Performance Data Sheet

AE1420Z-FZ1B

General Information

Model	AE1420Z-FZ1B	**Refrigerant**	R-404A
Test Condition	EN12900	**Performance Test Voltage**	220V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)			
		30	40	50	60
-40	Btu/h	752	596	430	261
	Watts (Power)	216	219	215	202
	Amps	2.15	2.15	2.13	2.09
	Lb/h	11.6	10.4	8.77	6.93
-35	Btu/h	1030	847	653	458
	Watts (Power)	248	256	256	250
	Amps	2.22	2.23	2.23	2.21
	Lb/h	16.2	14.9	13.2	11.4
-30	Btu/h	1370	1140	900	663
	Watts (Power)	279	291	297	297
	Amps	2.29	2.32	2.34	2.34
	Lb/h	21.5	20.1	18.2	16.2
-25	Btu/h	1780	1480	1180	891
	Watts (Power)	310	328	339	346
	Amps	2.38	2.43	2.47	2.49
	Lb/h	28.0	26.2	24.1	21.9
-23.3	Btu/h	1940	1610	1290	976
	Watts (Power)	321	340	354	363
	Amps	2.41	2.47	2.52	2.55
	Lb/h	30.5	28.6	26.4	24.1
-20	Btu/h	2270	1890	1520	1150
	Watts (Power)	343	366	384	398
	Amps	2.48	2.55	2.62	2.66
	Lb/h	35.8	33.7	31.3	28.7
-15	Btu/h	2860	2390	1920	1470
	Watts (Power)	379	407	432	453
	Amps	2.61	2.70	2.79	2.86
	Lb/h	45.5	42.9	40.0	37.0
-10	Btu/h	3560	2980	2400	1850
	Watts (Power)	419	453	484	513
	Amps	2.76	2.87	2.98	3.09
	Lb/h	57.2	54.0	50.5	47.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	7.897769E+03	3.554963E+02	2.869671E+00	9.801914E+01
C2	2.998739E+02	7.941999E+00	3.258550E-02	4.201170E+00
C3	-8.448726E+01	5.909791E+00	1.049493E-03	-1.731712E-01
C4	3.991488E+00	1.324935E-01	5.894645E-04	6.695545E-02
C5	-3.177338E+00	7.570467E-02	3.055686E-04	-1.903992E-02
C6	-5.547246E-02	-2.422287E-02	3.380821E-04	-6.633620E-03
C7	1.856916E-02	1.599548E-03	4.763211E-06	4.272773E-04
C8	-3.127071E-02	6.399949E-04	3.349181E-06	-2.093816E-04
C9	2.877213E-03	8.487076E-04	3.329321E-06	2.759126E-05
C10	1.018738E-03	1.382204E-04	-2.345688E-06	4.548626E-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

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Model	AE1420Z-FZ1B	**Refrigerant**	R-404A
Test Condition	EN12900	**Performance Test Voltage**	220V ~ 50HZ
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**
-40	Btu/h	801	718	632	542	449	355	261
	Watts	213	218	219	219	215	210	202
	Amps	2.15	2.15	2.15	2.15	2.14	2.12	2.09
	Lb/h	11.9	11.4	10.7	9.91	8.97	7.96	6.93
-35	Btu/h	958	866	771	672	572	471	370
	Watts	230	236	239	240	238	234	229
	Amps	2.18	2.19	2.19	2.19	2.19	2.17	2.15
	Lb/h	14.3	13.9	13.2	12.3	11.4	10.4	9.35
-30	Btu/h	1130	1030	921	812	701	590	480
	Watts	247	254	258	261	261	259	255
	Amps	2.22	2.23	2.24	2.24	2.24	2.24	2.22
	Lb/h	17.0	16.5	15.8	14.9	13.9	12.9	11.9
-25	Btu/h	1320	1210	1090	962	839	715	593
	Watts	263	271	278	281	283	283	281
	Amps	2.26	2.27	2.28	2.30	2.30	2.30	2.29
	Lb/h	19.9	19.4	18.6	17.7	16.7	15.6	14.5
-20	Btu/h	1540	1400	1270	1130	987	849	712
	Watts	280	289	297	302	306	308	308
	Amps	2.30	2.32	2.34	2.35	2.37	2.37	2.37
	Lb/h	23.2	22.5	21.7	20.7	19.7	18.5	17.4
-15	Btu/h	1780	1620	1460	1310	1150	992	838
	Watts	296	307	316	323	329	333	335
	Amps	2.35	2.37	2.39	2.42	2.43	2.45	2.45
	Lb/h	26.8	26.1	25.2	24.1	23.0	21.8	20.6
-10	Btu/h	2040	1860	1680	1500	1330	1150	974
	Watts	313	326	336	345	353	358	363
	Amps	2.40	2.42	2.45	2.48	2.51	2.53	2.55
	Lb/h	30.9	30.0	29.0	27.9	26.6	25.3	24.1
-5	Btu/h	2330	2130	1930	1720	1520	1320	1120
	Watts	331	345	357	368	377	385	392
	Amps	2.45	2.49	2.52	2.56	2.59	2.62	2.64
	Lb/h	35.4	34.5	33.3	32.0	30.7	29.3	27.9

