	-	-	-	-	-	-
024	HI	-	-	-	-	-	-	-	-	-	-	-	-	990	468	888	456	786	444	684	432	-	-
	MED	-	-	-	-	961	351	902	321	841	305	751	290	720	274	660	257	-	-	-	-	-	-
	LOW	810	261	765	240	720	219	675	198	627	215	-	-	-	-	-	-	-	-	-	-	-	-
030	HI	-	-	-	-	-	-	-	-	1171	604	1080	486	980	468	888	456	786	444	-	-	-	-
	MED	1080	351	1021	341	961	331	902	321	841	306	781	280	-	-	-	-	-	-	-	-	-	-
	LOW	810	261	766	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
036	HI	-	-	-	-	1440	608	1381	581	1273	656	1185	530	1097	604	1004	480	912	456	-	-	-	-
	MED	1465	631	1395	512	1325	492	1255	473	1167	446	1079	419	952	392	-	-	-	-	-	-	-	-
	LOW	1316	473	1260	455	1204	438	1148	420	1069	396	990	372	911	348	-	-	-	-	-	-	-	-
042	HI	-	-	-	-	1728	725	1633	697	1527	666	1422	636	1317	606	1205	676	1094	547	-	-	-	-
	MED	-	-	1674	614	1590	590	1506	567	1400	636	1296	602	1190	470	1063	428	-	-	-	-	-	-
	LOW	1679	867	1612	646	1449	526	1377	504	1282	476	1188	447	1093	418	-	-	-	-	-	-	-	-
048	HI	-	-	1982	870	1939	850	1897	830	1813	800	1728	770	1644	740	1559	707	1474	673	1389	640	-	-
	MED	1694	690	1662	673	1629	657	1597	640	1542	623	1486	607	1431	590	1336	563	1240	537	-	-	-	-
	LOW	1385	520	1349	510	1312	500	1276	490	1235	480	-	-	-	-	-	-	-	-	-	-	-	-
060	HI	-	-	-	-	2450	1213	2366	1165	2282	1117	2198	1068	2114	1020	1989	993	1864	967	1739	940	-	-
	MED	2339	1170	2275	1118	2211	1067	2147	1015	2083	963	2019	912	1955	860	1854	824	1753	788	1652	752	-	-
	LOW	1929	940	1877	903	1824	867	1772	830	1720	793	1667	757	1615	720	1586	706	1557	691	1528	677	-	-

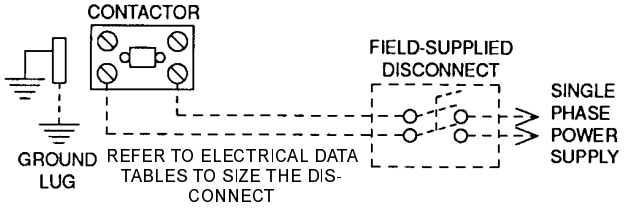
NOTE: Above data includes allowances for a dry indoor coil and no filters. For additional pressure drops, refer to the "Additional Static Pressure Resistance" table.

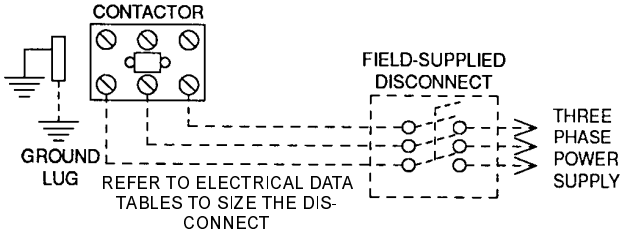
FIELD WIRING DIAGRAM



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

CONTROL WIRING





POWER WIRING

ELECTRICAL DATA (BASIC UNIT)

MODEL BHA	POWER SUPPLY	VOLTAGE LIMITATIONS [1]		COMPRESSOR		OUTDOOR FAN MOTOR, FLA	SUPPLY AIR BLOWER MOTOR, FLA	MINIMUM CIRCUIT AMPACITY	MAX. FUSE SIZE, AMPS [2]	MAX. HACR BREAKER SIZE, AMPS	UNIT POWER FACTOR	TRANSFORMER SIZE (VA)
		MIN.	MAX.	RLA	LRA							
018	208/230-1-60	187	253	9.0	48.0	1.1	2.6	14.9	20	20	.96	40
024	208/230-1-60	187	253	11.2	60.0	1.1	2.6	17.7	25	25	.96	40
030	208/230-1-60	187	253	12.0	73.0	1.1	2.6	18.7	25	25	.96	40
036	208/230-1-60	187	253	17.3	94.0	1.1	3.5	26.2	35	35	.96	40
042	208/230-1-60	187	253	20.5	120.0	1.1	3.5	30.2	40	40	.96	40
048	208/230-1-60	187	253	24.4	140.0	1.5	4.0	36.0	50	50	.96	40
060	208/230-1-60	187	253	28.9	165.0	1.5	7.0	44.6	60	60	.96	40
036	208/230-3-60	187	253	10.9	78.0	1.1	3.5	18.2	25	25	.96	75
042	208/230-3-60	187	253	14.1	110.0	1.1	3.5	22.2	30	30	.96	75
048	208/230-3-60	187	253	14.1	105.0	1.5	4.0	23.1	30	30	.96	75
060	208/230-3-60	187	253	16.0	125.0	1.5	7.0	28.5	40	40	.96	75
036	460-3-60	414	504	5.8	40.0	0.6	1.8	9.6	15	15	.96	75
042	460-3-60	414	504	7.1	54.0	0.6	1.8	11.2	15	15	.96	75
048	460-3-60	414	504	7.1	55.0	0.8	2.0	11.7	15	15	.96	75
060	460-3-60	414	504	8.0	67.0	0.8	3.5	14.3	20	20	.96	75
036	575-3-60	518	630	4.5	32.0	0.4	1.5	7.6	15	15	.96	75
042	575-3-60	518	630	5.8	44.0	0.4	1.5	9.1	15	15	.96	75
048	575-3-60	518	630	5.6	44.0	0.6	1.6	9.3	15	15	.96	75
060	575-3-60	518	630	6.4	50.0	0.6	2.8	11.4	15	15	.96	75

[1] = Rated in accordance with ARI Standard 110, utilization range "A". [2] = Dual element, time delay type.

