

### COMPRESSOR DEFINITION

|                           |                        |
|---------------------------|------------------------|
| Designation               | <b>VEM C9C</b>         |
| Nominal Voltage/Frequency | <b>230 V 40-150 Hz</b> |
| Engineering Number        | <b>513906017</b>       |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|                                    |                                   |                                   |             |
|------------------------------------|-----------------------------------|-----------------------------------|-------------|
| 1 Type                             | Hermetic reciprocating compressor |                                   |             |
| 2 Refrigerant                      | R-600a                            |                                   |             |
| 3 Nominal voltage and frequency    | 230 / 40-150                      | [ 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                            | 80 to 140 V                       | 80 to 140 V |
| 8.2 LBP (43°C Ambient temperature) | Static                            | 80 to 140 V                       | 80 to 140 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      | 1/5            | [hp]                             |
| 2 Displacement                | 9.04           | [cm <sup>3</sup> ] (0.552 cu.in) |
| 2.1 Bore [mm]                 | 24.000         |                                  |
| 2.2 Stroke [mm]               | 20.000         |                                  |
| 3 Lubricant charge            | 210            | [ml] (7.10 fl.oz.)               |
| 3.1 Lubricants approved       |                |                                  |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 |                                  |
| 4 Weight (with oil charge)    | 7.8            | [kg] (17.20 lb.)                 |
| 5 Nitrogen charge             | -              | [kgf/cm <sup>2</sup> ]           |

### C - ELETRICAL DATA

|  |                                   |                                    |
|--|-----------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 230 V 40-150 Hz 3 ~ (Three phase) |                                    |
| 2 Starting device type                       | Inverter                          |                                    |
| 2.1 Starting device                          | VCC31156XXXX                      |                                    |
| 3 Start capacitor                            | -                                 | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | -                                 | [µF(VAC minimum)]                  |
| 5 Motor protection                           | VCC31156XXXXX                     |                                    |
| 6 Start winding resistance                   | 8.10                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 8.10                              | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (40/150 Hz)    | 2.10                              | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (40/150 Hz) | 2.10                              | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (40/150 Hz)  | -                                 | [A] - Measured according to UL 984 |
| 11 Approval boards certification             | CCC - UL - VDE                    |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|   |          |     |                                     |                               |   |                           |  |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| TEST CONDITIONS:<br><b>@115V1200RPM</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] |
| 213                                     | 54       | 62  | 33                                  | 0.51                          | 0.67  | 6.45                      | 1.63   | 1.89  |

|   |          |     |                                     |                               |   |                           |  |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| TEST CONDITIONS:<br><b>@115V1600RPM</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] |
| 292                                     | 74       | 86  | 44                                  | 0.64                          | 0.92  | 6.65                      | 1.68   | 1.95  |

|   |          |     |                                     |                               |   |                           |  |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| TEST CONDITIONS:<br><b>@115V2000RPM</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] |
| 366                                     | 92       | 107 | 55                                  | 1.58                          | 1.15  | 6.69                      | 1.69   | 1.96  |

|   |          |     |                                     |                               |   |                           |  |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| TEST CONDITIONS:<br><b>@115V3000RPM</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] |
| 543                                     | 137      | 159 | 81                                  | 1.13                          | 1.70  | 6.70                      | 1.69   | 1.96  |

|   |          |     |                                     |                               |   |                           |  |       |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| TEST CONDITIONS:<br><b>@115V4500RPM</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] |
| 729                                     | 184      | 214 | 114                                 | 1.65                          | 2.29  | 6.39                      | 1.61   | 1.87  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@115V1200RPM |                            | 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)                      | 122                | 31      | 36                          | 20                                     | 0.30                    | 0.38                      | 5.98   | 1.51     | 1.75      |
| -30                              | (-22)                      | 166                | 42      | 49                          | 24                                     | 0.39                    | 0.52                      | 6.92   | 1.74     | 2.03      |
| -25                              | (-13)                      | 220                | 55      | 64                          | 28                                     | 0.43                    | 0.69                      | 7.98   | 2.01     | 2.34      |
| -20                              | (- 4)                      | 284                | 71      | 83                          | 31                                     | 0.46                    | 0.89                      | 9.22   | 2.32     | 2.70      |
| -15                              | (+ 5)                      | 359                | 91      | 105                         | 34                                     | 0.48                    | 1.13                      | 10.67  | 2.69     | 3.13      |
| -10                              | (+14)                      | 449                | 113     | 131                         | 36                                     | 0.52                    | 1.41                      | 12.40  | 3.12     | 3.63      |

| TEST CONDITIONS:<br>@115V1200RPM |                            | 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)                      | 109                | 28      | 32                          | 21                                      | 0.31                    | 0.34                      | 5.12   | 1.29     | 1.50      |
| -30                              | (-22)                      | 154                | 39      | 45                          | 26                                      | 0.38                    | 0.48                      | 5.93   | 1.50     | 1.74      |
| -25                              | (-13)                      | 207                | 52      | 61                          | 30                                      | 0.42                    | 0.65                      | 6.80   | 1.71     | 1.99      |
| -20                              | (- 4)                      | 270                | 68      | 79                          | 35                                      | 0.47                    | 0.85                      | 7.77   | 1.96     | 2.28      |
| -15                              | (+ 5)                      | 346                | 87      | 101                         | 39                                      | 0.54                    | 1.09                      | 8.89   | 2.24     | 2.60      |
| -10                              | (+14)                      | 435                | 110     | 127                         | 43                                      | 0.64                    | 1.37                      | 10.22  | 2.57     | 2.99      |

| TEST CONDITIONS:<br>@115V1200RPM |                            | 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)                      | 94                 | 24      | 27                          | 21                                      | 0.34                    | 0.29                      | 4.37   | 1.10     | 1.28      |
| -30                              | (-22)                      | 138                | 35      | 40                          | 27                                      | 0.39                    | 0.43                      | 5.16   | 1.30     | 1.51      |
| -25                              | (-13)                      | 191                | 48      | 56                          | 32                                      | 0.44                    | 0.60                      | 5.95   | 1.50     | 1.74      |
| -20                              | (- 4)                      | 255                | 64      | 75                          | 38                                      | 0.52                    | 0.80                      | 6.77   | 1.71     | 1.98      |
| -15                              | (+ 5)                      | 331                | 83      | 97                          | 43                                      | 0.64                    | 1.04                      | 7.68   | 1.93     | 2.25      |
| -10                              | (+14)                      | 420                | 106     | 123                         | 48                                      | 0.82                    | 1.32                      | 8.72   | 2.20     | 2.56      |

| TEST CONDITIONS:<br>@115V1600RPM |                            | 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)                      | 169                | 43      | 50                          | 26                                     | 0.49                    | 0.53                      | 6.37   | 1.61     | 1.87      |
| -30                              | (-22)                      | 228                | 58      | 67                          | 31                                     | 0.53                    | 0.72                      | 7.25   | 1.83     | 2.12      |
| -25                              | (-13)                      | 300                | 76      | 88                          | 36                                     | 0.56                    | 0.94                      | 8.24   | 2.08     | 2.41      |
| -20                              | (- 4)                      | 386                | 97      | 113                         | 41                                     | 0.60                    | 1.21                      | 9.39   | 2.37     | 2.75      |
| -15                              | (+ 5)                      | 488                | 123     | 143                         | 45                                     | 0.64                    | 1.53                      | 10.75  | 2.71     | 3.15      |
| -10                              | (+14)                      | 607                | 153     | 178                         | 49                                     | 0.69                    | 1.92                      | 12.38  | 3.12     | 3.63      |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@115V1600RPM |       | 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) | 153                        | 38       | 45  | 28                                     | 0.43                          | 0.48                    | 5.50                      | 1.39      | 1.61  |
| -30                              | (-22) | 212                        | 54       | 62  | 34                                     | 0.48                          | 0.67                    | 6.31                      | 1.59      | 1.85  |
| -25                              | (-13) | 284                        | 72       | 83  | 40                                     | 0.53                          | 0.89                    | 7.15                      | 1.80      | 2.09  |
| -20                              | (- 4) | 370                        | 93       | 108 | 46                                     | 0.60                          | 1.16                    | 8.07                      | 2.03      | 2.36  |
| -15                              | (+ 5) | 472                        | 119      | 138 | 52                                     | 0.67                          | 1.49                    | 9.12                      | 2.30      | 2.67  |
| -10                              | (+14) | 592                        | 149      | 173 | 57                                     | 0.76                          | 1.87                    | 10.36                     | 2.61      | 3.03  |