0	Btu/h	2660	2430	2200	1960	1740	1510	1290
	Watts	349	365	379	391	402	412	422
	Amps	2.52	2.55	2.60	2.64	2.68	2.72	2.75
	Lb/h	40.5	39.4	38.1	36.7	35.2	33.7	32.2
5	Btu/h	3010	2750	2490	2230	1970	1720	1470
	Watts	368	386	401	416	429	441	453
	Amps	2.58	2.63	2.68	2.73	2.78	2.82	2.86
	Lb/h	46.2	44.9	43.5	41.9	40.3	38.6	37.0
10	Btu/h	3410	3110	2820	2530	2240	1950	1670
	Watts	389	408	425	442	457	472	485
	Amps	2.66	2.71	2.77	2.82	2.88	2.93	2.98
	Lb/h	52.6	51.1	49.5	47.7	45.9	44.1	42.3

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	4.357928E+03	1.492591E+02	2.610333E+00	3.782251E+01
C2	1.184388E+02	2.263688E+00	7.711058E-03	1.355840E+00
C3	-1.840410E+01	3.497210E+00	-8.591461E-03	2.197620E-01
C4	1.097857E+00	1.105143E-02	8.514985E-05	1.478076E-02
C5	-6.690716E-01	7.028712E-03	2.102185E-05	-3.881564E-03
C6	-4.967766E-02	-1.440826E-02	1.246906E-04	-2.947551E-03
C7	3.184012E-03	2.742709E-04	8.167372E-07	7.326429E-05
C8	-5.361918E-03	1.097385E-04	5.742766E-07	-3.590220E-05
C9	4.933492E-04	1.455260E-04	5.708712E-07	4.731012E-06
C10	1.746808E-04	2.370034E-05	-4.022098E-07	7.799428E-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

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General Information

Model	AE1420Z-FZ1B	**Refrigerant**	R-404A
Test Condition	EN12900	**Performance Test Voltage**	220V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)			
		30	40	50	60
-40	Watts (Capacity)	220	175	126	76.5
	Watts (Power)	216	219	215	202
	Amps	2.15	2.15	2.13	2.09
	Lb/h	5.29	4.72	3.97	3.15
-35	Watts (Capacity)	303	248	191	134
	Watts (Power)	248	255	256	250
	Amps	2.22	2.23	2.23	2.21
	Lb/h	7.33	6.73	5.96	5.13
-30	Watts (Capacity)	402	334	264	194
	Watts (Power)	279	291	297	297
	Amps	2.29	2.32	2.34	2.34
	Lb/h	9.75	9.07	8.23	7.34
-25	Watts (Capacity)	522	435	347	261
	Watts (Power)	310	327	340	346
	Amps	2.38	2.43	2.47	2.49
	Lb/h	12.7	11.9	10.9	9.93
-23.3	Watts (Capacity)	568	473	379	286
	Watts (Power)	321	340	354	364
	Amps	2.41	2.47	2.52	2.55
	Lb/h	13.8	13.0	12.0	10.9
-20	Watts (Capacity)	665	555	446	338
	Watts (Power)	343	366	384	398
	Amps	2.48	2.55	2.62	2.66
	Lb/h	16.3	15.3	14.2	13.0
-15	Watts (Capacity)	838	700	563	430
	Watts (Power)	379	407	432	453

	Amps	2.61	2.70	2.79	2.86
	Lb/h	20.6	19.4	18.1	16.8
-10	Watts (Capacity)	1040	872	705	541
	Watts (Power)	419	453	484	513
	Amps	2.76	2.87	2.98	3.09
	Lb/h	25.9	24.4	22.9	21.3

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.314609E+03	3.764512E+02	2.869673E+00	4.456516E+01
C2	8.788437E+01	8.149718E+00	3.258557E-02	1.878608E+00
C3	-2.476085E+01	4.516150E+00	1.049414E-03	-9.748886E-02
C4	1.169789E+00	1.386400E-01	5.894664E-04	2.949326E-02
C5	-9.311869E-01	7.317428E-02	3.055676E-04	-8.365670E-03
C6	-1.625600E-02	7.102155E-03	3.380837E-04	-2.589732E-03
C7	5.442082E-03	1.616715E-03	4.763241E-06	1.834183E-04
C8	-9.164543E-03	5.300657E-04	3.349181E-06	-9.303818E-05
C9	8.432356E-04	8.166379E-04	3.329330E-06	1.054879E-05
C10	2.985543E-04	-9.657312E-05	-2.345697E-06	1.769921E-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