

### COMPRESSOR DEFINITION

|                           |                         |
|---------------------------|-------------------------|
| Designation               | <b>FMX A9C</b>          |
| Nominal Voltage/Frequency | <b>230 V 43 -134 Hz</b> |
| Engineering Number        | <b>513908179</b>        |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|                                    |   |                                   |           |
|------------------------------------|---|-----------------------------------|-----------|
| 1 Type                             | Hermetic reciprocating compressor                 |                                   |           |
| 2 Refrigerant                      | R-600a  |                                   |           |
| 3 Nominal voltage and frequency    | 230 / 43 -134                                     | [ V / Hz ]                        |           |
| 4 Application type                 | Low-Medium Back Pressure (Fullmotion Compressors) |                                   |           |
| 4.1 Evaporating temperature range  | -35°C to 0°C                                      | (-31°F to 32°F)                   |           |
| 5 Motor type                       | BPM   |                                   |           |
| 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) | -   | -                                 | -         |
| 8.2 LBP (43°C Ambient temperature) | -   | -                                 | -         |
| 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      | 1/7            | [hp]                             |
| 2 Displacement                | 8.74           | [cm <sup>3</sup> ] (0.533 cu.in) |
| 2.1 Bore [mm]                 | 22.500         |                                  |
| 2.2 Stroke [mm]               | 22.000         |                                  |
| 3 Lubricant charge            | 175            | [ml] (5.92 fl.oz.)               |
| 3.1 Lubricants approved       |                |                                  |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 |                                  |
| 4 Weight (with oil charge)    | 4.9            | [kg] (10.80 lb.)                 |
| 5 Nitrogen charge             | -              | [kgf/cm <sup>2</sup> ]           |

### C - ELETRICAL DATA

|   |                                  |                                    |
|---|----------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases  | 230 V 43-134 Hz 3~ (Three phase) |                                    |
| 2 Starting device type                        | Inverter                         |                                    |
| 2.1 Starting device                           | CF02D01 M 0.0 X                  |                                    |
| 3 Start capacitor                             | -                                | [µF(VAC minimum)]                  |
| 4 Run capacitor                               | -                                | [µF(VAC minimum)]                  |
| 5 Motor protection                            | INVERTER CF02D01 M 0             |                                    |
| 6 Start winding resistance                    | 20.00                            | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                      | 20.00                            | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (43 /134 Hz)    | 1.70                             | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (43 /134 Hz) | 1.70                             | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (43 /134 Hz)  | 1.70                             | [A] - Measured according to UL 984 |
| 11 Approval boards certification              | VDE                              |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|                                  |          |     |                                |                                  |  |                           |  |       |  |
|----------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|--|-------|--|
| TEST CONDITIONS:<br>@220V1300RPM |          |     | 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] |  |
| 212                              | 53       | 62  | 37                             | 0.31                             | 0.67   | 5.81                      | 1.46                                   | 1.70  |  |

|                                  |          |     |                                |                                  |  |                           |  |       |  |
|----------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|--|-------|--|
| TEST CONDITIONS:<br>@220V2000RPM |          |     | 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] |  |
| 334                              | 84       | 98  | 54                             | 0.44                             | 1.05   | 6.14                      | 1.55                                   | 1.80  |  |

|                                  |          |     |                                |                                  |  |                           |  |       |  |
|----------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|--|-------|--|
| TEST CONDITIONS:<br>@220V3000RPM |          |     | 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] |  |
| 495                              | 125      | 145 | 82                             | 0.65                             | 1.55   | 6.07                      | 1.53                                   | 1.78  |  |

|                                  |          |     |                                |                                  |  |                           |  |       |  |
|----------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|--|-------|--|
| TEST CONDITIONS:<br>@220V4000RPM |          |     | 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] |  |
| 614                              | 155      | 180 | 106                            | 0.80                             | 1.93   | 5.80                      | 1.46                                   | 1.70  |  |

