

### DEFINICIÓN DEL COMPRESOR

|                              |                 |
|------------------------------|-----------------|
| Denominación                 | VES F11C        |
| Voltage / Frecuencia nominal | 230 V 32-150 Hz |
| Código de Ingeniería         | 513907322       |

### A - APLICACIÓN / CONDICIONES LÍMITES DE TRABAJO

|   |                               |                                   |                |
|---|-------------------------------|-----------------------------------|----------------|
| 1 Tipo                                  | Compresor recíproco           |                                   |                |
| 2 Refrigerante                          | R-600a                        |                                   |                |
| 3 Voltaje y frecuencia nominal          | 230 / 32-150                  | [ V / Hz ]                        |                |
| 4 Tipo de aplicación                    |                               |                                   |                |
| 4.1 Rango de temperatura de evaporación | -35°C para 0°C                | (-31°F para 32°F)                 |                |
| 5 Tipo de motor                         | BPM                           |                                   |                |
| 6 Torque de Arranque                    | LST - Bajo Torque de Arranque |                                   |                |
| 7 Elemento de control                   | Tubo capilar                  |                                   |                |
| 8 Enfriamiento del compresor            | Rango de voltaje de operación |                                   |                |
|   |                               | 50 Hz                             | 60 Hz          |
| 8.1 LBP (32°C Temperatura ambiente)     | Estática                      | 160 para 264 V                    | 160 para 264 V |
| 8.2 LBP (43°C Temperatura ambiente)     | Estática                      | 160 para 264 V                    | 160 para 264 V |
| 8.3 HBP (32°C Temperatura ambiente)     | -                             | -                                 | -              |
| 8.4 HBP (43°C Temperatura ambiente)     | -                             | -                                 | -              |
| 9 Máxima temperatura de condensación    |                               |                                   |                |
| 9.1 Operación                           | 6.9                           | [kgf/cm <sup>2</sup> ] (98 psig)  | / °C - °F      |
| 9.2 Pico                                | 7.8                           | [kgf/cm <sup>2</sup> ] (111 psig) | / °C - °F      |
| 10 Máxima temperatura de las bobinas    | 130                           | [ °C ]                            |                |

### B - DATOS MECÁNICOS

|                                |                |                                  |
|--------------------------------|----------------|----------------------------------|
| 1 Referencia Comercial         | 1/5            | [hp]                             |
| 2 Desplazamiento               | 11.14          | [cm <sup>3</sup> ] (0.680 cu.in) |
| 2.1 Diametro [mm]              | 26.000         |                                  |
| 2.2 Curso [mm]                 | 21.000         |                                  |
| 3 Carga de aceite              | 205            | [ml] (6.93 fl.oz)                |
| 3.1 Aceites aprobados          |                |                                  |
| 3.2 Tipo/Viscosidad del aceite | ALQUILB / ISO5 |                                  |
| 4 Peso (com carga de aceite)   | 6.6            | [kg] (14.55 lb.)                 |
| 5 Carga de nitrógeno           | -              | [kgf/cm <sup>2</sup> ]           |

### C - DATOS ELÉCTRICOS

|   |                                  |                           |
|---|----------------------------------|---------------------------|
| 1 Voltaje nominal/Frecuencia/Numero de fases      | 230 V 31.7-150 Hz 3~ (Trifásico) |                           |
| 2 Tipo de Dispositivo de Arranque                 | Inverter                         |                           |
| 2.1 Dispositivo de Arranque                       | VESF 2456 XXX X                  |                           |
| 3 Capacitor de Arranque                           | -                                | [µF(VAC minimo)]          |
| 4 Capacitor de marcha                             | -                                | [µF(VAC minimo)]          |
| 5 Protección del motor                            | INVERTER VES 2456X               |                           |
| 6 Resistencia del motor - bobina arranque         | 9.30                             | [Ω en 25°C (77°F)] +/- 8% |
| 7 Resistencia del motor - bobina marcha           | 9.30                             | [Ω en 25°C (77°F)] +/- 8% |
| 8 LRA - Corriente com rotor trabado (32/150 Hz)   | 2.10                             | [A] - Medido según UL 984 |
| 9 FLA - Corriente a plena carga L/MBP (32/150 Hz) | -                                | [A] - Medido según UL 984 |
| 10 FLA - Corriente a plena carga HBP (32/150 Hz)  | -                                | [A] - Medido según UL 984 |
| 11 Institutos de aprobación                       | CCC - VDE                        |                           |

### D - PERFORMANCE - DATOS CHECK POINT

|  |          |     |                                      |                                |   |                               |           |       |  |
|--|----------|-----|--------------------------------------|--------------------------------|---|-------------------------------|-----------|-------|--|
| CONDICIONES DE PRUEBA:<br><b>@220V950RPM</b> |          |     | <b>CECOMAFLBP</b><br><b>Estática</b> |                                | Temperatura de evaporación <b>-25°C (-13°F)</b><br>(Temp. de condensación <b>55°C (131°F)</b> ) |                               |           |       |  |
| Capacidad de refrigeración<br>+/- 5%         |          |     | Consumo de potencia<br>+/- 5%        | Consumo de corriente<br>+/- 5% | Flujo de masa<br>+/- 5%   | RANGO DE EFICIENCIA<br>+/- 7% |           |       |  |
| [Btu/h]                                      | [kcal/h] | [W] | [W]                                  | [A]                            | [kg/h]  | [Btu/Wh]                      | [kcal/Wh] | [W/W] |  |
| 160  | 40       | 47  | 31                                   | 0.27                           | 0.61  | 5.11                          | 1.29      | 1.50  |  |

|   |          |     |                                      |                                |   |                               |           |       |  |
|---|----------|-----|--------------------------------------|--------------------------------|---|-------------------------------|-----------|-------|--|
| CONDICIONES DE PRUEBA:<br><b>@220V1300RPM</b> |          |     | <b>CECOMAFLBP</b><br><b>Estática</b> |                                | Temperatura de evaporación <b>-25°C (-13°F)</b><br>(Temp. de condensación <b>55°C (131°F)</b> ) |                               |           |       |  |
| Capacidad de refrigeración<br>+/- 5%          |          |     | Consumo de potencia<br>+/- 5%        | Consumo de corriente<br>+/- 5% | Flujo de masa<br>+/- 5%   | RANGO DE EFICIENCIA<br>+/- 7% |           |       |  |
| [Btu/h]                                       | [kcal/h] | [W] | [W]                                  | [A]                            | [kg/h]  | [Btu/Wh]                      | [kcal/Wh] | [W/W] |  |
| 222   | 56       | 65  | 42                                   | 0.35                           | 0.85  | 5.32                          | 1.34      | 1.56  |  |

|   |          |     |                                      |                                |   |                               |           |       |  |
|---|----------|-----|--------------------------------------|--------------------------------|---|-------------------------------|-----------|-------|--|
| CONDICIONES DE PRUEBA:<br><b>@220V4000RPM</b> |          |     | <b>CECOMAFLBP</b><br><b>Estática</b> |                                | Temperatura de evaporación <b>-25°C (-13°F)</b><br>(Temp. de condensación <b>55°C (131°F)</b> ) |                               |           |       |  |
| Capacidad de refrigeración<br>+/- 5%          |          |     | Consumo de potencia<br>+/- 5%        | Consumo de corriente<br>+/- 5% | Flujo de masa<br>+/- 5%   | RANGO DE EFICIENCIA<br>+/- 7% |           |       |  |
| [Btu/h]                                       | [kcal/h] | [W] | [W]                                  | [A]                            | [kg/h]  | [Btu/Wh]                      | [kcal/Wh] | [W/W] |  |
| 624   | 157      | 183 | 127                                  | 0.96                           | 2.38  | 4.91                          | 1.24      | 1.44  |  |

