



Tecumseh

Performance Data Sheet

AE4440Y-AA1A

General Information

Model	AE4440Y-AA1A	Refrigerant	R-134a
Test Condition	ARI	Performance Test Voltage	115V ~ 60HZ
Return Gas	4.4°C (40°F) RETURN GAS	Motor Type	CSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
5	Btu/h	2220	2010	1820	1660	1510	1360	1210
	Watts	330	322	324	333	344	355	361
	Amps	3.97	4.20	4.33	4.40	4.44	4.47	4.53
	Lb/h	31.1	29.1	27.6	26.6	25.7	24.8	23.7
10	Btu/h	2520	2280	2080	1890	1710	1540	1370
	Watts	342	336	341	353	367	381	389
	Amps	4.09	4.31	4.45	4.53	4.58	4.63	4.71
	Lb/h	35.3	33.2	31.6	30.3	29.3	28.2	27.0
15	Btu/h	2840	2580	2350	2150	1950	1750	1550
	Watts	357	354	362	376	393	409	420
	Amps	4.22	4.44	4.58	4.66	4.73	4.80	4.92
	Lb/h	39.9	37.7	36.0	34.6	33.5	32.3	30.9
20	Btu/h	3190	2910	2660	2430	2210	1990	1770
	Watts	374	373	383	400	419	437	450
	Amps	4.35	4.57	4.71	4.81	4.89	4.99	5.14
	Lb/h	44.8	42.6	40.8	39.4	38.2	36.9	35.4
25	Btu/h	3550	3260	2980	2730	2490	2260	2010
	Watts	391	392	404	423	444	464	479
	Amps	4.47	4.69	4.83	4.95	5.05	5.18	5.37
	Lb/h	50.2	47.9	46.1	44.7	43.4	42.0	40.5
30	Btu/h	3940	3630	3340	3070	2810	2550	2290
	Watts	405	409	423	443	466	488	504
	Amps	4.57	4.79	4.95	5.08	5.21	5.37	5.59
	Lb/h	55.8	53.6	51.8	50.4	49.1	47.7	46.1
35	Btu/h	4360	4020	3710	3420	3140	2870	2590
	Watts	416	421	437	458	483	506	523
	Amps	4.64	4.86	5.03	5.19	5.34	5.54	5.80
	Lb/h	61.8	59.6	57.9	56.5	55.2	53.8	52.2
40	Btu/h	4790	4440	4110	3800	3510	3220	2920
	Watts	422	428	444	467	493	517	535
	Amps	4.67	4.90	5.09	5.26	5.45	5.68	5.99
	Lb/h	68.0	65.9	64.3	63.0	61.7	60.5	58.9

45	Btu/h	5250	4880	4540	4210	3900	3590	3280
	Watts	419	427	444	468	494	518	538
	Amps	4.65	4.90	5.10	5.30	5.52	5.80	6.15
	Lb/h	74.5	72.6	71.1	69.8	68.7	67.5	66.1
50	Btu/h	5730	5340	4980	4650	4320	3990	3660
	Watts	408	415	433	458	484	509	529
	Amps	4.58	4.84	5.07	5.29	5.55	5.86	6.26
	Lb/h	81.3	79.5	78.1	77.1	76.1	75.0	73.7
55	Btu/h	6230	5830	5460	5100	4760	4420	4080
	Watts	385	393	411	435	462	487	507
	Amps	4.44	4.72	4.97	5.23	5.52	5.88	6.33
	Lb/h	88.3	86.7	85.5	84.6	83.8	82.9	81.7
60	Btu/h	6750	6340	5950	5590	5230	4880	4520
	Watts	348	356	375	399	426	451	470
	Amps	4.23	4.52	4.80	5.09	5.43	5.84	6.34
	Lb/h	95.4	94.1	93.1	92.5	91.9	91.2	90.2

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	5.477159E+03	1.264559E+03	-5.110273E+00	8.479813E+01
C2	9.220501E+01	-5.398169E+00	8.876028E-02	9.241071E-01
C3	-7.687282E+01	-2.575924E+01	2.254473E-01	-1.416213E+00
C4	2.852312E-01	1.956516E-01	6.908185E-05	2.955535E-03
C5	-4.755989E-01	7.787181E-02	-1.430063E-03	-1.808733E-03
C6	5.196245E-01	2.264818E-01	-1.803014E-03	1.119761E-02
C7	-4.112498E-05	-2.499089E-03	-1.214607E-05	-2.973416E-05
C8	2.034936E-03	-5.931882E-04	5.501803E-06	7.347832E-05
C9	-1.153947E-04	-5.188205E-05	7.020136E-06	-1.051226E-05
C10	-1.393945E-03	-6.420304E-04	4.833693E-06	-3.096673E-05

