



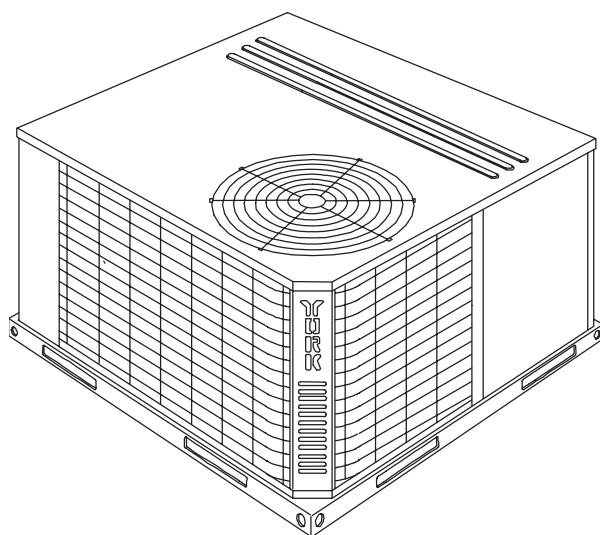
Heating and Air Conditioning

TECHNICAL GUIDE

CHAMPION® SERIES
(WORLD 50 HZ)

SINGLE PACKAGE
COOLING UNITS

D1EB036, 048 AND 060
3, 4 & 5 NOMINAL TONS



FLEXIBLE LIGHT COMMERCIAL UNIT

GENERAL

York's Champion® package units are designed to handle applications ranging from residential to light commercial and any in between. The Champion® is a unit that gives you the flexibility and choices you need in today's market.

FEATURING

- COOLING ONLY
- LOW PROFILE
- QUIET OPERATION
- COMMON FOOTPRINT
- OPTIONAL SLIDE IN MOTORIZED DAMPERS
- OPTIONAL SLIDE IN ECONOMIZERS
- FULL PERIMETER BASE RAILS
- BOTTOM AND SIDE UTILITY CONNECTIONS
- 1" OR 2" CLEANABLE FILTERS STANDARD ON ALL MODELS.



ISO 9001
Certified Quality
Management System

TABLE OF CONTENTS

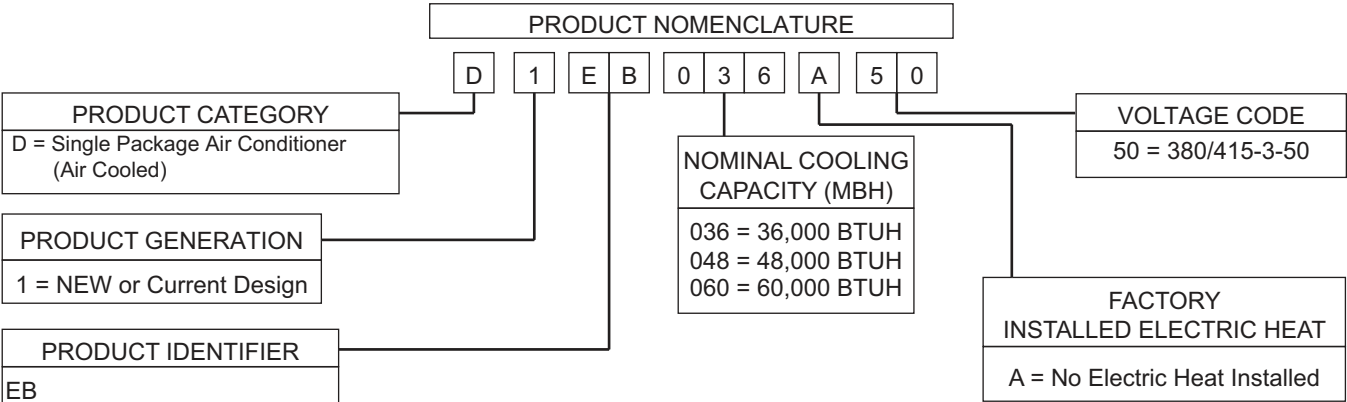
FLEXIBLE LIGHT COMMERCIAL UNIT	1
DESCRIPTION	3
STANDARD FEATURES / BENEFITS	3
FIELD-INSTALLED ACCESSORIES	4
MECHANICAL SPECIFICATIONS	29

LIST OF FIGURES

<u>Fig. #</u>		<u>Pg. #</u>
1	UNIT CUT AWAY	5
2	FIELD WIRING DIAGRAM	23
3	UNIT DIMENSIONS	24
4	TYPICAL APPLICATIONS	25
5	CENTER OF GRAVITY.....	25
6	ROOF CURB DIMENSIONS.....	26
7	TYPICAL WIRING DIAGRAM 3 & 4 TON (380/415-3-50 POWER SUPPLY)	27
8	TYPICAL WIRING DIAGRAM 5 TON (380/415-3-50 POWER SUPPLY)	28

LIST OF TABLES

<u>Tbl. #</u>		<u>Pg. #</u>
1	PHYSICAL DATA	6
2	DEB036 COOLING CAPACITIES - 3 TON (IMPERIAL) ..	7
3	DEB036 COOLING CAPACITIES - 3 TON (METRIC) ..	9
4	DEB048 COOLING CAPACITIES - 4 TON (IMPERIAL).....	11
5	DEB048 COOLING CAPACITIES - 4 TON (METRIC) ..	13
6	DEB060 COOLING CAPACITIES - 5 TON (IMPERIAL).....	15
7	DEB060 COOLING CAPACITIES - 5 TON (METRIC) ..	17
8	SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE W/DIRECT DRIVE BLOWER (IMPERIAL) 380/415 VOLTS	19
9	SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE W/DIRECT DRIVE BLOWER (METRIC) 380/415 VOLTS	19
10	SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE W/BELT-DRIVEN BLOWER (IMPERIAL) 380/415 VOLTS	20
11	SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE W/BELT-DRIVEN BLOWER (METRIC) 380/415 VOLTS	21
12	ADDITIONAL STATIC RESISTANCE	22
13	ELECTRICAL DATA.....	23
14	UNIT WEIGHTS AND CENTERS OF GRAVITY	25



DESCRIPTION

These packaged cooling air conditioners are designed for outdoor installation. Only utility and duct connections are required at the point of installation.

STANDARD FEATURES / BENEFITS

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 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 installation. 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, 3/4 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.

DURABLE FINISH - With a heavy duty cabinet made of powder-painted, galvanized steel the neutral color blends into surrounding areas. The powdered paint provides a better paint to steel bond, which resists corrosion and rust creep. The special primer formulas and glossy 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 1000 hours salt spray rating; the highest in the industry.

FULL PERIMETER BASE RAILS - The easily removable base rails provide a solid foundation for the entire unit and protects the unit during shipment. The rails provide fork lift access from all sides, and rigging holes are also provided so that an overhead crane can be used to place the units on a roof. On applications 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 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 does not add 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.

CONDENSER COIL GRILLE - A multi-piece totally enclosed, rigidly mounted condenser 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. The isolator mounted compressor and the rippled fins of the condenser coil muffle the normal fan motor and compressor operating sounds. The uniquely formed base pan also aids in sound alterations with its "Super-Structure" design. This design strategically places embossments in the pan for optimum strength and rigidity.

FAN SYSTEM - All models operate over a wide range of design conditions. 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.

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. No final field mounting required.

EASY SERVICE ACCESS - A large, single 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 part houses.

FILTER / FRAME - 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). Standard on all models.

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 SAFETY PACKAGE - Contains screw-in type High pressure, Low Pressure/Loss of Charge switch, freeze protection switch and lockout relay. Switches are placed onto existing Schrader 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.

ANTI SHORT CYCLE TIMER - Automatically prevents the compressor from restarting for 5 minutes after cycled off. Not required if Thermostat 2ET07700224 and 2ET04700224 are used.

MOTORIZED FRESH AIR DAMPER - Designed for duct mounted side return and unit mounted down shot 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 from 15" 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 return and unit mounted down shot 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.

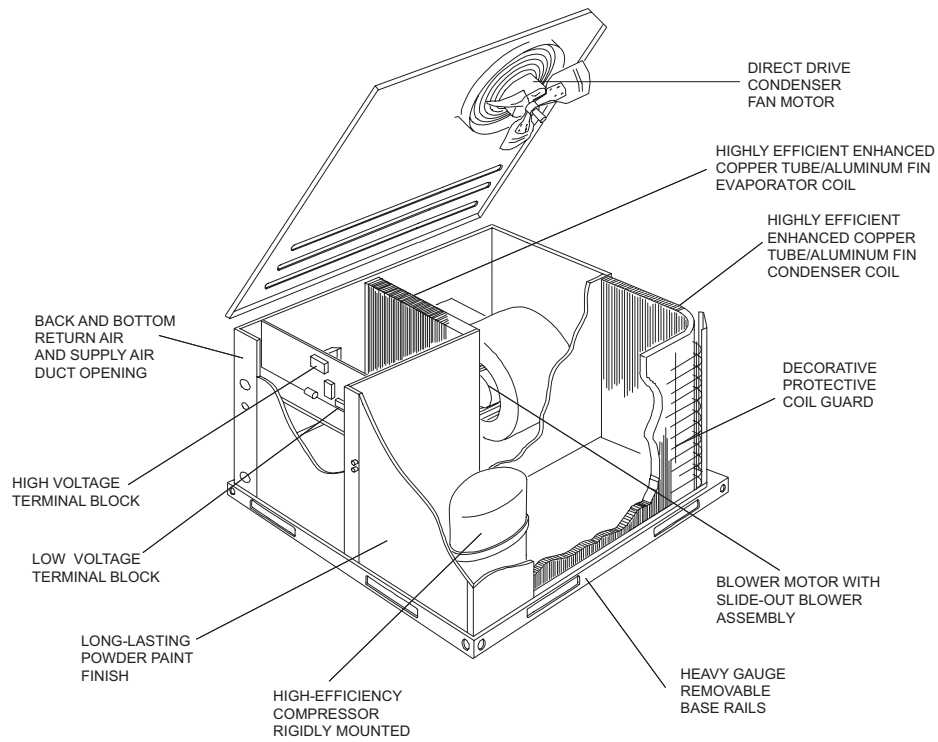


FIGURE 1 - UNIT CUT AWAY

TABLE 1: PHYSICAL DATA

COMPONENT	MODELS								
	DEB036			DEB048			DEB060		
NOMINAL TONNAGE	3.0			4.0			5.0		
COOLING PERFORMANCE									
RATING	T1	T2	T2	T1	T2	T3	T1	T2	T3
Indoor DB/WB °C	27 / 19	29 / 19	21 / 15	27 / 19	29 / 19	21 / 15	27 / 19	29 / 19	21 / 15
Outdoor DB/WB °C	35 / 24	46 / 24	27 / 19	35 / 24	46 / 24	27 / 19	35 / 24	46 / 24	27 / 19
Total Output (MBH)	36500	30550	34500	47000	40900	45000	58300	50800	54500
Total Output kW (MBH)	125 / 36.5	104 / 30.6	118 / 34.5	160 / 47	140 / 40.9	154 / 45	199 / 58.3	173 / 50.8	186 / 54.5
Total Input kW	4.25	4.72	3.75	5.07	6.14	4.40	6.00	7.25	5.20
COP²	2.52	1.90	2.70	2.72	1.95	3.00	2.85	2.05	3.07
Refrigerant charge kg (lb)	4.05 (8.94)			2.49 (5.5)			4.05 (8.94)		
Refrigerant type	R-22			R-22			R-22		
DIMENSIONS (inches)									
Length mm (in.)	1248 (49.13)			1248 (49.13)			1248 (49.13)		
Width mm (in.)	1200 (47.25)			1200 (47.25)			1200 (47.25)		
Height mm (in.)	851 (33.50)			1048 (41.25)			1048 (41.25)		
OPERATING WT. kg (lb)	147 (325)			177 (390)			220 (485)		
COMPRESSORS									
Type	Scroll 1-spd			Scroll 1-spd			Scroll 1-spd		
Quantity	1			1			1		
CONDENSER COIL DATA									
Face area m² (ft²)	0.77 (8.3)			1.47 (15.8)			1.47 (15.8)		
Rows	1			1			2		
Fins per cm (in.)	7.88 (20)			6.30 (16)			7.88 (20)		
Tube diameter mm (in.)	10 (0.375)			10 (0.375)			10 (0.375)		
Circuitry Type	Interlaced			Interlaced			Interlaced		
EVAPORATOR COIL DATA									
Face area m² (ft²)	0.41 (4.38)			0.52 (5.62)			0.52 (5.62)		
Rows	2			2			3		
Fins per cm (in.)	5.91 (15)			5.12 (13)			6.30 (16)		
Tube diameter mm (in.)	10 (0.375)			10 (0.375)			10 (0.375)		
Circuitry Type	Interlaced			Interlaced			Interlaced		
Refrigerant control	Orifice			Orifice			Orifice		
CONDENSER FAN DATA									
Quantity	1			1			1		
Fan diameter mm (in.)	559 (22)			559 (22)			559 (22)		
Type	Axial			Axial			Axial		
Drive type	Direct			Direct			Direct		
No. speeds	1			1			1		
Number of motors	1			1			1		
Motor HP each	1/2			1/2			1/2		
RPM	900			900			900		
Nominal total m³/s (cfm)	1.42 (3000)			1.42 (3000)			1.42 (3000)		
BLOWER DATA									
Quantity	1			1			1		
Centrifugal Blower Dia. x Wd. mm (in)	254 x 203 (10 x 8)			279 x 254 (11 x 10)			279 x 254 (11 x 10)		
Type	Centrifugal			Centrifugal			Centrifugal		
Motor HP each	3/4			1			1		
RPM	Variable			Variable			Variable		
Frame size	48			48			48		
FILTERS									
Quantity - Size mm (in)	2-559 x 356 x 25 2-(22 x 14 x 1)			2-559 x 356 x 25 2-(22 x 14 x 1)			2-559 x 356 x 25 2-(22 x 14 x 1)		