	NOMINAL VOLTAGE	VOLTAGE	KW CAP. MULTIPLIER
ELECTRIC HEAT CORRECTION FACTORS	240	208	.75
		230	.92
	480	460	.92
	600	575	.92

ELECTRICAL DATA (HEAT PUMP / ELECTRIC HEAT)

MODEL BHA	POWER SUPPLY	COMPRESSOR RLA	COMPRESSOR LRA	OUTDOOR FAN MOTOR FLA	SUPPLY AIR BLOWER MOTOR, FLA	ELECTRIC HEAT ACCESSORY MODEL NO.	STAGE	KW	TOTAL AMPS	MINIMUM CIRCUIT AMPACITY	MAX. FUSE SIZE [1] AMPS	MAX. HACR [2] BREAKER SIZE
018	208/230-1-60	9.0	48.0	1.1	2.6	2NH04500506	1	3.8/5.0 *	18.1/20.8	37.5/41.0	40/45	40/45
						2NH04500706	2	5.6/7.5 *	27.1/31.3	48.8/54.0	50/60	50/60
024	208/230-1-60	11.2	60.0	1.1	2.6	2NH04500506	1	3.8/5.0 *	18.1/20.8	40.7/44.2	45/50	45/50
						2NH04500706	2	5.6/7.5 *	27.1/31.3	52.0/57.2	60/60	60/60
						2NH04501006	2	7.5/10.0 *	36.1/41.7	63.3/70.2	70/80	70/80
030	208/230-1-60	14.7	73.0	1.1	2.6	2NH04500506	1	3.8/5.0 *	18.1/20.8	44.7/48.2	50/50	50/50
						2NH04500706	2	5.6/7.5 *	27.3/31.3	56.0/61.2	60/70	60/70
						2NH04501006	2	7.5/10.0 *	36.1/41.7	67.3/74.2	70/80	70/80
						2NH04501506	2	11.3/15.0 *	54.2/62.5	89.8/100.3	90/110	90/110
		14.7	73.0	1.1	2.6	2ND04501506	2	3.8/5.0	18.1/20.8	44.7/48.2	50/50	50/50
		0.0	0.0	0.0	0.0			7.5/10.0	36.1/41.7	45.1/52.1	50/60	50/60
036	208/230-1-60	17.3	94.0	1.1	3.5	2NH04500506	1	3.8/5.0 *	18.1/20.8	48.8/52.3	60/60	60/60
						2NH04500706	2	5.6/7.5 *	27.1/31.3	60.1/65.3	70/70	70/70
						2NH04501006	2	7.5/10.0 *	36.1/41.7	71.4/78.3	80/80	80/80
						2NH04501506	2	11.3/15.0 *	54.2/62.5	93.9/104.4	100/110	100/110
		17.3	94.0	1.1	3.5	2ND04501506	2	3.8/5.0	18.1/20.8	48.8/52.3	60/60	60/60
		0.0	0.0	0.0	0.0			7.5/10.0	36.1/41.7	45.1/52.1	50/60	50/60
042	208/230-1-60	20.5	120.0	1.1	3.5	2NH04500506	1	3.8/5.0 *	18.1/20.8	52.8/56.3	60/70	60/70
						2NH04500706	2	5.6/7.5 *	27.1/31.3	64.1/69.3	70/80	70/80
						2NH04501006	2	7.5/10.0 *	36.1/41.7	75.4/82.3	80/90	80/90
						2NH04501506	2	11.3/15.0 *	54.2/62.5	97.9/108.4	100/110	100/110
		20.5	120.0	1.1	3.5	2ND04501506	2	3.8/5.0	18.1/20.8	52.8/56.3	60/70	60/70
		0.0	0.0	0.0	0.0			7.5/10.0	36.1/41.7	45.1/52.1	50/60	50/60
048	208/230-1-60	24.4	140.0	1.5	4.0	2NH04501006	2	7.5/10.0 *	36.1/41.7	81.1/88.1	90/100	90/100
						2NH04501506	2	11.3/15.0 *	54.2/62.5	103.7/114.1	110/125	110/125
						2NH04502006	2	15.0/20.0 *	72.2/83.3	126.3/140.2	150/150	150/150
						2NH04502506	2	18.8/25.0 *	90.3/104.2	148.8/166.2	150/175	150/175
060	208/230-1-60	28.9	165.0	1.5	7.0	2NH04501006	2	7.5/10.0 *	36.1/41.7	89.8/96.7	100/110	100/110
						2NH04501506	2	11.3/15.0 *	54.2/62.5	112.3/122.8	125/125	125/125
						2NH04502006	2	15.0/20.0 *	72.2/83.3	134.9/148.8	150/150	150/150
						2NH04502506	2	18.8/25.0 *	90.3/104.2	157.5/174.8	175/175	175/175
036	208/230-3-60	10.9	78.0	1.1	3.5	2NH04501025	1	7.5/10.0 *	20.8/24.1	44.3/48.3	45/50	45/50
						2NH04501525	1	11.3/15.0 *	31.3/36.1	57.3/63.3	60/70	60/70
042	208/230-3-60	14.1	110.0	1.1	3.5	2NH04501025	1	7.5/10.0 *	20.8/24.1	48.3/57.3	50/60	50/60
						2NH04501525	1	11.3/15.0 *	31.3/36.1	61.3/67.3	70/70	70/70
048	208/230-3-60	14.1	105.0	1.5	4.0	2NH04501025	1	7.5/10.0 *	20.8/24.1	49.2/53.2	50/60	50/60
						2NH04501525	1	11.3/15.0 *	31.3/36.1	62.2/68.2	70/70	70/70
						2NH04502025	2	15.0/20.0 *	41.7/48.1	75.3/83.3	80/90	80/90
						2NH04502525	2	18.8/25.0 *	52.1/60.1	88.3/98.3	90/100	90/100
060	208/230-3-60	16.0	125.0	1.5	7.0	2NH04501025	1	7.5/10.0 *	20.8/24.1	54.6/58.6	60/60	60/60
						2NH04501525	1	11.3/15.0 *	31.3/36.1	67.6/73.6	70/80	70/80
						2NH04502025	2	15.0/20.0 *	41.7/48.1	80.7/88.7	90/90	90/90
						2NH04502525	2	18.8/25.0 *	52.1/60.1	93.7/103.7	100/110	100/110
036	460-3-60	5.8	40.0	0.6	1.8	2NH04501046	1	10.0 **	12.8	24.6	25	25
						2NH04501546	1	15.0 **	18.0	32.2	35	35
042	460-3-60	7.1	54.0	0.6	1.8	2NH04501046	1	10.0 **	12.0	26.2	30	30
						2NH04501546	1	15.0 **	18.0	33.8	35	35
048	460-3-60	7.1	55.0	0.8	2.0	2NH04501046	1	10.0 **	12.0	26.7	30	30
						2NH04501546	1	15.0 **	18.0	34.2	35	35
						2NH04502046	2	20.0 **	24.1	41.7	45	45
						2NH04502546	2	25.0 **	30.1	49.3	50	50
060	460-3-60	8.0	67.0	0.8	3.5	2NH04501046	1	10.0 **	12.0	29.4	30	30
						2NH04501546	1	15.0 **	18.0	36.9	40	40
						2NH04502046	2	20.0 **	24.1	44.4	45	45
						2NH04502546	2	25.0 **	30.1	51.9	60	60

[1] = Dual element, time delay type.
[2] = Standard circuit breakers may be used in Canada and on applications over 60 amps where the heaters are separately fused.

* = KW listed is for 240 volts, use table at top of page for 208 or 230 volts.
** = KW listed is for 480 volts, use table at top of page for 460 volts.
*** = KW listed is for 600 volts, use table at top of page for 575 volts.

