

LEVITOR II SERIES

Low Noise **Quietor** Fan Blade



Bulletin: KBH LEV II 07/05
Supersedes: KBH LEV II 0902 (Rev. 07/03)



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Proven source. Proven solutions.

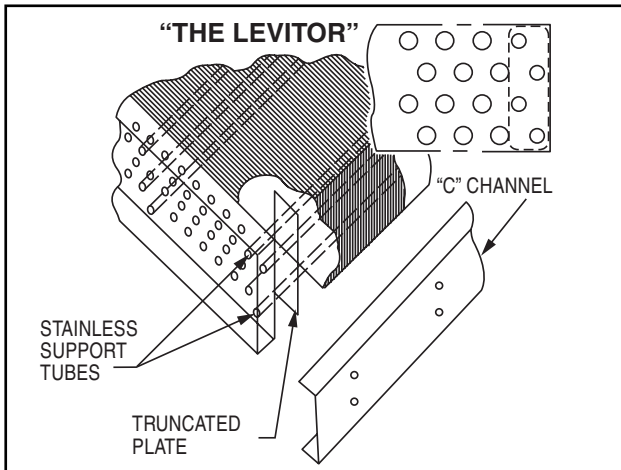
LEVITOR AIR COOLED CONDENSER

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The LEVITOR system addresses the problem of refrigerant coil wear and leaks due to vibration and thermal stress



Rooftop condensers have to operate in some of the toughest conditions imaginable. Temperature extremes result in constant expansion and contraction of refrigerant tubes as fans cycle and loads vary. The consequences are costly: rapid tube wear results in leaks, system breakdown and loss of costly refrigerant.

LEVITOR Coil Design Eliminates Refrigerant Tube Wear

Environmental concerns and spiraling cost of refrigerants have led to the development of direct drive remote air-cooled condensers with the LEVITOR coil support system. This innovative design uses dedicated stainless steel tubes and a unique coil support system to isolate refrigerant tubes from the unit. Coil support is transferred from the fins to the stainless tubes and truncated tube plates which ride freely in "C" channels. Tubes expand and contract without interference. The result, contact and friction wear is eliminated.

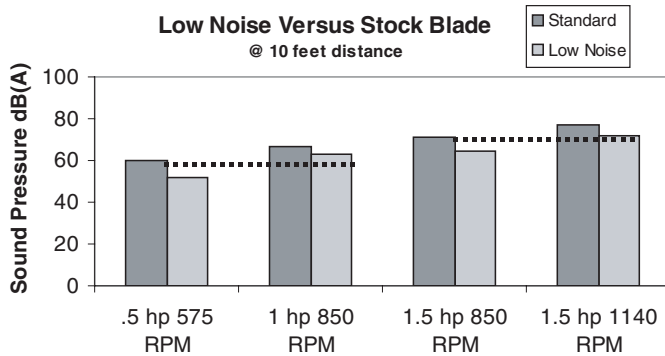
Quiet by Design

LEVITOR coil design does more than just eliminate tube wear. Sound reduction is an added benefit. Unlike traditional air-cooled condensers, fan and coil vibration is isolated from the cabinet, so it is not transmitted to the unit frame and building supports.

LEVITOR AIR COOLED CONDENSER

Low Noise Quieter Fan Blade

- The “swept-wing” blade design offers lower noise levels at the same fan speed. For example, the QUIETOR fan blade on a 575-rpm motor will be much quieter (8 dBA) than the existing 575-rpm fan
- QUIETOR fan blade is ideal for retrofits in areas where noise is an issue, but requires a new motor bracket.
- Lower noise condensers can translate into savings for your customer by minimizing the need of costly noise barriers.



Existing Motor	Existing Voltage	Retrofit Kit Part Number
1 hp 850 rpm	208/460	e208064ret
1 hp 850 rpm	575	e208065ret
1-1/2 hp 850	208/460	e208066ret
1-1/2 hp 850	575	e208067ret
1-1/2 hp 1140	208/460	e208068ret
1-1/2 hp 1140	575	e208069ret
1/2 hp 575	208/460	e208070ret
1/2 hp 575	575	e208070ret

Exclusive 3-year Limited Warranty

We’re so confident about our new suspended coil design that it is protected by a 3-year limited warranty on workmanship and material. It gives you extra protection from premature tube wear. See www.krack.com for complete warranty.

Computerized Circuiting

Our computerized coil circuiting program is designed to minimize the condenser refrigerant charge and maximize subcooling. Every condenser will be custom circuiting to precisely meet your application needs.

Modular Design

Arranged for vertical and horizontal air discharge. Multi-fan sections compartmented to allow individual fan cycling while preventing off-fan “windmilling”. Large clean-out access doors standard.

Corrosion Resistant

All models employ mill galvanized steel fan sections and coil side baffles. Legs are heavy mill gauge galvanized steel.

High Efficiency Coil

Copper tubes are mechanically expanded into corrugated full collared aluminum fins spaced 8, 10 or 12 per inch. Coils are pressure tested under water with 400 psig. dry air, shipped pressurized with dry nitrogen.

Optional fin materials are copper, heresite, electrofin or polyester coated aluminum. Multi-circuited coils are available. Liquid subcooling circuits are available.

Direct Driven Propeller Fans

Quiet multi-bladed propeller fans provide uniform air distribution through the coil. Venturi fan orifices optimize efficiency.

Weather Resistant Fan Motors

Outdoor condenser motors designed with ball bearings inherent overheat protection in each phase; shaft slingers; enclosure, hardware, and lubrication for all weather conditions. Each motor lead is wired to terminals in an electrical enclosure.

Versatile Fan Cycling Control Methods:

- Temperature fan cycling
- Pressure fan cycling
- Temperature and pressure fan cycling
- Electronic relay boards
- Variable speed header end fans

LEVITOR AIR COOLED CONDENSER SELECTION

THR Total Heat of Rejection

Condenser total heat of rejection (BTU/h) is the sum of the evaporator refrigeration effect and the heat of compression which varies with compressor type and operating conditions.

THR Calculation Method

THR = Open Reciprocating Compressor Capacity (BTU/h) + (2545 x BHP)

THR = Suction Gas Cooled Hermetic Reciprocating Compressor Capacity (BTU/h) + (3413 x kW)

THR Estimated Method

THR may be estimated by multiplying the rated compressor BTU/h capacity by the compressor operating condition factor shown in the proper table. Multiply result by altitude factor when applicable.

TABLE 2

EVAPORATOR TEMP. (°F)	OPEN COMPRESSOR CONDENSING TEMPERATURE (°F)					
	90	100	110	120	130	140
-30	1.37	1.42	1.47	*	*	*
-20	1.33	1.37	1.42	1.47	*	*
-10	1.28	1.32	1.37	1.42	1.47	*
0	1.24	1.28	1.32	1.37	1.41	1.47
10	1.21	1.24	1.28	1.32	1.36	1.42
20	1.17	1.20	1.24	1.28	1.32	1.37
30	1.14	1.17	1.20	1.24	1.27	1.32
40	1.12	1.15	1.17	1.20	1.23	1.28
50	1.09	1.12	1.14	1.17	1.20	1.24

*Beyond the normal limits for single stage compressor application

TABLE 1

EVAPORATOR TEMP. (°F)	HERMETIC COMPRESSOR CONDENSING TEMPERATURE (°F)					
	90	100	110	120	130	140
-40	1.66	1.73	1.80	2.00	*	*
-30	1.57	1.62	1.68	1.80	*	*
-20	1.49	1.53	1.58	1.65	*	*
-10	1.42	1.46	1.50	1.57	1.64	*
0	1.36	1.40	1.44	1.50	1.56	1.62
5	1.33	1.37	1.41	1.46	1.52	1.59
10	1.31	1.34	1.38	1.43	1.49	1.55
15	1.28	1.32	1.35	1.40	1.46	1.52
20	1.26	1.29	1.33	1.37	1.43	1.49
25	1.24	1.27	1.31	1.35	1.40	1.45
30	1.22	1.25	1.28	1.32	1.37	1.42
40	1.18	1.21	1.24	1.27	1.31	1.35
50	1.14	1.17	1.20	1.23	1.26	1.29

*Beyond the normal limits for single stage compressor application

TABLE 3

ALTITUDE			
FEET	FACTOR	FEET	FACTOR
1000	1.02	5000	1.12
2000	1.05	6000	1.15
3000	1.07	7000	1.17
4000	1.10	8000	1.24

Multi-Circuit Selection

Condenser coils may be divided into several individual refrigeration circuits or systems; each sized for a specific refrigerant, THR capacity and TD. Systems are tagged for identification from left to right; facing the connection end.

Avoid locating high TD sections next to low TD sections. Add excess circuits to low TD sections next to High TD sections. Add excess circuits to outboard sections. Thermal Fanrol fan cycling is recommended with multi-circuited condensers.

SAMPLE CALCULATION

95°F AMBIENT-SUCTION COOLED SEMI-HERMETIC RECIPROCATING COMPRESSORS

COMP NOM HP	DESIGN TO REF	SAT SUCT °F	SAT COND °F	COMPRESSOR RATING				BASED ON R-22 AT 15°F TD				CAPACITY PER CIRCUIT	CIR- CUI TS REQ'D	* CIR- CUI TS	SYSTEM NUMBER L TO R	ACTUAL TD °F			
				NET BTU/h	MOTOR kW	TOTAL BTU/h	REF FACTOR	TD FACTOR	SELECT THR										
6	134a	15	+20	110	40090	4.3	14676	54,766	÷ 0.95	x	1.0	=	57648	13503	4.3	4	1	16.1	
9	404A	10	-20	105	45900	8.1	27645	73,545	÷ 0.98	x	1.5	=	112569	13503	8.3	10	2	8.3	
10	404A	10	-20	105	50640	9.6	32765	83,405	÷ 0.98	x	1.5	=	127661	13503	9.5	10	3	9.5	
12	22	15	+20	110	104000	9.7	33106	137,106	÷ 1.00	x	1.0	=	137106	13503	10.1	10	4	15.1	
												UNIT THR REQ'D	434984			34			

Selection

LAVA-15310 Rated at THR of 459.1 MBH with R-22 at 15°F TD.
LAVA-15310 Unit lists 34 Circuits.
From Sample Calculation:
THR Req'd./Circuit = 434984 ÷ 34 = 12784
LAVA-15310 = 459100 ÷ 34 = 13503
Available THR / Circuit.

Circuits Req'd. = Select THR ÷ THR/Circuit.
Example: 57648 ÷ 13503 = 4.3 Circuits.

Assign Number of Circuits System and System Number Left to Right.

Actual TD = (Circuits Req'd ÷ Assign Circuits) x Design TD.

Example: 4.3 ÷ 4 x 15 = 16.1

REF FACTOR		TD FACTOR	
R-22-	1.00	10°F-	1.50
* R-134a-	0.95	15°F-	1.00
**R-404A-	0.98	20°F-	0.75
		25°F-	0.60

* Usable for R-12

**Usable for R-502, R-507

* Odd numbers not allowed on 3 row coils

APPLICATION

Locate Condensers no closer than their width from walls or other condensers. Avoid locations near exhaust fans, plumbing vents, flues or chimneys.

Parallel Condensers should be the same models resulting in the same refrigerant side pressure drops. Compressor discharge lines should have equal pressure drops to each condenser.

Condenser Charge will approximate 30% of the maximum flooding charge listed under "Specifications" for summer design conditions. Low ambient head pressure controls require an additional charge, which is difficult to predict with fan cycling and is maximized with holdback.

Receiver Capacity should be sized to store condenser summer charge, plus the condenser low ambient allowance, plus the evaporator charge, plus an allowance for piping and heat reclaim coil charges.

Compressor Discharge lines should be sized to minimize pressure drops and maintain oil return gas velocities. Each connection should be looped to the top of the condenser.

Gravity Liquid Drain Lines should drop from each outlet as low as possible before headering or running horizontally. Pitch downhill to receiver.

Off-Line Coil Sections will have refrigerant pressures corresponding to the ambient. Check valves or isolating valves should be installed in the liquid line drains to prevent refrigerant migration and receiver pressure loss.

Liquid Subcooling may be accomplished with a section of circuits in the coil or with a separate coil section under the last operating fans. Liquid outlet temperature will approach the entering air temperature by approximately 5°F. Benefit is not economical unless TD is 15°F or higher.

See Installation & Operating instructions for piping, holdback and fan cycling details.

Refrigerant Line Capacity Data

COPPER LINE SIZE O.D.	LINE CAPACITY IN TONS			CONDENSER TO RECEIVER LIQUID LINE 100'			LBS. OF REFRIGERANT LIQUID PER 100' OF LENGTH		
	COMPRESSOR DISCHARGE LINE								
	R-22	R-404A	R-134a	R-22	R-404A	R-134a	R-22	R-404A	R-134a
5/8	1.0	0.5	0.5	3.6	3.0	3.7	13.0	11.0	13.0
7/8	3.0	2.0	2.0	7.4	6.0	7.7	25.0	22.0	26.0
1-1/8	6.5	4.5	4.5	12.7	10.4	13.0	42.0	36.0	43.0
1-3/8	15.0	7.0	7.0	19.2	16.0	20.0	64.0	55.0	65.0
1-5/8	20.0	15.0	11.0	29.0	23.0	28.5	90.0	78.0	92.0
2-1/8	45.0	30.0	28.0	47.0	40.0	46.0	160.0	138.0	163.0
2-5/8	75.0	45.0	43.0	73.0	62.0	72.0	245.0	212.0	250.0

- Capacity is compressor suction tons for application between -40°F and +40°F suction at condensing temperatures between 80°F and 120°F sat.
- For multiple or unloading compressor application, the vertical discharge riser from the compressor may need to be one size smaller.
- This table data is only to be used as a guide. For exact values, please calculate to your specific job line lengths and design pressure/temp values using ASHRAE handbook or ARI refrigerant tables.