$$\text{Value} = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3$$

Te = Evaporator Temperature

Tc = Condensing Temperature



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Performance Data Sheet

AE4440Y-AA1A

General Information

Model	AE4440Y-AA1A	Refrigerant	R-134a
Test Condition	ASHRAE	Performance Test Voltage	115V ~ 60HZ
Return Gas	35°C (95°F) RETURN GAS	Motor Type	CSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
5	Btu/h	2460	2310	2140	1960	1790	1630	1490
	Watts	288	309	324	336	346	353	359
	Amps	4.15	4.35	4.47	4.53	4.56	4.58	4.62
	Lb/h	27.0	26.7	26.0	24.9	23.8	22.8	21.9
10	Btu/h	2800	2630	2440	2250	2060	1890	1730
	Watts	307	328	344	357	368	378	386
	Amps	4.23	4.44	4.57	4.65	4.69	4.73	4.78
	Lb/h	31.0	30.6	29.8	28.7	27.5	26.4	25.6
15	Btu/h	3160	2970	2770	2560	2360	2160	1990
	Watts	325	346	364	378	391	403	414
	Amps	4.31	4.53	4.67	4.77	4.83	4.89	4.96
	Lb/h	35.2	34.7	33.8	32.7	31.5	30.4	29.5
20	Btu/h	3550	3340	3120	2890	2670	2460	2270
	Watts	343	364	383	399	414	428	443
	Amps	4.38	4.61	4.78	4.89	4.97	5.05	5.14
	Lb/h	39.6	39.1	38.2	37.0	35.8	34.6	33.7
25	Btu/h	3980	3740	3500	3250	3010	2780	2570
	Watts	359	382	402	420	437	454	472
	Amps	4.45	4.70	4.88	5.01	5.12	5.22	5.34
	Lb/h	44.5	43.9	42.9	41.7	40.4	39.2	38.2
30	Btu/h	4430	4180	3910	3640	3380	3130	2900
	Watts	375	399	420	440	460	480	501
	Amps	4.52	4.79	4.99	5.14	5.27	5.39	5.54
	Lb/h	49.7	49.1	48.0	46.7	45.4	44.2	43.2
35	Btu/h	4920	4640	4350	4060	3770	3500	3250
	Watts	390	415	438	461	483	506	531
	Amps	4.58	4.87	5.10	5.27	5.43	5.58	5.75
	Lb/h	55.5	54.7	53.6	52.3	50.9	49.6	48.7
40	Btu/h	5460	5150	4830	4520	4210	3910	3640
	Watts	403	430	456	481	506	533	561
	Amps	4.65	4.96	5.21	5.41	5.59	5.77	5.98
	Lb/h	61.7	60.9	59.7	58.3	56.9	55.6	54.6

45	Btu/h	6030	5700	5360	5010	4680	4360	4060
	Watts	416	445	473	500	529	559	591
	Amps	4.71	5.05	5.32	5.55	5.76	5.98	6.21
	Lb/h	68.5	67.6	66.4	65.0	63.5	62.2	61.2
50	Btu/h	6660	6290	5920	5550	5190	4840	4520
	Watts	428	459	489	519	551	585	622
	Amps	4.78	5.15	5.45	5.71	5.95	6.19	6.46
	Lb/h	76.0	75.0	73.7	72.2	70.8	69.4	68.4
55	Btu/h	7330	6940	6530	6130	5740	5370	5020
	Watts	439	472	504	538	574	612	653
	Amps	4.85	5.24	5.58	5.87	6.14	6.42	6.72
	Lb/h	84.1	83.1	81.7	80.2	78.7	77.4	76.3
60	Btu/h	8060	7630	7200	6770	6340	5940	5560
	Watts	449	484	519	557	596	638	684
	Amps	4.92	5.35	5.71	6.04	6.35	6.66	7.00
	Lb/h	93.1	92.0	90.5	89.0	87.4	86.1	85.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.806580E+03	-1.621684E+02	-2.923948E+00	-1.020683E+01
C2	8.960802E+01	7.288246E+00	1.532199E-02	9.539582E-01
C3	3.002544E+01	9.344464E+00	1.753107E-01	1.001126E+00
C4	6.043537E-01	-4.675891E-02	-4.410573E-04	2.216256E-03
C5	-4.015299E-01	-7.811352E-02	-8.677697E-05	-3.541836E-03
C6	-4.283728E-01	-5.997285E-02	-1.396659E-03	-9.430883E-03
C7	4.221683E-03	-5.488033E-05	1.195731E-06	7.682891E-05
C8	-3.004808E-03	4.233524E-04	3.886687E-06	2.394653E-06
C9	6.200009E-04	4.574970E-04	1.471325E-06	1.133012E-05
C10	1.326247E-03	1.315929E-04	3.720216E-06	2.672175E-05