### E - PERFORMANCE - CURVAS

|  |       |                                      |                                   |     |  |                                |                         |                               |           |       |
|--|-------|--------------------------------------|-----------------------------------|-----|--|--------------------------------|-------------------------|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V950RPM</b> |       |                                      | <b>CECOMAF</b><br><b>Estática</b> |     | (Temp. de condensación <b>35°C (+95°F)</b> ) |                                |                         |                               |           |       |
| Temperatura de evaporación                   |       | Capacidad de refrigeración<br>+/- 5% |                                   |     | Consumo de potencia<br>+/- 5%                | Consumo de corriente<br>+/- 5% | Flujo de masa<br>+/- 5% | RANGO DE EFICIENCIA<br>+/- 7% |           |       |
| °C   | (°F)  | [Btu/h]                              | [kcal/h]                          | [W] | [W]  | [A]                            | [kg/h]                  | [Btu/Wh]                      | [kcal/Wh] | [W/W] |
| -35  | (-31) | 126                                  | 32                                | 37  | 20   | 0.18                           | 0.40                    | 6.43                          | 1.62      | 1.88  |
| -30  | (-22) | 166                                  | 42                                | 49  | 23   | 0.19                           | 0.53                    | 7.12                          | 1.79      | 2.09  |
| -25  | (-13) | 217                                  | 55                                | 64  | 27   | 0.21                           | 0.70                    | 8.00                          | 2.02      | 2.34  |
| -20  | (- 4) | 279                                  | 70                                | 82  | 31   | 0.23                           | 0.90                    | 9.09                          | 2.29      | 2.66  |
| -15  | (+ 5) | 355                                  | 89                                | 104 | 34   | 0.25                           | 1.14                    | 10.41                         | 2.62      | 3.05  |
| -10  | (+14) | 446                                  | 112                               | 131 | 37   | 0.26                           | 1.44                    | 11.96                         | 3.01      | 3.50  |
| -5   | (+23) | 553                                  | 139                               | 162 | 40   | 0.27                           | 1.79                    | 13.76                         | 3.47      | 4.03  |
| 0  | (+32) | 680                                  | 171                               | 199 | 42   | 0.27                           | 2.21                    | 15.82                         | 3.99      | 4.64  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 45°C (+113°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V950RPM                |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 106                        | 27       | 31  | 20                                    | 0.18                 | 0.37          | 5.25                | 1.32      | 1.54  |
| -30                        | (-22) | 142                        | 36       | 42  | 25                                    | 0.20                 | 0.49          | 5.79                | 1.46      | 1.70  |
| -25                        | (-13) | 188                        | 47       | 55  | 29                                    | 0.22                 | 0.65          | 6.45                | 1.63      | 1.89  |
| -20                        | (- 4) | 245                        | 62       | 72  | 34                                    | 0.25                 | 0.85          | 7.23                | 1.82      | 2.12  |
| -15                        | (+ 5) | 315                        | 79       | 92  | 38                                    | 0.27                 | 1.10          | 8.16                | 2.06      | 2.39  |
| -10                        | (+14) | 400                        | 101      | 117 | 43                                    | 0.30                 | 1.40          | 9.25                | 2.33      | 2.71  |
| -5                         | (+23) | 501                        | 126      | 147 | 48                                    | 0.32                 | 1.76          | 10.50               | 2.65      | 3.08  |
| 0                          | (+32) | 621                        | 156      | 182 | 52                                    | 0.33                 | 2.19          | 11.93               | 3.01      | 3.50  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 55°C (+131°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V950RPM                |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 83                         | 21       | 24  | 20                                    | 0.18                 | 0.32          | 4.05                | 1.02      | 1.19  |
| -30                        | (-22) | 115                        | 29       | 34  | 25                                    | 0.20                 | 0.44          | 4.57                | 1.15      | 1.34  |
| -25                        | (-13) | 157                        | 40       | 46  | 31                                    | 0.23                 | 0.60          | 5.13                | 1.29      | 1.50  |
| -20                        | (- 4) | 210                        | 53       | 61  | 37                                    | 0.26                 | 0.80          | 5.74                | 1.45      | 1.68  |
| -15                        | (+ 5) | 275                        | 69       | 80  | 43                                    | 0.30                 | 1.05          | 6.41                | 1.61      | 1.88  |
| -10                        | (+14) | 354                        | 89       | 104 | 49                                    | 0.34                 | 1.36          | 7.15                | 1.80      | 2.09  |
| -5                         | (+23) | 449                        | 113      | 132 | 56                                    | 0.37                 | 1.73          | 7.98                | 2.01      | 2.34  |
| 0                          | (+32) | 562                        | 142      | 165 | 63                                    | 0.40                 | 2.17          | 8.91                | 2.25      | 2.61  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 35°C (+95°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|--------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V1300RPM               |       | Estática                   |          |     |                                      |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                  | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                               | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                  | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 175                        | 44       | 51  | 27                                   | 0.25                 | 0.56          | 6.46                | 1.63      | 1.89  |
