COMPRESSOR DEFINITION

Designation	**NT 2212GK**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**925DA02**

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	27.80	[cm³] (1.696 cu.in)
2.1 Bore	38.100	
2.2 Stroke	12.200	
3 Lubricant charge	650	[ml] (21.98 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight(with oil charge)	18.3	[kg] (40.34 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	3ARR3B3AP3	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	20(440)	[µF(VAC minimum)]
5 Motor protection (external)	15HM1962-240	
6 Start winding resistance	3.89	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	1.69	[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	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**ASHRAELBP32**		Evaporating temperature		**-23.3°C (-9.94°F)**	
@220V50Hz			**Fan**		(Condensing temperature		**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]
4684	1180	1373	999	5.04	31.76	4.69	1.18	1.37

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)**	2263	570	663	575	3.34	15.21	3.93	0.99	1.15
-35	**(-31)**	2952	744	865	661	3.66	19.91	4.48	1.13	1.31
-30	**(-22)**	3835	966	1124	751	4.02	25.95	5.11	1.29	1.50
-25	**(-13)**	4914	1238	1440	845	4.41	33.39	5.81	1.46	1.70
-20	**(- 4)**	6193	1561	1815	945	4.84	42.29	6.55	1.65	1.92
-15	**(+ 5)**	7672	1933	2248	1049	5.29	52.71	7.31	1.84	2.14
-10	**(+14)**	9354	2357	2741	1158	5.78	64.71	8.08	2.04	2.37

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)**	2006	505	588	575	3.33	13.45	3.49	0.88	1.02
-35	**(-31)**	2689	678	788	679	3.73	18.10	3.96	1.00	1.16
-30	**(-22)**	3557	896	1042	787	4.16	24.02	4.52	1.14	1.32
-25	**(-13)**	4614	1163	1352	899	4.63	31.28	5.13	1.29	1.50
-20	**(- 4)**	5860	1477	1717	1015	5.13	39.94	5.77	1.45	1.69
-15	**(+ 5)**	7298	1839	2139	1136	5.66	50.04	6.43	1.62	1.88
-10	**(+14)**	8931	2251	2617	1261	6.23	61.66	7.09	1.79	2.08

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)**	1788	451	524	577	3.35	11.97	3.10	0.78	0.91
-35	**(-31)**	2453	618	719	700	3.83	16.48	3.51	0.88	1.03
-30	**(-22)**	3294	830	965	827	4.34	22.20	3.98	1.00	1.17
-25	**(-13)**	4315	1087	1264	957	4.88	29.20	4.51	1.14	1.32
-20	**(- 4)**	5516	1390	1616	1092	5.46	37.52	5.06	1.27	1.48
-15	**(+ 5)**	6901	1739	2022	1230	6.07	47.23	5.62	1.42	1.65
-10	**(+14)**	8472	2135	2483	1372	6.72	58.38	6.17	1.55	1.81

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Vertical		
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		