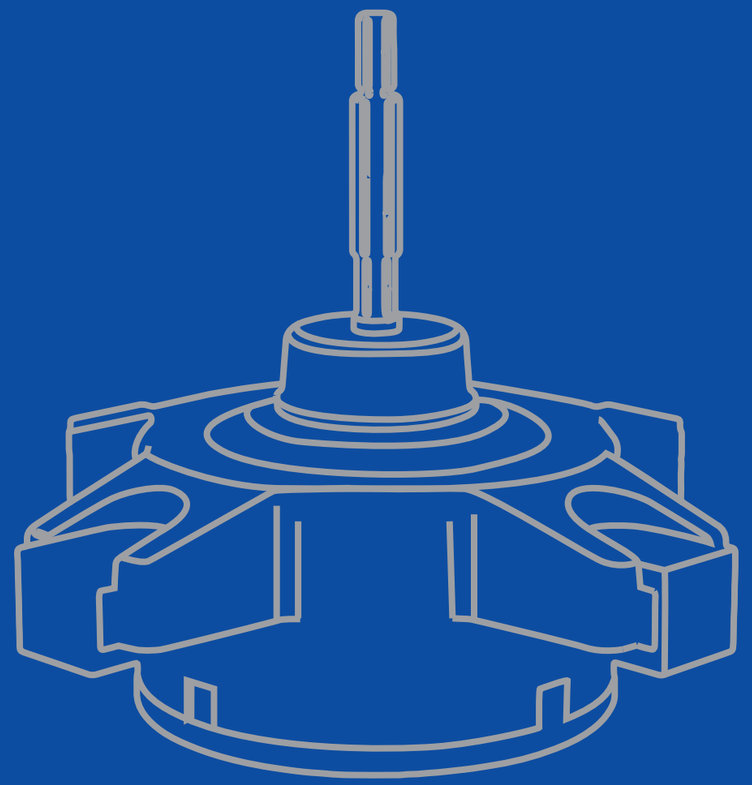
Welling

美好生活源动力

# 2021

# 威灵电机产品手册

MOTOR PRODUCT MANUAL



Welling

MOTIVITY OF A NICE LIFE

本资料相关技术数据仅供参考，实际数据以我司最新的产品规格书为准

The data of this catalog is for reference only,the actual data is subject to the latest specification document

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本手册印制于2020年12月，欲了解最新产品技术信息，请访问GMCC官方网站：www.gmcc-welling.com

This manual was printed in Dec. 2020. For technical details about the latest products, please visit GMCC website: www.gmcc-welling.com

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美好生活源动力


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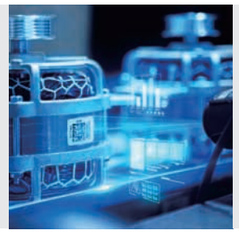




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# COMPANY
# PROFILE

# 公司简介

## 我们的企业
Company

Welling于1992年创建于广东顺德，是一家专业化研发、生产、销售电机及其驱动系统的精密制造企业，为国内外客户提供系统的电机技术解决方案；

Welling was founded in 1992, specializing in R&D and manufacturing of motors and their driving systems, its products are widely used in the fields of household appliances, cleaning equipment, pump products and industrial automation.

## 我们的产品应用
Product

Welling电机产品广泛应用于家用电器领域、清洁设备、泵类产品和工业自动化等领域，如各类空调、洗衣机、洗碗机、吸尘器、净水器等；

Welling motor products are widely used in the fields of household appliances, cleaning equipment, pump products and industrial automation, such as air conditioners, washing machines, dishwashers, vacuum cleaners, water purifiers, etc.

## 我们的体系
Market

四大电机制造基地五大工厂，2020冷年产销电机2.1亿台。其中，空调电机、洗衣机电机占市场份额分别超过34%和17%。

Four major motor manufacturing bases and five major factories, Welling achieved production and sales of 210million motors in 2020 refrigeration year , among which Air-conditioner motors and washing machine motors their market shares are 34% and 17% higher, respectively.

Welling




## 5个现代化工厂，年产能2.3亿台
5 modern factories, with an annual production capacity of 230 million units





广东顺德 Shunde, Guangdong



安徽芜湖 Wuhu, Anhui



江苏淮安 Huai'an, Jiangsu

Welling上海研发中心（CNAL测试验证中心）致力于高能效、低噪音、性能稳定电机方向的研究。

Welling Shanghai R&D Center (CNAL Test Verification Center) is committed to the study on the motors with high energy efficiency, low noise and stable performance.



上海 Shanghai

DEVELOPMENT

MILE

# 发展里程



**1998年**
佛山市威灵洗涤
电机制造有限公司成立

In 1998,
Foshan Welling Washing
Motor Manufacturing Co.,
Ltd. is established

**1992年**
广东威灵电机制造
有限公司成立

In 1992,
Company establishment

**1999年**
威灵（芜湖）电机制造
有限公司成立

In 1999,
Welling Motor Manufacturing
Co., Ltd. in Wuhu was founded



**2001年**
佛山市威灵电子电器
公司注册成立

In 2001,
Welling Electronics Co.,
Ltd. in Foshan was
registered to be founded

**2002年**
威灵( **Welling** )商标被认
定为"广东省著名商标"

In 2002,
Welling was identified as
"Famous Brand in
Guangdong"



**2004年**
淮安威灵电机制造
有限公司成立

In 2004,
Huai'an Welling Motor
Manufacturing Co., Ltd.
is established

**2006年**
威灵被认定为“中国名牌”

In 2006,
Chinese Famous Brand

**2011年**
威灵电机技术（上海）
有限公司成立

In 2011,
Welling Motor
Technology（Shanghai）
Co., Ltd. is established

**2013年**
常州新厂正式投产

In 2013,
Changzhou new plant
launched in use



**2014年**
入选中国外贸出口先
导样本企业

In 2014,
Selected as a China's ELI
(export leading index)
sample enterprise

**2016年**
设立“广东省企业
首席质量官”

In 2016,
"Guangdong Provincial
Enterprise CQO"
established

**2018年**
15万转高速BLDC
吸尘器电机研发成功
并正式发布

In 2018,
150,000 RPM high speed
motor for vacuum cleaner.

INNOVATIVE
TECHNOLOGIES

# 创新科技




**Welling一直致力于高能效、低噪音、性能可靠的电机研究，为客户提供系统的电机技术解决方案。**

Welling is always dedicated to developing high-efficiency, low-noise, and reliable-performance motors, and providing customers with systematic motor technology solutions.

## 研发能力
R&D Capability

Welling持续开发、引进先进技术，聘请外籍专家、高级工程师为技术研发主力，至2020年，公司规划投资2亿元用于研发中心科研创新工作，着力打造世界一流的研发机构，目前已有1250多项专利成功授权。

Welling is developing and importing advanced technologies, and hiring foreign experts and senior engineers as technical R&D team. Till 2020, the company has planned 200 million Yuan for the scientific and technologic innovation of the R&D center, and intending to build the center as a first-class R&D institute. Currently, the center has obtained more than 1250 patents.



## 研发系统
R&D System

Welling上海研发中心主要进行电机基础技术、可行技术及前瞻性技术研究；技术开发中心负责产品开发，通过全面的开发管理体系，确保产品的性能、品质以及成本满足客户要求。

Shanghai R&D center of Welling is mainly developing basic technologies, feasible technologies, and forward-looking technologies of motors. The center is responsible for developing products and ensuring that product performance, quality and cost meet customer requirements through the comprehensive development management system.




## 上海研发中心
Shanghai R&D Center

上海研发中心聘请国际著名电机及其驱动专家、英国皇家工程院院士诸自强教授担任研发中心主任，同时还聘请多名海内外博士、硕士加盟；形成以国际专家为带头人、硕士为主体的科研团队。研发中心不断开拓高新产品领域，打造自主的电机核心技术，以建设国际一流的研发机构为方向，为威灵电机快速稳步发展提供技术保障。

Shanghai R&D center hires Professor Zhu Ziqiang, international well-known motor and drive expert and academician of the Royal Academy of Engineering, as the director of the center, and many other foreign and domestic engineers holding doctoral or master degrees, which constitute an R&D team led by the international expert and consisting of mainly masters.



## 研发队伍建设
R&D Team Building

上海研发中心每年选拔并公派优秀员工到英国谢菲尔德大学攻读博士学位，促进企业人才培养成长，为威灵电机产品发展提供人才保障。

Shanghai R&D center selects and dispatches outstanding staff every year to University of Sheffield to study for a PhD, with an aim of promoting talent development and providing talent guarantee for the development of Welling motor products.

