Tecumseh

Performance Data Sheet

AJB2433ZXD

General

Model	AJB2433ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI	**Voltage/Frequency**	230V~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**
-40	Btu/h	1910	1730	1550			
	Watts	664	649	633			
	Amps	3.26	3.13	2.98			
	Lb/h	34.3	32.7	31.0			
-35	Btu/h	2280	2040	1790	1550		
	Watts	719	709	699	688		
	Amps	3.56	3.45	3.33	3.21		
	Lb/h	40.8	38.7	36.5	34.4		
-30	Btu/h	2710	2410	2100	1800	1500	
	Watts	776	772	767	762	756	
	Amps	3.84	3.76	3.67	3.58	3.48	
	Lb/h	48.3	45.7	43.1	40.4	37.7	
-25	Btu/h	3200	2830	2460	2100	1730	1370
	Watts	834	836	837	837	837	837
	Amps	4.11	4.05	4.00	3.93	3.87	3.79
	Lb/h	57.0	53.9	50.7	47.6	44.4	41.2
-20	Btu/h	3750	3310	2880	2460	2030	1600
	Watts	895	902	908	914	920	926
	Amps	4.37	4.35	4.32	4.29	4.25	4.21
	Lb/h	66.7	63.1	59.5	55.9	52.3	48.6
-15	Btu/h	4350	3850	3360	2870	2380	1890
	Watts	957	970	982	994	1010	1020
	Amps	4.64	4.64	4.64	4.64	4.63	4.62
	Lb/h	77.7	73.6	69.6	65.5	61.4	57.2
-10	Btu/h	5000	4440	3890	3330	2780	2220
	Watts	1020	1040	1060	1070	1090	1110
	Amps	4.90	4.94	4.97	5.00	5.03	5.05
	Lb/h	89.8	85.3	80.8	76.3	71.7	67.1
-5	Btu/h	5710	5090	4460	3840	3220	2610
	Watts	1090	1110	1140	1160	1180	1200
	Amps	5.17	5.24	5.31	5.37	5.43	5.48
	Lb/h	103	98.3	93.3	88.4	83.4	78.4
0	Btu/h	6460	5780	5090	4410	3720	3040
	Watts	1160	1190	1220	1240	1270	1300
	Amps	5.45	5.55	5.65	5.75	5.84	5.93
	Lb/h						

	Lb/h	118	113	107	102	96.4	91.0
5	Btu/h	7270	6520	5770	5020	4270	3520
	Watts	1230	1260	1300	1330	1370	1400
	Amps	5.74	5.88	6.01	6.15	6.28	6.40
	Lb/h	134	128	122	117	111	105
10	Btu/h	8120	7310	6490	5670	4860	4040
	Watts	1300	1340	1380	1420	1460	1500
	Amps	6.05	6.22	6.40	6.57	6.73	6.89
	Lb/h	152	145	139	133	127	120

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.267024E+04	8.879831E+02	4.468271E+00	1.660321E+02
C2	2.725594E+02	3.761850E+00	-4.144745E-03	3.848596E+00
C3	-6.892772E+01	2.964861E+00	1.082958E-02	-5.333026E-01
C4	1.066423E+00	3.935687E-02	7.025508E-05	2.476622E-02
C5	-1.285322E+00	1.122277E-01	6.695233E-04	-8.652036E-03
C6	-2.551798E-03	9.050086E-04	6.784728E-06	2.045259E-05
C7	-2.070896E-03	4.691238E-05	5.185895E-06	5.908118E-05
C8	-9.707462E-04	2.812414E-05	2.184385E-06	2.481420E-05
C9	-6.794662E-05	5.269717E-06	1.077883E-07	1.093897E-06
C10	2.557232E-05	-7.508281E-06	-6.717060E-08	-2.977890E-07

