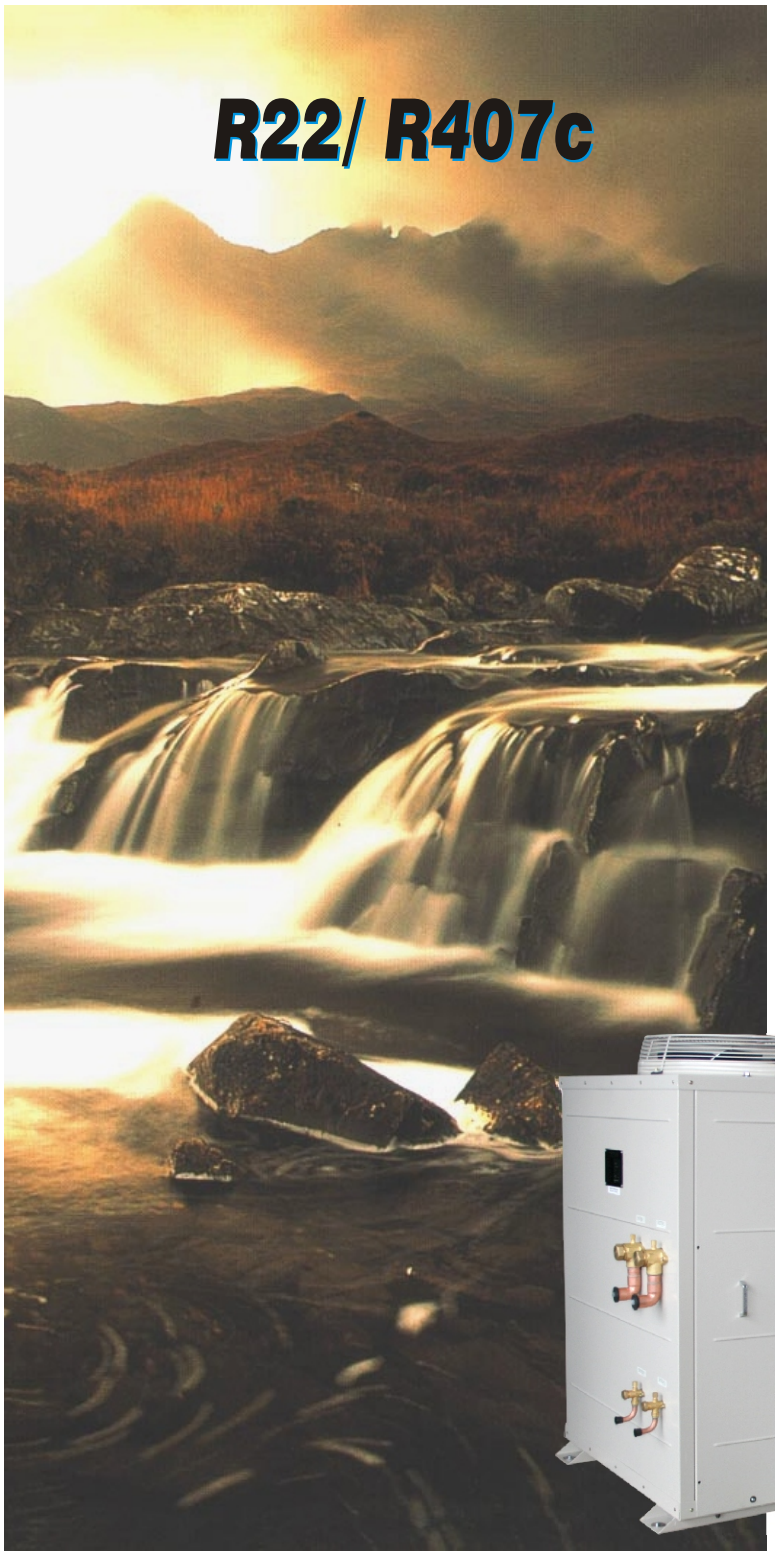
DUNHAM-BUSH

Products that perform...By people who care

FORM NO: MS0305H

AIR - COOLED SPLIT SYSTEM

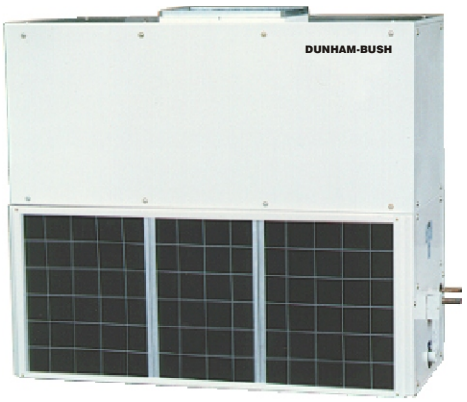
AIR CONDITIONERS WITH SCROLL COMPRESSORS



ACCS SERIES
HEB-D, EB-D SERIES
VEB-D SERIES
VEB-D-FB SERIES

COOLING CAPACITY-
60 MBH TO 1360 MBH

50 Hz



AIR-COOLED CONDENSING UNITS

GENERAL DESCRIPTION

The ACCS series with new features is suitable for hotel, office, hospitals, schools, factory and supermarket applications. The low noise and compact series are completely leak tested, evacuated, dehydrated and charged with dry nitrogen to maintain system “dryness” prior to field piping connections.

Scroll Compressor(s)

Reliability

- No contact scroll design that minimizes friction, increases volumetric efficiency and reduces vibration, thus longer service life.
- Suction gas cooled motor.

Low Power Consumption:

- High EER.
- No crankcase heater required.

Tandem Compressor

(ACCS 640 to 1520)

For condensing units, every two compressors is connected in tandem, to reduce refrigerant circuits to 3 or 4 and thus reduce the cost of labor and materials for field piping connection works.

Class F Insulation Condenser Fan Motor (ACCS 108 to 1520)

- Extra safety margin and longer motor life even in extreme operating conditions.
- IP 55 construction ensure extra motor protection
- Low motor speed at 950 rpm ensures quiet condenser fan operation.

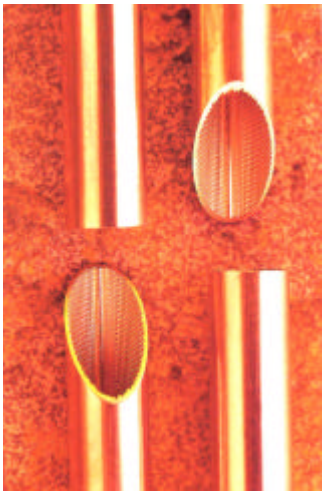
Multiple Compressor

(ACCS 220 to 1520)

- By cycling off compressor(s) operation to match building load, no energy is being wasted when room load requires lesser cooling capacity.
- No total shut down when servicing or repairing a faulty compressor.

Efficient Condenser Coil

- Staggered row of 3/8”OD inner groove tubes with 25 to 30% more surface area guarantee better heat transfer.
- Mechanically expanded into die-formed corrugated aluminum fins.
- Integral subcooling circuit to maximize efficiency.
- Leak and pressure tested to 450 psig.



Fully Leak Tested Refrigerant Circuit

- Leak and pressure tested at 450 psig.
- Pressure ports are provided on the discharge, liquid and suction line.
- Evacuated, dehydrated and pressurized with dry nitrogen for storage and shipping purpose.

Safety Control

- High-low pressure cutout to protect compressor from high discharge pressure and system leakage.

Casing

- Constructed from heavy gauge galvanized steel.
- Panels are painted powder coated paint for excellent finish, weatherability and corrosion resistance.

DUCTED EVAPORATOR BLOWER UNITS

GENERAL DESCRIPTION

The ducted evaporator-blower units; each consist of an evaporator coil, a centrifugal forward-curved blower fan complete with drive package and filters and enclosed in a single fibreglass insulated rigid steel cabinetry; are completely factory packaged to provide greater flexibility to the building owners, consultants, architects and installers. These flexibility includes;

- A wide range of model sizes covering cooling capacities from 61 to 1360 MBH; and each model size also has a wide band of air-flow rates (cfms) covering a wide band of static pressure to meet almost any system demands.
- Except for HEB 68D to HEB 95D which are specially designed for ducted, ceiling application, all other sizes allow flexibility for either horizontal air discharge or vertical air discharge ducted connections.
- All units can be provided with left or right hand piping connections. Except for HEB 68D to HEB 95D, which are direct driven, all units can also be left or right hand motor location to ease installation at site. This must be specified at the time of order entry to factory.

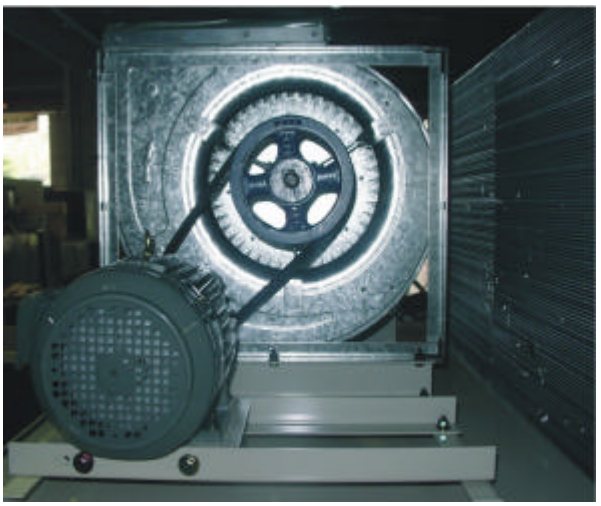
Efficient Evaporator Coil

- Independent thermal expansion valve with external equalizer for better refrigerant control and wider load condition.
- Leak and pressure tested to 450 psig
- Evacuated, dehydrated and charged with dry nitrogen.

Drive Package and Blowers

(HEB 108D to EB 1520D, VEB 108D to VEB 250D)

- Belt driven drive package offers flexibility on various air flow rate and various static pressure applications.
- Single large diameter double inlet double width blowers (AMCA certified) reduce the noise level and eliminates the need for common transition and eliminates air unbalance.



Casing

- Constructed of cold rolled heavy gauge steel sheet and insulated with 1/2" thick x 1 1/2 lb/ft³ (up to EB 760D) and 1" x 1 1/2 lb/ft³ (EB 800D and above) linacoustic fiberglass.
- Aesthetically coated powder paint to provide excellent finish, weatherability and corrosion resistance.
- Removable panels on the left and right hand side of the unit to provide access to critical parts and components.

Filters

Side loading 1" thick filters - from both sides-thus eliminates unnecessary duct opening at site.

OPTIONAL ACCESSORIES FEATURES

- Factory wired starters
  - DOL for compressors and fan motors.
  - Auto-transformer for compressors.
- Suction stop valve(s), discharge stop valve(s) and liquid stop valve(s).
- Internal spring vibration isolators for blower fan and drive assembly in EB units.
- Fan staging of multiple fans for head pressure control.
- Thermostat.
- Hydrophilic fins, copper or tinned coated copper fins for better corrosion resistance.
- Axial fan for ducted air discharge.
- Liquid line filter drier and sight glass.
- Hot gas by pass for low load and low ambient conditions.
- Decorative discharge plenum.
- Hot water heating coils.
- Electric heaters.
- R407C refrigerant instead of R22.