### E - PERFORMANCE - CURVES

|                                  |                            |                    |         |                                |                                  |  |                           |        |          |           |
|----------------------------------|----------------------------|--------------------|---------|--------------------------------|----------------------------------|--|---------------------------|--------|----------|-----------|
| TEST CONDITIONS:<br>@220V1300RPM |                            | ASHRAE32<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)                      | 130                | 33      | 38                             | 22                               | 0.21                                   | 0.41                      | 6.04   | 1.52     | 1.77      |
| -30                              | (-22)                      | 179                | 45      | 52                             | 26                               | 0.24                                   | 0.56                      | 6.76   | 1.70     | 1.98      |
| -25                              | (-13)                      | 234                | 59      | 69                             | 31                               | 0.26                                   | 0.73                      | 7.65   | 1.93     | 2.24      |
| -20                              | (- 4)                      | 300                | 76      | 88                             | 34                               | 0.30                                   | 0.94                      | 8.75   | 2.20     | 2.56      |
| -15                              | (+ 5)                      | 379                | 96      | 111                            | 38                               | 0.33                                   | 1.19                      | 10.07  | 2.54     | 2.95      |
| -10                              | (+14)                      | 476                | 120     | 139                            | 41                               | 0.35                                   | 1.50                      | 11.64  | 2.93     | 3.41      |
| -5                               | (+23)                      | 593                | 150     | 174                            | 44                               | 0.38                                   | 1.88                      | 13.48  | 3.40     | 3.95      |
| 0                                | (+32)                      | 735                | 185     | 216                            | 47                               | 0.39                                   | 2.33                      | 15.62  | 3.94     | 4.58      |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V1300RPM |       | 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) | 117                        | 30       | 34  | 22                                     | 0.22                          | 0.37                    | 5.30                      | 1.34      | 1.55  |
| -30                              | (-22) | 165                        | 42       | 48  | 28                                     | 0.25                          | 0.52                    | 5.88                      | 1.48      | 1.72  |
| -25                              | (-13) | 219                        | 55       | 64  | 33                                     | 0.28                          | 0.69                    | 6.57                      | 1.65      | 1.92  |
| -20                              | (- 4) | 282                        | 71       | 83  | 38                                     | 0.32                          | 0.89                    | 7.38                      | 1.86      | 2.16  |
| -15                              | (+ 5) | 358                        | 90       | 105 | 43                                     | 0.36                          | 1.13                    | 8.36                      | 2.11      | 2.45  |
| -10                              | (+14) | 449                        | 113      | 132 | 47                                     | 0.41                          | 1.42                    | 9.51                      | 2.40      | 2.79  |
| -5                               | (+23) | 561                        | 141      | 164 | 52                                     | 0.44                          | 1.78                    | 10.86                     | 2.74      | 3.18  |
| 0                                | (+32) | 697                        | 176      | 204 | 56                                     | 0.47                          | 2.21                    | 12.43                     | 3.13      | 3.64  |

| TEST CONDITIONS:<br>@220V1300RPM |       | 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) | 102                        | 26       | 30  | 22                                     | 0.22                          | 0.32                    | 4.55                      | 1.15      | 1.33  |
| -30                              | (-22) | 149                        | 38       | 44  | 29                                     | 0.25                          | 0.47                    | 5.07                      | 1.28      | 1.49  |
| -25                              | (-13) | 201                        | 51       | 59  | 36                                     | 0.29                          | 0.63                    | 5.63                      | 1.42      | 1.65  |
| -20                              | (- 4) | 260                        | 66       | 76  | 42                                     | 0.34                          | 0.82                    | 6.25                      | 1.57      | 1.83  |
| -15                              | (+ 5) | 332                        | 84       | 97  | 48                                     | 0.39                          | 1.04                    | 6.95                      | 1.75      | 2.04  |
| -10                              | (+14) | 418                        | 105      | 122 | 54                                     | 0.44                          | 1.32                    | 7.76                      | 1.96      | 2.27  |
| -5                               | (+23) | 523                        | 132      | 153 | 60                                     | 0.49                          | 1.66                    | 8.70                      | 2.19      | 2.55  |
| 0                                | (+32) | 651                        | 164      | 191 | 66                                     | 0.54                          | 2.06                    | 9.79                      | 2.47      | 2.87  |

