

General

AE4430Z-AA1A

Model AE4430Z-AA1A Unit of Measure Fahrenheit
 Condition ASHRAE(R-404A) Voltage/Frequency 115V~ 60HZ
 RETURN GAS 35°C (95°F) RETURN GAS MotorType CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)						
	90	100	110	120	130	140	
-10	Btu/h	1240					
	Watts	217					
	Amps	4.03					
-5	Lb/h	18.4					
	Btu/h	1480	1330				
	Watts	235	244				
0	Amps	4.04	4.12				
	Lb/h	21.7	20.7				
	Btu/h	1720	1570	1410			
5	Watts	252	263	272			
	Amps	4.06	4.15	4.21			
	Lb/h	25.3	24.4	23.3			
10	Btu/h	1990	1830	1660	1480		
	Watts	267	280	291	300		
	Amps	4.09	4.19	4.26	4.30		
15	Lb/h	29.1	28.2	27.2	26.0		
	Btu/h	2270	2100	1920	1720	1520	
	Watts	281	295	309	320	329	
20	Amps	4.13	4.23	4.31	4.37	4.43	
	Lb/h	33.3	32.4	31.4	30.1	28.7	
	Btu/h	2580	2390	2190	1980	1760	1530
25	Watts	293	309	325	338	350	359
	Amps	4.18	4.29	4.38	4.45	4.52	4.58
	Lb/h	37.8	36.9	35.8	34.6	33.1	31.4
30	Btu/h	2910	2700	2480	2250	2010	1760
	Watts	303	322	340	356	369	381
	Amps	4.23	4.35	4.45	4.53	4.62	4.70
35	Lb/h	42.7	41.8	40.7	39.3	37.7	35.9
	Btu/h	3270	3030	2790	2530	2260	1990
	Watts	312	333	353	371	388	402
40	Amps	4.27	4.41	4.52	4.62	4.72	4.82
	Lb/h	48.1	47.1	45.9	44.4	42.7	40.7
	Btu/h	3650	3390	3120	2830	2530	2230
45	Watts	320	342	365	385	405	421
	Amps	4.32	4.46	4.59	4.70	4.82	4.94
	Lb/h	54.1	53.0	51.6	49.9	48.0	45.8
50	Btu/h	4070	3780	3470	3150	2820	2480
	Watts	325	350	375	398	420	439
	Amps	4.36	4.52	4.65	4.79	4.92	5.06
55	Lb/h	60.5	59.3	57.8	55.9	53.8	51.3
	Btu/h	4520	4190	3850	3490	3120	2750
	Watts	329	356	383	409	434	456
60	Amps	4.40	4.56	4.71	4.86	5.01	5.17
	Lb/h	67.6	66.2	64.5	62.4	60.0	57.3
	Btu/h	5000	4640	4260	3860	3450	3030
65	Watts	331	360	390	419	446	471
	Amps	4.42	4.60	4.76	4.93	5.10	5.28
	Lb/h	75.4	73.7	71.8	69.5	66.8	63.8
70	Btu/h	5530	5120	4690	4250	3800	3330
	Watts	331	363	395	426	457	485
	Amps	4.43	4.62	4.80	4.99	5.18	5.38
75	Lb/h	83.8	81.9	79.7	77.1	74.1	70.8
	Btu/h	6090	5640	5160	4670	4170	3660
	Watts	328	363	398	432	466	497
80	Amps	4.42	4.63	4.83	5.03	5.24	5.47
	Lb/h	93.0	90.8	88.3	85.4	82.1	78.4

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.172506E+03	1.867863E+02	7.412899E-01	2.649998E+01
C2	5.877356E+01	1.423182E+00	1.235776E-02	4.240906E-01

C3	7.352634E+00	-5.337237E-01	7.324213E-02	5.943133E-02
C4	1.029136E+00	-4.262372E-02	9.275356E-05	1.136691E-02
C5	-3.578446E-02	6.309375E-03	-2.683011E-04	5.417307E-03
C6	-1.708261E-01	2.311358E-02	-5.155384E-04	-8.430433E-04
C7	3.119804E-03	-8.010308E-05	-3.702906E-06	6.220691E-05
C8	-7.625107E-03	1.596517E-04	1.511822E-06	-6.438492E-05
C9	-5.424404E-04	1.481920E-04	2.096042E-06	-2.163191E-05
C10	3.753686E-04	-1.019985E-04	1.238448E-06	3.458658E-07

