

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM Y55CLP |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 897GA89 |

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-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 254 V | - |
| 8.2 LBP (43°C Ambient temperature) | Static | 198 to 254 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 | 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) | 7.7 | [kg] (16.98 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 | 2019 | |
| 3 Start capacitor | - | [μF(VAC minimum)] |
| 4 Run capacitor | 4(300) | [μF(VAC minimum)] |
| 5 Motor protection | T0520/07 | |
| 6 Start winding resistance | 27.35 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 20.40 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 4.75 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | 0.50 | [A] |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] |
| 11 Approval boards certification | VDE | |

D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: @220V50Hz | | | CECOMAFLBP 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] |
| 403 | 102 | 118 | 92 | 0.44 | 1.54 | 4.37 | 1.10 | 1.28 |

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) | 260 | 65 | 76 | 66 | 0.31 | 0.90 | 3.92 | 0.99 | 1.15 |
| -30 | (-22) | 347 | 88 | 102 | 77 | 0.37 | 1.21 | 4.52 | 1.14 | 1.32 |
| -25 | (-13) | 459 | 116 | 135 | 89 | 0.42 | 1.60 | 5.16 | 1.30 | 1.51 |
| -20 | (- 4) | 596 | 150 | 175 | 102 | 0.47 | 2.08 | 5.86 | 1.48 | 1.72 |
| -15 | (+ 5) | 760 | 192 | 223 | 114 | 0.52 | 2.65 | 6.62 | 1.67 | 1.94 |
| -10 | (+14) | 953 | 240 | 279 | 128 | 0.57 | 3.34 | 7.44 | 1.88 | 2.18 |

| 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) | 214 | 54 | 63 | 67 | 0.31 | 0.81 | 3.20 | 0.81 | 0.94 |
| -30 | (-22) | 300 | 76 | 88 | 79 | 0.38 | 1.14 | 3.78 | 0.95 | 1.11 |
| -25 | (-13) | 404 | 102 | 118 | 92 | 0.44 | 1.54 | 4.36 | 1.10 | 1.28 |
| -20 | (- 4) | 527 | 133 | 155 | 106 | 0.50 | 2.02 | 4.94 | 1.24 | 1.45 |
| -15 | (+ 5) | 673 | 170 | 197 | 121 | 0.56 | 2.58 | 5.53 | 1.39 | 1.62 |
| -10 | (+14) | 841 | 212 | 247 | 137 | 0.62 | 3.23 | 6.13 | 1.54 | 1.80 |

| 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) | 177 | 45 | 52 | 68 | 0.31 | 0.75 | 2.61 | 0.66 | 0.76 |
| -30 | (-22) | 258 | 65 | 76 | 81 | 0.39 | 1.09 | 3.18 | 0.80 | 0.93 |
| -25 | (-13) | 352 | 89 | 103 | 95 | 0.46 | 1.49 | 3.71 | 0.93 | 1.09 |
| -20 | (- 4) | 461 | 116 | 135 | 111 | 0.52 | 1.95 | 4.18 | 1.05 | 1.23 |
| -15 | (+ 5) | 585 | 147 | 171 | 128 | 0.59 | 2.48 | 4.61 | 1.16 | 1.35 |
| -10 | (+14) | 727 | 183 | 213 | 146 | 0.67 | 3.10 | 5.00 | 1.26 | 1.47 |

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° | | |
| 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° | | |
| 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 42° | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |