Tecumseh

Performance Data Sheet

AE3430Y-AA1A

General

Model	AE3430Y-AA1A	**Unit of Measure**	Celsius
Condition	ASHRAE(R-134a)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	RSIR

Performance Information

EVAP TEMP (°C)		Condensing Temperature (°C)							
		30	35	40	45	50	55	60	65
-15	Btu/h	1630	1530	1420	1310	1200	1080	953	822
	Watts (Power)	237	244	249	254	257	261	264	267
	Amps	3.65	3.69	3.71	3.72	3.71	3.70	3.68	3.67
	Lb/h	21.5	21.0	20.4	19.7	18.8	17.9	16.8	15.6
-10	Btu/h	2080	1940	1810	1670	1540	1400	1260	1110
	Watts (Power)	253	264	272	280	287	293	299	305
	Amps	3.70	3.78	3.83	3.87	3.90	3.93	3.95	3.98
	Lb/h	27.3	26.7	26.0	25.2	24.3	23.3	22.3	21.1
-6.7	Btu/h	2410	2260	2100	1950	1790	1640	1480	1320
	Watts (Power)	264	277	289	299	308	316	324	332
	Amps	3.75	3.85	3.93	3.99	4.04	4.10	4.15	4.20
	Lb/h	31.8	31.1	30.2	29.4	28.4	27.4	26.3	25.2
-5	Btu/h	2600	2430	2260	2100	1930	1770	1600	1440
	Watts (Power)	270	284	297	309	319	328	338	347
	Amps	3.78	3.89	3.98	4.06	4.12	4.19	4.25	4.32
	Lb/h	34.4	33.5	32.6	31.7	30.7	29.7	28.6	27.4
0	Btu/h	3220	3010	2800	2590	2390	2190	2000	1800
	Watts (Power)	284	303	321	337	352	365	379	392
	Amps	3.87	4.02	4.15	4.26	4.36	4.47	4.57	4.68
	Lb/h	42.8	41.7	40.6	39.5	38.3	37.2	36.0	34.8
5	Btu/h	3940	3680	3420	3160	2920	2680	2450	2220
	Watts (Power)	293	318	341	363	383	401	419	437
	Amps	3.97	4.15	4.31	4.46	4.61	4.75	4.89	5.04
	Lb/h	52.8	51.4	50.0	48.7	47.3	46.0	44.6	43.3
7.2	Btu/h	4300	4000	3720	3440	3180	2920	2660	2420
	Watts (Power)	295	323	349	373	395	416	437	457
	Amps	4.01	4.21	4.38	4.55	4.71	4.87	5.03	5.20
	Lb/h	57.7	56.2	54.7	53.2	51.7	50.3	48.9	47.4
10	Btu/h	4780	4450	4130	3830	3530	3240	2960	2690
	Watts (Power)	295	327	356	384	410	434	458	481
	Amps	4.05	4.27	4.47	4.66	4.84	5.01	5.20	5.39
	Lb/h	64.6	62.8	61.1	59.4	57.8	56.2	54.7	53.1
15	Btu/h	5730	5340	4950	4590	4230	3880	3550	3230
	Watts (Power)	288	327	363	398	430	461	491	520
	Amps	4.11	4.36	4.60	4.82	5.04	5.26	5.48	5.71
	Lb/h								

	Lb/h	78.3	76.1	74.0	72.0	70.1	68.2	66.4	64.6

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	4.623185E+03	1.081790E+02	2.305731E+00	4.917057E+01
C2	2.042284E+02	-4.771172E+00	-1.873467E-02	2.290934E+00
C3	-5.038388E+01	7.976967E+00	7.934218E-02	-2.139824E-01
C4	2.966213E+00	-1.812586E-01	3.624517E-05	3.854037E-02
C5	-2.675319E+00	2.608508E-01	1.174355E-03	-1.876923E-02
C6	1.347025E-01	-8.398555E-02	-1.114270E-03	1.740835E-04
C7	1.119930E-02	-3.050666E-03	-1.949560E-05	2.533332E-04
C8	-3.050503E-02	2.924178E-03	2.001127E-07	-2.286556E-04
C9	1.120446E-02	-7.301425E-04	3.493174E-06	1.196317E-04
C10	-4.143391E-04	4.363747E-04	7.009283E-06	-4.487936E-06

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

AE3430Y-AA1A

General

Model	AE3430Y-AA1A	**Unit of Measure**	Fahrenheit
Condition	ASHRAE(R-134a)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	RSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)							
		80	**90**	**100**	**110**	**120**	**130**	**140**	**150**
5	Btu/h	1700	1590	1470	1350	1220	1090	953	807
	Watts	232	240	247	252	257	260	264	268
	Amps	3.61	3.67	3.71	3.72	3.71	3.70	3.68	3.67
	Lb/h	21.8	21.3	20.7	19.9	19.0	18.0	16.8	15.5
10	Btu/h	1950	1820	1680	1550	1410	1270	1120	965
	Watts	239	250	259	266	272	277	283	288
	Amps	3.62	3.70	3.76	3.79	3.81	3.82	3.83	3.84
	Lb/h	25.0	24.4	23.7	22.9	21.9	20.9	19.7	18.4
15	Btu/h	2220	2070	1920	1760	1610	1450	1290	1130
	Watts	247	260	271	281	289	296	303	310
	Amps	3.64	3.75	3.82	3.88	3.92	3.95	3.98	4.02
	Lb/h	28.5	27.8	27.0	26.1	25.2	24.1	22.9	21.6
20	Btu/h	2520	2350	2170	2000	1830	1660	1480	1310
	Watts	255	270	284	296	306	315	324	333
	Amps	3.67	3.80	3.89	3.97	4.03	4.09	4.15	4.21
	Lb/h	32.4	31.5	30.7	29.7	28.7	27.6	26.4	25.1
25	Btu/h	2850	2650	2450	2260	2070	1870	1690	1500
	Watts	262	280	297	311	324	336	347	358
	Amps	3.71	3.85	3.97	4.07	4.16	4.24	4.32	4.41
	Lb/h	36.7	35.7	34.7	33.7	32.5	31.4	30.1	28.8
30	Btu/h	3210	2980	2760	2540	2320	2110	1900	1700
	Watts	267	289	309	326	341	356	370	383
	Amps	3.75	3.91	4.06	4.18	4.29	4.39	4.50	4.61
	Lb/h	41.5	40.3	39.2	38.0	36.8	35.5	34.2	32.9
35	Btu/h	3610	3350	3090	2850	2600	2370	2140	1910
	Watts	272	297	320	340	359	376	392	408
	Amps	3.79	3.98	4.14	4.29	4.42	4.55	4.68	4.82
	Lb/h	46.7	45.4	44.1	42.8	41.4	40.1	38.7	37.3
40	Btu/h	4040	3740	3460	3180	2910	2650	2390	2140
	Watts	275	303	329	353	375	396	415	434
	Amps	3.83	4.04	4.23	4.39	4.55	4.70	4.85	5.02
	Lb/h	52.5	51.0	49.5	48.0	46.5	45.1	43.6	42.1
45	Btu/h	4500	4170	3850	3540	3240	2950	2670	2390
	Watts	275	308	338	365	390	414	437	459
	Amps	3.87	4.10	4.31	4.50	4.68	4.85	5.03	5.22

	Lb/h	58.8	57.1	55.4	53.7	52.1	50.5	48.9	47.3
50	Btu/h	5000	4630	4270	3930	3590	3270	2960	2660
	Watts	273	310	343	375	404	431	458	483
	Amps	3.90	4.15	4.38	4.59	4.80	4.99	5.20	5.41
	Lb/h	65.8	63.8	61.9	60.0	58.2	56.4	54.7	53.0
55	Btu/h	5540	5130	4730	4350	3980	3620	3280	2950
	Watts	268	309	347	382	415	447	477	506
	Amps	3.92	4.20	4.45	4.68	4.91	5.13	5.36	5.60
	Lb/h	73.3	71.1	68.9	66.8	64.8	62.8	61.0	59.1

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.070528E+03	5.215990E+01	1.308114E+00	1.776506E+01
C2	7.844545E+01	-2.354803E+00	-3.230835E-02	7.709770E-01
C3	-5.868728E+00	4.001212E+00	5.944465E-02	6.255583E-02
C4	8.985273E-01	-2.177216E-02	3.310040E-04	8.979709E-03
C5	-6.139124E-01	5.643231E-02	3.219255E-04	-4.596550E-03
C6	-1.308325E-02	-2.909832E-02	-4.784567E-04	-5.288104E-04
C7	1.920319E-03	-5.230909E-04	-3.342867E-06	4.343848E-05
C8	-5.230630E-03	5.014023E-04	3.431288E-08	-3.920707E-05
C9	1.921203E-03	-1.251959E-04	5.989668E-07	2.051298E-05
C10	-7.104581E-05	7.482420E-05	1.201866E-06	-7.695365E-07

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

AE3430Y-AA1A

General

Model	AE3430Y-AA1A	**Unit of Measure**	Fahrenheit
Condition	ASHRAE(R-513A)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	RSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)							
		80	90	100	110	120	130	140	150
5	Btu/h	1970	1840	1710	1570	1420	1270	1100	935
	Watts	260	270	278	284	288	293	297	301
	Amps	3.87	3.94	3.97	3.99	3.98	3.96	3.95	3.94
	Lb/h	23.9	23.4	22.7	21.8	20.8	19.7	18.4	16.9
10	Btu/h	2260	2110	1950	1790	1630	1470	1300	1120
	Watts	269	281	291	299	306	312	318	324
	Amps	3.88	3.97	4.03	4.06	4.08	4.09	4.10	4.12
	Lb/h	27.4	26.7	26.0	25.1	24.1	22.9	21.6	20.2
15	Btu/h	2570	2400	2220	2040	1860	1680	1500	1310
	Watts	278	293	305	315	324	333	340	348
	Amps	3.90	4.02	4.10	4.16	4.20	4.23	4.27	4.31
	Lb/h	31.2	30.5	29.6	28.6	27.6	26.4	25.1	23.7
20	Btu/h	2920	2720	2520	2320	2120	1920	1720	1520
	Watts	286	304	319	332	344	355	365	374
	Amps	3.93	4.07	4.18	4.26	4.33	4.39	4.45	4.52
	Lb/h	35.5	34.6	33.6	32.6	31.4	30.2	28.9	27.5
25	Btu/h	3300	3070	2840	2620	2390	2170	1950	1730
	Watts	294	315	333	349	364	377	390	402
	Amps	3.97	4.13	4.26	4.37	4.46	4.55	4.63	4.73
	Lb/h	40.2	39.2	38.1	36.9	35.7	34.4	33.1	31.6
30	Btu/h	3720	3460	3200	2940	2690	2450	2210	1970
	Watts	301	325	347	366	384	400	415	430
	Amps	4.02	4.20	4.35	4.48	4.60	4.71	4.82	4.94
	Lb/h	45.5	44.2	43.0	41.7	40.3	39.0	37.5	36.1
35	Btu/h	4180	3880	3580	3300	3020	2750	2480	2220
	Watts	306	334	359	382	403	423	441	459
	Amps	4.06	4.26	4.44	4.60	4.74	4.87	5.01	5.16
	Lb/h	51.2	49.8	48.4	46.9	45.4	44.0	42.5	40.9
40	Btu/h	4680	4340	4010	3680	3370	3070	2770	2490
	Watts	309	341	370	397	422	445	466	488
	Amps	4.10	4.33	4.53	4.71	4.88	5.04	5.20	5.38
	Lb/h	57.6	55.9	54.3	52.6	51.0	49.4	47.8	46.2
45	Btu/h	5220	4830	4460	4100	3750	3420	3090	2770
	Watts	309	346	379	410	439	465	491	516
	Amps	4.14	4.39	4.62	4.82	5.01	5.20	5.39	5.59

	Lb/h	64.5	62.6	60.7	58.9	57.1	55.4	53.6	51.9
50	Btu/h	5800	5370	4950	4550	4170	3790	3430	3080
	Watts	307	348	386	421	454	485	514	543
	Amps	4.18	4.45	4.70	4.93	5.14	5.35	5.57	5.80
	Lb/h	72.1	69.9	67.8	65.8	63.8	61.9	60.0	58.1
55	Btu/h	6420	5940	5480	5040	4610	4200	3800	3420
	Watts	301	347	390	430	467	502	536	569
	Amps	4.20	4.50	4.77	5.02	5.26	5.50	5.74	6.00
	Lb/h	80.4	77.9	75.5	73.3	71.0	68.9	66.8	64.8

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.399524E+03	5.862193E+01	1.402514E+00	1.947824E+01
C2	9.091003E+01	-2.646537E+00	-3.463988E-02	8.453267E-01
C3	-6.801239E+00	4.496918E+00	6.373447E-02	6.858845E-02
C4	1.041299E+00	-2.446949E-02	3.548909E-04	9.845673E-03
C5	-7.114600E-01	6.342365E-02	3.451572E-04	-5.039821E-03
C6	-1.516211E-02	-3.270328E-02	-5.129845E-04	-5.798066E-04
C7	2.225448E-03	-5.878961E-04	-3.584105E-06	4.762750E-05
C8	-6.061751E-03	5.635205E-04	3.678907E-08	-4.298803E-05
C9	2.226472E-03	-1.407063E-04	6.421912E-07	2.249116E-05
C10	-8.233462E-05	8.409409E-05	1.288599E-06	-8.437471E-07

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

AE3430Y-AA1A

General

Model	AE3430Y-AA1A	**Unit of Measure**	Fahrenheit
Condition	EN12900(R-134a)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	20°C (68°F) RETURN GAS	**MotorType**	RSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)							
		80	**90**	**100**	**110**	**120**	**130**	**140**	**150**
5	Btu/h	1700	1590	1470	1350	1220	1090	953	807
	Watts	232	240	247	252	257	260	264	268
	Amps	3.61	3.67	3.71	3.72	3.71	3.70	3.68	3.67
	Lb/h	21.8	21.3	20.7	19.9	19.0	18.0	16.8	15.5
10	Btu/h	1950	1820	1680	1550	1410	1270	1120	965
	Watts	239	250	259	266	272	277	283	288
	Amps	3.62	3.70	3.76	3.79	3.81	3.82	3.83	3.84
	Lb/h	25.0	24.4	23.7	22.9	21.9	20.9	19.7	18.4
15	Btu/h	2220	2070	1920	1760	1610	1450	1290	1130
	Watts	247	260	271	281	289	296	303	310
	Amps	3.64	3.75	3.82	3.88	3.92	3.95	3.98	4.02
	Lb/h	28.5	27.8	27.0	26.1	25.2	24.1	22.9	21.6
20	Btu/h	2520	2350	2170	2000	1830	1660	1480	1310
	Watts	255	270	284	296	306	315	324	333
	Amps	3.67	3.80	3.89	3.97	4.03	4.09	4.15	4.21
	Lb/h	32.4	31.5	30.7	29.7	28.7	27.6	26.4	25.1
25	Btu/h	2850	2650	2450	2260	2070	1870	1690	1500
	Watts	262	280	297	311	324	336	347	358
	Amps	3.71	3.85	3.97	4.07	4.16	4.24	4.32	4.41
	Lb/h	36.7	35.7	34.7	33.7	32.5	31.4	30.1	28.8
30	Btu/h	3210	2980	2760	2540	2320	2110	1900	1700
	Watts	267	289	309	326	341	356	370	383
	Amps	3.75	3.91	4.06	4.18	4.29	4.39	4.50	4.61
	Lb/h	41.5	40.3	39.2	38.0	36.8	35.5	34.2	32.9
35	Btu/h	3610	3350	3090	2850	2600	2370	2140	1910
	Watts	272	297	320	340	359	376	392	408
	Amps	3.79	3.98	4.14	4.29	4.42	4.55	4.68	4.82
	Lb/h	46.7	45.4	44.1	42.8	41.4	40.1	38.7	37.3
40	Btu/h	4040	3740	3460	3180	2910	2650	2390	2140
	Watts	275	303	329	353	375	396	415	434
	Amps	3.83	4.04	4.23	4.39	4.55	4.70	4.85	5.02
	Lb/h	52.5	51.0	49.5	48.0	46.5	45.1	43.6	42.1
45	Btu/h	4500	4170	3850	3540	3240	2950	2670	2390
	Watts	275	308	338	365	390	414	437	459
	Amps	3.87	4.10	4.31	4.50	4.68	4.85	5.03	5.22

	Lb/h	58.8	57.1	55.4	53.7	52.1	50.5	48.9	47.3
50	Btu/h	5000	4630	4270	3930	3590	3270	2960	2660
	Watts	273	310	343	375	404	431	458	483
	Amps	3.90	4.15	4.38	4.59	4.80	4.99	5.20	5.41
	Lb/h	65.8	63.8	61.9	60.0	58.2	56.4	54.7	53.0
55	Btu/h	5540	5130	4730	4350	3980	3620	3280	2950
	Watts	268	309	347	382	415	447	477	506
	Amps	3.92	4.20	4.45	4.68	4.91	5.13	5.36	5.60
	Lb/h	73.3	71.1	68.9	66.8	64.8	62.8	61.0	59.1

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.070528E+03	5.215990E+01	1.308114E+00	1.776506E+01
C2	7.844545E+01	-2.354803E+00	-3.230835E-02	7.709770E-01
C3	-5.868728E+00	4.001212E+00	5.944465E-02	6.255584E-02
C4	8.985273E-01	-2.177216E-02	3.310040E-04	8.979709E-03
C5	-6.139124E-01	5.643231E-02	3.219255E-04	-4.596550E-03
C6	-1.308325E-02	-2.909832E-02	-4.784567E-04	-5.288104E-04
C7	1.920319E-03	-5.230909E-04	-3.342867E-06	4.343848E-05
C8	-5.230630E-03	5.014023E-04	3.431288E-08	-3.920707E-05
C9	1.921203E-03	-1.251959E-04	5.989668E-07	2.051298E-05
C10	-7.104580E-05	7.482420E-05	1.201866E-06	-7.695364E-07

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