



## COMPRESSOR TECHNICAL DATA

### COMPRESSOR DEFINITION

Designation	NT 6215Z
Nominal Voltage/Frequency	220 V 50 Hz
Engineering Number	211AC06

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	220 / 50	[ 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	1/2+	[hp]
2 Displacement	17.39	[cm <sup>3</sup> ] (1.061 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	19.030	
3 Lubricant charge	450	[ml] (15.22 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 <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRP-0048	
3 Start capacitor	64-77(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0634/G6	
6 Start winding resistance	19.25	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.00	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	20.70	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IMQ	



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### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
5530	1394	1620	707	4.41	35.86	7.82	1.97	2.29

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		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)	2733	689	801	418	3.57	14.79	6.52	1.64	1.91
-10	(+14)	3435	866	1007	455	3.65	18.64	7.56	1.91	2.22
-5	(+23)	4329	1091	1268	489	3.74	23.57	8.87	2.23	2.60
0	(+32)	5401	1361	1583	520	3.83	29.55	10.40	2.62	3.05
+5	(+41)	6639	1673	1945	548	3.91	36.53	12.11	3.05	3.55
+10	(+50)	8032	2024	2354	574	4.00	44.47	13.97	3.52	4.09

TEST CONDITIONS: @220V50Hz		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)	2312	583	678	445	3.62	13.51	5.21	1.31	1.53
-10	(+14)	2968	748	870	491	3.73	17.40	6.04	1.52	1.77
-5	(+23)	3785	954	1109	535	3.85	22.29	7.06	1.78	2.07
0	(+32)	4751	1197	1392	578	3.98	28.12	8.21	2.07	2.41
+5	(+41)	5855	1475	1716	619	4.11	34.85	9.46	2.38	2.77
+10	(+50)	7084	1785	2076	660	4.24	42.44	10.76	2.71	3.15

TEST CONDITIONS: @220V50Hz		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)	1837	463	538	466	3.68	11.71	3.94	0.99	1.16
-10	(+14)	2452	618	718	521	3.82	15.68	4.70	1.19	1.38
-5	(+23)	3200	806	938	576	3.97	20.55	5.56	1.40	1.63
0	(+32)	4068	1025	1192	630	4.14	26.27	6.46	1.63	1.89
+5	(+41)	5044	1271	1478	684	4.33	32.79	7.38	1.86	2.16
+10	(+50)	6116	1541	1792	738	4.52	40.06	8.27	2.08	2.42



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### 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	6.42 +0.08/+0.00	[mm]	(0.253" +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		