MATCH SYSTEM COOLING

PERFORMANCE DATA R22

SINGLE COND. UNIT MODEL	EVAP. BLOWER MODEL	STD. CAPACITY MBH	AIR ON EVAP.		AIR TEMPERATURE ON CONDENSER COIL - °F											
			CFM	WB	75			95			115			125		
				TEMP. °F	TOTAL MBH[1]	SENS MBH[2]	KW[3]	TOTAL MBH[1]	SENS MBH[2]	KW[3]	TOTAL MBH[1]	SENS MBH[2]	KW[3]	TOTAL MBH[1]	SENS MBH[2]	KW[3]
ACCS 68	HEB 68D	60.7	2000	72	68.2	36.9	4.2	64.4	35.1	4.5	60.7	31.8	4.7	57.5	30.2	4.9
				67	65.1	49.4	4.1	60.7	46.1	4.4	57.5	43.8	4.6	54.3	41.3	4.8
				62	59.3	53.4	3.9	55.6	55.6	4.3	52.4	47.2	4.5	49.1	49.1	4.7
				57	52.4	52.4	3.9	48.7	48.7	4.3	46.1	46.1	4.5	43.3	43.3	4.6
ACCS 81	HEB 81D	73.0	2400	72	81.8	44.3	5.1	77.2	42.0	5.5	72.8	38.0	5.8	69.1	36.3	6.0
				67	78.0	59.2	5.0	73.0	55.3	5.4	68.8	52.4	5.7	65.4	49.5	5.9
				62	71.1	64.0	4.8	66.6	60.0	5.3	62.8	56.5	5.5	59.1	59.1	5.8
				57	62.9	62.9	4.8	58.4	58.4	5.2	55.3	55.3	5.5	52.0	52.0	5.7
ACCS 95	HEB 95D	85.9	2600	72	96.6	52.9	5.9	91.0	49.9	6.3	85.9	47.1	6.6	76.2	41.9	6.8
				67	92.2	70.3	5.7	85.9	65.6	6.2	81.4	62.2	6.5	72.3	55.2	6.7
				62	84.1	75.7	5.7	78.8	70.9	6.1	74.3	66.9	6.4	65.8	65.7	6.6
				57	74.3	74.3	5.5	69.0	69.0	6.0	65.3	65.3	6.3	57.9	57.9	6.6
ACCS 108	VEB 108D HEB 108D	100.0	3200	72	112.4	61.6	6.9	106.0	58.0	7.3	100.0	54.8	7.7	88.7	48.8	8.0
				67	107.3	81.8	6.7	100.0	76.3	7.2	94.8	72.3	7.6	84.1	64.2	7.9
				62	97.9	97.9	6.6	91.7	91.7	7.1	86.4	86.4	7.5	76.6	76.4	7.8
				57	86.4	86.4	6.4	80.3	80.3	7.1	76.0	76.0	7.4	67.4	67.0	7.7
ACCS 125	VEB 125D HEB 125D	112.5	3500	72	125.5	69.1	7.5	119.3	65.0	8.0	111.6	61.3	8.4	99.4	54.5	8.7
				67	119.8	91.2	7.3	112.5	85.0	8.0	105.8	80.4	8.4	94.2	71.7	8.6
				62	109.2	98.3	7.2	103.1	92.8	7.8	96.5	86.9	8.2	86.3	86.3	8.4
				57	96.5	96.5	7.1	90.2	90.2	7.7	84.8	84.8	8.1	75.7	75.7	8.3
ACCS 145	VEB 145D HEB 145D	130.3	4000	72	145.4	71.6	8.5	138.2	67.4	9.1	129.3	63.5	9.6	115.1	56.5	9.9
				67	138.8	94.5	8.3	130.0	88.1	9.1	122.5	83.3	9.6	109.1	74.3	9.8
				62	126.5	113.2	8.2	119.4	106.0	8.9	111.8	100.0	9.3	99.9	89.4	9.6
				57	111.8	111.8	8.1	104.5	104.5	8.8	98.2	98.2	9.2	87.7	87.7	9.4
ACCS 160	VEB 160D HEB 160D	150.0	4600	72	169.0	99.0	10.3	159.3	93.3	11.0	150.2	87.8	11.5	136.7	80.9	12.0
				67	161.2	134.1	9.9	150.0	120.9	10.9	142.4	118.5	11.4	129.7	107.9	11.9
				62	147.2	132.5	9.8	137.8	124.0	10.7	129.9	116.9	11.1	118.3	118.3	11.7
				57	129.9	129.9	9.7	120.4	120.4	10.5	114.2	114.2	11.0	103.8	103.8	11.5
ACCS 190	VEB 190D HEB 190D	170.0	4800	72	191.4	94.6	11.7	180.3	98.4	12.5	170.0	92.9	13.1	155.4	82.9	13.5
				67	182.6	137.9	11.4	170.0	128.5	12.3	161.3	121.8	12.9	147.4	111.3	13.3
				62	166.5	149.9	11.2	155.9	140.3	12.1	147.2	132.5	12.7	134.6	134.6	13.1
				57	147.2	147.2	11.0	136.5	136.5	11.9	129.3	129.3	12.6	118.3	118.3	12.9
ACCS 220	VEB 220D HEB 220D	200.0	5400	72	226.2	134.9	13.6	213.1	127.2	14.4	200.0	119.1	15.3	179.3	106.8	16.8
				67	212.1	180.0	13.5	200.0	169.7	14.3	187.8	159.3	15.3	168.3	142.7	16.7
				62	196.0	176.4	13.3	185.8	167.2	14.2	173.7	156.3	15.2	155.8	155.7	16.6
				57	177.8	177.8	13.2	167.7	167.7	14.1	157.6	157.6	15.0	135.1	135.1	16.5
ACCS 250	VEB 250D EB 250D	225.0	6400	72	251.0	136.0	15.2	236.6	128.1	16.2	223.2	120.8	16.9	200.9	108.7	17.6
				67	239.5	178.5	14.7	225.0	168.0	16.1	211.6	159.4	16.8	190.5	143.2	17.4
				62	218.5	196.7	14.5	204.6	184.1	15.7	193.0	173.7	16.5	174.0	172.5	17.1
				57	193.0	193.0	14.3	179.0	179.0	15.5	169.6	169.6	16.3	153.0	153.0	16.8
ACCS 290	EB 290D	260.0	7500	72	290.0	149.5	17.7	273.1	140.7	18.8	256.4	132.2	20.0	235.7	121.5	21.5
				67	271.9	191.7	17.6	260.0	180.8	18.6	240.9	169.7	19.9	221.3	156.0	21.4
				62	250.9	225.8	17.3	238.2	214.4	18.6	222.7	200.4	19.8	204.6	188.2	21.3
				57	227.9	227.9	17.2	215.0	215.0	18.4	202.1	202.1	19.6	177.6	177.6	21.1
ACCS 320	EB 320D	300.0	8000	72	339.4	173.8	20.6	319.8	163.8	21.9	300.0	153.8	23.2	268.9	137.8	25.0
				67	318.2	221.5	20.5	300.0	208.7	21.7	281.8	196.1	23.1	252.4	175.7	24.7
				62	294.0	264.6	20.1	278.7	250.8	21.5	251.4	226.3	23.0	233.6	210.9	24.5
				57	266.7	266.7	20.0	251.5	251.5	21.4	236.3	236.3	22.8	202.6	202.6	24.3
ACCS 380	EB 380D	350.0	9200	72	393.4	209.6	24.1	370.7	197.5	25.5	349.7	186.3	27.1	313.4	166.5	29.0
				67	375.2	276.2	23.9	350.0	257.4	25.4	331.4	244.1	27.0	297.2	218.4	28.8
				62	342.2	308.0	23.5	320.7	288.6	25.2	302.5	272.3	26.8	271.5	264.4	28.6
				57	302.5	302.5	23.3	280.4	280.4	25.0	265.7	265.7	26.6	238.6	238.6	28.4
ACCS 435	EB 435D	390.0	11500	72	436.8	211.4	27.4	413.4	200.9	29.1	390.0	182.4	30.9	358.6	171.4	33.0
				67	417.3	282.8	27.2	390.0	264.3	29.1	370.5	251.1	30.7	336.6	228.2	32.8
				62	382.2	340.9	26.7	358.8	317.2	28.7	335.4	301.3	30.6	311.5	276.2	32.6
				57	335.4	335.4	26.6	312.0	312.0	28.4	296.4	296.4	30.3	270.1	270.1	32.3

NOTES : 1.) RATINGS ARE GROSS CAPACITIES - FOR NET CAPACITIES , DEDUCT EVAPORATOR BLOWER MOTOR HEAT.
2.) AT 80 °F (26.6°C) AIR ON EVAPORATOR.
3.) COMPRESSOR KW INPUT.

MATCH SYSTEM COOLING

PERFORMANCE DATA R22

SINGLE COND. UNIT MODEL	EVAP. BLOWER MODEL	STD. CAPACITY MBH	AIR ON EVAP.		AIR TEMPERATURE ON CONDENSER COIL - °F											
			CFM	WB TEMP. °F	75			95			115			125		
					TOTAL MBH[1]	SENS MBH[2]	KW[3]	TOTAL MBH[1]	SENS MBH[2]	KW[3]	TOTAL MBH[1]	SENS MBH[2]	KW[3]	TOTAL MBH[1]	SENS MBH[2]	KW[3]
ACCS 480	EB 480D	435.0	12000	72	491.2	253.6	29.8	462.6	238.8	31.6	434.1	224.0	33.6	399.3	198.5	35.9
				67	460.3	380.0	29.6	435.0	306.0	31.4	407.9	287.5	33.4	374.7	264.2	35.6
				62	425.4	382.9	29.1	403.4	363.1	31.2	377.1	339.4	33.2	346.8	319.7	35.4
				57	386.0	386.0	28.9	363.9	363.9	30.9	341.8	341.8	33.0	300.8	300.8	35.1
ACCS 510	EB 510D	460.0	14000	72	520.6	267.1	31.7	490.3	251.6	33.7	460.1	236.1	35.8	418.5	214.8	38.6
				67	488.0	339.1	31.5	460.0	319.9	33.4	432.2	300.4	35.7	392.9	273.1	38.2
				62	450.8	405.7	31.0	427.6	384.8	33.1	399.7	359.7	35.4	363.5	327.6	37.9
				57	409.0	409.0	30.7	385.7	385.7	33.0	362.4	362.4	35.1	315.4	315.4	37.7
ACCS 570	EB 570D	510.0	15000	72	577.1	299.5	35.1	543.6	280.3	37.2	510.1	262.9	39.6	469.0	233.3	42.1
				67	541.1	445.4	34.8	510.0	358.7	37.0	479.2	337.0	39.4	440.4	309.7	41.9
				62	499.8	449.8	34.2	474.1	426.7	36.7	443.1	398.8	39.1	407.7	376.3	41.5
				57	453.4	453.4	34.0	427.6	427.6	36.4	401.8	401.8	38.8	353.7	353.7	41.2
ACCS 640	EB 640D	580.0	16000	72	656.4	335.2	39.7	618.2	315.8	42.1	580.1	296.4	44.8	536.8	274.2	47.7
				67	615.3	424.0	39.4	580.0	399.7	41.8	545.0	375.5	44.5	503.9	347.3	47.4
				62	568.4	511.6	38.8	539.1	485.2	41.5	504.1	453.7	44.3	466.4	419.8	47.1
				57	515.7	515.7	38.6	486.4	486.4	41.2	457.1	457.1	43.9	404.5	404.5	46.7
ACCS 700	EB 700D	640.0	17200	72	723.9	371.3	44.0	681.9	349.7	46.7	639.8	329.8	49.6	564.2	304.2	53.1
				67	678.7	471.7	43.7	640.0	444.9	46.3	600.8	417.9	49.4	527.0	386.0	52.7
				62	626.9	564.2	43.0	594.6	535.1	46.1	556.0	500.4	49.0	514.1	465.9	52.4
				57	568.7	568.7	42.7	536.4	536.4	45.7	504.1	504.1	48.7	423.1	423.1	52.0
ACCS 760	EB 760D	690.0	18000	72	781.1	400.7	47.5	735.8	377.3	50.4	690.4	355.9	53.6	608.8	328.3	57.4
				67	732.4	509.0	47.2	690.0	480.1	50.1	648.3	451.0	53.4	568.6	416.5	56.9
				62	676.5	608.9	46.4	641.7	577.5	49.7	599.9	539.9	53.0	554.8	502.8	56.6
				57	613.7	613.7	46.1	578.8	578.8	49.3	543.9	543.9	52.6	456.5	456.5	56.1
ACCS 800	EB 800D	740.0	19600	72	837.6	429.6	50.7	789.0	404.6	53.8	740.3	381.6	57.2	652.8	352.0	61.2
				67	785.3	545.8	50.4	740.0	514.7	53.4	695.2	483.6	56.9	609.7	446.6	60.7
				62	725.4	652.9	49.5	688.0	619.2	53.0	643.3	579.0	56.5	594.9	539.1	60.3
				57	658.0	658.0	49.2	620.7	620.7	52.6	583.4	583.4	56.1	489.5	489.5	59.8
ACCS 890	EB 890D	810.0	21000	72	906.9	468.6	55.2	854.4	441.1	58.6	801.7	414.0	62.3	741.9	387.5	66.5
				67	850.2	574.2	54.9	810.0	565.5	58.2	753.1	531.2	62.0	696.4	491.3	66.1
				62	785.5	707.0	54.0	745.0	670.5	57.8	696.4	626.8	61.6	644.4	594.9	65.5
				57	712.6	712.6	53.5	672.2	672.2	57.3	631.8	631.8	61.1	559.1	559.1	61.9
ACCS 960	EB 960D	880.0	23000	72	995.8	514.5	60.2	938.1	484.4	63.9	880.3	454.6	67.9	814.6	425.5	72.5
				67	933.6	630.4	59.8	880.0	621.0	63.5	826.9	583.3	67.7	764.7	539.5	72.0
				62	862.5	776.3	58.9	818.1	736.3	63.0	764.7	688.2	67.2	707.6	653.2	71.5
				57	782.5	782.5	58.4	738.0	738.0	62.5	693.5	693.5	66.6	614.1	614.1	67.5
ACCS 1020	EB 1020D	930.0	25800	72	1049.7	542.3	63.8	988.9	510.6	67.7	928.0	479.2	71.9	858.7	448.6	76.8
				67	984.1	664.6	63.3	930.0	654.6	67.2	871.7	614.8	71.6	806.1	568.7	76.3
				62	909.2	818.3	62.3	862.4	776.2	66.7	806.1	725.5	71.1	745.9	688.5	75.7
				57	824.8	824.8	61.8	778.0	778.0	66.2	731.2	731.2	70.6	647.1	647.1	71.5
ACCS 1140	EB 1140D	1020.0	26400	72	1153.8	596.1	70.2	1086.9	561.2	74.5	1019.9	526.7	79.1	943.8	493.0	84.5
				67	1081.7	730.4	69.7	1020.0	719.4	74.0	958.1	675.8	78.8	886.0	625.0	83.9
				62	999.3	899.4	68.6	947.8	853.0	73.4	886.0	797.4	78.2	819.8	756.8	83.3
				57	906.6	906.6	68.0	855.1	855.1	72.8	803.6	803.6	77.6	711.3	711.3	78.7
ACCS 1340	EB 1340D	1220.0	32000	72	1362.8	704.1	83.6	1283.8	662.9	88.8	1204.7	622.1	94.3	1114.8	582.3	100.7
				67	1277.6	862.7	83.0	1220.0	849.8	88.2	1131.6	798.2	93.9	1046.5	738.2	100.0
				62	1180.3	1062.3	81.7	1119.5	1007.6	87.5	1046.5	941.9	93.2	968.4	893.9	99.2
				57	1070.8	1070.8	81.0	1010.0	1010.0	86.8	949.2	949.2	92.5	840.1	840.1	93.7
ACCS 1520	EB 1520D	1360.0	36000	72	1541.5	796.4	93.6	1452.2	749.8	99.3	1362.7	703.7	105.5	1261.0	658.7	112.6
				67	1445.2	975.9	92.9	1360.0	961.2	98.7	1280.0	902.9	105.1	1183.7	835.0	111.9
				62	1335.1	1201.6	91.5	1266.3	1139.7	97.9	1183.7	1065.3	104.3	1095.4	1011.1	111.0
				57	1211.3	1211.3	90.7	1142.5	1142.5	97.1	1073.7	1073.7	103.5	950.3	950.3	104.9

NOTES : 1.) RATINGS ARE GROSS CAPACITIES - FOR NET CAPACITIES , DEDUCT EVAPORATOR BLOWER MOTOR HEAT.
2.) AT 80 °F (26.6°C) AIR ON EVAPORATOR.
3.) COMPRESSOR KW INPUT.

