

COMPRESSOR DEFINITION

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

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 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 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)	21.6	[kg] (47.62 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	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	CCC - IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
6522	1644	1911	1172	5.68	57.41	5.56	1.40	1.63

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			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)	4879	1230	1430	949	4.68	37.07	5.14	1.29	1.51
-15	(+ 5)	6400	1613	1875	1042	5.08	49.01	6.14	1.55	1.80
-10	(+14)	8167	2058	2393	1132	5.46	63.09	7.22	1.82	2.11
-5	(+23)	10169	2563	2980	1220	5.83	79.39	8.34	2.10	2.44
0	(+32)	12397	3124	3633	1305	6.20	98.00	9.50	2.39	2.78
+5	(+41)	14840	3740	4348	1387	6.57	119.00	10.68	2.69	3.13
+10	(+50)	17487	4407	5124	1465	6.96	142.48	11.86	2.99	3.48

TEST CONDITIONS: @220V50Hz			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)	3728	939	1092	964	4.73	32.21	3.87	0.98	1.14
-15	(+ 5)	5015	1264	1470	1067	5.19	43.69	4.70	1.18	1.38
-10	(+14)	6521	1643	1911	1172	5.66	57.38	5.56	1.40	1.63
-5	(+23)	8235	2075	2413	1277	6.12	73.36	6.45	1.62	1.89
0	(+32)	10147	2557	2973	1383	6.61	91.71	7.34	1.85	2.15
+5	(+41)	12246	3086	3588	1489	7.12	112.53	8.24	2.08	2.41
+10	(+50)	14523	3660	4256	1595	7.67	135.89	9.12	2.30	2.67

TEST CONDITIONS: @220V50Hz			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)	2621	660	768	965	4.77	26.63	2.71	0.68	0.79
-15	(+ 5)	3627	914	1063	1080	5.29	37.23	3.36	0.85	0.98
-10	(+14)	4824	1216	1414	1199	5.81	50.12	4.03	1.01	1.18
-5	(+23)	6202	1563	1817	1323	6.37	65.36	4.69	1.18	1.37
0	(+32)	7750	1953	2271	1450	6.96	83.06	5.34	1.35	1.57
+5	(+41)	9458	2384	2772	1581	7.59	103.28	5.97	1.50	1.75
+10	(+50)	11317	2852	3316	1715	8.29	126.13	6.55	1.65	1.92

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		