

COMPRESSOR DEFINITION

| | |
|---------------------------|--------------------|
| Designation | T 6222GK |
| Nominal Voltage/Frequency | 115 V 60 Hz |
| Engineering Number | 936ZG80 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|--|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-404A | | |
| 3 Nominal voltage and frequency | 115 / 60 | [V / Hz] | |
| 4 Application type | Medium Back Pressure (Commercial Compressors) | | |
| 4.1 Evaporating temperature range | -20°C to 0°C | (-4°F to 32°F) | |
| 5 Motor type | CSCR | | |
| 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) | 25.7 | [kgf/cm ²] (365 psig) | / °C - °F |
| 9.2 Peak (gauge) | 28.7 | [kgf/cm ²] (408 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|--|
| 1 Commercial designation | 1 | [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) | 17 | [kg] (37.48 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 | Voltage Relay | |
| 2.1 Starting device | 3ARR3B3S3 | |
| 3 Start capacitor | 189-227(165) | [µF(VAC minimum)] |
| 4 Run capacitor | 25(450) | [µF(VAC minimum)] |
| 5 Motor protection | CRA39007-3031 | |
| 6 Start winding resistance | 3.94 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 0.46 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 71.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | 15.00 | [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: @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] |
| 9637 | 2429 | 2824 | 1426 | 15.62 | 79.34 | 6.76 | 1.70 | 1.98 |

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] |
| -20 | (- 4) | 4202 | 1059 | 1231 | 663 | 7.52 | 26.67 | 6.34 | 1.60 | 1.86 |
| -15 | (+ 5) | 5586 | 1408 | 1637 | 736 | 8.06 | 35.66 | 7.59 | 1.91 | 2.22 |
| -10 | (+14) | 7116 | 1793 | 2085 | 812 | 8.72 | 45.71 | 8.76 | 2.21 | 2.57 |
| -5 | (+23) | 8792 | 2216 | 2576 | 896 | 9.46 | 56.89 | 9.80 | 2.47 | 2.87 |
| 0 | (+32) | 10614 | 2675 | 3110 | 994 | 10.26 | 69.27 | 10.68 | 2.69 | 3.13 |
| +5 | (+41) | 12581 | 3170 | 3687 | 1110 | 11.09 | 82.93 | 11.36 | 2.86 | 3.33 |
| +10 | (+50) | 14693 | 3703 | 4305 | 1248 | 11.92 | 97.92 | 11.80 | 2.97 | 3.46 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| 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] |
| -20 | (- 4) | 3581 | 902 | 1049 | 697 | 8.03 | 25.09 | 5.13 | 1.29 | 1.50 |
| -15 | (+ 5) | 4738 | 1194 | 1388 | 800 | 8.64 | 33.39 | 5.93 | 1.49 | 1.74 |
| -10 | (+14) | 6039 | 1522 | 1770 | 901 | 9.37 | 42.85 | 6.71 | 1.69 | 1.97 |
| -5 | (+23) | 7483 | 1886 | 2193 | 1006 | 10.20 | 53.54 | 7.45 | 1.88 | 2.18 |
| 0 | (+32) | 9069 | 2285 | 2657 | 1119 | 11.08 | 65.53 | 8.09 | 2.04 | 2.37 |
| +5 | (+41) | 10798 | 2721 | 3164 | 1246 | 12.00 | 78.88 | 8.61 | 2.17 | 2.52 |
| +10 | (+50) | 12668 | 3192 | 3712 | 1392 | 12.93 | 93.68 | 8.95 | 2.26 | 2.62 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| 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] |
| -20 | (- 4) | 2934 | 739 | 860 | 731 | 8.55 | 23.07 | 4.02 | 1.01 | 1.18 |
| -15 | (+ 5) | 3856 | 972 | 1130 | 863 | 9.22 | 30.53 | 4.46 | 1.12 | 1.31 |
| -10 | (+14) | 4917 | 1239 | 1441 | 989 | 10.02 | 39.24 | 4.97 | 1.25 | 1.46 |
| -5 | (+23) | 6119 | 1542 | 1793 | 1115 | 10.92 | 49.28 | 5.49 | 1.38 | 1.61 |
| 0 | (+32) | 7460 | 1880 | 2186 | 1244 | 11.89 | 60.72 | 6.00 | 1.51 | 1.76 |
| +5 | (+41) | 8940 | 2253 | 2620 | 1383 | 12.90 | 73.63 | 6.45 | 1.62 | 1.89 |
| +10 | (+50) | 10560 | 2661 | 3094 | 1536 | 13.92 | 88.08 | 6.80 | 1.71 | 1.99 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @100V60Hz | | 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] |
| -20 | (- 4) | 4916 | 1239 | 1440 | 775 | 8.80 | 31.20 | 6.35 | 1.60 | 1.86 |
| -15 | (+ 5) | 6535 | 1647 | 1915 | 861 | 9.44 | 41.72 | 7.59 | 1.91 | 2.23 |
| -10 | (+14) | 8326 | 2098 | 2440 | 950 | 10.20 | 53.48 | 8.76 | 2.21 | 2.57 |
| -5 | (+23) | 10287 | 2592 | 3014 | 1049 | 11.07 | 66.56 | 9.80 | 2.47 | 2.87 |
| 0 | (+32) | 12419 | 3130 | 3639 | 1163 | 12.01 | 81.06 | 10.68 | 2.69 | 3.13 |
| +5 | (+41) | 14721 | 3710 | 4313 | 1297 | 12.99 | 97.03 | 11.37 | 2.87 | 3.33 |
| +10 | (+50) | 17192 | 4332 | 5038 | 1455 | 13.98 | 114.58 | 11.83 | 2.98 | 3.47 |

