COMPRESSOR DEFINITION

Designation	**NJ 2212GK**
Nominal Voltage/Frequency	**115 V 60 Hz**
Engineering Number	**943BG01**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115 / 60	[V / Hz]	
4 Application type	Low Back Pressure R404A		
4.1 Evaporating temperature range	-40°C to -10°C	(-40°F to 14°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	25.2	[kgf/cm²] (358 psig)	/ ºC - ºF
9.2 Peak	28.3	[kgf/cm²] (402 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/3	[hp]
2 Displacement	34.38	[cm³] (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)	21.45	[kg] (47.29 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA2AE3C-105	
3 Start capacitor	400-480(125)	[µF(VAC minimum)]
4 Run capacitor	20(440)	[µF(VAC minimum)]
5 Motor protection	15HM2350-168	
6 Start winding resistance	2.31	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	0.32	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	-	[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	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**ASHRAELBP32**			Evaporating temperature		**-23.3°C (-9.94°F)**
@115V60Hz			**Fan**			(Condensing temperature		**54.4°C (129.92°F))**
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
5444	1372	1595	1312	13.82	36.91	4.15	1.05	1.22

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **35ºC (+95ºF))**			
@115V60Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	2406	606	705	708	9.85	16.18	3.36	0.85	0.98
-35	**(-31)**	3329	839	975	847	10.67	22.45	3.96	1.00	1.16
-30	**(-22)**	4507	1136	1321	1003	11.70	30.49	4.52	1.14	1.32
-25	**(-13)**	5958	1501	1746	1175	12.92	40.47	5.06	1.27	1.48
-20	**(- 4)**	7696	1939	2255	1364	14.34	52.56	5.60	1.41	1.64
-15	**(+ 5)**	9739	2454	2854	1570	15.96	66.92	6.17	1.56	1.81
-10	**(+14)**	12102	3050	3546	1792	17.78	83.70	6.81	1.72	1.99

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **45ºC (+113ºF))**			
@115V60Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	1726	435	506	624	9.47	11.57	2.77	0.70	0.81
-35	**(-31)**	2749	693	805	807	10.46	18.50	3.43	0.86	1.00
-30	**(-22)**	3965	999	1162	1001	11.67	26.77	4.00	1.01	1.17
-25	**(-13)**	5392	1359	1580	1206	13.10	36.56	4.49	1.13	1.32
-20	**(- 4)**	7045	1775	2064	1422	14.74	48.01	4.95	1.25	1.45
-15	**(+ 5)**	8940	2253	2620	1648	16.60	61.30	5.40	1.36	1.58
-10	**(+14)**	11092	2795	3250	1885	18.68	76.59	5.86	1.48	1.72

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **55ºC (+131ºF))**			
@115V60Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	1039	262	304	499	8.98	6.95	2.12	0.54	0.62
-35	**(-31)**	2180	549	639	735	10.15	14.65	2.88	0.73	0.84
-30	**(-22)**	3452	870	1011	976	11.55	23.27	3.50	0.88	1.02
-25	**(-13)**	4872	1228	1428	1222	13.19	32.97	4.00	1.01	1.17
-20	**(- 4)**	6456	1627	1892	1473	15.07	43.91	4.42	1.11	1.29
-15	**(+ 5)**	8220	2072	2409	1729	17.18	56.24	4.78	1.20	1.40
-10	**(+14)**	10181	2565	2983	1989	19.52	70.15	5.10	1.29	1.50

F - EXTERNAL CHARACTERISTICS

1 Base plate	American Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	12.77 +0.08/+0.00	[mm]	(0.503" +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	9.6 +0.07/+0.00	[mm]	(0.378" +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		