

### COMPRESSOR DEFINITION

Designation	J 9226GK
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	964LD01

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 60	[ V / Hz ]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 0°C	(-4°F to 32°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm <sup>2</sup> ] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm <sup>2</sup> ] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1+	[hp]
2 Displacement	21.71	[cm <sup>3</sup> ] (1.325 cu.in)
2.1 Bore [mm]	38.087	
2.2 Stroke [mm]	19.066	
3 Lubricant charge	890	[ml] (30.10 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	20.4	[kg] (44.97 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B6W3	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	20(450)	[µF(VAC minimum)]
5 Motor protection	T0736/C9	
6 Start winding resistance	7.76	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.78	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	34.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	8.40	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @208V60Hz			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°F)	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
13005	3277	3811	1675	8.40	107.07	7.76	1.96	2.27

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V50Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	4769	1202	1398	809	4.00	30.28	5.89	1.48	1.73
-15	(+ 5)	6082	1533	1782	885	4.33	38.82	6.88	1.73	2.01
-10	(+14)	7689	1938	2253	956	4.65	49.38	8.04	2.03	2.36
-5	(+23)	9591	2417	2810	1022	4.96	62.06	9.39	2.37	2.75
0	(+32)	11787	2970	3454	1083	5.25	76.94	10.88	2.74	3.19
+5	(+41)	14279	3598	4184	1138	5.52	94.13	12.52	3.15	3.67
+10	(+50)	17065	4300	5000	1188	5.76	113.71	14.28	3.60	4.19

TEST CONDITIONS: @208V50Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3984	1004	1168	814	4.00	27.91	4.90	1.24	1.44
-15	(+ 5)	5158	1300	1512	910	4.45	36.36	5.67	1.43	1.66
-10	(+14)	6577	1658	1927	1003	4.90	46.68	6.55	1.65	1.92
-5	(+23)	8242	2077	2415	1092	5.33	58.98	7.54	1.90	2.21
0	(+32)	10151	2558	2975	1177	5.76	73.33	8.63	2.17	2.53
+5	(+41)	12306	3101	3606	1259	6.16	89.83	9.79	2.47	2.87
+10	(+50)	14706	3706	4309	1336	6.55	108.58	11.02	2.78	3.23

TEST CONDITIONS: @208V50Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3168	798	928	820	4.00	24.92	3.86	0.97	1.13
-15	(+ 5)	4195	1057	1229	937	4.57	33.21	4.48	1.13	1.31
-10	(+14)	5418	1365	1587	1052	5.14	43.22	5.15	1.30	1.51
-5	(+23)	6836	1723	2003	1165	5.71	55.05	5.87	1.48	1.72
0	(+32)	8449	2129	2476	1276	6.27	68.79	6.62	1.67	1.94
+5	(+41)	10259	2585	3006	1384	6.82	84.52	7.38	1.86	2.16
+10	(+50)	12264	3090	3594	1490	7.35	102.36	8.14	2.05	2.38

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V60Hz		ASHRAE46 Fan			(Condensing temperature 35°C (+95°F) )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	5580	1406	1635	946	4.73	35.43	5.89	1.49	1.73
-15	(+ 5)	7115	1793	2085	1035	5.11	45.42	6.88	1.73	2.02
-10	(+14)	8995	2267	2636	1118	5.49	57.77	8.05	2.03	2.36
-5	(+23)	11221	2828	3288	1196	5.85	72.60	9.39	2.37	2.75
0	(+32)	13791	3475	4041	1267	6.20	90.02	10.88	2.74	3.19
+5	(+41)	16708	4210	4896	1332	6.51	110.14	12.52	3.16	3.67
+10	(+50)	19969	5032	5851	1390	6.77	133.07	14.29	3.60	4.19

TEST CONDITIONS: @208V60Hz		ASHRAE46 Fan			(Condensing temperature 45°C (+113°F) )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	4662	1175	1366	953	4.73	32.65	4.90	1.23	1.44
-15	(+ 5)	6035	1521	1768	1065	5.26	42.54	5.66	1.43	1.66
-10	(+14)	7695	1939	2255	1174	5.78	54.62	6.55	1.65	1.92
-5	(+23)	9643	2430	2826	1278	6.30	69.00	7.54	1.90	2.21
0	(+32)	11877	2993	3480	1378	6.79	85.79	8.63	2.17	2.53
+5	(+41)	14399	3629	4219	1473	7.26	105.11	9.79	2.47	2.87
+10	(+50)	17208	4336	5042	1563	7.69	127.05	11.03	2.78	3.23

TEST CONDITIONS: @208V60Hz		ASHRAE46 Fan			(Condensing temperature 55°C (+131°F) )					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3707	934	1086	959	4.73	29.16	3.86	0.97	1.13
-15	(+ 5)	4909	1237	1438	1096	5.40	38.86	4.48	1.13	1.31
-10	(+14)	6339	1597	1857	1231	6.07	50.57	5.15	1.30	1.51
-5	(+23)	7998	2015	2344	1363	6.74	64.41	5.87	1.48	1.72
0	(+32)	9885	2491	2897	1493	7.40	80.48	6.62	1.67	1.94
+5	(+41)	12002	3025	3517	1619	8.03	98.89	7.38	1.86	2.16
+10	(+50)	14348	3616	4204	1743	8.62	119.75	8.15	2.05	2.39

### F - EXTERNAL CHARACTERISTICS

1 Base plate	American Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	8 +0.07/+0.00	[mm]	(0.315" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted J		
3.3 PROCESS	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Vertical		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		