COMPRESSOR DEFINITION

Designation	**NJ 9238GK**
Nominal Voltage/Frequency	**230 V 50 Hz**
Engineering Number	**943RV11**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	230 / 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 - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm²] (365 psig)	/ ºC - ºF
9.2 Peak (gauge)	28.7	[kgf/cm²] (408 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/2	[hp]
2 Displacement	32.67	[cm³] (1.994 cu.in)
2.1 Bore [mm]	41.770	
2.2 Stroke [mm]	23.850	
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)	22.1	[kg] (48.72 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA3H3C-108	
3 Start capacitor	130-156(330)	[µF(VAC minimum)]
4 Run capacitor	25(440)	[µF(VAC minimum)]
5 Motor protection	T0878/C9 OR MRA3764-	
6 Start winding resistance	5.40	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	1.75	[Ω at 25ºC (77ºF)] +/- 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: **@230V50Hz**			**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]
15768	3974	4620	2216	10.10	129.81	7.12	1.79	2.09

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@230V50Hz** — **ASHRAE46** **Fan** — (Condensing temperature **35ºC (+95ºF))**

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)**	7254	1828	2126	1190	5.76	46.04	6.09	1.54	1.79
-15	**(+ 5)**	9297	2343	2724	1320	6.30	59.35	7.04	1.78	2.06
-10	**(+14)**	11635	2932	3409	1438	6.79	74.74	8.09	2.04	2.37
-5	**(+23)**	14266	3595	4180	1547	7.24	92.31	9.22	2.32	2.70
0	**(+32)**	17190	4332	5037	1646	7.64	112.19	10.44	2.63	3.06
+5	**(+41)**	20407	5142	5980	1736	7.99	134.51	11.72	2.95	3.43
+10	**(+50)**	23915	6027	7008	1815	8.31	159.37	13.06	3.29	3.83

TEST CONDITIONS: **@230V50Hz** — **ASHRAE46** **Fan** — (Condensing temperature **45ºC (+113ºF))**

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)**	6060	1527	1776	1214	5.86	42.47	5.00	1.26	1.47
-15	**(+ 5)**	7798	1965	2285	1360	6.46	54.96	5.73	1.44	1.68
-10	**(+14)**	9821	2475	2878	1503	7.05	69.68	6.53	1.65	1.91
-5	**(+23)**	12128	3056	3554	1642	7.63	86.77	7.38	1.86	2.16
0	**(+32)**	14718	3709	4313	1778	8.20	106.34	8.29	2.09	2.43
+5	**(+41)**	17591	4433	5155	1910	8.78	128.52	9.23	2.33	2.71
+10	**(+50)**	20746	5228	6079	2040	9.35	153.41	10.21	2.57	2.99

TEST CONDITIONS: **@230V50Hz** — **ASHRAE46** **Fan** — (Condensing temperature **55ºC (+131ºF))**

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)**	4815	1213	1411	1237	5.97	37.86	3.89	0.98	1.14
-15	**(+ 5)**	6235	1571	1827	1402	6.62	49.37	4.45	1.12	1.30
-10	**(+14)**	7931	1999	2324	1570	7.31	63.29	5.06	1.27	1.48
-5	**(+23)**	9900	2495	2901	1740	8.04	79.74	5.69	1.43	1.67
0	**(+32)**	12144	3060	3558	1914	8.80	98.84	6.34	1.60	1.86
+5	**(+41)**	14660	3694	4296	2091	9.60	120.72	7.01	1.77	2.05
+10	**(+50)**	17449	4397	5113	2272	10.44	145.49	7.68	1.94	2.25

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		