

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EG AS100HLR |
| Nominal Voltage/Frequency | 115-127 V 60 Hz |
| Engineering Number | 513701394 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|-----------------------------------|-----------------------------------|-------------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-134a | | |
| 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-CSIR | | |
| 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/Fan | - | 98 to 140 V |
| 8.2 LBP (43°C Ambient temperature) | Static/Fan | - | 98 to 140 V |
| 8.3 HBP (32°C Ambient temperature) | - | - | - |
| 8.4 HBP (43°C Ambient temperature) | - | - | - |
| 9 Maximum condensing temperature | | | |
| 9.1 Operating | 14.2 | [kgf/cm ²] (202 psig) | / °C - °F |
| 9.2 Peak | 15.9 | [kgf/cm ²] (226 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|--|
| 1 Commercial designation | 1/3 | [hp] |
| 2 Displacement | 7.95 | [cm ³] (0.485 cu.in) |
| 2.1 Bore [mm] | 22.500 | |
| 2.2 Stroke [mm] | 20.000 | |
| 3 Lubricant charge | 230 | [ml] (7.78 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO10 | |
| 4 Weight (with oil charge) | 10.4 | [kg] (22.93 lb.) |
| 5 Nitrogen charge | 0.2 to 0.3 | [kgf/cm ²] (2.84 to 4.27 psig) |

C - ELETRICAL DATA

| | | |
|--|------------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 115-127 V 60 Hz 1 ~ (Single phase) | |
| 2 Starting device type | Current Relay | |
| 2.1 Starting device | 213516248/213516264 | |
| 3 Start capacitor | 233-280(110) | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | 4TM 771NFBZZ-53 | |
| 6 Start winding resistance | 14.70 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 2.30 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 30.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | 3.68 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (60 Hz) | 4.35 | [A] - Measured according to UL 984 |
| 11 Approval boards certification | CE - TUV - UKCA - VDE | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|-----|--------------------------------|----------------------------------|--|---------------------------|--|-------|
| TEST CONDITIONS: @115V60Hz | | | ASHRAELBP32 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] |
| 1050 | 265 | 308 | 194 | 2.54 | 5.97 | 5.40 | 1.36 | 1.58 |

E - PERFORMANCE - CURVES

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|--------------------|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | ASHRAE32 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) | 543 | 137 | 159 | | 0.00 | 3.07 | 0.00 | 0.00 | 0.00 |
| -30 (-22) | 762 | 192 | 223 | | 0.00 | 4.32 | 0.00 | 0.00 | 0.00 |
| -25 (-13) | 1017 | 256 | 298 | | 0.00 | 5.77 | 0.00 | 0.00 | 0.00 |
| -20 (- 4) | 1319 | 332 | 387 | | 0.00 | 7.51 | 0.00 | 0.00 | 0.00 |
| -15 (+ 5) | 1682 | 424 | 493 | | 0.00 | 9.60 | 0.00 | 0.00 | 0.00 |
| -10 (+14) | 2117 | 534 | 620 | | 0.00 | 12.13 | 0.00 | 0.00 | 0.00 |

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|-------------------------------|----------------------------|----------|--------------------|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | ASHRAE32 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) | 445 | 112 | 130 | | 0.00 | 2.52 | 0.00 | 0.00 | 0.00 |
| -30 (-22) | 681 | 172 | 200 | | 0.00 | 3.86 | 0.00 | 0.00 | 0.00 |
| -25 (-13) | 945 | 238 | 277 | | 0.00 | 5.36 | 0.00 | 0.00 | 0.00 |
| -20 (- 4) | 1248 | 314 | 366 | | 0.00 | 7.10 | 0.00 | 0.00 | 0.00 |
| -15 (+ 5) | 1604 | 404 | 470 | | 0.00 | 9.15 | 0.00 | 0.00 | 0.00 |
| -10 (+14) | 2024 | 510 | 593 | | 0.00 | 11.60 | 0.00 | 0.00 | 0.00 |

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|-------------------------------|----------------------------|----------|--------------------|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | ASHRAE32 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) | 323 | 81 | 95 | | 0.00 | 1.83 | 0.00 | 0.00 | 0.00 |
| -30 (-22) | 578 | 146 | 170 | | 0.00 | 3.28 | 0.00 | 0.00 | 0.00 |
| -25 (-13) | 854 | 215 | 250 | | 0.00 | 4.85 | 0.00 | 0.00 | 0.00 |
| -20 (- 4) | 1160 | 292 | 340 | | 0.00 | 6.60 | 0.00 | 0.00 | 0.00 |
| -15 (+ 5) | 1512 | 381 | 443 | | 0.00 | 8.63 | 0.00 | 0.00 | 0.00 |
| -10 (+14) | 1921 | 484 | 563 | | 0.00 | 11.00 | 0.00 | 0.00 | 0.00 |

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 | | |
| 3.2 DISCHARGE | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted | | |
| 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 | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |