

### DEFINICIÓN DEL COMPRESOR

|                              |                        |
|------------------------------|------------------------|
| Denominación                 | <b>VES H11C</b>        |
| Voltage / Frecuencia nominal | <b>230 V 32-150 Hz</b> |
| Código de Ingeniería         | <b>513907411</b>       |

### 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 -5°C               | (-31°F para 23°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                      | 187 para 255 V                    | 187 para 255 V |
| 8.2 LBP (43°C Temperatura ambiente)     | -                             | -                                 | -              |
| 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         | 1/4            | [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)   | 6.55           | [kg] (14.44 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                       | CF02D03 M 0.0 X                  |                           |
| 3 Capacitor de Arranque                           | -                                | [µF(VAC minimo)]          |
| 4 Capacitor de marcha                             | -                                | [µF(VAC minimo)]          |
| 5 Protección del motor                            | CF02D03                          |                           |
| 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                       | VDE                              |                           |

### D - PERFORMANCE - DATOS CHECK POINT

|  |          |     |                                       |                                |   |  |           |       |
|--|----------|-----|---------------------------------------|--------------------------------|---|--|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V950RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Estática</b> |                                | Temperatura de evaporación<br>(Temp. de condensación) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°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] |
| 220  | 55       | 64  | 32                                    | 0.26                           | 0.69  | 6.85   | 1.73      | 2.01  |

|   |          |     |                                       |                                |   |  |           |       |
|---|----------|-----|---------------------------------------|--------------------------------|---|--|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V1300RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Estática</b> |                                | Temperatura de evaporación<br>(Temp. de condensación) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°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] |
| 293   | 74       | 86  | 42                                    | 0.32                           | 0.92  | 7.06   | 1.78      | 2.07  |

|   |          |     |                                       |                                |   |  |           |       |
|---|----------|-----|---------------------------------------|--------------------------------|---|--|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V1600RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Estática</b> |                                | Temperatura de evaporación<br>(Temp. de condensación) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°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] |
| 364   | 92       | 107 | 51                                    | 0.39                           | 1.14  | 7.14   | 1.80      | 2.09  |

|   |          |     |                                       |                                |   |  |           |       |
|---|----------|-----|---------------------------------------|--------------------------------|---|--|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V2000RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Estática</b> |                                | Temperatura de evaporación<br>(Temp. de condensación) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°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] |
| 454   | 114      | 133 | 64                                    | 0.50                           | 1.43  | 7.10   | 1.79      | 2.08  |

|   |          |     |                                       |                                |   |  |           |       |
|---|----------|-----|---------------------------------------|--------------------------------|---|--|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V3000RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Estática</b> |                                | Temperatura de evaporación<br>(Temp. de condensación) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°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] |
| 680   | 171      | 199 | 101                                   | 0.86                           | 2.14  | 6.75   | 1.70      | 1.98  |

|   |          |     |                                       |                                |   |  |           |       |
|---|----------|-----|---------------------------------------|--------------------------------|---|--|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V4000RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Estática</b> |                                | Temperatura de evaporación<br>(Temp. de condensación) | <b>-23.3°C (-9.94°F)</b><br><b>54.4°C (129.92°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] |
| 865   | 218      | 253 | 135                                   | 1.12                           |   | 6.43   | 1.62      | 1.88  |

### D - PERFORMANCE - DATOS CHECK POINT

|   |          |     |                                       |                                |  |                               |           |       |
|---|----------|-----|---------------------------------------|--------------------------------|--|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V4500RPM</b> |          |     | <b>ASHRAELBP32</b><br><b>Estática</b> |                                | Temperatura de evaporación <b>-23.3°C (-9.94°F)</b><br>(Temp. de condensación <b>54.4°C (129.92°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] |
| 867   | 218      | 254 | 136                                   | 1.16                           | 2.72   | 6.38                          | 1.61      | 1.87  |