| TEST CONDITIONS:<br>@115V1600RPM |       | 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) | 134                        | 34       | 39  | 29                                     | 0.42                          | 0.42                    | 4.66                      | 1.17      | 1.36  |
| -30                              | (-22) | 194                        | 49       | 57  | 35                                     | 0.49                          | 0.61                    | 5.52                      | 1.39      | 1.62  |
| -25                              | (-13) | 266                        | 67       | 78  | 42                                     | 0.58                          | 0.83                    | 6.33                      | 1.60      | 1.86  |
| -20                              | (- 4) | 351                        | 89       | 103 | 49                                     | 0.68                          | 1.10                    | 7.14                      | 1.80      | 2.09  |
| -15                              | (+ 5) | 453                        | 114      | 133 | 57                                     | 0.80                          | 1.43                    | 8.01                      | 2.02      | 2.35  |
| -10                              | (+14) | 573                        | 144      | 168 | 64                                     | 0.94                          | 1.81                    | 8.97                      | 2.26      | 2.63  |

| TEST CONDITIONS:<br>@115V2000RPM |       | 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) | 213                        | 54       | 62  | 33                                    | 0.51                          | 0.67                    | 6.45                      | 1.63      | 1.89  |
| -30                              | (-22) | 287                        | 72       | 84  | 39                                    | 0.60                          | 0.90                    | 7.31                      | 1.84      | 2.14  |
| -25                              | (-13) | 376                        | 95       | 110 | 46                                    | 0.67                          | 1.18                    | 8.26                      | 2.08      | 2.42  |
| -20                              | (- 4) | 483                        | 122      | 142 | 52                                    | 0.72                          | 1.52                    | 9.35                      | 2.36      | 2.74  |
| -15                              | (+ 5) | 610                        | 154      | 179 | 57                                    | 0.78                          | 1.92                    | 10.66                     | 2.69      | 3.12  |
| -10                              | (+14) | 759                        | 191      | 222 | 62                                    | 0.84                          | 2.39                    | 12.23                     | 3.08      | 3.58  |

| TEST CONDITIONS:<br>@115V2000RPM |       | 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) | 194                        | 49       | 57  | 35                                     | 0.49                          | 0.61                    | 5.61                      | 1.41      | 1.64  |
| -30                              | (-22) | 269                        | 68       | 79  | 42                                     | 0.60                          | 0.84                    | 6.41                      | 1.62      | 1.88  |
| -25                              | (-13) | 358                        | 90       | 105 | 49                                     | 0.68                          | 1.12                    | 7.22                      | 1.82      | 2.12  |
| -20                              | (- 4) | 464                        | 117      | 136 | 57                                     | 0.76                          | 1.46                    | 8.09                      | 2.04      | 2.37  |
| -15                              | (+ 5) | 591                        | 149      | 173 | 65                                     | 0.84                          | 1.86                    | 9.09                      | 2.29      | 2.66  |
| -10                              | (+14) | 740                        | 187      | 217 | 72                                     | 0.94                          | 2.34                    | 10.28                     | 2.59      | 3.01  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@115V2000RPM |                            | 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)                        | 171                        | 43                 | 50       | 36                          | 0.50                                   | 0.54                    | 4.74                      | 1.19     | 1.39      |       |
| -30 (-22)                        | 246                        | 62                 | 72       | 44                          | 0.62                                   | 0.77                    | 5.61                      | 1.41     | 1.64      |       |
| -25 (-13)                        | 335                        | 84                 | 98       | 52                          | 0.72                                   | 1.05                    | 6.41                      | 1.62     | 1.88      |       |
| -20 (- 4)                        | 442                        | 111                | 129      | 62                          | 0.83                                   | 1.39                    | 7.20                      | 1.81     | 2.11      |       |
| -15 (+ 5)                        | 568                        | 143                | 166      | 71                          | 0.94                                   | 1.79                    | 8.02                      | 2.02     | 2.35      |       |
| -10 (+14)                        | 717                        | 181                | 210      | 80                          | 1.07                                   | 2.26                    | 8.95                      | 2.26     | 2.62      |       |

