Tecumseh

Performance Data Sheet

AJA7494ZXD

General

Model	AJA7494ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-404A)	**Voltage/Frequency**	230V~60HZ
RETURN GAS	4.4°C (40°F) RETURN GAS	**MotorType**	CSR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)				
		100	**110**	**120**	**130**	**140**
-10	Btu/h	5480	4440	3490	2610	1750
	Watts	1200	1170	1130	1070	994
	Amps	6.29	6.23	6.09	5.84	5.45
	Lb/h	108	95.8	85.6	73.4	55.1
-5	Btu/h	6440	5340	4310	3330	2350
	Watts	1300	1290	1260	1220	1160
	Amps	6.68	6.67	6.59	6.40	6.08
	Lb/h	129	116	105	91.7	71.7
0	Btu/h	7490	6320	5210	4110	3000
	Watts	1400	1400	1390	1360	1310
	Amps	7.05	7.09	7.07	6.94	6.68
	Lb/h	152	138	127	112	91.0
5	Btu/h	8620	7380	6170	4950	3700
	Watts	1490	1500	1510	1500	1460
	Amps	7.40	7.50	7.53	7.47	7.27
	Lb/h	175	162	150	135	113
10	Btu/h	9820	8500	7180	5840	4450
	Watts	1570	1600	1620	1620	1610
	Amps	7.74	7.90	7.99	7.99	7.85
	Lb/h	200	188	176	160	138
15	Btu/h	11100	9670	8250	6770	5230
	Watts	1660	1700	1730	1750	1750
	Amps	8.09	8.29	8.44	8.50	8.43
	Lb/h	227	215	203	188	165
20	Btu/h	12400	10900	9350	7740	6030
	Watts	1740	1790	1840	1870	1880
	Amps	8.44	8.69	8.90	9.02	9.01
	Lb/h	254	243	233	218	195
25	Btu/h	13800	12200	10500	8730	6850
	Watts	1820	1890	1950	1990	2020
	Amps	8.80	9.11	9.37	9.55	9.61
	Lb/h	283	274	264	250	227
30	Btu/h	15200	13400	11600	9730	7680
	Watts	1900	1980	2050	2110	2150
	Amps	9.18	9.54	9.86	10.1	10.2
	Lb/h					

	Lb/h	313	306	297	284	263
35	Btu/h	16600	14800	12800	10700	8500
	Watts	1980	2080	2160	2230	2290
	Amps	9.59	10.0	10.4	10.7	10.9
	Lb/h	345	339	333	321	300
40	Btu/h	18100	16100	14000	11800	9320
	Watts	2070	2170	2270	2360	2420
	Amps	10.0	10.5	10.9	11.3	11.5
	Lb/h	377	374	370	360	341

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.959548E+04	1.827322E+03	1.038757E+01	1.261044E+03
C2	1.225511E+02	-7.480605E+00	5.940555E-03	1.260489E+00
C3	-3.775919E+02	-1.713218E+01	-1.310837E-01	-2.747383E+01
C4	3.115015E+00	-4.938388E-02	-2.275991E-04	-4.275088E-02
C5	3.104302E+00	2.326674E-01	2.767673E-04	6.654252E-02
C6	2.129640E+00	2.086280E-01	1.550714E-03	2.319448E-01
C7	-1.102945E-02	1.638646E-03	9.095248E-06	-1.281670E-05
C8	-1.514122E-02	-6.230709E-04	-6.783809E-07	6.880527E-04
C9	-2.148954E-02	2.769118E-04	3.810538E-06	-3.292771E-04
C10	-5.639253E-03	-8.030630E-04	-5.739270E-06	-6.814257E-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

AJA7494ZXD

General

Model	AJA7494ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-407A)	**Voltage/Frequency**	220V~60HZ
RETURN GAS	4.4°C (40°F) RETURN GAS	**MotorType**	CSR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	100	110	120	130	140
-10	Btu/h	6890	5680				
	Watts	1160	1140				
	Amps	6.17	6.15				
	Lb/h	90.3	77.1				
-5	Btu/h	7930	6670	5530			
	Watts	1240	1230	1220			
	Amps	6.50	6.53	6.52			
	Lb/h	106	92.2	83.0			
0	Btu/h	9060	7760	6550	5390		
	Watts	1320	1320	1330	1320		
	Amps	6.81	6.89	6.93	6.91		
	Lb/h	122	108	98.8	90.4		
5	Btu/h	10300	8930	7640	6380	5130	
	Watts	1390	1410	1420	1430	1420	
	Amps	7.11	7.23	7.33	7.36	7.30	
	Lb/h	138	125	116	107	96.4	
10	Btu/h	11600	10200	8800	7430	6050	
	Watts	1460	1490	1520	1540	1540	
	Amps	7.39	7.57	7.72	7.81	7.81	
	Lb/h	156	143	134	125	114	
15	Btu/h	13000	11500	10000	8540	7010	5410
	Watts	1520	1570	1610	1640	1660	1660
	Amps	7.68	7.91	8.11	8.25	8.31	8.24
	Lb/h	174	162	153	145	134	118
20	Btu/h	14400	12800	11300	9680	8010	6240
	Watts	1590	1650	1700	1740	1770	1790
	Amps	7.98	8.25	8.50	8.70	8.81	8.81
	Lb/h	192	182	174	166	155	139
25	Btu/h	15900	14300	12600	10900	9030	7090
	Watts	1650	1720	1790	1850	1890	1910
	Amps	8.28	8.60	8.90	9.16	9.33	9.39
	Lb/h	212	202	195	188	178	162
30	Btu/h	17500	15700	13900	12100	10100	7950
	Watts	1720	1800	1880	1950	2000	2040
	Amps	8.61	8.97	9.33	9.64	9.87	9.99

	Lb/h	232	224	218	212	203	187

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.063664E+04	1.732331E+03	1.015414E+01	8.996710E+02
C2	1.268624E+02	-7.091736E+00	5.807059E-03	8.992750E-01
C3	-3.908755E+02	-1.624159E+01	-1.281380E-01	-1.960075E+01
C4	3.224600E+00	-4.681672E-02	-2.224845E-04	-3.049991E-02
C5	3.213510E+00	2.205725E-01	2.705478E-04	4.747366E-02
C6	2.204560E+00	1.977827E-01	1.515866E-03	1.654772E-01
C7	-1.141746E-02	1.553463E-03	8.890860E-06	-9.143863E-06
C8	-1.567388E-02	-5.906814E-04	-6.631364E-07	4.908798E-04
C9	-2.224554E-02	2.625169E-04	3.724908E-06	-2.349173E-04
C10	-5.837640E-03	-7.613168E-04	-5.610298E-06	-4.861519E-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

AJA7494ZXD

General

Model	AJA7494ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-448A)	**Voltage/Frequency**	220V~60HZ
RETURN GAS	4.4°C (40°F) RETURN GAS	**MotorType**	CSR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	100	110	120	130	140
-10	Btu/h	7160	5900				
	Watts	1200	1180				
	Amps	6.24	6.22				
	Lb/h	92.7	79.2				
-5	Btu/h	8230	6930	5740			
	Watts	1280	1280	1260			
	Amps	6.58	6.60	6.60			
	Lb/h	108	94.7	85.2			
0	Btu/h	9410	8060	6800	5600		
	Watts	1360	1370	1370	1360		
	Amps	6.89	6.97	7.01	6.99		
	Lb/h	125	111	101	92.8		
5	Btu/h	10700	9270	7930	6630	5320	
	Watts	1440	1460	1470	1480	1470	
	Amps	7.19	7.32	7.41	7.45	7.39	
	Lb/h	142	129	119	110	99.0	
10	Btu/h	12000	10600	9140	7720	6280	
	Watts	1510	1540	1570	1590	1590	
	Amps	7.48	7.66	7.81	7.90	7.90	
	Lb/h	160	147	138	129	118	
15	Btu/h	13500	11900	10400	8870	7280	5620
	Watts	1580	1620	1670	1700	1710	1710
	Amps	7.77	8.00	8.20	8.35	8.40	8.34
	Lb/h	178	166	157	149	138	121
20	Btu/h	15000	13300	11700	10100	8320	6480
	Watts	1640	1700	1760	1800	1830	1850
	Amps	8.07	8.34	8.60	8.80	8.92	8.91
	Lb/h	198	186	178	170	160	143
25	Btu/h	16500	14800	13100	11300	9380	7360
	Watts	1710	1780	1850	1910	1950	1980
	Amps	8.38	8.70	9.01	9.26	9.44	9.50
	Lb/h	217	208	201	193	183	167
30	Btu/h	18100	16300	14500	12500	10500	8250
	Watts	1770	1860	1940	2010	2070	2110
	Amps	8.71	9.08	9.43	9.75	9.98	10.1

