

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | NT 6217GK       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 922AA04         |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|                                    |                                               |                         |           |
|------------------------------------|-----------------------------------------------|-------------------------|-----------|
| 1 Type                             | Hermetic reciprocating compressor             |                         |           |
| 2 Refrigerant                      | R-404A                                        |                         |           |
| 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 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 temperature   |                                               |                         |           |
| 9.1 Operating (gauge)              | 25.2                                          | [kgf/cm²] (358 psig)    | / °C - °F |
| 9.2 Peak (gauge)                   | 28.3                                          | [kgf/cm²] (402 psig)    | / °C - °F |
| 10 Maximum winding temperature     | 130                                           | [ °C ]                  |           |

### B - MECHANICAL DATA

|                               |               |                               |
|-------------------------------|---------------|-------------------------------|
| 1 Commercial designation      | 3/4           | [hp]                          |
| 2 Displacement                | 12.55         | [cm³] (0.766 cu.in)           |
| 2.1 Bore [mm]                 | 31.740        |                               |
| 2.2 Stroke [mm]               | 15.870        |                               |
| 3 Lubricant charge            | 450           | [ml] (15.22 fl.oz.)           |
| 3.1 Lubricants approved       |               |                               |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 |                               |
| 4 Weight (with oil charge)    | 16.7          | [kg] (36.82 lb.)              |
| 5 Nitrogen charge             | 0.2 to 0.3    | [kgf/cm²] (2.84 to 4.27 psig) |

### 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                          | 3ARR3B6AC3                         |                                    |
| 3 Start capacitor                            | 64-77(330)                         | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 10(440)                            | [µF(VAC minimum)]                  |
| 5 Motor protection                           | T0916/G6                           |                                    |
| 6 Start winding resistance                   | 13.10                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 3.10                               | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (50 Hz)        | -                                  | [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             | IMQ                                |                                    |

### D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS:<br>@220V50Hz  |          |      | ASHRAEHBP46<br>Fan                 |                                      | Evaporating temperature<br>(Condensing temperature |                               | 7.2°C (44.96°F)<br>54.4°C (129.92°F)) |       |
|--------------------------------|----------|------|------------------------------------|--------------------------------------|----------------------------------------------------|-------------------------------|---------------------------------------|-------|
| Cooling capacity<br><br>+/- 5% |          |      | Power<br>consumption<br><br>+/- 5% | Current<br>consumption<br><br>+/- 5% | Gas flow<br>rate<br><br>+/- 5%                     | EFFICIENCY RATE<br><br>+/- 7% |                                       |       |
| [Btu/h]                        | [kcal/h] | [W]  | [W]                                | [A]                                  | [kg/h]                                             | [Btu/Wh]                      | [kcal/Wh]                             | [W/W] |
| 6308                           | 1590     | 1848 | 736                                | 3.60                                 | 51.93                                              | 8.57                          | 2.16                                  | 2.51  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V50Hz |       | 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] |
| -20                           | (- 4) | 2864                       | 722      | 839  | 416                         | 2.24                                   | 18.17                   | 6.88                      | 1.73      | 2.02  |
| -15                           | (+ 5) | 3586                       | 904      | 1051 | 451                         | 2.39                                   | 22.90                   | 7.95                      | 2.00      | 2.33  |
| -10                           | (+14) | 4490                       | 1132     | 1316 | 483                         | 2.52                                   | 28.84                   | 9.29                      | 2.34      | 2.72  |
| -5                            | (+23) | 5576                       | 1405     | 1634 | 512                         | 2.64                                   | 36.07                   | 10.90                     | 2.75      | 3.19  |
| 0                             | (+32) | 6842                       | 1724     | 2005 | 537                         | 2.75                                   | 44.65                   | 12.75                     | 3.21      | 3.74  |
| +5                            | (+41) | 8290                       | 2089     | 2429 | 559                         | 2.84                                   | 54.67                   | 14.85                     | 3.74      | 4.35  |
| +10                           | (+50) | 9918                       | 2499     | 2906 | 577                         | 2.91                                   | 66.20                   | 17.17                     | 4.33      | 5.03  |

| TEST CONDITIONS:        |       |                  |          |      | ASHRAE46          |                     | (Condensing temperature 45°C (+113°F) ) |                 |           |       |
|-------------------------|-------|------------------|----------|------|-------------------|---------------------|-----------------------------------------|-----------------|-----------|-------|
| @220V50Hz               |       | Fan              |          |      |                   |                     |                                         |                 |           |       |
| Evaporating temperature |       | Cooling capacity |          |      | Power consumption | Current consumption | Gas flow rate                           | EFFICIENCY RATE |           |       |
|                         |       | +/- 5%           |          |      | +/- 5%            | +/- 5%              | +/- 5%                                  | +/- 7%          |           |       |
| °C                      | (°F)  | [Btu/h]          | [kcal/h] | [W]  | [W]               | [A]                 | [kg/h]                                  | [Btu/Wh]        | [kcal/Wh] | [W/W] |
| -20                     | (- 4) | 2421             | 610      | 709  | 446               | 2.36                | 16.96                                   | 5.46            | 1.37      | 1.60  |
| -15                     | (+ 5) | 3032             | 764      | 888  | 489               | 2.54                | 21.37                                   | 6.21            | 1.56      | 1.82  |
| -10                     | (+14) | 3801             | 958      | 1114 | 530               | 2.71                | 26.97                                   | 7.16            | 1.80      | 2.10  |
| -5                      | (+23) | 4729             | 1192     | 1386 | 568               | 2.88                | 33.83                                   | 8.30            | 2.09      | 2.43  |
| 0                       | (+32) | 5815             | 1465     | 1704 | 603               | 3.04                | 42.01                                   | 9.62            | 2.42      | 2.82  |
| +5                      | (+41) | 7060             | 1779     | 2069 | 636               | 3.18                | 51.60                                   | 11.10           | 2.80      | 3.25  |
| +10                     | (+50) | 8463             | 2133     | 2480 | 666               | 3.32                | 62.66                                   | 12.74           | 3.21      | 3.73  |

| TEST CONDITIONS:<br>@220V50Hz |       | ASHRAE46<br>Fan                |          |      | (Condensing temperature 55°C (+131°F) ) |                                   |                             |                               |           |       |
|-------------------------------|-------|--------------------------------|----------|------|-----------------------------------------|-----------------------------------|-----------------------------|-------------------------------|-----------|-------|
| Evaporating temperature       |       | Cooling capacity<br><br>+/- 5% |          |      | Power consumption<br><br>+/- 5%         | Current consumption<br><br>+/- 5% | Gas flow rate<br><br>+/- 5% | EFFICIENCY RATE<br><br>+/- 7% |           |       |
| °C                            | (°F)  | [Btu/h]                        | [kcal/h] | [W]  | [W]                                     | [A]                               | [kg/h]                      | [Btu/Wh]                      | [kcal/Wh] | [W/W] |
| -20                           | (- 4) | 1996                           | 503      | 585  | 469                                     | 2.44                              | 15.69                       | 4.24                          | 1.07      | 1.24  |
| -15                           | (+ 5) | 2490                           | 627      | 730  | 521                                     | 2.67                              | 19.72                       | 4.79                          | 1.21      | 1.40  |
| -10                           | (+14) | 3120                           | 786      | 914  | 572                                     | 2.89                              | 24.89                       | 5.47                          | 1.38      | 1.60  |
| -5                            | (+23) | 3886                           | 979      | 1139 | 622                                     | 3.10                              | 31.29                       | 6.26                          | 1.58      | 1.83  |
| 0                             | (+32) | 4789                           | 1207     | 1403 | 670                                     | 3.31                              | 38.99                       | 7.15                          | 1.80      | 2.10  |
| +5                            | (+41) | 5827                           | 1468     | 1707 | 716                                     | 3.52                              | 48.06                       | 8.14                          | 2.05      | 2.39  |
| +10                           | (+50) | 7001                           | 1764     | 2051 | 759                                     | 3.73                              | 58.59                       | 9.21                          | 2.32      | 2.70  |

## F - EXTERNAL CHARACTERISTICS

|                         |                  |      |                          |
|-------------------------|------------------|------|--------------------------|
| 1 Base plate            | Universal        |      |                          |
| 2 Tray holder           | No               |      |                          |
| 3 Connectors            |                  |      |                          |
| 3.1 SUCTION             | 9.6 +0.07/+0.00  | [mm] | (0.378" +0.003"/+0.000") |
| 3.1.1 Material          | Copper           |      |                          |
| 3.1.2 Shape             | Vertical         |      |                          |
| 3.2 DISCHARGE           | 6.42 +0.08/+0.00 | [mm] | (0.253" +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     |      |                          |