

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | EG X80CLC       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 513703005       |

### 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                | 11.14          | [cm <sup>3</sup> ] (0.680 cu.in) |
| 2.1 Bore [mm]                 | 26.000         |                                  |
| 2.2 Stroke [mm]               | 21.000         |                                  |
| 3 Lubricant charge            | 280            | [ml] (9.47 fl.oz.)               |
| 3.1 Lubricants approved       |                |                                  |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 |                                  |
| 4 Weight (with oil charge)    | 10.97          | [kg] (24.18 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                       | PTC  |                                    |
| 2.1 Starting device                          | 8EA17C3/8EA5B3/QPS2-A22MD3/QPS2-A22MD3 091 |                                    |
| 3 Start capacitor                            | -  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 5(310)                                     | [µF(VAC minimum)]                  |
| 5 Motor protection                           | 4TM189NFBYY-53                             |                                    |
| 6 Start winding resistance                   | 22.45                                      | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 18.35                                      | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (50 Hz)        | 5.10                                       | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz)     | 0.85                                       | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz)      | -  | [A] - Measured according to UL 984 |
| 11 Approval boards certification             | CCC - CE - UKCA - VDE                      |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|                               |          |     |                             |                               |  |                           |                               |       |
|-------------------------------|----------|-----|-----------------------------|-------------------------------|--|---------------------------|-------------------------------|-------|
| TEST CONDITIONS:<br>@220V50Hz |          |     | <b>CECOMAFLBP</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] |
| 518                           | 131      | 152 | 104                         | 0.47                          | 1.98   | 4.98                      | 1.25                          | 1.46  |

### E - PERFORMANCE - CURVES

|                               |                            |          |                          |                             |  |                         |                           |           |       |
|-------------------------------|----------------------------|----------|--------------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            |          | <b>CECOMAF</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)                     | 353                        | 89       | 103                      | 76                          | 0.36                                   | 1.23                    | 4.66                      | 1.17      | 1.37  |
| -30 (-22)                     | 459                        | 116      | 135                      | 87                          | 0.40                                   | 1.60                    | 5.30                      | 1.34      | 1.55  |
| -25 (-13)                     | 591                        | 149      | 173                      | 98                          | 0.45                                   | 2.06                    | 6.04                      | 1.52      | 1.77  |
| -20 (- 4)                     | 753                        | 190      | 221                      | 110                         | 0.50                                   | 2.63                    | 6.87                      | 1.73      | 2.01  |
| -15 (+ 5)                     | 950                        | 239      | 278                      | 122                         | 0.55                                   | 3.32                    | 7.78                      | 1.96      | 2.28  |
| -10 (+14)                     | 1187                       | 299      | 348                      | 135                         | 0.61                                   | 4.15                    | 8.76                      | 2.21      | 2.57  |

|                               |                            |          |                          |                             |  |                         |                           |           |       |
|-------------------------------|----------------------------|----------|--------------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            |          | <b>CECOMAF</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)                     | 303                        | 76       | 89                       | 78                          | 0.37                                   | 1.15                    | 3.88                      | 0.98      | 1.14  |
| -30 (-22)                     | 401                        | 101      | 117                      | 91                          | 0.42                                   | 1.53                    | 4.40                      | 1.11      | 1.29  |
| -25 (-13)                     | 518                        | 131      | 152                      | 104                         | 0.47                                   | 1.98                    | 4.99                      | 1.26      | 1.46  |
| -20 (- 4)                     | 661                        | 167      | 194                      | 117                         | 0.53                                   | 2.53                    | 5.64                      | 1.42      | 1.65  |
| -15 (+ 5)                     | 833                        | 210      | 244                      | 131                         | 0.59                                   | 3.19                    | 6.34                      | 1.60      | 1.86  |
| -10 (+14)                     | 1040                       | 262      | 305                      | 147                         | 0.66                                   | 3.99                    | 7.08                      | 1.78      | 2.07  |

|                               |                            |          |                          |                             |  |                         |                           |           |       |
|-------------------------------|----------------------------|----------|--------------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            |          | <b>CECOMAF</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)                     | 249                        | 63       | 73                       | 78                          | 0.37                                   | 1.05                    | 3.18                      | 0.80      | 0.93  |
| -30 (-22)                     | 337                        | 85       | 99                       | 93                          | 0.43                                   | 1.42                    | 3.62                      | 0.91      | 1.06  |
| -25 (-13)                     | 440                        | 111      | 129                      | 107                         | 0.49                                   | 1.86                    | 4.10                      | 1.03      | 1.20  |
| -20 (- 4)                     | 563                        | 142      | 165                      | 122                         | 0.55                                   | 2.39                    | 4.62                      | 1.16      | 1.35  |
| -15 (+ 5)                     | 710                        | 179      | 208                      | 139                         | 0.62                                   | 3.02                    | 5.15                      | 1.30      | 1.51  |
| -10 (+14)                     | 887                        | 223      | 260                      | 156                         | 0.70                                   | 3.78                    | 5.69                      | 1.43      | 1.67  |

### F - EXTERNAL CHARACTERISTICS

|                         |                                       |      |                          |
|-------------------------|---------------------------------------|------|--------------------------|
| 1 Base plate            | European Standard EG/F/AMEM Version 2 |      |                          |
| 2 Tray holder           | No                                    |      |                          |
| 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                               |      |                          |
| 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             | Slanted                               |      |                          |
| 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                               |      |                          |
| 3.4 Oil cooler (Copper) | No                                    | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs                          |      |                          |