

COMPRESSOR DEFINITION

Designation	NJ 9226GK
Nominal Voltage/Frequency	230 V 50 Hz
Engineering Number	944LV01

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	230 / 50	[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 - High 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 temperature			
9.1 Operating (gauge)	25.2	[kgf/cm ²] (358 psig)	/ °C - °F
9.2 Peak (gauge)	28.3	[kgf/cm ²] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1+	[hp]
2 Displacement	21.71	[cm ³] (1.325 cu.in)
2.1 Bore [mm]	38.087	
2.2 Stroke [mm]	19.066	
3 Lubricant charge	750	[ml] (25.36 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	20.7	[kg] (45.63 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA4M3C-110	
3 Start capacitor	88-108(330)	[μF(VAC minimum)]
4 Run capacitor	20(440)	[μF(VAC minimum)]
5 Motor protection	T0736/C9	
6 Start winding resistance	7.80	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.12	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	27.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @230V50Hz			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]	
11062	2788	3241	1386	6.30	91.07	7.98	2.01	2.34	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V50Hz		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	749	3.33	30.28	6.36	1.60	1.86
-15	(+ 5)	6082	1533	1782	819	3.60	38.82	7.43	1.87	2.18
-10	(+14)	7689	1938	2253	885	3.86	49.38	8.69	2.19	2.55
-5	(+23)	9591	2417	2810	946	4.11	62.06	10.14	2.56	2.97
0	(+32)	11787	2970	3454	1002	4.36	76.94	11.76	2.96	3.45
+5	(+41)	14279	3598	4184	1052	4.60	94.13	13.54	3.41	3.97
+10	(+50)	17065	4300	5000	1096	4.85	113.71	15.47	3.90	4.53

TEST CONDITIONS: @230V50Hz		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	754	3.30	27.91	5.29	1.33	1.55
-15	(+ 5)	5158	1300	1512	843	3.68	36.36	6.12	1.54	1.79
-10	(+14)	6577	1658	1927	929	4.05	46.68	7.07	1.78	2.07
-5	(+23)	8242	2077	2415	1011	4.40	58.98	8.15	2.05	2.39
0	(+32)	10151	2558	2975	1090	4.75	73.33	9.32	2.35	2.73
+5	(+41)	12306	3101	3606	1164	5.10	89.83	10.59	2.67	3.10
+10	(+50)	14706	3706	4309	1234	5.45	108.58	11.94	3.01	3.50

TEST CONDITIONS: @230V50Hz		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	759	3.27	24.92	4.17	1.05	1.22
-15	(+ 5)	4195	1057	1229	867	3.76	33.21	4.84	1.22	1.42
-10	(+14)	5418	1365	1587	974	4.24	43.22	5.57	1.40	1.63
-5	(+23)	6836	1723	2003	1079	4.71	55.05	6.34	1.60	1.86
0	(+32)	8449	2129	2476	1181	5.17	68.79	7.15	1.80	2.09
+5	(+41)	10259	2585	3006	1280	5.63	84.52	7.98	2.01	2.34
+10	(+50)	12264	3090	3594	1376	6.08	102.36	8.82	2.22	2.59

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		