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

AJB2433ZXD

General

Model	AJB2433ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-407A)	**Voltage/Frequency**	230V~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**
-40	Btu/h	1780	1610				
	Watts	569	556				
	Amps	2.98	2.85				
	Lb/h	22.5	21.5				
-35	Btu/h	2120	1890	1670			
	Watts	616	607	599			
	Amps	3.25	3.14	3.04			
	Lb/h	26.8	25.4	24.0			
-30	Btu/h	2520	2240	1950	1670		
	Watts	664	661	657	652		
	Amps	3.50	3.42	3.34	3.26		
	Lb/h	31.8	30.1	28.3	26.6		
-25	Btu/h	2980	2630	2290	1950	1610	
	Watts	715	716	716	717	717	
	Amps	3.75	3.70	3.64	3.59	3.53	
	Lb/h	37.5	35.4	33.4	31.3	29.2	
-20	Btu/h	3480	3080	2680	2280	1890	
	Watts	766	772	778	783	788	
	Amps	3.99	3.97	3.94	3.91	3.88	
	Lb/h	43.9	41.6	39.2	36.8	34.4	
-15	Btu/h	4040	3580	3120	2660	2210	
	Watts	820	830	841	851	861	
	Amps	4.23	4.23	4.23	4.23	4.23	
	Lb/h	51.1	48.5	45.8	43.1	40.4	
-10	Btu/h	4650	4130	3610	3100	2580	2070
	Watts	875	890	906	920	935	949
	Amps	4.47	4.50	4.53	4.56	4.58	4.60
	Lb/h	59.1	56.2	53.2	50.2	47.2	44.2
-5	Btu/h	5310	4730	4150	3570	3000	2420
	Watts	932	952	972	992	1010	1030
	Amps	4.72	4.78	4.84	4.90	4.95	5.00
	Lb/h	68.0	64.7	61.4	58.2	54.9	51.6
0	Btu/h	6010	5370	4730	4100	3460	2830
	Watts	990	1020	1040	1070	1090	1110
	Amps	4.97	5.06	5.16	5.24	5.33	5.41

	Lb/h	77.7	74.1	70.6	67.0	63.4	59.9
5	Btu/h	6760	6060	5360	4660	3970	3270
	Watts	1050	1080	1110	1140	1170	1200
	Amps	5.24	5.36	5.49	5.61	5.72	5.84
	Lb/h	88.2	84.4	80.6	76.8	72.9	69.1
10	Btu/h	7550	6790	6030	5270	4520	3760
	Watts	1110	1150	1180	1220	1250	1280
	Amps	5.52	5.68	5.83	5.99	6.14	6.29
	Lb/h	99.7	95.7	91.6	87.5	83.4	79.3

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.177745E+04	7.603289E+02	4.075344E+00	1.092755E+02
C2	2.533539E+02	3.221056E+00	-3.780268E-03	2.532988E+00
C3	-6.407083E+01	2.538640E+00	9.877259E-03	-3.509978E-01
C4	9.912791E-01	3.369903E-02	6.407705E-05	1.630011E-02
C5	-1.194754E+00	9.609414E-02	6.106474E-04	-5.694414E-03
C6	-2.371989E-03	7.749069E-04	6.188099E-06	1.346105E-05
C7	-1.924973E-03	4.016838E-05	4.729863E-06	3.888480E-05
C8	-9.023441E-04	2.408109E-05	1.992297E-06	1.633169E-05
C9	-6.315887E-05	4.512156E-06	9.830971E-08	7.199580E-07
C10	2.377041E-05	-6.428910E-06	-6.126381E-08	-1.959925E-07