MODEL BHA	POWER SUPPLY	COMPRESSOR		OUT-DOOR FAN MOTOR FLA	SUPPLY AIR BLOWER MOTOR, FLA	ELECTRIC HEAT ACCESSORY				MINIMUM CIRCUIT AMPAC-ITY	MAX. FUSE SIZE [1] AMPS	MAX. HACR[2] BREAKER SIZE
		RLA	LRA			MODEL NO.	STAGE	KW	TOTAL AMPS			
036	575-3-60	4.5	32.0	0.4	1.5	2NH04501058	1	10.0 ***	9.6	19.6	20	20
						2NH04501558	1	15.0 ***	14.4	25.6	30	30
042	575-3-60	5.8	44.0	0.4	1.5	2NH04501058	1	10.0 ***	9.6	21.1	25	25
						2NH04501558	1	15.0 ***	14.4	27.2	30	30
048	575-3-60	5.6	44.0	0.6	1.6	2NH04501058	1	10.0 ***	9.6	21.3	25	25
						2NH04501558	1	15.0 ***	14.4	27.3	30	30
						2NH04502058	2	20.0 ***	19.2	33.3	35	35
						2NH04502558	2	25.0 ***	24.1	39.3	40	40
060	575-3-60	6.4	50.0	0.6	2.8	2NH04501058	1	10.0 ***	9.6	23.4	25	25
						2NH04501558	1	15.0 ***	14.4	29.5	30	30
						2NH04502058	2	20.0 ***	19.2	35.5	40	40
						2NH04502558	2	25.0 ***	24.1	41.5	45	45

1 = Dual element, time delay type.

2 = Standard circuit breakers may be used in Canada and on applications over 60 amps where the heaters are separately fused.

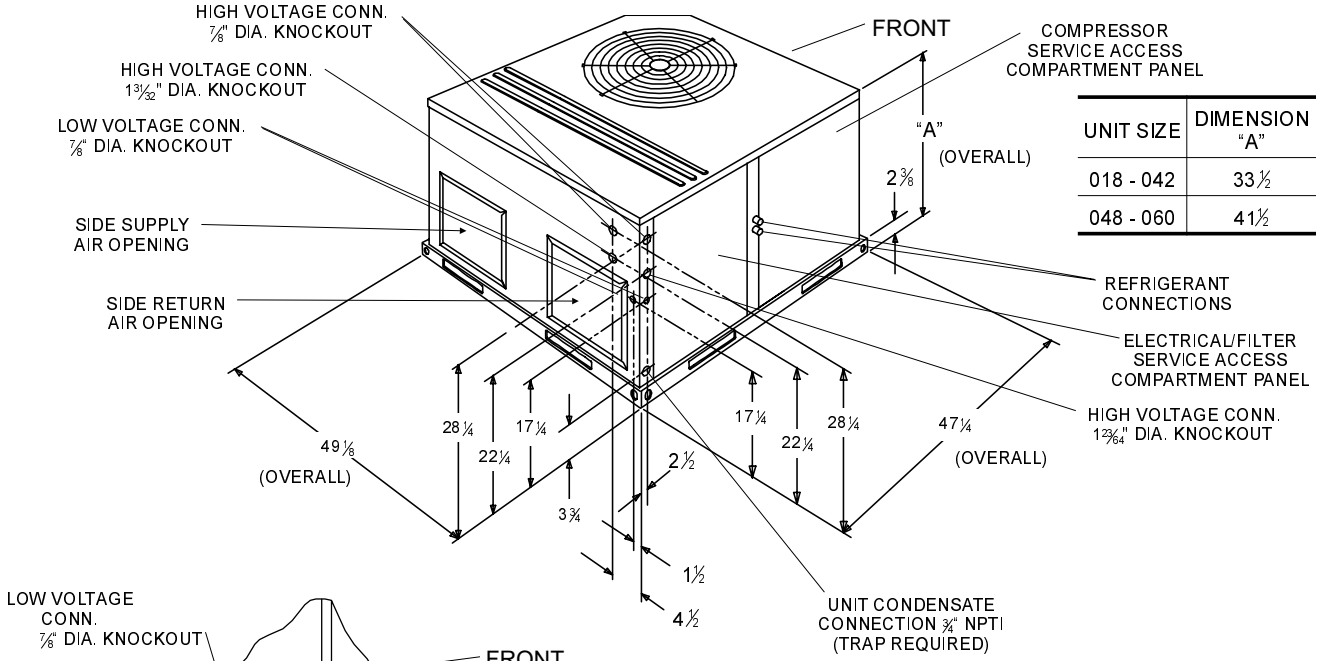
* = KW listed is for 240 volts, use table at top of page for 208 or 230 volts.

** = KW listed is for 480 volts, use table at top of page for 460 volts.

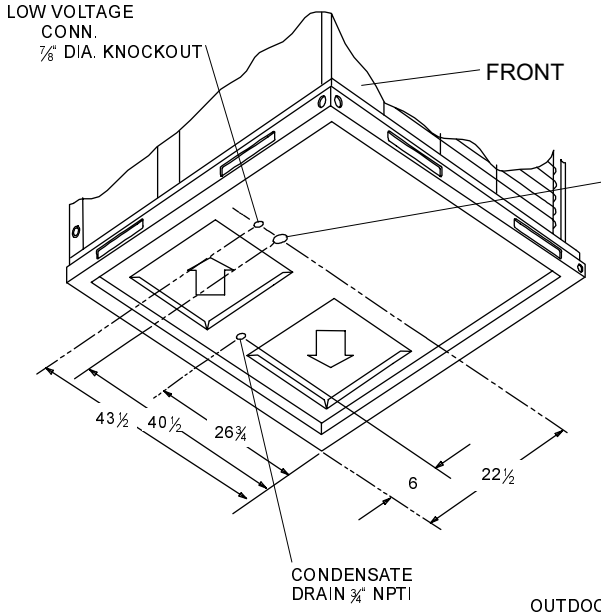
*** = KW listed is for 600 volts, use table at top of page for 575 volts.

	NOMINAL VOLTAGE	VOLTAGE	KW CAP. MULTI-PLIER
ELECTRIC HEAT CORRECTION FACTORS	240	208	.75
		230	.92
	480	460	.92
	600	575	.92

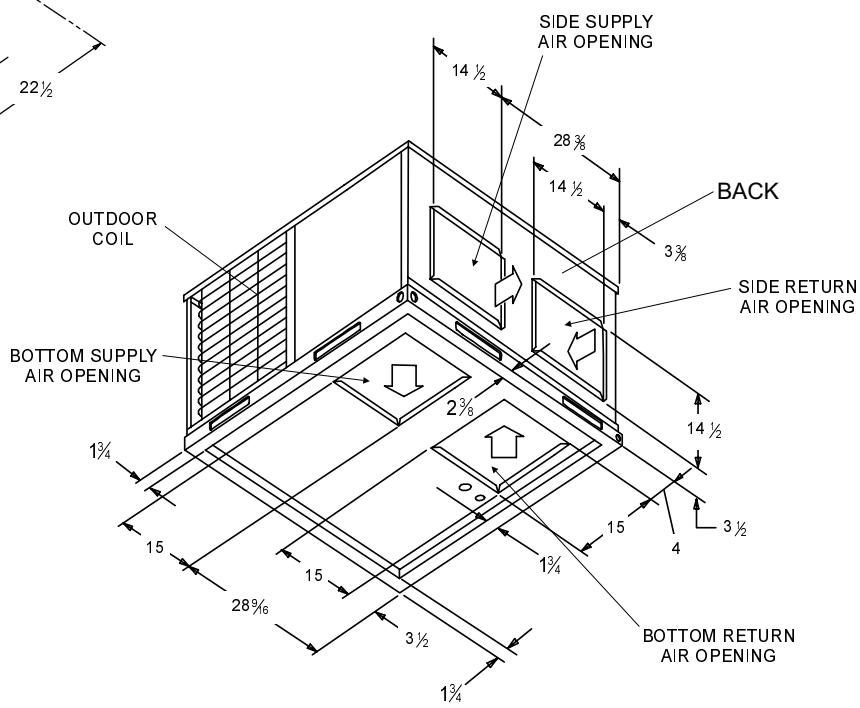
UNIT DIMENSIONS



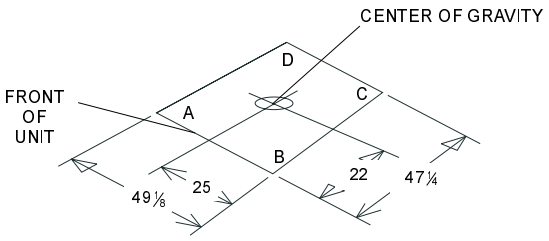
UNIT SIZE	DIMENSION "A"
018 - 042	33 1/2
048 - 060	41 1/2



All dimensions are in inches. They are subject to change without notice. Certified dimensions will be provided upon request.



