

### COMPRESSOR DEFINITION

Designation	NJ 6226ZX
Nominal Voltage/Frequency	380-420 V 50 Hz / 440-480 V 60 Hz
Engineering Number	148IM19

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	380-420 / 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	3PHASE		
6 Starting torque	HST - Hight 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 temperature			
9.1 Operating	14.2	[kgf/cm <sup>2</sup> ] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm <sup>2</sup> ] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1+	[hp]
2 Displacement	34.38	[cm <sup>3</sup> ] (2.098 cu.in)
2.1 Bore [mm]	42.850	
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)	20.2	[kg] (44.53 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	380-420 V 50 Hz / 440-480 V 60 Hz 3 ~ (Three phase)	
2 Starting device type	3PHASE	
2.1 Starting device		
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	34HM244	
6 Start winding resistance		[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	14.78	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IRAM - UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @440V60Hz			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]
11882	2994	3482	1390	2.36	77.04	8.55	2.15	2.51

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @440V50Hz		ASHRAE46 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)	6329	1595	1855	666	1.68	34.24	9.49	2.39	2.78
-10	(+14)	7589	1912	2224	735	1.73	41.18	10.35	2.61	3.03
-5	(+23)	9153	2307	2682	804	1.79	49.84	11.39	2.87	3.34
0	(+32)	11022	2778	3230	873	1.86	60.30	12.61	3.18	3.70
+5	(+41)	13195	3325	3867	942	1.94	72.59	13.99	3.53	4.10
+10	(+50)	15673	3950	4592	1011	2.03	86.79	15.51	3.91	4.55

TEST CONDITIONS: @440V50Hz		ASHRAE46 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)	4858	1224	1424	672	1.68	28.36	7.23	1.82	2.12
-10	(+14)	6128	1544	1796	765	1.76	35.94	8.01	2.02	2.35
-5	(+23)	7627	1922	2235	858	1.86	44.93	8.89	2.24	2.61
0	(+32)	9355	2357	2741	949	1.97	55.37	9.85	2.48	2.89
+5	(+41)	11310	2850	3314	1040	2.09	67.32	10.88	2.74	3.19
+10	(+50)	13494	3401	3954	1129	2.21	80.83	11.95	3.01	3.50

TEST CONDITIONS: @440V50Hz		ASHRAE46 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)	3332	840	976	678	1.68	21.24	4.93	1.24	1.44
-10	(+14)	4606	1161	1350	797	1.80	29.46	5.76	1.45	1.69
-5	(+23)	6033	1520	1768	914	1.94	38.75	6.59	1.66	1.93
0	(+32)	7613	1918	2231	1029	2.08	49.16	7.41	1.87	2.17
+5	(+41)	9345	2355	2738	1142	2.24	60.74	8.20	2.07	2.40
+10	(+50)	11230	2830	3291	1252	2.40	73.56	8.95	2.26	2.62

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @440V60Hz		ASHRAE46 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)	7405	1866	2170	797	1.71	40.07	9.28	2.34	2.72	
-10 (+14)	8879	2238	2602	874	1.76	48.18	10.18	2.57	2.98	
-5 (+23)	10709	2699	3138	950	1.82	58.32	11.28	2.84	3.30	
0 (+32)	12896	3250	3779	1027	1.90	70.55	12.55	3.16	3.68	
+5 (+41)	15438	3890	4524	1104	1.98	84.93	13.97	3.52	4.09	
+10 (+50)	18337	4621	5373	1181	2.07	101.54	15.54	3.92	4.55	

TEST CONDITIONS: @440V60Hz		ASHRAE46 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)	5684	1432	1666	809	1.71	33.17	7.02	1.77	2.06	
-10 (+14)	7170	1807	2101	913	1.80	42.05	7.86	1.98	2.30	
-5 (+23)	8924	2249	2615	1015	1.90	52.57	8.79	2.21	2.58	
0 (+32)	10944	2758	3207	1117	2.01	64.78	9.80	2.47	2.87	
+5 (+41)	13232	3335	3877	1217	2.13	78.76	10.87	2.74	3.19	
+10 (+50)	15788	3979	4626	1317	2.26	94.57	11.99	3.02	3.51	

TEST CONDITIONS: @440V60Hz		ASHRAE46 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)	3898	982	1142	821	1.71	24.85	4.76	1.20	1.40	
-10 (+14)	5390	1358	1579	953	1.84	34.47	5.63	1.42	1.65	
-5 (+23)	7059	1779	2069	1083	1.98	45.34	6.51	1.64	1.91	
0 (+32)	8907	2245	2610	1210	2.12	57.52	7.37	1.86	2.16	
+5 (+41)	10934	2755	3204	1336	2.28	71.07	8.20	2.07	2.40	
+10 (+50)	13139	3311	3850	1459	2.45	86.07	8.99	2.27	2.63	

### F - EXTERNAL CHARACTERISTICS

1 Base plate	American Standard
2 Tray holder	No
3 Connectors	
3.1 SUCTION	12.7 +0.25/-0.25 [mm] (0.500" +0.010"/-0.010")
3.1.1 Material	Steel
3.1.2 Shape	ROTOLOCK(Ex. thr. 1"-14UNS-2A)
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