

AE4440Y-AA1A
General

Model	AE4440Y-AA1A	Unit of Measure	Fahrenheit
Condition	ARI(R-134a)	Voltage/Frequency	115V~60HZ
RETURN GAS	4.4°C (40°F) RETURN GAS	MotorType	CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
		80	90	100	110	120	130	140	150
5	Btu/h	2220	2010	1820	1660	1510	1360	1210	1040
	Watts	330	322	324	333	344	355	361	358
	Amps	3.97	4.20	4.33	4.40	4.44	4.47	4.53	4.63
	Lb/h	31.1	29.1	27.6	26.6	25.7	24.8	23.7	22.2
10	Btu/h	2520	2280	2080	1890	1710	1540	1370	1170
	Watts	342	336	341	353	367	381	389	389
	Amps	4.09	4.31	4.45	4.53	4.58	4.63	4.71	4.85
	Lb/h	35.3	33.2	31.6	30.3	29.3	28.2	27.0	25.3
15	Btu/h	2840	2580	2350	2150	1950	1750	1550	1340
	Watts	357	354	362	376	393	409	420	422
	Amps	4.22	4.44	4.58	4.66	4.73	4.80	4.92	5.10
	Lb/h	39.9	37.7	36.0	34.6	33.5	32.3	30.9	29.1
20	Btu/h	3190	2910	2660	2430	2210	1990	1770	1530
	Watts	374	373	383	400	419	437	450	455
	Amps	4.35	4.57	4.71	4.81	4.89	4.99	5.14	5.36
	Lb/h	44.8	42.6	40.8	39.4	38.2	36.9	35.4	33.5
25	Btu/h	3550	3260	2980	2730	2490	2260	2010	1760
	Watts	391	392	404	423	444	464	479	485
	Amps	4.47	4.69	4.83	4.95	5.05	5.18	5.37	5.63
	Lb/h	50.2	47.9	46.1	44.7	43.4	42.0	40.5	38.5
30	Btu/h	3940	3630	3340	3070	2810	2550	2290	2010
	Watts	405	409	423	443	466	488	504	512
	Amps	4.57	4.79	4.95	5.08	5.21	5.37	5.59	5.90
	Lb/h	55.8	53.6	51.8	50.4	49.1	47.7	46.1	44.1
35	Btu/h	4360	4020	3710	3420	3140	2870	2590	2290
	Watts	416	421	437	458	483	506	523	532
	Amps	4.64	4.86	5.03	5.19	5.34	5.54	5.80	6.15
	Lb/h	61.8	59.6	57.9	56.5	55.2	53.8	52.2	50.2
40	Btu/h	4790	4440	4110	3800	3510	3220	2920	2610
	Watts	422	428	444	467	493	517	535	545
	Amps	4.67	4.90	5.09	5.26	5.45	5.68	5.99	6.39
	Lb/h	68.0	65.9	64.3	63.0	61.7	60.5	58.9	56.9
45	Btu/h	5250	4880	4540	4210	3900	3590	3280	2950
	Watts	419	427	444	468	494	518	538	548
	Amps	4.65	4.90	5.10	5.30	5.52	5.80	6.15	6.61

	Lb/h	74.5	72.6	71.1	69.8	68.7	67.5	66.1	64.1
50	Btu/h	5730	5340	4980	4650	4320	3990	3660	3320
	Watts	408	415	433	458	484	509	529	540
	Amps	4.58	4.84	5.07	5.29	5.55	5.86	6.26	6.78
	Lb/h	81.3	79.5	78.1	77.1	76.1	75.0	73.7	71.8
55	Btu/h	6230	5830	5460	5100	4760	4420	4080	3720
	Watts	385	393	411	435	462	487	507	518
	Amps	4.44	4.72	4.97	5.23	5.52	5.88	6.33	6.91
	Lb/h	88.3	86.7	85.5	84.6	83.8	82.9	81.7	80.0

