

### COMPRESSOR DEFINITION

|                           |                       |
|---------------------------|-----------------------|
| Designation               | <b>EK 6175CD</b>      |
| Nominal Voltage/Frequency | <b>100 V 50-60 Hz</b> |
| Engineering Number        | <b>516400011</b>      |

### A - APPLICATION / LIMIT WORKING CONDITIONS

|                                    |   |                                    |             |
|------------------------------------|---|------------------------------------|-------------|
| 1 Type                             | Hermetic reciprocating compressor                         |                                    |             |
| 2 Refrigerant                      | R-744   |                                    |             |
| 3 Nominal voltage and frequency    | 100 / 50-60   | [ V / Hz ]                         |             |
| 4 Application type                 | Low/Medium/High Back Pressure (Comercial Compressor R744) |                                    |             |
| 4.1 Evaporating temperature range  | -40°C to 10°C   | (-40°F to 50°F)                    |             |
| 5 Motor type                       | CSCR  |                                    |             |
| 6 Starting torque                  | HST - Hight starting torque                               |                                    |             |
| 7 Expansion device                 | Capillary tube or Expansion valve                         |                                    |             |
| 8 Compressor cooling               |   | Operating voltage range            |             |
|                                    |   | 50 Hz                              | 60 Hz       |
| 8.1 LBP (32°C Ambient temperature) | -   | -                                  | -           |
| 8.2 LBP (43°C Ambient temperature) | -   | -                                  | -           |
| 8.3 HBP (32°C Ambient temperature) | Fan   | 85 to 110 V                        | 85 to 110 V |
| 8.4 HBP (43°C Ambient temperature) | Fan   | 85 to 110 V                        | 85 to 110 V |
| 9 Maximum discharge pressure       |   |                                    |             |
| 9.1 Operating                      | 122.4   | [kgf/cm <sup>2</sup> ] (1741 psig) | (120.0 bar) |
| 9.2 Peak                           | 122.4   | [kgf/cm <sup>2</sup> ] (1741 psig) | (120.0 bar) |
| 10 Maximum winding temperature     | 130   | [ °C ]                             |             |

### B - MECHANICAL DATA

|                               |               |  |
|-------------------------------|---------------|--|
| 1 Commercial designation      |               | [hp]                                       |
| 2 Displacement                | 1.30          | [cm <sup>3</sup> ] (0.079 cu.in)           |
| 2.1 Bore [mm]                 | 13.000        |  |
| 2.2 Stroke [mm]               | 9.800         |  |
| 3 Lubricant charge            | 150           | [ml] (5.07 fl.oz.)                         |
| 3.1 Lubricants approved       |               |  |
| 3.2 Lubricants type/viscosity | ESTER / ISO68 |  |
| 4 Weight (with oil charge)    | 13.88         | [kg] (30.60 lb.)                           |
| 5 Nitrogen charge             | 0.2 to 0.3    | [kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig) |

### C - ELETRICAL DATA

|  |                                   |                                    |
|--|-----------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 100 V 50-60 Hz 1 ~ (Single phase) |                                    |
| 2 Starting device type                       | PTC                               |                                    |
| 2.1 Starting device                          | 7M4R7MB3/8EA14D7/QPS2-A4R7MB4     |                                    |
| 3 Start capacitor                            | 270-324(165)                      | [µF(VAC minimum)]                  |
| 4 Run capacitor                              | 20(250)                           | [µF(VAC minimum)]                  |
| 5 Motor protection                           | 4TM795NFBZZ-53                    |                                    |
| 6 Start winding resistance                   | 4.10                              | [Ω at 25°C (77°F)] +/- 8%          |
| 7 Run winding resistance                     | 0.98                              | [Ω at 25°C (77°F)] +/- 8%          |
| 8 LRA - Locked rotor amperage (50/60 Hz)     | 35.50/32.60                       | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50/60 Hz)  | 8.80/6.70                         | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50/60 Hz)   | 9.50/7.50                         | [A] - Measured according to UL 984 |
| 11 Approval boards certification             |                                   |                                    |

