

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | EM 2C26CLT      |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 513304532       |

### 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                            | 198 to 255 V                      | -         |
| 8.2 LBP (43°C Ambient temperature) | Static                            | 198 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 | MINERAL / ISO5 |                                  |
| 4 Weight (with oil charge)    | 8.21           | [kg] (18.10 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                          | MI2021                             |                                    |
| 3 Start capacitor                            | -                                  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 3(300)/2.5(300)/2(300)             | [µF(VAC minimum)]                  |
| 5 Motor protection                           | AE23AHNX                           |                                    |
| 6 Start winding resistance                   | 31.90                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 44.40                              | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (50 Hz)        | 2.00                               | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz)     | 0.30                               | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz)      | -                                  | [A] - Measured according to UL 984 |
| 11 Approval boards certification             | CE - UKCA - 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<br>consumption<br>+/- 5% | Current<br>consumption<br>+/- 5% | Gas flow<br>rate<br>+/- 5%                         | EFFICIENCY RATE<br>+/- 7% |                                        |       |
| [Btu/h]                       | [kcal/h] | [W] | [W]                            | [A]                              | [kg/h]                                             | [Btu/Wh]                  | [kcal/Wh]                              | [W/W] |
| 283                           | 71       | 83  | 48                             | 0.21                             |                                                    | 5.85                      | 1.47                                   | 1.71  |

### E - PERFORMANCE - CURVES

|                               |                            |                          |         |                                |                                  |                                       |                           |        |          |           |
|-------------------------------|----------------------------|--------------------------|---------|--------------------------------|----------------------------------|---------------------------------------|---------------------------|--------|----------|-----------|
| TEST CONDITIONS:<br>@220V50Hz |                            | ASHRAE32-NOFAN<br>Static |         |                                |                                  | (Condensing temperature 35°C (+95°F)) |                           |        |          |           |
| Evaporating<br>temperature    | Cooling capacity<br>+/- 5% |                          |         | Power<br>consumption<br>+/- 5% | Current<br>consumption<br>+/- 5% | Gas flow<br>rate<br>+/- 5%            | EFFICIENCY RATE<br>+/- 7% |        |          |           |
|                               | °C                         | (°F)                     | [Btu/h] | [kcal/h]                       | [W]                              | [W]                                   | [A]                       | [kg/h] | [Btu/Wh] | [kcal/Wh] |
| -35                           | (-31)                      | 173                      | 44      | 51                             | 31                               | 0.15                                  | 0.54                      | 5.56   | 1.40     | 1.63      |
| -30                           | (-22)                      | 231                      | 58      | 68                             | 36                               | 0.17                                  | 0.72                      | 6.35   | 1.60     | 1.86      |
| -25                           | (-13)                      | 301                      | 76      | 88                             | 42                               | 0.19                                  | 0.94                      | 7.23   | 1.82     | 2.12      |
| -20                           | (- 4)                      | 386                      | 97      | 113                            | 47                               | 0.21                                  | 1.21                      | 8.27   | 2.08     | 2.42      |
| -15                           | (+ 5)                      | 488                      | 123     | 143                            | 51                               | 0.23                                  | 1.54                      | 9.52   | 2.40     | 2.79      |
| -10                           | (+14)                      | 612                      | 154     | 179                            | 55                               | 0.25                                  | 1.93                      | 11.07  | 2.79     | 3.24      |

