

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | VEM X9C+        |
| Nominal Voltage/Frequency | 230 V 40-150 Hz |
| Engineering Number        | 513906005       |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|                                    |                                   |                                   |           |
|------------------------------------|-----------------------------------|-----------------------------------|-----------|
| 1 Type                             | Hermetic reciprocating compressor |                                   |           |
| 2 Refrigerant                      | R-600a                            |                                   |           |
| 3 Nominal voltage and frequency    | 230 / 40-150                      | [ V / Hz ]                        |           |
| 4 Application type                 | Low Back Pressure                 |                                   |           |
| 4.1 Evaporating temperature range  | -35°C to -10°C                    | (-31°F to 14°F)                   |           |
| 5 Motor type                       | BPM                               |                                   |           |
| 6 Starting torque                  | LST - Low Starting Torque         |                                   |           |
| 7 Expansion device                 | Capillary tube                    |                                   |           |
| 8 Compressor cooling               |                                   | Operating voltage range           |           |
|                                    |                                   | 50 Hz                             | 60 Hz     |
| 8.1 LBP (32°C Ambient temperature) | Static                            | -                                 | -         |
| 8.2 LBP (43°C Ambient temperature) | Static                            | -                                 | -         |
| 8.3 HBP (32°C Ambient temperature) | -                                 | -                                 | -         |
| 8.4 HBP (43°C Ambient temperature) | -                                 | -                                 | -         |
| 9 Maximum condensing temperature   |                                   |                                   |           |
| 9.1 Operating                      | 6.9                               | [kgf/cm <sup>2</sup> ] (98 psig)  | / °C - °F |
| 9.2 Peak                           | 7.8                               | [kgf/cm <sup>2</sup> ] (111 psig) | / °C - °F |
| 10 Maximum winding temperature     | 130                               | [ °C ]                            |           |

### B - MECHANICAL DATA

|                               |                |                                  |
|-------------------------------|----------------|----------------------------------|
| 1 Commercial designation      | 1/5            | [hp]                             |
| 2 Displacement                | 9.04           | [cm <sup>3</sup> ] (0.552 cu.in) |
| 2.1 Bore [mm]                 | 24.000         |                                  |
| 2.2 Stroke [mm]               | 20.000         |                                  |
| 3 Lubricant charge            | 210            | [ml] (7.10 fl.oz.)               |
| 3.1 Lubricants approved       |                |                                  |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 |                                  |
| 4 Weight (with oil charge)    | 7.8            | [kg] (17.20 lb.)                 |
| 5 Nitrogen charge             | -              | [kgf/cm <sup>2</sup> ]           |

### C - ELETRICAL DATA

|  |                                   |                                    |
|--|-----------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 230 V 40-150 Hz 3 ~ (Three phase) |                                    |
| 2 Starting device type                       | Inverter                          |                                    |
| 2.1 Starting device                          | VCC31156XXXX/VCC32456XXXX         |                                    |
| 3 Start capacitor                            | -                                 | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | -                                 | [µF(VAC minimum)]                  |
| 5 Motor protection                           | VCC3 105628N01 SH4.2              |                                    |
| 6 Start winding resistance                   | 13.40                             | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 13.40                             | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (40/150 Hz)    | -                                 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (40/150 Hz) | -                                 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (40/150 Hz)  | -                                 | [A] - Measured according to UL 984 |
| 11 Approval boards certification             | CCC - VDE                         |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|   |          |     |                                    |                               |   |                           |   |       |
|---|----------|-----|------------------------------------|-------------------------------|---|---------------------------|---|-------|
| TEST CONDITIONS:<br><b>@220V1200RPM</b> |          |     | <b>CECOMAFLBP</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) |                           | <b>-25°C (-13°F)</b><br><b>55°C (131°F)</b> |       |
| 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] |
| 162                                     | 41       | 47  | 36                                 | 0.29                          | 0.62  | 4.55                      | 1.15  | 1.33  |

|   |          |     |                                    |                               |   |                           |   |       |
|---|----------|-----|------------------------------------|-------------------------------|---|---------------------------|---|-------|
| TEST CONDITIONS:<br><b>@220V1600RPM</b> |          |     | <b>CECOMAFLBP</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) |                           | <b>-25°C (-13°F)</b><br><b>55°C (131°F)</b> |       |
| 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] |
| 215                                     | 54       | 63  | 44                                 | 0.34                          | 0.82  | 4.88                      | 1.23  | 1.43  |

|   |          |     |                                    |                               |   |                           |   |       |
|---|----------|-----|------------------------------------|-------------------------------|---|---------------------------|---|-------|
| TEST CONDITIONS:<br><b>@220V2000RPM</b> |          |     | <b>CECOMAFLBP</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) |                           | <b>-25°C (-13°F)</b><br><b>55°C (131°F)</b> |       |
| 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] |
| 271                                     | 68       | 79  | 54                                 | 0.41                          | 1.03  | 5.01                      | 1.26  | 1.47  |

|   |          |     |                                    |                               |   |                           |   |       |
|---|----------|-----|------------------------------------|-------------------------------|---|---------------------------|---|-------|
| TEST CONDITIONS:<br><b>@220V3000RPM</b> |          |     | <b>CECOMAFLBP</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) |                           | <b>-25°C (-13°F)</b><br><b>55°C (131°F)</b> |       |
| 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] |
| 409                                     | 103      | 120 | 79                                 | 0.58                          | 1.56  | 5.16                      | 1.30  | 1.51  |

|   |          |     |                                    |                               |   |                           |   |       |
|---|----------|-----|------------------------------------|-------------------------------|---|---------------------------|---|-------|
| TEST CONDITIONS:<br><b>@220V4500RPM</b> |          |     | <b>CECOMAFLBP</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) |                           | <b>-25°C (-13°F)</b><br><b>55°C (131°F)</b> |       |
| 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] |
| 573                                     | 144      | 168 | 115                                | 0.83                          | 2.18  | 4.97                      | 1.25  | 1.46  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V1200RPM |                            | CECOMAF<br>Static |          |                             | (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] |
| -35 (-31)                        | 112                        | 28                | 33       | 21                          | 0.18                                   | 0.35                    | 5.55                      | 1.40     | 1.62      |       |
| -30 (-22)                        | 187                        | 47                | 55       | 28                          | 0.23                                   | 0.61                    | 6.36                      | 1.60     | 1.86      |       |
| -25 (-13)                        | 246                        | 62                | 72       | 33                          | 0.27                                   | 0.81                    | 7.31                      | 1.84     | 2.14      |       |
| -20 (- 4)                        | 302                        | 76                | 89       | 36                          | 0.29                                   | 0.98                    | 8.40                      | 2.12     | 2.46      |       |
| -15 (+ 5)                        | 368                        | 93                | 108      | 38                          | 0.31                                   | 1.18                    | 9.64                      | 2.43     | 2.83      |       |
| -10 (+14)                        | 455                        | 115               | 133      | 41                          | 0.34                                   | 1.46                    | 11.05                     | 2.78     | 3.24      |       |

| TEST CONDITIONS:<br>@220V1200RPM |                            | CECOMAF<br>Static |          |                             | (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] |
| -35 (-31)                        | 124                        | 31                | 36       | 25                          | 0.21                                    | 0.44                    | 4.79                      | 1.21     | 1.40      |       |
| -30 (-22)                        | 156                        | 39                | 46       | 29                          | 0.25                                    | 0.55                    | 5.25                      | 1.32     | 1.54      |       |
| -25 (-13)                        | 191                        | 48                | 56       | 33                          | 0.28                                    | 0.66                    | 5.85                      | 1.47     | 1.71      |       |
| -20 (- 4)                        | 242                        | 61                | 71       | 37                          | 0.31                                    | 0.83                    | 6.58                      | 1.66     | 1.93      |       |
| -15 (+ 5)                        | 320                        | 81                | 94       | 43                          | 0.35                                    | 1.10                    | 7.47                      | 1.88     | 2.19      |       |
| -10 (+14)                        | 438                        | 110               | 128      | 51                          | 0.41                                    | 1.53                    | 8.52                      | 2.15     | 2.50      |       |

| TEST CONDITIONS:<br>@220V1200RPM |                            | CECOMAF<br>Static |          |                             | (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] |
| -35 (-31)                        | 92                         | 23                | 27       | 25                          | 0.18                                    | 0.35                    | 3.62                      | 0.91     | 1.06      |       |
| -30 (-22)                        | 107                        | 27                | 31       | 29                          | 0.23                                    | 0.41                    | 3.98                      | 1.00     | 1.17      |       |
| -25 (-13)                        | 143                        | 36                | 42       | 34                          | 0.28                                    | 0.55                    | 4.47                      | 1.13     | 1.31      |       |
| -20 (- 4)                        | 214                        | 54                | 63       | 43                          | 0.35                                    | 0.82                    | 5.10                      | 1.29     | 1.49      |       |
| -15 (+ 5)                        | 331                        | 83                | 97       | 55                          | 0.44                                    | 1.27                    | 5.89                      | 1.48     | 1.72      |       |
| -10 (+14)                        | 506                        | 128               | 148      | 72                          | 0.55                                    | 1.94                    | 6.84                      | 1.72     | 2.00      |       |

| TEST CONDITIONS:<br>@220V1600RPM |                            | CECOMAF<br>Static |          |                             | (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] |
| -35 (-31)                        | 165                        | 41                | 48       | 27                          | 0.20                                   | 0.52                    | 6.18                      | 1.56     | 1.81      |       |
| -30 (-22)                        | 241                        | 61                | 71       | 35                          | 0.27                                   | 0.78                    | 6.94                      | 1.75     | 2.03      |       |
| -25 (-13)                        | 317                        | 80                | 93       | 40                          | 0.31                                   | 1.03                    | 7.94                      | 2.00     | 2.33      |       |
| -20 (- 4)                        | 399                        | 101               | 117      | 44                          | 0.34                                   | 1.29                    | 9.13                      | 2.30     | 2.67      |       |
| -15 (+ 5)                        | 492                        | 124               | 144      | 47                          | 0.37                                   | 1.58                    | 10.43                     | 2.63     | 3.06      |       |
| -10 (+14)                        | 603                        | 152               | 177      | 51                          | 0.40                                   | 1.94                    | 11.81                     | 2.97     | 3.46      |       |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V1600RPM |       | CECOMAF<br>Static          |          |     | (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] |
| -35                              | (-31) | 160                        | 40       | 47  | 31                                     | 0.25                          | 0.56                    | 4.98                      | 1.25      | 1.46  |
| -30                              | (-22) | 199                        | 50       | 58  | 36                                     | 0.29                          | 0.69                    | 5.45                      | 1.37      | 1.60  |
| -25                              | (-13) | 249                        | 63       | 73  | 41                                     | 0.33                          | 0.86                    | 6.15                      | 1.55      | 1.80  |
| -20                              | (- 4) | 316                        | 80       | 92  | 45                                     | 0.36                          | 1.09                    | 7.02                      | 1.77      | 2.06  |
| -15                              | (+ 5) | 405                        | 102      | 119 | 51                                     | 0.40                          | 1.41                    | 8.00                      | 2.01      | 2.34  |
| -10                              | (+14) | 524                        | 132      | 153 | 58                                     | 0.45                          | 1.83                    | 9.03                      | 2.28      | 2.65  |

| TEST CONDITIONS:<br>@220V1600RPM |       | CECOMAF<br>Static          |          |     | (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] |
| -35                              | (-31) | 118                        | 30       | 35  | 30                                     | 0.24                          | 0.45                    | 3.94                      | 0.99      | 1.16  |
| -30                              | (-22) | 148                        | 37       | 43  | 36                                     | 0.29                          | 0.57                    | 4.26                      | 1.07      | 1.25  |
| -25                              | (-13) | 201                        | 51       | 59  | 43                                     | 0.34                          | 0.77                    | 4.79                      | 1.21      | 1.40  |
| -20                              | (- 4) | 281                        | 71       | 82  | 51                                     | 0.40                          | 1.07                    | 5.48                      | 1.38      | 1.60  |
| -15                              | (+ 5) | 395                        | 100      | 116 | 62                                     | 0.48                          | 1.51                    | 6.27                      | 1.58      | 1.84  |
| -10                              | (+14) | 549                        | 138      | 161 | 76                                     | 0.58                          | 2.11                    | 7.10                      | 1.79      | 2.08  |

