

COMPRESSOR DEFINITION

Designation	T 7223G
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	118DD24

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-22		
3 Nominal voltage and frequency	208-230 / 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	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	PSC	
2.1 Starting device		
3 Start capacitor	-	[μF(VAC minimum)]
4 Run capacitor	20(450)	[μF(VAC minimum)]
5 Motor protection	MST18AIN-3041	
6 Start winding resistance	6.20	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.15	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	35.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	6.30	[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: @208V60Hz			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]
10718	2701	3141	1294	6.12	66.19	8.28	2.09	2.43

E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V50Hz			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)	8819	2222	2584	798	4.94	0.00	11.04	2.78	3.23
+5 (+41)	10551	2659	3092	800	4.82	0.00	13.21	3.33	3.87
+10 (+50)	12878	3245	3773	806	4.69	0.00	15.99	4.03	4.68
+15 (+59)	15796	3980	4628	816	4.55	0.00	19.35	4.87	5.67

TEST CONDITIONS: @208V50Hz			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)	7759	1955	2274	888	5.14	0.00	8.76	2.21	2.57
+5 (+41)	9472	2387	2776	932	5.30	0.00	10.14	2.56	2.97
+10 (+50)	11599	2923	3399	976	5.45	0.00	11.85	2.99	3.47
+15 (+59)	14139	3563	4143	1022	5.58	0.00	13.86	3.49	4.06

TEST CONDITIONS: @208V50Hz			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)	6660	1678	1951	982	5.35	0.00	6.77	1.71	1.98
+5 (+41)	8345	2103	2445	1069	5.80	0.00	7.81	1.97	2.29
+10 (+50)	10264	2587	3008	1154	6.24	0.00	8.91	2.25	2.61
+15 (+59)	12418	3129	3639	1236	6.66	0.00	10.03	2.53	2.94

TEST CONDITIONS: @208V60Hz			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)	10844	2733	3177	939	5.05	0.00	11.53	2.91	3.38
+5 (+41)	12513	3153	3667	941	4.92	0.00	13.32	3.36	3.90
+10 (+50)	15254	3844	4470	947	4.78	0.00	16.12	4.06	4.72
+15 (+59)	19064	4804	5586	958	4.64	0.00	19.88	5.01	5.83

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@208V60Hz		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]
0	(+32)	9345	2355	2738	1045	5.25	0.00	8.98	2.26	2.63
+5	(+41)	11170	2815	3273	1093	5.41	0.00	10.18	2.57	2.98
+10	(+50)	13668	3444	4005	1143	5.56	0.00	11.92	3.00	3.49
+15	(+59)	16839	4243	4934	1193	5.69	0.00	14.15	3.57	4.15

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@208V60Hz		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]
0	(+32)	7792	1964	2283	1155	5.46	0.00	6.73	1.70	1.97
+5	(+41)	9763	2460	2861	1252	5.92	0.00	7.81	1.97	2.29
+10	(+50)	12008	3026	3519	1346	6.36	0.00	8.94	2.25	2.62
+15	(+59)	14530	3661	4257	1438	6.79	0.00	10.09	2.54	2.96

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		