

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------------|
| Designation | F GS100HAS |
| Nominal Voltage/Frequency | 100 V 50-60 Hz |
| Engineering Number | 513200990 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|-----------------------------------|-----------------------------------|-------------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-134a | | |
| 3 Nominal voltage and frequency | 100 / 50-60 | [V / Hz] | |
| 4 Application type | Low-Medium (Plus) Back Pressure | | |
| 4.1 Evaporating temperature range | -35°C to 5°C | (-31°F to 41°F) | |
| 5 Motor type | RSCR-CSCR | | |
| 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 | 85 to 110 V | 85 to 110 V |
| 8.2 LBP (43°C Ambient temperature) | Static/Fan | 85 to 110 V | 85 to 110 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 | 9.04 | [cm ³] (0.552 cu.in) |
| 2.1 Bore [mm] | 24.000 | |
| 2.2 Stroke [mm] | 20.000 | |
| 3 Lubricant charge | 280 | [ml] (9.47 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 11.52 | [kg] (25.40 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 | 100 V 50-60 Hz 1 ~ (Single phase) | |
| 2 Starting device type | PTC | |
| 2.1 Starting device | 7M4R7MB3/7M4R7MD3/8EA14B11/8EA14C3/8EA14D7/QPS2-/ | |
| 3 Start capacitor | 378-454(130) | [µF(VAC minimum)] |
| 4 Run capacitor | 12(155) | [µF(VAC minimum)] |
| 5 Motor protection | 5TM801KFBZZ-53 | |
| 6 Start winding resistance | 4.47 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 1.12 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50/60 Hz) | 30.90/28.30 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50/60 Hz) | 5.10/4.36 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50/60 Hz) | 5.96/5.23 | [A] - Measured according to UL 984 |
| 11 Approval boards certification | | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|--------------------------------------|----------|-----|-------------------------------------|-------------------------------|--|--|-----------|-------|
| TEST CONDITIONS: @100V50Hz | | | FUJI HEAT32 Static | | Evaporating temperature (Condensing temperature | -10°C (14°F) 75°C (167°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] |
| 1559 | 393 | 457 | 287 | 3.98 | | 5.43 | 1.37 | 1.59 |

| | | | | | | | | |
|--------------------------------------|----------|-----|-------------------------------------|-------------------------------|--|--|-----------|-------|
| TEST CONDITIONS: @100V60Hz | | | FUJI HEAT32 Static | | Evaporating temperature (Condensing temperature | -10°C (14°F) 75°C (167°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] |
| 1907 | 481 | 559 | 329 | 3.88 | | 5.80 | 1.46 | 1.70 |

E - PERFORMANCE - CURVES

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 | 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 | | |