

Model: AKA9462ZXA

Product Description

Type:	Reciprocating Compressors
Application:	CBP - Commercial Back Pressure
Refrigerant:	R-404A/R-407A/R-448A/R-449A/R-452A
Voltage/Frequency:	115V ~ 60Hz 100V ~ 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-407A)	115V ~ 60HZ	6208	1566	1820	1198	5.18	1.31	1.52	-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)	115V ~ 60HZ	6498	1639	1904	1229	5.29	1.33	1.55	-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)	115V ~ 60HZ	6498	1639	1904	1229	5.29	1.33	1.55	-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)	115V ~ 60HZ	6453	1627	1891	1281	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-404A)	115V ~ 60HZ	6250	1575	1831	1325	4.72	1.19	1.38	-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:	-17.8°C to 10°C (0°F to 50°F)
Motor Torque:	High Start Torque (HST)
Compressor Cooling:	Fan

Mechanical

Weight:	44
Weight Unit of Measure:	LB
Displacement (cc):	22.599
Oil Type:	Polyolester
Viscosity (cSt):	32
Oil Charge (cc):	512

Electrical

Voltage Range (50 Hz):	90-110
Voltage Range (60 Hz):	103-127
Locked Rotor Amps (LRA):	68

Rated Load Amps (RLA 50 Hz):	0
Rated Load Amps (RLA 60 Hz):	11.9
Max. Continuous Current (MCC in Amps):	18.8
Motor Resistance (Ohm) - Main:	.449
Motor Resistance (Ohm) - Start:	7.12
MotorType:	CSR
Overload Type:	
Relay Type:	

Agency Approval

cURus Recognized

AKA9462ZXA

General

Model	AKA9462ZXA	Unit of Measure	Fahrenheit
Condition	ARI (R-404A)	Voltage/Frequency	115V ~ 60HZ
RETURN GAS	4.4°C (40°F) RETURN GAS	MotorType	CSR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
		80	90	100	110	120	130	140	150
0	Btu/h	9100	6450	4740	3710	3080	2580	1930	864
	Watts	1080	1030	1010	1010	1010	994	950	865
	Amps	9.76	9.29	9.15	9.16	9.19	9.06	8.62	7.72
	Lb/h	191	132	96.8	78.7	70.1	63.4	51.1	25.6
5	Btu/h	9590	7090	5460	4440	3760	3140	2300	969
	Watts	1120	1080	1070	1080	1090	1090	1060	981
	Amps	10.1	9.69	9.61	9.71	9.81	9.77	9.43	8.63
	Lb/h	197	143	111	95.0	86.2	77.5	61.2	29.9
10	Btu/h	10200	7850	6290	5280	4530	3770	2730	1130
	Watts	1160	1130	1130	1150	1170	1180	1160	1090
	Amps	10.5	10.1	10.1	10.3	10.5	10.5	10.3	9.61
	Lb/h	205	156	128	114	104	93.5	73.0	35.6
15	Btu/h	11000	8720	7220	6190	5370	4460	3200	1320
	Watts	1190	1180	1190	1220	1250	1270	1260	1200
	Amps	10.9	10.6	10.7	10.9	11.2	11.3	11.2	10.6
	Lb/h	216	172	148	134	124	111	86.0	42.2
20	Btu/h	11800	9670	8220	7170	6250	5190	3710	1530
	Watts	1220	1220	1240	1280	1320	1350	1350	1310
	Amps	11.3	11.1	11.2	11.5	11.9	12.1	12.1	11.6
	Lb/h	229	191	169	156	146	129	99.7	49.3
25	Btu/h	12700	10700	9260	8180	7160	5930	4210	1730
	Watts	1260	1260	1300	1350	1400	1440	1450	1410
	Amps	11.6	11.5	11.7	12.1	12.6	12.9	13.0	12.6
	Lb/h	245	210	191	179	168	148	114	56.5
30	Btu/h	13700	11700	10300	9210	8070	6660	4690	1900
	Watts	1290	1300	1350	1410	1470	1520	1540	1510
	Amps	11.8	11.8	12.1	12.6	13.1	13.6	13.7	13.5
	Lb/h	261	231	215	203	190	167	128	63.3

