

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | VES F9C |
| Nominal Voltage/Frequency | 230 V 32-150 Hz |
| Engineering Number | 513907233 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|---|-----------------------------------|--------------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-600a | | |
| 3 Nominal voltage and frequency | 230 / 32-150 | [V / Hz] | |
| 4 Application type | Low-Medium Back Pressure (Fullmotion Compressors) | | |
| 4.1 Evaporating temperature range | -35°C to 0°C | (-31°F to 32°F) | |
| 5 Motor type | BPM | | |
| 6 Starting torque | LST - Low Starting Torque | | |
| 7 Expansion device | Capillary tube | | |
| 8 Compressor cooling | Operating voltage range | | |
| | | 50 Hz | 60 Hz |
| 8.1 LBP (32°C Ambient temperature) | Static | 160 to 264 V | 160 to 264 V |
| 8.2 LBP (43°C Ambient temperature) | Static | 160 to 264 V | 160 to 264 V |
| 8.3 HBP (32°C Ambient temperature) | - | - | - |
| 8.4 HBP (43°C Ambient temperature) | - | - | - |
| 9 Maximum condensing temperature | | | |
| 9.1 Operating | 6.9 | [kgf/cm ²] (98 psig) | / °C - °F |
| 9.2 Peak | 7.8 | [kgf/cm ²] (111 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|----------------|----------------------------------|
| 1 Commercial designation | 1/5 | [hp] |
| 2 Displacement | 9.04 | [cm ³] (0.552 cu.in) |
| 2.1 Bore [mm] | 24.000 | |
| 2.2 Stroke [mm] | 20.000 | |
| 3 Lubricant charge | 205 | [ml] (6.93 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 6.8 | [kg] (14.99 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELETRICAL DATA

| | | |
|--|------------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 230 V 31.7-150 Hz 3~ (Three phase) | |
| 2 Starting device type | Inverter | |
| 2.1 Starting device | VESF 2456 XXX X | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | INVERTER VES 2456X | |
| 6 Start winding resistance | 9.30 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 9.30 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (32/150 Hz) | 2.10 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (32/150 Hz) | - | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (32/150 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | CCC - VDE | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | | |
|---------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|-------------------------------|-------|--|
| TEST CONDITIONS: @220V950RPM | | | CECOMAFLBP Static | | Evaporating temperature (Condensing temperature | | -25°C (-13°F) 55°C (131°F) | | |
| Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| 119 | 30 | 35 | 23 | 0.23 | 0.45 | 5.09 | 1.28 | 1.49 | |

| | | | | | | | | | |
|----------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|-------------------------------|-------|--|
| TEST CONDITIONS: @220V1300RPM | | | CECOMAFLBP Static | | Evaporating temperature (Condensing temperature | | -25°C (-13°F) 55°C (131°F) | | |
| Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| 167 | 42 | 49 | 32 | 0.29 | 0.64 | 5.19 | 1.31 | 1.52 | |

| | | | | | | | | | |
|----------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|-------------------------------|-------|--|
| TEST CONDITIONS: @220V4000RPM | | | CECOMAFLBP Static | | Evaporating temperature (Condensing temperature | | -25°C (-13°F) 55°C (131°F) | | |
| Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| 491 | 124 | 144 | 102 | 0.77 | 1.87 | 4.81 | 1.21 | 1.41 | |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|---------------------------------|-------|----------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V950RPM | | CECOMAF Static | | | | | (Condensing temperature 35°C (+95°F)) | | | |
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 96 | 24 | 28 | 15 | 0.17 | 0.31 | 6.18 | 1.56 | 1.81 |
| -30 | (-22) | 130 | 33 | 38 | 18 | 0.19 | 0.42 | 7.11 | 1.79 | 2.08 |
| -25 | (-13) | 171 | 43 | 50 | 21 | 0.21 | 0.55 | 8.15 | 2.05 | 2.39 |
| -20 | (- 4) | 221 | 56 | 65 | 24 | 0.23 | 0.71 | 9.34 | 2.35 | 2.74 |
| -15 | (+ 5) | 281 | 71 | 82 | 26 | 0.24 | 0.90 | 10.72 | 2.70 | 3.14 |
| -10 | (+14) | 352 | 89 | 103 | 29 | 0.26 | 1.14 | 12.35 | 3.11 | 3.62 |
| -5 | (+23) | 436 | 110 | 128 | 30 | 0.28 | 1.41 | 14.27 | 3.60 | 4.18 |
| 0 | (+32) | 534 | 134 | 156 | 32 | 0.30 | 1.73 | 16.53 | 4.16 | 4.84 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V950RPM | | CECOMAF Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|---------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 78 | 20 | 23 | 16 | 0.17 | 0.27 | 4.91 | 1.24 | 1.44 |
| -30 | (-22) | 108 | 27 | 32 | 19 | 0.20 | 0.38 | 5.64 | 1.42 | 1.65 |
| -25 | (-13) | 145 | 37 | 43 | 23 | 0.22 | 0.51 | 6.39 | 1.61 | 1.87 |
| -20 | (- 4) | 190 | 48 | 56 | 26 | 0.24 | 0.66 | 7.22 | 1.82 | 2.12 |
| -15 | (+ 5) | 245 | 62 | 72 | 30 | 0.26 | 0.85 | 8.17 | 2.06 | 2.39 |
| -10 | (+14) | 310 | 78 | 91 | 33 | 0.28 | 1.09 | 9.29 | 2.34 | 2.72 |
| -5 | (+23) | 388 | 98 | 114 | 37 | 0.31 | 1.36 | 10.62 | 2.68 | 3.11 |
| 0 | (+32) | 479 | 121 | 140 | 40 | 0.34 | 1.69 | 12.22 | 3.08 | 3.58 |

| TEST CONDITIONS: @220V950RPM | | CECOMAF Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|---------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 58 | 15 | 17 | 16 | 0.17 | 0.22 | 3.60 | 0.91 | 1.06 |
| -30 | (-22) | 85 | 21 | 25 | 20 | 0.20 | 0.32 | 4.29 | 1.08 | 1.26 |
| -25 | (-13) | 117 | 30 | 34 | 24 | 0.22 | 0.45 | 4.94 | 1.24 | 1.45 |
| -20 | (- 4) | 158 | 40 | 46 | 28 | 0.25 | 0.60 | 5.58 | 1.41 | 1.63 |
| -15 | (+ 5) | 207 | 52 | 61 | 33 | 0.28 | 0.79 | 6.26 | 1.58 | 1.84 |
| -10 | (+14) | 267 | 67 | 78 | 38 | 0.31 | 1.03 | 7.04 | 1.77 | 2.06 |
| -5 | (+23) | 339 | 86 | 99 | 43 | 0.34 | 1.31 | 7.96 | 2.01 | 2.33 |
| 0 | (+32) | 425 | 107 | 124 | 47 | 0.38 | 1.64 | 9.06 | 2.28 | 2.66 |

| TEST CONDITIONS: @220V1300RPM | | CECOMAF Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 135 | 34 | 39 | 21 | 0.20 | 0.43 | 6.26 | 1.58 | 1.83 |
| -30 | (-22) | 181 | 46 | 53 | 25 | 0.22 | 0.58 | 7.20 | 1.81 | 2.11 |
| -25 | (-13) | 238 | 60 | 70 | 29 | 0.25 | 0.76 | 8.25 | 2.08 | 2.42 |
| -20 | (- 4) | 307 | 77 | 90 | 32 | 0.27 | 0.99 | 9.46 | 2.38 | 2.77 |
| -15 | (+ 5) | 390 | 98 | 114 | 36 | 0.30 | 1.25 | 10.84 | 2.73 | 3.17 |
| -10 | (+14) | 488 | 123 | 143 | 39 | 0.33 | 1.57 | 12.41 | 3.13 | 3.64 |
| -5 | (+23) | 603 | 152 | 177 | 42 | 0.36 | 1.95 | 14.22 | 3.58 | 4.17 |
| 0 | (+32) | 736 | 185 | 216 | 45 | 0.39 | 2.39 | 16.27 | 4.10 | 4.77 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V1300RPM | | CECOMAF Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 110 | 28 | 32 | 22 | 0.21 | 0.38 | 5.03 | 1.27 | 1.47 |
| -30 | (-22) | 153 | 38 | 45 | 26 | 0.24 | 0.53 | 5.79 | 1.46 | 1.70 |
| -25 | (-13) | 204 | 52 | 60 | 31 | 0.27 | 0.71 | 6.59 | 1.66 | 1.93 |
| -20 | (- 4) | 267 | 67 | 78 | 36 | 0.30 | 0.93 | 7.48 | 1.88 | 2.19 |
| -15 | (+ 5) | 342 | 86 | 100 | 40 | 0.33 | 1.19 | 8.47 | 2.13 | 2.48 |
| -10 | (+14) | 430 | 108 | 126 | 45 | 0.36 | 1.51 | 9.59 | 2.42 | 2.81 |
| -5 | (+23) | 534 | 135 | 156 | 49 | 0.40 | 1.87 | 10.87 | 2.74 | 3.18 |
| 0 | (+32) | 654 | 165 | 192 | 54 | 0.44 | 2.30 | 12.33 | 3.11 | 3.61 |

