



Model:RKA5513EXA

Product Description

Type: Rotary
Application: HBP/AC - Air Conditioning
Refrigerant: R22
Voltage/Frequency: 115V ~ 60Hz 100V ~ 50Hz

Product Specifications

Performance

Condition	Test Voltage	Refrigeration Capacity			Input Power	Efficiency			EVAP TEMP	COND TEMP	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
		Btu/h	kcal/h	W	W	Btu/Wh	kcal/Wh	W/W					
ASHRAE	115V ~ 60HZ	13200	3326	3868	1220	10.82	2.73	3.17	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°F)

General

Evaporating Temp. Range: -23.3°C to 12.8°C (-10°F to 55°F)
Motor Torque: Low Start Torque (LST)
Compressor Cooling: Fan

Mechanical

Weight: 28
Weight Unit of Measure: N/A
Displacement (cc): 18.142
Oil Type: Synthetic Alkylate
Viscosity (cSt): 53
Oil Charge (cc): 433
Sound Power dB(A): N/A

Electrical

Voltage Range (50 Hz): 90-110
Voltage Range (60 Hz): 103-127
Locked Rotor Amps (LRA): 67
Rated Load Amps (RLA 50 Hz): N/A
Rated Load Amps (RLA 60 Hz): 11.4
Max. Continuous Current (MCC in Amps): 17.6
Motor Resistance (Ohm) - Main: 0.55
Motor Resistance (Ohm) - Start: 4.01
Motor Type: PSC
Overload Type: EXTERNAL
Relay Type: N/A

Agency Approval

CSA Listed, UL Recognized



Tecumseh

Performance Data Sheet

RKA5513EXA

General Information

Model	RKA5513EXA	Refrigerant	R22
Test Condition	ASHRAE	Performance Test Voltage	115V ~ 60HZ
Return Gas	18.3°C (65°F) RETURN GAS	Motor Type	PSC

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)							
		80	90	100	110	120	130	140	150
-15	Btu/h	4860	4560						
	Watts	566	623						
	Amps	5.04	5.46						
	Lb/h	62.5	61.2						
-10	Btu/h	5370	5050	4730					
	Watts	581	641	701					
	Amps	5.13	5.61	6.14					
	Lb/h	68.7	67.2	65.8					
-5	Btu/h	5980	5620	5270	4940				
	Watts	595	659	723	786				
	Amps	5.23	5.77	6.35	6.98				
	Lb/h	76.0	74.4	72.8	71.3				
0	Btu/h	6670	6290	5910	5540	5190			
	Watts	610	677	744	812	880			
	Amps	5.33	5.93	6.57	7.24	7.95			
	Lb/h	84.4	82.6	80.9	79.2	77.7			
5	Btu/h	7470	7040	6630	6220	5830			
	Watts	624	694	765	837	910			
	Amps	5.43	6.09	6.78	7.50	8.26			
	Lb/h	93.8	92.0	90.1	88.3	86.6			
10	Btu/h	8360	7900	7440	6990	6550	6130	5710	
	Watts	638	711	786	861	939	1020	1100	
	Amps	5.54	6.25	6.99	7.76	8.55	9.38	10.3	
	Lb/h	104	102	100	98.5	96.6	94.8	93.2	
15	Btu/h	9340	8840	8340	7850	7360	6890	6420	
	Watts	653	728	806	885	966	1050	1140	
	Amps	5.65	6.41	7.20	8.01	8.84	9.71	10.6	
	Lb/h	116	114	112	110	108	106	104	
20	Btu/h	10400	9870	9330	8790	8260	7740	7220	6710
	Watts	667	745	825	908	993	1080	1170	1260
	Amps	5.76	6.58	7.41	8.25	9.12	10.0	10.9	11.9
	Lb/h	128	126	124	122	120	118	116	114

25	Btu/h	11600	11000	10400	9830	9240	8660	8090	7530
	Watts	682	761	844	930	1020	1110	1210	1300
	Amps	5.88	6.74	7.61	8.49	9.39	10.3	11.3	12.2
	Lb/h	142	140	138	135	133	131	129	127
30	Btu/h	12900	12200	11600	10900	10300	9680	9050	8420
	Watts	696	778	863	952	1040	1140	1240	1340
	Amps	5.99	6.90	7.81	8.73	9.66	10.6	11.6	12.6
	Lb/h	157	155	152	150	148	145	143	141
35	Btu/h	14200	13500	12800	12100	11500	10800	10100	9400
	Watts	711	794	882	973	1070	1170	1270	1380
	Amps	6.11	7.06	8.00	8.95	9.91	10.9	11.9	12.9
	Lb/h	172	170	168	165	163	160	158	156
40	Btu/h	15700	14900	14200	13400	12700	11900	11200	10400
	Watts	726	811	900	993	1090	1190	1300	1410
	Amps	6.23	7.22	8.20	9.18	10.2	11.1	12.1	13.2
	Lb/h	189	187	184	182	179	177	174	172
45	Btu/h	17200	16400	15600	14800	14000	13200	12400	11600
	Watts	741	827	918	1010	1110	1220	1330	1450
	Amps	6.35	7.37	8.38	9.39	10.4	11.4	12.4	13.4
	Lb/h	206	204	202	199	197	194	191	189
50	Btu/h	18900	18000	17200	16300	15400	14500	13700	12800
	Watts	757	843	935	1030	1140	1240	1360	1480
	Amps	6.47	7.53	8.57	9.60	10.6	11.6	12.7	13.7
	Lb/h	225	222	220	218	215	212	209	207
55	Btu/h	20600	19700	18800	17800	16900	16000	15000	14100
	Watts	773	860	953	1050	1160	1270	1390	1510
	Amps	6.59	7.68	8.74	9.79	10.8	11.9	12.9	13.9
	Lb/h	244	242	239	237	234	231	229	226

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	9.988236E+03	8.763372E+01	1.180036E+00	9.305157E+01
C2	1.898539E+02	1.461676E+00	-1.056255E-01	1.807020E+00
C3	-4.180823E+01	6.376495E+00	4.890128E-02	3.761910E-03
C4	2.273681E+00	3.930066E-02	4.950495E-04	1.923133E-02
C5	-3.498387E-01	-2.375555E-02	1.947268E-03	1.472206E-03
C6	-1.510284E-02	1.825593E-03	-1.645788E-05	-2.011916E-03
C7	-2.243695E-04	4.893074E-05	-5.290295E-07	-2.290368E-05
C8	-4.703070E-03	-5.032708E-04	-5.233321E-06	2.836047E-05
C9	-1.957826E-03	5.163456E-04	-4.637892E-06	-2.177738E-05
C10	2.496377E-04	6.948478E-07	6.613960E-07	7.602152E-06

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

Te = Evaporator Temperature

Tc = Condensing Temperature