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

Te = Evaporator Temperature

Tc = Condensing Temperature

AE4430Z-AA1A

General

Performance Data Sheet

Model AE4430Z-AA1A **Unit of Measure** Fahrenheit
Condition ASHRAE(R-448A) **Voltage/Frequency** 115V~ 60HZ
RETURN GAS 35°C (95°F) RETURN GAS **MotorType** CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)						
	90	100	110	120	130	140	
-10	Btu/h	1130					
	Watts	199					
	Amps	3.88					
-5	Lb/h	15.7					
	Btu/h	1340	1210				
	Watts	216	224				
0	Amps	3.88	3.96				
	Lb/h	18.5	17.7				
	Btu/h	1560	1430	1280			
5	Watts	231	241	250			
	Amps	3.90	3.99	4.04			
	Lb/h	21.6	20.8	19.9			
10	Btu/h	1800	1660	1510	1340		
	Watts	245	257	267	276		
	Amps	3.93	4.02	4.09	4.14		
15	Lb/h	24.8	24.1	23.2	22.2		
	Btu/h	2060	1910	1740	1560	1380	
	Watts	258	271	283	294	302	
20	Amps	3.97	4.07	4.14	4.20	4.25	
	Lb/h	28.4	27.6	26.8	25.7	24.5	
	Btu/h	2340	2170	1990	1800	1600	1390
25	Watts	269	284	298	311	321	329
	Amps	4.01	4.12	4.21	4.28	4.34	4.40
	Lb/h	32.2	31.5	30.6	29.5	28.2	26.8
30	Btu/h	2640	2450	2250	2040	1820	1590
	Watts	279	295	312	326	339	349
	Amps	4.06	4.18	4.27	4.36	4.43	4.51
35	Lb/h	36.4	35.7	34.7	33.5	32.1	30.6
	Btu/h	2960	2750	2530	2290	2050	1800
	Watts	287	306	324	341	356	369
40	Amps	4.11	4.23	4.34	4.44	4.53	4.63
	Lb/h	41.1	40.2	39.2	37.9	36.4	34.7
	Btu/h	3310	3080	2830	2570	2300	2020
45	Watts	293	314	335	354	371	386
	Amps	4.15	4.29	4.41	4.52	4.63	4.75
	Lb/h	46.1	45.2	44.0	42.6	40.9	39.1
50	Btu/h	3690	3420	3150	2860	2560	2250
	Watts	298	321	344	365	385	403
	Amps	4.19	4.34	4.47	4.60	4.73	4.86
55	Lb/h	51.6	50.6	49.3	47.7	45.9	43.8
	Btu/h	4100	3800	3490	3170	2830	2490
	Watts	302	327	352	376	398	419
60	Amps	4.22	4.38	4.53	4.67	4.82	4.97
	Lb/h	57.7	56.5	55.0	53.2	51.2	48.9
	Btu/h	4540	4210	3860	3500	3130	2750
65	Watts	303	331	358	384	409	433
	Amps	4.25	4.42	4.58	4.74	4.90	5.08
	Lb/h	64.3	62.9	61.2	59.2	57.0	54.4
70	Btu/h	5010	4640	4260	3860	3440	3020
	Watts	303	333	362	391	419	445
	Amps	4.25	4.44	4.62	4.79	4.97	5.17
75	Lb/h	71.5	69.9	68.0	65.8	63.2	60.4
	Btu/h	5530	5110	4680	4240	3780	3320
	Watts	301	333	365	397	427	456
80	Amps	4.25	4.45	4.64	4.83	5.03	5.25
	Lb/h	79.3	77.5	75.3	72.8	70.0	66.9

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.969863E+03	1.714121E+02	7.122239E-01	2.260431E+01
C2	5.329169E+01	1.306057E+00	1.187365E-02	3.617369E-01
C3	6.667015E+00	-4.897997E-01	7.036958E-02	5.069862E-02
C4	9.331489E-01	-3.911596E-02	8.909557E-05	9.696160E-03
C5	-3.245059E-02	5.790199E-03	-2.577735E-04	4.620917E-03
C6	-1.548937E-01	2.121114E-02	-4.953195E-04	-7.191446E-04
C7	2.828752E-03	-7.350615E-05	-3.557497E-06	5.305966E-05
C8	-6.913862E-03	1.465117E-04	1.452499E-06	-5.491958E-05
C9	-4.918397E-04	1.359935E-04	2.013831E-06	-1.845193E-05
C10	3.403591E-04	-9.360300E-05	1.189878E-06	2.951207E-07