| TEST CONDITIONS: @220V1300RPM | | CECOMAF Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 85 | 21 | 25 | 22 | 0.21 | 0.32 | 3.91 | 0.98 | 1.15 |
| -30 | (-22) | 123 | 31 | 36 | 27 | 0.25 | 0.47 | 4.58 | 1.15 | 1.34 |
| -25 | (-13) | 169 | 43 | 50 | 32 | 0.28 | 0.64 | 5.24 | 1.32 | 1.54 |
| -20 | (- 4) | 224 | 56 | 66 | 38 | 0.32 | 0.86 | 5.91 | 1.49 | 1.73 |
| -15 | (+ 5) | 290 | 73 | 85 | 44 | 0.36 | 1.11 | 6.61 | 1.67 | 1.94 |
| -10 | (+14) | 368 | 93 | 108 | 50 | 0.40 | 1.41 | 7.37 | 1.86 | 2.16 |
| -5 | (+23) | 460 | 116 | 135 | 56 | 0.44 | 1.77 | 8.22 | 2.07 | 2.41 |
| 0 | (+32) | 567 | 143 | 166 | 62 | 0.49 | 2.19 | 9.19 | 2.32 | 2.69 |

| TEST CONDITIONS: @220V1600RPM | | CECOMAF Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 164 | 41 | 48 | 26 | 0.24 | 0.52 | 6.20 | 1.56 | 1.82 |
| -30 | (-22) | 219 | 55 | 64 | 31 | 0.27 | 0.70 | 7.08 | 1.78 | 2.07 |
| -25 | (-13) | 289 | 73 | 85 | 36 | 0.31 | 0.93 | 8.10 | 2.04 | 2.37 |
| -20 | (- 4) | 375 | 94 | 110 | 40 | 0.34 | 1.20 | 9.29 | 2.34 | 2.72 |
| -15 | (+ 5) | 478 | 120 | 140 | 45 | 0.37 | 1.54 | 10.66 | 2.69 | 3.12 |
| -10 | (+14) | 599 | 151 | 176 | 49 | 0.40 | 1.93 | 12.21 | 3.08 | 3.58 |
| -5 | (+23) | 740 | 187 | 217 | 53 | 0.42 | 2.39 | 13.97 | 3.52 | 4.09 |
| 0 | (+32) | 902 | 227 | 264 | 56 | 0.44 | 2.93 | 15.94 | 4.02 | 4.67 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V1600RPM | | CECOMAF Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 139 | 35 | 41 | 27 | 0.25 | 0.48 | 5.11 | 1.29 | 1.50 |
| -30 | (-22) | 189 | 48 | 55 | 33 | 0.28 | 0.66 | 5.78 | 1.46 | 1.70 |
| -25 | (-13) | 251 | 63 | 74 | 38 | 0.32 | 0.87 | 6.55 | 1.65 | 1.92 |
| -20 | (- 4) | 328 | 83 | 96 | 44 | 0.36 | 1.14 | 7.41 | 1.87 | 2.17 |
| -15 | (+ 5) | 419 | 106 | 123 | 50 | 0.40 | 1.47 | 8.40 | 2.12 | 2.46 |
| -10 | (+14) | 528 | 133 | 155 | 55 | 0.44 | 1.85 | 9.51 | 2.40 | 2.79 |
| -5 | (+23) | 654 | 165 | 192 | 61 | 0.48 | 2.30 | 10.77 | 2.71 | 3.15 |
| 0 | (+32) | 799 | 201 | 234 | 66 | 0.51 | 2.81 | 12.18 | 3.07 | 3.57 |