| TEST CONDITIONS:<br>@115V3000RPM |                            | 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)                        | 314                        | 79                 | 92       | 50                          | 0.76                                  | 0.98                    | 6.25                      | 1.58     | 1.83      |       |
| -30 (-22)                        | 426                        | 107                | 125      | 60                          | 0.86                                  | 1.33                    | 7.03                      | 1.77     | 2.06      |       |
| -25 (-13)                        | 561                        | 141                | 164      | 71                          | 0.98                                  | 1.76                    | 7.91                      | 1.99     | 2.32      |       |
| -20 (- 4)                        | 722                        | 182                | 212      | 81                          | 1.10                                  | 2.27                    | 8.94                      | 2.25     | 2.62      |       |
| -15 (+ 5)                        | 913                        | 230                | 268      | 90                          | 1.23                                  | 2.87                    | 10.18                     | 2.56     | 2.98      |       |
| -10 (+14)                        | 1138                       | 287                | 334      | 98                          | 1.36                                  | 3.59                    | 11.66                     | 2.94     | 3.42      |       |

| TEST CONDITIONS:<br>@115V3000RPM |                            | 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)                        | 284                        | 72                 | 83       | 52                          | 0.74                                   | 0.89                    | 5.52                      | 1.39     | 1.62      |       |
| -30 (-22)                        | 396                        | 100                | 116      | 64                          | 0.88                                   | 1.24                    | 6.22                      | 1.57     | 1.82      |       |
| -25 (-13)                        | 530                        | 134                | 155      | 76                          | 1.02                                   | 1.66                    | 6.96                      | 1.75     | 2.04      |       |
| -20 (- 4)                        | 691                        | 174                | 203      | 89                          | 1.18                                   | 2.17                    | 7.77                      | 1.96     | 2.28      |       |
| -15 (+ 5)                        | 883                        | 222                | 259      | 101                         | 1.34                                   | 2.78                    | 8.71                      | 2.19     | 2.55      |       |
| -10 (+14)                        | 1108                       | 279                | 325      | 113                         | 1.50                                   | 3.50                    | 9.83                      | 2.48     | 2.88      |       |

| TEST CONDITIONS:<br>@115V3000RPM |                            | 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)                        | 247                        | 62                 | 72       | 52                          | 0.77                                   | 0.77                    | 4.76                      | 1.20     | 1.40      |       |
| -30 (-22)                        | 359                        | 90                 | 105      | 65                          | 0.92                                   | 1.12                    | 5.52                      | 1.39     | 1.62      |       |
| -25 (-13)                        | 493                        | 124                | 144      | 79                          | 1.08                                   | 1.55                    | 6.22                      | 1.57     | 1.82      |       |
| -20 (- 4)                        | 654                        | 165                | 192      | 95                          | 1.24                                   | 2.06                    | 6.94                      | 1.75     | 2.03      |       |
| -15 (+ 5)                        | 846                        | 213                | 248      | 110                         | 1.41                                   | 2.66                    | 7.71                      | 1.94     | 2.26      |       |
| -10 (+14)                        | 1071                       | 270                | 314      | 125                         | 1.59                                   | 3.38                    | 8.58                      | 2.16     | 2.51      |       |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@115V4500RPM |                            | 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)                      | 457                | 115     | 134                         | 78                                    | 1.18                    | 1.43                      | 5.87   | 1.48     | 1.72      |
| -30                              | (-22)                      | 605                | 152     | 177                         | 97                                    | 1.30                    | 1.90                      | 6.14   | 1.55     | 1.80      |
| -25                              | (-13)                      | 787                | 198     | 231                         | 109                                   | 1.47                    | 2.47                      | 7.21   | 1.82     | 2.11      |
| -20                              | (- 4)                      | 1006               | 254     | 295                         | 116                                   | 1.68                    | 3.16                      | 8.71   | 2.19     | 2.55      |
| -15                              | (+ 5)                      | 1265               | 319     | 371                         | 124                                   | 1.91                    | 3.98                      | 10.24  | 2.58     | 3.00      |
| -10                              | (+14)                      | 1568               | 395     | 459                         | 138                                   | 2.14                    | 4.95                      | 11.41  | 2.88     | 3.34      |

