

COMPRESSOR DEFINITION

Designation	NJ 9226GK
Nominal Voltage/Frequency	230 V 50 Hz
Engineering Number	944LV12

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 10°C	(-4°F to 50°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 temperature			
9.1 Operating	25.2	[kgf/cm ²] (358 psig)	/ °C - °F
9.2 Peak	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			EN12900MBP Fan		Evaporating temperature (Condensing temperature		-10°C (14°F) 45°C (113°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]
5624	1417	1648	970	4.46	49.50	5.80	1.46	1.70

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V50Hz			EN12900 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)	4233	1067	1240	760	3.55	32.17	5.56	1.40	1.63
-15	(+ 5)	5426	1367	1590	836	3.85	41.54	6.50	1.64	1.90
-10	(+14)	6872	1732	2014	909	4.17	53.07	7.56	1.91	2.22
-5	(+23)	8558	2157	2508	979	4.48	66.81	8.74	2.20	2.56
0	(+32)	10473	2639	3069	1046	4.78	82.80	10.01	2.52	2.93
+5	(+41)	12603	3176	3693	1110	5.03	101.08	11.34	2.86	3.32
+10	(+50)	14938	3764	4377	1170	5.23	121.68	12.72	3.21	3.73

TEST CONDITIONS: @230V50Hz			EN12900 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)	3350	844	982	782	3.63	28.93	4.29	1.08	1.26
-15	(+ 5)	4386	1105	1285	878	4.03	38.22	4.99	1.26	1.46
-10	(+14)	5623	1417	1648	970	4.44	49.50	5.79	1.46	1.70
-5	(+23)	7050	1777	2066	1059	4.85	62.82	6.65	1.68	1.95
0	(+32)	8654	2181	2536	1145	5.23	78.20	7.57	1.91	2.22
+5	(+41)	10423	2627	3054	1226	5.57	95.69	8.50	2.14	2.49
+10	(+50)	12344	3111	3617	1304	5.86	115.33	9.44	2.38	2.77

TEST CONDITIONS: @230V50Hz			EN12900 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)	2486	626	728	786	3.66	25.27	3.16	0.80	0.93
-15	(+ 5)	3309	834	970	905	4.16	33.97	3.65	0.92	1.07
-10	(+14)	4283	1079	1255	1021	4.66	44.48	4.20	1.06	1.23
-5	(+23)	5395	1360	1581	1133	5.16	56.85	4.77	1.20	1.40
0	(+32)	6634	1672	1944	1240	5.63	71.11	5.34	1.35	1.57
+5	(+41)	7986	2012	2340	1344	6.07	87.30	5.90	1.49	1.73
+10	(+50)	9439	2379	2766	1442	6.44	105.47	6.41	1.62	1.88

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		