

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 ²] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm ²] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	2	[hp]
2 Displacement	37.88	[cm ³] (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 ²]

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: @208V60Hz			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]
23038	5806	6751	3187	16.25	189.66	7.23	1.82	2.12

E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V60Hz			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)	11106	2799	3254	1642	8.64	70.47	6.76	1.70	1.98
-15	(+ 5)	13880	3498	4067	1814	9.36	88.68	7.64	1.93	2.24
-10	(+14)	16910	4261	4955	1994	10.23	108.66	8.48	2.14	2.48
-5	(+23)	20209	5093	5922	2182	11.19	130.72	9.27	2.34	2.72
0	(+32)	23784	5994	6969	2378	12.21	155.16	10.01	2.52	2.93
+5	(+41)	27646	6967	8101	2583	13.26	182.26	10.71	2.70	3.14
+10	(+50)	31805	8015	9320	2797	14.28	212.33	11.37	2.86	3.33

TEST CONDITIONS: @208V60Hz			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)	9252	2331	2711	1715	8.64	64.83	5.43	1.37	1.59
-15	(+ 5)	11846	2985	3471	1918	9.72	83.52	6.18	1.56	1.81
-10	(+14)	14722	3710	4314	2129	10.88	104.46	6.91	1.74	2.02
-5	(+23)	17889	4508	5242	2347	12.07	127.93	7.61	1.92	2.23
0	(+32)	21357	5382	6258	2572	13.27	154.24	8.29	2.09	2.43
+5	(+41)	25136	6334	7365	2806	14.42	183.68	8.95	2.26	2.62
+10	(+50)	29235	7367	8566	3047	15.50	216.56	9.60	2.42	2.81

TEST CONDITIONS: @208V60Hz			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)	7706	1942	2258	1745	8.74	60.54	4.39	1.11	1.29
-15	(+ 5)	9782	2465	2866	1997	10.21	77.45	4.90	1.23	1.44
-10	(+14)	12163	3065	3564	2255	11.69	97.08	5.40	1.36	1.58
-5	(+23)	14859	3745	4354	2520	13.16	119.70	5.90	1.49	1.73
0	(+32)	17880	4506	5239	2792	14.56	145.63	6.41	1.61	1.88
+5	(+41)	21236	5351	6223	3071	15.86	175.16	6.91	1.74	2.03
+10	(+50)	24936	6284	7307	3357	17.02	208.58	7.43	1.87	2.18

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		