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

Te = Evaporator Temperature

Tc = Condensing Temperature

AE4430Z-AA1A

General

Performance Data Sheet

Model AE4430Z-AA1A **Unit of Measure** Fahrenheit
Condition ASHRAE(R-449A) **Voltage/Frequency** 115V~ 60HZ
RETURN GAS 35°C (95°F) RETURN GAS **MotorType** CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)						
	90	100	110	120	130	140	
-10	Btu/h	1130					
	Watts	199					
	Amps	3.88					
-5	Lb/h	15.7					
	Btu/h	1340	1210				
	Watts	216	224				
0	Amps	3.88	3.96				
	Lb/h	18.5	17.7				
	Btu/h	1560	1430	1280			
5	Watts	231	241	250			
	Amps	3.90	3.99	4.04			
	Lb/h	21.6	20.8	19.9			
10	Btu/h	1800	1660	1510	1340		
	Watts	245	257	267	276		
	Amps	3.93	4.02	4.09	4.14		
15	Lb/h	24.8	24.1	23.2	22.2		
	Btu/h	2060	1910	1740	1560	1380	
	Watts	258	271	283	294	302	
20	Amps	3.97	4.07	4.14	4.20	4.25	
	Lb/h	28.4	27.6	26.8	25.7	24.5	
	Btu/h	2340	2170	1990	1800	1600	1390
25	Watts	269	284	298	311	321	329
	Amps	4.01	4.12	4.21	4.28	4.34	4.40
	Lb/h	32.2	31.5	30.6	29.5	28.2	26.8
30	Btu/h	2640	2450	2250	2040	1820	1590
	Watts	279	295	312	326	339	349
	Amps	4.06	4.18	4.27	4.36	4.43	4.51
35	Lb/h	36.4	35.7	34.7	33.5	32.1	30.6
	Btu/h	2960	2750	2530	2290	2050	1800
	Watts	287	306	324	341	356	369
40	Amps	4.11	4.23	4.34	4.44	4.53	4.63
	Lb/h	41.1	40.2	39.2	37.9	36.4	34.7
	Btu/h	3310	3080	2830	2570	2300	2020
45	Watts	293	314	335	354	371	386
	Amps	4.15	4.29	4.41	4.52	4.63	4.75
	Lb/h	46.1	45.2	44.0	42.6	40.9	39.1
50	Btu/h	3690	3420	3150	2860	2560	2250
	Watts	298	321	344	365	385	403
	Amps	4.19	4.34	4.47	4.60	4.73	4.86
55	Lb/h	51.6	50.6	49.3	47.7	45.9	43.8
	Btu/h	4100	3800	3490	3170	2830	2490
	Watts	302	327	352	376	398	419
60	Amps	4.22	4.38	4.53	4.67	4.82	4.97
	Lb/h	57.7	56.5	55.0	53.2	51.2	48.9
	Btu/h	4540	4210	3860	3500	3130	2750
65	Watts	303	331	358	384	409	433
	Amps	4.25	4.42	4.58	4.74	4.90	5.08
	Lb/h	64.3	62.9	61.2	59.2	57.0	54.4
70	Btu/h	5010	4640	4260	3860	3440	3020
	Watts	303	333	362	391	419	445
	Amps	4.25	4.44	4.62	4.79	4.97	5.17
75	Lb/h	71.5	69.9	68.0	65.8	63.2	60.4
	Btu/h	5530	5110	4680	4240	3780	3320
	Watts	301	333	365	397	427	456
80	Amps	4.25	4.45	4.64	4.83	5.03	5.25
	Lb/h	79.3	77.5	75.3	72.8	70.0	66.9

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.969863E+03	1.714121E+02	7.122239E-01	2.260431E+01
C2	5.329169E+01	1.306057E+00	1.187365E-02	3.617369E-01
C3	6.667015E+00	-4.897997E-01	7.036958E-02	5.069862E-02
C4	9.331489E-01	-3.911596E-02	8.909557E-05	9.696160E-03
C5	-3.245059E-02	5.790199E-03	-2.577735E-04	4.620917E-03
C6	-1.548937E-01	2.121114E-02	-4.953195E-04	-7.191446E-04
C7	2.828752E-03	-7.350615E-05	-3.557497E-06	5.305966E-05
C8	-6.913862E-03	1.465117E-04	1.452499E-06	-5.491958E-05
C9	-4.918397E-04	1.359935E-04	2.013831E-06	-1.845193E-05
C10	3.403591E-04	-9.360300E-05	1.189878E-06	2.951207E-07

