

COMPRESSOR DEFINITION

Designation	NJ9232GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	943NA01


A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R404A		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Medium Back Pressure		
4.1 Evaporating temperature range	-20°C to +10°C		
5 Motor type	CSR		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Fan cooled	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)	24.7	[bar]	
9.2 Peak (gauge)	27.7	[bar]	
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/4	[hp]
2 Displacement	26.2	[cm³]
2.1 Bore	41.77	[mm]
2.2 Stroke	19.07	[mm]
3 Lubricant charge	750	[ml]
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight(with oil charge)	22.1	[kg]
5 Nitrogen charge	0.2 to 0.3	[bar]

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	3ARR3B10AT3	
3 Start capacitor	88-108 (330)	[µF(VAC minimum)]
4 Run capacitor	30 (440)	[µF(VAC minimum)]
5 Motor protection (external)	T0809	
6 Start winding resistance	5.4	[ohm at 25°C] +/- 8%
7 Run winding resistance	1.75	[ohm at 25°C] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	43.0	[A] - According to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - According to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - According to UL 984
11 Approval boards certification	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz		EN12900 MBP Fan cooled		Evap. Temp -10°C Return Gas +20°C Cond. Temp +45°C Liquid Subcooling 0 K			
Cooling capacity +/- 5%		Power consumption +/- 5%	Current consumption +/- 5%	Gas Flow rate +/- 5%	Efficiency rate +/- 7%		
[W]		[W]	[A]	[kg/h]	[W/W]		
1911		1172	5.66	57.38	1.63		

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		EN12900 Fan cooled		Condensing temperature 35°C			
Evaporating temperature	Cooling capacity +/- 5%		Power consumption +/- 5%	Current consumption +/- 5%	Gas Flow rate +/- 5%	Efficiency rate +/- 7%	
°C	[W]	[W]	[A]	[kg/h]	[W/W]		
-20	1430	949	4.68	37.07	1.51		
-15	1876	1042	5.08	49.01	1.80		
-10	2393	1132	5.46	63.09	2.11		
-5	2980	1220	5.83	79.39	2.44		
0	3633	1305	6.20	98.00	2.78		
+5	4349	1386	6.57	119.00	3.14		
+10	5124	1465	6.96	142.48	3.50		

TEST CONDITIONS: @220V50Hz		EN12900 Fan cooled		Condensing temperature 45°C			
Evaporating temperature	Cooling capacity +/- 5%		Power consumption +/- 5%	Current consumption +/- 5%	Gas Flow rate +/- 5%	Efficiency rate +/- 7%	
°C	[W]	[W]	[A]	[kg/h]	[W/W]		
-20	1093	964	4.73	32.21	1.13		
-15	1470	1067	5.19	43.69	1.38		
-10	1911	1172	5.66	57.38	1.63		
-5	2413	1277	6.12	73.36	1.89		
0	2973	1383	6.61	91.71	2.15		
+5	3588	1489	7.12	112.53	2.41		
+10	4255	1595	7.67	135.89	2.67		

TEST CONDITIONS: @220V50Hz		EN12900 Fan cooled		Condensing temperature 55°C			
Evaporating temperature	Cooling capacity +/- 5%		Power consumption +/- 5%	Current consumption +/- 5%	Gas Flow rate +/- 5%	Efficiency rate +/- 7%	
°C	[W]	[W]	[A]	[kg/h]	[W/W]		
-20	768	965	4.77	26.63	0.80		
-15	1063	1080	5.29	37.23	0.98		
-10	1414	1199	5.81	50.12	1.18		
-5	1817	1323	6.37	65.36	1.37		
0	2271	1450	6.96	83.06	1.57		
+5	2771	1581	7.59	103.28	1.75		
+10	3315	1714	8.28	126.13	1.93		

1 Base plate	Large
2 Tray holder	No
3 Connectors	
3.1 SUCTION	12.77 +0.08/+0.00 [mm]
3.1.1 Material	Copper
3.1.2 Shape	Vertical
3.2 DISCHARGE	8.00 +0.07/+0.00 [mm]
3.2.1 Material	Copper
3.2.2 Shape	Slanted NJ
3.3 PROCESS	9.6 +0.07/+0.00 [mm]
3.3.1 Material	Copper
3.3.2 Shape	Vertical
3.4 Oil cooler	No
3.5 Connector sealing	Rubber Plugs