

COMPRESSOR DEFINITION

Designation	NT 6222GK
Nominal Voltage/Frequency	200-240 V 50 Hz / 230 V 60 Hz
Engineering Number	922CN09

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	200-240 / 50	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°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 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	[hp]
2 Displacement	17.39	[cm ³] (1.061 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	19.030	
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)	17.4	[kg] (38.36 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	200-240 V 50 Hz / 230 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA3N3C-122	
3 Start capacitor	130-156(250)	[µF(VAC minimum)]
4 Run capacitor	17.5(440)	[µF(VAC minimum)]
5 Motor protection	T0748/G9	
6 Start winding resistance	10.10	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.75	[Ω at 25°C (77°F)] +/- 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	CCC - IMQ - IRAM - UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @200V50Hz			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°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]
8492	2140	2488	1103	5.78	69.91	7.70	1.94	2.26

E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V50Hz			ASHRAE46 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]
-20 (- 4)	3862	973	1132	605	3.25	24.53	6.36	1.60	1.87
-15 (+ 5)	4861	1225	1424	660	3.52	31.04	7.37	1.86	2.16
-10 (+14)	6066	1529	1777	717	3.80	38.95	8.47	2.14	2.48
-5 (+23)	7492	1888	2195	774	4.09	48.44	9.69	2.44	2.84
0 (+32)	9153	2307	2682	831	4.38	59.72	11.02	2.78	3.23
+5 (+41)	11065	2789	3242	887	4.67	72.98	12.48	3.14	3.66
+10 (+50)	13243	3337	3880	941	4.96	88.40	14.06	3.54	4.12

TEST CONDITIONS: @200V50Hz			ASHRAE46 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]
-20 (- 4)	3232	814	947	648	3.47	22.62	5.00	1.26	1.47
-15 (+ 5)	4118	1038	1207	709	3.77	29.03	5.82	1.47	1.70
-10 (+14)	5166	1302	1514	771	4.08	36.67	6.70	1.69	1.96
-5 (+23)	6391	1611	1873	835	4.41	45.74	7.64	1.93	2.24
0 (+32)	7808	1968	2288	901	4.74	56.43	8.66	2.18	2.54
+5 (+41)	9430	2376	2763	967	5.08	68.93	9.75	2.46	2.86
+10 (+50)	11273	2841	3303	1033	5.42	83.44	10.92	2.75	3.20

TEST CONDITIONS: @200V50Hz			ASHRAE46 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]
-20 (- 4)	2718	685	796	695	3.70	21.39	3.91	0.99	1.15
-15 (+ 5)	3478	877	1019	762	4.04	27.53	4.56	1.15	1.34
-10 (+14)	4357	1098	1277	833	4.40	34.74	5.23	1.32	1.53
-5 (+23)	5368	1353	1573	908	4.78	43.21	5.92	1.49	1.73
0 (+32)	6525	1644	1912	984	5.18	53.14	6.64	1.67	1.94
+5 (+41)	7845	1977	2299	1062	5.58	64.73	7.39	1.86	2.16
+10 (+50)	9341	2354	2737	1142	5.98	78.15	8.18	2.06	2.40

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal
2 Tray holder	No
3 Connectors	
3.1 SUCTION	12.7 +0.25/-0.25 [mm] (0.500" +0.010"/-0.010")
3.1.1 Material	Steel
3.1.2 Shape	ROTOLOCK(Ex. thr. 1"-14UNS-2A)
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