



# Tecumseh

## Performance Data Sheet

### AKA5470EXA

### General Information

<b>Model</b>	AKA5470EXA	<b>Refrigerant</b>	R-22
<b>Test Condition</b>	ASHRAE	<b>Performance Test Voltage</b>	115V ~ 60HZ
<b>Return Gas</b>	35°C (95°F) RETURN GAS	<b>Motor Type</b>	PSC

### Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
-15	Btu/h							
	Watts	608	614					
	Amps	3.14	2.98					
	Lb/h							
-10	Btu/h							
	Watts	590	599	607				
	Amps	3.40	3.30	3.20				
	Lb/h							
-5	Btu/h							
	Watts	575	587	599	610			
	Amps	3.65	3.59	3.54	3.48			
	Lb/h							
0	Btu/h	932	510	36.1				
	Watts	562	578	594	608	622		
	Amps	3.86	3.86	3.85	3.85	3.85		
	Lb/h		0.23	1.60	3.26	5.24		
5	Btu/h	2100	1690	1230	729	169		
	Watts	552	572	591	609	626		
	Amps	4.06	4.11	4.15	4.19	4.24		
	Lb/h	12.7	12.6	12.7	13.1	13.7		
10	Btu/h	3200	2790	2340	1850	1320	730	83.4
	Watts	544	567	590	612	633	654	673
	Amps	4.24	4.33	4.42	4.52	4.61	4.71	4.81
	Lb/h	26.7	25.6	24.6	23.8	23.2	22.8	22.7
15	Btu/h	4260	3830	3380	2890	2370	1800	1190
	Watts	538	565	592	618	643	667	690
	Amps	4.40	4.54	4.68	4.82	4.96	5.11	5.25
	Lb/h	41.0	39.0	37.0	35.1	33.4	31.8	30.4
20	Btu/h	5280	4830	4360	3870	3350	2790	2190
	Watts	535	566	596	625	654	682	709
	Amps	4.53	4.72	4.91	5.10	5.29	5.48	5.68
	Lb/h	55.5	52.6	49.8	46.9	44.2	41.5	39.0

25	Btu/h	6300	5810	5310	4800	4260	3700	3100
	Watts	533	568	602	635	668	699	730
	Amps	4.65	4.88	5.12	5.36	5.60	5.84	6.08
	Lb/h	69.9	66.3	62.7	59.0	55.4	51.8	48.2
30	Btu/h	7310	6780	6240	5690	5130	4550	3950
	Watts	534	572	610	647	683	719	753
	Amps	4.74	5.03	5.31	5.60	5.89	6.18	6.47
	Lb/h	84.1	79.9	75.6	71.2	66.8	62.3	57.8
35	Btu/h	8350	7750	7160	6570	5970	5370	4740
	Watts	536	578	619	660	700	740	778
	Amps	4.82	5.15	5.48	5.82	6.15	6.49	6.83
	Lb/h	97.8	93.1	88.3	83.3	78.2	73.0	67.7
40	Btu/h	9430	8760	8100	7450	6800	6160	5500
	Watts	540	586	631	675	719	763	805
	Amps	4.88	5.26	5.64	6.02	6.40	6.79	7.18
	Lb/h	111	106	101	95.1	89.4	83.6	77.6
45	Btu/h	10600	9800	9070	8350	7640	6940	6250
	Watts	546	595	644	692	740	787	834
	Amps	4.91	5.34	5.77	6.20	6.63	7.07	7.50
	Lb/h	123	118	112	106	100	94.0	87.4
50	Btu/h	11800	10900	10100	9280	8510	7740	6990
	Watts	553	606	658	711	762	813	863
	Amps	4.94	5.41	5.89	6.37	6.84	7.33	7.81
	Lb/h	134	129	123	117	111	104	96.8
55	Btu/h	13100	12100	11200	10300	9410	8570	7750
	Watts	561	618	674	730	786	840	895
	Amps	4.94	5.46	5.99	6.51	7.04	7.57	8.10
	Lb/h	145	139	133	127	120	113	106

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.127273E+03	4.182625E+02	3.928827E+00	-2.595311E+00
C2	2.743455E+02	-7.797993E+00	-3.638842E-02	4.113045E+00
C3	-2.134379E+01	1.822035E+00	-7.527750E-04	-2.575885E-02
C4	3.434638E-01	4.986037E-02	-4.129568E-04	-4.113706E-03
C5	-1.103461E+00	6.494182E-02	9.767520E-04	-1.322605E-02
C6	1.933757E-03	1.131835E-03	-2.923123E-06	2.643201E-04
C7	2.276368E-02	-1.593028E-04	5.620701E-07	-2.510445E-04
C8	-2.447800E-02	8.127025E-06	-2.830965E-07	2.252631E-04
C9	8.529527E-03	4.626470E-05	4.592858E-09	-6.500856E-05
C10	-9.761297E-04	-1.811638E-05	2.936668E-08	4.123247E-06

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

Te = Evaporator Temperature

Tc = Condensing Temperature