

| | |
|---------------------------|------------------------|
| Designation | NEK2150GK |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 959AA51 |

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 | | |
| 4.1 Evaporating temperature range | -40°C to -10°C | | |
| 5 Motor type | CSIR | | |
| 6 Starting torque | HST - High starting torque | | |
| 7 Expansion device | Capillary tube or Expansion valve | | |
| 8 Compressor cooling | Fan cooled | Operating voltage range | |
| | | 50 Hz | 60 Hz |
| 8.1 LBP (32°C Ambient temperature) | - | - | - |
| 8.2 LBP (43°C Ambient temperature) | - | - | - |
| | - | - | - |
| | - | - | - |
| 9 Maximum condensing pressures/temperature | | | |
| 9.1 Operating (gauge) | 24.7 | [bar] | |
| 9.2 Peak (gauge) | 27.7 | [bar] | |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|--------------------|
| 1 Commercial designation | 1/2+ | [hp] |
| 2 Displacement | 12.12 | [cm ³] |
| 2.1 Bore | 27.78 | |
| 2.2 Stroke | 20.0 | |
| 3 Lubricant charge | 350 | [ml] |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight(with oil charge) | 11.6 | [kg] |
| 5 Nitrogen charge | 0.2 to 0.3 | [bar] |

C - ELECTRICAL 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 | MTRP0012 | |
| 3 Start capacitor | 72-88 (330) | [µf(VAC minimum)] |
| 4 Run capacitor | - | [µf(VAC minimum)] |
| 5 Motor protection (external) | T0634 | |
| 6 Start winding resistance | 30.4 | [ohm at 25°C] +/- 8% |
| 7 Run winding resistance | 4.2 | [ohm at 25°C] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 19.5 | [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 | IMQ | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | |
|--------------------------------------|--|--|-------------------------------|-------------------------|---------------------------|
| TEST CONDITIONS: @220V50Hz | | EN12900LBP household Fan Cooled | | Evap. temp. -35°C | Return Gas +32°C |
| | | | | Cond. temp. +40°C | Liquid Subcooling 0 K |
| Cooling capacity +/- 5% | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% |
| [W] | | [W] | [A] | [Kg/h] | [W/W] |
| 346 | | 354 | 2.87 | 8.74 | 0.98 |

E - PERFORMANCE - CURVES

| | | | | | | |
|--------------------------------------|----------------------------|---|-------------------------------|-------------------------|---------------------------|-------------|
| TEST CONDITIONS: @220V50Hz | | EN12900 household Fan Cooled | | Condensing temperature | | 35°C |
| Evaporating temperature | Cooling capacity +/- 5% | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | |
| °C | [W] | [W] | [A] | [Kg/h] | [W/W] | |
| -40 | 290 | 303 | 2.75 | 6.85 | 0.96 | |
| -35 | 381 | 347 | 2.86 | 9.07 | 1.10 | |
| -30 | 493 | 392 | 2.97 | 11.76 | 1.26 | |
| -25 | 627 | 438 | 3.10 | 14.99 | 1.43 | |
| -20 | 785 | 484 | 3.24 | 18.85 | 1.62 | |
| -15 | 969 | 532 | 3.40 | 23.43 | 1.82 | |
| -10 | 1180 | 582 | 3.57 | 34.67 | 2.03 | |

| | | | | | | |
|--------------------------------------|----------------------------|---|-------------------------------|-------------------------|---------------------------|-------------|
| TEST CONDITIONS: @220V50Hz | | EN12900 household Fan Cooled | | Condensing temperature | | 45°C |
| Evaporating temperature | Cooling capacity +/- 5% | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | |
| °C | [W] | [W] | [A] | [Kg/h] | [W/W] | |
| -40 | 235 | 311 | 2.77 | 6.21 | 0.76 | |
| -35 | 313 | 359 | 2.88 | 8.38 | 0.87 | |
| -30 | 408 | 410 | 3.01 | 10.97 | 1.00 | |
| -25 | 522 | 464 | 3.17 | 14.08 | 1.13 | |
| -20 | 657 | 521 | 3.34 | 17.79 | 1.26 | |
| -15 | 814 | 580 | 3.55 | 22.18 | 1.40 | |
| -10 | 995 | 643 | 3.78 | 27.33 | 1.55 | |

| | | | | | | |
|--------------------------------------|----------------------------|---|-------------------------------|-------------------------|---------------------------|-------------|
| TEST CONDITIONS: @220V50Hz | | EN12900 household Fan cooled | | Condensing temperature | | 55°C |
| Evaporating temperature | Cooling capacity +/- 5% | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | |
| °C | [W] | [W] | [A] | [Kg/h] | [W/W] | |
| -40 | - | - | - | - | - | |
| -35 | 249 | 367 | 2.90 | 7.58 | 0.68 | |
| -30 | 326 | 424 | 3.05 | 10.08 | 0.77 | |
| -25 | 419 | 486 | 3.23 | 13.07 | 0.86 | |
| -20 | 529 | 553 | 3.45 | 16.62 | 0.96 | |
| -15 | 657 | 624 | 3.69 | 20.81 | 1.05 | |
| -10 | 807 | 700 | 3.98 | 25.74 | 1.15 | |

F - EXTERNAL CHARACTERISTICS

| | |
|-------------------------|----------------------|
| 1 Base plate | European Standard |
| 2 Tray holder | No |
| 3 Connectors | |
| 3.1 SUCTION | 8.1 +0.10/+0.00 [mm] |
| 3.1.1 Material | Copper |
| 3.1.2 Shape | Slanted 42° |
| 3.2 DISCHARGE | 6.1 +0.10/+0.00 [mm] |
| 3.2.1 Material | Copper |
| 3.2.2 Shape | Straight |
| 3.3 PROCESS | 6.1 +0.10/+0.00 [mm] |
| 3.3.1 Material | Copper |
| 3.3.2 Shape | Slanted 42° |
| 3.4 Oil cooler (Copper) | No [mm] |
| 3.5 Connector sealing | Rubber Plugs |