CENTER OF GRAVITY



BHA UNIT SIZE	SHIPPING WEIGHT	OPERATING WEIGHT	CORNER WEIGHTS			
			A	B	C	D
018	350	345	103	92	73	82
024	350	345	95	92	80	83
030	360	355	98	94	82	85
036	367	362	100	96	84	87
042	394	389	107	103	90	93
048	445	440	121	117	102	105
060	490	485	133	129	112	116

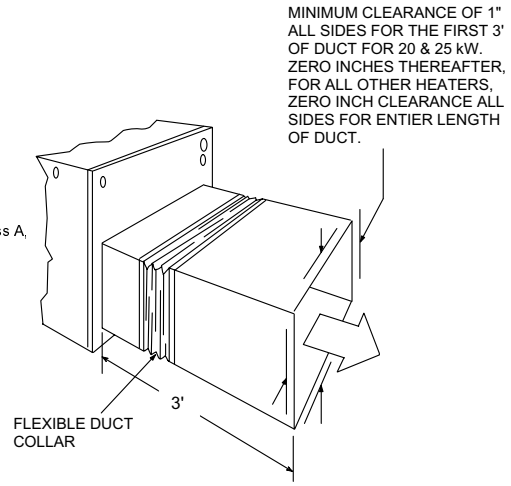
CLEARANCES

UNIT CLEARANCES (Minimum)	
Front	12"
Back	0"
Left Side (Filter Access)	24"
Right Side	24"
Below Unit[1]	0"
Above Unit[2]	36" (For Condenser Air Discharge)

[1] Units may be installed on combustible floors made from wood or class A, B or C roof covering material.

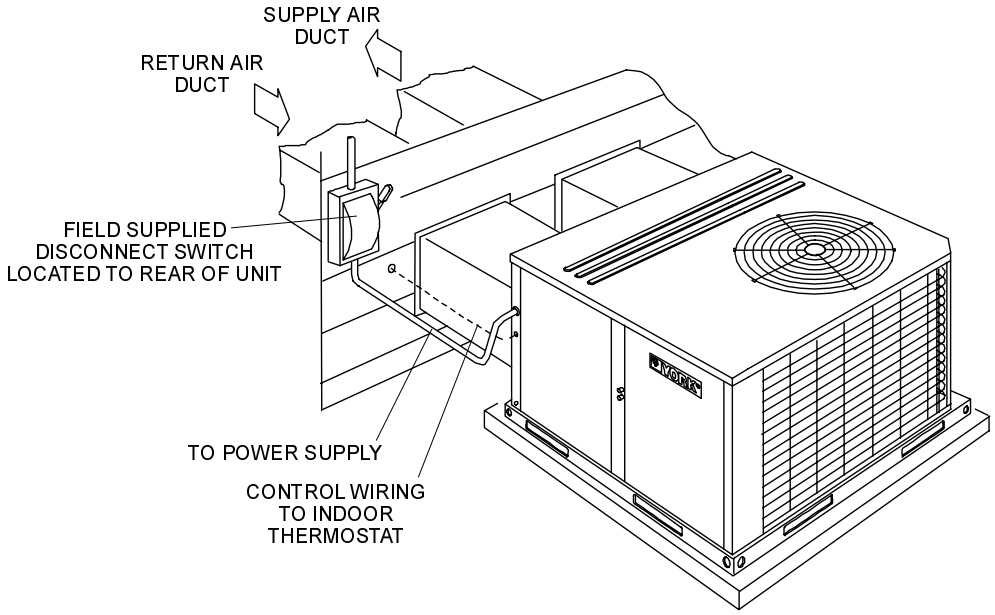
[2] Units must be installed outdoors. Overhanging structures or shrubs should not obstruct outdoor air discharge outlet.

NOTE: FOR UNITS APPLIED WITH A ROOF CURB, THE MINIMUM CLEARANCE MAY BE REDUCED FROM 1 INCH TO 1/2 INCH BETWEEN COMBUSTIBLE ROOF CURB MATERIAL AND THE SUPPLY DUCT.

