COMPRESSOR TECHNICAL DATA

COMPRESSOR DEFINITION

Designation	**NJ9238GK**
Nominal Voltage/Frequency	**230 V 50 Hz**
Engineering Number	**943RV01**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R404A		
3 Nominal voltage and frequency	230 / 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 - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling	Fan cooled	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)	24.7	[bar]	
9.2 Peak (gauge)	27.7	[bar]	
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/2	[hp]
2 Displacement	32.7	[cm³]
2.1 Bore	41.77	[mm]
2.2 Stroke	23.85	[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	230 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B10AT3	
3 Start capacitor	130-156 (330)	[µF(VAC minimum)]
4 Run capacitor	25 (440)	[µF(VAC minimum)]
5 Motor protection (external)	T0878	
6 Start winding resistance	5.4	[ohm at 25ºC] +/- 8%
7 Run winding resistance	1.75	[ohm at 25ºC] +/- 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:	**EN12900 MBP**	Evap. Temp –10°C Return Gas +20°C
@230V50Hz	**Fan cooled**	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]
2424	1521	7.43	72.81	1.59

E - PERFORMANCE - CURVES

TEST CONDITIONS:	**EN12900**	Condensing temperature **35ºC**
@230V50Hz	**Fan cooled**	

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	1904	1178	6.08	49.35	1.62
-15	2414	1311	6.57	63.08	1.84
-10	2991	1447	7.09	78.83	2.07
-5	3643	1583	7.65	97.03	2.30
0	4377	1720	8.22	118.10	2.55
+5	5202	1855	8.83	142.46	2.80
+10	6125	1988	9.46	170.53	3.08

TEST CONDITIONS:	**EN12900**	Condensing temperature **45ºC**
@230V50Hz	**Fan cooled**	

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	1507	1215	6.20	44.41	1.24
-15	1939	1365	6.80	57.66	1.42
-10	2424	1521	7.43	72.81	1.59
-5	2970	1683	8.10	90.28	1.76
0	3583	1849	8.81	110.49	1.94
+5	4272	2019	9.56	133.87	2.12
+10	5044	2191	10.35	160.83	2.30

TEST CONDITIONS:	**EN12900**	Condensing temperature **55ºC**
@230V50Hz	**Fan cooled**	

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	1170	1256	6.37	40.58	0.93
-15	1514	1417	7.01	53.00	1.07
-10	1895	1590	7.70	67.19	1.19
-5	2323	1773	8.44	83.57	1.31
0	2804	1965	9.23	102.56	1.43
+5	3347	2166	10.07	124.59	1.55
+10	3958	2373	10.96	150.09	1.67

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	