LAVE/LEVE CONDENSERS 1/2 HP, 575 RPM MOTORS

PERFORMANCE DATA ONE FAN WIDE

LAVE / LEVE MODEL	TOTAL HEAT OF REJECTION (MBH)								AIR FLOW CFM	CONDENSER CHARGE R-404A		APP NET WEIGHT lbs	AVAIL- ABLE CIRCUITS
	R-22				R-404A, R-507					lbs			
	TEMPERATURE DIFFERENCE				TEMPERATURE DIFFERENCE					S	W		
	10°F	15°F	20°F	25°F	10°F	15°F	20°F	25°F					
LAVE 112 08	33.2	49.8	66.4	83.0	32.3	48.4	64.6	80.7	6480	3.8	18.4	437	17
LAVE 112 10	37.2	55.8	74.4	93.0	36.2	54.3	72.4	90.5	6420	3.8	18.4	439	17
LAVE 112 12	40.4	60.6	80.8	101.0	39.3	58.9	78.6	98.2	6360	3.8	18.4	444	17
LAVE 113 08	43.8	65.7	87.6	109.5	42.6	63.9	85.2	106.5	6300	5.7	27.6	466	17
LAVE 113 10	47.9	71.8	95.8	119.7	46.6	69.9	93.2	116.5	6200	5.7	27.6	469	17
LAVE 113 12	50.6	75.9	101.2	126.5	47.2	70.8	94.4	118.0	6100	5.7	27.6	478	17
LAVE 114 08	53.1	79.6	106.2	132.7	51.7	77.5	103.4	129.2	6105	7.5	36.8	495	17
LAVE 114 10	55.9	83.8	111.8	139.7	54.4	81.6	108.8	136.0	5975	7.5	36.8	499	17
LAVE 114 12	58.1	87.1	116.2	145.2	56.6	84.9	113.2	141.5	5835	7.5	36.8	508	17
LAVE 122 08	66.5	99.7	133.0	166.2	64.7	97.0	129.4	161.7	12960	7.3	35.5	718	17
LAVE 122 10	74.4	111.6	148.8	186.0	72.3	108.4	144.6	180.7	12840	7.3	35.5	721	17
LAVE 122 12	80.9	121.3	161.8	202.2	78.7	118.0	157.4	196.7	12720	7.3	35.5	729	17
LAVE 123 08	87.5	131.2	175.0	218.7	85.1	127.6	170.2	212.7	12600	10.9	53.3	773	34
LAVE 123 10	95.8	143.7	191.6	239.5	93.2	139.8	186.4	233.0	12400	10.9	53.3	779	34
LAVE 123 12	101.2	151.8	202.4	253.0	98.4	147.6	196.8	246.0	12200	10.9	53.3	792	34
LAVE 124 08	106.3	159.4	212.6	265.7	103.4	155.1	206.8	258.5	12260	14.6	71.1	830	34
LAVE 124 10	111.7	167.5	223.4	279.2	108.7	163.0	217.4	271.7	11950	14.6	71.1	838	34
LAVE 124 12	116.3	174.4	232.6	290.7	113.2	169.8	226.4	283.0	11670	14.6	71.1	855	34
LAVE 132 10	111.5	167.2	223.0	278.7	108.5	162.7	217.0	271.2	19260	10.8	52.7	1041	34
LAVE 132 12	121.3	181.9	242.6	303.5	118.0	177.0	236.0	295.0	19080	10.8	52.7	1060	34
LAVE 133 08	138.1	207.1	276.2	345.2	134.3	201.4	268.6	335.7	18900	16.2	79.0	1126	34
LAVE 133 10	143.6	215.4	287.2	359.0	139.8	209.7	279.6	349.5	18600	16.2	79.0	1135	34
LAVE 133 12	152.0	228.0	304.0	380.0	147.9	221.8	295.8	369.7	18300	16.2	79.0	1153	34
LAVE 134 08	159.6	239.4	319.2	399.0	155.3	232.9	310.6	388.2	18315	21.6	105.4	1210	34
LAVE 134 10	167.6	251.4	335.2	419.0	163.0	244.5	326.0	407.5	17925	21.6	105.4	1223	34
LAVE 134 12	174.7	262.0	349.4	436.7	170.0	255.0	340.0	425.0	17505	21.6	105.4	1247	34
LAVE 143 08	174.8	262.2	349.6	437.0	170.0	255.0	340.0	425.0	25200	21.5	104.7	1437	34
LAVE 143 10	191.5	287.2	383.0	478.7	186.3	279.4	372.6	465.7	24800	21.5	104.7	1449	34
LAVE 143 12	202.4	303.6	404.8	506.0	197.0	295.5	394.0	492.5	24400	21.5	104.7	1474	34
LAVE 144 08	212.5	318.7	425.0	531.2	206.8	310.2	413.6	517.0	24420	28.6	139.8	1550	34
LAVE 144 10	223.4	335.1	446.8	558.5	217.4	326.1	434.8	543.5	23900	28.6	139.8	1566	34
LAVE 144 12	233.1	349.6	466.2	582.7	226.8	340.2	453.6	567.0	23340	28.6	139.8	1599	34
LAVE 153 08	231.9	347.8	463.8	579.7	225.6	338.4	451.2	564.0	31500	26.7	130.4	2020	34
LAVE 153 10	254.0	381.0	508.0	635.0	247.1	370.6	494.2	617.7	31000	26.7	130.4	2035	34
LAVE 153 12	270.3	405.4	540.6	675.7	263.0	394.5	526.0	657.5	30500	26.7	130.4	2066	34
LAVE 154 08	270.9	406.3	541.8	677.2	263.6	395.4	527.2	659.0	30525	35.6	173.9	2160	34
LAVE 154 10	289.8	434.7	579.6	724.5	282.0	423.0	564.0	705.0	28875	35.6	173.9	2181	34
LAVE 154 12	300.3	450.4	600.6	750.7	292.2	438.3	584.4	730.5	29175	35.6	173.9	2222	34
LEVE 163 08	278.4	417.6	556.8	696.0	270.8	406.2	541.6	677.0	37800	59.7	291.5	2554	34
LEVE 163 10	304.9	457.3	609.8	762.2	296.6	444.9	593.2	741.5	37200	59.7	291.5	2573	34
LEVE 163 12	324.5	486.7	649.0	811.2	315.7	473.5	631.4	789.2	36600	59.7	291.5	2610	34
LEVE 164 08	325.1	487.6	650.2	812.7	316.3	474.4	632.6	790.7	36630	79.6	388.7	2784	34
LEVE 164 10	347.8	521.7	695.6	869.5	338.4	507.6	676.8	846.0	35850	79.6	388.7	2808	34
LEVE 164 12	360.4	540.6	720.8	901.0	350.6	525.9	701.2	876.5	35010	79.6	388.7	2858	34

NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser.

Multiply R-22 rating by 0.95 for R-134a.

Summer charge based on 25% of condenser volume with 86°F liquid. Multiply by 1.14 for R-22.

Winter charge based on 90% of condenser volume with -20°F liquid. Multiply by 1.10 for R-22.

LAVE/LEVE CONDENSERS 1/2 HP, 575 RPM MOTORS

PERFORMANCE DATA TWO FANS WIDE

LAVE / LEVE MODEL	TOTAL HEAT OF REJECTION (MBH)								AIR FLOW CFM	CONDENSER CHARGE R-404A		APP NET WEIGHT lbs	AVAIL- ABLE CIRCUITS
	R-22				R-404A, R-507					lbs			
	TEMPERATURE DIFFERENCE				TEMPERATURE DIFFERENCE					S	W		
	10°F	15°F	20°F	25°F	10°F	15°F	20°F	25°F					
LAVE 222 08	133.0	199.5	266.0	332.5	129.4	194.1	258.8	323.5	25920	14.6	71.0	1311	34
LAVE 222 10	148.8	223.2	297.6	372.0	144.6	216.9	289.2	361.5	25680	14.6	71.0	1320	34
LAVE 222 12	161.8	242.7	323.6	404.5	157.4	236.1	314.8	393.5	25440	14.6	71.0	1336	34
LAVE 223 08	175.0	262.5	350.0	437.5	170.2	255.3	340.4	425.5	25200	21.8	106.6	1437	68
LAVE 223 10	191.6	287.4	383.2	479.0	186.4	279.6	372.8	466.0	24800	21.8	106.6	1425	68
LAVE 223 12	202.4	303.6	404.8	506.0	196.8	295.2	393.6	492.0	24400	21.8	106.6	1462	68
LAVE 224 08	212.6	318.9	425.2	531.5	206.8	310.2	413.6	517.0	24420	29.2	142.2	1539	68
LAVE 224 10	223.4	335.1	446.8	558.5	217.4	326.1	434.8	543.5	23900	29.2	142.2	1555	68
LAVE 224 12	232.6	348.9	465.2	581.5	226.4	339.6	452.8	566.0	23340	29.2	142.2	1588	68
LAVE 232 10	223.0	334.5	446.0	557.5	217.0	325.5	434.0	542.5	38520	21.6	105.4	1875	68
LAVE 232 12	242.6	363.9	485.2	606.5	236.0	354.0	472.0	590.0	38160	21.6	105.4	1912	68
LAVE 233 08	276.2	414.3	552.4	690.5	268.6	402.9	537.2	671.5	37800	32.4	158.0	2044	68
LAVE 233 10	287.2	430.8	574.4	718.0	279.6	419.4	559.2	699.0	37200	32.4	158.0	2063	68
LAVE 233 12	304.0	456.0	608.0	760.0	295.8	443.7	591.6	739.5	36600	32.4	158.0	2100	68
LAVE 234 08	319.2	478.8	638.4	798.0	310.6	465.9	621.2	776.5	36630	43.2	210.8	2214	68
LAVE 234 10	335.2	502.8	670.4	838.0	326.0	489.0	652.0	815.0	35950	43.2	210.8	2238	68
LAVE 234 12	349.4	524.1	698.8	873.5	340.0	510.0	680.0	850.0	35010	43.2	210.8	2287	68
LAVE 243 08	349.6	524.4	699.2	874.0	340.0	510.0	680.0	850.0	50400	43.0	209.4	2526	68
LAVE 243 10	383.0	574.5	766.0	957.5	372.6	588.9	745.2	931.5	49600	43.0	209.4	2651	68
LAVE 243 12	404.8	607.2	809.6	1012.0	394.0	591.0	788.0	985.0	48800	43.0	209.4	2700	68
LAVE 244 08	425.0	637.5	850.0	1062.5	413.6	620.4	827.2	1034.0	48840	57.2	279.6	2851	68
LAVE 244 10	446.8	670.2	893.6	1117.0	434.8	652.2	869.6	1087.0	47800	57.2	279.6	2884	68
LAVE 244 12	466.2	699.3	932.4	1165.5	453.6	680.4	907.2	1134.0	46680	57.2	279.6	2950	68
LAVE 253 08	463.8	695.7	927.6	1159.5	451.2	676.8	902.4	1128.0	63000	53.4	260.8	3725	68
LAVE 253 10	508.0	762.0	1016.0	1270.0	494.2	741.3	988.4	1235.5	62000	53.4	260.8	3755	68
LAVE 253 12	540.6	810.9	1081.2	1351.5	526.0	789.0	1052.0	1315.0	61000	53.4	286.8	3817	68
LAVE 254 08	541.8	812.7	1083.6	1354.5	527.2	790.8	1054.4	1318.0	61050	71.2	347.8	4005	68
LAVE 254 10	579.6	869.4	1159.2	1449.0	564.0	846.0	1128.0	1410.0	59750	71.2	347.8	4046	68
LAVE 254 12	600.6	900.9	1201.2	1501.5	584.4	876.6	1168.8	1461.0	58350	71.2	347.8	4129	68
LEVE 263 08	556.8	835.2	1113.6	1392.0	541.6	812.4	1083.2	1354.0	75600	119.4	583.0	4759	68
LEVE 263 10	609.8	914.7	1219.6	1524.5	593.2	889.8	1186.4	1483.0	74400	119.4	583.0	4796	68
LEVE 263 12	649.0	973.5	1298.0	1622.5	631.4	947.1	1262.8	1578.5	73200	119.4	583.0	4870	68
LEVE 264 08	650.2	975.3	1300.4	1625.5	632.6	948.9	1265.2	1581.5	73260	159.2	777.4	5218	68
LEVE 264 10	695.6	1043.4	1391.2	1739.0	676.8	1015.2	1353.6	1692.0	71700	159.2	777.4	5268	68
LEVE 264 12	720.8	1081.2	1441.6	1802.0	701.2	1051.8	1402.4	1753.0	70020	159.2	777.4	5366	68

NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser.
 Multiply R-22 rating by 0.95 for R-134a.
 Summer charge based on 25% of condenser volume with 86°F liquid. Multiply by 1.14 for R-22.
 Winter charge based on 90% of condenser volume with -20°F liquid. Multiply by 1.10 for R-22.