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

Te = Evaporator Temperature

Tc = Condensing Temperature

AE4430Z-AA1A

General

Performance Data Sheet

Model AE4430Z-AA1A **Unit of Measure** Fahrenheit
Condition ASHRAE(R-452A) **Voltage/Frequency** 115V~ 60HZ
RETURN GAS 35°C (95°F) RETURN GAS **MotorType** CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)						
	90	100	110	120	130	140	
-10	Btu/h	1180					
	Watts	208					
	Amps	3.84					
	Lb/h	17.0					
-5	Btu/h	1400	1260				
	Watts	225	234				
	Amps	3.85	3.92				
	Lb/h	20.1	19.2				
0	Btu/h	1630	1490	1340			
	Watts	241	251	260			
	Amps	3.86	3.95	4.01			
	Lb/h	23.4	22.5	21.5			
5	Btu/h	1880	1730	1570	1400		
	Watts	255	268	278	287		
	Amps	3.89	3.98	4.05	4.10		
	Lb/h	26.9	26.1	25.1	24.0		
10	Btu/h	2150	1990	1810	1630	1440	
	Watts	269	283	295	306	315	
	Amps	3.93	4.03	4.10	4.16	4.21	
	Lb/h	30.7	30.0	29.0	27.9	26.5	
15	Btu/h	2440	2260	2070	1870	1660	1450
	Watts	280	296	311	324	335	343
	Amps	3.98	4.08	4.17	4.24	4.30	4.36
	Lb/h	34.9	34.1	33.1	31.9	30.6	29.0
20	Btu/h	2750	2550	2340	2120	1900	1660
	Watts	291	308	325	340	354	364
	Amps	4.02	4.14	4.23	4.31	4.39	4.47
	Lb/h	39.5	38.6	37.6	36.3	34.8	33.1
25	Btu/h	3090	2870	2640	2390	2140	1880
	Watts	299	319	338	355	371	384
	Amps	4.07	4.19	4.30	4.40	4.49	4.59
	Lb/h	44.5	43.6	42.4	41.0	39.4	37.6
30	Btu/h	3450	3210	2950	2680	2390	2110
	Watts	306	328	349	369	387	403
	Amps	4.11	4.25	4.37	4.48	4.59	4.70
	Lb/h	50.0	48.9	47.7	46.1	44.4	42.3
35	Btu/h	3850	3570	3280	2980	2670	2340
	Watts	311	335	359	381	402	421
	Amps	4.15	4.30	4.43	4.55	4.68	4.81
	Lb/h	55.9	54.8	53.4	51.7	49.7	47.5
40	Btu/h	4270	3960	3640	3300	2950	2600
	Watts	315	341	367	392	415	437
	Amps	4.18	4.34	4.49	4.63	4.77	4.92
	Lb/h	62.5	61.2	59.6	57.7	55.5	53.0
45	Btu/h	4730	4380	4020	3650	3260	2870
	Watts	317	345	373	401	427	451
	Amps	4.21	4.38	4.53	4.69	4.85	5.03
	Lb/h	69.6	68.1	66.3	64.2	61.7	59.0
50	Btu/h	5230	4840	4440	4020	3590	3150
	Watts	316	347	378	408	437	464
	Amps	4.22	4.40	4.57	4.75	4.93	5.12
	Lb/h	77.4	75.7	73.7	71.3	68.5	65.5
55	Btu/h	5760	5330	4880	4420	3940	3460
	Watts	314	348	381	414	446	476
	Amps	4.21	4.40	4.59	4.79	4.99	5.20
	Lb/h	85.9	84.0	81.6	78.9	75.9	72.5

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.053616E+03	1.788125E+02	7.055268E-01	2.449016E+01
C2	5.555859E+01	1.362364E+00	1.176238E-02	3.919329E-01
C3	6.950550E+00	-5.109368E-01	6.970882E-02	5.493115E-02
C4	9.728116E-01	-4.080280E-02	8.824899E-05	1.050491E-02
C5	-3.383129E-02	6.040195E-03	-2.553506E-04	5.006480E-03
C6	-1.614804E-01	2.212673E-02	-4.906692E-04	-7.791682E-04
C7	2.949153E-03	-7.669305E-05	-3.523960E-06	5.748945E-05
C8	-7.207834E-03	1.528360E-04	1.438817E-06	-5.950215E-05
C9	-5.127598E-04	1.418642E-04	1.994923E-06	-1.999152E-05
C10	3.548333E-04	-9.764353E-05	1.178707E-06	3.197920E-07

