



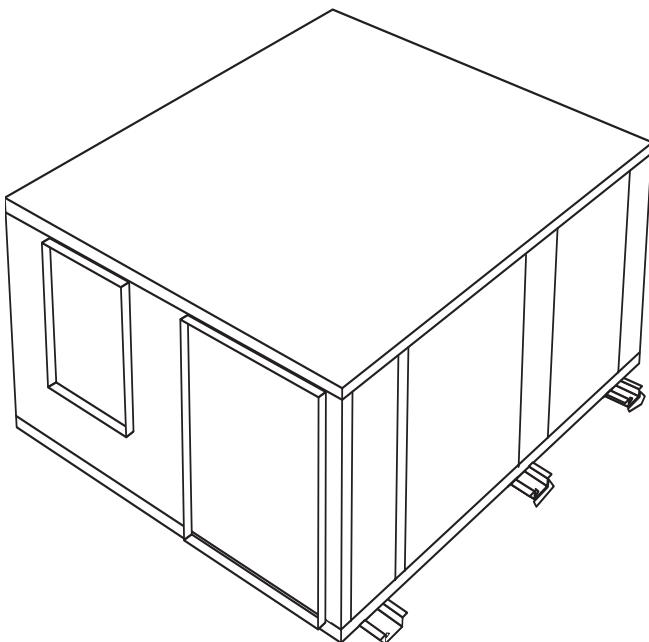
## Heating and Air Conditioning

### TECHNICAL GUIDE

#### SINGLE PACKAGE AIR CONDITIONERS

#### HORIZONTAL INDOOR & CONDENSER AIR FLOW

#### MODELS: D4HH 024 THRU 180



### 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 utilized 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.

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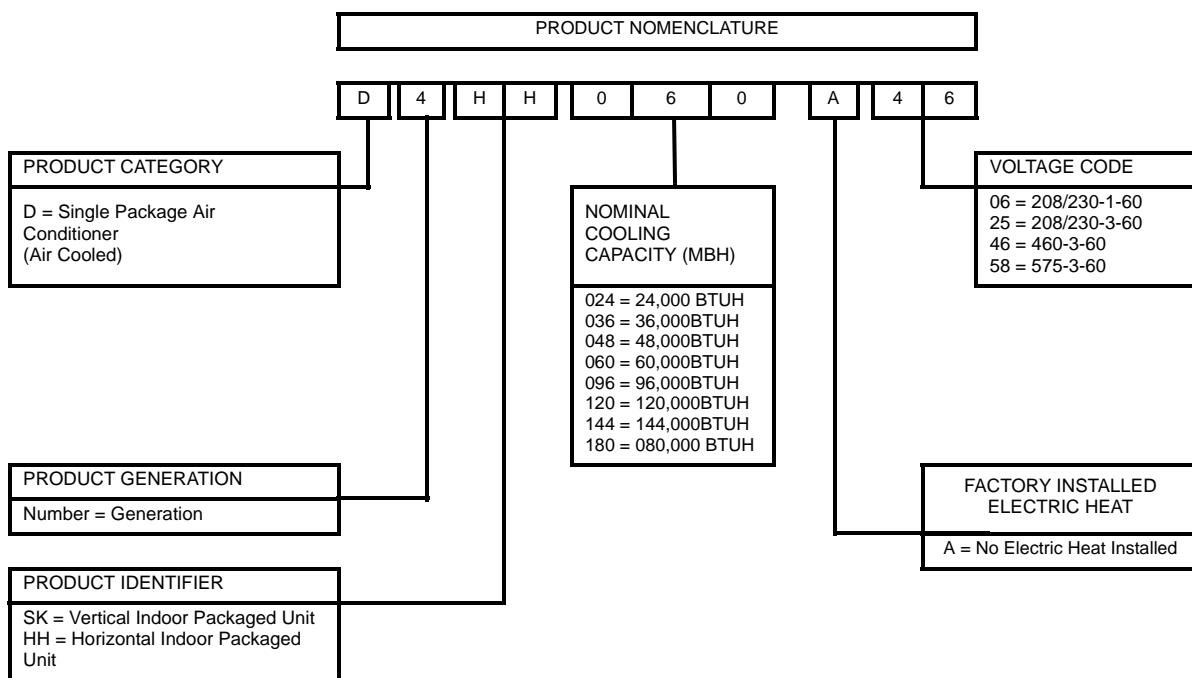
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## PRODUCT NOMENCLATURE



## 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 cutout 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. 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	D*HH024	D*HH036	D*HH048	D*HH060
Nominal Cooling (Ton)	2	3	4	5
<b>Cooling Performance*</b>				
Gross Cooling Capacity (Btuh)	24800	36000	48000	61000
Design CFM	800	1200	1600	2000
Net Cooling Capacity <sup>†</sup>	24200	35000	46500	59000
Net Cooling CFM	800	1200	1500	2000
SEER / EER <sup>‡</sup>	11.5	10.5	10.8	10.3
<b>Compressor - Qty / Type</b>	1 / Scroll	1 / Scroll	1 / Scroll	1 / Scroll
Capacity Steps (%)	100/0	100/0	100/0	100/0
<b>Evaporator Coil-Type</b>	Enhanced Copper Tubes, Enhanced Aluminum Fins			
Face Area (sq ft.)	2.44	3.00	5.14	5.14
Rows/FPI	3/10	3/12	3/12	4/10
Refrigerant Control	TX Valve			
<b>Condenser Coil-Type</b>	Enhanced Copper Tubes, Enhanced Aluminum Fins			
Face Area (sq ft.)	3.75	3.75	6.46	6.46
Rows/FPI	3/12	3/12	3/12	3/12
<b>Evaporator Fan-Type</b>	Centrifugal, Forward Curved			
Qty. - Diameter x Width (in)	1 - 9x7	1 - 10x8	1 - 12x9	1 - 12x9
Drive	Adjustable Belt			
Motor HP (Standard/Oversized)	0.25/0.33	0.5/0.75	0.75/NA	1.0/NA
<b>Condenser Fan-Type</b>	Centrifugal, Forward Curved			
Qty. - Diameter x Width (in)	1 - 10x10	1 - 10x10	1 - 12x11	1 - 12x11
Drive	Adjustable Belt			
Motor HP (Standard)	0.5	1.0	1.0	2.0
<b>Filters - Quantity/Size (in)</b>	1-18x24x2	1-18x25x2	2-16x20x2	2-20x20x2
<b>Condensate Connection</b>	3/4 NPT			
<b>Weight - Operating</b>	490	520	765	785
- Shipping	535	565	820	840

\*. Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67 entering wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.

†. Units 2 through 5 tons rated in accordance with ARI Standard 210/240.

‡. SEER rating relates to product 65,000 btuh and below. EER applies to product 65,000 btuh and above.