| TEST CONDITIONS:<br>@220V2000RPM |       | ASHRAE32<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) | 205                        | 52       | 60  | 34                                    | 0.31                          | 0.64                    | 6.02                      | 1.52      | 1.77  |
| -30                              | (-22) | 271                        | 68       | 80  | 40                                    | 0.34                          | 0.85                    | 6.81                      | 1.72      | 2.00  |
| -25                              | (-13) | 355                        | 89       | 104 | 46                                    | 0.38                          | 1.11                    | 7.74                      | 1.95      | 2.27  |
| -20                              | (- 4) | 458                        | 115      | 134 | 52                                    | 0.43                          | 1.44                    | 8.83                      | 2.22      | 2.59  |
| -15                              | (+ 5) | 583                        | 147      | 171 | 58                                    | 0.47                          | 1.83                    | 10.08                     | 2.54      | 2.95  |
| -10                              | (+14) | 731                        | 184      | 214 | 63                                    | 0.52                          | 2.31                    | 11.52                     | 2.90      | 3.38  |
| -5                               | (+23) | 906                        | 228      | 266 | 69                                    | 0.55                          | 2.87                    | 13.15                     | 3.31      | 3.85  |
| 0                                | (+32) | 1110                       | 280      | 325 | 74                                    | 0.58                          | 3.52                    | 15.00                     | 3.78      | 4.39  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V2000RPM |       | 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) | 183                        | 46       | 54  | 35                                     | 0.31                          | 0.57                    | 5.27                      | 1.33      | 1.55  |
| -30                              | (-22) | 250                        | 63       | 73  | 42                                     | 0.35                          | 0.78                    | 5.98                      | 1.51      | 1.75  |
| -25                              | (-13) | 333                        | 84       | 98  | 49                                     | 0.40                          | 1.04                    | 6.77                      | 1.71      | 1.98  |
| -20                              | (- 4) | 435                        | 110      | 127 | 57                                     | 0.46                          | 1.37                    | 7.66                      | 1.93      | 2.24  |
| -15                              | (+ 5) | 557                        | 140      | 163 | 64                                     | 0.52                          | 1.75                    | 8.65                      | 2.18      | 2.53  |
| -10                              | (+14) | 702                        | 177      | 206 | 72                                     | 0.58                          | 2.21                    | 9.77                      | 2.46      | 2.86  |
| -5                               | (+23) | 872                        | 220      | 256 | 79                                     | 0.63                          | 2.76                    | 11.02                     | 2.78      | 3.23  |
| 0                                | (+32) | 1070                       | 270      | 314 | 87                                     | 0.67                          | 3.39                    | 12.42                     | 3.13      | 3.64  |

| TEST CONDITIONS:<br>@220V2000RPM |       | 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) | 161                        | 41       | 47  | 34                                     | 0.30                          | 0.50                    | 4.70                      | 1.18      | 1.38  |
| -30                              | (-22) | 227                        | 57       | 67  | 42                                     | 0.36                          | 0.71                    | 5.37                      | 1.35      | 1.57  |
| -25                              | (-13) | 308                        | 78       | 90  | 51                                     | 0.42                          | 0.97                    | 6.06                      | 1.53      | 1.77  |
| -20                              | (- 4) | 406                        | 102      | 119 | 60                                     | 0.49                          | 1.28                    | 6.78                      | 1.71      | 1.99  |
| -15                              | (+ 5) | 524                        | 132      | 154 | 70                                     | 0.56                          | 1.65                    | 7.55                      | 1.90      | 2.21  |
| -10                              | (+14) | 664                        | 167      | 195 | 79                                     | 0.63                          | 2.10                    | 8.39                      | 2.11      | 2.46  |
| -5                               | (+23) | 828                        | 209      | 243 | 89                                     | 0.70                          | 2.62                    | 9.30                      | 2.34      | 2.72  |
| 0                                | (+32) | 1019                       | 257      | 298 | 99                                     | 0.75                          | 3.23                    | 10.30                     | 2.59      | 3.02  |

