

AJA4512YXD

General

Model	AJA4512YXD	Unit of Measure	Fahrenheit
Condition	ARI (R-134a)	Voltage/Frequency	230V ~ 60HZ
RETURN GAS	18.3°C (65°F) RETURN GAS	Motor Type	CSR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)					
		100	110	120	130	140
20	Btu/h	7970	7390	6700	5920	5100
	Watts	1040	1070	1090	1090	1100
	Amps	5.04	5.19	5.22	5.20	5.18
	Lb/h	106	103	98.0	91.3	83.2
25	Btu/h	8930	8190	7360	6480	5570
	Watts	1100	1140	1170	1190	1210
	Amps	5.26	5.42	5.47	5.48	5.49
	Lb/h	119	114	108	100	91.7
30	Btu/h	10100	9240	8290	7310	6340
	Watts	1150	1210	1240	1270	1300
	Amps	5.51	5.69	5.78	5.82	5.87
	Lb/h	135	129	122	114	105
35	Btu/h	11500	10500	9440	8370	7330
	Watts	1210	1270	1310	1350	1390
	Amps	5.80	6.00	6.11	6.19	6.28
	Lb/h	155	148	139	131	122
40	Btu/h	13100	11900	10700	9590	8500
	Watts	1270	1330	1380	1420	1480
	Amps	6.10	6.33	6.47	6.59	6.73
	Lb/h	176	168	159	150	142
45	Btu/h	14700	13400	12100	10900	9780
	Watts	1330	1390	1450	1500	1560
	Amps	6.40	6.66	6.84	7.00	7.19
	Lb/h	199	190	181	172	164
50	Btu/h	16400	15000	13600	12300	11100
	Watts	1400	1470	1520	1580	1650
	Amps	6.69	6.98	7.20	7.41	7.65
	Lb/h	222	213	204	195	187
55	Btu/h	18000	16500	15000	13700	12500
	Watts	1480	1540	1600	1660	1730
	Amps	6.96	7.28	7.55	7.81	8.10
	Lb/h	245	236	227	219	212

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	-1.323224E+04	-3.532774E+03	-1.471165E+01	-2.447772E+02
C2	5.071431E+02	1.367089E+01	4.368543E-02	6.824403E+00

C3	4.513728E+02	1.040727E+02	4.564277E-01	6.872419E+00
C4	9.101436E+00	6.788233E-03	1.507913E-03	1.048900E-01
C5	-9.511825E+00	-1.426218E-01	-1.388207E-03	-1.317082E-01
C6	-2.969804E+00	-8.156716E-01	-3.447713E-03	-4.026015E-02
C7	-7.591498E-02	3.619283E-03	-1.805879E-05	-1.048081E-03
C8	1.668678E-02	-3.444211E-03	6.972516E-06	4.704762E-04
C9	2.657231E-02	2.229760E-03	6.612338E-06	3.683673E-04
C10	5.631546E-03	1.990316E-03	8.432162E-06	6.666652E-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

AJA4512YXD

General

Model	AJA4512YXD	Unit of Measure	Fahrenheit
Condition	ARI (R-513A)	Voltage/Frequency	230V ~ 60HZ
RETURN GAS	18.3°C (65°F) RETURN GAS	MotorType	CSR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)					
		100	110	120	130	140
20	Btu/h	8360	7670	6960	6210	5430
	Watts	1090	1110	1140	1160	1170
	Amps	5.12	5.26	5.38	5.49	5.57
	Lb/h	127	123	118	112	106
25	Btu/h	9300	8490	7650	6760	5840
	Watts	1160	1200	1230	1260	1290
	Amps	5.33	5.50	5.66	5.79	5.90
	Lb/h	143	137	131	124	116
30	Btu/h	10600	9680	8710	7700	6650
	Watts	1230	1270	1320	1360	1400
	Amps	5.60	5.81	5.99	6.16	6.31
	Lb/h	164	157	150	141	132
35	Btu/h	12300	11200	10100	9010	7840
	Watts	1280	1340	1400	1450	1500
	Amps	5.93	6.17	6.39	6.59	6.77
	Lb/h	192	184	175	165	155
40	Btu/h	14300	13100	11900	10700	9380
	Watts	1330	1400	1470	1530	1590
	Amps	6.30	6.57	6.83	7.07	7.29
	Lb/h	224	215	206	195	184
45	Btu/h	16600	15300	14000	12600	11200
	Watts	1380	1450	1530	1610	1680
	Amps	6.70	7.02	7.32	7.60	7.86
	Lb/h	261	251	241	230	218
50	Btu/h	19100	17800	16400	14900	13400
	Watts	1420	1500	1590	1670	1760
	Amps	7.13	7.49	7.84	8.16	8.46
	Lb/h	302	292	281	269	256
55	Btu/h	22000	20500	19000	17500	15900
	Watts	1450	1550	1640	1740	1830
	Amps	7.58	7.99	8.38	8.75	9.09
	Lb/h	347	336	325	313	299

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	8.866215E+03	9.329269E+02	4.200954E+00	9.087331E+01
C2	1.211262E+02	-1.334967E+00	-7.337484E-02	3.887712E-01

C3	-2.948411E+00	-2.822258E+00	7.647741E-03	4.328007E-01
C4	8.202944E+00	-2.046630E-01	1.553495E-03	1.408725E-01
C5	-3.102755E+00	2.620951E-01	4.219585E-04	-3.861542E-02
C6	7.855027E-02	9.484448E-03	4.734915E-05	1.651887E-03
C7	-2.955449E-02	1.814462E-03	-1.142335E-05	-6.866758E-04
C8	1.384286E-02	-1.173814E-03	5.283034E-06	3.349594E-04
C9	-7.566647E-04	1.464970E-04	-2.780162E-07	-2.171430E-05
C10	-6.649260E-04	-6.698111E-05	-3.851402E-07	-1.416323E-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

Model: AJA4512YXD

Product Description

Type:	Reciprocating Compressors
Application:	HBP - High Back Pressure
Refrigerant:	R-134a/R-513A
Voltage/Frequency:	208-230V ~ 60Hz 200V ~ 50Hz
Version:	N/A



Product Specifications

Performance

Condition	Test Voltage	Refrigeration Capacity			Input Power (I) W	(E) Efficiency			EVAP TEMP	Condition	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
		(R) Btu/h	(R) kcal/h	(R) W		(E) Btu/Wh	(E) kcal/Wh	W/W					
ARI (R-513A)	230V ~ 60HZ	12636	3186	3703	1606	7.87	1.98	2.31	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	18.3°C (65°F)	46°C (115°F)
ARI (R-134a)	230V ~ 60HZ	12100	3049	3545	1500	8.07	2.03	2.36	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	18.3°C (65°F)	46°C (115°F)

General

Evaporating Temp. Range:	-6.7°C to 12.8°C (20°F to 55°F)
Motor Torque:	High Start Torque (HST)
Compressor Cooling:	Fan

Mechanical

Weight:	50
Weight Unit of Measure:	LB
Displacement (cc):	34.366
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):	41
Rated Load Amps (RLA 50 Hz):	0
Rated Load Amps (RLA 60 Hz):	7
Max. Continuous Current (MCC in Amps):	11.5

Motor Resistance (Ohm) - Main:	1.55
Motor Resistance (Ohm) - Start:	7.076
MotorType:	CSR
Overload Type:	
Relay Type:	

Agency Approval

cURus Recognized