|                               |                            |                          |         |                                |                                  |                                        |                           |        |          |           |
|-------------------------------|----------------------------|--------------------------|---------|--------------------------------|----------------------------------|----------------------------------------|---------------------------|--------|----------|-----------|
| TEST CONDITIONS:<br>@220V50Hz |                            | ASHRAE32-NOFAN<br>Static |         |                                |                                  | (Condensing temperature 45°C (+113°F)) |                           |        |          |           |
| Evaporating<br>temperature    | Cooling capacity<br>+/- 5% |                          |         | Power<br>consumption<br>+/- 5% | Current<br>consumption<br>+/- 5% | Gas flow<br>rate<br>+/- 5%             | EFFICIENCY RATE<br>+/- 7% |        |          |           |
|                               | °C                         | (°F)                     | [Btu/h] | [kcal/h]                       | [W]                              | [W]                                    | [A]                       | [kg/h] | [Btu/Wh] | [kcal/Wh] |
| -35                           | (-31)                      | 148                      | 37      | 43                             | 32                               | 0.15                                   | 0.46                      | 4.58   | 1.15     | 1.34      |
| -30                           | (-22)                      | 208                      | 52      | 61                             | 38                               | 0.17                                   | 0.65                      | 5.42   | 1.37     | 1.59      |
| -25                           | (-13)                      | 278                      | 70      | 81                             | 44                               | 0.19                                   | 0.87                      | 6.26   | 1.58     | 1.83      |
| -20                           | (- 4)                      | 361                      | 91      | 106                            | 50                               | 0.22                                   | 1.13                      | 7.14   | 1.80     | 2.09      |
| -15                           | (+ 5)                      | 461                      | 116     | 135                            | 56                               | 0.25                                   | 1.45                      | 8.15   | 2.05     | 2.39      |
| -10                           | (+14)                      | 580                      | 146     | 170                            | 62                               | 0.27                                   | 1.83                      | 9.35   | 2.36     | 2.74      |

|                               |                            |                          |         |                                |                                  |                                        |                           |        |          |           |
|-------------------------------|----------------------------|--------------------------|---------|--------------------------------|----------------------------------|----------------------------------------|---------------------------|--------|----------|-----------|
| TEST CONDITIONS:<br>@220V50Hz |                            | ASHRAE32-NOFAN<br>Static |         |                                |                                  | (Condensing temperature 55°C (+131°F)) |                           |        |          |           |
| Evaporating<br>temperature    | Cooling capacity<br>+/- 5% |                          |         | Power<br>consumption<br>+/- 5% | Current<br>consumption<br>+/- 5% | Gas flow<br>rate<br>+/- 5%             | EFFICIENCY RATE<br>+/- 7% |        |          |           |
|                               | °C                         | (°F)                     | [Btu/h] | [kcal/h]                       | [W]                              | [W]                                    | [A]                       | [kg/h] | [Btu/Wh] | [kcal/Wh] |
| -35                           | (-31)                      | 123                      | 31      | 36                             | 34                               | 0.14                                   | 0.38                      | 3.68   | 0.93     | 1.08      |
| -30                           | (-22)                      | 185                      | 47      | 54                             | 40                               | 0.17                                   | 0.58                      | 4.65   | 1.17     | 1.36      |
| -25                           | (-13)                      | 255                      | 64      | 75                             | 46                               | 0.20                                   | 0.80                      | 5.51   | 1.39     | 1.61      |
| -20                           | (- 4)                      | 338                      | 85      | 99                             | 53                               | 0.23                                   | 1.06                      | 6.32   | 1.59     | 1.85      |
| -15                           | (+ 5)                      | 435                      | 110     | 128                            | 61                               | 0.26                                   | 1.37                      | 7.15   | 1.80     | 2.10      |
| -10                           | (+14)                      | 551                      | 139     | 161                            | 68                               | 0.30                                   | 1.74                      | 8.08   | 2.04     | 2.37      |

### 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) | 97                         | 24       | 28  | 35                                      | 0.14                          | 0.30                    | 2.78                      | 0.70      | 0.81  |
| -30                           | (-22) | 161                        | 41       | 47  | 41                                      | 0.17                          | 0.51                    | 3.95                      | 0.99      | 1.16  |
| -25                           | (-13) | 233                        | 59       | 68  | 48                                      | 0.20                          | 0.73                    | 4.90                      | 1.24      | 1.44  |
| -20                           | (- 4) | 315                        | 79       | 92  | 56                                      | 0.24                          | 0.99                    | 5.71                      | 1.44      | 1.67  |
| -15                           | (+ 5) | 411                        | 103      | 120 | 64                                      | 0.28                          | 1.29                    | 6.44                      | 1.62      | 1.89  |
| -10                           | (+14) | 523                        | 132      | 153 | 73                                      | 0.32                          | 1.65                    | 7.16                      | 1.80      | 2.10  |

### F - EXTERNAL CHARACTERISTICS

|                         |                              |      |                          |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate            | European Standard EUEM       |      |                          |
| 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 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 90° up + 24° 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                 |      |                          |