| TEST CONDITIONS:<br>@220V3000RPM |       | ASHRAE32<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) | 297                        | 75       | 87  | 50                                    | 0.42                          | 0.93                    | 5.93                      | 1.49      | 1.74  |
| -30                              | (-22) | 407                        | 103      | 119 | 61                                    | 0.49                          | 1.28                    | 6.67                      | 1.68      | 1.95  |
| -25                              | (-13) | 534                        | 135      | 156 | 71                                    | 0.56                          | 1.68                    | 7.49                      | 1.89      | 2.19  |
| -20                              | (- 4) | 685                        | 173      | 201 | 82                                    | 0.64                          | 2.15                    | 8.41                      | 2.12      | 2.47  |
| -15                              | (+ 5) | 867                        | 218      | 254 | 92                                    | 0.72                          | 2.73                    | 9.48                      | 2.39      | 2.78  |
| -10                              | (+14) | 1087                       | 274      | 319 | 101                                   | 0.80                          | 3.43                    | 10.71                     | 2.70      | 3.14  |
| -5                               | (+23) | 1353                       | 341      | 397 | 111                                   | 0.87                          | 4.28                    | 12.13                     | 3.06      | 3.55  |
| 0                                | (+32) | 1672                       | 421      | 490 | 122                                   | 0.94                          | 5.30                    | 13.77                     | 3.47      | 4.03  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V3000RPM |       | 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) | 275                        | 69       | 81  | 51                                     | 0.43                          | 0.86                    | 5.37                      | 1.35      | 1.57  |
| -30                              | (-22) | 382                        | 96       | 112 | 64                                     | 0.51                          | 1.20                    | 6.00                      | 1.51      | 1.76  |
| -25                              | (-13) | 506                        | 128      | 148 | 76                                     | 0.60                          | 1.59                    | 6.69                      | 1.68      | 1.96  |
| -20                              | (- 4) | 653                        | 165      | 191 | 87                                     | 0.69                          | 2.05                    | 7.46                      | 1.88      | 2.19  |
| -15                              | (+ 5) | 832                        | 210      | 244 | 99                                     | 0.78                          | 2.62                    | 8.35                      | 2.11      | 2.45  |
| -10                              | (+14) | 1048                       | 264      | 307 | 111                                    | 0.88                          | 3.31                    | 9.39                      | 2.37      | 2.75  |
| -5                               | (+23) | 1310                       | 330      | 384 | 124                                    | 0.97                          | 4.14                    | 10.60                     | 2.67      | 3.10  |
| 0                                | (+32) | 1624                       | 409      | 476 | 137                                    | 1.06                          | 5.15                    | 12.00                     | 3.02      | 3.52  |

| TEST CONDITIONS:<br>@220V3000RPM |       | 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) | 250                        | 63       | 73  | 51                                     | 0.41                          | 0.78                    | 4.95                      | 1.25      | 1.45  |
| -30                              | (-22) | 351                        | 88       | 103 | 64                                     | 0.50                          | 1.10                    | 5.47                      | 1.38      | 1.60  |
| -25                              | (-13) | 468                        | 118      | 137 | 78                                     | 0.60                          | 1.47                    | 6.03                      | 1.52      | 1.77  |
| -20                              | (- 4) | 608                        | 153      | 178 | 91                                     | 0.71                          | 1.91                    | 6.66                      | 1.68      | 1.95  |
| -15                              | (+ 5) | 779                        | 196      | 228 | 105                                    | 0.82                          | 2.45                    | 7.38                      | 1.86      | 2.16  |
| -10                              | (+14) | 987                        | 249      | 289 | 120                                    | 0.93                          | 3.12                    | 8.22                      | 2.07      | 2.41  |
| -5                               | (+23) | 1241                       | 313      | 364 | 135                                    | 1.05                          | 3.93                    | 9.21                      | 2.32      | 2.70  |
| 0                                | (+32) | 1547                       | 390      | 453 | 150                                    | 1.16                          | 4.90                    | 10.37                     | 2.61      | 3.04  |

