

DEFINICIÓN DEL COMPRESOR

| | |
|------------------------------|--------------------|
| Denominación | F FU130UAX |
| Voltage / Frecuencia nominal | 220-240 V 50-60 Hz |
| Código de Ingeniería | 513200667 |

A - APLICACIÓN / CONDICIONES LÍMITES DE TRABAJO

| | | | |
|---|-------------------------------------|-------------------------------|----------------|
| 1 Tipo | Compresor recíproco | | |
| 2 Refrigerante | R-290 | | |
| 3 Voltaje y frecuencia nominal | 220-240 / 50-60 | [V / Hz] | |
| 4 Tipo de aplicación | | | |
| 4.1 Rango de temperatura de evaporación | -35°C para -5°C | (-31°F para 23°F) | |
| 5 Tipo de motor | CSIR | | |
| 6 Torque de Arranque | HST - Alto torque de arranque | | |
| 7 Elemento de control | Tubo capilar o Válvula de expansión | | |
| 8 Enfriamiento del compresor | | Rango de voltaje de operación | |
| | | 50 Hz | 60 Hz |
| 8.1 LBP (32°C Temperatura ambiente) | Forzada | 187 para 255 V | 187 para 255 V |
| 8.2 LBP (43°C Temperatura ambiente) | Forzada | 187 para 255 V | 187 para 255 V |
| 8.3 HBP (32°C Temperatura ambiente) | - | - | - |
| 8.4 HBP (43°C Temperatura ambiente) | - | - | - |
| 9 Máxima temperatura de condensación | | | |
| 9.1 Operación | 18.4 | [kgf/cm²] (262 psig) | / °C - °F |
| 9.2 Pico | 20.6 | [kgf/cm²] (293 psig) | / °C - °F |
| 10 Máxima temperatura de las bobinas | 130 | [°C] | |

B - DATOS MECÁNICOS

| | | |
|--------------------------------|-----------------|---------------------|
| 1 Referencia Comercial | 1/3+ | [hp] |
| 2 Desplazamiento | 6.76 | [cm³] (0.413 cu.in) |
| 2.1 Diametro [mm] | 22.500 | |
| 2.2 Curso [mm] | 17.000 | |
| 3 Carga de aceite | 280 | [ml] (9.47 fl.oz.) |
| 3.1 Aceites aprobados | | |
| 3.2 Tipo/Viscosidad del aceite | ALQUILB / ISO32 | |
| 4 Peso (com carga de aceite) | 10 | [kg] (22.05 lb.) |
| 5 Carga de nitrógeno | - | [kgf/cm²] |

C - DATOS ELÉCTRICOS

| | | |
|--|-------------------------------------|---------------------------|
| 1 Voltaje nominal/Frecuencia/Numero de fases | 220-240 V 50-60 Hz 1 ~ (Monofásico) | |
| 2 Tipo de Dispositivo de Arranque | Current Relay | |
| 2.1 Dispositivo de Arranque | 213516043 | |
| 3 Capacitor de Arranque | 145-175(280) | [µF(VAC minimo)] |
| 4 Capacitor de marcha | - | [µF(VAC minimo)] |
| 5 Protección del motor | 4TM757LFBYY-53 | |
| 6 Resistencia del motor - bobina arranque | 8.20 | [Ω en 25°C (77°F)] +/- 8% |
| 7 Resistencia del motor - bobina marcha | 7.40 | [Ω en 25°C (77°F)] +/- 8% |
| 8 LRA - Corriente con rotor trabado (50/60 Hz) | 18.00/19.00 | [A] - Medido según UL 984 |
| 9 FLA - Corriente a plena carga L/MBP (50/60 Hz) | 2.55/2.20 | [A] - Medido según UL 984 |
| 10 FLA - Corriente a plena carga HBP (50/60 Hz) | 2.95/2.60 | [A] - Medido según UL 984 |
| 11 Institutos de aprobación | CCC - TUV - UL - VDE | |

D - PERFORMANCE - DATOS CHECK POINT

| | | | | | | | | |
|--------------------------------------|----------|-----|-------------------------------|--------------------------------|---|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA: @220V50Hz | | | ASHRAELBP32 Forzada | | Temperatura de evaporación -23.3°C (-9.94°F) (Temp. de condensación 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] |
| 1090 | 275 | 319 | 214 | 1.66 | 3.24 | 5.10 | 1.29 | 1.49 |

| | | | | | | | | |
|--------------------------------------|----------|-----|-------------------------------|--------------------------------|---|-------------------------------|-----------|-------|
| CONDICIONES DE PRUEBA: @220V60Hz | | | ASHRAELBP32 Forzada | | Temperatura de evaporación -23.3°C (-9.94°F) (Temp. de condensación 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] |
| 1360 | 343 | 399 | 257 | 1.61 | 4.05 | 5.28 | 1.33 | 1.55 |

E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA: @220V50Hz | | 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) | 691 | 174 | 203 | 153 | 1.53 | 2.05 | 4.50 | 1.13 | 1.32 |
| -30 | (-22) | 879 | 221 | 257 | 170 | 1.56 | 2.61 | 5.16 | 1.30 | 1.51 |
| -25 | (-13) | 1129 | 285 | 331 | 187 | 1.60 | 3.36 | 6.03 | 1.52 | 1.77 |
| -20 | (- 4) | 1440 | 363 | 422 | 203 | 1.65 | 4.30 | 7.10 | 1.79 | 2.08 |
| -15 | (+ 5) | 1808 | 456 | 530 | 218 | 1.68 | 5.42 | 8.35 | 2.11 | 2.45 |
| -10 | (+14) | 2230 | 562 | 653 | 230 | 1.72 | 6.71 | 9.78 | 2.46 | 2.87 |
| -5 | (+23) | 2704 | 681 | 792 | 238 | 1.74 | 8.18 | 11.37 | 2.86 | 3.33 |

| CONDICIONES DE PRUEBA: | | | | ASHRAE32 | | (Temp. de condensación 45°C (+113°F)) | | | | |
|----------------------------|-------|----------------------------|----------|----------|---------------------|--|---------------|---------------------|-----------|-------|
| @220V50Hz | | 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) | 654 | 165 | 192 | 161 | 1.54 | 1.94 | 4.09 | 1.03 | 1.20 |
| -30 | (-22) | 823 | 207 | 241 | 179 | 1.57 | 2.44 | 4.60 | 1.16 | 1.35 |
| -25 | (-13) | 1055 | 266 | 309 | 198 | 1.62 | 3.14 | 5.28 | 1.33 | 1.55 |
| -20 | (- 4) | 1348 | 340 | 395 | 218 | 1.67 | 4.02 | 6.14 | 1.55 | 1.80 |
| -15 | (+ 5) | 1699 | 428 | 498 | 237 | 1.73 | 5.09 | 7.14 | 1.80 | 2.09 |
| -10 | (+14) | 2106 | 531 | 617 | 255 | 1.78 | 6.34 | 8.28 | 2.09 | 2.43 |
| -5 | (+23) | 2565 | 646 | 752 | 269 | 1.83 | 7.76 | 9.54 | 2.40 | 2.79 |

E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA: ASHRAE32 @220V50Hz | | | | (Temp. de condensación 55°C (+131°F)) | | | | | | |
|--|--------------------------------------|----------|-----|---|--------------------------------|-------------------------|-------------------------------|-----------|-------|--|
| Forzada | | | | | | | | | | |
| Temperatura de evaporación | 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] | |
| -35 (-31) | 620 | 156 | 182 | 169 | 1.55 | 1.83 | 3.72 | 0.94 | 1.09 | |
| -30 (-22) | 766 | 193 | 224 | 188 | 1.59 | 2.27 | 4.12 | 1.04 | 1.21 | |
| -25 (-13) | 977 | 246 | 286 | 209 | 1.64 | 2.90 | 4.67 | 1.18 | 1.37 | |
| -20 (- 4) | 1250 | 315 | 366 | 233 | 1.71 | 3.73 | 5.35 | 1.35 | 1.57 | |
| -15 (+ 5) | 1582 | 399 | 463 | 256 | 1.78 | 4.74 | 6.14 | 1.55 | 1.80 | |
| -10 (+14) | 1970 | 496 | 577 | 280 | 1.85 | 5.93 | 7.03 | 1.77 | 2.06 | |
| -5 (+23) | 2411 | 608 | 707 | 301 | 1.93 | 7.29 | 8.01 | 2.02 | 2.35 | |

| CONDICIONES DE PRUEBA: ASHRAE32 @220V50Hz | | | | (Temp. de condensación 65°C (+149°F)) | | | | | | |
|--|--------------------------------------|----------|-----|---|--------------------------------|-------------------------|-------------------------------|-----------|-------|--|
| Forzada | | | | | | | | | | |
| Temperatura de evaporación | 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] | |
| -35 (-31) | 606 | 153 | 178 | 176 | 1.57 | 1.79 | 3.39 | 0.85 | 0.99 | |
| -30 (-22) | 728 | 183 | 213 | 196 | 1.61 | 2.16 | 3.74 | 0.94 | 1.09 | |
| -25 (-13) | 915 | 230 | 268 | 220 | 1.67 | 2.72 | 4.19 | 1.06 | 1.23 | |
| -20 (- 4) | 1164 | 293 | 341 | 247 | 1.75 | 3.47 | 4.73 | 1.19 | 1.39 | |
| -15 (+ 5) | 1474 | 372 | 432 | 276 | 1.84 | 4.41 | 5.35 | 1.35 | 1.57 | |
| -10 (+14) | 1841 | 464 | 540 | 305 | 1.94 | 5.54 | 6.04 | 1.52 | 1.77 | |
| -5 (+23) | 2263 | 570 | 663 | 334 | 2.04 | 6.84 | 6.77 | 1.71 | 1.98 | |

| CONDICIONES DE PRUEBA: ASHRAE32 @220V60Hz | | | | (Temp. de condensación 35°C (+95°F)) | | | | | | |
|--|--------------------------------------|----------|-----|--|--------------------------------|-------------------------|-------------------------------|-----------|-------|--|
| Forzada | | | | | | | | | | |
| Temperatura de evaporación | 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] | |
| -35 (-31) | 876 | 221 | 257 | 176 | 1.33 | 2.59 | 4.98 | 1.25 | 1.46 | |
| -30 (-22) | 1128 | 284 | 331 | 194 | 1.39 | 3.35 | 5.77 | 1.46 | 1.69 | |
| -25 (-13) | 1400 | 353 | 410 | 213 | 1.46 | 4.17 | 6.58 | 1.66 | 1.93 | |
| -20 (- 4) | 1710 | 431 | 501 | 231 | 1.52 | 5.10 | 7.43 | 1.87 | 2.18 | |
| -15 (+ 5) | 2072 | 522 | 607 | 249 | 1.58 | 6.21 | 8.35 | 2.11 | 2.45 | |
| -10 (+14) | 2504 | 631 | 734 | 267 | 1.65 | 7.54 | 9.40 | 2.37 | 2.76 | |
| -5 (+23) | 3023 | 762 | 886 | 284 | 1.71 | 9.14 | 10.61 | 2.67 | 3.11 | |

E - PERFORMANCE - CURVAS

| CONDICIONES DE PRUEBA: | | | | ASHRAE32 | | (Temp. de condensación 45°C (+113°F)) | | | | |
|----------------------------|-------|----------------------------|----------|----------|---------------------|--|---------------|---------------------|-----------|-------|
| @220V60Hz | | 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) | 845 | 213 | 248 | 189 | 1.38 | 2.50 | 4.46 | 1.12 | 1.31 |
| -30 | (-22) | 1081 | 273 | 317 | 209 | 1.44 | 3.21 | 5.14 | 1.30 | 1.51 |
| -25 | (-13) | 1340 | 338 | 393 | 230 | 1.51 | 3.99 | 5.83 | 1.47 | 1.71 |
| -20 | (- 4) | 1638 | 413 | 480 | 250 | 1.58 | 4.89 | 6.56 | 1.65 | 1.92 |
| -15 | (+ 5) | 1991 | 502 | 583 | 270 | 1.65 | 5.96 | 7.38 | 1.86 | 2.16 |
| -10 | (+14) | 2417 | 609 | 708 | 291 | 1.73 | 7.27 | 8.32 | 2.10 | 2.44 |
| -5 | (+23) | 2931 | 738 | 859 | 311 | 1.81 | 8.86 | 9.42 | 2.37 | 2.76 |

| CONDICIONES DE PRUEBA: | | ASHRAE32 | | | (Temp. de condensación 55°C (+131°F)) | | | | | |
|----------------------------|-------|----------------------------|----------|-----|--|----------------------|---------------|---------------------|-----------|-------|
| @220V60Hz | | 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) | 784 | 198 | 230 | 196 | 1.41 | 2.32 | 3.99 | 1.00 | 1.17 |
| -30 | (-22) | 1005 | 253 | 295 | 221 | 1.48 | 2.98 | 4.53 | 1.14 | 1.33 |
| -25 | (-13) | 1251 | 315 | 367 | 246 | 1.56 | 3.72 | 5.08 | 1.28 | 1.49 |
| -20 | (- 4) | 1539 | 388 | 451 | 272 | 1.65 | 4.59 | 5.67 | 1.43 | 1.66 |
| -15 | (+ 5) | 1884 | 475 | 552 | 297 | 1.75 | 5.64 | 6.35 | 1.60 | 1.86 |
| -10 | (+14) | 2303 | 580 | 675 | 322 | 1.85 | 6.93 | 7.15 | 1.80 | 2.10 |
| -5 | (+23) | 2814 | 709 | 824 | 348 | 1.96 | 8.51 | 8.12 | 2.05 | 2.38 |

| CONDICIONES DE PRUEBA: | | ASHRAE32 | | | (Temp. de condensación 65°C (+149°F)) | | | | | |
|----------------------------|-------|----------------------------|----------|-----|--|----------------------|---------------|---------------------|-----------|-------|
| @220V60Hz | | 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) | 738 | 186 | 216 | 197 | 1.42 | 2.18 | 3.75 | 0.95 | 1.10 |
| -30 | (-22) | 945 | 238 | 277 | 230 | 1.52 | 2.80 | 4.12 | 1.04 | 1.21 |
| -25 | (-13) | 1179 | 297 | 346 | 262 | 1.63 | 3.51 | 4.50 | 1.13 | 1.32 |
| -20 | (- 4) | 1457 | 367 | 427 | 296 | 1.75 | 4.35 | 4.92 | 1.24 | 1.44 |
| -15 | (+ 5) | 1795 | 452 | 526 | 329 | 1.88 | 5.37 | 5.44 | 1.37 | 1.59 |
| -10 | (+14) | 2209 | 557 | 647 | 362 | 2.02 | 6.65 | 6.07 | 1.53 | 1.78 |
| -5 | (+23) | 2717 | 685 | 796 | 396 | 2.17 | 8.21 | 6.87 | 1.73 | 2.01 |

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 | Acero Cobrizado | | |
| 3.1.2 Forma | Curvo | | |
| 3.2 DESCARGA | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 3.2.1 Material | Acero Cobrizado | | |
| 3.2.2 Forma | Curvo | | |
| 3.3 PROCESO | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 3.3.1 Material | Acero Cobrizado | | |
| 3.3.2 Forma | Curvo | | |
| 3.4 Tubo enfriador de aceite (Cobre) | No | [mm] | |
| 3.5 Sellado del tudo | Tampa de Gomma | | |