

COMPRESSOR DEFINITION

Designation	T 6222GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	936VA41

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors R404A)		
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 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	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B4AA3	
3 Start capacitor	43-53(330)	[µF(VAC minimum)]
4 Run capacitor	15(450)	[µF(VAC minimum)]
5 Motor protection	T0748/C9	
6 Start winding resistance	10.15	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.80	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	29.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	6.20	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
9880	2490	2895	1318	6.20	81.34	7.50	1.89	2.20

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			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)	4420	1114	1295	693	3.37	28.06	6.37	1.61	1.87
-15	(+ 5)	5634	1420	1651	772	3.71	35.96	7.30	1.84	2.14
-10	(+14)	7069	1781	2071	849	4.04	45.40	8.33	2.10	2.44
-5	(+23)	8725	2199	2557	924	4.38	56.45	9.44	2.38	2.77
0	(+32)	10602	2672	3107	999	4.72	69.20	10.61	2.67	3.11
+5	(+41)	12700	3200	3721	1074	5.06	83.72	11.83	2.98	3.47
+10	(+50)	15019	3785	4401	1150	5.40	100.09	13.08	3.30	3.83

TEST CONDITIONS: @220V50Hz			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)	3666	924	1074	709	3.43	25.68	5.17	1.30	1.52
-15	(+ 5)	4750	1197	1392	803	3.84	33.48	5.91	1.49	1.73
-10	(+14)	6018	1517	1763	895	4.25	42.71	6.72	1.69	1.97
-5	(+23)	7472	1883	2189	987	4.67	53.46	7.57	1.91	2.22
0	(+32)	9110	2296	2669	1079	5.09	65.81	8.45	2.13	2.47
+5	(+41)	10933	2755	3204	1173	5.52	79.82	9.33	2.35	2.73
+10	(+50)	12941	3261	3792	1269	5.95	95.58	10.19	2.57	2.99

TEST CONDITIONS: @220V50Hz			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)	2912	734	853	725	3.49	22.90	4.02	1.01	1.18
-15	(+ 5)	3865	974	1133	833	3.97	30.60	4.64	1.17	1.36
-10	(+14)	4967	1252	1456	941	4.46	39.63	5.28	1.33	1.55
-5	(+23)	6218	1567	1822	1049	4.96	50.08	5.93	1.49	1.74
0	(+32)	7618	1920	2232	1159	5.46	62.02	6.57	1.66	1.92
+5	(+41)	9166	2310	2686	1271	5.97	75.52	7.17	1.81	2.10
+10	(+50)	10863	2738	3183	1387	6.49	90.67	7.72	1.95	2.26

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
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		