Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Fahrenheit
Condition	ASHRAE (R-404A)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	100	110	120	130	140
-10	Btu/h	1380					
	Watts	306					
	Amps	4.75					
	Lb/h	15.3					
-5	Btu/h	1730	1620				
	Watts	322	331				
	Amps	4.82	4.89				
	Lb/h	21.6	22.7				
0	Btu/h	2100	1940	1840			
	Watts	338	350	353			
	Amps	4.89	4.97	5.00			
	Lb/h	28.1	28.3	29.6			
5	Btu/h	2490	2280	2120	2020		
	Watts	353	367	375	377		
	Amps	4.96	5.06	5.11	5.13		
	Lb/h	34.6	34.1	34.5	35.6		
10	Btu/h	2900	2640	2430	2260	2130	
	Watts	367	384	395	402	405	
	Amps	5.04	5.15	5.22	5.26	5.27	
	Lb/h	41.2	40.2	39.8	40.0	40.4	
15	Btu/h	3320	3030	2770	2540	2330	2140
	Watts	381	400	415	425	433	440
	Amps	5.12	5.24	5.33	5.39	5.44	5.46
	Lb/h	48.0	46.5	45.6	44.9	44.3	43.6
20	Btu/h	3770	3440	3140	2860	2580	2310
	Watts	393	415	432	447	460	472
	Amps	5.20	5.33	5.44	5.53	5.60	5.66
	Lb/h	55.0	53.2	51.7	50.4	49.0	47.2
25	Btu/h	4220	3870	3530	3200	2860	2520
	Watts	405	428	449	467	484	502
	Amps	5.27	5.41	5.54	5.65	5.76	5.86
	Lb/h	62.1	60.2	58.4	56.6	54.4	51.7
30	Btu/h	4700	4320	3950	3580	3180	2770
	Watts	415	441	464	485	507	530
	Amps	5.34	5.49	5.63	5.77	5.91	6.04
	Lb/h						

	Lb/h	69.5	67.5	65.6	63.3	60.6	57.2
35	Btu/h	5180	4790	4390	3980	3540	3070
	Watts	424	451	477	502	528	556
	Amps	5.40	5.56	5.72	5.88	6.05	6.22
	Lb/h	77.2	75.3	73.3	70.8	67.6	63.6
40	Btu/h	5680	5280	4860	4410	3930	3400
	Watts	433	461	489	517	546	579
	Amps	5.46	5.63	5.80	5.99	6.18	6.39
	Lb/h	85.1	83.5	81.5	78.9	75.5	71.0
45	Btu/h	6190	5780	5350	4870	4350	3770
	Watts	440	469	499	529	563	600
	Amps	5.51	5.69	5.87	6.08	6.30	6.55
	Lb/h	93.3	92.1	90.4	87.8	84.2	79.3
50	Btu/h	6710	6300	5860	5360	4800	4180
	Watts	445	476	507	540	577	619
	Amps	5.55	5.73	5.93	6.16	6.41	6.69
	Lb/h	102	101	99.9	97.5	93.9	88.8
55	Btu/h	7240	6840	6390	5870	5290	4630
	Watts	450	481	514	549	590	635
	Amps	5.57	5.76	5.98	6.22	6.50	6.82
	Lb/h	111	111	110	108	104	99.3

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	7.877140E+03	-3.215244E+02	1.110776E+00	1.147654E+02
C2	6.837104E+01	5.274962E+00	5.234627E-02	1.050723E+00
C3	-1.187111E+02	1.486961E+01	7.870609E-02	-2.211233E+00
C4	-5.859399E-01	2.463118E-02	1.897166E-04	-2.317977E-02
C5	1.087205E+00	-1.003802E-01	-1.037297E-03	1.924443E-02
C6	7.187334E-01	-1.034271E-01	-4.726727E-04	1.746364E-02
C7	-1.400583E-03	-7.712337E-05	-1.962728E-06	3.716338E-05
C8	1.086688E-02	-4.408792E-04	-1.388504E-06	2.776850E-04
C9	-1.112630E-02	8.451387E-04	6.892389E-06	-1.838179E-04
C10	-1.257685E-03	2.183557E-04	7.176822E-07	-3.997793E-05

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

Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Fahrenheit
Condition	ASHRAE (R-407A)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	**100**	**110**	**120**	**130**	**140**
-10	Btu/h	1780					
	Watts	262					
	Amps	4.30					
	Lb/h	16.7					
-5	Btu/h	2040	1830				
	Watts	279	288				
	Amps	4.38	4.44				
	Lb/h	19.6	18.6				
0	Btu/h	2330	2100	1840			
	Watts	295	306	315			
	Amps	4.46	4.54	4.59			
	Lb/h	22.5	21.7	20.3			
5	Btu/h	2640	2400	2120	1820		
	Watts	310	323	334	344		
	Amps	4.54	4.63	4.71	4.76		
	Lb/h	25.7	24.9	23.5	21.9		
10	Btu/h	2990	2720	2420	2100	1780	
	Watts	324	339	353	365	375	
	Amps	4.61	4.72	4.83	4.91	4.94	
	Lb/h	29.1	28.3	27.0	25.4	23.7	
15	Btu/h	3360	3070	2740	2390	2040	1720
	Watts	337	354	370	385	397	407
	Amps	4.68	4.81	4.94	5.04	5.11	5.13
	Lb/h	32.8	32.0	30.7	29.0	27.4	25.9
20	Btu/h	3770	3450	3090	2700	2320	1960
	Watts	349	368	387	404	419	432
	Amps	4.75	4.89	5.04	5.17	5.27	5.32
	Lb/h	36.9	36.1	34.7	33.1	31.3	29.7
25	Btu/h	4210	3860	3460	3040	2620	2220
	Watts	359	381	402	422	440	456
	Amps	4.81	4.97	5.13	5.29	5.42	5.51
	Lb/h	41.4	40.6	39.2	37.5	35.6	33.9
30	Btu/h	4700	4310	3870	3400	2940	2490
	Watts	369	393	416	439	460	479
	Amps	4.87	5.04	5.22	5.40	5.55	5.68
	Lb/h						