MATCH SYSTEM COOLING

PERFORMANCE DATA R407c

SINGLE COND. UNIT MODEL	EVAP. BLOWER MODEL	NOM. CAPACITY MBH	AIR ON EVAP.		AIR TEMPERATURE ON CONDENSER COIL - °F								
					75°F			95°F			115°F		
			FLOW CFM	WB TEMP. °F	TOTAL MBH	SENS MBH	kW	TOTAL MBH	SENS MBH	kW	TOTAL MBH	SENS MBH	kW
ACCS 68 P	HEB 68D P	59.2	2000	72	66.6	36.3	4.2	62.9	34.5	4.5	59.2	31.3	4.7
				67	63.6	48.8	4.1	59.2	45.5	4.4	56.1	43.2	4.6
				62	57.9	57.9	3.9	54.3	54.3	4.3	51.1	51.1	4.5
				57	51.2	51.2	3.9	47.5	47.5	4.3	44.9	44.9	4.5
ACCS 81 P	HEB 81D P	72.6	2400	72	83.2	45.4	5.1	78.5	43.1	5.5	73.9	39.0	5.8
				67	79.4	60.9	5.0	72.6	56.9	5.4	69.9	53.9	5.7
				62	72.4	72.4	4.8	67.7	67.7	5.3	63.8	63.8	5.5
				57	64.0	64.0	4.8	59.3	59.3	5.2	56.2	56.2	5.5
ACCS 95 P	HEB 95D P	83.8	2600	72	94.4	52.1	5.9	88.8	49.1	6.3	83.8	46.3	6.6
				67	90.1	69.4	5.7	83.8	64.7	6.2	79.4	61.4	6.5
				62	82.2	82.2	5.7	76.9	76.9	6.1	72.4	72.4	6.4
				57	72.6	72.6	5.5	67.3	67.3	6.0	63.7	63.7	6.3
ACCS 108 P	HEB 108D P VEB108D P	97.6	3200	72	109.8	60.6	6.9	103.5	57.1	7.3	97.5	53.9	7.7
				67	104.8	80.7	6.7	97.6	75.3	7.2	92.4	71.4	7.6
				62	95.6	95.6	6.6	89.5	89.5	7.1	84.2	84.2	7.5
				57	84.4	84.4	6.4	78.4	78.4	7.1	74.1	74.1	7.4
ACCS 125 P	HEB 125D P VEB108D P	109.8	3500	72	122.6	68.0	7.5	116.4	64.0	8.0	108.8	60.3	8.4
				67	117.0	90.0	7.3	109.8	83.9	8.0	103.2	79.4	8.4
				62	106.7	106.7	7.2	100.6	100.6	7.8	94.1	94.1	8.2
				57	94.3	94.3	7.1	88.0	88.0	7.7	82.7	82.7	8.1
ACCS 145 P	HEB 145D P VEB145D P	127.2	4000	72	142.1	70.5	8.5	130.0	66.3	9.1	126.1	62.5	9.6
				67	135.6	93.3	8.3	127.2	87.0	9.1	119.4	82.2	9.6
				62	123.6	112.0	8.2	116.5	104.8	8.9	109.0	98.9	9.3
				57	109.2	109.2	8.1	102.0	91.9	8.8	95.7	87.0	9.2
ACCS 160 P	HEB 160D P VEB160D P	146.4	4600	72	165.1	97.4	10.4	155.5	91.8	11.1	146.4	86.4	11.6
				67	157.5	132.4	9.9	146.4	119.3	11.0	138.8	117.0	11.5
				62	143.8	143.8	9.8	134.5	134.5	10.8	126.7	126.7	11.2
				57	126.9	126.9	9.7	117.5	117.5	10.6	111.3	111.3	11.1
ACCS 190 P	HEB 190D P VEB190D P	165.9	4800	72	187.0	93.1	11.8	176.0	96.8	12.6	165.8	91.4	13.2
				67	178.4	136.1	11.5	165.9	126.8	12.4	157.3	120.2	13.0
				62	162.7	162.7	11.3	152.2	152.2	12.2	143.5	143.5	12.8
				57	143.8	143.8	11.1	133.2	133.2	12.0	126.1	126.1	12.7
ACCS 220 P	HEB 220D P VEB220D P	195.2	5400	72	221.0	132.7	13.7	208.0	125.2	14.5	195.0	117.2	15.4
				67	207.2	177.7	13.6	195.2	167.5	14.4	183.1	157.2	15.4
				62	191.5	191.5	13.4	181.3	181.3	14.3	169.4	169.4	15.3
				57	173.7	173.7	13.3	163.7	163.7	14.2	148.1	148.1	15.1
ACCS 250 P	EB250D P VEB250D P	219.6	6400	72	245.2	133.8	15.3	230.9	126.1	16.3	217.6	118.9	17.0
				67	234.0	176.2	14.8	219.6	165.8	16.2	206.3	157.3	16.9
				62	213.5	208.6	14.6	199.7	199.7	15.8	188.2	188.2	16.6
				57	188.6	188.6	14.4	174.7	174.7	15.6	165.4	165.4	16.4
ACCS 290 P	EB 290D P	253.8	7500	72	283.3	147.1	17.8	266.5	138.4	18.9	250.0	130.1	20.1
				67	265.6	189.2	17.7	253.8	178.4	18.7	234.9	167.5	20.0
				62	245.1	228.4	17.4	232.5	216.6	18.7	217.1	202.3	19.9
				57	222.7	222.7	17.3	209.8	209.8	18.5	192.6	192.6	19.7
ACCS 320 P	EB 320D P	292.8	8000	72	331.6	171.0	20.7	312.1	161.2	22.0	292.5	151.3	23.3
				67	310.9	218.6	20.6	292.8	206.0	21.8	274.8	193.6	23.2
				62	287.2	262.3	20.2	272.0	239.7	21.6	245.1	232.7	23.1
				57	260.6	260.6	20.1	245.5	245.5	21.5	222.1	222.1	22.9
ACCS 380 P	EB 380D P	341.6	9200	72	384.4	206.2	24.2	361.8	194.3	25.6	341.0	183.3	27.2
				67	366.6	272.6	24.0	341.6	254.1	25.5	323.1	240.9	27.1
				62	334.3	330.5	23.6	313.0	309.7	25.3	294.9	292.2	26.9
				57	295.5	295.5	23.4	273.7	273.7	25.1	259.1	259.1	26.7

NOTES : 1.) RATINGS ARE GROSS CAPACITIES - FOR NET CAPACITIES, DEDUCT EVAPORATOR BLOWER MOTOR HEAT.
2.) AT 80 °F (26.6°C) AIR ON EVAPORATOR.
3.) COMPRESSOR KW INPUT

MATCH SYSTEM COOLING

PERFORMANCE DATA R407c

SINGLE COND. UNIT MODEL	EVAP. BLOWER MODEL	NOM. CAPACITY MBH	AIR ON EVAP.		AIR TEMPERATURE ON CONDENSER COIL - °F								
			FLOW CFM	WB TEMP. °F	75°F			95°F			115°F		
					TOTAL MBH	SENS MBH	KW	TOTAL MBH	SENS MBH	kW	TOTAL MBH	SENS MBH	kW
ACCS 435 P	EB 435D P	380.6	11500	72	426.8	208.0	27.5	403.5	197.7	29.2	380.3	179.5	31.1
				67	407.7	279.1	27.3	380.6	260.9	29.2	361.2	247.8	30.9
				62	373.4	337.2	26.8	350.2	313.7	28.8	327.0	298.0	30.8
				57	327.7	327.7	26.7	304.5	304.5	28.5	289.0	289.0	30.5
ACCS 480 P	EB 480D P	424.6	12000	72	479.9	249.5	29.9	451.5	235.0	31.8	423.2	220.4	33.8
				67	449.7	375.1	29.7	424.6	302.0	31.6	397.7	283.8	33.6
				62	415.6	378.7	29.2	393.7	359.1	31.4	367.7	335.7	33.4
				57	377.1	377.1	29.0	355.2	355.2	31.1	333.3	333.3	33.2
ACCS 510 P	EB 510D P	449.0	14000	72	508.6	262.8	31.9	478.5	247.6	33.9	448.6	232.3	36.0
				67	476.8	334.7	31.7	449.0	315.7	33.6	421.4	296.5	35.9
				62	440.4	401.2	31.2	417.3	380.6	33.3	389.7	355.7	35.6
				57	399.6	399.6	30.9	376.4	376.4	33.2	353.3	353.3	35.3
ACCS 570 P	EB 570D P	497.8	15000	72	563.8	294.7	35.3	530.6	275.8	37.4	497.3	258.7	39.8
				67	528.7	439.6	35.0	497.8	354.0	37.2	467.2	332.6	39.6
				62	488.3	444.9	34.4	462.7	422.0	36.9	432.0	394.4	39.3
				57	443.0	443.0	34.2	417.3	417.3	36.6	391.8	391.8	39.0
ACCS 640 P	EB 640D P	566.1	16000	72	641.3	329.8	39.9	603.4	310.7	42.3	565.6	291.7	45.0
				67	601.1	418.5	39.6	566.1	394.5	42.0	531.4	370.6	44.7
				62	555.3	506.0	39.0	526.2	479.9	41.7	491.5	448.7	44.5
				57	503.8	503.8	38.8	474.7	474.7	41.4	445.7	445.7	44.1
ACCS 700 P	EB 700D P	624.6	17200	72	707.3	365.4	44.2	665.5	344.1	46.9	623.8	324.5	49.8
				67	663.1	465.6	43.9	624.6	439.1	46.5	585.8	412.5	49.6
				62	612.5	558.0	43.2	580.3	529.2	46.3	542.1	494.9	49.2
				57	555.6	555.6	42.9	523.5	523.5	45.9	491.5	491.5	48.9
ACCS 760 P	EB 760D P	673.4	18000	72	763.1	394.3	47.7	718.1	371.3	50.7	673.1	350.2	53.9
				67	715.6	502.4	47.4	673.4	473.9	50.4	632.1	445.1	53.7
				62	660.9	602.2	46.6	626.3	571.1	49.9	584.9	534.0	53.3
				57	599.6	599.6	46.3	564.9	564.9	49.5	530.3	530.3	52.9
ACCS 800 P	EB 800D P	722.2	19600	72	818.3	422.7	51.0	770.1	398.1	54.1	721.8	375.5	57.5
				67	767.2	538.7	50.7	722.2	508.0	53.7	677.8	477.3	57.2
				62	708.7	645.7	49.7	671.5	612.4	53.3	627.2	572.6	56.8
				57	642.9	642.9	49.4	605.8	605.8	52.9	568.8	568.8	56.4
ACCS 890 P	EB 890D P	790.6	21000	72	886.0	461.1	55.5	833.9	434.0	58.9	781.7	407.4	62.6
				67	830.6	566.7	55.2	790.6	558.1	58.5	734.3	524.3	62.3
				62	767.4	699.2	54.3	727.1	663.1	58.1	679.0	619.9	61.9
				57	696.2	696.2	53.8	656.1	656.1	57.6	616.0	616.0	61.4
ACCS 960 P	EB 960D P	858.9	23000	72	972.9	506.3	60.5	915.6	476.6	64.2	858.3	447.3	68.2
				67	912.1	622.2	60.1	858.9	612.9	63.8	806.2	575.7	68.0
				62	842.7	767.8	59.2	798.5	728.2	63.3	745.6	680.6	67.5
				57	764.5	764.5	58.7	720.3	720.3	62.8	676.2	676.2	66.9
ACCS 1020 P	EB1020D P	907.7	25800	72	1025.6	533.6	64.1	965.2	502.4	68.0	904.8	471.5	72.3
				67	961.5	656.0	63.6	907.7	646.1	67.5	849.9	606.8	72.0
				62	888.3	809.3	62.6	841.7	767.7	67.0	785.9	717.5	71.5
				57	805.8	805.8	62.1	759.3	759.3	66.5	712.9	712.9	71.0
ACCS 1140 P	EB1140D P	995.5	26400	72	1127.3	586.6	70.6	1060.8	552.2	74.9	994.4	518.3	79.5
				67	1056.8	720.9	70.0	995.5	710.0	74.4	934.1	667.0	79.2
				62	976.3	889.5	68.9	925.1	843.6	73.8	863.9	788.6	78.6
				57	885.7	885.7	68.3	834.6	834.6	73.2	783.5	783.5	78.0
ACCS 1340 P	EB1340D P	1190.7	32000	72	1331.5	692.8	84.0	1253.0	652.3	89.2	1174.6	612.1	94.8
				67	1248.2	851.5	83.4	1190.7	838.8	88.6	1103.3	787.8	94.4
				62	1153.2	1050.6	82.1	1092.6	996.5	87.9	1020.3	931.5	93.7
				57	1046.2	1046.2	81.4	985.8	985.8	87.2	925.5	925.5	93.0
ACCS 1520 P	EB1520D P	1327.4	36000	72	1506.0	783.7	94.1	1417.3	737.8	99.8	1328.6	692.4	106.0
				67	1412.0	963.2	93.4	1327.4	948.7	99.2	1248.0	891.2	105.6
				62	1304.4	1188.4	92.0	1235.9	1127.2	98.4	1154.1	1053.6	104.8
				57	1183.4	1183.4	91.2	1115.1	1115.1	97.6	1046.9	1046.9	104.0

NOTES : 1.) RATINGS ARE GROSS CAPACITIES - FOR NET CAPACITIES, DEDUCT EVAPORATOR BLOWER MOTOR HEAT.
2.) AT 80 °F (26.6°C) AIR ON EVAPORATOR.
3.) COMPRESSOR KW INPUT

BLOWER PERFORMANCE

Available External Static Pressure - IWG - For Accessories And Duct System Static Resistance (Allowance Made For Wet Coil And Filters)

RPM	CFM										FAN MODEL
	SP	BHP	SP	BHP	SP	BHP	SP	BHP	SP	BHP	
VEB/HEB108D											
	2170		**2600**		**3200**		**3800**		**4330**		**12 X 12 (INCHES)**
800	0.625	0.586	0.595	0.747	0.488	1.017	0.299	1.336	0.046	1.654	
900	0.860	0.719	0.846	0.9	0.778	1.207	0.633	1.568	0.430	1.936	
1000	1.114	0.872	1.121	1.079	1.080	1.419	1.022	1.827	0.818	2.238	
1100	1.392	1.048	1.401	1.272	1.393	1.654	1.329	2.105	1.208	2.562	
VEB/HEB125D											
	2170		**2800**		**3500**		**3900**		**4330**		**12 X 12 (INCHES)**
800	0.595	0.586	0.526	0.832	0.344	1.170	0.179	1.392	-	-	
900	0.830	0.719	0.787	0.996	0.657	1.381	0.529	1.637	0.340	1.936	
1000	1.084	0.872	1.069	1.186	0.980	1.615	0.877	1.898	0.728	2.238	
1100	1.362	1.048	1.362	1.393	1.310	1.871	1.239	2.189	1.118	2.562	
VEB/HEB145D											
	2170		**3100**		**4000**		**4100**		**4330**		**12 X 12 (INCHES)**
800	0.575	0.586	0.429	0.969	0.070	1.451	0.019	1.512	-	-	
900	0.810	0.719	0.708	1.15	0.427	1.703	0.382	1.771	0.280	1.936	
1000	1.064	0.872	1.009	1.359	0.787	1.976	0.749	2.051	0.668	2.238	
1100	1.342	1.048	1.312	1.584	1.150	2.270	1.119	2.353	1.058	2.562	
VEB/HEB160D											
	2800		**3700**		**4600**		**5100**		**5600**		**15 X 15 (INCHES)**
700	0.673	0.776	0.599	1.09	0.446	1.492	0.309	1.752	0.193	2.041	
800	0.967	1.000	0.925	1.368	0.820	1.830	0.718	2.129	0.580	2.453	
900	1.293	1.265	1.279	1.698	1.206	2.213	1.135	2.553	1.025	2.914	
1000	1.652	1.570	1.649	2.06	1.614	2.650	1.559	3.023	1.482	3.430	
VEB/HEB190D											
	2800		**3800**		**4800**		**5200**		**5600**		**15 X 15 (INCHES)**
700	0.633	0.776	0.535	1.136	0.303	1.593	0.175	1.81	0.073	2.041	
800	0.927	1.000	0.858	1.414	0.690	1.945	0.585	2.189	0.460	2.453	
900	1.253	1.265	1.216	1.748	1.087	2.343	1.009	2.623	0.850	2.914	
1000	1.612	1.570	1.589	2.121	1.502	2.794	1.439	3.1	1.362	3.430	
VEB/HEB220D											
	3960		**4700**		**5400**		**6700**		**7930**		**15 X 15 (INCHES)**
800	1.034	1.492	0.961	1.881	0.850	2.319	0.459	2.279	-	-	
900	1.393	1.832	1.359	2.279	1.282	2.763	0.969	3.849	0.492	5.108	
1000	1.773	2.218	1.769	2.723	1.729	3.264	1.494	4.464	1.090	5.855	
1100	2.185	2.658	2.201	3.219	2.494	3.825	2.031	5.144	1.700	6.662	
VEB/HEB250D											
	3960		**5200**		**6400**		**7200**		**7930**		**15 X 15 (INCHES)**
800	1.014	1.492	0.819	2.184	0.527	3.047	0.151	3.731	-	-	
900	1.373	1.832	1.249	2.623	1.020	3.574	0.679	4.328	0.432	5.108	
1000	1.753	2.218	1.685	3.107	1.530	4.167	1.235	4.993	1.030	5.855	
1100	2.165	2.658	2.142	3.653	2.050	4.820	1.809	5.733	1.640	6.662	
EB290D											
	4960		**6200**		**7500**		**8700**		**9900**		**18 X 13 (INCHES)**
750	1.469	2.366	1.349	3.247	1.070	4.311	0.671	5.441	0.137	6.718	
800	1.720	2.634	1.629	3.586	1.390	4.739	1.031	5.96	0.540	7.335	
900	2.257	3.230	2.209	4.319	2.004	5.085	1.761	7.058	1.360	8.650	
1000	2.836	3.904	2.829	5.14	2.730	6.666	2.519	8.27	2.190	10.061	

BLOWER PERFORMANCE

Available External Static Pressure - IWG - For Accessories And Duct System Static Resistance (Allowance Made For Wet Coil And Filters)

RPM	CFM										FAN MODEL
	SP	BHP	SP	BHP	SP	BHP	SP	BHP	SP	BHP	
EB320D											
	4960		**6500**		**8000**		**8900**		**9900**		**18 x 13 (INCHES)**
750	1.449	2.366	1.259	3.467	0.880	4.769	0.549	5.65	0.077	6.718	
800	1.700	2.634	1.551	3.827	1.220	5.238	0.919	6.188	0.480	7.335	
900	2.237	3.230	2.159	4.618	1.900	6.222	1.669	7.331	1.300	8.650	
1000	2.816	3.904	2.781	5.462	2.610	7.306	2.421	8.541	2.130	10.061	
EB380D											
	6420		**7800**		**9200**		**11000**		**12830**		**18 X 18 (INCHES)**
700	1.135	2.728	0.989	3.604	0.746	4.638	0.301	6.195	-	-	
800	1.616	3.404	1.519	4.43	1.330	5.635	0.951	7.435	0.392	9.547	
900	2.136	4.181	2.081	5.354	1.940	6.734	1.629	8.793	1.145	11.208	
1000	2.700	5.073	2.679	6.398	2.586	7.960	2.339	10.277	1.930	13.005	
EB435D											
	6420		**9000**		**11500**		**12200**		**12830**		**450 X 450 (MM)**
700	1.090	2.801	0.871	4.338	0.283	6.297	0.071	6.947	-	-	
800	1.500	3.592	1.401	5.374	0.964	7.625	0.789	8.367	0.580	9.039	
900	1.940	4.528	1.949	6.596	1.644	9.121	1.499	9.926	1.340	10.713	
1000	2.626	5.623	2.501	7.957	2.327	10.809	2.235	11.74	2.100	12.582	
EB480D											
	8750		**10400**		**12000**		**14800**		**17500**		**500 X 500 (MM)**
600	0.895	3.283	0.739	4.18	0.500	5.184	-	-	-	-	
700	1.390	4.292	1.299	5.358	1.120	6.520	0.619	8.991	-	-	
800	1.926	5.509	1.879	6.732	1.760	8.072	1.379	10.91	0.745	14.157	
900	2.500	6.928	2.491	8.322	2.736	9.863	2.151	13.055	1.627	16.709	
EB510D											
	8750		**11400**		**14000**		**15800**		**17500**		**500 X 500 (MM)**
600	0.895	3.283	0.601	4.776	0.083	6.644	-	-	-	-	
700	1.390	4.292	1.209	6.078	0.786	8.230	0.369	9.997	-	-	
800	1.926	5.509	1.819	7.546	1.510	10.033	1.159	12.032	0.745	14.157	
900	2.500	6.928	2.461	9.25	2.248	12.070	1.971	14.313	1.627	16.709	
EB570D											
	8750		**11900**		**15000**		**16200**		**17500**		**500 X 500 (MM)**
600	0.895	3.283	0.529	5.13	-	-	-	-	-	-	
700	1.390	4.292	1.139	6.443	0.570	9.181	0.261	10.387	-	-	
800	1.926	5.509	1.771	7.968	1.330	11.105	1.079	12.521	0.745	14.157	
900	2.500	6.928	2.441	9.766	2.113	13.290	1.919	14.901	1.627	16.709	
EB640D											
	10210		**13100**		**16000**		**18200**		**20410**		**560 X 560 (MM)**
600	1.226	4.561	1.061	6.207	0.720	8.234	0.319	10.003	-	-	
650	1.500	5.301	1.379	7.104	1.090	9.300	0.749	11.288	0.290	13.450	
700	1.790	6.134	1.701	8.064	1.470	10.468	1.169	12.612	0.750	14.959	
750	2.090	7.043	2.039	9.146	1.860	11.744	1.589	14.012	1.220	16.567	
EB700D											
	10210		**13700**		**17200**		**18800**		**20410**		**560 X 560 (MM)**
650	1.500	5.301	1.341	7.523	0.914	10.330	0.631	11.803	0.300	13.450	
700	1.790	6.134	1.679	8.549	1.320	11.592	1.069	13.197	0.760	14.959	
750	2.090	7.043	2.019	9.64	1.730	12.946	1.519	14.706	1.230	16.567	
800	2.410	8.063	2.371	10.827	2.140	14.380	1.959	16.265	1.700	18.256	

BLOWER PERFORMANCE

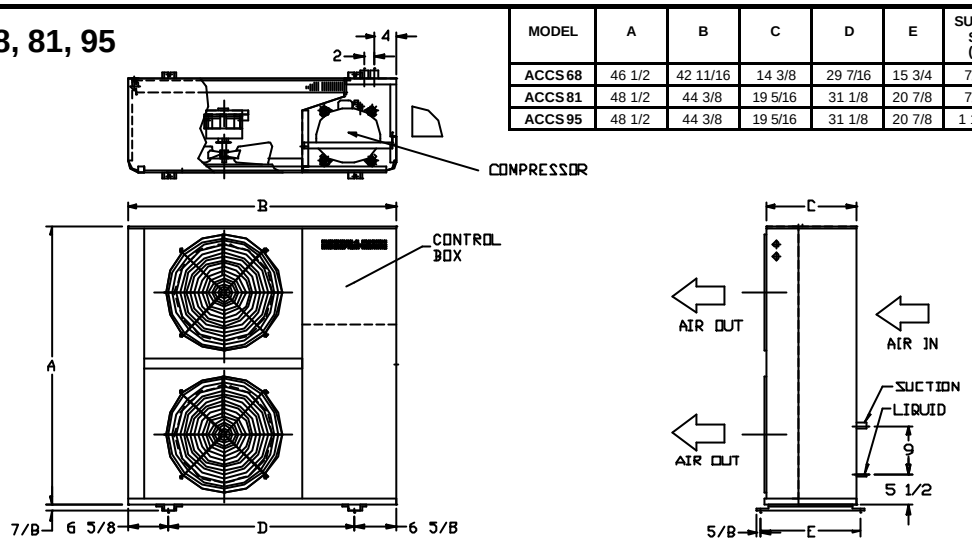
Available External Static Pressure - IWG - For Accessories And Duct System Static Resistance (Allowance Made For Wet Coil And Filters)