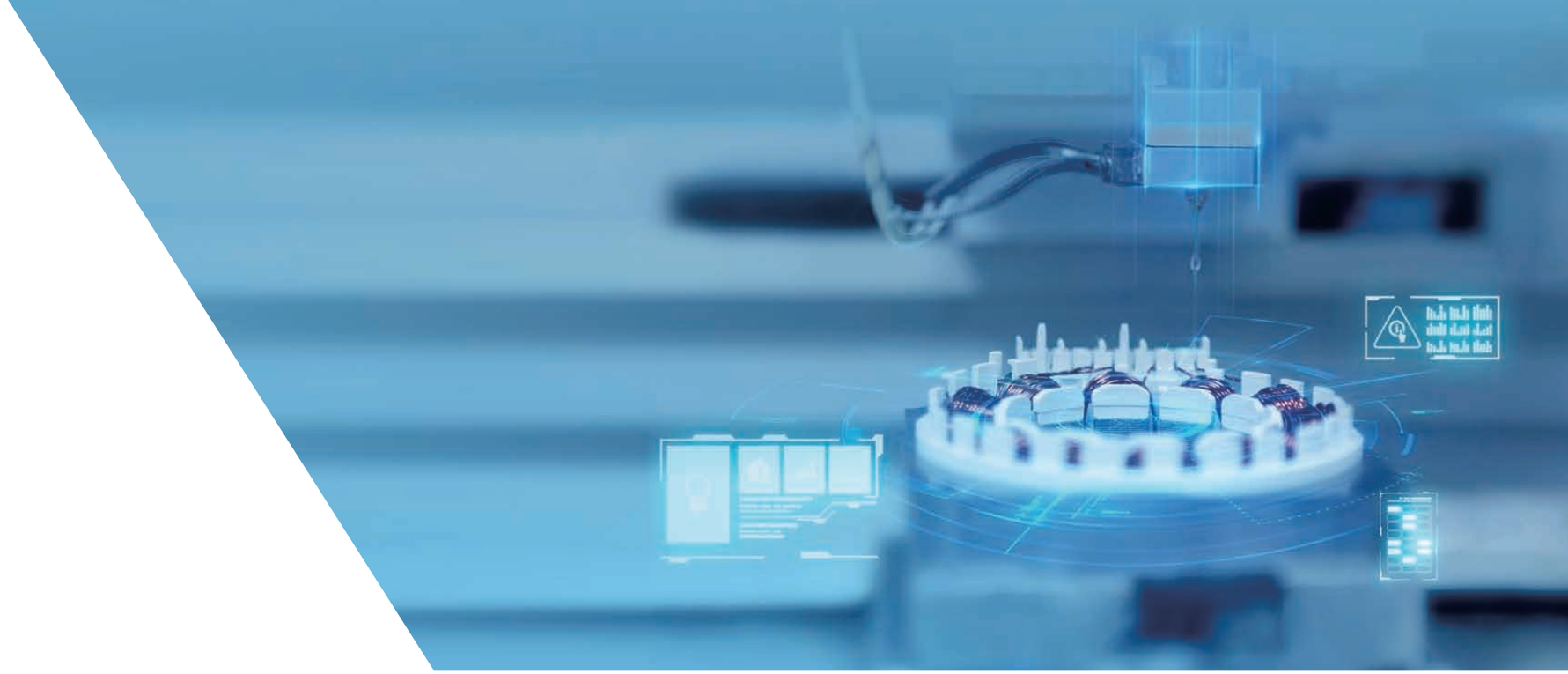


PRODUCT
QUALITY

# 制造品质

**以顾客为中心，通过全员的努力和持续改进，为顾客提供优质的产品和服务**

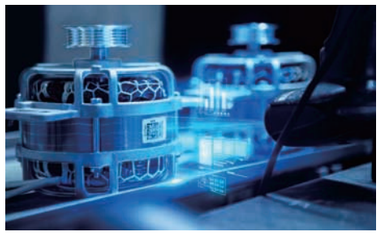
Oriented to customers, Welling provides quality products and services for customers by all hard work and continuous improvement.



## 制造能力
Manufacturing Capability

Welling依托多元化的生产模式，满足客户多样化的产品要求，致力于为客户制造出满意的产品；同时，积极发展自动化和信息化，持续推进精益管理，全力打造先进的智能工厂。

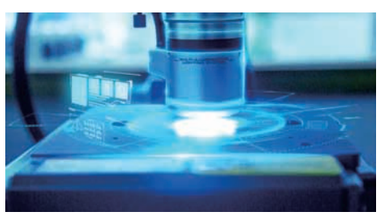
Depending on diverse production modes, Welling meets customers' diversified product requirements and devotes to manufacture satisfactory products for customers. Meanwhile, Welling develops automation and informatization proactively and continues to promote refined management to build an advanced intelligent plant.



## 产品检测
Product Test

Welling建立了完整的试验室质量体系，设有电机性能、安全性能、零部件精密尺寸、噪声振动、材料、环境、电机可靠性等多个检测试验室和计量校准室，可按标准方法进行规范的检查和校准。

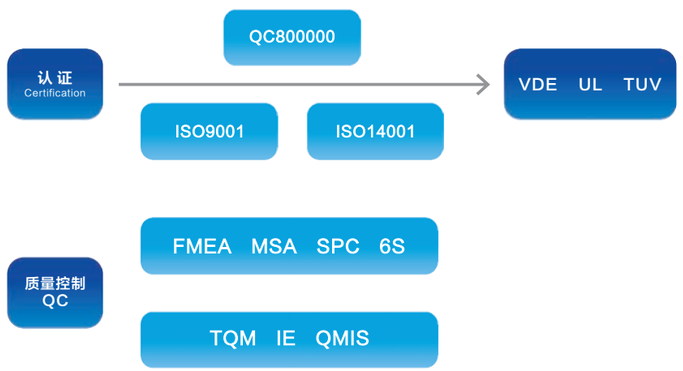
Welling builds a complete laboratory quality system which is equipped with multiple test laboratories that test motor performance/security/reliability, component size, noise, vibration, materials and environment, and metering & calibration rooms where inspection and calibration can be performed in accordance with standards.



## 品质管理
Quality Management

公司不断完善与优化品质管控体系，通过了TS16949符合性认证、QC080000、ISO14001、ISO9001体系认证，CCC、TUV、UL安全认证等，品质达到国际水平。

GMCC improves and optimizes quality management system continuously, and GMCC products are certified by TS16949, QC080000, ISO14001, ISO9001, CCC, TUV, and UL, so GMCC product quality reaches international level.



# MARKETING NETWORK

# 营销网络




## 服务全球
Servicing Globally

产品行销全球，涵盖20多个国家和地区，在国内设立了29个办事处，在美国、意大利、泰国、韩国等国家设立了海外办事处。

Welling products are sold worldwide, covering more than 20 countries and regions. 29 offices are built within China, and oversea offices are set in U.S., Italy, Thailand, and South Korea.

## 品牌之选
Best Choice of Brands

产品行销全球，服务于三星、LG、松下、开利、夏普、雷诺仕、日立、伊莱克斯、惠而浦、意黛喜、大金、西门子、美的、海信等国际知名品牌。

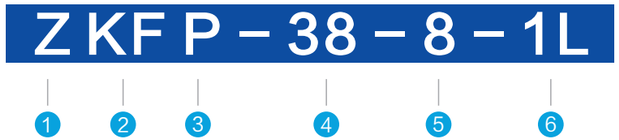
Welling products are sold to a great number of international well-known brands, including, Samsung, LG, Panasonic, Carrier, Sharp, Renault, Hitachi, Electrolux, Whirlpool, Yiddish, Daikin, Siemens, Midea, Hisense.

## 客户交流、技术分享
Customer Communication & Technology Sharing

高度重视营销服务的深度，Welling持续在有影响的平台上举行一系列技术宣讲会，包括技术应用研讨、新品应用推介等，为各领域客户提供富有价值的电机技术解决方案和应用可能。让营销迈向深度合作的关系。

With a strong emphasis on the depth of marketing services, Welling continues to hold a series of technical presentations on influential platforms, including technical application seminars, new product introductions, etc., to provide valuable motor technology solutions and application possibilities for customers in various fields. Let marketing move towards deep cooperation.

# 命名规则
## Model Naming Rules




1 **电机类型(见1.1)**
Motor type (see 1.1)

2 **使用行业和分类代号(见1.2)**
Applicable industry and classification code (see 1.2)

3 **功能代号(见1.3)**
Function code (see 1.3)

4 **标称功率（铁芯/外壳规格）(见1.4)**
Nominal power (iron core / shell specifications) (see 1.4)

5 **极数（叠厚）(见1.5)**
Pole number (thickness) (see 1.5)

6 **设计序号+绕组材质(见1.6)**
Design No. + Winding Material (see 1.6)

### 1.1 电机类型

“Y”表示异步电机、“Y”表示感应泵；
“H”表示串激电机、“H”表示串激泵；
“Z”表示无刷直流电机、“Z”表示无刷直流泵；
“D”表示有刷直流电机、“D”表示有刷直流泵。

### 1.1 Motor type

"Y" refers to the asynchronous motor, "Y" refers to the induction pump;
"H" refers to the series excited motor, "H" refers to the series excited pump;
"Z" refers to the brushless DC motor, "Z" refers to the brushless DC pump;
"D" refers to the brush DC motor, "D" refers to the brush DC pump.

### 1.2 使用行业和分类代号

- **使用行业各字符代表的含义：**

“K”表示空调类用电机；“B”表示冰箱类用电机；
“X”表示洗涤类用电机；“S”表示生活类用电机；
“C”表示厨房类用电机；“G”表示工具类用电机。

说明：提升生活质量和舒适度的终端所用的电机为生活类电机，围绕食品或饮品加工处理的终端所用的电机为厨房类用电机。

### 1.2 Applicable industry and classification code (see 1.2)

- **The meaning of each character in applicable industry:**

"K" refers to the motor used in the air conditioner; "B" refers to the refrigerator motor;
"X" refers to the motor used for washing; "S" refers to the motor used for living;
"C" refers to the motor used in the kitchen; "G" refers to the motor used for tools.

Description: Motors used on terminals that can improve living quality and comfortability belong to the living ones, while those used for food or beverage processing are the kitchen ones.

- **分类代号各字符代表的含义：**

“F”表示塑封电机或表示风扇、冷风扇、吊扇电机、冰箱电机；“T”表示铁壳电机；“S”表示商用电机；
“B”表示波轮电机或泵类；“G”表示滚筒电机；“W”表示洗碗机电泵；“H”表示干衣机电机；
“Y”表示冰压机电机、空压机电机；“R”表示热水器电机；“Q”表示空气清新机电机、加湿器电机、除湿机电机；
“M”表示食品加工电机；“C”表示油烟机电机；“J”表示清洁设备电机；“U”表示电动工具电机；
“X”表示饮水机清洗电泵；“S”表示净水设备电泵；“D”表示吸尘器电机。

- **The meaning of each character:**

"F" refers to plastic package motor or fan, cooling fan, ceiling-fan motor, refrigerator motor; "T" refers to iron shell motor; "S" refers to commercial motor;
"B" refers to impeller motor or pumps; "G" refers to the rollor motor; "W" refers to the dishwasher motor; "H" refers to the dryer motor;
"Y" refers to the ice compressor motor, and air compressor motor; “R" refers to water heater motor;
"Q" refers to air purifier motor, humidifier motor, dehumidifier motor; “M" refers to the food processing motor; "C" indicates the hood motor;
"J" refers to the cleaning machine motor; "U" refers to the motor of the electric tool; "X" refers to the motor used for water dispenser cleaning;
"S" refers to the motor used in water purification equipment; "D" refers to the vacuum cleaner motor.