### E - PERFORMANCE - CURVAS

|  |       |                                      |                                    |     |  |                                |                         |                               |           |       |
|--|-------|--------------------------------------|------------------------------------|-----|--|--------------------------------|-------------------------|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V950RPM</b> |       |                                      | <b>ASHRAE32</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) | 118                                  | 30                                 | 35  | 18   | 0.14                           | 0.37                    | 6.49                          | 1.63      | 1.90  |
| -30  | (-22) | 161                                  | 41                                 | 47  | 21   | 0.17                           | 0.51                    | 7.54                          | 1.90      | 2.21  |
| -25  | (-13) | 213                                  | 54                                 | 62  | 25   | 0.20                           | 0.67                    | 8.61                          | 2.17      | 2.52  |
| -20  | (- 4) | 276                                  | 69                                 | 81  | 28   | 0.23                           | 0.87                    | 9.81                          | 2.47      | 2.87  |
| -15  | (+ 5) | 352                                  | 89                                 | 103 | 31   | 0.25                           | 1.11                    | 11.20                         | 2.82      | 3.28  |
| -10  | (+14) | 444                                  | 112                                | 130 | 34   | 0.27                           | 1.40                    | 12.89                         | 3.25      | 3.78  |
| -5   | (+23) | 555                                  | 140                                | 163 | 37   | 0.28                           | 1.75                    | 14.96                         | 3.77      | 4.38  |

|  |       |                                      |                                    |     |   |                                |                         |                               |           |       |
|--|-------|--------------------------------------|------------------------------------|-----|---|--------------------------------|-------------------------|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V950RPM</b> |       |                                      | <b>ASHRAE32</b><br><b>Estática</b> |     | (Temp. de condensación <b>45°C (+113°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) | 107                                  | 27                                 | 31  | 19  | 0.15                           | 0.34                    | 5.50                          | 1.38      | 1.61  |
| -30  | (-22) | 150                                  | 38                                 | 44  | 23  | 0.18                           | 0.47                    | 6.51                          | 1.64      | 1.91  |
| -25  | (-13) | 200                                  | 50                                 | 59  | 27  | 0.21                           | 0.63                    | 7.45                          | 1.88      | 2.18  |
| -20  | (- 4) | 260                                  | 66                                 | 76  | 31  | 0.25                           | 0.82                    | 8.42                          | 2.12      | 2.47  |
| -15  | (+ 5) | 333                                  | 84                                 | 97  | 35  | 0.28                           | 1.05                    | 9.48                          | 2.39      | 2.78  |
| -10  | (+14) | 420                                  | 106                                | 123 | 39  | 0.31                           | 1.33                    | 10.74                         | 2.71      | 3.15  |
| -5   | (+23) | 525                                  | 132                                | 154 | 43  | 0.34                           | 1.66                    | 12.28                         | 3.10      | 3.60  |

|  |       |                                      |                                    |     |   |                                |                         |                               |           |       |
|--|-------|--------------------------------------|------------------------------------|-----|---|--------------------------------|-------------------------|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA:<br><b>@220V950RPM</b> |       |                                      | <b>ASHRAE32</b><br><b>Estática</b> |     | (Temp. de condensación <b>55°C (+131°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) | 89                                   | 22                                 | 26  | 21  | 0.16                           | 0.28                    | 4.35                          | 1.10      | 1.27  |
| -30  | (-22) | 134                                  | 34                                 | 39  | 24  | 0.19                           | 0.42                    | 5.45                          | 1.37      | 1.60  |
| -25  | (-13) | 185                                  | 47                                 | 54  | 29  | 0.23                           | 0.58                    | 6.39                          | 1.61      | 1.87  |
| -20  | (- 4) | 245                                  | 62                                 | 72  | 34  | 0.27                           | 0.77                    | 7.24                          | 1.82      | 2.12  |
| -15  | (+ 5) | 316                                  | 80                                 | 92  | 39  | 0.31                           | 0.99                    | 8.10                          | 2.04      | 2.37  |
| -10  | (+14) | 400                                  | 101                                | 117 | 44  | 0.35                           | 1.26                    | 9.06                          | 2.28      | 2.65  |
| -5   | (+23) | 502                                  | 126                                | 147 | 49  | 0.39                           | 1.59                    | 10.20                         | 2.57      | 2.99  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 167                        | 42       | 49  | 25                  | 0.20                                 | 0.52          | 6.65                | 1.68      | 1.95  |  |
| -30 (-22)                  | 225                        | 57       | 66  | 29                  | 0.23                                 | 0.70          | 7.62                | 1.92      | 2.23  |  |
| -25 (-13)                  | 295                        | 74       | 87  | 34                  | 0.27                                 | 0.93          | 8.65                | 2.18      | 2.54  |  |
| -20 (- 4)                  | 380                        | 96       | 111 | 39                  | 0.31                                 | 1.19          | 9.83                | 2.48      | 2.88  |  |
| -15 (+ 5)                  | 481                        | 121      | 141 | 43                  | 0.34                                 | 1.51          | 11.21               | 2.83      | 3.29  |  |
| -10 (+14)                  | 600                        | 151      | 176 | 47                  | 0.37                                 | 1.89          | 12.88               | 3.25      | 3.77  |  |
| -5 (+23)                   | 740                        | 187      | 217 | 50                  | 0.39                                 | 2.34          | 14.90               | 3.76      | 4.37  |  |