	Lb/h	46.4	45.6	44.1	42.3	40.3	38.5
35	Btu/h	5220	4790	4310	3800	3280	2780
	Watts	377	403	429	455	478	500
	Amps	4.92	5.10	5.30	5.50	5.68	5.84
	Lb/h	52.0	51.1	49.6	47.6	45.6	43.6
40	Btu/h	5790	5310	4780	4220	3650	3090
	Watts	383	412	441	469	496	521
	Amps	4.97	5.16	5.37	5.59	5.80	5.98
	Lb/h	58.2	57.2	55.6	53.6	51.3	49.2
45	Btu/h	6410	5880	5300	4680	4050	3430
	Watts	388	419	451	482	512	540
	Amps	5.01	5.21	5.43	5.67	5.90	6.12
	Lb/h	65.0	64.0	62.3	60.1	57.7	55.4
50	Btu/h	7080	6490	5850	5170	4480	3790
	Watts	391	425	459	493	527	558
	Amps	5.04	5.25	5.48	5.73	5.99	6.24
	Lb/h	72.7	71.5	69.7	67.3	64.8	62.3
55	Btu/h	7800	7160	6450	5700	4940	4190
	Watts	393	429	466	503	540	575
	Amps	5.07	5.28	5.52	5.79	6.07	6.34
	Lb/h	81.1	79.9	77.9	75.3	72.6	69.9

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	-8.961827E+02	2.331414E+02	5.364235E+00	-3.579290E+01
C2	6.139726E+01	1.078943E+00	2.998962E-02	2.711141E-01
C3	1.228490E+02	-5.674337E-01	-4.913471E-02	1.707926E+00
C4	1.342225E+00	-2.841253E-02	1.937100E-04	6.875657E-03
C5	2.008519E-01	6.333902E-03	-6.451342E-04	5.990401E-03
C6	-1.306928E+00	2.293195E-02	6.644233E-04	-1.575729E-02
C7	3.516020E-03	-1.215226E-04	-6.569476E-07	8.301377E-05
C8	-9.065721E-03	1.259494E-04	-2.700777E-06	-3.507852E-05
C9	-2.419385E-03	1.773811E-04	5.415735E-06	-2.481462E-05
C10	3.781865E-03	-1.001257E-04	-2.558516E-06	4.422612E-05

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

Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Fahrenheit
Condition	ASHRAE (R-448A)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	**100**	**110**	**120**	**130**	**140**
-10	Btu/h	1350					
	Watts	280					
	Amps	4.52					
	Lb/h	10.9					
-5	Btu/h	1700	1590				
	Watts	295	302				
	Amps	4.59	4.65				
	Lb/h	15.5	16.3				
0	Btu/h	2060	1900	1810			
	Watts	309	320	323			
	Amps	4.66	4.74	4.77			
	Lb/h	20.1	20.2	21.2			
5	Btu/h	2440	2240	2080	1980		
	Watts	323	336	343	345		
	Amps	4.73	4.82	4.87	4.88		
	Lb/h	24.7	24.4	24.7	25.5		
10	Btu/h	2840	2590	2390	2220	2090	
	Watts	336	352	362	368	370	
	Amps	4.80	4.91	4.97	5.01	5.02	
	Lb/h	29.5	28.7	28.5	28.6	28.9	
15	Btu/h	3260	2980	2720	2500	2290	2100
	Watts	348	366	379	389	396	403
	Amps	4.88	4.99	5.08	5.14	5.18	5.20
	Lb/h	34.3	33.3	32.6	32.1	31.7	31.2
20	Btu/h	3700	3380	3080	2800	2530	2260
	Watts	360	379	395	409	421	432
	Amps	4.95	5.07	5.18	5.26	5.33	5.39
	Lb/h	39.3	38.0	37.0	36.1	35.0	33.8
25	Btu/h	4150	3800	3470	3140	2810	2470
	Watts	370	392	410	427	443	460
	Amps	5.02	5.15	5.27	5.38	5.48	5.58
	Lb/h	44.4	43.0	41.8	40.4	38.9	37.0
30	Btu/h	4610	4240	3880	3510	3130	2720
	Watts	380	403	424	444	464	485
	Amps	5.08	5.23	5.37	5.50	5.62	5.76
	Lb/h						

