

COMPRESSOR DEFINITION

Designation	NJ 6220Z
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	144CA11

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	CSIR		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	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)	16,2	[kgf/cm ²] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20,6	[kgf/cm ²] (293 psig)	
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1	[hp]
2 Displacement	26,11	[cm ³] (1.593 cu.in)
2.1 Bore [mm]	41,770	
2.2 Stroke [mm]	19,066	
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)	20,5	[kg] (45.19 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device		
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	15HM1994-248	
6 Start winding resistance	13.62	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.11	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[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	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			EN12900HBP Fan		Evaporating temperature (Condensing temperature	5°C (41°F) 50°C (122°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]
7069	1781	2071	971	6,17	52,00	7,28	1,83	2,13

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900 Fan		(Condensing temperature 35°C (+95°F))				
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]
-15 (+ 5)	3522	887	1032	605	4,40	21,82	5,81	1,47	1,70
-10 (+14)	4620	1164	1354	667	4,54	28,82	6,93	1,75	2,03
-5 (+23)	5831	1469	1709	721	4,69	36,54	8,10	2,04	2,37
0 (+32)	7215	1818	2114	771	4,83	45,46	9,36	2,36	2,74
+5 (+41)	8834	2226	2588	822	4,98	56,08	10,73	2,70	3,14
+10 (+50)	10746	2708	3149	880	5,12	68,88	12,22	3,08	3,58

TEST CONDITIONS: @220V50Hz			EN12900 Fan		(Condensing temperature 45°C (+113°F))				
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]
-15 (+ 5)	2831	714	830	594	4,39	19,26	4,77	1,20	1,40
-10 (+14)	3802	958	1114	676	4,60	25,99	5,61	1,41	1,64
-5 (+23)	4864	1226	1425	751	4,81	33,43	6,48	1,63	1,90
0 (+32)	6078	1532	1781	822	5,03	42,05	7,39	1,86	2,17
+5 (+41)	7503	1891	2199	895	5,26	52,36	8,38	2,11	2,45
+10 (+50)	9201	2319	2696	975	5,51	64,84	9,45	2,38	2,77

TEST CONDITIONS: @220V50Hz			EN12900 Fan		(Condensing temperature 55°C (+131°F))				
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]
-15 (+ 5)	2135	538	625	582	4,39	16,16	3,67	0,93	1,08
-10 (+14)	2990	754	876	685	4,65	22,70	4,35	1,10	1,28
-5 (+23)	3916	987	1147	780	4,93	29,92	5,03	1,27	1,47
0 (+32)	4970	1253	1456	872	5,24	38,32	5,71	1,44	1,67
+5 (+41)	6215	1566	1821	967	5,56	48,38	6,43	1,62	1,88
+10 (+50)	7711	1943	2259	1071	5,90	60,59	7,19	1,81	2,11

F - EXTERNAL CHARACTERISTICS

1 Base plate	American Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	9,6 +0.07/+0.00	[mm]	(0.378" +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		