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

AJB2433ZXD

General

Model	AJB2433ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-448A)	**Voltage/Frequency**	230V~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
-40	Btu/h	1940	1760				
	Watts	592	578				
	Amps	3.11	2.98				
	Lb/h	24.6	23.5				
-35	Btu/h	2320	2070	1830			
	Watts	641	632	623			
	Amps	3.39	3.29	3.18			
	Lb/h	29.3	27.8	26.3			
-30	Btu/h	2760	2450	2140	1830		
	Watts	691	687	683	679		
	Amps	3.66	3.58	3.50	3.41		
	Lb/h	34.8	32.9	31.0	29.1		
-25	Btu/h	3260	2880	2510	2140	1770	
	Watts	743	744	745	746	746	
	Amps	3.92	3.87	3.81	3.75	3.69	
	Lb/h	41.0	38.8	36.5	34.2	32.0	
-20	Btu/h	3810	3370	2940	2500	2070	
	Watts	797	803	809	814	820	
	Amps	4.17	4.15	4.12	4.09	4.05	
	Lb/h	48.0	45.4	42.8	40.2	37.6	
-15	Btu/h	4420	3920	3420	2920	2420	
	Watts	853	864	874	885	895	
	Amps	4.42	4.43	4.43	4.43	4.42	
	Lb/h	55.9	53.0	50.1	47.1	44.2	
-10	Btu/h	5090	4520	3950	3390	2820	2260
	Watts	910	926	942	957	973	987
	Amps	4.67	4.71	4.74	4.77	4.79	4.82
	Lb/h	64.6	61.4	58.2	54.9	51.6	48.3
-5	Btu/h	5810	5180	4540	3910	3280	2650
	Watts	969	990	1010	1030	1050	1070
	Amps	4.93	5.00	5.06	5.12	5.18	5.23
	Lb/h	74.3	70.7	67.2	63.6	60.0	56.4
0	Btu/h	6580	5880	5180	4480	3790	3090
	Watts	1030	1060	1080	1110	1130	1160
	Amps	5.20	5.30	5.39	5.48	5.57	5.66

	Lb/h	84.9	81.0	77.2	73.3	69.4	65.5
5	Btu/h	7400	6630	5870	5110	4340	3580
	Watts	1090	1120	1160	1190	1220	1250
	Amps	5.48	5.61	5.74	5.86	5.99	6.11
	Lb/h	96.5	92.3	88.1	83.9	79.7	75.5
10	Btu/h	8270	7440	6600	5770	4940	4120
	Watts	1160	1190	1230	1270	1300	1340
	Amps	5.77	5.94	6.10	6.26	6.42	6.57
	Lb/h	109	105	100	95.6	91.2	86.7

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.289554E+04	7.908240E+02	4.262043E+00	1.194780E+02
C2	2.774059E+02	3.350245E+00	-3.953449E-03	2.769480E+00
C3	-7.015336E+01	2.640459E+00	1.032975E-02	-3.837687E-01
C4	1.085386E+00	3.505062E-02	6.701254E-05	1.782197E-02
C5	-1.308177E+00	9.994825E-02	6.386222E-04	-6.226073E-03
C6	-2.597173E-03	8.059866E-04	6.471587E-06	1.471784E-05
C7	-2.107720E-03	4.177944E-05	4.946546E-06	4.251528E-05
C8	-9.880076E-04	2.504692E-05	2.083567E-06	1.785649E-05
C9	-6.915481E-05	4.693128E-06	1.028135E-07	7.871769E-07
C10	2.602704E-05	-6.686759E-06	-6.407042E-08	-2.142913E-07