TABLE 2: DEB036 COOLING CAPACITIES - 3 TON (IMPERIAL)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		75°F								85°F							
CFM	WB (°F)	Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)						Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
900	77	38.0	3.4	19.7	16.2	12.6	9.0	5.5	1.9	37.5	3.7	19.3	15.4	11.4	7.5	3.5	-
	72	36.9	3.3	25.0	21.4	17.9	14.3	10.7	7.2	35.6	3.6	24.7	20.7	16.8	12.8	8.9	5.0
	67	35.8	3.3	30.3	26.7	23.1	19.5	16.0	12.4	33.8	3.5	30.0	26.1	22.2	18.2	14.3	10.3
	62	34.6	3.3	34.6	31.2	27.7	24.1	20.5	17.0	33.1	3.5	33.1	29.9	26.0	22.0	18.1	14.2
	57	33.4	3.2	33.4	33.4	31.9	28.3	24.8	21.2	32.5	3.4	32.5	32.5	29.6	25.7	21.8	17.8
1050	77	42.3	3.4	20.3	17.3	14.2	11.2	8.2	-	41.1	3.7	19.0	16.0	13.0	9.9	6.9	-
	72	41.0	3.4	26.4	23.3	20.2	17.0	13.9	10.8	39.1	3.6	25.7	22.4	19.1	15.7	12.4	9.0
	67	39.8	3.3	32.5	29.3	26.1	22.9	19.6	16.4	37.1	3.5	32.5	28.8	25.2	21.5	17.8	14.1
	62	38.4	3.3	38.4	34.7	31.2	27.7	24.1	20.6	36.4	3.5	36.4	33.3	29.5	25.7	21.8	18.0
	57	37.1	3.2	37.1	37.1	36.0	32.1	28.3	24.4	35.7	3.5	35.7	35.7	33.7	29.6	25.6	21.6
1200	77	46.6	3.4	20.8	18.3	15.9	13.4	10.9	8.4	44.8	3.7	18.7	16.6	14.5	12.4	10.3	8.2
	72	45.2	3.4	27.8	25.1	22.4	19.8	17.1	14.4	42.6	3.7	26.8	24.1	21.3	18.6	15.8	13.1
	67	43.8	3.3	34.7	31.9	29.0	26.2	23.3	20.5	40.4	3.6	35.0	31.6	28.2	24.8	21.4	18.0
	62	42.3	3.3	42.3	38.3	34.7	31.2	27.7	24.2	39.6	3.5	39.6	36.8	33.0	29.3	25.5	21.8
	57	40.9	3.3	40.9	40.9	40.1	35.9	31.8	27.6	38.8	3.5	38.8	38.8	37.7	33.6	29.5	25.4
1350	77	45.6	3.4	25.4	20.7	16.5	12.2	8.0	-	44.4	3.7	24.7	19.2	15.1	11.1	7.0	-
	72	44.2	3.4	31.9	27.6	23.3	19.0	14.7	10.4	42.3	3.7	31.0	26.6	22.3	17.9	13.5	9.1
	67	42.9	3.3	38.4	34.5	30.1	25.7	21.3	16.9	40.1	3.6	37.4	34.1	29.4	24.7	19.9	15.2
	62	41.5	3.3	41.5	39.4	36.0	31.3	26.6	21.8	39.3	3.5	39.3	37.9	34.4	29.6	24.7	19.8
	57	40.1	3.3	40.1	40.1	39.6	34.6	29.5	24.5	38.5	3.5	38.5	38.5	38.0	32.9	27.9	22.8
1500	77	44.6	3.4	29.9	23.0	17.1	11.1	5.2	-	44.1	3.7	30.7	21.8	15.8	9.7	3.7	-
	72	43.3	3.4	36.0	30.0	24.1	18.2	12.2	6.3	41.9	3.6	35.2	29.2	23.2	17.1	11.1	5.1
	67	42.0	3.3	42.0	37.1	31.2	25.2	19.3	13.3	39.8	3.6	39.8	36.6	30.6	24.6	18.5	12.5
	62	40.6	3.3	40.6	40.6	37.3	31.4	25.4	19.5	39.0	3.5	39.0	39.0	35.9	29.8	23.8	17.8
	57	39.2	3.3	39.2	39.2	39.2	33.3	27.3	21.4	38.2	3.5	38.2	38.2	38.2	32.2	26.2	20.2
		95°F								105°F							
900	77	37.0	4.0	18.8	14.5	10.2	5.9	1.6	-	34.9	4.2	17.4	13.4	9.4	5.4	1.4	-
	72	34.4	3.9	24.3	20.0	15.7	11.4	7.1	2.8	31.9	4.1	22.5	18.5	14.5	10.5	6.5	2.5
	67	31.8	3.7	29.8	25.5	21.2	16.9	12.6	8.2	28.8	3.9	27.7	23.7	19.7	15.7	11.7	7.7
	62	31.7	3.7	31.7	28.6	24.3	20.0	15.7	11.4	29.0	3.9	29.0	26.0	22.0	18.0	14.0	10.0
	57	31.6	3.7	31.6	31.6	27.4	23.1	18.8	14.4	29.2	3.8	29.2	28.4	24.4	20.4	16.4	12.4
1050	77	40.0	4.0	17.7	14.7	11.7	8.7	5.7	2.7	37.7	4.3	17.4	13.8	10.9	7.9	5.0	2.0
	72	37.2	3.9	25.1	21.5	18.0	14.4	10.8	7.3	34.4	4.1	23.8	20.3	16.9	13.4	10.0	6.5
	67	34.4	3.8	32.5	28.4	24.2	20.1	16.0	11.9	31.2	4.0	30.1	26.8	22.8	18.9	15.0	11.0
	62	34.3	3.7	34.3	32.0	27.8	23.7	19.5	15.4	31.4	3.9	31.4	29.5	25.6	21.6	17.7	13.7
	57	34.2	3.7	34.2	34.2	31.3	27.2	23.0	18.9	31.6	3.9	31.6	31.2	28.3	24.3	20.4	16.4
1200	77	43.0	4.0	16.6	14.9	13.2	11.5	9.8	8.1	40.5	4.3	17.4	14.3	12.4	10.5	8.6	6.6
	72	40.0	3.9	25.9	23.1	20.2	17.4	14.6	11.8	37.0	4.2	25.0	22.1	19.2	16.3	13.4	10.5
	67	37.0	3.8	35.2	31.3	27.3	23.4	19.4	15.5	33.5	4.0	32.6	29.9	26.0	22.1	18.2	14.3
	62	36.9	3.8	36.9	35.3	31.3	27.3	23.4	19.4	33.7	4.0	33.7	32.9	29.1	25.2	21.3	17.3
	57	36.8	3.7	36.8	36.8	35.3	31.3	27.3	23.3	33.9	3.9	33.9	33.9	32.2	28.3	24.3	20.4
1350	77	43.3	4.0	24.0	17.7	13.8	9.9	6.0	2.1	41.0	4.3	24.8	17.5	12.9	8.9	4.8	-
	72	40.3	3.9	30.2	25.7	21.2	16.8	12.3	7.8	37.4	4.1	29.1	24.6	20.0	15.5	11.0	-
	67	37.3	3.8	36.4	33.7	28.7	23.6	18.6	13.6	33.9	4.0	33.4	31.7	27.1	22.1	17.1	12.0
	62	37.1	3.8	37.1	36.3	32.9	27.8	22.8	17.7	34.1	4.0	34.1	33.7	30.4	25.3	20.3	15.2
	57	37.0	3.7	37.0	37.0	36.3	31.2	26.2	21.1	34.3	3.9	34.3	34.3	33.3	28.2	23.1	18.1
1500	77	43.6	4.0	31.4	20.6	14.5	8.4	2.3	-	41.5	4.3	32.3	20.6	13.5	7.3	-	-
	72	40.5	3.9	34.4	28.3	22.2	16.1	10.0	3.9	37.9	4.1	33.3	27.1	20.9	14.7	8.5	-
	67	37.5	3.8	37.5	36.1	30.0	23.9	17.8	11.7	34.3	4.0	34.3	33.6	28.3	22.1	15.9	9.7
	62	37.4	3.8	37.4	37.4	34.4	28.3	22.2	16.1	34.5	3.9	34.5	34.5	31.7	25.5	19.3	13.1
	57	37.3	3.7	37.3	37.3	37.3	31.2	25.1	18.9	34.7	3.9	34.7	34.7	34.3	28.1	21.9	15.8

TABLE 2: DEB036 COOLING CAPACITIES - 3 TON (IMPERIAL) (CONTINUED)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		115°F								125°F							
CFM	WB (°F)	Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)						Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
900	77	32.8	4.5	15.9	12.2	8.6	4.9	1.2	-	30.7	4.7	15.1	11.1	7.7	4.4	1.0	-
	72	29.3	4.3	20.7	17.1	13.4	9.7	6.0	2.3	26.7	4.5	18.9	15.6	12.2	8.8	5.5	2.1
	67	25.8	4.1	25.6	21.9	18.2	14.5	10.8	7.1	22.8	4.3	22.8	20.1	16.7	13.3	9.9	6.6
	62	26.3	4.1	26.3	23.5	19.8	16.1	12.4	8.7	23.6	4.2	23.6	20.9	17.5	14.2	10.8	7.4
	57	26.8	4.0	26.8	25.1	21.4	17.8	14.1	10.4	24.4	4.2	24.4	21.9	18.5	15.1	11.7	8.4
1050	77	35.4	4.5	17.1	13.0	10.1	7.2	4.3	1.4	33.1	4.8	17.5	12.2	9.3	6.4	3.6	0.7
	72	31.6	4.3	22.4	19.1	15.8	12.4	9.1	5.8	28.9	4.6	21.1	17.9	14.7	11.4	8.2	5.0
	67	27.9	4.2	27.8	25.2	21.4	17.7	13.9	10.2	24.6	4.4	24.6	23.6	20.0	16.5	12.9	9.3
	62	28.4	4.1	28.4	27.0	23.3	19.6	15.8	12.0	25.5	4.3	25.5	24.5	21.1	17.5	13.9	10.3
	57	28.9	4.1	28.9	28.1	25.3	21.5	17.7	13.9	26.3	4.3	26.3	25.1	22.2	18.6	15.1	11.5
1200	77	38.0	4.6	18.3	13.8	11.6	9.5	7.3	5.2	35.5	4.9	20.0	13.9	10.8	8.5	6.1	3.8
	72	34.0	4.4	24.1	21.1	18.1	15.2	12.2	9.2	31.0	4.7	23.2	20.2	17.1	14.0	11.0	7.9
	67	30.0	4.2	30.0	28.5	24.7	20.9	17.0	13.2	26.4	4.4	26.4	26.4	23.4	19.6	15.8	12.1
	62	30.5	4.2	30.5	30.5	26.9	23.0	19.1	15.3	27.3	4.4	27.3	27.3	24.6	20.8	17.0	13.2
	57	31.1	4.1	31.1	31.1	29.1	25.2	21.3	17.5	28.2	4.4	28.2	28.2	26.0	22.2	18.4	14.5
1350	77	38.7	4.6	25.7	17.2	12.1	7.9	3.7	-	36.4	4.8	27.0	17.6	11.2	6.8	2.5	-
	72	34.6	4.4	28.1	23.5	18.9	14.2	9.6	-	31.8	4.6	27.1	22.4	17.7	13.0	8.2	-
	67	30.5	4.2	30.5	29.8	25.6	20.6	15.5	10.5	27.1	4.4	27.1	27.1	24.1	19.1	14.0	9.0
	62	31.1	4.1	31.1	31.1	27.9	22.8	17.8	12.7	28.1	4.3	28.1	28.1	25.4	20.4	15.3	10.2
	57	31.7	4.1	31.7	31.7	30.2	25.2	20.1	15.0	29.0	4.3	29.0	29.0	27.2	22.1	17.0	12.0
1500	77	39.4	4.5	33.2	20.6	12.5	6.3	-	-	37.3	4.8	34.0	21.3	11.6	5.2	-	-
	72	35.2	4.3	32.1	25.8	19.6	13.3	7.0	-	32.6	4.5	30.9	24.6	18.2	11.9	5.5	-
	67	31.1	4.1	31.1	31.1	26.6	20.3	14.1	7.8	27.8	4.3	27.8	27.8	24.9	18.5	12.2	5.8
	62	31.6	4.1	31.6	31.6	29.0	22.7	16.4	10.1	28.8	4.3	28.8	28.8	26.2	19.9	13.5	7.2
	57	32.2	4.1	32.2	32.2	31.4	25.1	18.8	12.6	29.7	4.2	29.7	29.7	28.4	22.1	15.7	9.4

¹. The capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance table for the kW of the supply air blower motor.

². These ratings include the condensate fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

TABLE 3: DEB036 COOLING CAPACITIES - 3 TON (METRIC)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		24°C								29°C							
m³/s	WB (°C)	Total Cap. ¹ (kW)	Total Input ² (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)						Total Cap. ¹ (kW)	Total Input ² (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)					
				32	29	27	24	21	18			32	29	27	24	21	18
0.42	25	11.1	3.4	5.8	4.7	3.7	2.7	1.6	0.6	11.0	3.7	5.7	4.5	3.3	2.2	1.0	-
	22	10.8	3.3	7.3	6.3	5.2	4.2	3.1	2.1	10.4	3.6	7.2	6.1	4.9	3.8	2.6	1.5
	19	10.5	3.3	8.9	7.8	6.8	5.7	4.7	3.6	9.9	3.5	8.8	7.6	6.5	5.3	4.2	3.0
	17	10.1	3.3	10.1	9.2	8.1	7.1	6.0	5.0	9.7	3.5	9.7	8.8	7.6	6.5	5.3	4.1
	14	9.8	3.2	9.8	9.8	9.3	8.3	7.3	6.2	9.5	3.4	9.5	9.5	8.7	7.5	6.4	5.2
0.50	25	12.4	3.4	5.9	5.1	4.2	3.3	2.4	-	12.1	3.7	5.6	4.7	3.8	2.9	2.0	-
	22	12.0	3.4	7.7	6.8	5.9	5.0	4.1	3.2	11.5	3.6	7.5	6.6	5.6	4.6	3.6	2.6
	19	11.7	3.3	9.5	8.6	7.6	6.7	5.8	4.8	10.9	3.5	9.5	8.4	7.4	6.3	5.2	4.1
	17	11.3	3.3	11.3	10.2	9.1	8.1	7.1	6.0	10.7	3.5	10.7	9.8	8.6	7.5	6.4	5.3
	14	10.9	3.2	10.9	10.9	10.5	9.4	8.3	7.1	10.4	3.5	10.5	10.5	9.9	8.7	7.5	6.3
0.57	25	13.6	3.4	6.1	5.4	4.6	3.9	3.2	2.5	13.1	3.7	5.5	4.9	4.3	3.6	3.0	2.4
	22	13.2	3.4	8.1	7.4	6.6	5.8	5.0	4.2	12.5	3.7	7.9	7.1	6.3	5.4	4.6	3.8
	19	12.8	3.3	10.2	9.3	8.5	7.7	6.8	6.0	11.8	3.6	10.2	9.2	8.3	7.3	6.3	5.3
	17	12.4	3.3	12.4	11.2	10.2	9.1	8.1	7.1	11.6	3.5	11.6	10.8	9.7	8.6	7.5	6.4
	14	12.0	3.3	12.0	12.0	11.7	10.5	9.3	8.1	11.4	3.5	11.4	11.4	11.0	9.8	8.7	7.5
0.64	25	13.4	3.4	7.4	6.1	4.8	3.6	2.4	-	13.0	3.7	7.2	5.6	4.4	3.2	2.1	-
	22	13.0	3.4	9.3	8.1	6.8	5.6	4.3	3.0	12.4	3.7	9.1	7.8	6.5	5.2	4.0	2.7
	19	12.6	3.3	11.2	10.1	8.8	7.5	6.2	5.0	11.7	3.6	11.0	10.0	8.6	7.2	5.8	4.5
	17	12.2	3.3	12.2	11.6	10.6	9.2	7.8	6.4	11.5	3.5	11.5	11.1	10.1	8.7	7.2	5.8
	14	11.7	3.3	11.7	11.7	11.6	10.1	8.7	7.2	11.3	3.5	11.3	11.3	11.1	9.6	8.2	6.7
0.71	25	13.1	3.4	8.8	6.7	5.0	3.3	1.5	-	12.9	3.7	9.0	6.4	4.6	2.9	1.1	-
	22	12.7	3.4	10.5	8.8	7.1	5.3	3.6	1.8	12.3	3.6	10.3	8.6	6.8	5.0	3.3	1.5
	19	12.3	3.3	12.3	10.9	9.1	7.4	5.6	3.9	11.7	3.6	11.7	10.7	9.0	7.2	5.4	3.7
	17	11.9	3.3	11.9	11.9	10.9	9.2	7.5	5.7	11.4	3.5	11.4	11.4	10.5	8.7	7.0	5.2
	14	11.5	3.3	11.5	11.5	11.5	9.8	8.0	6.3	11.2	3.5	11.2	11.2	11.2	9.4	7.7	5.9
		35°C								41°C							
0.42	25	10.8	4.0	5.5	4.3	3.0	1.7	0.5	-	10.2	4.2	5.1	3.9	2.8	1.6	0.4	-
	22	10.1	3.9	7.1	5.9	4.6	3.3	2.1	0.8	9.3	4.1	6.6	5.4	4.3	3.1	1.9	0.7
	19	9.3	3.7	8.7	7.5	6.2	4.9	3.7	2.4	8.5	3.9	8.1	6.9	5.8	4.6	3.4	2.3
	17	9.3	3.7	9.3	8.4	7.1	5.9	4.6	3.3	8.5	3.9	8.5	7.6	6.5	5.3	4.1	2.9
	14	9.3	3.7	9.3	9.3	8.0	6.8	5.5	4.2	8.6	3.8	8.6	8.3	7.2	6.0	4.8	3.6
0.50	25	11.7	4.0	5.2	4.3	3.4	2.5	1.7	0.8	11.0	4.3	5.1	4.1	3.2	2.3	1.5	0.6
	22	10.9	3.9	7.4	6.3	5.3	4.2	3.2	2.1	10.1	4.1	7.0	6.0	4.9	3.9	2.9	1.9
	19	10.1	3.8	9.5	8.3	7.1	5.9	4.7	3.5	9.1	4.0	8.8	7.8	6.7	5.5	4.4	3.2
	17	10.1	3.7	10.1	9.4	8.1	6.9	5.7	4.5	9.2	3.9	9.2	8.6	7.5	6.3	5.2	4.0
	14	10.0	3.7	10.0	10.0	9.2	8.0	6.7	5.5	9.3	3.9	9.3	9.1	8.3	7.1	6.0	4.8
0.57	25	12.6	4.0	4.9	4.4	3.9	3.4	2.9	2.4	11.9	4.3	5.1	4.2	3.6	3.1	2.5	1.9
	22	11.7	3.9	7.6	6.8	5.9	5.1	4.3	3.5	10.8	4.2	7.3	6.5	5.6	4.8	3.9	3.1
	19	10.8	3.8	10.3	9.2	8.0	6.8	5.7	4.5	9.8	4.0	9.5	8.8	7.6	6.5	5.3	4.2
	17	10.8	3.8	10.8	10.3	9.2	8.0	6.8	5.7	9.9	4.0	9.9	9.6	8.5	7.4	6.2	5.1
	14	10.8	3.7	10.8	10.8	10.3	9.2	8.0	6.8	9.9	3.9	9.9	9.9	9.4	8.3	7.1	6.0
0.64	25	12.7	4.0	7.0	5.2	4.0	2.9	1.8	0.6	12.0	4.3	7.3	5.1	3.8	2.6	1.4	-
	22	11.8	3.9	8.8	7.5	6.2	4.9	3.6	2.3	11.0	4.1	8.5	7.2	5.9	4.5	3.2	-
	19	10.9	3.8	10.7	9.9	8.4	6.9	5.5	4.0	9.9	4.0	9.8	9.3	8.0	6.5	5.0	3.5
	17	10.9	3.8	10.9	10.7	9.6	8.2	6.7	5.2	10.0	4.0	10.0	9.9	8.9	7.4	5.9	4.5
	14	10.8	3.7	10.8	10.8	10.6	9.2	7.7	6.2	10.1	3.9	10.1	10.1	9.7	8.3	6.8	5.3
0.71	25	12.8	4.0	9.2	6.0	4.2	2.5	0.7	-	12.2	4.3	9.5	6.0	4.0	2.1	-	-
	22	11.9	3.9	10.1	8.3	6.5	4.7	2.9	1.1	11.1	4.1	9.8	7.9	6.1	4.3	2.5	-
	19	11.0	3.8	11.0	10.6	8.8	7.0	5.2	3.4	10.0	4.0	10.0	9.8	8.3	6.5	4.7	2.9
	17	11.0	3.8	11.0	11.0	10.1	8.3	6.5	4.7	10.1	3.9	10.1	10.1	9.3	7.5	5.7	3.8
	14	10.9	3.7	10.9	10.9	10.9	9.1	7.3	5.6	10.2	3.9	10.2	10.2	10.1	8.2	6.4	4.6