**TABLE 2: GENERAL DATA - 8 TO 15 TONS**

<b>Model</b>	<b>D*HH096</b>	<b>D*HH120</b>	<b>D*HH144</b>	<b>D*HH180</b>
Nominal Cooling (Ton)	8	10	12	15
<b>Cooling Performance *</b>				
Gross Cooling Capacity (Btuh)	94000	120000	146000	178000
Design CFM	3200	4000	4800	6000
Net Cooling Capacity <sup>†</sup>	91000	116000	142000	172000
Net Cooling CFM	3200	3600	4400	5200
EER	10.4	10.3	9.8	9.7
<b>Compressor - Qty / Type</b>	2 / Scroll	2 / Scroll	2 / Scroll	2 / Scroll
Capacity Steps (%)	100/50/0	100/50/0	100/50/0	100/50/0
<b>Evaporator Coil-Type</b>	Enhanced Copper Tubes, Enhanced Aluminum Fins			
Face Area (sq ft.)	6.86	8.94	9.72	12.06
Rows/FPI	4/10	4/14	4/12	5/10
Refrigerant Control	TX Valve			
<b>Condenser Coil-Type</b>	Enhanced Copper Tubes, Enhanced Aluminum Fins			
Face Area (sq ft.)	9.03	9.43	13.61	15.07
Rows/FPI	5/14	5/14	5/14	5/14
<b>Evaporator Fan-Type</b>	Centrifugal, Forward Curved			
Qty. - Diameter x Width (in)	1 - 15x11	1 - 15x15	1 - 15x15	1 - 18x18
Drive	Adjustable Belt			
Motor HP (Standard/Oversized)	1.5/2	3/NA	3/5	5/NA
<b>Condenser Fan-Type</b>	Centrifugal, Forward Curved			
Qty. - Diameter x Width (in)	1 - 15x15	1 - 15x15	1 - 15x15	1 - 18x18
Drive	Adjustable Belt			
Motor HP (Standard)	3.0	3.0	5.0	5.0
<b>Filters - Quantity/Size (in)</b>	2-20x25x2	4-14x25x2	4-14x25x2	3-14x20x2 3-16x20x2
<b>Condensate Connection</b>	3/4 NPT			
<b>Weight - Operating</b>	1220	1260	1625	1785
- Shipping	1305	1330	1780	1940

\*. Cooling performance is rated at 95°F ambient, 80°F entering dry bulb, 67 entering wet bulb and CFM listed. Gross capacity does not include the effect of fan motor heat.

†. Units 8 through 10 tons rated in accordance with ARI Standard 210/240. Units 12 through 15 tons rated in accordance with ARI Standard 360.

**TABLE 3: COOLING PERFORMANCE DATA - D\*HH024**

D*HH024 2 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB			EWB			EWB			EWB			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	
700	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
	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
800	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
	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	24.1	20.6	25.7	14.8	
900	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
	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 - D\*HH036**

D*HH036 3 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB			EWB			EWB			EWB			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	
1000	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
	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	34.8	28.3	37.8	23.3	31.5	31.5	33.3	27.7	36.1	20.6	
1200	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
	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	40.2	40.2	34.4	34.4	35.7	31.1	38.7	25.2	33.1	33.1	34.1	30.4	37.0	22.0	
1400	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
	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 - D\*HH048**

D*HH048 4 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB			EWB			EWB			EWB			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	
1450	75°F	45.2	36.4	48.6	28.8	53.1	21.3	43.7	35.8	47.1	28.2	51.5	20.7	41.9	35.1	45.4	27.5	49.6	20.5	40.0	34.3	43.6	26.8	47.6	19.7
	80°F	46.3	44.1	49.2	36.2	53.8	28.8	44.6	43.5	47.6	35.6	52.0	28.2	42.7	42.4	45.8	34.9	50.1	27.5	42.1	42.1	43.7	34.1	48.0	26.8
	85°F	49.0	49.0	49.9	44.0	54.2	36.1	47.5	47.5	48.1	43.2	52.4	35.5	46.0	46.0	46.0	42.3	50.5	34.9	44.2	44.2	43.8	41.4	48.3	34.1
1600	75°F	45.9	38.2	49.4	29.9	53.9	22.3	44.3	37.5	47.8	29.3	52.2	21.6	42.5	36.8	46.0	28.6	50.4	20.9	41.1	36.3	44.2	27.9	48.2	20.2
	80°F	46.7	46.2	50.0	37.9	54.6	29.9	46.7	46.7	48.3	37.3	52.8	29.2	44.9	44.9	46.1	36.6	50.8	28.6	42.9	44.3	35.8	48.6	27.8	
	85°F	50.4	50.4	50.6	46.2	54.8	37.0	48.8	48.8	48.5	48.5	53.0	37.2	47.2	47.2	46.3	44.4	50.9	36.5	45.3	45.3	44.6	43.9	48.8	35.7
1800	75°F	46.6	40.3	50.4	31.2	54.9	22.8	45.5	40.1	48.7	30.6	53.0	22.1	43.6	39.2	46.8	29.9	51.0	21.4	41.6	38.3	44.6	29.2	48.7	20.7
	80°F	49.8	49.8	50.7	40.1	55.5	31.2	47.9	47.9	48.9	39.4	53.6	30.6	45.7	45.7	46.9	38.7	51.3	29.8	43.3	43.3	44.8	38.0	48.9	29.1
	85°F	51.9	51.9	50.9	48.8	55.6	39.9	50.2	50.2	49.5	49.5	53.8	39.3	48.4	48.4	48.8	48.8	51.5	38.6	46.4	46.4	46.8	46.8	49.2	37.8
2000	75°F	58.2	48.1	62.6	37.7	68.3	28.1	56.0	47.1	60.4	36.8	66.0	27.3	54.0	46.4	58.2	36.0	63.5	26.4</						

