

### COMPRESSOR DEFINITION

Designation	NJ X6250GK
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	945DD21

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 60	[ 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	LST/HST - Low/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 temperature			
9.1 Operating	25.2	[kgf/cm <sup>2</sup> ] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm <sup>2</sup> ] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	2	[hp]
2 Displacement	37.88	[cm <sup>3</sup> ] (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)	21.8	[kg] (48.06 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA6M3C-114/RVA6M3C-574	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	25(450)	[µF(VAC minimum)]
5 Motor protection	15HM1983-247	
6 Start winding resistance	5.43	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.82	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	65.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @230V60Hz			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
11962	3014	3505	2462	12.36	128.91	4.86	1.22	1.42

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz			ARI4 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)	8748	2205	2563	1736	9.64	73.87	5.03	1.27	1.47
-15	(+ 5)	11106	2799	3254	1943	10.33	94.99	5.71	1.44	1.67
-10	(+14)	13599	3427	3985	2139	11.04	117.71	6.36	1.60	1.86
-5	(+23)	16233	4091	4757	2328	11.82	142.48	6.98	1.76	2.05
0	(+32)	19016	4792	5572	2511	12.72	169.75	7.58	1.91	2.22
+5	(+41)	21954	5533	6433	2692	13.80	199.99	8.16	2.06	2.39
+10	(+50)	25057	6314	7342	2874	15.11	233.64	8.71	2.20	2.55

TEST CONDITIONS: @230V60Hz			ARI4 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)	6933	1747	2032	1823	9.83	67.78	3.83	0.97	1.12
-15	(+ 5)	9108	2295	2669	2049	10.72	89.95	4.45	1.12	1.30
-10	(+14)	11428	2880	3349	2268	11.54	114.39	5.03	1.27	1.47
-5	(+23)	13900	3503	4073	2484	12.34	141.55	5.58	1.41	1.64
0	(+32)	16531	4166	4844	2699	13.18	171.88	6.12	1.54	1.79
+5	(+41)	19328	4871	5664	2916	14.11	205.84	6.63	1.67	1.94
+10	(+50)	22300	5620	6534	3137	15.18	243.88	7.12	1.79	2.09

TEST CONDITIONS: @230V60Hz			ARI4 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)	5285	1332	1549	1858	9.73	62.05	2.83	0.71	0.83
-15	(+ 5)	6971	1757	2043	2100	10.97	82.95	3.32	0.84	0.97
-10	(+14)	8813	2221	2582	2339	12.06	106.78	3.77	0.95	1.11
-5	(+23)	10816	2726	3169	2579	13.04	134.00	4.20	1.06	1.23
0	(+32)	12990	3273	3806	2822	13.97	165.06	4.61	1.16	1.35
+5	(+41)	15341	3866	4495	3072	14.91	200.42	4.99	1.26	1.46
+10	(+50)	17876	4505	5238	3330	15.90	240.53	5.36	1.35	1.57

### 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		