COMPRESSOR DEFINITION

Designation	**T 6220GK**
Nominal Voltage/Frequency	**115 V 60 Hz**
Engineering Number	**931DG80**

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	CSIR		
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 (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm²] (365 psig)	/ ºC - ºF
9.2 Peak (gauge)	28.7	[kgf/cm²] (408 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1-	[hp]
2 Displacement	17.39	[cm³] (1.061 cu.in)
2.1 Bore [mm]	34.120	
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)	16	[kg] (35.27 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (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	Current Relay	
2.1 Starting device	3ARR2KCP172S	
3 Start capacitor	145-175(250)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	CRA39010-3031	
6 Start winding resistance	4.10	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	0.54	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	55.00	[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]
8900	2243	2608	1545	15.40	73.27	5.76	1.45	1.69

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **35ºC (+95ºF))**
@115V50Hz **Fan**

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	550	7.16	21.79	6.24	1.57	1.83
-15	**(+ 5)**	4336	1093	1271	617	7.68	27.68	7.03	1.77	2.06
-10	**(+14)**	5412	1364	1586	694	8.27	34.76	7.79	1.96	2.28
-5	**(+23)**	6658	1678	1951	782	8.93	43.08	8.51	2.15	2.49
0	**(+32)**	8074	2035	2366	881	9.66	52.70	9.17	2.31	2.69
+5	**(+41)**	9657	2434	2830	992	10.45	63.67	9.75	2.46	2.86
+10	**(+50)**	11408	2875	3343	1114	11.30	76.03	10.23	2.58	3.00

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **45ºC (+113ºF))**
@115V50Hz **Fan**

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)**	2809	708	823	610	7.62	19.68	4.59	1.16	1.35
-15	**(+ 5)**	3610	910	1058	699	8.22	25.44	5.17	1.30	1.51
-10	**(+14)**	4558	1149	1335	794	8.90	32.35	5.75	1.45	1.68
-5	**(+23)**	5651	1424	1656	895	9.66	40.44	6.32	1.59	1.85
0	**(+32)**	6890	1736	2019	1001	10.49	49.77	6.87	1.73	2.01
+5	**(+41)**	8271	2084	2424	1114	11.39	60.40	7.37	1.86	2.16
+10	**(+50)**	9794	2468	2870	1233	12.36	72.37	7.80	1.96	2.28

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **55ºC (+131ºF))**
@115V50Hz **Fan**

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)**	2184	550	640	670	8.07	17.18	3.27	0.82	0.96
-15	**(+ 5)**	2883	727	845	782	8.76	22.82	3.68	0.93	1.08
-10	**(+14)**	3704	933	1085	895	9.53	29.55	4.13	1.04	1.21
-5	**(+23)**	4645	1171	1361	1007	10.38	37.41	4.61	1.16	1.35
0	**(+32)**	5707	1438	1672	1120	11.32	46.46	5.10	1.28	1.49
+5	**(+41)**	6886	1735	2018	1234	12.33	56.74	5.57	1.40	1.63
+10	**(+50)**	8182	2062	2397	1349	13.42	68.30	6.00	1.51	1.76

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **35ºC (+95ºF))**
@115V60Hz **Fan**

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)**	4136	1042	1212	663	8.63	26.26	6.24	1.57	1.83
-15	**(+ 5)**	5225	1317	1531	743	9.26	33.35	7.03	1.77	2.06
-10	**(+14)**	6520	1643	1911	836	9.97	41.88	7.79	1.96	2.28
-5	**(+23)**	8022	2021	2350	942	10.77	51.90	8.51	2.15	2.49
0	**(+32)**	9727	2451	2850	1062	11.64	63.49	9.17	2.31	2.69
+5	**(+41)**	11635	2932	3409	1196	12.60	76.70	9.74	2.45	2.85
+10	**(+50)**	13744	3463	4027	1347	13.64	91.60	10.19	2.57	2.99

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **45ºC (+113ºF))**
@115V60Hz **Fan**

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)**	3384	853	992	735	9.18	23.70	4.59	1.16	1.35
-15	**(+ 5)**	4349	1096	1274	843	9.91	30.66	5.16	1.30	1.51
-10	**(+14)**	5492	1384	1609	957	10.73	38.97	5.75	1.45	1.68
-5	**(+23)**	6809	1716	1995	1078	11.64	48.72	6.33	1.59	1.85
0	**(+32)**	8301	2092	2432	1206	12.64	59.97	6.87	1.73	2.01
+5	**(+41)**	9965	2511	2920	1343	13.73	72.77	7.36	1.85	2.16
+10	**(+50)**	11800	2974	3458	1489	14.91	87.19	7.77	1.96	2.28

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **55ºC (+131ºF))**
@115V60Hz **Fan**

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)**	2632	663	771	807	9.73	20.70	3.27	0.82	0.96
-15	**(+ 5)**	3474	875	1018	943	10.56	27.50	3.68	0.93	1.08
-10	**(+14)**	4463	1125	1308	1078	11.49	35.61	4.13	1.04	1.21
-5	**(+23)**	5597	1410	1640	1214	12.51	45.07	4.61	1.16	1.35
0	**(+32)**	6875	1732	2015	1350	13.64	55.97	5.09	1.28	1.49
+5	**(+41)**	8295	2090	2431	1489	14.86	68.35	5.55	1.40	1.63
+10	**(+50)**	9856	2484	2888	1630	16.18	82.29	5.97	1.50	1.75

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		