ELECTRICAL DATA ONE FAN WIDE

	FAN MOTOR TOTAL FULL LOAD AMPS		
	208/230/3/60	460/3	575/3
LAVE-11***	3.4	1.7	1.2
LAVE-12***	6.8	3.4	2.4
LAVE-13***	10.2	5.1	3.6
LAVE-14***	13.6	6.8	4.8
LAVE-15***	17.0	8.5	6.0
LEVE-16***	20.4	10.2	7.2

ELECTRICAL DATA TWO FANS WIDE

	FAN MOTOR TOTAL FULL LOAD AMPS		
	208/230/3/60	460/3	575/3
LAVE-22***	13.6	6.8	4.8
LAVE-23***	20.4	10.2	7.2
LAVE-24***	27.2	13.6	9.6
LAVE-25***	34.0	17.0	12.0
LEVE-26***	40.8	20.4	14.4

***Rows & FPI

***Rows & FPI

- (1) Minimum Unit Circuit Amps = 1.25 x FLA of One Motor + FLA of All Remaining Motors.
- (2) Maximum Unit Overload Protection = 2.25 x FLA of One Motor + FLA of All Remaining Motors.

LAVA/LEVA CONDENSERS 1 HP, 850 RPM MOTORS

PERFORMANCE DATA ONE FAN WIDE

LAVA / LEVA MODEL	TOTAL HEAT OF REJECTION (MBH)								AIR FLOW CFM	CONDENSER CHARGE R-404A		APP NET WEIGHT lbs	AVAIL- ABLE CIRCUITS
	R-22				R-404A, R-507					lbs			
	TEMPERATURE DIFFERENCE				TEMPERATURE DIFFERENCE					S	W		
	10°F	15°F	20°F	25°F	10°F	15°F	20°F	25°F					
LAVA112 08	42.4	63.7	84.9	106.1	41.6	62.4	83.2	104.0	9260	3.8	18.4	437	17
LAVA112 10	47.5	71.3	95.1	118.9	48.6	69.9	93.2	116.5	9151	3.8	18.4	439	17
LAVA112 12	51.7	77.6	103.4	129.3	50.7	76.0	101.3	126.7	9040	3.8	18.4	444	17
LAVA113 08	56.0	83.8	111.8	139.7	54.9	82.1	109.6	136.9	8933	5.7	27.6	466	17
LAVA113 10	61.2	91.8	122.4	153.0	60.0	90.0	120.0	149.9	8760	5.7	27.6	469	17
LAVA113 12	65.3	97.7	130.3	162.9	64.0	95.7	127.7	159.6	8574	5.7	27.6	478	17
LAVA114 08	65.3	97.9	130.5	163.2	64.0	95.9	127.9	159.9	8582	7.5	36.8	495	17
LAVA114 10	69.7	104.8	139.4	174.3	68.3	102.7	136.6	170.8	8314	7.5	36.8	499	17
LAVA114 12	72.3	108.5	144.6	180.8	70.9	106.3	141.7	177.2	8025	7.5	36.8	508	17
LAVA122 08	85.0	127.3	169.8	212.2	83.3	124.8	166.4	208.0	18520	7.3	35.5	718	17
LAVA122 10	95.1	142.6	190.2	237.7	93.2	139.7	186.4	232.9	18302	7.3	35.5	721	17
LAVA122 12	103.4	155.1	206.8	258.6	101.3	152.0	202.7	253.4	18080	7.3	35.5	729	17
LAVA123 08	111.8	183.7	223.6	279.5	109.6	180.0	219.1	273.9	17866	10.9	53.3	773	34
LAVA123 10	122.4	183.6	244.9	306.1	120.0	179.9	240.0	300.0	17520	10.9	53.3	779	34
LAVA123 12	130.3	195.4	260.6	325.7	127.7	191.5	255.4	319.2	17148	10.9	53.3	792	34
LAVA124 08	130.5	195.8	261.1	326.4	127.9	191.9	255.9	319.9	17164	14.6	71.1	830	34
LAVA124 10	139.4	209.1	278.8	348.5	136.6	204.9	273.2	341.5	16628	14.6	71.1	838	34
LAVA124 12	144.6	216.9	289.2	361.5	141.7	212.6	283.4	354.3	16050	14.6	71.1	855	34
LAVA132 10	142.6	213.9	285.3	356.6	139.7	209.6	279.6	349.5	27453	10.8	52.7	1041	34
LAVA132 12	155.1	232.7	310.3	387.8	152.0	228.0	304.1	380.0	27120	10.8	52.7	1060	34
LAVA133 08	176.6	251.5	335.3	419.2	173.1	246.5	328.6	410.8	26799	16.2	79.0	1126	34
LAVA133 10	183.6	275.5	367.3	459.1	179.9	270.0	360.0	449.9	26280	16.2	79.0	1135	34
LAVA133 12	195.4	293.1	390.9	488.6	191.5	287.2	383.1	478.8	25722	16.2	79.0	1153	34
LAVA134 08	195.8	293.7	391.6	489.6	191.9	287.8	383.8	479.8	25746	21.6	105.4	1210	34
LAVA134 10	209.1	313.7	418.2	522.8	204.9	307.4	409.8	512.3	24942	21.6	105.4	1223	34
LAVA134 12	217.0	325.4	433.8	542.3	212.7	318.9	425.1	531.5	24075	21.6	105.4	1247	34
LAVA143 08	223.6	335.3	447.1	588.9	219.1	328.6	438.2	547.7	35732	21.5	104.7	1437	34
LAVA143 10	244.9	367.3	489.7	612.2	240.0	360.0	479.9	600.0	35040	21.5	104.7	1449	34
LAVA143 12	260.6	390.3	521.1	651.4	255.4	382.5	510.7	638.4	34296	21.5	104.7	1474	34
LAVA144 08	261.1	391.6	522.2	652.7	255.9	383.8	511.8	639.6	34328	28.6	139.8	1550	34
LAVA144 10	278.8	418.2	557.7	697.1	273.2	409.8	546.5	683.2	33256	28.6	139.8	1566	34
LAVA144 12	289.2	433.8	578.4	723.0	283.4	425.1	566.8	708.5	32100	28.6	139.8	1599	34
LAVA153 08	279.5	419.2	588.9	698.6	273.0	410.8	547.7	684.6	44665	26.7	130.4	2020	34
LAVA153 10	306.1	459.1	612.2	765.2	300.0	449.9	600.0	749.9	43800	26.7	130.4	2035	34
LAVA153 12	325.7	488.6	651.4	814.3	319.2	478.8	638.4	798.0	42870	26.7	130.4	2066	34
LAVA154 08	326.4	489.6	652.7	815.9	319.9	479.8	639.6	799.6	42910	35.6	173.9	2160	34
LAVA154 10	348.5	522.8	697.1	871.3	341.5	512.3	683.2	853.9	41570	35.6	173.9	2181	34
LAVA154 12	361.5	542.5	723.0	903.8	354.3	531.5	708.5	885.7	40125	35.6	173.9	2222	34
LEVA 163 08	335.3	509.2	670.7	838.4	328.6	492.9	657.3	821.6	53598	59.7	291.5	2554	34
LEVA 163 10	367.3	550.9	734.6	918.2	360.0	539.9	719.9	899.8	52560	59.7	291.5	2573	34
LEVA 163 12	390.9	586.3	781.7	977.1	383.1	574.6	766.1	957.6	51444	59.7	291.5	2610	34
LEVA 164 08	391.6	587.4	783.3	979.1	383.8	575.8	767.6	959.5	51492	79.6	388.7	2784	34
LEVA 164 10	418.2	627.3	836.5	1045.6	409.8	614.9	819.8	1024.7	49884	79.6	388.7	2808	34
LEVA 164 12	433.8	650.7	867.6	1084.5	425.1	637.7	850.2	1062.8	48150	79.6	388.7	2858	34

NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser.

Multiply R-22 rating by 0.95 for R-134a.

Summer charge based on 25% of condenser volume with 86°F liquid. Multiply by 1.14 for R-22.

Winter charge based on 90% of condenser volume with -20°F liquid. Multiply by 1.10 for R-22.

LAVA/LEVA CONDENSERS 1 HP, 850 RPM MOTORS

PERFORMANCE DATA TWO FANS WIDE

LAVA / LEVA MODEL	TOTAL HEAT OF REJECTION (MBH)								AIR FLOW CFM	CONDENSER CHARGE R-404A		APP NET WEIGHT lbs	AVAIL- ABLE CIRCUITS
	R-22				R-404A, R-507					lbs			
	TEMPERATURE DIFFERENCE				TEMPERATURE DIFFERENCE					S	W		
	10°F	15°F	20°F	25°F	10°F	15°F	20°F	25°F					
LAVA222 08	169.8	254.7	339.6	424.5	166.4	249.6	322.8	416.0	37040	14.6	71.1	1311	34
LAVA222 10	190.2	285.3	380.3	475.4	186.4	279.6	372.7	465.9	36604	14.6	71.1	1320	34
LAVA222 12	206.8	310.3	413.7	517.1	202.7	304.1	405.4	506.8	36160	14.6	71.1	1336	34
LAVA223 08	223.6	335.3	447.1	558.9	219.1	328.6	438.2	547.7	35732	21.6	106.6	1425	68
LAVA223 10	244.9	367.3	489.7	612.2	240.0	360.0	479.9	600.0	35040	21.6	106.6	1437	68
LAVA223 12	260.6	390.9	521.1	651.4	255.4	383.1	510.7	638.4	34296	21.6	106.6	1462	68
LAVA224 08	261.1	391.6	522.2	652.7	255.9	383.8	511.8	639.6	34328	29.1	142.2	1539	68
LAVA224 10	278.8	418.2	557.7	697.1	273.2	409.8	546.5	683.2	33256	29.1	142.2	1555	68
LAVA224 12	289.2	433.8	578.4	723.0	283.4	425.1	566.8	708.5	32100	29.1	142.2	1588	68
LAVA232 10	285.3	427.9	570.5	713.1	279.6	419.3	559.1	698.8	54906	21.6	105.4	1875	68
LAVA232 12	310.3	465.4	620.5	775.7	304.1	456.1	608.1	760.2	54240	21.6	105.4	1912	68
LAVA233 08	335.3	503.0	670.7	838.4	328.6	492.9	657.3	821.6	53598	32.4	158.0	2044	68
LAVA233 10	367.3	550.9	734.6	918.2	360.0	539.9	719.9	899.8	52560	32.4	158.0	2063	68
LAVA233 12	390.9	586.3	781.7	977.1	383.1	574.6	766.1	957.6	51444	32.4	158.0	2100	68
LAVA234 08	391.6	587.5	783.3	979.1	383.8	575.8	767.6	959.5	51492	43.2	210.7	2214	68
LAVA234 10	418.2	627.4	836.5	1045.6	409.8	614.9	819.8	1024.7	49884	43.2	210.7	2238	68
LAVA234 12	433.8	650.7	867.6	1084.5	425.1	637.7	850.2	1062.8	48150	43.2	210.7	2287	68
LAVA243 08	447.1	670.7	894.3	1117.8	438.2	657.3	876.4	1095.4	71464	42.9	209.4	2626	68
LAVA243 10	489.7	734.6	979.4	1224.3	479.9	719.9	959.8	1199.8	70080	42.9	209.4	2651	68
LAVA243 12	521.1	781.7	1042.3	1302.8	510.7	766.1	1021.5	1276.7	68592	42.9	209.4	2700	68
LAVA244 08	522.2	783.3	1044.4	1305.5	511.8	767.6	1023.5	1279.4	68656	57.2	279.3	2851	68
LAVA244 10	557.6	836.5	1115.3	1394.1	546.4	819.8	1093.0	1366.2	66512	57.2	279.3	2884	68
LAVA244 12	578.4	867.6	1156.8	1446.1	566.8	850.2	1133.7	1417.2	64200	57.2	279.3	2950	68
LAVA253 08	558.9	838.4	1117.8	1397.3	547.7	821.6	1095.4	1369.4	89300	53.5	280.8	3725	68
LAVA253 10	612.2	918.2	1224.3	1530.4	600.0	899.8	1199.8	1499.8	87600	53.5	280.8	3755	68
LAVA253 12	651.4	977.1	1302.8	1628.6	638.4	957.6	1276.7	1596.0	85740	53.5	280.8	3817	68
LAVA254 08	652.7	979.1	1305.5	1631.9	639.6	959.5	1279.4	1599.3	85820	71.3	347.8	4005	68
LAVA254 10	697.1	1045.6	1394.1	1742.7	683.2	1024.7	1366.2	1707.8	83140	71.3	347.8	4046	68
LAVA254 12	723.0	1084.5	1446.1	1807.6	708.5	1062.8	1417.2	1771.4	80250	71.3	347.8	4129	68
LEVA 263 08	670.7	1006.0	1341.4	1676.7	657.3	985.9	1314.6	1643.2	107196	119.5	583.0	4759	68
LEVA 263 10	734.6	1101.9	1469.2	1836.5	719.9	1079.9	1439.8	1799.8	105120	119.5	583.0	4796	68
LEVA 263 12	781.6	1172.6	1563.4	1954.3	766.0	1149.1	1532.1	1915.2	102888	119.5	583.0	4870	68
LEVA 264 08	783.3	1174.9	1566.6	1958.2	767.6	1151.4	1535.3	1919.0	102984	159.3	777.3	5218	68
LEVA 264 10	836.5	1254.7	1673.0	2091.2	819.8	1229.6	1639.5	2049.4	99768	159.3	777.3	5268	68
LEVA 264 12	867.6	1301.5	1735.3	2169.1	850.2	1275.5	1700.6	2125.7	96300	159.3	777.3	5366	68

NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser.
 Multiply R-22 rating by 0.95 for R-134a.
 Summer charge based on 25% of condenser volume with 86°F liquid. Multiply by 1.14 for R-22.
 Winter charge based on 90% of condenser volume with -20°F liquid. Multiply by 1.10 for R-22.