TABLE 3: DEB036 COOLING CAPACITIES - 3 TON (METRIC) (CONTINUED)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		46°C								52°C							
m³/s	WB (°C)	Total Cap. ¹ (kW)	Total Input ² (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)						Total Cap. ¹ (kW)	Total Input ² (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)					
				32	29	27	24	21	18			32	29	27	24	21	18
0.42	25	9.6	4.5	4.7	3.6	2.5	1.4	0.4	-	9.0	4.7	4.4	3.3	2.3	1.3	0.3	-
	22	8.6	4.3	6.1	5.0	3.9	2.8	1.8	0.7	7.8	4.5	5.6	4.6	3.6	2.6	1.6	0.6
	19	7.6	4.1	7.5	6.4	5.3	4.3	3.2	2.1	6.7	4.3	6.7	5.9	4.9	3.9	2.9	1.9
	17	7.7	4.1	7.7	6.9	5.8	4.7	3.6	2.6	6.9	4.2	6.9	6.1	5.1	4.2	3.2	2.2
	14	7.9	4.0	7.9	7.4	6.3	5.2	4.1	3.0	7.1	4.2	7.1	6.4	5.4	4.4	3.4	2.5
0.50	25	10.4	4.5	5.0	3.8	3.0	2.1	1.3	0.4	9.7	4.8	5.1	3.6	2.7	1.9	1.0	0.2
	22	9.3	4.3	6.6	5.6	4.6	3.6	2.7	1.7	8.5	4.6	6.2	5.2	4.3	3.4	2.4	1.5
	19	8.2	4.2	8.1	7.4	6.3	5.2	4.1	3.0	7.2	4.4	7.2	6.9	5.9	4.8	3.8	2.7
	17	8.3	4.1	8.3	7.9	6.8	5.7	4.6	3.5	7.5	4.3	7.5	7.2	6.2	5.1	4.1	3.0
	14	8.5	4.1	8.5	8.2	7.4	6.3	5.2	4.1	7.7	4.3	7.7	7.3	6.5	5.5	4.4	3.4
0.57	25	11.1	4.6	5.4	4.0	3.4	2.8	2.2	1.5	10.4	4.9	5.9	4.1	3.2	2.5	1.8	1.1
	22	10.0	4.4	7.1	6.2	5.3	4.4	3.6	2.7	9.1	4.7	6.8	5.9	5.0	4.1	3.2	2.3
	19	8.8	4.2	8.8	8.4	7.2	6.1	5.0	3.9	7.7	4.4	7.7	7.7	6.8	5.7	4.6	3.5
	17	8.9	4.2	8.9	8.9	7.9	6.7	5.6	4.5	8.0	4.4	8.0	8.0	7.2	6.1	5.0	3.9
	14	9.1	4.1	9.1	9.1	8.5	7.4	6.3	5.1	8.3	4.4	8.3	8.3	7.6	6.5	5.4	4.3
0.64	25	11.3	4.6	7.5	5.0	3.5	2.3	1.1	-	10.7	4.8	7.9	5.2	3.3	2.0	0.7	-
	22	10.1	4.4	8.2	6.9	5.5	4.2	2.8	-	9.3	4.6	7.9	6.6	5.2	3.8	2.4	-
	19	8.9	4.2	8.9	8.7	7.5	6.0	4.6	3.1	8.0	4.4	8.0	8.0	7.1	5.6	4.1	2.6
	17	9.1	4.1	9.1	9.1	8.2	6.7	5.2	3.7	8.2	4.3	8.2	8.2	7.5	6.0	4.5	3.0
	14	9.3	4.1	9.3	9.3	8.9	7.4	5.9	4.4	8.5	4.3	8.5	8.5	8.0	6.5	5.0	3.5
0.71	25	11.6	4.5	9.7	6.0	3.7	1.8	-	-	10.9	4.8	10.0	6.3	3.4	1.5	-	-
	22	10.3	4.3	9.4	7.6	5.7	3.9	2.1	-	9.5	4.5	9.1	7.2	5.3	3.5	1.6	-
	19	9.1	4.1	9.1	9.1	7.8	6.0	4.1	2.3	8.2	4.3	8.2	8.2	7.3	5.4	3.6	1.7
	17	9.3	4.1	9.3	9.3	8.5	6.6	4.8	3.0	8.4	4.3	8.4	8.4	7.7	5.8	4.0	2.1
	14	9.4	4.1	9.4	9.4	9.2	7.4	5.5	3.7	8.7	4.2	8.7	8.7	8.3	6.5	4.6	2.7

1. The capacities are gross ratings. For net capacity, deduct air blower motor kW. Refer to the appropriate Blower Performance table for the kW of the supply air blower motor.
2. These ratings include the condensate fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

TABLE 4: DEB048 COOLING CAPACITIES - 4 TON (IMPERIAL)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		75°F								85°F							
CFM	WB (°F)	Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)						Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
1200	77	54.4	3.2	25.4	20.7	15.9	11.1	6.4	-	53.0	3.8	25.7	20.5	15.2	10.0	4.7	-
	72	52.4	3.1	33.9	29.1	24.3	19.6	14.8	10.1	50.6	3.8	34.0	28.8	23.5	18.3	13.0	7.8
	67	50.5	3.1	42.3	37.5	32.8	28.0	23.3	18.5	48.3	3.7	42.3	37.1	31.8	26.6	21.3	16.0
	62	45.5	3.1	45.5	45.5	40.4	35.7	30.9	26.1	43.5	3.7	43.5	43.5	39.1	33.8	28.6	23.3
	57	47.0	3.1	47.0	47.0	43.6	38.8	34.1	29.3	45.2	3.7	45.2	45.2	41.6	36.4	31.1	25.8
1500	77	57.0	3.4	24.5	20.9	17.2	13.5	9.9	6.2	55.2	4.0	24.5	20.5	16.5	12.5	8.4	4.4
	72	55.0	3.4	34.7	30.5	26.3	22.1	17.9	13.7	52.8	3.9	34.5	30.0	25.4	20.9	16.4	11.8
	67	52.9	3.3	44.9	40.2	35.5	30.7	26.0	21.3	50.3	3.8	44.5	39.4	34.4	29.3	24.3	19.2
	62	47.6	3.3	47.6	47.6	43.7	38.7	33.6	28.6	45.4	3.8	45.4	45.4	42.2	36.9	31.6	26.3
	57	49.2	3.3	49.2	49.2	47.2	41.8	36.5	31.2	47.1	3.8	47.1	47.1	45.0	39.4	33.9	28.3
1800	77	59.6	3.7	23.6	21.1	18.5	15.9	13.4	10.8	57.4	4.1	23.2	20.5	17.7	14.9	12.2	9.4
	72	57.5	3.6	35.6	32.0	28.3	24.7	21.0	17.4	54.9	4.0	35.0	31.1	27.3	23.5	19.7	15.9
	67	55.3	3.5	47.6	42.9	38.1	33.4	28.7	24.0	52.4	4.0	46.7	41.8	37.0	32.1	27.3	22.4
	62	49.8	3.5	49.8	49.8	47.0	41.7	36.4	31.1	47.2	3.9	47.2	47.2	45.4	40.0	34.7	29.3
	57	51.5	3.5	51.5	51.5	50.7	44.8	38.9	33.0	49.0	3.9	49.0	49.0	48.4	42.5	36.6	30.8
1900	77	61.4	3.6	30.9	25.1	19.8	14.6	9.4	-	57.7	4.1	31.4	24.0	18.6	13.2	7.8	-
	72	59.2	3.5	42.0	36.2	30.4	24.6	18.8	13.0	55.2	4.0	40.6	34.7	28.8	22.9	17.0	11.0
	67	56.9	3.4	53.1	47.3	40.9	34.6	28.3	22.0	52.7	3.9	49.8	45.4	39.0	32.5	26.1	19.6
	62	51.3	3.4	51.3	51.3	49.9	43.2	36.6	30.0	47.5	3.9	47.5	47.5	46.6	39.9	33.2	26.5
	57	53.0	3.4	53.0	53.0	52.6	45.7	38.8	31.9	49.3	3.9	49.3	49.3	49.0	42.0	35.1	28.1
2000	77	63.2	3.4	38.1	29.1	21.2	13.3	5.4	-	58.1	4.1	39.7	27.6	19.6	11.6	3.5	-
	72	60.9	3.4	48.3	40.4	32.5	24.6	16.6	8.7	55.5	4.0	46.3	38.3	30.3	22.2	14.2	6.2
	67	58.5	3.3	58.5	51.7	43.8	35.8	27.9	20.0	53.0	3.9	53.0	49.0	40.9	32.9	24.9	16.8
	62	52.7	3.3	52.7	52.7	52.7	44.8	36.9	29.0	47.8	3.9	47.8	47.8	47.8	39.7	31.7	23.7
	57	54.5	3.3	54.5	54.5	54.5	46.6	38.6	30.7	49.6	3.9	49.6	49.6	49.6	41.5	33.5	25.5
		95°F								105°F							
1200	77	51.5	4.4	26.0	20.3	14.5	8.8	3.0	-	48.3	4.9	24.0	18.7	13.3	8.0	2.7	-
	72	48.8	4.4	34.2	28.4	22.7	16.9	11.2	5.4	45.3	4.8	31.9	26.5	21.2	15.9	10.5	5.2
	67	46.1	4.3	42.3	36.6	30.8	25.1	19.3	13.6	42.3	4.7	39.7	34.4	29.1	23.7	18.4	13.1
	62	41.6	4.3	41.6	41.6	37.7	32.0	26.2	20.5	37.7	4.7	37.7	37.7	34.2	28.9	23.5	18.2
	57	43.5	4.3	43.5	43.5	39.6	33.9	28.1	22.4	39.8	4.7	39.8	39.8	36.6	31.2	25.9	20.6
1500	77	53.3	4.5	24.4	20.1	15.7	11.4	7.0	2.7	50.4	5.0	23.3	18.8	14.6	10.4	6.1	1.9
	72	50.6	4.4	34.2	29.4	24.5	19.7	14.8	9.9	47.3	4.9	32.6	27.9	23.2	18.5	13.7	9.0
	67	47.8	4.4	44.1	38.7	33.3	28.0	22.6	17.2	44.1	4.8	41.9	36.9	31.7	26.5	21.3	16.1
	62	43.1	4.3	43.1	43.1	40.8	35.2	29.6	24.0	39.3	4.8	39.3	39.3	37.3	31.9	26.5	21.1
	57	45.0	4.3	45.0	45.0	42.8	37.0	31.2	25.4	41.5	4.8	41.5	41.5	39.9	34.3	28.7	23.1
1800	77	55.2	4.5	22.8	19.9	16.9	13.9	11.0	8.0	52.4	5.1	22.5	18.9	15.8	12.7	9.6	6.5
	72	52.3	4.5	34.3	30.3	26.4	22.4	18.4	14.5	49.2	5.0	33.3	29.2	25.1	21.0	16.9	12.8
	67	49.4	4.4	45.8	40.8	35.8	30.8	25.9	20.9	45.9	4.9	44.1	39.5	34.4	29.4	24.3	19.2
	62	44.6	4.4	44.6	44.6	43.8	38.4	33.0	27.5	40.8	4.9	40.8	40.8	40.5	35.0	29.5	24.0
	57	46.5	4.3	46.5	46.5	46.0	40.2	34.3	28.5	43.2	4.9	43.2	43.2	43.3	37.4	31.5	25.6
1900	77	54.1	4.6	32.0	23.0	17.4	11.9	6.3	0.8	51.0	5.1	32.3	22.6	16.2	10.5	4.8	-
	72	51.2	4.6	39.3	33.3	27.2	21.1	15.1	9.0	47.8	5.0	38.0	31.9	25.7	19.5	13.4	7.2
	67	48.4	4.5	46.6	43.5	37.0	30.4	23.8	17.3	44.7	5.0	43.8	41.2	35.2	28.6	21.9	15.2
	62	43.7	4.5	43.7	43.7	43.3	36.5	29.7	23.0	39.7	4.9	39.7	39.7	39.6	32.7	25.8	18.9
	57	45.6	4.4	45.6	45.6	45.3	38.4	31.4	24.4	42.0	4.9	42.0	42.0	42.1	35.0	27.9	20.8
2000	77	53.0	4.7	41.2	26.1	18.0	9.8	1.7	-	49.6	5.1	42.1	26.2	16.5	8.3	0.0	-
	72	50.2	4.7	44.3	36.2	28.0	19.9	11.8	3.6	46.5	5.1	42.8	34.5	26.3	18.0	9.8	1.5
	67	47.4	4.6	47.4	46.2	38.1	30.0	21.8	13.7	43.4	5.0	43.4	42.8	36.0	27.8	19.5	11.3
	62	42.8	4.5	42.8	42.8	42.8	34.6	26.5	18.4	38.6	5.0	38.6	38.6	38.6	30.4	22.1	13.9
	57	44.7	4.5	44.7	44.7	44.7	36.5	28.4	20.2	40.8	4.9	40.8	40.8	40.8	32.6	24.3	16.1

