Technical Data Sheet

2/13/2015

Model: RKA5480EXD

Product Description

Type:	Rotary
Application:	HBP/AC - Air Conditioning
Refrigerant:	R-22
Voltage/Frequency:	208-230V ~ 60Hz 200V ~ 50Hz
Version:	N/A

Product Specifications

Performance

		Refrigeration Capacity			Input Power	Efficiency			EVAP TEMP	COND TEMP	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
Condition	Test Voltage	Btu/h	kcal/h	W	W	Btu/Wh	kcal/Wh	W/W					
ASHRAE	230V ~ 60HZ	8100	2041	2373	735	11.02	2.78	3.23	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:	LB
Displacement (cc):	11.422
Oil Type:	Synthetic Alkylate
Viscosity (cSt):	53
Oil Charge (cc):	356

Electrical

Voltage Range (50 Hz):	180-220
Voltage Range (60 Hz):	197-254
Locked Rotor Amps (LRA):	23
Rated Load Amps (RLA 50 Hz):	0
Rated Load Amps (RLA 60 Hz):	3.4
Max. Continuous Current (MCC in Amps):	6.9
Motor Resistance (Ohm) - Main:	3.57
Motor Resistance (Ohm) - Start:	5.88
Motor Type:	PSC
Overload Type:	N/A
Relay Type:	N/A

Agency Approval

cURus Recognized

Performance Data Sheet

RKA5480EXD

General Information

Model	RKA5480EXD	**Refrigerant**	R-22
Test Condition	ASHRAE	**Performance Test Voltage**	230V ~ 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
-15	Btu/h	2980	2800					
	Watts	338	377					
	Amps	1.37	1.57					
	Lb/h	38.5	37.9					
-10	Btu/h	3300	3100	2900				
	Watts	347	387	425				
	Amps	1.42	1.63	1.82				
	Lb/h	42.2	41.4	40.7				
-5	Btu/h	3670	3450	3240	3030			
	Watts	355	397	438	477			
	Amps	1.47	1.68	1.89	2.09			
	Lb/h	46.6	45.7	44.9	44.1			
0	Btu/h	4100	3860	3620	3400	3180		
	Watts	364	408	450	492	533		
	Amps	1.51	1.74	1.96	2.17	2.38		
	Lb/h	51.7	50.7	49.7	48.8	47.9		
5	Btu/h	4580	4320	4070	3820	3570		
	Watts	373	418	462	506	550		
	Amps	1.56	1.80	2.02	2.25	2.47		
	Lb/h	57.5	56.4	55.3	54.3	53.3		
10	Btu/h	5130	4840	4560	4290	4020	3760	3500
	Watts	382	428	474	520	566	613	660
	Amps	1.60	1.85	2.09	2.32	2.56	2.80	3.04
	Lb/h	63.9	62.8	61.6	60.5	59.4	58.2	57.1
15	Btu/h	5730	5420	5120	4820	4520	4230	3940
	Watts	391	438	486	534	582	632	682
	Amps	1.65	1.90	2.15	2.40	2.64	2.89	3.15
	Lb/h	71.0	69.8	68.6	67.4	66.1	64.9	63.7
20	Btu/h	6390	6060	5730	5400	5070	4750	4430
	Watts	401	449	498	547	598	650	704
	Amps	1.69	1.96	2.21	2.47	2.72	2.98	3.25
	Lb/h	78.8	77.5	76.2	74.9	73.6	72.3	71.0

25	Btu/h	7110	6750	6390	6030	5670	5320	4960
	Watts	410	459	509	561	614	668	725
	Amps	1.74	2.01	2.27	2.54	2.80	3.07	3.35
	Lb/h	87.2	85.8	84.5	83.1	81.7	80.3	78.9
30	Btu/h	7890	7500	7110	6720	6330	5940	5550
	Watts	419	469	520	574	629	686	745
	Amps	1.78	2.06	2.33	2.60	2.88	3.16	3.45
	Lb/h	96.2	94.8	93.4	92.0	90.5	89.1	87.6
35	Btu/h	8720	8300	7880	7460	7030	6610	6180
	Watts	429	479	531	586	643	703	765
	Amps	1.83	2.11	2.39	2.67	2.95	3.24	3.54
	Lb/h	106	104	103	101	99.9	98.4	96.9
40	Btu/h	9620	9160	8710	8250	7790	7330	6870
	Watts	438	489	542	598	657	719	784
	Amps	1.87	2.16	2.45	2.73	3.02	3.32	3.63
	Lb/h	116	115	113	112	110	108	107
45	Btu/h	10600	10100	9590	9090	8600	8100	7600
	Watts	448	499	553	610	671	735	802
	Amps	1.92	2.21	2.50	2.80	3.09	3.40	3.72
	Lb/h	127	125	124	122	121	119	117
50	Btu/h	11600	11100	10500	9990	9460	8920	8380
	Watts	457	509	564	622	684	750	820
	Amps	1.97	2.26	2.56	2.86	3.16	3.48	3.80
	Lb/h	138	137	135	133	132	130	129
55	Btu/h	12600	12100	11500	10900	10400	9790	9210
	Watts	467	519	574	633	697	765	837
	Amps	2.01	2.31	2.61	2.92	3.23	3.55	3.88
	Lb/h	150	148	147	145	144	142	140

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	6.139232E+03	-2.800298E+01	-1.023463E+00	6.044652E+01
C2	1.163974E+02	2.624281E+00	-8.775508E-04	1.206028E+00
C3	-2.593258E+01	5.559843E+00	4.384500E-02	-1.226310E-01
C4	1.391892E+00	2.137469E-02	8.549543E-05	1.218895E-02
C5	-2.112887E-01	-4.507300E-02	6.214906E-05	-9.619627E-04
C6	-6.720101E-03	-9.823720E-03	-1.974813E-04	1.804861E-04
C7	-1.530022E-04	-1.093626E-05	8.513755E-08	-2.116342E-05
C8	-2.843915E-03	-2.403652E-04	-1.147038E-06	2.026579E-05
C9	-1.224896E-03	4.317978E-04	7.882599E-07	-6.261487E-06
C10	1.453287E-04	2.022551E-05	5.728559E-07	-2.392737E-07

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