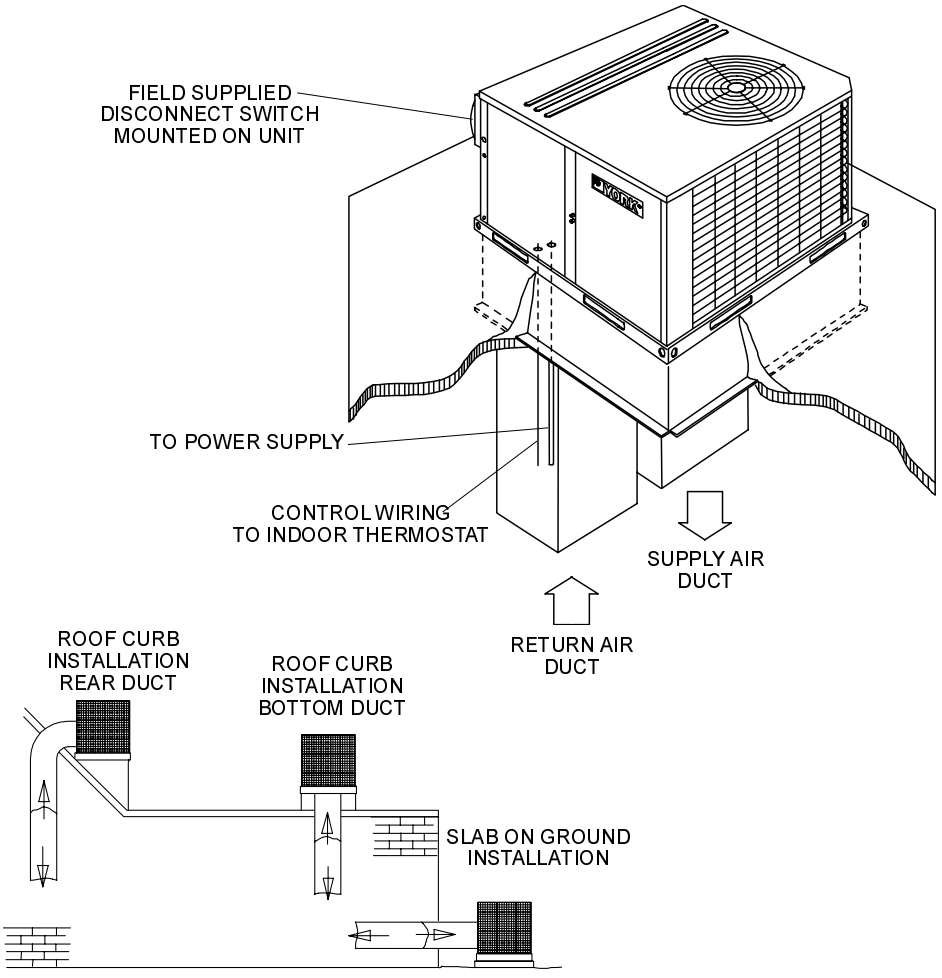


TYPICAL APPLICATIONS

TYPICAL SLAB ON GROUND INSTALLATION

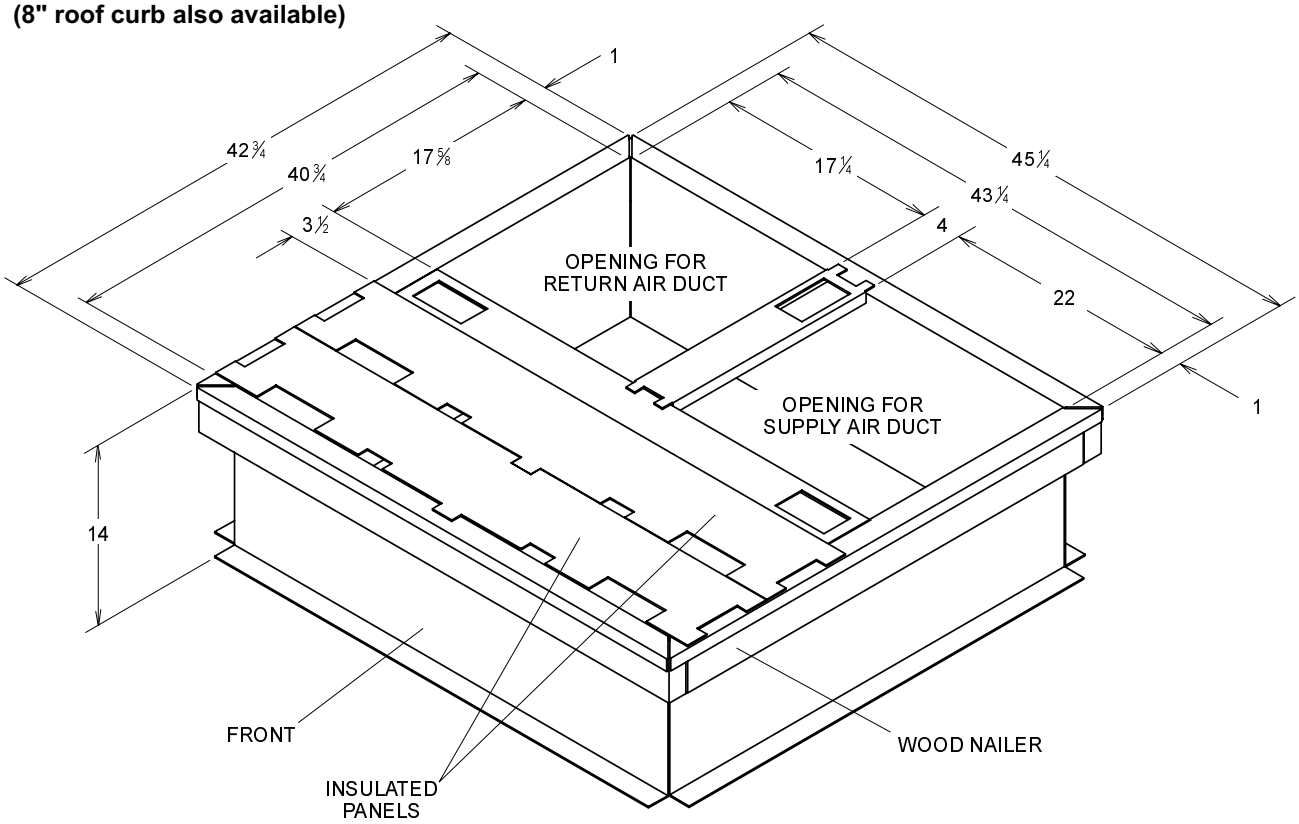


TYPICAL ROOF CURB INSTALLATION



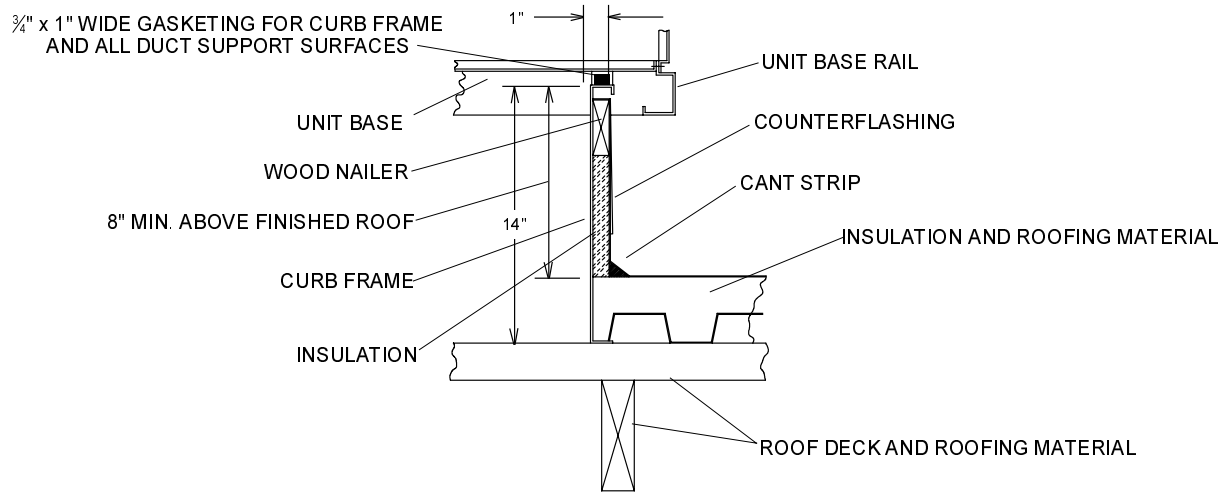
ROOF CURB DIMENSIONS

(8" roof curb also available)

