

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NE K6217GK |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 959GA51 |

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 | Medium Back Pressure (Commercial Compressors) | | |
| 4.1 Evaporating temperature range | -20°C to 10°C | (-4°F to 50°F) | |
| 5 Motor type | CSCR | | |
| 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 temperature | | | |
| 9.1 Operating | 25.2 | [kgf/cm ²] (358 psig) | / °C - °F |
| 9.2 Peak | 28.3 | [kgf/cm ²] (402 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|--|
| 1 Commercial designation | 3/4 | [hp] |
| 2 Displacement | 14.28 | [cm ³] (0.871 cu.in) |
| 2.1 Bore [mm] | 30.157 | |
| 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) | 11.6 | [kg] (25.57 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 | Voltage Relay | |
| 2.1 Starting device | RVA403C-123 | |
| 3 Start capacitor | 72-88(330) | [μF(VAC minimum)] |
| 4 Run capacitor | 15(440) | [μF(VAC minimum)] |
| 5 Motor protection | T0188/G9 | |
| 6 Start winding resistance | 11.70 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 3.56 | [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 | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|--------------------------------------|-------|
| TEST CONDITIONS: @220V50Hz | | | 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] |
| 7080 | 1784 | 2075 | 1010 | 4.86 | 58.29 | 7.01 | 1.77 | 2.05 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | 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) | 3469 | 874 | 1016 | 544 | 2.69 | 22.03 | 6.36 | 1.60 | 1.86 |
| -15 | (+ 5) | 4235 | 1067 | 1241 | 588 | 2.91 | 27.04 | 7.22 | 1.82 | 2.11 |
| -10 | (+14) | 5162 | 1301 | 1513 | 635 | 3.14 | 33.15 | 8.13 | 2.05 | 2.38 |
| -5 | (+23) | 6249 | 1575 | 1831 | 687 | 3.39 | 40.42 | 9.09 | 2.29 | 2.66 |
| 0 | (+32) | 7497 | 1889 | 2197 | 744 | 3.65 | 48.92 | 10.07 | 2.54 | 2.95 |
| +5 | (+41) | 8905 | 2244 | 2609 | 805 | 3.92 | 58.73 | 11.06 | 2.79 | 3.24 |
| +10 | (+50) | 10474 | 2640 | 3069 | 870 | 4.20 | 69.92 | 12.04 | 3.03 | 3.53 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | 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) | 2987 | 753 | 875 | 572 | 2.84 | 20.91 | 5.22 | 1.31 | 1.53 |
| -15 | (+ 5) | 3670 | 925 | 1075 | 630 | 3.10 | 25.88 | 5.83 | 1.47 | 1.71 |
| -10 | (+14) | 4488 | 1131 | 1315 | 690 | 3.37 | 31.85 | 6.51 | 1.64 | 1.91 |
| -5 | (+23) | 5440 | 1371 | 1594 | 752 | 3.66 | 38.92 | 7.24 | 1.82 | 2.12 |
| 0 | (+32) | 6526 | 1644 | 1912 | 818 | 3.96 | 47.15 | 7.99 | 2.01 | 2.34 |
| +5 | (+41) | 7746 | 1952 | 2270 | 886 | 4.27 | 56.61 | 8.75 | 2.20 | 2.56 |
| +10 | (+50) | 9101 | 2293 | 2667 | 957 | 4.60 | 67.38 | 9.50 | 2.39 | 2.78 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | 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) | 2502 | 630 | 733 | 592 | 2.94 | 19.67 | 4.24 | 1.07 | 1.24 |
| -15 | (+ 5) | 3104 | 782 | 910 | 666 | 3.27 | 24.58 | 4.65 | 1.17 | 1.36 |
| -10 | (+14) | 3814 | 961 | 1118 | 742 | 3.61 | 30.43 | 5.13 | 1.29 | 1.50 |
| -5 | (+23) | 4632 | 1167 | 1357 | 818 | 3.96 | 37.30 | 5.65 | 1.42 | 1.66 |
| 0 | (+32) | 5558 | 1401 | 1629 | 896 | 4.32 | 45.25 | 6.21 | 1.56 | 1.82 |
| +5 | (+41) | 6591 | 1661 | 1931 | 974 | 4.69 | 54.36 | 6.78 | 1.71 | 1.99 |
| +10 | (+50) | 7733 | 1949 | 2266 | 1054 | 5.07 | 64.71 | 7.34 | 1.85 | 2.15 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|-------------------|------|--------------------------|
| 1 Base plate | European Standard | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 8.1 +0.10/+0.00 | [mm] | (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 | | |