



Model #: LRC131  
Serial #: W037420

2003  
130 Tons

# LSC-E/LRC

## EVAPORATIVE CONDENSERS

**NEW!**  
**ENHANCED**  
**LSC-E DESIGN**



Operating Weight: 5,790 lbs  
Shipping Weight: 8,580 lbs

L: 15' 3"  
W: 5' 1"  
H: 7' 4"

Available with Optional  
**Pulse~Pure**  
Water Treatment System



**Technology for the Future...Available Today!**



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International Institute of  
Aeromaterial Refrigeration  
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## LSC-E/LRC SELECTION PROCEDURE

**Table 1 - HCFC-22 and HFC-134a Heat Rejection Factors**

Condensing Pres. psig		Cond. Temp. °F	Wet Bulb Temperature, (°F)																	
HCFC-22	HFC-134a		50	55	60	62	64	66	68	70	72	74	75	76	77	78	80	82	84	86
156	95	85	1.10	1.22	1.39	1.50	1.61	1.75	1.93	2.13	2.42	2.78	3.02	3.29	3.64	4.00	-	-	-	-
168	104	90	.93	1.02	1.14	1.21	1.28	1.36	1.45	1.57	1.71	1.89	2.00	2.12	2.25	2.38	2.85	3.50	-	-
182	114	95	.80	.87	.95	1.00	1.05	1.10	1.15	1.22	1.31	1.40	1.45	1.50	1.56	1.64	1.82	2.07	2.37	2.77
196	124	100	.71	.76	.82	.85	.88	.91	.94	.98	1.03	1.09	1.12	1.15	1.20	1.24	1.34	1.46	1.63	1.82
211	135	105	.63	.66	.70	.72	.75	.77	.80	.83	.87	.91	.93	.95	.97	1.00	1.06	1.13	1.23	1.35
226	146	110	.56	.59	.62	.64	.65	.67	.69	.71	.74	.77	.78	.80	.82	.84	.88	.93	.98	1.04

**Table 2 - Ammonia (R-717) Heat Rejection Factors**

Condensing Pres. psig		Cond. Temp. °F	Wet Bulb Temperature, (°F)																
			50	55	60	62	64	66	68	70	72	74	75	76	77	78	80	82	84
152	85	.98	1.09	1.24	1.34	1.44	1.56	1.72	1.90	2.16	2.48	2.70	2.94	3.25	3.57	-	-	-	-
166	90	.83	.91	1.02	1.08	1.14	1.21	1.29	1.40	1.53	1.69	1.79	1.89	2.01	2.12	2.54	3.12	-	-
181	95	.71	.78	.85	.89	.94	.98	1.03	1.09	1.17	1.25	1.29	1.34	1.39	1.47	1.63	1.85	2.12	2.47
185	96.3	.69	.75	.82	.86	.90	.94	.98	1.03	1.10	1.18	1.22	1.26	1.31	1.37	1.51	1.71	1.94	2.25
197	100	.63	.68	.73	.76	.79	.81	.84	.87	.92	.97	1.00	1.03	1.07	1.11	1.20	1.30	1.46	1.63
214	105	.56	.59	.62	.64	.67	.69	.71	.74	.78	.81	.83	.85	.87	.89	.95	1.01	1.10	1.21
232	110	.50	.53	.55	.57	.58	.60	.62	.63	.66	.69	.70	.71	.73	.75	.79	.83	.87	.93