TABLE 4: DEB048 COOLING CAPACITIES - 4 TON (IMPERIAL) (CONTINUED)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		115°F								125°F							
CFM	WB (°F)	Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)						Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
1200	77	45.2	5.3	22.0	17.1	12.2	7.2	2.3	-	42.0	5.8	19.9	15.4	11.0	6.5	2.0	-
	72	41.8	5.2	29.5	24.6	19.7	14.8	9.9	5.0	38.4	5.6	27.2	22.7	18.2	13.7	9.2	4.7
	67	38.5	5.1	37.1	32.2	27.3	22.4	17.4	12.5	34.7	5.5	34.5	30.0	25.5	21.0	16.5	12.0
	62	33.7	5.1	33.7	33.7	30.6	25.7	20.8	15.9	29.7	5.5	29.7	29.7	27.1	22.6	18.1	13.6
	57	36.1	5.1	36.1	36.1	33.5	28.6	23.7	18.8	32.5	5.5	32.5	32.5	30.5	26.0	21.5	17.0
1500	77	47.4	5.5	22.1	17.5	13.4	9.4	5.3	1.2	44.5	6.0	21.7	16.3	12.3	8.4	4.4	0.5
	72	44.0	5.4	30.9	26.4	21.8	17.2	12.7	8.1	40.7	5.9	29.3	24.9	20.4	16.0	11.6	7.2
	67	40.5	5.3	39.8	35.2	30.2	25.1	20.1	15.0	36.9	5.7	36.9	33.5	28.6	23.7	18.8	13.9
	62	35.4	5.3	35.4	35.4	33.9	28.7	23.4	18.2	31.6	5.7	31.6	31.6	30.5	25.4	20.3	15.2
	57	38.0	5.2	38.0	38.0	37.1	31.6	26.2	20.8	34.5	5.7	34.5	34.5	34.2	28.9	23.7	18.4
1800	77	49.7	5.6	22.2	18.0	14.7	11.5	8.2	5.0	47.0	6.2	23.7	17.1	13.6	10.2	6.8	3.4
	72	46.1	5.5	32.3	28.1	23.9	19.7	15.5	11.2	43.0	6.1	31.3	27.0	22.7	18.3	14.0	9.6
	67	42.5	5.4	42.5	38.2	33.0	27.9	22.7	17.5	39.0	6.0	39.0	36.9	31.7	26.4	21.1	15.8
	62	37.1	5.4	37.1	37.1	37.1	31.6	26.0	20.4	33.4	6.0	33.4	33.4	33.4	28.2	22.5	16.8
	57	39.8	5.4	39.8	39.8	40.6	34.7	28.7	22.7	36.4	5.9	36.4	36.4	36.4	31.9	25.9	19.9
1900	77	48.0	5.6	32.6	22.2	14.9	9.1	3.3	-	44.9	6.1	33.8	21.8	13.7	7.7	1.8	-
	72	44.4	5.5	36.8	30.5	24.2	17.9	11.6	5.3	41.1	6.0	35.5	29.1	22.7	16.3	9.9	3.5
	67	40.9	5.4	40.9	38.8	33.5	26.7	19.9	13.2	37.2	5.9	37.2	36.5	31.7	24.9	18.0	11.1
	62	35.8	5.4	35.8	35.8	35.8	28.8	21.9	14.9	31.9	5.9	31.9	31.9	31.9	25.0	17.9	10.9
	57	38.4	5.4	38.4	38.4	38.8	31.6	24.5	17.3	34.8	5.8	34.8	34.8	34.8	28.3	21.0	13.8
2000	77	46.2	5.6	43.1	26.3	15.1	6.8	-	-	42.8	6.0	42.8	27.0	13.7	5.2	-	-
	72	42.8	5.5	41.2	32.9	24.5	16.2	7.8	-0.6	39.1	5.9	39.1	31.2	22.8	14.3	5.8	-
	67	39.4	5.4	39.4	39.4	33.9	25.6	17.2	8.8	35.4	5.8	35.4	35.4	31.8	23.4	14.9	6.4
	62	34.5	5.4	34.5	34.5	34.5	26.1	17.8	9.4	30.3	5.8	30.3	30.3	30.3	21.9	13.4	4.9
	57	37.0	5.3	37.0	37.0	37.0	28.6	20.2	11.9	33.1	5.7	33.1	33.1	33.1	24.6	16.2	7.7

1. The capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance table for the kW of the supply air blower motor.

2. These ratings include the condensate fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

TABLE 5: DEB048 COOLING CAPACITIES - 4 TON (METRIC)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		24°C								29°C							
m³/s	WB (°C)	Total Cap. ¹ (kW)	Total Input ² (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)						Total Cap. ¹ (kW)	Total Input ² (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)					
				32	29	27	24	21	18			32	29	27	24	21	18
0.57	25	15.9	3.2	7.4	6.1	4.7	3.3	1.9	-	15.5	3.8	7.5	6.0	4.5	2.9	1.4	-
	22	15.4	3.1	9.9	8.5	7.1	5.7	4.3	3.0	14.8	3.8	10.0	8.4	6.9	5.4	3.8	2.3
	19	14.8	3.1	12.4	11.0	9.6	8.2	6.8	5.4	14.2	3.7	12.4	10.9	9.3	7.8	6.2	4.7
	17	13.3	3.1	13.3	13.3	11.8	10.4	9.1	7.7	12.8	3.7	12.8	12.8	11.4	9.9	8.4	6.8
	14	13.8	3.1	13.8	13.8	12.8	11.4	10.0	8.6	13.2	3.7	13.2	13.2	12.2	10.7	9.1	7.6
0.71	25	16.7	3.4	7.2	6.1	5.0	4.0	2.9	1.8	16.2	4.0	7.2	6.0	4.8	3.6	2.5	1.3
	22	16.1	3.4	10.2	8.9	7.7	6.5	5.3	4.0	15.5	3.9	10.1	8.8	7.5	6.1	4.8	3.5
	19	15.5	3.3	13.2	11.8	10.4	9.0	7.6	6.2	14.7	3.8	13.0	11.6	10.1	8.6	7.1	5.6
	17	14.0	3.3	14.0	14.0	12.8	11.3	9.9	8.4	13.3	3.8	13.3	13.3	12.4	10.8	9.3	7.7
	14	14.4	3.3	14.4	14.4	13.8	12.3	10.7	9.1	13.8	3.8	13.8	13.8	13.2	11.6	9.9	8.3
0.85	25	17.5	3.7	6.9	6.2	5.4	4.7	3.9	3.2	16.8	4.1	6.8	6.0	5.2	4.4	3.6	2.8
	22	16.8	3.6	10.4	9.4	8.3	7.2	6.2	5.1	16.1	4.0	10.2	9.1	8.0	6.9	5.8	4.7
	19	16.2	3.5	13.9	12.6	11.2	9.8	8.4	7.0	15.3	4.0	13.7	12.3	10.8	9.4	8.0	6.6
	17	14.6	3.5	14.6	14.6	13.8	12.2	10.7	9.1	13.8	3.9	13.8	13.8	13.3	11.7	10.2	8.6
	14	15.1	3.5	15.1	15.1	14.9	13.1	11.4	9.7	14.4	3.9	14.4	14.4	14.2	12.5	10.7	9.0
0.90	25	18.0	3.6	9.0	7.4	5.8	4.3	2.7	-	16.9	4.1	9.2	7.0	5.5	3.9	2.3	-
	22	17.3	3.5	12.3	10.6	8.9	7.2	5.5	3.8	16.2	4.0	11.9	10.2	8.4	6.7	5.0	3.2
	19	16.7	3.4	15.6	13.9	12.0	10.1	8.3	6.4	15.4	3.9	14.6	13.3	11.4	9.5	7.6	5.8
	17	15.0	3.4	15.0	15.0	14.6	12.7	10.7	8.8	13.9	3.9	13.9	13.9	13.7	11.7	9.7	7.8
	14	15.5	3.4	15.5	15.5	15.4	13.4	11.4	9.3	14.4	3.9	14.4	14.4	14.4	12.3	10.3	8.2
0.94	25	18.5	3.4	11.2	8.5	6.2	3.9	1.6	-	17.0	4.1	11.6	8.1	5.7	3.4	1.0	-
	22	17.8	3.4	14.2	11.8	9.5	7.2	4.9	2.6	16.3	4.0	13.6	11.2	8.9	6.5	4.2	1.8
	19	17.2	3.3	17.2	15.1	12.8	10.5	8.2	5.9	15.5	3.9	15.5	14.3	12.0	9.6	7.3	4.9
	17	15.5	3.3	15.5	15.5	15.5	13.1	10.8	8.5	14.0	3.9	14.0	14.0	14.0	11.6	9.3	6.9
	14	16.0	3.3	16.0	16.0	16.0	13.6	11.3	9.0	14.5	3.9	14.5	14.5	14.5	12.2	9.8	7.5
		35°C								41°C							
0.57	25	15.1	4.4	7.6	5.9	4.3	2.6	0.9	-	14.2	4.9	7.0	5.5	3.9	2.4	0.8	-
	22	14.3	4.4	10.0	8.3	6.7	5.0	3.3	1.6	13.3	4.8	9.3	7.8	6.2	4.7	3.1	1.5
	19	13.5	4.3	12.4	10.7	9.0	7.4	5.7	4.0	12.4	4.7	11.6	10.1	8.5	7.0	5.4	3.8
	17	12.2	4.3	12.2	12.2	11.1	9.4	7.7	6.0	11.0	4.7	11.0	11.0	10.0	8.5	6.9	5.3
	14	12.7	4.3	12.7	12.7	11.6	9.9	8.2	6.6	11.7	4.7	11.7	11.7	10.7	9.2	7.6	6.0
0.71	25	15.6	4.5	7.2	5.9	4.6	3.3	2.1	0.8	14.8	5.0	6.8	5.5	4.3	3.0	1.8	0.6
	22	14.8	4.4	10.0	8.6	7.2	5.8	4.3	2.9	13.9	4.9	9.6	8.2	6.8	5.4	4.0	2.6
	19	14.0	4.4	12.9	11.3	9.8	8.2	6.6	5.1	12.9	4.8	12.3	10.8	9.3	7.8	6.3	4.7
	17	12.6	4.3	12.6	12.6	11.9	10.3	8.7	7.0	11.5	4.8	11.5	11.5	10.9	9.4	7.8	6.2
	14	13.2	4.3	13.2	13.2	12.6	10.9	9.2	7.5	12.2	4.8	12.2	12.2	11.7	10.1	8.4	6.8
0.85	25	16.2	4.5	6.7	5.8	5.0	4.1	3.2	2.4	15.4	5.1	6.6	5.5	4.6	3.7	2.8	1.9
	22	15.3	4.5	10.1	8.9	7.7	6.6	5.4	4.2	14.4	5.0	9.8	8.6	7.4	6.2	5.0	3.8
	19	14.5	4.4	13.4	12.0	10.5	9.0	7.6	6.1	13.5	4.9	12.9	11.6	10.1	8.6	7.1	5.6
	17	13.1	4.4	13.1	13.1	12.8	11.3	9.7	8.1	12.0	4.9	12.0	12.0	11.9	10.3	8.6	7.0
	14	13.6	4.3	13.6	13.6	13.5	11.8	10.1	8.4	12.6	4.9	12.6	12.6	12.7	11.0	9.2	7.5
0.90	25	15.8	4.6	9.4	6.7	5.1	3.5	1.9	0.2	15.0	5.1	9.5	6.6	4.7	3.1	1.4	-
	22	15.0	4.6	11.5	9.7	8.0	6.2	4.4	2.6	14.0	5.0	11.2	9.3	7.5	5.7	3.9	2.1
	19	14.2	4.5	13.7	12.8	10.8	8.9	7.0	5.1	13.1	5.0	12.8	12.1	10.3	8.4	6.4	4.5
	17	12.8	4.5	12.8	12.8	12.7	10.7	8.7	6.7	11.6	4.9	11.6	11.6	11.6	9.6	7.6	5.5
	14	13.4	4.4	13.4	13.4	13.3	11.2	9.2	7.1	12.3	4.9	12.3	12.3	12.3	10.3	8.2	6.1
0.94	25	15.5	4.7	12.1	7.7	5.3	2.9	0.5	-	14.5	5.1	12.4	7.7	4.9	2.4	0.0	-
	22	14.7	4.7	13.0	10.6	8.2	5.8	3.4	1.1	13.6	5.1	12.5	10.1	7.7	5.3	2.9	0.4
	19	13.9	4.6	13.9	13.6	11.2	8.8	6.4	4.0	12.7	5.0	12.7	12.6	10.6	8.1	5.7	3.3
	17	12.5	4.5	12.5	12.5	12.5	10.2	7.8	5.4	11.3	5.0	11.3	11.3	11.3	8.9	6.5	4.1
	14	13.1	4.5	13.1	13.1	13.1	10.7	8.3	5.9	12.0	4.9	12.0	12.0	12.0	9.5	7.1	4.7