### D - PERFORMANCE - CHECK POINT DATA

|                               |          |     |                             |                               |   |                           |  |       |  |
|-------------------------------|----------|-----|-----------------------------|-------------------------------|---|---------------------------|--|-------|--|
| TEST CONDITIONS:<br>@100V50Hz |          |     | ASHRAE32/HBP/R744<br>Fan    |                               | Evaporating temperature<br>(Discharge Pressure) |                           | 7.2°C (44.96°F)<br>85 bar (86.68 kgf/cm <sup>2</sup> ) |       |  |
| Cooling capacity<br>+/- 5%    |          |     | Power consumption<br>+/- 5% | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5%                         | EFFICIENCY RATE<br>+/- 7% |  |       |  |
| [Btu/h]                       | [kcal/h] | [W] | [W]                         | [A]                           | [kg/h]  | [Btu/Wh]                  | [kcal/Wh]  | [W/W] |  |
| 3064                          | 772      | 898 | 346                         | 5.30                          | 15.59   | 8.87                      | 2.24   | 2.60  |  |

|                               |          |      |                             |                               |   |                           |  |       |  |
|-------------------------------|----------|------|-----------------------------|-------------------------------|---|---------------------------|--|-------|--|
| TEST CONDITIONS:<br>@100V60Hz |          |      | ASHRAE32/HBP/R744<br>Fan    |                               | Evaporating temperature<br>(Discharge Pressure) |                           | 7.2°C (44.96°F)<br>85 bar (86.68 kgf/cm <sup>2</sup> ) |       |  |
| Cooling capacity<br>+/- 5%    |          |      | Power consumption<br>+/- 5% | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5%                         | EFFICIENCY RATE<br>+/- 7% |  |       |  |
| [Btu/h]                       | [kcal/h] | [W]  | [W]                         | [A]                           | [kg/h]  | [Btu/Wh]                  | [kcal/Wh]  | [W/W] |  |
| 3650                          | 920      | 1070 | 394                         | 4.68                          | 18.58   | 9.26                      | 2.33   | 2.71  |  |

|                               |          |     |                             |                               |   |                           |   |       |  |
|-------------------------------|----------|-----|-----------------------------|-------------------------------|---|---------------------------|---|-------|--|
| TEST CONDITIONS:<br>@100V50Hz |          |     | ASHRAE32/MBP/R744<br>Fan    |                               | Evaporating temperature<br>(Discharge Pressure) |                           | -10°C (14°F)<br>85 bar (86.68 kgf/cm <sup>2</sup> ) |       |  |
| Cooling capacity<br>+/- 5%    |          |     | Power consumption<br>+/- 5% | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5%                         | EFFICIENCY RATE<br>+/- 7% |   |       |  |
| [Btu/h]                       | [kcal/h] | [W] | [W]                         | [A]                           | [kg/h]  | [Btu/Wh]                  | [kcal/Wh]   | [W/W] |  |
| 1763                          | 444      | 517 | 347                         | 5.36                          | 9.40  | 5.08                      | 1.28  | 1.49  |  |

|                               |          |     |                             |                               |   |                           |   |       |  |
|-------------------------------|----------|-----|-----------------------------|-------------------------------|---|---------------------------|---|-------|--|
| TEST CONDITIONS:<br>@100V60Hz |          |     | ASHRAE32/MBP/R744<br>Fan    |                               | Evaporating temperature<br>(Discharge Pressure) |                           | -10°C (14°F)<br>85 bar (86.68 kgf/cm <sup>2</sup> ) |       |  |
| Cooling capacity<br>+/- 5%    |          |     | Power consumption<br>+/- 5% | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5%                         | EFFICIENCY RATE<br>+/- 7% |   |       |  |
| [Btu/h]                       | [kcal/h] | [W] | [W]                         | [A]                           | [kg/h]  | [Btu/Wh]                  | [kcal/Wh]   | [W/W] |  |
| 2082                          | 525      | 610 | 388                         | 4.63                          | 11.10   | 5.37                      | 1.35  | 1.57  |  |

