

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EG Y60HLP |
| Nominal Voltage/Frequency | 115-127 V 60 Hz |
| Engineering Number | 513700204 |

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 | | |
| 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 | - | 103 to 140 V |
| 8.2 LBP (43°C Ambient temperature) | Static | - | 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 / ISO7 | |
| 4 Weight (with oil charge) | 10.75 | [kg] (23.70 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 | 4SP14U319N/4SP14W319N/4SP21U319N/4SP21W319N | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [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) | 1.75 | [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] |
| 620 | 156 | 182 | 120 | 1.40 | 3.52 | 5.18 | 1.31 | 1.52 |

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) | 325 | 82 | 95 | 78 | 1.14 | 1.84 | 4.13 | 1.04 | 1.21 |
| -30 (-22) | 470 | 118 | 138 | 95 | 1.26 | 2.67 | 4.96 | 1.25 | 1.45 |
| -25 (-13) | 639 | 161 | 187 | 111 | 1.38 | 3.63 | 5.77 | 1.45 | 1.69 |
| -20 (- 4) | 841 | 212 | 247 | 128 | 1.49 | 4.79 | 6.58 | 1.66 | 1.93 |
| -15 (+ 5) | 1089 | 274 | 319 | 146 | 1.63 | 6.22 | 7.42 | 1.87 | 2.17 |
| -10 (+14) | 1392 | 351 | 408 | 166 | 1.78 | 7.97 | 8.33 | 2.10 | 2.44 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|--------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| 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) | 270 | 68 | 79 | 76 | 1.14 | 1.52 | 3.60 | 0.91 | 1.05 |
| -30 (-22) | 416 | 105 | 122 | 95 | 1.27 | 2.36 | 4.39 | 1.11 | 1.29 |
| -25 (-13) | 581 | 146 | 170 | 115 | 1.39 | 3.30 | 5.10 | 1.29 | 1.49 |
| -20 (- 4) | 775 | 195 | 227 | 135 | 1.54 | 4.41 | 5.77 | 1.45 | 1.69 |
| -15 (+ 5) | 1010 | 255 | 296 | 157 | 1.70 | 5.77 | 6.43 | 1.62 | 1.88 |
| -10 (+14) | 1296 | 327 | 380 | 181 | 1.89 | 7.43 | 7.10 | 1.79 | 2.08 |

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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) | 190 | 48 | 56 | 65 | 1.08 | 1.07 | 2.89 | 0.73 | 0.85 |
| -30 (-22) | 338 | 85 | 99 | 88 | 1.22 | 1.92 | 3.73 | 0.94 | 1.09 |
| -25 (-13) | 501 | 126 | 147 | 112 | 1.37 | 2.84 | 4.45 | 1.12 | 1.30 |
| -20 (- 4) | 689 | 174 | 202 | 136 | 1.54 | 3.92 | 5.07 | 1.28 | 1.49 |
| -15 (+ 5) | 913 | 230 | 268 | 163 | 1.74 | 5.21 | 5.64 | 1.42 | 1.65 |
| -10 (+14) | 1184 | 298 | 347 | 192 | 1.98 | 6.78 | 6.18 | 1.56 | 1.81 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|-------------------------------|------|--------------------------|
| 1 Base plate | Universal 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 | 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 | | |