### 1.3 由1位大写字母（A~Z）组成，B、I、O不使用，无特殊代码要求的可省略

### 1.3 Composed of 1 uppercase letters (A~Z); B, I, O are not used; those with no special code requirements can be omitted.

### 1.4 标称功率（铁芯/外壳规格）

串激电机用定子铁芯外径的整数值表示，有刷直流电机、有刷直流泵用机壳外径的整数值表示，其他电机用额定输出功率的整数值表示，用1至5位阿拉伯数字表示（1,2,3…），对于额定输出超过10000W的电机，应将后面三个零以K表示，例：10000W，在型号中应为10K。

### 1.4 Nominal power (iron core / shell specifications)

The series excited motor is expressed by the integer value of stator core diameter; the brushless DC motor and brush DC pump are expressed by the integer value of case diameter; other motors can be expressed by the integer value of output rating, with arabic numerals of single digit to 5 digit(1, 2, 3...). For motors whose rated output is more than 10000W, the following three zeros should be expressed by K, for example: in the model, 10000W should be 10K.

### 1.5 极数（叠厚）

串激电机用定子铁芯叠厚的整数值表示，有刷直流电机、有刷直流泵用转子铁芯叠厚的整数值表示，其他电机用极数表示，用1至3位阿拉伯数字表示（1,2,3…）。

### 1.5 Pole number (thickness)

The series excited motor is expressed by the integer value of stator core thickness; the brushless DC motor and brush DC pump are expressed by the integer value of stator core thickness; other motors can be expressed by pole numbers, arabic numerals of single digit to triple digit(1, 2, 3...).

### 1.6 设计序号+绕组材质

用“1-999”的阿拉伯数字表示。L表示含有铝线绕组，不含铝线绕组的可省略。

### 1.6 Design No. + Winding Material

Use arabic numerals "1-999" to represent it. L refers to aluminium wire winding is contained. The one without that winding can be omitted.

# 风之灵

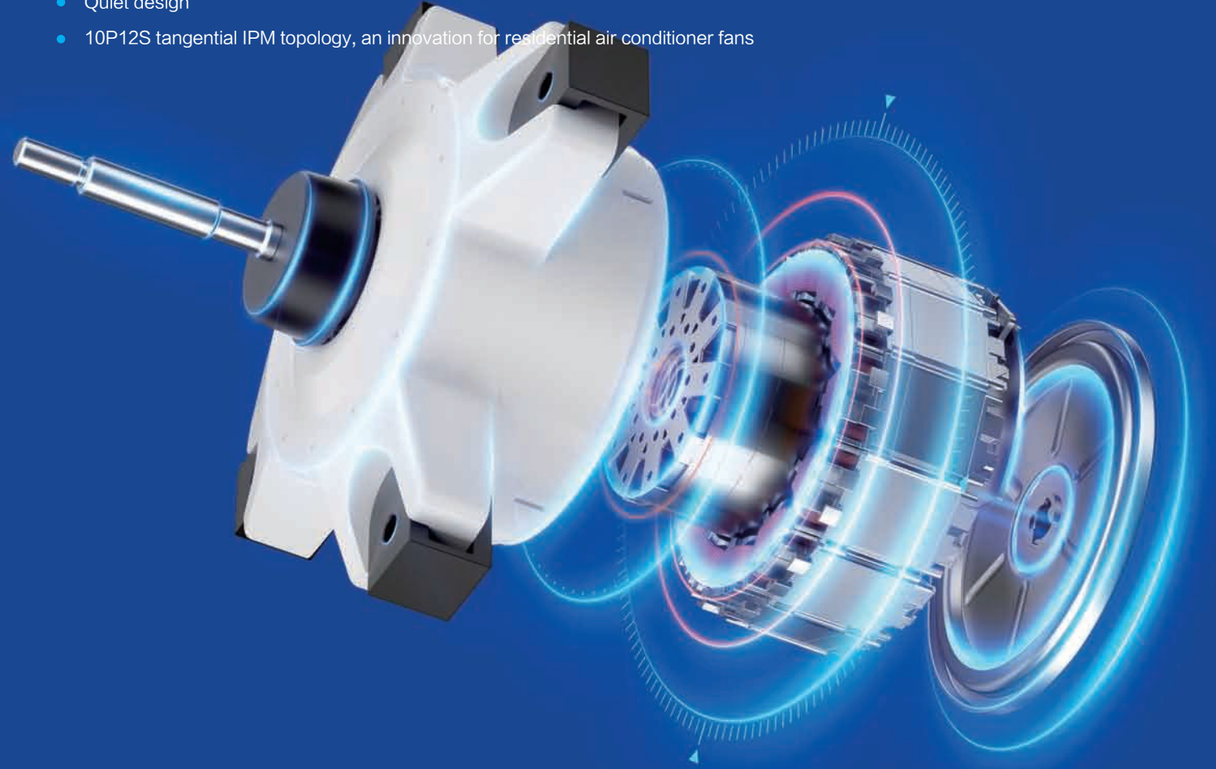
## 家用空调新能效专用BLDC电机

## Wind Spirit

BLDC motor for new energy efficiency household air conditioner

- 高绕组系数，高功率密度
- 小型化设计，体积减少30%
- 静音化设计
- 10P12S切向IPM拓扑结构创新应用于家用空调风机

- High winding coefficient, high power density
- Miniaturized design, with a 30% reduction in volume
- Quiet design
- 10P12S tangential IPM topology, an innovation for residential air conditioner fans





# DC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 10 W | 20 W | 30 W | 40 W | 50 W | 60 W | 70 W | 80 W | | | | |
| 70 | ■ | ■ | ■ | ■ | | | | | | 5~30 | 140/310 | ○ | 方波驱动、弦波驱动、无驱动可选 Square-wave driving & sine-wave driving & no driving |
| 79 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | 5~70 | 140/310 | ○ | 方波驱动、弦波驱动、无驱动可选 Square-wave driving & sine-wave driving & no driving |
| 79 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | 5~70 | 140/310 | ⬠ | 弦波驱动、无驱动可选 Sine-wave driving & no driving |



### 70系列室内机 70 series Indoor Unit

**产品特点** Features

树脂封装，铜线
Resin package, copper wire

**用途** Application

空调室内机
A/C Indoor Unit



### 79系列室内机 79 series Indoor Unit

**产品特点** Features

树脂封装，本体厚度39/42/51mm可选，铜线
Resin packaging, body thickness is optional among 39/42/51mm, copper wires

**用途** Application

空调室内机，空气净化器
Air conditioner indoor unit, air purifier



### 79系列室外机 79 series Outdoor Unit

**产品特点** Features

树脂封装，铜线，安装方式为法兰盘式
Resin packaging, copper wires, flange mounting

**用途** Application

空调室外机，空气能热水器
Air conditioner outdoor unit, air energy water heater

# DC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 10 W | 20 W | 30 W | 40 W | 50 W | 60 W | 70 W | 80 W | | | | |
| 87 | | | ■ | ■ | ■ | ■ | ■ | | | 20~65 | 140/310 | ○ | 方波驱动、正弦波驱动、无驱动可选<br>Square-wave driving & sine-wave driving & no driving |
| 87 | | | | ■ | ■ | ■ | ■ | | | 25~65 | 140/310 | ⬠ | 方波驱动、弦波驱动、无驱动可选<br>Square-wave driving & sine-wave driving & no driving |
| 87 | | | ■ | ■ | ■ | ■ | ■ | | | 20~60 | 140/310 | ○ | 弦波驱动、无驱动可选<br>Sine-wave driving & no driving |



## 87系列室内机 87 series Indoor Unit

**产品特点** Features

树脂封装，本体厚度39/42/51mm可选，铜线及铝线可选

Resin packaging, body thickness is optional among 39/42/51mm, copper & aluminum wires

**用途** Application

空调室内机，空气净化器

A/C indoor unit , air purifier



## 87系列室外机 87 series Outdoor Unit

**产品特点** Features

树脂封装，铜线及铝线可选，安装方式为法兰盘式

Resin packaging, copper & aluminum wires, flange mounting

**用途** Application

空调室外机，空气能热水器

A/C outdoor unit，air-heat pump water heater



## 87系列盘管机 87 series FAN COIL

**产品特点** Features

树脂封装，铜线及铝线可选，安装方式为法兰盘式

Resin packaging, copper & aluminum wires, flange mounting

**用途** Application

盘管风机

FCU



# DC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20 W | 30 W | 40 W | 50 W | 60 W | 70 W | 80 W | 90 W | 100 W | | | | |
| 94 | | | | | ■ | ■ | ■ | ■ | ■ | 60~100 | 310 | ⬠ | 弦波驱动、无驱动可选<br>Sine-wave driving & no driving |
| 94 | | | | | ■ | ■ | ■ | ■ | ■ | 60~100 | 310 | ⬠ | 弦波驱动、无驱动可选<br>Sine-wave driving & no driving |
| 94 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 20~100 | 310 | ○ | 弦波驱动、无驱动可选<br>Sine-wave driving & no driving |



## 94系列室内机 94 series Indoor Unit

**产品特点** Features

树脂封装，铜线及铝线可选

Resin packaging, copper & aluminum wires

**用途** Application

柜机室内机

Packaged A/C indoor unit



## 94系列室外机 94 series Outdoor Unit

**产品特点** Features

树脂封装，铜线及铝线可选

Resin packaging, copper & aluminum wires

**用途** Application

柜机室外机，天花机室外机

Packaged A/C outdoor unit,ceiling A/C outdoor unit



## 94系列盘管机 94 series FAN COIL

**产品特点** Features

树脂封装，铜线及铝线可选

Resin packaging, copper & aluminum wires

**用途** Application

盘管风机

FCU

# AC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 10 W | 20 W | 30 W | 40 W | 50 W | 60 W | 70 W | 80 W | | | | |
| 78 | | | | | | | | | | 5~30 | 100-130/ 200-240 | □ | PG/抽头/单速可选，PG调速，可选2/6/12极磁环<br>PG / tap / single speed, PG speed regulation, 2/6/12 magnet ring |
| 79 | | | | | | | | | | 5~30 | 100-130/ 200-240 | □ | PG调速<br>PG speed regulation |
| 80 | | | | | | | | | | 5~35 | 100-130/ 200-240 | □ | 主抽头/副抽头/单速可选<br>Main tap / assistant tap / single speed |



## 78系列 78 series

**产品特点** Features

树脂封装，本体厚度32/39/41/49可选，铜线及铝线可选

Resin packaging, body thickness is optional among 32/39/41/49mm，copper & aluminum wires

**用途** Application

空调，空气净化机

Air conditioner，air purifier



## 79系列 79 series

**产品特点** Features

树脂封装，本体厚度32/39/49可选，铜线

Resin packaging, body thickness is optional among 32/39/49mm，copper wire

**用途** Application

空调

Air conditioner



## 80系列分体空调室外机 80 series （Outdoor Unit）

**产品特点** Features

铁壳电机拉伸结构，铁芯10-35mm可选，铜线及铝线可选

Steel casing motor tensile structure, iron core is optional from 10 to 35mm，copper & aluminum wires

**用途** Application

空调外机

A/C outdoor unit



# AC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 10 W | 20 W | 30 W | 40 W | 50 W | 60 W | 70 W | 80 W | | | | |
| 80 | | | | | | | | | | 5~35 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选<br>Main tap / assistant tap / single speed |
| 95 | | | | | | | | | | 25~80 | 100-130 /200-240 | □ | PG调速<br>PG speed regulation |



## 80系列移动空调机 80 series （Portable A/C）

**产品特点** Features

铁壳电机拉伸结构，铁芯10-35mm可选，铜线及铝线可选

Steel casing motor tensile structure, iron core is optional from 10 to 35mm，copper & aluminum wires

**用途** Application

移动空调和清新机等

Kitchen hood, portable A/C, air freshener



## 95系列分体空调室内机 95 series Indoor Unit

**产品特点** Features

铁壳电机拉伸结构，铜线及铝线可选

Steel casing motor tensile structure, copper & aluminum wires

**用途** Application

空调

Air conditioner

# AC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 10 W | 20 W | 30 W | 40 W | 50 W | 60 W | 70 W | 80 W | | | | |
| 95 | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 15~80 | 100~130/ 200~240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 95 | | | ■ | ■ | ■ | | | | | 15~40 | 100~130/ 200~240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 95 | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 15~80 | 100~130/ 200~240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |



**95系列分体空调室外机** 95 series Outdoor Unit

**产品特点** Features

铁壳电机拉伸结构，铁芯15-40mm可选，铜线及铝线可选

Steel casing motor tensile structure, tensile end cap packaging, iron core is optional from 17.5 to 40mm, copper & aluminum wires

**用途** Application

空调外机

A/C outdoor unit



**95系列分体空调室外机** 95 series Outdoor Unit

**产品特点** Features

树脂封装，铁芯17.5-25mm可选，铜线

Resin packaging, iron core is optional from 17.5 to 25mm, copper wire

**用途** Application

空调外机

A/C outdoor unit



**95系列移动空调机** 95 series Portable A/C

**产品特点** Features

铁壳电机拉伸结构，铁芯17.5-40mm可选，铜线及铝线可选

Steel casing motor tensile structure, iron core is optional from 17.5 to 40mm, copper & aluminum wires

**用途** Application

空调外机，移动空调

A/C outdoor unit, portable A/C



# AC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 10 W | 20 W | 30 W | 40 W | 50 W | 80 W | 90 W | 100 W | | | | |
| 95 | | | | ■ | ■ | ■ | ■ | | | 25~80 | 100~130/ 200~240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 95 | | ■ | ■ | ■ | ■ | ■ | ■ | | | 10~80 | 100~130/ 200~240 | □ | 主抽头/副抽头可选 Main tap / assistant tap |



**95系列窗式空调机** 95 series Window A/C

**产品特点** Features

铁壳电机拉伸结构，铁芯17.5-40mm可选，铜线及铝线可选

Steel casing motor tensile structure, iron core is optional from 17.5 to 40mm, copper & aluminum wires

**用途** Application

窗机，移动空调

Window A/C, portable A/C



**95系风盘式空调内机** 95 series Indoor FCU

**产品特点** Features

铁壳电机卷板结构，铜线及铝线可选

Steel casing motor plate rolling structure, copper & aluminum wires

**用途** Application

空调

Air conditioner

# AC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 10 W | 20 W | 30 W | 40 W | 50 W | 80 W | 90 W | 100 W | | | | |
| 110 | | | | | | ■ | ■ | ■ | ■ | 50~100 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 110 | | | | | | ■ | ■ | ■ | ■ | 50~100 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 110 | | | | | | ■ | ■ | ■ | ■ | 50~100 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |



**110系列分体落地空调室内机** 110 series Indoor Unit

**产品特点** Features

铁壳电机拉伸结构，铜线及铝线可选

Steel casing motor tensile structure, copper & aluminum wires

**用途** Application

空调

Air conditioner



**110系列分体空调室外机** 110 series Outdoor Unit

**产品特点** Features

铁壳电机拉伸结构，铁芯20-45mm可选，铜线及铝线可选

Steel casing motor tensile structure，iron core is optional from 20 to 45mm，copper and aluminum wires

**用途** Application

空调外机

A/C outdoor unit



**110系列移动空调机** 110 series Portable A/C

**产品特点** Features

铁壳电机拉伸结构，铁芯20-45mm可选，铜线及铝线可选

Steel casing motor tensile structure，iron core is optional from 20 to 45mm，copper & aluminum wires

**用途** Application

移动空调

kitchen hood



# AC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 10 W | 20 W | 30 W | 40 W | 50 W | 80 W | 90 W | 100 W | | | | |
| 110 | | | | | | ■ | ■ | ■ | ■ | 50~100 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 110 | | | | | | ■ | ■ | ■ | ■ | 50~100 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 120 | | | | | | ■ | ■ | ■ | ■ | 50~100 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |



**110系列窗式空调机** 110 series Window A/C

**产品特点** Features

铁壳电机拉伸结构，铁芯20-45mm可选，铜线及铝线可选

Steel casing motor tensile structure, iron core is optional from 20 to 45mm, copper & aluminum wires

**用途** Application

窗机，移动空调

Window A/C, portable A/C



**110系列风盘式空调内机** 110 series Indoor FCU

**产品特点** Features

铁壳电机卷板结构，铁芯20-45mm可选，铜线及铝线可选

Steel casing motor plate rolling structure, iron core is optional from 20 to 45mm, copper & aluminum wires

**用途** Application

风机盘管

FCU



**120系列风盘式空调内机** 120 series Indoor FCU

**产品特点** Features

铁壳电机卷板结构，铁芯20-45mm可选，铜线及铝线可选

Steel casing motor plate rolling structure, iron core is optional from 20 to 45mm, copper & aluminum wires

**用途** Application

风机盘管

FCU

# AC-家用空调用电机

Home Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50 W | 60 W | 70 W | 80 W | 90 W | 100 W | 110 W | 120 W | 130 W | | | | |
| 120 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 60~130 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 120 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 60~130 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |



## 120系列分体落地空调室内机 120 series Indoor Unit

**产品特点** Features

铁壳电机拉伸结构,铁芯20-45mm可选，铜线及铝线可选

Steel casing motor tensile structure , iron core is optional from 20 to 45mm, copper & aluminum wires

**用途** Application

空调

Air conditioner



## 120系列分体落地空调室外机 120 series Outdoor Unit

**产品特点** Features

铁壳电机拉伸结构，铁芯20-45mm可选，铜线及铝线可选

Steel casing motor tensile structure, iron core is optional from 20 to 45 mm, copper & aluminum wires

**用途** Application

空调外机

A/C outdoor unit




# AC-家用空调用电机

Home Air Conditioner Motor


| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50 W | 60 W | 70 W | 80 W | 90 W | 100 W | 110 W | 120 W | 130 W | | | | |
| 120 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 60~130 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |
| 120 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 60~130 | 100-130 /200-240 | □ | 主抽头/副抽头/单速可选 Main tap / assistant tap / single speed |



## 120系列窗式空调机 120 series Window A/C

**产品特点** Features

铁壳电机拉伸结构，铁芯20-45mm可选，铜线及铝线可选

Steel casing motor tensile structure, iron core is optional from 20 to 45 mm, Copper & aluminum wires

**用途** Application

窗机

Window A/C



## 120系列移动空调机 120 series Portable A/C

**产品特点** Features

铁壳电机拉伸结构，铁芯20-45mm可选，铜线及铝线可选

Steel casing motor tensile structure, iron core is optional from 20 to 45 mm, copper & aluminum wires

**用途** Application

移动空调

Portable A/C

# 抽油烟机用电机
Kitchen Hood Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50 W | 60 W | 70 W | 80 W | 100 W | 110 W | 120 W | 130 W | 150 W | | | | |
| 107 | | | | ● | ● | ● | ● | ● | ● | 80~150 | 310 | ● | FOC矢量控制、恒风量控制可选<br>FOC vector control / constant cfm control |
| 120 | ● | ● | ● | ● | ● | ● | ● | ● | ● | 50~150 | 220/230 | □ | 主抽头/副抽头/单速可选<br>Main tap / assistant tap / single speed |



