

### COMPRESSOR DEFINITION

Designation	<b>NJ 9226GS</b>
Nominal Voltage/Frequency	<b>380-420 V 50 Hz / 440-480 V 60 Hz</b>
Engineering Number	<b>948LM95</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	380-420 / 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	3PHASE		
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 <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)	19	[kg] (41.89 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	380-420 V 50 Hz / 440-480 V 60 Hz 3 ~ (Three phase)	
2 Starting device type	3PHASE	
2.1 Starting device		
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	31HM26-36	
6 Start winding resistance	9.33	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	9.33	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @380V50Hz			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]
11086	2794	3248	1300	2.40	91.27	8.53	2.15	2.50

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @380V50Hz			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)	4722	1190	1384	681	1.51	29.98	6.93	1.75	2.03
-15	(+ 5)	5936	1496	1739	778	1.62	37.89	7.63	1.92	2.24
-10	(+14)	7425	1871	2176	860	1.72	47.69	8.63	2.18	2.53
-5	(+23)	9190	2316	2693	931	1.81	59.46	9.89	2.49	2.90
0	(+32)	11230	2830	3291	990	1.89	73.30	11.34	2.86	3.32
+5	(+41)	13546	3414	3969	1040	1.97	89.29	12.94	3.26	3.79
+10	(+50)	16138	4067	4729	1082	2.05	107.51	14.64	3.69	4.29

TEST CONDITIONS: @380V50Hz			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)	3962	998	1161	742	1.56	27.76	5.36	1.35	1.57
-15	(+ 5)	4911	1238	1439	851	1.70	34.61	5.76	1.45	1.69
-10	(+14)	6104	1538	1789	949	1.83	43.31	6.41	1.62	1.88
-5	(+23)	7539	1900	2209	1039	1.95	53.95	7.26	1.83	2.13
0	(+32)	9218	2323	2701	1120	2.07	66.60	8.24	2.08	2.41
+5	(+41)	11140	2807	3264	1196	2.18	81.35	9.32	2.35	2.73
+10	(+50)	13305	3353	3899	1266	2.30	98.29	10.44	2.63	3.06

TEST CONDITIONS: @380V50Hz			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)	3298	831	967	760	1.58	25.94	4.33	1.09	1.27
-15	(+ 5)	4021	1013	1178	891	1.76	31.83	4.52	1.14	1.32
-10	(+14)	4954	1248	1452	1013	1.93	39.53	4.89	1.23	1.43
-5	(+23)	6098	1537	1787	1130	2.09	49.11	5.40	1.36	1.58
0	(+32)	7452	1878	2184	1242	2.25	60.66	5.99	1.51	1.76
+5	(+41)	9018	2273	2642	1351	2.41	74.28	6.62	1.67	1.94
+10	(+50)	10794	2720	3163	1458	2.57	90.04	7.24	1.82	2.12

### 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	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		