

Model: RGA5510EXA

Product Description

Type:	Rotary Compressors
Application:	HBP/AC - Air Conditioning
ProductDescription:	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					
EN12900 (R-22)	100V ~ 50HZ	7440	1875	2180	732	10.16	2.56	2.98	5°C (41°F)	50°C (122°F)	32°C (90°F)	15°C (59°F)	50°C (122°F)
EN12900 (R-22)	115V ~ 60HZ	9205	2320	2697	897	10.26	2.59	3.01	5°C (41°F)	50°C (122°F)	32°C (90°F)	15°C (59°F)	50°C (122°F)
ASHRAE (R-22)	115V ~ 60HZ	10300	2596	3018	954	10.8	2.72	3.16	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:	-15°C to 15°C (5°F to 59°F)
Motor Torque:	Low Start Torque (LST)
Compressor Cooling:	Fan

Mechanical

Weight:	27
Weight Unit of Measure:	LB
Displacement (cc):	14.208
Oil Type:	Synthetic Alkylate
Viscosity (cSt):	53
Oil Charge (cc):	250

Electrical

Voltage Range (50 Hz):	90-110
Voltage Range (60 Hz):	103-127
Locked Rotor Amps (LRA):	58.4
Rated Load Amps (RLA 50 Hz):	9.8
Rated Load Amps (RLA 60 Hz):	9.2

Max. Continuous Current (MCC in Amps): 16
Motor Resistance (Ohm) - Main: .58
Motor Resistance (Ohm) - Start: 4
Motor Type: PSC
Overload Type:
Relay Type:

[Agency Approval](#)

cURus Recognized



Performance Data Sheet

RGA5510EXA

General

Model	RGA5510EXA	Unit of Measure	Fahrenheit
Condition	ASHRAE	Voltage/Frequency	115V ~ 60HZ
RETURN GAS	18.3°C (65°F) RETURN GAS	MotorType	PSC

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
		80	90	100	110	120	130	140	150
-15	Btu/h	3390							
	Watts	483							
	Amps	5.92							
	Lb/h	46.1							
-10	Btu/h	3940	3840						
	Watts	509	544						
	Amps	6.07	6.33						
	Lb/h	52.5	51.8						
-5	Btu/h	4540	4390	4240					
	Watts	530	570	611					
	Amps	6.20	6.50	6.80					
	Lb/h	59.4	58.6	57.7					
0	Btu/h	5180	4990	4790	4590				
	Watts	547	592	638	684				
	Amps	6.29	6.63	6.98	7.34				
	Lb/h	66.8	65.9	64.9	63.9				
5	Btu/h	5870	5630	5390	5140	4890			
	Watts	560	610	661	712	764			
	Amps	6.35	6.74	7.13	7.52	7.93			
	Lb/h	74.8	73.8	72.7	71.6	70.4			
10	Btu/h	6630	6330	6030	5740	5440	5140		
	Watts	569	624	680	736	792	850		
	Amps	6.39	6.82	7.25	7.68	8.13	8.59		
	Lb/h	83.5	82.3	81.1	79.8	78.4	77.0		
15	Btu/h	7440	7090	6740	6390	6040	5680	5330	
	Watts	574	634	694	755	817	879	942	
	Amps	6.41	6.87	7.34	7.82	8.30	8.80	9.31	
	Lb/h	92.9	91.5	90.0	88.6	87.1	85.5	83.9	
20	Btu/h	8330	7920	7510	7100	6690	6290	5880	5480
	Watts	575	640	705	771	838	905	972	1040
	Amps	6.40	6.90	7.41	7.93	8.45	8.99	9.53	10.1
	Lb/h	103	101	99.7	98.1	96.4	94.6	92.8	91.0
25	Btu/h	9280	8810	8340	7880	7410	6950	6490	6030
	Watts	573	643	713	783	855	926	999	1070
	Amps	6.37	6.91	7.46	8.01	8.58	9.15	9.74	10.3

