

COMPRESSOR DEFINITION

Designation	NT 2212GS
Nominal Voltage/Frequency	200 V 50-60 Hz
Engineering Number	926KR02

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	200 / 50-60	[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	3PHASE		
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 ²] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm ²] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/4	[hp]
2 Displacement	27.80	[cm ³] (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)	18.04	[kg] (39.77 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	200 V 50-60 Hz 3 ~ (Three phase)	
2 Starting device type	3PHASE	
2.1 Starting device		
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0926/K9	
6 Start winding resistance	2.75	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.60	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @200V60Hz			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]
5362	1351	1571	1197	4.21	36.35	4.48	1.13	1.31

E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V50Hz		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)	2130	537	624	563	3.41	14.31	3.77	0.95	1.11
-35	(-31)	2782	701	815	653	3.55	18.76	4.28	1.08	1.25
-30	(-22)	3642	918	1067	745	3.71	24.64	4.90	1.23	1.43
-25	(-13)	4708	1186	1380	840	3.89	31.99	5.61	1.41	1.64
-20	(- 4)	5981	1507	1753	937	4.09	40.85	6.38	1.61	1.87
-15	(+ 5)	7461	1880	2186	1037	4.32	51.27	7.20	1.81	2.11
-10	(+14)	9148	2305	2680	1139	4.58	63.28	8.03	2.02	2.35

TEST CONDITIONS: @200V50Hz		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)	1878	473	550	568	3.40	12.59	3.31	0.83	0.97
-35	(-31)	2536	639	743	672	3.57	17.07	3.78	0.95	1.11
-30	(-22)	3390	854	993	780	3.76	22.89	4.34	1.09	1.27
-25	(-13)	4439	1119	1301	891	3.98	30.10	4.97	1.25	1.46
-20	(- 4)	5683	1432	1665	1005	4.23	38.73	5.65	1.42	1.66
-15	(+ 5)	7123	1795	2087	1122	4.51	48.84	6.35	1.60	1.86
-10	(+14)	8758	2207	2566	1243	4.82	60.46	7.05	1.78	2.07

TEST CONDITIONS: @200V50Hz		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)	1636	412	479	570	3.42	10.95	2.87	0.72	0.84
-35	(-31)	2278	574	668	690	3.62	15.30	3.30	0.83	0.97
-30	(-22)	3104	782	910	815	3.85	20.92	3.80	0.96	1.11
-25	(-13)	4115	1037	1206	944	4.11	27.84	4.36	1.10	1.28
-20	(- 4)	5308	1338	1556	1077	4.41	36.10	4.94	1.24	1.45
-15	(+ 5)	6686	1685	1959	1213	4.75	45.75	5.52	1.39	1.62
-10	(+14)	8248	2078	2417	1354	5.12	56.83	6.08	1.53	1.78

E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V60Hz		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]
-40	(-40)	2408	607	705	604	2.71	16.18	3.98	1.00	1.17
-35	(-31)	3317	836	972	744	3.06	22.37	4.46	1.13	1.31
-30	(-22)	4396	1108	1288	884	3.41	29.74	4.98	1.26	1.46
-25	(-13)	5646	1423	1654	1021	3.75	38.35	5.54	1.40	1.62
-20	(- 4)	7065	1780	2070	1154	4.09	48.25	6.13	1.54	1.80
-15	(+ 5)	8655	2181	2536	1279	4.44	59.47	6.76	1.70	1.98
-10	(+14)	10415	2625	3052	1397	4.80	72.06	7.44	1.87	2.18

TEST CONDITIONS: @200V60Hz		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]
-40	(-40)	2026	511	594	615	2.71	13.59	3.30	0.83	0.97
-35	(-31)	2930	738	859	764	3.10	19.72	3.82	0.96	1.12
-30	(-22)	4009	1010	1175	917	3.49	27.07	4.35	1.10	1.27
-25	(-13)	5262	1326	1542	1072	3.89	35.68	4.89	1.23	1.43
-20	(- 4)	6690	1686	1960	1227	4.30	45.59	5.44	1.37	1.60
-15	(+ 5)	8292	2090	2430	1380	4.73	56.86	6.02	1.52	1.76
-10	(+14)	10069	2537	2950	1530	5.18	69.51	6.61	1.66	1.94

TEST CONDITIONS: @200V60Hz		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]
-40	(-40)	1785	450	523	619	2.70	11.95	2.88	0.73	0.84
-35	(-31)	2618	660	767	775	3.12	17.59	3.38	0.85	0.99
-30	(-22)	3629	915	1063	940	3.55	24.46	3.87	0.98	1.13
-25	(-13)	4819	1214	1412	1111	4.00	32.61	4.34	1.09	1.27
-20	(- 4)	6188	1559	1813	1288	4.48	42.09	4.81	1.21	1.41
-15	(+ 5)	7736	1949	2267	1469	4.99	52.94	5.27	1.33	1.54
-10	(+14)	9463	2385	2773	1650	5.53	65.20	5.72	1.44	1.68

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		