

COMPRESSOR DEFINITION

Designation	NJ2212GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	943BA01


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	Low Back Pressure		
4.1 Evaporating temperature range	-40°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)	-	-	-
	-	-	-
	-	-	-
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	34.38	[cm³]
2.1 Bore	42.85	
2.2 Stroke	23.85	
3 Lubricant charge	750	[ml]
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight(with oil charge)	21.5	[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	3ARR3B3AV3	
3 Start capacitor	88-108 (330)	[µF(VAC minimum)]
4 Run capacitor	20(440)	[µF(VAC minimum)]
5 Motor protection (external)	15HM2445-168 (internal)	
6 Start winding resistance	7.25	[ohm at 25°C] +/- 8%
7 Run winding resistance	1.95	[ohm at 25°C] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	36	[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		EN12900LBP Fan		Evap. Temp -35°C Return Gas +20°C Cond. Temp +40°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]	
	762	784	4.2	20.66		0.97	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		EN12900 Fan		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]
-40		617	671	3.67	15.66		0.92
-35		873	789	4.20	22.28		1.11
-30		1181	911	4.76	30.28		1.30
-25		1545	1036	5.36	39.81		1.49
-20		1967	1166	6.02	51.01		1.69
-15		2451	1303	6.74	64.04		1.88
-10		2999	1448	7.54	79.05		2.07

TEST CONDITIONS: @220V50Hz		EN12900 Fan		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]
-40		442	624	3.65	12.77		0.71
-35		660	767	4.22	19.10		0.86
-30		919	914	4.83	26.69		1.01
-25		1221	1064	5.51	35.71		1.15
-20		1570	1220	6.27	46.29		1.29
-15		1970	1382	7.12	58.60		1.43
-10		2423	1553	8.08	72.78		1.56

TEST CONDITIONS: @220V50Hz		EN12900 Fan		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]
-40		-	-	-	-		-
-35		474	710	4.26	16.19		0.67
-30		688	891	4.90	23.46		0.77
-25		933	1076	5.63	32.05		0.87
-20		1214	1267	6.46	42.10		0.96
-15		1534	1465	7.41	53.77		1.05
-10		1896	1671	8.48	67.19		1.13

F - EXTERNAL CHARACTERISTICS

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 (Copper)	No	[mm]
3.5 Connector sealing	Rubber Plugs	