ELECTRICAL DATA ONE FAN WIDE

	FAN MOTOR TOTAL FULL LOAD AMPS		
	208/230/3/60	460/3/60	575/3/60
LAVA-11***	4.4	2.0	1.45
LAVA-12***	8.8	4.0	2.9
LAVA-13***	13.2	6.0	4.35
LAVA-14***	17.6	8.0	5.8
LAVA-15***	22.0	10.0	7.25
LEVA-16***	26.4	12.0	8.7

ELECTRICAL DATA TWO FANS WIDE

	FAN MOTOR TOTAL FULL LOAD AMPS		
	208/230/3/60	460/3/60	575/3/60
LAVA-22***	17.6	8.0	5.8
LAVA-23***	26.4	12.0	8.7
LAVA-24***	35.2	16.0	11.6
LAVA-25***	44.0	20.0	14.5
LEVA-26***	52.8	24.0	17.4

***Rows & FPI

***Rows & FPI

- (1) Minimum Unit Circuit Amps = 1.25 x FLA of One Motor + FLA of All Remaining Motors.
- (2) Maximum Unit Overload Protection = 2.25 x FLA of One Motor + FLA of All Remaining Motors.

LAVC/LEVC CONDENSERS 1-1/2 HP, 850 RPM MOTORS

PERFORMANCE DATA ONE FAN WIDE

LAVC / LEVC MODEL	TOTAL HEAT OF REJECTION (MBH)								AIR FLOW CFM	CONDENSER CHARGE R-404A lbs		APP NET WEIGHT lbs	AVAIL- ABLE CIRCUITS
	R-22				R-404A, R-507					S	W		
	TEMPERATURE DIFFERENCE				TEMPERATURE DIFFERENCE								
	10°F	15°F	20°F	25°F	10°F	15°F	20°F	25°F					
LAVC11208	46.2	69.3	92.4	115.4	45.3	67.9	90.6	113.1	10967	3.8	18.4	437	17
LAVC11210	51.5	77.2	102.9	128.6	50.4	75.7	100.8	126.0	10682	3.8	18.4	439	17
LAVC11212	55.6	83.4	111.3	139.1	54.5	81.7	109.1	136.3	10409	3.8	18.4	444	17
LAVC11308	60.1	90.2	120.3	150.3	58.9	88.4	117.9	147.3	10159	5.7	27.6	466	17
LAVC11310	65.3	98.0	130.7	163.4	64.0	96.0	128.1	160.1	9785	5.7	27.6	469	17
LAVC11312	69.1	103.6	138.2	172.7	67.7	101.5	135.4	169.2	9441	5.7	27.6	478	17
LAVC11408	69.4	104.1	138.8	173.5	68.0	102.0	136.0	170.0	9449	7.5	36.8	495	17
LAVC11410	73.7	110.5	147.3	184.1	72.2	103.8	144.4	180.4	9031	7.5	36.8	499	17
LAVC11412	76.3	114.4	152.5	190.6	74.7	112.3	149.5	186.8	8660	7.5	36.8	508	17
LAVC12208	92.3	138.5	184.7	230.9	90.5	135.7	181.0	226.3	21934	7.3	35.5	718	17
LAVC12210	102.9	154.3	205.7	257.2	100.8	151.2	201.6	252.1	21364	7.3	35.5	721	17
LAVC12212	111.3	166.9	222.5	278.1	108.0	163.6	218.1	272.5	20818	7.3	35.5	729	17
LAVC12308	120.3	180.4	240.5	300.6	117.9	176.8	235.7	294.6	20318	10.9	53.3	773	34
LAVC12310	130.7	196.0	261.4	326.7	128.1	192.1	256.2	320.2	19570	10.9	53.3	779	34
LAVC12312	138.2	207.3	276.4	345.5	135.4	203.2	270.9	338.6	18882	10.9	53.3	792	34
LAVC12408	138.8	208.2	277.6	346.9	136.0	204.0	272.0	340.0	18898	14.6	71.1	830	34
LAVC12410	147.3	221.0	294.6	368.3	144.4	216.6	288.7	360.9	18062	14.6	71.1	838	34
LAVC12412	152.5	228.8	305.0	381.3	149.5	224.2	298.9	373.7	17320	14.6	71.1	855	34
LAVC13210	154.3	231.5	308.6	385.8	151.2	226.9	302.4	378.1	32046	10.8	52.7	1041	34
LAVC13212	166.9	250.3	333.8	417.2	163.5	245.3	327.1	408.9	31227	10.8	52.7	1060	34
LAVC13308	180.4	270.6	360.8	450.9	176.8	265.2	353.6	441.9	30477	16.2	79.0	1126	34
LAVC13310	196.0	294.0	392.0	490.1	192.1	288.1	384.2	480.3	29355	16.2	79.0	1135	34
LAVC13312	207.3	310.9	414.5	518.2	203.1	304.7	406.2	507.8	28323	16.2	79.0	1153	34
LAVC13408	208.1	312.2	416.2	520.4	204.0	306.0	408.0	510.0	28347	21.6	105.4	1210	34
LAVC13410	221.0	331.5	441.9	552.4	216.6	324.9	433.1	541.4	27093	21.6	105.4	1223	34
LAVC13412	238.7	343.1	457.5	571.9	224.2	336.2	448.4	560.5	25980	21.6	105.4	1247	34
LAVC14308	240.5	360.8	481.0	601.3	235.7	353.6	471.4	589.3	40636	21.5	104.7	1437	34
LAVC14310	261.3	392.0	522.7	653.4	256.1	384.2	512.2	640.3	39140	21.5	104.7	1449	34
LAVC14312	276.3	414.5	552.7	690.9	270.8	406.2	541.6	677.1	37764	21.5	104.7	1474	34
LAVC14408	277.5	416.3	555.1	693.9	272.0	408.0	544.0	680.0	37796	28.6	139.8	1550	34
LAVC14410	294.6	441.9	589.2	736.6	288.7	433.1	577.4	721.9	36124	28.6	139.8	1566	34
LAVC14412	305.0	457.5	610.0	762.5	298.9	448.4	597.8	747.3	34640	28.6	139.8	1599	34
LAVC15308	300.6	430.9	601.3	751.6	294.6	441.9	589.3	736.6	25998	26.7	130.4	2020	34
LAVC15310	326.7	490.1	653.4	816.8	320.2	480.3	640.3	800.5	28247	26.7	130.4	2035	34
LAVC15312	345.5	518.2	690.9	863.6	338.6	507.8	677.1	846.3	29861	26.7	130.4	2066	34
LAVC15408	346.9	520.4	693.9	867.4	340.0	510.0	680.0	850.1	30005	35.6	173.9	2160	34
LAVC15410	368.3	552.4	736.6	920.7	360.9	541.4	721.9	902.3	31850	35.6	173.9	2181	34
LAVC15412	381.3	571.9	762.5	953.2	373.6	560.5	747.3	934.1	32974	35.6	173.9	2222	34
LEVC16308	360.7	541.1	721.5	901.9	353.5	530.3	707.1	883.9	60954	59.7	291.5	2554	34
LEVC16310	392.1	588.1	784.1	980.1	384.2	576.3	768.4	960.5	57710	59.7	291.5	2573	34
LEVC16312	414.5	621.8	829.1	1036.4	406.2	609.4	812.5	1015.7	56646	59.7	291.5	2610	34
LEVC16408	416.3	624.5	832.7	1040.8	408.0	612.0	816.0	1020.0	56694	79.6	388.7	2784	34
LEVC16410	441.9	662.9	883.9	1104.8	433.1	649.6	866.2	1082.7	54186	79.6	388.7	2808	34
LEVC16412	457.5	686.3	915.0	1143.8	448.4	672.6	896.7	1120.9	51960	79.6	388.7	2858	34

NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser.

Multiply R-22 rating by 0.95 for R-134a.

Summer charge based on 25% of condenser volume with 86°F liquid. Multiply by 1.14 for R-22.

Winter charge based on 90% of condenser volume with -20°F liquid. Multiply by 1.10 for R-22.

LAVC/LEVC CONDENSERS 1-1/2 HP, 850 RPM MOTORS

PERFORMANCE DATA TWO FANS WIDE

LAVC / LEVC MODEL	TOTAL HEAT OF REJECTION (MBH)								AIR FLOW CFM	CONDENSER CHARGE R-404A lbs		APP NET WEIGHT lbs	AVAIL-ABLE CIRCUITS
	R-22				R-404A, R-507					S	W		
	TEMPERATURE DIFFERENCE				TEMPERATURE DIFFERENCE								
	10°F	15°F	20°F	25°F	10°F	15°F	20°F	25°F					
LAVC222 08	184.7	277.1	369.4	461.8	181.0	271.6	362.0	452.6	43868	14.6	71.1	1311	34
LAVC222 10	205.7	308.6	411.5	514.4	201.6	302.4	403.3	504.1	42728	14.6	71.1	1320	34
LAVC222 12	222.5	333.8	445.0	556.3	218.1	327.1	436.1	545.2	41636	14.6	71.1	1336	34
LAVC223 08	240.5	360.8	481.0	601.3	235.7	353.6	471.4	589.3	40636	21.6	106.6	1425	68
LAVC223 10	261.3	392.0	522.7	653.4	256.1	384.2	512.2	640.3	39140	21.6	106.6	1437	68
LAVC223 12	276.3	414.5	552.7	690.9	270.8	406.2	541.6	677.1	37764	21.6	106.6	1462	68
LAVC224 08	277.5	416.3	555.1	693.9	272.0	408.0	544.0	680.0	37796	29.1	142.2	1539	68
LAVC224 10	294.6	441.9	589.2	736.6	288.7	433.1	577.4	721.9	36124	29.1	142.2	1555	68
LAVC224 12	305.0	457.5	610.0	762.5	298.9	448.4	597.8	747.3	34640	29.1	142.2	1588	68
LAVC232 10	308.6	462.9	617.2	771.5	302.4	453.6	604.9	756.1	64092	21.6	105.4	1875	68
LAVC232 12	333.7	500.6	667.5	834.4	327.1	490.6	654.2	817.7	62454	21.6	105.4	1912	68
LAVC233 08	360.7	541.1	721.5	901.9	353.5	530.3	707.1	883.9	60954	32.4	158.0	2044	68
LAVC233 10	392.1	588.1	784.1	980.1	384.2	576.3	768.4	960.5	58710	32.4	158.0	2063	68
LAVC233 12	414.5	621.8	829.1	1036.4	406.2	609.4	812.5	1015.7	56646	32.4	158.0	2100	68
LAVC234 08	416.3	624.5	832.7	1040.8	408.0	612.0	816.0	1020.0	56694	43.2	210.7	2214	68
LAVC234 10	441.9	662.9	883.9	1104.8	433.1	649.6	866.2	1082.7	54186	43.2	210.7	2238	68
LAVC234 12	457.5	686.3	915.0	1143.8	448.4	672.6	896.7	1120.9	51960	43.2	210.7	2287	68
LAVC243 08	481.0	721.6	962.0	1202.6	471.4	707.2	942.8	1178.6	81272	42.9	209.4	2526	68
LAVC243 10	522.7	784.1	1045.4	1306.8	512.3	768.4	1024.5	1280.7	78280	42.9	209.4	2651	68
LAVC243 12	552.7	829.1	1105.5	1381.8	541.7	812.5	1083.4	1354.2	75528	42.9	209.4	2700	68
LAVC244 08	555.1	832.7	1110.2	1387.8	544.0	816.0	1088.0	1360.0	75592	57.2	279.3	2851	68
LAVC244 10	589.3	883.9	1178.5	1473.1	577.5	866.2	1154.9	1443.6	72248	57.2	279.3	2884	68
LAVC244 12	610.0	915.0	1220.0	1525.0	597.8	896.7	1195.6	1494.5	69280	57.2	279.3	2950	68
LAVC253 08	601.3	901.9	1202.5	1503.2	589.2	883.9	1178.5	1473.1	101590	53.5	280.8	3725	68
LAVC253 10	653.4	980.1	1306.8	1633.5	640.3	960.5	1280.7	1600.8	97850	53.5	280.8	3755	68
LAVC253 12	690.9	1036.4	1381.8	1727.3	677.1	1015.7	1354.2	1692.8	94410	53.5	280.8	3817	68
LAVC254 08	693.9	1040.8	1387.8	1734.7	680.8	1020.0	1360.0	1700.0	94490	71.3	347.8	4005	68
LAVC254 10	736.5	1104.8	1473.1	1841.4	721.8	1082.7	1443.6	1804.6	90310	71.3	347.8	4046	68
LAVC254 12	762.5	1143.8	1525.0	1906.3	747.3	1120.9	1494.5	1868.2	86600	71.3	347.8	4129	68
LEVC263 08	721.5	1082.3	1443.0	1803.8	707.0	1060.7	1414.1	1767.7	121908	119.5	583.0	4759	68
LEVC263 10	784.1	1176.1	1568.2	1960.2	768.4	1152.6	1536.8	1921.0	117420	119.5	583.0	4796	68
LEVC263 12	829.1	1243.6	1658.2	2072.7	812.5	1218.7	1625.0	2031.2	113292	119.5	583.0	4870	68
LEVC264 08	832.7	1249.0	1665.3	2081.6	816.0	1224.0	1632.0	2040.0	113388	159.3	777.3	5218	68
LEVC264 10	883.9	1325.8	1767.7	2209.7	866.2	1299.3	1732.3	2165.5	108372	159.3	777.3	5268	68
LEVC264 12	915.0	1372.5	1830.0	2287.6	896.7	1345.1	1793.4	2241.8	103920	159.3	777.3	5366	68

NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser.
 Multiply R-22 rating by 0.95 for R-134a.
 Summer charge based on 25% of condenser volume with 86°F liquid. Multiply by 1.14 for R-22.
 Winter charge based on 90% of condenser volume with -20°F liquid. Multiply by 1.10 for R-22.