RPM	CFM										FAN MODEL
	SP	BHP	SP	BHP	SP	BHP	SP	BHP	SP	BHP	
EB760D											
	10210		14100		18000		19200		20410		560 X 560 (MM)
650	1.450	5.301	1.209	7.804	0.650	11.055	0.411	12.214	0.140	13.450	
700	1.740	6.134	1.56	8.863	1.070	12.372	0.859	13.654	0.600	14.959	
750	2.040	7.043	1.909	9.991	1.495	13.785	1.299	15.136	1.070	16.567	
800	2.360	8.063	2.269	11.218	1.920	15.280	1.741	16.698	1.540	18.256	
EB800D											
	14630		17100		19600		24400		29250		630 X 630 (MM)
600	1.760	8.606	1.721	10.443	1.620	12.567	1.229	17.416	0.500	23.208	
650	2.110	9.970	2.099	12.008	2.030	14.323	1.701	19.517	1.090	25.910	
700	2.480	11.481	2.499	13.743	2.450	16.226	2.199	21.899	1.680	28.798	
750	2.870	13.143	2.891	15.512	2.880	18.272	2.699	24.425	2.260	31.820	
EB890D											
	14630		17800		21000		25100		29250		630 X 630 (MM)
600	1.740	8.606	1.679	11.062	1.500	13.889	1.089	18.157	0.430	23.208	
650	2.090	9.970	2.051	12.606	1.930	15.762	1.599	20.447	1.020	25.910	
700	2.460	11.481	2.449	14.363	2.364	17.766	2.109	22.894	1.610	28.798	
750	2.850	13.143	2.869	16.296	2.810	19.934	2.611	25.436	2.190	31.820	
EB960D											
	16250		19600		23000		27800		32500		630 X 630 (MM)
600	1.760	9.813	1.649	12.627	1.400	15.886	0.809	21.461	-	-	
650	2.130	11.313	2.059	14.392	1.870	17.970	1.349	23.922	0.540	30.839	
700	2.510	12.932	2.469	16.253	2.330	20.141	1.901	26.598	1.190	34.071	
750	2.910	14.713	2.909	18.35	2.810	22.534	2.459	29.494	-	-	
EB1020D											
	16250		21000		25800		29200		32500		710 X 710 (MM)
550	1.820	9.882	1.719	13.154	1.470	17.185	1.189	20.508	0.840	24.170	
600	2.220	11.764	2.159	15.4	1.960	19.823	1.739	23.566	1.410	27.448	
650	2.650	13.899	2.621	17.889	2.470	22.745	2.279	26.761	2.000	31.036	
700	3.110	16.297	3.099	20.625	3.000	25.954	2.849	30.333	2.600	34.894	
EB1140D											
	16250		21300		26400		29400		32500		710 X 710 (MM)
500	1.440	8.199	1.209	11.381	0.830	15.285	0.521	18.008	0.150	21.214	
550	1.770	9.882	1.619	13.347	1.320	17.765	1.039	20.729	0.690	24.170	
600	2.170	11.764	2.069	15.652	1.810	20.418	1.569	23.679	1.260	27.448	
650	2.600	13.899	2.539	18.208	2.330	23.414	2.129	26.993	1.850	31.036	
EB1340D											
	23480		27700		32000		39500		46950		800 X 800 (MM)
450	1.590	12.538	1.489	15.548	1.310	19.091	0.859	26.585	0.200	35.670	
500	2.060	15.156	1.989	18.526	1.850	22.515	1.451	30.719	0.870	40.839	
550	2.560	18.120	2.519	21.873	2.410	26.270	2.089	35.437	-	-	
600	3.100	21.511	3.081	25.608	3.010	30.510	2.751	40.549	-	-	
EB1520D											
	23480		29700		36000		41500		46950		800 X 800 (MM)
450	1.570	12.610	1.379	15.493	1.060	22.967	0.659	28.97	0.140	35.742	
500	2.040	15.236	1.891	20.335	1.630	22.912	1.261	33.292	0.810	40.919	
550	2.540	18.207	2.459	24.049	2.230	31.040	1.901	38.128	-	-	
600	3.080	21.607	3.011	27.828	3.320	35.655	2.589	43.599	-	-	

DIMENSIONAL DATA

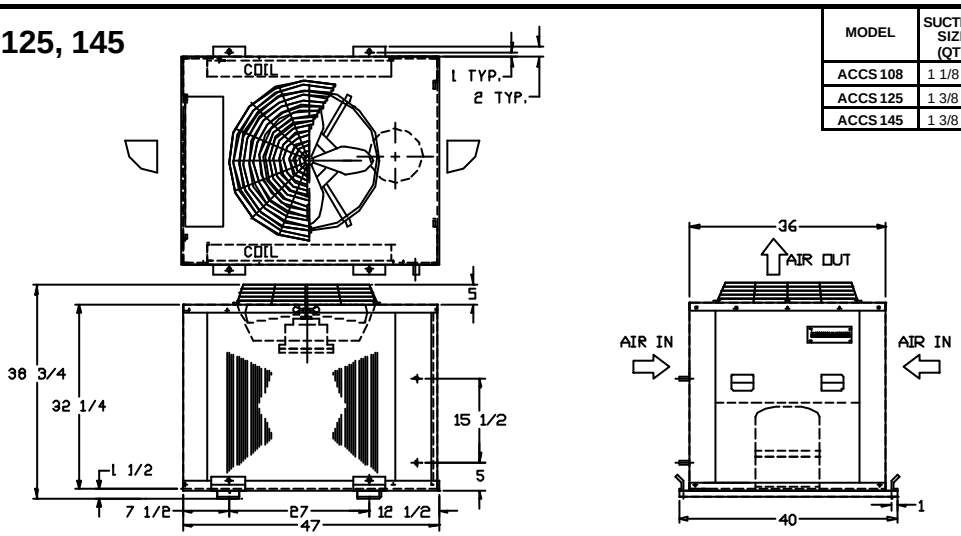
Air Cooled Condensing Units

ACCS 68, 81, 95



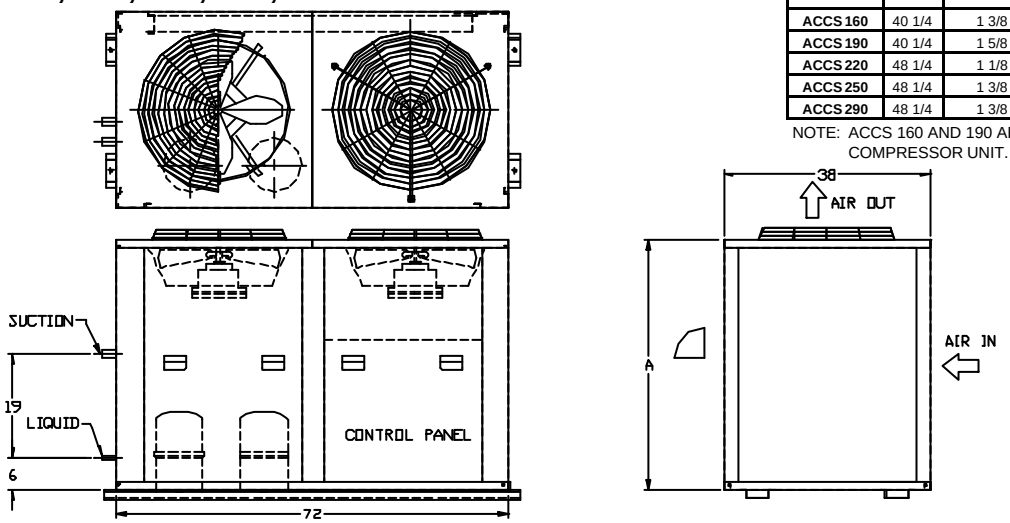
MODEL	A	B	C	D	E	SUCTION SIZE (QTY)	LIQUID SIZE (QTY)
ACCS 68	46 1/2	42 11/16	14 3/8	29 7/16	15 3/4	7/8 (1)	3/8 (1)
ACCS 81	48 1/2	44 3/8	19 5/16	31 1/8	20 7/8	7/8 (1)	1/2 (1)
ACCS 95	48 1/2	44 3/8	19 5/16	31 1/8	20 7/8	1 1/8 (1)	1/2 (1)

ACCS 108, 125, 145



MODEL	SUCTION SIZE (QTY)	LIQUID SIZE (QTY)
ACCS 108	1 1/8 (1)	1/2 (1)
ACCS 125	1 3/8 (1)	1/2 (1)
ACCS 145	1 3/8 (1)	5/8 (1)

ACCS 160, 190, 220, 250, 290



MODEL	A	SUCTION SIZE (QTY)	LIQUID SIZE (QTY)
ACCS 160	40 1/4	1 3/8 (1)	5/8 (1)
ACCS 190	40 1/4	1 5/8 (1)	5/8 (1)
ACCS 220	48 1/4	1 1/8 (2)	1/2 (2)
ACCS 250	48 1/4	1 3/8 (2)	1/2 (2)
ACCS 290	48 1/4	1 3/8 (2)	5/8 (2)

NOTE: ACCS 160 AND 190 ARE SINGLE COMPRESSOR UNIT.

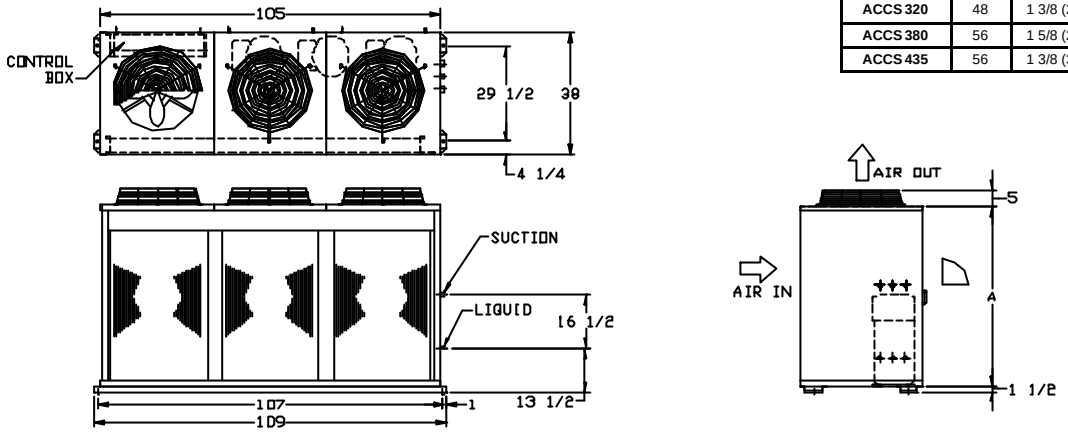
NOTE : ALL DIMENSIONS ARE IN INCHES.

DIMENSIONAL DATA

Air Cooled Condensing Units

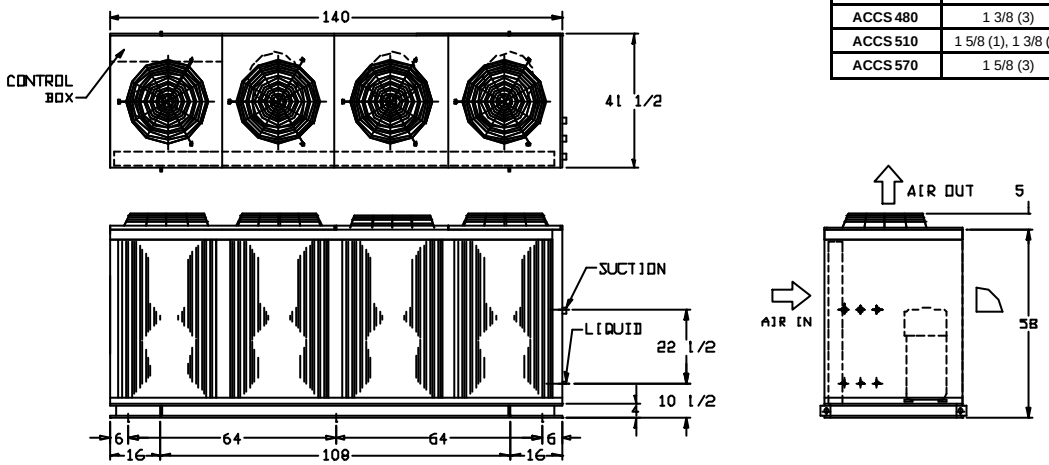
ACCS 320, 380, 435

MODEL	A	SUCTION SIZE (QTY)	LIQUID SIZE (QTY)
ACCS 320	48	1 3/8 (2)	5/8 (2)
ACCS 380	56	1 5/8 (2)	5/8 (2)
ACCS 435	56	1 3/8 (3)	5/8 (3)



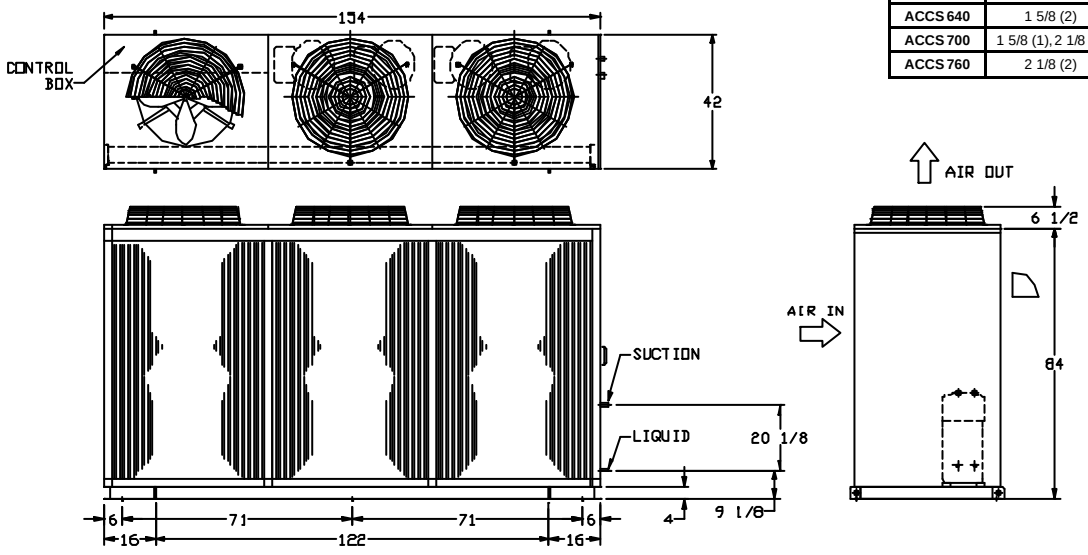
ACCS 480, 510, 570

MODEL	SUCTION SIZE (QTY)	LIQUID SIZE (QTY)
ACCS 480	1 3/8 (3)	5/8 (3)
ACCS 510	1 5/8 (1), 1 3/8 (2)	5/8 (3)
ACCS 570	1 5/8 (3)	5/8 (3)



