

# 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                                                                               | WB29KE-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)                                                               | 63.9                                |
| 制冷量 Cooling Capacity(W)                                                                | 6125.0                              |
| 输入功率 Input Power (W)                                                                   | 3397.0                              |
| 额定运行电流 RLA (A)                                                                         | 6.6                                 |
| 制冷 COP(W/W)                                                                            | 1.8                                 |
| 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)                                                                           | 46.0                                |
| 最大运行电流 Max. Operating Current (A)                                                      | 8.6                                 |
| 额定转速 Rated Speed (rpm)                                                                 | 2900.0                              |
| 压缩机重量 Weight (kg, 含油 With Oil)                                                         | 28.0                                |
| 润滑油种类 Oil Type                                                                         | POE                                 |
| 润滑油运动粘度 Oil Viscosity (cSt, 40°C)                                                      | 32.0                                |
| 润滑油密度 Oil Density (kg/L, 20°C)                                                         | 0.977                               |
| 初次注油 Oil Initial Charge (L)                                                            | 1.4                                 |
| 重新注油 Oil Recharge (L)                                                                  | 1.2                                 |
| 油循环率 Oil Circulation Rate                                                              | ≤0.01                               |
| 额定噪音 Rated Sound<br>(声功率级, Sound Power Level, dBA)                                     | 70.0                                |
| 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) | 75.0                                |
| 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. (°C)                      | 130°C                        |
| 线间电阻 UV(CS) Line-Line (Ω, 25°C)                         | 3.2 (±10%)                   |
| 线间电阻 UW(CR) Line-Line (Ω, 25°C)                         | 3.2 (±10%)                   |
| 线间电阻 VW(SR) Line-Line (Ω, 25°C)                         | 3.2 (±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)                      | 3.2H/2.0L |
| 低压侧 Low Side (MPa)                       |           |
| 压缩机内空余容积 Spare Volume (Without Oil)      |           |
| 高压侧 High Side (L)                        | -         |
| 低压侧 Low Side (L)                         |           |
| 最大制冷剂充注量 (kg)<br>Max. Refrigerant Charge | 3.5       |
| 排气温度限制 (°C)<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 be Tested 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. (°C)             | -6.7                    | 10.0                          |
| 冷凝温度 C.T. (°C)             | 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.(°C)              | 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%                   | -                             |

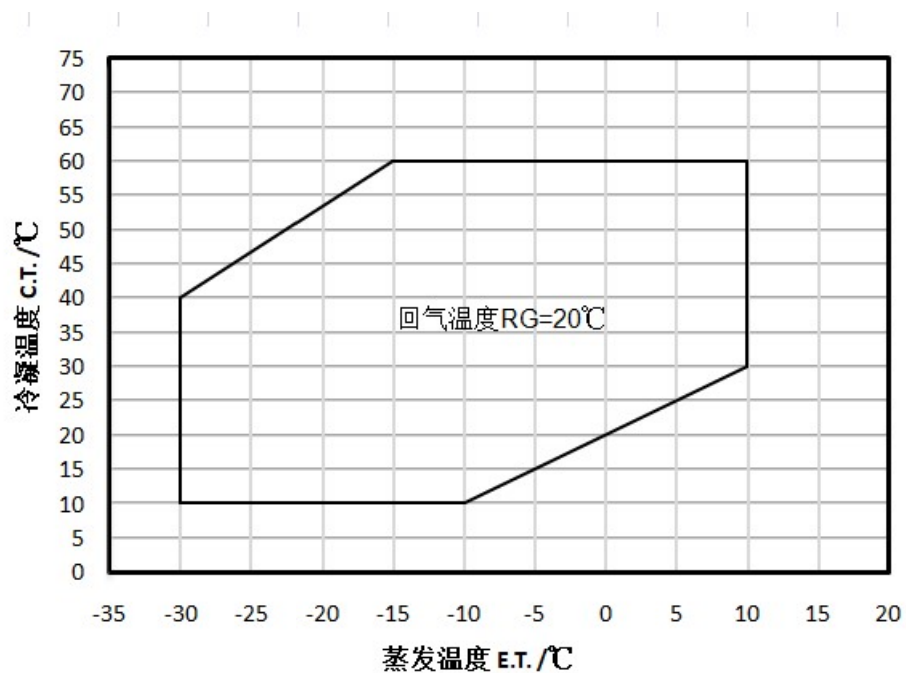
3 内置保护 Internal Protection

| 保护方式<br>Protection Method                 | 配置<br>Config | 参数<br>Parameter                      |                   |                   |
|-------------------------------------------|--------------|--------------------------------------|-------------------|-------------------|
| 内置过载保护器<br>Internal OLP                   | 有 With       |                                      | 供应商 1<br>Vendor 1 | 供应商 2<br>Vendor 2 |
|                                           |              | 型号<br>Model                          | 34HM219-XX        | -                 |
|                                           |              | 打开温度(°C)<br>Open Temp.               | 125±5°C           | -                 |
|                                           |              | 复位温度(°C)<br>Close Temp.              | 61±9°C            | -                 |
|                                           |              | 瞬间切断电流<br>Short time<br>Trip Current | 37A/2-10s         | -                 |
| 内置压力保护器<br>Internal Pressure<br>Protector | 无 Without    | -                                    |                   |                   |

#### 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℃   |      |      |      | 3.69 | 4.70  | 5.76  | 6.91  | 8.16  | 9.54  |
| P:kW |       |      |      |      | 4.34 | 4.41  | 4.46  | 4.47  | 4.46  | 4.43  |
| Q:kW | 55℃   |      |      |      | 4.49 | 5.54  | 6.69  | 7.95  | 9.35  | 10.92 |
| P:kW |       |      |      |      | 3.92 | 3.98  | 4.01  | 4.02  | 4.00  | 3.97  |
| Q:kW | 50℃   |      |      | 4.12 | 5.12 | 6.23  | 7.47  | 8.86  | 10.43 | 12.19 |
| P:kW |       |      |      | 3.46 | 3.53 | 3.57  | 3.59  | 3.59  | 3.58  | 3.55  |
| Q:kW | 45℃   |      | 3.67 | 4.59 | 5.63 | 6.80  | 8.14  | 9.67  | 11.41 | 13.38 |
| P:kW |       |      | 3.05 | 3.11 | 3.16 | 3.19  | 3.21  | 3.21  | 3.19  | 3.17  |
| Q:kW | 40℃   | 3.23 | 4.03 | 4.95 | 6.03 | 7.29  | 8.74  | 10.41 | 12.33 | 14.52 |
| P:kW |       | 2.68 | 2.74 | 2.79 | 2.82 | 2.84  | 2.85  | 2.85  | 2.85  | 2.83  |
| Q:kW | 35℃   | 3.51 | 4.29 | 5.23 | 6.37 | 7.71  | 9.29  | 11.12 | 13.23 | 15.64 |
| P:kW |       | 2.42 | 2.46 | 2.49 | 2.51 | 2.53  | 2.54  | 2.54  | 2.54  | 2.54  |
| Q:kW | 30℃   | 3.72 | 4.50 | 5.47 | 6.66 | 8.11  | 9.82  | 11.82 | 14.13 | 16.78 |
| P:kW |       | 2.17 | 2.20 | 2.22 | 2.23 | 2.24  | 2.25  | 2.26  | 2.27  | 2.28  |
| Q:kW | 25℃   | 3.90 | 4.67 | 5.69 | 6.96 | 8.51  | 10.36 | 12.54 | 15.07 |       |
| P:kW |       | 1.95 | 1.96 | 1.97 | 1.98 | 1.99  | 2.00  | 2.02  | 2.05  |       |
| Q:kW | 20℃   | 4.07 | 4.86 | 5.92 | 7.28 | 8.95  | 10.95 | 13.32 |       |       |
| P:kW |       | 1.75 | 1.75 | 1.75 | 1.76 | 1.77  | 1.79  | 1.82  |       |       |
| Q:kW | 15℃   | 4.26 | 5.08 | 6.20 | 7.65 | 9.45  | 11.62 |       |       |       |
| P:kW |       | 1.57 | 1.56 | 1.56 | 1.57 | 1.59  | 1.62  |       |       |       |
| Q:kW | 10℃   | 4.51 | 5.37 | 6.56 | 8.11 | 10.05 |       |       |       |       |
| P:kW |       | 1.42 | 1.40 | 1.40 | 1.41 | 1.44  |       |       |       |       |

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