**TABLE 7: COOLING PERFORMANCE DATA - D\*HH096**

D*HH096 8 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB			EWB			EWB			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	
<b>CFM</b>	<b>EDB</b>	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	89.5	73.1	96.5	57.7	103.9	42.8	85.8	71.5	92.9	56.2	100.1	41.4	82.9	70.4	89.1	54.6	95.8	39.8	78.8	68.5	84.9	53.0	91.2	38.1
	80°F	90.4	87.8	97.4	72.6	105.5	57.3	87.4	86.3	93.6	71.1	101.6	55.9	84.4	84.4	89.5	69.5	97.4	54.3	81.2	81.2	85.1	67.8	92.9	52.7
	85°F	96.1	96.1	98.2	87.8	105.8	72.0	93.0	93.0	93.9	86.0	101.8	70.5	89.8	89.8	90.5	84.7	97.5	69.0	86.2	86.2	86.0	82.6	93.2	67.3
3200	75°F	90.2	75.2	97.3	59.0	104.8	43.4	87.4	74.2	93.8	57.5	100.7	41.9	83.6	72.5	89.9	56.0	96.3	40.2	79.3	70.5	85.6	54.3	91.7	38.6
	80°F	91.9	90.8	98.1	74.7	106.4	58.6	89.2	89.2	94.3	73.2	102.4	57.2	86.1	86.1	90.0	71.6	98.0	55.6	82.7	82.7	85.4	69.8	93.5	53.9
	85°F	97.7	97.7	98.6	90.5	106.5	74.1	94.6	94.6	95.4	89.3	102.5	72.6	91.2	91.1	87.3	98.2	71.1	87.5	87.5	87.5	85.8	93.8	69.4	
3400	75°F	91.8	78.0	98.2	60.3	105.4	43.8	88.1	76.3	94.4	58.8	101.3	42.3	84.1	74.4	90.5	57.2	96.8	40.7	79.7	72.4	86.2	55.5	92.1	39.0
	80°F	93.8	93.8	98.7	76.8	107.2	59.9	90.8	90.8	94.7	75.2	103.0	58.4	87.4	87.4	90.8	73.6	98.7	56.8	83.9	83.9	87.2	72.5	93.9	55.1
	85°F	99.2	99.2	100.1	93.8	107.4	76.1	96.0	96.0	95.9	91.8	103.2	74.6	92.5	92.3	90.4	99.0	73.0	88.8	88.8	88.9	88.4	94.2	71.4	

**TABLE 8: COOLING PERFORMANCE DATA - D\*HH120**

D*HH 120 10 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB			EWB			EWB			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	
<b>CFM</b>	<b>EDB</b>	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	114.5	93.3	123.6	73.7	134.6	53.9	110.9	91.8	119.1	71.9	129.6	52.1	106.1	89.6	114.2	70.0	124.2	50.3	100.9	87.2	109.2	67.9	118.8	48.5
	80°F	115.4	111.8	124.5	92.6	135.8	73.6	111.2	109.8	119.6	90.7	130.7	71.7	108.0	108.0	114.3	88.6	125.1	69.7	104.0	104.0	110.1	87.1	119.2	67.8
	85°F	122.9	122.9	125.5	111.7	136.1	92.2	118.9	118.9	120.1	109.5	131.0	90.2	114.6	114.6	115.7	107.8	125.4	88.3	110.2	110.2	110.5	105.5	119.8	86.2
4000	75°F	116.7	98.5	125.6	76.9	136.5	55.4	112.1	96.4	120.9	75.0	131.3	53.6	107.1	94.2	115.9	73.0	125.8	52.7	101.8	91.9	110.6	70.9	120.1	50.7
	80°F	119.9	119.9	126.2	97.5	137.6	76.6	115.9	115.9	121.1	95.5	131.9	74.7	111.5	111.5	117.1	94.1	126.0	72.7	107.1	107.1	111.8	92.0	120.0	70.6
	85°F	126.6	126.6	127.8	118.7	137.8	97.0	122.3	122.3	122.6	116.4	132.4	95.0	117.8	117.8	117.3	114.0	126.9	93.0	113.2	113.2	113.7	112.5	121.0	90.9
4400	75°F	118.3	103.2	127.3	79.8	138.2	57.8	113.3	101.0	122.3	77.9	132.7	55.8	108.0	98.7	117.2	75.9	127.1	53.8	103.9	97.0	111.7	73.8	121.2	51.7
	80°F	123.2	123.2	128.6	103.0	138.6	79.5	118.6	118.6	123.9	101.0	133.4	77.5	113.8	113.8	118.6	98.9	128.0	75.5	108.8	108.8	113.0	96.7	122.1	73.4
	85°F	129.8	129.8	128.9	124.4	139.4	101.6	125.2	125.2	124.9	123.0	133.7	99.6	120.5	120.5	121.0	121.0	128.2	98.3	115.6	115.6	117.0	117.0	122.3	96.2

**TABLE 9: COOLING PERFORMANCE DATA - D\*HH144**

D*HH 144 12 TON		AMBIENT CONDENSER AIR TEMPERATURE																							
		85°F						95°F						105°F						115°F					
		EWB			EWB			EWB			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	
<b>CFM</b>	<b>EDB</b>	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	138.4	110.2	149.9	87.9	164.0	65.6	133.6	108.1	144.7	85.8	157.4	63.3	128.2	105.8	138.8	83.4	149.7	62.0	123.1	103.8	132.0	80.7	140.9	58.7
	80°F	141.6	133.3	151.0	109.6	165.2	88.7	136.0	130.4	145.6	107.5	158.1	86.0	129.5	127.1	139.6	105.1	150.4	83.2	124.4	124.3	132.7	102.5	141.2	80.0
	85°F	148.3	148.3	152.6	132.1	165.8	110.8	144.0	144.0	147.1	129.8	158.7	108.3	139.2	139.2	140.8	127.3	150.6	105.5	133.6	133.6	134.9	125.2	141.3	102.3
4800	75°F	139.6	115.5	152.4	91.4	164.8	68.2	135.9	114.2	146.7	89.1	157.8	65.5	130.6	111.8	140.4	86.7	149.4	62.5	124.3	109.0	133.1	83.8	139.9	59.0
	80°F	143.4	139.9	153.4	115.3	166.6	91.8	139.2	138.0	147.6	113.0	159.0	89.1	136.8	136.8	141.2	110.6	150.4	86.1	130.4	133.8	107.9	140.4	82.8	
	85°F	153.1	153.1	154.9	139.6	166.8	116.1	148.4	148.4	149.0	137.3	159.2	113.4	143.2	143.2	144.2	135.6	150.7	110.5	137.3	137.3	137.5	141.0	140.7	
5300	75°F	142.8	121.7	154.1	94.6	165.8	69.1	137.8	119.5	148.3	92.3	158.3	66.4	132.1	117.0	141.5	89.7	149.6	63.2	125.6	114.2	134.0	86.8	139.2	59.7
	80°F	150.4	150.4	155.1	120.5	166.6	94.3	145.2	145.2	148.9	118.														