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 150                        | 38       | 44  | 26                  | 0.21                                  | 0.47          | 5.69                | 1.43      | 1.67  |  |
| -30 (-22)                  | 207                        | 52       | 61  | 31                  | 0.25                                  | 0.65          | 6.61                | 1.66      | 1.94  |  |
| -25 (-13)                  | 277                        | 70       | 81  | 37                  | 0.29                                  | 0.87          | 7.50                | 1.89      | 2.20  |  |
| -20 (- 4)                  | 361                        | 91       | 106 | 43                  | 0.34                                  | 1.13          | 8.45                | 2.13      | 2.48  |  |
| -15 (+ 5)                  | 461                        | 116      | 135 | 48                  | 0.38                                  | 1.45          | 9.52                | 2.40      | 2.79  |  |
| -10 (+14)                  | 580                        | 146      | 170 | 54                  | 0.43                                  | 1.83          | 10.77               | 2.71      | 3.16  |  |
| -5 (+23)                   | 720                        | 181      | 211 | 59                  | 0.47                                  | 2.28          | 12.29               | 3.10      | 3.60  |  |

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 130                        | 33       | 38  | 28                  | 0.22                                  | 0.41          | 4.65                | 1.17      | 1.36  |  |
| -30 (-22)                  | 186                        | 47       | 55  | 33                  | 0.26                                  | 0.58          | 5.64                | 1.42      | 1.65  |  |
| -25 (-13)                  | 255                        | 64       | 75  | 39                  | 0.31                                  | 0.80          | 6.51                | 1.64      | 1.91  |  |
| -20 (- 4)                  | 337                        | 85       | 99  | 46                  | 0.36                                  | 1.06          | 7.34                | 1.85      | 2.15  |  |
| -15 (+ 5)                  | 436                        | 110      | 128 | 53                  | 0.42                                  | 1.37          | 8.20                | 2.07      | 2.40  |  |
| -10 (+14)                  | 554                        | 140      | 162 | 60                  | 0.48                                  | 1.75          | 9.16                | 2.31      | 2.68  |  |
| -5 (+23)                   | 692                        | 174      | 203 | 67                  | 0.53                                  | 2.19          | 10.29               | 2.59      | 3.01  |  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 206                        | 52       | 60  | 31                  | 0.24                                 | 0.64          | 6.66                | 1.68      | 1.95  |  |
| -30 (-22)                  | 277                        | 70       | 81  | 36                  | 0.28                                 | 0.87          | 7.61                | 1.92      | 2.23  |  |
| -25 (-13)                  | 364                        | 92       | 107 | 42                  | 0.33                                 | 1.14          | 8.62                | 2.17      | 2.53  |  |
| -20 (- 4)                  | 468                        | 118      | 137 | 48                  | 0.38                                 | 1.47          | 9.78                | 2.46      | 2.87  |  |
| -15 (+ 5)                  | 594                        | 150      | 174 | 54                  | 0.42                                 | 1.87          | 11.13               | 2.80      | 3.26  |  |
| -10 (+14)                  | 743                        | 187      | 218 | 58                  | 0.46                                 | 2.34          | 12.74               | 3.21      | 3.73  |  |
| -5 (+23)                   | 919                        | 231      | 269 | 63                  | 0.49                                 | 2.90          | 14.67               | 3.70      | 4.30  |  |

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 188                        | 47       | 55  | 33                  | 0.26                                  | 0.59          | 5.81                | 1.46      | 1.70  |  |
| -30 (-22)                  | 258                        | 65       | 76  | 39                  | 0.31                                  | 0.81          | 6.68                | 1.68      | 1.96  |  |
| -25 (-13)                  | 343                        | 86       | 100 | 45                  | 0.36                                  | 1.08          | 7.55                | 1.90      | 2.21  |  |
| -20 (- 4)                  | 446                        | 112      | 131 | 52                  | 0.42                                  | 1.40          | 8.48                | 2.14      | 2.48  |  |
| -15 (+ 5)                  | 569                        | 143      | 167 | 60                  | 0.47                                  | 1.79          | 9.52                | 2.40      | 2.79  |  |
| -10 (+14)                  | 716                        | 180      | 210 | 67                  | 0.53                                  | 2.26          | 10.75               | 2.71      | 3.15  |  |
| -5 (+23)                   | 889                        | 224      | 260 | 73                  | 0.58                                  | 2.81          | 12.22               | 3.08      | 3.58  |  |

