

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM T56CLP |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 513306205 |

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 | 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 | 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 | 1/6 | [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 | 180 | [ml] (6.09 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 7.65 | [kg] (16.87 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 | PTC | |
| 2.1 Starting device | 2019X | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | AE18BQ10 | |
| 6 Start winding resistance | 24.75 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 21.55 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 5.50 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | 0.81 | [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 | | | CECOMAF Static | | Evaporating temperature (Condensing temperature | | -25°C (-13°F) 55°C (131°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] |
| 389 | 98 | 114 | 110 | 0.81 | 1.48 | 3.54 | 0.89 | 1.04 |

E - PERFORMANCE - CURVES

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|--------------------------|-----------------------------|----------------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | CECOMAF 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) | 262 | 66 | 77 | 78 | 0.67 | 0.91 | 3.32 | 0.84 | 0.97 |
| -30 (-22) | 349 | 88 | 102 | 94 | 0.71 | 1.21 | 3.74 | 0.94 | 1.10 |
| -25 (-13) | 461 | 116 | 135 | 110 | 0.75 | 1.60 | 4.21 | 1.06 | 1.23 |
| -20 (- 4) | 600 | 151 | 176 | 127 | 0.79 | 2.09 | 4.74 | 1.19 | 1.39 |
| -15 (+ 5) | 765 | 193 | 224 | 143 | 0.84 | 2.67 | 5.33 | 1.34 | 1.56 |
| -10 (+14) | 956 | 241 | 280 | 159 | 0.88 | 3.35 | 5.99 | 1.51 | 1.75 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|--------------------------|-----------------------------|----------------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | CECOMAF 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) | 217 | 55 | 64 | 80 | 0.68 | 0.82 | 2.73 | 0.69 | 0.80 |
| -30 (-22) | 299 | 75 | 88 | 95 | 0.72 | 1.14 | 3.15 | 0.79 | 0.92 |
| -25 (-13) | 402 | 101 | 118 | 112 | 0.76 | 1.53 | 3.57 | 0.90 | 1.05 |
| -20 (- 4) | 527 | 133 | 154 | 130 | 0.81 | 2.01 | 4.02 | 1.01 | 1.18 |
| -15 (+ 5) | 674 | 170 | 197 | 150 | 0.86 | 2.58 | 4.48 | 1.13 | 1.31 |
| -10 (+14) | 843 | 213 | 247 | 170 | 0.92 | 3.24 | 4.96 | 1.25 | 1.45 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|--------------------------|-----------------------------|----------------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | CECOMAF 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) | 174 | 44 | 51 | 79 | 0.67 | 0.74 | 2.20 | 0.55 | 0.64 |
| -30 (-22) | 250 | 63 | 73 | 96 | 0.72 | 1.05 | 2.60 | 0.65 | 0.76 |
| -25 (-13) | 342 | 86 | 100 | 116 | 0.76 | 1.45 | 2.96 | 0.75 | 0.87 |
| -20 (- 4) | 451 | 114 | 132 | 137 | 0.82 | 1.91 | 3.29 | 0.83 | 0.96 |
| -15 (+ 5) | 579 | 146 | 170 | 161 | 0.88 | 2.46 | 3.60 | 0.91 | 1.06 |
| -10 (+14) | 724 | 182 | 212 | 186 | 0.96 | 3.08 | 3.89 | 0.98 | 1.14 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|---------------------------------------|------|--------------------------|
| 1 Base plate | European Standard EG/F/AMEM Version 2 | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 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 | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 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 | | |