| TEST CONDITIONS: @220V1600RPM | | CECOMAF Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 109 | 28 | 32 | 27 | 0.25 | 0.42 | 3.98 | 1.00 | 1.17 |
| -30 | (-22) | 154 | 39 | 45 | 34 | 0.29 | 0.59 | 4.58 | 1.16 | 1.34 |
| -25 | (-13) | 210 | 53 | 62 | 40 | 0.33 | 0.80 | 5.22 | 1.32 | 1.53 |
| -20 | (- 4) | 279 | 70 | 82 | 47 | 0.38 | 1.07 | 5.91 | 1.49 | 1.73 |
| -15 | (+ 5) | 361 | 91 | 106 | 54 | 0.43 | 1.38 | 6.65 | 1.67 | 1.95 |
| -10 | (+14) | 457 | 115 | 134 | 61 | 0.48 | 1.76 | 7.45 | 1.88 | 2.18 |
| -5 | (+23) | 570 | 144 | 167 | 68 | 0.53 | 2.19 | 8.35 | 2.10 | 2.45 |
| 0 | (+32) | 700 | 176 | 205 | 75 | 0.58 | 2.70 | 9.33 | 2.35 | 2.73 |

| TEST CONDITIONS: @220V2000RPM | | CECOMAF Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 207 | 52 | 61 | 33 | 0.29 | 0.66 | 6.17 | 1.55 | 1.81 |
| -30 | (-22) | 274 | 69 | 80 | 39 | 0.33 | 0.88 | 7.01 | 1.77 | 2.05 |
| -25 | (-13) | 358 | 90 | 105 | 45 | 0.37 | 1.15 | 7.97 | 2.01 | 2.33 |
| -20 | (- 4) | 461 | 116 | 135 | 51 | 0.41 | 1.48 | 9.06 | 2.28 | 2.65 |
| -15 | (+ 5) | 585 | 148 | 172 | 57 | 0.45 | 1.88 | 10.29 | 2.59 | 3.02 |
| -10 | (+14) | 732 | 185 | 215 | 63 | 0.49 | 2.36 | 11.68 | 2.94 | 3.42 |
| -5 | (+23) | 905 | 228 | 265 | 68 | 0.53 | 2.93 | 13.24 | 3.34 | 3.88 |
| 0 | (+32) | 1104 | 278 | 323 | 74 | 0.57 | 3.58 | 14.98 | 3.78 | 4.39 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V2000RPM | | CECOMAF Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 175 | 44 | 51 | 35 | 0.30 | 0.61 | 5.07 | 1.28 | 1.49 |
| -30 | (-22) | 239 | 60 | 70 | 42 | 0.34 | 0.83 | 5.76 | 1.45 | 1.69 |
| -25 | (-13) | 317 | 80 | 93 | 49 | 0.39 | 1.11 | 6.52 | 1.64 | 1.91 |
| -20 | (- 4) | 412 | 104 | 121 | 56 | 0.44 | 1.44 | 7.37 | 1.86 | 2.16 |
| -15 | (+ 5) | 524 | 132 | 154 | 63 | 0.49 | 1.83 | 8.31 | 2.09 | 2.43 |
| -10 | (+14) | 657 | 165 | 192 | 70 | 0.54 | 2.30 | 9.35 | 2.36 | 2.74 |
| -5 | (+23) | 812 | 205 | 238 | 77 | 0.59 | 2.85 | 10.52 | 2.65 | 3.08 |
| 0 | (+32) | 991 | 250 | 290 | 84 | 0.64 | 3.49 | 11.82 | 2.98 | 3.46 |

| TEST CONDITIONS: @220V2000RPM | | CECOMAF Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 139 | 35 | 41 | 34 | 0.29 | 0.53 | 4.08 | 1.03 | 1.19 |
| -30 | (-22) | 200 | 50 | 59 | 42 | 0.35 | 0.76 | 4.69 | 1.18 | 1.37 |
| -25 | (-13) | 271 | 68 | 79 | 51 | 0.41 | 1.03 | 5.32 | 1.34 | 1.56 |
| -20 | (- 4) | 356 | 90 | 104 | 60 | 0.47 | 1.36 | 5.99 | 1.51 | 1.75 |
| -15 | (+ 5) | 457 | 115 | 134 | 68 | 0.54 | 1.75 | 6.70 | 1.69 | 1.96 |
| -10 | (+14) | 574 | 145 | 168 | 77 | 0.60 | 2.21 | 7.47 | 1.88 | 2.19 |
| -5 | (+23) | 712 | 179 | 209 | 86 | 0.67 | 2.74 | 8.31 | 2.09 | 2.43 |
| 0 | (+32) | 871 | 219 | 255 | 94 | 0.74 | 3.36 | 9.23 | 2.33 | 2.71 |

| TEST CONDITIONS: @220V3000RPM | | CECOMAF Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 302 | 76 | 88 | 52 | 0.43 | 0.97 | 5.80 | 1.46 | 1.70 |
| -30 | (-22) | 413 | 104 | 121 | 61 | 0.50 | 1.33 | 6.72 | 1.69 | 1.97 |
| -25 | (-13) | 544 | 137 | 159 | 71 | 0.57 | 1.75 | 7.66 | 1.93 | 2.24 |
| -20 | (- 4) | 698 | 176 | 205 | 81 | 0.64 | 2.24 | 8.64 | 2.18 | 2.53 |
| -15 | (+ 5) | 880 | 222 | 258 | 91 | 0.71 | 2.83 | 9.69 | 2.44 | 2.84 |
| -10 | (+14) | 1093 | 275 | 320 | 101 | 0.78 | 3.52 | 10.84 | 2.73 | 3.18 |
| -5 | (+23) | 1341 | 338 | 393 | 110 | 0.85 | 4.34 | 12.12 | 3.05 | 3.55 |
| 0 | (+32) | 1627 | 410 | 477 | 120 | 0.91 | 5.28 | 13.55 | 3.41 | 3.97 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V3000RPM | | CECOMAF Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 254 | 64 | 74 | 53 | 0.43 | 0.88 | 4.82 | 1.21 | 1.41 |
| -30 | (-22) | 356 | 90 | 104 | 64 | 0.52 | 1.24 | 5.56 | 1.40 | 1.63 |
| -25 | (-13) | 477 | 120 | 140 | 75 | 0.61 | 1.66 | 6.31 | 1.59 | 1.85 |
| -20 | (- 4) | 619 | 156 | 181 | 87 | 0.70 | 2.16 | 7.09 | 1.79 | 2.08 |
| -15 | (+ 5) | 787 | 198 | 231 | 99 | 0.79 | 2.75 | 7.92 | 1.99 | 2.32 |
| -10 | (+14) | 985 | 248 | 288 | 112 | 0.88 | 3.45 | 8.83 | 2.22 | 2.59 |
| -5 | (+23) | 1215 | 306 | 356 | 124 | 0.97 | 4.27 | 9.84 | 2.48 | 2.88 |
| 0 | (+32) | 1483 | 374 | 435 | 135 | 1.06 | 5.22 | 10.99 | 2.77 | 3.22 |

| TEST CONDITIONS: @220V3000RPM | | CECOMAF Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 204 | 51 | 60 | 52 | 0.43 | 0.78 | 3.93 | 0.99 | 1.15 |
| -30 | (-22) | 297 | 75 | 87 | 65 | 0.52 | 1.13 | 4.55 | 1.15 | 1.33 |
| -25 | (-13) | 405 | 102 | 119 | 78 | 0.62 | 1.54 | 5.16 | 1.30 | 1.51 |
| -20 | (- 4) | 534 | 135 | 157 | 92 | 0.73 | 2.04 | 5.78 | 1.46 | 1.69 |
| -15 | (+ 5) | 687 | 173 | 201 | 107 | 0.84 | 2.63 | 6.44 | 1.62 | 1.89 |
| -10 | (+14) | 868 | 219 | 254 | 121 | 0.95 | 3.33 | 7.16 | 1.80 | 2.10 |
| -5 | (+23) | 1080 | 272 | 316 | 136 | 1.06 | 4.16 | 7.97 | 2.01 | 2.33 |
| 0 | (+32) | 1328 | 335 | 389 | 150 | 1.17 | 5.12 | 8.89 | 2.24 | 2.61 |

