

COMPRESSOR DEFINITION

| | |
|---------------------------|--------------------|
| Designation | NE U6212Z |
| Nominal Voltage/Frequency | 115 V 60 Hz |
| Engineering Number | 269MG71 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-134a | | |
| 3 Nominal voltage and frequency | 115 / 60 | [V / Hz] | |
| 4 Application type | High Back Pressure (Commercial Compressors) | | |
| 4.1 Evaporating temperature range | -15°C to 10°C | (5°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 | 14.2 | [kgf/cm ²] (202 psig) | / °C - °F |
| 9.2 Peak | 15.9 | [kgf/cm ²] (226 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|----------------------------------|
| 1 Commercial designation | 1/2 | [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) | 11.5 | [kg] (25.35 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELETRICAL DATA

| | | |
|--|-------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 115 V 60 Hz 1~ (Single phase) | |
| 2 Starting device type | Voltage Relay | |
| 2.1 Starting device | RVA9AD3C-121 | |
| 3 Start capacitor | 189-227(250) | [µF(VAC minimum)] |
| 4 Run capacitor | 30(400) | [µF(VAC minimum)] |
| 5 Motor protection | T0793/G9 | |
| 6 Start winding resistance | 5.45 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 0.92 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 40.00 | [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] |
| 5772 | 1455 | 1691 | 693 | 6.10 | 37.42 | 8.33 | 2.10 | 2.44 |

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] |
| -15 | (+ 5) | 2747 | 692 | 805 | 378 | 3.29 | 14.85 | 7.26 | 1.83 | 2.13 |
| -10 | (+14) | 3416 | 861 | 1001 | 419 | 3.65 | 18.54 | 8.17 | 2.06 | 2.39 |
| -5 | (+23) | 4274 | 1077 | 1252 | 467 | 4.07 | 23.28 | 9.15 | 2.31 | 2.68 |
| 0 | (+32) | 5322 | 1341 | 1560 | 522 | 4.55 | 29.12 | 10.18 | 2.56 | 2.98 |
| +5 | (+41) | 6559 | 1653 | 1922 | 584 | 5.09 | 36.09 | 11.22 | 2.83 | 3.29 |
| +10 | (+50) | 7986 | 2012 | 2340 | 652 | 5.69 | 44.21 | 12.27 | 3.09 | 3.60 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|---|----------------------------------|----------------------------|---------------------------|-----------|-------|
| 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] |
| -15 | (+ 5) | 2474 | 624 | 725 | 402 | 3.49 | 14.45 | 6.13 | 1.54 | 1.80 |
| -10 | (+14) | 3103 | 782 | 909 | 449 | 3.90 | 18.20 | 6.90 | 1.74 | 2.02 |
| -5 | (+23) | 3880 | 978 | 1137 | 502 | 4.37 | 22.86 | 7.73 | 1.95 | 2.26 |
| 0 | (+32) | 4805 | 1211 | 1408 | 561 | 4.90 | 28.44 | 8.58 | 2.16 | 2.51 |
| +5 | (+41) | 5879 | 1481 | 1723 | 624 | 5.48 | 34.99 | 9.42 | 2.38 | 2.76 |
| +10 | (+50) | 7101 | 1789 | 2081 | 693 | 6.12 | 42.54 | 10.24 | 2.58 | 3.00 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|---|----------------------------------|----------------------------|---------------------------|-----------|-------|
| 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] |
| -15 | (+ 5) | 2103 | 530 | 616 | 421 | 3.63 | 13.41 | 5.02 | 1.26 | 1.47 |
| -10 | (+14) | 2730 | 688 | 800 | 477 | 4.08 | 17.46 | 5.72 | 1.44 | 1.68 |
| -5 | (+23) | 3464 | 873 | 1015 | 537 | 4.57 | 22.24 | 6.44 | 1.62 | 1.89 |
| 0 | (+32) | 4305 | 1085 | 1262 | 601 | 5.12 | 27.80 | 7.17 | 1.81 | 2.10 |
| +5 | (+41) | 5254 | 1324 | 1540 | 669 | 5.72 | 34.15 | 7.87 | 1.98 | 2.31 |
| +10 | (+50) | 6310 | 1590 | 1849 | 740 | 6.38 | 41.34 | 8.52 | 2.15 | 2.50 |

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 | | |