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Rev:202502



# 高能效涡旋压缩机

High Energy Efficiency Scroll Compressor

## 空调冷水机应用产品手册

Product Manual For Air conditioning & Cooling Water Application

苏州为山之环境技术有限公司  
Suzhou Weishans Climate Technologies Co.,Ltd



## 为山者

积土成山，事当有为不为

为山者，当以九仞为目标，坚韧前行

居谷不弃，据高无傲，以余力尽余志

为山者，当持仁心，聚仁人志士以作为

仁德宽厚，虚怀若谷，度己度人，度可度之人

为山者智而不乱智，谋而不全谋

为山者实为治军，将即将，身先士卒，令必行，士必勤勇，功当巨赏

为山者胜于人，乃心胜于人，非物胜于人也

为山者，虽积跬步箕土，乃成伟山

## WEISHANS

To build mountain with small amounts of earth, You would select what to do and what not to do.

To be WEISHANS, You should have a high goal, go forward no matter what difficulty to meet, No give up when you low,

No pride when you high, Do what you can do for the capable goal.

To be WEISHANS, You should have a heart like god, Collect kind and upright men to do something right, kind god feeling to others , mind breadth, sublime oneself and others ,and sublime the men who will sublime.

To be WEISHANS, should be smart but only smart on the right direction, and have astuteness on the right place.

To be WEISHANS, Just like build an army, General should be exactly like a leader with active and positive Behavior, order must have good result and active feedback, soldiers must be active to order and work hard, great reward for great job.

To be WEISHANS, They defeat others, They are so strong in mind not on the treasure.

To be WEISHANS, Even with small steps to reach peak , Even collect small earth to build great mountain.

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# 苏州为山之环境技术有限公司

公司简介  
ABOUT US

苏州为山之环境技术有限公司成立于 2018 年 6 月，坐落于工业发达的历史名城苏州，专注于开发节能环保型压缩机，是一家创新型科技企业。为山之研发的涡旋式热泵压缩机核心技术已取得重大突破，并成功应用于多个领域，包括但不限于工业制冷、商用热水、工业蒸汽、农业烘干、制冷工程、精密空调、轨道交通制冷、转轮除湿及工业余热回收等。

公司研发的系列热泵蒸汽涡旋压缩机以及国内率先推出的防爆系列涡旋压缩机，显著拓展了涡旋压缩机的应用范围。公司自主研发的强力增焓技术也进一步扩大了压缩机的运行范围，使得在常温条件下使用同一工质实现高效蒸汽成为现实。

公司拥有先进的自动化生产线和高精度检测与加工设备，创新工艺流程，具备年产 10 万台涡旋压缩机的组装生产能力，产品覆盖从 2 匹至 25 匹。公司产品通过了 CCC、CE、CB、ROHS & REACH 和 ISO 9001 等多项国际认证。

公司高度重视知识产权保护，至今已申请 41 项知识产权，其中包括 13 项发明专利（5 项已获授权）、27 项实用新型专利（21 项已获授权）和 1 项软件著作权。公司荣获江苏省民营科技企业和国家级高新技术企业称号。

公司注重质量管理体系和信息化建设，秉持以人为本的理念，组建了一支具有竞争力的人才队伍，激发员工的积极性和创造力，不断提高运营效率。公司秉承创新、诚信的理念，致力于为客户创造更多价值，携手实现共赢。

展望未来，公司将继续加大研发投入，致力于为客户提供绿色环保的热泵及冷冻压缩机解决方案，以减少全球碳排放为使命，为构建绿色地球家园贡献力量。

[www.weishans.com](http://www.weishans.com)



## OUR VISION

### 企业愿景

为山之遵循“求精不求巧，求本不求华”的产品理念，把“为山”打造成国内外知名品牌。

WE AIM TO MAKE “WEISHAN” THE FIRST-CLASS INTERNATIONAL BRAND. WE ALWAYS FOLLOW THE THINKING “TO ACHIEVE PERFECTION WITHOUT INGENUITY, SEEKING FOR ORIGIN WITHOUT REFINEMENT.”

# Suzhou Weishans Climate Technologies Co., Ltd

Suzhou Weishans Climate Technology Co., Ltd was established in June 2018, it is located in Suzhou with developed industry and long history city, and focuses on the development of energy-saving and environment protection compressors. It is an innovative technology enterprise. The core technology of the scroll heat pump compressors developed by Weishans has made significant breakthroughs and has been successfully applied in multiple fields, including but not limited to industrial refrigeration, commercial hot water, industrial steam, agricultural drying, refrigeration engineering, precision air conditioning, rail transit refrigeration, rotary wheel dehumidification and industrial waste heat recovery, etc. The series of heat pump steam scroll compressors developed by the company and the explosion-proof series of scroll compressors first launched in China have significantly expanded the application range of scroll compressors. The company's independently developed strong enthalpy increase technology has also further expanded the operating range of the compressor, making it possible to achieve efficient steam using the same working fluid under normal temperature conditions.

The company owns advanced automated production lines and high-precision testing and machining equipments, innovated technological process, and has an annual assembly production capacity of 100,000 scroll compressors, with products covering the range from 2HP to 25HP. The company's products have passed multiple international certifications including CCC, CE, CB, ROHS & REACH and ISO 9001.

The company attaches great importance to the protection of intellectual property rights and has applied for 41 intellectual property rights so far, including 13 invention patents (5 have been authorized), 27 utility model patents (21 have been authorized) and 1 software copyright. The company has been awarded the titles of Jiangsu Private Technology Enterprise and National High-tech Enterprise.

The company attaches great importance to the quality management system and information construction, adheres to the people-oriented concept, and has formed a competitive talent team to stimulate the enthusiasm and creativity of employees and continuously improve operational efficiency. The company adheres to the concepts of innovation and integrity, and is committed to creating more value for customers and achieving win-win results together.

Looking forward to the future, the company will continue to increase investment in research and development, and is committed to providing customers with green and environmentally heat pump and refrigeration compressor solutions. With the mission of reducing global carbon emissions, it will contribute to building a green Earth home.

以“九仞”为目标，坚韧前行；居谷不弃，据高无傲！

“JIUREN” IS OUR AIM. WE WILL MOVE FORWARD TOUGHLY. WE WILL NEVER GIVE UP EVEN IN DOWNS AND NEVER BE ARROGANT WHEN IN UPS.

## SERVICE AIM

### 服务宗旨

顾客第一、品质第一、服务第一、持续改进、回报社会

CUSTOMERS FIRST, QUALITY FIRST, SERVICE FIRST, KEEPING IMPROVING, REPAYING SOCIETY

Build a Nine-ren Mountain  
Forge Ahead  
为山九仞 砥砺前行



## ABOUT PRODUCT

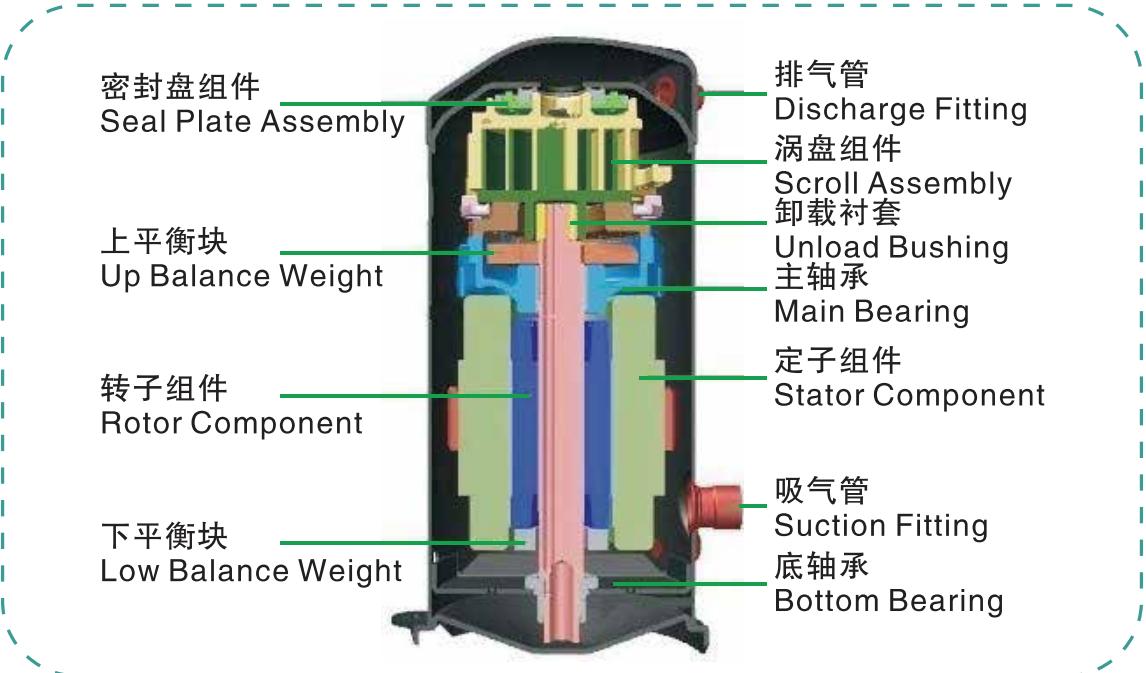
### 产品特点

“为山”牌涡旋压缩机性能优良，突出的特点有：

1. 国产替代：拥有自主知识产权，且与国外知名企业的同等技术水平的产品具有良好的互换性。
2. 重点开发的中高功率范围12匹及以上的全封闭压缩机新产品，获得良好的市场应用口碑。
3. 针对不同的冷媒设计多种涡旋盘，适用范围广，WW系列压缩机在烘干机组上冷凝温度最高可达85摄氏度。
4. 能效比高，入围北极熊创新产品奖前三甲，是节能机组产品。

*"Weishan" brand scroll compressors have excellent performance, and the outstanding features are as below:*

1. Localization substitution: independent intellectual property rights; good interchangeability with products of the same technical level as well-known foreign companies.
2. Stress-developed ≥12HP hermetic compressors in the medium and high power range and get good market application reputation.
3. The products are designed with multiple scrolls for different refrigerants and have a wide application range. The condensing temperature of WW series can reach 85°C on the drying unit.
4. The products have high energy efficiency ratio are selected in the top three of the Polar Bear Innovative Product Award and are the energy-saving units.



- 01** 柔性密封盘端面设计  
Flexible Sealing Disc
- 02** 平衡优化实现低振动  
Low Vibration by Balance
- 03** 压缩比优化  
Compression Ratio Optimization
- 04** 双润滑通道设计  
Double Lubrication Channel
- 05** 非对称设计  
Asymmetric Scroll of Dynamic and Static
- 06** 铆焊工艺  
Riveting and Welding

为山之的涡旋压缩机为热泵，空调，冷水机及冷冻冷藏等应用提供了出众的解决方案，涡旋压缩机是高可靠性，高能效比，紧凑性系统设计的理想选择。为山系列涡旋压缩机可提供2~25HP的产品，其适用的制冷剂包括R410A, R22, R407C, R134a等

Weishans'scroll compression technology provide an outstanding solution for Heat pump, air conditioner, chiller and refrigeration applicaiton. Scroll compressors are an ideal choice with high reliability, high EER and compact system design. The scroll compressors of Weishan series can provide 2HP~25HP products, the applicable refrigerants include R410A, R22,R407C, R134a ETC.