**TABLE 11: FAN PERFORMANCE DATA - SUPPLY AIR BLOWER PERFORMANCE - (2 TO 5 TONS)**

MODEL #	SUPPLY CFM	EXTERNAL STATIC PRESSURE - Inches W.C.													
		0.2		0.4		0.6		0.8		1.0		1.2		1.4	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
D*HH024	700	732	0.09	908	0.13	1040	0.17	1160	0.21	1280	0.27	1378	0.31	-	-
	800	791	0.12	927	0.16	1083	0.21	1198	0.27	1304	0.30	-	-	-	-
	900	855	0.16	979	0.21	1106	0.26	1206	0.29	-	-	-	-	-	-
D*HH036	1000	808	0.19	903	0.24	1010	0.29	1102	0.36	1198	0.42	1277	0.48	1364	0.55
	1200	929	0.31	1010	0.36	1100	0.42	1191	0.48	1272	0.55	1350	0.64	1420	0.70
	1400	1053	0.47	1135	0.53	1205	0.61	1273	0.68	1360	0.74	1418	0.81	-	-
D*HH048	1450	652	0.26	742	0.30	820	0.37	896	0.46	974	0.52	1048	0.58	1110	0.68
	1600	704	0.34	785	0.40	851	0.43	923	0.52	991	0.63	1079	0.71	1122	0.78
	1800	770	0.46	844	0.53	914	0.61	976	0.72	1045	0.75	-	-	-	-
D*HH060	1800	723	0.41	800	0.49	873	0.56	931	0.62	1005	0.71	1045	0.78	1104	0.87
	2000	786	0.55	857	0.63	923	0.71	987	0.79	1031	0.87	1082	0.95	1143	1.05
	2200	851	0.71	917	0.80	979	0.89	1038	0.98	1096	1.07	-	-	-	-

- NOTE:
- At higher evaporator airflows and wet bulb conditions, condensate carry-over may occur. Adjust airflow downward as necessary.
  - Values include pressure drop from wet coil and clean filters.
  - Shaded areas indicate oversize motors

**TABLE 12: CONDENSER AIR BLOWER PERFORMANCE (2 TO 5 TONS)**

MODEL#	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - Inches W.C.													
		0.2		0.4		0.6		0.8		1.0		1.2		1.4	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
D*HH024	1400	731	0.23	842	0.32	947	0.38	1043	0.43	1125	0.50	-	-	-	-
D*HH036	1950	941	0.54	1024	0.63	1104	0.71	1183	0.80	1258	0.89	-	-	-	-
D*HH048	2550	691	0.61	765	0.71	838	0.82	910	0.94	979	1.08	-	-	-	-
D*HH060	3300	830	1.18	890	1.31	949	1.44	1007	1.58	1065	1.72	-	-	-	-

**TABLE 13: FAN PERFORMANCE DATA - SUPPLY AIR BLOWER PERFORMANCE (8 TO 15 TONS)**

MODEL #	SUPPLY CFM	EXTERNAL STATIC PRESSURE - Inches W.C.													
		0.2		0.4		0.6		0.8		1.0		1.2		1.4	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
D*HH096	3000	702	0.89	759	1.02	813	1.14	864	1.27	911	1.39	962	1.52	1005	1.64
	3200	740	1.06	794	1.19	845	1.32	894	1.46	940	1.59	984	1.73	1030	1.90
	3400	779	1.26	830	1.39	879	1.53	926	1.68	971	1.82	1013	1.96	1055	2.11
D*HH120	3600	790	1.30	845	1.47	898	1.65	949	1.84	996	2.04	1043	2.25	1089	2.47
	4000	867	1.70	917	1.93	966	2.12	1013	2.32	1057	2.62	1110	2.74	1150	2.96
	4400	943	2.28	988	2.48	1032	2.68	1075	2.89	1113	3.11	-	-	-	-
D*HH144	4300	755	1.51	808	1.69	858	1.87	905	2.06	952	2.25	997	2.45	1040	2.66
	4800	831	2.05	879	2.25	925	2.45	969	2.66	1011	2.86	1053	3.08	1094	3.30
	5300	908	2.71	952	2.93	994	3.15	1035	3.38	1074	3.60	1113	3.83	1151	4.07
D*HH180	5400	658	2.00	704	2.25	747	2.49	789	2.75	829	3.02	855	3.31	898	3.62
	6000	723	2.69	765	2.97	805	3.24	843	3.52	880	3.80	916	4.09	944	4.40
	6600	787	3.52	825	3.81	863	4.13	898	4.42	933	4.73	967	5.05	1000	5.37

- NOTE:
- At higher evaporator airflows, and wet bulb conditions condensate carry-over may occur. Adjust airflow downward as necessary.
  - Values include pressure drop from wet coil and clean filters.
  - Shaded areas indicate oversize motors

**TABLE 14: CONDENSER AIR BLOWER PERFORMANCE (8 TO 15 TONS)**

MODEL #	OUTDOOR CFM	EXTERNAL STATIC PRESSURE - Inches W.C.													
		0.2		0.4		0.6		0.8		1.0		1.2		1.4	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
D*HH096	4000	714	1.25	770	1.42	822	1.59	872	1.76	921	1.95	968	2.15	1014	2.37
D*HH120	4600	798	1.81	847	2.00	895	2.19	940	2.39	984	2.59	1027	2.80	1071	3.02
D*HH144	5600	726	2.13	776	2.33	825	2.54	872	2.76	916	2.98	959	3.20	1000	3.43
D*HH180	6900	673	2.90	716	3.20	757	3.50	796	3.80	834	4.11	871	4.43	906	4.75

**ELECTRICAL DATA****TABLE 15: STANDARD MOTORS (2 TO 5 TONS)**

MODEL# D*HH	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	(MOP)	MAX FUSE/ CCT. BKR. AMP
		QTY	RLA	LRA	HP	FLA	HP	FLA			
024A06	208-230/1/60	1	@	13.6	61.0	0.25	2.6	0.50	4.4	24.00	37.60
024A25	208-230/3/60	1	@	8.6	55.0	0.25	1.4	0.50	2.1	14.25	22.85
036A06	208-230/1/60	1	@	17.9	88.0	0.50	4.4	1.00	7.4	34.18	52.08
036A25	208-230/3/60	1	@	11.4	77.0	0.50	2.1	1.00	3.1	19.45	30.85
036A46	460/3/60	1	@	5.7	39.0	0.50	1.0	1.00	1.4	9.53	15.23
036A58	575/3/60	1	@	4.7	31.0	0.50	0.8	1.00	1.1	7.78	12.48
048A06	208-230/1/60	1	@	20.4	109.0	0.75	5.4	1.00	7.4	38.30	58.70
048A25	208-230/3/60	1	@	13.9	88.0	0.75	3.2	1.00	3.1	23.68	37.58
048A46	460/3/60	1	@	7.1	44.0	0.75	1.5	1.00	1.4	11.83	18.97
048A58	575/3/60	1	@	5.4	34.0	0.75	1.2	1.00	1.1	8.99	14.34
060A25	208-230/3/60	1	@	19.3	123.0	1.00	3.1	2.00	5.9	33.13	52.43
060A46	460/3/60	1	@	7.5	49.5	1.00	1.4	2.00	2.8	13.58	21.08
060A58	575/3/60	1	@	6.4	40.0	1.00	1.1	2.00	2.2	11.30	17.70

