

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | EM Y26CLC       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 513306528       |

### 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                       | RSIR-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      |                | [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            | 180            | [ml] (6.09 fl.oz.)               |
| 3.1 Lubricants approved       |                |                                  |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 |                                  |
| 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                       | PTC                                |                                    |
| 2.1 Starting device                          | 2019                               |                                    |
| 3 Start capacitor                            | -                                  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 2.5(300)                           | [µF(VAC minimum)]                  |
| 5 Motor protection                           | AE23AHNX                           |                                    |
| 6 Start winding resistance                   | 27.30                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 38.00                              | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (50 Hz)        | 2.70                               | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz)     | 0.25                               | [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 |          |     | <b>CECOMAFLBP</b><br>Static    |                                  | Evaporating temperature<br>(Condensing temperature |                           | -25°C (-13°F)<br>55°C (131°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] |
| 212                           | 53       | 62  | 51                             | 0.25                             | 0.81   | 4.17                      | 1.05                          | 1.22  |

### E - PERFORMANCE - CURVES

|                               |       |                            |          |     |                                |                                       |                            |                           |           |       |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|---------------------------------------|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |       | <b>CECOMAF</b><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] | [W/W] |
| -35                           | (-31) | 167                        | 42       | 49  | 36                             | 0.20                                  | 0.53                       | 4.59                      | 1.16      | 1.35  |
| -30                           | (-22) | 226                        | 57       | 66  | 42                             | 0.22                                  | 0.73                       | 5.43                      | 1.37      | 1.59  |
| -25                           | (-13) | 295                        | 74       | 87  | 47                             | 0.23                                  | 0.95                       | 6.31                      | 1.59      | 1.85  |
| -20                           | (- 4) | 379                        | 95       | 111 | 52                             | 0.25                                  | 1.22                       | 7.26                      | 1.83      | 2.13  |
| -15                           | (+ 5) | 479                        | 121      | 140 | 57                             | 0.27                                  | 1.54                       | 8.34                      | 2.10      | 2.44  |
| -10                           | (+14) | 599                        | 151      | 175 | 62                             | 0.28                                  | 1.93                       | 9.59                      | 2.42      | 2.81  |

|                               |       |                            |          |     |                                |  |                            |                           |           |       |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |       | <b>CECOMAF</b><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] | [W/W] |
| -35                           | (-31) | 135                        | 34       | 40  | 36                             | 0.20                                   | 0.47                       | 3.71                      | 0.93      | 1.09  |
| -30                           | (-22) | 191                        | 48       | 56  | 43                             | 0.22                                   | 0.67                       | 4.44                      | 1.12      | 1.30  |
| -25                           | (-13) | 256                        | 64       | 75  | 50                             | 0.24                                   | 0.89                       | 5.15                      | 1.30      | 1.51  |
| -20                           | (- 4) | 331                        | 83       | 97  | 56                             | 0.26                                   | 1.16                       | 5.88                      | 1.48      | 1.72  |
| -15                           | (+ 5) | 421                        | 106      | 123 | 63                             | 0.29                                   | 1.47                       | 6.67                      | 1.68      | 1.95  |
| -10                           | (+14) | 528                        | 133      | 155 | 70                             | 0.31                                   | 1.85                       | 7.56                      | 1.90      | 2.21  |

|                               |       |                            |          |     |                                |  |                            |                           |           |       |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |       | <b>CECOMAF</b><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] | [W/W] |
| -35                           | (-31) | 98                         | 25       | 29  | 35                             | 0.20                                   | 0.37                       | 2.82                      | 0.71      | 0.83  |
| -30                           | (-22) | 152                        | 38       | 44  | 43                             | 0.22                                   | 0.58                       | 3.54                      | 0.89      | 1.04  |
| -25                           | (-13) | 212                        | 53       | 62  | 51                             | 0.25                                   | 0.81                       | 4.18                      | 1.05      | 1.22  |
| -20                           | (- 4) | 280                        | 71       | 82  | 59                             | 0.27                                   | 1.07                       | 4.77                      | 1.20      | 1.40  |
| -15                           | (+ 5) | 360                        | 91       | 105 | 67                             | 0.30                                   | 1.38                       | 5.36                      | 1.35      | 1.57  |
| -10                           | (+14) | 454                        | 115      | 133 | 76                             | 0.34                                   | 1.75                       | 5.99                      | 1.51      | 1.75  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V50Hz |       | CECOMAF<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) | 59                         | 15       | 17  | 33                                      | 0.19                          | 0.25                    | 1.79                      | 0.45      | 0.52  |
| -30                           | (-22) | 111                        | 28       | 33  | 42                                      | 0.22                          | 0.47                    | 2.59                      | 0.65      | 0.76  |
| -25                           | (-13) | 167                        | 42       | 49  | 51                                      | 0.25                          | 0.70                    | 3.24                      | 0.82      | 0.95  |
| -20                           | (- 4) | 229                        | 58       | 67  | 61                                      | 0.28                          | 0.97                    | 3.78                      | 0.95      | 1.11  |
| -15                           | (+ 5) | 300                        | 76       | 88  | 71                                      | 0.31                          | 1.28                    | 4.26                      | 1.07      | 1.25  |
| -10                           | (+14) | 383                        | 97       | 112 | 81                                      | 0.35                          | 1.64                    | 4.72                      | 1.19      | 1.38  |

### F - EXTERNAL CHARACTERISTICS

|                         |                              |      |                          |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate            | European Standard EUEM       |      |                          |
| 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           | 4.9 +0.10/-0.05              | [mm] | (0.193" +0.004"/-0.002") |
| 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                 |      |                          |