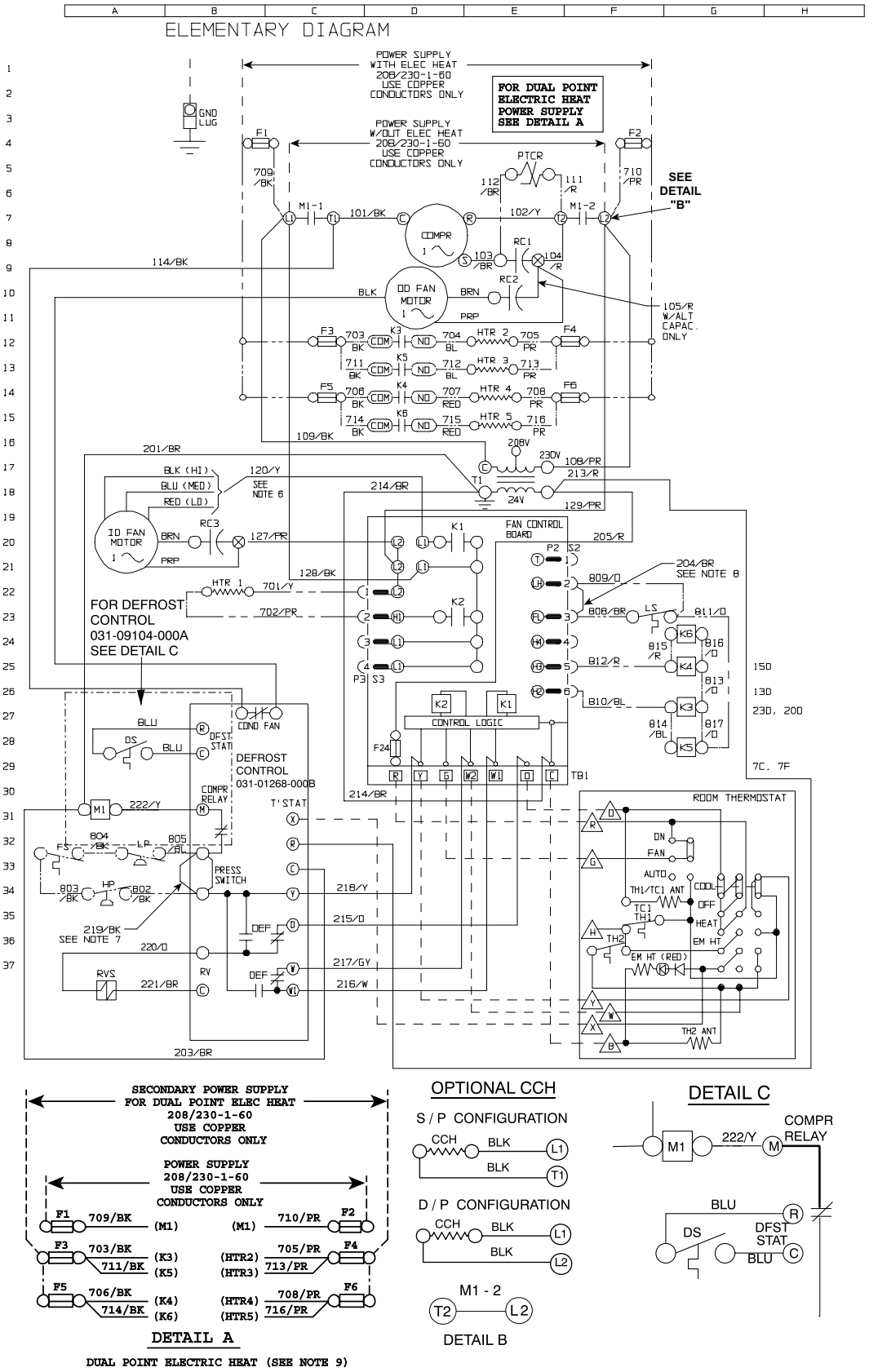


RECOMMENDED DUCT SIZE	
SUPPLY AIR DUCT	17⅛" x 21½"
RETURN AIR DUCT	17⅛" x 16¾"