**TABLE 16: OVERSIZE EVAPORATOR MOTOR (2 AND 3 TONS)**

MODEL# D*HH	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	(MOP)	MAX FUSE/ CCT. BKR. AMP
		QTY	RLA	LRA	HP	FLA	HP	FLA			
024A06	208-230/1/60	1	@	13.6	61.0	0.33	3.2	0.50	4.4	24.60	38.20
024A25	208-230/3/60	1	@	8.6	55.0	0.33	1.8	0.50	2.1	14.65	23.25
036A06	208-230/1/60	1	@	17.9	88.0	0.75	5.4	1.00	7.4	35.18	53.08
036A25	208-230/3/60	1	@	11.4	77.0	0.75	3.2	1.00	3.1	20.55	31.95
036A46	460/3/60	1	@	5.7	39.0	0.75	1.5	1.00	1.4	10.03	15.73
036A58	575/3/60	1	@	4.7	31.0	0.75	1.2	1.00	1.1	8.18	12.88

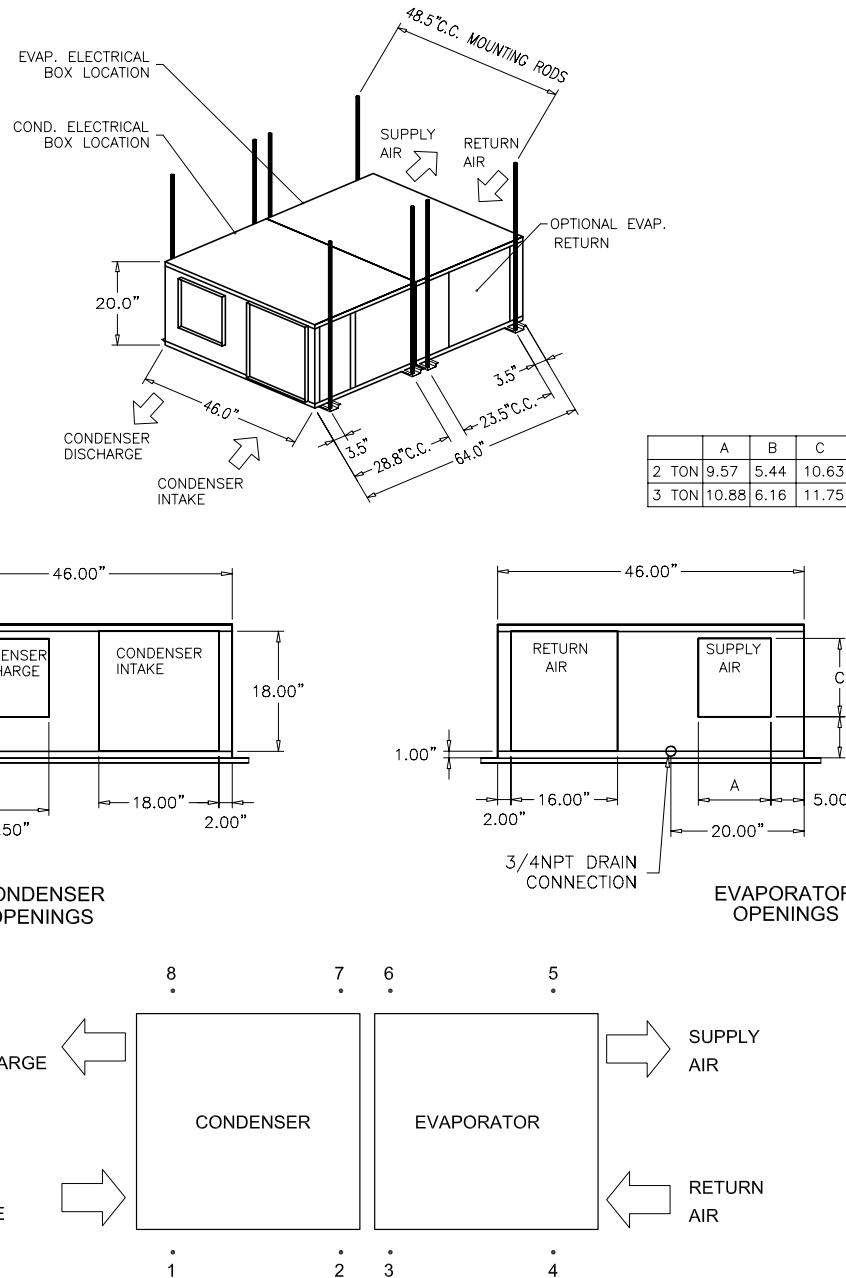
**TABLE 17: STANDARD MOTORS (8 TO 15 TONS)**

MODEL#	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	(MOP)	MAX FUSE/ CCT. BKR. AMP
		QTY	RLA	LRA	HP	FLA	HP	FLA			
096A25	208-230/3/60	2	@	13.9	88.0	1.50	4.5	3.00	8.7	44.48	58.38
096A46	460/3/60	2	@	7.1	44.0	1.50	2.1	3.00	4.0	22.17	29.31
096A58	575/3/60	2	@	5.4	34.0	1.50	1.7	3.00	3.2	16.94	22.29
120A25	208-230/3/60	2	@	19.3	123.0	3.00	8.7	3.00	8.7	60.83	80.13
120A46	460/3/60	2	@	7.5	49.5	3.00	4.0	3.00	4.0	24.88	32.38
120A58	575/3/60	2	@	6.4	40.0	3.00	3.2	3.00	3.2	20.80	27.20
144A25	208-230/3/60	2	@	20.7	156.0	3.00	8.7	5.00	13.7	68.98	89.68
144A46	460/3/60	2	@	10.0	75.0	3.00	4.0	5.00	6.6	33.10	43.10
144A58	575/3/60	2	@	8.2	54.0	3.00	3.2	5.00	5.3	26.95	35.15
180A25	208-230/3/60	2	@	28.6	196.0	5.00	13.7	5.00	13.7	91.75	120.35
180A46	460/3/60	2	@	14.2	100.0	5.00	6.6	5.00	6.6	45.15	59.35
180A58	575/3/60	2	@	9.7	90.0	5.00	5.3	5.00	5.3	32.43	42.13

**TABLE 18: OVERSIZE EVAPORATOR MOTOR (8 AND 12 TONS)**

MODEL#	VOLTAGE	COMPRESSOR			EVAPORATOR FAN		CONDENSER FAN		MIN. CCT. AMPACITY	(MOP)	MAX FUSE/ CCT. BKR. AMP
		QTY	RLA	LRA	HP	FLA	HP	FLA			
096A25	208-230/3/60	2	@	13.9	88.0	2.00	5.9	3.00	8.7	45.88	59.78
096A46	460/3/60	2	@	7.1	44.0	2.00	2.8	3.00	4.0	22.87	30.01
096A58	575/3/60	2	@	5.4	34.0	2.00	2.2	3.00	3.2	17.44	22.79
144A25	208-230/3/60	2	@	20.7	156.0	5.00	13.7	5.00	13.7	73.98	94.68
144A46	460/3/60	2	@	10.0	75.0	5.00	6.6	5.00	6.6	35.70	45.70
144A58	575/3/60	2	@	8.2	54.0	5.00	5.3	5.00	5.3	29.05	37.25

