

### COMPRESSOR DEFINITION

Designation	NJ 9226GK
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	944LD12

### 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 10°C	(-4°F to 50°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	25.2	[kgf/cm <sup>2</sup> ] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm <sup>2</sup> ] (402 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	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 <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELECTRICAL 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	RVA4AH3C-648	
3 Start capacitor	88-108(330)	[μF(VAC minimum)]
4 Run capacitor	20(400)	[μF(VAC minimum)]
5 Motor protection	T0838/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)	-	[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]
12653	3189	3708	1684	8.22	104.17	7.51	1.89	2.20

### 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)	5907	1489	1731	896	4.33	37.51	6.59	1.66	1.93
-15	(+ 5)	7415	1869	2173	988	4.74	47.32	7.51	1.89	2.20
-10	(+14)	9264	2334	2714	1078	5.18	59.49	8.60	2.17	2.52
-5	(+23)	11454	2886	3356	1165	5.63	74.11	9.83	2.48	2.88
0	(+32)	13985	3524	4098	1250	6.06	91.29	11.19	2.82	3.28
+5	(+41)	16858	4248	4940	1332	6.47	111.14	12.66	3.19	3.71
+10	(+50)	20072	5058	5881	1413	6.83	133.77	14.23	3.58	4.17

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)	4738	1194	1388	893	4.30	33.18	5.30	1.34	1.55
-15	(+ 5)	6072	1530	1779	1020	4.90	42.80	5.96	1.50	1.75
-10	(+14)	7678	1935	2250	1143	5.50	54.50	6.72	1.69	1.97
-5	(+23)	9557	2408	2800	1262	6.11	68.39	7.57	1.91	2.22
0	(+32)	11709	2951	3431	1377	6.69	84.58	8.50	2.14	2.49
+5	(+41)	14134	3562	4142	1489	7.25	103.16	9.48	2.39	2.78
+10	(+50)	16831	4241	4932	1598	7.76	124.25	10.50	2.65	3.08

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)	3534	890	1035	889	4.30	27.79	3.98	1.00	1.17
-15	(+ 5)	4758	1199	1394	1045	5.04	37.67	4.55	1.15	1.33
-10	(+14)	6188	1559	1813	1197	5.77	49.37	5.17	1.30	1.51
-5	(+23)	7822	1971	2292	1344	6.50	62.99	5.83	1.47	1.71
0	(+32)	9659	2434	2830	1486	7.21	78.63	6.50	1.64	1.90
+5	(+41)	11701	2949	3429	1623	7.88	96.41	7.17	1.81	2.10
+10	(+50)	13947	3515	4087	1755	8.49	116.42	7.82	1.97	2.29

### F - EXTERNAL CHARACTERISTICS

1 Base plate	American Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	12.77 +0.08/+0.00	[mm]	(0.503" +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	6.42 +0.08/+0.00	[mm]	(0.253" +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		