

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | EM X66CLC       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 701QA97         |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|                                    |                                   |                                   |           |
|------------------------------------|-----------------------------------|-----------------------------------|-----------|
| 1 Type                             | Hermetic reciprocating compressor |                                   |           |
| 2 Refrigerant                      | R-600a                            |                                   |           |
| 3 Nominal voltage and frequency    | 220-240 / 50                      | [ 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                       | RSCR                              |                                   |           |
| 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                            | 187 to 255 V                      | -         |
| 8.2 LBP (43°C Ambient temperature) | Static                            | 187 to 255 V                      | -         |
| 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      |                | [hp]                             |
| 2 Displacement                | 10.61          | [cm <sup>3</sup> ] (0.647 cu.in) |
| 2.1 Bore [mm]                 | 26.000         |                                  |
| 2.2 Stroke [mm]               | 20.000         |                                  |
| 3 Lubricant charge            | 150            | [ml] (5.07 fl.oz.)               |
| 3.1 Lubricants approved       |                |                                  |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 |                                  |
| 4 Weight (with oil charge)    | 7.6            | [kg] (16.75 lb.)                 |
| 5 Nitrogen charge             | -              | [kgf/cm <sup>2</sup> ]           |

### C - ELETRICAL DATA

|  |                                    |                                    |
|--|------------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 220-240 V 50 Hz 1 ~ (Single phase) |                                    |
| 2 Starting device type                       | TSD                                |                                    |
| 2.1 Starting device                          | TSD-220V/TSD2-220V1.2/TSD2-D-220V  |                                    |
| 3 Start capacitor                            | -                                  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 5(350)/4(350)                      | [µF(VAC minimum)]                  |
| 5 Motor protection                           | CP4TMC258R61A5                     |                                    |
| 6 Start winding resistance                   | 15.20                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 20.50                              | [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             | VDE                                |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|                               |          |     |                                   |                               |  |                               |           |       |
|-------------------------------|----------|-----|-----------------------------------|-------------------------------|--|-------------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |          |     | <b>CECOMAFLBP-NOFAN</b><br>Static |                               | Evaporating temperature<br>(Condensing temperature | -25°C (-13°F)<br>55°C (131°F) |           |       |
| 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] |
| 467                           | 118      | 137 | 100                               | 0.53                          | 1.78   | 4.68                          | 1.18      | 1.37  |

### E - PERFORMANCE - CURVES

|                               |                            |                                |     |                             |                               |  |                           |           |       |
|-------------------------------|----------------------------|--------------------------------|-----|-----------------------------|-------------------------------|--|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            | <b>CECOMAF-NOFAN</b><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)                     | 307                        | 77                             | 90  | 74                          | 0.60                          | 1.07                                   | 4.15                      | 1.05      | 1.22  |
| -30 (-22)                     | 416                        | 105                            | 122 | 86                          | 0.64                          | 1.45                                   | 4.86                      | 1.23      | 1.43  |
| -25 (-13)                     | 548                        | 138                            | 160 | 100                         | 0.69                          | 1.91                                   | 5.50                      | 1.39      | 1.61  |
| -20 (- 4)                     | 705                        | 178                            | 207 | 116                         | 0.74                          | 2.46                                   | 6.11                      | 1.54      | 1.79  |
| -15 (+ 5)                     | 889                        | 224                            | 261 | 132                         | 0.80                          | 3.11                                   | 6.73                      | 1.70      | 1.97  |
| -10 (+14)                     | 1102                       | 278                            | 323 | 149                         | 0.86                          | 3.86                                   | 7.40                      | 1.86      | 2.17  |

|                               |                            |                                |     |                             |                               |  |                           |           |       |
|-------------------------------|----------------------------|--------------------------------|-----|-----------------------------|-------------------------------|--|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            | <b>CECOMAF-NOFAN</b><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)                     | 243                        | 61                             | 71  | 69                          | 0.59                          | 0.93                                   | 3.53                      | 0.89      | 1.03  |
| -30 (-22)                     | 344                        | 87                             | 101 | 83                          | 0.64                          | 1.31                                   | 4.14                      | 1.04      | 1.21  |
| -25 (-13)                     | 465                        | 117                            | 136 | 99                          | 0.70                          | 1.77                                   | 4.66                      | 1.17      | 1.37  |
| -20 (- 4)                     | 608                        | 153                            | 178 | 118                         | 0.76                          | 2.32                                   | 5.12                      | 1.29      | 1.50  |
| -15 (+ 5)                     | 775                        | 195                            | 227 | 139                         | 0.84                          | 2.97                                   | 5.57                      | 1.40      | 1.63  |
| -10 (+14)                     | 968                        | 244                            | 284 | 160                         | 0.92                          | 3.72                                   | 6.05                      | 1.52      | 1.77  |

|                               |                            |                                |     |                             |                               |  |                           |           |       |
|-------------------------------|----------------------------|--------------------------------|-----|-----------------------------|-------------------------------|--|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            | <b>CECOMAF-NOFAN</b><br>Static |     |                             |                               | (Condensing temperature 65°C (+149°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)                     | 201                        | 51                             | 59  | 73                          | 0.59                          | 0.85                                   | 2.74                      | 0.69      | 0.80  |
| -30 (-22)                     | 285                        | 72                             | 84  | 87                          | 0.64                          | 1.20                                   | 3.27                      | 0.83      | 0.96  |
| -25 (-13)                     | 387                        | 97                             | 113 | 105                         | 0.71                          | 1.63                                   | 3.69                      | 0.93      | 1.08  |
| -20 (- 4)                     | 507                        | 128                            | 149 | 126                         | 0.79                          | 2.15                                   | 4.03                      | 1.02      | 1.18  |
| -15 (+ 5)                     | 649                        | 164                            | 190 | 150                         | 0.87                          | 2.76                                   | 4.34                      | 1.09      | 1.27  |
| -10 (+14)                     | 814                        | 205                            | 239 | 174                         | 0.97                          | 3.47                                   | 4.65                      | 1.17      | 1.36  |

### F - EXTERNAL CHARACTERISTICS

|                         |   |
|-------------------------|---|
| 1 Base plate            | European Standard                             |
| 2 Tray holder           | Yes   |
| 3 Connectors            |   |
| 3.1 SUCTION             | 6.1 +0.10/+0.00 [mm] (0.240" +0.004"/+0.000") |
| 3.1.1 Material          | Copper  |
| 3.1.2 Shape             | Slanted 42° up + 45° to Back                  |
| 3.2 DISCHARGE           | 5.1 +0.10/+0.00 [mm] (0.201" +0.004"/+0.000") |
| 3.2.1 Material          | Copper  |
| 3.2.2 Shape             | Slanted 0° up + 45° to Back                   |
| 3.3 PROCESS             | 6.1 +0.10/+0.00 [mm] (0.240" +0.004"/+0.000") |
| 3.3.1 Material          | Copper  |
| 3.3.2 Shape             | Slanted 45° up + 45° to Back                  |
| 3.4 Oil cooler (Copper) | No [mm]                                       |
| 3.5 Connector sealing   | Rubber Plugs                                  |