### 制冷量数据 Capacity Data

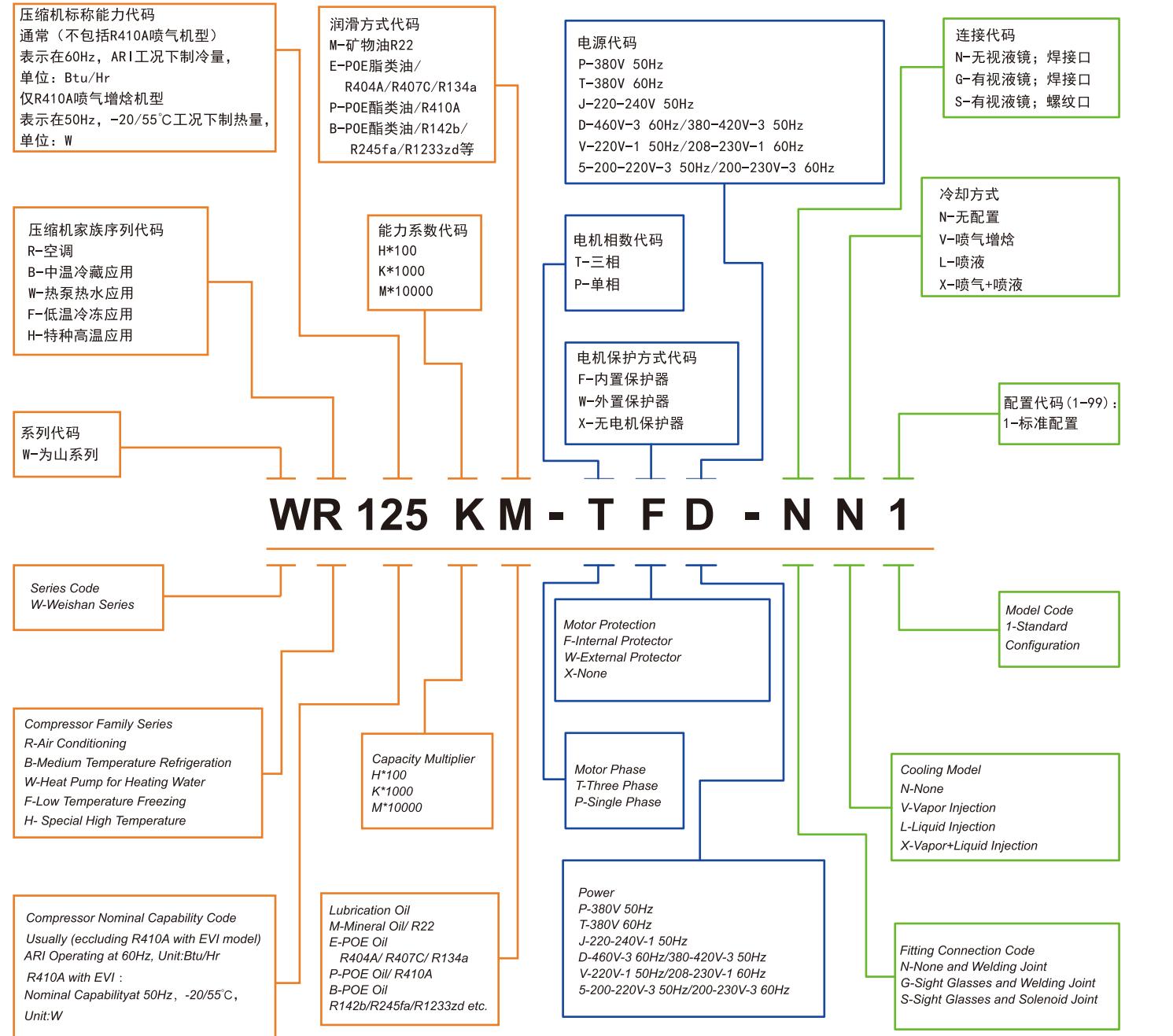
本样本所列压缩机制冷量数据, 电源频率50Hz (电机同步转速2900rpm)。当压缩机在60Hz频率(电机转速3500rpm)运行时, 制冷量以及输入功率相应约增加20%。压缩机不宜在应用范围外使用。

The capacity data of scroll compressors listed in this catalogue, power frequency is 50 Hz (Synchronous speed of motor 2900 rpm). When the compressors are operated with 60Hz (the speed of motor 3500 rpm), the capacity and input power are correspondingly increased about 20%. The compressors should not be used beyond the application range.  
Cooling capacity data of compressor listed in this sample, power frequency: 50Hz(synchronous motor speed: 2900rpm

# 命名规则

## Nomenclature

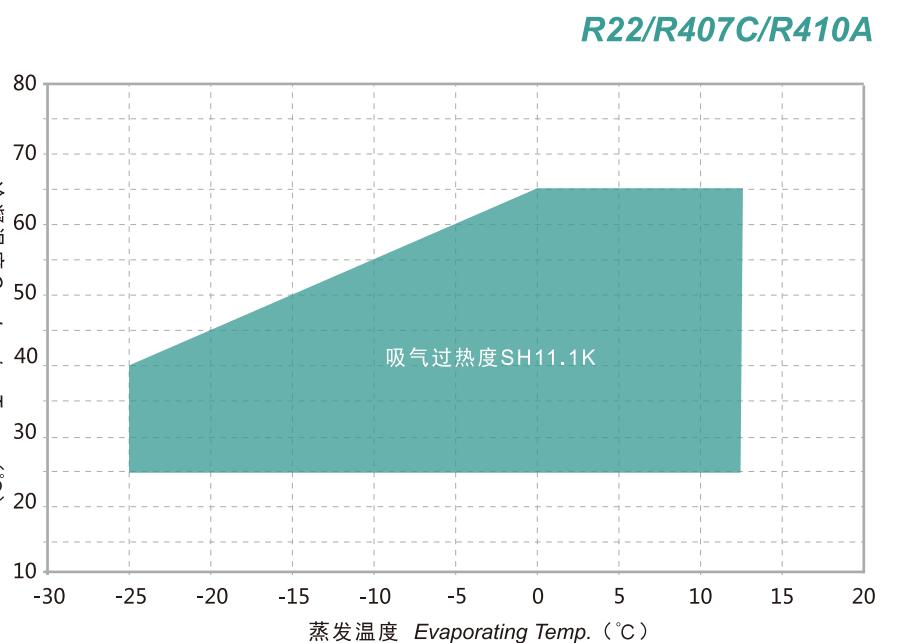
### 命名规则 NOMENCLATURE



# 应用范围

## Application Range

### 应用范围 APPLICATION RANGE



## 技术参数

### Specifications

#### 技术参数 SPECIFICATIONS

型号 Model	WR28KM-TFD-NN1	WR36KM-TFD-NN1	WR48KM-TFD-NN1	WR61KM-TFD-NN1	WR72KM-TFD-NN1	WR81KM-TFD-NN1	WR94KM-TFD-NN1				
电制 Motor Power	380-420V/3~50Hz or 460V/3~60Hz										
名义功率 Nominal Power(HP)	2	3	4	5	6	7	8				
排量 Displacement(CC/Rev)	37.2	50.6	63.9	84.5	98.9	108	127				
制冷剂 Refrigerant	R22										
名义制冷量 Nominal Capacity(W)	6449	8772	11079	14650	18315	20000	23300				
名义输入功率 Nominal Power(W)	1959	2665	3365	4450	5330	5820	6770				
名义工况能效比 COP(W/W)	3.29	3.29	3.29	3.29	3.44	3.44	3.44				
名义工况电流 Nominal Operating Current(A)	3.6	4.8	6.2	8.2	9.5	10.5	12.5				
堵转电流LRA(A)	45	45	45	60	60	110	117				
最大运行电流MOC(A)	5.1	6.6	8.4	11.6	13.6	16.3	17.3				
曲轴箱加热器功率 Crankcase Heater(W)	70	70	70	70	70	70	90				
接管内径尺寸 Fitting ID Size(mm)	排气管 Dis.Tube	12.94-13.10					22.37-22.51				
	吸气管 Suc.Tube	22.37-22.51					34.97-35.10				
外形尺寸 Dimension(mm)	长(L)	244.4		233.63		281.4					
	宽(W)	230.5		230.5		273.7					
	高(H)	403.4		442.7		523.7					
底脚安装尺寸(孔径) Mounting Dim.(Dia.)(mm)	190.5x190.5(9.0)					190.5x190.5(8.5)					
润滑油类型 Lubrication Oil	3GS										
润滑油初次充注量 Lubrication Oil Initial Charge(L)	1.4	1.4	1.4	1.8	1.8	1.8	3.0				
润滑油重新充注量(L) Lubrication Oil Recharge(L)	1.2	1.2	1.2	1.6	1.6	1.6	2.8				
最大工作压力 Maximum Operating Pressure(MPa)											
高压侧 High Pressure Side	3.0										
低压侧 Low Pressure Side	2.0										
重量 Weight(kg)	28	28	28	37	38	38	66				

注：蒸发温度7.2°C，冷凝温度54.4°C，回气温度18.3°C，过冷度8.3°C

Note: Evaporating Temperature 7.2°C, Condensing Temperature 54.4°C, Return Gas Temperature 18.3°C, Subcooling 8.3°C

## R22

## R22

## 技术参数

### Specifications

#### 技术参数 SPECIFICATIONS

型号 Model	WR108KM-TFD-NN1	WR125KM-TFD-NN1	WR144KM-TFD-NN1	WR160KM-TFD-NN1	WR190KM-TFD-GN1	WR250KM-TWD-GN1	WR310KM-TWD-GN1					
电制 Motor Power	380-420V/3~50Hz or 460V/3~60Hz											
名义功率 Nominal Power(HP)	9	10	12	13	15	20	25					
排量 Displacement(CC/Rev)	147.7	167.2	190.8	209	248.9	325	400					
制冷剂 Refrigerant	R22											
名义制冷量 Nominal Capacity(W)	27558	31100	35600	38290	45600	59542	73282					
名义输入功率 Nominal Power(W)	7896	9020	10200	11504	13700	17889	22017					
名义工况能效比 COP(W/W)	3.44	3.45	3.49	3.33	3.33	3.33	3.33					
名义工况电流 Nominal Operating Current(A)	14.3	15.8	17.6	18.9	22.5	29.4	38.4					
堵转电流LRA(A)	122	122	149	149	290	290						
最大运行电流MOC(A)	19.5	22.2	23.5	26.1	31.1	40.6	50.0					
曲轴箱加热器功率 Crankcase Heater(W)	90	90	90	90	90	90	90					
接管内径尺寸 Fitting ID Size(mm)	排气管 Dis.Tube	22.37-22.51					28.81-28.95					
	吸气管 Suc.Tube	34.97-35.10										
外形尺寸 Dimension(mm)	长(L)	281.4					337.34					
	宽(W)	273.7					333.77					
	高(H)	523.7					649.7					
底脚安装尺寸(孔径) Mounting Dim.(Dia.)(mm)	190.5x190.5(8.5)											
润滑油类型 Lubrication Oil	3GS											
润滑油初次充注量 Lubrication Oil Initial Charge(L)	3	3	3.2	3.2	3.2	5	5					
润滑油重新充注量(L) Lubrication Oil Recharge(L)	2.8	2.8	3	3	3	4.8	4.8					
最大工作压力 Maximum Operating Pressure(MPa)												
高压侧 High Pressure Side	3.0											
低压侧 Low Pressure Side	2.0											
重量 Weight(kg)	66	66	66	66	66	92	92					

