

### COMPRESSOR DEFINITION

|                           |                 |
|---------------------------|-----------------|
| Designation               | VEM Z5C         |
| Nominal Voltage/Frequency | 230 V 53-150 Hz |
| Engineering Number        | 513902006       |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|                                    |                                   |                                   |              |
|------------------------------------|-----------------------------------|-----------------------------------|--------------|
| 1 Type                             | Hermetic reciprocating compressor |                                   |              |
| 2 Refrigerant                      | R-600a                            |                                   |              |
| 3 Nominal voltage and frequency    | 230 / 53-150                      | [ 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                       | 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) | Static                            | 187 to 255 V                      | 187 to 255 V |
| 8.2 LBP (43°C Ambient temperature) | Static                            | 187 to 255 V                      | 187 to 255 V |
| 8.3 HBP (32°C Ambient temperature) | -                                 | -                                 | -            |
| 8.4 HBP (43°C Ambient temperature) | -                                 | -                                 | -            |
| 9 Maximum condensing temperature   |                                   |                                   |              |
| 9.1 Operating                      | 6.9                               | [kgf/cm <sup>2</sup> ] (98 psig)  | / °C - °F    |
| 9.2 Peak                           | 7.8                               | [kgf/cm <sup>2</sup> ] (111 psig) | / °C - °F    |
| 10 Maximum winding temperature     | 130                               | [ °C ]                            |              |

### B - MECHANICAL DATA

|                               |                |                                  |
|-------------------------------|----------------|----------------------------------|
| 1 Commercial designation      | 1/10           | [hp]                             |
| 2 Displacement                | 4.99           | [cm <sup>3</sup> ] (0.305 cu.in) |
| 2.1 Bore [mm]                 | 21.000         |                                  |
| 2.2 Stroke [mm]               | 14.400         |                                  |
| 3 Lubricant charge            | 220            | [ml] (7.44 fl.oz.)               |
| 3.1 Lubricants approved       |                |                                  |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 |                                  |
| 4 Weight (with oil charge)    | 7.59           | [kg] (16.73 lb.)                 |
| 5 Nitrogen charge             | -              | [kgf/cm <sup>2</sup> ]           |

### C - ELETRICAL DATA

|  |                                   |                                    |
|--|-----------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 230 V 53-150 Hz 3 ~ (Three phase) |                                    |
| 2 Starting device type                       | Inverter                          |                                    |
| 2.1 Starting device                          | VCC32456XXXX                      |                                    |
| 3 Start capacitor                            | -                                 | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | -                                 | [µF(VAC minimum)]                  |
| 5 Motor protection                           | VCC32456XXXXX                     |                                    |
| 6 Start winding resistance                   | 16.07                             | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 16.07                             | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (53/15 Hz)     | 2.10/2.10                         | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (53/15 Hz)  | 2.10/2.10                         | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (53/15 Hz)   | -                                 | [A] - Measured according to UL 984 |
| 11 Approval boards certification             | CE - UKCA - VDE                   |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|   |          |     |                                     |                               |   |  |           |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| TEST CONDITIONS:<br><b>@220V1600RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°F)</b> |           |       |
| 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] |
| 145                                     | 37       | 42  | 26                                  | 0.21                          | 0.46  | 5.49   | 1.38      | 1.61  |

|   |          |     |                                     |                               |   |  |           |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| TEST CONDITIONS:<br><b>@220V2000RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°F)</b> |           |       |
| 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] |
| 189                                     | 48       | 55  | 33                                  | 0.25                          | 0.59  | 5.82   | 1.47      | 1.71  |

|   |          |     |                                     |                               |   |  |           |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| TEST CONDITIONS:<br><b>@220V3000RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°F)</b> |           |       |
| 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] |
| 284                                     | 72       | 83  | 49                                  | 0.38                          | 0.89  | 5.83   | 1.47      | 1.71  |

|   |          |     |                                     |                               |   |  |           |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| TEST CONDITIONS:<br><b>@220V4500RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Static</b> |                               | Evaporating temperature<br>(Condensing temperature) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°F)</b> |           |       |
| 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] |
| 440                                     | 111      | 129 | 78                                  | 0.58                          | 1.38  | 5.66   | 1.43      | 1.66  |