## 107系列烟机 DC 107 series Kitchen Hood

**产品特点** Features

树脂封装，法兰盘式安装, 铜线及铝线可选
Resin packaging，flange mounting, copper & aluminum wires

**用途** Application

抽油烟机
Kitchen hood



## 120系列抽油烟机 120 series Kitchen Hood

**产品特点** Features

铁壳电机拉伸结构，铁芯20-45mm可选，铜线及铝线可选
Steel casing motor tensile structure, iron core is optional from 20 to 45 mm, copper & aluminum wires

**用途** Application

抽油烟机
Kitchen hood



# 抽油烟机用电机
Kitchen Hood Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30 W | 50 W | 70 W | 80 W | 100 W | 110 W | 120 W | 130 W | 150 W | | | | |
| 80 | ● | ● | ● | ● | ● | | | | | 30~100 | 220/230 | △ | 主抽头/副抽头/单速可选<br>Main tap / assistant tap / single speed |
| 95 | | ● | ● | ● | ● | | | | | 50~100 | 220/230 | □ | 主抽头/副抽头/单速可选<br>Main tap / assistant tap / single speed |



## 80系列 80 series

**产品特点** Features

铁壳电机拉伸结构，铁芯20-40mm，铜线
Steel casing motor tensile structure, iron core is optional from 20 to 40mm, copper wire

**用途** Application

抽油烟机
Kitchen hood



## 95系列 95 series

**产品特点** Features

铁壳电机拉伸结构，铁芯20-40mm，铜线及铝线可选
Steel casing motor tensile structure, iron core is optional from 20 to 40mm, copper & aluminum wires

**用途** Application

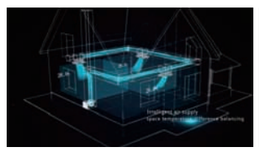
抽油烟机
Kitchen hood

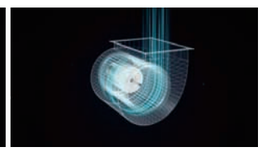
# 气之灵
## 商用盘管风机用电机

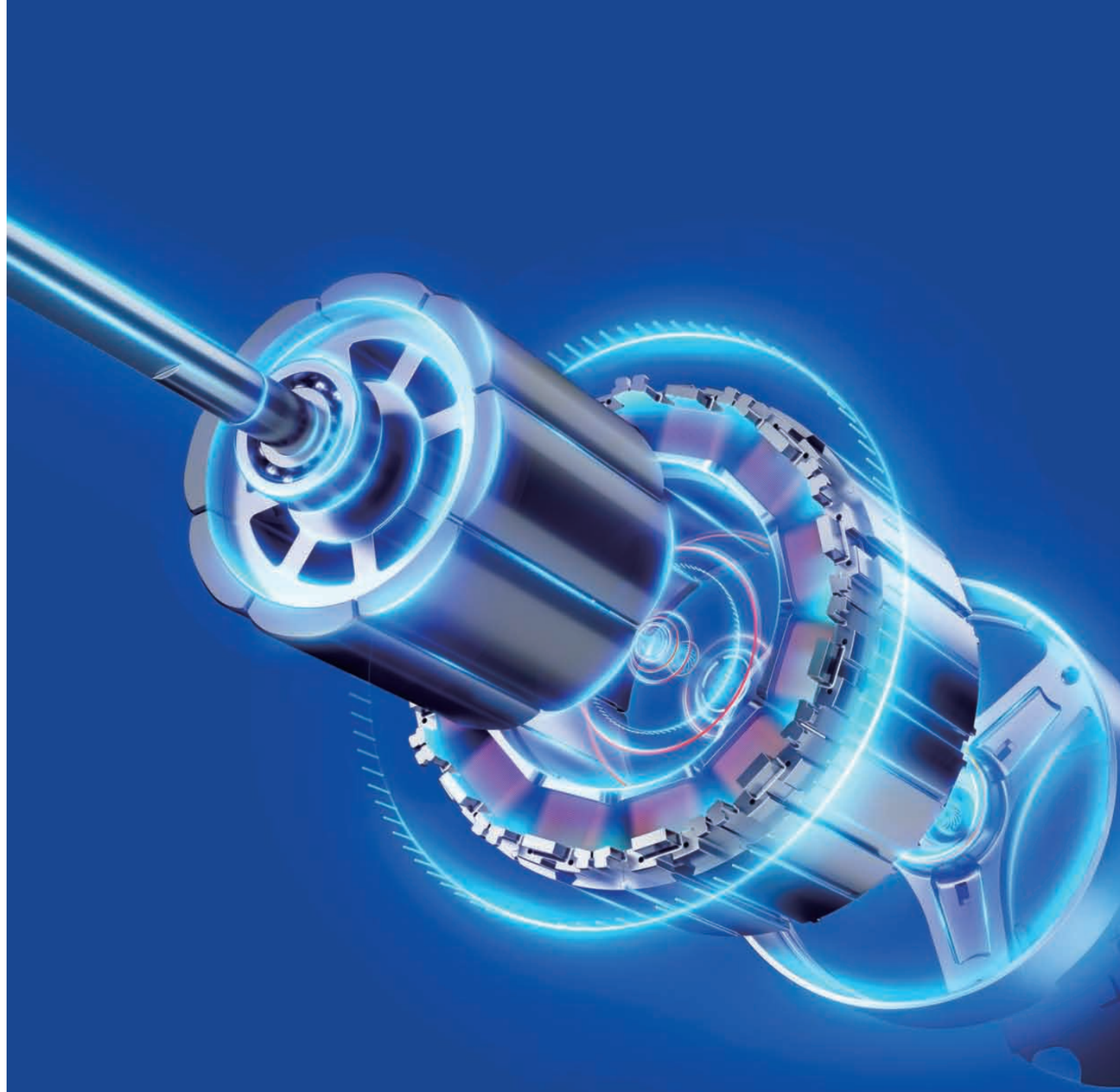
## Air Spirit
Welling motor for commercial indoor FCU

- 恒转矩变频电机技术，高效低噪控制技术
- 智能送风，平衡空间温差，恒温舒适空间
- 多重防护，安全可靠

- Constant torque inversion motor technology and high-efficiency and low-noise control technology
- Intelligent air supply, balancing room temperature and ensuring thermostatic and comfortable space
- Multiple protection, safe and reliable







# 商用空调用电机
Commercial Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50 W | 80 W | 110 W | 140 W | 170 W | 200 W | 220 W | 240 W | 250 W | | | | |
| 107 | | ■ | ■ | ■ | | | | | | 80~150 | 310 | ⬠ | FOC矢量控制 FOC vector control |
| 107 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | 80~240 | 310 | ⬠ | FOC矢量控制 FOC vector control |



**107系列室内机** 107 series Indoor

**产品特点** Features

树脂封装，铜线及铝线可选
Resin packaging, copper & aluminum wires

**用途** Application

柜机室内机
Packaged A/C indoor unit



**107系列室外机（柜机，天花机）** 107 series Outdoor Unit（Pcakaged/Ceiling）

**产品特点** Features

树脂封装，铜线及铝线可选，减震胶圈及法兰盘安装可选
Resin packaging，copper & aluminum wires，vibration reduction rubber gasket & flange mounting

**用途** Application

柜机室外机，天花机室外机
Packaged A/C outdoor unit，ceiling A/C outdoor unit



# 商用空调用电机
Commercial Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50 W | 80 W | 110 W | 140 W | 170 W | 200 W | 220 W | 240 W | 250 W | | | | |
| 107 | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 100~250 | 310 | ▲ | FOC矢量控制 FOC vector control |
| 107 | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 100~250 | 310 | ■ | FOC矢量控制 FOC vector control |



**107系列室外机（柜机，天花机）** 107 series Outdoor Unit（Pcakaged/Ceiling）

**产品特点** Features

树脂封装，胶圈及法兰盘式安装可选, 铜线及铝线可选
Resin packaging，rubber gasket & flange mounting, copper and aluminum wires

**用途** Application

柜机室外机，天花机室外机
Packaged A/C outdoor unit，ceiling A/C outdoor unit



**107系列室内机（盘管机）** 107 series Indoor Unit（Coil Unit）

**产品特点** Features

树脂封装, 胶圈安装, 铜线及铝线可选
Resin packaging, rubber gasket mounting, copper & aluminum wires

**用途** Application

盘管风机
FCU

# 商用空调用电机
Commercial Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 80 W | 100 W | 200 W | 400 W | 500 W | 600 W | 700 W | 800 W | 1000 W | | | | |
| 138 | | | | ■ | ■ | ■ | ■ | | | 250~750 | 230/115 | ⬭ | FOC矢量控制，恒转矩/恒转速/恒风量/Sensorless<br>FOC vector control, constant torque / constant speed / constant cfm / sensorless |
| 140 | | | ■ | ■ | ■ | ■ | ■ | ■ | | 200~900 | 310 | ▂▁▂ | Sensorless |
| 173 | | | | ■ | ■ | ■ | ■ | ■ | ■ | 350~1000 | 310/560 | ■ | Sensor / sensorless |



## 138系列室内机 138 series Indoor Unit

**产品特点** Features

树脂封装，铁芯22–64mm可选，铜线及铝线可选
Resin packaging, iron core is optionalfrom 20 to 64mm, copper & aluminum wires

**用途** Application

商用空调
Commercial A/C



## 140系列室内机（BLDC） 140 Series BLDC Indoor Unit

**产品特点** Features

铁壳电机卷板结构，铁芯22–64mm可选，铜线及铝线可选
Steel casing motor plate rolling structure, iron core is optional from 20 to 64mm，copper & aluminum wires

**用途** Application

商用室内机
Commercial indoor unit



## 173系列室外机 173 series Outdoor Unit

**产品特点** Features

树脂封装，铁芯20–65mm可选，铜线及铝线可选
Resin packaging, iron core is optional from 20 to 65mm, copper & aluminum wires

**用途** Application

商用空调
Commercial A/C



# 商用空调用电机
Commercial Air Conditioner Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 80 W | 100 W | 200 W | 300 W | 500 W | 600 W | 800 W | 1500 W | 2100 W | | | | |
| 140 | | ■ | ■ | ■ | | | | | | 80~300 | 230/460 | 💧 ⌊ | 主抽头/副抽头/单速可选<br>Main tap / assistant tap / single speed |
| 160 | | | | | ■ | ■ | ■ | ■ | ■ | 350~2100 | 460 | 💧 | 三相<br>Triphase |



## 140系列空调室内机（感应电机） 140 series Indoor FCU

**产品特点** Features

铁壳电机卷板结构，铁芯20–70mm可选，铜线及铝线可选
Steel casing motor plate rolling structure, iron core is optional from 20 to 70 mm, copper & aluminum wires

**用途** Application

商用空调
Commercial A/C



## 160系列室内机 160 series Indoor Unit

**产品特点** Features

铁壳电机卷板结构，铁芯30–130mm可选，铜线
Steel casing motor plate rolling structure, iron core is optional from 30 to 130 mm，copper wire

**用途** Application

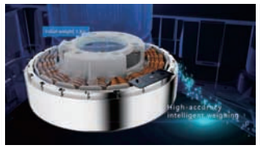
商用空调
Commercial A/C

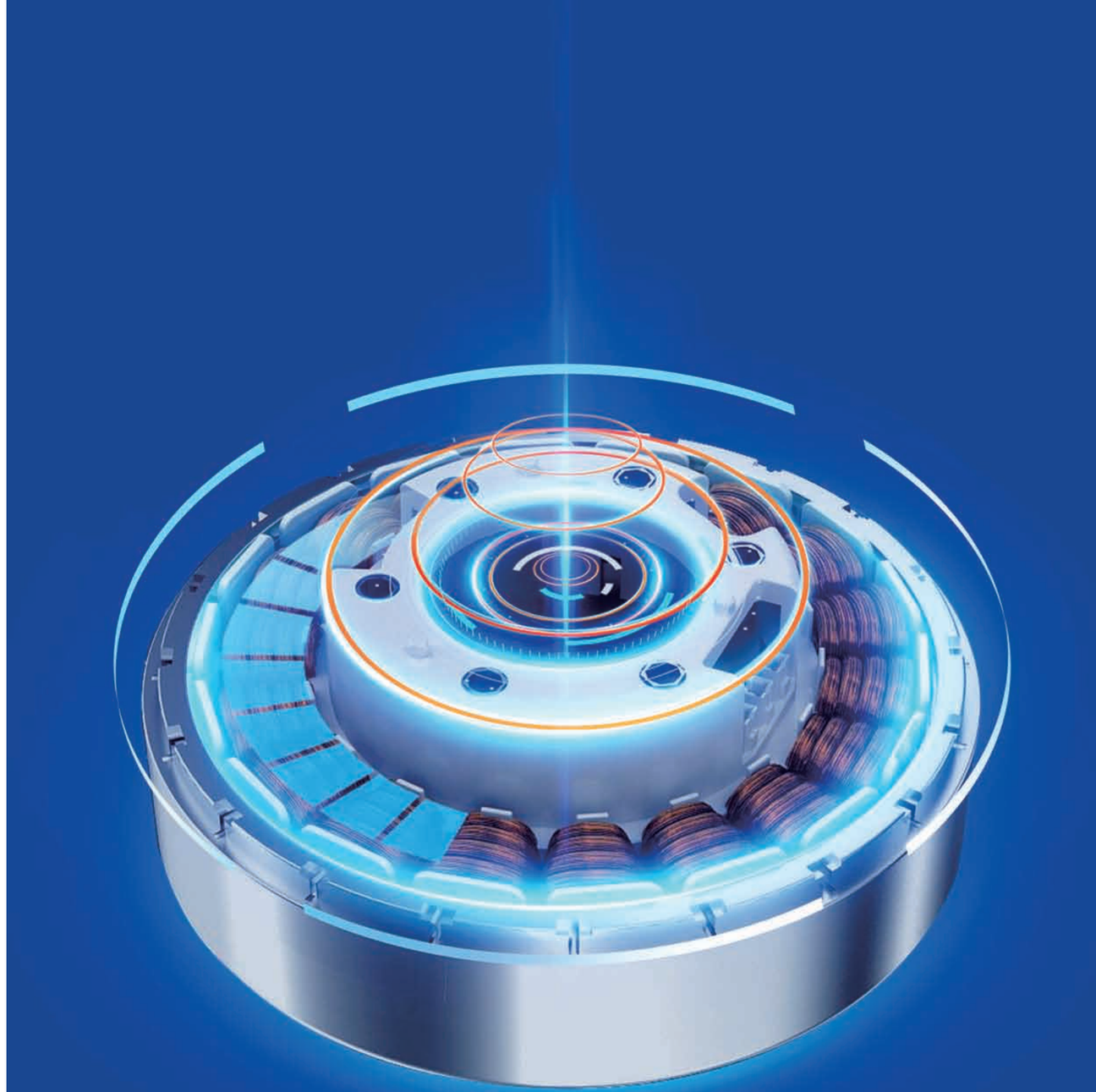
# 水之灵
## 全自动波轮洗衣机用电机

## Water Spirit
Welling motor for pulsator washing machine

- 高精度智能称重技术
- 高性能烧结铁氧体技术，电机高效节能
- 磁瓦正弦化优化设计，确保超低噪音

- High-precision intelligent weighing technology
- High-performance sintered ferrite technology, improving energy efficiency of the motors
- Magnetic tile sinusoidal design, minimizing noise

# DC–波轮洗衣机用电机

Pulsator Washing Machine Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30 W | 50 W | 100 W | 150 W | 250 W | 300 W | 325 W | 450 W | 550 W | | | | |
| 107 | ● | ● | ● | ● | ● | ● | ● | | | 30~325 | 280–310 | ⅂ | DC输入 DC input |
| 161 | | | | | ● | ● | ● | ● | ● | 250~550 | 220 | L | 正弦波驱动，Sensor /Sensorless可选 Sine–wave driving, sensor / sensorless |
| 161* | | | | | ● | ● | ● | ● | ● | 250~550 | 220 | L | 正弦波驱动，Sensor /Sensorless可选 Sine–wave driving, sensor / sensorless |



**107–BLDC系列** DC107–BLDC series

**产品特点** Features

驱动内置，驱动器与电机本体一体塑封，结构简单，成本低，可靠性高，铝线

Driver internally installed. AIO plastic package of the driver and motor body with the advantages of simple structure and high reliability. aluminium wire

**用途** Application

波轮洗衣机，适用于皮带传动结构

Drum washing machine (belt driven mechanical)



**161–DDM系列** DC161–DDM series

**产品特点** Features

直接驱动，树脂封装

Direct driving, resin packaging

**用途** Application

波轮全自动洗衣机

Pulsator washing machine





**161–DDM系列（可选外接部件）** 161–DDM series（optional external parts）

**产品特点** Features

直接驱动，树脂封装

Direct driving, resin packaging

**用途** Application

波轮全自动洗衣机

Pulsator washing machine



# AC–波轮洗衣机用电机

Pulsator Washing Machine Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 80 W | 100 W | 120 W | 140 W | 150 W | 170 W | 180 W | 190 W | 300 W | | | | |
| 110 | ● | ● | ● | ● | ● | | | | | 80~150 | 220–240 | 💧 | / |
| 115 | | | | ● | ● | ● | ● | ● | | 140~200 | 220–240 | 💧 | / |
| 120 | | | | | | | ● | ● | ● | 180~300 | 220–240 | 💧 | / |



**110系列** 110 series

**产品特点** Features

拉伸/铸铝端盖电机，铜线及铝线可选，铁芯平台110/115/120，长度16–60mm可选

Motor with drawn / cast aluminum end cap, copper & aluminum wires，110/115/120 length: 16–60mm

**用途** Application

全自动洗衣机，双筒洗涤/脱水电机

Automatic washing machine, double barrel washing/dehydration motor



**115系列** 115 series

**产品特点** Features

拉伸/铸铝端盖电机，铜线及铝线可选，铁芯平台110/115/120，长度16–60mm可选

Motor with drawn/cast aluminum end cap，copper & aluminum wires，110/115/120 length: 16–60mm

**用途** Application

全自动洗衣机，双筒洗涤/脱水电机

Automatic washing machine, double barrel washing/dehydration motor



**120系列** 120 series

**产品特点** Features

拉伸/铸铝端盖电机，铜线及铝线可选，铁芯平台110/115/120，长度16–60mm可选

Motor with drawn/cast aluminum end cap，copper & aluminum wires，110/115/120 length: 16–60mm

**用途** Application

全自动洗衣机，双筒洗涤/脱水电机

Automatic washing machine, double barrel washing/dehydration motor

# 浪之灵
## 滚筒洗衣机用电机

## Wave Spirit
Welling motor for drum washing machine

- 无位置传感器快速起动技术，可提高洗净比，有效减少洗涤时间
- 正弦波矢量控制驱动，有效降低噪音和振动
- 智能不平衡感知技术，实现快速脱水和超低噪音

- Quick start technology of position-less sensors, effectively reducing washing time
- Sine wave vector control drive, effectively reducing noise and vibration
- Intelligent imbalance sensing technology, implementing quick dehydration and minimizing noise





# 滚筒洗衣机用电机
Drum Washing Machine Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30 W | 50 W | 200 W | 300 W | 350 W | 400 W | 450 W | 500 W | 550 W | | | | |
| UM-F | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 200~550 | 220-240 | ▁▃▁ | / |
| UM-A | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | 30~450 | 220-240 | ▁▃▁ | / |
| UM-C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | 30~450 | 220-240 | ▁▃▁ | / |



### UM-F系列 UM-F series

**产品特点** Features

带速度反馈，能实现500rpm-17000rpm间的无级变速，结构合理，调速方便，启动转矩大，过载能力强，绝缘性能好，可靠性高

Stepless speed regulation of 500 rpm~17000 rpm, with speed feedback. with the advantages of reasonable structure, convenient operation, high starting torque, strong overload capacity, good insulation performance and high reliability, etc.

**用途** Application

滚筒洗衣机，适用于皮带传动结构

Drum washing machine (belt driven mechanical)



### UM-A系列 UM-A series

**产品特点** Features

带速度反馈，能实现500rpm-17000rpm间的无级变速，结构合理，调速方便，启动转矩大，过载能力强，绝缘性能好，可靠性高

Stepless speed regulation of 500 rpm~17000 rpm, with speed feedback. with the advantages of reasonable structure, convenient operation, high starting torque, strong overload capacity, good insulation performance and high reliability, etc.

**用途** Application

滚筒洗衣机，适用于皮带传动结构

Drum washing machine (belt driven mechanical)



### UM-C系列 UM-C series

**产品特点** Features

带速度反馈，能实现500rpm-17000rpm间的无级变速，结构合理，调速方便，启动转矩大，过载能力强，绝缘性能好，可靠性高

Stepless speed regulation of 500 rpm~17000 rpm, with speed feedback. with the advantages of reasonable structure, convenient operation, high starting torque, strong overload capacity, good insulation performance and high reliability, etc.

**用途** Application

滚筒洗衣机，适用于皮带传动结构

Drum washing machine (belt driven mechanical)

# 滚筒洗衣机用电机

Drum Washing Machine Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30 W | 50 W | 100 W | 150 W | 250 W | 300 W | 350 W | 550 W | 1000 W | | | | |
| BLDC | | | | | | | | | | 30~1000 | 洗涤40/脱水178 Washing 40 / Dehydration 178 | | 正弦波驱动，高速时弱磁控制，Sensor/Sensorless可选 Sine-wave driving, field weakening control at high speed, sensor / sensorless |
| CIM-2P | | | | | | | | | | 30~550 | 洗涤36/脱水195 Washing 36 / Dehydration 195 | | / |
| CIM-4P | | | | | | | | | | 30~550 | 洗涤36/脱水195 Washing 36 / Dehydration 195 | | / |



## BLDC系列 BLDC series

**产品特点** Features

铜/铝线可选

Copper / aluminum wire

**用途** Application

滚筒洗衣机，适用于皮带结构

Drum washing machine (belt driven mechanical)



## CIM-2P系列 CIM-2P series

**产品特点** Features

带速度反馈，能实现500rpm-18000rpm见的无级变速，结构合理，调速方便，启动转矩大，过载能力强，绝缘性能好，可靠性高

Stepless speed regulation of 500 rpm~18000 rpm, with speed feedback. with the advantages of reasonable structure, convenient operation, high starting torque, strong overload capacity, good insulation performance and high reliability, etc.

**用途** Application

滚筒洗衣机，适用于皮带传动结构

Drum washing machine (belt driven mechanical)



## CIM-4P系列 CIM-4P series

**产品特点** Features

带速度反馈，能实现500rpm-18000rpm见的无级变速，结构合理，调速方便，启动转矩大，过载能力强，绝缘性能好，可靠性高

Stepless speed regulation of 500 rpm~18000 rpm, with speed feedback. with the advantages of reasonable structure, convenient operation, high starting torque, strong overload capacity, good insulation performance and high reliability, etc.

**用途** Application

滚筒洗衣机，适用于皮带传动结构

Drum washing machine (belt driven mechanical)



# 干衣机用电机

Dryer Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 50 W | 70 W | 80 W | 90 W | 100 W | 150 W | 200 W | 250 W | 300 W | | | | |
| 105 | | | | | | | | | | 90~250 | 220-240 | ^ | 正反转控制 Positive and negative turn control |
| 120 | | | | | | | | | | 180~300 | 120/230 | ^ | / |
| 112 | | | | | | | | | | 90~250 | 220-240 | ^ | 正弦波驱动，无霍尔控制方式 Sine-wave driving, sensorless control |



## 105系列 105 series AC

**产品特点** Features

拉伸/铸铝端盖电机，铜线及铝线可选，长度120-400mm可选

Motor with drawn/cast aluminum end cap, copper & aluminum wires, 120-400mm

**用途** Application

直排式，冷凝式，热泵式干衣机

Air-vented, condensing / heat pump dryers



## 120系列 120 series AC

**产品特点** Features

拉伸/铸铝端盖电机，铜线及铝线可选，长度120-400mm可选

Motor with drawn/cast aluminum end cap, copper & aluminum wires, 120-400mm

**用途** Application

直排式，冷凝式，热泵式干衣机

Air-vented, condensing / heat pump dryers



## 112系列 112 series DC

**产品特点** Features

效率高，调速范围广，噪音低震动小，电磁方案采用8极12槽结构，转子采用包塑结构，转子采用内外铁芯结构

High efficiency，wide range of speed regulation, low noise and vibration. an 8-pole 12-slot structure is adopted in the electromagnetic solutions. aplastic-clad structure is adopted in the rotors. the inner and outer iron core structure is adopted in the rotors

**用途** Application

干衣机

Dryer motor

# 飓之灵

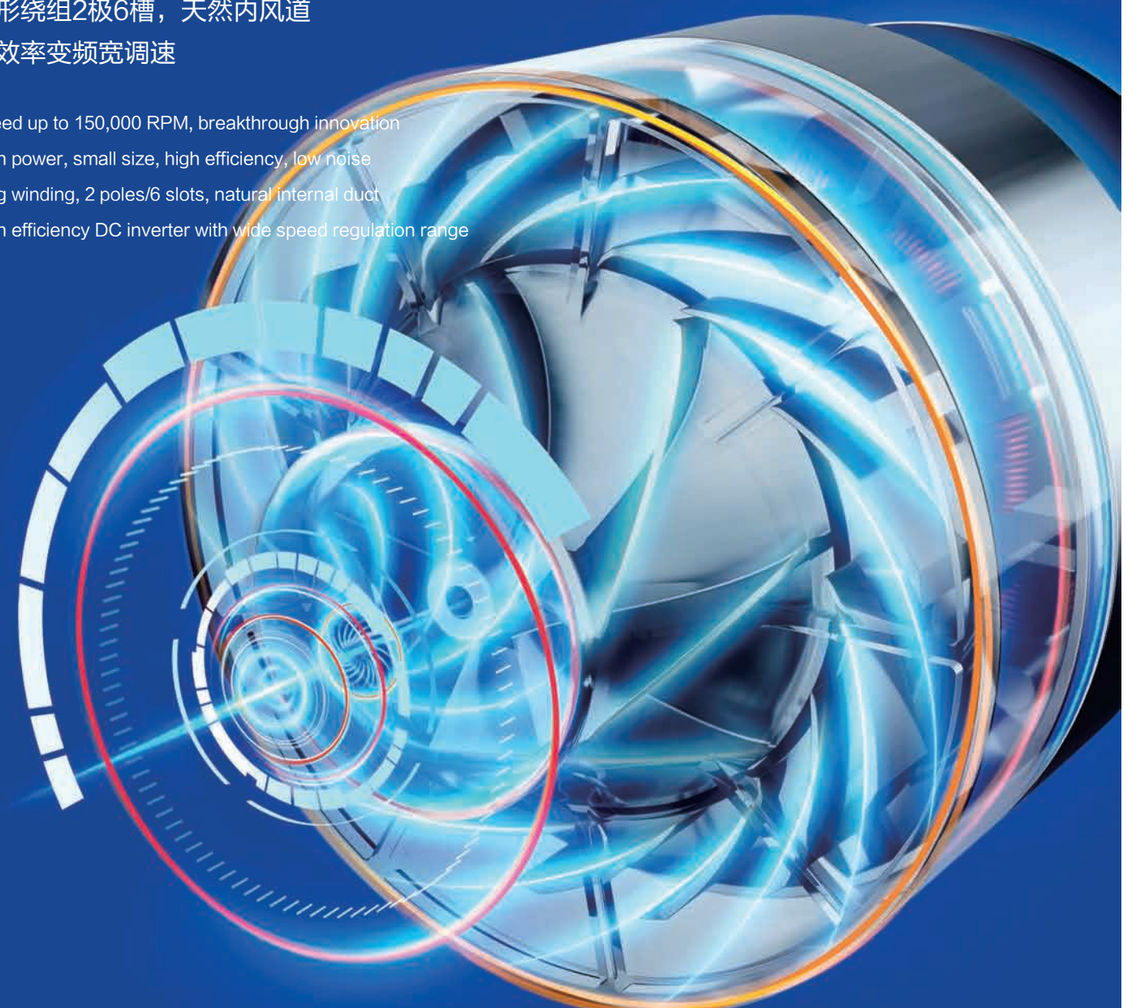
## 吸尘器用超高转速BLDC电机

## Hurricane Spirit

Welling high speed BLDC motor for vacuum cleaner

- 转速高达15万RPM，创新突破
- 大功率、小体积、高效率、低噪音
- 环形绕组2极6槽，天然内风道
- 高效率变频宽调速

- Speed up to 150,000 RPM, breakthrough innovation
- High power, small size, high efficiency, low noise
- Ring winding, 2 poles/6 slots, natural internal duct
- High efficiency DC inverter with wide speed regulation range