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

Te = Evaporator Temperature

Tc = Condensing Temperature

AE4430Z-AA1A

General

Performance Data Sheet

Model AE4430Z-AA1A **Unit of Measure** Fahrenheit
Condition EN12900(R-404A) **Voltage/Frequency** 115V~ 60HZ
RETURN GAS 20°C (68°F) RETURN GAS **MotorType** CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
	80	90	100	110	120	130	140	150	
5	Btu/h	1930	1780	1620	1450	1270	1080	888	682
	Watts	262	275	289	301	311	319	323	324
	Amps	4.05	4.18	4.28	4.35	4.40	4.44	4.48	4.51
	Lb/h	29.8	29.1	28.2	27.2	25.9	24.4	22.6	20.6
10	Btu/h	2170	2010	1830	1650	1460	1250	1040	819
	Watts	270	285	300	314	326	336	343	346
	Amps	4.09	4.23	4.33	4.41	4.47	4.53	4.58	4.63
	Lb/h	33.5	32.9	32.1	31.0	29.8	28.3	26.5	24.4
15	Btu/h	2430	2260	2070	1860	1650	1430	1200	958
	Watts	278	295	312	327	341	353	362	368
	Amps	4.13	4.27	4.39	4.48	4.55	4.62	4.69	4.76
	Lb/h	37.7	37.1	36.3	35.3	34.0	32.5	30.6	28.4
20	Btu/h	2730	2530	2320	2100	1870	1620	1370	1100
	Watts	285	304	322	340	356	370	382	390
	Amps	4.17	4.32	4.45	4.55	4.64	4.72	4.81	4.90
	Lb/h	42.5	41.9	41.1	40.0	38.7	37.0	35.0	32.7
25	Btu/h	3060	2840	2600	2350	2090	1820	1540	1240
	Watts	291	312	332	352	371	387	401	412
	Amps	4.21	4.37	4.51	4.62	4.72	4.82	4.93	5.04
	Lb/h	47.8	47.2	46.3	45.2	43.7	42.0	39.9	37.4
30	Btu/h	3420	3170	2910	2630	2340	2040	1720	1390
	Watts	296	318	341	363	384	403	420	433
	Amps	4.25	4.42	4.56	4.69	4.81	4.93	5.05	5.19
	Lb/h	53.8	53.2	52.2	50.9	49.3	47.4	45.1	42.4
35	Btu/h	3820	3530	3240	2930	2600	2260	1910	1550
	Watts	299	324	349	373	397	418	438	454
	Amps	4.28	4.46	4.62	4.76	4.90	5.03	5.17	5.33
	Lb/h	60.6	59.8	58.6	57.2	55.4	53.3	50.8	47.8
40	Btu/h	4250	3930	3590	3250	2880	2510	2110	1710
	Watts	301	328	355	382	408	432	454	474
	Amps	4.31	4.50	4.67	4.82	4.97	5.13	5.29	5.48
	Lb/h	68.0	67.0	65.8	64.1	62.1	59.7	56.9	53.7
45	Btu/h	4720	4360	3980	3590	3180	2760	2330	1880
	Watts	300	330	359	389	417	445	470	492
	Amps	4.32	4.52	4.70	4.87	5.04	5.22	5.40	5.61
	Lb/h	76.2	75.1	73.6	71.7	69.5	66.8	63.7	60.1
50	Btu/h	5220	4810	4390	3960	3510	3040	2550	2050
	Watts	298	329	361	394	425	455	483	509
	Amps	4.32	4.53	4.73	4.91	5.10	5.29	5.50	5.74
	Lb/h	85.3	83.9	82.2	80.0	77.4	74.4	71.0	67.1
55	Btu/h	5760	5310	4840	4350	3850	3330	2790	2240
	Watts	292	327	361	396	431	464	495	524
	Amps	4.30	4.52	4.73	4.94	5.14	5.36	5.59	5.85
	Lb/h	95.2	93.6	91.5	89.1	86.2	82.8	78.9	74.6

	COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.623168E+03	2.035797E+02	7.582120E-01	3.081818E+01	
C2	4.183478E+01	4.897722E-01	1.264082E-02	1.972426E-01	
C3	-8.504756E+00	-6.972786E-01	7.491422E-02	-4.861826E-02	
C4	1.210391E+00	-1.841750E-02	9.484198E-05	1.488972E-02	
C5	2.204331E-02	5.322666E-03	-2.744225E-04	6.859487E-03	
C6	-3.166578E-02	2.486245E-02	-5.273084E-04	2.338653E-04	
C7	1.364815E-03	-3.304791E-04	-3.787168E-06	5.960898E-05	
C8	-8.153123E-03	2.248053E-04	1.546295E-06	-7.944512E-05	
C9	-7.905978E-04	1.288275E-04	2.143896E-06	-2.324310E-05	
C10	-2.644901E-05	-1.053619E-04	1.266722E-06	-3.489546E-06	

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

Te = Evaporator Temperature

Tc = Condensing Temperature