

DEFINICIÓN DEL COMPRESOR

| | |
|------------------------------|-----------------------|
| Denominación | F GS125HAS |
| Voltage / Frecuencia nominal | 100 V 50-60 Hz |
| Código de Ingeniería | 513200763 |

A - APLICACIÓN / CONDICIONES LÍMITES DE TRABAJO

| | | | |
|---|-------------------------------|-----------------------------------|---------------|
| 1 Tipo | Compresor recíproco | | |
| 2 Refrigerante | R-134a | | |
| 3 Voltaje y frecuencia nominal | 100 / 50-60 | [V / Hz] | |
| 4 Tipo de aplicación | | | |
| 4.1 Rango de temperatura de evaporación | -35°C para 5°C | (-31°F para 41°F) | |
| 5 Tipo de motor | CSCR | | |
| 6 Torque de Arranque | LST - Bajo Torque de Arranque | | |
| 7 Elemento de control | Tubo capilar | | |
| 8 Enfriamiento del compresor | Rango de voltaje de operación | | |
| | | 50 Hz | 60 Hz |
| 8.1 LBP (32°C Temperatura ambiente) | Forzada | 90 para 110 V | 90 para 110 V |
| 8.2 LBP (43°C Temperatura ambiente) | Forzada | 90 para 110 V | 90 para 110 V |
| 8.3 HBP (32°C Temperatura ambiente) | - | - | - |
| 8.4 HBP (43°C Temperatura ambiente) | - | - | - |
| 9 Máxima temperatura de condensación | | | |
| 9.1 Operación | 14.2 | [kgf/cm ²] (202 psig) | / °C - °F |
| 9.2 Pico | 15.9 | [kgf/cm ²] (226 psig) | / °C - °F |
| 10 Máxima temperatura de las bobinas | 130 | [°C] | |

B - DATOS MECÁNICOS

| | | |
|--------------------------------|---------------|--|
| 1 Referencia Comercial | 1/3+ | [hp] |
| 2 Desplazamiento | 11.14 | [cm ³] (0.680 cu.in) |
| 2.1 Diametro [mm] | 26.000 | |
| 2.2 Curso [mm] | 21.000 | |
| 3 Carga de aceite | 280 | [ml] (9.47 fl.oz) |
| 3.1 Aceites aprobados | | |
| 3.2 Tipo/Viscosidad del aceite | ESTER / ISO22 | |
| 4 Peso (com carga de aceite) | 11.52 | [kg] (25.40 lb.) |
| 5 Carga de nitrógeno | 0.2 para 0.3 | [kgf/cm ²] (2.84 para 4.27 psig) |

C - DATOS ELÉCTRICOS

| | | |
|--|---------------------------------|---------------------------|
| 1 Voltaje nominal/Frecuencia/Numero de fases | 100 V 50-60 Hz 1 ~ (Monofásico) | |
| 2 Tipo de Dispositivo de Arranque | PTC | |
| 2.1 Dispositivo de Arranque | | |
| 3 Capacitor de Arranque | 124-149(180) | [µF(VAC minimo)] |
| 4 Capacitor de marcha | 25(180) | [µF(VAC minimo)] |
| 5 Protección del motor | 5TM801MFBZZ-53 | |
| 6 Resistencia del motor - bobina arranque | 3.48 | [Ω en 25°C (77°F)] +/- 8% |
| 7 Resistencia del motor - bobina marcha | 1.06 | [Ω en 25°C (77°F)] +/- 8% |
| 8 LRA - Corriente com rotor trabado (50/60 Hz) | 34.50/31.38 | [A] - Medido según UL 984 |
| 9 FLA - Corriente a plena carga L/MBP (50/60 Hz) | 5.92/4.69 | [A] - Medido según UL 984 |
| 10 FLA - Corriente a plena carga HBP (50/60 Hz) | 7.41/7.38 | [A] - Medido según UL 984 |
| 11 Institutos de aprobación | | |

