

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | EM C66CLT       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 710HA98         |

### 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 / ISO2 |                                  |
| 4 Weight (with oil charge)    | 7.7            | [kg] (16.98 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                          | M.I.E-START 2021                   |                                    |
| 3 Start capacitor                            | -                                  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 4(350)                             | [µF(VAC minimum)]                  |
| 5 Motor protection                           | AE15BU                             |                                    |
| 6 Start winding resistance                   | 20.50                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 16.10                              | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (50 Hz)        | 5.80                               | [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 |          |     | 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] |
| 625                           | 158      | 183 | 100                         | 0.46                          | 1.96   | 6.28                      | 1.58                                   | 1.84  |

### 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)                     | 372                        | 94                       | 109 | 68                          | 0.39                          | 1.17                                   | 5.51                      | 1.39      | 1.61  |  |
| -30 (-22)                     | 491                        | 124                      | 144 | 78                          | 0.43                          | 1.54                                   | 6.30                      | 1.59      | 1.85  |  |
| -25 (-13)                     | 643                        | 162                      | 188 | 89                          | 0.47                          | 2.02                                   | 7.22                      | 1.82      | 2.12  |  |
| -20 (- 4)                     | 828                        | 209                      | 243 | 100                         | 0.52                          | 2.60                                   | 8.24                      | 2.08      | 2.42  |  |
| -15 (+ 5)                     | 1047                       | 264                      | 307 | 112                         | 0.57                          | 3.30                                   | 9.33                      | 2.35      | 2.73  |  |
| -10 (+14)                     | 1300                       | 328                      | 381 | 124                         | 0.62                          | 4.10                                   | 10.45                     | 2.63      | 3.06  |  |

|                               |                            |                          |     |                             |                               |   |                           |           |       |  |
|-------------------------------|----------------------------|--------------------------|-----|-----------------------------|-------------------------------|---|---------------------------|-----------|-------|--|
| 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)                     | 340                        | 86                       | 100 | 68                          | 0.39                          | 1.07                                    | 4.99                      | 1.26      | 1.46  |  |
| -30 (-22)                     | 457                        | 115                      | 134 | 80                          | 0.44                          | 1.43                                    | 5.69                      | 1.43      | 1.67  |  |
| -25 (-13)                     | 607                        | 153                      | 178 | 93                          | 0.49                          | 1.90                                    | 6.50                      | 1.64      | 1.90  |  |
| -20 (- 4)                     | 789                        | 199                      | 231 | 107                         | 0.55                          | 2.48                                    | 7.39                      | 1.86      | 2.16  |  |
| -15 (+ 5)                     | 1005                       | 253                      | 294 | 121                         | 0.61                          | 3.16                                    | 8.32                      | 2.10      | 2.44  |  |
| -10 (+14)                     | 1254                       | 316                      | 367 | 135                         | 0.67                          | 3.96                                    | 9.27                      | 2.34      | 2.72  |  |

|                               |                            |                          |     |                             |                               |   |                           |           |       |  |
|-------------------------------|----------------------------|--------------------------|-----|-----------------------------|-------------------------------|---|---------------------------|-----------|-------|--|
| 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)                     | 302                        | 76                       | 89  | 67                          | 0.39                          | 0.95                                    | 4.50                      | 1.13      | 1.32  |  |
| -30 (-22)                     | 416                        | 105                      | 122 | 81                          | 0.44                          | 1.31                                    | 5.12                      | 1.29      | 1.50  |  |
| -25 (-13)                     | 563                        | 142                      | 165 | 96                          | 0.50                          | 1.77                                    | 5.83                      | 1.47      | 1.71  |  |
| -20 (- 4)                     | 741                        | 187                      | 217 | 112                         | 0.57                          | 2.33                                    | 6.60                      | 1.66      | 1.93  |  |
| -15 (+ 5)                     | 953                        | 240                      | 279 | 129                         | 0.64                          | 3.00                                    | 7.40                      | 1.87      | 2.17  |  |
| -10 (+14)                     | 1197                       | 302                      | 351 | 146                         | 0.72                          | 3.78                                    | 8.20                      | 2.07      | 2.40  |  |

### 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 42° 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                 |      |                          |