TABLE 5: DEB048 COOLING CAPACITIES - 4 TON (METRIC) (CONTINUED)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		46°C								52°C							
m³/s	WB (°C)	Total Cap. ¹ (kW)	Total Input ² (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)						Total Cap. ¹ (kW)	Total Input ² (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)					
				32	29	27	24	21	18			32	29	27	24	21	18
0.57	25	13.2	5.3	6.4	5.0	3.6	2.1	0.7	-	12.3	5.8	5.8	4.5	3.2	1.9	0.6	-
	22	12.3	5.2	8.7	7.2	5.8	4.3	2.9	1.5	11.2	5.6	8.0	6.7	5.3	4.0	2.7	1.4
	19	11.3	5.1	10.9	9.4	8.0	6.6	5.1	3.7	10.2	5.5	10.1	8.8	7.5	6.2	4.8	3.5
	17	9.9	5.1	9.9	9.9	9.0	7.5	6.1	4.7	8.7	5.5	8.7	8.7	7.9	6.6	5.3	4.0
	14	10.6	5.1	10.6	10.6	9.8	8.4	6.9	5.5	9.5	5.5	9.5	9.5	8.9	7.6	6.3	5.0
0.71	25	13.9	5.5	6.5	5.1	3.9	2.7	1.5	0.3	13.0	6.0	6.4	4.8	3.6	2.4	1.3	0.1
	22	12.9	5.4	9.1	7.7	6.4	5.1	3.7	2.4	11.9	5.9	8.6	7.3	6.0	4.7	3.4	2.1
	19	11.9	5.3	11.7	10.3	8.8	7.4	5.9	4.4	10.8	5.7	10.8	9.8	8.4	6.9	5.5	4.1
	17	10.4	5.3	10.4	10.4	9.9	8.4	6.9	5.3	9.3	5.7	9.3	9.3	8.9	7.4	6.0	4.5
	14	11.1	5.2	11.1	11.1	10.9	9.3	7.7	6.1	10.1	5.7	10.1	10.1	10.0	8.5	6.9	5.4
0.85	25	14.6	5.6	6.5	5.3	4.3	3.4	2.4	1.5	13.8	6.2	6.9	5.0	4.0	3.0	2.0	1.0
	22	13.5	5.5	9.5	8.2	7.0	5.8	4.5	3.3	12.6	6.1	9.2	7.9	6.6	5.4	4.1	2.8
	19	12.4	5.4	12.4	11.2	9.7	8.2	6.7	5.1	11.4	6.0	11.4	10.8	9.3	7.7	6.2	4.6
	17	10.9	5.4	10.9	10.9	10.9	9.3	7.6	6.0	9.8	6.0	9.8	9.8	9.8	8.3	6.6	4.9
	14	11.7	5.4	11.7	11.7	11.9	10.2	8.4	6.7	10.7	5.9	10.7	10.7	10.7	9.3	7.6	5.8
0.90	25	14.1	5.6	9.6	6.5	4.4	2.7	1.0	-	13.2	6.1	9.9	6.4	4.0	2.3	0.5	-
	22	13.0	5.5	10.8	8.9	7.1	5.3	3.4	1.6	12.0	6.0	10.4	8.5	6.7	4.8	2.9	1.0
	19	12.0	5.4	12.0	11.4	9.8	7.8	5.8	3.9	10.9	5.9	10.9	10.7	9.3	7.3	5.3	3.3
	17	10.5	5.4	10.5	10.5	10.5	8.5	6.4	4.4	9.3	5.9	9.3	9.3	9.3	7.3	5.3	3.2
	14	11.2	5.4	11.2	11.2	11.4	9.3	7.2	5.1	10.2	5.8	10.2	10.2	10.2	8.3	6.2	4.0
0.94	25	13.5	5.6	12.6	7.7	4.4	2.0	-	-	12.5	6.0	12.5	7.9	4.0	1.5	-	-
	22	12.5	5.5	12.1	9.6	7.2	4.7	2.3	-0.2	11.5	5.9	11.5	9.2	6.7	4.2	1.7	-
	19	11.6	5.4	11.6	11.6	9.9	7.5	5.0	2.6	10.4	5.8	10.4	10.4	9.3	6.8	4.4	1.9
	17	10.1	5.4	10.1	10.1	10.1	7.7	5.2	2.8	8.9	5.8	8.9	8.9	8.9	6.4	3.9	1.4
	14	10.8	5.3	10.8	10.8	10.8	8.4	5.9	3.5	9.7	5.7	9.7	9.7	9.7	7.2	4.7	2.3

1. The capacities are gross ratings. For net capacity, deduct air blower motor kW. Refer to the appropriate Blower Performance table for the kW of the supply air blower motor.

2. These ratings include the condensate fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

TABLE 6: DEB060 COOLING CAPACITIES - 5 TON (IMPERIAL)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		75°F								85°F							
CFM	WB (°F)	Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)						Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
1500	77	70.8	4.3	31.3	25.4	19.4	13.5	7.5	1.6	67.9	4.7	32.7	26.1	19.5	13.0	6.4	-
	72	67.4	4.2	42.5	36.5	30.6	24.6	18.7	12.7	64.5	4.6	43.1	36.5	30.0	23.4	16.8	10.2
	67	64.0	4.1	53.6	47.6	41.7	35.7	29.8	23.9	61.1	4.5	53.5	46.9	40.4	33.8	27.2	20.7
	62	60.0	4.1	60.0	58.6	50.6	44.7	38.7	32.8	56.1	4.5	56.1	55.4	48.8	42.3	35.7	29.1
	57	58.4	4.0	58.4	58.4	52.6	46.7	40.7	34.8	55.5	4.5	55.5	55.5	50.6	44.1	37.5	30.9
1750	77	72.5	4.2	30.4	25.8	21.1	16.5	11.9	7.2	70.0	4.7	31.9	26.6	21.2	15.9	10.6	5.3
	72	69.0	4.1	44.1	38.7	33.3	27.9	22.5	17.1	66.5	4.6	44.4	38.5	32.6	26.7	20.7	14.8
	67	65.5	4.0	57.7	51.5	45.4	39.2	33.1	26.9	62.9	4.5	57.0	50.4	43.9	37.4	30.8	24.3
	62	61.4	4.0	61.4	60.7	55.1	48.7	43.2	36.1	57.8	4.5	57.8	57.4	53.1	46.4	40.1	32.9
	57	59.8	4.0	59.8	59.8	57.2	50.8	45.9	37.8	57.1	4.5	57.1	57.1	55.1	48.1	42.0	34.2
2000	77	74.2	4.2	29.5	26.2	22.9	19.5	16.2	12.8	72.0	4.7	31.1	27.0	23.0	18.9	14.8	10.7
	72	70.6	4.1	45.7	40.8	36.0	31.1	26.2	21.4	68.4	4.6	45.8	40.5	35.2	29.9	24.6	19.4
	67	67.0	4.0	61.8	55.4	49.1	42.7	36.3	29.9	64.8	4.6	60.5	54.0	47.5	41.0	34.5	28.0
	62	62.9	4.0	62.9	62.9	59.5	52.8	47.8	39.3	59.5	4.5	59.5	59.5	57.4	50.5	44.4	36.6
	57	61.2	3.9	61.2	61.2	61.9	54.8	51.1	40.8	58.7	4.5	58.7	58.7	59.5	52.2	46.5	37.6
2250	77	77.1	4.0	37.8	30.6	24.0	17.4	10.8	4.2	74.7	4.6	40.8	31.6	24.5	17.5	10.4	3.4
	72	73.4	3.9	52.5	45.1	37.7	30.4	23.0	15.7	70.9	4.5	52.9	45.3	37.6	29.9	22.3	14.6
	67	69.7	3.8	67.1	59.6	51.5	43.4	35.3	27.2	67.2	4.5	65.0	59.0	50.7	42.4	34.2	25.9
	62	65.4	3.8	65.4	65.4	63.7	55.4	48.0	38.8	61.7	4.4	61.7	61.7	60.6	52.2	44.1	35.2
	57	63.6	3.8	63.6	63.6	64.0	55.5	48.7	38.6	60.9	4.4	60.9	60.9	61.3	52.6	44.8	35.3
2500	77	80.1	3.8	46.1	34.9	25.1	15.2	5.4	-	77.3	4.5	50.6	36.1	26.1	16.0	6.0	-
	72	76.2	3.7	59.2	49.4	39.5	29.7	19.8	10.0	73.5	4.5	60.1	50.0	40.0	30.0	19.9	9.9
	67	72.3	3.6	72.3	63.8	54.0	44.1	34.3	24.4	69.6	4.4	69.6	64.0	53.9	43.9	33.8	23.8
	62	67.8	3.6	67.8	67.8	67.8	58.0	48.1	38.3	63.9	4.4	63.9	63.9	63.9	53.8	43.8	33.8
	57	66.1	3.6	66.1	66.1	66.1	56.2	46.4	36.5	63.1	4.3	63.1	63.1	63.1	53.1	43.0	33.0
		95°F								105°F							
1500	77	65.0	5.1	34.0	26.8	19.6	12.4	5.2	-	60.9	5.7	30.5	23.8	17.2	10.5	3.8	-
	72	61.6	5.1	43.7	36.5	29.3	22.2	15.0	7.8	57.1	5.7	40.3	33.6	26.9	20.3	13.6	6.9
	67	58.3	5.0	53.4	46.2	39.1	31.9	24.7	17.5	53.3	5.6	50.0	43.4	36.7	30.0	23.4	16.7
	62	52.2	4.9	52.2	52.2	47.1	39.9	32.7	25.5	48.4	5.6	48.4	48.4	43.4	36.7	30.0	23.4
	57	52.5	4.9	52.5	52.5	48.6	41.5	34.3	27.1	48.6	5.5	48.6	48.6	44.5	37.8	31.2	24.5
1750	77	67.4	5.2	33.3	27.3	21.3	15.3	9.3	3.4	63.9	5.8	31.3	24.7	19.0	13.3	7.6	1.9
	72	63.9	5.1	44.8	38.3	31.9	25.4	19.0	12.5	59.9	5.7	42.4	36.1	29.8	23.6	17.3	11.1
	67	60.4	5.1	56.3	49.4	42.5	35.6	28.6	21.7	55.9	5.7	53.4	47.5	40.7	33.9	27.1	20.2
	62	54.1	5.0	54.1	54.1	51.2	44.0	36.9	29.7	50.7	5.6	50.7	50.7	48.1	41.0	34.0	27.0
	57	54.4	5.0	54.4	54.4	52.9	45.5	38.1	30.7	50.9	5.6	50.9	50.9	49.3	42.1	34.9	27.7
2000	77	69.8	5.2	32.6	27.8	23.0	18.2	13.4	8.7	66.8	5.8	32.2	25.5	20.8	16.1	11.4	6.7
	72	66.1	5.2	45.9	40.2	34.5	28.7	23.0	17.3	62.6	5.8	44.4	38.6	32.7	26.9	21.1	15.2
	67	62.5	5.1	59.1	52.5	45.9	39.2	32.6	26.0	58.4	5.7	56.7	51.6	44.7	37.7	30.7	23.8
	62	56.0	5.1	56.0	56.0	55.3	48.2	41.1	33.9	53.0	5.7	53.0	53.0	52.7	45.4	38.0	30.7
	57	56.3	5.0	56.3	56.3	57.1	49.5	42.0	34.4	53.3	5.6	53.3	53.3	54.1	46.4	38.6	30.9
2250	77	72.2	5.2	43.8	32.6	25.1	17.5	10.0	2.5	68.5	5.9	43.6	30.6	22.4	14.8	7.3	-
	72	68.4	5.2	53.4	45.4	37.5	29.5	21.5	13.6	64.3	5.8	51.3	43.2	35.2	27.1	19.0	10.9
	67	64.7	5.1	63.0	58.3	49.9	41.4	33.0	24.6	60.0	5.8	59.1	55.9	47.9	39.3	30.6	22.0
	62	58.0	5.1	58.0	58.0	57.6	48.9	40.3	31.6	54.4	5.7	54.4	54.4	54.3	45.4	36.6	27.8
	57	58.2	5.0	58.2	58.2	58.6	49.7	40.8	31.9	54.7	5.7	54.7	54.7	55.1	46.1	37.0	28.0
2500	77	74.6	5.3	55.0	37.3	27.1	16.8	6.6	-	70.3	5.9	55.0	35.6	23.9	13.6	3.2	-
	72	70.7	5.2	60.9	50.7	40.5	30.2	20.0	9.8	65.9	5.9	58.2	47.9	37.6	27.2	16.9	6.5
	67	66.8	5.2	66.8	64.1	53.9	43.6	33.4	23.2	61.5	5.8	61.5	60.2	51.2	40.9	30.5	20.2
	62	59.9	5.1	59.9	59.9	59.9	49.7	39.5	29.2	55.9	5.8	55.9	55.9	55.9	45.5	35.2	24.8
	57	60.2	5.0	60.2	60.2	60.2	50.0	39.7	29.5	56.1	5.7	56.1	56.1	56.1	45.8	35.4	25.1

TABLE 6: DEB060 COOLING CAPACITIES - 5 TON (IMPERIAL) (CONTINUED)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		115°F								125°F							
CFM	WB (°F)	Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)						Total Cap. ¹ (MBH)	Total ² Input (kW)	Sensible Capacity (MBH) Return Dry Bulb (°F)					
				90	85	80	75	70	65			90	85	80	75	70	65
1500	77	56.9	6.3	27.0	20.8	14.7	8.6	2.4	-	52.8	6.9	23.5	17.9	12.2	6.6	1.0	-
	72	52.6	6.2	36.8	30.7	24.5	18.4	12.3	6.1	48.1	6.8	33.3	27.7	22.1	16.5	10.9	5.3
	67	48.4	6.2	46.6	40.5	34.4	28.2	22.1	15.9	43.5	6.8	43.2	37.6	32.0	26.4	20.8	15.2
	62	44.6	6.2	44.6	44.6	39.7	33.5	27.4	21.2	40.8	6.8	40.8	40.8	35.9	30.3	24.7	19.1
	57	44.8	6.1	44.8	44.8	40.3	34.2	28.0	21.9	41.0	6.8	41.0	41.0	36.2	30.5	24.9	19.3
1750	77	60.3	6.4	29.4	22.0	16.7	11.3	5.9	0.5	56.8	6.9	28.1	19.4	14.3	9.2	4.1	-
	72	55.8	6.3	39.9	33.8	27.8	21.7	15.7	9.6	51.8	6.9	37.5	31.6	25.7	19.9	14.0	8.1
	67	51.3	6.3	50.5	45.6	38.9	32.2	25.5	18.7	46.8	6.8	46.8	43.8	37.1	30.5	23.9	17.2
	62	47.3	6.2	47.3	47.3	44.9	38.1	31.2	24.3	43.9	6.8	43.9	43.9	41.8	35.1	28.3	21.6
	57	47.5	6.2	47.5	47.5	45.7	38.7	31.7	24.7	44.1	6.8	44.1	44.1	42.1	35.3	28.5	21.7
2000	77	63.8	6.4	31.7	23.3	18.6	14.0	9.3	4.7	60.8	7.0	33.0	21.0	16.4	11.8	7.2	2.7
	72	59.0	6.4	43.0	37.0	31.0	25.1	19.1	13.1	55.5	6.9	41.6	35.5	29.3	23.2	17.1	11.0
	67	54.3	6.3	54.3	50.8	43.5	36.2	28.8	21.5	50.2	6.9	50.2	49.9	42.3	34.6	27.0	19.3
	62	50.0	6.3	50.0	50.0	50.2	42.6	35.0	27.4	47.0	6.9	47.0	47.0	47.0	39.8	32.0	24.1
	57	50.2	6.3	50.2	50.2	51.0	43.2	35.3	27.5	47.2	6.9	47.2	47.2	47.2	40.0	32.0	24.0
2250	77	64.9	6.5	43.3	28.6	19.7	12.1	4.6	-	61.3	7.1	43.9	27.2	17.0	9.4	1.9	-
	72	60.1	6.4	49.3	41.1	32.8	24.6	16.4	8.2	55.9	7.1	47.2	38.9	30.5	22.2	13.9	5.5
	67	55.2	6.4	55.2	53.5	46.0	37.1	28.2	19.4	50.5	7.0	50.5	50.5	44.1	35.0	25.8	16.7
	62	50.9	6.4	50.9	50.9	51.0	42.0	32.9	23.9	47.4	7.0	47.4	47.4	47.4	38.5	29.3	20.1
	57	51.1	6.3	51.1	51.1	51.5	42.4	33.2	24.1	47.6	7.0	47.6	47.6	47.6	38.7	29.4	20.1
2500	77	66.0	6.6	54.9	34.0	20.8	10.3	-	-	61.8	7.2	54.8	33.7	17.6	7.1	-	-
	72	61.1	6.5	55.6	45.1	34.6	24.2	13.7	3.3	56.3	7.2	52.9	42.3	31.7	21.2	10.6	0.1
	67	56.2	6.5	56.2	56.2	48.5	38.1	27.6	17.2	50.9	7.1	50.9	50.9	45.9	35.3	24.7	14.2
	62	51.8	6.4	51.8	51.8	51.8	41.3	30.9	20.4	47.7	7.1	47.7	47.7	47.7	37.2	26.6	16.0
	57	52.0	6.4	52.0	52.0	52.0	41.6	31.1	20.7	48.0	7.1	48.0	48.0	48.0	37.4	26.8	16.3

1. The capacities are gross ratings. For net capacity, deduct air blower motor, MBh = 3.415 x kW. Refer to the appropriate Blower Performance table for the kW of the supply air blower motor.
2. These ratings include the condensate fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

TABLE 7: DEB060 COOLING CAPACITIES - 5 TON (METRIC)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		24°C								29°C							
m³/s	WB (°C)	Total Cap. ¹ (kW)	Total ² Input (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)						Total Cap. ¹ (kW)	Total ² Input (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)					
				32	29	27	24	21	18			32	29	27	24	21	18
0.71	25	20.8	4.3	9.2	7.4	5.7	4.0	2.2	0.5	19.9	4.7	9.6	7.6	5.7	3.8	1.9	-
	22	19.8	4.2	12.4	10.7	9.0	7.2	5.5	3.7	18.9	4.6	12.6	10.7	8.8	6.9	4.9	3.0
	19	18.8	4.1	15.7	14.0	12.2	10.5	8.7	7.0	17.9	4.5	15.7	13.8	11.8	9.9	8.0	6.1
	17	17.6	4.1	17.6	17.2	14.8	13.1	11.3	9.6	16.4	4.5	16.4	16.2	14.3	12.4	10.5	8.5
	14	17.1	4.0	17.1	17.1	15.4	13.7	11.9	10.2	16.2	4.5	16.3	16.3	14.8	12.9	11.0	9.1
0.83	25	21.3	4.2	8.9	7.6	6.2	4.8	3.5	2.1	20.5	4.7	9.3	7.8	6.2	4.7	3.1	1.5
	22	20.2	4.1	12.9	11.3	9.7	8.2	6.6	5.0	19.5	4.6	13.0	11.3	9.5	7.8	6.1	4.3
	19	19.2	4.0	16.9	15.1	13.3	11.5	9.7	7.9	18.4	4.5	16.7	14.8	12.9	11.0	9.0	7.1
	17	18.0	4.0	18.0	17.8	16.1	14.3	12.7	10.6	16.9	4.5	16.9	16.8	15.6	13.6	11.7	9.6
	14	17.5	4.0	17.5	17.5	16.8	14.9	13.4	11.1	16.7	4.5	16.7	16.7	16.1	14.1	12.3	10.0
0.94	25	21.7	4.2	8.7	7.7	6.7	5.7	4.7	3.8	21.1	4.7	9.1	7.9	6.7	5.5	4.3	3.1
	22	20.7	4.1	13.4	12.0	10.5	9.1	7.7	6.3	20.0	4.6	13.4	11.9	10.3	8.8	7.2	5.7
	19	19.6	4.0	18.1	16.2	14.4	12.5	10.6	8.8	19.0	4.6	17.7	15.8	13.9	12.0	10.1	8.2
	17	18.4	4.0	18.4	18.4	17.4	15.5	14.0	11.5	17.4	4.5	17.4	17.4	16.8	14.8	13.0	10.7
	14	17.9	3.9	17.9	17.9	18.1	16.1	15.0	11.9	17.2	4.5	17.2	17.2	17.4	15.3	13.6	11.0
1.06	25	22.6	4.0	11.1	9.0	7.0	5.1	3.2	1.2	21.9	4.6	12.0	9.3	7.2	5.1	3.1	1.0
	22	21.5	3.9	15.4	13.2	11.1	8.9	6.8	4.6	20.8	4.5	15.5	13.3	11.0	8.8	6.5	4.3
	19	20.4	3.8	19.7	17.5	15.1	12.7	10.3	8.0	19.7	4.5	19.1	17.3	14.9	12.4	10.0	7.6
	17	19.2	3.8	19.2	19.2	18.7	16.2	14.1	11.4	18.1	4.4	18.1	18.1	17.8	15.3	12.9	10.3
	14	18.7	3.8	18.7	18.7	18.7	16.3	14.3	11.3	17.9	4.4	17.9	17.9	18.0	15.4	13.1	10.3
1.18	25	23.5	3.8	13.5	10.2	7.4	4.5	1.6	-	22.7	4.5	14.8	10.6	7.6	4.7	1.8	-
	22	22.3	3.7	17.4	14.5	11.6	8.7	5.8	2.9	21.5	4.5	17.6	14.7	11.7	8.8	5.8	2.9
	19	21.2	3.6	21.2	18.7	15.8	12.9	10.0	7.2	20.4	4.4	20.4	18.7	15.8	12.9	9.9	7.0
	17	19.9	3.6	19.9	19.9	19.9	17.0	14.1	11.2	18.7	4.4	18.7	18.7	18.7	15.8	12.8	9.9
	14	19.4	3.6	19.4	19.4	19.4	16.5	13.6	10.7	18.5	4.3	18.5	18.5	18.5	15.6	12.6	9.7
		35°C								41°C							
0.71	25	19.1	5.1	10.0	7.9	5.8	3.6	1.5	-	17.9	5.7	8.9	7.0	5.0	3.1	1.1	-
	22	18.1	5.1	12.8	10.7	8.6	6.5	4.4	2.3	16.7	5.7	11.8	9.8	7.9	5.9	4.0	2.0
	19	17.1	5.0	15.7	13.6	11.4	9.3	7.2	5.1	15.6	5.6	14.7	12.7	10.8	8.8	6.9	4.9
	17	15.3	4.9	15.3	15.3	13.8	11.7	9.6	7.5	14.2	5.6	14.2	14.2	12.7	10.8	8.8	6.9
	14	15.4	4.9	15.4	15.4	14.3	12.1	10.0	7.9	14.3	5.5	14.3	14.3	13.0	11.1	9.1	7.2
0.83	25	19.8	5.2	9.8	8.0	6.3	4.5	2.7	1.0	18.7	5.8	9.2	7.2	5.6	3.9	2.2	0.6
	22	18.7	5.1	13.1	11.2	9.3	7.5	5.6	3.7	17.5	5.7	12.4	10.6	8.7	6.9	5.1	3.2
	19	17.7	5.1	16.5	14.5	12.4	10.4	8.4	6.4	16.4	5.7	15.6	13.9	11.9	9.9	7.9	5.9
	17	15.9	5.0	15.9	15.9	15.0	12.9	10.8	8.7	14.9	5.6	14.9	14.9	14.1	12.0	10.0	7.9
	14	15.9	5.0	15.9	15.9	15.5	13.3	11.2	9.0	14.9	5.6	14.9	14.9	14.4	12.3	10.2	8.1
0.94	25	20.4	5.2	9.6	8.2	6.8	5.3	3.9	2.5	19.6	5.8	9.4	7.5	6.1	4.7	3.3	2.0
	22	19.4	5.2	13.4	11.8	10.1	8.4	6.8	5.1	18.3	5.8	13.0	11.3	9.6	7.9	6.2	4.5
	19	18.3	5.1	17.3	15.4	13.4	11.5	9.6	7.6	17.1	5.7	16.6	15.1	13.1	11.0	9.0	7.0
	17	16.4	5.1	16.4	16.4	16.2	14.1	12.0	9.9	15.5	5.7	15.5	15.5	15.5	13.3	11.1	9.0
	14	16.5	5.0	16.5	16.5	16.7	14.5	12.3	10.1	15.6	5.6	15.6	15.6	15.8	13.6	11.3	9.1
1.06	25	21.2	5.2	12.8	9.5	7.3	5.1	2.9	0.7	20.1	5.9	12.8	9.0	6.6	4.3	2.1	-
	22	20.1	5.2	15.7	13.3	11.0	8.6	6.3	4.0	18.8	5.8	15.0	12.7	10.3	7.9	5.6	3.2
	19	19.0	5.1	18.5	17.1	14.6	12.1	9.7	7.2	17.6	5.8	17.3	16.4	14.0	11.5	9.0	6.4
	17	17.0	5.1	17.0	17.0	16.9	14.3	11.8	9.3	16.0	5.7	16.0	16.0	15.9	13.3	10.7	8.1
	14	17.1	5.0	17.1	17.1	17.2	14.6	12.0	9.4	16.0	5.7	16.0	16.0	16.1	13.5	10.9	8.2
1.18	25	21.9	5.3	16.1	10.9	7.9	4.9	1.9	-	20.6	5.9	16.1	10.4	7.0	4.0	0.9	-
	22	20.7	5.2	17.9	14.9	11.9	8.9	5.9	2.9	19.3	5.9	17.1	14.0	11.0	8.0	4.9	1.9
	19	19.6	5.2	19.6	18.8	15.8	12.8	9.8	6.8	18.0	5.8	18.0	17.6	15.0	12.0	8.9	5.9
	17	17.6	5.1	17.6	17.6	17.6	14.6	11.6	8.6	16.4	5.8	16.4	16.4	16.4	13.3	10.3	7.3
	14	17.6	5.0	17.6	17.6	17.6	14.6	11.6	8.6	16.4	5.7	16.4	16.4	16.4	13.4	10.4	7.4

TABLE 7: DEB060 COOLING CAPACITIES - 5 TON (METRIC) (CONTINUED)

Air on Evaporator Coil		Temperature of Air on Condenser Coil															
		46°C								52°C							
m³/s	WB (°C)	Total Cap. ¹ (kW)	Total ² Input (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)						Total Cap. ¹ (kW)	Total ² Input (kW)	Sensible Capacity (kW) Return Dry Bulb (°C)					
				32	29	27	24	21	18			32	29	27	24	21	18
0.71	25	16.7	6.3	7.9	6.1	4.3	2.5	0.7	-	15.5	6.9	6.9	5.2	3.6	1.9	0.3	-
	22	15.4	6.2	10.8	9.0	7.2	5.4	3.6	1.8	14.1	6.8	9.8	8.1	6.5	4.8	3.2	1.5
	19	14.2	6.2	13.7	11.9	10.1	8.3	6.5	4.7	12.7	6.8	12.7	11.0	9.4	7.7	6.1	4.4
	17	13.1	6.2	13.1	13.1	11.6	9.8	8.0	6.2	12.0	6.8	12.0	12.0	10.5	8.9	7.2	5.6
	14	13.1	6.1	13.1	13.1	11.8	10.0	8.2	6.4	12.0	6.8	12.0	12.0	10.6	9.0	7.3	5.7
0.83	25	17.7	6.4	8.6	6.5	4.9	3.3	1.7	0.1	16.6	6.9	8.2	5.7	4.2	2.7	1.2	-
	22	16.4	6.3	11.7	9.9	8.1	6.4	4.6	2.8	15.2	6.9	11.0	9.3	7.5	5.8	4.1	2.4
	19	15.0	6.3	14.8	13.4	11.4	9.4	7.5	5.5	13.7	6.8	13.7	12.8	10.9	8.9	7.0	5.1
	17	13.9	6.2	13.9	13.9	13.2	11.2	9.1	7.1	12.9	6.8	12.9	12.9	12.2	10.3	8.3	6.3
	14	13.9	6.2	13.9	13.9	13.4	11.3	9.3	7.2	12.9	6.8	12.9	12.9	12.3	10.3	8.3	6.3
0.94	25	18.7	6.4	9.3	6.8	5.5	4.1	2.7	1.4	17.8	7.0	9.7	6.1	4.8	3.5	2.1	0.8
	22	17.3	6.4	12.6	10.9	9.1	7.3	5.6	3.8	16.3	6.9	12.2	10.4	8.6	6.8	5.0	3.2
	19	15.9	6.3	15.9	14.9	12.7	10.6	8.5	6.3	14.7	6.9	14.7	14.6	12.4	10.1	7.9	5.7
	17	14.7	6.3	14.7	14.7	14.7	12.5	10.3	8.0	13.8	6.9	13.8	13.8	13.8	11.7	9.4	7.1
	14	14.7	6.3	14.7	14.7	15.0	12.7	10.3	8.0	13.8	6.9	13.8	13.8	13.8	11.7	9.4	7.0
1.06	25	19.0	6.5	12.7	8.4	5.8	3.6	1.3	-	18.0	7.1	12.9	8.0	5.0	2.8	0.5	-
	22	17.6	6.4	14.4	12.0	9.6	7.2	4.8	2.4	16.4	7.1	13.8	11.4	8.9	6.5	4.1	1.6
	19	16.2	6.4	16.2	15.7	13.5	10.9	8.3	5.7	14.8	7.0	14.8	14.8	12.9	10.2	7.6	4.9
	17	14.9	6.4	14.9	14.9	14.9	12.3	9.7	7.0	13.9	7.0	13.9	13.9	13.9	11.3	8.6	5.9
	14	15.0	6.3	15.0	15.0	15.1	12.4	9.7	7.1	13.9	7.0	13.9	13.9	13.9	11.3	8.6	5.9
1.18	25	19.4	6.6	16.1	10.0	6.1	3.0	-	-	18.1	7.2	16.1	9.9	5.2	2.1	-	-
	22	17.9	6.5	16.3	13.2	10.2	7.1	4.0	1.0	16.5	7.2	15.5	12.4	9.3	6.2	3.1	0.0
	19	16.5	6.5	16.5	16.5	14.2	11.2	8.1	5.0	14.9	7.1	14.9	14.9	13.4	10.3	7.2	4.2
	17	15.2	6.4	15.2	15.2	15.2	12.1	9.1	6.0	14.0	7.1	14.0	14.0	14.0	10.9	7.8	4.7
	14	15.2	6.4	15.2	15.2	15.2	12.2	9.1	6.1	14.1	7.1	14.1	14.1	14.1	11.0	7.9	4.8

1. The capacities are gross ratings. For net capacity, deduct air blower motor kW. Refer to the appropriate Blower Performance table for the kW of the supply air blower motor.

2. These ratings include the condensate fan motors (total 1 kW) and the compressor motors but not the supply air blower motor.

**TABLE 8: SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE W/DIRECT DRIVE BLOWER (IMPERIAL)
380/415 VOLTS**

MODEL DEB		AVAILABLE EXTERNAL STATIC PRESSURE - IWG															
		0.2		0.3		0.4		0.5		0.6		0.7		0.8		0.9	
		CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS
036	HI	1295	503	1220	485	1130	466	1030	446	920	427	750	403	450	378	---	---
	MED	1270	406	1190	384	1100	361	1000	338	880	314	690	283	---	---	---	---
	LO	1200	349	1125	327	1040	305	935	282	815	262	635	244	---	---	---	---
048	HI	1710	805	1600	779	1490	754	1370	728	1230	699	1070	670	880	637	640	602
	MED	1670	598	1570	574	1460	550	1340	526	1210	502	1050	476	860	450	630	426
	LO	1580	579	1490	567	1390	550	1280	528	1150	498	1010	459	820	398	550	292

**TABLE 9: SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE W/DIRECT DRIVE BLOWER (METRIC)
380/415 VOLTS**

MODEL DEB		AVAILABLE EXTERNAL STATIC PRESSURE - Pa															
		54		74		99		124		149		174		198		223	
		M ³ S	WATTS	M ³ S	WATTS	M ³ S	WATTS	M ³ S	WATTS	M ³ S	WATTS	M ³ S	WATTS	M ³ S	WATTS	M ³ S	WATTS
036	HI	0.61	503	0.58	485	0.53	466	0.49	446	0.43	427	0.35	403	0.21	378	---	---
	MED	0.60	406	0.56	384	0.52	361	0.47	338	0.42	314	0.33	283	---	---	---	---
	LO	0.57	349	0.53	327	0.49	305	0.44	282	0.38	262	0.30	244	---	---	---	---
048	HI	0.81	805	0.76	779	0.70	754	0.65	728	0.58	699	0.50	670	0.42	637	0.30	602
	MED	0.79	598	0.74	574	0.69	550	0.63	526	0.57	502	0.50	476	0.41	450	0.30	426
	LO	0.75	579	0.70	567	0.66	550	0.60	528	0.54	498	0.48	459	0.39	398	0.26	292

**TABLE 10: SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE W/BELT-DRIVEN BLOWER (IMPERIAL)
380/415 VOLTS**

MODEL DEB	AIR FLOW CFM	AVAILABLE EXTERNAL STATIC PRESSURE - IWG											
		0.2		0.3		0.4		0.5		0.6		0.7	
		RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS
060	2500	1266	1683	---	---	---	---	---	---	---	---	---	---
	2394	1222	1453	1269	1621	---	---	---	---	---	---	---	---
	2288	1166	1297	1225	1399	1273	1560	---	---	---	---	---	---
	2204	1142	1217	1169	1248	1228	1346	1252	1424	1276	1501	---	---
	2098	1118	1137	1120	1127	1172	1201	1230	1295	1255	1373	1279	1443
	1992	1067	1030	1070	1005	1120	1137	1174	1156	1233	1245	1257	1320
	1907	1015	922	1043	944	1071	968	1122	1056	1177	1112	1235	1197
	1801	---	---	1016	883	1044	907	1098	977	1138.5	1023	1179	1069
	1695	---	---	---	---	1017	846	1074	897.00	1113.75	951	1154	1006
	1589	---	---	---	---	---	---	1018	811.00	1075	863	1128	942
	1504	---	---	---	---	---	---	---	---	---	---	1076	829

MODEL DEB	AIR FLOW CFM	AVAILABLE EXTERNAL STATIC PRESSURE - IWG											
		0.8		0.9		1.0		1.1		1.2		1.3	
		RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS
060	2500	---	---	---	---	---	---	---	---	---	---	---	---
	2394	---	---	---	---	---	---	---	---	---	---	---	---
	2288	---	---	---	---	---	---	---	---	---	---	---	---
	2204	---	---	---	---	---	---	---	---	---	---	---	---
	2098	---	---	---	---	---	---	---	---	---	---	---	---
	1992	1282	1387	---	---	---	---	---	---	---	---	---	---
	1907	1260	1269	1285	1333	---	---	---	---	---	---	---	---
	1801	1238	1150	1263	1219	1288	1280	---	---	---	---	---	---
	1695	1181	1028	1240	1104	1265	1170	1291	1229	---	---	---	---
	1589	1155	967	1183	989	1242	1059	1268	1123	1294	1179	---	---
	1541	1129	906	1158	910	1187	914	1244	1016	1271	1063	1298	1109

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

**TABLE 11: SIDE AND BOTTOM SUPPLY AIR BLOWER PERFORMANCE W/BELT-DRIVEN BLOWER (METRIC)
380/415 VOLTS**

MODEL DEB	AIR FLOW M ³ S	AVAILABLE EXTERNAL STATIC PRESSURE - Pa											
		50		75		100		125		149		174	
		RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS
060	1.18	1266	1683	---	---	---	---	---	---	---	---	---	---
	1.13	1222	1453	1269	1621	---	---	---	---	---	---	---	---
	1.08	1166	1297	1225	1399	1273	1560	---	---	---	---	---	---
	1.04	1142	1217	1169	1248	1228	1346	1252	1424	1276	1501	---	---
	0.99	1118	1137	1120	1127	1172	1201	1230	1295	1255	1373	1279	1443
	0.94	1067	1030	1070	1005	1120	1137	1174	1156	1233	1245	1257	1320
	0.90	1015	922	1043	944	1071	968	1122	1056	1177	1112	1235	1197
	0.85	---	---	1016	883	1044	907	1098	977	1138.5	1023	1179	1069
	0.80	---	---	---	---	1017	846	1074	897.00	1113.75	951	1154	1006
	0.75	---	---	---	---	---	---	1018	811.00	1075	863	1128	942
	0.71	---	---	---	---	---	---	---	---	---	---	1076	829

MODEL DEB	AIR FLOW M ³ S	AVAILABLE EXTERNAL STATIC PRESSURE - Pa											
		199		224		248		273		298		322	
		RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS	RPM	WATTS
060	1.18	---	---	---	---	---	---	---	---	---	---	---	---
	1.13	---	---	---	---	---	---	---	---	---	---	---	---
	1.08	---	---	---	---	---	---	---	---	---	---	---	---
	1.04	---	---	---	---	---	---	---	---	---	---	---	---
	0.99	---	---	---	---	---	---	---	---	---	---	---	---
	0.94	1282	1387	---	---	---	---	---	---	---	---	---	---
	0.90	1260	1269	1285	1333	---	---	---	---	---	---	---	---
	0.85	1238	1150	1263	1219	1288	1280	---	---	---	---	---	---
	0.80	1181	1028	1240	1104	1265	1170	1291	1229	---	---	---	---
	0.75	1155	967	1183	989	1242	1059	1268	1123	1294	1179	---	---
	0.71	1129	906	1158	910	1187	914	1244	1016	1271	1063	1298	1109

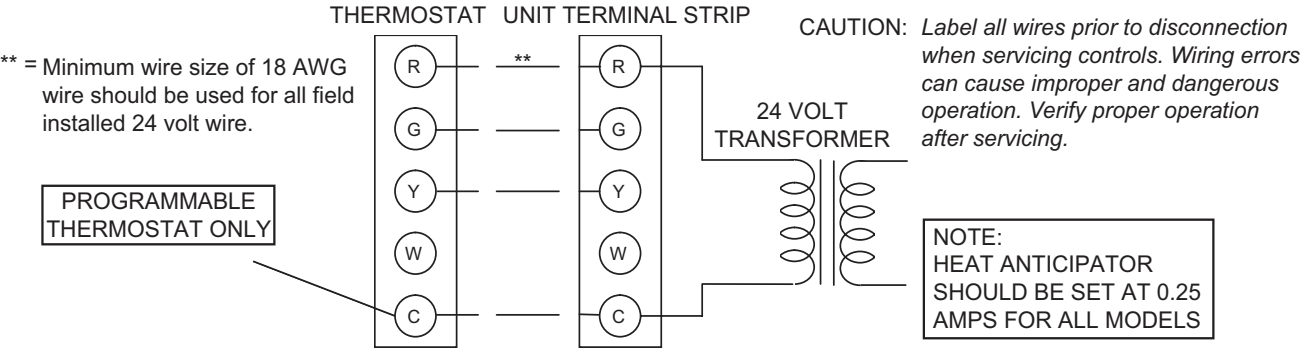
Note: Above data includes allowances for a dry evaporator coil and no filters. For additional pressure drops, refer to the Additional Static Pressure Resistance table.

TABLE 12: ADDITIONAL STATIC RESISTANCE

Size (Tons)	Model	Airflow m ³ /s (cfm)	Wet Indoor Coil Pa (in.wc)	Economizer ¹ Pa (in.wc)	Filter / Frame Kit Pa (in.wc)
036 (3.0)	DEB	0.42 (900)	12.45 (0.05)	2.49 (0.01)	4.98 (0.02)
		0.47 (1000)	14.95 (0.06)	2.49 (0.01)	4.98 (0.02)
		0.52 (1100)	17.44 (0.07)	4.98 (0.02)	7.47 (0.03)
		0.57 (1200)	17.44 (0.07)	4.98 (0.02)	7.47 (0.03)
		0.61 (1300)	19.93 (0.08)	7.47 (0.03)	7.47 (0.03)
		0.66 (1400)	22.42 (0.09)	9.96 (0.04)	9.96 (0.04)
		0.71 (1500)	24.91 (0.1)	12.45 (0.05)	9.96 (0.04)
048 (4.0)	DEB	0.57 (1200)	17.44 (0.07)	4.98 (0.02)	7.47 (0.03)
		0.61 (1300)	19.93 (0.08)	7.47 (0.03)	7.47 (0.03)
		0.66 (1400)	24.91 (0.1)	9.96 (0.04)	9.96 (0.04)
		0.71 (1500)	29.89 (0.12)	12.45 (0.05)	9.96 (0.04)
		0.76 (1600)	32.28 (0.13)	14.95 (0.06)	9.96 (0.04)
		0.80 (1700)	37.36 (0.15)	17.44 (0.07)	12.45 (0.05)
		0.85 (1800)	34.87 (0.14)	19.93 (0.08)	12.45 (0.05)
		0.90 (1900)	37.36 (0.15)	22.42 (0.09)	12.45 (0.05)
060 (5.0)	DEB	0.94 (2000)	39.85 (0.16)	24.91 (0.1)	14.95 (0.06)
		0.71 (1500)	65.39 (0.26)	12.45 (0.05)	9.96 (0.04)
		0.76 (1600)	69.75 (0.28)	14.95 (0.06)	9.96 (0.04)
		0.80 (1700)	74.10 (0.3)	17.44 (0.07)	12.45 (0.05)
		0.85 (1800)	78.46 (0.32)	19.93 (0.08)	12.45 (0.05)
		0.90 (1900)	82.82 (0.33)	22.42 (0.09)	12.45 (0.05)
		0.94 (2000)	87.18 (0.35)	24.91 (0.1)	14.95 (0.06)
		0.99 (2100)	91.54 (0.37)	29.89 (0.12)	14.95 (0.06)
		1.04 (2200)	95.90 (0.39)	32.38 (0.13)	14.95 (0.06)
		1.09 (2300)	100.26 (0.4)	34.87 (0.14)	17.44 (0.07)
		1.13 (2400)	104.62 (0.42)	39.85 (0.16)	17.44 (0.07)
		1.18 (2500)	108.98 (0.44)	44.84 (0.18)	19.93 (0.08)

¹. The pressure drop through the economizer is greater than 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.

CONTROL WIRING



POWER WIRING

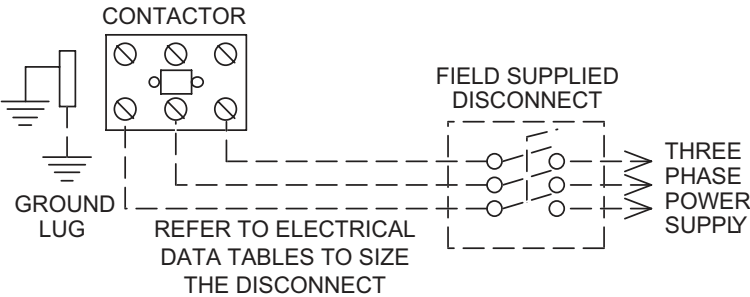


FIGURE 2 - FIELD WIRING DIAGRAM

TABLE 13: ELECTRICAL DATA

SIZE (TONS)	MODEL	POWER	COMPRESSOR			OD FAN MOTORS (EACH)	SUPPLY BLOWER MOTOR	MCA ¹ (AMPS)	MOCP ² (AMPS)	MAX. FUSE ³ SIZE (AMPS)
			RLA	LRA	MCC					
036 (3.0)	DEB	380/415-3-50	6.7	39.0	9.5	1.0	1.8	11.2	15	15
048 (4.0)	DEB	380/415-3-50	8.7	66.5	12.5	1.0	3.2	15.1	20	20
060 (5.0)	DEB	380/415-3-50	10.4	73.0	13.0	1.0	2.7	15.7	25	25

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

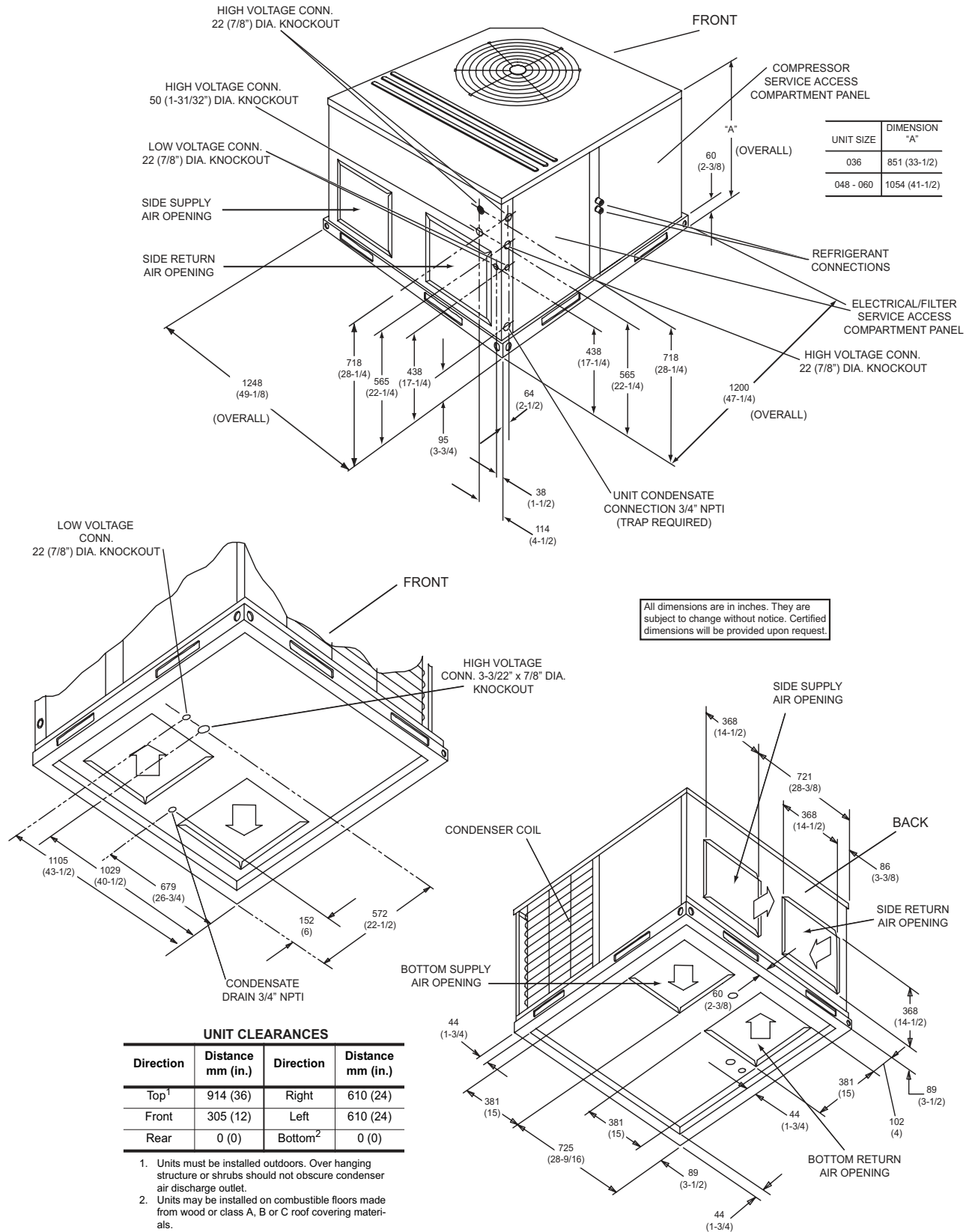


FIGURE 3 - UNIT DIMENSIONS

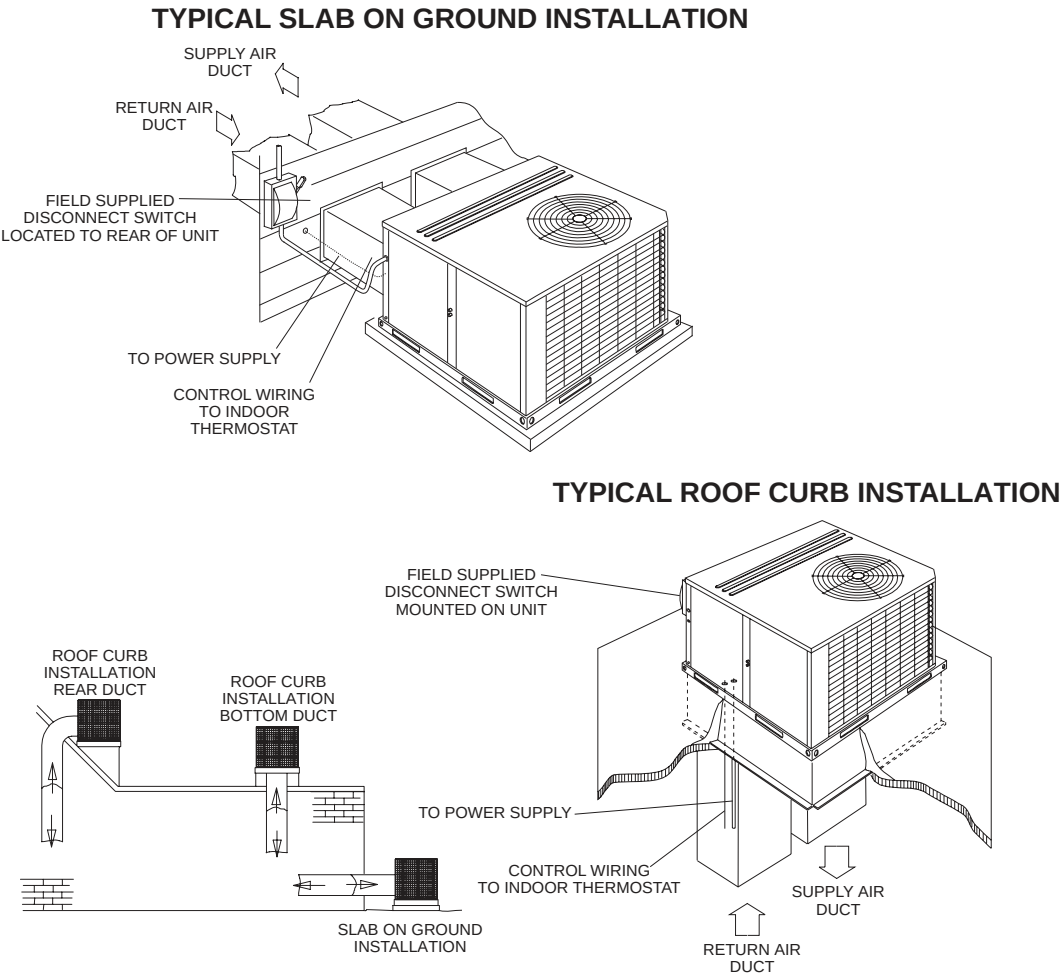


FIGURE 4 - TYPICAL APPLICATIONS

TABLE 14: UNIT WEIGHTS AND CENTERS OF GRAVITY

SIZE (Tons)	MODEL	UNIT WEIGHT kg (lb)		CENTER OF GRAVITY mm (in.)		4 POINT LOAD LOCATION kg (lb)			
		Shipping	Operating	X	Y	A	B	C	D
036 (3.0)	DEB	150 (330)	147 (325)	610 (24)	597 (23.5)	35 (77)	35 (78)	39 (85)	38 (84)
048 (4.0)	DEB	179 (395)	177 (390)	610 (24)	597 (23.5)	42 (93)	43 (94)	46 (102)	46 (101)
060 (5.0)	DEB	222 (490)	220 (485)	572 (22.5)	610 (24)	57 (125)	51 (112)	53 (117)	60 (131)

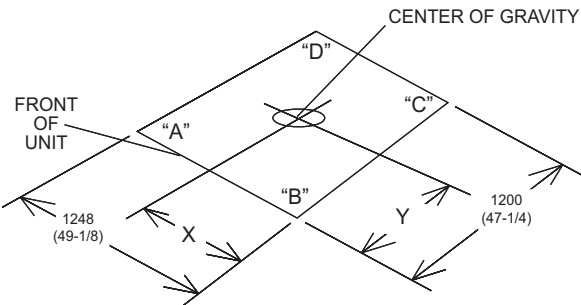
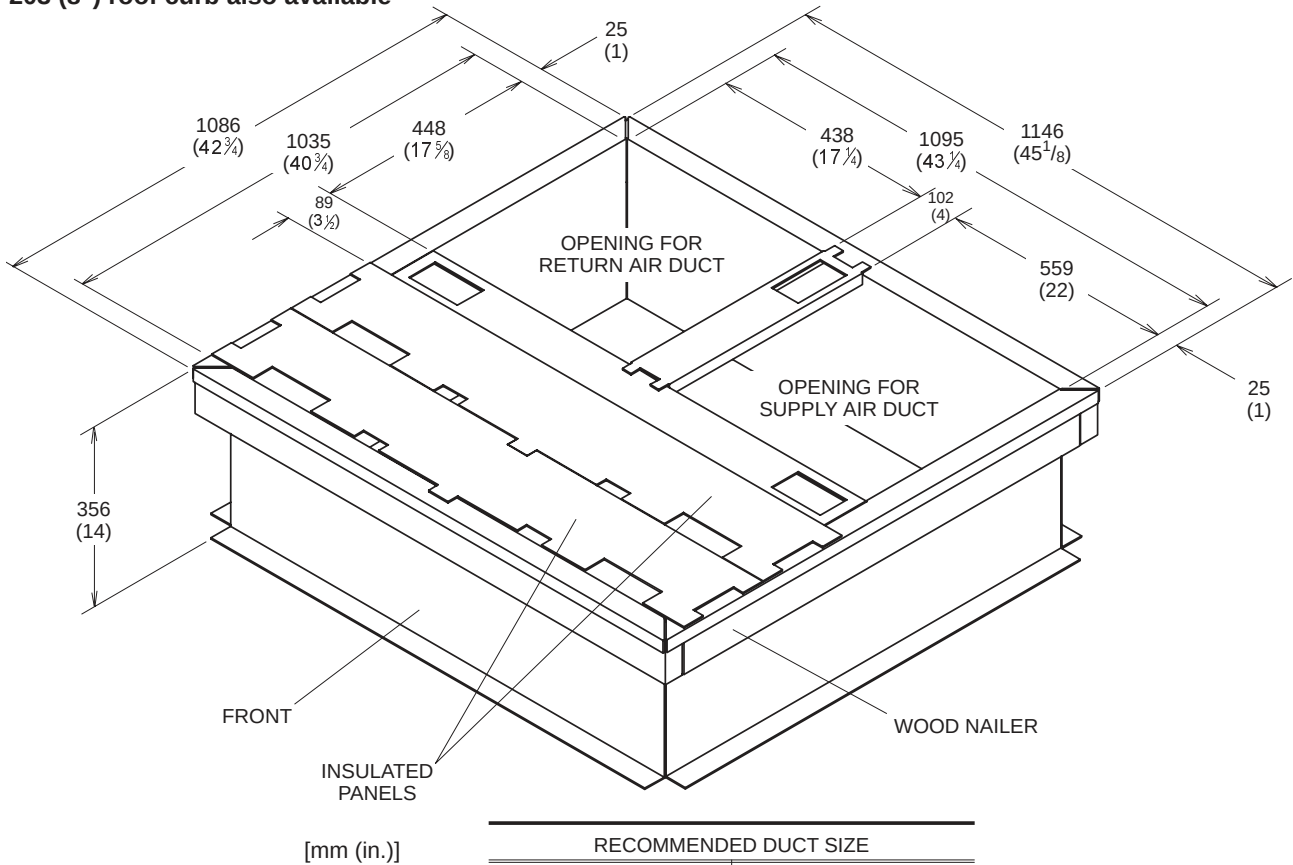


FIGURE 5 - CENTER OF GRAVITY

ROOF CURB DIMENSIONS

203 (8") roof curb also available



RECOMMENDED DUCT SIZE	
SUPPLY AIR DUCT	435 x 546 (17 1/8" x 21 1/2")
RETURN AIR DUCT	435 x 425 (17 1/8" x 16 3/4")

ROOF CURB APPLICATION

19 x 25 (3/4" x 1") WIDE GASKETING FOR CURB FRAME AND ALL DUCT SUPPORT SURFACES

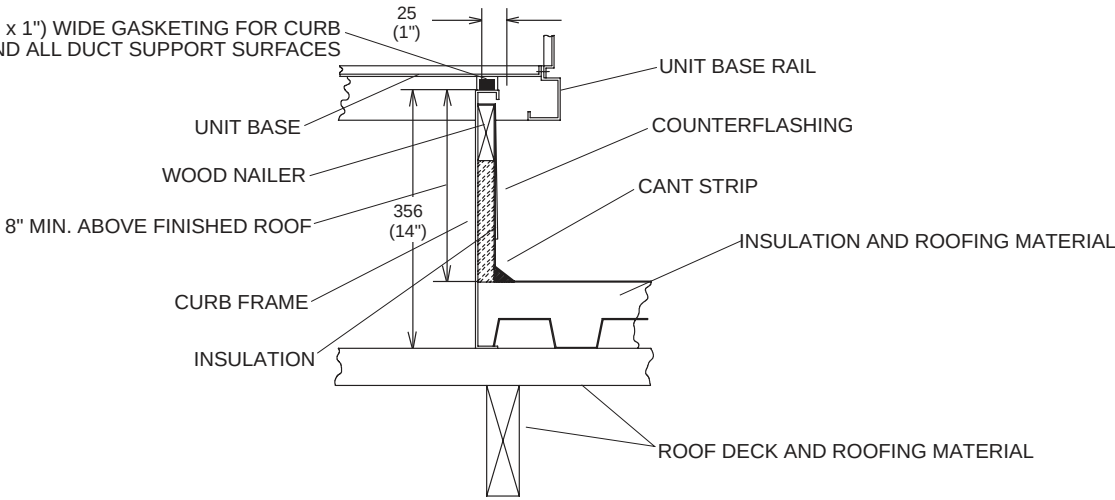
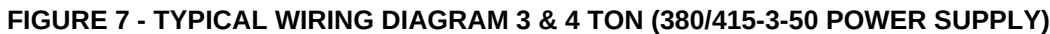


FIGURE 6 - ROOF CURB DIMENSIONS



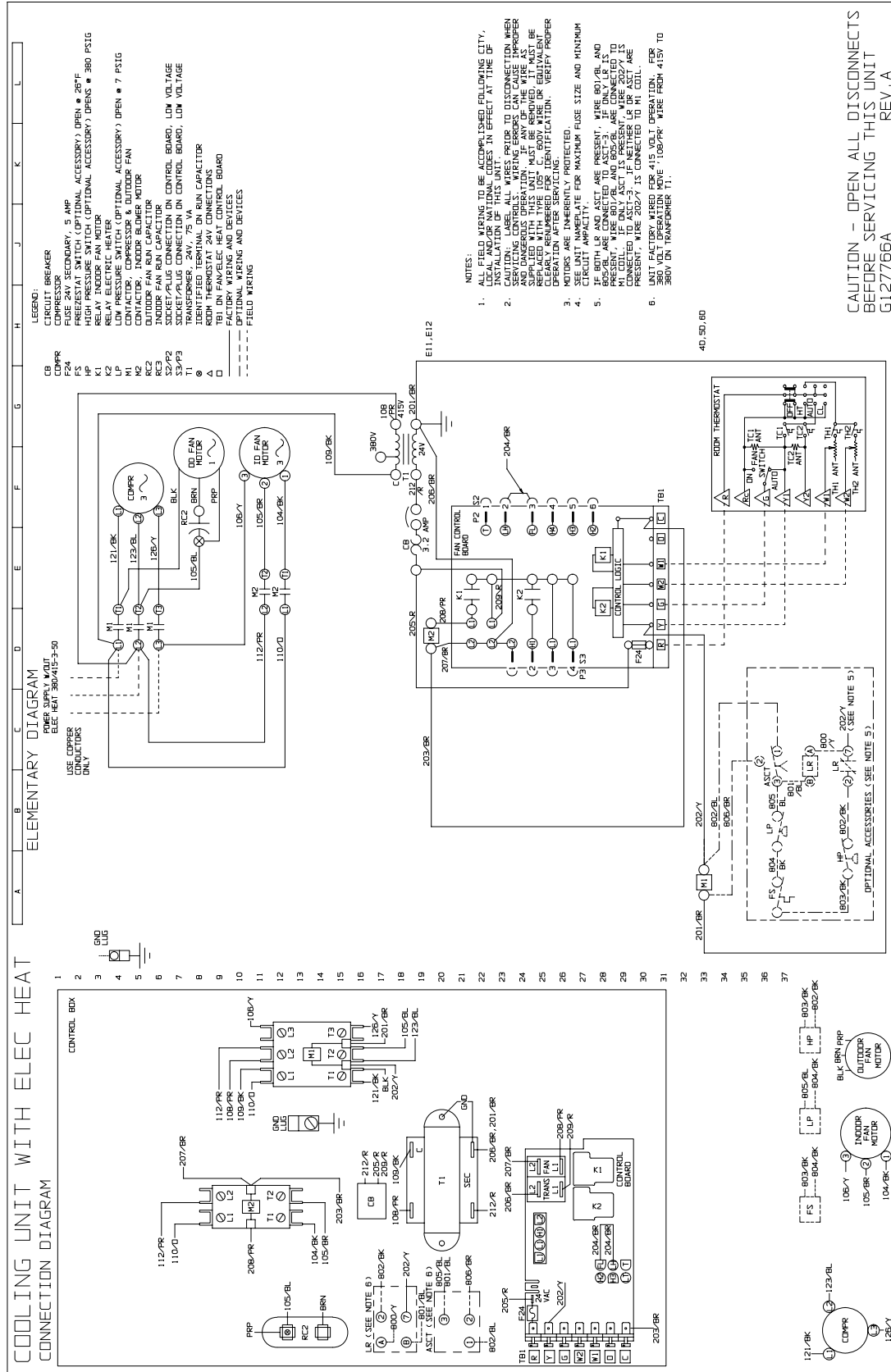


FIGURE 8 - TYPICAL WIRING DIAGRAM 5 TON (380/415-3-50 POWER SUPPLY)

MECHANICAL SPECIFICATIONS

GENERAL DESCRIPTION

Units shall be factory-assembled, single packaged, Electric Cooling units, designed for outdoor mounted installation. 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.

UNIT CABINET

- Unit cabinet shall be constructed of G90 galvanized steel, with exterior surfaces coated with a non-chalking, powered paint finish, certified at 1000 hours salt spray test per ASTM-B117 standards.
- The unit top shall be a single piece "Water Shed" design, with drip edges and no-seam corners to provide optimum water integrity.
- Unit shall have a rigidly mounted condenser coil guard to provide protection from objects and personnel after installation.
- Indoor blower section shall be insulated with up to 3/4" thick, aluminum, foil faced insulation, fastened to prevent insulation from entering the air stream.
- Cabinet panels shall be "large" size, easily removable for servicing and maintenance, with built-in lift handles.
- Unit shall be built on a formed, "Super-Structure" design base pan, with embossments at critical points to add strength, rigidity and aid in minimizing sound.
- Full perimeter base rails shall be provided to assure reliable transit of equipment, overhead rigging, fork 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 air tight.
- Unit's vertical discharge and return duct configuration shall be designed to fit between standard 24" O.C. beams without modification to building structure, duct work and base unit.
- Condensate pan shall be internally sloped and conform to ASHRAE 62-89 self-draining standards, with 3/4" NPTI copper, ridged mount connection.

INDOOR (EVAPORATOR) FAN ASSEMBLY

- Job site selected brake horse power (BHP) shall not exceed the motors nameplate horse power rating.
- Fan wheel shall be double-inlet type with forward-curved blades, dynamically balanced to operate smoothly throughout the entire range of operation.
- 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:
 - Shall be fully hermetic reciprocating 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.
 - Shall have internal isolation and sound muffling to minimize vibration and noise, and be externally isolated on a dedicated, independent mounting.
- Coils:
 - Evaporator and condenser coils shall have aluminum plate fins mechanically bonded to seamless internally-enhanced copper tubes with all joints brazed.
 - Evaporator and Condenser coils shall be of the direct expansion, draw-thru design.
- Refrigerant Circuit and Refrigerant Safety Components shall include:
 - Independent fixed-orifice expansion devices.
 - Filter/strainer to eliminate any foreign matter.
 - Accessible service gauge 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.
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 have large, easily removable panels, covering electrical controls and compressor, allowing easy access for any necessary maintenance or servicing.

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.

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.