### E - PERFORMANCE - CURVES

|   |                            |                                  |         |                             |                               |   |                           |        |          |           |
|---|----------------------------|----------------------------------|---------|-----------------------------|-------------------------------|---|---------------------------|--------|----------|-----------|
| TEST CONDITIONS:<br><b>@220V1600RPM</b> |                            | <b>ASHRAE32</b><br><b>Static</b> |         |                             |                               | (Condensing temperature <b>35°C (+95°F)</b> ) |                           |        |          |           |
| 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] |
| -35                                     | (-31)                      | 94                               | 24      | 28                          | 17                            | 0.14  | 0.29                      | 5.45   | 1.37     | 1.60      |
| -30                                     | (-22)                      | 123                              | 31      | 36                          | 20                            | 0.17  | 0.39                      | 6.27   | 1.58     | 1.84      |
| -25                                     | (-13)                      | 159                              | 40      | 47                          | 22                            | 0.19  | 0.50                      | 7.20   | 1.81     | 2.11      |
| -20                                     | (- 4)                      | 204                              | 51      | 60                          | 25                            | 0.21  | 0.64                      | 8.29   | 2.09     | 2.43      |
| -15                                     | (+ 5)                      | 260                              | 65      | 76                          | 27                            | 0.23  | 0.82                      | 9.60   | 2.42     | 2.81      |
| -10                                     | (+14)                      | 328                              | 83      | 96                          | 29                            | 0.24  | 1.04                      | 11.19  | 2.82     | 3.28      |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V1600RPM |       | 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) | 87                         | 22       | 25  | 18                                     | 0.16                          | 0.27                    | 4.83                      | 1.22      | 1.42  |
| -30                              | (-22) | 117                        | 29       | 34  | 21                                     | 0.18                          | 0.37                    | 5.60                      | 1.41      | 1.64  |
| -25                              | (-13) | 152                        | 38       | 45  | 24                                     | 0.20                          | 0.48                    | 6.39                      | 1.61      | 1.87  |
| -20                              | (- 4) | 195                        | 49       | 57  | 27                                     | 0.21                          | 0.61                    | 7.25                      | 1.83      | 2.12  |
| -15                              | (+ 5) | 247                        | 62       | 72  | 30                                     | 0.23                          | 0.78                    | 8.24                      | 2.08      | 2.41  |
| -10                              | (+14) | 310                        | 78       | 91  | 33                                     | 0.24                          | 0.98                    | 9.42                      | 2.37      | 2.76  |

| TEST CONDITIONS:<br>@220V1600RPM |       | 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) | 70                         | 18       | 21  | 18                                     | 0.17                          | 0.22                    | 3.95                      | 1.00      | 1.16  |
| -30                              | (-22) | 102                        | 26       | 30  | 21                                     | 0.19                          | 0.32                    | 4.78                      | 1.21      | 1.40  |
| -25                              | (-13) | 139                        | 35       | 41  | 25                                     | 0.20                          | 0.43                    | 5.54                      | 1.40      | 1.62  |
| -20                              | (- 4) | 181                        | 46       | 53  | 29                                     | 0.22                          | 0.57                    | 6.29                      | 1.58      | 1.84  |
| -15                              | (+ 5) | 231                        | 58       | 68  | 33                                     | 0.24                          | 0.73                    | 7.07                      | 1.78      | 2.07  |
| -10                              | (+14) | 290                        | 73       | 85  | 36                                     | 0.27                          | 0.92                    | 7.96                      | 2.01      | 2.33  |

| 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) | 119                        | 30       | 35  | 22                                    | 0.19                          | 0.37                    | 5.34                      | 1.35      | 1.57  |
| -30                              | (-22) | 153                        | 39       | 45  | 25                                    | 0.21                          | 0.48                    | 6.13                      | 1.54      | 1.79  |
| -25                              | (-13) | 200                        | 50       | 58  | 28                                    | 0.23                          | 0.63                    | 7.12                      | 1.79      | 2.09  |
| -20                              | (- 4) | 259                        | 65       | 76  | 31                                    | 0.26                          | 0.81                    | 8.33                      | 2.10      | 2.44  |
| -15                              | (+ 5) | 333                        | 84       | 98  | 34                                    | 0.29                          | 1.05                    | 9.77                      | 2.46      | 2.86  |
| -10                              | (+14) | 421                        | 106      | 123 | 37                                    | 0.31                          | 1.33                    | 11.43                     | 2.88      | 3.35  |

