



COMPRESSOR TECHNICAL DATA

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | NE K2130GK |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 958BA51 |

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 - 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 | 1/3+ | [hp] |
| 2 Displacement | 7.37 | [cm ³] (0.450 cu.in) |
| 2.1 Bore [mm] | 24.282 | |
| 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) | 10.9 | [kg] (24.03 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 | T0056/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) | - | [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 | |



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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] |
| 715 | 180 | 210 | 212 | 1.92 | 5.26 | 3.37 | 0.85 | 0.99 |

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) | 579 | 146 | 170 | 184 | 1.88 | 4.01 | 3.15 | 0.79 | 0.92 |
| -35 | (-31) | 801 | 202 | 235 | 208 | 1.96 | 5.58 | 3.85 | 0.97 | 1.13 |
| -30 | (-22) | 1065 | 268 | 312 | 235 | 2.04 | 7.44 | 4.53 | 1.14 | 1.33 |
| -25 | (-13) | 1374 | 346 | 403 | 264 | 2.11 | 9.63 | 5.21 | 1.31 | 1.53 |
| -20 | (- 4) | 1732 | 436 | 507 | 292 | 2.19 | 12.20 | 5.93 | 1.49 | 1.74 |
| -15 | (+ 5) | 2140 | 539 | 627 | 319 | 2.26 | 15.17 | 6.70 | 1.69 | 1.96 |
| -10 | (+14) | 2603 | 656 | 763 | 345 | 2.34 | 18.60 | 7.55 | 1.90 | 2.21 |

| 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) | 447 | 113 | 131 | 184 | 1.87 | 3.48 | 2.44 | 0.61 | 0.71 |
| -35 | (-31) | 641 | 162 | 188 | 213 | 1.95 | 5.01 | 3.01 | 0.76 | 0.88 |
| -30 | (-22) | 869 | 219 | 255 | 245 | 2.04 | 6.82 | 3.55 | 0.89 | 1.04 |
| -25 | (-13) | 1133 | 286 | 332 | 279 | 2.13 | 8.94 | 4.06 | 1.02 | 1.19 |
| -20 | (- 4) | 1438 | 362 | 421 | 313 | 2.23 | 11.41 | 4.59 | 1.16 | 1.34 |
| -15 | (+ 5) | 1786 | 450 | 523 | 347 | 2.33 | 14.27 | 5.15 | 1.30 | 1.51 |
| -10 | (+14) | 2181 | 550 | 639 | 379 | 2.44 | 17.56 | 5.76 | 1.45 | 1.69 |

| 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) | 332 | 84 | 97 | 185 | 1.86 | 2.99 | 1.79 | 0.45 | 0.52 |
| -35 | (-31) | 498 | 126 | 146 | 216 | 1.95 | 4.50 | 2.30 | 0.58 | 0.67 |
| -30 | (-22) | 690 | 174 | 202 | 252 | 2.05 | 6.26 | 2.75 | 0.69 | 0.80 |
| -25 | (-13) | 910 | 229 | 267 | 289 | 2.15 | 8.32 | 3.15 | 0.79 | 0.92 |
| -20 | (- 4) | 1163 | 293 | 341 | 328 | 2.27 | 10.70 | 3.55 | 0.89 | 1.04 |
| -15 | (+ 5) | 1451 | 366 | 425 | 368 | 2.40 | 13.46 | 3.95 | 0.99 | 1.16 |
| -10 | (+14) | 1778 | 448 | 521 | 406 | 2.54 | 16.63 | 4.38 | 1.10 | 1.28 |



COMPRESSOR TECHNICAL DATA

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 | | |