ACCS 640, 700, 760

MODEL	SUCTION SIZE (QTY)	LIQUID SIZE (QTY)
ACCS 640	1 5/8 (2)	7/8 (2)
ACCS 700	1 5/8 (1), 2 1/8 (1)	7/8 (2)
ACCS 760	2 1/8 (2)	7/8 (2)



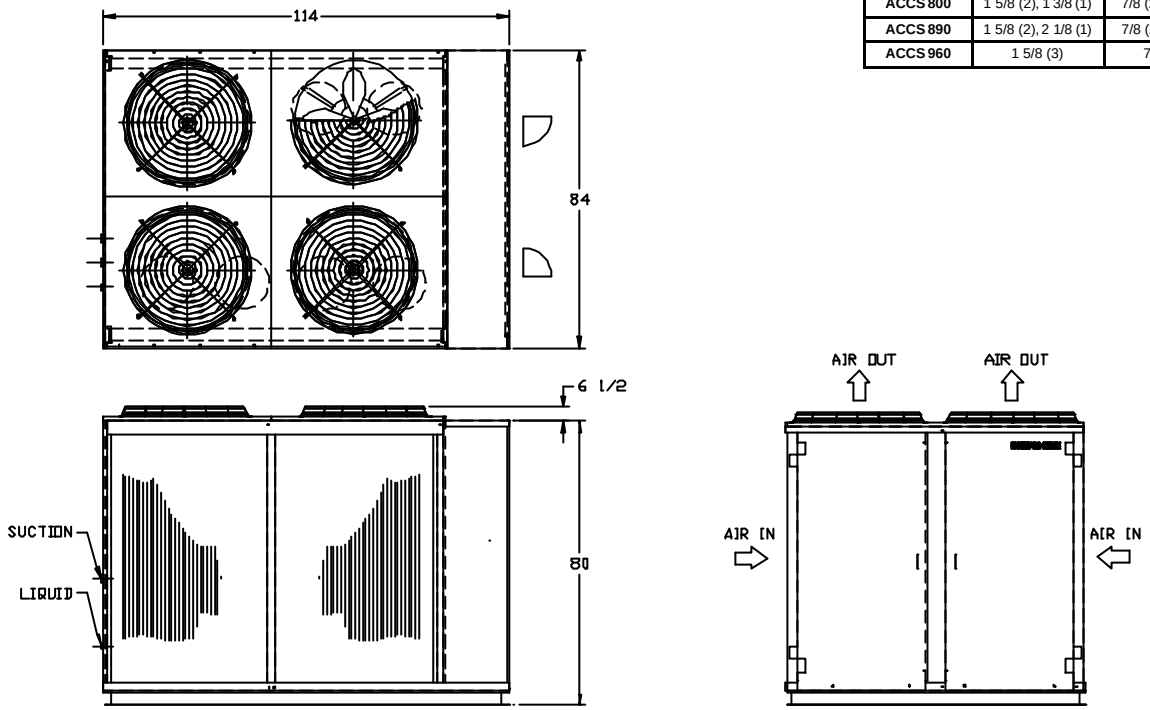
NOTE : ALL DIMENSIONS ARE IN INCHES.

DIMENSIONAL DATA

Air Cooled Condensing Units

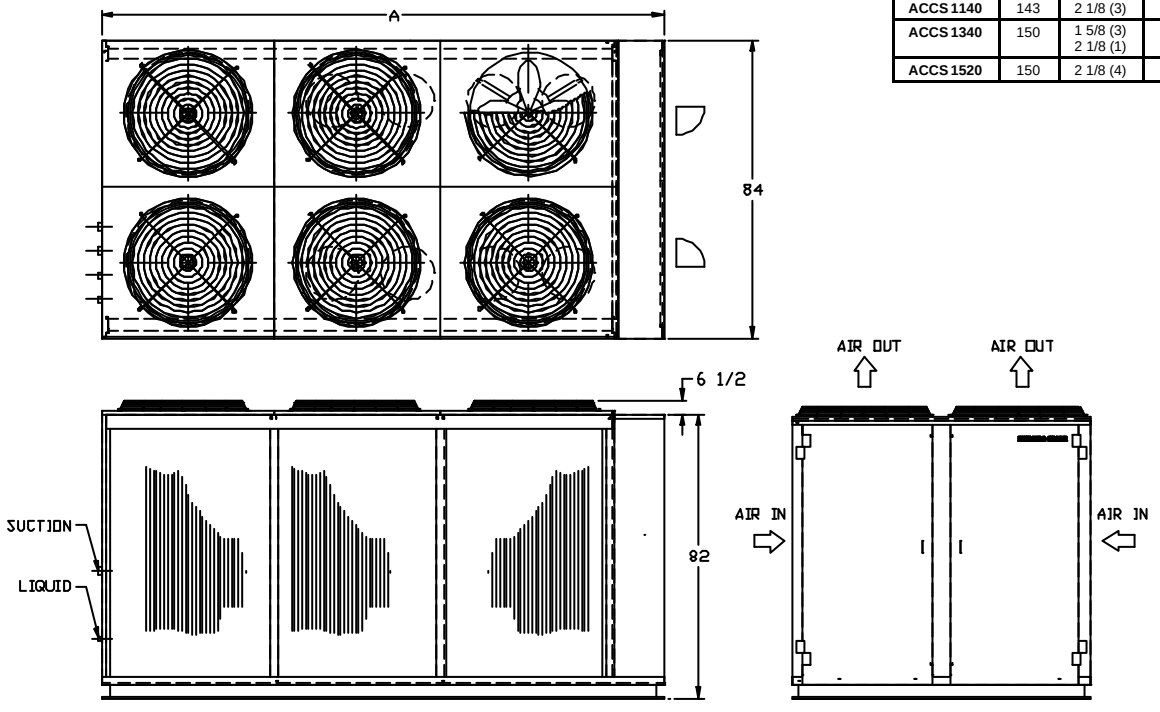
ACCS 800, 890, 960

MODEL	SUCTION SIZE (QTY)	LIQUID SIZE (QTY)
ACCS 800	1 5/8 (2), 1 3/8 (1)	7/8 (2), 5/8 (1)
ACCS 890	1 5/8 (2), 2 1/8 (1)	7/8 (2), 5/8 (1)
ACCS 960	1 5/8 (3)	7/8 (3)



ACCS 1020, 1140, 1340, 1520

MODEL	A	SUCTION SIZE (QTY)	LIQUID SIZE (QTY)
ACCS 1020	143	1 5/8 (2) 2 1/8 (1)	7/8 (3)
ACCS 1140	143	2 1/8 (3)	7/8 (3)
ACCS 1340	150	1 5/8 (3) 2 1/8 (1)	7/8 (4)
ACCS 1520	150	2 1/8 (4)	7/8 (4)

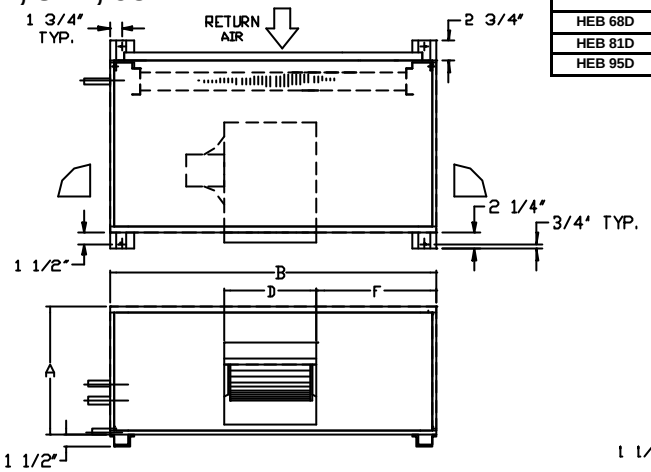


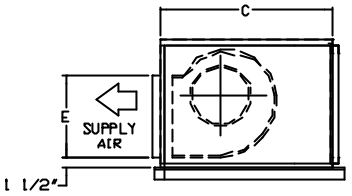
NOTE: ALL DIMENSIONS ARE IN INCHES.

DIMENSIONAL DATA

Evaporator Units

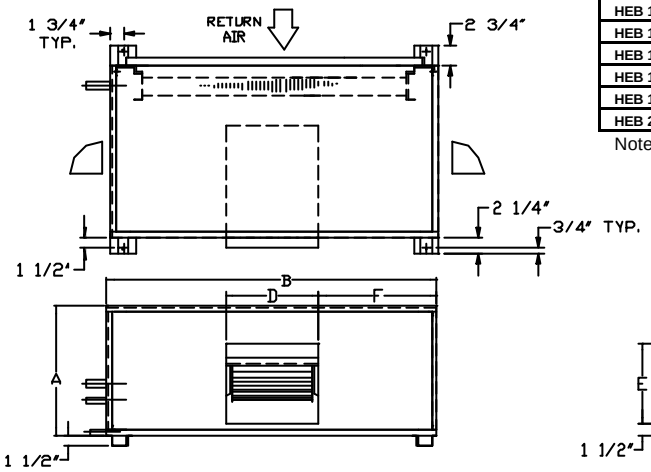
HEB 68D, 81D, 95D

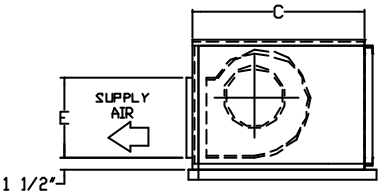




MODEL	A	B	C	D	E	F
HEB 68D	20	46	24	13	11 3/8	16 1/2
HEB 81D	20	46	24	13	11 3/8	16 1/2
HEB 95D	23	46	30	15 1/2	13 1/2	15 1/4

HEB 108D, 125D, 145D, 160D, 190D, 220D

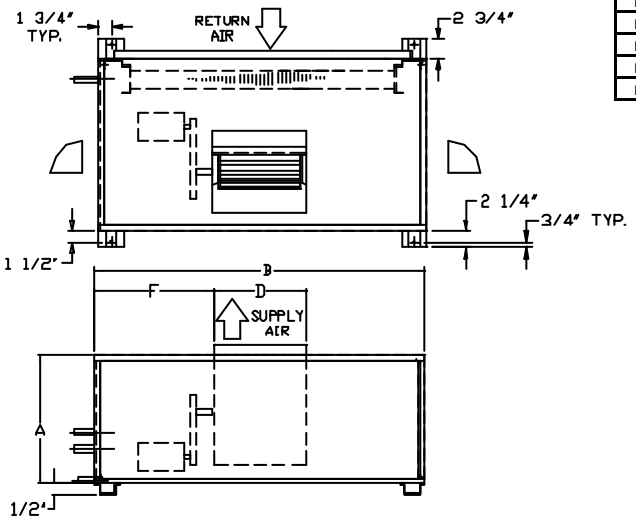


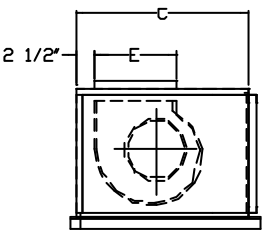


MODEL	A	B	C	D	E	F
HEB 108D	27	50	33	16	13 1/2	21 1/4
HEB 125D	27	50	33	16	13 1/2	21 1/4
HEB 145D	27	50	33	16	13 1/2	24 1/4
HEB 160D	29	58	40	18 1/2	16	24 3/8
HEB 190D	29	58	40	18 1/2	16	24 3/8
HEB 220D	29	78	40	18 1/2	16	30

Note: HEB 220D comes with double circuitry.

EB 250D, 290D, 320D, 380D, 435D





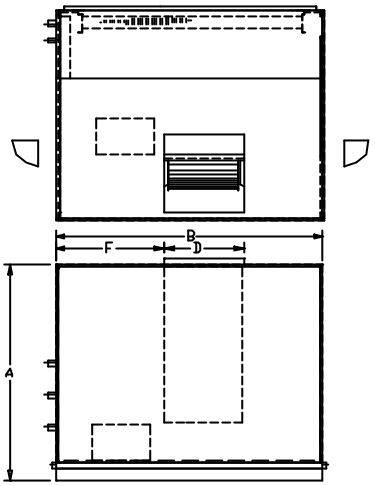
MODEL	A	B	C	D	E	F
EB 250D	29	78	40	18 1/2	16	30
EB 290D	38	84	45	17	19	33 1/2
EB 320D	38	84	45	17	19	33 1/2
EB 380D	48	84	45	22	19	37
EB 435D	48	84	45	22 1/2	22 1/2	37

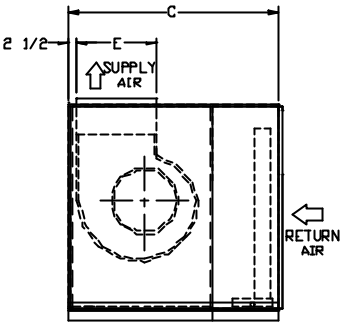
NOTES. : 1.) ALL DIMENSIONS ARE IN INCHES.
2.) UNITS SHOWN ARE RIGHT HAND PIPING CONNECTION.

DIMENSIONAL DATA

EB 480D, 510D, 570D, 640D, 700D, 760D

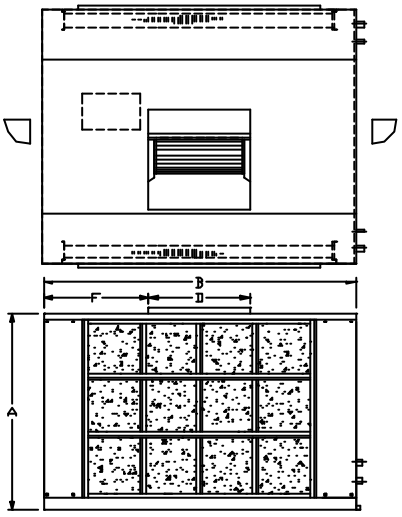
MODEL	A	B	C	D	E	F
EB 480D	68	84	66	25	25	34
EB 510D	68	84	66	25	25	34
EB 570D	68	84	66	25	25	34
EB 640D	78	84	66	28	28	34
EB 700D	78	84	66	28	28	34
EB 760D	78	84	66	28	28	34

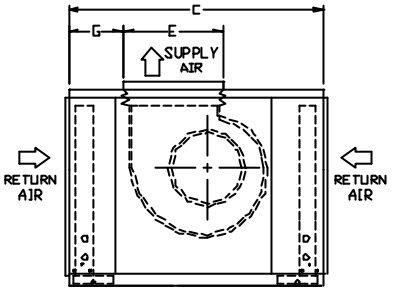




EB 800D, 890D, 960D, 1020D, 1140D, 1340D, 1520D

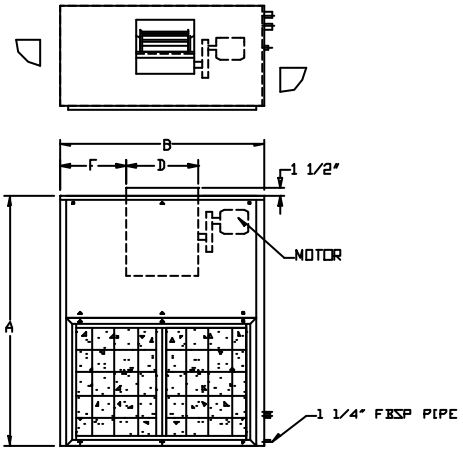
MODEL	A	B	C	D	E	F	G
EB 800D	62	98	80	31 1/2	31 1/2	39	17
EB 890D	62	98	80	31 1/2	31 1/2	39	17
EB 960D	62	98	80	31 1/2	31 1/2	39	17
EB 1020D	62	98	80	35 1/2	35 1/2	39	14
EB 1140D	62	98	80	35 1/2	35 1/2	39	14
EB 1340D	70	118	86	40	40	39	14
EB 1520D	70	118	86	40	40	39	14

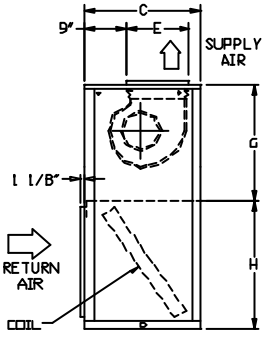




VEB 108D, 125D, 145D, 160D, 190D, 220D, 250D

Model	A	B	C	D	E	F	G	H
VEB 108D	51 1/2	52	25	15 1/2	13 1/2	17 1/4	25 3/4	25 3/4
VEB 125D	51 1/2	52	25	15 1/2	13 1/2	17 1/4	25 3/4	25 3/4
VEB 145D	51 1/2	52	25	15 1/2	13 1/2	17 1/4	25 3/4	25 3/4
VEB 160D	57 1/2	58 1/2	28	18 5/8	16	15	28 3/4	28 3/4
VEB 190D	57 1/2	58 1/2	28	18 5/8	16	15	28 3/4	28 3/4
VEB 220D	57 1/2	81 1/2	28	15 1/2	16	26	28 3/4	28 3/4
VEB 250D	57 1/2	81 1/2	28	18 1/2	16	24 3/4	28 3/4	28 3/4





NOTES. : 1.) ALL DIMENSIONS ARE IN INCHES.
2.) UNITS SHOWN ARE RIGHT HAND PIPING CONNECTION.

DIMENSIONAL DATA

Free Blow Type Evaporator Blower Unit

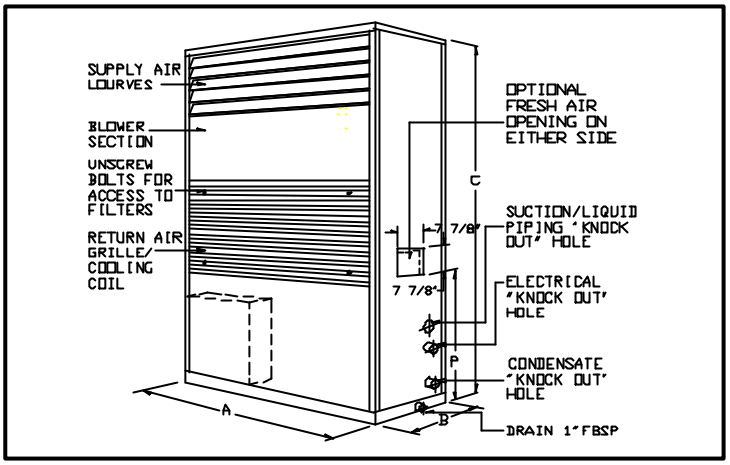
VEB 68D-FB, 81D-FB, 95D-FB, 108D-FB, 125D-FB, 145D-FB, 160D-FB, 190D-FB, 220D-FB

For Access To Internal Components

1.) Unscrew bolts at return air grille, remove grille and access to filters and coil.
2.) Unscrew bolts for blower section panel push panel up and remove panel for access to blower and drive assembly.
3.) Unscrew bolts for bottom panel, push panel up and access to compressor(s), condenser(s) and controls.

Model	A	B	*C	P
VEB 68D-FB	48	22	79	29
VEB 81D-FB	48	22	79	29
VEB 95D-FB	48	22	79	29
VEB 108D-FB	56	24	81	29
VEB 125D-FB	61	24	81	29
VEB 145D-FB	61	24	81	29
VEB 160D-FB	61	30	86	29
VEB 190D-FB	72	30	86	33
VEB 220D-FB	72	30	86	33

- Add 10" to the units height if autotransformer are required.



PHYSICAL DATA

Air Cooled Condensing Units

MODEL	COMPRESSOR					CONDENSER COIL		CONDENSER FAN				APPROX. OPERATING WEIGHT
	QTY	POWER SUPPLY	MRA EA.	LRA EA.	NRA EA.	FACE AREA SQ. FT	ROWS/ FPI	QTY.	MTR. HP EA.	MTR. FLA EA.	BLADE DIA. (INCH)	(LBS)
ACCS 68	1	400-3-50Hz	-	1x45	1x9.3	10.5	2/14	2	1/12	0.5	18.0	390
ACCS 81	1	400-3-50Hz	1x15.0	1x101	1x10.5	12.0	2/14	2	1/5	1.3	18.0	396
ACCS 95	1	400-3-50Hz	1x15.6	1x95	1x12.5	12.0	2/16	2	1/5	1.3	18.0	400
ACCS 108	1	400-3-50Hz	1x16.8	1x111	1x13.7	15.3	2/14	1	5/8	1.83	26.0	450
ACCS 125	1	400-3-50Hz	1x19.6	1x118	1x15.8	15.3	2/16	1	5/8	1.9	26.0	480
ACCS 145	1	400-3-50Hz	1x22.3	1x118	1x17.6	15.3	3/14	1	5/8	1.9	26.0	500
ACCS 160	1	400-3-50Hz	1x25.6	1x167	1x19.1	17.2	2/16	2	5/8	1.83	26.0	780
ACCS 190	1	400-3-50Hz	1x30.0	1x198	1x23.7	17.2	3/12	2	5/8	1.83	26.0	840
ACCS 220	2	400-3-50Hz	2x16.8	2x111	2x13.7	20.7	3/12	2	5/8	1.83	26.0	900
ACCS 250	2	400-3-50Hz	2x19.6	2x118	2x15.8	20.7	3/16	2	5/8	1.83	26.0	930
ACCS 290	2	400-3-50Hz	2x22.3	2x118	2x17.6	20.7	4/14	2	5/8	1.83	26.0	990
ACCS 320	2	400-3-50Hz	2x25.6	2x167	2x19.1	32.0	3/16	3	5/8	1.83	26.0	1450
ACCS 380	2	400-3-50Hz	2x30.0	2x198	2x23.7	37.3	3/16	3	5/8	1.83	26.0	1600
ACCS 435	3	400-3-50Hz	3x23.3	3x118	3x17.6	37.3	4/16	3	5/8	1.83	26.0	1800
ACCS 480	3	400-3-50Hz	3x25.6	3x167	3x19.1	48.8	3/14	4	5/8	1.83	26.0	2493
ACCS 510	3	400-3-50Hz	2x25.6, 1x30.0	2x167 1x198	2x19.1 1x23.7	48.8	3/16	4	5/8	1.83	26.0	2587
ACCS 570	3	400-3-50Hz	3x30.0	3x198	3x23.7	48.8	4/14	4	5/8	1.83	26.0	2680
ACCS 640	4	400-3-50Hz	4x25.6	4x167	4x19.1	66.0	4/16	3	1 1/2	3.2	31.5	3333
ACCS 700	4	400-3-50Hz	2x25.6 2x30.0	2x167 2x198	2x19.1 2x23.7	68.0	4/16	3	1 1/2	3.2	31.5	3373
ACCS 760	4	400-3-50Hz	4x30.0	4x198	4x23.7	72.0	4/16	3	1 1/2	3.2	31.5	3456
ACCS 800	5	400-3-50Hz	5x25.6	5x167	5x19.1	94.0	3/16	4	1 1/2	3.2	31.5	4671
ACCS 890	5	400-3-50Hz	2x25.6 3x30.0	2x167 3x198	2x19.1 3x23.7	94.0	4/14	4	1 1/2	3.2	31.5	4700
ACCS 960	6	400-3-50Hz	6x25.6	6x167	6x19.1	94.0	4/16	4	1 1/2	3.2	31.5	4843
ACCS 1020	6	400-3-50Hz	4x25.6 2x30.0	4x167 2x198	4x19.1 2x23.7	123.0	3/16	6	1 1/2	3.2	31.5	5900
ACCS 1140	6	400-3-50Hz	6x30.0	6x198	6x23.7	123.0	4/14	6	1 1/2	3.2	31.5	6028
ACCS 1340	8	400-3-50Hz	6x25.6, 2x30.0	6x167 2x198	6x19.1 2x23.7	129.0	4/16	6	1 1/2	3.2	31.5	6700
ACCS 1520	8	400-3-50Hz	8x30.0	8x198	8x23.7	129.0	4/16	6	1 1/2	3.2	31.5	6819

Notes: 1.) Condenser fan motors for ACCS 108 to 1520 are for 400V-3-50Hz electrical supply.

Condenser fan motors for ACCS 68 to 95 are for 230V-1-50Hz electrical supply.

2.) Minimum - Maximum voltage is 360V-440V.
3.) MRA - Maximum must trip amp.
4.) LRA - Locked rotor amp.
5.) NRA - Nominal running amp.
6.) FLA - Full load amp.