**Table 3 - Unit Heat Rejection**

LSC-E Models						LRC Models					
Model	MBH Base	Model	MBH Base	Model	MBH Base	Model	MBH Base	Model	MBH Base	Model	MBH Base
LSC-36E-1g	529	LSC-225E-1g	3,308	LSC-650E-1g	9,555	LRC-25-1g	368	LRC-101-1g	1,485	LRC-213-1g	3,131
LSC-41E-1g	603	LSC-240E-1g	3,528	LSC-690E-1g	10,143	LRC-27-1g	397	LRC-108-1g	1,588	LRC-225-1g	3,308
LSC-48E-1g	706	LSC-250E-1g	3,675	LSC-720E-1g	10,584	LRC-29-1g	426	LRC-114-1g	1,676	LRC-227-1g	3,337
LSC-54E-1g	794	LSC-280E-1g	4,116	LSC-755E-1g	11,099	LRC-35-1g	515	LRC-116-1g	1,705	LRC-233-1g	3,425
LSC-65E-1g	956	LSC-300E-1g	4,410	LSC-800E-1g	11,760	LRC-38-1g	559	LRC-128-1g	1,882	LRC-240-1g	3,528
LSC-70E-1g	1,029	LSC-315E-1g	4,631	LSC-805E-1g	11,834	LRC-42-1g	617	LRC-131-1g	1,926	LRC-246-1g	3,616
LSC-75E-1g	1,103	LSC-335E-1g	4,925	LSC-860E-1g	12,642	LRC-48-1g	706	LRC-140-1g	2,058	LRC-249-1g	3,660
LSC-80E-1g	1,176	LSC-355E-1g	5,219	LSC-900E-1g	13,230	LRC-51-1g	750	LRC-155-1g	2,279	LRC-255-1g	3,749
LSC-90E-1g	1,323	LSC-370E-1g	5,439	LSC-960E-1g	14,112	LRC-58-1g	853	LRC-174-1g	2,558	LRC-269-1g	3,954
LSC-100E-1g	1,470	LSC-385E-1g	5,660	LSC-1000E-1g	14,700	LRC-65-1g	956	LRC-183-1g	2,690	LRC-287-1g	4,219
LSC-110E-1g	1,617	LSC-400E-1g	5,880	LSC-1030E-1g	15,141	LRC-72-1g	1,058	LRC-188-1g	2,764	LRC-300-1g	4,410
LSC-120E-1g	1,764	LSC-430E-1g	6,321	LSC-1100E-1g	16,170	LRC-76-1g	1,117	LRC-190-1g	2,793	LRC-321-1g	4,719
LSC-135E-1g	1,985	LSC-450E-1g	6,615	LSC-1180E-1g	17,346	LRC-84-1g	1,235	LRC-210-1g	2,955	LRC-336-1g	4,939
LSC-150E-1g	2,205	LSC-480E-1g	7,056	LSC-1250E-1g	18,375	LRC-91-1g	1,338	LRC-211-1g	3,102	LRC-361-1g	5,307
LSC-155E-1g	2,279	LSC-500E-1g	7,350	LSC-1310E-1g	19,257					LRC-379-1g	5,571
LSC-170E-1g	2,499	LSC-515E-1g	7,571	LSC-1380E-1g	20,286						
LSC-185E-1g	2,720	LSC-550E-1g	8,085	LSC-1440E-1g	21,168						
LSC-200E-1g	2,940	LSC-500E-1g	8,673	LSC-1510E-1g	22,197						
LSC-210E-1g	3,087	LSC-625E-1g	9,188	LSC-1610E-1g	23,667						

**Note:** Table 3 presents only the standard model selections. Other models exist for special horsepower or layout applications. Please consult the factory or EVAPCO Representative for the special situations.

## LSC-E/LRC SELECTION PROCEDURE

**Table 5 - HCFC-22 and HFC-134a Capacity Factors**

Condensing Pres. psig		Cond. Temp. °F	Wet Bulb Temperature, (°F)																	
HCFC-22	HFC-134a		50	55	60	62	64	66	68	70	72	74	75	76	77	78	80	82	84	86
156	95	85	1.05	1.16	1.32	1.43	1.53	1.66	1.83	2.02	2.30	2.64	2.87	3.13	3.46	3.80	-	-	-	-
168	104	90	.90	.98	1.10	1.17	1.24	1.31	1.40	1.52	1.65	1.82	1.93	2.05	2.17	2.30	2.75	3.38	-	-
182	114	95	.78	.85	.93	.98	1.02	1.07	1.12	1.19	1.28	1.37	1.42	1.46	1.52	1.60	1.78	2.02	2.31	2.70
196	124	100	.70	.75	.81	.84	.87	.90	.93	.97	1.02	1.08	1.11	1.14	1.19	1.23	1.33	1.44	1.61	1.80
211	135	105	.63	.66	.70	.72	.75	.77	.80	.83	.87	.91	.93	.95	.97	1.00	1.06	1.13	1.23	1.35
226	146	110	.57	.60	.63	.65	.66	.68	.70	.72	.75	.78	.79	.81	.83	.85	.89	.94	.99	1.05

Suction Temp. °F		-20°	-10°	0°	+10°	+20°	+30°	+40°	+50°
Suction Press. (psig)	HCFC-22	10.1	16.5	24.0	32.8	43.0	54.9	68.5	84.0
	HFC-134a	-1.8	1.9	6.5	11.9	18.4	26.1	35.0	45.4
Capacity Factor		1.22	1.17	1.13	1.09	1.06	1.03	1.00	0.97

