

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM E32CLT |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 711AA90 |

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 | 6.20 | [cm ³] (0.378 cu.in) |
| 2.1 Bore [mm] | 22.500 | |
| 2.2 Stroke [mm] | 15.600 | |
| 3 Lubricant charge | 150 | [ml] (5.07 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO2 | |
| 4 Weight (with oil charge) | 8.2 | [kg] (18.08 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 | 2(350)/2.5(350)/3(350)/4(350) | [µF(VAC minimum)] |
| 5 Motor protection | AE37FN | |
| 6 Start winding resistance | 31.80 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 31.30 | [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] |
| 242 | 61 | 71 | 46 | 0.22 | 0.92 | 5.25 | 1.32 | 1.54 |

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) | 202 | 51 | 59 | 33 | 0.15 | 0.65 | 6.11 | 1.54 | 1.79 | |
| -30 (-22) | 272 | 69 | 80 | 39 | 0.18 | 0.87 | 7.01 | 1.77 | 2.05 | |
| -25 (-13) | 361 | 91 | 106 | 45 | 0.21 | 1.16 | 8.05 | 2.03 | 2.36 | |
| -20 (- 4) | 471 | 119 | 138 | 51 | 0.23 | 1.51 | 9.22 | 2.32 | 2.70 | |
| -15 (+ 5) | 599 | 151 | 176 | 57 | 0.26 | 1.93 | 10.49 | 2.64 | 3.07 | |
| -10 (+14) | 748 | 188 | 219 | 63 | 0.29 | 2.41 | 11.85 | 2.99 | 3.47 | |

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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) | 161 | 41 | 47 | 32 | 0.16 | 0.56 | 5.04 | 1.27 | 1.48 | |
| -30 (-22) | 223 | 56 | 65 | 39 | 0.19 | 0.78 | 5.77 | 1.45 | 1.69 | |
| -25 (-13) | 304 | 77 | 89 | 46 | 0.22 | 1.06 | 6.58 | 1.66 | 1.93 | |
| -20 (- 4) | 402 | 101 | 118 | 54 | 0.25 | 1.40 | 7.47 | 1.88 | 2.19 | |
| -15 (+ 5) | 519 | 131 | 152 | 62 | 0.28 | 1.81 | 8.40 | 2.12 | 2.46 | |
| -10 (+14) | 654 | 165 | 192 | 70 | 0.32 | 2.29 | 9.36 | 2.36 | 2.74 | |

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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) | 121 | 31 | 35 | 31 | 0.15 | 0.46 | 3.90 | 0.98 | 1.14 | |
| -30 (-22) | 174 | 44 | 51 | 38 | 0.19 | 0.66 | 4.56 | 1.15 | 1.34 | |
| -25 (-13) | 244 | 61 | 71 | 46 | 0.23 | 0.93 | 5.26 | 1.33 | 1.54 | |
| -20 (- 4) | 331 | 83 | 97 | 55 | 0.27 | 1.26 | 5.96 | 1.50 | 1.75 | |
| -15 (+ 5) | 434 | 109 | 127 | 65 | 0.31 | 1.66 | 6.66 | 1.68 | 1.95 | |
| -10 (+14) | 554 | 140 | 162 | 76 | 0.35 | 2.12 | 7.33 | 1.85 | 2.15 | |

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 | 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 +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 | | |