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	9.734695E+04	4.289214E+03	4.391553E+01	2.455668E+03
C2	-6.529613E+02	-9.976737E+00	1.093186E-02	-2.218835E+01
C3	-2.176432E+03	-8.888500E+01	-9.538388E-01	-5.720518E+01
C4	5.025502E+00	-6.542823E-03	1.282346E-03	1.107631E-01
C5	1.463087E+01	2.246707E-01	7.311167E-05	4.388992E-01
C6	1.706852E+01	8.031786E-01	8.683824E-03	4.617530E-01

C7	-2.901677E-02	1.208627E-04	-4.562942E-05	-5.495635E-04
C8	-2.313868E-02	-4.196367E-04	4.750338E-06	-5.057531E-04
C9	-6.790019E-02	-6.954028E-06	6.743726E-06	-1.908481E-03
C10	-4.564741E-02	-2.418788E-03	-2.622347E-05	-1.255920E-03

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

AKA9462ZXA

General

Model	AKA9462ZXA	Unit of Measure	Fahrenheit
Condition	ARI (R-404A)	Voltage/Frequency	115V ~ 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	8830	7740	6620	5410	4040
	Watts	1220	1260	1300	1320	1330
	Amps	10.9	11.3	11.7	11.8	12.0
	Lb/h	162	155	146	134	119
25	Btu/h	9950	8830	7690	6450	5070
	Watts	1260	1320	1360	1400	1420
	Amps	11.4	11.9	12.3	12.6	12.9
	Lb/h	185	179	172	163	150
30	Btu/h	11100	9940	8730	7430	5990
	Watts	1310	1380	1430	1480	1520
	Amps	11.8	12.4	12.9	13.3	13.8
	Lb/h	206	201	195	187	176
35	Btu/h	12400	11100	9770	8380	6840
	Watts	1360	1430	1500	1550	1610
	Amps	12.2	12.9	13.5	14.0	14.6
	Lb/h	228	222	217	210	199
40	Btu/h	13800	12300	10900	9330	7660
	Watts	1400	1490	1560	1630	1700
	Amps	12.6	13.3	14.0	14.7	15.4
	Lb/h	253	247	241	234	224
45	Btu/h	15300	13700	12000	10300	8470
	Watts	1450	1540	1620	1700	1780
	Amps	13.0	13.8	14.5	15.3	16.1
	Lb/h	284	277	270	263	252
50	Btu/h	17000	15200	13300	11400	9330
	Watts	1490	1590	1680	1770	1860
	Amps	13.4	14.2	15.0	15.9	16.9
	Lb/h	325	316	308	299	287

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.985619E+04	-8.918768E+02	-1.894406E+01	3.537688E+02
C2	1.124142E+01	9.124954E+00	2.492906E-01	7.994514E+00
C3	-4.854702E+02	4.079437E+01	6.060452E-01	-7.592094E+00
C4	5.277408E+00	1.303947E-01	-1.128237E-04	-2.121421E-01
C5	2.181940E+00	-2.092976E-01	-3.918690E-03	3.579714E-02
C6	3.368929E+00	-2.586905E-01	-4.146429E-03	6.096190E-02

