

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | NE K2134GK |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 958AA51 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|--|-----------------------------------|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-404A | | |
| 3 Nominal voltage and frequency | 220-240 / 50 | [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 - 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 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) | 11 | [kg] (24.25 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 | 220-240 V 50 Hz 1 ~ (Single phase) | |
| 2 Starting device type | Current Relay | |
| 2.1 Starting device | MTRP-0029 | |
| 3 Start capacitor | 53-64(330) | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | T0168/G5 | |
| 6 Start winding resistance | 31.70 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 5.18 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 16.10 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | - | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | CCC - IMQ | |

D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: @220V50Hz | | | EN12900LBP_HH Fan | | Evaporating temperature (Condensing temperature | | -35°C (-31°F) 40°C (104°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] |
| 863 | 217 | 253 | 253 | 2.13 | 6.35 | 3.41 | 0.86 | 1.00 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 708 | 178 | 208 | 218 | 2.01 | 4.91 | 3.24 | 0.82 | 0.95 |
| -35 | (-31) | 944 | 238 | 277 | 249 | 2.05 | 6.57 | 3.80 | 0.96 | 1.11 |
| -30 | (-22) | 1247 | 314 | 366 | 281 | 2.12 | 8.71 | 4.45 | 1.12 | 1.30 |
| -25 | (-13) | 1612 | 406 | 472 | 313 | 2.20 | 11.31 | 5.15 | 1.30 | 1.51 |
| -20 | (- 4) | 2034 | 513 | 596 | 346 | 2.30 | 14.34 | 5.88 | 1.48 | 1.72 |
| -15 | (+ 5) | 2507 | 632 | 735 | 379 | 2.41 | 17.78 | 6.61 | 1.67 | 1.94 |
| -10 | (+14) | 3026 | 763 | 887 | 413 | 2.53 | 21.61 | 7.31 | 1.84 | 2.14 |

| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 579 | 146 | 170 | 223 | 1.98 | 4.52 | 2.61 | 0.66 | 0.76 |
| -35 | (-31) | 775 | 195 | 227 | 256 | 2.05 | 6.06 | 3.03 | 0.76 | 0.89 |
| -30 | (-22) | 1032 | 260 | 302 | 291 | 2.14 | 8.10 | 3.54 | 0.89 | 1.04 |
| -25 | (-13) | 1345 | 339 | 394 | 328 | 2.25 | 10.60 | 4.09 | 1.03 | 1.20 |
| -20 | (- 4) | 1708 | 431 | 501 | 366 | 2.38 | 13.55 | 4.66 | 1.17 | 1.37 |
| -15 | (+ 5) | 2117 | 534 | 620 | 406 | 2.52 | 16.92 | 5.22 | 1.32 | 1.53 |
| -10 | (+14) | 2566 | 647 | 752 | 447 | 2.67 | 20.68 | 5.74 | 1.45 | 1.68 |

| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 456 | 115 | 134 | 225 | 1.95 | 4.10 | 2.02 | 0.51 | 0.59 |
| -35 | (-31) | 607 | 153 | 178 | 262 | 2.05 | 5.49 | 2.33 | 0.59 | 0.68 |
| -30 | (-22) | 813 | 205 | 238 | 301 | 2.17 | 7.39 | 2.70 | 0.68 | 0.79 |
| -25 | (-13) | 1068 | 269 | 313 | 344 | 2.31 | 9.76 | 3.11 | 0.78 | 0.91 |
| -20 | (- 4) | 1368 | 345 | 401 | 389 | 2.46 | 12.58 | 3.53 | 0.89 | 1.03 |
| -15 | (+ 5) | 1708 | 430 | 501 | 436 | 2.63 | 15.83 | 3.93 | 0.99 | 1.15 |
| -10 | (+14) | 2082 | 525 | 610 | 486 | 2.81 | 19.49 | 4.28 | 1.08 | 1.25 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|-------------------|------|--------------------------|
| 1 Base plate | European Standard | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 8.1 +0.10/+0.00 | [mm] | (0.319" +0.004"/+0.000") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Slanted 42° | | |
| 3.2 DISCHARGE | 6.1 +0.10/+0.00 | [mm] | (0.240" +0.004"/+0.000") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Straight | | |
| 3.3 PROCESS | 6.1 +0.10/+0.00 | [mm] | (0.240" +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 | | |