注：蒸发温度7.2°C，冷凝温度54.4°C，回气温度18.3°C，过冷度8.3°C

Note: Evaporating Temperature 7.2°C, Condensing Temperature 54.4°C, Return Gas Temperature 18.3°C, Subcooling 8.3°C

## 技术参数

### Specifications

#### 技术参数 SPECIFICATIONS

型号 Model	WR28KE-TFD-NN1	WR36KE-TFD-NN1	WR48KE-TFD-NN1	WR61KE-TFD-NN1	WR72KE-TFD-NN1	WR81KE-TFD-NN1	WR94KE-TFD-NN1				
电制 Motor Power	380-420V/3~50Hz or 460V/3~60Hz										
名义功率 Nominal Power(HP)	2	3	4	5	6	7	8				
排量 Displacement(CC/Rev)	37.2	50.6	63.9	84.5	98.9	108	127				
制冷剂 Refrigerant	R407C										
名义制冷量 Nominal Capacity(W)	6251	8503	10738	14200	17491	19100	22200				
名义输入功率 Nominal Power(W)	1981	2695	3403	4500	5495	6000	6970				
名义工况能效比 COP(W/W)	3.15	3.15	3.15	3.15	3.18	3.18	3.18				
名义工况电流 Nominal Operating Current(A)	3.7	4.9	6.3	8.3	9.8	11.1	13				
堵转电流LRA(A)	45	45	45	60	60	110	117				
最大运行电流MOC(A)	5.2	7.0	8.6	11.7	14.4	16.3	17.3				
曲轴箱加热器功率 Crankcase Heater(W)	70	70	70	70	70	70	90				
接管内径尺寸 Fitting ID Size(mm)	排气管 Dis.Tube	12.94-13.10					22.37-22.51				
	吸气管 Suc.Tube	22.37-22.51					34.97-35.10				
外形尺寸 Dimension(mm)	长(L)	244.4		233.63		281.4					
	宽(W)	230.5		230.5		273.7					
	高(H)	403.4		442.7		523.7					
底脚安装尺寸(孔径) Mounting Dim.(Dia.)(mm)	190.5x190.5(9.0)					190.5x190.5(8.5)					
润滑油类型 Lubrication Oil	POE										
润滑油初次充注量 Lubrication Oil Initial Charge(L)	1.4	1.4	1.4	1.8	1.8	1.8	3.0				
润滑油重新充注量(L) Lubrication Oil Recharge(L)	1.2	1.2	1.2	1.6	1.6	1.6	2.8				
最大工作压力 Maximum Operating Pressure(MPa)											
高压侧 High Pressure Side	3.0										
低压侧 Low Pressure Side	2.0										
重量 Weight(kg)	28	28	28	37	38	38	66				

注：蒸发温度7.2°C，冷凝温度54.4°C，回气温度18.3°C，过冷度8.3°C

Note: Evaporating Temperature 7.2°C, Condensing Temperature 54.4°C, Return Gas Temperature 18.3°C, Subcooling 8.3°C

## R407C

## 技术参数

### Specifications

#### 技术参数 SPECIFICATIONS

型号 Model	WR108KE-TFD-NN1	WR125KE-TFD-NN1	WR144KE-TFD-NN1	WR160KE-TFD-GN1	WR190KE-TFD-GN1	WR250KE-TWD-GN1	WR310KE-TWD-GN1					
电制 Motor Power	380-420V/3~50Hz or 460V/3~60Hz											
名义功率 Nominal Power(HP)	9	10	12	13	15	20	25					
排量 Displacement(CC/Rev)	147.7	167.2	190.8	209	248.9	325	400					
制冷剂 Refrigerant	R407C											
名义制冷量 Nominal Capacity(W)	26242	29620	33900	36644	43640	56983	70133					
名义输入功率 Nominal Power(W)	8133	9290	10506	11621	13840	18072	22242					
名义工况能效比 COP(W/W)	3.18	3.19	3.23	3.15	3.15	3.15	3.15					
名义工况电流 Nominal Operating Current(A)	14.7	16.2	17.9	19	22.6	29.5	38.5					
堵转电流LRA(A)	122	122	149	149	290	290						
最大运行电流MOC(A)	20.6	22.2	23.5	26.1	31.1	40.6	50.0					
曲轴箱加热器功率 Crankcase Heater(W)	90	90	90	90	90	90	90					
接管内径尺寸 Fitting ID Size(mm)	排气管 Dis.Tube	22.37-22.51					28.81-28.95					
	吸气管 Suc.Tube	34.97-35.10					34.97-35.10					
外形尺寸 Dimension(mm)	长(L)	281.4					337.34					
	宽(W)	273.7					333.77					
	高(H)	523.7					649.7					
底脚安装尺寸(孔径) Mounting Dim.(Dia.)(mm)	190.5x190.5(8.5)											
润滑油类型 Lubrication Oil	POE											
润滑油初次充注量 Lubrication Oil Initial Charge(L)	3	3	3.2	3.2	3.2	5	5					
润滑油重新充注量(L) Lubrication Oil Recharge(L)	2.8	2.8	3	3	3	4.8	4.8					
最大工作压力 Maximum Operating Pressure(MPa)												
高压侧 High Pressure Side	3.0											
低压侧 Low Pressure Side	2.0											
重量 Weight(kg)	66	66	66	66	66	92	92					

注：蒸发温度7.2°C，冷凝温度54.4°C，回气温度18.3°C，过冷度8.3°C

Note: Evaporating Temperature 7.2°C, Condensing Temperature 54.4°C, Return Gas Temperature 18.3°C, Subcooling 8.3°C

## 技术参数

### Specifications

技术参数 SPECIFICATIONS

型号 Model	WR28KP-TFD-NN1	WR36KP-TFD-NN1	WR48KP-TFD-NN1	WR61KP-TFD-NN1	WR72KP-TFD-NN1	WR81KP-TFD-NN1	WR94KP-TFD-NN1						
电制 Motor Power	380-420V/3~/50Hz or 460V/3~/60Hz												
名义功率 Nominal Power(HP)	2	3	4	5	6	7	8						
排量 Displacement(CC/Rev)	26.7	36	48	63.9	67.1	77.2	84.5						
制冷剂 Refrigerant	R410A												
名义制冷量 Nominal Capacity(W)	7079	9545	12726	16942	17790	20468	22403						
名义输入功率 Nominal Power(W)	2280	3074	4099	5457	5730	6592	7216						
名义工况能效比 COP(W/W)	3.1	3.1	3.1	3.1	3.1	3.1	3.1						
名义工况电流 Nominal Operating Current(A)	4.3	5.8	7.6	9.8	10.2	10.8	11.8						
堵转电流LRA(A)	45	45	45	60	85	85	85						
最大运行电流MOC(A)	5.1	6.9	9.2	12.0	12.6	14.5	15.8						
曲轴箱加热器功率 Crankcase Heater(W)	70	70	70	70	70	70	70						
接管内径尺寸 Fitting ID Size(mm)	排气管 Dis.Tube 吸气管 Suc.Tube	12.94-13.10 22.37-22.51											
外形尺寸 Dimension(mm)	长(L) 宽(W) 高(H)	244.4 230.5 403.4		233.63 230.5 442.7									
底脚安装尺寸(孔径) Mounting Dim.(Dia.)(mm)	190.5x190.5(9.0)												
润滑油类型 Lubrication Oil	POE												
润滑油初次充注量 Lubrication Oil Initial Charge(L)	1.4	1.4	1.4	1.4	1.8	1.8	1.8						
润滑油重新充注量(L) Lubrication Oil Recharge(L)	1.2	1.2	1.2	1.2	1.6	1.6	1.6						
最大工作压力 Maximum Operating Pressure(MPa)													
高压侧 High Pressure Side	4.3												
低压侧 Low Pressure Side	2.0												
重量 Weight(kg)	28	28	28	30	38	38	38						

注：蒸发温度7.2°C，冷凝温度54.4°C，回气温度18.3°C，过冷度8.3°C

Note: Evaporating Temperature 7.2°C, Condensing Temperature 54.4°C, Return Gas Temperature 18.3°C, Subcooling 8.3°C

## R410A

## 技术参数

### Specifications

制冷量 COOLING CAPACITY

型号 Model	WR108KP-TFD-NN1	WR125KP-TFD-NN1	WR144KP-TFD-NN1	WR154KP-TFD-NN1	WR190KP-TFD-GN1	WR235KP-TWD-GN1	WR292KP-TWD-GN1						
电制 Motor Power	380-420V/3~/50Hz or 460V/3~/60Hz												
名义功率 Nominal Power(HP)	9	10	12	13	15	20	25						
排量 Displacement(CC/Rev)	98.9	112	127	143.1	167.2	220	262.8						
制冷剂 Refrigerant	R410A												
名义制冷量 Nominal Capacity(W)	26221	29694	33671	37940	44330	59855	71500						
名义输入功率 Nominal Power(W)	8446	9196	10428	11750	13729	18141	21670						
名义工况能效比 COP(W/W)	3.1	3.23	3.23	3.23	3.3	3.3	3.3						
名义工况电流 Nominal Operating Current(A)	15.1	15.7	17.1	20.0	23.4	32.4	38.7						
堵转电流LRA(A)	122	149	149	149	290	290	290						
最大运行电流MOC(A)	18.5	21.1	23.8	26.8	31.3	46.0	55.0						
曲轴箱加热器功率 Crankcase Heater(W)	90	90	90	90	90	90	90						
接管内径尺寸 Fitting ID Size(mm)	排气管 Dis.Tube 吸气管 Suc.Tube	22.37-22.51 34.97-35.10											
外形尺寸 Dimension(mm)	长(L) 宽(W) 高(H)	281.4 273.7 523.7											
底脚安装尺寸(孔径) Mounting Dim.(Dia.)(mm)	190.5x190.5(8.5)												
润滑油类型 Lubrication Oil	POE												
润滑油初次充注量 Lubrication Oil Initial Charge(L)	1.8	3	3	3	3	5	5						
润滑油重新充注量(L) Lubrication Oil Recharge(L)	1.6	2.8	2.8	2.8	2.8	4.8	4.8						
最大工作压力 Maximum Operating Pressure(MPa)													
高压侧 High Pressure Side	4.3												
低压侧 Low Pressure Side	2.0												
重量 Weight(kg)	43	66	66	66	66	92	92						

注：蒸发温度7.2°C，冷凝温度54.4°C，回气温度18.3°C，过冷度8.3°C

Note: Evaporating Temperature 7.2°C, Condensing Temperature 54.4°C, Return Gas Temperature 18.3°C, Subcooling 8.3°C