### E - PERFORMANCE - CURVES

|                               |                            |                      |         |                             |                               |                         |   |        |          |           |
|-------------------------------|----------------------------|----------------------|---------|-----------------------------|-------------------------------|-------------------------|---|--------|----------|-----------|
| TEST CONDITIONS:<br>@100V50Hz |                            | ASHRAE32/R744<br>Fan |         |                             |                               |                         | (Discharge Pressure 80 bar (81 kgf/cm <sup>2</sup> )) |        |          |           |
| Evaporating temperature       | Cooling capacity<br>+/- 5% |                      |         | Power consumption<br>+/- 5% | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7%                             |        |          |           |
|                               | °C                         | (°F)                 | [Btu/h] | [kcal/h]                    | [W]                           | [W]                     | [A]   | [kg/h] | [Btu/Wh] | [kcal/Wh] |
| -40                           | (-40)                      | 539                  | 136     | 158                         | 254                           | 4.34                    | 2.74  | 2.13   | 0.54     | 0.62      |
| -35                           | (-31)                      | 685                  | 173     | 201                         | 272                           | 4.40                    | 3.56  | 2.50   | 0.63     | 0.73      |
| -30                           | (-22)                      | 846                  | 213     | 248                         | 289                           | 4.47                    | 4.42  | 2.90   | 0.73     | 0.85      |
| -25                           | (-13)                      | 1028                 | 259     | 301                         | 305                           | 4.55                    | 5.40  | 3.34   | 0.84     | 0.98      |
| -20                           | (- 4)                      | 1234                 | 311     | 362                         | 318                           | 4.62                    | 6.56  | 3.85   | 0.97     | 1.13      |
| -15                           | (+ 5)                      | 1470                 | 371     | 431                         | 329                           | 4.68                    | 7.94  | 4.47   | 1.13     | 1.31      |
| -10                           | (+14)                      | 1741                 | 439     | 510                         | 336                           | 4.73                    | 9.63  | 5.22   | 1.32     | 1.53      |
| -5                            | (+23)                      | 2052                 | 517     | 601                         | 340                           | 4.76                    | 11.67   | 6.12   | 1.54     | 1.79      |
| 0                             | (+32)                      | 2407                 | 606     | 705                         | 339                           | 4.77                    | 14.14   | 7.21   | 1.82     | 2.11      |
| +5                            | (+41)                      | 2811                 | 708     | 824                         | 334                           | 4.74                    | 17.09   | 8.50   | 2.14     | 2.49      |
| +10                           | (+50)                      | 3269                 | 824     | 958                         | 323                           | 4.68                    | 20.59   | 10.03  | 2.53     | 2.94      |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:        |       | ASHRAE32/R744    |          |     |                   |                     | (Discharge Pressure 90 bar (91 kgf/cm <sup>2</sup> )) |                 |           |       |
|-------------------------|-------|------------------|----------|-----|-------------------|---------------------|---|-----------------|-----------|-------|
| @100V50Hz               |       | Fan              |          |     |                   |                     |   |                 |           |       |
| Evaporating temperature |       | Cooling capacity |          |     | Power consumption | Current consumption | Gas flow rate   | EFFICIENCY RATE |           |       |
|                         |       | +/- 5%           |          |     | +/- 5%            | +/- 5%              | +/- 5%  | +/- 7%          |           |       |
| °C                      | (°F)  | [Btu/h]          | [kcal/h] | [W] | [W]               | [A]                 | [kg/h]  | [Btu/Wh]        | [kcal/Wh] | [W/W] |
| -40                     | (-40) | 516              | 130      | 151 | 260               | 4.35                | 2.45  | 2.01            | 0.51      | 0.59  |
| -35                     | (-31) | 668              | 168      | 196 | 281               | 4.43                | 3.26  | 2.39            | 0.60      | 0.70  |
| -30                     | (-22) | 837              | 211      | 245 | 300               | 4.51                | 4.11  | 2.78            | 0.70      | 0.82  |
| -25                     | (-13) | 1028             | 259      | 301 | 318               | 4.61                | 5.07  | 3.20            | 0.81      | 0.94  |
| -20                     | (- 4) | 1245             | 314      | 365 | 334               | 4.70                | 6.20  | 3.69            | 0.93      | 1.08  |
| -15                     | (+ 5) | 1494             | 376      | 438 | 347               | 4.78                | 7.56  | 4.26            | 1.07      | 1.25  |
| -10                     | (+14) | 1779             | 448      | 521 | 358               | 4.86                | 9.22  | 4.94            | 1.25      | 1.45  |
| -5                      | (+23) | 2104             | 530      | 617 | 365               | 4.91                | 11.23   | 5.77            | 1.45      | 1.69  |
| 0                       | (+32) | 2476             | 624      | 726 | 368               | 4.94                | 13.67   | 6.76            | 1.70      | 1.98  |
| +5                      | (+41) | 2899             | 730      | 849 | 367               | 4.94                | 16.58   | 7.95            | 2.00      | 2.33  |
| +10                     | (+50) | 3377             | 851      | 989 | 361               | 4.91                | 20.03   | 9.36            | 2.36      | 2.74  |

| TEST CONDITIONS:        |       | ASHRAE32/R744    |          |      |                   |                     | (Discharge Pressure 105 bar (107 kgf/cm <sup>2</sup> )) |                 |           |       |
|-------------------------|-------|------------------|----------|------|-------------------|---------------------|---|-----------------|-----------|-------|
| @100V50Hz               |       | Fan              |          |      |                   |                     |   |                 |           |       |
| Evaporating temperature |       | Cooling capacity |          |      | Power consumption | Current consumption | Gas flow rate   | EFFICIENCY RATE |           |       |
|                         |       | +/- 5%           |          |      | +/- 5%            | +/- 5%              | +/- 5%  | +/- 7%          |           |       |
| °C                      | (°F)  | [Btu/h]          | [kcal/h] | [W]  | [W]               | [A]                 | [kg/h]  | [Btu/Wh]        | [kcal/Wh] | [W/W] |
| -40                     | (-40) | 492              | 124      | 144  | 268               | 4.38                | 2.31  | 1.85            | 0.47      | 0.54  |
| -35                     | (-31) | 641              | 161      | 188  | 291               | 4.47                | 3.09  | 2.24            | 0.56      | 0.66  |
| -30                     | (-22) | 809              | 204      | 237  | 313               | 4.58                | 3.90  | 2.62            | 0.66      | 0.77  |
| -25                     | (-13) | 1001             | 252      | 293  | 334               | 4.70                | 4.82  | 3.00            | 0.76      | 0.88  |
| -20                     | (- 4) | 1221             | 308      | 358  | 354               | 4.82                | 5.90  | 3.43            | 0.86      | 1.01  |
| -15                     | (+ 5) | 1475             | 372      | 432  | 372               | 4.93                | 7.20  | 3.93            | 0.99      | 1.15  |
| -10                     | (+14) | 1768             | 446      | 518  | 387               | 5.04                | 8.80  | 4.51            | 1.14      | 1.32  |
| -5                      | (+23) | 2104             | 530      | 617  | 399               | 5.13                | 10.75   | 5.22            | 1.32      | 1.53  |
| 0                       | (+32) | 2489             | 627      | 729  | 408               | 5.20                | 13.11   | 6.08            | 1.53      | 1.78  |
| +5                      | (+41) | 2926             | 737      | 857  | 413               | 5.24                | 15.95   | 7.10            | 1.79      | 2.08  |
| +10                     | (+50) | 3421             | 862      | 1003 | 413               | 5.25                | 19.32   | 8.33            | 2.10      | 2.44  |