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

AJB2433ZXD

General

Model	AJB2433ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-449A)	**Voltage/Frequency**	230V~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**
-40	Btu/h	1940	1760				
	Watts	592	578				
	Amps	3.11	2.98				
	Lb/h	24.6	23.5				
-35	Btu/h	2320	2070	1830			
	Watts	641	632	623			
	Amps	3.39	3.29	3.18			
	Lb/h	29.3	27.8	26.3			
-30	Btu/h	2760	2450	2140	1830		
	Watts	691	687	683	679		
	Amps	3.66	3.58	3.50	3.41		
	Lb/h	34.8	32.9	31.0	29.1		
-25	Btu/h	3260	2880	2510	2140	1770	
	Watts	743	744	745	746	746	
	Amps	3.92	3.87	3.81	3.75	3.69	
	Lb/h	41.0	38.8	36.5	34.2	32.0	
-20	Btu/h	3810	3370	2940	2500	2070	
	Watts	797	803	809	814	820	
	Amps	4.17	4.15	4.12	4.09	4.05	
	Lb/h	48.0	45.4	42.8	40.2	37.6	
-15	Btu/h	4420	3920	3420	2920	2420	
	Watts	853	864	874	885	895	
	Amps	4.42	4.43	4.43	4.43	4.42	
	Lb/h	55.9	53.0	50.1	47.1	44.2	
-10	Btu/h	5090	4520	3950	3390	2820	2260
	Watts	910	926	942	957	973	987
	Amps	4.67	4.71	4.74	4.77	4.79	4.82
	Lb/h	64.6	61.4	58.2	54.9	51.6	48.3
-5	Btu/h	5810	5180	4540	3910	3280	2650
	Watts	969	990	1010	1030	1050	1070
	Amps	4.93	5.00	5.06	5.12	5.18	5.23
	Lb/h	74.3	70.7	67.2	63.6	60.0	56.4
0	Btu/h	6580	5880	5180	4480	3790	3090
	Watts	1030	1060	1080	1110	1130	1160
	Amps	5.20	5.30	5.39	5.48	5.57	5.66
	Lb/h						

	Lb/h	84.9	81.0	77.2	73.3	69.4	65.5
5	Btu/h	7400	6630	5870	5110	4340	3580
	Watts	1090	1120	1160	1190	1220	1250
	Amps	5.48	5.61	5.74	5.86	5.99	6.11
	Lb/h	96.5	92.3	88.1	83.9	79.7	75.5
10	Btu/h	8270	7440	6600	5770	4940	4120
	Watts	1160	1190	1230	1270	1300	1340
	Amps	5.77	5.94	6.10	6.26	6.42	6.57
	Lb/h	109	105	100	95.6	91.2	86.7

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.289554E+04	7.908240E+02	4.262043E+00	1.194780E+02
C2	2.774059E+02	3.350245E+00	-3.953449E-03	2.769480E+00
C3	-7.015336E+01	2.640459E+00	1.032975E-02	-3.837687E-01
C4	1.085386E+00	3.505062E-02	6.701254E-05	1.782197E-02
C5	-1.308177E+00	9.994825E-02	6.386222E-04	-6.226073E-03
C6	-2.597173E-03	8.059866E-04	6.471587E-06	1.471784E-05
C7	-2.107720E-03	4.177944E-05	4.946546E-06	4.251528E-05
C8	-9.880076E-04	2.504692E-05	2.083567E-06	1.785649E-05
C9	-6.915481E-05	4.693128E-06	1.028135E-07	7.871769E-07
C10	2.602704E-05	-6.686759E-06	-6.407042E-08	-2.142913E-07

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

AJB2433ZXD

General

Model	AJB2433ZXD	**Unit of Measure**	Fahrenheit
Condition	ARI (R-452A)	**Voltage/Frequency**	230V~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
-40	Btu/h	1960	1770				
	Watts	607	593				
	Amps	3.09	2.96				
	Lb/h	30.4	29.0				
-35	Btu/h	2340	2090	1840			
	Watts	657	648	639			
	Amps	3.37	3.26	3.16			
	Lb/h	36.2	34.3	32.4			
-30	Btu/h	2790	2470	2160	1850		
	Watts	709	705	701	696		
	Amps	3.64	3.56	3.47	3.39		
	Lb/h	42.9	40.6	38.2	35.9		
-25	Btu/h	3290	2910	2530	2160	1780	
	Watts	762	764	764	765	765	
	Amps	3.89	3.84	3.78	3.72	3.66	
	Lb/h	50.6	47.8	45.0	42.2	39.4	
-20	Btu/h	3850	3410	2960	2520	2080	
	Watts	818	824	830	835	841	
	Amps	4.14	4.12	4.09	4.06	4.02	
	Lb/h	59.2	56.1	52.9	49.6	46.4	
-15	Btu/h	4470	3960	3450	2950	2440	
	Watts	875	886	897	908	918	
	Amps	4.39	4.40	4.40	4.39	4.39	
	Lb/h	68.9	65.4	61.7	58.1	54.5	
-10	Btu/h	5140	4570	3990	3420	2850	2280
	Watts	933	950	966	982	998	1010
	Amps	4.64	4.68	4.71	4.74	4.76	4.78
	Lb/h	79.7	75.7	71.7	67.7	63.7	59.6
-5	Btu/h	5870	5230	4590	3950	3310	2680
	Watts	994	1020	1040	1060	1080	1100
	Amps	4.90	4.96	5.02	5.08	5.14	5.19
	Lb/h	91.7	87.3	82.9	78.4	74.0	69.6
0	Btu/h	6640	5940	5230	4530	3830	3120
	Watts	1060	1080	1110	1140	1160	1190
	Amps	5.16	5.26	5.35	5.45	5.53	5.62