**Table 6 - Ammonia (R-717) Capacity Factors**

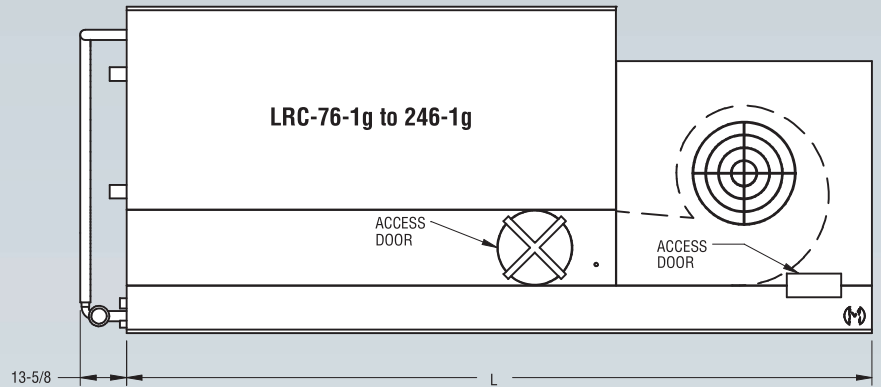
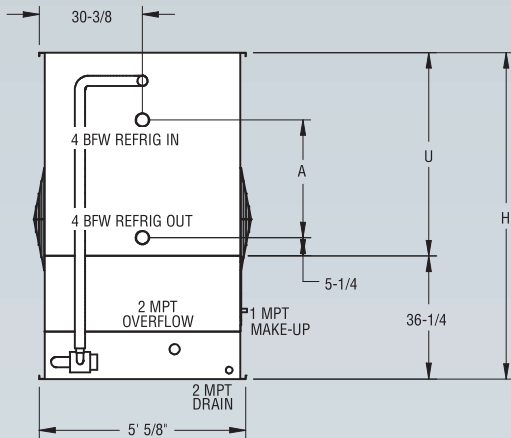
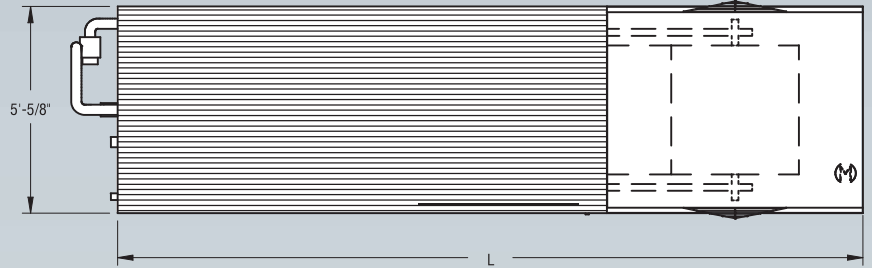
Condensing Pres. psig		Cond. Temp. °F	Wet Bulb Temperature, (°F)																
			50	55	60	62	64	66	68	70	72	74	75	76	77	78	80	82	84
152	85	.99	1.09	1.25	1.34	1.44	1.57	1.73	1.91	2.17	2.49	2.71	2.95	3.26	3.59	-	-	-	-
166	90	.84	.93	1.03	1.10	1.16	1.23	1.32	1.42	1.55	1.71	1.81	1.92	2.04	2.16	2.59	3.17	-	-
181	95	.74	.80	.87	.92	.97	1.01	1.06	1.12	1.21	1.29	1.33	1.38	1.44	1.51	1.68	1.91	2.18	2.55
185	96.3	.72	.78	.85	.89	.93	.97	1.01	1.07	1.14	1.22	1.26	1.30	1.35	1.41	1.56	1.76	2.01	2.33
197	100	.66	.71	.76	.79	.82	.85	.87	.91	.96	1.01	1.04	1.07	1.12	1.15	1.25	1.36	1.52	1.69
214	105	.59	.62	.66	.68	.71	.73	.75	.78	.82	.86	.88	.90	.91	.94	1.00	1.07	1.16	1.27
232	110	.53	.56	.59	.61	.62	.64	.66	.68	.71	.73	.74	.76	.78	.80	.84	.89	.93	.99

Suction Temp. °F		-30°	-20°	-10°	0°	+10°	+20°	+30°	+40°
Suction Press. (psig)		-1.6	3.6	9.0	15.7	23.8	33.5	45.0	58.6
Capacity Factor		1.18	1.14	1.10	1.07	1.03	1.00	0.97	0.95

**Note:** Table 4 presents only the standard model selections. Other models exist for special horsepower or layout applications. Please consult the factory or EVAPCO Representative for the special situations.

