Performance Data Sheet

AE4450Y-AA1A

General Information

Model	AE4450Y-AA1A	**Refrigerant**	R-134a
Test Condition	ASHRAE	**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	2740	2560	2380	2200	2020	1840	1670
	Watts	370	387	403	419	433	444	453
	Amps	5.23	5.34	5.45	5.55	5.64	5.70	5.73
	Lb/h	35.0	34.3	33.4	32.5	31.4	30.3	29.3
10	Btu/h	3150	2950	2740	2520	2310	2100	1900
	Watts	394	410	427	444	460	475	487
	Amps	5.39	5.49	5.59	5.70	5.80	5.89	5.95
	Lb/h	40.4	39.5	38.4	37.3	36.0	34.8	33.6
15	Btu/h	3610	3370	3130	2880	2630	2390	2170
	Watts	419	435	452	471	489	506	522
	Amps	5.56	5.64	5.75	5.86	5.98	6.09	6.19
	Lb/h	46.4	45.3	44.0	42.6	41.2	39.8	38.5
20	Btu/h	4120	3840	3550	3270	2990	2720	2460
	Watts	444	460	478	498	518	538	558
	Amps	5.74	5.81	5.92	6.04	6.17	6.31	6.45
	Lb/h	52.9	51.6	50.1	48.5	46.9	45.3	43.9
25	Btu/h	4660	4340	4020	3690	3380	3070	2780
	Watts	469	485	504	525	548	572	595
	Amps	5.93	5.99	6.09	6.23	6.38	6.54	6.71
	Lb/h	60.1	58.5	56.8	55.0	53.2	51.5	49.8
30	Btu/h	5240	4880	4510	4150	3800	3460	3130
	Watts	495	511	531	554	579	606	633
	Amps	6.13	6.19	6.28	6.42	6.59	6.79	6.99
	Lb/h	67.8	66.0	64.1	62.1	60.1	58.2	56.4
35	Btu/h	5860	5450	5050	4650	4250	3870	3510
	Watts	521	537	558	583	610	640	672
	Amps	6.35	6.39	6.49	6.63	6.82	7.04	7.29
	Lb/h	76.2	74.1	72.0	69.8	67.6	65.5	63.5
40	Btu/h	6520	6070	5620	5170	4740	4310	3910
	Watts	547	563	585	612	642	675	711
	Amps	6.57	6.60	6.70	6.86	7.06	7.31	7.59
	Lb/h	85.2	82.9	80.5	78.1	75.7	73.4	71.2

45	Btu/h	7220	6720	6220	5730	5250	4790	4340
	Watts	573	590	613	641	674	711	751
	Amps	6.80	6.82	6.92	7.09	7.31	7.59	7.91
	Lb/h	94.9	92.3	89.7	87.0	84.4	81.9	79.6
50	Btu/h	7960	7410	6860	6320	5800	5290	4800
	Watts	599	616	640	671	706	747	791
	Amps	7.03	7.05	7.15	7.33	7.57	7.88	8.24
	Lb/h	105	102	99.5	96.6	93.8	91.1	88.5
55	Btu/h	8740	8130	7540	6950	6370	5820	5280
	Watts	624	642	668	700	739	783	832
	Amps	7.28	7.29	7.39	7.58	7.84	8.18	8.58
	Lb/h	116	113	110	107	104	101	98.2
60	Btu/h	9550	8900	8240	7610	6980	6370	5790
	Watts	650	668	695	730	772	820	873
	Amps	7.53	7.53	7.64	7.84	8.12	8.49	8.93
	Lb/h	128	125	121	118	114	111	108

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.671794E+03	2.580402E+02	4.921971E+00	1.940680E+01
C2	1.307482E+02	1.103881E+01	1.161569E-01	1.367879E+00
C3	9.679116E+00	-3.032248E-01	-1.736258E-02	3.638536E-01
C4	1.165098E+00	-1.320043E-03	1.810173E-04	1.154660E-02
C5	-8.531248E-01	-1.428938E-01	-1.856653E-03	-6.81592E-03
C6	-2.220526E-01	2.711031E-02	3.612949E-04	-3.657376E-03
C7	-4.576825E-04	-1.227095E-04	-6.892279E-07	1.919940E-05
C8	-4.089089E-03	1.960379E-04	9.617843E-07	-1.069454E-05
C9	1.376139E-03	7.855517E-04	9.392204E-06	1.514926E-05
C10	6.505231E-04	-1.191727E-04	-1.477190E-06	9.773275E-06

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