

COMPRESSOR DEFINITION

Designation	T 6217GK
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	931AG71

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 - 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 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	3/4+	[hp]
2 Displacement	14.50	[cm ³] (0.885 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	15.870	
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)	16.93	[kg] (37.32 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	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	CST00GK-3031	
6 Start winding resistance	4.10	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.54	[Ω at 25°C (77°F)] +/- 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)	13.00	[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: @100V50Hz			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]
6786	1710	1988	1068	12.74	55.87	6.35	1.60	1.86

E - PERFORMANCE - CURVES

TEST CONDITIONS: @100V50Hz			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)	2830	713	829	582	7.15	17.96	4.86	1.23	1.42
-15	(+ 5)	3792	956	1111	653	7.56	24.21	5.80	1.46	1.70
-10	(+14)	4863	1225	1425	717	7.94	31.24	6.78	1.71	1.99
-5	(+23)	6041	1522	1770	774	8.29	39.09	7.81	1.97	2.29
0	(+32)	7328	1847	2147	823	8.63	47.83	8.90	2.24	2.61
+5	(+41)	8723	2198	2556	866	8.99	57.50	10.06	2.53	2.95
+10	(+50)	10227	2577	2997	901	9.36	68.16	11.29	2.85	3.31

TEST CONDITIONS: @100V50Hz			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)	2325	586	681	563	7.22	16.30	4.14	1.04	1.21
-15	(+ 5)	3154	795	924	655	7.85	22.23	4.81	1.21	1.41
-10	(+14)	4088	1030	1198	740	8.44	29.00	5.52	1.39	1.62
-5	(+23)	5127	1292	1502	817	9.00	36.68	6.27	1.58	1.84
0	(+32)	6272	1581	1838	887	9.55	45.32	7.08	1.78	2.07
+5	(+41)	7522	1896	2204	949	10.10	54.96	7.94	2.00	2.33
+10	(+50)	8879	2237	2602	1003	10.67	65.65	8.89	2.24	2.60

TEST CONDITIONS: @100V50Hz			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)	1800	454	527	542	7.29	14.15	3.32	0.84	0.97
-15	(+ 5)	2489	627	729	657	8.14	19.71	3.79	0.96	1.11
-10	(+14)	3281	827	961	764	8.94	26.18	4.30	1.08	1.26
-5	(+23)	4175	1052	1223	862	9.71	33.63	4.84	1.22	1.42
0	(+32)	5172	1303	1516	953	10.47	42.10	5.43	1.37	1.59
+5	(+41)	6272	1580	1838	1036	11.22	51.65	6.07	1.53	1.78
+10	(+50)	7475	1884	2190	1110	11.98	62.33	6.79	1.71	1.99

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3311	834	970	681	7.26	21.01	4.86	1.23	1.42
-15	(+ 5)	4437	1118	1300	764	7.73	28.33	5.80	1.46	1.70
-10	(+14)	5690	1434	1667	839	8.20	36.55	6.78	1.71	1.99
-5	(+23)	7068	1781	2071	905	8.66	45.74	7.81	1.97	2.29
0	(+32)	8573	2160	2512	963	9.12	55.95	8.90	2.24	2.61
+5	(+41)	10204	2571	2990	1012	9.55	67.26	10.05	2.53	2.95
+10	(+50)	11962	3015	3505	1053	9.97	79.73	11.29	2.84	3.31

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2720	685	797	658	7.36	19.06	4.14	1.04	1.21
-15	(+ 5)	3690	930	1081	766	8.01	26.00	4.81	1.21	1.41
-10	(+14)	4783	1205	1402	866	8.64	33.94	5.52	1.39	1.62
-5	(+23)	5999	1512	1758	956	9.26	42.92	6.27	1.58	1.84
0	(+32)	7338	1849	2150	1037	9.85	53.02	7.08	1.78	2.07
+5	(+41)	8800	2218	2579	1109	10.41	64.29	7.95	2.00	2.33
+10	(+50)	10386	2617	3043	1172	10.94	76.80	8.89	2.24	2.61

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2106	531	617	634	7.45	16.56	3.32	0.84	0.97
-15	(+ 5)	2913	734	854	769	8.28	23.06	3.79	0.96	1.11
-10	(+14)	3839	967	1125	894	9.08	30.63	4.30	1.08	1.26
-5	(+23)	4885	1231	1431	1009	9.85	39.35	4.84	1.22	1.42
0	(+32)	6051	1525	1773	1115	10.58	49.25	5.43	1.37	1.59
+5	(+41)	7337	1849	2150	1211	11.27	60.42	6.08	1.53	1.78
+10	(+50)	8743	2203	2562	1297	11.91	72.91	6.80	1.71	1.99

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		