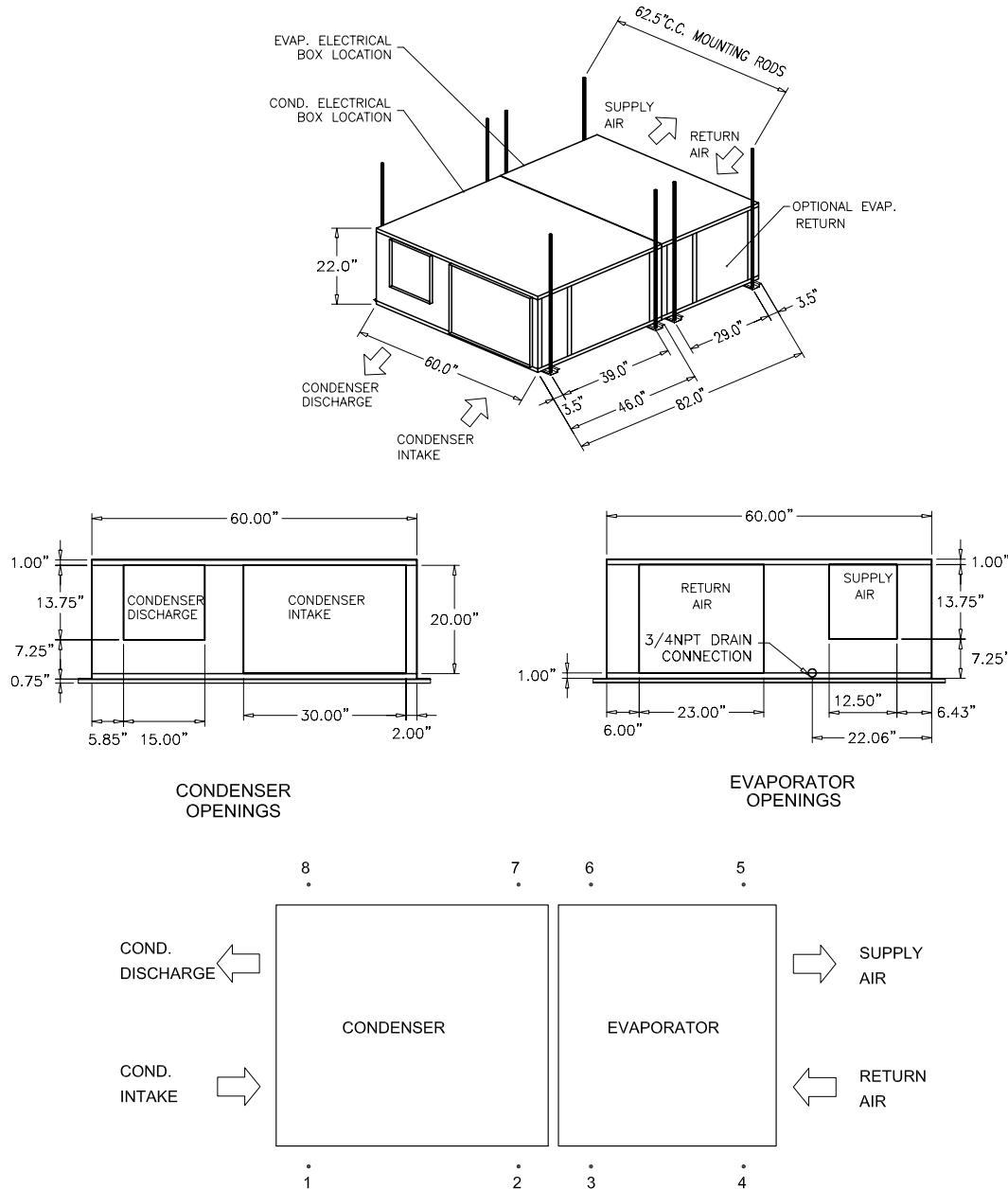
## 2 & 3 TON UNITS



UNIT	POINT WEIGHTS [Lbs.]								TOTAL	
	1	2	3	4	5	6	7	8	OPERATING	SHIPPING
2 TON	100	55	55	49	51	49	50	81	490	520
3 TON	104	59	59	54	54	102	103	86	535	565

**FIGURE 1 - DIMENSIONAL DATA - 2 & 3 TON UNITS**

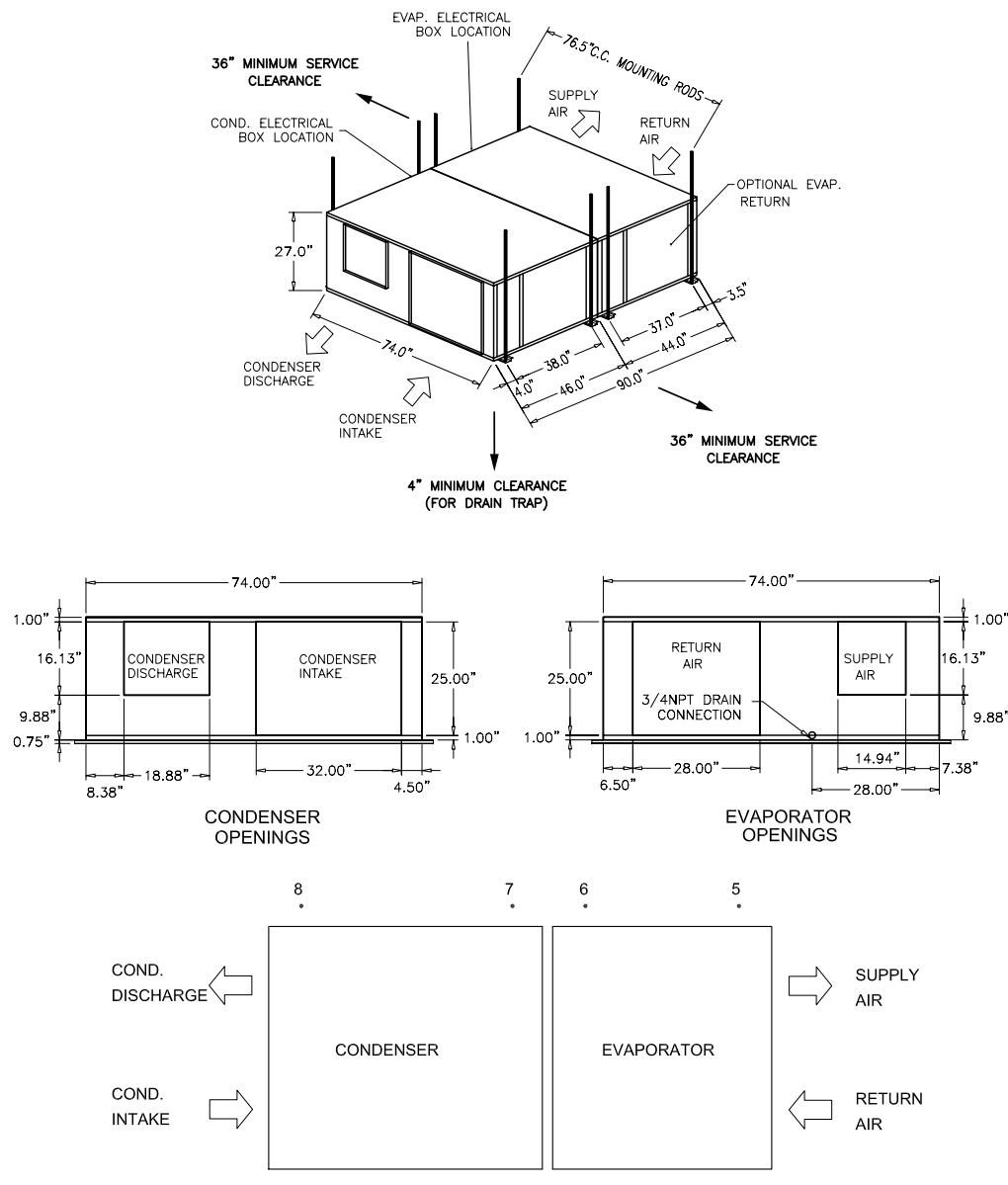
## 4 & 5 TON UNITS



UNIT	POINT WEIGHTS [Lbs.]								TOTAL OPERATING SHIPPING	
	1	2	3	4	5	6	7	8		
4 TON	125	122	76	72	78	84	103	105	765	785
5 TON	127	126	78	73	79	85	109	108	820	840

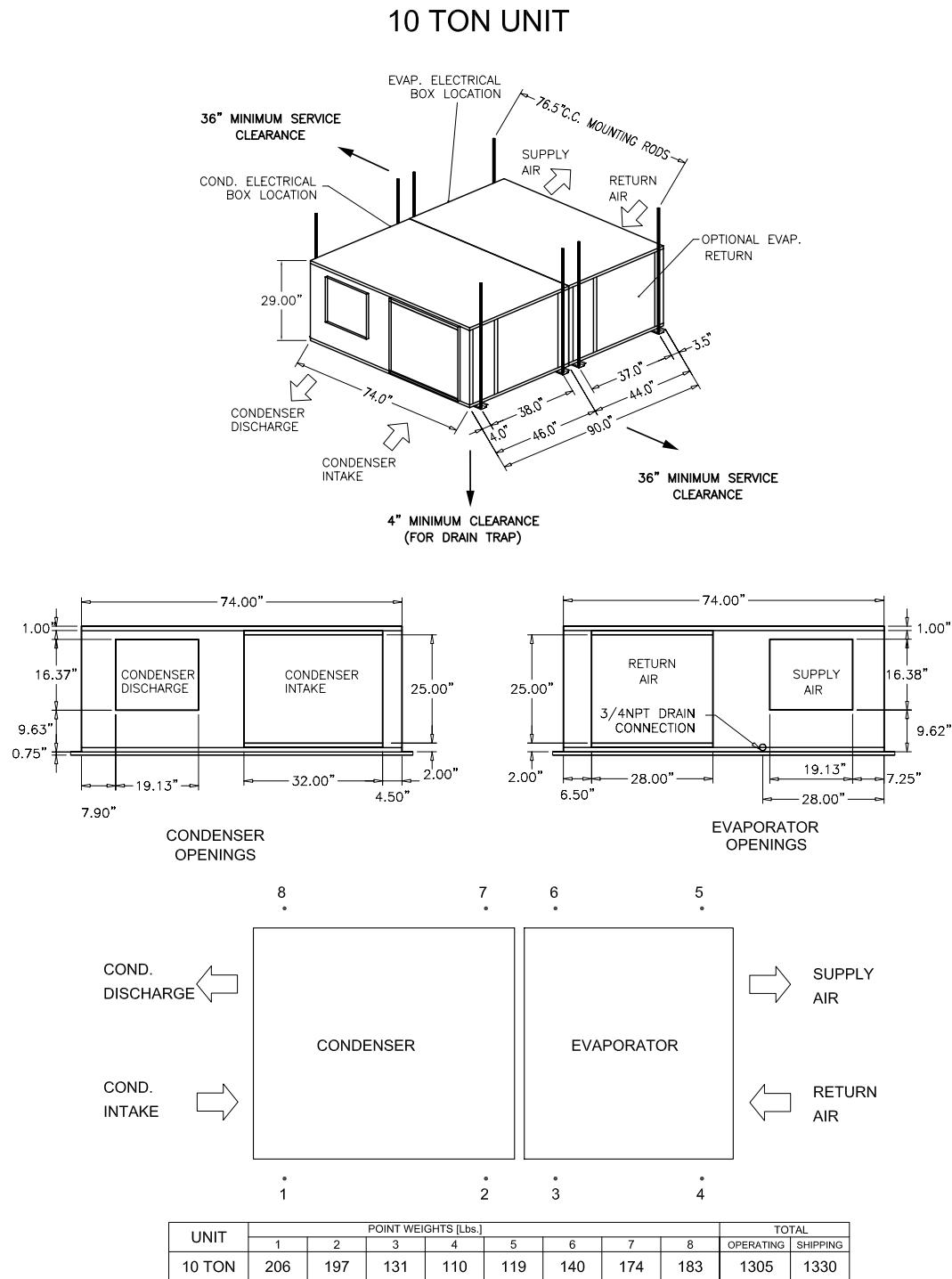
**FIGURE 2 - DIMENSIONAL DATA - 4 & 5 TON UNITS**

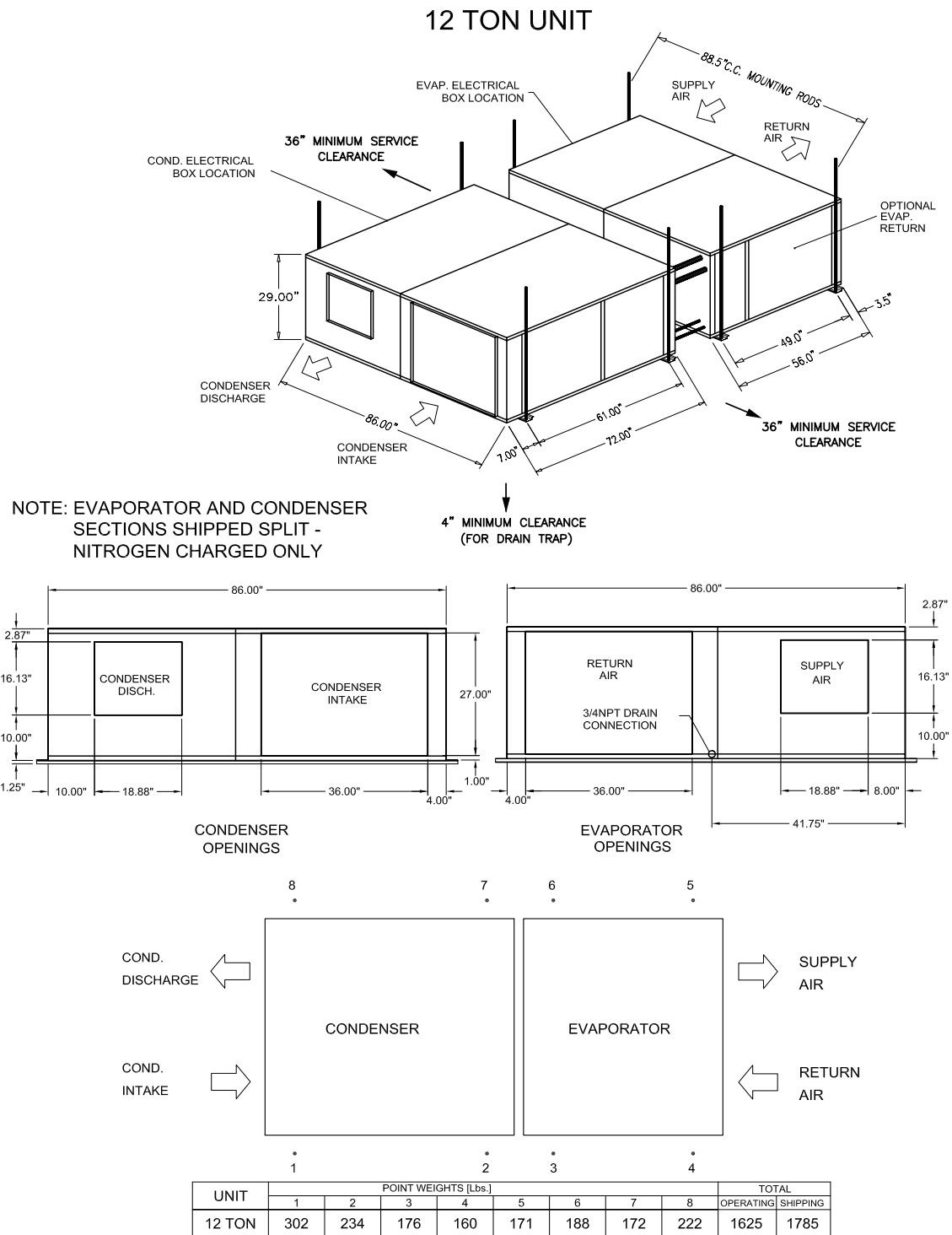
## 8 TON UNIT



UNIT	POINT WEIGHTS [Lbs.]								TOTAL	
	1	2	3	4	5	6	7	8	OPERATING	SHIPPING
8 TON	204	191	125	106	115	134	167	178	1220	1260

**FIGURE 3 - DIMENSIONAL DATA - 8 TON UNIT**

**FIGURE 4 - DIMENSIONAL DATA - 10 TON UNIT**

**FIGURE 5 - DIMENSIONAL DATA - 12 TON UNIT**

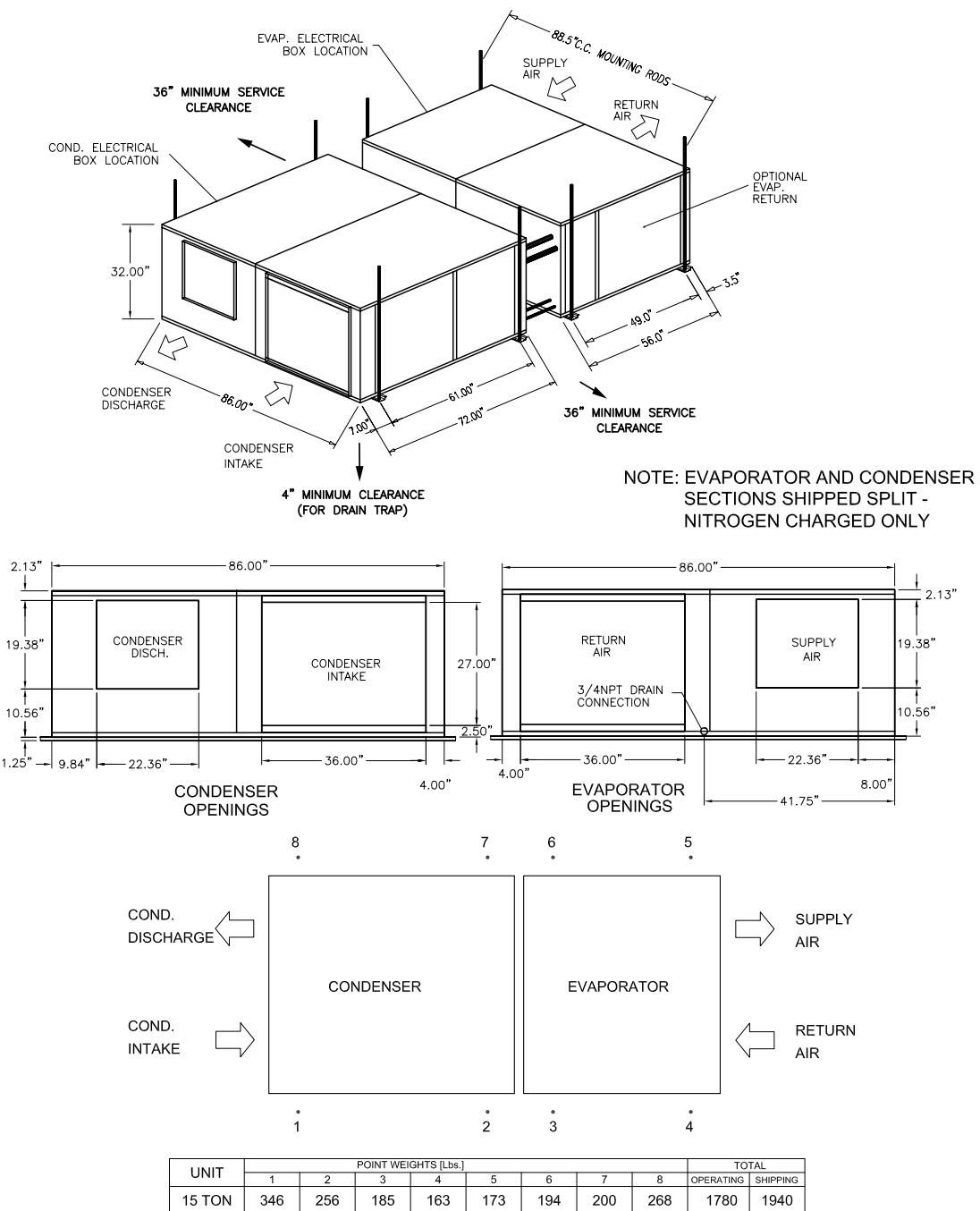


FIGURE 6 - DIMENSIONAL DATA - 15 TON UNIT

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