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



Performance Data Sheet

AE4440Y-AA1A

General

Model	AE4440Y-AA1A	Unit of Measure	Fahrenheit
Condition	ARI(R-134a)	Voltage/Frequency	115V ~ 60HZ
RETURN GAS	18.3°C (65°F) RETURN GAS	MotorType	CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
		80	90	100	110	120	130	140	150
5	Btu/h	2500	2260	2070	1930	1790	1640	1460	1200
	Watts	303	312	324	337	350	358	361	356
	Amps	4.30	4.29	4.34	4.41	4.48	4.52	4.52	4.44
	Lb/h	31.0	28.6	27.2	26.5	26.0	25.2	23.6	20.8
10	Btu/h	2790	2530	2330	2180	2030	1880	1690	1430
	Watts	322	331	343	357	371	382	388	387
	Amps	4.41	4.41	4.46	4.53	4.62	4.68	4.70	4.65
	Lb/h	34.6	32.1	30.7	30.0	29.5	28.8	27.3	24.7
15	Btu/h	3130	2850	2630	2460	2300	2140	1940	1680
	Watts	340	349	362	377	393	407	416	419
	Amps	4.51	4.51	4.57	4.66	4.76	4.85	4.89	4.87
	Lb/h	38.8	36.2	34.8	34.0	33.5	32.8	31.4	28.9
20	Btu/h	3520	3210	2970	2770	2600	2420	2200	1930
	Watts	358	367	381	397	415	432	444	452
	Amps	4.61	4.62	4.68	4.79	4.91	5.01	5.09	5.10
	Lb/h	43.6	40.8	39.3	38.5	37.9	37.2	35.8	33.4
25	Btu/h	3950	3610	3340	3120	2920	2720	2490	2200
	Watts	376	385	399	417	437	457	473	485
	Amps	4.70	4.72	4.79	4.91	5.05	5.19	5.29	5.34
	Lb/h	49.0	46.1	44.4	43.5	42.8	42.1	40.7	38.2
30	Btu/h	4430	4060	3750	3500	3280	3050	2800	2490
	Watts	393	402	417	437	460	482	502	518
	Amps	4.79	4.81	4.90	5.04	5.21	5.37	5.50	5.58
	Lb/h	55.1	52.0	50.1	49.0	48.2	47.4	45.9	43.4
35	Btu/h	4970	4550	4210	3920	3660	3410	3120	2790
	Watts	409	419	435	457	482	507	532	552
	Amps	4.88	4.91	5.02	5.18	5.36	5.55	5.72	5.84
	Lb/h	61.9	58.5	56.4	55.1	54.2	53.2	51.6	49.1
40	Btu/h	5550	5090	4710	4380	4090	3790	3480	3110
	Watts	425	435	453	477	504	533	561	587
	Amps	4.96	5.01	5.13	5.31	5.52	5.74	5.95	6.11
	Lb/h	69.5	65.8	63.4	61.8	60.7	59.5	57.8	55.1
45	Btu/h	6190	5680	5250	4880	4540	4210	3850	3460
	Watts	440	451	470	496	526	559	591	622
	Amps	5.05	5.10	5.25	5.45	5.69	5.94	6.18	6.39

	Lb/h	77.8	73.7	71.0	69.2	67.8	66.4	64.5	61.7
50	Btu/h	6890	6320	5840	5420	5030	4650	4260	3820
	Watts	454	466	487	515	549	585	622	657
	Amps	5.13	5.20	5.37	5.60	5.87	6.16	6.43	6.68
	Lb/h	86.9	82.5	79.4	77.2	75.5	73.9	71.7	68.7
55	Btu/h	7640	7010	6470	6000	5560	5130	4690	4200
	Watts	467	480	503	534	571	611	652	693
	Amps	5.21	5.30	5.49	5.75	6.05	6.38	6.70	6.99
	Lb/h	96.9	92.0	88.5	85.9	83.9	81.9	79.5	76.3

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



Performance Data Sheet

AE4440Y-AA1A

General

Model	AE4440Y-AA1A	Unit of Measure	Celsius
Condition	ASHRAE(R-134a)	Voltage/Frequency	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	MotorType	CSIR

Performance Information

EVAP TEMP (°C)	Condensing Temperature (°C)								
		30	35	40	45	50	55	60	65
-15	Btu/h	2290	2190	2020	1800	1550	1270	998	735
	Watts (Power)	307	318	328	337	344	348	348	344
	Amps	4.35	4.40	4.45	4.50	4.53	4.54	4.53	4.48
	Lb/h	25.4	25.3	24.1	22.2	19.8	17.2	14.5	12.1
-10	Btu/h	2900	2800	2630	2410	2160	1890	1620	1370
	Watts (Power)	337	350	363	376	387	395	400	401
	Amps	4.50	4.57	4.63	4.70	4.76	4.81	4.83	4.82
	Lb/h	31.7	32.1	31.4	30.0	28.1	25.9	23.7	21.8
-6.7	Btu/h	3360	3240	3060	2830	2570	2300	2030	1770
	Watts (Power)	355	371	386	401	415	426	435	440
	Amps	4.61	4.68	4.76	4.85	4.93	5.00	5.05	5.07
	Lb/h	36.4	37.0	36.5	35.3	33.6	31.7	29.7	28.0
-5	Btu/h	3620	3490	3300	3070	2800	2520	2240	1980
	Watts (Power)	364	381	398	414	429	443	453	460
	Amps	4.66	4.74	4.83	4.93	5.02	5.10	5.16	5.20
	Lb/h	39.1	39.7	39.3	38.2	36.6	34.7	32.8	31.2
0	Btu/h	4490	4320	4080	3810	3500	3190	2880	2590
	Watts (Power)	389	409	430	451	471	490	506	519
	Amps	4.81	4.91	5.03	5.16	5.28	5.41	5.51	5.60
	Lb/h	48.2	48.9	48.6	47.6	46.0	44.3	42.5	41.0
5	Btu/h	5530	5300	5000	4670	4310	3940	3580	3240
	Watts (Power)	409	433	458	484	510	535	557	578
	Amps	4.93	5.06	5.21	5.37	5.54	5.71	5.87	6.01
	Lb/h	59.8	60.4	59.9	58.8	57.2	55.3	53.4	51.8
7.2	Btu/h	6060	5790	5460	5090	4700	4300	3910	3540
	Watts (Power)	416	442	469	498	526	553	579	603
	Amps	4.97	5.12	5.28	5.47	5.65	5.84	6.02	6.19
	Lb/h	65.8	66.3	65.8	64.5	62.7	60.8	58.8	57.1
10	Btu/h	6790	6470	6100	5680	5240	4800	4370	3960
	Watts (Power)	423	451	482	513	545	576	606	633
	Amps	5.02	5.18	5.37	5.57	5.79	6.00	6.22	6.42
	Lb/h	74.4	74.7	74.0	72.6	70.6	68.4	66.3	64.4
15	Btu/h	8290	7870	7390	6880	6350	5810	5280	4780
	Watts (Power)	429	463	498	536	574	612	649	684
	Amps	5.05	5.25	5.48	5.73	6.00	6.27	6.54	6.80

	Lb/h	92.9	92.7	91.5	89.6	87.1	84.5	81.8	79.5
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COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.304881E+03	3.293813E+02	4.919644E+00	8.932947E+00
C2	2.638631E+02	1.984371E+00	1.536950E-02	2.082729E+00
C3	1.254039E+02	-8.352590E-01	-3.495405E-02	2.663185E+00
C4	5.984825E+00	-1.508693E-01	-9.998164E-04	7.194117E-02
C5	-2.747422E+00	2.693653E-02	-1.243396E-04	-1.869341E-03
C6	-3.526076E+00	1.249229E-01	1.329068E-03	-5.517924E-02
C7	4.425545E-02	-2.024415E-03	-1.822305E-05	9.303738E-04
C8	-8.034690E-02	1.954134E-03	1.805564E-05	-7.777052E-04
C9	9.385582E-03	1.911286E-03	1.754563E-05	1.784639E-05
C10	2.195304E-02	-1.031944E-03	-9.686567E-06	3.351641E-04

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

Te = Evaporator Temperature

Tc = Condensing Temperature



Performance Data Sheet

AE4440Y-AA1A

General

Model	AE4440Y-AA1A	Unit of Measure	Fahrenheit
Condition	ASHRAE(R-134a)	Voltage/Frequency	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	MotorType	CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)					
		100	110	120	130	140
5	Btu/h	2140	1960	1790	1630	1490
	Watts	324	336	346	353	359
	Amps	4.47	4.53	4.56	4.58	4.62
	Lb/h	26.0	24.9	23.8	22.8	21.9
10	Btu/h	2440	2250	2060	1890	1730
	Watts	344	357	368	378	386
	Amps	4.57	4.65	4.69	4.73	4.78
	Lb/h	29.8	28.7	27.5	26.4	25.6
15	Btu/h	2770	2560	2360	2160	1990
	Watts	364	378	391	403	414
	Amps	4.67	4.77	4.83	4.89	4.96
	Lb/h	33.8	32.7	31.5	30.4	29.5
20	Btu/h	3120	2890	2670	2460	2270
	Watts	383	399	414	428	443
	Amps	4.78	4.89	4.97	5.05	5.14
	Lb/h	38.2	37.0	35.8	34.6	33.7
25	Btu/h	3500	3250	3010	2780	2570
	Watts	402	420	437	454	472
	Amps	4.88	5.01	5.12	5.22	5.34
	Lb/h	42.9	41.7	40.4	39.2	38.2
30	Btu/h	3910	3640	3380	3130	2900
	Watts	420	440	460	480	501
	Amps	4.99	5.14	5.27	5.39	5.54
	Lb/h	48.0	46.7	45.4	44.2	43.2
35	Btu/h	4350	4060	3770	3500	3250
	Watts	438	461	483	506	531
	Amps	5.10	5.27	5.43	5.58	5.75
	Lb/h	53.6	52.3	50.9	49.6	48.7
40	Btu/h	4830	4520	4210	3910	3640
	Watts	456	481	506	533	561
	Amps	5.21	5.41	5.59	5.77	5.98
	Lb/h	59.7	58.3	56.9	55.6	54.6
45	Btu/h	5360	5010	4680	4360	4060
	Watts	473	500	529	559	591
	Amps	5.32	5.55	5.76	5.98	6.21

	Lb/h	66.4	65.0	63.5	62.2	61.2
50	Btu/h	5920	5550	5190	4840	4520
	Watts	489	519	551	585	622
	Amps	5.45	5.71	5.95	6.19	6.46
	Lb/h	73.7	72.2	70.8	69.4	68.4
55	Btu/h	6530	6130	5740	5370	5020
	Watts	504	538	574	612	653
	Amps	5.58	5.87	6.14	6.42	6.72
	Lb/h	81.7	80.2	78.7	77.4	76.3

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



Performance Data Sheet

AE4440Y-AA1A

General

Model	AE4440Y-AA1A	Unit of Measure	Fahrenheit
Condition	ASHRAE(R-513A)	Voltage/Frequency	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	MotorType	CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
		80	90	100	110	120	130	140	150
5	Btu/h	2560	2400	2230	2040	1860	1700	1550	1420
	Watts	321	343	360	374	384	392	399	405
	Amps	4.78	5.01	5.14	5.21	5.25	5.28	5.31	5.39
	Lb/h	32.7	32.3	31.4	30.2	28.9	27.6	26.5	25.9
10	Btu/h	2920	2740	2540	2340	2150	1970	1800	1670
	Watts	342	364	383	397	409	420	429	439
	Amps	4.87	5.11	5.26	5.35	5.40	5.45	5.51	5.61
	Lb/h	37.5	37.0	36.1	34.8	33.4	32.0	31.0	30.4
15	Btu/h	3290	3090	2880	2670	2450	2250	2070	1920
	Watts	362	385	404	421	435	448	460	473
	Amps	4.96	5.21	5.38	5.49	5.56	5.63	5.71	5.84
	Lb/h	42.6	42.0	41.0	39.6	38.2	36.8	35.7	35.1
20	Btu/h	3700	3480	3250	3010	2780	2560	2360	2200
	Watts	381	405	426	444	460	476	492	509
	Amps	5.04	5.31	5.50	5.63	5.72	5.81	5.92	6.08
	Lb/h	48.0	47.4	46.2	44.8	43.3	41.9	40.8	40.1
25	Btu/h	4140	3900	3640	3380	3130	2890	2680	2490
	Watts	399	424	447	467	486	505	524	545
	Amps	5.12	5.41	5.62	5.77	5.89	6.01	6.14	6.33
	Lb/h	53.9	53.1	51.9	50.5	48.9	47.4	46.3	45.7
30	Btu/h	4610	4350	4070	3790	3510	3250	3020	2810
	Watts	417	443	467	490	512	534	557	582
	Amps	5.20	5.51	5.74	5.92	6.06	6.21	6.38	6.59
	Lb/h	60.2	59.4	58.1	56.6	55.0	53.5	52.3	51.7
35	Btu/h	5120	4830	4530	4230	3930	3650	3390	3160
	Watts	433	461	487	512	537	563	590	620
	Amps	5.27	5.61	5.87	6.07	6.25	6.42	6.62	6.87
	Lb/h	67.2	66.2	64.9	63.3	61.6	60.1	58.9	58.3
40	Btu/h	5680	5360	5030	4700	4380	4070	3790	3540
	Watts	449	478	506	534	562	592	624	658
	Amps	5.35	5.71	6.00	6.23	6.44	6.64	6.88	7.16
	Lb/h	74.7	73.7	72.3	70.6	68.9	67.4	66.2	65.5
45	Btu/h	6280	5930	5570	5220	4870	4530	4220	3950
	Watts	463	494	525	556	588	621	657	697
	Amps	5.43	5.82	6.13	6.39	6.64	6.88	7.15	7.48

	Lb/h	83.0	81.9	80.4	78.7	76.9	75.3	74.1	73.5
50	Btu/h	6930	6550	6160	5780	5400	5040	4700	4400
	Watts	476	510	543	577	613	651	691	736
	Amps	5.50	5.92	6.27	6.57	6.85	7.13	7.44	7.80
	Lb/h	92.0	90.9	89.3	87.5	85.7	84.1	82.9	82.2
55	Btu/h	7630	7220	6800	6380	5980	5590	5220	4890
	Watts	488	524	561	598	638	680	726	776
	Amps	5.58	6.04	6.42	6.75	7.07	7.39	7.74	8.15
	Lb/h	102	101	99.0	97.2	95.3	93.7	92.5	91.8

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.880089E+03	-1.802693E+02	-3.366057E+00	-1.236149E+01
C2	9.325414E+01	8.101747E+00	1.763872E-02	1.155339E+00
C3	3.124716E+01	1.038748E+01	2.018182E-01	1.212464E+00
C4	6.289446E-01	-5.197805E-02	-5.077464E-04	2.684108E-03
C5	-4.178680E-01	-8.683241E-02	-9.989789E-05	-4.289518E-03
C6	-4.458031E-01	-6.666691E-02	-1.607838E-03	-1.142174E-02
C7	4.393462E-03	-6.100597E-05	1.376529E-06	9.304750E-05
C8	-3.127073E-03	4.706062E-04	4.474365E-06	2.900164E-06
C9	6.452285E-04	5.085620E-04	1.693793E-06	1.372191E-05
C10	1.380212E-03	1.462811E-04	4.282723E-06	3.236271E-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