



Tecumseh

Performance Data Sheet

AE3430Y-AA1A

General Information

Model	AE3430Y-AA1A	Refrigerant	R-134a
Test Condition	ASHRAE	Performance Test Voltage	115V ~ 60HZ
Return Gas	20°C (68°F) RETURN GAS	Motor Type	RSIR

Performance Information

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

45	Btu/h	4500	4170	3850	3540	3240	2950	2670
	Watts	275	308	338	365	390	414	437
	Amps	3.87	4.10	4.31	4.50	4.68	4.85	5.03
	Lb/h	58.8	57.1	55.4	53.7	52.1	50.5	48.9
50	Btu/h	5000	4630	4270	3930	3590	3270	2960
	Watts	273	310	343	375	404	431	458
	Amps	3.90	4.15	4.38	4.59	4.80	4.99	5.20
	Lb/h	65.8	63.8	61.9	60.0	58.2	56.4	54.7
55	Btu/h	5540	5130	4730	4350	3980	3620	3280
	Watts	268	309	347	382	415	447	477
	Amps	3.92	4.20	4.45	4.68	4.91	5.13	5.36
	Lb/h	73.3	71.1	68.9	66.8	64.8	62.8	61.0
60	Btu/h	6120	5660	5220	4800	4390	4000	3620
	Watts	259	305	347	387	425	460	494
	Amps	3.93	4.23	4.50	4.76	5.01	5.26	5.51
	Lb/h	81.5	79.0	76.5	74.2	72.0	69.8	67.8

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	-4.59655E-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

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

Te = Evaporator Temperature

Tc = Condensing Temperature