

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NE 2134GK |
| Nominal Voltage/Frequency | 208-230 V 60 Hz |
| Engineering Number | 953AD71 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|--|-----------------------------------|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-404A | | |
| 3 Nominal voltage and frequency | 208-230 / 60 | [V / Hz] | |
| 4 Application type | Low Back Pressure R404A | | |
| 4.1 Evaporating temperature range | -40°C to -10°C | (-40°F to 14°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 | 12.11 | [cm ³] (0.739 cu.in) |
| 2.1 Bore [mm] | 27.775 | |
| 2.2 Stroke [mm] | 20.000 | |
| 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) | 11.65 | [kg] (25.68 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 | 208-230 V 60 Hz 1~ (Single phase) | |
| 2 Starting device type | Current Relay | |
| 2.1 Starting device | MTRPH-0012 | |
| 3 Start capacitor | 53-64(330) | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | T0659/G9 | |
| 6 Start winding resistance | 22.19 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 3.45 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 21.70 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | 3.20 | [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

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @200V60Hz | | ASHRAE32 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] |
| -40 | (-40) | 618 | 156 | 181 | 227 | 2.03 | 4.15 | 2.69 | 0.68 | 0.79 |
| -35 | (-31) | 1220 | 307 | 358 | 322 | 2.39 | 8.23 | 3.83 | 0.97 | 1.12 |
| -30 | (-22) | 1831 | 462 | 537 | 408 | 2.74 | 12.39 | 4.57 | 1.15 | 1.34 |
| -25 | (-13) | 2460 | 620 | 721 | 482 | 3.05 | 16.72 | 5.10 | 1.28 | 1.49 |
| -20 | (- 4) | 3116 | 785 | 913 | 545 | 3.33 | 21.28 | 5.60 | 1.41 | 1.64 |
| -15 | (+ 5) | 3807 | 959 | 1115 | 595 | 3.58 | 26.15 | 6.28 | 1.58 | 1.84 |
| -10 | (+14) | 4542 | 1144 | 1331 | 632 | 3.80 | 31.42 | 7.32 | 1.84 | 2.14 |

| TEST CONDITIONS: @200V60Hz | | ASHRAE32 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] |
| -40 | (-40) | 299 | 75 | 88 | 167 | 1.91 | 2.00 | 1.71 | 0.43 | 0.50 |
| -35 | (-31) | 849 | 214 | 249 | 262 | 2.22 | 5.71 | 3.20 | 0.81 | 0.94 |
| -30 | (-22) | 1428 | 360 | 418 | 354 | 2.55 | 9.64 | 4.15 | 1.05 | 1.22 |
| -25 | (-13) | 2044 | 515 | 599 | 442 | 2.90 | 13.86 | 4.73 | 1.19 | 1.39 |
| -20 | (- 4) | 2708 | 682 | 793 | 525 | 3.25 | 18.45 | 5.15 | 1.30 | 1.51 |
| -15 | (+ 5) | 3426 | 863 | 1004 | 604 | 3.62 | 23.49 | 5.58 | 1.41 | 1.64 |
| -10 | (+14) | 4209 | 1061 | 1233 | 676 | 4.00 | 29.06 | 6.23 | 1.57 | 1.83 |

| TEST CONDITIONS: @200V60Hz | | ASHRAE32 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] |
| -40 | (-40) | - 5 | - 1 | - 2 | 112 | 1.79 | - 0.04 | 0.11 | 0.03 | 0.03 |
| -35 | (-31) | 492 | 124 | 144 | 204 | 2.05 | 3.30 | 2.11 | 0.53 | 0.62 |
| -30 | (-22) | 1038 | 262 | 304 | 301 | 2.37 | 7.00 | 3.41 | 0.86 | 1.00 |
| -25 | (-13) | 1643 | 414 | 481 | 401 | 2.74 | 11.11 | 4.19 | 1.06 | 1.23 |
| -20 | (- 4) | 2314 | 583 | 678 | 505 | 3.17 | 15.74 | 4.66 | 1.17 | 1.37 |
| -15 | (+ 5) | 3060 | 771 | 897 | 610 | 3.66 | 20.94 | 5.00 | 1.26 | 1.47 |
| -10 | (+14) | 3890 | 980 | 1140 | 717 | 4.20 | 26.80 | 5.40 | 1.36 | 1.58 |

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 | | |