	Lb/h	49.7	48.3	46.9	45.3	43.3	40.9
35	Btu/h	5090	4700	4310	3910	3470	3010
	Watts	388	413	436	459	483	509
	Amps	5.15	5.30	5.45	5.60	5.76	5.93
	Lb/h	55.2	53.9	52.4	50.6	48.4	45.5
40	Btu/h	5580	5180	4770	4330	3860	3340
	Watts	396	422	447	472	500	530
	Amps	5.20	5.36	5.53	5.70	5.89	6.09
	Lb/h	60.9	59.7	58.3	56.5	54.0	50.7
45	Btu/h	6070	5680	5250	4780	4270	3700
	Watts	402	429	456	484	515	549
	Amps	5.25	5.42	5.59	5.79	6.00	6.23
	Lb/h	66.7	65.9	64.6	62.8	60.2	56.7
50	Btu/h	6580	6190	5750	5260	4720	4110
	Watts	407	435	464	494	528	566
	Amps	5.28	5.46	5.65	5.86	6.10	6.37
	Lb/h	72.9	72.4	71.4	69.7	67.1	63.5
55	Btu/h	7100	6710	6270	5760	5190	4540
	Watts	411	440	470	502	539	581
	Amps	5.31	5.49	5.70	5.93	6.19	6.49
	Lb/h	79.3	79.3	78.6	77.2	74.7	71.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	7.732241E+03	-2.940659E+02	1.057903E+00	8.206863E+01
C2	6.711304E+01	4.824557E+00	4.985254E-02	7.513621E-01
C3	-1.165274E+02	1.359972E+01	7.495798E-02	-1.581248E+00
C4	-5.751544E-01	2.252537E-02	1.807045E-04	-1.657562E-02
C5	1.067206E+00	-9.180760E-02	-9.878987E-04	1.376168E-02
C6	7.055119E-01	-9.459420E-02	-4.501634E-04	1.248821E-02
C7	-1.374858E-03	-7.051563E-05	-1.869422E-06	2.657358E-05
C8	1.066695E-02	-4.032294E-04	-1.322414E-06	1.985725E-04
C9	-1.092162E-02	7.729637E-04	6.564174E-06	-1.314481E-04
C10	-1.234550E-03	1.997074E-04	6.835047E-07	-2.858810E-05

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

Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Fahrenheit
Condition	ASHRAE (R-449A)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	**100**	**110**	**120**	**130**	**140**
-10	Btu/h	1350					
	Watts	280					
	Amps	4.52					
	Lb/h	10.9					
-5	Btu/h	1700	1590				
	Watts	295	302				
	Amps	4.59	4.65				
	Lb/h	15.5	16.3				
0	Btu/h	2060	1900	1810			
	Watts	309	320	323			
	Amps	4.66	4.74	4.77			
	Lb/h	20.1	20.2	21.2			
5	Btu/h	2440	2240	2080	1980		
	Watts	323	336	343	345		
	Amps	4.73	4.82	4.87	4.88		
	Lb/h	24.7	24.4	24.7	25.5		
10	Btu/h	2840	2590	2390	2220	2090	
	Watts	336	352	362	368	370	
	Amps	4.80	4.91	4.97	5.01	5.02	
	Lb/h	29.5	28.7	28.5	28.6	28.9	
15	Btu/h	3260	2980	2720	2500	2290	2100
	Watts	348	366	379	389	396	403
	Amps	4.88	4.99	5.08	5.14	5.18	5.20
	Lb/h	34.3	33.3	32.6	32.1	31.7	31.2
20	Btu/h	3700	3380	3080	2800	2530	2260
	Watts	360	379	395	409	421	432
	Amps	4.95	5.07	5.18	5.26	5.33	5.39
	Lb/h	39.3	38.0	37.0	36.1	35.0	33.8
25	Btu/h	4150	3800	3470	3140	2810	2470
	Watts	370	392	410	427	443	460
	Amps	5.02	5.15	5.27	5.38	5.48	5.58
	Lb/h	44.4	43.0	41.8	40.4	38.9	37.0
30	Btu/h	4610	4240	3880	3510	3130	2720
	Watts	380	403	424	444	464	485
	Amps	5.08	5.23	5.37	5.50	5.62	5.76
	Lb/h						

	Lb/h	49.7	48.3	46.9	45.3	43.3	40.9
35	Btu/h	5090	4700	4310	3910	3470	3010
	Watts	388	413	436	459	483	509
	Amps	5.15	5.30	5.45	5.60	5.76	5.93
	Lb/h	55.2	53.9	52.4	50.6	48.4	45.5
40	Btu/h	5580	5180	4770	4330	3860	3340
	Watts	396	422	447	472	500	530
	Amps	5.20	5.36	5.53	5.70	5.89	6.09
	Lb/h	60.9	59.7	58.3	56.5	54.0	50.7
45	Btu/h	6070	5680	5250	4780	4270	3700
	Watts	402	429	456	484	515	549
	Amps	5.25	5.42	5.59	5.79	6.00	6.23
	Lb/h	66.7	65.9	64.6	62.8	60.2	56.7
50	Btu/h	6580	6190	5750	5260	4720	4110
	Watts	407	435	464	494	528	566
	Amps	5.28	5.46	5.65	5.86	6.10	6.37
	Lb/h	72.9	72.4	71.4	69.7	67.1	63.5
55	Btu/h	7100	6710	6270	5760	5190	4540
	Watts	411	440	470	502	539	581
	Amps	5.31	5.49	5.70	5.93	6.19	6.49
	Lb/h	79.3	79.3	78.6	77.2	74.7	71.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	7.732241E+03	-2.940659E+02	1.057903E+00	8.206863E+01
C2	6.711304E+01	4.824557E+00	4.985254E-02	7.513621E-01
C3	-1.165274E+02	1.359972E+01	7.495798E-02	-1.581248E+00
C4	-5.751544E-01	2.252537E-02	1.807045E-04	-1.657562E-02
C5	1.067206E+00	-9.180760E-02	-9.878987E-04	1.376168E-02
C6	7.055119E-01	-9.459420E-02	-4.501634E-04	1.248821E-02
C7	-1.374858E-03	-7.051563E-05	-1.869422E-06	2.657358E-05
C8	1.066695E-02	-4.032294E-04	-1.322414E-06	1.985725E-04
C9	-1.092162E-02	7.729637E-04	6.564174E-06	-1.314481E-04
C10	-1.234550E-03	1.997074E-04	6.835047E-07	-2.858810E-05

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

Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Fahrenheit
Condition	ASHRAE (R-452A)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	35°C (95°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	**100**	**110**	**120**	**130**	**140**
-10	Btu/h	1300					
	Watts	293					
	Amps	4.52					
	Lb/h	14.1					
-5	Btu/h	1630	1530				
	Watts	309	316				
	Amps	4.58	4.65				
	Lb/h	20.0	21.0				
0	Btu/h	1980	1830	1740			
	Watts	324	335	338			
	Amps	4.65	4.73	4.76			
	Lb/h	25.9	26.2	27.4			
5	Btu/h	2350	2150	2010	1910		
	Watts	338	352	359	361		
	Amps	4.72	4.82	4.87	4.88		
	Lb/h	32.0	31.5	31.9	32.9		
10	Btu/h	2740	2500	2300	2140	2010	
	Watts	352	368	379	385	388	
	Amps	4.80	4.90	4.97	5.01	5.02	
	Lb/h	38.1	37.1	36.8	37.0	37.3	
15	Btu/h	3140	2870	2620	2410	2210	2020
	Watts	365	383	397	407	415	422
	Amps	4.87	4.99	5.07	5.13	5.17	5.20
	Lb/h	44.4	43.0	42.1	41.5	41.0	40.3
20	Btu/h	3560	3250	2970	2700	2440	2180
	Watts	376	397	414	428	440	452
	Amps	4.94	5.07	5.17	5.26	5.33	5.39
	Lb/h	50.8	49.1	47.8	46.6	45.3	43.6
25	Btu/h	3990	3660	3340	3030	2710	2380
	Watts	387	410	430	447	464	481
	Amps	5.01	5.15	5.27	5.38	5.48	5.57
	Lb/h	57.4	55.6	54.0	52.3	50.3	47.8
30	Btu/h	4440	4090	3740	3380	3010	2620
	Watts	397	422	444	465	485	508
	Amps	5.08	5.23	5.36	5.49	5.62	5.75
	Lb/h						

	Lb/h	64.2	62.4	60.6	58.5	56.0	52.8
35	Btu/h	4900	4530	4150	3760	3350	2900
	Watts	406	432	456	480	505	532
	Amps	5.14	5.30	5.45	5.60	5.76	5.92
	Lb/h	71.3	69.6	67.7	65.4	62.5	58.8
40	Btu/h	5370	4990	4590	4170	3710	3210
	Watts	414	441	468	495	523	555
	Amps	5.20	5.36	5.52	5.70	5.88	6.08
	Lb/h	78.6	77.2	75.3	73.0	69.8	65.6
45	Btu/h	5850	5470	5060	4610	4110	3570
	Watts	421	449	477	507	539	575
	Amps	5.24	5.41	5.59	5.78	6.00	6.23
	Lb/h	86.3	85.2	83.5	81.2	77.8	73.3
50	Btu/h	6340	5960	5540	5070	4540	3950
	Watts	426	455	485	517	553	593
	Amps	5.28	5.45	5.65	5.86	6.10	6.37
	Lb/h	94.2	93.6	92.3	90.1	86.7	82.0
55	Btu/h	6840	6460	6040	5550	5000	4370
	Watts	430	460	492	526	564	608
	Amps	5.30	5.49	5.69	5.92	6.19	6.49
	Lb/h	102	102	102	99.7	96.5	91.7

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	7.446142E+03	-3.077964E+02	1.057211E+00	1.060621E+02
C2	6.463003E+01	5.049706E+00	4.982067E-02	9.710572E-01
C3	-1.122159E+02	1.423477E+01	7.490902E-02	-2.043544E+00
C4	-5.538837E-01	2.358069E-02	1.805693E-04	-2.142232E-02
C5	1.027721E+00	-9.609460E-02	-9.872536E-04	1.778508E-02
C6	6.794080E-01	-9.901141E-02	-4.498692E-04	1.613928E-02
C7	-1.323882E-03	-7.383696E-05	-1.868026E-06	3.434787E-05
C8	1.027225E-02	-4.220594E-04	-1.321591E-06	2.566275E-04
C9	-1.051752E-02	8.090576E-04	6.559906E-06	-1.698786E-04
C10	-1.188872E-03	2.090330E-04	6.830557E-07	-3.694615E-05

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

Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Celsius
Condition	EN12900	**Voltage/Frequency**	115V~60HZ
RETURN GAS	20°C (68°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°C)		Condensing Temperature (°C)							
		30	**35**	**40**	**45**	**50**	**55**	**60**	**65**
-15	Btu/h	2450	2210	2010	1860	1740	1660	1590	1550
	Watts (Power)	342	358	368	372	373	370	365	358
	Amps	4.93	5.04	5.11	5.14	5.15	5.12	5.07	4.99
	Lb/h	39.2	37.2	36.1	35.8	36.2	37.1	38.3	39.7
-10	Btu/h	3060	2770	2520	2290	2080	1880	1690	1510
	Watts (Power)	365	384	398	409	417	423	427	432
	Amps	5.07	5.19	5.28	5.35	5.40	5.43	5.44	5.44
	Lb/h	49.4	47.1	45.4	44.2	43.4	42.8	42.2	41.5
-6.7	Btu/h	3510	3200	2900	2630	2360	2100	1830	1560
	Watts (Power)	378	399	417	431	443	454	465	477
	Amps	5.16	5.29	5.40	5.49	5.56	5.63	5.68	5.73
	Lb/h	57.0	54.7	52.8	51.2	49.8	48.3	46.8	44.9
-5	Btu/h	3750	3430	3120	2820	2530	2230	1930	1610
	Watts (Power)	385	407	425	441	456	470	483	499
	Amps	5.20	5.34	5.45	5.55	5.64	5.73	5.80	5.88
	Lb/h	61.2	58.9	56.9	55.2	53.5	51.7	49.7	47.2
0	Btu/h	4510	4160	3800	3440	3080	2690	2280	1850
	Watts (Power)	402	426	448	469	490	511	533	558
	Amps	5.32	5.47	5.61	5.74	5.87	6.00	6.14	6.29
	Lb/h	74.3	72.4	70.5	68.6	66.3	63.7	60.5	56.7
5	Btu/h	5320	4940	4550	4150	3710	3240	2740	2200
	Watts (Power)	416	442	467	492	518	545	575	609
	Amps	5.43	5.58	5.74	5.90	6.07	6.25	6.45	6.67
	Lb/h	88.7	87.5	86.0	84.2	81.7	78.6	74.7	69.7
7.2	Btu/h	5680	5300	4900	4470	4010	3510	2970	2380
	Watts (Power)	421	448	474	500	528	558	592	629
	Amps	5.46	5.62	5.78	5.96	6.15	6.35	6.57	6.82
	Lb/h	95.4	94.6	93.4	91.7	89.3	86.1	81.9	76.5
10	Btu/h	6160	5770	5360	4910	4410	3880	3290	2640
	Watts (Power)	427	454	481	509	539	573	610	652
	Amps	5.50	5.66	5.83	6.02	6.23	6.46	6.72	7.00
	Lb/h	104	104	103	102	99.6	96.3	91.9	86.1
15	Btu/h	7010	6620	6190	5710	5170	4570	3900	3160
	Watts (Power)	434	461	489	520	555	593	637	687
	Amps	5.54	5.70	5.89	6.11	6.35	6.63	6.94	7.28

	Lb/h	121	122	122	122	120	117	112	106

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	6.965798E+03	1.557896E+02	4.109772E+00	9.525859E+01
C2	1.223963E+02	6.079030E+00	5.329201E-02	8.661483E-01
C3	-9.911162E+01	1.234930E+01	5.452271E-02	-1.176533E+00
C4	-1.425781E-01	1.919761E-02	-1.403535E-04	-1.507725E-02
C5	2.981172E+00	-2.471666E-01	-2.229152E-03	9.905114E-02
C6	8.009509E-01	-1.755257E-01	-5.961929E-04	2.194383E-02
C7	-2.161861E-02	-4.839808E-04	-1.149650E-05	-1.923732E-04
C8	3.688245E-02	-2.694101E-03	-8.133051E-06	1.335368E-03
C9	-6.094539E-02	4.983681E-03	4.037025E-05	-1.196550E-03
C10	-7.498348E-03	1.241184E-03	4.203604E-06	-1.996234E-04