C7	4.627592E-02	-1.002281E-03	1.026157E-05	4.002137E-03
C8	-7.741667E-02	-4.833333E-04	-1.283333E-05	-1.367000E-03
C9	3.482143E-03	1.910714E-03	2.839286E-05	2.671429E-04
C10	-1.083333E-02	4.444444E-04	8.333333E-06	-2.194444E-04

$$\text{Value} = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3$$

Te = Evaporator Temperature

Tc = Condensing Temperature

AKA9462ZXA

General

Model	AKA9462ZXA	Unit of Measure	Fahrenheit
Condition	ARI (R-448A)	Voltage/Frequency	115V ~ 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
0	Btu/h	4930	3860	3210		
	Watts	940	938	936		
	Amps	8.45	8.47	8.49		
	Lb/h	73.5	59.7	53.2		
5	Btu/h	5680	4620	3910	3260	
	Watts	997	1000	1010	1010	
	Amps	8.89	8.97	9.07	9.03	
	Lb/h	84.5	72.1	65.5	58.8	
10	Btu/h	6540	5490	4710	3920	
	Watts	1050	1070	1090	1090	
	Amps	9.37	9.53	9.70	9.75	
	Lb/h	97.5	86.3	79.3	71.0	
15	Btu/h	7510	6440	5580	4640	3330
	Watts	1100	1130	1160	1180	1170
	Amps	9.87	10.1	10.4	10.5	10.4
	Lb/h	112	102	94.5	84.2	65.3
20	Btu/h	8540	7450	6500	5390	3850
	Watts	1150	1190	1230	1250	1250
	Amps	10.4	10.7	11.0	11.2	11.2
	Lb/h	128	119	111	98.2	75.7
25	Btu/h	9630	8500	7440	6160	4380
	Watts	1200	1250	1300	1330	1340
	Amps	10.8	11.2	11.6	11.9	12.0
	Lb/h	145	136	127	113	86.3
30	Btu/h	10700	9570	8390	6920	4880
	Watts	1250	1300	1360	1410	1420
	Amps	11.2	11.6	12.1	12.5	12.7
	Lb/h	163	154	144	127	97.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.012079E+05	3.978452E+03	4.059417E+01	1.864501E+03
C2	-6.788586E+02	-9.253860E+00	1.010538E-02	-1.684681E+01
C3	-2.262753E+03	-8.244512E+01	-8.816993E-01	-4.343386E+01
C4	5.224815E+00	-6.069733E-03	1.185353E-03	8.409838E-02
C5	1.521116E+01	2.083926E-01	6.758252E-05	3.332404E-01
C6	1.774549E+01	7.449869E-01	8.027060E-03	3.505926E-01

C7	-3.016762E-02	1.121094E-04	-4.217840E-05	-4.172633E-04
C8	-2.405636E-02	-3.892281E-04	4.391083E-06	-3.840002E-04
C9	-7.059325E-02	-6.451040E-06	6.233691E-06	-1.449041E-03
C10	-4.745786E-02	-2.243542E-03	-2.424017E-05	-9.535755E-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

AKA9462ZXA

General

Model	AKA9462ZXA	Unit of Measure	Fahrenheit
Condition	ARI (R-449A)	Voltage/Frequency	115V ~ 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
0	Btu/h	4930	3860	3210		
	Watts	940	938	936		
	Amps	8.45	8.47	8.49		
	Lb/h	73.5	59.7	53.2		
5	Btu/h	5680	4620	3910	3260	
	Watts	997	1000	1010	1010	
	Amps	8.89	8.97	9.07	9.03	
	Lb/h	84.5	72.1	65.5	58.8	
10	Btu/h	6540	5490	4710	3920	
	Watts	1050	1070	1090	1090	
	Amps	9.37	9.53	9.70	9.75	
	Lb/h	97.5	86.3	79.3	71.0	
15	Btu/h	7510	6440	5580	4640	3330
	Watts	1100	1130	1160	1180	1170
	Amps	9.87	10.1	10.4	10.5	10.4
	Lb/h	112	102	94.5	84.2	65.3
20	Btu/h	8540	7450	6500	5390	3850
	Watts	1150	1190	1230	1250	1250
	Amps	10.4	10.7	11.0	11.2	11.2
	Lb/h	128	119	111	98.2	75.7
25	Btu/h	9630	8500	7440	6160	4380
	Watts	1200	1250	1300	1330	1340
	Amps	10.8	11.2	11.6	11.9	12.0
	Lb/h	145	136	127	113	86.3
30	Btu/h	10700	9570	8390	6920	4880
	Watts	1250	1300	1360	1410	1420
	Amps	11.2	11.6	12.1	12.5	12.7
	Lb/h	163	154	144	127	97.0