| -30                        | (-22) | 232                        | 58       | 68  | 32                                   | 0.28                 | 0.74          | 7.20                | 1.82      | 2.11  |
| -25                        | (-13) | 300                        | 76       | 88  | 37                                   | 0.31                 | 0.96          | 8.12                | 2.05      | 2.38  |
| -20                        | (- 4) | 384                        | 97       | 113 | 42                                   | 0.34                 | 1.23          | 9.21                | 2.32      | 2.70  |
| -15                        | (+ 5) | 485                        | 122      | 142 | 46                                   | 0.37                 | 1.56          | 10.50               | 2.64      | 3.08  |
| -10                        | (+14) | 605                        | 153      | 177 | 51                                   | 0.40                 | 1.95          | 11.97               | 3.02      | 3.51  |
| -5                         | (+23) | 748                        | 188      | 219 | 55                                   | 0.43                 | 2.42          | 13.64               | 3.44      | 4.00  |
| 0                          | (+32) | 914                        | 230      | 268 | 59                                   | 0.46                 | 2.97          | 15.52               | 3.91      | 4.55  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 45°C (+113°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V1300RPM               |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 146                        | 37       | 43  | 28                                    | 0.25                 | 0.51          | 5.29                | 1.33      | 1.55  |
| -30                        | (-22) | 198                        | 50       | 58  | 34                                    | 0.29                 | 0.69          | 5.88                | 1.48      | 1.72  |
| -25                        | (-13) | 260                        | 66       | 76  | 39                                    | 0.33                 | 0.90          | 6.58                | 1.66      | 1.93  |
| -20                        | (- 4) | 335                        | 85       | 98  | 45                                    | 0.37                 | 1.17          | 7.40                | 1.87      | 2.17  |
| -15                        | (+ 5) | 427                        | 108      | 125 | 51                                    | 0.41                 | 1.49          | 8.36                | 2.11      | 2.45  |
| -10                        | (+14) | 536                        | 135      | 157 | 57                                    | 0.45                 | 1.88          | 9.44                | 2.38      | 2.77  |
| -5                         | (+23) | 666                        | 168      | 195 | 63                                    | 0.49                 | 2.34          | 10.67               | 2.69      | 3.13  |
| 0                          | (+32) | 818                        | 206      | 240 | 69                                    | 0.54                 | 2.88          | 12.05               | 3.04      | 3.53  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 55°C (+131°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V1300RPM               |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 119                        | 30       | 35  | 28                                    | 0.26                 | 0.45          | 4.22                | 1.06      | 1.24  |
| -30                        | (-22) | 164                        | 41       | 48  | 35                                    | 0.30                 | 0.63          | 4.71                | 1.19      | 1.38  |
| -25                        | (-13) | 219                        | 55       | 64  | 42                                    | 0.35                 | 0.83          | 5.26                | 1.32      | 1.54  |
| -20                        | (- 4) | 285                        | 72       | 84  | 49                                    | 0.39                 | 1.09          | 5.87                | 1.48      | 1.72  |
| -15                        | (+ 5) | 365                        | 92       | 107 | 56                                    | 0.44                 | 1.40          | 6.56                | 1.65      | 1.92  |
| -10                        | (+14) | 462                        | 117      | 136 | 63                                    | 0.50                 | 1.78          | 7.33                | 1.85      | 2.15  |
| -5                         | (+23) | 578                        | 146      | 170 | 71                                    | 0.56                 | 2.23          | 8.17                | 2.06      | 2.40  |
| 0                          | (+32) | 716                        | 180      | 210 | 79                                    | 0.62                 | 2.76          | 9.11                | 2.30      | 2.67  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 35°C (+95°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|--------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V1600RPM               |       | Estática                   |          |     |                                      |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                  | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                               | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                  | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 213                        | 54       | 62  | 34                                   | 0.29                 | 0.68          | 6.34                | 1.60      | 1.86  |
| -30                        | (-22) | 284                        | 72       | 83  | 40                                   | 0.33                 | 0.91          | 7.17                | 1.81      | 2.10  |
| -25                        | (-13) | 369                        | 93       | 108 | 45                                   | 0.38                 | 1.19          | 8.12                | 2.05      | 2.38  |
| -20                        | (- 4) | 472                        | 119      | 138 | 51                                   | 0.42                 | 1.52          | 9.21                | 2.32      | 2.70  |
| -15                        | (+ 5) | 596                        | 150      | 175 | 57                                   | 0.46                 | 1.92          | 10.45               | 2.63      | 3.06  |
| -10                        | (+14) | 745                        | 188      | 218 | 63                                   | 0.50                 | 2.40          | 11.87               | 2.99      | 3.48  |
| -5                         | (+23) | 921                        | 232      | 270 | 68                                   | 0.54                 | 2.98          | 13.48               | 3.40      | 3.95  |
| 0                          | (+32) | 1129                       | 284      | 331 | 74                                   | 0.59                 | 3.67          | 15.32               | 3.86      | 4.49  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 45°C (+113°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V1600RPM               |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 181                        | 46       | 53  | 35                                    | 0.30                 | 0.63          | 5.22                | 1.32      | 1.53  |
| -30                        | (-22) | 245                        | 62       | 72  | 42                                    | 0.35                 | 0.85          | 5.87                | 1.48      | 1.72  |
| -25                        | (-13) | 321                        | 81       | 94  | 49                                    | 0.40                 | 1.12          | 6.59                | 1.66      | 1.93  |
| -20                        | (- 4) | 413                        | 104      | 121 | 56                                    | 0.44                 | 1.44          | 7.40                | 1.86      | 2.17  |
| -15                        | (+ 5) | 525                        | 132      | 154 | 63                                    | 0.49                 | 1.83          | 8.31                | 2.10      | 2.44  |
| -10                        | (+14) | 659                        | 166      | 193 | 70                                    | 0.55                 | 2.31          | 9.36                | 2.36      | 2.74  |
| -5                         | (+23) | 819                        | 206      | 240 | 78                                    | 0.61                 | 2.88          | 10.56               | 2.66      | 3.10  |
| 0                          | (+32) | 1009                       | 254      | 296 | 85                                    | 0.68                 | 3.55          | 11.93               | 3.01      | 3.50  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 55°C (+131°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V1600RPM               |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 151                        | 38       | 44  | 35                                    | 0.30                 | 0.58          | 4.30                | 1.08      | 1.26  |
| -30                        | (-22) | 206                        | 52       | 60  | 43                                    | 0.35                 | 0.78          | 4.82                | 1.22      | 1.41  |
| -25                        | (-13) | 272                        | 69       | 80  | 51                                    | 0.41                 | 1.04          | 5.37                | 1.35      | 1.57  |
| -20                        | (- 4) | 353                        | 89       | 103 | 59                                    | 0.47                 | 1.35          | 5.96                | 1.50      | 1.75  |
| -15                        | (+ 5) | 451                        | 114      | 132 | 68                                    | 0.53                 | 1.73          | 6.61                | 1.67      | 1.94  |
| -10                        | (+14) | 570                        | 144      | 167 | 78                                    | 0.60                 | 2.19          | 7.34                | 1.85      | 2.15  |
| -5                         | (+23) | 714                        | 180      | 209 | 87                                    | 0.68                 | 2.75          | 8.18                | 2.06      | 2.40  |
| 0                          | (+32) | 886                        | 223      | 259 | 97                                    | 0.77                 | 3.41          | 9.15                | 2.31      | 2.68  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 35°C (+95°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|--------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V2000RPM               |       | Estática                   |          |     |                                      |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                  | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                               | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                  | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 264                        | 67       | 77  | 42                                   | 0.36                 | 0.85          | 6.23                | 1.57      | 1.83  |
| -30                        | (-22) | 348                        | 88       | 102 | 50                                   | 0.41                 | 1.12          | 7.00                | 1.76      | 2.05  |
| -25                        | (-13) | 458                        | 115      | 134 | 58                                   | 0.47                 | 1.47          | 7.90                | 1.99      | 2.32  |
| -20                        | (- 4) | 593                        | 149      | 174 | 66                                   | 0.53                 | 1.91          | 8.94                | 2.25      | 2.62  |
| -15                        | (+ 5) | 753                        | 190      | 221 | 75                                   | 0.59                 | 2.42          | 10.10               | 2.55      | 2.96  |
| -10                        | (+14) | 938                        | 236      | 275 | 83                                   | 0.65                 | 3.03          | 11.39               | 2.87      | 3.34  |
| -5                         | (+23) | 1147                       | 289      | 336 | 89                                   | 0.70                 | 3.71          | 12.81               | 3.23      | 3.75  |
| 0                          | (+32) | 1381                       | 348      | 405 | 95                                   | 0.74                 | 4.48          | 14.36               | 3.62      | 4.21  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 45°C (+113°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V2000RPM               |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 229                        | 58       | 67  | 44                                    | 0.38                 | 0.79          | 5.18                | 1.31      | 1.52  |
| -30                        | (-22) | 301                        | 76       | 88  | 52                                    | 0.43                 | 1.05          | 5.80                | 1.46      | 1.70  |
| -25                        | (-13) | 398                        | 100      | 117 | 61                                    | 0.49                 | 1.39          | 6.50                | 1.64      | 1.91  |
| -20                        | (- 4) | 520                        | 131      | 152 | 71                                    | 0.57                 | 1.81          | 7.31                | 1.84      | 2.14  |
| -15                        | (+ 5) | 665                        | 168      | 195 | 81                                    | 0.64                 | 2.32          | 8.20                | 2.07      | 2.40  |
| -10                        | (+14) | 835                        | 210      | 245 | 91                                    | 0.72                 | 2.92          | 9.17                | 2.31      | 2.69  |
| -5                         | (+23) | 1028                       | 259      | 301 | 101                                   | 0.80                 | 3.61          | 10.24               | 2.58      | 3.00  |
| 0                          | (+32) | 1244                       | 313      | 365 | 109                                   | 0.86                 | 4.38          | 11.39               | 2.87      | 3.34  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 55°C (+131°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V2000RPM               |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 190                        | 48       | 56  | 45                                    | 0.38                 | 0.72          | 4.23                | 1.07      | 1.24  |
| -30                        | (-22) | 252                        | 63       | 74  | 53                                    | 0.44                 | 0.96          | 4.74                | 1.19      | 1.39  |
| -25                        | (-13) | 337                        | 85       | 99  | 64                                    | 0.51                 | 1.28          | 5.31                | 1.34      | 1.56  |
| -20                        | (- 4) | 445                        | 112      | 130 | 75                                    | 0.59                 | 1.70          | 5.93                | 1.49      | 1.74  |
| -15                        | (+ 5) | 576                        | 145      | 169 | 87                                    | 0.69                 | 2.20          | 6.60                | 1.66      | 1.93  |
| -10                        | (+14) | 730                        | 184      | 214 | 100                                   | 0.78                 | 2.80          | 7.32                | 1.84      | 2.14  |
| -5                         | (+23) | 906                        | 228      | 266 | 112                                   | 0.87                 | 3.49          | 8.08                | 2.04      | 2.37  |
| 0                          | (+32) | 1105                       | 278      | 324 | 124                                   | 0.96                 | 4.27          | 8.89                | 2.24      | 2.60  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 35°C (+95°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|--------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V3000RPM               |       | Estática                   |          |     |                                      |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                  | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                               | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                  | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 377                        | 95       | 110 | 65                                   | 0.51                 | 1.21          | 5.81                | 1.47      | 1.70  |
| -30                        | (-22) | 512                        | 129      | 150 | 77                                   | 0.59                 | 1.64          | 6.61                | 1.67      | 1.94  |
| -25                        | (-13) | 677                        | 171      | 199 | 91                                   | 0.69                 | 2.17          | 7.46                | 1.88      | 2.18  |
| -20                        | (- 4) | 875                        | 220      | 256 | 105                                  | 0.80                 | 2.81          | 8.36                | 2.11      | 2.45  |
| -15                        | (+ 5) | 1107                       | 279      | 324 | 119                                  | 0.91                 | 3.56          | 9.31                | 2.35      | 2.73  |
| -10                        | (+14) | 1378                       | 347      | 404 | 134                                  | 1.03                 | 4.44          | 10.32               | 2.60      | 3.02  |
| -5                         | (+23) | 1688                       | 425      | 495 | 148                                  | 1.13                 | 5.46          | 11.38               | 2.87      | 3.33  |
| 0                          | (+32) | 2042                       | 515      | 598 | 163                                  | 1.21                 | 6.63          | 12.50               | 3.15      | 3.66  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 45°C (+113°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V3000RPM               |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 328                        | 83       | 96  | 67                                    | 0.52                 | 1.14          | 4.91                | 1.24      | 1.44  |
| -30                        | (-22) | 445                        | 112      | 130 | 80                                    | 0.61                 | 1.55          | 5.54                | 1.40      | 1.62  |
| -25                        | (-13) | 590                        | 149      | 173 | 95                                    | 0.73                 | 2.05          | 6.21                | 1.56      | 1.82  |
| -20                        | (- 4) | 764                        | 193      | 224 | 110                                   | 0.85                 | 2.66          | 6.92                | 1.74      | 2.03  |
| -15                        | (+ 5) | 972                        | 245      | 285 | 127                                   | 0.98                 | 3.39          | 7.68                | 1.94      | 2.25  |
| -10                        | (+14) | 1215                       | 306      | 356 | 143                                   | 1.11                 | 4.26          | 8.48                | 2.14      | 2.49  |
| -5                         | (+23) | 1497                       | 377      | 439 | 161                                   | 1.23                 | 5.26          | 9.33                | 2.35      | 2.73  |
| 0                          | (+32) | 1819                       | 458      | 533 | 178                                   | 1.33                 | 6.41          | 10.23               | 2.58      | 3.00  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 55°C (+131°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V3000RPM               |       | Estática                   |          |     |                                       |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                   | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                                | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                   | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 276                        | 70       | 81  | 68                                    | 0.53                 | 1.05          | 4.09                | 1.03      | 1.20  |
| -30                        | (-22) | 377                        | 95       | 110 | 82                                    | 0.64                 | 1.43          | 4.59                | 1.16      | 1.35  |
