

**Model: AKA9442EXA**
**Product Description**

**Type:** Reciprocating Compressors  
**Application:** CBP - Commercial Back Pressure  
**Refrigerant:** R-22  
**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					
ASHRAE (R-22)	115V ~ 60HZ	4150	1046	1216	735	5.65	1.42	1.65	-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:** 40  
**Weight Unit of Measure:** LB  
**Displacement (cc):** 15.634  
**Oil Type:** Polyolester  
**Viscosity (cSt):** 32  
**Oil Charge (cc):** 453

**Electrical**

**Voltage Range (50 Hz):** 90-110  
**Voltage Range (60 Hz):** 103-127  
**Locked Rotor Amps (LRA):** 58.8  
**Rated Load Amps (RLA 50 Hz):** 0  
**Rated Load Amps (RLA 60 Hz):** 8.8  
**Max. Continuous Current (MCC in Amps):** 13  
**Motor Resistance (Ohm) - Main:** .59

Motor Resistance (Ohm) - Start:  
MotorType:

4.22  
CSIR

Overload Type:

Relay Type:

## Agency Approval

cURus Recognized

**AKA9442EXA**
**General**

Model	AKA9442EXA	Unit of Measure	Fahrenheit
Condition	ASHRAE	Voltage/Frequency	115V~60HZ
RETURN GAS	4.4°C (40°F) RETURN GAS	MotorType	CSIR

**Performance Information**

EVAP TEMP (°F)	Condensing Temperature (°F)				
		100	110	120	130
0	Btu/h	3230			
	Watts	535			
	Amps	7.40			
	Lb/h	42.4			
5	Btu/h	3870	3420		
	Watts	573	584		
	Amps	7.66	7.66		
	Lb/h	51.0	46.9		
10	Btu/h	4470	4010	3470	
	Watts	606	626	627	
	Amps	7.86	7.93	7.95	
	Lb/h	59.1	55.2	50.0	
15	Btu/h	5120	4620	4090	3450
	Watts	639	664	678	669
	Amps	8.07	8.20	8.31	8.27
	Lb/h	67.9	63.9	59.1	52.3
20	Btu/h	5910	5340	4780	4150
	Watts	675	702	726	735
	Amps	8.36	8.54	8.73	8.80
	Lb/h	78.7	74.2	69.4	63.2

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.421038E+04	1.484237E+03	2.963105E+01	2.067135E+02
C2	4.681776E+02	7.159271E+01	1.893796E-01	6.377745E+00
C3	-2.847471E+02	-4.213433E+01	-6.430397E-01	-4.823124E+00
C4	3.088418E+00	5.028817E-01	-1.314927E-03	4.006098E-02
C5	-6.920913E+00	-1.455275E+00	-3.849768E-03	-1.009397E-01
C6	2.824469E+00	5.451439E-01	6.258902E-03	5.102957E-02
C7	1.186430E-01	4.622172E-03	9.332260E-05	1.670560E-03
C8	-5.651360E-02	-6.520253E-03	-1.332246E-05	-7.528168E-04
C9	3.616236E-02	8.203011E-03	2.588614E-05	5.568158E-04
C10	-1.074859E-02	-2.186864E-03	-2.051292E-05	-1.922827E-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