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

Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Fahrenheit
Condition	EN12900	**Voltage/Frequency**	115V~60HZ
RETURN GAS	20°C (68°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)							
		80	**90**	**100**	**110**	**120**	**130**	**140**	**150**
5	Btu/h	2630	2330	2090	1910	1770	1670	1590	1540
	Watts	328	350	364	371	373	370	365	358
	Amps	4.84	4.99	5.08	5.14	5.15	5.12	5.07	4.98
	Lb/h	41.1	38.2	36.5	35.8	36.1	37.0	38.3	39.9
10	Btu/h	2980	2650	2380	2150	1950	1780	1630	1490
	Watts	340	364	380	391	397	400	400	400
	Amps	4.91	5.06	5.17	5.25	5.28	5.29	5.28	5.24
	Lb/h	46.7	43.6	41.6	40.4	39.9	39.8	40.0	40.3
15	Btu/h	3350	3000	2690	2420	2170	1940	1710	1490
	Watts	351	376	395	409	420	427	434	440
	Amps	4.98	5.14	5.26	5.35	5.42	5.46	5.48	5.49
	Lb/h	52.6	49.5	47.3	45.7	44.6	43.7	42.9	41.9
20	Btu/h	3740	3370	3040	2720	2420	2130	1840	1530
	Watts	361	388	410	427	441	453	465	479
	Amps	5.06	5.22	5.35	5.46	5.55	5.62	5.69	5.74
	Lb/h	59.0	56.0	53.7	51.8	50.2	48.6	46.8	44.7
25	Btu/h	4150	3770	3400	3050	2710	2360	2000	1620
	Watts	371	399	423	442	460	477	495	514
	Amps	5.13	5.29	5.44	5.56	5.68	5.78	5.88	5.98
	Lb/h	65.7	62.9	60.6	58.6	56.6	54.4	51.8	48.7
30	Btu/h	4580	4180	3800	3410	3020	2620	2190	1740
	Watts	380	409	434	457	478	500	523	548
	Amps	5.19	5.36	5.52	5.66	5.80	5.93	6.07	6.22
	Lb/h	72.8	70.4	68.2	66.1	63.8	61.1	57.8	53.8
35	Btu/h	5020	4610	4210	3800	3370	2910	2420	1900
	Watts	389	418	445	470	495	520	548	579
	Amps	5.26	5.43	5.59	5.75	5.91	6.07	6.25	6.44
	Lb/h	80.2	78.2	76.3	74.2	71.7	68.7	64.9	60.1
40	Btu/h	5470	5060	4640	4200	3730	3230	2690	2090
	Watts	396	426	454	481	509	538	571	608
	Amps	5.31	5.48	5.65	5.83	6.01	6.21	6.42	6.65
	Lb/h	87.9	86.5	84.9	83.0	80.5	77.2	72.9	67.5
45	Btu/h	5930	5520	5090	4620	4120	3570	2970	2310
	Watts	403	433	462	491	522	555	592	634
	Amps	5.36	5.53	5.71	5.90	6.10	6.33	6.57	6.85

	Lb/h	95.9	95.2	94.1	92.4	90.0	86.6	81.9	75.9
50	Btu/h	6400	5990	5540	5060	4530	3940	3290	2560
	Watts	408	439	469	499	532	569	610	657
	Amps	5.40	5.57	5.76	5.96	6.18	6.44	6.72	7.03
	Lb/h	104	104	104	102	100	96.7	91.9	85.4
55	Btu/h	6870	6460	6010	5510	4950	4320	3620	2840
	Watts	413	443	473	506	541	581	626	678
	Amps	5.43	5.60	5.79	6.01	6.25	6.53	6.85	7.20
	Lb/h	113	114	114	113	111	108	103	96.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	8.000924E+03	-3.164682E+02	1.115605E+00	1.356743E+02
C2	3.223392E+01	5.113215E+00	5.257191E-02	-4.175759E-02
C3	-1.192027E+02	1.469990E+01	7.904624E-02	-2.356242E+00
C4	1.094834E-01	2.867440E-02	1.905497E-04	-8.813956E-03
C5	1.184180E+00	-1.014117E-01	-1.041779E-03	2.904796E-02
C6	7.050421E-01	-1.019509E-01	-4.747156E-04	1.662420E-02
C7	-3.706894E-03	-8.298711E-05	-1.971280E-06	-3.298580E-05
C8	6.324151E-03	-4.619515E-04	-1.394556E-06	2.289725E-04
C9	-1.045017E-02	8.545407E-04	6.922197E-06	-2.051697E-04
C10	-1.285725E-03	2.128230E-04	7.207826E-07	-3.422897E-05

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

Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Celsius
Condition	EN12900 (R-404A)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	20°C (68°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°C)		Condensing Temperature (°C)						
		30	35	40	45	50	55	60
-25	Btu/h	1530	1410					
	Watts (Power)	292	299					
	Amps	4.69	4.76					
	Lb/h	23.9	23.5					
-23.3	Btu/h	1650	1510					
	Watts (Power)	301	309					
	Amps	4.73	4.81					
	Lb/h	26.0	25.2					
-20	Btu/h	1930	1750	1630	1560			
	Watts (Power)	318	329	333	331			
	Amps	4.81	4.90	4.94	4.93			
	Lb/h	30.6	29.3	29.1	30.1			
-15	Btu/h	2450	2210	2010	1860	1740	1660	
	Watts (Power)	342	358	368	372	373	370	
	Amps	4.93	5.04	5.11	5.14	5.15	5.12	
	Lb/h	39.2	37.2	36.1	35.8	36.2	37.1	
-10	Btu/h	3060	2770	2520	2290	2080	1880	1690
	Watts (Power)	365	384	398	409	417	423	427
	Amps	5.07	5.19	5.28	5.35	5.40	5.43	5.44
	Lb/h	49.4	47.1	45.4	44.2	43.4	42.8	42.2
-6.7	Btu/h	3510	3200	2900	2630	2360	2100	1830
	Watts (Power)	378	399	417	431	443	454	465
	Amps	5.16	5.29	5.40	5.49	5.56	5.63	5.68
	Lb/h	57.0	54.7	52.8	51.2	49.8	48.3	46.8
-5	Btu/h	3750	3430	3120	2820	2530	2230	1930
	Watts (Power)	385	407	425	441	456	470	483
	Amps	5.20	5.34	5.45	5.55	5.64	5.73	5.80
	Lb/h	61.2	58.9	56.9	55.2	53.5	51.7	49.7
0	Btu/h	4510	4160	3800	3440	3080	2690	2280
	Watts (Power)	402	426	448	469	490	511	533
	Amps	5.32	5.47	5.61	5.74	5.87	6.00	6.14
	Lb/h	74.3	72.4	70.5	68.6	66.3	63.7	60.5
5	Btu/h	5320	4940	4550	4150	3710	3240	2740
	Watts (Power)	416	442	467	492	518	545	575
	Amps	5.43	5.58	5.74	5.90	6.07	6.25	6.45