| -25                        | (-13) | 502                        | 127      | 147 | 98                                    | 0.77                 | 1.91          | 5.13                | 1.29      | 1.50  |
| -20                        | (- 4) | 656                        | 165      | 192 | 115                                   | 0.91                 | 2.50          | 5.69                | 1.43      | 1.67  |
| -15                        | (+ 5) | 840                        | 212      | 246 | 133                                   | 1.05                 | 3.22          | 6.29                | 1.59      | 1.84  |
| -10                        | (+14) | 1057                       | 266      | 310 | 153                                   | 1.20                 | 4.06          | 6.93                | 1.75      | 2.03  |
| -5                         | (+23) | 1311                       | 330      | 384 | 172                                   | 1.33                 | 5.04          | 7.60                | 1.91      | 2.23  |
| 0                          | (+32) | 1603                       | 404      | 470 | 193                                   | 1.45                 | 6.18          | 8.31                | 2.09      | 2.43  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                    |          |     | (Temp. de condensación 35°C (+95°F)) |                      |               |                     |           |       |
|----------------------------|-------|----------------------------|----------|-----|--------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @220V4000RPM               |       | Estática                   |          |     |                                      |                      |               |                     |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración |          |     | Consumo de potencia                  | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA |           |       |
|                            |       | +/- 5%                     |          |     | +/- 5%                               | +/- 5%               | +/- 5%        | +/- 7%              |           |       |
| °C                         | (°F)  | [Btu/h]                    | [kcal/h] | [W] | [W]                                  | [A]                  | [kg/h]        | [Btu/Wh]            | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 488                        | 123      | 143 | 89                                   | 0.68                 | 1.56          | 5.47                | 1.38      | 1.60  |
| -30                        | (-22) | 643                        | 162      | 188 | 105                                  | 0.80                 | 2.08          | 6.13                | 1.54      | 1.80  |
| -25                        | (-13) | 799                        | 201      | 234 | 118                                  | 0.89                 | 2.58          | 6.83                | 1.72      | 2.00  |
| -20                        | (- 4) | 993                        | 250      | 291 | 131                                  | 0.98                 | 3.19          | 7.63                | 1.92      | 2.24  |
| -15                        | (+ 5) | 1263                       | 318      | 370 | 147                                  | 1.08                 | 4.05          | 8.56                | 2.16      | 2.51  |
| -10                        | (+14) | 1645                       | 414      | 482 | 168                                  | 1.21                 | 5.29          | 9.66                | 2.43      | 2.83  |
| -5                         | (+23) | 2176                       | 548      | 638 | 199                                  | 1.40                 | 7.04          | 10.97               | 2.76      | 3.21  |
| 0                          | (+32) | 2895                       | 729      | 848 | 240                                  | 1.67                 | 9.44          | 12.54               | 3.16      | 3.67  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |       | CECOMAF                              |          |     | (Temp. de condensación 45°C (+113°F)) |                                |                         |                               |           |       |
|----------------------------|-------|--------------------------------------|----------|-----|---------------------------------------|--------------------------------|-------------------------|-------------------------------|-----------|-------|
| @220V4000RPM               |       | Estática                             |          |     |                                       |                                |                         |                               |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración<br>+/- 5% |          |     | Consumo de potencia<br>+/- 5%         | Consumo de corriente<br>+/- 5% | Flujo de masa<br>+/- 5% | RANGO DE EFICIENCIA<br>+/- 7% |           |       |
| °C                         | (°F)  | [Btu/h]                              | [kcal/h] | [W] | [W]                                   | [A]                            | [kg/h]                  | [Btu/Wh]                      | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 426                                  | 107      | 125 | 92                                    | 0.72                           | 1.48                    | 4.62                          | 1.16      | 1.35  |
| -30                        | (-22) | 575                                  | 145      | 168 | 109                                   | 0.85                           | 2.00                    | 5.20                          | 1.31      | 1.52  |
| -25                        | (-13) | 718                                  | 181      | 210 | 124                                   | 0.96                           | 2.50                    | 5.80                          | 1.46      | 1.70  |
| -20                        | (- 4) | 892                                  | 225      | 262 | 139                                   | 1.05                           | 3.11                    | 6.46                          | 1.63      | 1.89  |
| -15                        | (+ 5) | 1136                                 | 286      | 333 | 157                                   | 1.17                           | 3.97                    | 7.22                          | 1.82      | 2.12  |
| -10                        | (+14) | 1486                                 | 374      | 435 | 182                                   | 1.31                           | 5.20                    | 8.12                          | 2.05      | 2.38  |
| -5                         | (+23) | 1979                                 | 499      | 580 | 215                                   | 1.51                           | 6.95                    | 9.21                          | 2.32      | 2.70  |
| 0                          | (+32) | 2652                                 | 668      | 777 | 260                                   | 1.77                           | 9.34                    | 10.51                         | 2.65      | 3.08  |

