

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NE U6214U |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 862GA51 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-290 | | |
| 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 | 18.4 | [kgf/cm ²] (262 psig) | / °C - °F |
| 9.2 Peak | 20.6 | [kgf/cm ²] (293 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|----------------------------------|
| 1 Commercial designation | 1/2 | [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) | 10.4 | [kg] (22.93 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

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 | RVA4L3C-566 | |
| 3 Start capacitor | 53-64(330) | [µF(VAC minimum)] |
| 4 Run capacitor | 7(400) | [µF(VAC minimum)] |
| 5 Motor protection | T0874/G9 | |
| 6 Start winding resistance | 18.83 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 5.14 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 19.50 | [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 - CE - UKCA - VDE | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|-----|-----------------------------|-------------------------------|--|---------------------------|------------------------------|-------|
| TEST CONDITIONS: @220V50Hz | | | EN12900MBP_HH Fan | | Evaporating temperature (Condensing temperature | | -10°C (14°F) 45°C (113°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] |
| 3220 | 811 | 944 | 447 | 2.37 | 10.85 | 7.21 | 1.82 | 2.11 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|------------------|------|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 2472 | 623 | 724 | 350 | 1.98 | 7.55 | 7.06 | 1.78 | 2.07 |
| -15 | (+ 5) | 3026 | 763 | 887 | 378 | 2.09 | 9.29 | 8.02 | 2.02 | 2.35 |
| -10 | (+14) | 3681 | 928 | 1079 | 404 | 2.19 | 11.35 | 9.13 | 2.30 | 2.68 |
| -5 | (+23) | 4438 | 1118 | 1300 | 428 | 2.29 | 13.75 | 10.38 | 2.62 | 3.04 |
| 0 | (+32) | 5296 | 1335 | 1552 | 451 | 2.39 | 16.51 | 11.75 | 2.96 | 3.44 |
| +5 | (+41) | 6256 | 1576 | 1833 | 473 | 2.49 | 19.65 | 13.23 | 3.33 | 3.88 |
| +10 | (+50) | 7317 | 1844 | 2144 | 495 | 2.58 | 23.17 | 14.79 | 3.73 | 4.33 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|------------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 2131 | 537 | 624 | 378 | 2.10 | 7.11 | 5.65 | 1.42 | 1.65 |
| -15 | (+ 5) | 2629 | 662 | 770 | 412 | 2.23 | 8.81 | 6.38 | 1.61 | 1.87 |
| -10 | (+14) | 3218 | 811 | 943 | 444 | 2.36 | 10.84 | 7.24 | 1.83 | 2.12 |
| -5 | (+23) | 3900 | 983 | 1143 | 474 | 2.48 | 13.21 | 8.21 | 2.07 | 2.41 |
| 0 | (+32) | 4673 | 1178 | 1369 | 504 | 2.61 | 15.94 | 9.27 | 2.34 | 2.72 |
| +5 | (+41) | 5538 | 1396 | 1623 | 533 | 2.73 | 19.04 | 10.40 | 2.62 | 3.05 |
| +10 | (+50) | 6496 | 1637 | 1903 | 562 | 2.85 | 22.54 | 11.58 | 2.92 | 3.39 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|------------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 1811 | 456 | 531 | 402 | 2.18 | 6.69 | 4.50 | 1.13 | 1.32 |
| -15 | (+ 5) | 2241 | 565 | 657 | 444 | 2.35 | 8.32 | 5.05 | 1.27 | 1.48 |
| -10 | (+14) | 2753 | 694 | 807 | 483 | 2.52 | 10.27 | 5.70 | 1.44 | 1.67 |
| -5 | (+23) | 3347 | 843 | 981 | 521 | 2.68 | 12.57 | 6.42 | 1.62 | 1.88 |
| 0 | (+32) | 4023 | 1014 | 1179 | 559 | 2.85 | 15.23 | 7.20 | 1.81 | 2.11 |
| +5 | (+41) | 4782 | 1205 | 1401 | 596 | 3.01 | 18.26 | 8.02 | 2.02 | 2.35 |
| +10 | (+50) | 5623 | 1417 | 1648 | 634 | 3.17 | 21.69 | 8.86 | 2.23 | 2.60 |

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 | | |