# 制冷量-R22

Cooling Capacity - R22

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR28KM-TFD-NN1	Q	65°C						5332	6409	
	P							2442	2491	
WR36KM-TFD-NN1	Q	60°C					4607	5630	6757	
	P						2160	2194	2250	
WR48KM-TFD-NN1	Q	55°C				3940	4895	5965	7135	
	P					1914	1940	1980	2042	
WR61KM-TFD-NN1	Q	50°C			3337	4210	5209	6320	7529	
	P				1696	1721	1750	1794	1861	
WR28KM-TFD-NN1	Q	45°C			2801	3579	4494	5532	6679	7922
	P				1497	1527	1553	1585	1631	1700
WR36KM-TFD-NN1	Q	40°C		2339	3008	3825	4776	5847	7026	8297
	P			1308	1349	1378	1405	1437	1485	1555
WR48KM-TFD-NN1	Q	35°C	1954	2501	3206	4057	5040	6140	7344	8639
	P		1120	1179	1218	1246	1271	1302	1348	1418
WR61KM-TFD-NN1	Q	30°C	2064	2644	3381	4261	5269	6393	7619	8932
	P		1007	1062	1098	1122	1145	1173	1217	1284
WR28KM-TFD-NN1	Q	25°C	2144	2753	3516	4419	5449	6591	7832	9158
	P		903	953	983	1003	1020	1044	1083	1146
WR36KM-TFD-NN1	Q	65°C					7252	8718		
	P						3322	3388		
WR48KM-TFD-NN1	Q	60°C				6266	7658	9190		
	P					2938	2984	3060		
WR61KM-TFD-NN1	Q	55°C			5360	6659	8113	9705		
	P				2604	2639	2693	2777		
WR28KM-TFD-NN1	Q	50°C			4538	5726	7085	8596	10241	
	P				2307	2340	2381	2440	2531	
WR36KM-TFD-NN1	Q	45°C			3810	4868	6112	7524	9085	10775
	P				2037	2076	2112	2156	2219	2313
WR48KM-TFD-NN1	Q	40°C		3181	4091	5202	6496	7954	9557	11286
	P			1779	1835	1875	1911	1955	2019	2115
WR61KM-TFD-NN1	Q	35°C	2658	3402	4361	5519	6855	8352	9990	11751
	P		1523	1603	1656	1694	1729	1771	1834	1929
WR28KM-TFD-NN1	Q	30°C	2807	3597	4599	5796	7167	8696	10363	12149
	P		1370	1445	1493	1527	1557	1596	1655	1746
WR36KM-TFD-NN1	Q	25°C	2916	3744	4782	6011	7411	8965	10653	12457
	P		1228	1296	1337	1364	1388	1420	1474	1559

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R22

Cooling Capacity - R22

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR28KM-TFD-NN1	Q	65°C							9158	11009
	P								4195	4278
WR36KM-TFD-NN1	Q	60°C							7914	9671
	P								3710	3768
WR48KM-TFD-NN1	Q	55°C							6768	10246
	P								3288	3401
WR61KM-TFD-NN1	Q	50°C							5731	12933
	P								2914	3082
WR28KM-TFD-NN1	Q	45°C							4811	11473
	P								2572	13608
WR36KM-TFD-NN1	Q	40°C							4017	12069
	P								2247	14253
WR48KM-TFD-NN1	Q	35°C							3357	12616
	P								1923	14840
WR61KM-TFD-NN1	Q	30°C							3545	13087
	P								1730	15342
WR28KM-TFD-NN1	Q	25°C							3682	13453
	P								1551	15732
WR36KM-TFD-NN1	Q	65°C								12111
	P									5548
WR48KM-TFD-NN1	Q	60°C								10465
	P									4907
WR61KM-TFD-NN1	Q	55°C								8950
	P									4348
WR28KM-TFD-NN1	Q	50°C								7579
	P									3853
WR36KM-TFD-NN1	Q	45°C								6362
	P									3401
WR48KM-TFD-NN1	Q	40°C								5312
	P									2971
WR61KM-TFD-NN1	Q	35°C								4440
	P									2543
WR28KM-TFD-NN1	Q	30°C								4688
	P									2287
WR36KM-TFD-NN1	Q	25°C								4869
	P									2051

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R22

Cooling Capacity - R22

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR72KM-TFD-NN1	Q	65°C						14175	17039	
	P							6493	6622	
	Q	60°C					12248	14968	17963	
	P						5743	5832	5981	
	Q	55°C				10476	13015	15858	18970	
	P					5090	5158	5263	5429	
	Q	50°C			8871	11192	13848	16802	20017	
	P				4510	4575	4654	4770	4947	
	Q	45°C			7447	9515	11947	14706	17757	21061
	P				3980	4058	4128	4213	4336	4521
	Q	40°C		6217	7996	10168	12697	15546	18679	22059
	P			3477	3586	3664	3735	3822	3947	4134
	Q	35°C	5196	6649	8525	10787	13398	16324	19526	22969
	P		2977	3134	3237	3311	3379	3462	3585	3770
	Q	30°C	5487	7030	8989	11328	14009	16997	20255	23746
	P		2677	2824	2919	2984	3043	3119	3235	3413
	Q	25°C	5699	7319	9347	11749	14486	17522	20822	24349
	P		2401	2533	2614	2666	2712	2776	2880	3048
WR81KM-TFD-NN1	Q	65°C					15479	18607		
	P						7091	7231		
	Q	60°C				13375	16345	19616		
	P					6271	6369	6532		
	Q	55°C			11439	14212	17317	20715		
	P				5558	5633	5748	5928		
	Q	50°C			9687	12222	15122	18348	21859	
	P				4925	4995	5082	5209	5402	
	Q	45°C		8132	10391	13046	16060	19390	22999	
	P			4347	4432	4508	4601	4735	4937	
	Q	40°C	6789	8732	11104	13865	16976	20398	24089	
	P		3797	3916	4001	4079	4173	4310	4514	
	Q	35°C	5674	7261	9309	11779	14631	17826	21322	25082
	P		3250	3422	3535	3616	3690	3781	3915	4117
	Q	30°C	5992	7677	9817	12370	15298	18561	22118	25931
	P		2923	3084	3187	3258	3323	3406	3532	3727
	Q	25°C	6223	7992	10207	12830	15818	19135	22738	26589
	P		2621	2766	2854	2911	2962	3031	3145	3328

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R22

Cooling Capacity - R22

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR94KM-TFD-NN1	Q	65°C							18202	21880
	P								8338	8503
	Q	60°C							15728	19221
	P								7374	7681
	Q	55°C			10476	13015	15858	18970		
	P				5090	5158	5263	5429		
	Q	50°C			8871	11192	13848	16802	20017	
	P				4510	4575	4654	4770	4947	
	Q	45°C			7447	9515	11947	14706	17757	21061
	P				3980	4058	4128	4213	4336	4521
	Q	40°C	6217	7996	10168	12697	15546	18679	22059	
	P		3477	3586	3664	3735	3822	3947	4134	
	Q	35°C	5196	6649	8525	10787	13398	16324	19526	22969
	P		2977	3134	3237	3311	3379	3462	3585	3770
	Q	30°C	5487	7030	8989	11328	14009	16997	20255	23746
	P		2677	2824	2919	2984	3043	3119	3235	3413
	Q	25°C	5699	7319	9347	11749	14486	17522	20822	24349
	P		2401	2533	2614	2666	2712	2776	2880	3048
WR108KM-TFD-NN1	Q	65°C							21169	25447
	P								9697	9889
	Q	60°C							18292	22354
	P								8576	8933
	Q	55°C							15645	19436
	P								7601	7703
	Q	50°C							13248	16715
	P								6735	6832
	Q	45°C							11121	14210
	P								5945	6061
	Q	40°C							9285	11942
	P								5193	5356
	Q	35°C							7760	9930
	P								4445	4680
	Q	30°C							8195	10499
	P								3998	4218
	Q	25°C							8511	10930
	P								3585	3783

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R22

Cooling Capacity - R22

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR125KM-TFD-NN1	Q	65°C						23964	28806	
	P							10978	11195	
	Q	60°C					20707	25305	30368	
	P						9709	9860	10112	
	Q	55°C				17710	22002	26810	32070	
	P					8604	8720	8898	9177	
	Q	50°C			14997	18922	23412	28405	33840	
	P				7625	7734	7867	8064	8363	
	Q	45°C			12589	16086	20198	24863	30019	35606
	P				6729	6861	6980	7123	7331	7643
	Q	40°C		10511	13518	17190	21465	26282	31578	37293
	P			5879	6063	6195	6315	6461	6672	6988
	Q	35°C	8785	11241	14412	18236	22651	27597	33010	38831
	P		5032	5297	5473	5598	5712	5853	6060	6373
	Q	30°C	9277	11886	15198	19151	23684	28735	34242	40145
	P		4526	4774	4934	5045	5144	5273	5468	5770
	Q	25°C	9634	12373	15803	19862	24489	29623	35202	41164
	P		4058	4282	4419	4507	4585	4693	4869	5153
WR144KM-TFD-NN1	Q	65°C					27346	32872		
	P						12527	12775		
	Q	60°C				23629	28876	34655		
	P					11079	11252	11540		
	Q	55°C			20210	25108	30594	36597		
	P				9819	9951	10154	10473		
	Q	50°C		17113	21593	26716	32415	38617		
	P			8701	8825	8978	9202	9544		
	Q	45°C		14366	18357	23049	28372	34256	40631	
	P			7679	7830	7965	8129	8366	8721	
	Q	40°C	11995	15426	19617	24495	29991	36036	42557	
	P		6708	6918	7069	7206	7373	7614	7975	
	Q	35°C	10024	12827	16446	20810	25849	31492	37670	44311
	P		5743	6045	6246	6389	6518	6679	6916	7273
	Q	30°C	10586	13563	17343	21854	27027	32791	39076	45811
	P		5165	5448	5631	5757	5871	6017	6240	6585
	Q	25°C	10994	14119	18033	22665	27946	33804	40171	46974
	P		4631	4887	5042	5143	5232	5355	5556	5880

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R22

Cooling Capacity - R22

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR160KM-TFD-NN1	Q	65°C							29954	36008
	P								13722	13993
	Q	60°C							25883	31631
	P								12136	12325
	Q	55°C							22138	33512
	P								10755	11123
	Q	50°C							18746	23652
	P								9531	9834
	Q	45°C							15737	20108
	P								8412	8577
	Q	40°C							13139	16898
	P								7348	7578
	Q	35°C							10981	14051
	P								6290	6622
	Q	30°C							11596	14857
	P								5657	5968
	Q	25°C							12043	15466
	P								5073	5353
WR190KM-TFD-GN1	Q	65°C								35673
	P									16342
	Q	60°C								30825
	P									14453
	Q	55°C								26364
	P									12809
	Q	50°C								22325
	P									11350
	Q	45°C								18741
	P									10018
	Q	40°C								15647
	P									8751
	Q	35°C								13077
	P									7491
	Q	30°C								13810
	P									6738
	Q	25°C								14342
	P									6041

