

### COMPRESSOR DEFINITION

Designation	NT 6215ZV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	211FD04

### 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	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 - 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	9660C-3018-163	
3 Start capacitor	64-77(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0883/J5	
6 Start winding resistance	7.55	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.52	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	20.80	[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)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ARIHBP</b> <b>Fan</b>		Evaporating temperature (Condensing temperature		<b>7.2°C (44.96°F)</b> <b>54.4°C (129.92°F)</b>	
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]
5577	1405	1634	852	5.03	43.77	6.55	1.65	1.92

### E - PERFORMANCE - CURVES

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ARI18</b> <b>Fan</b>		(Condensing temperature <b>35°C (+95°F)</b> )					
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)	2868	723	840	458	3.41	17.93	6.26	1.58	1.84
-10	(+14)	3673	926	1076	509	3.60	23.10	7.21	1.82	2.11
-5	(+23)	4621	1164	1354	562	3.80	29.21	8.22	2.07	2.41
0	(+32)	5710	1439	1673	617	4.02	36.32	9.25	2.33	2.71
+5	(+41)	6942	1749	2034	674	4.25	44.50	10.30	2.60	3.02
+10	(+50)	8315	2096	2437	732	4.49	53.80	11.36	2.86	3.33

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ARI18</b> <b>Fan</b>		(Condensing temperature <b>45°C (+113°F)</b> )					
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)	2452	618	718	489	3.51	16.83	5.01	1.26	1.47
-10	(+14)	3135	790	919	550	3.74	21.63	5.70	1.44	1.67
-5	(+23)	3947	995	1157	613	3.99	27.39	6.44	1.62	1.89
0	(+32)	4889	1232	1433	679	4.27	34.17	7.21	1.82	2.11
+5	(+41)	5961	1502	1747	746	4.56	42.02	7.99	2.01	2.34
+10	(+50)	7162	1805	2099	816	4.87	51.01	8.78	2.21	2.57

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ARI18</b> <b>Fan</b>		(Condensing temperature <b>55°C (+131°F)</b> )					
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)	2098	529	615	524	3.64	16.02	4.00	1.01	1.17
-10	(+14)	2679	675	785	594	3.91	20.57	4.51	1.14	1.32
-5	(+23)	3376	851	989	666	4.21	26.10	5.07	1.28	1.49
0	(+32)	4191	1056	1228	740	4.53	32.65	5.66	1.43	1.66
+5	(+41)	5122	1291	1501	817	4.87	40.29	6.27	1.58	1.84
+10	(+50)	6170	1555	1808	896	5.24	49.09	6.88	1.73	2.02

### 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	Vertical		
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	Vertical		
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		