

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | NT U6234GKV     |
| Nominal Voltage/Frequency | 208-230 V 60 Hz |
| Engineering Number        | 925BD50         |

### 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 - 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                      | 25.2  | [kgf/cm <sup>2</sup> ] (358 psig) | / °C - °F |
| 9.2 Peak                           | 28.3  | [kgf/cm <sup>2</sup> ] (402 psig) | / °C - °F |
| 10 Maximum winding temperature     | 130   | [ °C ]                            |           |

### B - MECHANICAL DATA

|                               |               |  |
|-------------------------------|---------------|--|
| 1 Commercial designation      | 1 1/4         | [hp]                                       |
| 2 Displacement                | 23.74         | [cm <sup>3</sup> ] (1.449 cu.in)           |
| 2.1 Bore [mm]                 | 38.100        |  |
| 2.2 Stroke [mm]               | 20.830        |  |
| 3 Lubricant charge            | 650           | [ml] (21.98 fl.oz.)                        |
| 3.1 Lubricants approved       |               |  |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 |  |
| 4 Weight (with oil charge)    | 18.1          | [kg] (39.90 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 | 208-230 V 60 Hz 1~ (Single phase) |                                    |
| 2 Starting device type                       | Voltage Relay                     |                                    |
| 2.1 Starting device                          | RVA4AL3C-649/RVA4AL3D-672         |                                    |
| 3 Start capacitor                            | 108-130(330)                      | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 30(400)                           | [µF(VAC minimum)]                  |
| 5 Motor protection                           | USP-577-84                        |                                    |
| 6 Start winding resistance                   | 3.09                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 1.27                              | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (60 Hz)        | 46.00                             | [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:<br>@230V60Hz |          |      | ARIMBP<br>Fan                  |                                  | Evaporating temperature<br>(Condensing temperature |                           | -6.7°C (19.94°F)<br>48.9°C (120.02°F) |       |
| Cooling capacity<br>+/- 5%    |          |      | Power<br>consumption<br>+/- 5% | Current<br>consumption<br>+/- 5% | Gas flow<br>rate<br>+/- 5%                         | EFFICIENCY RATE<br>+/- 7% |                                       |       |
| [Btu/h]                       | [kcal/h] | [W]  | [W]                            | [A]                              | [kg/h]   | [Btu/Wh]                  | [kcal/Wh]                             | [W/W] |
| 8214                          | 2070     | 2407 | 1416                           | 6.64                             | 88.52  | 5.80                      | 1.46                                  | 1.70  |

### E - PERFORMANCE - CURVES

|                               |       |                            |             |      |                                       |                                  |                            |                           |           |       |
|-------------------------------|-------|----------------------------|-------------|------|---------------------------------------|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@230V60Hz |       |                            | ARI4<br>Fan |      | (Condensing temperature 35°C (+95°F)) |                                  |                            |                           |           |       |
| Evaporating<br>temperature    |       | Cooling capacity<br>+/- 5% |             |      | Power<br>consumption<br>+/- 5%        | Current<br>consumption<br>+/- 5% | Gas flow<br>rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C                            | (°F)  | [Btu/h]                    | [kcal/h]    | [W]  | [W]                                   | [A]                              | [kg/h]                     | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -20                           | (- 4) | 6566                       | 1655        | 1924 | 1069                                  | 5.25                             | 55.50                      | 6.13                      | 1.54      | 1.80  |
| -15                           | (+ 5) | 8156                       | 2055        | 2390 | 1147                                  | 5.53                             | 69.71                      | 7.11                      | 1.79      | 2.08  |
| -10                           | (+14) | 9942                       | 2505        | 2913 | 1214                                  | 5.79                             | 85.97                      | 8.20                      | 2.07      | 2.40  |
| -5                            | (+23) | 11929                      | 3006        | 3495 | 1271                                  | 6.03                             | 104.65                     | 9.39                      | 2.37      | 2.75  |
| 0                             | (+32) | 14120                      | 3558        | 4138 | 1323                                  | 6.26                             | 126.11                     | 10.67                     | 2.69      | 3.13  |
| +5                            | (+41) | 16521                      | 4163        | 4841 | 1374                                  | 6.49                             | 150.70                     | 12.02                     | 3.03      | 3.52  |
| +10                           | (+50) | 19136                      | 4822        | 5607 | 1425                                  | 6.72                             | 178.79                     | 13.43                     | 3.38      | 3.93  |

|                               |       |                            |             |      |  |                                  |                            |                           |           |       |
|-------------------------------|-------|----------------------------|-------------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@230V60Hz |       |                            | ARI4<br>Fan |      | (Condensing temperature 45°C (+113°F)) |                                  |                            |                           |           |       |
| Evaporating<br>temperature    |       | Cooling capacity<br>+/- 5% |             |      | Power<br>consumption<br>+/- 5%         | Current<br>consumption<br>+/- 5% | Gas flow<br>rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C                            | (°F)  | [Btu/h]                    | [kcal/h]    | [W]  | [W]                                    | [A]                              | [kg/h]                     | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -20                           | (- 4) | 5249                       | 1323        | 1538 | 1121                                   | 5.45                             | 51.26                      | 4.70                      | 1.18      | 1.38  |
| -15                           | (+ 5) | 6639                       | 1673        | 1945 | 1230                                   | 5.86                             | 65.58                      | 5.40                      | 1.36      | 1.58  |
| -10                           | (+14) | 8192                       | 2064        | 2400 | 1325                                   | 6.24                             | 82.03                      | 6.17                      | 1.56      | 1.81  |
| -5                            | (+23) | 9913                       | 2498        | 2905 | 1411                                   | 6.60                             | 100.99                     | 7.01                      | 1.77      | 2.06  |
| 0                             | (+32) | 11806                      | 2975        | 3460 | 1491                                   | 6.94                             | 122.80                     | 7.91                      | 1.99      | 2.32  |
| +5                            | (+41) | 13877                      | 3497        | 4066 | 1567                                   | 7.28                             | 147.83                     | 8.85                      | 2.23      | 2.59  |
| +10                           | (+50) | 16128                      | 4064        | 4726 | 1645                                   | 7.62                             | 176.44                     | 9.82                      | 2.48      | 2.88  |

|                               |       |                            |             |      |  |                                  |                            |                           |           |       |
|-------------------------------|-------|----------------------------|-------------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@230V60Hz |       |                            | ARI4<br>Fan |      | (Condensing temperature 55°C (+131°F)) |                                  |                            |                           |           |       |
| Evaporating<br>temperature    |       | Cooling capacity<br>+/- 5% |             |      | Power<br>consumption<br>+/- 5%         | Current<br>consumption<br>+/- 5% | Gas flow<br>rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C                            | (°F)  | [Btu/h]                    | [kcal/h]    | [W]  | [W]                                    | [A]                              | [kg/h]                     | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -20                           | (- 4) | 3870                       | 975         | 1134 | 1151                                   | 5.57                             | 45.47                      | 3.36                      | 0.85      | 0.98  |
| -15                           | (+ 5) | 4992                       | 1258        | 1463 | 1289                                   | 6.10                             | 59.46                      | 3.87                      | 0.97      | 1.13  |
| -10                           | (+14) | 6245                       | 1574        | 1830 | 1413                                   | 6.60                             | 75.67                      | 4.42                      | 1.11      | 1.29  |
| -5                            | (+23) | 7633                       | 1924        | 2237 | 1527                                   | 7.07                             | 94.46                      | 5.01                      | 1.26      | 1.47  |
| 0                             | (+32) | 9162                       | 2309        | 2685 | 1633                                   | 7.52                             | 116.19                     | 5.62                      | 1.42      | 1.65  |
| +5                            | (+41) | 10835                      | 2730        | 3175 | 1736                                   | 7.96                             | 141.22                     | 6.24                      | 1.57      | 1.83  |
| +10                           | (+50) | 12657                      | 3190        | 3709 | 1839                                   | 8.40                             | 169.90                     | 6.87                      | 1.73      | 2.01  |

### F - EXTERNAL CHARACTERISTICS

|                         |                   |      |                          |
|-------------------------|-------------------|------|--------------------------|
| 1 Base plate            | Universal         |      |                          |
| 2 Tray holder           | No                |      |                          |
| 3 Connectors            |                   |      |                          |
| 3.1 SUCTION             | 12.77 +0.08/+0.00 | [mm] | (0.503" +0.003"/+0.000") |
| 3.1.1 Material          | Copper            |      |                          |
| 3.1.2 Shape             | Vertical          |      |                          |
| 3.2 DISCHARGE           | 9.6 +0.07/+0.00   | [mm] | (0.378" +0.003"/+0.000") |
| 3.2.1 Material          | Copper            |      |                          |
| 3.2.2 Shape             | Vertical          |      |                          |
| 3.3 PROCESS             | 6.42 +0.08/+0.00  | [mm] | (0.253" +0.003"/+0.000") |
| 3.3.1 Material          | Copper            |      |                          |
| 3.3.2 Shape             | Vertical          |      |                          |
| 3.4 Oil cooler (Copper) | No                | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs      |      |                          |