COMPRESSOR DEFINITION

Designation	**NJ 2212GK**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**943DA11**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 50	[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 pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm²] (365 psig)	/ ºC - ºF
9.2 Peak (gauge)	28.7	[kgf/cm²] (408 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/2	[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)	21.5	[kg] (47.40 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

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	RVA2L3C-112	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	20(400)	[µF(VAC minimum)]
5 Motor protection	15HM1963-248	
6 Start winding resistance	4.84	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	1.70	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[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 - IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**ASHRAELBP32** **Fan**		Evaporating temperature (Condensing temperature	**-23.3°C (-9.94°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]
5276	1330	1546	1160	5.80	35.77	4.55	1.15	1.33

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **35ºC (+95ºF))**
@220V50Hz **Fan**

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]
-40	**(-40)**	2369	597	694	656	3.66	15.92	3.60	0.91	1.06
-35	**(-31)**	3300	832	967	774	4.13	22.25	4.28	1.08	1.26
-30	**(-22)**	4450	1121	1304	901	4.66	30.10	4.95	1.25	1.45
-25	**(-13)**	5820	1467	1705	1036	5.26	39.54	5.61	1.41	1.64
-20	**(- 4)**	7410	1867	2171	1181	5.92	50.61	6.26	1.58	1.83
-15	**(+ 5)**	9222	2324	2702	1334	6.63	63.37	6.90	1.74	2.02
-10	**(+14)**	11256	2837	3298	1496	7.37	77.86	7.54	1.90	2.21

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **45ºC (+113ºF))**
@220V50Hz **Fan**

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]
-40	**(-40)**	1917	483	562	614	3.54	12.85	3.12	0.79	0.92
-35	**(-31)**	2855	719	837	758	4.09	19.22	3.76	0.95	1.10
-30	**(-22)**	3984	1004	1167	910	4.72	26.90	4.37	1.10	1.28
-25	**(-13)**	5305	1337	1554	1070	5.40	35.97	4.95	1.25	1.45
-20	**(- 4)**	6818	1718	1998	1238	6.14	46.47	5.51	1.39	1.61
-15	**(+ 5)**	8524	2148	2498	1413	6.92	58.45	6.04	1.52	1.77
-10	**(+14)**	10423	2627	3054	1596	7.75	71.96	6.54	1.65	1.92

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **55ºC (+131ºF))**
@220V50Hz **Fan**

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]
-40	**(-40)**	1560	393	457	594	3.48	10.44	2.63	0.66	0.77
-35	**(-31)**	2473	623	725	756	4.11	16.62	3.26	0.82	0.95
-30	**(-22)**	3548	894	1040	925	4.80	23.91	3.84	0.97	1.12
-25	**(-13)**	4786	1206	1402	1100	5.55	32.39	4.36	1.10	1.28
-20	**(- 4)**	6188	1559	1813	1282	6.35	42.08	4.84	1.22	1.42
-15	**(+ 5)**	7754	1954	2272	1470	7.20	53.06	5.28	1.33	1.55
-10	**(+14)**	9486	2390	2780	1665	8.08	65.36	5.68	1.43	1.66

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	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		