| TEST CONDITIONS:<br>@220V2000RPM |       | CECOMAF<br>Static          |          |     | (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] |
| -35                              | (-31) | 221                        | 56       | 65  | 35                                    | 0.26                          | 0.70                    | 6.24                      | 1.57      | 1.83  |
| -30                              | (-22) | 290                        | 73       | 85  | 42                                    | 0.31                          | 0.93                    | 7.00                      | 1.76      | 2.05  |
| -25                              | (-13) | 378                        | 95       | 111 | 48                                    | 0.36                          | 1.22                    | 7.97                      | 2.01      | 2.33  |
| -20                              | (- 4) | 485                        | 122      | 142 | 53                                    | 0.40                          | 1.56                    | 9.11                      | 2.29      | 2.67  |
| -15                              | (+ 5) | 612                        | 154      | 179 | 59                                    | 0.44                          | 1.97                    | 10.39                     | 2.62      | 3.04  |
| -10                              | (+14) | 759                        | 191      | 223 | 64                                    | 0.48                          | 2.45                    | 11.79                     | 2.97      | 3.46  |

| TEST CONDITIONS:<br>@220V2000RPM |       | CECOMAF<br>Static          |          |     | (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] |
| -35                              | (-31) | 191                        | 48       | 56  | 38                                     | 0.30                          | 0.66                    | 5.03                      | 1.27      | 1.48  |
| -30                              | (-22) | 248                        | 62       | 73  | 44                                     | 0.35                          | 0.86                    | 5.64                      | 1.42      | 1.65  |
| -25                              | (-13) | 322                        | 81       | 94  | 51                                     | 0.40                          | 1.12                    | 6.38                      | 1.61      | 1.87  |
| -20                              | (- 4) | 416                        | 105      | 122 | 58                                     | 0.45                          | 1.45                    | 7.22                      | 1.82      | 2.12  |
| -15                              | (+ 5) | 530                        | 133      | 155 | 65                                     | 0.50                          | 1.85                    | 8.16                      | 2.06      | 2.39  |
| -10                              | (+14) | 664                        | 167      | 195 | 73                                     | 0.55                          | 2.33                    | 9.14                      | 2.30      | 2.68  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:        |                  | CECOMAF  |     |                   | (Condensing temperature 55°C (+131°F)) |               |                 |           |       |  |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V2000RPM            |                  | Static   |     |                   |  |               |                 |           |       |  |
| Evaporating temperature | Cooling capacity |          |     | Power consumption | Current consumption                    | Gas flow rate | EFFICIENCY RATE |           |       |  |
|                         | +/- 5%           |          |     |                   |  |               | +/- 7%          |           |       |  |
| °C (°F)                 | [Btu/h]          | [kcal/h] | [W] | [W]               | [A]                                    | [kg/h]        | [Btu/Wh]        | [kcal/Wh] | [W/W] |  |
| -35 (-31)               | 138              | 35       | 40  | 37                | 0.29                                   | 0.53          | 3.76            | 0.95      | 1.10  |  |
| -30 (-22)               | 193              | 49       | 57  | 45                | 0.35                                   | 0.74          | 4.36            | 1.10      | 1.28  |  |
| -25 (-13)               | 266              | 67       | 78  | 53                | 0.42                                   | 1.01          | 5.03            | 1.27      | 1.47  |  |
| -20 (- 4)               | 358              | 90       | 105 | 62                | 0.49                                   | 1.37          | 5.75            | 1.45      | 1.69  |  |
| -15 (+ 5)               | 470              | 118      | 138 | 72                | 0.56                                   | 1.80          | 6.49            | 1.64      | 1.90  |  |
| -10 (+14)               | 603              | 152      | 177 | 84                | 0.63                                   | 2.31          | 7.22            | 1.82      | 2.11  |  |

