

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EG D60HLC |
| Nominal Voltage/Frequency | 115-127 V 60 Hz |
| Engineering Number | 513703061 |

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 | - | 98 to 140 V |
| 8.2 LBP (43°C Ambient temperature) | Static | - | 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 | 1/5 | [hp] |
| 2 Displacement | 5.17 | [cm ³] (0.315 cu.in) |
| 2.1 Bore [mm] | 22.500 | |
| 2.2 Stroke [mm] | 13.000 | |
| 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) | 10.08 | [kg] (22.22 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/TSD2-115V/TSD2-115V0.6 | |
| 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 | CE - NOM - UKCA - 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] |
| 593 | 149 | 174 | 97 | 0.89 | 3.37 | 6.10 | 1.54 | 1.79 |

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) | 356 | 90 | 104 | 67 | 0.62 | 2.02 | 5.33 | 1.34 | 1.56 |
| -30 (-22) | 493 | 124 | 144 | 77 | 0.71 | 2.79 | 6.40 | 1.61 | 1.88 |
| -25 (-13) | 657 | 166 | 193 | 89 | 0.81 | 3.73 | 7.46 | 1.88 | 2.18 |
| -20 (- 4) | 855 | 215 | 251 | 100 | 0.91 | 4.87 | 8.57 | 2.16 | 2.51 |
| -15 (+ 5) | 1090 | 275 | 319 | 111 | 1.00 | 6.22 | 9.81 | 2.47 | 2.87 |
| -10 (+14) | 1365 | 344 | 400 | 121 | 1.10 | 7.82 | 11.26 | 2.84 | 3.30 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|--------------------|--------------------------------|----------------------------------------|----------------------------|---------------------------|-----------|-------|
| 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) | 292 | 74 | 86 | 64 | 0.60 | 1.65 | 4.52 | 1.14 | 1.32 |
| -30 (-22) | 433 | 109 | 127 | 78 | 0.71 | 2.45 | 5.60 | 1.41 | 1.64 |
| -25 (-13) | 602 | 152 | 176 | 92 | 0.84 | 3.42 | 6.57 | 1.66 | 1.93 |
| -20 (- 4) | 802 | 202 | 235 | 107 | 0.97 | 4.56 | 7.53 | 1.90 | 2.21 |
| -15 (+ 5) | 1038 | 261 | 304 | 122 | 1.10 | 5.92 | 8.53 | 2.15 | 2.50 |
| -10 (+14) | 1313 | 331 | 385 | 136 | 1.23 | 7.52 | 9.66 | 2.43 | 2.83 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|--------------------|--------------------------------|----------------------------------------|----------------------------|---------------------------|-----------|-------|
| 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) | 205 | 52 | 60 | 56 | 0.54 | 1.16 | 3.57 | 0.90 | 1.05 |
| -30 (-22) | 350 | 88 | 103 | 73 | 0.68 | 1.99 | 4.74 | 1.19 | 1.39 |
| -25 (-13) | 522 | 132 | 153 | 91 | 0.84 | 2.97 | 5.72 | 1.44 | 1.68 |
| -20 (- 4) | 725 | 183 | 212 | 110 | 1.00 | 4.12 | 6.60 | 1.66 | 1.93 |
| -15 (+ 5) | 961 | 242 | 282 | 129 | 1.17 | 5.49 | 7.44 | 1.87 | 2.18 |
| -10 (+14) | 1237 | 312 | 362 | 148 | 1.34 | 7.09 | 8.33 | 2.10 | 2.44 |

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) | 104 | 26 | 31 | 43 | 0.45 | 0.59 | 2.56 | 0.65 | 0.75 |
| -30 | (-22) | 254 | 64 | 75 | 64 | 0.62 | 1.44 | 3.89 | 0.98 | 1.14 |
| -25 | (-13) | 429 | 108 | 126 | 86 | 0.81 | 2.44 | 4.96 | 1.25 | 1.45 |
| -20 | (- 4) | 634 | 160 | 186 | 109 | 1.01 | 3.61 | 5.84 | 1.47 | 1.71 |
| -15 | (+ 5) | 871 | 220 | 255 | 133 | 1.22 | 4.97 | 6.61 | 1.67 | 1.94 |
| -10 | (+14) | 1146 | 289 | 336 | 157 | 1.43 | 6.57 | 7.34 | 1.85 | 2.15 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|-------------------------------|------|--------------------------|
| 1 Base plate | Universal EG/F/AMEM version 2 | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 8.2 +0.12/-0.08 | [mm] | (0.323" +0.005"/-0.003") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Straight | | |
| 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 | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 3.3.1 Material | Copper | | |
| 3.3.2 Shape | Straight | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |