

### COMPRESSOR DEFINITION

|                           |                    |
|---------------------------|--------------------|
| Designation               | <b>NE 6211E</b>    |
| Nominal Voltage/Frequency | <b>115 V 60 Hz</b> |
| Engineering Number        | <b>263GG71</b>     |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|  |   |                                   |           |
|--|---|-----------------------------------|-----------|
| 1 Type                                     | Hermetic reciprocating compressor           |                                   |           |
| 2 Refrigerant                              | R-22  |                                   |           |
| 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                               | CSIR  |                                   |           |
| 6 Starting torque                          | HST - Hight starting torque                 |                                   |           |
| 7 Expantion 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 pressures/temperature |   |                                   |           |
| 9.1 Operating (gauge)                      | 21.7  | [kgf/cm <sup>2</sup> ] (309 psig) | / °C - °F |
| 9.2 Peak (gauge)                           | 24.2  | [kgf/cm <sup>2</sup> ] (344 psig) | / °C - °F |
| 10 Maximum winding temperature             | 130   | [ °C ]                            |           |

### B - MECHANICAL DATA

|                               |                 |  |
|-------------------------------|-----------------|--|
| 1 Commercial designation      | 1/2             | [hp]                                       |
| 2 Displacement                | 9.99            | [cm <sup>3</sup> ] (0.610 cu.in)           |
| 2.1 Bore [mm]                 | 26.497          |  |
| 2.2 Stroke [mm]               | 18.120          |  |
| 3 Lubricant charge            | 350             | [ml] (11.84 fl.oz.)                        |
| 3.1 Lubricants approved       |                 |  |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO46 |  |
| 4 Weight (with oil charge)    | 11.65           | [kg] (25.68 lb.)                           |
| 5 Nitrogen charge             | 0.2 to 0.3      | [kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig) |

### C - ELETRICAL DATA

|  |                               |                                    |
|--|-------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 115 V 60 Hz 1~ (Single phase) |                                    |
| 2 Starting device type                       | Current Relay                 |                                    |
| 2.1 Starting device                          | MTRPH-63                      |                                    |
| 3 Start capacitor                            | 145-175(165)                  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | -                             | [µF(VAC minimum)]                  |
| 5 Motor protection                           | T0809/G9                      |                                    |
| 6 Start winding resistance                   | 5.33                          | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 0.87                          | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (60 Hz)        | 38.50                         | [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)      | 7.00                          | [A] - Measured according to UL 984 |
| 11 Approval boards certification             | UL                            |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|                               |          |      |                             |                               |  |                           |                                      |       |
|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|--------------------------------------|-------|
| TEST CONDITIONS:<br>@100V50Hz |          |      | ASHRAEHBP46<br>Fan          |                               | Evaporating temperature<br>(Condensing temperature |                           | 7.2°C (44.96°F)<br>54.4°C (129.92°F) |       |
| Cooling capacity<br>+/- 5%    |          |      | Power consumption<br>+/- 5% | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5%                            | EFFICIENCY RATE<br>+/- 7% |                                      |       |
| [Btu/h]                       | [kcal/h] | [W]  | [W]                         | [A]                           | [kg/h]   | [Btu/Wh]                  | [kcal/Wh]                            | [W/W] |
| 4570                          | 1152     | 1339 | 665                         | 7.50                          | 28.22  | 6.87                      | 1.73                                 | 2.01  |

### E - PERFORMANCE - CURVES

|                               |                            |          |                 |                             |                                       |                         |                           |           |       |
|-------------------------------|----------------------------|----------|-----------------|-----------------------------|---------------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@100V50Hz |                            |          | ASHRAE46<br>Fan |                             | (Condensing temperature 35°C (+95°F)) |                         |                           |           |       |
| Evaporating temperature       | Cooling capacity<br>+/- 5% |          |                 | Power consumption<br>+/- 5% | Current consumption<br>+/- 5%         | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C (°F)                       | [Btu/h]                    | [kcal/h] | [W]             | [W]                         | [A]                                   | [kg/h]                  | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -15 (+5)                      | 2348                       | 592      | 688             | 375                         | 5.35                                  | 12.33                   | 6.21                      | 1.57      | 1.82  |
| -10 (+14)                     | 2920                       | 736      | 856             | 423                         | 5.52                                  | 15.40                   | 6.98                      | 1.76      | 2.04  |
| -5 (+23)                      | 3602                       | 908      | 1056            | 452                         | 5.72                                  | 19.08                   | 8.02                      | 2.02      | 2.35  |
| 0 (+32)                       | 4394                       | 1107     | 1288            | 474                         | 5.94                                  | 23.41                   | 9.22                      | 2.32      | 2.70  |
| +5 (+41)                      | 5295                       | 1334     | 1552            | 501                         | 6.17                                  | 28.40                   | 10.47                     | 2.64      | 3.07  |
| +10 (+50)                     | 6306                       | 1589     | 1848            | 545                         | 6.39                                  | 34.07                   | 11.64                     | 2.93      | 3.41  |

|                               |                            |          |                 |                             |  |                         |                           |           |       |
|-------------------------------|----------------------------|----------|-----------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@100V50Hz |                            |          | ASHRAE46<br>Fan |                             | (Condensing temperature 45°C (+113°F)) |                         |                           |           |       |
| Evaporating temperature       | Cooling capacity<br>+/- 5% |          |                 | Power consumption<br>+/- 5% | Current consumption<br>+/- 5%          | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C (°F)                       | [Btu/h]                    | [kcal/h] | [W]             | [W]                         | [A]                                    | [kg/h]                  | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -15 (+5)                      | 2048                       | 516      | 600             | 391                         | 5.38                                   | 11.49                   | 5.21                      | 1.31      | 1.53  |
| -10 (+14)                     | 2562                       | 646      | 751             | 451                         | 5.65                                   | 14.43                   | 5.72                      | 1.44      | 1.68  |
| -5 (+23)                      | 3174                       | 800      | 930             | 490                         | 5.95                                   | 17.97                   | 6.49                      | 1.64      | 1.90  |
| 0 (+32)                       | 3886                       | 979      | 1139            | 523                         | 6.27                                   | 22.13                   | 7.41                      | 1.87      | 2.17  |
| +5 (+41)                      | 4696                       | 1183     | 1376            | 559                         | 6.60                                   | 26.94                   | 8.35                      | 2.10      | 2.45  |
| +10 (+50)                     | 5605                       | 1412     | 1642            | 611                         | 6.93                                   | 32.41                   | 9.20                      | 2.32      | 2.70  |

|                               |                            |          |                 |                             |  |                         |                           |           |       |
|-------------------------------|----------------------------|----------|-----------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@100V50Hz |                            |          | ASHRAE46<br>Fan |                             | (Condensing temperature 55°C (+131°F)) |                         |                           |           |       |
| Evaporating temperature       | Cooling capacity<br>+/- 5% |          |                 | Power consumption<br>+/- 5% | Current consumption<br>+/- 5%          | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C (°F)                       | [Btu/h]                    | [kcal/h] | [W]             | [W]                         | [A]                                    | [kg/h]                  | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -15 (+5)                      | 1749                       | 441      | 512             | 442                         | 5.48                                   | 10.55                   | 3.98                      | 1.00      | 1.17  |
| -10 (+14)                     | 2204                       | 555      | 646             | 505                         | 5.83                                   | 13.36                   | 4.39                      | 1.11      | 1.29  |
| -5 (+23)                      | 2747                       | 692      | 805             | 548                         | 6.22                                   | 16.74                   | 5.05                      | 1.27      | 1.48  |
| 0 (+32)                       | 3378                       | 851      | 990             | 582                         | 6.62                                   | 20.73                   | 5.82                      | 1.47      | 1.71  |
| +5 (+41)                      | 4097                       | 1032     | 1200            | 620                         | 7.04                                   | 25.33                   | 6.61                      | 1.66      | 1.94  |
| +10 (+50)                     | 4903                       | 1236     | 1437            | 672                         | 7.46                                   | 30.58                   | 7.28                      | 1.83      | 2.13  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@100V60Hz |                            | ASHRAE46<br>Fan |          |                             | (Condensing temperature 35°C (+95°F)) |                         |                           |          |           |       |
|-------------------------------|----------------------------|-----------------|----------|-----------------------------|---------------------------------------|-------------------------|---------------------------|----------|-----------|-------|
| Evaporating temperature       | Cooling capacity<br>+/- 5% |                 |          | Power consumption<br>+/- 5% | Current consumption<br>+/- 5%         | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |          |           |       |
|                               | °C (°F)                    | [Btu/h]         | [kcal/h] | [W]                         | [W]                                   | [A]                     | [kg/h]                    | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -15 (+5)                      | 2830                       | 713             | 829      | 458                         | 6.34                                  | 14.86                   | 6.17                      | 1.56     | 1.81      |       |
| -10 (+14)                     | 3519                       | 887             | 1031     | 500                         | 6.62                                  | 18.56                   | 7.04                      | 1.77     | 2.06      |       |
| -5 (+23)                      | 4341                       | 1094            | 1272     | 540                         | 6.89                                  | 22.99                   | 8.04                      | 2.03     | 2.36      |       |
| 0 (+32)                       | 5294                       | 1334            | 1551     | 578                         | 7.16                                  | 28.20                   | 9.16                      | 2.31     | 2.69      |       |
| +5 (+41)                      | 6380                       | 1608            | 1869     | 614                         | 7.43                                  | 34.21                   | 10.38                     | 2.62     | 3.04      |       |
| +10 (+50)                     | 7598                       | 1915            | 2226     | 650                         | 7.70                                  | 41.05                   | 11.69                     | 2.95     | 3.42      |       |

| TEST CONDITIONS:<br>@100V60Hz |                            | ASHRAE46<br>Fan |          |                             | (Condensing temperature 45°C (+113°F)) |                         |                           |          |           |       |
|-------------------------------|----------------------------|-----------------|----------|-----------------------------|--|-------------------------|---------------------------|----------|-----------|-------|
| Evaporating temperature       | Cooling capacity<br>+/- 5% |                 |          | Power consumption<br>+/- 5% | Current consumption<br>+/- 5%          | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |          |           |       |
|                               | °C (°F)                    | [Btu/h]         | [kcal/h] | [W]                         | [W]                                    | [A]                     | [kg/h]                    | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -15 (+5)                      | 2468                       | 622             | 723      | 481                         | 6.46                                   | 13.84                   | 5.14                      | 1.30     | 1.51      |       |
| -10 (+14)                     | 3087                       | 778             | 905      | 533                         | 6.82                                   | 17.39                   | 5.79                      | 1.46     | 1.70      |       |
| -5 (+23)                      | 3825                       | 964             | 1121     | 584                         | 7.19                                   | 21.66                   | 6.54                      | 1.65     | 1.92      |       |
| 0 (+32)                       | 4682                       | 1180            | 1372     | 634                         | 7.57                                   | 26.67                   | 7.38                      | 1.86     | 2.16      |       |
| +5 (+41)                      | 5658                       | 1426            | 1658     | 683                         | 7.95                                   | 32.46                   | 8.28                      | 2.09     | 2.43      |       |
| +10 (+50)                     | 6753                       | 1702            | 1979     | 732                         | 8.35                                   | 39.05                   | 9.23                      | 2.33     | 2.71      |       |

| TEST CONDITIONS:<br>@100V60Hz |                            | ASHRAE46<br>Fan |          |                             | (Condensing temperature 55°C (+131°F)) |                         |                           |          |           |       |
|-------------------------------|----------------------------|-----------------|----------|-----------------------------|--|-------------------------|---------------------------|----------|-----------|-------|
| Evaporating temperature       | Cooling capacity<br>+/- 5% |                 |          | Power consumption<br>+/- 5% | Current consumption<br>+/- 5%          | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |          |           |       |
|                               | °C (°F)                    | [Btu/h]         | [kcal/h] | [W]                         | [W]                                    | [A]                     | [kg/h]                    | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -15 (+5)                      | 2106                       | 531             | 617      | 504                         | 6.59                                   | 12.71                   | 4.18                      | 1.05     | 1.22      |       |
| -10 (+14)                     | 2655                       | 669             | 778      | 566                         | 7.03                                   | 16.10                   | 4.69                      | 1.18     | 1.37      |       |
| -5 (+23)                      | 3309                       | 834             | 970      | 628                         | 7.49                                   | 20.17                   | 5.27                      | 1.33     | 1.54      |       |
| 0 (+32)                       | 4070                       | 1026            | 1193     | 690                         | 7.97                                   | 24.97                   | 5.90                      | 1.49     | 1.73      |       |
| +5 (+41)                      | 4936                       | 1244            | 1446     | 752                         | 8.47                                   | 30.52                   | 6.57                      | 1.66     | 1.92      |       |
| +10 (+50)                     | 5908                       | 1489            | 1731     | 814                         | 9.00                                   | 36.85                   | 7.25                      | 1.83     | 2.12      |       |

### 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     |      |                          |