

### COMPRESSOR DEFINITION

Designation	<b>NT 6220GK</b>
Nominal Voltage/Frequency	<b>115 V 60 Hz</b>
Engineering Number	<b>922BG02</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115 / 60	[ 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	CSIR		
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	3/4	[hp]
2 Displacement	14.50	[cm <sup>3</sup> ] (0.885 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	15.870	
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	[kg] (37.48 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	3ARR2KCP172S	
3 Start capacitor	243-292(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	CRA1773	
6 Start winding resistance	2.66	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.43	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	54.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	12.58	[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: @115V60Hz			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]
8464	2133	2480	1160	12.20	69.68	7.30	1.84	2.14

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			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)	3879	977	1137	614	7.98	24.63	6.30	1.59	1.85
-15	(+ 5)	4900	1235	1436	677	8.40	31.29	7.25	1.83	2.13
-10	(+14)	6135	1546	1798	734	8.80	39.40	8.37	2.11	2.45
-5	(+23)	7575	1909	2220	787	9.19	49.00	9.63	2.43	2.82
0	(+32)	9212	2321	2699	836	9.56	60.12	11.02	2.78	3.23
+5	(+41)	11038	2782	3234	880	9.92	72.80	12.53	3.16	3.67
+10	(+50)	13047	3288	3823	922	10.27	87.07	14.14	3.56	4.14

TEST CONDITIONS: @115V60Hz			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)	3218	811	943	655	8.26	22.53	4.92	1.24	1.44
-15	(+ 5)	4117	1037	1206	735	8.81	29.02	5.61	1.41	1.64
-10	(+14)	5195	1309	1522	809	9.34	36.88	6.42	1.62	1.88
-5	(+23)	6446	1624	1889	877	9.87	46.12	7.34	1.85	2.15
0	(+32)	7860	1981	2303	940	10.38	56.79	8.35	2.10	2.45
+5	(+41)	9432	2377	2764	999	10.89	68.93	9.44	2.38	2.77
+10	(+50)	11152	2810	3268	1054	11.39	82.56	10.59	2.67	3.10

TEST CONDITIONS: @115V60Hz			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)	2597	654	761	678	8.41	20.42	3.83	0.97	1.12
-15	(+ 5)	3363	847	985	780	9.13	26.63	4.32	1.09	1.26
-10	(+14)	4275	1077	1253	875	9.83	34.11	4.89	1.23	1.43
-5	(+23)	5327	1342	1561	964	10.52	42.89	5.52	1.39	1.62
0	(+32)	6511	1641	1908	1048	11.21	53.00	6.22	1.57	1.82
+5	(+41)	7817	1970	2291	1126	11.89	64.47	6.95	1.75	2.04
+10	(+50)	9240	2328	2708	1200	12.58	77.34	7.70	1.94	2.26

### 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		