| TEST CONDITIONS:        |                  | CECOMAF  |     |                   | (Condensing temperature 35°C (+95°F)) |               |                 |           |       |  |
|-------------------------|------------------|----------|-----|-------------------|---------------------------------------|---------------|-----------------|-----------|-------|--|
| @220V3000RPM            |                  | Static   |     |                   |                                       |               |                 |           |       |  |
| Evaporating temperature | Cooling capacity |          |     | Power consumption | Current consumption                   | Gas flow rate | EFFICIENCY RATE |           |       |  |
|                         | +/- 5%           |          |     |                   |                                       |               | +/- 7%          |           |       |  |
| °C (°F)                 | [Btu/h]          | [kcal/h] | [W] | [W]               | [A]                                   | [kg/h]        | [Btu/Wh]        | [kcal/Wh] | [W/W] |  |
| -35 (-31)               | 328              | 83       | 96  | 55                | 0.42                                  | 1.05          | 5.93            | 1.49      | 1.74  |  |
| -30 (-22)               | 435              | 110      | 127 | 64                | 0.47                                  | 1.39          | 6.82            | 1.72      | 2.00  |  |
| -25 (-13)               | 573              | 144      | 168 | 73                | 0.54                                  | 1.84          | 7.83            | 1.97      | 2.29  |  |
| -20 (- 4)               | 741              | 187      | 217 | 83                | 0.61                                  | 2.38          | 8.94            | 2.25      | 2.62  |  |
| -15 (+ 5)               | 940              | 237      | 275 | 93                | 0.68                                  | 3.03          | 10.12           | 2.55      | 2.97  |  |
| -10 (+14)               | 1168             | 294      | 342 | 103               | 0.76                                  | 3.77          | 11.36           | 2.86      | 3.33  |  |

| TEST CONDITIONS:        |                  | CECOMAF  |     |                   | (Condensing temperature 45°C (+113°F)) |               |                 |           |       |  |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V3000RPM            |                  | Static   |     |                   |  |               |                 |           |       |  |
| Evaporating temperature | Cooling capacity |          |     | Power consumption | Current consumption                    | Gas flow rate | EFFICIENCY RATE |           |       |  |
|                         | +/- 5%           |          |     |                   |  |               | +/- 7%          |           |       |  |
| °C (°F)                 | [Btu/h]          | [kcal/h] | [W] | [W]               | [A]                                    | [kg/h]        | [Btu/Wh]        | [kcal/Wh] | [W/W] |  |
| -35 (-31)               | 283              | 71       | 83  | 56                | 0.43                                   | 0.98          | 5.03            | 1.27      | 1.47  |  |
| -30 (-22)               | 370              | 93       | 108 | 66                | 0.50                                   | 1.28          | 5.65            | 1.42      | 1.65  |  |
| -25 (-13)               | 487              | 123      | 143 | 76                | 0.58                                   | 1.69          | 6.37            | 1.61      | 1.87  |  |
| -20 (- 4)               | 634              | 160      | 186 | 88                | 0.66                                   | 2.21          | 7.18            | 1.81      | 2.10  |  |
| -15 (+ 5)               | 809              | 204      | 237 | 100               | 0.75                                   | 2.83          | 8.06            | 2.03      | 2.36  |  |
| -10 (+14)               | 1013             | 255      | 297 | 113               | 0.84                                   | 3.55          | 8.99            | 2.26      | 2.63  |  |

| TEST CONDITIONS:        |                  | CECOMAF  |     |                   | (Condensing temperature 55°C (+131°F)) |               |                 |           |       |  |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V3000RPM            |                  | Static   |     |                   |  |               |                 |           |       |  |
| Evaporating temperature | Cooling capacity |          |     | Power consumption | Current consumption                    | Gas flow rate | EFFICIENCY RATE |           |       |  |
|                         | +/- 5%           |          |     |                   |  |               | +/- 7%          |           |       |  |
| °C (°F)                 | [Btu/h]          | [kcal/h] | [W] | [W]               | [A]                                    | [kg/h]        | [Btu/Wh]        | [kcal/Wh] | [W/W] |  |
| -35 (-31)               | 220              | 55       | 64  | 55                | 0.41                                   | 0.84          | 4.05            | 1.02      | 1.19  |  |
| -30 (-22)               | 296              | 75       | 87  | 66                | 0.50                                   | 1.13          | 4.52            | 1.14      | 1.33  |  |
| -25 (-13)               | 401              | 101      | 117 | 79                | 0.60                                   | 1.53          | 5.10            | 1.29      | 1.49  |  |
| -20 (- 4)               | 534              | 135      | 156 | 92                | 0.70                                   | 2.04          | 5.76            | 1.45      | 1.69  |  |
| -15 (+ 5)               | 694              | 175      | 203 | 107               | 0.81                                   | 2.66          | 6.47            | 1.63      | 1.90  |  |
| -10 (+14)               | 881              | 222      | 258 | 122               | 0.91                                   | 3.38          | 7.22            | 1.82      | 2.11  |  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V4500RPM |                            | CECOMAF<br>Static |          |                             | (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] |
| -35 (-31)                        | 468                        | 118               | 137      | 82                          | 0.58                                  | 1.50                    | 5.76                      | 1.45     | 1.69      |       |
| -30 (-22)                        | 594                        | 150               | 174      | 92                          | 0.66                                  | 1.91                    | 6.51                      | 1.64     | 1.91      |       |
| -25 (-13)                        | 740                        | 187               | 217      | 101                         | 0.74                                  | 2.38                    | 7.35                      | 1.85     | 2.15      |       |
| -20 (- 4)                        | 917                        | 231               | 269      | 110                         | 0.83                                  | 2.95                    | 8.28                      | 2.09     | 2.43      |       |
| -15 (+ 5)                        | 1134                       | 286               | 332      | 121                         | 0.91                                  | 3.64                    | 9.32                      | 2.35     | 2.73      |       |
| -10 (+14)                        | 1399                       | 353               | 410      | 133                         | 1.00                                  | 4.51                    | 10.47                     | 2.64     | 3.07      |       |

