

## COMPRESSOR DEFINITION

Designation	<b>NJ2192GK</b>
Nominal Voltage/Frequency	<b>220-240 V 50 Hz</b>
Engineering Number	<b>944AA01</b>



## 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 1/4	[hp]
2 Displacement	26.2	[cm³]
2.1 Bore	41.77	
2.2 Stroke	19.07	
3 Lubricant charge	750	[ml]
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight(with oil charge)	17.5	[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	3ARR3B3AA3	
3 Start capacitor	88-108 (330)	[µF(VAC minimum)]
4 Run capacitor	20 (440)	[µF(VAC minimum)]
5 Motor protection (external)	15HM2459-168 (internal)	
6 Start winding resistance	11.2	[ ohm at 25°C ] +/- 8%
7 Run winding resistance	2.9	[ ohm at 25°C ] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	26	[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: <b>@220V50Hz</b>		<b>EN12900LBP</b> <b>Fan</b>		Evap. Temp <b>-35°C</b> Return Gas +20°C Cond. Temp <b>+40°C</b> 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]	
	585	602	2.74	15.89		0.97	

**E - PERFORMANCE - CURVES**

TEST CONDITIONS: <b>@220V50Hz</b>		<b>EN12900</b> <b>Fan</b>		Condensing temperature <b>35°C</b>			
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		479	530	2.42	12.19		0.90
-35		666	613	2.79	17.00		1.09
-30		898	700	3.20	23.01		1.28
-25		1177	792	3.66	30.31		1.49
-20		1502	890	4.13	38.94		1.69
-15		1874	992	4.61	48.96		1.89
-10		2292	1101	5.09	60.43		2.08

TEST CONDITIONS: <b>@220V50Hz</b>		<b>EN12900</b> <b>Fan</b>		Condensing temperature <b>45°C</b>			
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		348	480	2.29	9.99		0.72
-35		509	586	2.70	14.73		0.87
-30		705	696	3.18	20.52		1.01
-25		936	810	3.71	27.42		1.16
-20		1203	928	4.27	35.48		1.30
-15		1505	1051	4.86	44.75		1.43
-10		1842	1178	5.47	55.31		1.56

TEST CONDITIONS: <b>@220V50Hz</b>		<b>EN12900</b> <b>Fan</b>		Condensing temperature <b>55°C</b>			
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		362	547	2.66	12.27		0.66
-30		530	687	3.21	18.07		0.77
-25		722	830	3.83	24.81		0.87
-20		938	976	4.51	32.53		0.96
-15		1179	1126	5.23	41.31		1.05
-10		1444	1280	5.97	51.18		1.13

**F - EXTERNAL CHARACTERISTICS**

1 Base plate	Large	
2 Tray holder	No	
3 Connectors		
3.1 SUCTION	9.6 +0.07/+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	