

COMPRESSOR DEFINITION

Designation	T 6217Z
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	206TD23

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	208-230 / 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 ²] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4+	[hp]
2 Displacement	22.37	[cm ³] (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)	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	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0072	
3 Start capacitor	88-108(330)	[μF(VAC minimum)]
4 Run capacitor	-	[μF(VAC minimum)]
5 Motor protection	T0728/20	
6 Start winding resistance	9.00	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.30	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	30.00	[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)	6.00	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @200V50Hz			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]
6500	1638	1905	930	5.90	42.14	6.99	1.76	2.05

E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V50Hz			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	568	4.40	16.10	5.24	1.32	1.53
-10	(+14)	3824	964	1120	644	4.69	20.75	5.94	1.50	1.74
-5	(+23)	4930	1242	1445	707	4.93	26.85	6.97	1.76	2.04
0	(+32)	6296	1587	1845	756	5.13	34.44	8.33	2.10	2.44
+5	(+41)	7920	1996	2321	791	5.28	43.57	10.02	2.53	2.94
+10	(+50)	9803	2470	2873	813	5.39	54.28	12.05	3.04	3.53

TEST CONDITIONS: @200V50Hz			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	575	4.43	14.65	4.37	1.10	1.28
-10	(+14)	3291	829	964	669	4.79	19.30	4.92	1.24	1.44
-5	(+23)	4291	1081	1257	749	5.11	25.27	5.72	1.44	1.68
0	(+32)	5509	1388	1614	814	5.38	32.60	6.76	1.70	1.98
+5	(+41)	6944	1750	2035	863	5.61	41.33	8.05	2.03	2.36
+10	(+50)	8597	2167	2519	898	5.79	51.51	9.58	2.41	2.81

TEST CONDITIONS: @200V50Hz			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	581	4.45	12.92	3.48	0.88	1.02
-10	(+14)	2736	689	802	695	4.90	17.50	3.95	0.99	1.16
-5	(+23)	3623	913	1062	792	5.30	23.27	4.57	1.15	1.34
0	(+32)	4686	1181	1373	874	5.65	30.26	5.36	1.35	1.57
+5	(+41)	5927	1494	1737	939	5.96	38.53	6.31	1.59	1.85
+10	(+50)	7344	1851	2152	988	6.22	48.10	7.43	1.87	2.18

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@200V60Hz		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	664	4.49	18.98	5.28	1.33	1.55
-10	(+14)	4506	1136	1320	754	4.79	24.45	5.98	1.51	1.75
-5	(+23)	5810	1464	1703	827	5.03	31.64	7.02	1.77	2.06
0	(+32)	7420	1870	2174	885	5.24	40.59	8.39	2.11	2.46
+5	(+41)	9335	2352	2735	926	5.39	51.35	10.09	2.54	2.96
+10	(+50)	11555	2912	3386	951	5.50	63.98	12.14	3.06	3.56

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@200V60Hz		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	672	4.52	17.22	4.40	1.11	1.29
-10	(+14)	3867	975	1133	783	4.89	22.68	4.95	1.25	1.45
-5	(+23)	5042	1271	1477	876	5.22	29.69	5.74	1.45	1.68
0	(+32)	6473	1631	1897	952	5.50	38.31	6.79	1.71	1.99
+5	(+41)	8159	2056	2391	1010	5.73	48.56	8.08	2.04	2.37
+10	(+50)	10102	2546	2960	1051	5.91	60.52	9.62	2.42	2.82

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@200V60Hz		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	680	4.54	15.11	3.48	0.88	1.02
-10	(+14)	3201	807	938	813	5.00	20.48	3.95	0.99	1.16
-5	(+23)	4239	1068	1242	927	5.40	27.23	4.58	1.15	1.34
0	(+32)	5484	1382	1607	1022	5.76	35.41	5.37	1.35	1.57
+5	(+41)	6935	1748	2032	1098	6.08	45.08	6.32	1.59	1.85
+10	(+50)	8593	2165	2518	1156	6.34	56.28	7.43	1.87	2.18

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		