

### COMPRESSOR DEFINITION

|                           |                    |
|---------------------------|--------------------|
| Designation               | <b>T 6217GK</b>    |
| Nominal Voltage/Frequency | <b>115 V 60 Hz</b> |
| Engineering Number        | <b>931AG71</b>     |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|  |   |                                   |           |
|--|---|-----------------------------------|-----------|
| 1 Type                                     | Hermetic reciprocating compressor             |                                   |           |
| 2 Refrigerant                              | R-404A  |                                   |           |
| 3 Nominal voltage and frequency            | 115 / 60                                      | [ V / Hz ]                        |           |
| 4 Application type                         | Medium Back Pressure (Commercial Compressors) |                                   |           |
| 4.1 Evaporating temperature range          | -20°C to 0°C                                  | (-4°F to 32°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      | 3/4+          | [hp]                                       |
| 2 Displacement                | 14.50         | [cm <sup>3</sup> ] (0.885 cu.in)           |
| 2.1 Bore [mm]                 | 34.120        |  |
| 2.2 Stroke [mm]               | 15.870        |  |
| 3 Lubricant charge            | 550           | [ml] (18.60 fl.oz.)                        |
| 3.1 Lubricants approved       |               |  |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 |  |
| 4 Weight (with oil charge)    | 16.93         | [kg] (37.32 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                          | 3ARR2KCP172S                  |                                    |
| 3 Start capacitor                            | 145-175(250)                  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | -                             | [µF(VAC minimum)]                  |
| 5 Motor protection                           | CST00GK-3031                  |                                    |
| 6 Start winding resistance                   | 4.10                          | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 0.54                          | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (60 Hz)        | 55.00                         | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz)     | 13.00                         | [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>@115V60Hz |          |      | 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] |
| 7939                          | 2001     | 2326 | 1250                           | 13.00                            | 65.36  | 6.35                      | 1.60                                 | 1.86  |

### E - PERFORMANCE - CURVES

|                               |       |                            |                 |      |                                       |                                  |                            |                           |           |       |
|-------------------------------|-------|----------------------------|-----------------|------|---------------------------------------|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@115V50Hz |       |                            | 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) | 2830                       | 713             | 829  | 582                                   | 7.15                             | 17.96                      | 4.86                      | 1.23      | 1.42  |
| -15                           | (+ 5) | 3792                       | 956             | 1111 | 653                                   | 7.56                             | 24.21                      | 5.80                      | 1.46      | 1.70  |
| -10                           | (+14) | 4863                       | 1225            | 1425 | 717                                   | 7.94                             | 31.24                      | 6.78                      | 1.71      | 1.99  |
| -5                            | (+23) | 6041                       | 1522            | 1770 | 774                                   | 8.29                             | 39.09                      | 7.81                      | 1.97      | 2.29  |
| 0                             | (+32) | 7328                       | 1847            | 2147 | 823                                   | 8.63                             | 47.83                      | 8.90                      | 2.24      | 2.61  |
| +5                            | (+41) | 8723                       | 2198            | 2556 | 866                                   | 8.99                             | 57.50                      | 10.06                     | 2.53      | 2.95  |
| +10                           | (+50) | 10227                      | 2577            | 2997 | 901                                   | 9.36                             | 68.16                      | 11.29                     | 2.85      | 3.31  |

|                               |       |                            |                 |      |  |                                  |                            |                           |           |       |
|-------------------------------|-------|----------------------------|-----------------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@115V50Hz |       |                            | 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) | 2325                       | 586             | 681  | 563                                    | 7.22                             | 16.30                      | 4.14                      | 1.04      | 1.21  |
| -15                           | (+ 5) | 3154                       | 795             | 924  | 655                                    | 7.85                             | 22.23                      | 4.81                      | 1.21      | 1.41  |
| -10                           | (+14) | 4088                       | 1030            | 1198 | 740                                    | 8.44                             | 29.00                      | 5.52                      | 1.39      | 1.62  |
| -5                            | (+23) | 5127                       | 1292            | 1502 | 817                                    | 9.00                             | 36.68                      | 6.27                      | 1.58      | 1.84  |
| 0                             | (+32) | 6272                       | 1581            | 1838 | 887                                    | 9.55                             | 45.32                      | 7.08                      | 1.78      | 2.07  |
| +5                            | (+41) | 7522                       | 1896            | 2204 | 949                                    | 10.10                            | 54.96                      | 7.94                      | 2.00      | 2.33  |
| +10                           | (+50) | 8879                       | 2237            | 2602 | 1003                                   | 10.67                            | 65.65                      | 8.89                      | 2.24      | 2.60  |

