

General

AE2410Y-AA1A

Model AE2410Y-AA1A Unit of Measure Fahrenheit
 Condition ASHRAE(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	
-40	Btu/h	723	507	377	309	277	256	220	145
	Watts	10.5	7.30	5.55	4.77	4.51	4.29	3.65	2.12
	Amps	2.73	2.70	2.69	2.68	2.68	2.66	2.63	2.58
	Lb/h	170	160	152	147	142	137	131	122
-35	Btu/h	793	566	426	346	301	266	216	126
	Watts	11.6	8.24	6.36	5.45	5.03	4.65	3.83	2.11
	Amps	2.78	2.75	2.73	2.72	2.71	2.70	2.66	2.61
	Lb/h	178	169	162	157	153	149	143	135
-30	Btu/h	886	651	500	409	353	305	242	137
	Watts	12.9	9.52	7.54	6.51	5.97	5.45	4.49	2.62
	Amps	2.84	2.80	2.78	2.77	2.76	2.75	2.71	2.66
	Lb/h	188	179	174	170	166	162	157	149
-25	Btu/h	1000	757	598	497	430	370	294	175
	Watts	14.6	11.1	9.04	7.93	7.30	6.68	5.60	3.61
	Amps	2.90	2.87	2.85	2.84	2.83	2.81	2.78	2.73
	Lb/h	198	191	187	184	181	178	173	166
-20	Btu/h	1130	884	716	606	529	458	370	239
	Watts	16.4	12.9	10.8	9.68	8.99	8.30	7.14	5.05
	Amps	2.97	2.94	2.93	2.92	2.91	2.90	2.87	2.82
	Lb/h	211	205	202	200	198	195	191	185
-15	Btu/h	1290	1030	853	735	648	568	468	325
	Watts	18.5	15.0	12.9	11.7	11.0	10.3	9.07	6.91
	Amps	3.06	3.03	3.02	3.01	3.01	3.00	2.98	2.93
	Lb/h	224	220	218	217	216	215	212	206
-10	Btu/h	1450	1190	1010	880	785	695	586	431
	Watts	20.8	17.3	15.2	14.1	13.3	12.6	11.4	9.17
	Amps	3.15	3.13	3.12	3.12	3.13	3.12	3.11	3.07
	Lb/h	238	236	235	236	236	236	234	229
-5	Btu/h	1630	1360	1170	1040	937	839	720	555
	Watts	23.2	19.8	17.8	16.6	15.9	15.2	14.0	11.8
	Amps	3.26	3.24	3.24	3.25	3.26	3.27	3.25	3.22
	Lb/h	254	253	254	256	258	259	258	254
0	Btu/h	1810	1540	1350	1210	1100	996	869	694
	Watts	25.7	22.4	20.5	19.4	18.8	18.1	16.9	14.8
	Amps	3.37	3.37	3.37	3.39	3.41	3.43	3.42	3.40
	Lb/h	271	272	275	278	281	284	284	280
5	Btu/h	2010	1730	1540	1390	1280	1160	1030	847
	Watts	28.4	25.2	23.4	22.4	21.9	21.3	20.1	18.0
	Amps	3.50	3.50	3.52	3.55	3.58	3.61	3.62	3.60
	Lb/h	289	292	296	301	306	310	311	309
10	Btu/h	2210	1930	1730	1580	1460	1340	1200	1010
	Watts	31.1	28.0	26.4	25.5	25.1	24.6	23.6	21.6
	Amps	3.64	3.66	3.69	3.73	3.77	3.81	3.83	3.83
	Lb/h	308	312	319	326	332	338	340	340

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	9.876735E+03	1.569177E+02	4.983662E+00	4.475188E+02
C2	3.730721E+01	2.641138E-01	9.513207E-03	-4.484920E-01
C3	-1.965269E+02	-3.364351E+00	-4.683806E-02	-5.434194E+00
C4	8.180294E-03	-2.965240E-03	-3.187578E-05	1.940915E-03
C5	8.238702E-02	4.067341E-03	1.789124E-04	5.908557E-02
C6	1.533538E+00	2.777769E-02	4.387511E-04	5.352482E-02
C7	-3.229655E-03	-3.819398E-05	5.860951E-07	-6.994740E-05
C8	1.666563E-03	6.102905E-05	3.311498E-06	2.352997E-04
C9	-9.078772E-04	-1.108242E-05	7.955196E-08	-1.273089E-04
C10	-4.209784E-03	-7.777796E-05	-1.312393E-06	-1.648269E-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

Te = Evaporator Temperature

T_c = Condensing Temperature

AE2410Y-AA1A

General

Performance Data Sheet

Model AE2410Y-AA1A **Unit of Measure** Fahrenheit
Condition ASHRAE(R-513A) **Voltage/Frequency** 115V~60HZ
RETURN GAS 32.2°C (90°F) RETURN GAS **MotorType** CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
	80	90	100	110	120	130	140	150	
-40	Btu/h	1080	754	561	460	412	380	327	215
	Watts	200	188	179	172	167	161	154	144
	Amps	2.88	2.85	2.83	2.83	2.82	2.81	2.78	2.72
-35	Lb/h	12.9	8.97	6.81	5.86	5.54	5.27	4.48	2.60
	Btu/h	1180	843	634	515	448	396	322	187
	Watts	209	198	190	185	180	174	168	158
-30	Amps	2.93	2.90	2.88	2.87	2.86	2.84	2.81	2.75
	Lb/h	14.2	10.1	7.82	6.69	6.18	5.71	4.70	2.59
	Btu/h	1320	968	744	609	525	454	360	203
-25	Watts	220	211	204	199	195	191	184	175
	Amps	2.99	2.95	2.93	2.92	2.91	2.89	2.86	2.80
	Lb/h	15.9	11.7	9.26	8.00	7.33	6.70	5.52	3.22
-20	Btu/h	1490	1130	889	739	639	551	437	261
	Watts	233	225	219	216	213	209	203	195
	Amps	3.06	3.02	3.00	2.99	2.98	2.97	2.93	2.88
-15	Lb/h	17.9	13.6	11.1	9.74	8.97	8.21	6.88	4.43
	Btu/h	1690	1310	1070	902	786	682	551	355
	Watts	247	241	237	234	232	230	225	217
-10	Amps	3.14	3.10	3.08	3.08	3.07	3.06	3.03	2.97
	Lb/h	20.2	15.9	13.3	11.9	11.0	10.2	8.77	6.20
	Btu/h	1910	1530	1270	1090	964	844	697	483
-5	Watts	263	258	256	255	254	252	249	242
	Amps	3.22	3.19	3.18	3.18	3.18	3.17	3.14	3.09
	Lb/h	22.7	18.4	15.9	14.4	13.5	12.6	11.1	8.49
0	Btu/h	2160	1770	1500	1310	1170	1030	871	641
	Watts	280	277	276	277	278	277	275	269
	Amps	3.32	3.30	3.29	3.29	3.30	3.29	3.27	3.23
5	Lb/h	25.5	21.3	18.7	17.3	16.4	15.5	14.0	11.3
	Btu/h	2420	2020	1740	1550	1390	1250	1070	826
	Watts	299	297	299	301	303	304	303	298
10	Amps	3.43	3.42	3.42	3.43	3.44	3.44	3.43	3.40
	Lb/h	28.5	24.3	21.8	20.4	19.6	18.7	17.2	14.5
	Btu/h	2700	2290	2010	1800	1640	1480	1290	1030
15	Watts	318	319	322	327	330	333	333	329
	Amps	3.56	3.55	3.56	3.58	3.60	3.61	3.61	3.59
	Lb/h	31.6	27.6	25.2	23.9	23.1	22.3	20.8	18.1
20	Btu/h	2990	2580	2290	2070	1900	1730	1530	1260
	Watts	339	342	348	354	360	364	365	363
	Amps	3.69	3.69	3.71	3.75	3.78	3.80	3.81	3.80
25	Lb/h	34.8	30.9	28.7	27.5	26.9	26.1	24.7	22.2
	Btu/h	3280	2870	2570	2350	2170	2000	1790	1500
	Watts	361	367	375	383	390	396	400	399
30	Amps	3.84	3.85	3.89	3.93	3.98	4.01	4.04	4.04
	Lb/h	38.2	34.5	32.4	31.4	30.9	30.3	29.0	26.5

	COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.469444E+04	5.256450E+02	5.254340E+00	1.927846E+02	
C2	5.550505E+01	-5.267881E-01	1.002990E-02	3.244827E-01	
C3	-2.923895E+02	-6.382875E+00	-4.938198E-02	-4.133346E+00	
C4	1.217051E-02	2.279753E-03	-3.360705E-05	-3.643009E-03	
C5	1.225740E-01	6.940051E-02	1.886297E-04	4.997019E-03	
C6	2.281572E+00	6.286898E-02	4.625810E-04	3.412688E-02	
C7	-4.805027E-03	-8.215856E-05	6.179277E-07	-4.692403E-05	
C8	2.479485E-03	2.763774E-04	3.491356E-06	7.497855E-05	
C9	-1.350725E-03	-1.495340E-04	8.387267E-08	-1.361554E-05	
C10	-6.263247E-03	-1.936018E-04	-1.383673E-06	-9.555578E-05	

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

Te = Evaporator Temperature

Tc = Condensing Temperature

AE2410Y-AA1A

General

Performance Data Sheet

Model AE2410Y-AA1A **Unit of Measure** Fahrenheit
Condition EN12900(R-134a) **Voltage/Frequency** 115V~ 60HZ
RETURN GAS 20°C (68°F) RETURN GAS **MotorType** CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)					
	90	100	110	120	130	140
-40	Btu/h	325	225	139		
	Watts	128	119	108		
	Amps	2.62	2.61	2.59		
-35	Lb/h	3.34	2.61	1.84		
	Btu/h	518	414	324	249	
	Watts	164	158	149	138	
-30	Amps	2.70	2.70	2.68	2.66	
	Lb/h	6.22	5.51	4.76	3.97	
	Btu/h	679	571	477	398	333
-25	Watts	190	187	181	171	159
	Amps	2.78	2.78	2.77	2.75	2.73
	Lb/h	8.54	7.85	7.12	6.35	5.54
-20	Btu/h	819	706	608	525	455
	Watts	209	208	204	197	187
	Amps	2.85	2.85	2.85	2.84	2.83
-15	Lb/h	10.5	9.79	9.08	8.32	7.53
	Btu/h	945	829	727	639	565
	Watts	221	223	221	217	210
-10	Amps	2.92	2.93	2.94	2.93	2.92
	Lb/h	12.2	11.5	10.8	10.1	9.28
	Btu/h	1070	948	841	749	671
-5	Watts	230	234	235	233	229
	Amps	2.99	3.01	3.02	3.03	3.02
	Lb/h	13.8	13.1	12.4	11.7	11.0
0	Btu/h	1200	1070	962	865	783
	Watts	237	244	247	248	246
	Amps	3.07	3.10	3.12	3.13	3.13
5	Lb/h	15.5	14.8	14.2	13.5	12.7
	Btu/h	1340	1210	1100	997	910
	Watts	245	254	260	263	263
10	Amps	3.17	3.21	3.23	3.25	3.26
	Lb/h	17.4	16.8	16.1	15.4	14.7
	Btu/h	1510	1380	1260	1150	1060
15	Watts	256	267	275	281	284
	Amps	3.29	3.33	3.36	3.38	3.40
	Lb/h	19.8	19.2	18.5	17.8	17.1
20	Btu/h	1720	1580	1450	1340	1250
	Watts	271	285	296	303	309
	Amps	3.42	3.47	3.51	3.54	3.56
25	Lb/h	22.7	22.1	21.5	20.8	20.1
	Btu/h	1960	1820	1690	1580	1480
	Watts	293	309	322	333	340
30	Amps	3.59	3.64	3.69	3.73	3.76
	Lb/h	26.3	25.8	25.1	24.5	23.8

	COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.357362E+03	2.170988E+01	2.519700E+00	2.326203E+01	
C2	4.467553E+01	-1.928994E+00	1.312228E-02	4.930763E-01	
C3	-2.691879E+01	3.915140E+00	1.247164E-02	-2.052044E-02	
C4	6.877841E-01	9.561878E-02	4.455017E-04	1.145749E-02	
C5	-8.428813E-02	4.928271E-02	1.333247E-04	3.380421E-04	
C6	7.128153E-02	-1.462336E-02	-4.385155E-05	-2.050768E-04	
C7	1.250458E-02	2.814556E-03	5.851535E-06	2.147571E-04	
C8	-5.902941E-05	-6.220367E-06	1.105663E-08	-9.926021E-07	
C9	-1.448819E-05	-1.485363E-06	2.632911E-09	-2.509878E-07	
C10	-9.597353E-08	-6.336225E-09	1.176452E-11	-2.410569E-09	

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

Te = Evaporator Temperature

Tc = Condensing Temperature