	Lb/h	114	112	110	108	106	104	102	100
30	Btu/h	10300	9780	9250	8730	8200	7680	7160	6640
	Watts	568	642	717	792	868	945	1020	1100
	Amps	6.32	6.90	7.48	8.08	8.68	9.29	9.92	10.6
	Lb/h	126	124	121	119	117	115	113	110
35	Btu/h	11400	10800	10200	9650	9060	8480	7900	7320
	Watts	560	639	718	798	878	959	1040	1120
	Amps	6.25	6.87	7.49	8.12	8.76	9.41	10.1	10.7
	Lb/h	138	136	134	131	129	126	124	121
40	Btu/h	12600	12000	11300	10600	10000	9350	8710	8070
	Watts	550	633	717	801	886	971	1060	1140
	Amps	6.16	6.82	7.48	8.15	8.83	9.52	10.2	10.9
	Lb/h	152	149	146	144	141	138	135	133
45	Btu/h	13900	13200	12500	11700	11000	10300	9590	8890
	Watts	537	624	712	801	890	980	1070	1160
	Amps	6.06	6.75	7.45	8.16	8.88	9.60	10.3	11.1
	Lb/h	167	164	160	157	154	151	148	145
50	Btu/h	15300	14500	13700	12900	12100	11300	10600	9790
	Watts	522	613	706	799	892	986	1080	1180
	Amps	5.94	6.67	7.41	8.15	8.91	9.67	10.4	11.2
	Lb/h	183	179	175	172	168	165	162	158
55	Btu/h	16800	15900	15000	14200	13300	12500	11600	10800
	Watts	504	600	697	794	892	990	1090	1190
	Amps	5.81	6.58	7.35	8.14	8.92	9.72	10.5	11.3
	Lb/h	199	195	191	188	184	180	176	172

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	6.685549E+03	1.917649E+02	3.651362E+00	7.316521E+01
C2	2.192553E+02	-5.090718E+00	-5.108059E-02	1.839731E+00
C3	-1.883642E+01	4.462344E+00	3.326887E-02	-8.077097E-02
C4	1.447843E+00	-7.095084E-02	-4.909448E-04	1.638027E-02
C5	-1.143798E+00	9.991621E-02	8.462241E-04	-4.620124E-03
C6	4.603020E-03	-1.172690E-03	-1.921334E-05	1.404984E-04
C7	6.200309E-03	3.021148E-04	2.096035E-06	6.904463E-05
C8	-4.753515E-03	-1.736470E-04	-8.746337E-07	-5.573742E-05
C9	9.078552E-04	1.130569E-05	-1.262244E-07	1.182131E-05
C10	-5.726949E-05	1.173468E-05	1.939049E-07	-1.546910E-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



Performance Data Sheet

RGA5510EXA

General

Model	RGA5510EXA	Unit of Measure	Celsius
Condition	EN12900	Voltage/Frequency	100V~50HZ
RETURN GAS	10K (18°F) SUPERHEAT	MotorType	PSC

Performance Information

EVAP TEMP (°C)	Condensing Temperature (°C)								
		30	35	40	45	50	55	60	65
-25	Watts (Capacity)	698	653						
	Watts (Power)	450	477						
	Amps	7.32	7.43						
-23.3	Watts (Capacity)	770	723	672					
	Watts (Power)	457	486	514					
	Amps	7.37	7.50	7.64					
-20	Watts (Capacity)	922	870	813	754	696			
	Watts (Power)	469	502	534	565	594			
	Amps	7.46	7.62	7.80	8.00	8.22			
-15	Watts (Capacity)	1180	1120	1060	986	911	838		
	Watts (Power)	483	522	560	597	633	668		
	Amps	7.55	7.76	7.99	8.25	8.52	8.81		
-10	Watts (Capacity)	1490	1420	1340	1250	1160	1070	976	
	Watts (Power)	492	536	580	624	667	710	752	
	Amps	7.60	7.86	8.15	8.45	8.78	9.13	9.49	
-6.7	Watts (Capacity)	1720	1640	1550	1460	1350	1240	1130	1030
	Watts (Power)	494	543	591	639	686	734	781	828
	Amps	7.61	7.91	8.23	8.57	8.93	9.31	9.71	10.1
-5	Watts (Capacity)	1840	1760	1670	1570	1460	1340	1220	1110
	Watts (Power)	495	545	595	645	695	745	795	844
	Amps	7.61	7.92	8.26	8.62	9.00	9.39	9.81	10.2
0	Watts (Capacity)	2250	2160	2050	1930	1790	1650	1510	1360
	Watts (Power)	493	548	603	660	716	774	831	889
	Amps	7.57	7.94	8.33	8.74	9.17	9.62	10.1	10.6
5	Watts (Capacity)	2720	2610	2480	2340	2180	2010	1840	1660
	Watts (Power)	485	545	606	668	732	796	861	927
	Amps	7.49	7.91	8.35	8.82	9.30	9.80	10.3	10.9
7.2	Watts (Capacity)	2950	2830	2690	2540	2370	2190	2000	1810
	Watts (Power)	480	542	605	670	736	803	872	941
	Amps	7.44	7.88	8.35	8.84	9.34	9.87	10.4	11.0
10	Watts (Capacity)	3250	3120	2970	2810	2620	2430	2230	2010
	Watts (Power)	472	536	603	671	740	811	884	958
	Amps	7.36	7.84	8.33	8.85	9.38	9.94	10.5	11.1
15	Watts (Capacity)	3850	3700	3530	3340	3130	2900	2660	2420
	Watts (Power)	453	522	593	667	743	820	900	982

