

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EG U60HLC |
| Nominal Voltage/Frequency | 115-127 V 60 Hz |
| Engineering Number | 513700099 |

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 | 103 to 140 V |
| 8.2 LBP (43°C Ambient temperature) | Static | 85 to 110 V | 103 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) | 11.23 | [kg] (24.76 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 | PTC | |
| 2.1 Starting device | 7M4R7MD3/8EA14C3/8EA1B3/8EA21C3/8EA3B3/8EA4B3/8M4I | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | 15(180) | [µF(VAC minimum)] |
| 5 Motor protection | 4TM283ULBYY-53 | |
| 6 Start winding resistance | 5.50 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 5.20 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 9.50 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | 1.60 | [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 | | | GEALBP Static | | Evaporating temperature (Condensing temperature | | -23.3°C (-9.94°F) 40.5°C (104.9°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] |
| 680 | 171 | 199 | 105 | 0.94 | 3.86 | 6.46 | 1.63 | 1.89 |

E - PERFORMANCE - CURVES

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|----------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | GEA 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) | 254 | 64 | 75 | 69 | 0.63 | 0.00 | 3.69 | 0.93 | 1.08 |
| -30 (-22) | 423 | 107 | 124 | 88 | 0.79 | 0.00 | 4.75 | 1.20 | 1.39 |
| -25 (-13) | 604 | 152 | 177 | 106 | 0.94 | 0.00 | 5.73 | 1.44 | 1.68 |
| -20 (- 4) | 810 | 204 | 237 | 121 | 1.08 | 0.00 | 6.69 | 1.69 | 1.96 |
| -15 (+ 5) | 1051 | 265 | 308 | 137 | 1.23 | 0.00 | 7.69 | 1.94 | 2.25 |
| -10 (+14) | 1339 | 338 | 393 | 152 | 1.38 | 0.00 | 8.76 | 2.21 | 2.57 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|----------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | GEA 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) | 219 | 55 | 64 | 70 | 0.64 | 0.00 | 3.12 | 0.79 | 0.92 |
| -30 (-22) | 372 | 94 | 109 | 89 | 0.80 | 0.00 | 4.11 | 1.04 | 1.20 |
| -25 (-13) | 539 | 136 | 158 | 107 | 0.95 | 0.00 | 5.01 | 1.26 | 1.47 |
| -20 (- 4) | 730 | 184 | 214 | 125 | 1.11 | 0.00 | 5.86 | 1.48 | 1.72 |
| -15 (+ 5) | 957 | 241 | 281 | 142 | 1.27 | 0.00 | 6.72 | 1.69 | 1.97 |
| -10 (+14) | 1233 | 311 | 361 | 161 | 1.46 | 0.00 | 7.64 | 1.93 | 2.24 |

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|-------------------------------|----------------------------|----------|----------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @115V60Hz | | | GEA 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) | 186 | 47 | 55 | 71 | 0.65 | 0.00 | 2.62 | 0.66 | 0.77 |
| -30 (-22) | 321 | 81 | 94 | 90 | 0.81 | 0.00 | 3.53 | 0.89 | 1.04 |
| -25 (-13) | 470 | 118 | 138 | 109 | 0.97 | 0.00 | 4.34 | 1.09 | 1.27 |
| -20 (- 4) | 644 | 162 | 189 | 128 | 1.14 | 0.00 | 5.07 | 1.28 | 1.49 |
| -15 (+ 5) | 855 | 215 | 251 | 147 | 1.33 | 0.00 | 5.80 | 1.46 | 1.70 |
| -10 (+14) | 1115 | 281 | 327 | 169 | 1.54 | 0.00 | 6.56 | 1.65 | 1.92 |

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 | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-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 | | |