| TEST CONDITIONS:<br>@220V4000RPM |       | ASHRAE32<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) | 341                        | 86       | 100 | 62                                    | 0.50                          | 1.07                    | 5.52                      | 1.39      | 1.62  |
| -30                              | (-22) | 485                        | 122      | 142 | 78                                    | 0.59                          | 1.52                    | 6.23                      | 1.57      | 1.83  |
| -25                              | (-13) | 675                        | 170      | 198 | 95                                    | 0.72                          | 2.12                    | 7.08                      | 1.78      | 2.07  |
| -20                              | (- 4) | 901                        | 227      | 264 | 112                                   | 0.86                          | 2.83                    | 8.03                      | 2.02      | 2.35  |
| -15                              | (+ 5) | 1154                       | 291      | 338 | 128                                   | 1.00                          | 3.63                    | 9.04                      | 2.28      | 2.65  |
| -10                              | (+14) | 1425                       | 359      | 417 | 142                                   | 1.12                          | 4.49                    | 10.08                     | 2.54      | 2.95  |
| -5                               | (+23) | 1704                       | 429      | 499 | 153                                   | 1.18                          | 5.39                    | 11.11                     | 2.80      | 3.25  |
| 0                                | (+32) | 1983                       | 500      | 581 | 160                                   | 1.17                          | 6.29                    | 12.09                     | 3.05      | 3.54  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V4000RPM |       | 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) | 326                        | 82       | 95  | 66                                     | 0.53                          | 1.02                    | 4.96                      | 1.25      | 1.45  |
| -30                              | (-22) | 453                        | 114      | 133 | 82                                     | 0.61                          | 1.42                    | 5.54                      | 1.40      | 1.62  |
| -25                              | (-13) | 627                        | 158      | 184 | 100                                    | 0.74                          | 1.97                    | 6.25                      | 1.58      | 1.83  |
| -20                              | (- 4) | 838                        | 211      | 246 | 118                                    | 0.90                          | 2.63                    | 7.07                      | 1.78      | 2.07  |
| -15                              | (+ 5) | 1079                       | 272      | 316 | 136                                    | 1.05                          | 3.39                    | 7.95                      | 2.00      | 2.33  |
| -10                              | (+14) | 1338                       | 337      | 392 | 152                                    | 1.18                          | 4.22                    | 8.86                      | 2.23      | 2.60  |
| -5                               | (+23) | 1608                       | 405      | 471 | 165                                    | 1.26                          | 5.08                    | 9.77                      | 2.46      | 2.86  |
| 0                                | (+32) | 1879                       | 474      | 551 | 174                                    | 1.27                          | 5.96                    | 10.63                     | 2.68      | 3.11  |

| TEST CONDITIONS:<br>@220V4000RPM |       | 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) | 299                        | 75       | 88  | 70                                     | 0.57                          | 0.94                    | 4.30                      | 1.08      | 1.26  |
| -30                              | (-22) | 413                        | 104      | 121 | 87                                     | 0.65                          | 1.29                    | 4.82                      | 1.22      | 1.41  |
| -25                              | (-13) | 575                        | 145      | 169 | 105                                    | 0.78                          | 1.81                    | 5.49                      | 1.38      | 1.61  |
| -20                              | (- 4) | 777                        | 196      | 228 | 124                                    | 0.94                          | 2.44                    | 6.25                      | 1.58      | 1.83  |
| -15                              | (+ 5) | 1010                       | 254      | 296 | 142                                    | 1.10                          | 3.18                    | 7.09                      | 1.79      | 2.08  |
| -10                              | (+14) | 1263                       | 318      | 370 | 159                                    | 1.24                          | 3.98                    | 7.95                      | 2.00      | 2.33  |
| -5                               | (+23) | 1528                       | 385      | 448 | 174                                    | 1.34                          | 4.83                    | 8.80                      | 2.22      | 2.58  |
| 0                                | (+32) | 1795                       | 452      | 526 | 185                                    | 1.38                          | 5.69                    | 9.62                      | 2.42      | 2.82  |

### F - EXTERNAL CHARACTERISTICS

|                         |                              |      |                          |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate            | European Standard FMX        |      |                          |
| 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 58° up + 11° 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 45° up + 37° 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 45° up + 57° to Back |      |                          |
| 3.4 Oil cooler (Copper) | No                           | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs                 |      |                          |