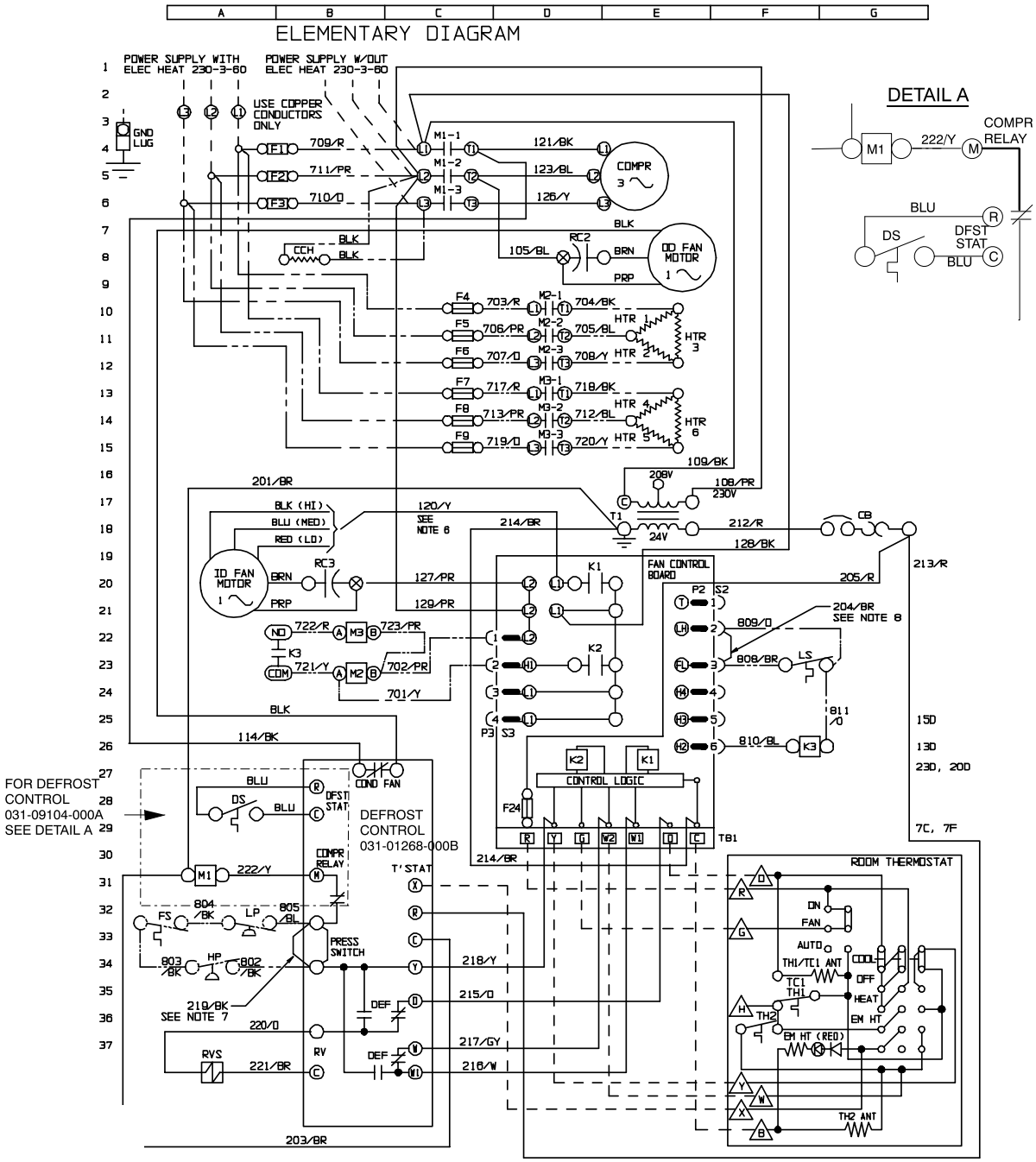
ROOF CURB APPLICATION



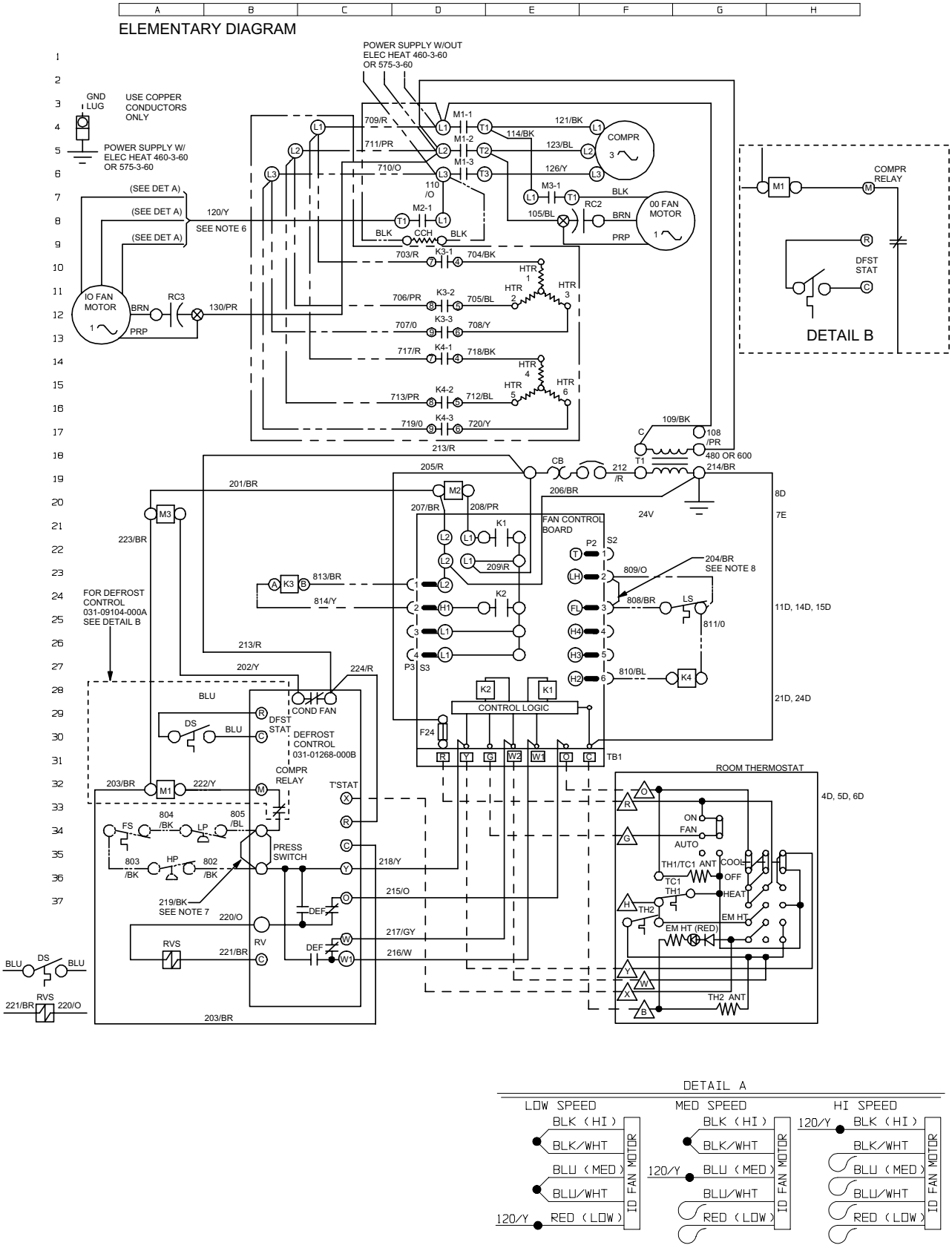
TYPICAL WIRING DIAGRAM (208/230-1-60 POWER SUPPLY)



TYPICAL WIRING DIAGRAM (230-3-60 POWER SUPPLY)



TYPICAL WIRING DIAGRAM (460-3-60 & 575-3-60 POWER SUPPLY)



TYPICAL WIRING DIAGRAM NOTES (See page 24, 25 and 26)

CB	CIRCUIT BREAKER 24V, 3 AMP
CCH	CRANKCASE HEATER (OPTIONAL)
COMPR	COMPRESSOR
DS	DEFROST SENSOR, CLOSES @ 31°F, OPENS @ 55°F.
F1 F2 F3	FUSES, LINE VOLTAGE - 60 AMP (10, 15, 20, & 25 KW ELEC HEAT)
F4 F5 F6	FUSES, LINE VOLTAGE - 30 AMP (10, 15, 20, & 25 KW ELEC HEAT)
F7 F8 F9	FUSES, LINE VOLTAGE - 30 AMP (20 & 25 KW ELEC HEAT)
F24	FUSE 24V SECONDARY, 5 AMP
FS	FREEZESTAT SWITCH (OPTIONAL ACCESSORY) OPEN @ 26°F
HP	HIGH PRESSURE SWITCH (OPTIONAL ACCESSORY) OPENS @ 380 PSIG
HTR 1	ELECTRIC HEATER (OPT. ACCSSRY: ALL KW ELEC HEAT)
HTR 2	ELECTRIC HEATER (OPT. ACCSSRY: 7.5, 10, 15, 20, & 25 KW ELEC HEAT)
HTR 3	ELECTRIC HEATER (OPT. ACCSSRY: 20 & 25 KW ELEC HEAT)
HTR 4	ELECTRIC HEATER (OPT. ACCSSRY: 15, 20, & 25 KW ELEC HEAT)
HTR 5	ELECTRIC HEATER (OPT. ACCSSRY: 20 & 25 KW ELEC HEAT)
HTR 6	ELECTRIC HEATER (OPT. ACCSSRY: 20 & 25 KW ELEC HEAT)
K1	RELAY INDOOR FAN MOTOR
K2	RELAY ELECTRIC HEATER
K3	RELAY ELECTRIC HEATER, 24 VDC COIL
K7	RELAY LIMIT TRIP, 24 VDC COIL
LP	LOW PRESSURE SWITCH (OPTIONAL ACCESSORY) OPEN @ 7 PSIG
LS	LIMIT SWITCH, ELECTRIC HEAT (PART OF ELEC HEAT ACCESSORY)
M1	CONTACTOR, COMPRESSOR & OUTDOOR FAN
M2	CONTACTOR, ELECTRIC HEAT, 230V COIL
M3	CONTACTOR, ELECTRIC HEAT, 230V COIL
PTCR	START ASSIST (OPTIONAL DEVICE)
RC1/RC2	COMPRESSOR START & OUTDOOR FAN RUN CAPACITOR
RC1	COMPRESSOR START CAPACITOR (ALTERNATE)
RC2	OUTDOOR FAN RUN CAPACITOR (ALTERNATE)
RC3	INDOOR FAN RUN CAPACITOR
RVS	REVERSING VALVE SOLENOID
S2/P2	SOCKET/PLUG CONNECTION ON FAN CONTROL BOARD, LOW VOLTAGE
S3/P3	SOCKET/PLUG CONNECTION ON FAN CONTROL BOARD, LINE VOLTAGE
S4/P4	SOCKET/PLUG CONNECTION ON ID FAN MOTOR,24V
S3/P3	SOCKET/PLUG CONNECTION ON ID FAN MOTOR, 230V
T1	TRANSFORMER, 24V, 40 VA
TB2	TERMINAL BLOCK ECM MOTOR "SPEED" CONNECTIONS
⊗	IDENTIFIED TERMINAL ON RUN CAPACITOR
△	ROOM THERMOSTAT 24V CONNECTIONS
□	TB1 ON FAN/ELEC HEAT CONTROL BOARD
————	FACTORY WIRING AND DEVICES
——--——	OPTIONAL WIRING AND DEVICES
— — — —	FIELD WIRING

TYPICAL WIRING DIAGRAM LEGEND (See page 24, 25 and 26)

1. ALL FIELD WIRING TO BE ACCOMPLISHED FOLLOWING CITY, LOCAL AND/OR NATIONAL CODES IN EFFECT AT TIME OF INSTALLATION OF THIS UNIT.
2. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. IF ANY OF THE WIRE AS SUPPLIED WITH THIS UNIT MUST BE REMOVED, IT MUST BE REPLACED WITH TYPE 105° C, 600V WIRE OR EQUIVALENT CLEARLY RENUMBERED FOR IDENTIFICATION. VERIFY PROPER OPERATION AFTER SERVICING.
3. MOTORS ARE INHERENTLY PROTECTED.
4. UNIT FACTORY WIRED FOR 230 VOLT OPERATION. FOR 208 VOLT OPERATION MOVE '108/PR' WIRE FROM 240V TO 208V ON TRANSFORMER T1.
5. SEE UNIT NAMEPLATE FOR MAXIMUM FUSE SIZE AND MINIMUM CIRCUIT AMPACITY.
6. SELECT INDOOR BLOWER SPEED TO OBTAIN APPROX 400 CFM/TON IN COOLING.
7. IF OPTIONAL SAFETY SWITCH KIT IS INSTALLED, WIRE 219/BK IS REMOVED.
8. WIRE 204/BR IS REMOVED WHEN ELECTRIC HEAT IS INSTALLED.
9. ELECTRIC HEAT ACCESSORY WITH DUAL POINT SUPPLY POWER. SEE DETAIL A
10. SHUNT CONTACT ALSO USED WITH CRANKCASE HEATER. (OPTIONAL)

CAUTION - OPEN ALL DISCONNECTS BEFORE SERVICING THIS UNIT

MECHANICAL SPECIFICATIONS

GENERAL DESCRIPTION

Units shall be factory-assembled, single packaged, Heat Pumps, designed for outdoor mounted installation. Units shall have minimum SEER ratings of 10.0. 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-22 refrigerant and factory tested prior to shipment. All unit wiring shall be both numbered and color coded.

All units shall be manufactured in a facility certified to ISO 9001 standards, and the cooling performance shall be rated in accordance with DOE and ARI test procedures. Units shall be certified to UL 1995/CAN/CSA C22.2 No. 236 standards.

UNIT CABINET

1. Unit cabinet shall be constructed of G90 galvanized steel, with exterior surfaces coated with a non-chalking, powered paint finish, certified at 750 hours salt spray test per ASTM-B117 standards.

2. The unit top shall be a single piece “Water Shed” design, with drip edges and no-seam corners to provide optimum water integrity.

3. Unit shall have a rigidly mounted condenser coil guard to provide protection from objects and personnel after installation.

4. 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.

5. Cabinet panels shall be “large” size, easily removable for servicing and maintenance, with built-in lift handles.

6. 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.

7. Full perimeter base rails shall be provided to assure reliable transit of equipment, overhead rigging, fork truck access and proper sealing on roof curb applications. Base rails shall be removable, when required, to lower unit height.

8. Filters shall be furnished and be accessible through a removable access door, sealed air tight. (Single phase models - accessory kit available. Three phase models - standard from factory.)

9. 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.

10. Condensate pan shall be internally sloped and conform to ASHARE 62-89 self-draining standards, with ¾" NPTI copper, ridged mount connection.

INDOOR (SUPPLY) FAN ASSEMBLY

1. Fan shall be direct drive, multi-speed design. Job site selected (BHP) brake horse power shall not exceed the motors nameplate horse power rating.

2. 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.

3. Bearings shall be sealed and permanently lubricated for longer life and no maintenance.

4. Fan assembly shall be “Slip Track” (slide-out) design for easy removal and cleaning.

OUTDOOR FAN ASSEMBLY

1. 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.

2. The outdoor fan motor shall be totally enclosed with permanently lubricated bearings and internally protected against overload conditions.

REFRIGERANT COMPONENTS

1. Compressors:

   A. Shall be fully hermetic type, direct drive, internally protected with internal high-pressure relief and over temperature protection. The hermetic motor shall be suction gas cooled and have a voltage range of + or - 10% of the unit nameplate voltage.

   B. Shall have internal isolation and sound muffling to minimize vibration and noise, and be externally isolated on a dedicated, independent mounting.

2. Coils:

   A. Evaporator and condenser coils shall have aluminum plate fins mechanically bonded to seamless internally-enhanced copper tubes with all joints brazed.

   B. Evaporator and Condenser coils shall be of the direct expansion, blow-thru design.

3. Refrigerant Circuit and Refrigerant Safety Components shall include:

   A. Independent fixed-orifice expansion devices.

   B. Filter/strainer to eliminate any foreign matter.

   C. Accessible service gage connections on both suction and discharge lines to charge, evacuate, and measure refrigerant pressure during any necessary servicing or troubleshooting, without losing charge and without disrupting condenser or evaporator air flow.

   D. The refrigeration system shall provide at least 10° F of liquid sub-cooling at design conditions.

   E. Unit shall have a suction line accumulator and automatic reversing valve.

4. Unit Controls:

   A. Unit shall contain a large, low voltage Terminal Board for easy connection of field low voltage wiring.

   B. Controls shall be mounted in a large control box with tilt-out, hinged access door, allowing easy access for-trouble shooting and maintenance without affecting the normal system operation pressures.

   C. Unit shall contain a reliable time-temperature defrost control to provide defrost, including field selectable time periods between cycles (30, 60 and 90 minutes), factory set at 60 minutes. The defrost control shall also have an “X” terminal to provide a 24 volt signal for room termostat “LED” indication of unit lockout, plus built in 5 minute anti-short cycle protection.

   D. Unit shall have large, easily removable panels, covering electrical controls and compressor, allowing easy access for any necessary maintenance or servicing.

ELECTRIC HEATING SECTION

1. An electric heating section, with nickel chromium elements, shall be provided in a range of 5 thru 25 KW, offering two stages of capacity - 7 KW and above on single phase heaters, and one 20 KW and above on three phase heaters.

2. The heating section shall have a primary limit control(s) and automatic reset, to prevent the heating element system from operating at an excessive temperature.

3. The heating section assembly shall slide out of the unit for easy maintenance and service.

4. Units with electric heating sections shall be wired for a single point power supply, with branch circuit fusing (where required).

UNIT OPERATING CHARACTERISTICS

1. Unit shall be capable of starting and running at 125° F outdoor temperature, exceeding maximum load criteria of ARI Standard 210/240.

2. The compressor, with standard controls, shall be capable of operation down to 45° F outdoor temperature. Accessory low ambient kit shall be available for operation to 0° F.

ELECTRICAL REQUIREMENTS

All unit power wiring shall enter unit cabinet at a single factory provided location and be capable of side or bottom entry, to minimize roof penetrations and avoid unit field modifications. Separate side and bottom openings shall be provided for the control wiring.

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