| TEST CONDITIONS: @100V60Hz | | 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] |
| -20 | (- 4) | 4190 | 1056 | 1228 | 815 | 9.40 | 29.36 | 5.13 | 1.29 | 1.50 |
| -15 | (+ 5) | 5544 | 1397 | 1625 | 935 | 10.11 | 39.07 | 5.93 | 1.49 | 1.74 |
| -10 | (+14) | 7066 | 1781 | 2070 | 1054 | 10.96 | 50.13 | 6.71 | 1.69 | 1.97 |
| -5 | (+23) | 8755 | 2206 | 2565 | 1177 | 11.92 | 62.64 | 7.45 | 1.88 | 2.18 |
| 0 | (+32) | 10611 | 2674 | 3109 | 1309 | 12.96 | 76.67 | 8.10 | 2.04 | 2.37 |
| +5 | (+41) | 12633 | 3184 | 3702 | 1456 | 14.04 | 92.29 | 8.62 | 2.17 | 2.53 |
| +10 | (+50) | 14821 | 3735 | 4343 | 1623 | 15.14 | 109.60 | 8.98 | 2.26 | 2.63 |

| TEST CONDITIONS: @100V60Hz | | 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] |
| -20 | (- 4) | 3433 | 865 | 1006 | 855 | 10.00 | 27.00 | 4.02 | 1.01 | 1.18 |
| -15 | (+ 5) | 4511 | 1137 | 1322 | 1010 | 10.79 | 35.71 | 4.46 | 1.12 | 1.31 |
| -10 | (+14) | 5753 | 1450 | 1686 | 1157 | 11.73 | 45.91 | 4.97 | 1.25 | 1.46 |
| -5 | (+23) | 7159 | 1804 | 2098 | 1304 | 12.77 | 57.66 | 5.49 | 1.38 | 1.61 |
| 0 | (+32) | 8728 | 2199 | 2558 | 1455 | 13.91 | 71.04 | 6.00 | 1.51 | 1.76 |
| +5 | (+41) | 10460 | 2636 | 3065 | 1616 | 15.10 | 86.15 | 6.46 | 1.63 | 1.89 |
| +10 | (+50) | 12354 | 3113 | 3620 | 1792 | 16.31 | 103.05 | 6.82 | 1.72 | 2.00 |

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 | 9.6 +0.07/+0.00 | [mm] | (0.378" +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 | | |