| CONDICIONES DE PRUEBA:     |       | CECOMAF                              |          |     | (Temp. de condensación 55°C (+131°F)) |                                |                         |                               |           |       |
|----------------------------|-------|--------------------------------------|----------|-----|---------------------------------------|--------------------------------|-------------------------|-------------------------------|-----------|-------|
| @220V4000RPM               |       | Estática                             |          |     |                                       |                                |                         |                               |           |       |
| Temperatura de evaporación |       | Capacidad de refrigeración<br>+/- 5% |          |     | Consumo de potencia<br>+/- 5%         | Consumo de corriente<br>+/- 5% | Flujo de masa<br>+/- 5% | RANGO DE EFICIENCIA<br>+/- 7% |           |       |
| °C                         | (°F)  | [Btu/h]                              | [kcal/h] | [W] | [W]                                   | [A]                            | [kg/h]                  | [Btu/Wh]                      | [kcal/Wh] | [W/W] |
| -35                        | (-31) | 363                                  | 91       | 106 | 93                                    | 0.72                           | 1.38                    | 3.92                          | 0.99      | 1.15  |
| -30                        | (-22) | 503                                  | 127      | 148 | 111                                   | 0.87                           | 1.90                    | 4.42                          | 1.11      | 1.29  |
| -25                        | (-13) | 632                                  | 159      | 185 | 128                                   | 1.00                           | 2.40                    | 4.91                          | 1.24      | 1.44  |
| -20                        | (- 4) | 787                                  | 198      | 230 | 146                                   | 1.11                           | 3.00                    | 5.43                          | 1.37      | 1.59  |
| -15                        | (+ 5) | 1003                                 | 253      | 294 | 168                                   | 1.23                           | 3.85                    | 6.02                          | 1.52      | 1.76  |
| -10                        | (+14) | 1320                                 | 333      | 387 | 196                                   | 1.38                           | 5.08                    | 6.72                          | 1.69      | 1.97  |
| -5                         | (+23) | 1773                                 | 447      | 519 | 234                                   | 1.58                           | 6.82                    | 7.57                          | 1.91      | 2.22  |
| 0                          | (+32) | 2400                                 | 605      | 703 | 284                                   | 1.85                           | 9.20                    | 8.61                          | 2.17      | 2.52  |



**F - CARACTERÍSTICAS EXTERNAS**

|                                      |                |      |           |
|--------------------------------------|----------------|------|-----------|
| 1 Placa base                         |                |      |           |
| 2 Soporte de badeja                  | No             |      |           |
| 3 Tubos                              |                |      |           |
| 3.1 SUCCIÓN                          | 8.2            | [mm] | (0.323" ) |
| 3.1.1 Material                       |                |      |           |
| 3.1.2 Forma                          |                |      |           |
| 3.2 DESCARGA                         | 4.9            | [mm] | (0.193" ) |
| 3.2.1 Material                       |                |      |           |
| 3.2.2 Forma                          |                |      |           |
| 3.3 PROCESO                          | 6.5            | [mm] | (0.256" ) |
| 3.3.1 Material                       |                |      |           |
| 3.3.2 Forma                          |                |      |           |
| 3.4 Tubo enfriador de aceite (Cobre) | No             | [mm] |           |
| 3.5 Sellado del tudo                 | Tampa de Gomma |      |           |