# 高速BLDC吸尘器用电机

High Speed BLDC Motor for Vacuum Cleaner

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 150 W | 200 W | 250 W | 300 W | 350 W | 400 W | 450 W | 500 W | 550 W | | | | |
| 8万转 | | | ■ | ■ | ■ | ■ | ■ | | | 250~450 | 18/21.6/25.2/28.8 | ⊓ | 电控无霍尔控制方式 Sensorless electronic control |
| 12万转 | | | | | | ■ | ■ | ■ | | 400~500 | 18/21.6/25.2/28.8 | ⊓ | 电控无霍尔控制方式 Sensorless electronic control |
| 15万转 | | | | | | | | ■ | ■ | 500~550 | 21.6/25.2/28.8 | ⊓ | 电控无霍尔控制方式 Sensorless electronic control |



### 8万转高速BLDC电机 80 thousand rpm High Speed BLDC Motor

**产品特点** Features

小体积，高效率，长寿命，低噪音，满足600H寿命试验，满足60000次频繁启停耐久试验

Small size, high efficiency, long life, and low noise, meet the life test of 600h,meet 60,000 frequent start-stop endurance tests

**用途** Application

手持充电式吸尘器

Handheld rechargeable vacuum cleaner



### 12万转高速BLDC电机 120 thousand rpm High Speed BLDC Motor

**产品特点** Features

小型轻量，高效率，长寿命，低噪音，满足600H寿命试验，满足60000次频繁启停耐久试验

Small and lightweight, high efficiency, long life, and low noise, meet the life test of 600h,meet 60,000 frequent start-stop endurance tests

**用途** Application

手持充电式吸尘器

Handheld rechargeable vacuum cleaner



### 15万转高速BLDC电机 150 thousand rpm High Speed BLDC Motor

**产品特点** Features

小型轻量，高效率，长寿命，大吸力，超高转速，满足600H寿命试验，满足60000次频繁启停耐久试验

Small and lightweight, high efficiency, long life, high suction, and super high speed, meet the life test of 600h,meet 60,000 frequent start-stop endurance tests

**用途** Application

手持充电式吸尘器

Handheld rechargeable vacuum cleaner

# 洗碗机电泵
Dishwasher Pump

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20 W | 30 W | 40 W | 45 W | 50 W | 55 W | 60 W | 65 W | 70 W | | | | |
| ϕ73 | | | ■ | ■ | ■ | ■ | ■ | ■ | | 40~65 | 230 | □ | DC输入，180度正弦波控制 DC input, 180° sine-wave control |
| □73 | | | ■ | ■ | ■ | ■ | ■ | ■ | | 40~65 | 230 | □ | DC输入，180度正弦波控制 DC input, 180° sine-wave control |



**ϕ73系列（可集成加热）** ϕ73 series（Intergrated Heat Pump）**DC**

**产品特点** Features

Halbach铁氧体磁环技术，免生锈，体积小，重量轻，结构简单，可靠性高；
可集成水浸式加热管技术，水温加热保护+干烧断电保护；BMC塑封技术，
防潮湿；铜线/铝线

Halbach ferrite magnetic ring technology, and rust-free, small size, light weight, simple structure, and high reliability. Can integrate water immersion heating tube technology, water temperature overheat protection + dry-burning power-off protection. BMC plastic sealing technology, moisture-proof. Copper wires / aluminum wires

**用途** Application

洗碗机
Dishwasher



**□73系列（可集成加热）** □73 series（Intergrated Heat Pump）**DC**

**产品特点** Features

钕铁硼转子，体积小，重量轻，结构简单，可靠性高，铝线。
可集成水浸式加热管技术，具备水温加热保护+干烧断电保护

NdFeB rotor, small size, light weight, simple structure, high reliability, aluminum wires. Can integrate water immersion heating tube technology, water temperature overheat protection + dry-burning power-off protection.

**用途** Application

洗碗机
Dishwasher



# 洗碗机电泵
Dishwasher Pump

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 30 W | 40 W | 50 W | 60 W | 70 W | 80 W | 90 W | 100 W | 110 W | | | | |
| ϕ90 | ■ | ■ | ■ | ■ | ■ | | | | | 30~70 | 220-240/50Hz，115-127/60Hz | □ | / |
| □101 | | | | ■ | ■ | ■ | ■ | ■ | ■ | 60~110 | 220-240/50Hz，115-127/60Hz | □ | / |



**ϕ90系列** ϕ90series **AC**

**产品特点** Features

电容运转感应水泵，铜线/铝线
Capacitance running induction pump，copper wires / aluminum wires

**用途** Application

洗碗机
Dishwasher



**□101系列** □101series **AC**

**产品特点** Features

电容运转感应水泵，铜线/铝线
Capacitance running induction pump，copper wires / aluminum wires

**用途** Application

洗碗机
Dishwasher

# 电抗器
Electric Reacter

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 电感 Reted Output (mH) | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.5 mH | 5 mH | 8 mH | 10 mH | 15 mH | 20 mH | 25 mH | 30 mH | 35 mH | | | | |
| 空调电抗 | ——— | ——— | ——— | ——— | ——— | ——— | ——— | | | 1.5~25（mH） | 串联系统，无电压要求 Series system, no voltage requirement | | / |
| 洗衣机电抗 | ——— | ——— | ——— | ——— | ——— | ——— | ——— | | | 1.5~25（mH） | 串联系统，无电压要求 Series system, no voltage requirement | T | / |
| 破壁机电抗 | ——— | ——— | ——— | ——— | ——— | ——— | ——— | | | 1.5~25（mH） | 串联系统，无电压要求 Series system, no voltage requirement | T | / |



**空调用电抗器系列** Electric Reactor for A/C

**产品特点** Features

采用优质绝缘材料及先进生产工艺，产品一致性好，可靠性高，铜线/铝线可选
Using high quality insulation materials and advanced production technology, good product consistency and high reliability，copper & aluminum wires

**用途** Application

家用/商用变频空调
Home / commercial inverter air conditioner



**洗衣机用电抗器系列** Electric Reactor for Washing Machine

**产品特点** Features

树脂灌封，塑料外壳，铜线及铝线可选，安装方式为塑封壳体装配
Resin packaging, plastic casing，copper & aluminum wires，plastic-sealed shell assembly

**用途** Application

变频洗衣机
DC washing machine



**破壁机电抗器系列** Electric Reactor for The Wall Machine

**产品特点** Features

采用优质绝缘材料及先进生产工艺，产品一致性好，可靠性高，铜线/铝线可选
Using high quality insulation materials and advanced production technology, good product consistency and high reliability，copper & aluminum wires

**用途** Application

变频破壁机
DC inverter wall machine



# 燃气热水器用电机
Gas Water Heater Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 W | 15 W | 20 W | 25 W | 30 W | 35 W | 40 W | 45 W | 50 W | | | | |
| 76 | | ——— | ——— | ——— | ——— | | | | | 8~30 | 36 | □ | PWM |
| 78 | ——— | ——— | ——— | | | | | | | 6~20 | 220 | □ | 主抽头/副抽头/单速/双速可选 Main tap / assistant tap / single speed / double speed |
| 70/40 | ——— | ——— | ——— | | | | | | | 5~20 | 220 | □ | 主抽头/副抽头/单速/双速可选 Main tap / assistant tap / single speed / double speed |



**76系列** 76 series **DC**

**产品特点** Features

铁壳电机拉伸结构，铜线，安装脚
Steel casing motor tensile structure, copper wire, foot mounting structure

**用途** Application

燃气热水器
Gas water heater



**78系列** 78 series **AC**

**产品特点** Features

铁壳电机拉伸结构,散热好
Steel casing motor tensile structure, good heat dissipation

**用途** Application

燃气热水器
Gas water heater



**70/40系列** 70 series **AC**

**产品特点** Features

树脂封装，防护等级高，噪音低，结构简易。
Resin packaging, simple structure

**用途** Application

燃气热水器
Gas water heater

# 其他
Other Motor

| 产品系列 Series | 能力范围 Capacity range | | | | | | | | | 功率 Output | 电压 Voltage | 安装方式 Installation method | 控制方式 Control |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 W | 2 W | 3 W | 4 W | 5 W | 6 W | 7 W | 8 W | 9 W | | | | |
| 50 | | | | | | | | | | 1~3 | 12 | □ | 无霍尔感应、正弦波驱动 Sensorless，sine-wave driving |



**50系列 DC-冰箱** 50 series DC refrigerator

**产品特点** Features

体积小，树脂封装，铜线，胶圈安装
Small size, resin packaging, copper wire, rubber gasket mounting

**用途** Application

冰箱
Refrigerator



**50系列 DC-空调排水泵** 50 Series A/C drainage pump

**产品特点** Features

低噪音振动、低成本、轻量化
Low noise and vibration, low cost, lightweight

**用途** Application

家用/商用空调
Home / commercial air conditioner



# 安装方式
Installation Method

| | | | |
|---|---|---|---|
| 01 | ○ | 橡胶圈 | Rubber gasket |
| 02 | ⬠ | 法兰盘/带胶圈 | Flange type with rubber gasket |
| 03 | ■ | 树脂封装，胶圈安装 | Resin packaging, rubber gasket |
| 04 | □ | 水平 | Horizontally |
| 05 | ▲ | 减震胶圈/法兰盘 | Damping rubber gasket / Flange type |
| 06 | ● | 法兰盘式 | Flange type |
| 07 | △ | 端盖支架 | Cap support |
| 08 | ⬭ | 抱箍安装 | Hoop Mounting |
| 09 | 💧 | 水平线垂直 | Horizontal line vertical |
| 10 | ⏢ | 橡胶圈、支架 | Rubber gasket, support |
| 11 | ⅂ | 轴伸端朝下 | The axle stretch end downward |
| 12 | L | 垂直 | Vertically |
| 13 | ⊥ | 具有安装脚结构 | Foot Mounting Structure |
| 14 | ⩓ | 减震圈/支架 | Damping ring / support |
| 15 | T | 螺钉固定 | Screw fixing |
| 16 | ⫚ | 钣金限位后螺钉固定 | Screw fixing after sheet metal limit |

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