

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM D26CLT |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 700PA89 |

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 | 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) | 7.1 | [kg] (15.65 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 ES1B | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 2(350)/2.5(350) | [µF(VAC minimum)] |
| 5 Motor protection | AX24BNXX | |
| 6 Start winding resistance | 22.40 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 40.44 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 2.77 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | 0.40 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz) | 0.48 | [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] |
| 274 | 69 | 80 | 43 | 0.20 | 0.86 | 6.42 | 1.62 | 1.88 |

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) | 155 | 39 | 46 | 27 | 0.13 | 0.49 | 5.66 | 1.43 | 1.66 |
| -30 (-22) | 223 | 56 | 65 | 33 | 0.16 | 0.70 | 6.74 | 1.70 | 1.98 |
| -25 (-13) | 299 | 75 | 88 | 38 | 0.18 | 0.94 | 7.85 | 1.98 | 2.30 |
| -20 (- 4) | 387 | 97 | 113 | 43 | 0.20 | 1.21 | 9.02 | 2.27 | 2.64 |
| -15 (+ 5) | 489 | 123 | 143 | 48 | 0.22 | 1.54 | 10.30 | 2.60 | 3.02 |
| -10 (+14) | 610 | 154 | 179 | 52 | 0.25 | 1.93 | 11.74 | 2.96 | 3.44 |

| | | | | | | | | | |
|-------------------------------|----------------------------|--------------------------|-----|-----------------------------|-------------------------------|--|---------------------------|-----------|-------|
| 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) | 140 | 35 | 41 | 29 | 0.14 | 0.44 | 4.93 | 1.24 | 1.45 |
| -30 (-22) | 204 | 51 | 60 | 34 | 0.17 | 0.64 | 5.94 | 1.50 | 1.74 |
| -25 (-13) | 277 | 70 | 81 | 40 | 0.19 | 0.87 | 6.91 | 1.74 | 2.02 |
| -20 (- 4) | 361 | 91 | 106 | 46 | 0.21 | 1.14 | 7.89 | 1.99 | 2.31 |
| -15 (+ 5) | 461 | 116 | 135 | 51 | 0.24 | 1.45 | 8.93 | 2.25 | 2.62 |
| -10 (+14) | 579 | 146 | 170 | 57 | 0.27 | 1.83 | 10.07 | 2.54 | 2.95 |

| | | | | | | | | | |
|-------------------------------|----------------------------|--------------------------|-----|-----------------------------|-------------------------------|--|---------------------------|-----------|-------|
| 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 | 29 | 0.14 | 0.37 | 4.22 | 1.06 | 1.24 |
| -30 (-22) | 180 | 45 | 53 | 35 | 0.17 | 0.57 | 5.18 | 1.30 | 1.52 |
| -25 (-13) | 249 | 63 | 73 | 41 | 0.19 | 0.78 | 6.05 | 1.52 | 1.77 |
| -20 (- 4) | 331 | 83 | 97 | 48 | 0.22 | 1.04 | 6.87 | 1.73 | 2.01 |
| -15 (+ 5) | 427 | 108 | 125 | 55 | 0.25 | 1.35 | 7.70 | 1.94 | 2.26 |
| -10 (+14) | 543 | 137 | 159 | 63 | 0.29 | 1.71 | 8.57 | 2.16 | 2.51 |

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) | 96 | 24 | 28 | 26 | 0.13 | 0.30 | 3.64 | 0.92 | 1.07 |
| -30 | (-22) | 153 | 38 | 45 | 33 | 0.16 | 0.48 | 4.59 | 1.16 | 1.34 |
| -25 | (-13) | 219 | 55 | 64 | 41 | 0.19 | 0.69 | 5.39 | 1.36 | 1.58 |
| -20 | (- 4) | 297 | 75 | 87 | 49 | 0.23 | 0.93 | 6.09 | 1.54 | 1.79 |
| -15 | (+ 5) | 390 | 98 | 114 | 58 | 0.27 | 1.23 | 6.74 | 1.70 | 1.97 |
| -10 | (+14) | 503 | 127 | 147 | 68 | 0.31 | 1.59 | 7.37 | 1.86 | 2.16 |

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 | 5.1 +0.10/+0.00 | [mm] | (0.201" +0.004"/+0.000") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted 42° 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 | | |