| TEST CONDITIONS:<br>@220V4500RPM |                            | CECOMAF<br>Static |          |                             | (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] |
| -35 (-31)                        | 418                        | 105               | 123      | 85                          | 0.61                                   | 1.45                    | 4.87                      | 1.23     | 1.43      |       |
| -30 (-22)                        | 523                        | 132               | 153      | 97                          | 0.71                                   | 1.82                    | 5.42                      | 1.37     | 1.59      |       |
| -25 (-13)                        | 642                        | 162               | 188      | 107                         | 0.80                                   | 2.24                    | 6.03                      | 1.52     | 1.77      |       |
| -20 (- 4)                        | 785                        | 198               | 230      | 118                         | 0.89                                   | 2.74                    | 6.71                      | 1.69     | 1.97      |       |
| -15 (+ 5)                        | 961                        | 242               | 282      | 129                         | 0.98                                   | 3.36                    | 7.48                      | 1.88     | 2.19      |       |
| -10 (+14)                        | 1181                       | 298               | 346      | 141                         | 1.07                                   | 4.13                    | 8.34                      | 2.10     | 2.44      |       |

| TEST CONDITIONS:<br>@220V4500RPM |                            | CECOMAF<br>Static |          |                             | (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] |
| -35 (-31)                        | 334                        | 84                | 98       | 87                          | 0.64                                   | 1.27                    | 3.82                      | 0.96     | 1.12      |       |
| -30 (-22)                        | 440                        | 111               | 129      | 101                         | 0.74                                   | 1.67                    | 4.34                      | 1.09     | 1.27      |       |
| -25 (-13)                        | 555                        | 140               | 163      | 113                         | 0.84                                   | 2.11                    | 4.90                      | 1.23     | 1.44      |       |
| -20 (- 4)                        | 687                        | 173               | 201      | 125                         | 0.94                                   | 2.62                    | 5.51                      | 1.39     | 1.61      |       |
| -15 (+ 5)                        | 846                        | 213               | 248      | 137                         | 1.05                                   | 3.24                    | 6.18                      | 1.56     | 1.81      |       |
| -10 (+14)                        | 1042                       | 262               | 305      | 150                         | 1.15                                   | 4.00                    | 6.93                      | 1.75     | 2.03      |       |

### F - EXTERNAL CHARACTERISTICS

|                         |                  |      |                          |
|-------------------------|------------------|------|--------------------------|
| 1 Base plate            | Universal EUEM   |      |                          |
| 2 Tray holder           | No               |      |                          |
| 3 Connectors            |                  |      |                          |
| 3.1 SUCTION             | 6.5 +0.12/-0.08  | [mm] | (0.256" +0.005"/-0.003") |
| 3.1.1 Material          | Copper           |      |                          |
| 3.1.2 Shape             | Straight         |      |                          |
| 3.2 DISCHARGE           | 4.94 +0.08/-0.08 | [mm] | (0.194" +0.003"/-0.003") |
| 3.2.1 Material          | Copper           |      |                          |
| 3.2.2 Shape             | Straight         |      |                          |
| 3.3 PROCESS             | 6.5 +0.12/-0.08  | [mm] | (0.256" +0.005"/-0.003") |
| 3.3.1 Material          | Copper           |      |                          |
| 3.3.2 Shape             | Straight         |      |                          |
| 3.4 Oil cooler (Copper) | No               | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs     |      |                          |