

### COMPRESSOR DEFINITION

Designation	<b>T 6217Z</b>
Nominal Voltage/Frequency	<b>115 V 60 Hz</b>
Engineering Number	<b>206TG23</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115 / 60	[ V / Hz ]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	CSIR		
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)	16.2	[kgf/cm <sup>2</sup> ] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm <sup>2</sup> ] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	3/4+	[hp]
2 Displacement	22.37	[cm <sup>3</sup> ] (1.365 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	20.830	
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)	16.33	[kg] (36.00 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (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	Current Relay	
2.1 Starting device	MTRPH-73-31	
3 Start capacitor	189-227(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0826/20	
6 Start winding resistance	4.25	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.70	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	51.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	11.00	[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]
6529	1645	1913	900	10.95	42.33	7.25	1.83	2.12

### 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]
-15	(+ 5)	2977	750	872	515	7.93	16.10	5.78	1.46	1.69
-10	(+14)	3824	964	1120	592	8.46	20.75	6.46	1.63	1.89
-5	(+23)	4930	1242	1445	655	8.90	26.85	7.52	1.89	2.20
0	(+32)	6296	1587	1845	704	9.25	34.44	8.95	2.25	2.62
+5	(+41)	7920	1996	2321	738	9.52	43.57	10.75	2.71	3.15
+10	(+50)	9803	2470	2873	758	9.71	54.28	12.92	3.26	3.79

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]
-15	(+ 5)	2510	633	735	518	7.98	14.65	4.85	1.22	1.42
-10	(+14)	3291	829	964	613	8.64	19.30	5.38	1.36	1.58
-5	(+23)	4291	1081	1257	693	9.22	25.27	6.18	1.56	1.81
0	(+32)	5509	1388	1614	757	9.71	32.60	7.26	1.83	2.13
+5	(+41)	6944	1750	2035	806	10.12	41.33	8.62	2.17	2.53
+10	(+50)	8597	2167	2519	839	10.44	51.51	10.26	2.58	3.01

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]
-15	(+ 5)	2026	511	594	521	8.03	12.92	3.88	0.98	1.14
-10	(+14)	2736	689	802	635	8.83	17.50	4.32	1.09	1.27
-5	(+23)	3623	913	1062	732	9.55	23.27	4.95	1.25	1.45
0	(+32)	4686	1181	1373	813	10.18	30.26	5.76	1.45	1.69
+5	(+41)	5927	1494	1737	877	10.74	38.53	6.76	1.70	1.98
+10	(+50)	7344	1851	2152	924	11.21	48.10	7.94	2.00	2.33

### E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@100V60Hz		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]
-15	(+ 5)	3507	884	1028	622	8.10	18.98	5.63	1.42	1.65
-10	(+14)	4506	1136	1320	706	8.63	24.45	6.39	1.61	1.87
-5	(+23)	5810	1464	1703	774	9.08	31.64	7.50	1.89	2.20
0	(+32)	7420	1870	2174	828	9.44	40.59	8.97	2.26	2.63
+5	(+41)	9335	2352	2735	866	9.72	51.35	10.79	2.72	3.16
+10	(+50)	11555	2912	3386	890	9.91	63.98	12.97	3.27	3.80

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@100V60Hz		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]
-15	(+ 5)	2949	743	864	629	8.14	17.22	4.70	1.18	1.38
-10	(+14)	3867	975	1133	733	8.82	22.68	5.28	1.33	1.55
-5	(+23)	5042	1271	1477	820	9.40	29.69	6.14	1.55	1.80
0	(+32)	6473	1631	1897	891	9.91	38.31	7.25	1.83	2.12
+5	(+41)	8159	2056	2391	946	10.32	48.56	8.63	2.17	2.53
+10	(+50)	10102	2546	2960	984	10.66	60.52	10.28	2.59	3.01

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@100V60Hz		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]
-15	(+ 5)	2371	597	695	637	8.19	15.11	3.71	0.94	1.09
-10	(+14)	3201	807	938	761	9.01	20.48	4.21	1.06	1.24
-5	(+23)	4239	1068	1242	868	9.74	27.23	4.89	1.23	1.43
0	(+32)	5484	1382	1607	957	10.39	35.41	5.73	1.44	1.68
+5	(+41)	6935	1748	2032	1028	10.96	45.08	6.75	1.70	1.98
+10	(+50)	8593	2165	2518	1082	11.44	56.28	7.94	2.00	2.33

### 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	Slanted 42°		
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	Straight		
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	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		