

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM C60CLT |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 701CA72 |

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 | 187 to 255 V | - |
| 8.2 LBP (43°C Ambient temperature) | Static | 187 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 | | [hp] |
| 2 Displacement | 9.87 | [cm ³] (0.602 cu.in) |
| 2.1 Bore [mm] | 26.000 | |
| 2.2 Stroke [mm] | 18.600 | |
| 3 Lubricant charge | 150 | [ml] (5.07 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 8.1 | [kg] (17.86 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 | MI2021/V230 | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 4(350) | [µF(VAC minimum)] |
| 5 Motor protection | AE15BU | |
| 6 Start winding resistance | 15.00 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 17.65 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | - | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | - | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | 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] |
| 431 | 109 | 126 | 86 | 0.42 | 1.64 | 5.00 | 1.26 | 1.47 |

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) | 349 | 88 | 102 | 61 | 0.00 | 1.12 | 5.69 | 1.44 | 1.67 | |
| -30 (-22) | 459 | 116 | 134 | 72 | 0.00 | 1.47 | 6.41 | 1.62 | 1.88 | |
| -25 (-13) | 592 | 149 | 173 | 82 | 0.00 | 1.90 | 7.22 | 1.82 | 2.12 | |
| -20 (- 4) | 751 | 189 | 220 | 93 | 0.00 | 2.42 | 8.13 | 2.05 | 2.38 | |
| -15 (+ 5) | 941 | 237 | 276 | 103 | 0.00 | 3.03 | 9.16 | 2.31 | 2.68 | |
| -10 (+14) | 1165 | 294 | 341 | 113 | 0.00 | 3.76 | 10.30 | 2.60 | 3.02 | |

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|-------------------------------|----------------------------|--------------------------------|-----|-----------------------------|-------------------------------|---|---------------------------|-----------|-------|--|
| 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) | 289 | 73 | 85 | 63 | 0.00 | 1.00 | 4.61 | 1.16 | 1.35 | |
| -30 (-22) | 392 | 99 | 115 | 75 | 0.00 | 1.36 | 5.24 | 1.32 | 1.54 | |
| -25 (-13) | 516 | 130 | 151 | 87 | 0.00 | 1.80 | 5.92 | 1.49 | 1.73 | |
| -20 (- 4) | 663 | 167 | 194 | 99 | 0.00 | 2.31 | 6.66 | 1.68 | 1.95 | |
| -15 (+ 5) | 838 | 211 | 246 | 112 | 0.00 | 2.93 | 7.46 | 1.88 | 2.18 | |
| -10 (+14) | 1043 | 263 | 306 | 125 | 0.00 | 3.65 | 8.33 | 2.10 | 2.44 | |

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|-------------------------------|----------------------------|--------------------------------|-----|-----------------------------|-------------------------------|---|---------------------------|-----------|-------|--|
| 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) | 234 | 59 | 69 | 64 | 0.00 | 0.89 | 3.67 | 0.93 | 1.08 | |
| -30 (-22) | 328 | 83 | 96 | 77 | 0.00 | 1.25 | 4.27 | 1.08 | 1.25 | |
| -25 (-13) | 439 | 111 | 129 | 90 | 0.00 | 1.67 | 4.87 | 1.23 | 1.43 | |
| -20 (- 4) | 571 | 144 | 167 | 104 | 0.00 | 2.18 | 5.48 | 1.38 | 1.60 | |
| -15 (+ 5) | 728 | 183 | 213 | 119 | 0.00 | 2.79 | 6.10 | 1.54 | 1.79 | |
| -10 (+14) | 912 | 230 | 267 | 135 | 0.00 | 3.50 | 6.75 | 1.70 | 1.98 | |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate | European Standard | | |
| 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 | 4.94 +0.08/-0.08 | [mm] | (0.194" +0.003"/-0.003") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted 0° up + 45° to Back | | |
| 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 45° up + 45° to Back | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |