Performance Data Sheet

AE4440Z-AA1A

General Information

Model	AE4440Z-AA1A	**Refrigerant**	R-404A
Test Condition	EN12900 ASERCOM	**Performance Test Voltage**	115V ~ 60HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
5	Btu/h	2630	2330	2090	1910	1770	1670	1590
	Watts	328	350	364	371	373	370	365
	Amps	4.84	4.99	5.08	5.14	5.15	5.12	5.07
	Lb/h	41.1	38.2	36.5	35.8	36.1	37.0	38.3
10	Btu/h	2980	2650	2380	2150	1950	1780	1630
	Watts	340	364	380	391	397	400	400
	Amps	4.91	5.06	5.17	5.25	5.28	5.29	5.28
	Lb/h	46.7	43.6	41.6	40.4	39.9	39.8	40.0
15	Btu/h	3350	3000	2690	2420	2170	1940	1710
	Watts	351	376	395	409	420	427	434
	Amps	4.98	5.14	5.26	5.35	5.42	5.46	5.48
	Lb/h	52.6	49.5	47.3	45.7	44.6	43.7	42.9
20	Btu/h	3740	3370	3040	2720	2420	2130	1840
	Watts	361	388	410	427	441	453	465
	Amps	5.06	5.22	5.35	5.46	5.55	5.62	5.69
	Lb/h	59.0	56.0	53.7	51.8	50.2	48.6	46.8
25	Btu/h	4150	3770	3400	3050	2710	2360	2000
	Watts	371	399	423	442	460	477	495
	Amps	5.13	5.29	5.44	5.56	5.68	5.78	5.88
	Lb/h	65.7	62.9	60.6	58.6	56.6	54.4	51.8
30	Btu/h	4580	4180	3800	3410	3020	2620	2190
	Watts	380	409	434	457	478	500	523
	Amps	5.19	5.36	5.52	5.66	5.80	5.93	6.07
	Lb/h	72.8	70.4	68.2	66.1	63.8	61.1	57.8
35	Btu/h	5020	4610	4210	3800	3370	2910	2420
	Watts	389	418	445	470	495	520	548
	Amps	5.26	5.43	5.59	5.75	5.91	6.07	6.25
	Lb/h	80.2	78.2	76.3	74.2	71.7	68.7	64.9
40	Btu/h	5470	5060	4640	4200	3730	3230	2690
	Watts	396	426	454	481	509	538	571
	Amps	5.31	5.48	5.65	5.83	6.01	6.21	6.42
	Lb/h	87.9	86.5	84.9	83.0	80.5	77.2	72.9

45	Btu/h	5930	5520	5090	4620	4120	3570	2970
	Watts	403	433	462	491	522	555	592
	Amps	5.36	5.53	5.71	5.90	6.10	6.33	6.57
	Lb/h	95.9	95.2	94.1	92.4	90.0	86.6	81.9
50	Btu/h	6400	5990	5540	5060	4530	3940	3290
	Watts	408	439	469	499	532	569	610
	Amps	5.40	5.57	5.76	5.96	6.18	6.44	6.72
	Lb/h	104	104	104	102	100	96.7	91.9
55	Btu/h	6870	6460	6010	5510	4950	4320	3620
	Watts	413	443	473	506	541	581	626
	Amps	5.43	5.60	5.79	6.01	6.25	6.53	6.85
	Lb/h	113	114	114	113	111	108	103
60	Btu/h	7340	6940	6480	5970	5380	4720	3980
	Watts	416	446	477	510	548	591	640
	Amps	5.44	5.61	5.81	6.04	6.30	6.61	6.96
	Lb/h	121	123	124	124	123	119	114

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	8.000924E+03	-3.164682E+02	1.115605E+00	1.356743E+02
C2	3.223392E+01	5.113215E+00	5.257191E-02	-4.175759E-02
C3	-1.192027E+02	1.469990E+01	7.904624E-02	-2.356242E+00
C4	1.094834E-01	2.867440E-02	1.905497E-04	-8.813956E-03
C5	1.184180E+00	-1.014117E-01	-1.041779E-03	2.904796E-02
C6	7.050421E-01	-1.019509E-01	-4.747156E-04	1.662420E-02
C7	-3.706894E-03	-8.298711E-05	-1.971280E-06	-3.298580E-05
C8	6.324151E-03	-4.619515E-04	-1.394556E-06	2.289725E-04
C9	-1.045017E-02	8.545407E-04	6.922197E-06	-2.051697E-04
C10	-1.285725E-03	2.128230E-04	7.207826E-07	-3.422897E-05

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

AE4440Z-AA1A

General Information

Model	AE4440Z-AA1A	**Refrigerant**	R-404A
Test Condition	ASHRAE	**Performance Test Voltage**	115V ~ 60HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°F)	Condensing Temperature (°F)							
		80	90	100	110	120	130	140
5	Btu/h	2450	2290	2080	1840	1580	1330	1110
	Watts	319	334	348	360	370	378	383
	Amps	4.69	4.80	4.90	4.98	5.04	5.04	4.98
	Lb/h	37.8	37.7	36.5	34.5	32.2	29.9	27.9
10	Btu/h	2770	2590	2360	2100	1820	1550	1300
	Watts	332	349	365	380	393	404	411
	Amps	4.76	4.87	4.99	5.10	5.19	5.23	5.21
	Lb/h	42.7	42.7	41.6	39.6	37.2	34.8	32.8
15	Btu/h	3110	2910	2660	2380	2070	1770	1500
	Watts	344	363	381	399	414	428	439
	Amps	4.82	4.95	5.09	5.22	5.33	5.40	5.42
	Lb/h	48.0	48.2	47.0	45.1	42.7	40.2	38.1
20	Btu/h	3490	3270	2990	2680	2350	2010	1700
	Watts	355	376	396	416	435	452	465
	Amps	4.89	5.02	5.17	5.33	5.46	5.57	5.63
	Lb/h	54.0	54.2	53.0	51.0	48.6	46.0	43.7
25	Btu/h	3900	3650	3350	3000	2640	2270	1920
	Watts	364	387	410	433	454	474	491
	Amps	4.94	5.09	5.25	5.43	5.59	5.73	5.82
	Lb/h	60.6	60.8	59.6	57.6	55.0	52.3	49.9
30	Btu/h	4350	4070	3740	3360	2950	2550	2160
	Watts	372	397	423	448	473	495	516
	Amps	5.00	5.15	5.33	5.52	5.70	5.87	6.00
	Lb/h	68.0	68.1	67.0	64.8	62.1	59.3	56.6
35	Btu/h	4840	4530	4160	3740	3290	2840	2410
	Watts	378	406	434	462	490	515	539
	Amps	5.05	5.20	5.39	5.60	5.81	6.00	6.17
	Lb/h	76.2	76.3	75.1	72.8	70.0	66.9	64.1
40	Btu/h	5370	5030	4610	4150	3660	3160	2680
	Watts	382	413	444	475	505	534	561
	Amps	5.09	5.25	5.45	5.67	5.90	6.13	6.32
	Lb/h	85.4	85.4	84.1	81.7	78.7	75.4	72.3

45	Btu/h	5950	5560	5100	4590	4060	3510	2970
	Watts	385	418	452	486	519	552	582
	Amps	5.13	5.30	5.50	5.74	5.99	6.24	6.46
	Lb/h	95.6	95.5	94.1	91.5	88.3	84.8	81.4
50	Btu/h	6580	6140	5630	5070	4480	3880	3290
	Watts	386	421	458	495	532	567	601
	Amps	5.17	5.33	5.54	5.79	6.06	6.33	6.59
	Lb/h	107	107	105	102	98.9	95.2	91.5
55	Btu/h	7260	6770	6210	5590	4950	4290	3630
	Watts	385	423	462	502	542	581	619
	Amps	5.20	5.36	5.58	5.84	6.12	6.42	6.70
	Lb/h	119	119	117	114	111	107	103
60	Btu/h	7980	7440	6820	6150	5440	4720	4000
	Watts	382	423	465	508	551	594	635
	Amps	5.22	5.38	5.60	5.87	6.17	6.48	6.80
	Lb/h	133	133	131	128	124	119	115

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	-7.774086E+02	2.511334E+02	5.670021E+00	-5.257704E+01
C2	5.326053E+01	1.162216E+00	3.169882E-02	3.982455E-01
C3	1.065682E+02	-6.112129E-01	-5.193576E-02	2.508812E+00
C4	1.164348E+00	-3.060517E-02	2.047594E-04	1.009980E-02
C5	1.742331E-01	6.822560E-03	-6.819077E-04	8.799429E-03
C6	-1.133725E+00	2.470163E-02	7.022992E-04	-2.314624E-02
C7	3.050049E-03	-1.309031E-04	-6.944618E-07	1.219410E-04
C8	-7.864290E-03	1.356707E-04	-2.854732E-06	-5.152776E-05
C9	-2.098749E-03	1.910706E-04	5.724443E-06	-3.645069E-05
C10	3.280665E-03	-1.078526E-04	-2.704364E-06	6.496476E-05

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

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General Information

Model	AE4440Z-AA1A	**Refrigerant**	R-404A
Test Condition	EN12900 ASERCOM	**Performance Test Voltage**	115V ~ 60HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°C)	Condensing Temperature (°C)				
		30	40	50	60
-15	Btu/h	2450	2010	1740	1590
	Watts (Power)	342	368	373	365
	Amps	4.93	5.11	5.15	5.07
	Lb/h	39.2	36.1	36.2	38.3
-10	Btu/h	3060	2520	2080	1690
	Watts (Power)	365	398	417	427
	Amps	5.07	5.28	5.40	5.44
	Lb/h	49.4	45.4	43.4	42.2
-6.7	Btu/h	3510	2900	2360	1830
	Watts (Power)	378	417	443	465
	Amps	5.16	5.40	5.56	5.68
	Lb/h	57.0	52.8	49.8	46.8
-5	Btu/h	3750	3120	2530	1930
	Watts (Power)	385	425	456	483
	Amps	5.20	5.45	5.64	5.80
	Lb/h	61.2	56.9	53.5	49.7
0	Btu/h	4510	3800	3080	2280
	Watts (Power)	402	448	490	533
	Amps	5.32	5.61	5.87	6.14
	Lb/h	74.3	70.5	66.3	60.5
5	Btu/h	5320	4550	3710	2740
	Watts (Power)	416	467	518	575
	Amps	5.43	5.74	6.07	6.45
	Lb/h	88.7	86.0	81.7	74.7
7.2	Btu/h	5680	4900	4010	2970
	Watts (Power)	421	474	528	592
	Amps	5.46	5.78	6.15	6.57
	Lb/h	95.4	93.4	89.3	81.9
10	Btu/h	6160	5360	4410	3290
	Watts (Power)	427	481	539	610
	Amps	5.50	5.83	6.23	6.72
	Lb/h	104	103	99.6	91.9

15	Btu/h	7010	6190	5170	3900
	Watts (Power)	434	489	555	637
	Amps	5.54	5.89	6.35	6.94
	Lb/h	121	122	120	112

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	6.965798E+03	1.557896E+02	4.109772E+00	9.525859E+01
C2	1.223963E+02	6.079030E+00	5.329201E-02	8.661483E-01
C3	-9.911162E+01	1.234930E+01	5.452271E-02	-1.176533E+00
C4	-1.425781E-01	1.919761E-02	-1.403535E-04	-1.507725E-02
C5	2.981172E+00	-2.471666E-01	-2.229152E-03	9.905114E-02
C6	8.009509E-01	-1.755257E-01	-5.961929E-04	2.194383E-02
C7	-2.161861E-02	-4.839808E-04	-1.149650E-05	-1.923732E-04
C8	3.688245E-02	-2.694101E-03	-8.133051E-06	1.335368E-03
C9	-6.094539E-02	4.983681E-03	4.037025E-05	-1.196550E-03
C10	-7.498348E-03	1.241184E-03	4.203604E-06	-1.996234E-04

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

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