| 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) | 96                         | 24       | 28  | 22                                     | 0.17                          | 0.30                    | 4.33                      | 1.09      | 1.27  |
| -30                              | (-22) | 132                        | 33       | 39  | 26                                     | 0.19                          | 0.41                    | 5.13                      | 1.29      | 1.50  |
| -25                              | (-13) | 179                        | 45       | 53  | 29                                     | 0.23                          | 0.56                    | 6.08                      | 1.53      | 1.78  |
| -20                              | (- 4) | 239                        | 60       | 70  | 33                                     | 0.26                          | 0.75                    | 7.16                      | 1.80      | 2.10  |
| -15                              | (+ 5) | 312                        | 79       | 91  | 37                                     | 0.30                          | 0.98                    | 8.38                      | 2.11      | 2.46  |
| -10                              | (+14) | 397                        | 100      | 116 | 41                                     | 0.34                          | 1.25                    | 9.75                      | 2.46      | 2.86  |

### E - PERFORMANCE - CURVES

| 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)                        | 87                         | 22                 | 26       | 23                          | 0.19                                   | 0.27                    | 3.85                      | 0.97     | 1.13      |       |
| -30 (-22)                        | 123                        | 31                 | 36       | 26                          | 0.21                                   | 0.38                    | 4.64                      | 1.17     | 1.36      |       |
| -25 (-13)                        | 168                        | 42                 | 49       | 31                          | 0.24                                   | 0.53                    | 5.49                      | 1.38     | 1.61      |       |
| -20 (- 4)                        | 225                        | 57                 | 66       | 35                          | 0.28                                   | 0.71                    | 6.40                      | 1.61     | 1.87      |       |
| -15 (+ 5)                        | 292                        | 74                 | 86       | 40                          | 0.32                                   | 0.92                    | 7.37                      | 1.86     | 2.16      |       |
| -10 (+14)                        | 372                        | 94                 | 109      | 44                          | 0.37                                   | 1.18                    | 8.42                      | 2.12     | 2.47      |       |

| 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)                        | 166                        | 42                 | 49       | 34                          | 0.25                                  | 0.52                    | 4.87                      | 1.23     | 1.43      |       |
| -30 (-22)                        | 224                        | 57                 | 66       | 38                          | 0.30                                  | 0.70                    | 5.85                      | 1.47     | 1.71      |       |
| -25 (-13)                        | 304                        | 77                 | 89       | 43                          | 0.35                                  | 0.95                    | 7.00                      | 1.76     | 2.05      |       |
| -20 (- 4)                        | 403                        | 101                | 118      | 49                          | 0.40                                  | 1.27                    | 8.28                      | 2.09     | 2.43      |       |
| -15 (+ 5)                        | 517                        | 130                | 152      | 54                          | 0.44                                  | 1.63                    | 9.66                      | 2.43     | 2.83      |       |
| -10 (+14)                        | 646                        | 163                | 189      | 58                          | 0.47                                  | 2.04                    | 11.10                     | 2.80     | 3.25      |       |

| 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)                        | 158                        | 40                 | 46       | 35                          | 0.30                                   | 0.50                    | 4.48                      | 1.13     | 1.31      |       |
| -30 (-22)                        | 211                        | 53                 | 62       | 40                          | 0.34                                   | 0.66                    | 5.31                      | 1.34     | 1.56      |       |
| -25 (-13)                        | 286                        | 72                 | 84       | 46                          | 0.38                                   | 0.90                    | 6.28                      | 1.58     | 1.84      |       |
| -20 (- 4)                        | 380                        | 96                 | 111      | 52                          | 0.42                                   | 1.19                    | 7.34                      | 1.85     | 2.15      |       |
| -15 (+ 5)                        | 491                        | 124                | 144      | 58                          | 0.47                                   | 1.54                    | 8.46                      | 2.13     | 2.48      |       |
| -10 (+14)                        | 615                        | 155                | 180      | 64                          | 0.51                                   | 1.94                    | 9.62                      | 2.42     | 2.82      |       |

| 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)                        | 132                        | 33                 | 39       | 35                          | 0.28                                   | 0.41                    | 3.80                      | 0.96     | 1.11      |       |
| -30 (-22)                        | 183                        | 46                 | 53       | 40                          | 0.31                                   | 0.57                    | 4.61                      | 1.16     | 1.35      |       |
| -25 (-13)                        | 256                        | 64                 | 75       | 46                          | 0.36                                   | 0.80                    | 5.52                      | 1.39     | 1.62      |       |
| -20 (- 4)                        | 348                        | 88                 | 102      | 54                          | 0.42                                   | 1.09                    | 6.49                      | 1.63     | 1.90      |       |
| -15 (+ 5)                        | 458                        | 115                | 134      | 61                          | 0.48                                   | 1.44                    | 7.48                      | 1.88     | 2.19      |       |
| -10 (+14)                        | 581                        | 146                | 170      | 69                          | 0.54                                   | 1.83                    | 8.46                      | 2.13     | 2.48      |       |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@220V4500RPM |                            | 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] |
| -35                              | (-31)                      | 237                | 60      | 70                          | 53                                    | 0.39                    | 0.74                      | 4.46   | 1.12     | 1.31      |
| -30                              | (-22)                      | 340                | 86      | 100                         | 61                                    | 0.48                    | 1.07                      | 5.53   | 1.39     | 1.62      |
| -25                              | (-13)                      | 450                | 113     | 132                         | 69                                    | 0.54                    | 1.41                      | 6.56   | 1.65     | 1.92      |
| -20                              | (- 4)                      | 570                | 144     | 167                         | 75                                    | 0.60                    | 1.79                      | 7.59   | 1.91     | 2.22      |
| -15                              | (+ 5)                      | 703                | 177     | 206                         | 81                                    | 0.64                    | 2.21                      | 8.66   | 2.18     | 2.54      |
| -10                              | (+14)                      | 853                | 215     | 250                         | 87                                    | 0.68                    | 2.69                      | 9.81   | 2.47     | 2.87      |

| TEST CONDITIONS:<br>@220V4500RPM |                            | 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] |
| -35                              | (-31)                      | 216                | 55      | 63                          | 54                                     | 0.44                    | 0.68                      | 4.03   | 1.02     | 1.18      |
| -30                              | (-22)                      | 320                | 81      | 94                          | 63                                     | 0.52                    | 1.00                      | 5.03   | 1.27     | 1.47      |
| -25                              | (-13)                      | 431                | 108     | 126                         | 72                                     | 0.58                    | 1.35                      | 5.96   | 1.50     | 1.75      |
| -20                              | (- 4)                      | 551                | 139     | 162                         | 81                                     | 0.64                    | 1.73                      | 6.86   | 1.73     | 2.01      |
| -15                              | (+ 5)                      | 686                | 173     | 201                         | 88                                     | 0.69                    | 2.16                      | 7.77   | 1.96     | 2.28      |
| -10                              | (+14)                      | 836                | 211     | 245                         | 96                                     | 0.74                    | 2.64                      | 8.72   | 2.20     | 2.56      |

| TEST CONDITIONS:<br>@220V4500RPM |                            | 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] |
| -35                              | (-31)                      | 176                | 44      | 52                          | 50                                     | 0.37                    | 0.55                      | 3.50   | 0.88     | 1.03      |
| -30                              | (-22)                      | 282                | 71      | 82                          | 62                                     | 0.47                    | 0.88                      | 4.51   | 1.14     | 1.32      |
| -25                              | (-13)                      | 394                | 99      | 116                         | 73                                     | 0.55                    | 1.24                      | 5.42   | 1.37     | 1.59      |
| -20                              | (- 4)                      | 517                | 130     | 152                         | 83                                     | 0.63                    | 1.63                      | 6.27   | 1.58     | 1.84      |
| -15                              | (+ 5)                      | 654                | 165     | 192                         | 92                                     | 0.71                    | 2.06                      | 7.09   | 1.79     | 2.08      |
| -10                              | (+14)                      | 807                | 203     | 237                         | 102                                    | 0.79                    | 2.55                      | 7.93   | 2.00     | 2.32      |

### 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 12° out + 79° up        |      |                          |
| 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             | Slanted parallel BP+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 42° up + 45° to Back    |      |                          |
| 3.4 Oil cooler (Copper) | No                              | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs                    |      |                          |