| TEST CONDITIONS:<br>@115V4500RPM |                            | 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)                      | 429                | 108     | 126                         | 78                                     | 1.16                    | 1.34                      | 5.53   | 1.39     | 1.62      |
| -30                              | (-22)                      | 574                | 145     | 168                         | 97                                     | 1.35                    | 1.80                      | 5.93   | 1.49     | 1.74      |
| -25                              | (-13)                      | 755                | 190     | 221                         | 108                                    | 1.57                    | 2.37                      | 7.07   | 1.78     | 2.07      |
| -20                              | (- 4)                      | 973                | 245     | 285                         | 116                                    | 1.80                    | 3.06                      | 8.55   | 2.16     | 2.51      |
| -15                              | (+ 5)                      | 1233               | 311     | 361                         | 127                                    | 2.05                    | 3.88                      | 10.00  | 2.52     | 2.93      |
| -10                              | (+14)                      | 1537               | 387     | 450                         | 144                                    | 2.28                    | 4.85                      | 11.02  | 2.78     | 3.23      |

| TEST CONDITIONS:<br>@115V4500RPM |                            | 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)                      | 389                | 98      | 114                         | 86                                     | 1.17                    | 1.22                      | 4.49   | 1.13     | 1.31      |
| -30                              | (-22)                      | 532                | 134     | 156                         | 107                                    | 1.38                    | 1.67                      | 4.78   | 1.20     | 1.40      |
| -25                              | (-13)                      | 712                | 179     | 209                         | 123                                    | 1.62                    | 2.23                      | 5.74   | 1.45     | 1.68      |
| -20                              | (- 4)                      | 930                | 234     | 273                         | 136                                    | 1.85                    | 2.92                      | 6.98   | 1.76     | 2.04      |
| -15                              | (+ 5)                      | 1192               | 300     | 349                         | 153                                    | 2.08                    | 3.75                      | 8.10   | 2.04     | 2.37      |
| -10                              | (+14)                      | 1498               | 377     | 439                         | 177                                    | 2.27                    | 4.73                      | 8.73   | 2.20     | 2.56      |

### F - EXTERNAL CHARACTERISTICS

|                         |                              |      |                          |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate            | European Standard EUEM       |      |                          |
| 2 Tray holder           | Yes                          |      |                          |
| 3 Connectors            |                              |      |                          |
| 3.1 SUCTION             | 6.1 +0.10/+0.00              | [mm] | (0.240" +0.004"/+0.000") |
| 3.1.1 Material          | Copper                       |      |                          |
| 3.1.2 Shape             | Slanted 12° out + 79° up     |      |                          |
| 3.2 DISCHARGE           | 4.9 +0.10/-0.05              | [mm] | (0.193" +0.004"/-0.002") |
| 3.2.1 Material          | Copper                       |      |                          |
| 3.2.2 Shape             | Slanted 0° up + 24° to Back  |      |                          |
| 3.3 PROCESS             | 6.2 +0.05/+0.05              | [mm] | (0.244" +0.002"/+0.002") |
| 3.3.1 Material          | Copper                       |      |                          |
| 3.3.2 Shape             | Slanted 42° up + 45° to Back |      |                          |
| 3.4 Oil cooler (Copper) | No                           | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs                 |      |                          |