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R22

Cooling Capacity - R22

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR250KM-TFD-GN1	Q	65°C						46580	55993	
	P							21338	21760	
	Q	60°C						40249	49187	59029
	P							18872	19166	19656
	Q	55°C						34424	42768	52112
	P							16725	16950	17296
	Q	50°C						29150	36780	45508
	P							14821	15033	15292
	Q	45°C						24471	31268	39260
	P							13080	13337	13567
	Q	40°C						20431	26276	33414
	P							11427	11784	12042
WR310KM-TFD-GN1	Q	35°C						17075	21850	28013
	P							9782	10297	10639
	Q	30°C						18032	23103	29541
	P							8797	9280	9591
	Q	25°C						18727	24050	30717
	P							7888	8324	8589
	Q	65°C								57329
	P									68915
	Q	60°C								26263
	P									26781
	Q	55°C								49537
	P									60538
	Q	50°C								72651
	P									23227
	Q	45°C								42368
	P									52637
	Q	40°C								64138
	P									76723
	Q	35°C								18241
	P									18502
	Q	30°C								35877
	P									45267
	Q	25°C								56009
	P									67955
	Q	20°C								80958
	P									85181
	Q	15°C								30118
	P									38484
	Q	10°C								48320
	P									59480
	Q	5°C								71816
	P									85181
	Q	0°C								16697
	P									17041
	Q	-5°C								17539
	P									18283
	Q	-10°C								25146
	P									32340
	Q	-15°C								41125
	P									51352
	Q	-20°C								62875
	P									75546
	Q	-25°C								89218
	P									15456
	Q	-30°C								15962
	P									16718
	Q	-35°C								21016
	P									26892
	Q	-40°C								34478
	P									43627
	Q	-45°C								54190
	P									66021
	Q	-50°C								78972
	P									92896
	Q	-55°C								12039
	P									12673
	Q	-60°C								13094
	P									13393
	Q	-65°C								13665
	P									14002
	Q	-70°C								14498
	P									15247
	Q	-75°C								22193
	P									28435
	Q	-80°C								36358
	P									45815
	Q	-85°C								56660
	P									68744
	Q	-90°C								81920
	P									96041
	Q	-95°C								10828
	P									11422
	Q	-100°C								11804
	P									12068
	Q	-105°C								12307
	P									12614
	Q	-110°C								13082
	P									13805
	Q	-115°C								23049
	P									29600
	Q	-120°C								37805
	P									47517
	Q	-125°C								58587
	P									70869
	Q	-130°C								84215
	P									98478
	Q	-135°C								9709
	P									10244
	Q	-140°C								10571
	P									

# 制冷量-R407C

Cooling Capacity - R407C

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR48KE-TFD-NN1	Q	65°C						8273	10232	
	P							4209	4279	
	Q	60°C					7230	9026	11117	
	P						3732	3803	3858	
	Q	55°C					6216	7852	9761	11976
	P						3301	3374	3427	3473
	Q	50°C				5246	6724	8456	10471	12801
	P					2909	2986	3039	3081	3124
	Q	45°C			4334	5659	7215	9034	11147	13585
	P				2552	2635	2690	2729	2765	2811
WR61KE-TFD-NN1	Q	40°C		3495	4670	6055	7681	9579	11782	14319
	P			2225	2316	2374	2413	2444	2480	2535
	Q	35°C	2744	3772	4989	6426	8113	10084	12368	14997
	P		1923	2024	2088	2128	2156	2185	2228	2298
	Q	30°C	2981	4033	5284	6764	8505	10539	12897	15611
	P		1755	1826	1869	1896	1919	1953	2008	2099
	Q	25°C	3202	4270	5546	7062	8849	10939	13363	16152
	P		1584	1631	1659	1679	1704	1748	1822	1940
	Q	65°C					10940	13531		
	P						5565	5658		
WR72KE-TFD-NN1	Q	60°C					9561	11936	14701	
	P						4936	5029	5102	
	Q	55°C				8220	10383	12908	15836	
	P					4365	4462	4532	4593	
	Q	50°C			6937	8892	11181	13846	16927	
	P				3847	3949	4019	4074	4131	
	Q	45°C			5731	7483	9541	11946	14740	17964
	P				3374	3485	3557	3609	3656	3717
	Q	40°C		4621	6175	8007	10157	12667	15580	18936
	P			2942	3063	3140	3191	3232	3280	3352
WR81KE-TFD-NN1	Q	35°C	3629	4989	6598	8497	10729	13334	16355	19832
	P		2544	2677	2761	2814	2851	2889	2946	3038
	Q	30°C	3942	5334	6987	8945	11247	13937	17055	20643
	P		2321	2415	2471	2507	2538	2582	2656	2776
	Q	25°C	4234	5646	7334	9338	11702	14465	17671	21359
	P		2094	2157	2194	2220	2254	2311	2409	2565

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R407C

Cooling Capacity - R407C

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR48KE-TFD-NN1	Q	65°C							12804	15837
	P								6514	6623
	Q	60°C							11190	13970
	P								17206	5972
	Q	55°C							9621	12152
	P								5109	5222
	Q	50°C							16206	19812
	P								4502	4622
	Q	45°C							4704	4834
	P								17252	21025
WR61KE-TFD-NN1	Q	40°C							6707	8758
	P								4078	4163
	Q	35°C							4224	4279
	P								4350	4350
	Q	30°C							5409	7228
	P								3444	3585
	Q	25°C							3293	3735
	P								3382	3839
	Q	20°C							3448	3556
	P								3556	3556
WR72KE-TFD-NN1	Q	65°C							13982	17294
	P								7113	7232
	Q	60°C							12220	15255
	P								6308	6428
	Q	55°C							10506	13271
	P								5702	5792
	Q	50°C							8866	11365
	P								4916	5047
	Q	45°C							7324	9564
	P								4454	4546
	Q	40°C							5907	7893
	P								4013	4078
WR81KE-TFD-NN1	Q	35°C							17697	21635
	P								4131	4673
	Q	30°C							4673	4750
	P								4750	4750
	Q	25°C							5907	7893
	P								3760	3914
	Q	20°C							4013	4078
	P								4131	4192
	Q	15°C							4192	4285
	P								4285	4285

# 制冷量-R407C

Cooling Capacity - R407C

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR94KE-TFD-NN1	Q	65°C						16442	20336	
	P							8364	8504	
	Q	60°C					14370	17939	22094	
	P						7418	7559	7668	
	Q	55°C				12355	15605	19400	23801	
	P					6560	6706	6811	6903	
	Q	50°C			10426	13365	16805	20810	25441	
	P				5781	5935	6040	6123	6208	
	Q	45°C			8613	11247	14340	17955	22154	26999
	P				5072	5237	5346	5424	5495	5586
	Q	40°C		6946	9281	12034	15265	19039	23416	28459
	P			4422	4603	4719	4796	4857	4930	5038
	Q	35°C	5454	7498	9916	12771	16125	20041	24581	29807
	P		3823	4023	4150	4229	4285	4343	4428	4566
	Q	30°C	5925	8016	10501	13443	16904	20947	25633	31026
	P		3488	3630	3714	3768	3815	3881	3991	4171
	Q	25°C	6364	8486	11022	14035	17587	21741	26558	32102
	P		3148	3242	3297	3337	3387	3474	3621	3855
WR108KE-TFD-NN1	Q	65°C					19122	23651		
	P						9728	9890		
	Q	60°C					16712	20863	25696	
	P						8627	8791	8918	
	Q	55°C				14368	18149	22562	27681	
	P					7630	7799	7922	8028	
	Q	50°C			12125	15543	19544	24202	29588	
	P				6724	6902	7025	7121	7220	
	Q	45°C			10017	13080	16677	20881	25765	31400
	P				5898	6091	6218	6308	6391	6497
	Q	40°C		8078	10794	13995	17753	22142	27232	33098
	P			5143	5353	5488	5577	5649	5733	5860
	Q	35°C	6343	8720	11532	14853	18754	23308	28587	34665
	P		4446	4679	4827	4918	4983	5050	5150	5311
	Q	30°C	6891	9323	12213	15635	19660	24361	29811	36083
	P		4057	4221	4320	4382	4436	4513	4642	4851
	Q	25°C	7401	9869	12819	16323	20454	25285	30887	37334
	P		3661	3771	3834	3881	3939	4040	4211	4483

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R407C

Cooling Capacity - R407C

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR125KE-TFD-NN1	Q	65°C							21647	26773
	P								11012	11196
	Q	60°C							18918	23617
	P								9766	9952
	Q	55°C							16265	20545
	P								8637	8828
	Q	50°C							13726	17595
	P								7611	7814
	Q	45°C							11339	14807
	P								6677	7038
	Q	40°C							9144	12219
	P								5822	6060
	Q	35°C	7180	9871	13055	16813	21229	26385	32362	39242
	P		5033	5297	5464	5567	5641	5717	5830	6012
	Q	30°C	7801	10554	13825	17699	22255	27577	33747	40847
	P		4592	4778	4890	4960	5022	5109	5255	5492
	Q	25°C	8378	11172	14511	18478	23154	28623	34965	42263
	P		4144	4269	4340	4393	4459	4573	4767	5075
WR144KE-TFD-NN1	Q	65°C							24702	30552
	P								12566	12776
	Q	60°C							21589	26951
	P								11145	11356
	Q	55°C							18561	23445
	P								9856	10074
	Q	50°C							15663	20079
	P								8686	8916
	Q	45°C							12940	16897
	P								7619	7868
	Q	40°C							10435	13944
	P								6643	6916
	Q	35°C	8193	11264	14897	19187	24226	30109	36929	44781
	P		5743	6044	6235	6353	6437	6524	6653	6860
	Q	30°C	8902	12043	15777	20197	25397	31470	38511	46613
	P		5240	5453	5580	5660	5731	5830	5996	6267
	Q	25°C	9561	12749	16560	21086	26423	32663	39900	48229
	P		4729	4871	4953	5013	5089	5219	5440	5792

以上数据基于11.1K吸气过热度, 8.3K过冷度

# 制冷量-R407C

Cooling Capacity - R407C

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR160KE-TFD-NN1	Q	65°C						27058	33466	
	P							13765	13995	
	Q	60°C						23648	29521	36360
	P							12208	12440	12620
	Q	55°C						20332	25681	31926
	P							10796	11035	11209
	Q	50°C						17157	21994	27656
	P							9514	9767	9940
	Q	45°C						14174	18509	23599
	P							8346	8619	8798
	Q	40°C						11431	15274	19804
	P							7277	7575	7766
	Q	35°C						8975	12339	16318
	P							6291	6621	6830
	Q	30°C						9751	13192	17282
	P							5740	5973	6112
	Q	25°C						10473	13965	18139
	P							5180	5336	5425
WR190KE-TFD-GN1	Q	65°C						32224	39855	
	P							16393	16667	
	Q	60°C						28163	35157	43301
	P							14539	14814	15029
	Q	55°C						24213	30584	38021
	P							12857	13142	13349
	Q	50°C						20433	26193	32936
	P							11330	11631	11838
	Q	45°C						16880	22042	28104
	P							9940	10264	10478
	Q	40°C						13613	18190	23584
	P							8666	9021	9249
	Q	35°C						10688	14694	19434
	P							7492	7885	8134
	Q	30°C						11612	15710	20581
	P							6836	7113	7279
	Q	25°C						12472	16631	21602
	P							6169	6354	6461

