

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | NE U6215GK |
| Nominal Voltage/Frequency | 208-230 V 60 Hz |
| Engineering Number | 959ND92 |

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 | 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 - 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 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 | 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) | 11.6 | [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 | 208-230 V 60 Hz 1~ (Single phase) | |
| 2 Starting device type | Voltage Relay | |
| 2.1 Starting device | RVA4AH3C-648 | |
| 3 Start capacitor | 108-130(330) | [µF(VAC minimum)] |
| 4 Run capacitor | 12.5(400) | [µF(VAC minimum)] |
| 5 Motor protection | MRA6981-3261 | |
| 6 Start winding resistance | 10.53 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 2.92 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 30.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | - | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (60 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | CCC - UL | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|------|--------------------------------|----------------------------------|--|---------------------------|---------------------------------------|-------|
| TEST CONDITIONS: @230V60Hz | | | ARIMBP Fan | | Evaporating temperature (Condensing temperature | | -6.7°C (19.94°F) 48.9°C (120.02°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] |
| 3944 | 994 | 1156 | 805 | 4.25 | 42.50 | 4.90 | 1.23 | 1.44 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|---------------------------------------|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | ARI4 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) | 2980 | 751 | 873 | 585 | 3.53 | 25.17 | 5.09 | 1.28 | 1.49 |
| -15 | (+ 5) | 3608 | 909 | 1057 | 640 | 3.69 | 30.82 | 5.65 | 1.42 | 1.66 |
| -10 | (+14) | 4437 | 1118 | 1300 | 698 | 3.86 | 38.39 | 6.36 | 1.60 | 1.86 |
| -5 | (+23) | 5437 | 1370 | 1593 | 760 | 4.06 | 47.75 | 7.14 | 1.80 | 2.09 |
| 0 | (+32) | 6580 | 1658 | 1928 | 830 | 4.28 | 58.80 | 7.91 | 1.99 | 2.32 |
| +5 | (+41) | 7836 | 1975 | 2296 | 910 | 4.54 | 71.42 | 8.61 | 2.17 | 2.52 |
| +10 | (+50) | 9177 | 2313 | 2689 | 1002 | 4.83 | 85.51 | 9.17 | 2.31 | 2.69 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | ARI4 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) | 2467 | 622 | 723 | 613 | 3.61 | 24.13 | 4.02 | 1.01 | 1.18 |
| -15 | (+ 5) | 2972 | 749 | 871 | 680 | 3.82 | 29.37 | 4.38 | 1.10 | 1.28 |
| -10 | (+14) | 3660 | 922 | 1073 | 748 | 4.05 | 36.64 | 4.90 | 1.23 | 1.43 |
| -5 | (+23) | 4503 | 1135 | 1319 | 818 | 4.30 | 45.84 | 5.50 | 1.39 | 1.61 |
| 0 | (+32) | 5470 | 1378 | 1603 | 893 | 4.58 | 56.85 | 6.13 | 1.54 | 1.80 |
| +5 | (+41) | 6534 | 1647 | 1915 | 977 | 4.90 | 69.56 | 6.70 | 1.69 | 1.96 |
| +10 | (+50) | 7666 | 1932 | 2246 | 1071 | 5.25 | 83.85 | 7.14 | 1.80 | 2.09 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | ARI4 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) | 1962 | 494 | 575 | 630 | 3.64 | 22.98 | 3.12 | 0.79 | 0.91 |
| -15 | (+ 5) | 2334 | 588 | 684 | 712 | 3.90 | 27.84 | 3.27 | 0.83 | 0.96 |
| -10 | (+14) | 2872 | 724 | 842 | 791 | 4.17 | 34.86 | 3.62 | 0.91 | 1.06 |
| -5 | (+23) | 3547 | 894 | 1039 | 871 | 4.47 | 43.93 | 4.07 | 1.03 | 1.19 |
| 0 | (+32) | 4330 | 1091 | 1269 | 954 | 4.80 | 54.93 | 4.55 | 1.15 | 1.33 |
| +5 | (+41) | 5192 | 1308 | 1521 | 1042 | 5.16 | 67.75 | 5.00 | 1.26 | 1.47 |
| +10 | (+50) | 6105 | 1539 | 1789 | 1140 | 5.56 | 82.28 | 5.34 | 1.35 | 1.56 |

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 | | |