# Engineering Data & Dimensions

## Models LRC-76-1g to 246-1g



**Table 8 Engineering Data**

Model No.*	R-717 Tons*	Fans		Weights		Refrigerant Charge lbs.†	Coil Volume ft <sup>3</sup>	Spray Pump		Remote Pump			Dimensions			
		HP**	CFM	Shipping	Operating			HP	GPM	Gallons Req'd***	Conn. Size	Operating Weight	Height H	Upper U	Coil A	Length L
LRC-76-1g	54	5	16,030	3,900	5,730	65	9	1	160	120	6"	4,250	6' 7-3/4"	43-1/2"	19-1/2"	12' 2-7/8"
LRC-84-1g	60	7-1/2	18,370	3,940	5,770	65	9	1	160	120	6"	4,290	6' 7-3/4"	43-1/2"	19-1/2"	12' 2-7/8"
LRC-91-1g	65	5	15,730	4,390	6,250	85	11	1	160	120	6"	4,770	7' 3-1/4"	51"	27"	12' 2-7/8"
LRC-101-1g	72	7-1/2	18,010	4,480	6,330	85	11	1	160	120	6"	4,850	7' 3-1/4"	51"	27"	12' 2-7/8"
LRC-114-1g	81	7-1/2	17,650	4,980	6,860	105	14	1	160	120	6"	5,380	7' 10-3/4"	58-1/2"	34-1/2"	12' 2-7/8"
LRC-108-1g	77	7-1/2	22,450	5,040	7,790	95	13	1-1/2	255	170	6"	5,630	6' 7-3/4"	43-1/2"	19-1/2"	15' 2-1/4"
LRC-116-1g	82	10	24,690	5,080	7,820	95	13	1-1/2	255	170	6"	5,660	6' 7-3/4"	43-1/2"	19-1/2"	15' 2-1/4"
LRC-128-1g	91	15	28,280	5,190	7,930	95	13	1-1/2	255	170	6"	5,770	6' 7-3/4"	43-1/2"	19-1/2"	15' 2-1/4"
LRC-131-1g	93	7-1/2	22,000	5,790	8,580	125	17	1-1/2	255	170	6"	6,420	7' 3-1/4"	51"	27"	15' 2-1/4"
LRC-140-1g	99	10	24,240	5,830	8,620	125	17	1-1/2	255	170	6"	6,460	7' 3-1/4"	51"	27"	15' 2-1/4"
LRC-155-1g	110	15	27,740	5,940	8,730	125	17	1-1/2	255	170	6"	6,570	7' 3-1/4"	51"	27"	15' 2-1/4"
LRC-174-1g	123	15	27,160	6,740	9,570	150	21	1-1/2	255	170	6"	7,410	7' 10-3/4"	58-1/2"	34-1/2"	15' 2-1/4"
LRC-183-1g	130	15	26,620	7,410	10,290	180	25	1-1/2	255	170	6"	8,130	8' 6-1/4"	66"	42"	15' 2-1/4"
LRC-190-1g	135	20	34,220	7,260	11,070	165	22	2	345	240	8"	8,210	7' 4-1/4"	52"	27"	18' 2-5/8"
LRC-201-1g	143	25	36,860	7,270	11,080	165	22	2	345	240	8"	8,220	7' 4-1/4"	52"	27"	18' 2-5/8"
LRC-213-1g	151	20	33,500	8,250	12,120	200	28	2	345	240	8"	9,260	7' 11-3/4"	59-1/2"	34-1/2"	18' 2-5/8"
LRC-225-1g	160	25	36,080	8,260	12,130	200	28	2	345	240	8"	9,270	7' 11-3/4"	59-1/2"	34-1/2"	18' 2-5/8"
LRC-233-1g	165	30	38,360	8,280	12,150	200	28	2	345	240	8"	9,290	7' 11-3/4"	59-1/2"	34-1/2"	18' 2-5/8"
LRC-246-1g	174	30	37,580	9,210	13,120	240	33	2	345	240	8"	10,270	8' 7-1/4"	67"	42"	18' 2-5/8"

\* Tons at standard conditions: HCFC-22 and HFC-134a. 105°F condensing, 40°F suction and 78°F W.B.; ammonia 96.3°F condensing, 20°F suction and 78°F W.B.

\*\* For dry operation or for external static pressure up to 1/2" use next larger size fan motor.

\*\*\* Gallons shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation. (12" would normally be sufficient.)

† Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.

Dimensions are subject to change. Do not use for pre-fabrication.