

COMPRESSOR DEFINITION

| | |
|---------------------------|--------------------|
| Designation | NE 6210GK |
| Nominal Voltage/Frequency | 115 V 60 Hz |
| Engineering Number | 951NG71 |

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 | 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) | 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 | 1/2- | [hp] |
| 2 Displacement | 8.77 | [cm ³] (0.535 cu.in) |
| 2.1 Bore [mm] | 26.497 | |
| 2.2 Stroke [mm] | 15.920 | |
| 3 Lubricant charge | 350 | [ml] (11.84 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 10.4 | [kg] (22.93 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 | Current Relay | |
| 2.1 Starting device | MTRPH-63 | |
| 3 Start capacitor | 145-175(165) | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | T0736/G9 | |
| 6 Start winding resistance | 7.30 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 1.20 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 29.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | 6.00 | [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: @115V60Hz | | | 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] |
| 5030 | 1268 | 1474 | 736 | 8.00 | 41.41 | 6.83 | 1.72 | 2.00 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|---------------------------------------|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | 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) | 2292 | 578 | 672 | 416 | 5.53 | 14.55 | 5.51 | 1.39 | 1.61 |
| -15 | (+ 5) | 2883 | 726 | 845 | 453 | 5.79 | 18.40 | 6.37 | 1.61 | 1.87 |
| -10 | (+14) | 3596 | 906 | 1054 | 488 | 6.04 | 23.10 | 7.37 | 1.86 | 2.16 |
| -5 | (+23) | 4433 | 1117 | 1299 | 523 | 6.30 | 28.68 | 8.48 | 2.14 | 2.48 |
| 0 | (+32) | 5392 | 1359 | 1580 | 556 | 6.56 | 35.20 | 9.70 | 2.44 | 2.84 |
| +5 | (+41) | 6475 | 1632 | 1897 | 588 | 6.82 | 42.69 | 11.02 | 2.78 | 3.23 |
| +10 | (+50) | 7682 | 1936 | 2251 | 618 | 7.10 | 51.19 | 12.42 | 3.13 | 3.64 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | 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) | 1843 | 464 | 540 | 403 | 5.45 | 12.91 | 4.58 | 1.15 | 1.34 |
| -15 | (+ 5) | 2385 | 601 | 699 | 456 | 5.82 | 16.81 | 5.23 | 1.32 | 1.53 |
| -10 | (+14) | 3029 | 763 | 888 | 507 | 6.19 | 21.50 | 5.97 | 1.50 | 1.75 |
| -5 | (+23) | 3776 | 952 | 1107 | 556 | 6.56 | 27.02 | 6.79 | 1.71 | 1.99 |
| 0 | (+32) | 4626 | 1166 | 1355 | 603 | 6.93 | 33.41 | 7.68 | 1.93 | 2.25 |
| +5 | (+41) | 5578 | 1406 | 1634 | 647 | 7.30 | 40.72 | 8.62 | 2.17 | 2.53 |
| +10 | (+50) | 6633 | 1672 | 1944 | 689 | 7.68 | 48.98 | 9.61 | 2.42 | 2.82 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | 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) | 1376 | 347 | 403 | 389 | 5.36 | 10.82 | 3.54 | 0.89 | 1.04 |
| -15 | (+ 5) | 1866 | 470 | 547 | 459 | 5.85 | 14.77 | 4.06 | 1.02 | 1.19 |
| -10 | (+14) | 2438 | 614 | 714 | 527 | 6.33 | 19.45 | 4.63 | 1.17 | 1.36 |
| -5 | (+23) | 3092 | 779 | 906 | 591 | 6.82 | 24.90 | 5.24 | 1.32 | 1.53 |
| 0 | (+32) | 3828 | 965 | 1122 | 652 | 7.30 | 31.16 | 5.87 | 1.48 | 1.72 |
| +5 | (+41) | 4646 | 1171 | 1361 | 710 | 7.79 | 38.28 | 6.52 | 1.64 | 1.91 |
| +10 | (+50) | 5547 | 1398 | 1625 | 764 | 8.28 | 46.29 | 7.17 | 1.81 | 2.10 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------|------|--------------------------|
| 1 Base plate | Universal | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 8.03 +0.07/+0.00 | [mm] | (0.316" +0.003"/+0.000") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Slanted 42° | | |
| 3.2 DISCHARGE | 6.45 +0.10/+0.00 | [mm] | (0.254" +0.004"/+0.000") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Straight | | |
| 3.3 PROCESS | 6.45 +0.10/+0.00 | [mm] | (0.254" +0.004"/+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 | | |