

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | EM T26CLP       |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number        | 891BA75         |

### 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-Medium Back Pressure          |                                   |           |
| 4.1 Evaporating temperature range          | -35°C to -5°C                     | (-31°F to 23°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 pressures/temperature |                                   |                                   |           |
| 9.1 Operating (gauge)                      | 7.7                               | [kgf/cm <sup>2</sup> ] (109 psig) | / °C - °F |
| 9.2 Peak (gauge)                           | 9.8                               | [kgf/cm <sup>2</sup> ] (139 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 | MINERAL / ISO7 |                                  |
| 4 Weight (with oil charge)    | 7              | [kg] (15.43 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                          | MSDA3                              |                                    |
| 3 Start capacitor                            | -                                  | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 2.5(450)                           | [µF(VAC minimum)]                  |
| 5 Motor protection                           | 4TM110NFBYY-153                    |                                    |
| 6 Start winding resistance                   | 31.60                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 42.90                              | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (50 Hz)        | 3.00                               | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz)     | 0.32                               | [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<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] |
| 290                           | 73       | 85  | 65                             | 0.32                             | 0.91   | 4.43                      | 1.12                                   | 1.30  |

### E - PERFORMANCE - CURVES

|                               |                            |          |                    |                                |  |                            |                           |           |       |
|-------------------------------|----------------------------|----------|--------------------|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            |          | ASHRAE32<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)                     | 148                        | 37       | 43                 | 49                             | 0.26                                   | 0.46                       | 3.02                      | 0.76      | 0.88  |
| -30 (-22)                     | 210                        | 53       | 61                 | 55                             | 0.29                                   | 0.66                       | 3.79                      | 0.95      | 1.11  |
| -25 (-13)                     | 283                        | 71       | 83                 | 61                             | 0.31                                   | 0.89                       | 4.62                      | 1.16      | 1.35  |
| -20 (- 4)                     | 368                        | 93       | 108                | 67                             | 0.33                                   | 1.16                       | 5.50                      | 1.39      | 1.61  |
| -15 (+ 5)                     | 468                        | 118      | 137                | 73                             | 0.35                                   | 1.47                       | 6.44                      | 1.62      | 1.89  |
| -10 (+14)                     | 583                        | 147      | 171                | 78                             | 0.37                                   | 1.84                       | 7.44                      | 1.87      | 2.18  |
| -5 (+23)                      | 715                        | 180      | 209                | 84                             | 0.40                                   | 2.26                       | 8.48                      | 2.14      | 2.48  |

|                               |                            |          |                    |                                |  |                            |                           |           |       |
|-------------------------------|----------------------------|----------|--------------------|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            |          | ASHRAE32<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)                     | 135                        | 34       | 40                 | 49                             | 0.26                                   | 0.42                       | 2.78                      | 0.70      | 0.81  |
| -30 (-22)                     | 193                        | 49       | 56                 | 56                             | 0.28                                   | 0.60                       | 3.46                      | 0.87      | 1.01  |
| -25 (-13)                     | 262                        | 66       | 77                 | 63                             | 0.31                                   | 0.82                       | 4.18                      | 1.05      | 1.22  |
| -20 (- 4)                     | 346                        | 87       | 101                | 70                             | 0.34                                   | 1.09                       | 4.94                      | 1.24      | 1.45  |
| -15 (+ 5)                     | 443                        | 112      | 130                | 77                             | 0.37                                   | 1.40                       | 5.74                      | 1.45      | 1.68  |
| -10 (+14)                     | 557                        | 140      | 163                | 85                             | 0.40                                   | 1.76                       | 6.57                      | 1.66      | 1.93  |
| -5 (+23)                      | 687                        | 173      | 201                | 92                             | 0.44                                   | 2.17                       | 7.44                      | 1.87      | 2.18  |

|                               |                            |          |                    |                                |  |                            |                           |           |       |
|-------------------------------|----------------------------|----------|--------------------|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS:<br>@220V50Hz |                            |          | ASHRAE32<br>Static |                                | (Condensing temperature 65°C (+149°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)                     | 119                        | 30       | 35                 | 46                             | 0.26                                   | 0.37                       | 2.58                      | 0.65      | 0.76  |
| -30 (-22)                     | 173                        | 44       | 51                 | 55                             | 0.28                                   | 0.54                       | 3.18                      | 0.80      | 0.93  |
| -25 (-13)                     | 240                        | 60       | 70                 | 63                             | 0.31                                   | 0.75                       | 3.81                      | 0.96      | 1.12  |
| -20 (- 4)                     | 320                        | 81       | 94                 | 72                             | 0.34                                   | 1.01                       | 4.46                      | 1.12      | 1.31  |
| -15 (+ 5)                     | 416                        | 105      | 122                | 81                             | 0.38                                   | 1.31                       | 5.14                      | 1.30      | 1.51  |
| -10 (+14)                     | 528                        | 133      | 155                | 90                             | 0.42                                   | 1.67                       | 5.83                      | 1.47      | 1.71  |
| -5 (+23)                      | 657                        | 166      | 193                | 100                            | 0.47                                   | 2.08                       | 6.54                      | 1.65      | 1.92  |

### F - EXTERNAL CHARACTERISTICS

|                         |                   |      |                          |
|-------------------------|-------------------|------|--------------------------|
| 1 Base plate            | European Standard |      |                          |
| 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°       |      |                          |
| 3.2 DISCHARGE           | 5.02 +0.02/-0.02  | [mm] | (0.198" +0.001"/-0.001") |
| 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      |      |                          |