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.012079E+05	3.978452E+03	4.059417E+01	1.864501E+03
C2	-6.788586E+02	-9.253860E+00	1.010538E-02	-1.684681E+01
C3	-2.262753E+03	-8.244512E+01	-8.816993E-01	-4.343386E+01
C4	5.224815E+00	-6.069733E-03	1.185353E-03	8.409838E-02
C5	1.521116E+01	2.083926E-01	6.758252E-05	3.332404E-01
C6	1.774549E+01	7.449869E-01	8.027060E-03	3.505926E-01

C7	-3.016762E-02	1.121094E-04	-4.217840E-05	-4.172633E-04
C8	-2.405636E-02	-3.892281E-04	4.391083E-06	-3.840002E-04
C9	-7.059325E-02	-6.451040E-06	6.233691E-06	-1.449041E-03
C10	-4.745786E-02	-2.243542E-03	-2.424017E-05	-9.535755E-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

AKA9462ZXA

General

Model	AKA9462ZXA	Unit of Measure	Fahrenheit
Condition	ARI (R-452A)	Voltage/Frequency	115V ~ 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
0	Btu/h	4900	3830	3180		
	Watts	980	977	975		
	Amps	8.92	8.93	8.96		
	Lb/h	99.1	80.6	71.7		
5	Btu/h	5640	4590	3880	3240	
	Watts	1040	1050	1060	1050	
	Amps	9.37	9.46	9.57	9.53	
	Lb/h	114	97.2	88.3	79.3	
10	Btu/h	6500	5450	4680	3890	
	Watts	1100	1110	1130	1140	
	Amps	9.88	10.0	10.2	10.3	
	Lb/h	131	116	107	95.7	
15	Btu/h	7450	6400	5540	4600	3310
	Watts	1150	1180	1210	1220	1210
	Amps	10.4	10.6	10.9	11.1	10.9
	Lb/h	151	137	127	114	88.0
20	Btu/h	8480	7400	6450	5360	3830
	Watts	1200	1240	1280	1310	1310
	Amps	10.9	11.2	11.6	11.8	11.8
	Lb/h	173	160	149	132	102
25	Btu/h	9560	8440	7390	6120	4350
	Watts	1250	1300	1350	1390	1400
	Amps	11.4	11.8	12.2	12.6	12.6
	Lb/h	196	184	172	152	116
30	Btu/h	10700	9500	8330	6880	4840
	Watts	1300	1360	1420	1460	1480
	Amps	11.8	12.3	12.8	13.2	13.4
	Lb/h	220	208	195	171	131

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.005009E+05	4.145614E+03	4.280841E+01	2.514328E+03
C2	-6.741165E+02	-9.642696E+00	1.065632E-02	-2.271837E+01
C3	-2.246947E+03	-8.590918E+01	-9.297924E-01	-5.857167E+01
C4	5.188311E+00	-6.324528E-03	1.250013E-03	1.134090E-01
C5	1.510490E+01	2.171489E-01	7.127048E-05	4.493833E-01
C6	1.762153E+01	7.762886E-01	8.464903E-03	4.727832E-01

C7	-2.995679E-02	1.168216E-04	-4.447905E-05	-5.626920E-04
C8	-2.388834E-02	-4.055857E-04	4.630583E-06	-5.178344E-04
C9	-7.010014E-02	-6.721501E-06	6.573709E-06	-1.954070E-03
C10	-4.712636E-02	-2.337808E-03	-2.556237E-05	-1.285921E-03

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