

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM C26CLT |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 513301857 |

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 | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 7.6 | [kg] (16.75 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 | TSD2-220V1.2 | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 2(350)/2.5(350) | [µF(VAC minimum)] |
| 5 Motor protection | 4TM110KFBYY-73 | |
| 6 Start winding resistance | 33.40 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 57.00 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 2.10 | [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) | 0.30 | [A] - Measured according to UL 984 |
| 11 Approval boards certification | VDE | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|--|-------|
| TEST CONDITIONS: @220V50Hz | | | ASHRAE LBP-NOFAN Static | | Evaporating temperature (Condensing temperature | | -23.3°C (-9.94°F) 54.4°C (129.92°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] |
| 272 | 69 | 80 | 45 | 0.21 | 0.85 | 6.07 | 1.53 | 1.78 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | ASHRAE32-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) | 158 | 40 | 46 | 30 | 0.14 | 0.50 | 5.27 | 1.33 | 1.55 |
| -30 | (-22) | 227 | 57 | 67 | 36 | 0.16 | 0.71 | 6.35 | 1.60 | 1.86 |
| -25 | (-13) | 308 | 78 | 90 | 42 | 0.19 | 0.97 | 7.44 | 1.87 | 2.18 |
| -20 | (- 4) | 403 | 101 | 118 | 47 | 0.22 | 1.26 | 8.57 | 2.16 | 2.51 |
| -15 | (+ 5) | 513 | 129 | 150 | 52 | 0.24 | 1.61 | 9.80 | 2.47 | 2.87 |
| -10 | (+14) | 641 | 162 | 188 | 58 | 0.27 | 2.02 | 11.16 | 2.81 | 3.27 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|---|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | ASHRAE32-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) | 137 | 35 | 40 | 30 | 0.14 | 0.43 | 4.53 | 1.14 | 1.33 |
| -30 | (-22) | 204 | 51 | 60 | 37 | 0.16 | 0.64 | 5.55 | 1.40 | 1.63 |
| -25 | (-13) | 282 | 71 | 83 | 43 | 0.19 | 0.89 | 6.53 | 1.64 | 1.91 |
| -20 | (- 4) | 375 | 94 | 110 | 50 | 0.22 | 1.18 | 7.49 | 1.89 | 2.20 |
| -15 | (+ 5) | 483 | 122 | 141 | 57 | 0.26 | 1.52 | 8.49 | 2.14 | 2.49 |
| -10 | (+14) | 609 | 154 | 178 | 63 | 0.29 | 1.92 | 9.57 | 2.41 | 2.80 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|---|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | ASHRAE32-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) | 112 | 28 | 33 | 30 | 0.15 | 0.35 | 3.83 | 0.96 | 1.12 |
| -30 | (-22) | 175 | 44 | 51 | 36 | 0.17 | 0.55 | 4.85 | 1.22 | 1.42 |
| -25 | (-13) | 250 | 63 | 73 | 43 | 0.20 | 0.79 | 5.77 | 1.45 | 1.69 |
| -20 | (- 4) | 340 | 86 | 99 | 51 | 0.23 | 1.07 | 6.62 | 1.67 | 1.94 |
| -15 | (+ 5) | 445 | 112 | 130 | 60 | 0.28 | 1.40 | 7.44 | 1.88 | 2.18 |
| -10 | (+14) | 568 | 143 | 167 | 68 | 0.32 | 1.79 | 8.29 | 2.09 | 2.43 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | ASHRAE32-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) | 84 | 21 | 25 | 27 | 0.14 | 0.26 | 3.11 | 0.78 | 0.91 |
| -30 | (-22) | 143 | 36 | 42 | 34 | 0.16 | 0.45 | 4.19 | 1.06 | 1.23 |
| -25 | (-13) | 214 | 54 | 63 | 42 | 0.19 | 0.67 | 5.10 | 1.29 | 1.49 |
| -20 | (- 4) | 300 | 76 | 88 | 51 | 0.23 | 0.94 | 5.89 | 1.48 | 1.73 |
| -15 | (+ 5) | 401 | 101 | 118 | 61 | 0.28 | 1.26 | 6.59 | 1.66 | 1.93 |
| -10 | (+14) | 521 | 131 | 153 | 72 | 0.33 | 1.65 | 7.26 | 1.83 | 2.13 |

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 + 24° 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 | | |