	Lb/h	238	230	224	218	208	192

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.182122E+04	1.791143E+03	1.027086E+01	9.241342E+02
C2	1.317676E+02	-7.332497E+00	5.873807E-03	9.237275E-01
C3	-4.059888E+02	-1.679298E+01	-1.296108E-01	-2.013372E+01
C4	3.349281E+00	-4.840613E-02	-2.250418E-04	-3.132924E-02
C5	3.337762E+00	2.280608E-01	2.736576E-04	4.876453E-02
C6	2.289800E+00	2.044974E-01	1.533290E-03	1.699767E-01
C7	-1.185892E-02	1.606203E-03	8.993054E-06	-9.392496E-06
C8	-1.627992E-02	-6.107348E-04	-6.707586E-07	5.042275E-04
C9	-2.310567E-02	2.714292E-04	3.767723E-06	-2.413050E-04
C10	-6.063355E-03	-7.871632E-04	-5.674784E-06	-4.993710E-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

AJA7494ZXD

General

Model	AJA7494ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-449A)	**Voltage/Frequency**	220V~60HZ
RETURN GAS	4.4°C (40°F) RETURN GAS	**MotorType**	CSR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	100	110	120	130	140
-10	Btu/h	7160	5900				
	Watts	1200	1180				
	Amps	6.24	6.22				
	Lb/h	92.7	79.2				
-5	Btu/h	8230	6930	5740			
	Watts	1280	1280	1260			
	Amps	6.58	6.60	6.60			
	Lb/h	108	94.7	85.2			
0	Btu/h	9410	8060	6800	5600		
	Watts	1360	1370	1370	1360		
	Amps	6.89	6.97	7.01	6.99		
	Lb/h	125	111	101	92.8		
5	Btu/h	10700	9270	7930	6630	5320	
	Watts	1440	1460	1470	1480	1470	
	Amps	7.19	7.32	7.41	7.45	7.39	
	Lb/h	142	129	119	110	99.0	
10	Btu/h	12000	10600	9140	7720	6280	
	Watts	1510	1540	1570	1590	1590	
	Amps	7.48	7.66	7.81	7.90	7.90	
	Lb/h	160	147	138	129	118	
15	Btu/h	13500	11900	10400	8870	7280	5620
	Watts	1580	1620	1670	1700	1710	1710
	Amps	7.77	8.00	8.20	8.35	8.40	8.34
	Lb/h	178	166	157	149	138	121
20	Btu/h	15000	13300	11700	10100	8320	6480
	Watts	1640	1700	1760	1800	1830	1850
	Amps	8.07	8.34	8.60	8.80	8.92	8.91
	Lb/h	198	186	178	170	160	143
25	Btu/h	16500	14800	13100	11300	9380	7360
	Watts	1710	1780	1850	1910	1950	1980
	Amps	8.38	8.70	9.01	9.26	9.44	9.50
	Lb/h	217	208	201	193	183	167
30	Btu/h	18100	16300	14500	12500	10500	8250
	Watts	1770	1860	1940	2010	2070	2110
	Amps	8.71	9.08	9.43	9.75	9.98	10.1

	Lb/h	238	230	224	218	208	192

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.182122E+04	1.791143E+03	1.027086E+01	9.241342E+02
C2	1.317676E+02	-7.332497E+00	5.873807E-03	9.237275E-01
C3	-4.059888E+02	-1.679298E+01	-1.296108E-01	-2.013372E+01
C4	3.349281E+00	-4.840613E-02	-2.250418E-04	-3.132924E-02
C5	3.337762E+00	2.280608E-01	2.736576E-04	4.876453E-02
C6	2.289800E+00	2.044974E-01	1.533290E-03	1.699767E-01
C7	-1.185892E-02	1.606203E-03	8.993054E-06	-9.392496E-06
C8	-1.627992E-02	-6.107348E-04	-6.707586E-07	5.042275E-04
C9	-2.310567E-02	2.714292E-04	3.767723E-06	-2.413050E-04
C10	-6.063355E-03	-7.871632E-04	-5.674784E-06	-4.993710E-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

AJA7494ZXD

General

Model	AJA7494ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-452A)	**Voltage/Frequency**	220V~60HZ
RETURN GAS	4.4°C (40°F) RETURN GAS	**MotorType**	CSR