ELECTRICAL DATA ONE FAN WIDE

	FAN MOTOR TOTAL FULL LOAD AMPS		
	208/230/3/60	460/3/60	575/3/60
LAVC-11***	6.0	3.0	2.5
LAVC-12***	12.0	6.0	5.0
LAVC-13***	18.0	9.0	7.5
LAVC-14***	24.0	12.0	10.0
LAVC-15***	30.0	15.0	12.5
LEVC-16***	36.0	18.0	15.0

ELECTRICAL DATA TWO FANS WIDE

	FAN MOTOR TOTAL FULL LOAD AMPS		
	208/230/3/60	460/3/60	575/3/60
LAVC-22***	24.0	12.0	10.0
LAVC-23***	36.0	18.0	15.0
LAVC-24***	48.0	24.0	20.0
LAVC-25***	60.0	30.0	25.0
LEVC-26***	72.0	36.0	30.0

***Rows & FPI

***Rows & FPI

- (1) Minimum Unit Circuit Amps = 1.25 x FLA of One Motor + FLA of All Remaining Motors.
- (2) Maximum Unit Overload Protection = 2.25 x FLA of One Motor + FLA of All Remaining Motors.

LAVF/LEVF CONDENSERS 1-1/2 HP, 1140 RPM MOTORS

PERFORMANCE DATA ONE FAN WIDE

LAVF / LEVF MODEL	TOTAL HEAT OF REJECTION (MBH)								AIR FLOW CFM	CONDENSER CHARGE R-404A		APP NET WEIGHT lbs	AVAIL- ABLE CIRCUITS
	R-22				R-404A, R-507					lbs			
	TEMPERATURE DIFFERENCE				TEMPERATURE DIFFERENCE					S	W		
	10°F	15°F	20°F	25°F	10°F	15°F	20°F	25°F					
LAVF 112 08	47.5	71.3	95.1	118.9	46.6	69.9	93.2	116.5	11649	3.8	18.4	437	17
LAVF 112 10	53.4	80.1	106.8	135.5	52.3	78.5	104.7	130.8	11541	3.8	18.4	439	17
LAVF 112 12	58.3	87.4	116.5	145.7	57.1	85.7	114.2	142.8	11430	3.8	18.4	444	17
LAVF 113 08	63.8	95.7	127.6	159.5	62.5	93.8	125.0	156.3	11323	5.7	27.6	466	17
LAVF 113 10	70.3	105.5	140.7	175.9	68.9	103.4	137.9	172.4	11147	5.7	27.6	469	17
LAVF 113 12	75.5	113.2	150.9	188.8	74.0	110.9	147.9	184.8	10969	5.7	27.6	478	17
LAVF 114 08	76.0	114.0	152.1	190.1	74.5	111.7	149.1	186.3	10974	7.5	36.8	495	17
LAVF 114 10	82.3	123.4	164.5	205.6	80.6	120.9	161.2	201.5	10730	7.5	36.8	499	17
LAVF 114 12	86.7	130.0	173.3	216.6	84.9	127.4	169.8	212.3	10486	7.5	36.8	508	17
LAVF 122 08	95.1	142.6	190.2	237.7	93.2	139.7	186.4	232.9	23298	7.3	35.5	718	17
LAVF 122 10	106.8	160.2	213.7	267.1	104.7	157.0	209.4	261.8	23082	7.3	35.5	721	17
LAVF 122 12	116.5	174.8	233.1	291.3	114.2	171.3	228.4	285.5	22860	7.3	35.5	729	17
LAVF 123 08	127.6	191.4	255.2	319.1	125.0	187.6	250.1	312.7	22646	10.9	53.3	773	34
LAVF 123 10	140.7	211.1	281.4	351.8	137.9	206.9	275.8	344.8	22294	10.9	53.3	779	34
LAVF 123 12	150.9	226.3	301.8	377.2	147.8	221.8	295.8	369.7	21938	10.9	53.3	792	34
LAVF 124 08	152.1	228.1	304.1	380.2	149.0	223.5	298.0	372.6	21948	14.6	71.1	830	34
LAVF 124 10	164.5	246.7	329.0	411.2	161.2	241.8	322.4	403.0	21460	14.6	71.1	838	34
LAVF 124 12	173.3	259.9	346.5	433.2	169.8	254.7	339.6	424.5	20972	14.6	71.1	855	34
LAVF 132 10	160.3	240.4	320.5	400.6	157.1	235.6	314.1	392.6	34623	10.8	52.7	1041	34
LAVF 132 12	174.8	262.2	349.6	437.0	171.3	257.0	342.6	428.3	34290	10.8	52.7	1060	34
LAVF 133 08	191.4	287.1	382.9	478.6	187.6	281.4	375.2	469.0	33969	16.2	79.0	1126	34
LAVF 133 10	211.1	316.6	422.1	527.7	206.8	310.3	413.7	517.1	33441	16.2	79.0	1135	34
LAVF 133 12	226.3	339.5	452.6	565.8	221.8	332.7	443.5	554.5	32907	16.2	79.0	1153	34
LAVF 134 08	228.1	342.1	456.2	570.2	223.5	335.3	447.1	558.8	32922	21.6	105.4	1210	34
LAVF 134 10	246.7	370.1	493.5	616.9	241.8	362.7	483.6	604.6	32190	21.6	105.4	1223	34
LAVF 134 12	259.9	389.9	519.8	649.8	254.7	382.1	509.4	636.8	31458	21.6	105.4	1247	34
LAVF 143 08	255.3	382.9	510.5	638.1	250.2	375.2	500.3	625.3	45292	21.5	104.7	1437	34
LAVF 143 10	281.4	422.1	565.8	703.6	275.8	413.7	551.5	689.5	44588	21.5	104.7	1449	34
LAVF 143 12	301.7	452.6	603.5	754.4	295.7	443.5	591.4	739.3	43876	21.5	104.7	1474	34
LAVF 144 08	304.1	456.2	608.3	760.3	298.1	447.1	596.1	745.1	43896	28.6	139.8	1550	34
LAVF 144 10	329.0	493.5	658.0	822.5	322.4	483.6	644.8	806.1	42920	28.6	139.8	1566	34
LAVF 144 12	346.5	519.8	693.1	866.4	339.6	509.4	679.2	849.1	41944	28.6	139.8	1599	34
LAVF 153 08	319.1	478.6	638.1	797.6	312.7	469.0	625.3	781.6	56615	26.7	130.4	2020	34
LAVF 153 10	351.8	527.7	703.6	879.5	344.8	517.1	689.5	861.9	55735	26.7	130.4	2035	34
LAVF 153 12	377.2	565.8	754.4	943.0	369.7	554.5	739.3	924.1	54845	26.7	130.4	2066	34
LAVF 154 08	380.1	570.2	760.3	950.4	372.5	558.8	745.1	931.4	54870	35.6	173.9	2160	34
LAVF 154 10	411.3	616.9	822.5	1028.1	403.0	604.6	806.1	1007.5	53650	35.6	173.9	2181	34
LAVF 154 12	433.2	649.8	866.4	1083.0	424.5	636.8	849.1	1061.3	52430	35.6	173.9	2222	34
LEVF 163 08	382.9	574.3	765.7	957.2	375.2	562.8	750.4	938.1	67938	59.7	291.5	2554	34
LEVF 163 10	422.1	633.2	844.3	1055.3	413.7	620.5	827.4	1034.2	66882	59.7	291.5	2573	34
LEVF 163 12	452.6	678.9	905.3	1131.6	433.5	665.3	887.2	1109.0	65814	59.7	291.5	2610	34
LEVF 164 08	456.2	684.3	912.4	1140.5	447.1	670.6	894.2	1117.7	65844	79.6	388.7	2784	34
LEVF 164 10	493.5	740.2	987.0	1233.7	483.6	725.4	967.3	1209.0	64380	79.6	388.7	2808	34
LEVF 164 12	519.8	779.7	1039.6	1299.5	509.4	764.1	1018.8	1273.5	62916	79.6	388.7	2858	34

NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser.

Multiply R-22 rating by 0.95 for R-134a.

Summer charge based on 25% of condenser volume with 86°F liquid. Multiply by 1.14 for R-22.

Winter charge based on 90% of condenser volume with -20°F liquid. Multiply by 1.10 for R-22.

LAVF/LEV F CONDENSERS 1-1/2 HP, 1140 RPM MOTORS

PERFORMANCE DATA TWO FANS WIDE

LAVF / LEV F MODEL	TOTAL HEAT OF REJECTION (MBH)								AIR FLOW CFM	CONDENSER CHARGE R-404A		APP NET WEIGHT lbs	AVAIL- ABLE CIRCUITS
	R-22				R-404A, R-507					lbs			
	TEMPERATURE DIFFERENCE				TEMPERATURE DIFFERENCE					S	W		
	10°F	15°F	20°F	25°F	10°F	15°F	20°F	25°F					
LAVF222 08	190.2	285.3	380.3	475.4	186.4	279.6	372.7	465.9	46556	14.6	71.1	1311	34
LAVF222 10	213.7	320.5	427.3	534.2	209.4	314.1	418.8	523.5	45824	14.6	71.1	1320	34
LAVF222 12	233.1	349.6	466.1	582.7	228.4	342.6	456.8	571.0	45096	14.6	71.1	1336	34
LAVF223 08	255.3	382.9	510.5	638.1	250.2	375.2	500.3	625.3	44412	21.6	106.6	1425	68
LAVF223 10	281.4	422.1	562.8	703.6	275.8	413.7	551.5	689.5	43364	21.6	106.6	1437	68
LAVF223 12	301.7	452.6	603.5	754.4	295.7	443.5	591.4	739.3	42344	21.6	106.6	1462	68
LAVF224 08	304.1	456.2	608.3	760.3	298.1	447.1	596.1	745.1	42376	29.1	142.2	1539	68
LAVF224 10	329.0	493.5	658.0	822.5	322.4	483.6	644.8	806.1	41056	29.1	142.2	1555	68
LAVF224 12	346.5	519.8	693.1	866.4	339.6	509.4	679.2	849.1	39808	29.1	142.2	1588	68
LAVF232 10	320.5	480.7	641.0	801.2	314.1	471.1	628.2	785.2	68736	21.6	105.4	1875	68
LAVF232 12	349.6	524.4	699.2	874.0	342.6	513.9	685.2	856.5	67644	21.6	105.4	1912	68
LAVF233 08	382.9	574.3	765.7	957.2	375.2	562.8	750.4	938.1	66618	32.4	158.0	2044	68
LAVF233 10	442.1	633.2	844.3	1055.3	413.7	620.5	827.4	1034.2	65046	32.4	158.0	2063	68
LAVF233 12	452.6	678.9	905.3	1131.6	443.5	665.3	887.2	1109.0	63516	32.4	158.0	2100	68
LAVF234 08	456.2	684.3	912.4	1140.5	447.1	670.6	894.2	1117.7	63564	43.2	210.7	2214	68
LAVF234 10	493.5	740.2	987.0	1233.7	483.6	725.4	967.3	1209.0	61584	43.2	210.7	2238	68
LAVF234 12	519.8	779.7	1039.6	1299.5	509.4	764.1	1018.8	1273.5	59712	43.2	210.7	2287	68
LAVF243 08	510.5	765.7	1021.0	1276.2	500.3	750.4	1000.6	1250.7	88824	42.9	209.4	2526	68
LAVF243 10	562.9	844.3	1125.7	1407.1	551.6	827.4	1103.2	1379.0	86728	42.9	209.4	2651	68
LAVF243 12	603.5	905.3	1207.0	1508.8	591.5	887.2	1182.9	1478.6	84688	42.9	209.4	2700	68
LAVF244 08	608.3	912.4	1216.5	1520.6	596.1	894.2	1192.2	1490.2	84752	57.2	279.3	2851	68
LAVF244 10	658.0	987.0	1316.0	1644.9	644.8	967.3	1289.7	1612.0	82112	57.2	279.3	2884	68
LAVF244 12	693.1	1039.6	1386.2	1732.7	679.2	1018.8	1358.5	1698.0	79616	57.2	279.3	2950	68
LAVF253 08	638.1	957.2	1276.2	1595.3	625.4	938.1	1250.7	1563.4	111030	53.5	280.8	3725	68
LAVF253 10	703.5	1055.3	1407.1	1758.9	689.5	1034.2	1379.0	1723.7	108410	53.5	280.8	3755	68
LAVF253 12	754.4	1131.6	1508.8	1886.0	739.3	1109.0	1478.6	1848.3	105860	53.5	280.8	3817	68
LAVF254 08	760.3	1140.5	1520.6	1900.8	745.1	1117.7	1490.2	1862.8	105940	71.3	347.8	4005	68
LAVF254 10	822.5	1233.7	1644.9	2056.2	806.0	1209.0	1612.0	2015.1	102640	71.3	347.8	4046	68
LAVF254 12	866.3	1299.5	1732.7	2165.9	849.0	1273.5	1698.0	2122.6	99520	71.3	347.8	4129	68
LEV F263 08	765.7	1148.6	1531.5	1914.3	750.4	1125.6	1500.9	1876.0	133236	119.5	583.0	4759	68
LEV F263 10	884.3	1266.4	1688.5	2110.7	827.4	1241.1	1654.7	2068.5	130092	119.5	583.0	4796	68
LEV F263 12	905.3	1357.9	1810.5	2263.1	887.2	1330.7	1774.3	2217.8	127032	119.5	583.0	4870	68
LEV F264 08	912.4	1368.6	1824.8	2281.0	894.2	1341.2	1788.3	2235.4	127128	159.3	777.3	5218	68
LEV F264 10	986.9	1480.4	1973.9	2467.4	967.2	1450.8	1934.4	2418.1	123168	159.3	777.3	5268	68
LEV F264 12	1039.6	1559.4	2079.3	2599.1	1018.9	1528.2	2037.7	2547.1	119424	159.3	777.3	5366	68

NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser.

Multiply R-22 rating by 0.95 for R-134a.

Summer charge based on 25% of condenser volume with 86°F liquid. Multiply by 1.14 for R-22.

Winter charge based on 90% of condenser volume with -20°F liquid. Multiply by 1.10 for R-22.

ELECTRICAL DATA ONE FAN WIDE

	FAN MOTOR TOTAL FULL LOAD AMPS		
	208/230/3/60	460/3/60	575/3/60
LAVF-11***	7.0	3.5	2.4
LAVF-12***	14.0	7.0	4.8
LAVF-13***	21.0	10.5	7.2
LAVF-14***	28.0	14.0	9.6
LAVF-15***	35.0	17.5	12.0
LEV F-16***	42.0	21.0	14.4

***Rows & FPI

(1) Minimum Unit Circuit Amps = 1.25 x FLA of One Motor + FLA of All Remaining Motors.

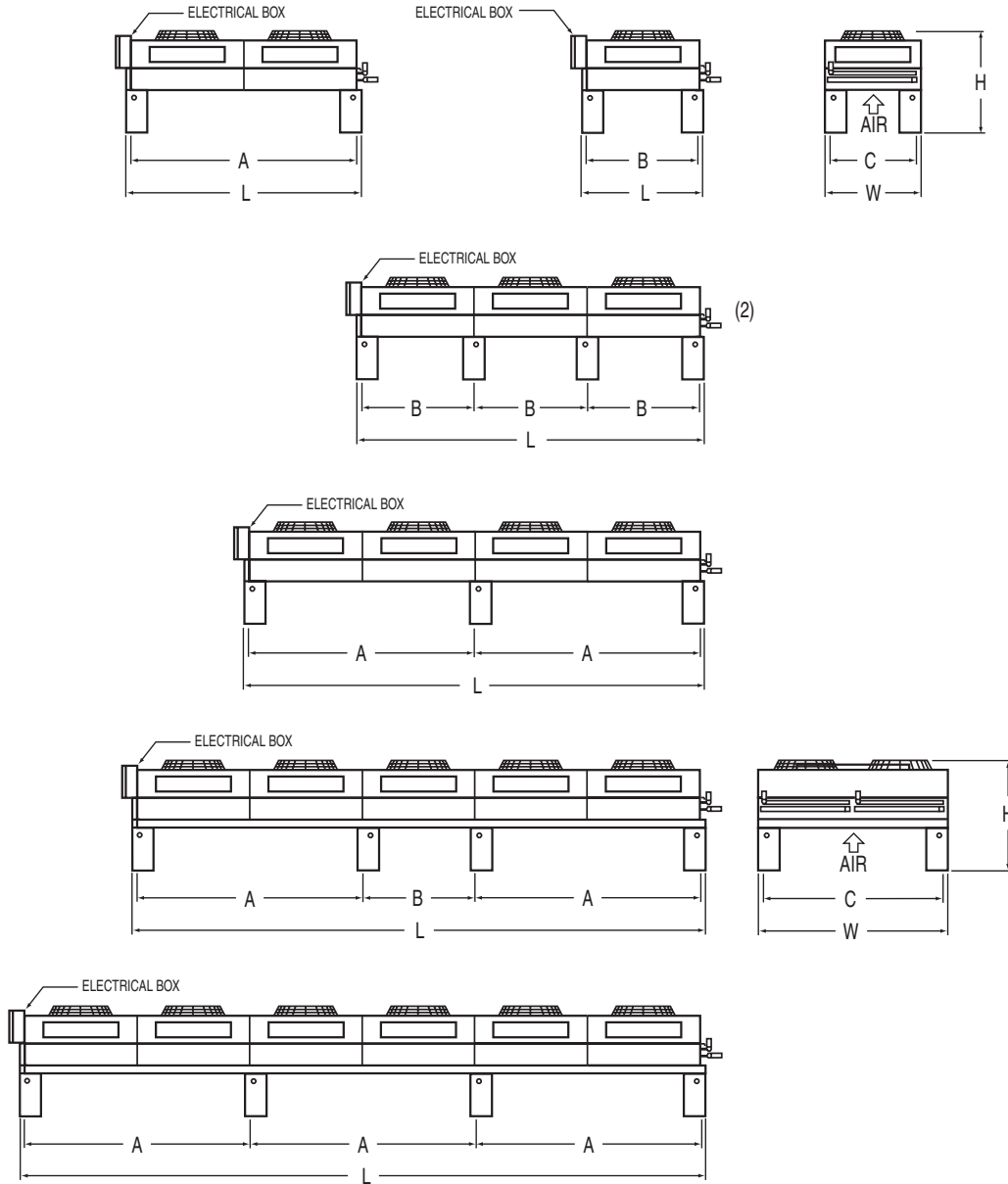
(2) Maximum Unit Overload Protection = 2.25 x FLA of One Motor + FLA of All Remaining Motors.

ELECTRICAL DATA TWO FANS WIDE

	FAN MOTOR TOTAL FULL LOAD AMPS		
	208/230/3/60	460/3/60	575/3/60
LAVF-22***	28.0	14.0	9.6
LAVF-23***	42.0	21.0	14.4
LAVF-24***	56.0	28.0	19.2
LAVF-25***	70.0	35.0	24.0
LEV F-26***	84.0	42.0	28.8

***Rows & FPI

LEVITOR AIR CONDENSER



DIMENSIONAL DATA ONE FAN WIDE

MODEL	L	W	H	A	B	C	CONNECTIONS OD IN ⁽¹⁾	
							INLET	OUTLET
LAV*-11***	58	45-1/4	54	-	54	41-1/4	1-3/8	1-3/8
LAV*-12***	112	45-1/4	54	108	-	41-1/4	1-5/8	1-5/8
LAV*-13***	166	45-1/4	54	108	54	41-1/4	2-1/8	2-1/8
LAV*-14***	220	45-1/4	54	108	-	41-1/4	2-1/8	2-1/8
LAV*-15***	274	45-1/4	58-1/2	108	54	41-1/4	2-1/8	2-1/8
LEV*-16***	328	45-1/4	58-1/2	108	-	41-1/4	2-5/8	2-5/8

DIMENSIONAL DATA TWO FANS WIDE

MODEL	L	W	H	A	B	C	CONNECTIONS OD IN ⁽¹⁾	
							INLET	OUTLET
LAV*-22***	112	90-1/2	54	108	-	86-1/2	(2)1-5/8	(2)1-5/8
LAV*-23***	166	90-1/2	54	108	54	86-1/2	(2)2-1/8	(2)2-1/8
LAV*-24***	220	90-1/2	54	108	-	86-1/2	(2)2-1/8	(2)2-1/8
LAV*-25***	274	90-1/2	58-1/2	108	54	86-1/2	(2)2-1/8	(2)2-1/8
LEV*-26***	328	90-1/2	58-1/2	108	-	86-1/2	(2)2-5/8	(2)2-5/8

***Rows & FPI.

*Indicates fan/motor combination

Includes standard 22" legs.

(1) Connections are approximate. Exact size is determined by computerized circuiting program.

(2) 1 X 3 has four legs; 2 x 3 has eight legs.

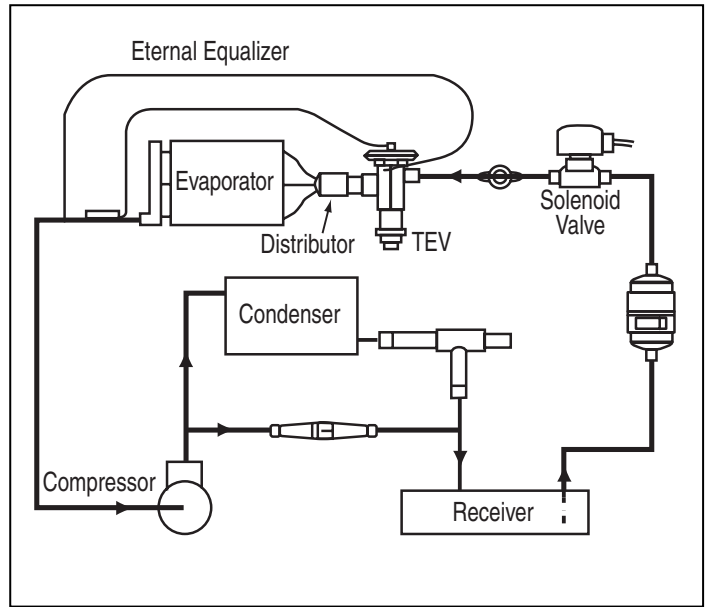
LOW AMBIENT CONTROLS/HEAD PRESSURE CONTROL SYSTEM

Piping Schematic For Winter Control

Head Pressure Control for systems with air-cooled condenser is accomplished with two pressure regulating valves designed specifically for this type of application. When low ambient conditions are encountered during winter operation on air-cooled systems with a resultant drop in condensing pressure, the Head Pressure control's purpose is to hold back enough of the condenser liquid refrigerant so that some of the condenser surface is rendered inactive. This reduction of active condensing surface results in a rise in the condensing pressure and sufficient liquid line pressure for normal system operation.

Fan Cycling Controls

Factory installed and tested fan cycling control panels (optional, see page 20 and 21 for details).



FAN CYCLING SEQUENCE

NOTE:

Data given in table "A" is based on zero wind velocity. If condensers are subjected to wind effect, these multipliers will increase.

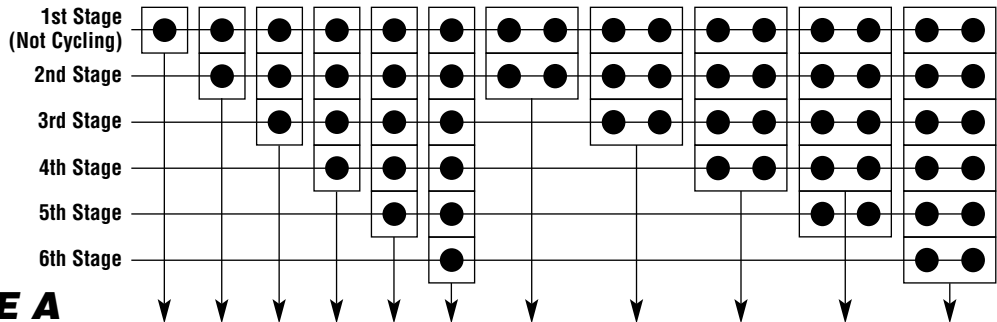


TABLE A

CAPACITY MULTIPLIER WITH CONTINUOUS RUNNING FANS ONLY	1.00	0.55	0.40	0.33	0.28	0.24	0.55	0.40	0.33	0.28	0.24

LAVB CONDENSERS 1/2 HP, 1140 RPM MOTORS

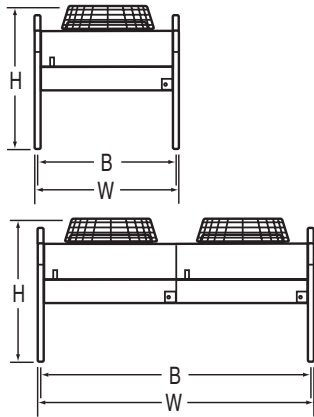
PERFORMANCE DATA

TOTAL HEAT OF REJECTION CAPACITY (MBH)												
LAVB MODEL	RATING BASED ON 85°-115°F ENTERING AIR TEMPERATURE TD IS SATURATED CONDENSING TEMP. MINUS ENTERING AIR TEMP.								AIR FLOW CFM	WINTER FLOOD CHARGE LBS.	WEIGHT INCL. FLOOD CHARGE LBS.	AVAILABLE CIRCUITS
	#OF FANS	ROWS DEEP	R-22 TD			R-404A, R-507A TD						
			10°F	15°F	20°F	10°F	15°F	20°F				
LAVB112 10	1	2	30.2	45.4	60.5	29.4	44.2	58.9	6750	10	181	15
LAVB113 10	1	3	39.4	59.1	78.9	38.4	57.6	76.7	6400	14	185	15
LAVB114 10	1	4	45.4	68.2	90.9	44.2	66.4	88.4	6000	19	200	15
LAVB122 10	2	2	60.5	90.7	121.0	58.9	83.3	117.8	13500	19	352	15
LAVB123 10	2	3	78.9	118.3	157.8	76.7	115.1	153.5	12800	29	372	15
LAVB124 10	2	4	90.9	136.3	181.7	88.4	132.6	176.8	12000	39	400	15
LAVB133 10	3	3	118.3	177.8	236.7	115.1	172.7	230.2	19200	43	559	15
LAVB134 10	3	4	136.3	204.5	272.6	132.6	199.0	265.2	18000	58	600	15
LAVB143 10	4	3	157.8	236.7	315.6	153.5	230.2	307.1	25600	64	840	30
LAVB144 10	4	4	181.7	272.6	363.4	176.8	265.2	353.6	24000	86	900	30
LAVB153 10	5	5	197.2	295.9	394.5	191.9	287.8	383.3	32000	62	861	30
LAVB154 10	5	4	227.1	340.7	454.3	221.0	331.5	441.9	30000	97	950	30
LAVB163 10	6	3	236.7	355.0	473.3	230.2	345.5	460.5	38400	86	1070	30
LAVB164 10	6	4	272.6	408.8	545.1	265.2	397.8	530.4	36000	116	1150	30
LAVB173 10	7	3	276.1	414.2	552.2	268.6	403.0	537.3	44800	107	1349	30
LAVB174 10	7	4	318.0	477.0	636.0	309.4	464.1	618.8	42000	144	1450	30
TWO FANS WIDE												
LAVB222 10	4	2	121.0	181.5	242.0	117.8	176.5	235.4	27000	38	654	30
LAVB223 10	4	4	157.8	236.7	315.6	153.5	230.2	307.1	25600	64	865	30
LAVB224 10	4	4	181.7	272.6	363.4	176.8	265.2	353.6	24000	86	925	30
LAVB233 10	6	3	236.7	355.0	473.3	230.2	345.5	460.6	38400	86	1118	30
LAVB234 10	6	4	272.6	408.8	545.1	265.2	397.8	530.4	36000	116	1225	30
LAVB243 10	8	3	315.6	473.3	631.1	307.1	460.6	614.1	51200	126	1705	60
LAVB244 10	8	4	363.4	545.1	726.8	353.6	530.4	707.1	48000	172	1825	60
LAVB253 10	10	3	394.5	591.7	788.9	383.8	575.7	767.6	64000	124	1722	60
LAVB254 10	10	4	454.3	681.4	908.5	441.9	663.0	884.0	60000	194	1925	60
LAVB263 10	12	3	473.3	710.0	946.7	460.6	690.8	921.2	76800	172	2095	60
LAVB264 10	12	4	545.1	817.7	1090.2	530.4	795.6	1060.8	72000	232	2225	60
LAVB273 10	14	3	552.2	828.3	1104.5	537.3	806.0	1074.7	89600	214	2725	60
LAVB274 10	14	4	636.0	953.9	1271.9	618.8	928.2	1237.5	84000	288	2925	60

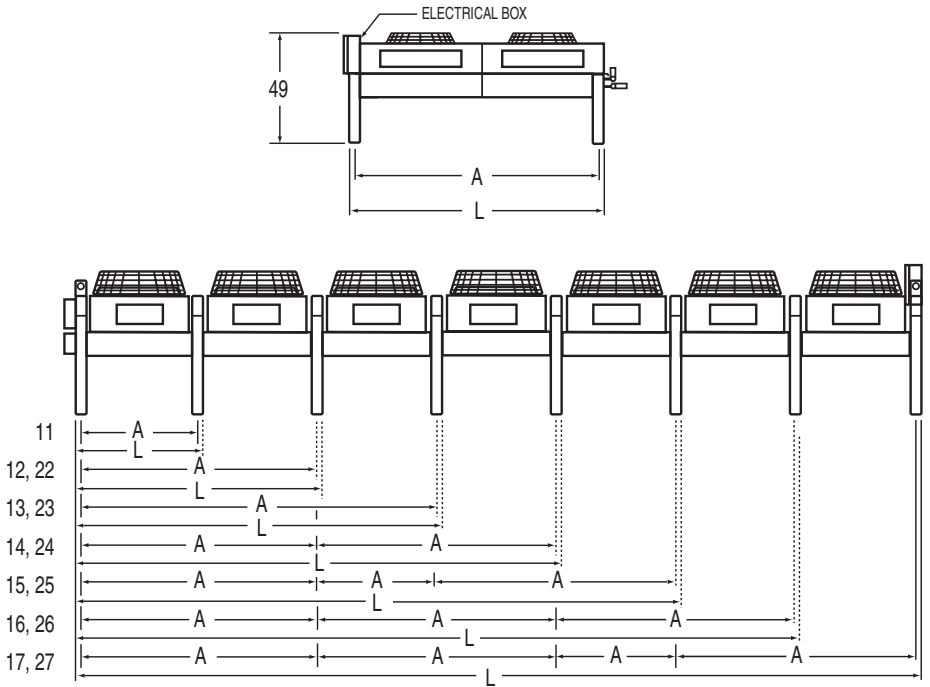
NOTE: Ratings are based on 85°F-115°F entering air temperature. The temperature difference is between the saturated condensing temp. and the entering air temp. to the condenser. Multiply R-22 rating by 0.95 for R-134a.

LEVITOR AIR COOLED CONDENSER

HEADER END VIEW



SIDE VIEWS



DIMENSIONAL DATA ONE FAN WIDE

MODEL	L	W	H	A	B
LAVB-11***	39	45-3/4	41-1/4	36	43-3/4
LAVB-12***	75	45-3/4	41-1/4	72	43-3/4
LAVB-13***	111	45-3/4	41-1/4	108	43-3/4
LAVB-14***	147	45-3/4	41-1/4	72/72	43-3/4
LAVB-15***	183	45-3/4	41-1/4	72/36/72	43-3/4
LAVB-16***	219	45-3/4	41-1/4	72/72/72	43-3/4
LAVB-17***	262	45-3/4	41-1/4	72/72/36/72	43-3/4

ELECTRICAL DATA ONE FAN WIDE

FAN MOTOR TOTAL RATED FULL LOAD AMPS				CONNECTIONS OD IN. ⁽¹⁾	
208/230/1	208/230/3	460-3	575-3	INLET	OUTLET
4.2	2.8	1.3	0.76	1-1/8	1-1/8
8.4	5.6	2.6	1.52	1-3/8	1-1/8
12.6	8.4	3.9	2.28	1-3/8	1-3/8
16.8	11.2	5.2	3.04	1-5/8	1-5/8
21.0	14.0	6.5	3.8	2-1/8	2-1/8
25.2	16.8	7.8	4.56	2-1/8	2-1/8
29.4	19.6	9.1	5.32	2-5/8	2-5/8

TWO FANS WIDE

LAVB-22***	75	87-5/8	41-1/4	72	87-5/8
LAVB-23***	111	87-5/8	41-1/4	108	87-5/8
LAVB-24***	147	87-5/8	41-1/4	72/72	87-5/8
LAVB-25***	183	87-5/8	41-1/4	72/36/72	87-5/8
LAVB-26***	219	87-5/8	41-1/4	72/72/72	87-5/8
LAVB-27***	255	87-5/8	41-1/4	72/72/36/72	87-5/8

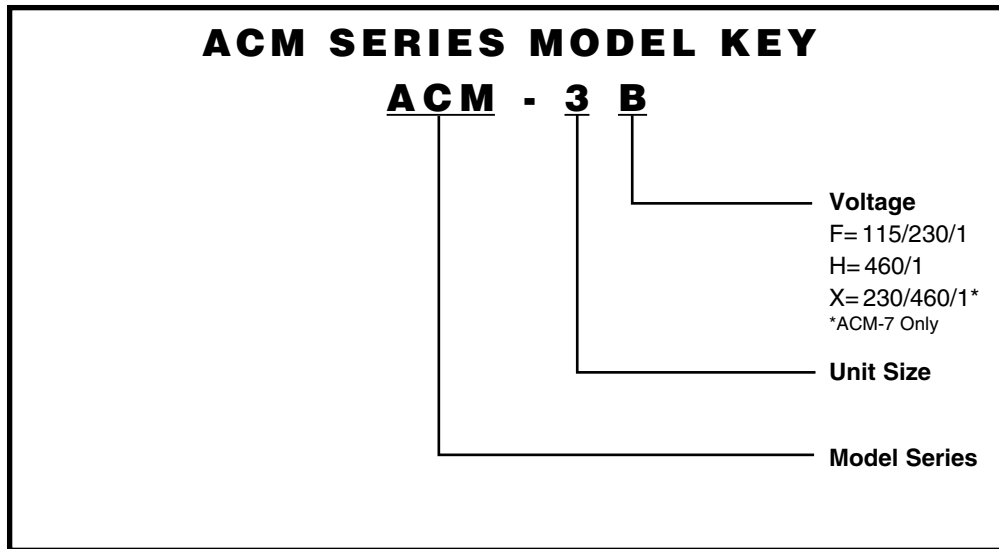
16.8	11.2	5.2	3.04	(2)1-3/8	(2)1-3/8
25.2	16.8	7.8	4.56	(2)1-3/8	(2)1-3/8
33.6	22.4	10.4	6.08	(2)1-5/8	(2)1-5/8
42.0	28.0	13.0	7.6	(2)2-1/8	(2)2-1/8
50.4	33.6	15.6	9.12	(2)2-1/8	(2)2-1/8
58.8	39.2	18.2	10.64	(2)2-5/8	(2)2-5/8

Includes standard 18" legs.

(1) Connections are approximate. Exact size is determined by computerized circuiting program.

ACM SERIES AIR COOLED CONDENSER

ACM is a small, economical remote air-cooled condenser designed to be versatile and easy to maintain. The unit has the ability to be either in a vertical or horizontal air flow position. The ACM Series does not incorporate the Levitor coil design. The corrosion-resistant materials along with sturdy construction allow the unit to perform under the most severe operating conditions.



SPECIFICATIONS

MODEL	30°TD CAPACITY (BTUH) THR	FAN QTY	FAN DIAMETER (IN)	MOTOR (HP)	AIR FLOW (CFM)	FPI	INLET HDR CONN (ODS)	OUTLET HDR CONN (ODS)
ACM-1	21,100	1	14	1/4	1460	10	5/8	5/8
ACM-2	30,200	1	20	1/4	2300	10	7/8	7/8
ACM-3	46,600	1	20	1/4	2100	10	7/8	7/8
ACM-4	54,400	1	20	1/3	3500	12	7/8	7/8
ACM-5	72,000	1	20	1/3	3200	10	1-1/8	1-1/8
ACM-7	99,000	1	24	3/4	5400	10	1-3/8	1-1/8

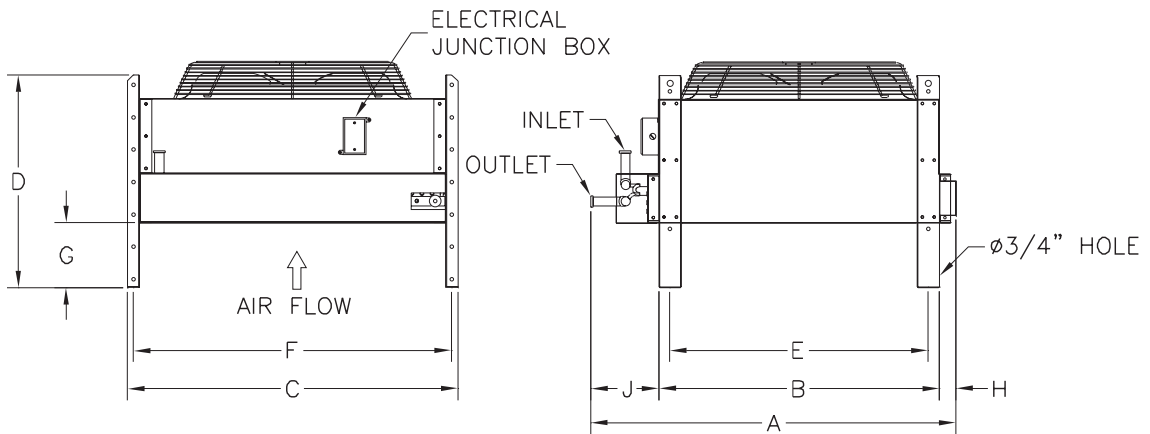
ELECTRICAL DATA

MODEL	MOTOR	115/60/1			208-230/60/1			460/60/1		
	HP	FLA	MCA	MOP	FLA	MCA	MOP	FLA	MCA	MOP
ACM-1	1/4	3.2	4.0	15	1.6	2.0	15	0.8	1.0	15
ACM-2	1/4	3.2	4.0	15	1.6	2.0	15	0.8	1.0	15
ACM-3	1/4	3.2	4.0	15	1.6	2.0	15	0.8	1.0	15
ACM-4	1/3	5.1	6.4	15	2.7	3.4	15	1.3	1.6	15
ACM-5	1/3	5.1	6.4	15	2.7	3.4	15	1.3	1.6	15
ACM-7	3/4	--	--	--	4.4	5.5	15	2.2	2.8	15

ACM SERIES AIR COOLED CONDENSER

DIMENSIONS

MODEL	A	B	C	D	E	F	G	H	J	INLET	OUTLET	WEIGHT
ACM-1	34	24	23-1/2	24-1/2	20-7/8	22	8	2	8	5/8	5/8	90
ACM-2	34	24	28-1/2	27-1/2	20-7/8	27	8	2	8	7/8	7/8	95
ACM-3	34	24	28-1/2	27-1/2	20-7/8	27	8	2	8	7/8	7/8	115
ACM-4	45	35	28-1/2	27-1/2	31-7/8	27	8	2	8	1-1/8	1-1/8	120
ACM-5	45	35	28-1/2	27-1/2	31-7/8	27	8	2	8	1-1/8	1-1/8	140
ACM-7	48	35	42-1/2	32	31-7/8	37-7/8	12	2	8	1-1/8	1-1/8	200



Condenser Charge (lbs)

MODEL	R-404A		R-22		R-134A	
	Summer	Winter	Summer	Winter	Summer	Winter
ACM-1	.076	3.52	0.92	3.90	0.93	3.92
ACM-2	1.01	4.65	1.21	5.15	1.22	5.18
ACM-3	2.01	9.26	2.41	10.27	2.44	10.33
ACM-4	1.45	6.67	1.74	7.39	1.76	7.43
ACM-5	2.85	13.14	3.42	14.57	3.46	14.64
ACM-7	3.51	16.17	4.21	17.93	4.26	18.03