	Lb/h	88.7	87.5	86.0	84.2	81.7	78.6	74.7
7.2	Btu/h	5680	5300	4900	4470	4010	3510	2970
	Watts (Power)	421	448	474	500	528	558	592
	Amps	5.46	5.62	5.78	5.96	6.15	6.35	6.57
	Lb/h	95.4	94.6	93.4	91.7	89.3	86.1	81.9
10	Btu/h	6160	5770	5360	4910	4410	3880	3290
	Watts (Power)	427	454	481	509	539	573	610
	Amps	5.50	5.66	5.83	6.02	6.23	6.46	6.72
	Lb/h	104	104	103	102	99.6	96.3	91.9
15	Btu/h	7010	6620	6190	5710	5170	4570	3900
	Watts (Power)	434	461	489	520	555	593	637
	Amps	5.54	5.70	5.89	6.11	6.35	6.63	6.94
	Lb/h	121	122	122	122	120	117	112

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	6.965798E+03	1.557896E+02	4.109772E+00	9.525859E+01
C2	1.223963E+02	6.079030E+00	5.329201E-02	8.661483E-01
C3	-9.911162E+01	1.234930E+01	5.452271E-02	-1.176533E+00
C4	-1.425781E-01	1.919761E-02	-1.403535E-04	-1.507725E-02
C5	2.981172E+00	-2.471666E-01	-2.229152E-03	9.905114E-02
C6	8.009509E-01	-1.755257E-01	-5.961929E-04	2.194383E-02
C7	-2.161861E-02	-4.839808E-04	-1.149650E-05	-1.923732E-04
C8	3.688245E-02	-2.694101E-03	-8.133051E-06	1.335368E-03
C9	-6.094539E-02	4.983681E-03	4.037025E-05	-1.196550E-03
C10	-7.498348E-03	1.241184E-03	4.203604E-06	-1.996234E-04

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

Tecumseh

Performance Data Sheet

AE4440Z-AA1A

General

Model	AE4440Z-AA1A	**Unit of Measure**	Fahrenheit
Condition	EN12900 (R-404A)	**Voltage/Frequency**	115V~60HZ
RETURN GAS	20°C (68°F) RETURN GAS	**MotorType**	CSIR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
-10	Btu/h	1780	1580	1460	1430	1480	1600	1770
	Watts	291	306	310	305	292	272	247
	Amps	4.64	4.77	4.82	4.81	4.74	4.61	4.43
	Lb/h	27.3	25.4	25.4	27.0	30.2	34.6	40.0
-5	Btu/h	2030	1790	1630	1550	1530	1570	1660
	Watts	303	321	329	328	320	306	288
	Amps	4.70	4.84	4.91	4.92	4.88	4.78	4.64
	Lb/h	31.4	29.1	28.4	29.1	31.2	34.3	38.3
0	Btu/h	2320	2050	1850	1710	1630	1600	1600
	Watts	316	336	347	350	347	339	327
	Amps	4.77	4.91	4.99	5.03	5.01	4.95	4.86
	Lb/h	36.0	33.3	32.1	32.1	33.2	35.1	37.7
5	Btu/h	2630	2330	2090	1910	1770	1670	1590
	Watts	328	350	364	371	373	370	365
	Amps	4.84	4.99	5.08	5.14	5.15	5.12	5.07
	Lb/h	41.1	38.2	36.5	35.8	36.1	37.0	38.3
10	Btu/h	2980	2650	2380	2150	1950	1780	1630
	Watts	340	364	380	391	397	400	400
	Amps	4.91	5.06	5.17	5.25	5.28	5.29	5.28
	Lb/h	46.7	43.6	41.6	40.4	39.9	39.8	40.0
15	Btu/h	3350	3000	2690	2420	2170	1940	1710
	Watts	351	376	395	409	420	427	434
	Amps	4.98	5.14	5.26	5.35	5.42	5.46	5.48
	Lb/h	52.6	49.5	47.3	45.7	44.6	43.7	42.9
20	Btu/h	3740	3370	3040	2720	2420	2130	1840
	Watts	361	388	410	427	441	453	465
	Amps	5.06	5.22	5.35	5.46	5.55	5.62	5.69
	Lb/h	59.0	56.0	53.7	51.8	50.2	48.6	46.8
25	Btu/h	4150	3770	3400	3050	2710	2360	2000
	Watts	371	399	423	442	460	477	495
	Amps	5.13	5.29	5.44	5.56	5.68	5.78	5.88
	Lb/h	65.7	62.9	60.6	58.6	56.6	54.4	51.8
30	Btu/h	4580	4180	3800	3410	3020	2620	2190
	Watts	380	409	434	457	478	500	523
	Amps	5.19	5.36	5.52	5.66	5.80	5.93	6.07

