



# Tecumseh

## Performance Data Sheet

### AEA3414YXA

### General Information

<b>Model</b>	AEA3414YXA	<b>Refrigerant</b>	R-134a
<b>Test Condition</b>	ARI	<b>Performance Test Voltage</b>	115V ~ 60HZ
<b>Return Gas</b>	18.3°C (65°F) RETURN GAS	<b>Motor Type</b>	RSIR

### Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
20	Btu/h	1250	1080	951	848	759	673	577
	Watts	163	173	179	183	185	185	185
	Amps	2.57	2.52	2.50	2.50	2.50	2.51	2.50
	Lb/h	16.6	14.7	13.5	12.7	12.0	11.3	10.4
25	Btu/h	1400	1220	1080	960	859	762	655
	Watts	171	182	189	194	196	198	199
	Amps	2.52	2.49	2.49	2.50	2.52	2.54	2.54
	Lb/h	18.6	16.6	15.3	14.4	13.7	12.9	11.9
30	Btu/h	1570	1380	1220	1100	983	875	757
	Watts	179	191	199	205	208	211	214
	Amps	2.54	2.52	2.52	2.55	2.58	2.61	2.63
	Lb/h	20.9	18.9	17.5	16.5	15.7	14.9	13.8
35	Btu/h	1760	1550	1390	1250	1120	1010	878
	Watts	188	200	209	216	221	225	228
	Amps	2.59	2.58	2.60	2.63	2.68	2.72	2.76
	Lb/h	23.4	21.4	19.9	18.9	18.0	17.2	16.1
40	Btu/h	1960	1740	1560	1410	1280	1150	1010
	Watts	197	210	220	228	234	239	244
	Amps	2.67	2.67	2.70	2.74	2.80	2.85	2.90
	Lb/h	26.2	24.1	22.6	21.5	20.6	19.7	18.6
45	Btu/h	2160	1930	1740	1580	1440	1300	1150
	Watts	207	221	232	240	247	253	259
	Amps	2.76	2.77	2.80	2.86	2.92	2.99	3.05
	Lb/h	28.9	26.8	25.3	24.2	23.4	22.5	21.4
50	Btu/h	2360	2120	1920	1750	1600	1450	1300
	Watts	218	232	244	253	261	268	275
	Amps	2.86	2.87	2.91	2.97	3.05	3.12	3.19
	Lb/h	31.7	29.6	28.1	27.0	26.1	25.3	24.2
55	Btu/h	2550	2300	2090	1910	1750	1600	1430
	Watts	230	245	257	267	276	284	292
	Amps	2.93	2.95	3.00	3.07	3.15	3.23	3.30
	Lb/h	34.3	32.2	30.8	29.7	28.9	28.1	27.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	4.785234E+03	-1.402424E+02	6.450892E+00	6.936123E+01
C2	2.333653E+01	2.665682E-01	-1.176671E-01	2.215179E-01
C3	-9.456904E+01	6.902933E+00	-7.002471E-02	-1.457819E+00
C4	9.093977E-01	5.949163E-03	2.687373E-03	1.214227E-02
C5	-3.561071E-01	7.138018E-03	2.781563E-04	-4.546000E-03
C6	7.535054E-01	-5.341889E-02	5.509048E-04	1.230208E-02
C7	-7.693951E-03	1.206526E-04	-1.833773E-05	-1.166710E-04
C8	1.139874E-03	-7.645533E-05	-2.787658E-06	3.936495E-05
C9	2.865302E-04	8.147848E-05	6.356552E-07	4.775313E-06
C10	-2.071715E-03	1.274472E-04	-1.602145E-06	-3.486876E-05

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

Te = Evaporator Temperature

Tc = Condensing Temperature