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 166                        | 42       | 49  | 34                  | 0.27                                  | 0.52          | 4.87                | 1.23      | 1.43  |  |
| -30 (-22)                  | 234                        | 59       | 69  | 41                  | 0.32                                  | 0.74          | 5.78                | 1.46      | 1.69  |  |
| -25 (-13)                  | 317                        | 80       | 93  | 48                  | 0.38                                  | 1.00          | 6.60                | 1.66      | 1.93  |  |
| -20 (- 4)                  | 418                        | 105      | 123 | 57                  | 0.45                                  | 1.31          | 7.40                | 1.86      | 2.17  |  |
| -15 (+ 5)                  | 539                        | 136      | 158 | 65                  | 0.52                                  | 1.70          | 8.24                | 2.08      | 2.42  |  |
| -10 (+14)                  | 683                        | 172      | 200 | 74                  | 0.59                                  | 2.16          | 9.19                | 2.31      | 2.69  |  |
| -5 (+23)                   | 854                        | 215      | 250 | 83                  | 0.66                                  | 2.70          | 10.29               | 2.59      | 3.02  |  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:<br>@220V2000RPM |                                      | ASHRAE32<br>Estática |          |                               | (Temp. de condensación 35°C (+95°F)) |                         |                               |          |           |       |
|--|--------------------------------------|----------------------|----------|-------------------------------|--------------------------------------|-------------------------|-------------------------------|----------|-----------|-------|
| 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)                              | 259                                  | 65                   | 76       | 39                            | 0.31                                 | 0.81                    | 6.65                          | 1.68     | 1.95      |       |
| -30 (-22)                              | 348                                  | 88                   | 102      | 46                            | 0.36                                 | 1.09                    | 7.55                          | 1.90     | 2.21      |       |
| -25 (-13)                              | 456                                  | 115                  | 134      | 53                            | 0.42                                 | 1.43                    | 8.53                          | 2.15     | 2.50      |       |
| -20 (- 4)                              | 586                                  | 148                  | 172      | 61                            | 0.48                                 | 1.84                    | 9.65                          | 2.43     | 2.83      |       |
| -15 (+ 5)                              | 742                                  | 187                  | 217      | 68                            | 0.54                                 | 2.34                    | 10.99                         | 2.77     | 3.22      |       |
| -10 (+14)                              | 926                                  | 233                  | 271      | 74                            | 0.59                                 | 2.92                    | 12.60                         | 3.17     | 3.69      |       |
| -5 (+23)                               | 1141                                 | 288                  | 334      | 78                            | 0.62                                 | 3.61                    | 14.55                         | 3.67     | 4.26      |       |

| CONDICIONES DE PRUEBA:<br>@220V2000RPM |                                      | ASHRAE32<br>Estática |          |                               | (Temp. de condensación 45°C (+113°F)) |                         |                               |          |           |       |
|--|--------------------------------------|----------------------|----------|-------------------------------|---------------------------------------|-------------------------|-------------------------------|----------|-----------|-------|
| 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)                              | 237                                  | 60                   | 69       | 41                            | 0.32                                  | 0.74                    | 5.87                          | 1.48     | 1.72      |       |
| -30 (-22)                              | 324                                  | 82                   | 95       | 48                            | 0.38                                  | 1.02                    | 6.70                          | 1.69     | 1.96      |       |
| -25 (-13)                              | 431                                  | 109                  | 126      | 57                            | 0.45                                  | 1.35                    | 7.53                          | 1.90     | 2.21      |       |
| -20 (- 4)                              | 560                                  | 141                  | 164      | 66                            | 0.53                                  | 1.76                    | 8.43                          | 2.12     | 2.47      |       |
| -15 (+ 5)                              | 714                                  | 180                  | 209      | 75                            | 0.60                                  | 2.25                    | 9.45                          | 2.38     | 2.77      |       |
| -10 (+14)                              | 897                                  | 226                  | 263      | 84                            | 0.67                                  | 2.83                    | 10.66                         | 2.69     | 3.12      |       |
| -5 (+23)                               | 1112                                 | 280                  | 326      | 92                            | 0.73                                  | 3.52                    | 12.13                         | 3.06     | 3.55      |       |

| CONDICIONES DE PRUEBA:<br>@220V2000RPM |                                      | ASHRAE32<br>Estática |          |                               | (Temp. de condensación 55°C (+131°F)) |                         |                               |          |           |       |
|--|--------------------------------------|----------------------|----------|-------------------------------|---------------------------------------|-------------------------|-------------------------------|----------|-----------|-------|
| 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)                              | 211                                  | 53                   | 62       | 42                            | 0.33                                  | 0.66                    | 4.97                          | 1.25     | 1.46      |       |
| -30 (-22)                              | 295                                  | 74                   | 86       | 51                            | 0.40                                  | 0.92                    | 5.85                          | 1.47     | 1.71      |       |
| -25 (-13)                              | 398                                  | 100                  | 117      | 60                            | 0.48                                  | 1.25                    | 6.65                          | 1.68     | 1.95      |       |
| -20 (- 4)                              | 525                                  | 132                  | 154      | 71                            | 0.56                                  | 1.65                    | 7.42                          | 1.87     | 2.17      |       |
| -15 (+ 5)                              | 677                                  | 171                  | 198      | 82                            | 0.65                                  | 2.13                    | 8.24                          | 2.08     | 2.41      |       |
| -10 (+14)                              | 858                                  | 216                  | 251      | 93                            | 0.74                                  | 2.71                    | 9.16                          | 2.31     | 2.69      |       |
| -5 (+23)                               | 1070                                 | 270                  | 314      | 104                           | 0.83                                  | 3.38                    | 10.26                         | 2.59     | 3.01      |       |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 399                        | 101      | 117 | 62                  | 0.49                                 | 1.25          | 6.45                | 1.63      | 1.89  |  |
| -30 (-22)                  | 506                        | 128      | 148 | 71                  | 0.56                                 | 1.59          | 7.20                | 1.82      | 2.11  |  |
| -25 (-13)                  | 660                        | 166      | 193 | 82                  | 0.65                                 | 2.07          | 8.06                | 2.03      | 2.36  |  |
| -20 (- 4)                  | 858                        | 216      | 251 | 95                  | 0.75                                 | 2.70          | 9.06                | 2.28      | 2.65  |  |
| -15 (+ 5)                  | 1099                       | 277      | 322 | 107                 | 0.85                                 | 3.46          | 10.26               | 2.59      | 3.01  |  |
| -10 (+14)                  | 1380                       | 348      | 404 | 118                 | 0.94                                 | 4.35          | 11.72               | 2.95      | 3.43  |  |
| -5 (+23)                   | 1699                       | 428      | 498 | 126                 | 1.00                                 | 5.37          | 13.48               | 3.40      | 3.95  |  |

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 350                        | 88       | 103 | 61                  | 0.48                                  | 1.10          | 5.76                | 1.45      | 1.69  |  |
| -30 (-22)                  | 473                        | 119      | 139 | 73                  | 0.57                                  | 1.48          | 6.49                | 1.64      | 1.90  |  |
| -25 (-13)                  | 637                        | 161      | 187 | 88                  | 0.69                                  | 2.00          | 7.24                | 1.82      | 2.12  |  |
| -20 (- 4)                  | 840                        | 212      | 246 | 104                 | 0.82                                  | 2.64          | 8.06                | 2.03      | 2.36  |  |
| -15 (+ 5)                  | 1080                       | 272      | 316 | 120                 | 0.95                                  | 3.40          | 8.99                | 2.27      | 2.64  |  |
| -10 (+14)                  | 1354                       | 341      | 397 | 134                 | 1.06                                  | 4.27          | 10.11               | 2.55      | 2.96  |  |
| -5 (+23)                   | 1661                       | 419      | 487 | 146                 | 1.15                                  | 5.25          | 11.44               | 2.88      | 3.35  |  |

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 319                        | 80       | 93  | 63                  | 0.50                                  | 1.00          | 5.06                | 1.27      | 1.48  |  |
| -30 (-22)                  | 442                        | 111      | 129 | 76                  | 0.60                                  | 1.38          | 5.84                | 1.47      | 1.71  |  |
| -25 (-13)                  | 600                        | 151      | 176 | 92                  | 0.73                                  | 1.88          | 6.57                | 1.65      | 1.92  |  |
| -20 (- 4)                  | 791                        | 199      | 232 | 109                 | 0.87                                  | 2.49          | 7.28                | 1.83      | 2.13  |  |
| -15 (+ 5)                  | 1014                       | 256      | 297 | 127                 | 1.00                                  | 3.19          | 8.03                | 2.02      | 2.35  |  |
| -10 (+14)                  | 1265                       | 319      | 371 | 143                 | 1.13                                  | 3.99          | 8.87                | 2.24      | 2.60  |  |
| -5 (+23)                   | 1543                       | 389      | 452 | 156                 | 1.24                                  | 4.88          | 9.86                | 2.48      | 2.89  |  |

### E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (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)                  | 504                        | 127      | 148 | 85                  | 0.68                                  | 1.58          | 5.89                | 1.49      | 1.73  |  |
| -30 (-22)                  | 628                        | 158      | 184 | 97                  | 0.77                                  | 1.97          | 6.55                | 1.65      | 1.92  |  |
| -25 (-13)                  | 818                        | 206      | 240 | 111                 | 0.88                                  | 2.57          | 7.35                | 1.85      | 2.15  |  |
| -20 (- 4)                  | 1057                       | 266      | 310 | 126                 | 1.00                                  | 3.32          | 8.35                | 2.10      | 2.45  |  |
| -15 (+ 5)                  | 1332                       | 336      | 390 | 139                 | 1.10                                  | 4.19          | 9.56                | 2.41      | 2.80  |  |
| -10 (+14)                  | 1627                       | 410      | 477 | 148                 | 1.17                                  | 5.13          | 11.03               | 2.78      | 3.23  |  |
| -5 (+23)                   | 1926                       | 485      | 564 | 151                 | 1.19                                  | 6.09          | 12.79               | 3.22      | 3.75  |  |

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (Temp. de condensación 45°C (+113°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)                  | 461                        | 116      | 135 | 85                  | 0.67                                   | 1.44          | 5.46                | 1.38      | 1.60  |  |
| -30 (-22)                  | 595                        | 150      | 174 | 99                  | 0.78                                   | 1.86          | 6.09                | 1.53      | 1.78  |  |
| -25 (-13)                  | 784                        | 198      | 230 | 115                 | 0.91                                   | 2.46          | 6.79                | 1.71      | 1.99  |  |
| -20 (- 4)                  | 1014                       | 256      | 297 | 133                 | 1.05                                   | 3.19          | 7.61                | 1.92      | 2.23  |  |
| -15 (+ 5)                  | 1269                       | 320      | 372 | 148                 | 1.17                                   | 4.00          | 8.57                | 2.16      | 2.51  |  |
| -10 (+14)                  | 1535                       | 387      | 450 | 158                 | 1.25                                   | 4.84          | 9.72                | 2.45      | 2.85  |  |
| -5 (+23)                   | 1795                       | 452      | 526 | 162                 | 1.28                                   | 5.68          | 11.08               | 2.79      | 3.25  |  |

| CONDICIONES DE PRUEBA:     |                            | ASHRAE32 |     |                     | (Temp. de condensación 55°C (+131°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)                  | 412                        | 104      | 121 | 84                  | 0.66                                   | 1.29          | 4.91                | 1.24      | 1.44  |  |
| -30 (-22)                  | 551                        | 139      | 161 | 99                  | 0.78                                   | 1.73          | 5.58                | 1.41      | 1.64  |  |
| -25 (-13)                  | 736                        | 186      | 216 | 118                 | 0.93                                   | 2.31          | 6.26                | 1.58      | 1.83  |  |
| -20 (- 4)                  | 952                        | 240      | 279 | 136                 | 1.08                                   | 2.99          | 6.98                | 1.76      | 2.05  |  |
| -15 (+ 5)                  | 1184                       | 298      | 347 | 152                 | 1.21                                   | 3.73          | 7.78                | 1.96      | 2.28  |  |
| -10 (+14)                  | 1416                       | 357      | 415 | 164                 | 1.30                                   | 4.47          | 8.68                | 2.19      | 2.54  |  |
| -5 (+23)                   | 1633                       | 412      | 479 | 168                 | 1.33                                   | 5.17          | 9.73                | 2.45      | 2.85  |  |



**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 |      |           |