	Lb/h	72.8	70.4	68.2	66.1	63.8	61.1	57.8
35	Btu/h	5020	4610	4210	3800	3370	2910	2420
	Watts	389	418	445	470	495	520	548
	Amps	5.26	5.43	5.59	5.75	5.91	6.07	6.25
	Lb/h	80.2	78.2	76.3	74.2	71.7	68.7	64.9
40	Btu/h	5470	5060	4640	4200	3730	3230	2690
	Watts	396	426	454	481	509	538	571
	Amps	5.31	5.48	5.65	5.83	6.01	6.21	6.42
	Lb/h	87.9	86.5	84.9	83.0	80.5	77.2	72.9
45	Btu/h	5930	5520	5090	4620	4120	3570	2970
	Watts	403	433	462	491	522	555	592
	Amps	5.36	5.53	5.71	5.90	6.10	6.33	6.57
	Lb/h	95.9	95.2	94.1	92.4	90.0	86.6	81.9
50	Btu/h	6400	5990	5540	5060	4530	3940	3290
	Watts	408	439	469	499	532	569	610
	Amps	5.40	5.57	5.76	5.96	6.18	6.44	6.72
	Lb/h	104	104	104	102	100	96.7	91.9
55	Btu/h	6870	6460	6010	5510	4950	4320	3620
	Watts	413	443	473	506	541	581	626
	Amps	5.43	5.60	5.79	6.01	6.25	6.53	6.85
	Lb/h	113	114	114	113	111	108	103

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	8.000924E+03	-3.164682E+02	1.115605E+00	1.356743E+02
C2	3.223394E+01	5.113215E+00	5.257191E-02	-4.175754E-02
C3	-1.192027E+02	1.469990E+01	7.904624E-02	-2.356242E+00
C4	1.094835E-01	2.867440E-02	1.905496E-04	-8.813957E-03
C5	1.184180E+00	-1.014117E-01	-1.041779E-03	2.904796E-02
C6	7.050421E-01	-1.019509E-01	-4.747156E-04	1.662420E-02
C7	-3.706895E-03	-8.298711E-05	-1.971279E-06	-3.298580E-05
C8	6.324151E-03	-4.619515E-04	-1.394556E-06	2.289726E-04
C9	-1.045017E-02	8.545406E-04	6.922197E-06	-2.051698E-04
C10	-1.285725E-03	2.128230E-04	7.207826E-07	-3.422898E-05

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

Technical Datasheet

7/26/2019

Model: AE4440Z-AA1A

Product Description

Type: Reciprocating Compressors

Application: HBP/CBP - High/Commercial Back Pressure

Refrigerant: R-404A/R-407A/R-448A/R-449A/R-452A

Voltage/Frequency: 115V ~ 60Hz

Version: N/A

Product Specifications

Performance

		Refrigeration Capacity			Input Power	(E) Efficiency							
Condition	Test Voltage	(R) Btu/h	(R) kcal/h	(R) W	(I) W	(E) Btu/Wh	(E) kcal/Wh	W/W	EVAP TEMP	Condition	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
ASHRAE (R-407A)	115V ~ 60HZ	4046	1020	1186	512	7.9	1.99	2.32	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°F)
ASHRAE (R-449A)	115V ~ 60HZ	4270	1077	1251	515	8.29	2.09	2.43	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°F)
ASHRAE (R-448A)	115V ~ 60HZ	4270	1077	1251	515	8.29	2.09	2.43	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°F)
ASHRAE (R-452A)	115V ~ 60HZ	4112	1037	1205	539	7.63	1.92	2.24	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°F)
ASHRAE (R-404A)	115V ~ 60HZ	4350	1096	1275	563	7.73	1.95	2.26	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°F)

General

Evaporating Temp. Range: -15°C to 15°C (5°F to 59°F)

Motor Torque: High Start Torque (HST)

Compressor Cooling: Fan

Mechanical

Weight: 10

Weight Unit of Measure: KG

Displacement (cc): 6.69

Oil Type: Polyolester

Viscosity (cSt): 32

Oil Charge (cc): 285

Electrical

Voltage Range (50 Hz):

Voltage Range (60 Hz): 103-127

Locked Rotor Amps (LRA): 36

Rated Load Amps (RLA 50 Hz): 0

Rated Load Amps (RLA 60 Hz): 6.3

Max. Continuous Current (MCC in Amps): 7.78

Motor Resistance (Ohm) - Main: 1.37

Motor Resistance (Ohm) - Start: 3.85

MotorType: CSIR

Overload Type:
Relay Type:

Agency Approval

CE Listed, cURus Recognized