

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM C55CLT |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 700CA95 |

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 | 9.04 | [cm ³] (0.552 cu.in) |
| 2.1 Bore [mm] | 24.000 | |
| 2.2 Stroke [mm] | 20.000 | |
| 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) | 7.45 | [kg] (16.42 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 | TSD | |
| 2.1 Starting device | MI.E-START 2021 | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 4(350) | [µF(VAC minimum)] |
| 5 Motor protection | AE64FS | |
| 6 Start winding resistance | 21.45 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 26.20 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 4.15 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | 0.54 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz) | 0.79 | [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] |
| 393 | 99 | 115 | 82 | 0.37 | 1.50 | 4.82 | 1.21 | 1.41 |

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) | 301 | 76 | 88 | 56 | 0.26 | 0.96 | 5.36 | 1.35 | 1.57 | |
| -30 (-22) | 409 | 103 | 120 | 66 | 0.30 | 1.31 | 6.25 | 1.58 | 1.83 | |
| -25 (-13) | 540 | 136 | 158 | 75 | 0.34 | 1.73 | 7.21 | 1.82 | 2.11 | |
| -20 (- 4) | 693 | 175 | 203 | 85 | 0.38 | 2.23 | 8.23 | 2.07 | 2.41 | |
| -15 (+ 5) | 871 | 220 | 255 | 94 | 0.42 | 2.80 | 9.31 | 2.35 | 2.73 | |
| -10 (+14) | 1074 | 271 | 315 | 103 | 0.46 | 3.46 | 10.43 | 2.63 | 3.06 | |

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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) | 249 | 63 | 73 | 56 | 0.26 | 0.86 | 4.44 | 1.12 | 1.30 | |
| -30 (-22) | 346 | 87 | 101 | 67 | 0.31 | 1.20 | 5.15 | 1.30 | 1.51 | |
| -25 (-13) | 464 | 117 | 136 | 78 | 0.36 | 1.61 | 5.90 | 1.49 | 1.73 | |
| -20 (- 4) | 603 | 152 | 177 | 90 | 0.41 | 2.10 | 6.69 | 1.69 | 1.96 | |
| -15 (+ 5) | 766 | 193 | 224 | 102 | 0.46 | 2.67 | 7.51 | 1.89 | 2.20 | |
| -10 (+14) | 952 | 240 | 279 | 114 | 0.52 | 3.33 | 8.35 | 2.10 | 2.45 | |

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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) | 204 | 51 | 60 | 57 | 0.26 | 0.78 | 3.64 | 0.92 | 1.07 | |
| -30 (-22) | 288 | 73 | 84 | 68 | 0.31 | 1.10 | 4.22 | 1.06 | 1.24 | |
| -25 (-13) | 391 | 99 | 115 | 81 | 0.37 | 1.49 | 4.82 | 1.21 | 1.41 | |
| -20 (- 4) | 515 | 130 | 151 | 94 | 0.43 | 1.97 | 5.43 | 1.37 | 1.59 | |
| -15 (+ 5) | 660 | 166 | 193 | 109 | 0.50 | 2.53 | 6.04 | 1.52 | 1.77 | |
| -10 (+14) | 828 | 209 | 243 | 124 | 0.57 | 3.18 | 6.65 | 1.68 | 1.95 | |

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) | 164 | 41 | 48 | 56 | 0.26 | 0.69 | 2.91 | 0.73 | 0.85 |
| -30 | (-22) | 233 | 59 | 68 | 68 | 0.31 | 0.98 | 3.41 | 0.86 | 1.00 |
| -25 | (-13) | 320 | 81 | 94 | 82 | 0.37 | 1.36 | 3.91 | 0.98 | 1.14 |
| -20 | (- 4) | 427 | 108 | 125 | 98 | 0.44 | 1.81 | 4.39 | 1.11 | 1.29 |
| -15 | (+ 5) | 553 | 139 | 162 | 114 | 0.52 | 2.35 | 4.85 | 1.22 | 1.42 |
| -10 | (+14) | 700 | 176 | 205 | 133 | 0.61 | 2.98 | 5.28 | 1.33 | 1.55 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate | European Standard | | |
| 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 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 0° up + 45° 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 | | |