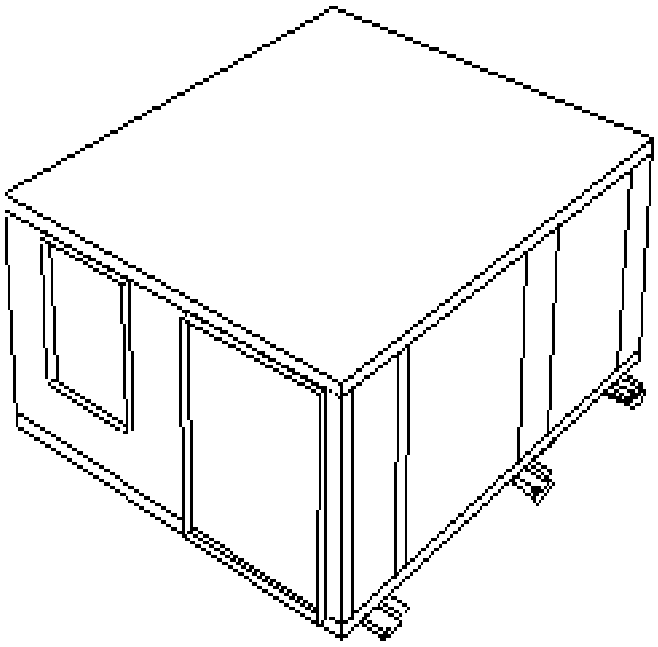
YORK®
Heating and Air Conditioning

TECHNICAL GUIDE

SINGLE PACKAGE AIR CONDITIONERS
HORIZONTAL INDOOR &
CONDENSER AIR FLOW



DESCRIPTION

York horizontal ductable air conditioning packages offer a complete line of unit options for indoor, through-the-wall installations for high and low rise building applications.

York's compact, low profile indoor design protects from potential vandalism, weathering and eliminates the need for any unsightly exterior equipment.

Floor-by-floor installation provides independent zone and temperature control. Renovation and restoration projects are simplified where roof load, cooling tower, and construction restrictions can present installation problems.

The air cooled DHH horizontal series units are available from 2 to 15 tons.

York's DHH horizontal air cooled indoor air conditioning features high efficiency, quality engineering and dependable operation.

HORIZONTAL FEATURES

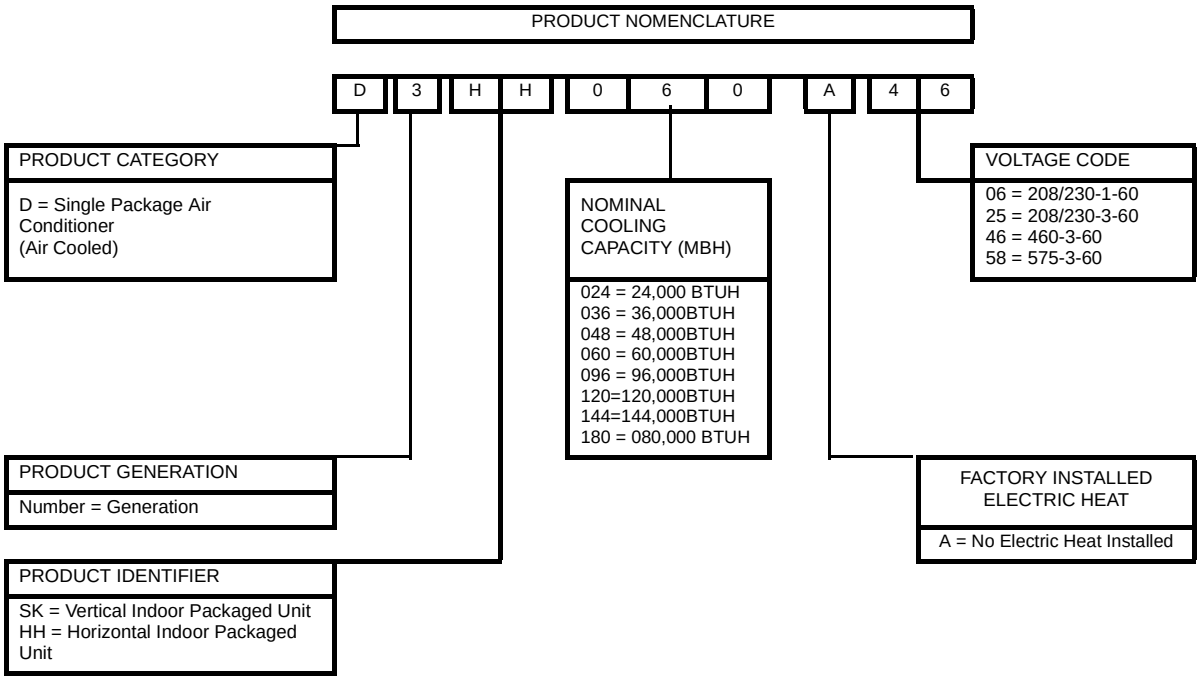
- Low profile cabinets are unitized for single package and/ or split Installation.
- Ideal for tenant change and/or renovations.
- Ductable ceiling mount saves valuable floor space.
- Protected from extreme weather conditions and vandalism.
- Compact size fits through standard openings (31").
- Low profile range 20" to 29" in depth.
- Static compatibility to suit various installation requirements. using centrifugal blowers and adjustable pulleys.
- Available in 2, 3, 4, 5, 8, 10, 12, and 15 ton capacities.

MODELS: D3HH 024 THRU 180

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES



GENERAL MECHANICAL SPECIFICATIONS

GENERAL - All 2 to 10 ton models ship with a full refrigerant charge. The 12 and 15 ton models are shipped as separate evaporator and condensing unit modules (nitrogen holding charge only). The 4 through 10 ton units include refrigeration line shut-off valves to allow the units to be field split. All packages/models are designed for suspended mounting via integral structural channels.

CABINET - All cabinets are completely constructed of 18 Gauge corrosion resistant "Galvalume" coated steel. The entire unit interior (both evaporator and condensing section) is insulated with 1/2" thick 2 LB density insulation. Service panels are equipped with 1/2" thick 2 lb. density insulation. Service panels are equipped with lifting handles for ease of removal and handling.

COMPRESSORS - All models utilize "Scroll" type hermetic compressors. Compressors are mounted on rubber isolators to minimize vibration transmission. Internal overload protection is provided. External high pressure and low pressure cut-out switches are included in each compressor control circuit. Crankcase heaters are standard on all models.

REFRIGERANT CIRCUIT - The 2 to 5 tons units use a single refrigeration circuit. The 8 to 15 ton units feature two independent refrigeration circuits. Each circuit includes an adjustable thermal expansion valve (with external equalizer), liquid line filter drier, sight glass/moisture indicator, and service gauge ports.

EVAPORATOR AND CONDENSER COILS - The evaporator and condenser coils are constructed of internally enhanced copper tubes mechanically bonded to rippled aluminum plate fins. Both coils are employed in a draw-through configuration. Large evaporator coil face area minimizes potential water blow-off (max face velocity is 550 fpm at rated airflow).

INDOOR/OUTDOOR FANS - Forward curved, double inlet and double width centrifugal blowers are used for both evaporator and condenser air movement. blow wheels are fabricated of galvanized steel. Blowers employ solid steel shafts, supported in permanently lubricated ball bearing. All blowers are belt driven in permanently lubricated ball bearing. All blowers are belt driven. Variable-pitch motor sheaves allow for field adjustment of blower rpm.

ELECTRICAL/CONTROLS - All units are completely factory wired with all necessary controls. Manual reset protection is provided on both evaporator and condenser motors. A manual reset circuit is also provided on each compressor control circuit in the event of high/low pressure cutout. A 24 volt control circuit with oversize transformer, is provided for field connection.

FILTERS - All models are shipped with 2 inch thick medium-efficiency throwaway filters factory installed. Filter rack is internal to the cabinet.

FACTORY INSTALLED ACCESSORIES

OVERSIZED EVAPORATOR FAN MOTORS - Increased horsepower motors and drive components are available for those applications where external static pressure requirements exceed the capability of the standard motor.

CORROSION RESISTANT COATINGS - Condenser and/or evaporator coils shall have a 2 to 3 mil coating of Heresite P-413 protective coating applied in a multiple dip and bake process.

STAINLESS STEEL DRAIN PAN - Evaporator drain pan shall be fabricated of 304 stainless steel material. The 3/4 in. NPT drain connection fitting is also of 304 stainless steel.

HOT GAS BYPASS - Adjustable hot gas regulator and all necessary piping shall be installed on lead compressor circuit. Bypass capacity shall be minimum 50% of compressor capacity. The bypass valve opens at a preset suction pressure to prevent coil freeze-up at light evaporator load, or low airflow conditions. The use of the field installed Low Ambient Control is strongly recommended when hot gas bypass is installed.

FIELD INSTALLED ACCESSORIES

LOW AMBIENT CONTROL - Head pressure control damper kit will allow unit operation down to 0°F ambient. Damper assembly fits over condenser air intake. The kit includes damper actuator, and low pressure switch bypass timer(s).

TABLE 1: GENERAL DATA 2 TO 5 TONS

MODEL DHH:	024	036	048	060
NOMINAL COOLING (TONS)	2	3	4	5
COOLING PERFORMANCE				
CALCULATED SEER*	10.5	10.5	10.6	10.4
GROSS COOLING CAPACITY (BTUH)	26600	37200	50300	62700
DESIGN CFM	800	1200	1600	2000
SYSTEM POWER (KW)	2.52	3.85	4.88	6.24
COMPRESSOR-TYPE	SCROLL	SCROLL	SCROLL	SCROLL
NUMBER USED	1	1	1	1
EVAPORATOR COIL-TYPE	"COPPER TUBES, ALUMINUM FINS"			
FACE AREA (SQ FT)	2.44	3.00	4.17	5.14
ROWS/FPI	3/12	3/14	3/14	3/14
REFRIGERANT CONTROL	TX VALVE	TX VALVE	TX VALVE	TX VALVE
CONDENSER COIL-TYPE	"COPPER TUBES, ALUMINUM FINS"			
FACE AREA (SQ FT)	3.75	3.75	6.67	6.67
ROWS/FPI	4/16	4/16	4/14	4/14
EVAPORATOR FAN-TYPE				
NUMBER USED	1	1	1	1
DIAMETER x WIDTH (IN)	9x7	10x8	12x9	12x9
DRIVE				
MOTOR HP (STANDARD/OVERSIZED)	0.25/0.5	0.5/0.75	0.5/0.75	0.75/1
CONDENSER FAN-TYPE				
NUMBER USED	1	1	1	1
DIAMETER x WIDTH (IN)	10x10	10x10	12x11	12x11
DRIVE				
MOTOR HP (STANDARD)	0.5	1	1	2
FILTERS				
NUMBER USED-SIZE (IN)	1-18x24x2	1-18x25x2	2-16x20x2	2-20x20x2
CONDENSATE CONNECTION				
WEIGHT				
OPERATING	490	520	765	785
SHIPPING	535	565	820	840

*. Per ARI Standards 210

TABLE 2: GENERAL DATA 8 TO 15 TONS

MODEL DHH:	096	120	144	180
NOMINAL COOLING (TONS)	8	10	12	15
CALCULATED EER*	9.4	8.8	8.6	7.4
	COOLING PERFOMANCE			
GROSS COOLING CAPACITY (BTUH)	100500	124400	154200	191600
DESIGN CFM	3000	3800	4600	5600
SYSTEM POWER (KW)	10.22	13.35	17.11	24.20
COMPRESSOR-TYPE	SCROLL	SCROLL	SCROLL	SCROLL
NUMBER USED	2	2	2	2
EVAPORATOR COIL-TYPE	COPPER TUBES, ALUMINUM FINS"			
FACE AREA (SQ FT)	6.86	7.99	9.72	10.89
ROWS/FPI	4/12	4/14	4/12	4/12
REFRIGERANT CONTROL	TX VALVE	TX VALVE	TX VALVE	TX VALVE
CONDENSER COIL-TYPE	COPPER TUBES, ALUMINUM FINS			
FACE AREA (SQ FT)	9.03	9.03	14.00	14.00
ROWS/FPI	5/16	5/16	6/14	6/14
EVAPORATOR FAN-TYPE	"CENTRIFUGAL, FORWARD CURVED"			
NUMBER USED	1	1	1	1
DIAMETER x WIDTH (IN)	15 x 11	15 x 11	15 x 15	15 x 15
DRIVE	BELT			
MOTOR HP (STANDARD/OVERSIZED)	1.5/2	3/NA	3/5	5/NA
CONDENSER FAN-TYPE	"CENTRIFUGAL, FORWARD CURVED"			
NUMBER USED	1	1	1	1
DIAMETER x WIDTH (IN)	15 x 15	15 x 15	15 x 15	15 x 15
DRIVE				
MOTOR HP (STANDARD)	3	5	5	7.5
	FILTERS			
NUMBER USED-SIZE (IN)	2-20 x 25 x 2	3-16 x 25 x 2	4-14 x 20 x 2	6-14 x 20 x 2
CONDENSATE CONNECTION	3/4 NPT			
OPERATING	1220	1260	1625	1785
SHIPPING	1305	1330	1780	1940

*. PER ARI STANDARDS 360

TABLE 3: COOLING PERFORMANCE DATA - DHH024

DHH024 2 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB						EWB						EWB						EWB					
		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F	
CFM	EDB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
	75°F	24.7	17.8	27.1	14.3	29.6	10.8	23.8	17.3	26.1	13.7	28.5	10.5	22.8	16.6	25.0	13.5	27.2	10.0	21.7	16.2	23.6	12.9	25.0	9.1
700	80°F	24.7	20.9	27.1	17.4	29.6	14.0	23.8	20.4	26.1	17.0	28.5	13.6	22.8	19.9	25.0	16.7	27.2	13.1	21.7	19.4	23.6	16.0	25.0	11.6
	85°F	24.7	24.0	27.1	20.5	29.6	17.1	23.8	23.5	26.1	20.2	28.5	16.7	23.1	23.1	25.0	19.8	27.2	16.2	22.2	22.2	23.6	19.2	25.0	14.1
	75°F	25.4	18.9	27.7	15.0	30.2	11.1	24.4	18.3	26.6	14.4	29.2	10.7	23.4	17.8	25.5	14.1	27.8	10.2	22.3	17.4	24.1	13.4	25.7	9.4
800	80°F	25.4	22.3	27.7	18.5	30.2	14.5	24.4	21.8	26.6	18.0	29.2	14.2	23.4	21.4	25.5	17.6	27.8	13.7	22.3	20.9	24.1	17.1	25.7	12.1
	85°F	25.7	25.7	27.7	21.9	30.2	18.0	25.1	25.1	26.6	21.6	29.2	17.7	24.2	24.2	25.5	21.1	27.8	17.2	23.0	23.0	24.1	20.6	25.7	14.6
	75°F	25.9	19.8	28.3	15.6	30.8	11.3	24.9	19.3	27.2	15.2	29.7	10.9	23.8	18.8	26.0	14.8	28.3	10.4	22.5	18.3	24.5	14.2	26.2	9.6
900	80°F	25.9	23.6	28.3	19.5	30.8	15.1	24.9	23.1	27.2	19.1	29.7	14.7	23.8	22.7	26.0	18.6	28.3	14.2	22.5	22.1	24.5	18.1	26.2	12.5
	85°F	26.6	26.6	28.3	23.3	30.8	19.0	25.7	25.7	27.2	23.0	29.7	18.6	25.0	25.0	26.0	22.5	28.3	18.1	23.9	23.9	24.5	22.0	26.2	15.5

TABLE 4: COOLING PERFORMANCE DATA - DHH036

DHH036 3 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB						EWB						EWB						EWB					
		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F	
CFM	EDB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
	75°F	34.5	25.6	38.2	20.7	40.9	15.1	33.2	24.9	36.2	19.6	39.2	14.5	31.9	24.2	34.8	19.0	37.8	14.1	30.5	23.3	33.3	18.5	36.1	13.2
1000	80°F	34.5	30.1	38.2	25.5	40.9	19.7	33.2	29.5	36.2	24.2	39.2	19.1	31.9	28.8	34.8	23.6	37.8	18.7	30.5	27.8	33.3	23.1	36.1	16.9
	85°F	34.5	34.5	38.2	30.4	40.9	24.2	33.8	33.8	36.2	28.8	39.2	23.7	32.7	32.7	34.8	28.3	37.8	23.3	31.5	31.5	33.3	27.7	36.1	20.6
	75°F	35.6	27.6	39.1	21.9	42.0	15.7	34.2	27.2	37.2	20.9	40.2	15.1	32.8	26.3	35.7	20.3	38.7	14.7	31.3	25.6	34.1	19.7	37.0	13.5
1200	80°F	35.6	33.0	39.1	27.5	42.0	21.0	34.2	32.7	37.2	26.3	40.2	20.4	32.8	31.6	35.7	25.7	38.7	20.0	31.3	30.9	34.1	25.1	37.0	17.7
	85°F	37.0	37.0	39.1	33.1	42.0	26.3	35.8	35.8	37.2	31.6	40.2	25.7	34.4	34.4	35.7	31.1	38.7	25.2	33.1	33.1	34.1	30.4	37.0	22.0
	75°F	36.4	29.6	39.8	23.2	42.9	16.2	34.9	28.9	37.9	22.2	41.0	15.7	33.5	28.3	36.4	21.7	39.5	15.2	31.8	27.6	34.7	21.1	37.8	13.8
1400	80°F	36.4	35.7	39.8	29.5	42.9	22.2	34.9	34.9	37.9	28.3	41.0	21.6	33.5	33.5	36.4	27.8	39.5	21.2	31.8	31.8	34.7	27.2	37.8	18.6
	85°F	38.4	38.4	39.8	35.9	42.9	28.3	37.1	37.1	37.9	34.4	41.0	27.7	35.7	35.7	36.4	34.0	39.5	27.2	33.8	33.8	34.7	33.3	37.8	23.4

TABLE 5: COOLING PERFORMANCE DATA - DHH048

DHH048 4 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB						EWB						EWB						EWB					
		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F	
CFM	EDB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
	75°F	47.5	35.8	51.6	28.0	56.0	20.7	45.8	35.0	49.6	27.3	53.8	20.1	43.2	33.6	47.4	26.4	51.6	19.5	41.8	33.1	45.3	25.6	48.6	18.3
1450	80°F	47.5	42.4	51.6	34.6	56.0	27.3	45.8	41.6	49.6	33.9	53.8	26.7	43.2	40.1	47.4	33.0	51.6	26.0	41.8	39.7	45.3	32.2	48.6	24.4
	85°F	48.4	48.4	51.6	41.3	56.0	33.9	46.9	46.9	49.6	40.6	53.8	33.3	45.1	45.1	47.4	39.7	51.6	32.6	43.4	43.4	45.3	38.9	48.6	30.6
	75°F	48.2	37.3	52.4	29.1	56.9	21.2	46.4	36.4	50.3	28.3	54.6	20.7	44.2	35.4	48.1	27.5	52.4	20.0	42.2	34.5	45.9	26.6	49.4	18.8
1600	80°F	48.2	44.4	52.4	36.3	56.9	28.4	46.4	43.6	50.3	35.5	54.6	28.0	44.2	42.6	48.1	34.7	52.4	27.1	42.2	41.8	45.9	33.8	49.4	25.5
	85°F	49.8	49.8	52.4	43.6	56.9	35.6	48.2	48.2	50.3	42.7	54.6	35.3	46.4	46.4	48.1	41.9	52.4	34.3	44.6	44.6	45.9	41.0	49.4	32.3
	75°F	49.0	39.1	53.2	30.2	57.8	21.7	47.1	38.2	51.1	29.5	55.4	21.1	44.8	37.2	48.8	28.6	53.2	20.5	42.8	36.3	46.6	27.9	50.4	19.6
1800	80°F	49.0	47.0	53.2	38.1	57.8	29.6	47.1	46.2	51.1	37.4	55.4	28.8	44.8	44.8	48.8	36.5	53.2	28.3	42.8	42.8	46.6	35.8	50.4	27.1
	85°F	51.2	51.2	53.2	46.1	57.8	37.5	49.7	49.7	51.1	45.3	55.4	36.7	47.6	47.6	48.8	44.4	53.2	36.1	46.0	46.0	46.6	43.8	50.4	34.7

TABLE 6: COOLING PERFORMANCE DATA - DHH060

DHH060 5 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB						EWB						EWB						EWB					
		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F	
CFM	EDB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
1800	75°F	58.8	44.3	63.8	34.7	69.2	25.7	56.6	43.2	61.4	33.8	66.6	24.9	54.1	42.0	58.8	32.8	63.8	24.1	51.6	40.8	56.1	31.7	61.0	23.3
	80°F	58.8	52.5	63.8	42.8	69.2	33.9	56.6	51.4	61.4	42.0	66.6	33.1	54.1	50.3	58.8	41.0	63.8	32.2	51.6	49.1	56.1	39.9	61.0	31.4
	85°F	59.8	59.8	63.8	51.1	69.2	42.0	58.0	58.0	61.4	50.2	66.6	41.2	56.0	56.0	58.8	49.2	63.8	40.3	53.9	53.9	56.1	48.1	61.0	39.5
2000	75°F	59.8	46.4	64.8	36.0	70.3	26.3	57.5	45.2	62.4	35.1	67.6	25.6	54.7	43.8	59.6	34.0	64.8	24.7	52.3	42.8	56.8	33.0	61.9	23.7
	80°F	59.8	55.3	64.8	44.9	70.3	35.2	57.5	54.2	62.4	44.1	67.6	34.6	54.7	52.7	59.6	43.0	64.8	33.6	52.3	51.8	56.8	42.0	61.9	32.7
	85°F	61.7	61.7	64.8	53.9	70.3	44.1	59.8	59.8	62.4	53.2	67.6	43.8	57.6	57.6	59.6	52.0	64.8	42.5	55.4	55.4	56.8	50.9	61.9	41.5
2200	75°F	60.6	48.3	65.6	37.5	71.2	26.8	58.2	47.2	63.1	36.4	68.4	26.1	55.6	45.9	60.4	35.4	65.6	25.3	53.0	44.9	57.5	34.4	62.6	24.5
	80°F	60.6	58.0	65.6	47.5	71.2	36.4	58.2	56.9	63.1	46.2	68.4	35.7	55.6	55.6	60.4	45.2	65.6	34.0	53.0	53.0	57.5	44.1	62.6	34.0
	85°F	63.3	63.3	65.6	57.5	71.2	46.0	61.3	61.3	63.1	56.0	68.4	45.3	59.1	59.1	60.4	55.0	65.6	44.5	56.8	56.8	57.5	53.8	62.6	43.5

TABLE 7: COOLING PERFORMANCE DATA - DHH096

DHH096 8 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB						EWB						EWB						EWB					
		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F	
CFM	EDB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
3000	75°F	96.5	73.5	104.6	57.5	113.8	42.3	92.4	71.4	100.5	55.9	109.8	41.1	88.8	69.9	96.6	54.5	105.3	39.9	84.8	68.0	92.7	53.1	101.6	38.9
	80°F	96.5	87.3	104.6	71.4	113.8	58.1	92.4	85.2	100.5	69.9	109.8	54.9	88.8	83.9	96.6	68.4	105.3	53.4	84.8	82.0	92.7	66.9	101.6	52.4
	85°F	98.7	98.7	104.6	85.3	113.8	69.8	95.4	95.4	100.5	83.9	109.8	68.6	92.4	92.4	96.6	82.3	105.3	67.2	89.2	89.2	92.7	80.8	101.6	66.1
3200	75°F	97.4	75.5	105.6	58.9	114.9	42.9	93.3	73.8	101.6	57.4	110.8	41.7	89.4	71.8	97.5	55.8	106.2	40.5	85.6	70.2	93.5	54.5	102.5	39.5
	80°F	97.4	90.1	105.6	73.7	114.9	57.4	93.3	88.5	101.6	72.1	110.8	56.2	89.4	86.6	97.5	70.5	106.2	54.9	85.6	85.0	93.5	69.0	102.5	53.8
	85°F	100.6	100.6	105.6	88.3	114.9	71.9	96.2	96.2	101.6	86.9	110.8	70.8	94.1	94.1	97.5	85.3	106.2	69.4	90.8	90.8	93.5	83.7	102.5	68.3
3400	75°F	98.2	77.6	106.5	66.2	115.9	43.5	94.1	75.7	103.0	59.1	111.8	42.3	90.2	74.0	98.3	57.3	107.1	41.1	86.2	72.9	94.3	56.0	103.4	40.1
	80°F	98.2	93.0	106.5	75.8	115.9	58.7	94.1	91.2	103.0	74.7	111.8	57.6	90.2	89.5	98.3	72.8	107.1	56.2	86.2	86.2	94.3	71.4	103.4	55.2
	85°F	102.3	102.3	106.5	91.2	115.9	74.0	98.8	98.8	103.0	90.4	111.8	73.0	95.7	95.7	98.3	88.3	107.1	71.4	92.4	92.4	94.3	86.9	103.4	70.4

TABLE 8: COOLING PERFORMANCE DATA - DHH120

DHH120 10 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB						EWB						EWB						EWB					
		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F	
CFM	EDB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
3600	75°F	118.4	90.9	128.5	71.3	139.8	52.5	113.8	87.8	123.8	69.5	134.2	50.8	108.8	86.4	118.0	87.3	128.6	49.2	103.5	84.1	112.8	65.5	123.5	47.9
	80°F	118.4	108.0	128.5	88.6	139.8	69.7	113.8	104.8	123.8	87.0	134.2	67.9	108.8	103.9	118.0	84.7	128.6	56.2	103.5	101.5	112.8	82.9	123.5	64.8
	85°F	121.8	121.8	128.5	106.0	139.8	86.9	118.0	118.0	123.8	104.3	134.2	85.0	113.8	113.8	118.0	101.9	128.6	83.3	103.5	109.6	112.8	100.2	123.5	81.8
4000	75°F	120.2	95.3	130.5	74.2	141.8	53.7	115.4	53.7	125.6	72.4	136.2	52.1	110.3	90.9	119.8	70.4	130.5	50.5	105.0	88.7	114.5	68.7	125.2	49.2
	80°F	120.2	114.1	130.5	93.3	141.8	72.4	115.4	112.2	125.6	91.5	136.2	70.8	110.3	109.9	119.8	89.6	130.5	69.0	105.0	105.0	114.5	87.7	123.5	67.7
	85°F	125.6	125.6	130.5	112.3	141.8	91.3	121.8	121.8	125.6	110.6	136.2	89.4	117.2	117.2	119.8	108.6	130.5	87.8	112.8	112.8	114.5	106.8	125.2	86.3
4400	75°F	121.8	99.8	132.1	77.1	143.6	54.8	117.0	97.8	127.2	75.4	137.8	53.3	111.6	95.7	121.2	73.4	132.0	51.7	106.2	93.3	115.8	71.5	126.6	50.3
	80°F	121.8	120.7	132.1	97.8	143.6	75.1	117.0	117.0	127.2	96.1	137.8	73.5	116.6	116.6	121.2	94.1	132.0	71.9	106.2	106.2	115.8	92.1	126.6	70.5
	85°F	129.0	129.0	132.1	118.6	143.6	95.6	125.0	125.0	127.2	116.8	137.8	93.9	122.2	122.2	121.2	115.0	132.0	92.2	115.8	115.8	115.8	112.9	126.6	90.7

TABLE 9: COOLING PERFORMANCE DATA - DHH144

DHH144 12 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB						EWB						EWB						EWB					
		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F	
CFM	EDB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
4300	75°F	146.0	109.2	158.6	85.9	172.0	63.4	140.8	106.5	152.5	83.5	163.6	60.3	134.6	103.5	146.4	81.1	159.6	59.6	128.2	100.5	139.6	78.5	152.4	57.4
	80°F	146.0	128.9	158.6	105.6	172.0	83.4	140.8	126.2	152.5	103.5	163.5	79.3	134.6	123.2	146.4	101.0	159.6	79.3	128.2	120.3	139.6	98.5	152.4	77.1
	85°F	147.8	147.8	158.6	125.9	172.0	103.2	143.4	143.4	152.5	123.5	163.6	98.1	134.6	138.6	146.4	120.9	159.6	99.1	133.2	133.2	139.6	118.3	152.4	96.7
4800	75°F	148.6	114.2	161.4	89.4	174.8	64.8	143.0	111.6	155.0	86.9	166.2	61.6	136.8	109.0	148.8	84.6	162.2	51.1	130.2	105.8	141.7	81.7	154.8	58.9
	80°F	148.6	135.9	161.4	111.3	174.8	86.5	143.0	133.4	155.0	108.9	166.2	57.5	136.8	130.9	148.8	106.5	162.2	82.8	130.2	127.7	141.7	103.5	154.8	80.4
	85°F	152.8	152.8	161.4	133.3	174.8	108.3	148.0	148.0	155.0	130.9	166.2	103.0	143.0	143.0	148.8	128.5	162.2	104.6	137.4	137.4	141.7	125.4	154.8	102.0
5300	75°F	150.8	119.4	163.6	92.4	177.2	66.0	145.0	116.7	157.0	90.1	168.4	62.8	138.6	113.7	150.6	87.7	164.4	62.3	132.6	111.6	143.5	85.3	156.8	60.8
	80°F	150.8	143.2	163.6	116.4	177.2	89.6	145.0	140.6	157.0	114.1	168.4	85.2	138.6	137.6	150.6	111.5	164.4	85.6	132.6	132.6	143.5	109.2	156.8	84.3
	85°F	157.2	157.2	163.6	140.3	177.2	113.4	152.0	152.0	157.0	138.1	168.4	107.7	146.8	146.8	150.6	135.3	164.4	109.1	141.2	141.2	143.5	133.0	156.8	108.3

TABLE 10: COOLING PERFORMANCE DATA - DHH180

DHH180 15TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB						EWB						EWB						EWB					
		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F		62°F		67°F		72°F	
CFM	EDB	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
5400	75°F	182.8	137.2	199.0	107.6	215.8	78.9	175.6	132.7	190.6	104.2	207.6	76.3	168.0	128.8	182.0	100.8	197.8	73.1	159.0	124.6	173.2	97.3	189.1	70.5
	80°F	182.8	161.9	199.0	132.3	215.8	103.5	175.6	156.9	190.6	129.0	207.6	100.8	168.0	153.3	182.0	125.3	197.8	97.5	159.0	149.3	173.2	121.9	189.1	94.9
	85°F	184.4	184.4	199.0	157.0	215.8	128.1	178.8	178.8	190.6	153.8	207.6	125.3	172.5	172.5	182.0	150.1	197.8	122.0	165.2	165.2	173.2	146.7	189.1	119.3
6000	75°F	186.0	143.5	202.2	111.4	219.2	80.4	178.4	138.6	193.6	108.0	210.8	77.7	170.6	135.2	184.6	104.4	200.4	74.5	161.4	131.0	175.6	101.1	192.0	72.1
	80°F	186.0	170.9	202.2	138.5	219.2	107.1	178.4	165.3	193.6	135.1	210.8	104.5	170.6	162.2	184.6	131.6	200.4	101.2	161.4	158.0	175.6	128.1	192.0	98.8
	85°F	190.8	190.8	202.2	165.5	219.2	134.1	184.0	184.0	193.6	162.2	210.8	131.5	177.6	177.6	184.6	158.7	200.4	128.0	170.2	170.2	175.6	155.4	192.0	125.5
6600	75°F	188.6	148.6	205.5	115.4	222.4	81.8	180.8	144.6	196.2	111.6	213.6	79.0	172.8	141.1	187.0	108.2	203.0	76.1	163.4	137.4	177.8	105.0	194.4	73.6
	80°F	188.6	177.8	205.5	145.2	222.4	110.9	180.8	173.9	196.2	141.0	213.6	108.2	172.8	170.5	187.0	137.8	203.0	105.1	163.4	163.4	177.8	134.5	194.4	102.2
	85°F	195.6	195.6	205.5	174.8	222.4	140.3	189.2	189.2	196.2	170.4	213.6	137.5	182.0	182.0	187.0	167.1	203.0	133.9	174.6	174.6	177.8	164.1	194.4	131.2

TABLE 11: SUPPLY AIR BLOWER PERFORMANCE 2 TO 5 TON

MODEL DHH	SUPPLY CFM	EXTERNAL STATIC PRESSURE - INCHES W.C.													
		0.2		0.4		0.6		0.8		1.0		1.2		1.4	
		RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH
024	700	708	0.09	845	0.13	991	0.17	1120	0.21	1240	0.25	1352	0.30	1456	0.36
	800	763	0.12	901	0.15	1016	0.20	1136	0.25	1251	0.30	1362	0.35	1489	0.41
	900	830	0.16	955	0.20	1078	0.25	1192	0.30	1300	0.35	1401	0.40	1495	0.46
036	1000	779	0.18	880	0.23	978	0.28	1074	0.34	1167	0.40	1256	0.47	1342	0.54
	1200	890	0.29	985	0.34	1075	0.40	1159	0.47	1239	0.54	1314	0.62	1382	0.71
	1400	1007	0.43	1090	0.50	1169	0.57	1244	0.64	1315	0.70	1382	0.77	-	-
048	1450	664	0.27	742	0.33	819	0.39	895	0.46	970	0.53	1043	0.61	1116	0.69
	1600	710	0.34	791	0.41	867	0.48	938	0.56	1005	0.63	1066	0.70	1123	0.77
	1800	780	0.47	853	0.54	920	0.61	983	0.68	1040	0.75	-	-	-	-
060	1800	696	0.39	776	0.46	850	0.54	921	0.62	988	0.69	1051	0.78	1110	0.86
	2000	752	0.51	826	0.59	895	0.67	960	0.76	1021	0.86	1077	0.96	1129	1.07
	2200	812	0.66	881	0.75	946	0.84	1007	0.93	1065	1.02	-	-	-	-

NOTE:

1. At higher evaporator airflows, and wet bulb conditions condensate carry-over may occur. Adjust airflow downward as necessary
2. Values include pressure drop from wet coil and clean filters
3. Shaded ares indicate oversized motors are required

TABLE 12: SUPPLY AIR BLOWER PERFORMANCE 8 TO 15 TON

MODEL DHH	SUPPLY CFM	EXTERMAL STATIC PRESSURE - INCHES W.C.																	
		0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.6		1.8	
		RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BHP	RPM	BHP
096	3000	640	0.77	700	0.88	757	1.01	810	1.14	861	1.26	908	1.36	854	1.58	995	1.65	1088	1.80
	3200	676	0.92	733	1.06	787	1.18	888	1.31	887	1.44	8.84	1.59	979	1.71	1020	1.95	1059	1.96
	3400	710	1.08	764	1.22	816	1.38	885	1.48	812	1.64	858	1.78	1001	1.82	1043	2.07	-	-
120	3600	758	1.30	807	1.44	858	1.58	903	1.78	848	1.88	992	2.08	1034	2.18	1074	2.34	1118	2.48
	4000	830	1.75	876	1.80	822	2.07	965	2.23	1007	2.38	1048	2.58	1087	2.72	1128	2.88	1168	3.05
	4400	910	2.31	852	2.49	884	2.00	1084	2.84	1078	3.02	-	-	-	-	-	-	-	-
144	4300	688	1.31	745	1.48	788	1.65	847	1.83	885	2.02	841	2.21	888	2.40	1030	2.60	1075	2.80
	4800	757	1.77	808	1.99	857	2.16	808	2.35	847	2.55	990	2.78	1031	2.97	1078	3.19	1133	3.41
	5300	828	2.84	878	2.55	818	2.76	861	2.98	1002	3.20	1042	3.42	1081	3.64	1119	3.37	1157	4.11
180	5400	817	2.87	884	2.58	909	2.79	858	3.01	884	3.28	1034	3.45	1078	3.63	1111	3.91	1148	4.15
	6000	888	3.20	842	3.43	983	3.67	1028	3.91	1062	4.15	1099	4.40	1136	4.94	1171	4.89	-	-
	6600	878	4.20	1018	4.45	1057	4.71	1084	4.98	-	-	-	-	-	-	-	-	-	-

NOTE:

1. At higher evaporator airflows, and wet bulb conditions condensate carry-over may occur. Adjust airflow downward as necessary
2. Values include pressure drop from wet coil and clean filters
3. Shaded ares indicate oversized motors are required

TABLE 13: CONDENSER AIR BLOWER PERFORMANCE 2 TO 5 TON

MODEL DHH	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - INCHES W.C.											
		0.2		0.4		0.6		0.8		1.0		1.2	
		RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH
024	1400	731	0.23	842	0.29	946	0.36	1043	0.43	1133	0.50	-	-
036	1950	941	0.54	1024	0.62	1104	0.71	1182	0.80	1258	0.89	1320	1.05
048	2550	669	0.58	743	0.68	816	0.79	887	0.90	956	1.02	-	-
060	3300	826	1.17	885	1.30	942	1.42	999	1.56	1056	1.70	1112	1.85

TABLE 14: CONDENSER AIR BLOWER PERFORMANCE 8 TO 15 TON

MODEL DHH	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - INCHES W.C.															
		0.2		0.4		0.6		0.8		1.0		1.2		1.4		1.8	
		RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BPH	RPM	BHP	RPM	BHP
096	4800	757	1.77	808	1.96	857	2.18	903	2.35	947	2.55	880	2.76	1031	2.97	1073	3.19
120	5700	801	2.88	845	3.20	986	3.43	1026	3.66	1085	3.90	1103	4.13	1133	4.87	1175	4.62
144	6800	811	3.41	848	3.62	889	3.35	930	4.09	971	4.35	1010	4.61	1046	4.87	1087	5.14

ELECTRICAL DATA

TABLE 15: STANDARD MOTORS - 2 TO 5 TON

MODEL DHH	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	MAX FUSE/ CCT. BKR. AMP
		QTY	RLA	LRA	HP	FLA	HP	FLA		
024A06	208-230/1/60	1 @	13.6	61.0	0.25	3.0	0.50	4.8	24.80	35
024A25	208-230/3/60	1 @	8.6	55.0	0.25	1.8	0.50	2.4	14.95	20
036A06	208-230/1/60	1 @	17.9	88.0	0.50	4.8	1.00	7.2	34.38	50
036A25	208-230/3/60	1 @	11.4	77.0	0.50	2.4	1.00	3.7	20.35	30
036A46	460/3/60	1 @	5.7	39.0	0.50	1.1	1.00	1.7	9.93	15
036A58	575/3/60	1 @	4.7	31.0	0.50	0.9	1.00	1.5	8.28	15
048A06	208-230/1/60	1 @	26.4	129.0	0.50	4.8	1.00	7.2	45.00	70
048A25	208-230/3/60	1 @	15.0	99.0	0.50	2.4	1.00	3.7	24.85	35
048A46	460/3/60	1 @	8.2	49.5	0.50	1.1	1.00	1.7	13.05	20
048A58	575/3/60	1 @	6.4	40.0	0.50	0.9	1.00	1.5	10.40	15
060A25	208-230/3/60	1 @	19.3	123.0	0.75	3.1	2.00	6.6	33.83	50
060A46	460/3/60	1 @	10.0	62.0	0.75	1.4	2.00	3.0	16.90	25
060A58	575/3/60	1 @	7.9	50.0	0.75	1.1	2.00	2.5	13.48	20

TABLE 16: STANDARD MOTORS - 8 TO 15 TONS

MODEL DHH	VOLTAGE	QTY	COMPRESSOR		EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	MAX FUSE/ CCT. BKR. AMP
			RLA	LRA	HP	FLA	HP	FLA		
096A25	208-230/3/60	2 @	15.0	99.0	1.550	4.8	3.00	9.2	47.75	60
096A46	460/3/60	2 @	8.2	49.5	1.50	2.2	3.00	4.2	24.85	30
096A58	575/3/60	2 @	6.4	40.0	1.50	1.9	3.00	3.6	19.90	25
120A25	208-230/3/60	2 @	19.3	123.0	3.00	9.2	5.00	14.3	66.93	80
120A46	460/3/60	2 @	10.0	62.0	3.00	4.2	5.00	6.6	33.30	40
120A58	575/3/60	2 @	7.9	50.0	3.00	3.6	5.00	5.7	27.08	30
144A25	208-230/3/60	2 @	20.7	156.0	3.00	9.2	5.00	14.3	70.08	90
144A46	460/3/60	2 @	10.0	70.0	3.00	4.2	5.00	6.6	33.30	40
144A58	575/3/60	2 @	8.2	54.0	3.00	3.6	5.00	5.7	27.75	35
180A25	208-230/3/60	2 @	32.1	195.0	5.00	14.3	7.50	21.8	108.33	125
180A46	460/3/60	2 @	16.4	95.0	5.00	6.6	7.50	10.0	53.50	60
180A58	575/3/60	2 @	12.0	80.0	5.00	5.7	7.50	8.4	41.10	50

ELECTRICAL DATA

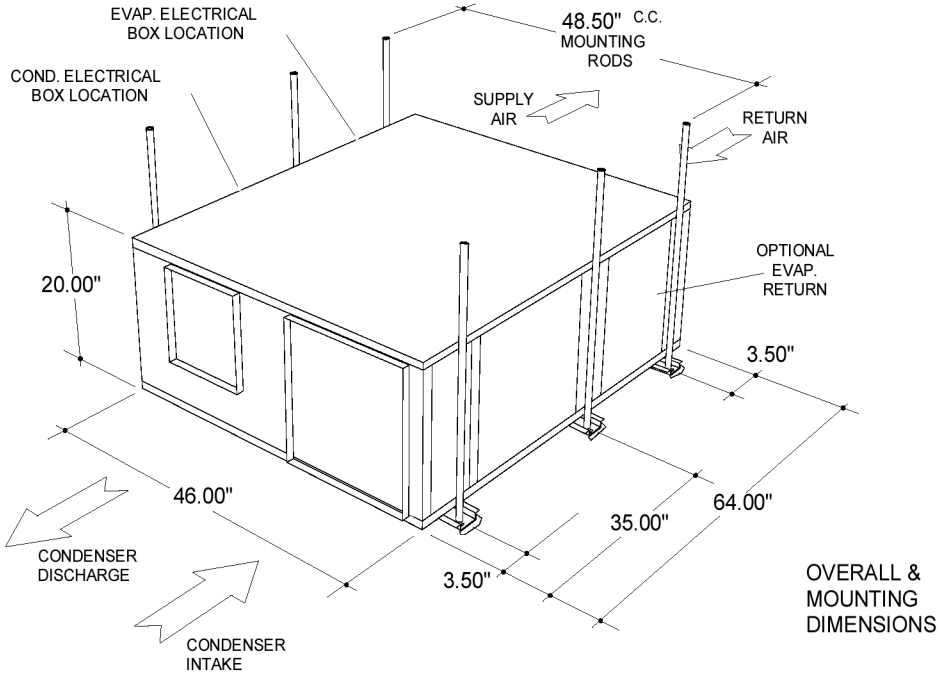
TABLE 17: OVERSIZE EVAPORATOR MOTORS - 2 TO 5 TONS

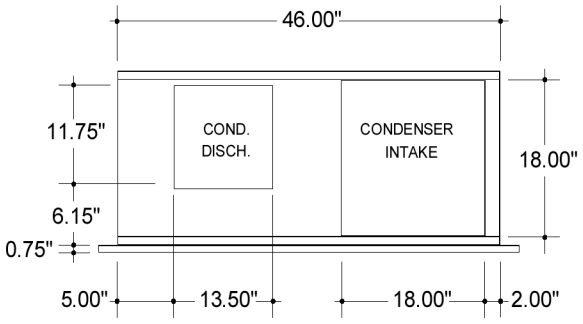
MODEL DHH	VOLTAGE	QTY	COMPRESSOR		EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	MAX FUSE/ CCT. BKR. AMP
			RLA	LRA	RLA	LRA	RLA	LRA		
024A06	208-230/1/60	1 @	13.6	61.0	0.50	4.8	0.50	4.8	26.60	40
024A25	208-230/3/60	1 @	8.6	55.0	0.50	2.4	0.50	2.4	15.55	20
036A06	208-230/1/60	1 @	17.9	88.0	0.75	5.9	1.00	7.2	35.48	50
036A25	208-230/3/60	1 @	11.4	77.0	0.75	3.1	1.00	3.7	21.05	30
036A46	460/3/60	1 @	5.7	39.0	0.75	1.4	1.00	1.7	10.23	15
036A58	575/3/60	1 @	4.7	31.0	0.75	1.1	1.00	1.5	8.48	15
048A06	208-230/1/60	1 @	26.4	129.0	0.75	5.9	1.00	7.2	46.10	70
048A25	208-230/3/60	1 @	15.0	99.0	0.75	3.1	1.00	3.7	25.55	40
048A46	460/3/60	1 @	8.2	49.5	0.75	1.4	1.00	1.7	13.35	20
048A58	575/3/60	1 @	6.4	40.0	0.75	1.1	1.00	1.5	10.60	15
060A25	208-230/3/60	1 @	19.3	123.0	1.00	3.7	2.00	6.6	34.43	50
060A46	460/3/60	1 @	10.0	62.0	1.00	1.7	2.00	3.0	17.20	25
060A58	575/3/60	1 @	7.9	50.0	1.00	1.5	2.00	2.5	13.88	20

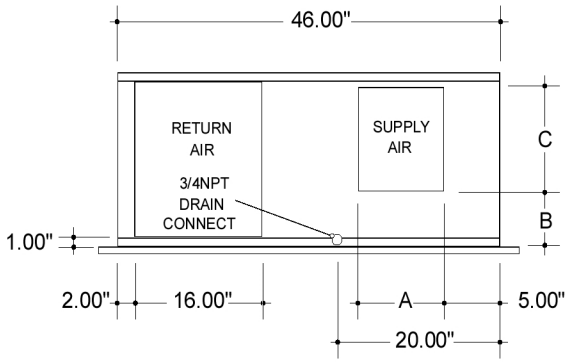
TABLE 18: OVERSIZE EVAPORATOR MOTORS - 8 TO 10 TON

MODEL DHH	VOLTAGE	QTY	COMPRESSOR		EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	MAX FUSE/ CCT. BKR. AMP
			RLA	LRA	HP	FLA	HP	FLA		
096A25	208-230/3/60	2 @	15.0	99.0	2.00	6.6	3.00	9.2	49.55	60
096A46	460/3/60	2 @	8.2	49.5	2.00	3.0	3.00	4.2	25.65	30
096A58	575/3/60	2 @	6.4	40.0	2.00	2.5	3.00	3.6	20.50	25
120A25	208-230/3/60	2 @	19.3	123.0	3.00*	9.2	5.00	14.3	66.93	80
120A46	460/3/60	2 @	10.0	62.0	3.00*	4.2	5.00	6.6	33.30	40
120A58	575/3/60	2 @	7.9	50.0	3.00*	3.6	5.00	5.7	27.08	30
144A25	208-230/3/60	2 @	20.7	156.0	5.00	14.3	5.00	14.3	75.18	90
144A46	460/3/60	2 @	10.0	70.0	5.00	6.6	5.00	6.6	35.70	45
144A58	575/3/60	2 @	8.2	54.0	5.00	5.7	5.00	5.7	29.85	35
180A25	208-230/3/60	2 @	32.1	195.0	5.00*	14.3	7.50	21.8	108.33	125
180A46	460/3/60	2 @	16.4	95.0	5.00*	6.6	7.50	10.0	53.50	60
180A58	575/3/60	2 @	12.0	80.0	5.00*	5.7	7.50	8.4	41.10	50

FIGURE 1: 2 TO 3 TON UNIT DIMENSIONS







	A	B	C
2 TON	9.57"	5.44"	10.63"
3 TON	10.88"	6.16"	11.75"

FIGURE 2: 4 TO 5 TON UNIT DIMENSIONS

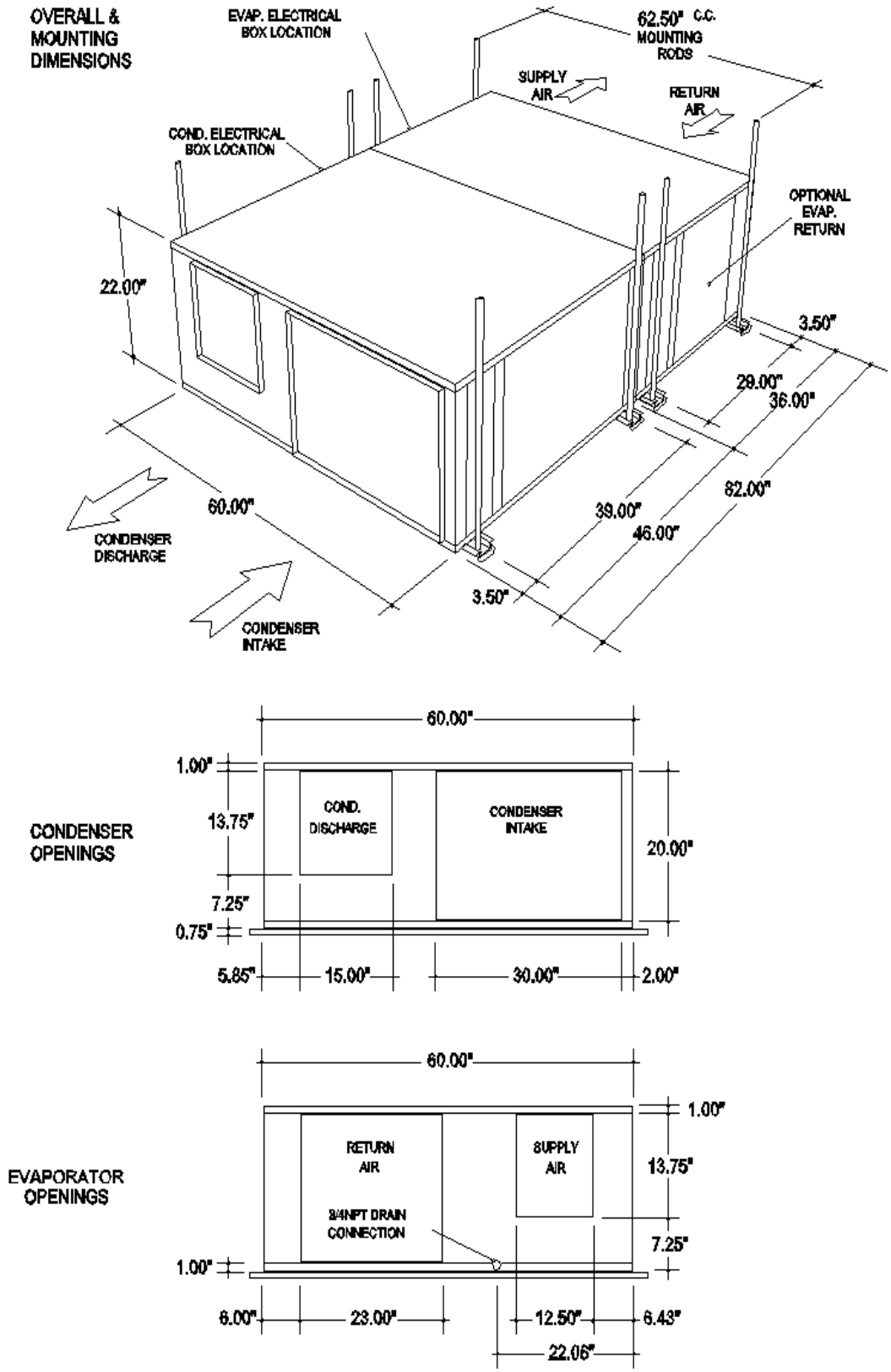
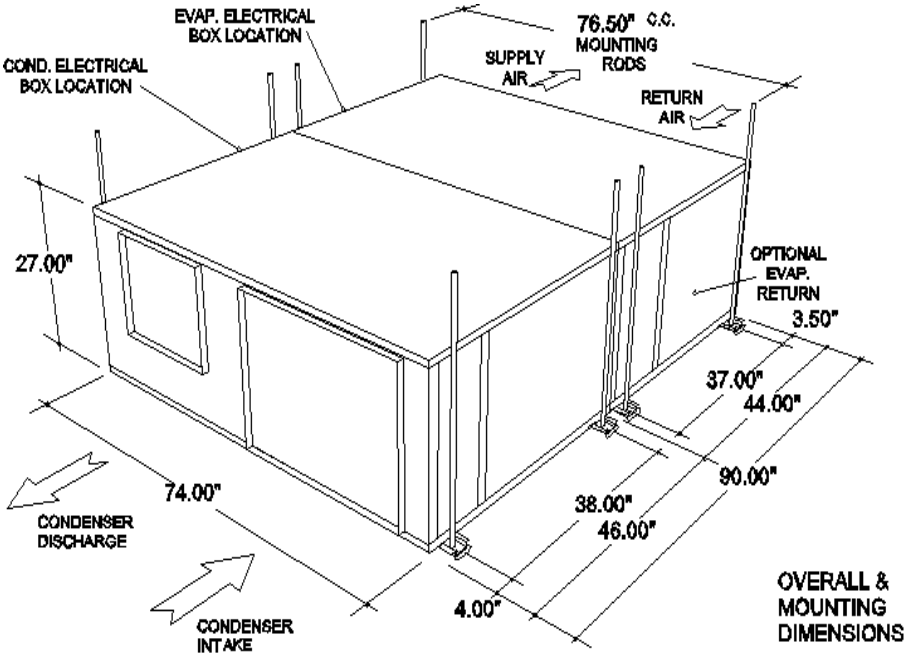
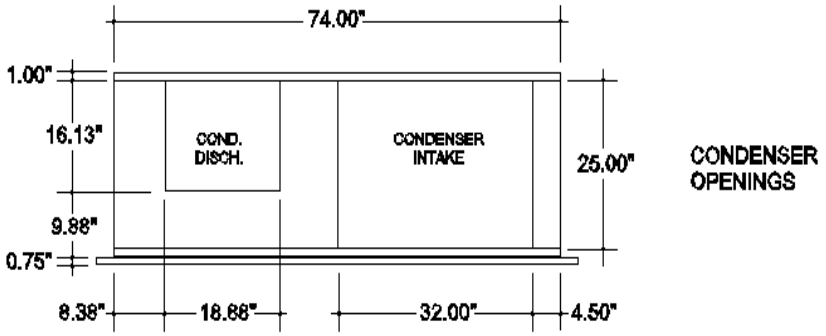


