

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM X66CLC |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 701QA72 |

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 | 10.61 | [cm ³] (0.647 cu.in) |
| 2.1 Bore [mm] | 26.000 | |
| 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) | 7.6 | [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 | TSD-220V/TSD2-220V1.2/TSD2-D-220V | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 5(350)/4(350) | [µF(VAC minimum)] |
| 5 Motor protection | CP4TMC258R61A5 | |
| 6 Start winding resistance | 15.20 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 20.50 | [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 | | | 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] |
| 624 | 157 | 183 | 106 | 0.53 | 1.96 | 5.91 | 1.49 | 1.73 |

E - PERFORMANCE - CURVES

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|--------------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| 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) | 340 | 86 | 100 | 73 | 0.60 | 1.07 | 4.63 | 1.17 | 1.36 |
| -30 (-22) | 462 | 116 | 135 | 87 | 0.64 | 1.45 | 5.32 | 1.34 | 1.56 |
| -25 (-13) | 608 | 153 | 178 | 102 | 0.69 | 1.91 | 6.04 | 1.52 | 1.77 |
| -20 (- 4) | 783 | 197 | 229 | 116 | 0.74 | 2.46 | 6.77 | 1.71 | 1.98 |
| -15 (+ 5) | 987 | 249 | 289 | 131 | 0.80 | 3.11 | 7.51 | 1.89 | 2.20 |
| -10 (+14) | 1224 | 308 | 359 | 147 | 0.86 | 3.86 | 8.28 | 2.09 | 2.43 |

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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) | 295 | 74 | 87 | 69 | 0.59 | 0.93 | 4.27 | 1.08 | 1.25 |
| -30 (-22) | 418 | 105 | 122 | 84 | 0.64 | 1.31 | 4.97 | 1.25 | 1.46 |
| -25 (-13) | 565 | 142 | 166 | 100 | 0.70 | 1.77 | 5.64 | 1.42 | 1.65 |
| -20 (- 4) | 739 | 186 | 217 | 117 | 0.76 | 2.32 | 6.27 | 1.58 | 1.84 |
| -15 (+ 5) | 943 | 238 | 276 | 137 | 0.84 | 2.97 | 6.86 | 1.73 | 2.01 |
| -10 (+14) | 1179 | 297 | 345 | 158 | 0.92 | 3.72 | 7.43 | 1.87 | 2.18 |

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|-------------------------------|----------------------------|----------|--------------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| 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) | 271 | 68 | 79 | 74 | 0.59 | 0.85 | 3.67 | 0.92 | 1.07 |
| -30 (-22) | 384 | 97 | 112 | 87 | 0.64 | 1.20 | 4.41 | 1.11 | 1.29 |
| -25 (-13) | 521 | 131 | 153 | 103 | 0.71 | 1.63 | 5.07 | 1.28 | 1.49 |
| -20 (- 4) | 684 | 172 | 200 | 121 | 0.79 | 2.15 | 5.65 | 1.42 | 1.65 |
| -15 (+ 5) | 877 | 221 | 257 | 143 | 0.87 | 2.76 | 6.14 | 1.55 | 1.80 |
| -10 (+14) | 1101 | 277 | 323 | 169 | 0.97 | 3.47 | 6.54 | 1.65 | 1.92 |

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 | 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 | 6.1 +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 | | |