

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | EM X26CLC       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 875BA90         |

### 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 254 V                      | -         |
| 8.2 LBP (43°C Ambient temperature) | Static                            | 198 to 254 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)    | 7.51           | [kg] (16.56 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                          | TSD3-220V                          |                                    |
| 3 Start capacitor                            | -                                  | [μF(VAC minimum)]                  |
| 4 Run capacitor                              | 4(440)                             | [μF(VAC minimum)]                  |
| 5 Motor protection                           | 4TM 110NFBYY-73                    |                                    |
| 6 Start winding resistance                   | 22.37                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 70.00                              | [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)     | 0.20                               | [A]                                |
| 10 FLA - Full Load Amperage HBP (50 Hz)      | -                                  | [A]                                |
| 11 Approval boards certification             | VDE                                |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|                               |          |     |                             |                               |  |                           |  |       |
|-------------------------------|----------|-----|-----------------------------|-------------------------------|--|---------------------------|--|-------|
| TEST CONDITIONS:<br>@220V50Hz |          |     | ASHRAELBP32<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] |
| 282                           | 71       | 83  | 49                          | 0.24                          | 0.89   | 5.73                      | 1.44                                   | 1.68  |

### E - PERFORMANCE - CURVES

|                               |       |                            |                    |     |  |                               |                         |                           |           |       |
|-------------------------------|-------|----------------------------|--------------------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |       |                            | ASHRAE32<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) | 151                        | 38                 | 44  | 33                                     | 0.19                          | 0.47                    | 4.56                      | 1.15      | 1.33  |
| -30                           | (-22) | 207                        | 52                 | 61  | 39                                     | 0.20                          | 0.65                    | 5.28                      | 1.33      | 1.55  |
| -25                           | (-13) | 279                        | 70                 | 82  | 46                                     | 0.23                          | 0.88                    | 6.07                      | 1.53      | 1.78  |
| -20                           | (- 4) | 366                        | 92                 | 107 | 53                                     | 0.26                          | 1.15                    | 6.93                      | 1.75      | 2.03  |
| -15                           | (+ 5) | 467                        | 118                | 137 | 60                                     | 0.29                          | 1.47                    | 7.84                      | 1.98      | 2.30  |
| -10                           | (+14) | 582                        | 147                | 170 | 66                                     | 0.32                          | 1.83                    | 8.82                      | 2.22      | 2.59  |

|                               |       |                            |                    |     |  |                               |                         |                           |           |       |
|-------------------------------|-------|----------------------------|--------------------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |       |                            | ASHRAE32<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) | 128                        | 32                 | 37  | 33                                     | 0.19                          | 0.40                    | 3.91                      | 0.99      | 1.15  |
| -30                           | (-22) | 182                        | 46                 | 53  | 39                                     | 0.20                          | 0.57                    | 4.66                      | 1.17      | 1.37  |
| -25                           | (-13) | 252                        | 64                 | 74  | 46                                     | 0.23                          | 0.79                    | 5.42                      | 1.37      | 1.59  |
| -20                           | (- 4) | 337                        | 85                 | 99  | 54                                     | 0.27                          | 1.06                    | 6.19                      | 1.56      | 1.81  |
| -15                           | (+ 5) | 436                        | 110                | 128 | 62                                     | 0.31                          | 1.37                    | 6.97                      | 1.76      | 2.04  |
| -10                           | (+14) | 548                        | 138                | 161 | 71                                     | 0.35                          | 1.73                    | 7.76                      | 1.96      | 2.27  |

|                               |       |                            |                    |     |  |                               |                         |                           |           |       |
|-------------------------------|-------|----------------------------|--------------------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |       |                            | ASHRAE32<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) | 102                        | 26                 | 30  | 33                                     | 0.19                          | 0.32                    | 3.13                      | 0.79      | 0.92  |
| -30                           | (-22) | 155                        | 39                 | 45  | 39                                     | 0.21                          | 0.48                    | 3.95                      | 0.99      | 1.16  |
| -25                           | (-13) | 222                        | 56                 | 65  | 47                                     | 0.24                          | 0.70                    | 4.72                      | 1.19      | 1.38  |
| -20                           | (- 4) | 304                        | 77                 | 89  | 56                                     | 0.28                          | 0.95                    | 5.46                      | 1.38      | 1.60  |
| -15                           | (+ 5) | 400                        | 101                | 117 | 65                                     | 0.32                          | 1.26                    | 6.15                      | 1.55      | 1.80  |
| -10                           | (+14) | 509                        | 128                | 149 | 75                                     | 0.36                          | 1.61                    | 6.81                      | 1.72      | 2.00  |

### 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°       |      |                          |
| 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             | Straight          |      |                          |
| 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 42°       |      |                          |
| 3.4 Oil cooler (Copper) | No                | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs      |      |                          |