

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM 2C26CLT |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 513304532 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|-----------------------------------|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-600a | | |
| 3 Nominal voltage and frequency | 220-240 / 50 | [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 | RSCR | | |
| 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 255 V | - |
| 8.2 LBP (43°C Ambient temperature) | Static | 198 to 255 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 | 1/10 | [hp] |
| 2 Displacement | 5.19 | [cm ³] (0.317 cu.in) |
| 2.1 Bore [mm] | 21.000 | |
| 2.2 Stroke [mm] | 15.000 | |
| 3 Lubricant charge | 150 | [ml] (5.07 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | MINERAL / ISO5 | |
| 4 Weight (with oil charge) | 8.21 | [kg] (18.10 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELETRICAL DATA

| | | |
|--|------------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 220-240 V 50 Hz 1 ~ (Single phase) | |
| 2 Starting device type | PTC | |
| 2.1 Starting device | 7M220MD3/8EA17C3/QPS2-A22MD3 | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 3(300)/2.5(300)/2(300) | [µF(VAC minimum)] |
| 5 Motor protection | 4TM110KFBYY-73 | |
| 6 Start winding resistance | 31.90 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 44.40 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 2.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | 0.30 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | CE - IRAM - UKCA - VDE | |

D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: @220V50Hz | | | CECOMAFLBP-NOFAN 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] |
| 214 | 54 | 63 | 47 | 0.21 | 0.82 | 4.53 | 1.14 | 1.33 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | CECOMAF-NOFAN 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) | 171 | 43 | 50 | 32 | 0.16 | 0.55 | 5.36 | 1.35 | 1.57 |
| -30 | (-22) | 230 | 58 | 68 | 37 | 0.18 | 0.74 | 6.21 | 1.56 | 1.82 |
| -25 | (-13) | 300 | 76 | 88 | 43 | 0.20 | 0.96 | 7.10 | 1.79 | 2.08 |
| -20 | (- 4) | 383 | 97 | 112 | 48 | 0.22 | 1.23 | 8.10 | 2.04 | 2.37 |
| -15 | (+ 5) | 483 | 122 | 141 | 52 | 0.24 | 1.55 | 9.30 | 2.34 | 2.72 |
| -10 | (+14) | 603 | 152 | 177 | 56 | 0.26 | 1.94 | 10.77 | 2.71 | 3.15 |

| TEST CONDITIONS: @220V50Hz | | CECOMAF-NOFAN 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) | 134 | 34 | 39 | 33 | 0.16 | 0.46 | 4.08 | 1.03 | 1.20 |
| -30 | (-22) | 191 | 48 | 56 | 39 | 0.18 | 0.66 | 4.90 | 1.23 | 1.44 |
| -25 | (-13) | 255 | 64 | 75 | 45 | 0.20 | 0.89 | 5.66 | 1.43 | 1.66 |
| -20 | (- 4) | 330 | 83 | 97 | 51 | 0.23 | 1.15 | 6.46 | 1.63 | 1.89 |
| -15 | (+ 5) | 420 | 106 | 123 | 57 | 0.26 | 1.47 | 7.35 | 1.85 | 2.15 |
| -10 | (+14) | 528 | 133 | 155 | 63 | 0.28 | 1.85 | 8.43 | 2.12 | 2.47 |

| TEST CONDITIONS: @220V50Hz | | CECOMAF-NOFAN 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) | 102 | 26 | 30 | 35 | 0.15 | 0.39 | 2.99 | 0.75 | 0.88 |
| -30 | (-22) | 156 | 39 | 46 | 40 | 0.18 | 0.59 | 3.84 | 0.97 | 1.13 |
| -25 | (-13) | 215 | 54 | 63 | 47 | 0.21 | 0.82 | 4.55 | 1.15 | 1.33 |
| -20 | (- 4) | 283 | 71 | 83 | 54 | 0.24 | 1.08 | 5.19 | 1.31 | 1.52 |
| -15 | (+ 5) | 362 | 91 | 106 | 61 | 0.27 | 1.39 | 5.85 | 1.47 | 1.71 |
| -10 | (+14) | 457 | 115 | 134 | 69 | 0.31 | 1.75 | 6.60 | 1.66 | 1.93 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | CECOMAF-NOFAN Static | | | (Condensing temperature 65°C (+149°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) | 75 | 19 | 22 | 35 | 0.15 | 0.32 | 2.09 | 0.53 | 0.61 |
| -30 | (-22) | 126 | 32 | 37 | 41 | 0.18 | 0.53 | 3.03 | 0.76 | 0.89 |
| -25 | (-13) | 179 | 45 | 52 | 48 | 0.21 | 0.75 | 3.75 | 0.94 | 1.10 |
| -20 | (- 4) | 239 | 60 | 70 | 56 | 0.25 | 1.01 | 4.31 | 1.09 | 1.26 |
| -15 | (+ 5) | 308 | 78 | 90 | 65 | 0.29 | 1.31 | 4.79 | 1.21 | 1.41 |
| -10 | (+14) | 389 | 98 | 114 | 74 | 0.33 | 1.66 | 5.28 | 1.33 | 1.55 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate | European Standard EUEM | | |
| 2 Tray holder | No | | |
| 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 42° up + 45° to Back | | |
| 3.2 DISCHARGE | 5.1 +0.10/+0.00 | [mm] | (0.201" +0.004"/+0.000") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted 90° 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 43° up + 45° to Back | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |