

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | VEG Y11C |
| Nominal Voltage/Frequency | 230 V 53-120 Hz |
| Engineering Number | 513800034 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|--|-----------------------------------|-----------------------------------|--------------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-600a | | |
| 3 Nominal voltage and frequency | 230 / 53-120 | [V / Hz] | |
| 4 Application type | Low Back Pressure | | |
| 4.1 Evaporating temperature range | -35°C to -10°C | (-31°F to 14°F) | |
| 5 Motor type | BPM | | |
| 6 Starting torque | LST - Low Starting Torque | | |
| 7 Expansion device | Capillary tube | | |
| 8 Compressor cooling | Operating voltage range | | |
| | | 50 Hz | 60 Hz |
| 8.1 LBP (32°C Ambient temperature) | Static | 198 to 265 V | 198 to 265 V |
| 8.2 LBP (43°C Ambient temperature) | Static | 198 to 265 V | 198 to 265 V |
| 8.3 HBP (32°C Ambient temperature) | - | - | - |
| 8.4 HBP (43°C Ambient temperature) | - | - | - |
| 9 Maximum condensing pressures/temperature | | | |
| 9.1 Operating (gauge) | 7.7 | [kgf/cm ²] (109 psig) | / °C - °F |
| 9.2 Peak (gauge) | 9.8 | [kgf/cm ²] (139 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|-----------------|----------------------------------|
| 1 Commercial designation | 1/4 | [hp] |
| 2 Displacement | 11.14 | [cm ³] (0.680 cu.in) |
| 2.1 Bore [mm] | 26.000 | |
| 2.2 Stroke [mm] | 21.000 | |
| 3 Lubricant charge | 430 | [ml] (14.54 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | MINERAL / ISO10 | |
| 4 Weight (with oil charge) | 10.99 | [kg] (24.23 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELETRICAL DATA

| | | |
|--|-----------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 230 V 53-120 Hz 3 ~ (Three phase) | |
| 2 Starting device type | Inverter | |
| 2.1 Starting device | VCC32456XXXX | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | VCC32456XXXXX | |
| 6 Start winding resistance | 9.50 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 9.50 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50/60 Hz) | - | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50/60 Hz) | - | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50/60 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | VDE | |

D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: @220V1600RPM | | | 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] | |
| 275 | 69 | 81 | 56 | 0.45 | 1.05 | 4.90 | 1.23 | 1.44 | |

| TEST CONDITIONS: @220V2000RPM | | | 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] | |
| 345 | 87 | 101 | 72 | 0.56 | 1.32 | 4.79 | 1.21 | 1.40 | |

| TEST CONDITIONS: @220V3600RPM | | | 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] | |
| 630 | 159 | 185 | 139 | 1.03 | 2.40 | 4.54 | 1.14 | 1.33 | |

E - PERFORMANCE - CURVES

| 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) | 203 | 51 | 59 | 39 | - 45.23 | 0.65 | 5.20 | 1.31 | 1.52 |
| -30 | (-22) | 278 | 70 | 81 | 45 | 67.23 | 0.89 | 6.19 | 1.56 | 1.81 |
| -25 | (-13) | 366 | 92 | 107 | 51 | 80.07 | 1.18 | 7.23 | 1.82 | 2.12 |
| -20 | (- 4) | 471 | 119 | 138 | 56 | 35.99 | 1.51 | 8.37 | 2.11 | 2.45 |
| -15 | (+ 5) | 596 | 150 | 175 | 62 | - 22.32 | 1.92 | 9.65 | 2.43 | 2.83 |
| -10 | (+14) | 745 | 188 | 218 | 67 | - 52.15 | 2.40 | 11.12 | 2.80 | 3.26 |

| 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) | 165 | 42 | 48 | 41 | 91.44 | 0.57 | 4.05 | 1.02 | 1.19 |
| -30 | (-22) | 232 | 58 | 68 | 48 | 186.83 | 0.81 | 4.85 | 1.22 | 1.42 |
| -25 | (-13) | 311 | 78 | 91 | 55 | 182.60 | 1.08 | 5.65 | 1.42 | 1.65 |
| -20 | (- 4) | 407 | 103 | 119 | 62 | 121.44 | 1.42 | 6.51 | 1.64 | 1.91 |
| -15 | (+ 5) | 523 | 132 | 153 | 70 | 46.05 | 1.83 | 7.49 | 1.89 | 2.19 |
| -10 | (+14) | 663 | 167 | 194 | 77 | - 0.86 | 2.32 | 8.63 | 2.17 | 2.53 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: | | CECOMAF | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V1600RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 154 | 39 | 45 | 41 | - 45.20 | 0.59 | 3.70 | 0.93 | 1.09 | |
| -30 (-22) | 209 | 53 | 61 | 49 | 67.29 | 0.79 | 4.32 | 1.09 | 1.26 | |
| -25 (-13) | 276 | 70 | 81 | 57 | 80.16 | 1.05 | 4.90 | 1.24 | 1.44 | |
| -20 (- 4) | 359 | 90 | 105 | 65 | 36.10 | 1.37 | 5.52 | 1.39 | 1.62 | |
| -15 (+ 5) | 462 | 116 | 135 | 74 | - 22.19 | 1.77 | 6.22 | 1.57 | 1.82 | |
| -10 (+14) | 589 | 148 | 172 | 83 | - 52.01 | 2.26 | 7.05 | 1.78 | 2.06 | |

| TEST CONDITIONS: | | CECOMAF | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|---------------------------------------|---------------|-----------------|-----------|-------|--|
| @220V2000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 253 | 64 | 74 | 50 | 0.39 | 0.81 | 5.04 | 1.27 | 1.48 | |
| -30 (-22) | 347 | 87 | 102 | 57 | 0.44 | 1.11 | 6.04 | 1.52 | 1.77 | |
| -25 (-13) | 459 | 116 | 135 | 65 | 0.49 | 1.47 | 7.06 | 1.78 | 2.07 | |
| -20 (- 4) | 592 | 149 | 174 | 73 | 0.55 | 1.90 | 8.13 | 2.05 | 2.38 | |
| -15 (+ 5) | 748 | 189 | 219 | 80 | 0.60 | 2.41 | 9.32 | 2.35 | 2.73 | |
| -10 (+14) | 928 | 234 | 272 | 87 | 0.64 | 3.00 | 10.66 | 2.69 | 3.12 | |

| TEST CONDITIONS: | | CECOMAF | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V2000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 206 | 52 | 60 | 51 | 0.41 | 0.71 | 4.03 | 1.01 | 1.18 | |
| -30 (-22) | 293 | 74 | 86 | 59 | 0.46 | 1.02 | 4.91 | 1.24 | 1.44 | |
| -25 (-13) | 396 | 100 | 116 | 68 | 0.52 | 1.38 | 5.76 | 1.45 | 1.69 | |
| -20 (- 4) | 517 | 130 | 151 | 78 | 0.59 | 1.80 | 6.61 | 1.67 | 1.94 | |
| -15 (+ 5) | 659 | 166 | 193 | 87 | 0.65 | 2.30 | 7.53 | 1.90 | 2.21 | |
| -10 (+14) | 823 | 207 | 241 | 96 | 0.71 | 2.88 | 8.55 | 2.15 | 2.50 | |

| TEST CONDITIONS: | | CECOMAF | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V2000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 175 | 44 | 51 | 53 | 0.43 | 0.67 | 3.29 | 0.83 | 0.96 | |
| -30 (-22) | 251 | 63 | 74 | 62 | 0.49 | 0.96 | 4.09 | 1.03 | 1.20 | |
| -25 (-13) | 341 | 86 | 100 | 71 | 0.56 | 1.30 | 4.79 | 1.21 | 1.40 | |
| -20 (- 4) | 447 | 113 | 131 | 82 | 0.63 | 1.71 | 5.45 | 1.37 | 1.60 | |
| -15 (+ 5) | 570 | 144 | 167 | 93 | 0.71 | 2.18 | 6.12 | 1.54 | 1.79 | |
| -10 (+14) | 713 | 180 | 209 | 104 | 0.78 | 2.74 | 6.85 | 1.73 | 2.01 | |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V3600RPM | | 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) | 476 | 120 | 140 | 99 | 0.75 | 1.53 | 4.80 | 1.21 | 1.41 | |
| -30 (-22) | 612 | 154 | 179 | 110 | 0.84 | 1.96 | 5.59 | 1.41 | 1.64 | |
| -25 (-13) | 806 | 203 | 236 | 126 | 0.95 | 2.58 | 6.41 | 1.62 | 1.88 | |
| -20 (- 4) | 1048 | 264 | 307 | 143 | 1.08 | 3.37 | 7.29 | 1.84 | 2.14 | |
| -15 (+ 5) | 1328 | 335 | 389 | 161 | 1.20 | 4.28 | 8.25 | 2.08 | 2.42 | |
| -10 (+14) | 1635 | 412 | 479 | 176 | 1.31 | 5.28 | 9.30 | 2.34 | 2.73 | |

| TEST CONDITIONS: @220V3600RPM | | 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) | 406 | 102 | 119 | 99 | 0.79 | 1.41 | 4.09 | 1.03 | 1.20 | |
| -30 (-22) | 537 | 135 | 157 | 114 | 0.89 | 1.87 | 4.72 | 1.19 | 1.38 | |
| -25 (-13) | 719 | 181 | 211 | 133 | 1.01 | 2.50 | 5.39 | 1.36 | 1.58 | |
| -20 (- 4) | 940 | 237 | 275 | 153 | 1.13 | 3.28 | 6.11 | 1.54 | 1.79 | |
| -15 (+ 5) | 1190 | 300 | 349 | 173 | 1.25 | 4.16 | 6.89 | 1.74 | 2.02 | |
| -10 (+14) | 1459 | 368 | 428 | 189 | 1.35 | 5.11 | 7.76 | 1.96 | 2.27 | |

| TEST CONDITIONS: @220V3600RPM | | 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) | 340 | 86 | 100 | 99 | 0.78 | 1.29 | 3.43 | 0.86 | 1.01 | |
| -30 (-22) | 462 | 116 | 135 | 117 | 0.90 | 1.76 | 3.97 | 1.00 | 1.16 | |
| -25 (-13) | 625 | 158 | 183 | 138 | 1.03 | 2.39 | 4.53 | 1.14 | 1.33 | |
| -20 (- 4) | 819 | 206 | 240 | 159 | 1.16 | 3.13 | 5.14 | 1.29 | 1.51 | |
| -15 (+ 5) | 1034 | 261 | 303 | 178 | 1.28 | 3.95 | 5.80 | 1.46 | 1.70 | |
| -10 (+14) | 1260 | 318 | 369 | 193 | 1.37 | 4.83 | 6.55 | 1.65 | 1.92 | |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|---------------------------------------|------|--------------------------|
| 1 Base plate | European Standard EG/F/AMEM Version 2 | | |
| 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 | | |
| 3.2 DISCHARGE | 4.94 +0.08/-0.08 | [mm] | (0.194" +0.003"/-0.003") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted | | |
| 3.3 PROCESS | 6.1 +0.10/+0.00 | [mm] | (0.240" +0.004"/+0.000") |
| 3.3.1 Material | Copper | | |
| 3.3.2 Shape | Slanted | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |