

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM 2C26CLT |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 513304501 |

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 | TSD | |
| 2.1 Starting device | TSD-220V | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 2.5(300)/2(300)/3(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 | | | 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] |
| 283 | 71 | 83 | 46 | 0.21 | | 6.10 | 1.54 | 1.79 |

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) | 172 | 43 | 50 | 30 | 0.15 | 0.54 | 5.74 | 1.45 | 1.68 |
| -30 (-22) | 232 | 58 | 68 | 35 | 0.17 | 0.73 | 6.66 | 1.68 | 1.95 |
| -25 (-13) | 303 | 76 | 89 | 40 | 0.19 | 0.95 | 7.61 | 1.92 | 2.23 |
| -20 (- 4) | 387 | 98 | 114 | 45 | 0.21 | 1.22 | 8.68 | 2.19 | 2.54 |
| -15 (+ 5) | 490 | 123 | 143 | 49 | 0.23 | 1.54 | 9.95 | 2.51 | 2.92 |
| -10 (+14) | 612 | 154 | 179 | 53 | 0.25 | 1.93 | 11.50 | 2.90 | 3.37 |

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|-------------------------------|----------------------------|--------------------------|-----|--------------------------------|----------------------------------|---|---------------------------|-----------|-------|
| 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) | 144 | 36 | 42 | 31 | 0.15 | 0.45 | 4.72 | 1.19 | 1.38 |
| -30 (-22) | 206 | 52 | 60 | 36 | 0.17 | 0.65 | 5.67 | 1.43 | 1.66 |
| -25 (-13) | 278 | 70 | 81 | 42 | 0.19 | 0.87 | 6.56 | 1.65 | 1.92 |
| -20 (- 4) | 362 | 91 | 106 | 48 | 0.22 | 1.14 | 7.47 | 1.88 | 2.19 |
| -15 (+ 5) | 462 | 116 | 135 | 54 | 0.25 | 1.45 | 8.48 | 2.14 | 2.49 |
| -10 (+14) | 581 | 146 | 170 | 60 | 0.27 | 1.83 | 9.68 | 2.44 | 2.84 |

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|-------------------------------|----------------------------|--------------------------|-----|--------------------------------|----------------------------------|---|---------------------------|-----------|-------|
| 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) | 120 | 30 | 35 | 32 | 0.14 | 0.38 | 3.83 | 0.96 | 1.12 |
| -30 (-22) | 183 | 46 | 54 | 38 | 0.17 | 0.58 | 4.87 | 1.23 | 1.43 |
| -25 (-13) | 255 | 64 | 75 | 44 | 0.20 | 0.80 | 5.76 | 1.45 | 1.69 |
| -20 (- 4) | 338 | 85 | 99 | 51 | 0.23 | 1.06 | 6.58 | 1.66 | 1.93 |
| -15 (+ 5) | 436 | 110 | 128 | 59 | 0.26 | 1.37 | 7.40 | 1.87 | 2.17 |
| -10 (+14) | 551 | 139 | 162 | 66 | 0.30 | 1.74 | 8.32 | 2.10 | 2.44 |

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) | 98 | 25 | 29 | 33 | 0.14 | 0.31 | 2.98 | 0.75 | 0.87 |
| -30 | (-22) | 163 | 41 | 48 | 39 | 0.17 | 0.51 | 4.19 | 1.06 | 1.23 |
| -25 | (-13) | 235 | 59 | 69 | 46 | 0.20 | 0.74 | 5.15 | 1.30 | 1.51 |
| -20 | (- 4) | 316 | 80 | 93 | 54 | 0.24 | 0.99 | 5.95 | 1.50 | 1.74 |
| -15 | (+ 5) | 411 | 104 | 121 | 62 | 0.28 | 1.30 | 6.65 | 1.68 | 1.95 |
| -10 | (+14) | 523 | 132 | 153 | 71 | 0.32 | 1.65 | 7.35 | 1.85 | 2.15 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|--------------------------------|------|--------------------------|
| 1 Base plate | European Standard EUEM | | |
| 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 parallel BP+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 | | |