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R407C

Cooling Capacity - R407C

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR250KE-TWD-GN1	Q	65°C								42076
	P									52041
	Q	60°C								21405
	P									21763
	Q	55°C								36773
	P									45906
	Q	50°C								56541
	P									18984
	Q	45°C								19344
	P									19624
	Q	40°C								31616
	P									39934
	Q	35°C								49645
	P									60909
	Q	30°C								16788
	P									17160
	Q	25°C								17431
	P									17664
WR310KE-TWD-GN1	Q	65°C								51786
	P									64051
	Q	60°C								26345
	P									26785
	Q	55°C								45260
	P									56500
	Q	50°C								23365
	P									69588
	Q	45°C								21120
	P									24153
	Q	40°C								38912
	P									49150
	Q	35°C								61102
	P									74964
	Q	30°C								20663
	P									21453
	Q	25°C								21740
	P									8056

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R410A

Cooling Capacity - R410A

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR28KP-TFD-NN1	Q	65°C						5432	6495	
	P							2741	2744	
	Q	60°C					4971	5982	7121	
	P						2463	2461	2471	
	Q	55°C				4472	5423	6500	7709	
	P					2214	2209	2213	2232	
	Q	50°C			3957	4840	5848	6986	8260	
	P				1989	1985	1986	1997	2023	
	Q	45°C			3445	4253	5185	6245	7439	8772
	P				1783	1784	1784	1791	1808	1842
WR36KP-TFD-NN1	Q	40°C	2958	3684	4531	5506	6614	7858	9244	
	P		1591	1599	1604	1609	1621	1646	1689	
	Q	35°C	2518	3153	3909	4791	5804	6953	8242	9677
	P		1408	1428	1439	1446	1456	1475	1507	1559
	Q	30°C	2682	3340	4121	5032	6077	7262	8590	10068
	P		1265	1285	1298	1310	1325	1350	1390	1451
	Q	25°C	2843	3516	4318	5252	6324	7539	8902	10417
	P		1138	1160	1176	1192	1212	1244	1292	1363
	Q	65°C					7324	8758		
	P						3696	3700		
WR48KP-TFD-NN1	Q	60°C				6703	8065	9601		
	P					3321	3318	3332		
	Q	55°C			6030	7312	8764	10394		
	P				2985	2979	2984	3009		
	Q	50°C			5335	6525	7885	9420	11137	
	P				2681	2677	2678	2692	2727	
	Q	45°C			4645	5734	6990	8420	10030	11827
	P				2404	2405	2406	2414	2438	2484
	Q	40°C		3989	4967	6110	7424	8917	10595	12464
	P			2145	2157	2162	2169	2186	2219	2277
	Q	35°C	3395	4252	5271	6460	7826	9374	11113	13047
	P		1899	1925	1940	1950	1964	1988	2032	2102
WR61KP-TFD-NN1	Q	30°C	3617	4503	5556	6785	8194	9791	11582	13574
	P		1705	1733	1751	1766	1787	1820	1874	1957
	Q	25°C	3833	4741	5822	7082	8527	10165	12002	14045
	P		1534	1564	1586	1607	1635	1677	1742	1838

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R410A

Cooling Capacity - R410A

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR48KP-TFD-NN1	Q	65°C							9766	11677
	P								4927	4933
	Q	60°C							8937	10754
	P								4428	4443
	Q	55°C							8040	9749
	P								3980	3979
	Q	50°C							7113	10513
	P								3575	3570
	Q	45°C							6193	7645
	P								3205	3208
WR61KP-TFD-NN1	Q	40°C							5318	6622
	P								2860	2875
	Q	35°C							4527	5669
	P								2532	2587
	Q	30°C							4822	6004
	P								2273	2311
	Q	25°C							5111	6322
	P								2046	2086
	Q	65°C								13000
	P									6560
WR36KP-TFD-NN1	Q	60°C								11897
	P									5895
	Q	55°C								10703
	P									5298
	Q	50°C								9469
	P									4760
	Q	45°C								8244
	P									4266
	Q	40°C								7080
	P									3807
	Q	35°C								6026
	P									3371
	Q	30°C								6420
	P									3026
	Q	25°C								6804
	P									2724

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R410A

Cooling Capacity - R410A

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR72KP-TFD-NN1	Q	65°C						13651	16324	
	P							6888	6896	
	Q	60°C					12493	15033	17895	
	P						6190	6184	6211	
	Q	55°C				11239	13628	16336	19374	
	P					5564	5552	5562	5608	
	Q	50°C			9943	12162	14696	17557	20758	
	P				4998	4989	4991	5018	5083	
	Q	45°C		8657	10688	13029	15694	18695	22045	
	P			4480	4482	4484	4500	4544	4630	
WR81KP-TFD-NN1	Q	40°C	7435	9257	11388	13838	16621	19748	23232	
	P		3998	4020	4030	4043	4074	4136	4244	
	Q	35°C	6328	7924	9825	12041	14587	17473	20713	24318
	P		3540	3589	3616	3635	3660	3706	3787	3918
	Q	30°C	6741	8393	10357	12646	15273	18249	21588	25301
	P		3178	3230	3263	3292	3330	3392	3493	3647
	Q	25°C	7145	8837	10851	13200	15894	18947	22371	26178
	P		2860	2916	2956	2995	3047	3126	3248	3425
	Q	65°C					15706	18781		
	P						7925	7934		
WR94KP-TFD-NN1	Q	60°C				14374	17296	20589		
	P					7122	7115	7145		
	Q	55°C			12931	15680	18795	22290		
	P				6401	6388	6400	6452		
	Q	50°C		11440	13993	16908	20200	23882		
	P			5750	5740	5742	5773	5848		
	Q	45°C		9960	12296	14990	18057	21509	25363	
	P			5154	5157	5159	5177	5228	5327	
	Q	40°C	8554	10651	13102	15921	19122	22720	26729	
	P		4600	4625	4637	4652	4687	4758	4882	
WR108KP-TFD-NN1	Q	35°C	7281	9117	11303	13854	16782	20103	23831	27979
	P		4072	4129	4160	4182	4211	4264	4357	4507
	Q	30°C	7756	9656	11915	14549	17571	20996	24837	29110
	P		3656	3716	3754	3787	3831	3903	4019	4196
	Q	25°C	8220	10167	12485	15186	18286	21799	25738	30119
	P		3290	3354	3401	3445	3505	3597	3737	3941

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R410A

Cooling Capacity - R410A

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR94KP-TFD-NN1	Q	65°C							17191	20557
	P								8674	8685
	Q	60°C							15733	18931
	P								7795	7821
	Q	55°C							14154	17162
	P								7007	7062
	Q	50°C							12522	15316
	P								6294	6283
	Q	45°C							10902	13459
	P								5642	5645
WR108KP-TFD-NN1	Q	40°C							11658	14341
	P								5035	5062
	Q	35°C							7969	9979
	P								4457	4520
	Q	30°C							8490	10569
	P								4002	4068
	Q	25°C							8997	11129
	P								3602	3672

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R410A

Cooling Capacity - R410A

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR125KP-TFD-NN1	Q	65°C						22786	27247	
	P							11497	11511	
	Q	60°C					20853	25093	29870	
	P						10332	10322	10366	
	Q	55°C				18760	22748	27267	32338	
	P					9287	9268	9284	9361	
	Q	50°C			16597	20301	24530	29306	34648	
	P				8342	8328	8331	8375	8485	
	Q	45°C			14450	17839	21748	26196	31205	36796
	P				7478	7482	7485	7511	7584	7729
WR144KP-TFD-NN1	Q	40°C		12410	15452	19008	23098	27742	32962	38778
	P			6673	6709	6727	6749	6799	6903	7083
	Q	35°C	10563	13227	16399	20099	24347	29165	34573	40591
	P		5908	5990	6035	6067	6109	6186	6322	6539
	Q	30°C	11252	14008	17287	21108	25492	30461	36033	42231
	P		5304	5391	5447	5494	5558	5662	5831	6087
	Q	25°C	11926	14751	18113	22032	26529	31625	37341	43695
	P		4774	4866	4933	4998	5085	5218	5421	5718
	Q	65°C					25838	30896		
	P						13037	13053		
WR190KP-TFD-GN1	Q	60°C				23646	28453	33870		
	P					11715	11705	11755		
	Q	55°C			21273	25794	30919	36669		
	P				10531	10509	10528	10614		
	Q	50°C			18819	23020	27816	33231	39288	
	P				9460	9443	9446	9497	9621	
	Q	45°C			16386	20229	24660	29705	35385	41724
	P				8480	8484	8487	8517	8600	8764
	Q	40°C		14072	17522	21554	26191	31458	37377	43971
	P			7567	7608	7627	7652	7710	7827	8032
WR154KP-TFD-NN1	Q	35°C	11977	14998	18595	22790	27608	33071	39203	46027
	P		6699	6793	6844	6880	6928	7015	7168	7415
	Q	30°C	12759	15885	19602	23935	28906	34540	40859	47887
	P		6015	6113	6176	6230	6303	6421	6612	6902
	Q	25°C	13523	16726	20538	24983	30082	35861	42341	49548
	P		5413	5518	5594	5668	5767	5917	6147	6483

以上数据基于11.1K吸气过热度, 8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

# 制冷量-R410A

Cooling Capacity - R410A

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR154KP-TFD-NN1	Q	65°C							29114	34812
	P								14690	14708
	Q	60°C							26643	32060
	P								13201	13188
	Q	55°C							23970	29064
	P								11866	11841
	Q	50°C							21205	25938
	P								10659	10640
	Q	45°C							18463	22793
	P								9554	9559
WR190KP-TFD-GN1	Q	40°C							35446	42115
	P								8526	8573
	Q	35°C	13496	16900	20952	25679	31108	37263	44173	51862
	P		7549	7654	7711	7752	7806	7904	8077	8355
	Q	30°C	14377	17898	22087	26969	32571	38919	46039	53958
	P		6777	6888	6959	7020	7102	7235	7450	7777
	Q	25°C	15237	18847	23142	28150	33896	40407	47709	55829
	P		6099	6218	6303	6386	6498	6667	6926	7305
	Q	65°C							34017	40675
	P								17164	17185
	Q	60°C							31130	37460
	P								15424	15409
	Q	55°C							28006	33959
	P								13864	13836
	Q	50°C							24776	30306
	P								12454	12432
	Q	45°C							21572	26632
	P								11164	11169
	Q	40°C							18526	23068
	P								9962	10016
	Q	35°C	15769	19746	24481	30004	36347	43539	51612	60597
	P		8820	8943	9010	9057	9121	9235	9437	9762
	Q	30°C	16798	20913	25807	31511	38056	45473	53793	63046
	P		7919	8048	8131	8202	8298	8453	8704	9087
	Q	25°C	17803	22021	27040	32891	39605	47212	55744	65231
	P		7126	7265	7365	7462	7592	7790	8093	85

# 制冷量-R410A

Cooling Capacity - R410A

制冷量 COOLING CAPACITY

型号 Model	项目 Item (W)	Tc\Te	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C
WR235KP-TWD-GN1	Q	65°C						44759	53520	
	P							22584	22611	
WR292KP-TWD-GN1	Q	60°C					40961	49289	58672	
	P						20295	20276	20363	
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	55°C				36850	44683	53560	63521	
	P					18242	18205	18237	18387	
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	50°C			32601	39876	48184	57565	68058	
	P				16387	16358	16364	16451	16666	
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	45°C			28385	35042	42719	51457	61296	72277
	P				14689	14696	14702	14754	14898	15181
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	40°C	24376	30352	37337	45371	54494	64747	76171	
	P		13108	13179	13213	13256	13356	13559	13914	
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	35°C	20748	25982	32212	39479	47825	57288	67911	79733
	P		11605	11767	11855	11918	12001	12152	12417	12845
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	30°C	22103	27517	33956	41462	50074	59833	70780	82955
	P		10419	10590	10699	10792	10918	11123	11453	11957
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	25°C	23425	28975	35578	43277	52111	62121	73347	85830
	P		9377	9559	9691	9818	9989	10250	10649	11231
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	65°C					53466	63932		
	P						26978	27010		
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	60°C				48930	58878	70087		
	P					24243	24220	24324		
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	55°C			44020	53376	63980	75879		
	P				21791	21746	21785	21964		
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	50°C		38943	47634	57558	68764	81299		
	P			19575	19541	19547	19651	19908		
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	45°C	33907	41859	51030	61468	73221	86338		
	P		17547	17556	17563	17624	17796	18134		
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	40°C	29119	36257	44601	54197	65095	77344	90990	
	P		15659	15743	15783	15835	15954	16197	16620	
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	35°C	24785	31036	38478	47160	57129	68434	81123	95244
	P		13863	14056	14162	14236	14335	14516	14833	15344
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	30°C	26403	32870	40562	49528	59816	71473	84550	99093
	P		12446	12650	12780	12892	13042	13286	13681	14283
WR28KM~WR48KM WR28KE~WR48KE WR28KP~WR61KP	Q	25°C	27982	34611	42500	51696	62249	74207	87617	102528
	P		11201	11419	11576	11729	11933	12244	12720	13416

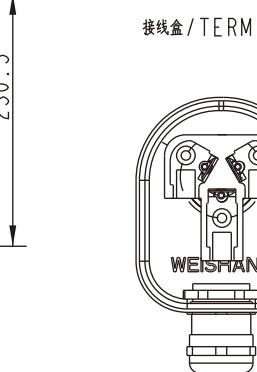
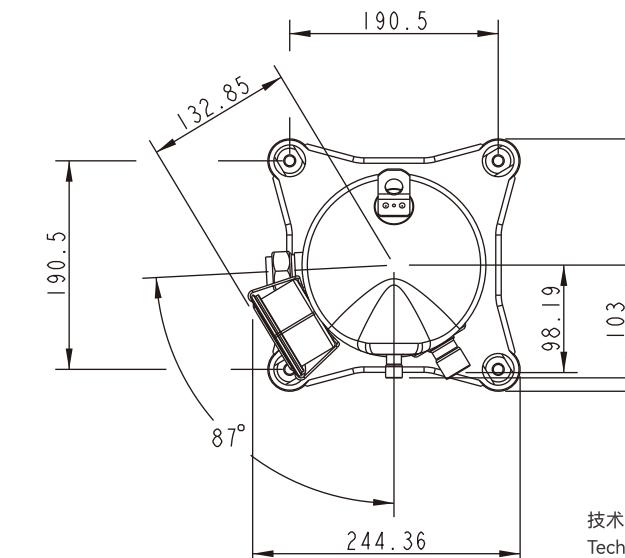
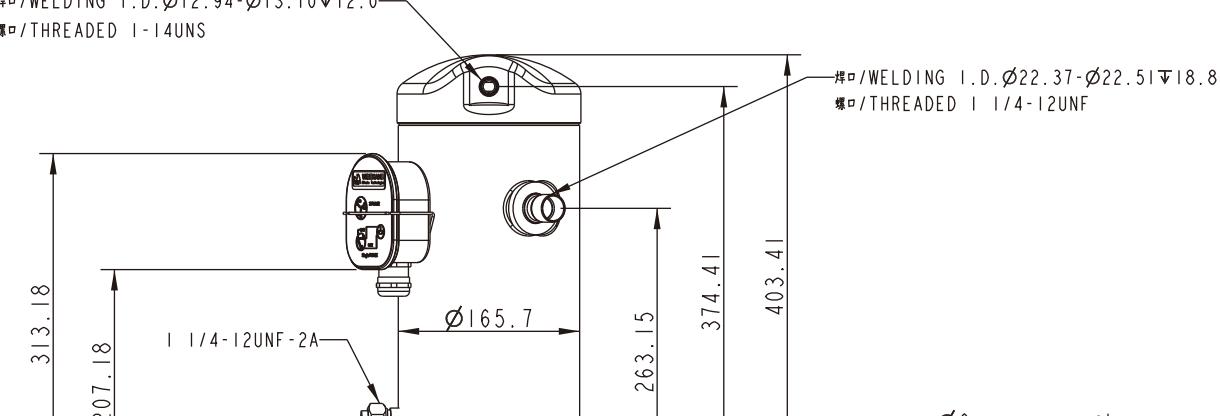
以上数据基于11.1K吸气过热度，8.3K过冷度

The above data are based on 11.1k supheating and 8.3K subcooling

WR28KM~WR48KM  
WR28KE~WR48KE  
WR28KP~WR61KP

外形尺寸

Dimensional Information



技术要求:

Technical requirements:

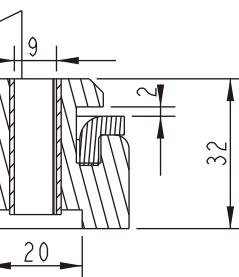
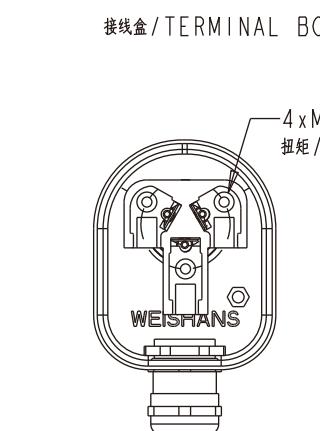
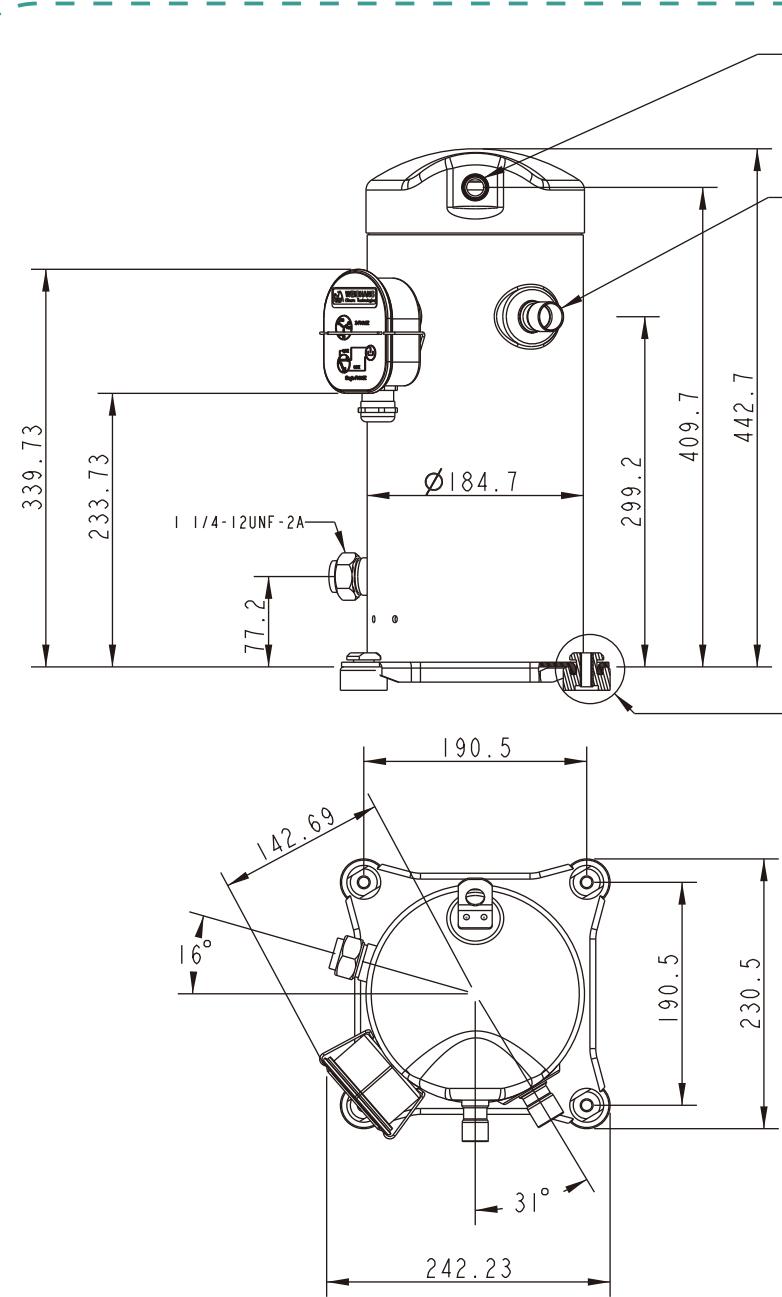
- 未注尺寸单位Unsized unit:mm
- 未注尺寸公差Undimensioned tolerance: $\pm 3\text{mm}$
- 未注角度公差Angle tolerance without injection: $\pm 3^\circ$