D - PERFORMANCE - DATOS CHECK POINT

| | | | | | | | | |
|--------------------------------------|----------|-----|-------------------------------|--------------------------------|--|-------------------------------|--|-------|
| CONDICIONES DE PRUEBA: @100V50Hz | | | ASHRAELBP32 Forzada | | Temperatura de evaporación (Temp. de condensación | | -23.3°C (-9.94°F) 54.4°C (129.92°F) | |
| Capacidad de refrigeración +/- 5% | | | Consumo de potencia +/- 5% | Consumo de corriente +/- 5% | Flujo de masa +/- 5% | RANGO DE EFICIENCIA +/- 7% | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| 1074 | 271 | 315 | 246 | 4.32 | 6.10 | 4.37 | 1.10 | 1.28 |

| | | | | | | | | |
|--------------------------------------|----------|-----|-------------------------------|--------------------------------|--|-------------------------------|--|-------|
| CONDICIONES DE PRUEBA: @100V60Hz | | | ASHRAELBP32 Forzada | | Temperatura de evaporación (Temp. de condensación | | -23.3°C (-9.94°F) 54.4°C (129.92°F) | |
| Capacidad de refrigeración +/- 5% | | | Consumo de potencia +/- 5% | Consumo de corriente +/- 5% | Flujo de masa +/- 5% | RANGO DE EFICIENCIA +/- 7% | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| 1256 | 317 | 368 | 255 | 3.10 | 7.14 | 4.92 | 1.24 | 1.44 |

E - PERFORMANCE - CURVAS

| | | | | | | | | | |
|-------------------------------------|--------------------------------------|----------|----------------------------|-------------------------------|--|-------------------------|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA: @100V50Hz | | | ASHRAE32 Forzada | | (Temp. de condensación 35°C (+95°F)) | | | | |
| Temperatura de evaporación | Capacidad de refrigeración +/- 5% | | | Consumo de potencia +/- 5% | Consumo de corriente +/- 5% | Flujo de masa +/- 5% | RANGO DE EFICIENCIA +/- 7% | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 (-31) | 594 | 150 | 174 | 182 | 4.83 | 3.36 | 3.26 | 0.82 | 0.95 |
| -30 (-22) | 839 | 211 | 246 | 205 | 4.70 | 4.76 | 4.08 | 1.03 | 1.20 |
| -25 (-13) | 1126 | 284 | 330 | 229 | 4.71 | 6.40 | 4.92 | 1.24 | 1.44 |
| -20 (- 4) | 1470 | 370 | 431 | 255 | 4.81 | 8.36 | 5.78 | 1.46 | 1.69 |
| -15 (+ 5) | 1882 | 474 | 551 | 282 | 4.97 | 10.74 | 6.68 | 1.68 | 1.96 |
| -10 (+14) | 2374 | 598 | 696 | 310 | 5.16 | 13.60 | 7.66 | 1.93 | 2.25 |
| -5 (+23) | 2960 | 746 | 867 | 339 | 5.35 | 17.03 | 8.73 | 2.20 | 2.56 |
| 0 (+32) | 3651 | 920 | 1070 | 368 | 5.50 | 21.12 | 9.91 | 2.50 | 2.90 |
| +5 (+41) | 4460 | 1124 | 1307 | 397 | 5.57 | 25.94 | 11.23 | 2.83 | 3.29 |

| | | | | | | | | | |
|-------------------------------------|--------------------------------------|----------|----------------------------|-------------------------------|---|-------------------------|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA: @100V50Hz | | | ASHRAE32 Forzada | | (Temp. de condensación 45°C (+113°F)) | | | | |
| Temperatura de evaporación | Capacidad de refrigeración +/- 5% | | | Consumo de potencia +/- 5% | Consumo de corriente +/- 5% | Flujo de masa +/- 5% | RANGO DE EFICIENCIA +/- 7% | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 (-31) | 536 | 135 | 157 | 182 | 4.56 | 3.03 | 2.95 | 0.74 | 0.86 |
| -30 (-22) | 776 | 195 | 227 | 207 | 4.44 | 4.40 | 3.74 | 0.94 | 1.10 |
| -25 (-13) | 1057 | 266 | 310 | 234 | 4.47 | 6.00 | 4.51 | 1.14 | 1.32 |
| -20 (- 4) | 1392 | 351 | 408 | 264 | 4.61 | 7.92 | 5.29 | 1.33 | 1.55 |
| -15 (+ 5) | 1794 | 452 | 526 | 295 | 4.83 | 10.23 | 6.09 | 1.53 | 1.78 |
| -10 (+14) | 2274 | 573 | 666 | 328 | 5.10 | 13.02 | 6.93 | 1.75 | 2.03 |
| -5 (+23) | 2845 | 717 | 834 | 362 | 5.37 | 16.37 | 7.85 | 1.98 | 2.30 |
| 0 (+32) | 3520 | 887 | 1031 | 397 | 5.63 | 20.36 | 8.85 | 2.23 | 2.59 |
| +5 (+41) | 4311 | 1086 | 1263 | 433 | 5.82 | 25.07 | 9.96 | 2.51 | 2.92 |

