

COMPRESSOR DEFINITION

Designation	T 7223G
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	118DG24

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-22		
3 Nominal voltage and frequency	115 / 60	[V / Hz]	
4 Application type	Air Conditioning		
4.1 Evaporating temperature range	0°C to 15°C	(32°F to 59°F)	
5 Motor type	PSC		
6 Starting torque	LST - Low Starting Torque		
7 Expansion device	Capillary tube		
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)	21.7	[kgf/cm ²] (309 psig)	/ °C - °F
9.2 Peak (gauge)	24.2	[kgf/cm ²] (344 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	MINERAL / ISO32	
4 Weight (with oil charge)	15.05	[kg] (33.18 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	PSC	
2.1 Starting device		
3 Start capacitor	-	[μF(VAC minimum)]
4 Run capacitor	25(450)	[μF(VAC minimum)]
5 Motor protection	CRA39009-3031	
6 Start winding resistance	[Ω at 25°C (77°F)] +/- 8%	
7 Run winding resistance	[Ω at 25°C (77°F)] +/- 8%	
8 LRA - Locked rotor amperage (60 Hz)	50.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	11.20	[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]
9161	2309	2684	1109	9.76	56.58	8.26	2.08	2.42

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]
0 (+32)	8589	2164	2517	880	8.38	0.00	9.75	2.46	2.86
+5 (+41)	10458	2635	3064	900	8.64	0.00	11.64	2.93	3.41
+10 (+50)	13025	3282	3817	934	9.09	0.00	13.94	3.51	4.09
+15 (+59)	16292	4106	4774	983	9.74	0.00	16.57	4.18	4.85

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]
0 (+32)	7758	1955	2273	952	9.31	0.00	8.17	2.06	2.39
+5 (+41)	9473	2387	2776	987	9.71	0.00	9.58	2.41	2.81
+10 (+50)	11600	2923	3399	1043	10.25	0.00	11.10	2.80	3.25
+15 (+59)	14138	3563	4143	1119	10.92	0.00	12.65	3.19	3.71

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]
0 (+32)	6899	1739	2022	1028	10.28	0.00	6.71	1.69	1.96
+5 (+41)	8441	2127	2473	1078	10.83	0.00	7.83	1.97	2.29
+10 (+50)	10108	2547	2962	1156	11.45	0.00	8.76	2.21	2.57
+15 (+59)	11901	2999	3487	1261	12.15	0.00	9.43	2.38	2.76

TEST CONDITIONS: @100V60Hz			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]
0 (+32)	10576	2665	3099	1035	8.55	0.00	10.20	2.57	2.99
+5 (+41)	12404	3126	3635	1057	8.82	0.00	11.76	2.96	3.44
+10 (+50)	15427	3888	4521	1094	9.28	0.00	14.10	3.55	4.13
+15 (+59)	19645	4951	5756	1146	9.94	0.00	17.13	4.32	5.02

E - PERFORMANCE - CURVES

TEST CONDITIONS: @100V60Hz		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]
0	(+32)	9344	2355	2738	1120	9.50	0.00	8.36	2.11	2.45
+5	(+41)	11171	2815	3273	1159	9.91	0.00	9.62	2.42	2.82
+10	(+50)	13669	3445	4005	1219	10.46	0.00	11.19	2.82	3.28
+15	(+59)	16838	4243	4934	1300	11.14	0.00	12.97	3.27	3.80

TEST CONDITIONS: @100V60Hz		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]
0	(+32)	8073	2034	2366	1209	10.49	0.00	6.67	1.68	1.95
+5	(+41)	9875	2489	2894	1264	11.05	0.00	7.81	1.97	2.29
+10	(+50)	11826	2980	3465	1348	11.68	0.00	8.80	2.22	2.58
+15	(+59)	13925	3509	4080	1461	12.40	0.00	9.52	2.40	2.79

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		