

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EG Z60HLP |
| Nominal Voltage/Frequency | 115-127 V 60 Hz |
| Engineering Number | 513700324 |

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 | 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 | 85 to 110 V | 98 to 140 V |
| 8.2 LBP (43°C Ambient temperature) | Static | 85 to 110 V | 98 to 140 V |
| 8.3 HBP (32°C Ambient temperature) | - | - | - |
| 8.4 HBP (43°C Ambient temperature) | - | - | - |
| 9 Maximum condensing pressures/temperature | | | |
| 9.1 Operating (gauge) | 16.2 | [kgf/cm ²] (230 psig) | / °C - °F |
| 9.2 Peak (gauge) | 20.6 | [kgf/cm ²] (293 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|--|
| 1 Commercial designation | 1/5 | [hp] |
| 2 Displacement | 5.56 | [cm ³] (0.339 cu.in) |
| 2.1 Bore [mm] | 22.500 | |
| 2.2 Stroke [mm] | 14.000 | |
| 3 Lubricant charge | 280 | [ml] (9.47 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO10 | |
| 4 Weight (with oil charge) | 10.95 | [kg] (24.14 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 | TSD | |
| 2.1 Starting device | TSD- 115V | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 12(180) | [µF(VAC minimum)] |
| 5 Motor protection | 4TM319NFBYY-53 | |
| 6 Start winding resistance | 5.70 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 5.10 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 9.30 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | 1.50 | [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 | | | 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] |
| 660 | 166 | 193 | 113 | 1.00 | 3.75 | 5.87 | 1.48 | 1.72 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|--|----------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | ASHRAE32 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) | 402 | 101 | 118 | 76 | 0.69 | 2.27 | 5.28 | 1.33 | 1.55 |
| -30 | (-22) | 533 | 134 | 156 | 87 | 0.77 | 3.02 | 6.17 | 1.55 | 1.81 |
| -25 | (-13) | 699 | 176 | 205 | 99 | 0.85 | 3.97 | 7.13 | 1.80 | 2.09 |
| -20 | (- 4) | 904 | 228 | 265 | 110 | 0.94 | 5.14 | 8.19 | 2.06 | 2.40 |
| -15 | (+ 5) | 1151 | 290 | 337 | 122 | 1.04 | 6.57 | 9.39 | 2.37 | 2.75 |
| -10 | (+14) | 1445 | 364 | 423 | 134 | 1.14 | 8.28 | 10.75 | 2.71 | 3.15 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|---|----------------------------|---------------------------|-----------|-------|
| 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) | 346 | 87 | 101 | 75 | 0.70 | 1.96 | 4.58 | 1.15 | 1.34 |
| -30 | (-22) | 486 | 122 | 142 | 89 | 0.81 | 2.75 | 5.46 | 1.38 | 1.60 |
| -25 | (-13) | 658 | 166 | 193 | 104 | 0.94 | 3.73 | 6.35 | 1.60 | 1.86 |
| -20 | (- 4) | 865 | 218 | 253 | 119 | 1.07 | 4.92 | 7.28 | 1.83 | 2.13 |
| -15 | (+ 5) | 1111 | 280 | 326 | 135 | 1.20 | 6.34 | 8.27 | 2.08 | 2.42 |
| -10 | (+14) | 1402 | 353 | 411 | 150 | 1.34 | 8.03 | 9.35 | 2.36 | 2.74 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|-----|--------------------------------|---|----------------------------|---------------------------|-----------|-------|
| 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) | 252 | 64 | 74 | 68 | 0.63 | 1.43 | 3.69 | 0.93 | 1.08 |
| -30 | (-22) | 402 | 101 | 118 | 86 | 0.78 | 2.28 | 4.62 | 1.16 | 1.35 |
| -25 | (-13) | 580 | 146 | 170 | 105 | 0.95 | 3.30 | 5.49 | 1.38 | 1.61 |
| -20 | (- 4) | 791 | 199 | 232 | 125 | 1.12 | 4.50 | 6.33 | 1.60 | 1.86 |
| -15 | (+ 5) | 1038 | 262 | 304 | 144 | 1.30 | 5.92 | 7.17 | 1.81 | 2.10 |
| -10 | (+14) | 1325 | 334 | 388 | 164 | 1.48 | 7.59 | 8.03 | 2.02 | 2.35 |

E - PERFORMANCE - CURVES

| 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) | 165 | 42 | 48 | 58 | 0.54 | 0.93 | 2.90 | 0.73 | 0.85 |
| -30 | (-22) | 325 | 82 | 95 | 81 | 0.74 | 1.84 | 3.93 | 0.99 | 1.15 |
| -25 | (-13) | 511 | 129 | 150 | 105 | 0.95 | 2.90 | 4.84 | 1.22 | 1.42 |
| -20 | (- 4) | 725 | 183 | 213 | 129 | 1.16 | 4.13 | 5.65 | 1.42 | 1.66 |
| -15 | (+ 5) | 973 | 245 | 285 | 154 | 1.38 | 5.55 | 6.38 | 1.61 | 1.87 |
| -10 | (+14) | 1258 | 317 | 369 | 179 | 1.61 | 7.21 | 7.08 | 1.78 | 2.07 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|---------------------------------------|------|--------------------------|
| 1 Base plate | European Standard EG/F/AMEM Version 2 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |