



## COMPRESSOR TECHNICAL DATA

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | NT 6226GK       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 923BA02         |

### 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                               | CSIR                                          |                                   |           |
| 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 pressures/temperature |                                               |                                   |           |
| 9.1 Operating (gauge)                      | 25.7                                          | [kgf/cm <sup>2</sup> ] (365 psig) | / °C - °F |
| 9.2 Peak (gauge)                           | 28.7                                          | [kgf/cm <sup>2</sup> ] (408 psig) | / °C - °F |
| 10 Maximum winding temperature             | 130                                           | [ °C ]                            |           |

### B - MECHANICAL DATA

|                               |               |                                            |
|-------------------------------|---------------|--------------------------------------------|
| 1 Commercial designation      | 1+            | [hp]                                       |
| 2 Displacement                | 22.37         | [cm <sup>3</sup> ] (1.365 cu.in)           |
| 2.1 Bore [mm]                 | 36.990        |                                            |
| 2.2 Stroke [mm]               | 20.830        |                                            |
| 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)    | 17.5          | [kg] (38.58 lb.)                           |
| 5 Nitrogen charge             | 0.2 to 0.3    | [kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig) |

### C - ELECTRICAL DATA

|                                              |                                    |                                    |
|----------------------------------------------|------------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 220-240 V 50 Hz 1 ~ (Single phase) |                                    |
| 2 Starting device type                       | Current Relay                      |                                    |
| 2.1 Starting device                          | 3CR-702-185                        |                                    |
| 3 Start capacitor                            | 130-156(250)                       | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | -                                  | [µF(VAC minimum)]                  |
| 5 Motor protection                           | T0625/C9                           |                                    |
| 6 Start winding resistance                   | 8.40                               | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 1.70                               | [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                                |                                    |



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### 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>+/- 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] |
| 10992                         | 2770     | 3221 | 1540                           | 8.47                             | 90.49                                              | 7.14                      | 1.80                                 | 2.09  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V50Hz |       | ASHRAE46<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) | 5203                       | 1311     | 1525 | 800                                   | 5.56                             | 33.02                      | 6.49                      | 1.63      | 1.90  |
| -15                           | (+ 5) | 6476                       | 1632     | 1898 | 873                                   | 5.80                             | 41.36                      | 7.43                      | 1.87      | 2.18  |
| -10                           | (+14) | 8006                       | 2018     | 2346 | 947                                   | 6.06                             | 51.43                      | 8.46                      | 2.13      | 2.48  |
| -5                            | (+23) | 9799                       | 2469     | 2871 | 1024                                  | 6.35                             | 63.39                      | 9.58                      | 2.41      | 2.81  |
| 0                             | (+32) | 11858                      | 2988     | 3475 | 1103                                  | 6.65                             | 77.39                      | 10.75                     | 2.71      | 3.15  |
| +5                            | (+41) | 14190                      | 3576     | 4158 | 1184                                  | 6.98                             | 93.58                      | 11.98                     | 3.02      | 3.51  |
| +10                           | (+50) | 16799                      | 4233     | 4923 | 1267                                  | 7.33                             | 112.12                     | 13.25                     | 3.34      | 3.88  |

| TEST CONDITIONS:<br>@220V50Hz |       | ASHRAE46<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) | 4433                       | 1117     | 1299 | 871                                    | 5.76                             | 31.05                      | 5.10                      | 1.28      | 1.49  |
| -15                           | (+ 5) | 5533                       | 1394     | 1621 | 955                                    | 6.06                             | 39.01                      | 5.79                      | 1.46      | 1.70  |
| -10                           | (+14) | 6855                       | 1727     | 2009 | 1043                                   | 6.39                             | 48.65                      | 6.56                      | 1.65      | 1.92  |
| -5                            | (+23) | 8403                       | 2118     | 2462 | 1135                                   | 6.75                             | 60.11                      | 7.39                      | 1.86      | 2.17  |
| 0                             | (+32) | 10182                      | 2566     | 2984 | 1230                                   | 7.15                             | 73.56                      | 8.27                      | 2.08      | 2.42  |
| +5                            | (+41) | 12199                      | 3074     | 3574 | 1329                                   | 7.57                             | 89.15                      | 9.18                      | 2.31      | 2.69  |
| +10                           | (+50) | 14456                      | 3643     | 4236 | 1431                                   | 8.02                             | 107.03                     | 10.11                     | 2.55      | 2.96  |

| TEST CONDITIONS:<br>@220V50Hz |       | ASHRAE46<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) | 3752                       | 945      | 1099 | 941                                    | 6.02                             | 29.51                      | 3.99                      | 1.01      | 1.17  |
| -15                           | (+ 5) | 4660                       | 1174     | 1365 | 1040                                   | 6.38                             | 36.89                      | 4.48                      | 1.13      | 1.31  |
| -10                           | (+14) | 5753                       | 1450     | 1686 | 1144                                   | 6.78                             | 45.89                      | 5.03                      | 1.27      | 1.47  |
| -5                            | (+23) | 7038                       | 1774     | 2062 | 1253                                   | 7.22                             | 56.66                      | 5.62                      | 1.42      | 1.65  |
| 0                             | (+32) | 8518                       | 2147     | 2496 | 1368                                   | 7.71                             | 69.35                      | 6.23                      | 1.57      | 1.83  |
| +5                            | (+41) | 10199                      | 2570     | 2989 | 1487                                   | 8.23                             | 84.13                      | 6.86                      | 1.73      | 2.01  |
| +10                           | (+50) | 12086                      | 3046     | 3542 | 1611                                   | 8.79                             | 101.15                     | 7.49                      | 1.89      | 2.20  |



## COMPRESSOR TECHNICAL DATA

### 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     |      |                          |