

Model: AKA9455EXD

Product Description

Type:	Reciprocating Compressors
Application:	CBP - Commercial Back Pressure
Refrigerant:	R-22
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					
ASHRAE (R-22)	230V ~ 60HZ	5500	1386	1612	990	5.56	1.4	1.63	-6.7°C (20°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°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:	42
Weight Unit of Measure:	LB
Displacement (cc):	18.584
Oil Type:	Polyolester
Viscosity (cSt):	32
Oil Charge (cc):	453

Electrical

Voltage Range (50 Hz):	180-220
Voltage Range (60 Hz):	187-254
Locked Rotor Amps (LRA):	31
Rated Load Amps (RLA 50 Hz):	0
Rated Load Amps (RLA 60 Hz):	4.9
Max. Continuous Current (MCC in Amps):	8.55
Motor Resistance (Ohm) - Main:	1.77

Motor Resistance (Ohm) - Start: 10.43
MotorType: CSR

Overload Type:

Relay Type:

Agency Approval

cURus Recognized

AKA9455EXD

General

Model	AKA9455EXD	Unit of Measure	Fahrenheit
Condition	ASHRAE	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
0	Btu/h	4270			
	Watts	760			
	Amps	4.00			
	Lb/h	56.1			
5	Btu/h	5370	4230		
	Watts	790	811		
	Amps	4.14	4.20		
	Lb/h	70.8	58.0		
10	Btu/h	6010	5110	4470	
	Watts	825	854	875	
	Amps	4.28	4.36	4.45	
	Lb/h	79.4	70.4	64.3	
15	Btu/h	6650	5810	5260	4670
	Watts	860	896	924	942
	Amps	4.40	4.51	4.62	4.70
	Lb/h	88.1	80.3	76.1	70.8
20	Btu/h	7740	6770	6130	5500
	Watts	892	933	966	990
	Amps	4.52	4.67	4.80	4.90
	Lb/h	103	94.0	89.1	83.8

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.018522E+05	5.826387E+02	1.197930E+01	1.345746E+03
C2	-2.747048E+02	-1.378393E+01	-9.666058E-02	-3.763506E+00
C3	-2.330225E+03	-1.103916E+00	-2.138749E-01	-3.134934E+01
C4	1.953469E+01	5.742403E-01	-1.210001E-03	2.626439E-01
C5	1.290697E+00	1.482701E-01	2.079589E-03	1.041728E-02
C6	1.909016E+01	6.174952E-02	1.871866E-03	2.613772E-01
C7	6.013343E-01	-5.278278E-03	4.885919E-06	8.158607E-03
C8	-3.757585E-01	-4.049569E-03	9.078750E-06	-5.053882E-03
C9	4.392309E-02	4.292438E-04	-8.125988E-06	6.662560E-04
C10	-5.545724E-02	-3.297665E-04	-5.309251E-06	-7.684843E-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



Performance Data Sheet

AKA9455EXD

General

Model	AKA9455EXD	Unit of Measure	Fahrenheit
Condition	ASHRAE	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
20	Btu/h	7730	6900	6170	5500
	Watts	894	935	963	990
	Amps	4.52	4.66	4.79	4.90
	Lb/h	103	95.7	89.6	83.8
25	Btu/h	8570	7770	7050	6360
	Watts	925	975	1010	1050
	Amps	4.64	4.82	4.99	5.13
	Lb/h	113	107	102	96.1
30	Btu/h	9570	8770	8030	7310
	Watts	951	1010	1060	1110
	Amps	4.74	4.97	5.17	5.34
	Lb/h	126	120	115	110
35	Btu/h	10700	9900	9120	8340
	Watts	975	1040	1100	1150
	Amps	4.84	5.10	5.34	5.54
	Lb/h	140	135	130	124
40	Btu/h	12000	11100	10300	9440
	Watts	996	1070	1130	1200
	Amps	4.91	5.22	5.49	5.72
	Lb/h	156	151	145	139
45	Btu/h	13400	12500	11600	10600
	Watts	1020	1100	1170	1240
	Amps	4.98	5.32	5.63	5.89
	Lb/h	173	168	162	156
50	Btu/h	15000	14000	12900	11800
	Watts	1040	1120	1200	1280
	Amps	5.03	5.41	5.76	6.05
	Lb/h	192	186	180	172

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.741831E+04	-2.754706E+03	8.956218E+00	4.904992E+02
C2	-4.579609E+02	-6.999511E+00	-1.117245E-01	-6.966010E+00
C3	-5.766063E+02	8.903262E+01	-1.252685E-01	-7.897484E+00
C4	8.802074E+00	-3.127412E-02	-2.221796E-04	1.063788E-01
C5	6.449555E+00	1.359603E-01	2.041849E-03	9.530788E-02
C6	3.402743E+00	-7.480572E-01	1.036357E-03	5.034639E-02

C7	-1.253533E-02	1.576231E-03	5.709165E-07	-1.932609E-04
C8	-4.689781E-02	-1.712849E-03	-1.044969E-06	-5.297551E-04
C9	-1.839259E-02	6.254915E-04	-5.485840E-06	-2.573134E-04
C10	-7.665292E-03	2.037632E-03	-2.898141E-06	-1.210135E-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