	Amps	7.20	7.72	8.27	8.84	9.43	10.0	10.7	11.3
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COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.347340E+03	1.815550E+02	5.770930E+00	
C2	9.470820E+01	-4.742910E+00	-7.461010E-02	
C3	1.429880E+01	9.747230E+00	4.788490E-02	
C4	1.415620E+00	-8.790260E-02	-8.682890E-04	
C5	6.072270E-02	6.142460E-02	2.096560E-03	
C6	-6.908490E-01	2.400220E-02	4.014410E-04	
C7	6.454860E-03	-9.883180E-05	0.000000E+00	
C8	-8.216030E-03	-7.674430E-04	0.000000E+00	
C9	-1.015540E-02	2.132030E-03	0.000000E+00	
C10	3.658560E-03	-1.002590E-04	0.000000E+00	

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

Te = Evaporator Temperature

Tc = Condensing Temperature



Performance Data Sheet

RG A5510EXA

General

Model	RG A5510EXA	Unit of Measure	Celsius
Condition	EN12900	Voltage/Frequency	115V~ 60HZ
RETURN GAS	10K (18°F) SUPERHEAT	MotorType	PSC

Performance Information

EVAP TEMP (°C)	Condensing Temperature (°C)								
		30	35	40	45	50	55	60	65
-25	Watts (Capacity)	869	812						
	Watts (Power)	559	590						
	Amps	5.87	6.03						
-23.3	Watts (Capacity)	956	897	833					
	Watts (Power)	568	601	635					
	Amps	5.96	6.13	6.33					
-20	Watts (Capacity)	1140	1080	1010	934	854			
	Watts (Power)	584	620	658	697	739			
	Amps	6.09	6.31	6.55	6.82	7.11			
-15	Watts (Capacity)	1460	1390	1310	1220	1130	1040		
	Watts (Power)	605	647	689	733	781	831		
	Amps	6.25	6.53	6.84	7.17	7.52	7.90		
-10	Watts (Capacity)	1830	1740	1650	1560	1450	1340	1230	
	Watts (Power)	619	667	715	766	818	875	936	
	Amps	6.34	6.69	7.06	7.45	7.87	8.31	8.78	
-6.7	Watts (Capacity)	2100	2010	1910	1800	1690	1560	1440	1300
	Watts (Power)	624	676	729	784	841	901	966	1040
	Amps	6.36	6.75	7.17	7.60	8.06	8.55	9.06	9.59
-5	Watts (Capacity)	2260	2160	2050	1940	1820	1690	1550	1410
	Watts (Power)	625	680	735	792	851	914	981	1050
	Amps	6.37	6.78	7.21	7.67	8.15	8.66	9.19	9.75
0	Watts (Capacity)	2750	2630	2510	2370	2230	2080	1920	1750
	Watts (Power)	622	684	748	812	878	947	1020	1100
	Amps	6.33	6.80	7.30	7.83	8.37	8.95	9.54	10.2
5	Watts (Capacity)	3320	3180	3020	2870	2700	2520	2340	2140
	Watts (Power)	608	679	751	823	897	974	1050	1140
	Amps	6.23	6.77	7.33	7.92	8.53	9.17	9.83	10.5
7.2	Watts (Capacity)	3590	3440	3270	3100	2920	2730	2540	2330
	Watts (Power)	598	674	749	825	903	984	1070	1160
	Amps	6.16	6.73	7.32	7.94	8.58	9.24	9.93	10.6
10	Watts (Capacity)	3960	3790	3610	3420	3230	3020	2810	2580
	Watts (Power)	582	663	743	825	907	993	1080	1170
	Amps	6.06	6.67	7.29	7.95	8.62	9.32	10.0	10.8
15	Watts (Capacity)	4680	4480	4270	4050	3820	3580	3340	3080
	Watts (Power)	543	634	725	815	907	1000	1100	1200

	Amps	5.83	6.50	7.19	7.91	8.65	9.42	10.2	11.0
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COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	3.253460E+03	1.958760E+02	3.985930E+00	
C2	1.291130E+02	-1.246210E+01	-9.116680E-02	
C3	-1.041580E+01	1.687780E+01	6.364300E-02	
C4	1.870470E+00	-2.989590E-01	-1.281520E-03	
C5	-7.015380E-01	3.882980E-01	2.578420E-03	
C6	-2.251020E-01	-1.271620E-01	4.822960E-04	
C7	7.771680E-03	-1.760060E-03	0.000000E+00	
C8	-1.508930E-02	2.947630E-03	0.000000E+00	
C9	-2.448520E-03	-9.312060E-04	0.000000E+00	
C10	4.669160E-04	1.250210E-03	0.000000E+00	

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

Te = Evaporator Temperature

Tc = Condensing Temperature