Performance Information

EVAP TEMP (°F)		Condensing Temperature (°F)					
		90	100	110	120	130	140
-10	Btu/h	6800	5600				
	Watts	1260	1240				
	Amps	6.60	6.57				
	Lb/h	120	102				
-5	Btu/h	7820	6580	5460			
	Watts	1350	1340	1330			
	Amps	6.95	6.98	6.97			
	Lb/h	140	122	110			
0	Btu/h	8940	7650	6460	5320		
	Watts	1430	1440	1440	1430		
	Amps	7.28	7.36	7.41	7.39		
	Lb/h	161	144	131	120		
5	Btu/h	10100	8810	7540	6300	5060	
	Watts	1510	1530	1550	1550	1540	
	Amps	7.60	7.73	7.84	7.87	7.81	
	Lb/h	184	166	154	142	128	
10	Btu/h	11400	10000	8680	7340	5970	
	Watts	1590	1620	1650	1670	1670	
	Amps	7.90	8.09	8.25	8.35	8.34	
	Lb/h	207	190	178	166	152	
15	Btu/h	12800	11300	9880	8420	6920	5340
	Watts	1660	1710	1750	1790	1800	1800
	Amps	8.21	8.45	8.67	8.82	8.88	8.81
	Lb/h	231	215	204	192	178	156
20	Btu/h	14200	12700	11100	9550	7910	6160
	Watts	1730	1790	1850	1900	1930	1940
	Amps	8.53	8.82	9.09	9.30	9.42	9.42
	Lb/h	255	241	231	220	206	185
25	Btu/h	15700	14100	12400	10700	8920	7000
	Watts	1800	1870	1940	2010	2050	2080
	Amps	8.85	9.19	9.52	9.79	9.98	10.0
	Lb/h	281	268	259	250	237	215
30	Btu/h	17200	15500	13700	11900	9940	7840
	Watts	1870	1960	2040	2120	2180	2220
	Amps	9.20	9.59	9.97	10.3	10.5	10.7
	Lb/h						

	Lb/h	308	297	290	282	269	249

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.023044E+04	1.883314E+03	1.085443E+01	1.194853E+03
C2	1.251804E+02	-7.709820E+00	6.207546E-03	1.194327E+00
C3	-3.856930E+02	-1.765713E+01	-1.369751E-01	-2.603175E+01
C4	3.181846E+00	-5.089707E-02	-2.378283E-04	-4.050692E-02
C5	3.170903E+00	2.397966E-01	2.892063E-04	6.304975E-02
C6	2.175330E+00	2.150206E-01	1.620409E-03	2.197702E-01
C7	-1.126608E-02	1.688856E-03	9.504023E-06	-1.214396E-05
C8	-1.546607E-02	-6.421626E-04	-7.088699E-07	6.519373E-04
C9	-2.195059E-02	2.853967E-04	3.981798E-06	-3.119936E-04
C10	-5.760241E-03	-8.276699E-04	-5.997215E-06	-6.456582E-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

Technical Datasheet

7/26/2019

Model: AJA7494ZXD

Product Description

Type: Reciprocating Compressors

Application: MBP – Medium Back Pressure

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

Voltage/Frequency: 208-230V ~ 60Hz 200V ~ 50Hz

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
ARI (R-407A)	230V ~ 60HZ	9679	2441	2837	1744	5.55	1.4	1.63	-6.7°C (20°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)
ARI (R-452A)	230V ~ 60HZ	9551	2408	2799	1896	5.04	1.27	1.48	-6.7°C (20°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)
ARI (R-448A)	230V ~ 60HZ	10053	2535	2946	1804	5.57	1.41	1.63	-6.7°C (20°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)
ARI (R-449A)	230V ~ 60HZ	10053	2535	2946	1804	5.57	1.41	1.63	-6.7°C (20°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)
ARI (R-404A)	230V ~ 60HZ	9350	2356	2740	1840	5.08	1.28	1.49	-6.7°C (20°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)

General

Evaporating Temp. Range: -23.3°C to -1.1°C (-10°F to 30°F)

Motor Torque: High Start Torque (HST)

Compressor Cooling: Fan

Mechanical

Weight: 55

Weight Unit of Measure: LB

Displacement (cc): 32.678

Oil Type: Polyolester

Viscosity (cSt): 32

Oil Charge (cc): 782

Electrical

Voltage Range (50 Hz): 180-220

Voltage Range (60 Hz): 187-254

Locked Rotor Amps (LRA): 54

Rated Load Amps (RLA 50 Hz):	0
Rated Load Amps (RLA 60 Hz):	8.9
Max. Continuous Current (MCC in Amps):	14.4
Motor Resistance (Ohm) - Main:	1.08
Motor Resistance (Ohm) - Start:	2.552
MotorType:	CSR
Overload Type:	
Relay Type:	

Agency Approval

cURus Recognized