PHYSICAL DATA

Evaporator Blower Units

MODEL	BLOWER SECTION						EVAPORATOR COIL		FILTERS		APPROX. OPERATING WEIGHT LBS	SUCTION CONNECTION		LIQUID CONNECTION	
	BLOWER		MTR.			FAN CFM									
	QTY.	DIA. x WIDTH	MAX HP	FLA EACH	LRA EACH	MIN-MAX CFM	ROWS DEEP	FACE AREA (SQ.FT)	QTY.	SIZE (INCH.)		QTY	SIZE	QTY	SIZE
HEB 68D	1	10x10 (inch.)	0.75	5.6	-	1350 - 2700	3	4.5	2	16x20x1	260	1	7/8	1	3/8
HEB 81D	1	10x10 (inch.)	1.0	6.5	-	1350 - 2700	3	4.5	2	16x20x1	275	1	7/8	1	1/2
HEB 95D	1	12x12 (inch.)	1.0	6.0	-	1500 - 3000	3	5.0	2	20x20x1	340	1	1 1/8	1	1/2
VEB/ HEB 108D	1	12x12 (inch.)	4.0	6.4	43.9	2170 - 4330	3	7.2	1 1	20x25x1 25x25x1	360	1	1 1/8	1	1/2
VEB/ HEB 125D	1	12x12 (inch.)	4.0	6.4	43.9	2170 - 4330	3	7.2	1 1	20x25x1 25x25x1	380	1	1 3/8	1	1/2
VEB/ HEB 145D	1	12x12 (inch.)	4.0	6.4	43.9	2170 - 4330	4	7.2	1 1	20x25x1 25x25x1	400	1	1 3/8	1	5/8
VEB/ HEB 160D	1	15x15 (inch.)	5.5	8.3	59.4	2800 - 5600	3	9.3	2	25x25x1	470	1	1 3/8	1	5/8
VEB/ HEB 190D	1	15x15 (inch.)	5.5	8.3	59.4	2800 - 5600	3	9.3	2	25x25x1	500	1	1 5/8	1	5/8
VEB/ HEB 220D	1	15x15 (inch.)	10.0	14.9	109	3960 - 7930	3	13.0	1 2	20x25x1 25x25x1	500	2	1 1/8	2	1/2
VEB/EB 250D	1	15x15 (inch.)	10.0	14.9	109	3900 - 7790	3	13.0	1 2	20x25x1 25x25x1	680	2	1 3/8	2	1/2
EB 290D	1	18x13 (inch.)	15.0	21.5	153	4958 – 9917	3	17.5	3 3	16x25x1 20x25x1	900	2	1 3/8	2	5/8
EB 320D	1	18x13 (inch.)	15.0	21.5	153	4958 – 9917	4	17.5	3 3	16x25x1 20x25x1	920	2	1 3/8	2	5/8
EB 380D	1	18x18 (inch.)	15.0	21.5	153	6417 - 12833	3	22.5	3 3	20x25x1 25x25x1	1100	2	1 5/8	2	5/8
EB 435D	1	450x450 (mm.)	15.0	21.5	153	6417 – 12833	3	22.5	3 3	20x25x1 25x25x1	1150	3	1 3/8	3	5/8
EB 480D	1	500x500 (mm.)	20.0	29.2	210	8750 - 17500	3	30.0	9	20x25x1	1450	3	1 3/8	3	5/8
EB 510D	1	500x500 (mm.)	20.0	29.2	210	8750 - 17500	3	30.0	9	20x25x1	1520	2 1	1 3/8 1 5/8	3	5/8
EB 570D	1	500x500 (mm.)	20.0	29.2	210	8750 - 17500	3	30.0	9	20x25x1	1600	3	1 5/8	3	5/8
EB 640D	1	560x560 (mm.)	30.0	41.2	289	10208 - 20410	3	35.0	3 6	20x25x1 25x25x1	1820	2	1 5/8	2	7/8
EB 700D	1	560x560 (mm.)	30.0	41.2	289	10208 - 20410	4	35.0	3 6	20x25x1 25x25x1	1860	1 1	1 5/8 2 1/8	2	7/8
EB 760D	1	560x560 (mm.)	30.0	41.2	289	10208 - 20410	4	35.0	3 6	20x25x1 25x25x1	1900	2	2 1/8	2	7/8
EB 800D	1	630x630 (mm.)	40.0	55.6	395	14625 - 29250	3	48.8	4 4 4 4	16x20x1 16x25x1 20x25x1 25x25x1	2100	2 1	1 5/8 1 3/8	2 1	7/8 5/8
EB 890D	1	630x630 (mm.)	40.0	55.6	395	14625 - 29250	3	48.8	8 8	16x25x1 25x25x1	2180	2 1	1 5/8 2 1/8	2 1	7/8 5/8
EB 960D	1	630x630 (mm.)	40.0	55.6	395	16250 - 32500	3	54.2	8 8	16x25x1 25x25x1	2250	3	1 5/8	3	7/8
EB 1020D	1	710x710 (mm.)	40.0	55.6	395	16250 - 32500	3	54.2	8 8	16x25x1 25x25x1	2340	2 1	1 5/8 2 1/8	3	7/8
EB 1140D	1	710x710 (mm.)	40.0	55.6	395	16250 - 32500	4	54.2	8 8	16x25x1 25x25x1	2400	3	2 1/8	3	7/8
EB 1340D	1	800x800 (mm.)	50.0	67.4	489	23480 - 46950	3	78.3	24	20x25x1	3500	3 1	1 5/8 2 1/8	4	7/8
EB 1520D	1	800x800 (mm.)	50.0	67.4	489	23480 - 46950	4	78.3	24	20x25x1	3750	4	2 1/8	4	7/8

Note: Power supply for HEB 68D to 95D is 230-1-50hz.

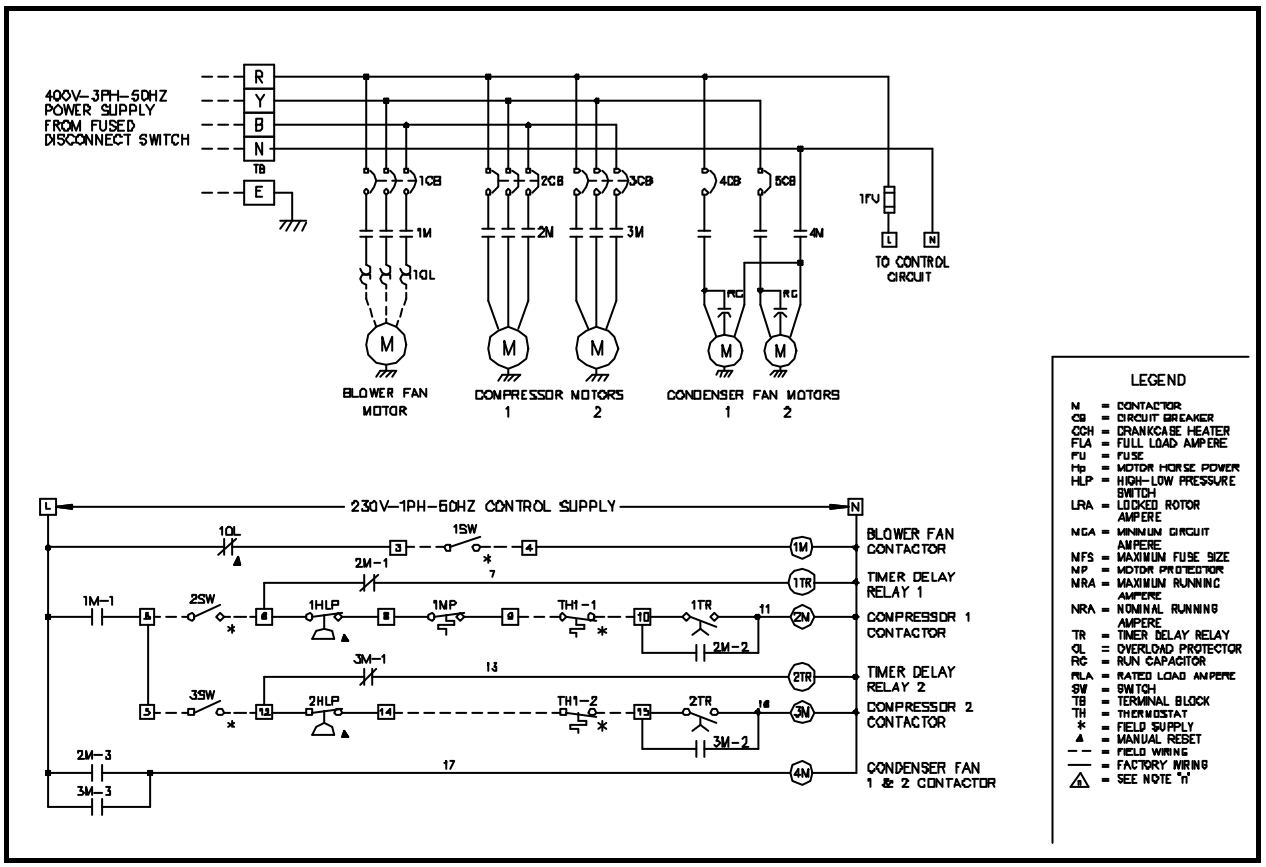
PHYSICAL DATA

Evaporator Free Blower Units

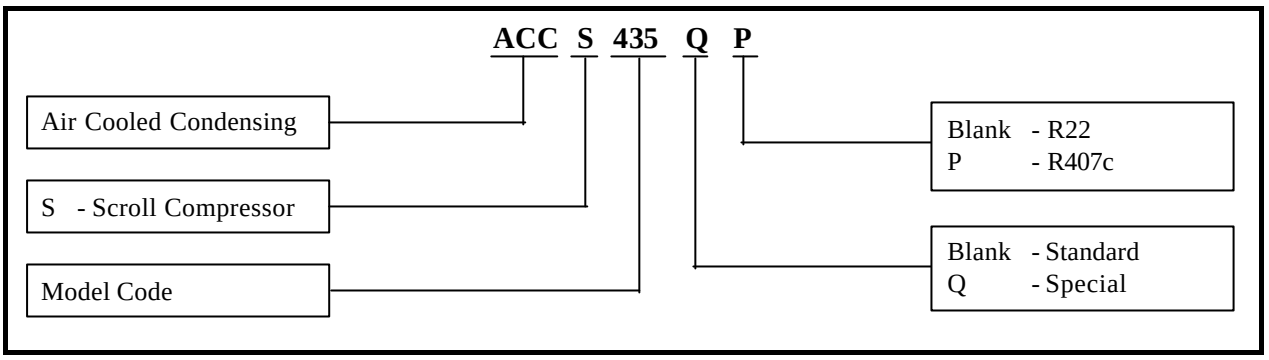
MODEL	BLOWER SECTION				EVAPORATOR COIL		FILTERS		SUCTION CONNECTION		LIQUID CONNECTION	
	BLOWER		MTR.	FAN CFM								
	QTY.	DIA. X WIDTH (INCH)	HP	CFM	ROWS DEEP	NOM FACE AREA (SQ.FT)	QTY.	SIZE (INCH.)	QTY	SIZE	QTY	SIZE
VEB 68D-FB	1	10-9	1/2	2000	3	5.4	2	20 7/8 x 18 1/8 x 1/2	1	7/8	1	3/8
VEB 81D-FB	2	9-7	1/3	2400	3	7.0	2	20 7/8 x 18 1/8 x 1/2	1	7/8	1	1/2
VEB 95D-FB	2	9-7	1/3	2600	4	7.0	2	20 7/8 x 18 1/8 x 1/2	1	1 1/8	1	1/2
VEB 108D-FB	2	10-8	1 1/2	3200	4	7.0	2	20 7/8 x 18 1/8 x 1/2	1	1 1/8	1	1/2
VEB 125D-FB	2	10-10	1 1/2	3500	3	9.9	2	27 3/4 x 18 1/8 x 1/2	1	1 3/8	1	1/2
VEB 145D-FB	2	10-10	1 1/2	4000	3	9.9	2	27 3/4 x 18 1/8 x 1/2	1	1 3/8	1	5/8
VEB 160D-FB	2	10-10	2	4600	4	9.9	2	27 3/4 x 18 1/8 x 1/2	1	1 3/8	1	5/8
VEB 190D-FB	2	12-12	2	4800	3	13.1	2	32 5/8 x 18 1/8 x 1/2	1	1 5/8	1	5/8
VEB 220D-FB	2	12-12	2	5400	4	13.1	2	32 5/8 x 18 1/8 x 1/2	2	11/8	2	1/2

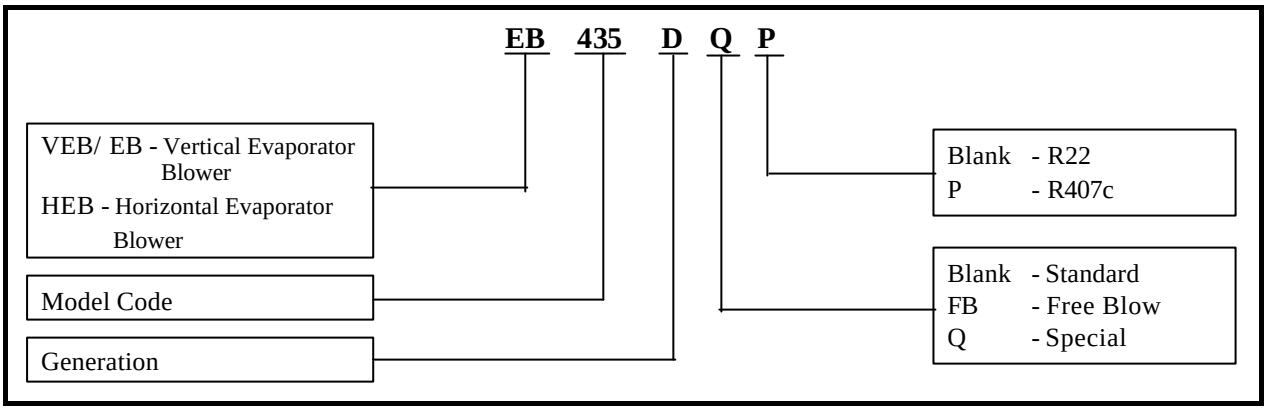
Note: Power supply for VEB 68D-FB to 95D-FB is 230-1-50hz.

TYPICAL WIRING SCHEMATIC



NOMENCLATURE





LIMITS AND CORRECTION FACTORS

LIMITATION (AIR TEMPERATURE °F)

		DB	WB
INDOOR	MAX.	95	72
	MIN.	66	57
OUTDOOR	MAX.	125	-
	MIN.	66	-

CORRECTION FACTORS

To correct for variation in air flow, use this multiplier.

AIR FLOW VARIATION	TOTAL CAPACITY	SENSIBLE CAPACITY
0.8	0.960	0.900
0.9	0.980	0.950
1.0	1.000	1.000
1.1	1.015	1.045
1.2	1.025	1.090

To correct for altitude, use this multiplier.

ALTITUDE ABOVE SEA LEVEL - FT	COOLING CAPACITY
0	1.00
2000	0.98
3000	0.97
4000	0.96
5000	0.95
6000	0.93
7000	0.92

To correct sensible capacity for varying dry bulb.

DRY BULB	WET BULB			
	57	62	67	72
75	0.84	0.81	0.78	0.74
80	1.00	1.00	1.00	1.00
85	1.16	1.18	1.21	1.26

NOTE: IF THE CAPACITY AFTER MULTIPLYING THE SENSIBLE WITH THE CORRECTION FACTOR EXCEED THE TOTAL CAPACITY, THEN THE SENSIBLE MUST BE EQUAL TO THE TOTAL.

MANUFACTURER RESERVES THE RIGHT TO CHANGE SPECIFICATION OR DESIGN AT ANY TIME WITHOUT PRIOR NOTICE.

DUNHAM-BUSH

Products that perform...By people who care