$$\text{Value} = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3$$

Te = Evaporator Temperature

Tc = Condensing Temperature



Tecumseh

Performance Data Sheet

AE4440Y-AA1A

General Information

Model	AE4440Y-AA1A	Refrigerant	R-134a
Test Condition	ARI	Performance Test Voltage	115V ~ 60HZ
Return Gas	18.3°C (65°F) RETURN GAS	Motor Type	CSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
5	Btu/h	2500	2260	2070	1930	1790	1640	1460
	Watts	303	312	324	337	350	358	361
	Amps	4.30	4.29	4.34	4.41	4.48	4.52	4.52
	Lb/h	31.0	28.6	27.2	26.5	26.0	25.2	23.6
10	Btu/h	2790	2530	2330	2180	2030	1880	1690
	Watts	322	331	343	357	371	382	388
	Amps	4.41	4.41	4.46	4.53	4.62	4.68	4.70
	Lb/h	34.6	32.1	30.7	30.0	29.5	28.8	27.3
15	Btu/h	3130	2850	2630	2460	2300	2140	1940
	Watts	340	349	362	377	393	407	416
	Amps	4.51	4.51	4.57	4.66	4.76	4.85	4.89
	Lb/h	38.8	36.2	34.8	34.0	33.5	32.8	31.4
20	Btu/h	3520	3210	2970	2770	2600	2420	2200
	Watts	358	367	381	397	415	432	444
	Amps	4.61	4.62	4.68	4.79	4.91	5.01	5.09
	Lb/h	43.6	40.8	39.3	38.5	37.9	37.2	35.8
25	Btu/h	3950	3610	3340	3120	2920	2720	2490
	Watts	376	385	399	417	437	457	473
	Amps	4.70	4.72	4.79	4.91	5.05	5.19	5.29
	Lb/h	49.0	46.1	44.4	43.5	42.8	42.1	40.7
30	Btu/h	4430	4060	3750	3500	3280	3050	2800
	Watts	393	402	417	437	460	482	502
	Amps	4.79	4.81	4.90	5.04	5.21	5.37	5.50
	Lb/h	55.1	52.0	50.1	49.0	48.2	47.4	45.9
35	Btu/h	4970	4550	4210	3920	3660	3410	3120
	Watts	409	419	435	457	482	507	532
	Amps	4.88	4.91	5.02	5.18	5.36	5.55	5.72
	Lb/h	61.9	58.5	56.4	55.1	54.2	53.2	51.6
40	Btu/h	5550	5090	4710	4380	4090	3790	3480
	Watts	425	435	453	477	504	533	561
	Amps	4.96	5.01	5.13	5.31	5.52	5.74	5.95
	Lb/h	69.5	65.8	63.4	61.8	60.7	59.5	57.8

45	Btu/h	6190	5680	5250	4880	4540	4210	3850
	Watts	440	451	470	496	526	559	591
	Amps	5.05	5.10	5.25	5.45	5.69	5.94	6.18
	Lb/h	77.8	73.7	71.0	69.2	67.8	66.4	64.5
50	Btu/h	6890	6320	5840	5420	5030	4650	4260
	Watts	454	466	487	515	549	585	622
	Amps	5.13	5.20	5.37	5.60	5.87	6.16	6.43
	Lb/h	86.9	82.5	79.4	77.2	75.5	73.9	71.7
55	Btu/h	7640	7010	6470	6000	5560	5130	4690
	Watts	467	480	503	534	571	611	652
	Amps	5.21	5.30	5.49	5.75	6.05	6.38	6.70
	Lb/h	96.9	92.0	88.5	85.9	83.9	81.9	79.5
60	Btu/h	8450	7760	7160	6620	6120	5640	5140
	Watts	480	494	519	552	592	636	683
	Amps	5.30	5.41	5.62	5.91	6.25	6.61	6.97
	Lb/h	108	102	98.3	95.4	93.0	90.7	88.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	9.391099E+03	5.580787E+02	8.752384E+00	1.409692E+02
C2	7.741531E+01	9.896315E+00	6.055447E-02	7.764666E-01
C3	-1.783681E+02	-9.965017E+00	-1.370727E-01	-3.002881E+00
C4	1.645673E+00	-3.304397E-02	-4.889361E-04	1.730610E-02
C5	-6.078474E-01	-1.305272E-01	-8.136531E-04	-5.435730E-03
C6	1.456573E+00	1.108555E-01	1.325803E-03	2.602191E-02
C7	1.698087E-03	-5.984050E-05	1.275740E-06	3.995910E-05
C8	-9.696308E-03	3.256820E-04	3.900416E-06	-8.465991E-05
C9	2.518432E-03	6.961012E-04	4.557969E-06	3.282990E-05
C10	-4.274218E-03	-3.648788E-04	-4.086880E-06	-7.668913E-05

$$\text{Value} = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3$$

Te = Evaporator Temperature

Tc = Condensing Temperature