| TEST CONDITIONS: @220V4000RPM | | CECOMAF Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 375 | 94 | 110 | 70 | 0.54 | 1.20 | 5.39 | 1.36 | 1.58 |
| -30 | (-22) | 491 | 124 | 144 | 82 | 0.64 | 1.57 | 6.02 | 1.52 | 1.76 |
| -25 | (-13) | 651 | 164 | 191 | 95 | 0.73 | 2.09 | 6.86 | 1.73 | 2.01 |
| -20 | (- 4) | 853 | 215 | 250 | 108 | 0.82 | 2.74 | 7.86 | 1.98 | 2.30 |
| -15 | (+ 5) | 1097 | 277 | 322 | 122 | 0.91 | 3.53 | 8.98 | 2.26 | 2.63 |
| -10 | (+14) | 1381 | 348 | 405 | 136 | 1.01 | 4.46 | 10.19 | 2.57 | 2.99 |
| -5 | (+23) | 1704 | 429 | 499 | 149 | 1.10 | 5.51 | 11.45 | 2.89 | 3.36 |
| 0 | (+32) | 2064 | 520 | 605 | 162 | 1.19 | 6.70 | 12.72 | 3.20 | 3.73 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V4000RPM | | CECOMAF Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 336 | 85 | 98 | 72 | 0.57 | 1.17 | 4.64 | 1.17 | 1.36 |
| -30 | (-22) | 436 | 110 | 128 | 85 | 0.68 | 1.52 | 5.15 | 1.30 | 1.51 |
| -25 | (-13) | 574 | 145 | 168 | 99 | 0.78 | 2.00 | 5.82 | 1.47 | 1.71 |
| -20 | (- 4) | 748 | 188 | 219 | 113 | 0.88 | 2.61 | 6.62 | 1.67 | 1.94 |
| -15 | (+ 5) | 957 | 241 | 281 | 127 | 0.99 | 3.34 | 7.52 | 1.89 | 2.20 |
| -10 | (+14) | 1201 | 303 | 352 | 142 | 1.09 | 4.20 | 8.47 | 2.13 | 2.48 |
| -5 | (+23) | 1476 | 372 | 433 | 157 | 1.20 | 5.18 | 9.43 | 2.38 | 2.76 |
| 0 | (+32) | 1783 | 449 | 523 | 171 | 1.32 | 6.28 | 10.37 | 2.61 | 3.04 |

| TEST CONDITIONS: @220V4000RPM | | CECOMAF Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|-------|----------------------------|----------|-----|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| Evaporating temperature | | Cooling capacity +/- 5% | | | Power consumption +/- 5% | Current consumption +/- 5% | Gas flow rate +/- 5% | EFFICIENCY RATE +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 285 | 72 | 84 | 73 | 0.58 | 1.09 | 3.89 | 0.98 | 1.14 |
| -30 | (-22) | 375 | 94 | 110 | 87 | 0.68 | 1.43 | 4.31 | 1.09 | 1.26 |
| -25 | (-13) | 496 | 125 | 145 | 102 | 0.79 | 1.89 | 4.86 | 1.23 | 1.42 |
| -20 | (- 4) | 647 | 163 | 190 | 117 | 0.90 | 2.47 | 5.51 | 1.39 | 1.61 |
| -15 | (+ 5) | 827 | 208 | 242 | 133 | 1.02 | 3.16 | 6.22 | 1.57 | 1.82 |
| -10 | (+14) | 1035 | 261 | 303 | 149 | 1.14 | 3.97 | 6.94 | 1.75 | 2.04 |
| -5 | (+23) | 1270 | 320 | 372 | 166 | 1.27 | 4.89 | 7.65 | 1.93 | 2.24 |
| 0 | (+32) | 1529 | 385 | 448 | 182 | 1.40 | 5.91 | 8.30 | 2.09 | 2.43 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate | European Standard VES | | |
| 2 Tray holder | Yes | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 6.1 +0.10/+0.00 | [mm] | (0.240" +0.004"/+0.000") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Slanted 45° up + 15° to Back | | |
| 3.2 DISCHARGE | 4.9 +0.10/-0.05 | [mm] | (0.193" +0.004"/-0.002") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted 0° up + 24° to Back | | |
| 3.3 PROCESS | 6 +0.08/-0.08 | [mm] | (0.236" +0.003"/-0.003") |
| 3.3.1 Material | Copper(OD) | | |
| 3.3.2 Shape | Slanted 47° up + 59° to Back | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |