COMPRESSOR DEFINITION

Designation	**NJ 2192K**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**144DA11**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-502		
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 temperature			
9.1 Operating	23.4	[kgf/cm²] (333 psig)	/ ºC - ºF
9.2 Peak	26.3	[kgf/cm²] (374 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/4	[hp]
2 Displacement	26.11	[cm³] (1.593 cu.in)
2.1 Bore [mm]	41.770	
2.2 Stroke [mm]	19.066	
3 Lubricant charge	750	[ml] (25.36 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO46	
4 Weight (with oil charge)	20.4	[kg] (44.97 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	RVA2M3C-111	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	20(440)	[µF(VAC minimum)]
5 Motor protection	3HM191-105	
6 Start winding resistance	11.20	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	2.90	[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		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**EN12900LBP**			Evaporating temperature		**-35°C (-31°F)**
@220V50Hz			**Fan**			(Condensing temperature		**40°C (104°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]
1996	503	585	602	2.76		3.32	0.84	0.97

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**EN12900**					(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)**	1636	412	479	530	2.42	0.00	3.07	0.77	0.90
-35	**(-31)**	2271	572	666	612	2.79	0.00	3.73	0.94	1.09
-30	**(-22)**	3065	772	898	700	3.20	0.00	4.39	1.11	1.29
-25	**(-13)**	4016	1012	1177	793	3.66	0.00	5.06	1.28	1.48
-20	**(- 4)**	5126	1292	1502	892	4.13	0.00	5.74	1.45	1.68
-15	**(+ 5)**	6394	1611	1874	994	4.61	0.00	6.43	1.62	1.88
-10	**(+14)**	7821	1971	2292	1098	5.09	0.00	7.13	1.80	2.09

TEST CONDITIONS:		**EN12900**					(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)**	1186	299	348	484	2.29	0.00	2.45	0.62	0.72
-35	**(-31)**	1736	437	509	585	2.70	0.00	2.97	0.75	0.87
-30	**(-22)**	2406	606	705	693	3.18	0.00	3.47	0.88	1.02
-25	**(-13)**	3196	805	936	808	3.71	0.00	3.96	1.00	1.16
-20	**(- 4)**	4106	1035	1203	928	4.27	0.00	4.43	1.12	1.30
-15	**(+ 5)**	5136	1294	1505	1052	4.86	0.00	4.88	1.23	1.43
-10	**(+14)**	6287	1584	1842	1179	5.47	0.00	5.33	1.34	1.56

TEST CONDITIONS:		**EN12900**					(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)**	741	187	217	430	2.19	0.00	1.74	0.44	0.51
-35	**(-31)**	1233	311	361	556	2.66	0.00	2.20	0.55	0.64
-30	**(-22)**	1808	456	530	689	3.21	0.00	2.61	0.66	0.76
-25	**(-13)**	2464	621	722	829	3.83	0.00	2.97	0.75	0.87
-20	**(- 4)**	3202	807	938	975	4.51	0.00	3.30	0.83	0.97
-15	**(+ 5)**	4023	1014	1179	1126	5.23	0.00	3.59	0.90	1.05
-10	**(+14)**	4926	1241	1443	1280	5.97	0.00	3.84	0.97	1.12

F - EXTERNAL CHARACTERISTICS

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