外形尺寸 DIMENSIONAL INFORMATION

# 外形尺寸

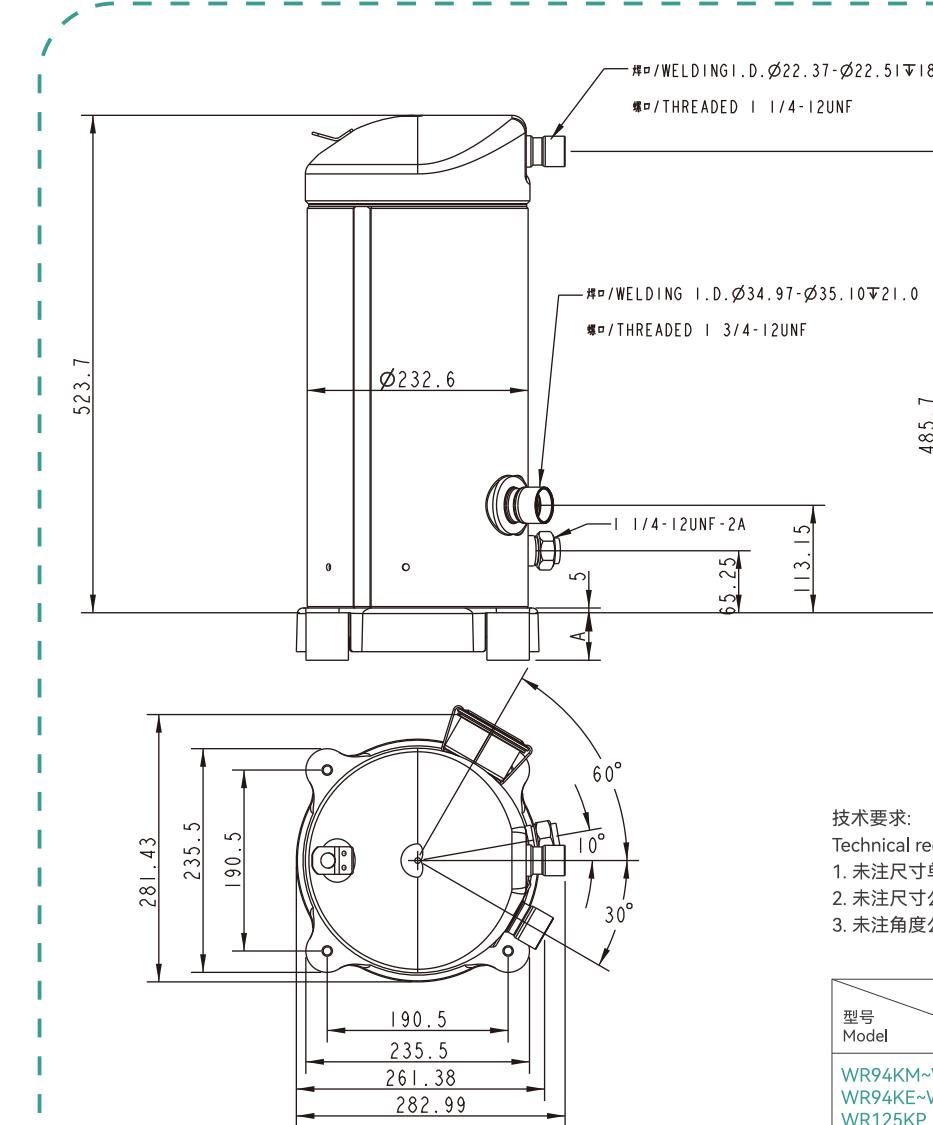
Dimensional Information

## 外形尺寸 DIMENSIONAL INFORMATION

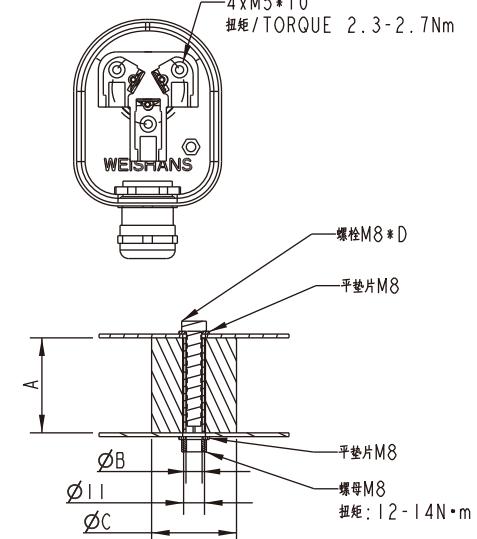


WR94KM~WR190KM  
WR94KE~WR190KE  
WR125KP~WR190KP

WR94KM~WR190KM  
WR94KE~WR190KE  
WR125KP~WR190KP



接线盒/TERMINAL BOX:



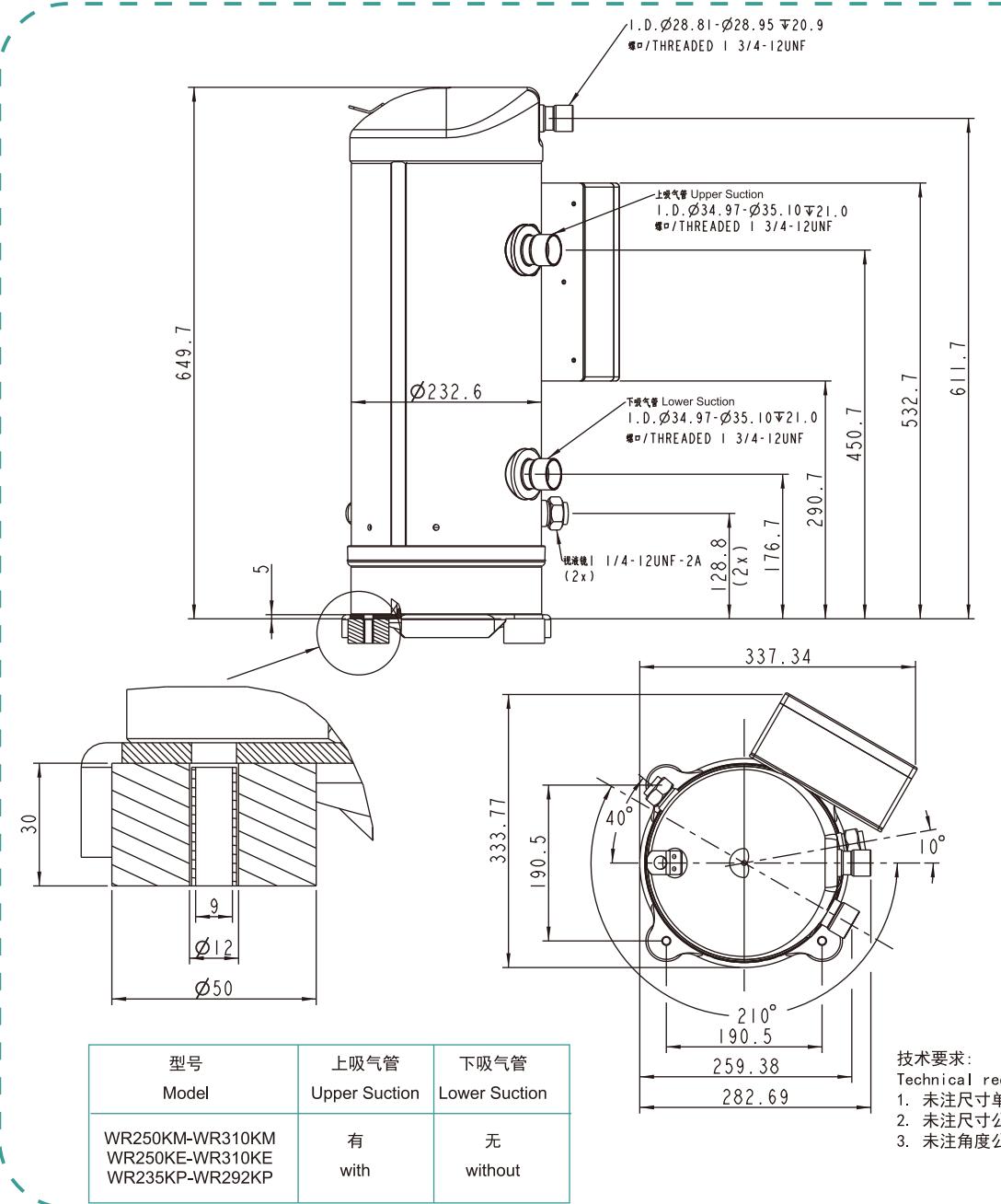
技术要求:  
Technical requirements:  
1. 未注尺寸单位Unsized unit: mm  
2. 未注尺寸公差Undimensioned tolerance:  $\pm 3$ mm  
3. 未注角度公差Angle tolerance without injection:  $\pm 3^\circ$

型号 Model	尺寸 Dimension A	B	C	D
WR94KM~WR125KM WR94KE~WR125KE WR125KP	30	9	50	50
WR144KM~WR190KM WR144KE~WR190KE WR144KP~WR190KP	50	8.5	45	70

# 外形尺寸

Dimensional Information

## 外形尺寸 DIMENSIONAL INFORMATION

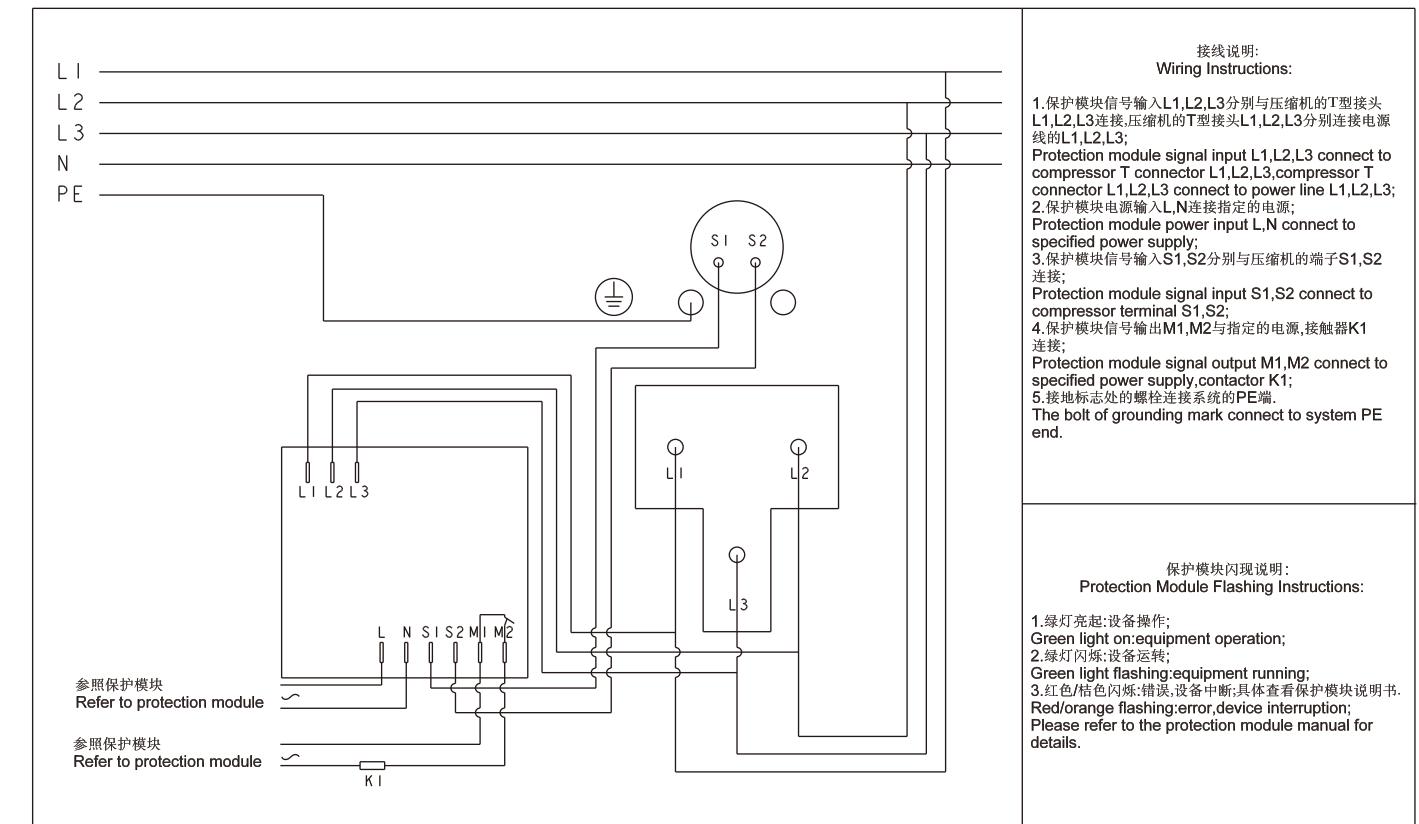


WR250KM~WR310KM  
WR250KE~WR310KE  
WR235KP~WR292KP

WR250KM~WR310KM  
WR250KE~WR310KE  
WR235KP~WR292KP

# 接线图

Wiring Diagram



## 接线图 WIRING DIAGRAM