	Lb/h	105	100	95.2	90.4	85.6	80.7
5	Btu/h	7470	6700	5930	5160	4390	3620
	Watts	1120	1150	1180	1220	1250	1280
	Amps	5.44	5.57	5.70	5.82	5.94	6.06
	Lb/h	119	114	109	104	98.4	93.2
10	Btu/h	8350	7510	6670	5830	4990	4160
	Watts	1190	1220	1260	1300	1330	1370
	Amps	5.73	5.90	6.06	6.22	6.37	6.53
	Lb/h	135	129	123	118	112	107

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.302005E+04	8.112694E+02	4.231776E+00	1.473770E+02
C2	2.800844E+02	3.436860E+00	-3.925373E-03	3.416175E+00
C3	-7.083072E+01	2.708724E+00	1.025640E-02	-4.733817E-01
C4	1.095866E+00	3.595679E-02	6.653664E-05	2.198353E-02
C5	-1.320808E+00	1.025322E-01	6.340870E-04	-7.679910E-03
C6	-2.622250E-03	8.268240E-04	6.425628E-06	1.815458E-05
C7	-2.128071E-03	4.285957E-05	4.911418E-06	5.244293E-05
C8	-9.975472E-04	2.569447E-05	2.068771E-06	2.202612E-05
C9	-6.982254E-05	4.814461E-06	1.020833E-07	9.709888E-07
C10	2.627834E-05	-6.859633E-06	-6.361542E-08	-2.643300E-07

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: AJB2433ZXD

Product Description

Type: Reciprocating Compressors
Application: LBP - Low Back Pressure
Refrigerant: R-404A
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	3095	781	907	920	3.36	.85	.99	-23°C (-10°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)
ARI (R-452A)	230V ~ 60HZ	3422	863	1003	982	3.48	.88	1.02	-23°C (-10°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)
ARI (R-448A)	230V ~ 60HZ	3389	855	993	957	3.54	.89	1.04	-23°C (-10°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)
ARI (R-449A)	230V ~ 60HZ	3389	855	993	957	3.54	.89	1.04	-23°C (-10°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)
ARI (R-404A)	230V ~ 60HZ	3330	839	976	1075	3.1	.78	.91	-23°C (-10°F)	49°C (120°F)	35°C (95°F)	4.4°C (40°F)	49°C (120°F)

General

Evaporating Temp. Range: -40°C to -12.2°C (-40°F to 10°F)
Motor Torque: High Start Torque (HST)
Compressor Cooling: Fan

Mechanical

Weight: 56
Weight Unit of Measure: LB
Displacement (cc): 26.204
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): 37

Rated Load Amps (RLA 50 Hz):	0
Rated Load Amps (RLA 60 Hz):	4.7
Max. Continuous Current (MCC in Amps):	0
Motor Resistance (Ohm) - Main:	
Motor Resistance (Ohm) - Start:	
MotorType:	CSR
Overload Type:	
Relay Type:	

Agency Approval

CE Listed