| TEST CONDITIONS:        |       | ASHRAE32/R744    |          |     |                   |                     | (Discharge Pressure 120 bar (122 kgf/cm <sup>2</sup> )) |                 |           |       |
|-------------------------|-------|------------------|----------|-----|-------------------|---------------------|---|-----------------|-----------|-------|
| @100V50Hz               |       | Fan              |          |     |                   |                     |   |                 |           |       |
| Evaporating temperature |       | Cooling capacity |          |     | Power consumption | Current consumption | Gas flow rate   | EFFICIENCY RATE |           |       |
|                         |       | +/- 5%           |          |     | +/- 5%            | +/- 5%              | +/- 5%  | +/- 7%          |           |       |
| °C                      | (°F)  | [Btu/h]          | [kcal/h] | [W] | [W]               | [A]                 | [kg/h]  | [Btu/Wh]        | [kcal/Wh] | [W/W] |
| -40                     | (-40) | 481              | 121      | 141 | 273               | 4.40                | 2.12  | 1.69            | 0.42      | 0.49  |
| -35                     | (-31) | 611              | 154      | 179 | 298               | 4.51                | 2.84  | 2.08            | 0.52      | 0.61  |
| -30                     | (-22) | 762              | 192      | 223 | 323               | 4.64                | 3.59  | 2.43            | 0.61      | 0.71  |
| -25                     | (-13) | 940              | 237      | 275 | 348               | 4.78                | 4.44  | 2.78            | 0.70      | 0.82  |
| -20                     | (- 4) | 1149             | 289      | 337 | 371               | 4.93                | 5.44  | 3.15            | 0.79      | 0.92  |
| -15                     | (+ 5) | 1393             | 351      | 408 | 393               | 5.07                | 6.67  | 3.56            | 0.90      | 1.04  |
| -10                     | (+14) | 1679             | 423      | 492 | 413               | 5.21                | 8.19  | 4.05            | 1.02      | 1.19  |
| -5                      | (+23) | 2010             | 506      | 589 | 430               | 5.34                | 10.05   | 4.63            | 1.17      | 1.36  |
| 0                       | (+32) | 2392             | 603      | 701 | 444               | 5.44                | 12.32   | 5.34            | 1.35      | 1.56  |
| +5                      | (+41) | 2828             | 713      | 829 | 454               | 5.53                | 15.06   | 6.20            | 1.56      | 1.82  |
| +10                     | (+50) | 3326             | 838      | 975 | 460               | 5.58                | 18.33   | 7.24            | 1.83      | 2.12  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@100V60Hz |       | ASHRAE32/R744<br>Fan       |          |      | (Discharge Pressure 80 bar (81 kgf/cm <sup>2</sup> )) |                               |                         |                           |           |       |
|-------------------------------|-------|----------------------------|----------|------|---|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature       |       | Cooling capacity<br>+/- 5% |          |      | Power consumption<br>+/- 5%                           | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C                            | (°F)  | [Btu/h]                    | [kcal/h] | [W]  | [W]   | [A]                           | [kg/h]                  | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -40                           | (-40) | 680                        | 171      | 199  | 267   | 2.99                          | 0.00                    | 2.56                      | 0.64      | 0.75  |
| -35                           | (-31) | 837                        | 211      | 245  | 291   | 3.19                          | 0.00                    | 2.86                      | 0.72      | 0.84  |
| -30                           | (-22) | 1019                       | 257      | 299  | 314   | 3.38                          | 0.00                    | 3.21                      | 0.81      | 0.94  |
| -25                           | (-13) | 1230                       | 310      | 360  | 334   | 3.56                          | 0.00                    | 3.64                      | 0.92      | 1.07  |
| -20                           | (- 4) | 1475                       | 372      | 432  | 351   | 3.72                          | 0.00                    | 4.17                      | 1.05      | 1.22  |
| -15                           | (+ 5) | 1757                       | 443      | 515  | 365   | 3.86                          | 0.00                    | 4.81                      | 1.21      | 1.41  |
| -10                           | (+14) | 2081                       | 524      | 610  | 375   | 3.96                          | 0.00                    | 5.59                      | 1.41      | 1.64  |
| -5                            | (+23) | 2452                       | 618      | 718  | 380   | 4.01                          | 0.00                    | 6.53                      | 1.65      | 1.91  |
| 0                             | (+32) | 2873                       | 724      | 842  | 381   | 4.02                          | 0.00                    | 7.66                      | 1.93      | 2.24  |
| +5                            | (+41) | 3349                       | 844      | 981  | 376   | 3.97                          | 0.00                    | 8.99                      | 2.26      | 2.63  |
| +10                           | (+50) | 3884                       | 979      | 1138 | 365   | 3.86                          | 0.00                    | 10.54                     | 2.66      | 3.09  |

| TEST CONDITIONS:<br>@100V60Hz |       | ASHRAE32/R744<br>Fan       |          |      | (Discharge Pressure 90 bar (91 kgf/cm <sup>2</sup> )) |                               |                         |                           |           |       |
|-------------------------------|-------|----------------------------|----------|------|---|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature       |       | Cooling capacity<br>+/- 5% |          |      | Power consumption<br>+/- 5%                           | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C                            | (°F)  | [Btu/h]                    | [kcal/h] | [W]  | [W]   | [A]                           | [kg/h]                  | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -40                           | (-40) | 675                        | 170      | 198  | 273   | 3.05                          | 0.00                    | 2.50                      | 0.63      | 0.73  |
| -35                           | (-31) | 833                        | 210      | 244  | 300   | 3.26                          | 0.00                    | 2.79                      | 0.70      | 0.82  |
| -30                           | (-22) | 1017                       | 256      | 298  | 325   | 3.48                          | 0.00                    | 3.12                      | 0.79      | 0.91  |
| -25                           | (-13) | 1231                       | 310      | 361  | 348   | 3.69                          | 0.00                    | 3.50                      | 0.88      | 1.03  |
| -20                           | (- 4) | 1479                       | 373      | 433  | 369   | 3.88                          | 0.00                    | 3.96                      | 1.00      | 1.16  |
| -15                           | (+ 5) | 1766                       | 445      | 518  | 386   | 4.06                          | 0.00                    | 4.53                      | 1.14      | 1.33  |
| -10                           | (+14) | 2096                       | 528      | 614  | 400   | 4.20                          | 0.00                    | 5.21                      | 1.31      | 1.53  |
| -5                            | (+23) | 2472                       | 623      | 724  | 410   | 4.30                          | 0.00                    | 6.03                      | 1.52      | 1.77  |
| 0                             | (+32) | 2900                       | 731      | 850  | 416   | 4.36                          | 0.00                    | 7.02                      | 1.77      | 2.06  |
| +5                            | (+41) | 3384                       | 853      | 992  | 416   | 4.37                          | 0.00                    | 8.19                      | 2.06      | 2.40  |
| +10                           | (+50) | 3927                       | 990      | 1151 | 411   | 4.31                          | 0.00                    | 9.57                      | 2.41      | 2.80  |

| TEST CONDITIONS:<br>@100V60Hz |       | ASHRAE32/R744<br>Fan       |          |      | (Discharge Pressure 105 bar (107 kgf/cm <sup>2</sup> )) |                               |                         |                           |           |       |
|-------------------------------|-------|----------------------------|----------|------|---|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature       |       | Cooling capacity<br>+/- 5% |          |      | Power consumption<br>+/- 5%                             | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C                            | (°F)  | [Btu/h]                    | [kcal/h] | [W]  | [W]   | [A]                           | [kg/h]                  | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -40                           | (-40) | 655                        | 165      | 192  | 280   | 3.10                          | 0.00                    | 2.35                      | 0.59      | 0.69  |
| -35                           | (-31) | 811                        | 204      | 238  | 310   | 3.35                          | 0.00                    | 2.66                      | 0.67      | 0.78  |
| -30                           | (-22) | 993                        | 250      | 291  | 339   | 3.60                          | 0.00                    | 2.97                      | 0.75      | 0.87  |
| -25                           | (-13) | 1206                       | 304      | 354  | 366   | 3.85                          | 0.00                    | 3.31                      | 0.83      | 0.97  |
| -20                           | (- 4) | 1455                       | 367      | 426  | 392   | 4.10                          | 0.00                    | 3.70                      | 0.93      | 1.08  |
| -15                           | (+ 5) | 1744                       | 439      | 511  | 415   | 4.32                          | 0.00                    | 4.16                      | 1.05      | 1.22  |
| -10                           | (+14) | 2076                       | 523      | 608  | 435   | 4.53                          | 0.00                    | 4.71                      | 1.19      | 1.38  |
| -5                            | (+23) | 2457                       | 619      | 720  | 452   | 4.70                          | 0.00                    | 5.38                      | 1.36      | 1.58  |
| 0                             | (+32) | 2890                       | 728      | 847  | 465   | 4.83                          | 0.00                    | 6.19                      | 1.56      | 1.81  |
| +5                            | (+41) | 3380                       | 852      | 990  | 473   | 4.91                          | 0.00                    | 7.15                      | 1.80      | 2.09  |
| +10                           | (+50) | 3931                       | 991      | 1152 | 477   | 4.94                          | 0.00                    | 8.29                      | 2.09      | 2.43  |

### E - PERFORMANCE - CURVES

| TEST CONDITIONS:<br>@100V60Hz |       | ASHRAE32/R744<br>Fan       |          |      | (Discharge Pressure 120 bar (122 kgf/cm <sup>2</sup> )) |                               |                         |                           |           |       |
|-------------------------------|-------|----------------------------|----------|------|---|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature       |       | Cooling capacity<br>+/- 5% |          |      | Power consumption<br>+/- 5%                             | Current consumption<br>+/- 5% | Gas flow rate<br>+/- 5% | EFFICIENCY RATE<br>+/- 7% |           |       |
| °C                            | (°F)  | [Btu/h]                    | [kcal/h] | [W]  | [W]   | [A]                           | [kg/h]                  | [Btu/Wh]                  | [kcal/Wh] | [W/W] |
| -40                           | (-40) | 622                        | 157      | 182  | 285   | 3.14                          | 0.00                    | 2.10                      | 0.53      | 0.62  |
| -35                           | (-31) | 769                        | 194      | 225  | 318   | 3.41                          | 0.00                    | 2.45                      | 0.62      | 0.72  |
| -30                           | (-22) | 944                        | 238      | 277  | 350   | 3.70                          | 0.00                    | 2.77                      | 0.70      | 0.81  |
| -25                           | (-13) | 1151                       | 290      | 337  | 382   | 3.99                          | 0.00                    | 3.09                      | 0.78      | 0.91  |
| -20                           | (- 4) | 1394                       | 351      | 409  | 412   | 4.28                          | 0.00                    | 3.44                      | 0.87      | 1.01  |
| -15                           | (+ 5) | 1678                       | 423      | 492  | 441   | 4.56                          | 0.00                    | 3.83                      | 0.96      | 1.12  |
| -10                           | (+14) | 2008                       | 506      | 588  | 467   | 4.82                          | 0.00                    | 4.28                      | 1.08      | 1.26  |
| -5                            | (+23) | 2387                       | 601      | 699  | 490   | 5.06                          | 0.00                    | 4.83                      | 1.22      | 1.41  |
| 0                             | (+32) | 2819                       | 710      | 826  | 510   | 5.26                          | 0.00                    | 5.47                      | 1.38      | 1.60  |
| +5                            | (+41) | 3309                       | 834      | 970  | 527   | 5.42                          | 0.00                    | 6.25                      | 1.58      | 1.83  |
| +10                           | (+50) | 3861                       | 973      | 1131 | 539   | 5.53                          | 0.00                    | 7.18                      | 1.81      | 2.10  |

### F - EXTERNAL CHARACTERISTICS

|                         |                     |      |                          |
|-------------------------|---------------------|------|--------------------------|
| 1 Base plate            | Universal           |      |                          |
| 2 Tray holder           | No                  |      |                          |
| 3 Connectors            |                     |      |                          |
| 3.1 SUCTION             | 6.5 +0.12/-0.08     | [mm] | (0.256" +0.005"/-0.003") |
| 3.1.1 Material          | Copper plated steel |      |                          |
| 3.1.2 Shape             | Straight            |      |                          |
| 3.2 DISCHARGE           | 6.5 +0.12/-0.08     | [mm] | (0.256" +0.005"/-0.003") |
| 3.2.1 Material          | Copper plated steel |      |                          |
| 3.2.2 Shape             | Straight            |      |                          |
| 3.3 PROCESS             | 6.5 +0.12/-0.08     | [mm] | (0.256" +0.005"/-0.003") |
| 3.3.1 Material          | Copper plated steel |      |                          |
| 3.3.2 Shape             | Straight            |      |                          |
| 3.4 Oil cooler (Copper) | No                  | [mm] |                          |
| 3.5 Connector sealing   | Rubber Plugs        |      |                          |