|                               |       |                            |                 |      |  |                                  |                            |                           |           |       |
|-------------------------------|-------|----------------------------|-----------------|------|--|----------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@115V50Hz |       |                            | 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) | 1800                       | 454             | 527  | 542                                    | 7.29                             | 14.15                      | 3.32                      | 0.84      | 0.97  |
| -15                           | (+ 5) | 2489                       | 627             | 729  | 657                                    | 8.14                             | 19.71                      | 3.79                      | 0.96      | 1.11  |
| -10                           | (+14) | 3281                       | 827             | 961  | 764                                    | 8.94                             | 26.18                      | 4.30                      | 1.08      | 1.26  |
| -5                            | (+23) | 4175                       | 1052            | 1223 | 862                                    | 9.71                             | 33.63                      | 4.84                      | 1.22      | 1.42  |
| 0                             | (+32) | 5172                       | 1303            | 1516 | 953                                    | 10.47                            | 42.10                      | 5.43                      | 1.37      | 1.59  |
| +5                            | (+41) | 6272                       | 1580            | 1838 | 1036                                   | 11.22                            | 51.65                      | 6.07                      | 1.53      | 1.78  |
| +10                           | (+50) | 7475                       | 1884            | 2190 | 1110                                   | 11.98                            | 62.33                      | 6.79                      | 1.71      | 1.99  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:        |       | ASHRAE46         |          |      | (Condensing temperature 35°C (+95°F)) |                     |               |                 |           |       |
|-------------------------|-------|------------------|----------|------|---------------------------------------|---------------------|---------------|-----------------|-----------|-------|
| @115V60Hz               |       | 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) | 3311             | 834      | 970  | 681                                   | 7.26                | 21.01         | 4.86            | 1.23      | 1.42  |
| -15                     | (+ 5) | 4437             | 1118     | 1300 | 764                                   | 7.73                | 28.33         | 5.80            | 1.46      | 1.70  |
| -10                     | (+14) | 5690             | 1434     | 1667 | 839                                   | 8.20                | 36.55         | 6.78            | 1.71      | 1.99  |
| -5                      | (+23) | 7068             | 1781     | 2071 | 905                                   | 8.66                | 45.74         | 7.81            | 1.97      | 2.29  |
| 0                       | (+32) | 8573             | 2160     | 2512 | 963                                   | 9.12                | 55.95         | 8.90            | 2.24      | 2.61  |
| +5                      | (+41) | 10204            | 2571     | 2990 | 1012                                  | 9.55                | 67.26         | 10.05           | 2.53      | 2.95  |
| +10                     | (+50) | 11962            | 3015     | 3505 | 1053                                  | 9.97                | 79.73         | 11.29           | 2.84      | 3.31  |

| TEST CONDITIONS:        |       | ASHRAE46         |          |      | (Condensing temperature 45°C (+113°F)) |                     |               |                 |           |       |
|-------------------------|-------|------------------|----------|------|--|---------------------|---------------|-----------------|-----------|-------|
| @115V60Hz               |       | 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) | 2720             | 685      | 797  | 658                                    | 7.36                | 19.06         | 4.14            | 1.04      | 1.21  |
| -15                     | (+ 5) | 3690             | 930      | 1081 | 766                                    | 8.01                | 26.00         | 4.81            | 1.21      | 1.41  |
| -10                     | (+14) | 4783             | 1205     | 1402 | 866                                    | 8.64                | 33.94         | 5.52            | 1.39      | 1.62  |
| -5                      | (+23) | 5999             | 1512     | 1758 | 956                                    | 9.26                | 42.92         | 6.27            | 1.58      | 1.84  |
| 0                       | (+32) | 7338             | 1849     | 2150 | 1037                                   | 9.85                | 53.02         | 7.08            | 1.78      | 2.07  |
| +5                      | (+41) | 8800             | 2218     | 2579 | 1109                                   | 10.41               | 64.29         | 7.95            | 2.00      | 2.33  |
| +10                     | (+50) | 10386            | 2617     | 3043 | 1172                                   | 10.94               | 76.80         | 8.89            | 2.24      | 2.61  |

| TEST CONDITIONS:        |       | ASHRAE46         |          |      | (Condensing temperature 55°C (+131°F)) |                     |               |                 |           |       |
|-------------------------|-------|------------------|----------|------|--|---------------------|---------------|-----------------|-----------|-------|
| @115V60Hz               |       | 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) | 2106             | 531      | 617  | 634                                    | 7.45                | 16.56         | 3.32            | 0.84      | 0.97  |
| -15                     | (+ 5) | 2913             | 734      | 854  | 769                                    | 8.28                | 23.06         | 3.79            | 0.96      | 1.11  |
| -10                     | (+14) | 3839             | 967      | 1125 | 894                                    | 9.08                | 30.63         | 4.30            | 1.08      | 1.26  |
| -5                      | (+23) | 4885             | 1231     | 1431 | 1009                                   | 9.85                | 39.35         | 4.84            | 1.22      | 1.42  |
| 0                       | (+32) | 6051             | 1525     | 1773 | 1115                                   | 10.58               | 49.25         | 5.43            | 1.37      | 1.59  |
| +5                      | (+41) | 7337             | 1849     | 2150 | 1211                                   | 11.27               | 60.42         | 6.08            | 1.53      | 1.78  |
| +10                     | (+50) | 8743             | 2203     | 2562 | 1297                                   | 11.91               | 72.91         | 6.80            | 1.71      | 1.99  |

### 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             | 9.6 +0.07/+0.00  | [mm] | (0.378" +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     |      |                          |