

COMPRESSOR DEFINITION

| | |
|---------------------------|-------------|
| Designation | NT 6217ZV |
| Nominal Voltage/Frequency | 115 V 60 Hz |
| Engineering Number | 212IG02 |

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 | CSCR | | |
| 6 Starting torque | HST - Hight 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 temperature | | | |
| 9.1 Operating | 14.2 | [kgf/cm ²] (202 psig) | / °C - °F |
| 9.2 Peak | 15.9 | [kgf/cm ²] (226 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 | 450 | [ml] (15.22 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 17.5 | [kg] (38.58 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELETRICAL DATA

| | | |
|--|-------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 115 V 60 Hz 1~ (Single phase) | |
| 2 Starting device type | Voltage Relay | |
| 2.1 Starting device | RVA2AG3C-117 | |
| 3 Start capacitor | 243-292(250) | [µF(VAC minimum)] |
| 4 Run capacitor | 35(400) | [µF(VAC minimum)] |
| 5 Motor protection | UP14NA5345-T | |
| 6 Start winding resistance | 2.78 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 0.57 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 50.00 | [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) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | UL | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|------|--------------------------------|----------------------------------|--|---------------------------|--------------------------------------|-------|
| TEST CONDITIONS: @115V60Hz | | | ARIHBP 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] |
| 6864 | 1730 | 2011 | 913 | 8.32 | 53.87 | 7.52 | 1.90 | 2.20 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | ARI18 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) | 3602 | 908 | 1055 | 505 | 4.76 | 22.52 | 7.13 | 1.80 | 2.09 |
| -10 | (+14) | 4574 | 1153 | 1340 | 556 | 5.18 | 28.78 | 8.23 | 2.07 | 2.41 |
| -5 | (+23) | 5669 | 1429 | 1661 | 609 | 5.64 | 35.84 | 9.31 | 2.35 | 2.73 |
| 0 | (+32) | 6927 | 1746 | 2030 | 665 | 6.13 | 44.04 | 10.41 | 2.62 | 3.05 |
| +5 | (+41) | 8386 | 2113 | 2457 | 724 | 6.64 | 53.74 | 11.57 | 2.92 | 3.39 |
| +10 | (+50) | 10085 | 2541 | 2955 | 786 | 7.16 | 65.27 | 12.83 | 3.23 | 3.76 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|---|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | ARI18 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) | 3008 | 758 | 881 | 543 | 5.07 | 20.63 | 5.53 | 1.39 | 1.62 |
| -10 | (+14) | 3912 | 986 | 1146 | 607 | 5.62 | 27.00 | 6.44 | 1.62 | 1.89 |
| -5 | (+23) | 4902 | 1235 | 1436 | 671 | 6.18 | 34.03 | 7.31 | 1.84 | 2.14 |
| 0 | (+32) | 6018 | 1517 | 1763 | 736 | 6.75 | 42.07 | 8.18 | 2.06 | 2.40 |
| +5 | (+41) | 7299 | 1839 | 2139 | 802 | 7.33 | 51.46 | 9.10 | 2.29 | 2.67 |
| +10 | (+50) | 8784 | 2214 | 2574 | 868 | 7.90 | 62.55 | 10.11 | 2.55 | 2.96 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|---|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | ARI18 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) | 2423 | 611 | 710 | 568 | 5.29 | 18.52 | 4.28 | 1.08 | 1.25 |
| -10 | (+14) | 3268 | 823 | 957 | 649 | 6.00 | 25.08 | 5.02 | 1.27 | 1.47 |
| -5 | (+23) | 4162 | 1049 | 1220 | 728 | 6.71 | 32.16 | 5.71 | 1.44 | 1.67 |
| 0 | (+32) | 5146 | 1297 | 1508 | 806 | 7.40 | 40.10 | 6.39 | 1.61 | 1.87 |
| +5 | (+41) | 6259 | 1577 | 1834 | 882 | 8.08 | 49.26 | 7.10 | 1.79 | 2.08 |
| +10 | (+50) | 7539 | 1900 | 2209 | 957 | 8.73 | 59.97 | 7.88 | 1.99 | 2.31 |

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 | | |