

COMPRESSOR DEFINITION

Designation	T 6215Z
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	206ZG23

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 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	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	ESTER / ISO22	
4 Weight (with oil charge)	14.6	[kg] (32.19 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	Current Relay	
2.1 Starting device	MTRPH-70-31	
3 Start capacitor	189-227(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0824/20	
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)	10.20	[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]
5710	1439	1673	800	8.90	37.02	7.14	1.80	2.09

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)	2555	644	749	475	8.73	13.83	5.36	1.35	1.57
-10	(+14)	3282	827	962	492	8.71	17.81	6.72	1.69	1.97
-5	(+23)	4249	1071	1245	528	8.83	23.14	8.04	2.03	2.36
0	(+32)	5456	1375	1599	585	9.07	29.85	9.29	2.34	2.72
+5	(+41)	6904	1740	2023	663	9.44	37.98	10.39	2.62	3.04
+10	(+50)	8590	2165	2517	762	9.95	47.57	11.30	2.85	3.31

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)	2192	552	642	452	8.45	12.79	4.83	1.22	1.42
-10	(+14)	2876	725	843	502	8.63	16.87	5.73	1.45	1.68
-5	(+23)	3750	945	1099	561	8.90	22.09	6.69	1.69	1.96
0	(+32)	4813	1213	1410	631	9.27	28.49	7.65	1.93	2.24
+5	(+41)	6067	1529	1778	711	9.72	36.11	8.55	2.15	2.50
+10	(+50)	7511	1893	2201	802	10.26	44.99	9.34	2.35	2.74

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)	1818	458	533	427	8.15	11.59	4.28	1.08	1.25
-10	(+14)	2452	618	718	512	8.54	15.68	4.77	1.20	1.40
-5	(+23)	3226	813	945	595	8.98	20.72	5.40	1.36	1.58
0	(+32)	4141	1044	1213	679	9.47	26.74	6.10	1.54	1.79
+5	(+41)	5196	1309	1523	762	10.00	33.78	6.84	1.72	2.01
+10	(+50)	6391	1610	1873	845	10.59	41.86	7.56	1.90	2.21

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)	2985	752	875	561	8.86	16.15	5.31	1.34	1.56
-10	(+14)	3840	968	1125	581	8.87	20.84	6.65	1.68	1.95
-5	(+23)	4981	1255	1459	624	9.00	27.12	7.98	2.01	2.34
0	(+32)	6400	1613	1875	688	9.26	35.01	9.26	2.33	2.71
+5	(+41)	8091	2039	2371	775	9.64	44.51	10.42	2.63	3.05
+10	(+50)	10048	2532	2944	883	10.15	55.64	11.41	2.88	3.34

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)	2566	647	752	540	8.61	14.97	4.74	1.19	1.39
-10	(+14)	3361	847	985	597	8.81	19.72	5.64	1.42	1.65
-5	(+23)	4382	1104	1284	665	9.09	25.82	6.60	1.66	1.93
0	(+32)	5625	1417	1648	744	9.45	33.29	7.58	1.91	2.22
+5	(+41)	7082	1785	2075	834	9.91	42.15	8.50	2.14	2.49
+10	(+50)	8748	2204	2563	935	10.47	52.40	9.32	2.35	2.73

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)	2135	538	626	519	8.32	13.60	4.14	1.04	1.21
-10	(+14)	2863	722	839	612	8.71	18.32	4.65	1.17	1.36
-5	(+23)	3761	948	1102	706	9.16	24.16	5.31	1.34	1.55
0	(+32)	4822	1215	1413	800	9.66	31.13	6.03	1.52	1.77
+5	(+41)	6041	1522	1770	894	10.21	39.26	6.78	1.71	1.99
+10	(+50)	7410	1867	2171	987	10.82	48.54	7.50	1.89	2.20

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		