

### COMPRESSOR DEFINITION

Designation	NT 2210GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	923KA02

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

### B - MECHANICAL DATA

1 Commercial designation	1 1/4	[hp]
2 Displacement	26.21	[cm <sup>3</sup> ] (1.599 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	24.400	
3 Lubricant charge	450	[ml] (15.22 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	17.9	[kg] (39.46 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (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	RVA2E3C-103	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	20(440)	[µF(VAC minimum)]
5 Motor protection	15HM1962-247	
6 Start winding resistance	3.92	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.72	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	33.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	6.43	[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: @220V50Hz			EN12900LBP Fan		Evaporating temperature (Condensing temperature		-35°C (-31°F) 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]
2337	589	685	648	3.52	18.55	3.61	0.91	1.06

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900 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]
-40	(-40)	1881	474	551	557	3.20	14.00	3.37	0.85	0.99
-35	(-31)	2530	638	741	640	3.53	18.93	3.96	1.00	1.16
-30	(-22)	3352	845	982	728	3.88	25.18	4.61	1.16	1.35
-25	(-13)	4346	1095	1273	819	4.26	32.81	5.30	1.34	1.55
-20	(- 4)	5512	1389	1615	915	4.66	41.88	6.02	1.52	1.76
-15	(+ 5)	6851	1726	2007	1014	5.09	52.45	6.75	1.70	1.98
-10	(+14)	8361	2107	2450	1118	5.55	64.59	7.48	1.89	2.19

TEST CONDITIONS: @220V50Hz			EN12900 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]
-40	(-40)	1471	371	431	559	3.21	12.41	2.63	0.66	0.77
-35	(-31)	2037	513	597	658	3.59	17.29	3.09	0.78	0.91
-30	(-22)	2743	691	804	761	4.01	23.39	3.60	0.91	1.05
-25	(-13)	3589	904	1052	868	4.45	30.78	4.13	1.04	1.21
-20	(- 4)	4574	1153	1340	978	4.93	39.52	4.68	1.18	1.37
-15	(+ 5)	5700	1436	1670	1092	5.43	49.67	5.23	1.32	1.53
-10	(+14)	6964	1755	2041	1209	5.97	61.29	5.77	1.45	1.69

TEST CONDITIONS: @220V50Hz			EN12900 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]
-40	(-40)	1149	289	337	566	3.23	11.38	2.03	0.51	0.60
-35	(-31)	1613	406	473	681	3.68	16.04	2.37	0.60	0.69
-30	(-22)	2185	551	640	800	4.17	21.84	2.73	0.69	0.80
-25	(-13)	2863	722	839	922	4.69	28.83	3.11	0.78	0.91
-20	(- 4)	3649	920	1069	1047	5.24	37.08	3.49	0.88	1.02
-15	(+ 5)	4542	1145	1331	1177	5.82	46.64	3.87	0.97	1.13
-10	(+14)	5543	1397	1624	1309	6.44	57.59	4.22	1.06	1.24

### 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	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		