



Tecumseh

Performance Data Sheet

AE4450E-DS1B

General Information

Model	AE4450E-DS1B	Refrigerant	R-22
Test Condition	EN12900 ASERCOM	Performance Test Voltage	115V ~ 60HZ
Return Gas	20°C (68°F) RETURN GAS	Motor Type	CSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
5	Btu/h	2860	2770	2620	2430	2220	2010	1820
	Watts	308	332	352	368	381	391	400
	Amps	3.97	4.15	4.30	4.42	4.52	4.59	4.65
	Lb/h	34.8	35.2	34.6	33.5	32.0	30.5	29.3
10	Btu/h	3240	3130	2970	2760	2530	2300	2090
	Watts	320	347	370	389	405	420	432
	Amps	4.06	4.26	4.43	4.58	4.71	4.82	4.91
	Lb/h	39.5	39.8	39.3	38.1	36.6	35.0	33.7
15	Btu/h	3660	3530	3350	3120	2870	2620	2390
	Watts	331	361	387	409	429	447	464
	Amps	4.14	4.36	4.56	4.74	4.90	5.04	5.17
	Lb/h	44.6	45.0	44.4	43.2	41.6	40.0	38.5
20	Btu/h	4120	3970	3760	3510	3240	2960	2700
	Watts	342	374	403	428	452	474	495
	Amps	4.21	4.46	4.69	4.89	5.08	5.26	5.42
	Lb/h	50.3	50.7	50.1	48.8	47.1	45.3	43.7
25	Btu/h	4620	4450	4210	3940	3640	3330	3040
	Watts	351	386	418	447	474	500	525
	Amps	4.28	4.55	4.80	5.04	5.26	5.47	5.67
	Lb/h	56.6	56.9	56.3	54.9	53.1	51.2	49.4
30	Btu/h	5170	4970	4700	4390	4060	3730	3400
	Watts	358	396	431	464	494	524	553
	Amps	4.33	4.63	4.91	5.18	5.43	5.68	5.92
	Lb/h	63.6	63.8	63.1	61.6	59.6	57.6	55.6
35	Btu/h	5760	5530	5230	4890	4520	4150	3790
	Watts	364	405	443	479	513	547	581
	Amps	4.37	4.70	5.01	5.31	5.59	5.88	6.15
	Lb/h	71.2	71.4	70.5	68.9	66.8	64.5	62.4
40	Btu/h	6400	6130	5800	5420	5020	4610	4210
	Watts	369	412	454	493	531	569	606
	Amps	4.40	4.76	5.10	5.43	5.75	6.06	6.38
	Lb/h	79.6	79.6	78.6	76.8	74.5	72.1	69.7

45	Btu/h	7090	6790	6420	6000	5550	5100	4660
	Watts	371	418	462	505	547	588	630
	Amps	4.41	4.80	5.17	5.53	5.89	6.24	6.60
	Lb/h	88.7	88.6	87.5	85.5	83.0	80.3	77.7
50	Btu/h	7840	7490	7080	6620	6130	5630	5140
	Watts	371	421	469	515	560	606	653
	Amps	4.41	4.82	5.22	5.62	6.01	6.40	6.80
	Lb/h	98.7	98.5	97.1	94.9	92.2	89.2	86.3
55	Btu/h	8640	8250	7790	7280	6740	6190	5650
	Watts	369	422	473	523	572	622	673
	Amps	4.38	4.83	5.26	5.69	6.12	6.55	6.99
	Lb/h	110	109	108	105	102	98.9	95.7
60	Btu/h	9500	9060	8550	7990	7400	6800	6210
	Watts	365	421	475	528	582	635	691
	Amps	4.34	4.81	5.28	5.74	6.21	6.68	7.16
	Lb/h	121	121	119	116	113	109	106

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	-1.322816E+03	-1.376388E+02	9.466521E-01	-3.681869E+01
C2	7.430363E+01	4.289280E-01	-1.435795E-03	5.266663E-01
C3	1.214469E+02	9.141577E+00	6.025796E-02	1.907398E+00
C4	1.234965E+00	-1.725466E-02	-1.520017E-04	1.196903E-02
C5	-4.480970E-02	6.302077E-03	6.464627E-05	5.280684E-03
C6	-1.181107E+00	-5.633104E-02	-3.473662E-04	-1.709315E-02
C7	2.677432E-03	-2.251658E-04	-2.318608E-06	6.081283E-05
C8	-6.749194E-03	7.375511E-05	1.468723E-06	-4.597174E-05
C9	-8.977348E-04	2.707167E-04	2.220933E-06	-2.403746E-05
C10	3.289874E-03	1.199382E-04	6.644760E-07	4.735956E-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