E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA: | | ASHRAE32 | | | (Temp. de condensación 55°C (+131°F)) | | | | | |
|----------------------------|----------------------------|----------|------|---------------------|---------------------------------------|---------------|---------------------|-----------|-------|--|
| @100V50Hz | | Forzada | | | | | | | | |
| Temperatura de evaporación | Capacidad de refrigeración | | | Consumo de potencia | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA | | | |
| | +/- 5% | | | +/- 5% | +/- 5% | +/- 5% | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 446 | 112 | 131 | 175 | 4.54 | 2.52 | 2.54 | 0.64 | 0.75 | |
| -30 (-22) | 682 | 172 | 200 | 204 | 4.40 | 3.87 | 3.33 | 0.84 | 0.97 | |
| -25 (-13) | 957 | 241 | 280 | 235 | 4.42 | 5.44 | 4.07 | 1.03 | 1.19 | |
| -20 (- 4) | 1284 | 324 | 376 | 269 | 4.58 | 7.31 | 4.79 | 1.21 | 1.40 | |
| -15 (+ 5) | 1675 | 422 | 491 | 305 | 4.83 | 9.56 | 5.51 | 1.39 | 1.61 | |
| -10 (+14) | 2143 | 540 | 628 | 343 | 5.14 | 12.28 | 6.26 | 1.58 | 1.83 | |
| -5 (+23) | 2701 | 681 | 791 | 383 | 5.48 | 15.54 | 7.04 | 1.77 | 2.06 | |
| 0 (+32) | 3359 | 847 | 984 | 425 | 5.81 | 19.43 | 7.90 | 1.99 | 2.31 | |
| +5 (+41) | 4132 | 1041 | 1211 | 468 | 6.10 | 24.03 | 8.83 | 2.23 | 2.59 | |

| CONDICIONES DE PRUEBA: | | ASHRAE32 | | | (Temp. de condensación 65°C (+149°F)) | | | | | |
|----------------------------|----------------------------|----------|------|---------------------|---------------------------------------|---------------|---------------------|-----------|-------|--|
| @100V50Hz | | Forzada | | | | | | | | |
| Temperatura de evaporación | Capacidad de refrigeración | | | Consumo de potencia | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA | | | |
| | +/- 5% | | | +/- 5% | +/- 5% | +/- 5% | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 326 | 82 | 95 | 163 | 4.76 | 1.84 | 2.00 | 0.51 | 0.59 | |
| -30 (-22) | 557 | 140 | 163 | 196 | 4.57 | 3.17 | 2.81 | 0.71 | 0.82 | |
| -25 (-13) | 827 | 208 | 242 | 231 | 4.56 | 4.70 | 3.55 | 0.90 | 1.04 | |
| -20 (- 4) | 1145 | 289 | 336 | 270 | 4.70 | 6.52 | 4.25 | 1.07 | 1.25 | |
| -15 (+ 5) | 1527 | 385 | 447 | 311 | 4.96 | 8.71 | 4.92 | 1.24 | 1.44 | |
| -10 (+14) | 1983 | 500 | 581 | 355 | 5.29 | 11.35 | 5.60 | 1.41 | 1.64 | |
| -5 (+23) | 2526 | 637 | 740 | 402 | 5.66 | 14.53 | 6.29 | 1.58 | 1.84 | |
| 0 (+32) | 3169 | 799 | 929 | 451 | 6.05 | 18.33 | 7.02 | 1.77 | 2.06 | |
| +5 (+41) | 3924 | 989 | 1150 | 502 | 6.41 | 22.82 | 7.82 | 1.97 | 2.29 | |

| CONDICIONES DE PRUEBA: | | ASHRAE32 | | | (Temp. de condensación 35°C (+95°F)) | | | | | |
|----------------------------|----------------------------|----------|------|---------------------|--------------------------------------|---------------|---------------------|-----------|-------|--|
| @100V60Hz | | Forzada | | | | | | | | |
| Temperatura de evaporación | Capacidad de refrigeración | | | Consumo de potencia | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA | | | |
| | +/- 5% | | | +/- 5% | +/- 5% | +/- 5% | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 701 | 177 | 205 | 173 | 3.08 | 3.97 | 4.02 | 1.01 | 1.18 | |
| -30 (-22) | 975 | 246 | 286 | 203 | 3.12 | 5.53 | 4.81 | 1.21 | 1.41 | |
| -25 (-13) | 1301 | 328 | 381 | 235 | 3.30 | 7.39 | 5.56 | 1.40 | 1.63 | |
| -20 (- 4) | 1692 | 426 | 496 | 270 | 3.59 | 9.62 | 6.29 | 1.59 | 1.84 | |
| -15 (+ 5) | 2162 | 545 | 633 | 307 | 3.95 | 12.33 | 7.04 | 1.77 | 2.06 | |
| -10 (+14) | 2725 | 687 | 798 | 347 | 4.35 | 15.61 | 7.83 | 1.97 | 2.29 | |
| -5 (+23) | 3395 | 855 | 995 | 389 | 4.77 | 19.54 | 8.67 | 2.19 | 2.54 | |
| 0 (+32) | 4185 | 1055 | 1226 | 434 | 5.15 | 24.21 | 9.60 | 2.42 | 2.81 | |
| +5 (+41) | 5111 | 1288 | 1498 | 482 | 5.48 | 29.72 | 10.64 | 2.68 | 3.12 | |

E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA: | | ASHRAE32 | | | (Temp. de condensación 45°C (+113°F)) | | | | | |
|----------------------------|-------|----------------------------|----------|------|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @100V60Hz | | Forzada | | | | | | | | |
| Temperatura de evaporación | | Capacidad de refrigeración | | | Consumo de potencia | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA | | |
| | | +/- 5% | | | +/- 5% | +/- 5% | +/- 5% | +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 620 | 156 | 182 | 169 | 2.84 | 3.50 | 3.65 | 0.92 | 1.07 |
| -30 | (-22) | 900 | 227 | 264 | 203 | 2.90 | 5.11 | 4.43 | 1.12 | 1.30 |
| -25 | (-13) | 1227 | 309 | 359 | 240 | 3.12 | 6.97 | 5.14 | 1.30 | 1.51 |
| -20 | (- 4) | 1614 | 407 | 473 | 279 | 3.47 | 9.18 | 5.81 | 1.47 | 1.70 |
| -15 | (+ 5) | 2075 | 523 | 608 | 322 | 3.91 | 11.84 | 6.47 | 1.63 | 1.90 |
| -10 | (+14) | 2623 | 661 | 769 | 367 | 4.40 | 15.03 | 7.14 | 1.80 | 2.09 |
| -5 | (+23) | 3274 | 825 | 959 | 416 | 4.93 | 18.84 | 7.83 | 1.97 | 2.30 |
| 0 | (+32) | 4040 | 1018 | 1184 | 468 | 5.44 | 23.37 | 8.59 | 2.16 | 2.52 |
| +5 | (+41) | 4936 | 1244 | 1446 | 524 | 5.91 | 28.70 | 9.42 | 2.37 | 2.76 |

| CONDICIONES DE PRUEBA: | | ASHRAE32 | | | (Temp. de condensación 55°C (+131°F)) | | | | | |
|----------------------------|-------|----------------------------|----------|------|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @100V60Hz | | Forzada | | | | | | | | |
| Temperatura de evaporación | | Capacidad de refrigeración | | | Consumo de potencia | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA | | |
| | | +/- 5% | | | +/- 5% | +/- 5% | +/- 5% | +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 498 | 126 | 146 | 158 | 2.78 | 2.82 | 3.14 | 0.79 | 0.92 |
| -30 | (-22) | 785 | 198 | 230 | 196 | 2.84 | 4.46 | 3.95 | 1.00 | 1.16 |
| -25 | (-13) | 1114 | 281 | 326 | 238 | 3.08 | 6.33 | 4.67 | 1.18 | 1.37 |
| -20 | (- 4) | 1498 | 377 | 439 | 283 | 3.46 | 8.52 | 5.31 | 1.34 | 1.56 |
| -15 | (+ 5) | 1950 | 491 | 571 | 332 | 3.95 | 11.13 | 5.91 | 1.49 | 1.73 |
| -10 | (+14) | 2485 | 626 | 728 | 384 | 4.52 | 14.23 | 6.49 | 1.64 | 1.90 |
| -5 | (+23) | 3117 | 786 | 913 | 441 | 5.13 | 17.93 | 7.08 | 1.78 | 2.07 |
| 0 | (+32) | 3860 | 973 | 1131 | 501 | 5.75 | 22.32 | 7.69 | 1.94 | 2.25 |
| +5 | (+41) | 4726 | 1191 | 1385 | 565 | 6.35 | 27.48 | 8.36 | 2.11 | 2.45 |

| CONDICIONES DE PRUEBA: | | ASHRAE32 | | | (Temp. de condensación 65°C (+149°F)) | | | | | |
|----------------------------|-------|----------------------------|----------|------|---------------------------------------|----------------------|---------------|---------------------|-----------|-------|
| @100V60Hz | | Forzada | | | | | | | | |
| Temperatura de evaporación | | Capacidad de refrigeración | | | Consumo de potencia | Consumo de corriente | Flujo de masa | RANGO DE EFICIENCIA | | |
| | | +/- 5% | | | +/- 5% | +/- 5% | +/- 5% | +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 337 | 85 | 99 | 139 | 2.90 | 1.90 | 2.46 | 0.62 | 0.72 |
| -30 | (-22) | 631 | 159 | 185 | 183 | 2.94 | 3.59 | 3.34 | 0.84 | 0.98 |
| -25 | (-13) | 963 | 243 | 282 | 230 | 3.17 | 5.47 | 4.09 | 1.03 | 1.20 |
| -20 | (- 4) | 1343 | 339 | 394 | 282 | 3.57 | 7.64 | 4.74 | 1.19 | 1.39 |
| -15 | (+ 5) | 1788 | 451 | 524 | 338 | 4.09 | 10.20 | 5.32 | 1.34 | 1.56 |
| -10 | (+14) | 2311 | 582 | 677 | 398 | 4.71 | 13.23 | 5.85 | 1.47 | 1.71 |
| -5 | (+23) | 2925 | 737 | 857 | 462 | 5.39 | 16.82 | 6.36 | 1.60 | 1.86 |
| 0 | (+32) | 3644 | 918 | 1068 | 531 | 6.09 | 21.07 | 6.87 | 1.73 | 2.01 |
| +5 | (+41) | 4482 | 1130 | 1313 | 604 | 6.79 | 26.06 | 7.40 | 1.86 | 2.17 |

F - CARACTERÍSTICAS EXTERNAS

| | | | |
|--------------------------------------|-------------------------------|------|--------------------------|
| 1 Placa base | Universal EG/F/AMEM version 2 | | |
| 2 Soporte de badeja | No | | |
| 3 Tubos | | | |
| 3.1 SUCCIÓN | 8.2 +0.12/-0.08 | [mm] | (0.323" +0.005"/-0.003") |
| 3.1.1 Material | Cobre | | |
| 3.1.2 Forma | Recto | | |
| 3.2 DESCARGA | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 3.2.1 Material | Cobre | | |
| 3.2.2 Forma | Recto | | |
| 3.3 PROCESO | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 3.3.1 Material | Cobre | | |
| 3.3.2 Forma | Recto | | |
| 3.4 Tubo enfriador de aceite (Cobre) | No | [mm] | |
| 3.5 Sellado del tudo | Tampa de Gomma | | |