# 产品规格书

## SPECIFICATION

| 修订记录 Revision Record | | | |
|---|---|---|---|
| 版本<br>Version | 修订人<br>Revisor | 描述<br>Description | 日期<br>Date |
| | | | |
| | | | |

# 1 规格参数 Specification

## 1.1 基本性能指标 Basic Performance

| | |
|---|---|
| 型号 Model | WB40KE-TFD-SN1 |
| 型式 Compressor Type | 全封闭涡旋压缩机 Hermetic Scroll Compressor |
| 应用 Application | 中温冷藏 Mid. Temp.Refrigeration |
| 制冷剂 Refrigerant | R404A |
| 排量 Displacement (cc/rev) | 84.5 |
| 制冷量 Cooling Capacity(W) | 8560.0 |
| 输入功率 Input Power (W) | 4260.0 |
| 额定运行电流 RLA (A) | 8.1 |
| 制冷 Cooling COP(W/W) | 2.03 |
| 电源 Power | 380-420V/3~/50Hz or 460V/3~/60Hz |
| 最低运行电压 Min. Operating Voltage (V) | 342.0 |
| 最高运行电压 Max. Operating Voltage (V) | 462.0 |
| 堵转电流 LRA (A) | 61.0 |
| 最大运行电流 Max. Operating Current (A) | 12.1 |
| 额定转速 Rated Speed (rpm) | 2900.0 |
| 压缩机重量 Weight (kg, 含油 With Oil) | 36.0 |
| 润滑油种类 Oil Type | POE |
| 润滑油运动粘度 Oil Viscosity (cSt, 40℃) | 32.0 |
| 润滑油密度 Oil Density (kg/L, 20℃) | 0.977 |
| 初次注油 Oil Initial Charge (L)<br>重新注油 Oil Recharge (L) | 1.8<br>1.6 |
| 油循环率 Oil Circulation Rate | ≤0.01 |
| 额定噪音 Rated Sound<br>(声功率级, Sound Power Level, dBA) | 72.0 |
| 运行范围内最大运行噪音<br>Max. Oper. Sound Under Oper. Envelope<br>(声功率级, Sound Power Level, dBA) | 77.0 |
| 振动位移值 峰-峰 (mm)<br>Vibration peak-peak | ≤0.1 |
| 水分含量 Moisture (mg) | ≤500.0 |
| 杂质含量 Impurity (mg) | ≤100.0 |
| 最低启动电压 LVS (V) | 334.0 |
| 最大负载运行时最低电压(V)<br>Min. Oper. Voltage Under Max. Load | 342.0 |
| 启动电容 Start Capacitor (μF/V) | - |

| | |
|---|---|
| 启动继电器 Start Relay | - |
| 运行电容 Run Capacitor (μF/V) | - |
| 接线盒防护等级 IP Class | 21.0 |
| 压缩机颜色 Compressor Color | 黑色 Black |

1.2 电机参数 Motor Parameter

| | |
|---|---|
| 电机类型 Motor Type | 感应电机 Induction Motor |
| 电机极数 Motor Pole | 2 |
| 电机绝缘温度 Motor Insulation Temp. (℃) | 130℃ |
| 线间电阻 UV(CS) Line-Line (Ω, 25℃) | 2.5 (±10%) |
| 线间电阻 UW(CR) Line-Line (Ω, 25℃) | 2.5 (±10%) |
| 线间电阻 VW(SR) Line-Line (Ω, 25℃) | 2.5 (±10%) |
| 电气强度 Dielectric Strength<br>2000VAC / 1s / 50Hz or 60Hz | 泄露电流 Leakage Current<br>≤5mA |
| 绝缘电阻 Insulation Resistant (MΩ) | ≥20 |
| 接地电阻 Ground Resistant (Ω) | ≤0.1 |

1.3 安全运行限制 Safety Oper. Limits

| | |
|---|---|
| 气密性检漏压力 (MPa)<br>Tightness Test Pressure | 3.0-3.5 |
| 最大运行压力 Max Oper. Pressure | |
| 高压侧 High Side (MPa)<br>低压侧 Low Side (MPa) | 3.2H/2.0L |
| 压缩机内空余容积 Spare Volume (Without Oil) | |
| 高压侧 High Side (L)<br>低压侧 Low Side (L) | - |
| 最大制冷剂充注量 (kg)<br>Max. Refrigerant Charge | 4.5 |
| 排气温度限制 (℃)<br>Discharge Temp. Limit | ≤125.0 |
| 启停间隔 Start-Stop Interval | ≥3min |

2 性能与噪音值等需在额定工况运行 24 小时磨合后进行测试

Performance, Sound and Other Parameters Should beTested after 24 hours Running-in Under Rated Condition.

| 项目<br>Item | 额定工况<br>Rated Condition | 最大负载工况<br>Max. load Condition |
|---|---|---|
| 蒸发温度 E.T. (℃) | -6.7 | 10.0 |
| 冷凝温度 C.T. (℃) | 48.9 | 60.0 |
| 过热度 S.H. (K) | 11.1 | 11.1 |
| 过冷度 S.C. (K) | 0.0 | 0.0 |
| 环境温度 A.T.(℃) | 35.0 | 46.1 |
| 能力允差<br>Capacity Deviation | ≥7.5% | - |
| 功率允差<br>Power Deviation | ≤7.5% | - |
| 能效允差<br>COP Deviation | ≥7.5% | - |

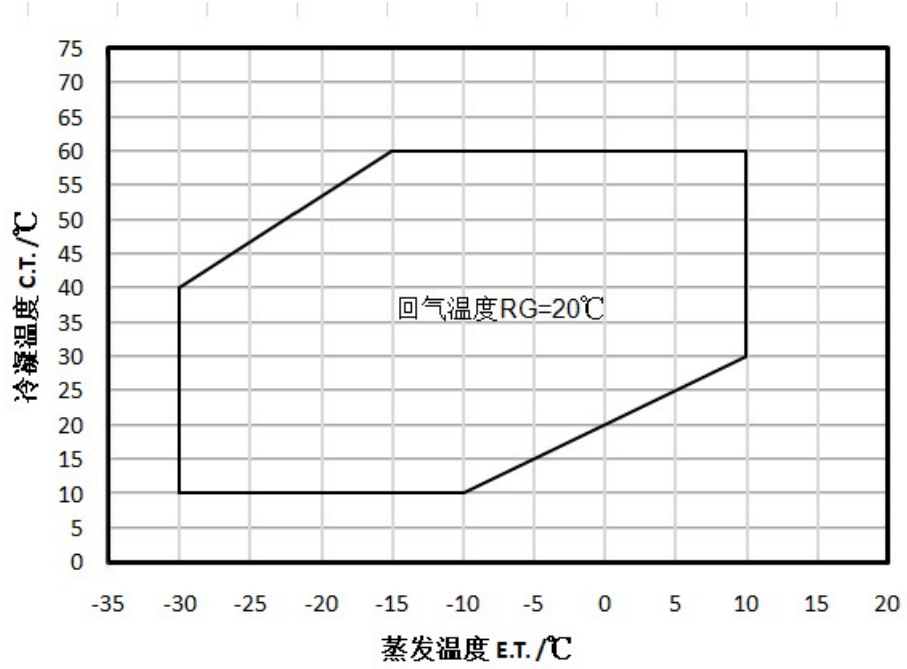
3 内置保护 Internal Protection

<table>
<tr><td>保护方式<br>Protection Method</td><td>配置<br>Config</td><td colspan="3">参数<br>Parameter</td></tr>
<tr><td rowspan="5">内置过载保护器<br>Internal OLP</td><td rowspan="5">有 With</td><td></td><td>供应商 1<br>Vendor 1</td><td>供应商 2<br>Vendor 2</td></tr>
<tr><td>型号<br>Model</td><td>37HM577-XX</td><td>-</td></tr>
<tr><td>打开温度(℃)<br>Open Temp.</td><td>130±5℃</td><td>-</td></tr>
<tr><td>复位温度(℃)<br>Close Temp.</td><td>55±9℃</td><td>-</td></tr>
<tr><td>瞬间切断电流<br>Short time<br>Trip Current</td><td>45A/3-10s</td><td>-</td></tr>
<tr><td>内置压力保护器<br>Internal Pressure<br>Protector</td><td>无 Without</td><td colspan="3">-</td></tr>
</table>

4 压缩机附件 Compressor Accessory

| | | | |
|---|---|---|---|
| 附件 Accessory | 名称 Description | 料号 P/N | 数量 PCS |
| 1 | 脚垫 | 070-0003-00 | 4.0 |
| 2 | 导套 | 010-0014-00 | 4.0 |
| 3 | - | - | - |
| 4 | - | - | - |

5 压缩机运行范围 Compressor Oper. Envelope



## 6 压缩机性能参数表 Compressor Performance Sheet

| Item | Tc\Te | -30℃ | -25℃ | -20℃ | -15℃ | -10℃ | -5℃ | 0℃ | 5℃ | 10℃ |
|---|---|---|---|---|---|---|---|---|---|---|
| Q:kW | 60℃ | | | | 4.88 | 6.21 | 7.62 | 9.13 | 10.79 | 12.61 |
| P:kW | | | | | 5.73 | 5.83 | 5.89 | 5.91 | 5.90 | 5.85 |
| Q:kW | 55℃ | | | | 5.93 | 7.33 | 8.84 | 10.51 | 12.37 | 14.44 |
| P:kW | | | | | 5.18 | 5.26 | 5.30 | 5.31 | 5.29 | 5.25 |
| Q:kW | 50℃ | | | 5.45 | 6.77 | 8.24 | 9.88 | 11.72 | 13.79 | 16.12 |
| P:kW | | | | 4.58 | 4.66 | 4.72 | 4.75 | 4.75 | 4.73 | 4.69 |
| Q:kW | 45℃ | | 4.86 | 6.07 | 7.44 | 9.00 | 10.77 | 12.79 | 15.09 | 17.69 |
| P:kW | | | 4.03 | 4.12 | 4.18 | 4.22 | 4.24 | 4.24 | 4.22 | 4.19 |
| Q:kW | 40℃ | 4.27 | 5.32 | 6.55 | 7.97 | 9.63 | 11.56 | 13.77 | 16.31 | 19.20 |
| P:kW | | 3.55 | 3.63 | 3.69 | 3.73 | 3.76 | 3.77 | 3.78 | 3.76 | 3.74 |
| Q:kW | 35℃ | 4.64 | 5.67 | 6.92 | 8.42 | 10.19 | 12.28 | 14.70 | 17.50 | 20.69 |
| P:kW | | 3.20 | 3.25 | 3.29 | 3.32 | 3.34 | 3.35 | 3.36 | 3.36 | 3.35 |
| Q:kW | 30℃ | 4.92 | 5.94 | 7.23 | 8.81 | 10.72 | 12.98 | 15.63 | 18.69 | 22.19 |
| P:kW | | 2.87 | 2.91 | 2.93 | 2.95 | 2.97 | 2.98 | 2.99 | 3.00 | 3.02 |
| Q:kW | 25℃ | 5.15 | 6.18 | 7.52 | 9.20 | 11.25 | 13.70 | 16.59 | 19.93 | |
| P:kW | | 2.58 | 2.59 | 2.60 | 2.62 | 2.63 | 2.65 | 2.67 | 2.71 | |
| Q:kW | 20℃ | 5.38 | 6.42 | 7.83 | 9.62 | 11.83 | 14.49 | 17.62 | | |
| P:kW | | 2.31 | 2.31 | 2.32 | 2.33 | 2.34 | 2.37 | 2.41 | | |
| Q:kW | 15℃ | 5.64 | 6.72 | 8.20 | 10.12 | 12.50 | 15.37 | | | |
| P:kW | | 2.08 | 2.06 | 2.06 | 2.07 | 2.10 | 2.14 | | | |
| Q:kW | 10℃ | 5.97 | 7.10 | 8.67 | 10.73 | 13.30 | | | | |
| P:kW | | 1.87 | 1.85 | 1.85 | 1.87 | 1.90 | | | | |

性能参数基于吸气温度 20.0℃，过冷度 0.0K。

Performance Based on Retrun Gas Temp. 20.0℃ and Subcooling 0.0K.

7 压缩机外形图 Compressor Outline