CONDENSER CONTROL PANEL

RELAY BOARD* - PT B 1 2 K A 3 1 1 T

***Relay Board**
 If supplied with condenser – specify:
 Altech, Control, Cpc, Eci, Danfoss,
 Encore, Novar, Microtherm, other
 If supplied on rack: at rack

Controls
 NC – No controls
 PT – Pressure controls
 TF – Temperature controls
 TP – Temp & press control
 PV – Press control with variable speed
 TV – Temp control with variable speed
 VN – Variable speed with no controls

Fan/Motor Combination
 A – 850 RPM, 1HP, 30”
 B – 1140 RPM, 1/2 HP, 24”
 C – 850 RPM, 1-1/2 HP, 30”
 E – 570 RPM, 1/2 HP, 30”
 F – 1140 RPM, 1-1/2 HP, 30”

Ambient Air sensor for split (50% winter reduction)
 T – Sensor provided
 N – Sensor not required

Type of Application
 1 – Standard
 2 – 50% Winter reduction (split condenser)
 3 – 50/50 Split dual panel for 2 independent slabs
 4 – No control operation (terminal blocks only)

Fuses & Breakers
 1 – Individual fuses & contactors
 2 – Individual circuit breakers & contactors
 3 – Fuses & contactors per pair of fans
 4 – Terminal blocks only
 5 – Circuit breaker & contactor per pair of fans

Controls
 1 – Mechanical
 3 – Electronic
 4 – No Controls

Control Voltage
 A – 208/230V
 B – 115/1
 C – NO CONTROL VOLT
 D – 24V
 E – 208/230 No Transformer
 F – 115/1 No Transformer
 G – No Control Voltage No Transformer

Power Voltage
 A – 208/230/1/60
 K – 208/230/3/60
 M – 460/3/60
 P – 575/3/60
 U – 380/3/50

Fans In Line
 1 to 7

Fans Wide
 1 or 2

STANDARD FAN CYCLING CONTROL PANEL ARRANGEMENTS

- Thermal Fanrol-Electronic temperature control cycles fans in response to entering air temperature. Set points and differential for each step is adjustable.
- Pressurrol-Electronic pressure control with single point pressure transducer cycles fans in response to condenser pressure. Set points and differential for each step is adjustable.
- Thermal Pressure Fanrol-Electronic temperature control cycle fans in response to entering air temperature, except for header end fan(s). Header end fan(s) are controlled by pressure control.
- Variable Speed Control-Header end fan(s) are controlled with a speed controller in response to head pressure. Electronic pressure control cycles the balance of fans.
- Fan cycling Sequence-Fans are cycled off individually or side by side pairs in sequence from the end opposite the header to the header end. Header end fans run continuously if compressors are operating.

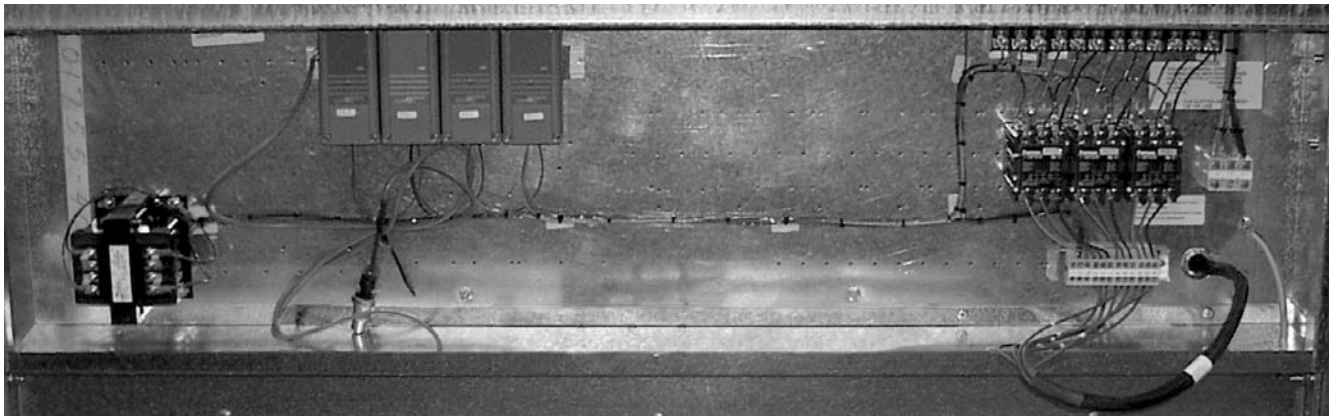
Control Panel

- Standard weather resistant enclosure is mounted on the opposite end when looking at the headers.

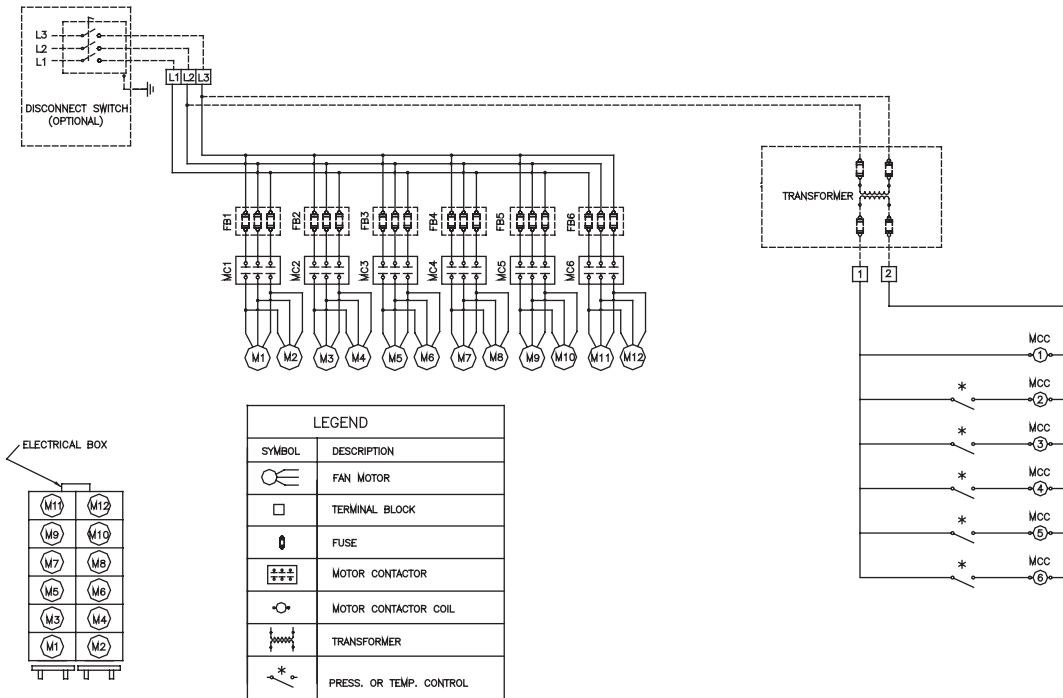
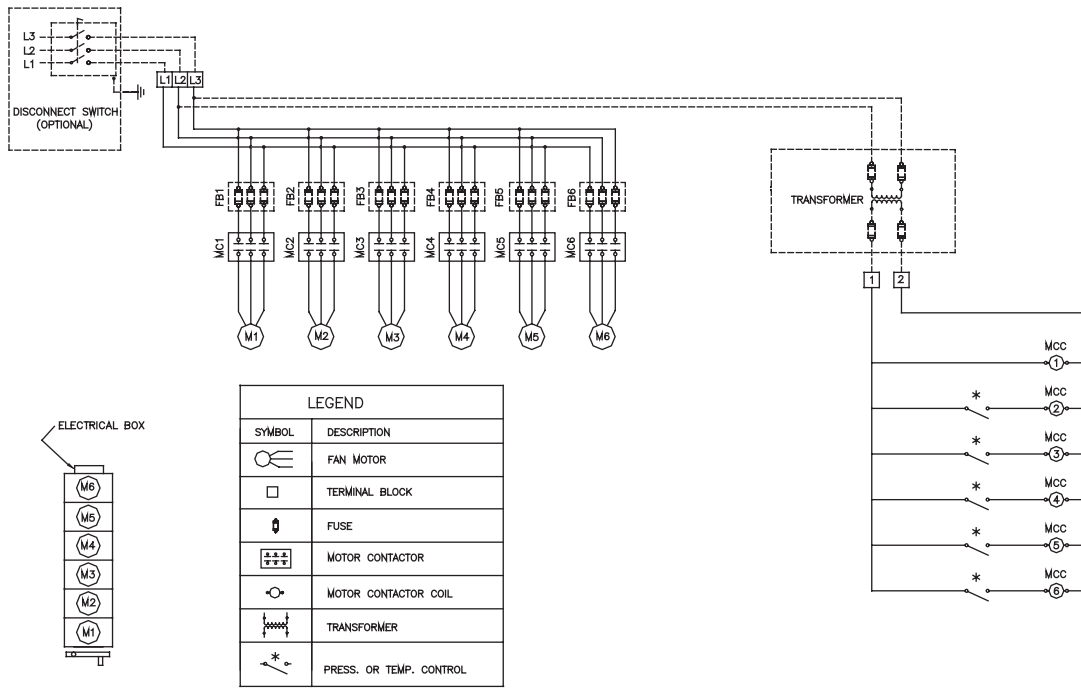
- Control power is 24, 115 or 230 volts. A transformer is factory installed when required.
- Fan contactor with branch circuit fuse protection. Each motor or bank of motors protected by fuses.
- For horizontal airflow application, consult factory.
- Disconnect not included, but may be required to meet local codes.

Optional Arrangements

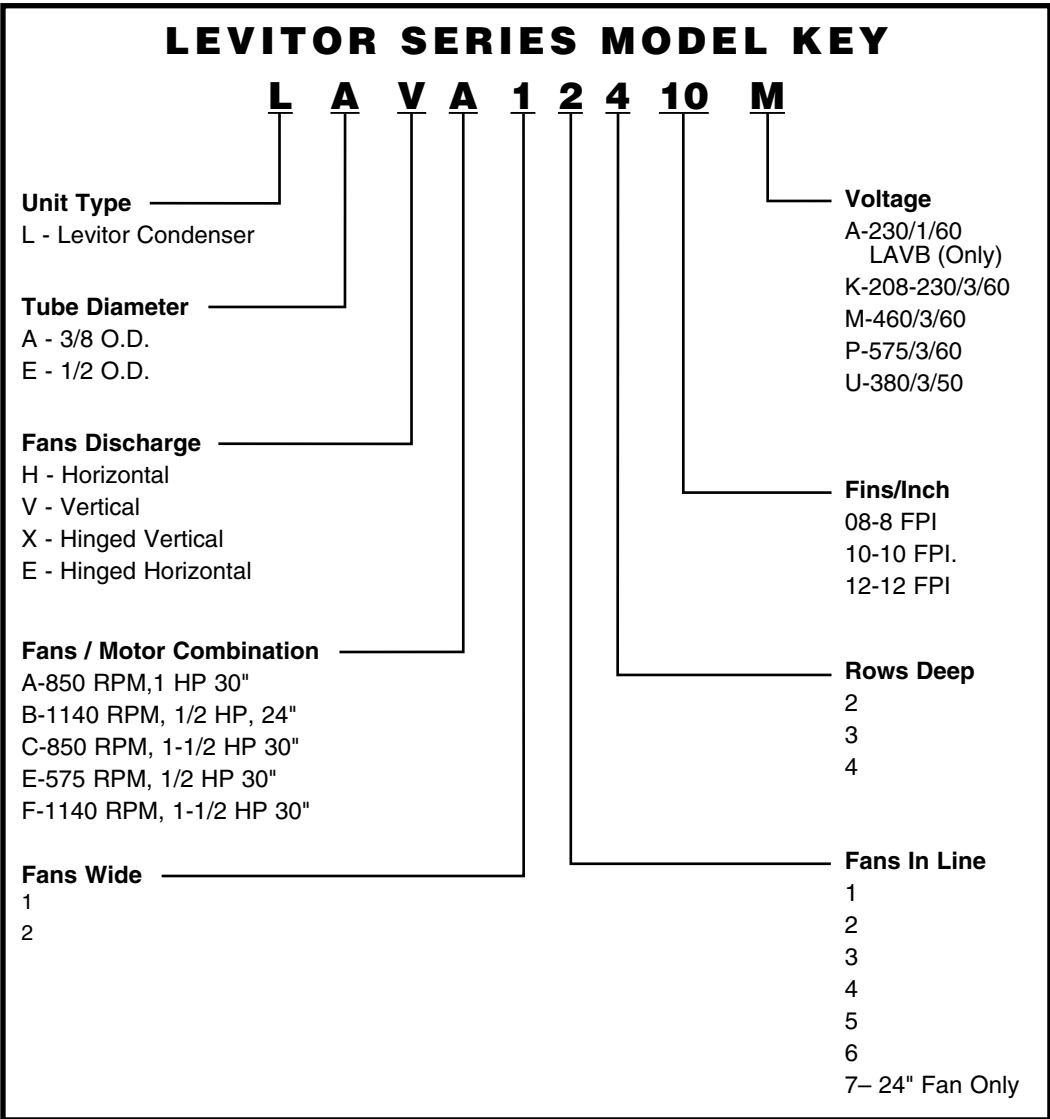
- Fan motor contactor and fuses only.
- Fan motor contactor and fuses only which operate via a customer specified solid state board. Circuit board is factory mounted and wired.
- 50/50 split with two fan wide models. Each side is controlled separately with individual control panels on each side.
- 50% winter reduction with two fan wide models. The right side fans are isolated in winter. Fans are locked out via a relay or switch during shutdown.



LEVITOR SERIES AIR COOLED CONDENSER



LEVITOR SERIES AIR COOLED CONDENSER





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