

COMPRESSOR DEFINITION

Designation	NJ X6250GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	945DA21

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
2.1 Max Refrigerant Charge	800 [g]		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSCR		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
Application	Ambient Temp.	Cooling	50 Hz 60 Hz
MBP	43 °C	Fan	- -
9 Maximum condensing temperature			
9.1 Operating	[55]	[°C]	
9.2 Peak	[60]	[°C]	
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	2	[hp]
2 Displacement	37.88	[cm³] (2.312 cu.in)
2.1 Bore [mm]	44.980	
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)	22.8	[kg] (50.26 lb.)
5 Nitrogen charge	-	[kgf/cm²]

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	RVA3AN3C-647	
3 Start capacitor	130-156(330)	[µF(VAC minimum)]
4 Run capacitor	25(450)	[µF(VAC minimum)]
5 Motor protection	USP-699-88	
6 Start winding resistance	[Ω at 25°C (77°F)] +/- 8%	
7 Run winding resistance	[Ω at 25°C (77°F)] +/- 8%	
8 LRA - Locked rotor amperage (50 Hz)	53.00	[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	CCC - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
20206	5092	5921	2544	12.45	166.35	7.94	2.00	2.33

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			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]
-20 (- 4)	9750	2457	2857	1334	7.03	61.87	7.30	1.84	2.14
-15 (+ 5)	12121	3055	3552	1467	7.61	77.40	8.27	2.08	2.42
-10 (+14)	14901	3755	4366	1600	8.20	95.72	9.32	2.35	2.73
-5 (+23)	18088	4558	5300	1733	8.80	117.02	10.44	2.63	3.06
0 (+32)	21684	5464	6354	1865	9.40	141.52	11.62	2.93	3.41
+5 (+41)	25687	6473	7527	1998	10.00	169.40	12.86	3.24	3.77
+10 (+50)	30099	7585	8820	2129	10.60	200.88	14.13	3.56	4.14

TEST CONDITIONS: @220V50Hz			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]
-20 (- 4)	8371	2110	2453	1429	7.42	58.62	5.85	1.48	1.72
-15 (+ 5)	10451	2634	3062	1587	8.12	73.68	6.58	1.66	1.93
-10 (+14)	12873	3244	3772	1745	8.83	91.36	7.37	1.86	2.16
-5 (+23)	15637	3940	4582	1903	9.55	111.87	8.21	2.07	2.41
0 (+32)	18743	4723	5492	2060	10.27	135.41	9.10	2.29	2.67
+5 (+41)	22192	5592	6503	2218	10.99	162.17	10.01	2.52	2.93
+10 (+50)	25983	6548	7614	2376	11.71	192.37	10.94	2.76	3.21

TEST CONDITIONS: @220V50Hz			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]
-20 (- 4)	6840	1724	2004	1508	7.64	53.81	4.54	1.14	1.33
-15 (+ 5)	8650	2180	2535	1697	8.50	68.49	5.09	1.28	1.49
-10 (+14)	10736	2705	3146	1887	9.37	85.64	5.68	1.43	1.67
-5 (+23)	13099	3301	3838	2077	10.24	105.44	6.31	1.59	1.85
0 (+32)	15738	3966	4612	2266	11.12	128.11	6.95	1.75	2.04
+5 (+41)	18654	4701	5466	2457	11.99	153.85	7.60	1.91	2.23
+10 (+50)	21846	5505	6401	2647	12.86	182.86	8.25	2.08	2.42

F - EXTERNAL CHARACTERISTICS

1 Base plate	American Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	12.81 +0.04/-0.04	[mm]	(0.504" +0.002"/-0.002")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	8.04 +0.04/-0.04	[mm]	(0.317" +0.002"/-0.002")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted J		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+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		