

### COMPRESSOR DEFINITION

Designation	<b>NJ 9232GK</b>
Nominal Voltage/Frequency	<b>220-240 V 50 Hz</b>
Engineering Number	<b>943NA01</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 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 pressures/temperature			
9.1 Operating (gauge)	25.2	[kgf/cm <sup>2</sup> ] (358 psig)	/ °C - °F
9.2 Peak (gauge)	28.3	[kgf/cm <sup>2</sup> ] (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 <sup>3</sup> ] (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)	21.6	[kg] (47.62 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	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA3H3C-108	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	30(450)	[µF(VAC minimum)]
5 Motor protection	T0809/C9	
6 Start winding resistance	5.40	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.75	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	43.00	[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	IMQ	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
13754	3466	4030	1576	7.16	113.23	8.73	2.20	2.56

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			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)	5822	1467	1706	866	4.38	36.97	6.72	1.69	1.97
-15	(+ 5)	7429	1872	2177	953	4.63	47.42	7.80	1.96	2.28
-10	(+14)	9413	2372	2758	1035	4.88	60.45	9.10	2.29	2.67
-5	(+23)	11774	2967	3450	1111	5.13	76.18	10.60	2.67	3.11
0	(+32)	14512	3657	4252	1182	5.39	94.73	12.27	3.09	3.60
+5	(+41)	17629	4442	5166	1248	5.64	116.21	14.11	3.55	4.13
+10	(+50)	21122	5323	6189	1308	5.90	140.75	16.07	4.05	4.71

TEST CONDITIONS: @220V50Hz			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)	4859	1224	1424	870	4.37	34.03	5.59	1.41	1.64
-15	(+ 5)	6300	1587	1846	982	4.75	44.40	6.41	1.62	1.88
-10	(+14)	8054	2030	2360	1089	5.14	57.17	7.39	1.86	2.17
-5	(+23)	10122	2551	2966	1191	5.52	72.43	8.49	2.14	2.49
0	(+32)	12504	3151	3664	1289	5.90	90.32	9.71	2.45	2.84
+5	(+41)	15200	3830	4454	1383	6.29	110.95	11.00	2.77	3.22
+10	(+50)	18210	4589	5336	1472	6.67	134.44	12.36	3.12	3.62

TEST CONDITIONS: @220V50Hz			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)	3859	972	1131	875	4.37	30.35	4.41	1.11	1.29
-15	(+ 5)	5123	1291	1501	1012	4.88	40.55	5.06	1.28	1.48
-10	(+14)	6637	1672	1945	1145	5.40	52.95	5.80	1.46	1.70
-5	(+23)	8401	2117	2462	1275	5.91	67.65	6.59	1.66	1.93
0	(+32)	10415	2625	3052	1401	6.43	84.79	7.43	1.87	2.18
+5	(+41)	12680	3195	3716	1524	6.94	104.47	8.28	2.09	2.43
+10	(+50)	15195	3829	4452	1643	7.46	126.82	9.12	2.30	2.67

### 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		