

COMPRESSOR DEFINITION

Designation	T 6222GK
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	936VD71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 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 - 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	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	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B6V3	
3 Start capacitor	43-53(330)	[μF(VAC minimum)]
4 Run capacitor	15(450)	[μF(VAC minimum)]
5 Motor protection	MRA6981-3074	
6 Start winding resistance	9.68	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.97	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	34.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	7.70	[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: @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]
9637	2429	2824	1426	7.96	79.34	6.76	1.70	1.98

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)	4202	1059	1231	709	3.46	26.67	5.93	1.49	1.74
-15	(+ 5)	5586	1408	1637	782	3.75	35.66	7.15	1.80	2.09
-10	(+14)	7116	1793	2085	863	4.11	45.71	8.24	2.08	2.42
-5	(+23)	8792	2216	2576	953	4.55	56.89	9.22	2.32	2.70
0	(+32)	10614	2675	3110	1052	5.03	69.27	10.09	2.54	2.96
+5	(+41)	12581	3170	3687	1161	5.56	82.93	10.83	2.73	3.17
+10	(+50)	14693	3703	4305	1278	6.12	97.92	11.46	2.89	3.36

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)	3581	902	1049	706	3.42	25.09	5.07	1.28	1.49
-15	(+ 5)	4738	1194	1388	800	3.84	33.39	5.93	1.49	1.74
-10	(+14)	6039	1522	1770	899	4.32	42.85	6.72	1.69	1.97
-5	(+23)	7483	1886	2193	1006	4.84	53.54	7.44	1.88	2.18
0	(+32)	9069	2285	2657	1119	5.39	65.53	8.10	2.04	2.37
+5	(+41)	10798	2721	3164	1239	5.96	78.88	8.70	2.19	2.55
+10	(+50)	12668	3192	3712	1366	6.55	93.68	9.24	2.33	2.71

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)	2934	739	860	704	3.38	23.07	4.17	1.05	1.22
-15	(+ 5)	3856	972	1130	818	3.94	30.53	4.72	1.19	1.38
-10	(+14)	4917	1239	1441	936	4.52	39.24	5.25	1.32	1.54
-5	(+23)	6119	1542	1793	1058	5.13	49.28	5.78	1.46	1.69
0	(+32)	7460	1880	2186	1185	5.75	60.72	6.30	1.59	1.85
+5	(+41)	8940	2253	2620	1316	6.37	73.63	6.81	1.72	1.99
+10	(+50)	10560	2661	3094	1452	6.97	88.08	7.31	1.84	2.14

E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V60Hz		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	830	4.05	31.20	5.92	1.49	1.74
-15	(+ 5)	6535	1647	1915	915	4.39	41.72	7.14	1.80	2.09
-10	(+14)	8326	2098	2440	1010	4.81	53.48	8.24	2.08	2.42
-5	(+23)	10287	2592	3014	1115	5.32	66.56	9.22	2.32	2.70
0	(+32)	12419	3130	3639	1231	5.89	81.06	10.09	2.54	2.96
+5	(+41)	14721	3710	4313	1358	6.54	97.03	10.84	2.73	3.17
+10	(+50)	17192	4332	5038	1494	7.24	114.58	11.47	2.89	3.36

TEST CONDITIONS: @200V60Hz		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	827	4.00	29.36	5.07	1.28	1.48
-15	(+ 5)	5544	1397	1625	936	4.50	39.07	5.92	1.49	1.74
-10	(+14)	7066	1781	2070	1052	5.05	50.13	6.72	1.69	1.97
-5	(+23)	8755	2206	2565	1177	5.66	62.64	7.44	1.88	2.18
0	(+32)	10611	2674	3109	1309	6.31	76.67	8.10	2.04	2.37
+5	(+41)	12633	3184	3702	1449	7.00	92.29	8.70	2.19	2.55
+10	(+50)	14821	3735	4343	1597	7.73	109.60	9.25	2.33	2.71

TEST CONDITIONS: @200V60Hz		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	824	3.95	27.00	4.17	1.05	1.22
-15	(+ 5)	4511	1137	1322	957	4.61	35.71	4.72	1.19	1.38
-10	(+14)	5753	1450	1686	1095	5.29	45.91	5.25	1.32	1.54
-5	(+23)	7159	1804	2098	1238	6.00	57.66	5.78	1.46	1.69
0	(+32)	8728	2199	2558	1387	6.73	71.04	6.30	1.59	1.84
+5	(+41)	10460	2636	3065	1541	7.47	86.15	6.80	1.71	1.99
+10	(+50)	12354	3113	3620	1700	8.22	103.05	7.31	1.84	2.14

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		