

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | EM C26CLT       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 701FA90         |

### 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      | 1/10           | [hp]                             |
| 2 Displacement                | 5.19           | [cm <sup>3</sup> ] (0.317 cu.in) |
| 2.1 Bore [mm]                 | 21.000         |                                  |
| 2.2 Stroke [mm]               | 15.000         |                                  |
| 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                          | TSD2-220V1.2                       |                                    |
| 3 Start capacitor                            | -                                  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 2(350)/2.5(350)                    | [µF(VAC minimum)]                  |
| 5 Motor protection                           | CP4TMC112K61A5                     |                                    |
| 6 Start winding resistance                   | 33.40                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 57.00                              | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (50 Hz)        | 2.40                               | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz)     | 0.34                               | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz)      | 0.41                               | [A] - Measured according to UL 984 |
| 11 Approval boards certification             | VDE                                |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|                               |          |     |                             |                               |  |                           |  |       |
|-------------------------------|----------|-----|-----------------------------|-------------------------------|--|---------------------------|--|-------|
| TEST CONDITIONS:<br>@220V50Hz |          |     | ASHRAE LBP-NOFAN<br>Static  |                               | Evaporating temperature<br>(Condensing temperature |                           | -23.3°C (-9.94°F)<br>54.4°C (129.92°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] |
| 272                           | 69       | 80  | 45                          | 0.21                          | 0.85   | 6.07                      | 1.53                                   | 1.78  |

### E - PERFORMANCE - CURVES

|                               |                            |                          |     |                             |                               |                                       |                           |           |       |
|-------------------------------|----------------------------|--------------------------|-----|-----------------------------|-------------------------------|---------------------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            | ASHRAE32-NOFAN<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)                     | 158                        | 40                       | 46  | 30                          | 0.14                          | 0.50                                  | 5.27                      | 1.33      | 1.55  |
| -30 (-22)                     | 227                        | 57                       | 67  | 36                          | 0.16                          | 0.71                                  | 6.35                      | 1.60      | 1.86  |
| -25 (-13)                     | 308                        | 78                       | 90  | 42                          | 0.19                          | 0.97                                  | 7.44                      | 1.87      | 2.18  |
| -20 (- 4)                     | 403                        | 101                      | 118 | 47                          | 0.22                          | 1.26                                  | 8.57                      | 2.16      | 2.51  |
| -15 (+ 5)                     | 513                        | 129                      | 150 | 52                          | 0.24                          | 1.61                                  | 9.80                      | 2.47      | 2.87  |
| -10 (+14)                     | 641                        | 162                      | 188 | 58                          | 0.27                          | 2.02                                  | 11.16                     | 2.81      | 3.27  |

|                               |                            |                          |     |                             |                               |  |                           |           |       |
|-------------------------------|----------------------------|--------------------------|-----|-----------------------------|-------------------------------|--|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            | ASHRAE32-NOFAN<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)                     | 137                        | 35                       | 40  | 30                          | 0.14                          | 0.43                                   | 4.53                      | 1.14      | 1.33  |
| -30 (-22)                     | 204                        | 51                       | 60  | 37                          | 0.16                          | 0.64                                   | 5.55                      | 1.40      | 1.63  |
| -25 (-13)                     | 282                        | 71                       | 83  | 43                          | 0.19                          | 0.89                                   | 6.53                      | 1.64      | 1.91  |
| -20 (- 4)                     | 375                        | 94                       | 110 | 50                          | 0.22                          | 1.18                                   | 7.49                      | 1.89      | 2.20  |
| -15 (+ 5)                     | 483                        | 122                      | 141 | 57                          | 0.26                          | 1.52                                   | 8.49                      | 2.14      | 2.49  |
| -10 (+14)                     | 609                        | 154                      | 178 | 63                          | 0.29                          | 1.92                                   | 9.57                      | 2.41      | 2.80  |

|                               |                            |                          |     |                             |                               |  |                           |           |       |
|-------------------------------|----------------------------|--------------------------|-----|-----------------------------|-------------------------------|--|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            | ASHRAE32-NOFAN<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)                     | 112                        | 28                       | 33  | 30                          | 0.15                          | 0.35                                   | 3.83                      | 0.96      | 1.12  |
| -30 (-22)                     | 175                        | 44                       | 51  | 36                          | 0.17                          | 0.55                                   | 4.85                      | 1.22      | 1.42  |
| -25 (-13)                     | 250                        | 63                       | 73  | 43                          | 0.20                          | 0.79                                   | 5.77                      | 1.45      | 1.69  |
| -20 (- 4)                     | 340                        | 86                       | 99  | 51                          | 0.23                          | 1.07                                   | 6.62                      | 1.67      | 1.94  |
| -15 (+ 5)                     | 445                        | 112                      | 130 | 60                          | 0.28                          | 1.40                                   | 7.44                      | 1.88      | 2.18  |
| -10 (+14)                     | 568                        | 143                      | 167 | 68                          | 0.32                          | 1.79                                   | 8.29                      | 2.09      | 2.43  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V50Hz |       | ASHRAE32-NOFAN<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) | 84                         | 21       | 25  | 27                                      | 0.14                          | 0.26                    | 3.11                      | 0.78      | 0.91  |
| -30                           | (-22) | 143                        | 36       | 42  | 34                                      | 0.16                          | 0.45                    | 4.19                      | 1.06      | 1.23  |
| -25                           | (-13) | 214                        | 54       | 63  | 42                                      | 0.19                          | 0.67                    | 5.10                      | 1.29      | 1.49  |
| -20                           | (- 4) | 300                        | 76       | 88  | 51                                      | 0.23                          | 0.94                    | 5.89                      | 1.48      | 1.73  |
| -15                           | (+ 5) | 401                        | 101      | 118 | 61                                      | 0.28                          | 1.26                    | 6.59                      | 1.66      | 1.93  |
| -10                           | (+14) | 521                        | 131      | 153 | 72                                      | 0.33                          | 1.65                    | 7.26                      | 1.83      | 2.13  |

### 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           | 4.94 +0.08/-0.08             | [mm] | (0.194" +0.003"/-0.003") |
| 3.2.1 Material          | Copper                       |      |                          |
| 3.2.2 Shape             | Slanted 0° up + 45° to Back  |      |                          |
| 3.3 PROCESS             | 6 +0.08/-0.08                | [mm] | (0.236" +0.003"/-0.003") |
| 3.3.1 Material          | Copper(OD)                   |      |                          |
| 3.3.2 Shape             | Slanted 43° up + 45° to Back |      |                          |
| 3.4 Oil cooler (Copper) | No                           | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs                 |      |                          |