

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM X60CLC |
| Nominal Voltage/Frequency | 115-127 V 60 Hz |
| Engineering Number | 711ME98 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|-----------------------------------|-----------------------------------|--------------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-600a | | |
| 3 Nominal voltage and frequency | 115-127 / 60 | [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 | RSIR | | |
| 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 | - | 103 to 135 V |
| 8.2 LBP (43°C Ambient temperature) | Static | - | 103 to 135 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 | 1/7 | [hp] |
| 2 Displacement | 9.04 | [cm ³] (0.552 cu.in) |
| 2.1 Bore [mm] | 24.000 | |
| 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 | 115-127 V 60 Hz 1 ~ (Single phase) | |
| 2 Starting device type | PTC | |
| 2.1 Starting device | V115 | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | T0887/07 | |
| 6 Start winding resistance | 5.90 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 5.30 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 12.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | - | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (60 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | UL | |

D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: @115V60Hz | | | 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] |
| 616 | 155 | 181 | 113 | 1.44 | 1.93 | 5.44 | 1.37 | 1.59 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @115V60Hz | | 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) | 376 | 95 | 110 | 77 | 1.25 | 1.18 | 4.86 | 1.22 | 1.42 |
| -30 | (-22) | 481 | 121 | 141 | 88 | 1.30 | 1.51 | 5.51 | 1.39 | 1.61 |
| -25 | (-13) | 621 | 156 | 182 | 99 | 1.37 | 1.95 | 6.29 | 1.59 | 1.84 |
| -20 | (- 4) | 796 | 201 | 233 | 111 | 1.44 | 2.50 | 7.18 | 1.81 | 2.10 |
| -15 | (+ 5) | 1007 | 254 | 295 | 124 | 1.52 | 3.17 | 8.13 | 2.05 | 2.38 |
| -10 | (+14) | 1252 | 316 | 367 | 138 | 1.62 | 3.95 | 9.11 | 2.30 | 2.67 |

| TEST CONDITIONS: @115V60Hz | | 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) | 349 | 88 | 102 | 80 | 1.28 | 1.09 | 4.35 | 1.10 | 1.27 |
| -30 | (-22) | 452 | 114 | 132 | 92 | 1.33 | 1.42 | 4.94 | 1.24 | 1.45 |
| -25 | (-13) | 589 | 148 | 173 | 104 | 1.40 | 1.85 | 5.65 | 1.42 | 1.66 |
| -20 | (- 4) | 761 | 192 | 223 | 118 | 1.49 | 2.39 | 6.44 | 1.62 | 1.89 |
| -15 | (+ 5) | 966 | 244 | 283 | 133 | 1.59 | 3.04 | 7.28 | 1.83 | 2.13 |
| -10 | (+14) | 1206 | 304 | 354 | 149 | 1.70 | 3.81 | 8.13 | 2.05 | 2.38 |

| TEST CONDITIONS: @115V60Hz | | 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) | 326 | 82 | 96 | 83 | 1.29 | 1.02 | 3.94 | 0.99 | 1.16 |
| -30 | (-22) | 424 | 107 | 124 | 95 | 1.35 | 1.33 | 4.47 | 1.13 | 1.31 |
| -25 | (-13) | 555 | 140 | 163 | 109 | 1.43 | 1.74 | 5.09 | 1.28 | 1.49 |
| -20 | (- 4) | 720 | 181 | 211 | 124 | 1.53 | 2.26 | 5.78 | 1.46 | 1.69 |
| -15 | (+ 5) | 918 | 231 | 269 | 141 | 1.64 | 2.89 | 6.50 | 1.64 | 1.91 |
| -10 | (+14) | 1149 | 290 | 337 | 160 | 1.78 | 3.63 | 7.21 | 1.82 | 2.11 |

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 | 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 | | |