FIGURE 3: 8 TO 10 UNIT DIMENSIONS





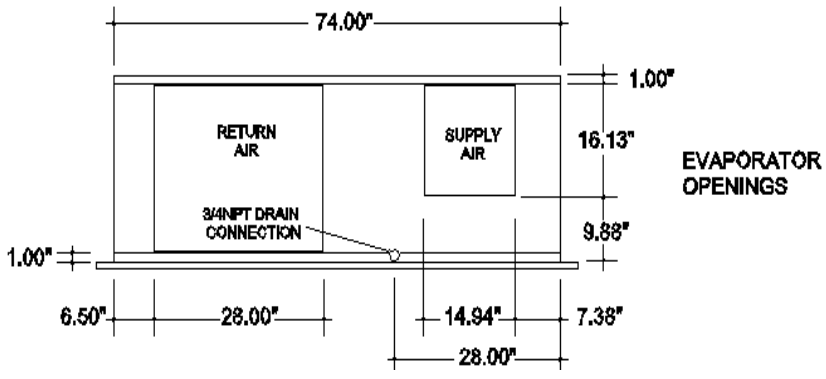
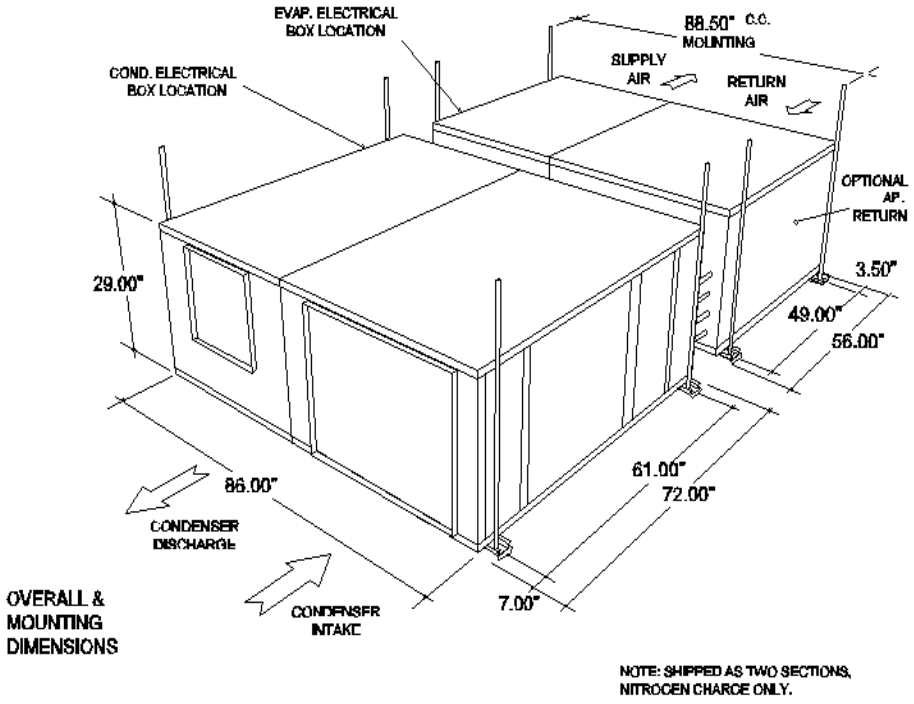
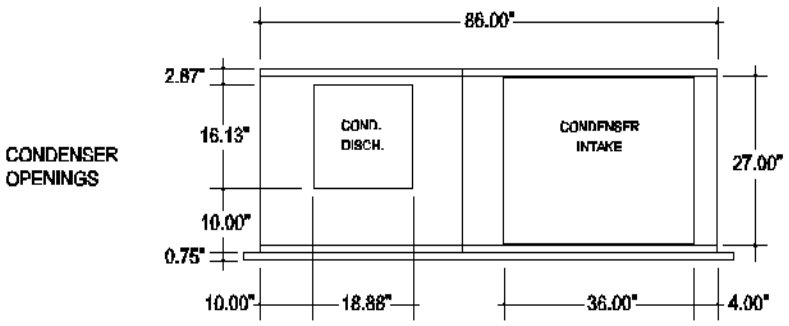
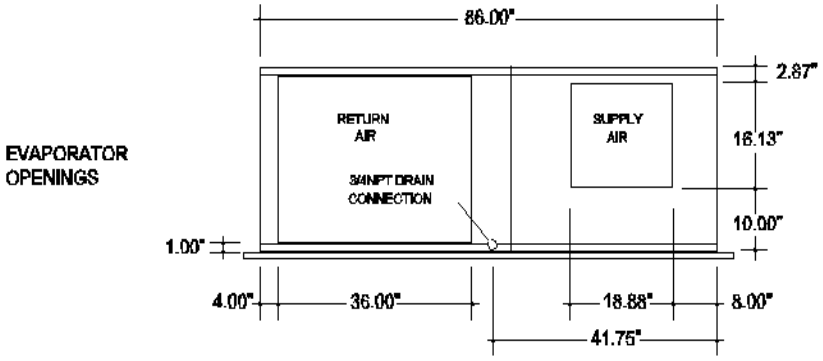


FIGURE 4: 12 TO 15 UNIT DIMENSIONS







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