

### COMPRESSOR DEFINITION

Designation	NT 2212GKV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	925CD02

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 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 - High 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 1/2	[hp]
2 Displacement	27.80	[cm <sup>3</sup> ] (1.696 cu.in)
2.1 Bore [mm]	38.100	
2.2 Stroke [mm]	24.400	
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	-	[kgf/cm <sup>2</sup> ]

### C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA2AM3C-104	
3 Start capacitor	130-156(330)	[µF(VAC minimum)]
4 Run capacitor	25(440)	[µF(VAC minimum)]
5 Motor protection	15HM1962-240	
6 Start winding resistance	3.30	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.35	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	45.00	[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: @208V60Hz			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]
5710	1439	1673	1176	5.80	38.71	4.86	1.22	1.42

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V60Hz			ASHRAE32 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)	2521	635	739	656	3.26	16.94	3.84	0.97	1.13
-35	(-31)	3499	882	1025	777	3.85	23.60	4.50	1.13	1.32
-30	(-22)	4648	1171	1362	899	4.43	31.44	5.17	1.30	1.52
-25	(-13)	5964	1503	1748	1021	5.02	40.52	5.85	1.47	1.71
-20	(- 4)	7447	1877	2182	1143	5.61	50.85	6.52	1.64	1.91
-15	(+ 5)	9093	2291	2664	1265	6.20	62.47	7.19	1.81	2.11
-10	(+14)	10900	2747	3194	1388	6.79	75.41	7.84	1.98	2.30

TEST CONDITIONS: @208V60Hz			ASHRAE32 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)	2271	572	666	654	3.25	15.23	3.47	0.88	1.02
-35	(-31)	3211	809	941	792	3.92	21.61	4.05	1.02	1.19
-30	(-22)	4330	1091	1269	932	4.60	29.24	4.64	1.17	1.36
-25	(-13)	5624	1417	1648	1074	5.29	38.13	5.23	1.32	1.53
-20	(- 4)	7092	1787	2078	1219	5.99	48.34	5.82	1.47	1.70
-15	(+ 5)	8733	2201	2559	1366	6.70	59.88	6.39	1.61	1.87
-10	(+14)	10542	2657	3089	1516	7.42	72.78	6.96	1.75	2.04

TEST CONDITIONS: @208V60Hz			ASHRAE32 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)	2049	516	600	659	3.27	13.72	3.11	0.78	0.91
-35	(-31)	2931	739	859	810	4.01	19.69	3.62	0.91	1.06
-30	(-22)	4000	1008	1172	965	4.76	26.96	4.15	1.04	1.22
-25	(-13)	5253	1324	1539	1124	5.54	35.55	4.67	1.18	1.37
-20	(- 4)	6688	1685	1960	1288	6.33	45.49	5.19	1.31	1.52
-15	(+ 5)	8302	2092	2433	1457	7.15	56.81	5.70	1.44	1.67
-10	(+14)	10094	2544	2958	1630	7.98	69.55	6.19	1.56	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	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		