

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | NE U6215GK |
| Nominal Voltage/Frequency | 115-127 V 60 Hz |
| Engineering Number | 959NE92 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-404A | | |
| 3 Nominal voltage and frequency | 115-127 / 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 - ELECTRICAL DATA

| | | |
|--|------------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 115-127 V 60 Hz 1 ~ (Single phase) | |
| 2 Starting device type | Voltage Relay | |
| 2.1 Starting device | RVAH7AA3C-571 | |
| 3 Start capacitor | 189-227(250) | [µF(VAC minimum)] |
| 4 Run capacitor | 30(400) | [µF(VAC minimum)] |
| 5 Motor protection | T0865/J5 | |
| 6 Start winding resistance | 3.87 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 0.90 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 47.00 | [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 | UL | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|--------------------------------------|-------|
| TEST CONDITIONS: @115V60Hz | | | 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] |
| 7781 | 1961 | 2280 | 1072 | 9.96 | 64.06 | 7.26 | 1.83 | 2.13 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | 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) | 3795 | 956 | 1112 | 541 | 5.43 | 24.08 | 7.02 | 1.77 | 2.06 |
| -15 | (+ 5) | 4674 | 1178 | 1369 | 594 | 5.85 | 29.85 | 7.87 | 1.98 | 2.31 |
| -10 | (+14) | 5692 | 1434 | 1668 | 656 | 6.35 | 36.57 | 8.67 | 2.19 | 2.54 |
| -5 | (+23) | 6850 | 1726 | 2007 | 726 | 6.94 | 44.32 | 9.43 | 2.38 | 2.76 |
| 0 | (+32) | 8148 | 2053 | 2387 | 804 | 7.61 | 53.17 | 10.14 | 2.55 | 2.97 |
| +5 | (+41) | 9585 | 2415 | 2809 | 889 | 8.36 | 63.21 | 10.78 | 2.72 | 3.16 |
| +10 | (+50) | 11163 | 2813 | 3271 | 983 | 9.19 | 74.50 | 11.36 | 2.86 | 3.33 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | 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) | 3268 | 823 | 957 | 574 | 5.72 | 22.89 | 5.69 | 1.43 | 1.67 |
| -15 | (+ 5) | 4056 | 1022 | 1188 | 637 | 6.23 | 28.59 | 6.37 | 1.60 | 1.87 |
| -10 | (+14) | 4970 | 1252 | 1456 | 708 | 6.82 | 35.27 | 7.03 | 1.77 | 2.06 |
| -5 | (+23) | 6010 | 1515 | 1761 | 784 | 7.48 | 42.99 | 7.67 | 1.93 | 2.25 |
| 0 | (+32) | 7176 | 1808 | 2103 | 867 | 8.21 | 51.84 | 8.27 | 2.09 | 2.42 |
| +5 | (+41) | 8468 | 2134 | 2481 | 957 | 9.02 | 61.88 | 8.85 | 2.23 | 2.59 |
| +10 | (+50) | 9886 | 2491 | 2897 | 1053 | 9.89 | 73.20 | 9.38 | 2.36 | 2.75 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | 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) | 2725 | 687 | 798 | 602 | 5.93 | 21.43 | 4.53 | 1.14 | 1.33 |
| -15 | (+ 5) | 3404 | 858 | 997 | 679 | 6.55 | 26.95 | 5.02 | 1.26 | 1.47 |
| -10 | (+14) | 4196 | 1057 | 1229 | 761 | 7.24 | 33.47 | 5.51 | 1.39 | 1.61 |
| -5 | (+23) | 5099 | 1285 | 1494 | 848 | 7.98 | 41.06 | 6.01 | 1.51 | 1.76 |
| 0 | (+32) | 6115 | 1541 | 1792 | 940 | 8.79 | 49.79 | 6.50 | 1.64 | 1.91 |
| +5 | (+41) | 7243 | 1825 | 2122 | 1037 | 9.66 | 59.74 | 6.99 | 1.76 | 2.05 |
| +10 | (+50) | 8483 | 2138 | 2486 | 1139 | 10.59 | 70.99 | 7.45 | 1.88 | 2.18 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------|------|--------------------------|
| 1 Base plate | Universal | | |
| 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 | 6.45 +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 | | |