

COMPRESSOR DEFINITION

Designation	NJ 9232GS
Nominal Voltage/Frequency	380 V 60 Hz
Engineering Number	947NP01

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	380 / 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	3PHASE		
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 pressures/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 1/4	[hp]
2 Displacement	26.11	[cm ³] (1.593 cu.in)
2.1 Bore [mm]	41.770	
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 ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	380 V 60 Hz 1 ~ (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	34HM269-49	
6 Start winding resistance		[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	8.45	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	16.50	[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		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @380V60Hz			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]
14305	3605	4192	1989	3.56	117.77	7.19	1.81	2.11

E - PERFORMANCE - CURVES

TEST CONDITIONS: @380V60Hz			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)	6640	1673	1946	1010	2.14	42.12	6.56	1.65	1.92
-15	(+ 5)	8371	2109	2453	1124	2.28	53.47	7.45	1.88	2.18
-10	(+14)	10421	2626	3054	1241	2.43	66.96	8.40	2.12	2.46
-5	(+23)	12791	3223	3748	1361	2.59	82.75	9.41	2.37	2.76
0	(+32)	15481	3901	4536	1481	2.76	101.03	10.46	2.64	3.07
+5	(+41)	18494	4661	5419	1601	2.94	121.95	11.56	2.91	3.39
+10	(+50)	21830	5501	6397	1720	3.13	145.70	12.68	3.20	3.72

TEST CONDITIONS: @380V60Hz			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)	5293	1334	1551	1036	2.16	37.10	5.12	1.29	1.50
-15	(+ 5)	6792	1712	1990	1175	2.34	47.89	5.79	1.46	1.70
-10	(+14)	8601	2167	2520	1318	2.54	61.02	6.52	1.64	1.91
-5	(+23)	10720	2701	3141	1463	2.75	76.65	7.32	1.84	2.14
0	(+32)	13150	3314	3853	1609	2.97	94.97	8.16	2.06	2.39
+5	(+41)	15893	4005	4657	1755	3.19	116.15	9.06	2.28	2.65
+10	(+50)	18949	4775	5553	1900	3.42	140.34	9.98	2.51	2.92

TEST CONDITIONS: @380V60Hz			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)	4096	1032	1200	1048	2.19	32.20	3.89	0.98	1.14
-15	(+ 5)	5259	1325	1541	1216	2.42	41.64	4.33	1.09	1.27
-10	(+14)	6721	1694	1969	1388	2.65	53.62	4.85	1.22	1.42
-5	(+23)	8484	2138	2486	1561	2.90	68.32	5.43	1.37	1.59
0	(+32)	10549	2658	3091	1736	3.16	85.91	6.07	1.53	1.78
+5	(+41)	12917	3255	3785	1911	3.42	106.55	6.76	1.70	1.98
+10	(+50)	15589	3928	4568	2085	3.68	130.42	7.48	1.88	2.19

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		