

### COMPRESSOR DEFINITION

Designation	T 6215Z
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	206ZD23

### 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 <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	20.44	[cm <sup>3</sup> ] (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)	14.7	[kg] (32.41 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	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0072	
3 Start capacitor	64-77(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MRT20AJN-69	
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)	5.36	[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]
7080	1784	2075	970	5.70	45.90	7.30	1.84	2.14

### 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]
-15	(+5)	2719	685	797	487	4.50	14.71	5.56	1.40	1.63
-10	(+14)	3492	880	1023	505	4.50	18.95	6.96	1.75	2.04
-5	(+23)	4520	1139	1325	541	4.56	24.61	8.35	2.11	2.45
0	(+32)	5804	1463	1701	597	4.68	31.75	9.69	2.44	2.84
+5	(+41)	7344	1851	2152	672	4.87	40.40	10.91	2.75	3.20
+10	(+50)	9139	2303	2678	766	5.13	50.60	11.96	3.01	3.50

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]
-15	(+5)	2333	588	683	469	4.36	13.61	4.96	1.25	1.45
-10	(+14)	3060	771	897	518	4.45	17.95	5.91	1.49	1.73
-5	(+23)	3989	1005	1169	576	4.59	23.50	6.93	1.75	2.03
0	(+32)	5121	1290	1500	644	4.78	30.31	7.97	2.01	2.33
+5	(+41)	6455	1627	1891	722	5.01	38.42	8.96	2.26	2.62
+10	(+50)	7991	2014	2341	809	5.30	47.86	9.85	2.48	2.89

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]
-15	(+5)	1934	487	567	451	4.21	12.33	4.32	1.09	1.26
-10	(+14)	2609	657	764	532	4.41	16.68	4.88	1.23	1.43
-5	(+23)	3433	865	1006	613	4.63	22.04	5.58	1.41	1.63
0	(+32)	4406	1110	1291	693	4.88	28.45	6.36	1.60	1.86
+5	(+41)	5528	1393	1620	773	5.16	35.93	7.18	1.81	2.10
+10	(+50)	6799	1713	1992	853	5.46	44.54	7.96	2.01	2.33

### E - PERFORMANCE - CURVES

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]
-15 (+5)	3181	802	932	570	4.60	17.21	5.57	1.40	1.63	
-10 (+14)	4085	1030	1197	590	4.59	22.17	6.96	1.75	2.04	
-5 (+23)	5289	1333	1550	633	4.65	28.80	8.35	2.10	2.45	
0 (+32)	6791	1711	1990	699	4.78	37.15	9.68	2.44	2.84	
+5 (+41)	8592	2165	2518	786	4.97	47.27	10.90	2.75	3.20	
+10 (+50)	10693	2695	3133	896	5.24	59.21	11.96	3.01	3.51	

TEST CONDITIONS: @208V60Hz		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)	2729	688	800	549	4.45	15.92	4.96	1.25	1.45	
-10 (+14)	3580	902	1049	606	4.54	21.00	5.91	1.49	1.73	
-5 (+23)	4667	1176	1367	674	4.69	27.49	6.93	1.75	2.03	
0 (+32)	5991	1510	1755	754	4.88	35.46	7.96	2.01	2.33	
+5 (+41)	7552	1903	2213	844	5.12	44.95	8.96	2.26	2.63	
+10 (+50)	9350	2356	2740	946	5.40	56.00	9.86	2.48	2.89	

TEST CONDITIONS: @208V60Hz		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)	2262	570	663	527	4.29	14.42	4.32	1.09	1.27	
-10 (+14)	3052	769	894	622	4.50	19.52	4.88	1.23	1.43	
-5 (+23)	4016	1012	1177	717	4.73	25.79	5.58	1.41	1.63	
0 (+32)	5154	1299	1510	811	4.99	33.28	6.36	1.60	1.86	
+5 (+41)	6467	1630	1895	905	5.27	42.04	7.17	1.81	2.10	
+10 (+50)	7955	2005	2331	998	5.58	52.11	7.96	2.01	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		