

COMPRESSOR DEFINITION

Designation	T 6220GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	931BA41

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)		
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	17.39	[cm ³] (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)	16.64	[kg] (36.68 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	3ARR3B3U3	
3 Start capacitor	72-88(330)	[μF(VAC minimum)]
4 Run capacitor	15(450)	[μF(VAC minimum)]
5 Motor protection	T0743/C9	
6 Start winding resistance	6.80	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.45	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	26.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	5.12	[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]
8209	2069	2405	1104	5.11	67.58	7.44	1.87	2.18

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)	3474	875	1018	671	3.25	22.04	5.18	1.30	1.52
-15	(+ 5)	4613	1163	1352	729	3.54	29.45	6.32	1.59	1.85
-10	(+14)	5872	1480	1721	785	3.81	37.72	7.48	1.89	2.19
-5	(+23)	7250	1827	2124	837	4.04	46.91	8.66	2.18	2.54
0	(+32)	8747	2204	2563	887	4.24	57.09	9.86	2.48	2.89
+5	(+41)	10364	2612	3037	934	4.40	68.31	11.08	2.79	3.25
+10	(+50)	12100	3049	3546	978	4.52	80.65	12.32	3.11	3.61

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)	2880	726	844	675	3.25	20.19	4.27	1.08	1.25
-15	(+ 5)	3846	969	1127	747	3.59	27.10	5.15	1.30	1.51
-10	(+14)	4941	1245	1448	816	3.90	35.05	6.05	1.53	1.77
-5	(+23)	6164	1553	1806	881	4.19	44.10	6.99	1.76	2.05
0	(+32)	7517	1894	2203	944	4.45	54.32	7.97	2.01	2.33
+5	(+41)	8999	2268	2637	1003	4.68	65.77	8.98	2.26	2.63
+10	(+50)	10611	2674	3109	1059	4.87	78.52	10.02	2.53	2.94

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)	2262	570	663	679	3.26	17.78	3.33	0.84	0.98
-15	(+ 5)	3047	768	893	765	3.64	24.12	3.98	1.00	1.17
-10	(+14)	3971	1001	1164	848	4.00	31.69	4.68	1.18	1.37
-5	(+23)	5033	1268	1475	927	4.35	40.54	5.43	1.37	1.59
0	(+32)	6235	1571	1827	1002	4.67	50.75	6.22	1.57	1.82
+5	(+41)	7575	1909	2220	1074	4.97	62.36	7.07	1.78	2.07
+10	(+50)	9055	2282	2653	1142	5.24	75.46	7.97	2.01	2.33

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		