



Tecumseh

Performance Data Sheet

THA0414YXA

General Information

Model	THA0414YXA	Refrigerant	R-134a
Test Condition	ARI	Performance Test Voltage	115V ~ 60HZ
Return Gas	4.4°C (40°F) RETURN GAS	Motor Type	RSIR

Performance Information

Evap Temp (°F)	Condensing Temperature (°F)							
		80	90	100	110	120	130	140
0	Btu/h	1180	1100	1010	928	844	759	674
	Watts	215	218	222	225	229	233	236
	Amps	3.50	3.51	3.53	3.55	3.56	3.58	3.60
	Lb/h	16.6	16.0	15.5	14.9	14.4	13.8	13.2
5	Btu/h	1350	1260	1160	1070	976	882	788
	Watts	226	231	236	240	245	249	254
	Amps	3.56	3.58	3.60	3.63	3.65	3.67	3.70
	Lb/h	18.9	18.3	17.8	17.2	16.6	16.1	15.5
10	Btu/h	1540	1430	1320	1220	1110	1010	904
	Watts	238	244	250	255	261	267	272
	Amps	3.62	3.65	3.68	3.71	3.74	3.77	3.80
	Lb/h	21.4	20.9	20.3	19.7	19.1	18.5	17.9
15	Btu/h	1730	1610	1500	1380	1260	1140	1030
	Watts	251	258	264	271	278	284	291
	Amps	3.70	3.73	3.77	3.81	3.84	3.88	3.92
	Lb/h	24.2	23.6	23.0	22.3	21.7	21.1	20.4
20	Btu/h	1950	1810	1680	1550	1420	1290	1160
	Watts	264	272	279	287	295	303	310
	Amps	3.78	3.82	3.86	3.91	3.95	3.99	4.04
	Lb/h	27.3	26.6	25.9	25.3	24.6	23.9	23.2
25	Btu/h	2180	2030	1890	1740	1600	1450	1310
	Watts	277	286	295	304	313	321	330
	Amps	3.87	3.92	3.97	4.02	4.07	4.11	4.16
	Lb/h	30.8	30.0	29.3	28.5	27.8	27.0	26.3
30	Btu/h	2440	2280	2120	1950	1790	1630	1480
	Watts	291	301	311	321	331	341	351
	Amps	3.97	4.03	4.08	4.14	4.19	4.25	4.30
	Lb/h	34.7	33.8	33.0	32.1	31.3	30.5	29.7

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.844120E+03	1.853421E+02	3.357138E+00	2.087474E+01
C2	5.201099E+01	6.064563E-01	5.408524E-04	4.878726E-01

C3	-8.283195E+00	3.641129E-01	1.732662E-03	-5.358901E-02
C4	2.748778E-01	9.682287E-03	1.533376E-04	5.265944E-03
C5	-2.404674E-01	2.080031E-02	1.305889E-04	-7.087353E-04
C6	-1.679169E-04	4.384141E-05	4.047210E-07	6.427209E-06
C7	5.356233E-03	-1.224276E-05	1.233219E-06	7.220309E-05
C8	-2.156068E-03	4.415786E-06	-4.673923E-07	-2.909354E-05
C9	2.225179E-04	-3.819047E-07	4.463476E-08	3.003515E-06
C10	-2.436963E-06	-3.436327E-07	-3.898779E-09	-1.016326E-07

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

Te = Evaporator Temperature

Tc = Condensing Temperature



Tecumseh

Performance Data Sheet

THA0414YXA

General Information

Model	THA0414YXA	Refrigerant	R-134a
Test Condition	ARI	Performance Test Voltage	115V ~ 60HZ
Return Gas	18.3°C (65°F) RETURN GAS	Motor Type	RSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
20	Btu/h	1980	1850	1730	1610	1490	1370	1250
	Watts	252	261	270	279	288	297	306
	Amps	3.71	3.76	3.80	3.84	3.89	3.93	3.97
	Lb/h	26.3	25.6	25.0	24.3	23.7	23.1	22.5
25	Btu/h	2240	2100	1960	1820	1680	1540	1390
	Watts	268	278	287	297	307	317	326
	Amps	3.80	3.86	3.91	3.96	4.01	4.07	4.12
	Lb/h	29.6	28.9	28.2	27.4	26.7	26.0	25.2
30	Btu/h	2530	2370	2210	2050	1890	1720	1560
	Watts	285	296	306	316	327	337	348
	Amps	3.91	3.97	4.03	4.09	4.15	4.21	4.27
	Lb/h	33.3	32.5	31.8	31.0	30.1	29.3	28.5
35	Btu/h	2830	2650	2480	2300	2120	1940	1750
	Watts	303	315	326	337	348	359	370
	Amps	4.02	4.09	4.16	4.23	4.30	4.37	4.44
	Lb/h	37.3	36.5	35.7	34.9	34.0	33.1	32.2
40	Btu/h	3150	2960	2760	2560	2370	2170	1970
	Watts	323	335	346	358	370	382	394
	Amps	4.15	4.22	4.30	4.37	4.45	4.53	4.61
	Lb/h	41.6	40.8	40.0	39.1	38.2	37.3	36.3
45	Btu/h	3480	3270	3060	2850	2630	2420	2200
	Watts	344	356	368	381	393	406	418
	Amps	4.29	4.37	4.45	4.53	4.62	4.70	4.79
	Lb/h	46.1	45.3	44.5	43.7	42.8	41.8	40.8
50	Btu/h	3820	3600	3370	3150	2910	2680	2440
	Watts	366	379	392	405	418	431	444
	Amps	4.44	4.53	4.62	4.71	4.80	4.89	4.98
	Lb/h	50.8	50.1	49.3	48.5	47.6	46.6	45.6

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.457944E+03	1.478551E+02	3.379056E+00	2.002070E+01
C2	6.656339E+01	1.117783E+00	-4.956940E-03	4.227765E-01

C3	-4.543188E+00	6.374773E-01	9.999089E-04	-4.217957E-02
C4	3.771966E-01	2.269319E-02	2.175970E-04	7.294965E-03
C5	-3.783447E-01	1.346114E-02	1.671793E-04	-1.126695E-03
C6	1.863675E-03	1.377699E-05	-4.533775E-07	3.974621E-05
C7	-2.045652E-03	3.314087E-05	1.658387E-06	-5.368107E-05
C8	1.785896E-03	-3.442611E-05	-1.559896E-06	4.780321E-05
C9	-4.925641E-04	1.117621E-05	4.642679E-07	-1.346942E-05
C10	2.784928E-05	-1.223359E-06	-3.953463E-08	8.752104E-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