

COMPRESSOR DEFINITION

Designation	T 6222GK
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	936ZG80

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 0°C	(-4°F to 32°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight starting torque		
7 Expantion 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 pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm ²] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm ²] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1	[hp]
2 Displacement	20.44	[cm ³] (1.247 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	19.030	
3 Lubricant charge	550	[ml] (18.60 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 ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B3S3	
3 Start capacitor	189-227(165)	[µF(VAC minimum)]
4 Run capacitor	25(450)	[µF(VAC minimum)]
5 Motor protection	CRA39007-3031	
6 Start winding resistance	3.94	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.46	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	71.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	15.00	[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]
11276	2842	3304	1668	15.93	92.83	6.76	1.70	1.98

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V50Hz			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)	4202	1059	1231	663	7.52	26.67	6.34	1.60	1.86
-15 (+ 5)	5586	1408	1637	736	8.06	35.66	7.59	1.91	2.22
-10 (+14)	7116	1793	2085	812	8.72	45.71	8.76	2.21	2.57
-5 (+23)	8792	2216	2576	896	9.46	56.89	9.80	2.47	2.87
0 (+32)	10614	2675	3110	994	10.26	69.27	10.68	2.69	3.13
+5 (+41)	12581	3170	3687	1110	11.09	82.93	11.36	2.86	3.33
+10 (+50)	14693	3703	4305	1248	11.92	97.92	11.80	2.97	3.46

TEST CONDITIONS: @115V50Hz			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)	3581	902	1049	697	8.03	25.09	5.13	1.29	1.50
-15 (+ 5)	4738	1194	1388	800	8.64	33.39	5.93	1.49	1.74
-10 (+14)	6039	1522	1770	901	9.37	42.85	6.71	1.69	1.97
-5 (+23)	7483	1886	2193	1006	10.20	53.54	7.45	1.88	2.18
0 (+32)	9069	2285	2657	1119	11.08	65.53	8.09	2.04	2.37
+5 (+41)	10798	2721	3164	1246	12.00	78.88	8.61	2.17	2.52
+10 (+50)	12668	3192	3712	1392	12.93	93.68	8.95	2.26	2.62

TEST CONDITIONS: @115V50Hz			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)	2934	739	860	731	8.55	23.07	4.02	1.01	1.18
-15 (+ 5)	3856	972	1130	863	9.22	30.53	4.46	1.12	1.31
-10 (+14)	4917	1239	1441	989	10.02	39.24	4.97	1.25	1.46
-5 (+23)	6119	1542	1793	1115	10.92	49.28	5.49	1.38	1.61
0 (+32)	7460	1880	2186	1244	11.89	60.72	6.00	1.51	1.76
+5 (+41)	8940	2253	2620	1383	12.90	73.63	6.45	1.62	1.89
+10 (+50)	10560	2661	3094	1536	13.92	88.08	6.80	1.71	1.99

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)	4916	1239	1440	775	8.80	31.20	6.35	1.60	1.86	
-15 (+ 5)	6535	1647	1915	861	9.44	41.72	7.59	1.91	2.23	
-10 (+14)	8326	2098	2440	950	10.20	53.48	8.76	2.21	2.57	
-5 (+23)	10287	2592	3014	1049	11.07	66.56	9.80	2.47	2.87	
0 (+32)	12419	3130	3639	1163	12.01	81.06	10.68	2.69	3.13	
+5 (+41)	14721	3710	4313	1297	12.99	97.03	11.37	2.87	3.33	
+10 (+50)	17192	4332	5038	1455	13.98	114.58	11.83	2.98	3.47	

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)	4190	1056	1228	815	9.40	29.36	5.13	1.29	1.50	
-15 (+ 5)	5544	1397	1625	935	10.11	39.07	5.93	1.49	1.74	
-10 (+14)	7066	1781	2070	1054	10.96	50.13	6.71	1.69	1.97	
-5 (+23)	8755	2206	2565	1177	11.92	62.64	7.45	1.88	2.18	
0 (+32)	10611	2674	3109	1309	12.96	76.67	8.10	2.04	2.37	
+5 (+41)	12633	3184	3702	1456	14.04	92.29	8.62	2.17	2.53	
+10 (+50)	14821	3735	4343	1623	15.14	109.60	8.98	2.26	2.63	

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)	3433	865	1006	855	10.00	27.00	4.02	1.01	1.18	
-15 (+ 5)	4511	1137	1322	1010	10.79	35.71	4.46	1.12	1.31	
-10 (+14)	5753	1450	1686	1157	11.73	45.91	4.97	1.25	1.46	
-5 (+23)	7159	1804	2098	1304	12.77	57.66	5.49	1.38	1.61	
0 (+32)	8728	2199	2558	1455	13.91	71.04	6.00	1.51	1.76	
+5 (+41)	10460	2636	3065	1616	15.10	86.15	6.46	1.63	1.89	
+10 (+50)	12354	3113	3620	1792	16.31	103.05	6.82	1.72	2.00	

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	9.6 +0.07/+0.00	[mm]	(0.378" +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		