

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | EM U32CLC |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 895LA77 |

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 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 | 5.96 | [cm ³] (0.364 cu.in) |
| 2.1 Bore [mm] | 22.500 | |
| 2.2 Stroke [mm] | 15.000 | |
| 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) | 6.8 | [kg] (14.99 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 | - | [μF(VAC minimum)] |
| 5 Motor protection | AE24AHN10 | |
| 6 Start winding resistance | 25.60 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 36.20 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 2.90 | [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] |
| 250 | 63 | 73 | 68 | 0.50 | 0.95 | 3.70 | 0.93 | 1.08 |

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) | 163 | 41 | 48 | 50 | 0.47 | 0.57 | 3.25 | 0.82 | 0.95 |
| -30 | (-22) | 221 | 56 | 65 | 57 | 0.48 | 0.77 | 3.87 | 0.97 | 1.13 |
| -25 | (-13) | 291 | 73 | 85 | 65 | 0.49 | 1.01 | 4.46 | 1.12 | 1.31 |
| -20 | (- 4) | 376 | 95 | 110 | 74 | 0.50 | 1.31 | 5.10 | 1.29 | 1.49 |
| -15 | (+ 5) | 480 | 121 | 141 | 82 | 0.52 | 1.67 | 5.85 | 1.47 | 1.71 |
| -10 | (+14) | 606 | 153 | 178 | 89 | 0.54 | 2.12 | 6.77 | 1.71 | 1.98 |

| 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) | 125 | 32 | 37 | 50 | 0.47 | 0.47 | 2.49 | 0.63 | 0.73 |
| -30 | (-22) | 183 | 46 | 54 | 58 | 0.48 | 0.70 | 3.13 | 0.79 | 0.92 |
| -25 | (-13) | 249 | 63 | 73 | 68 | 0.50 | 0.95 | 3.68 | 0.93 | 1.08 |
| -20 | (- 4) | 326 | 82 | 95 | 77 | 0.52 | 1.25 | 4.20 | 1.06 | 1.23 |
| -15 | (+ 5) | 417 | 105 | 122 | 87 | 0.54 | 1.60 | 4.77 | 1.20 | 1.40 |
| -10 | (+14) | 527 | 133 | 154 | 96 | 0.56 | 2.02 | 5.45 | 1.37 | 1.60 |

| 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) | 94 | 24 | 27 | 50 | 0.47 | 0.40 | 1.88 | 0.47 | 0.55 |
| -30 | (-22) | 151 | 38 | 44 | 59 | 0.49 | 0.64 | 2.54 | 0.64 | 0.74 |
| -25 | (-13) | 213 | 54 | 62 | 70 | 0.51 | 0.90 | 3.05 | 0.77 | 0.89 |
| -20 | (- 4) | 281 | 71 | 82 | 81 | 0.53 | 1.19 | 3.48 | 0.88 | 1.02 |
| -15 | (+ 5) | 360 | 91 | 105 | 93 | 0.55 | 1.53 | 3.88 | 0.98 | 1.14 |
| -10 | (+14) | 453 | 114 | 133 | 104 | 0.58 | 1.93 | 4.34 | 1.09 | 1.27 |

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