

联系我们
Contact us

河北中磁科技有限公司
Hebei Zhongci Technology Co., Ltd

地 址：河北省石家庄市栾城区南车路172号

电 话：0311-85461111

邮 箱：zckjyxb@163.com

网 址：www.hcmotor.cn

Add: No.172 Nanche Road, Luancheng District, Shijiazhuang City, Hebei Province

Tel: 0311-85461111

Mail: zckjyxb@163.com

Http://www.hcmotor.cn



永磁同步变频电机

Permanent magnet synchronous variable frequency motor

河北中磁科技有限公司
Hebei Zhongci Technology Co., Ltd

目录 Content

企业简介	1	Company profile	1
企业资质	2	Company qualification	2
产品代码说明	4	Explanation of the product code	4
产品概述	5	General information	5
铭牌	6	Rating plates	6
电气特性	7	Electrical characteristic	7
机械设计	9	Mechanical design	9
变频器驱动	14	Frequency changer	14
订购信息	15	Ordering information	15
风冷永磁同步变频电机	16	Air-cooled permanent magnet synchronous variable frequency motor	16
液冷永磁同步变频电机	17	Liquid cooled permanent magnet synchronous variable frequency motor	17
伺服永磁同步变频电机	18	Servo permanent magnet synchronous variable frequency motor	18
低速大扭矩永磁同步变频电机	19	Low speed high torque permanent magnet synchronous variable frequency motor	19
高压永磁同步变频电机	20	High voltage permanent magnet synchronous variable frequency motor	20
高低压永磁变频工控系统	21	High and low voltage permanent magnet frequency conversion industrial control system	21
永磁辅助式同步磁阻电机	22	Permanent magnet assisted synchronous reluctance motor	22
复合防爆型永磁同步变频电机	23	Compound explosion-proof permanent magnet synchronous variable frequency motor	23
技术数据	24	Technical data	24
机械参数-低压系列	26	Mechanical parameter-Low voltage series	26
机械参数/电气参数-高压系列	27	Mechanical parameter / Electrical parameter-High voltage series	27

企业简介 Company profile



河北中磁科技有限公司位于河北省石家庄市栾城区南车路172号，占地面积15000m²，是一家集研发、制造、营销于一体的高新技术企业，致力于为每个客户提供优质的产品和专业的服务。

公司现有风冷永磁同步变频电机、液冷永磁同步变频电机、伺服永磁同步变频电机、低速大扭矩永磁同步变频电机、高压永磁同步变频电机、高低压永磁变频工控系统、永磁辅助式同步磁阻电机、复合防爆型永磁同步变频电机8大系列产品，上百种规格，广泛应用于压缩机、风机、水泵、工程机械、矿山设备、水泥设备、医药化工设备、纺织设备等领域。产品凭借过硬的质量，受到国内外客户的高度好评。

公司始终以客户为中心，秉承“节能、品质、服务”的经营理念，保持企业稳步发展。公司与西安交通大学、沈阳工业大学、上海电气科学研究所等国家重点大学和科研机构开展密切合作，通过一系列的技术交流、培训与合作，不断提升研发、技术、生产等部门的专业技能，同时在新产品研发上取得重大成果。企业内部推行ERP数字化运营管理和ISO9001质量体系管理，以最快的效率实现产品交付。

Hebei Zhongci Technology Co., Ltd. is located in No. 172 Nanche Road, Shijiazhuang City, Hebei Province, covering an area of 15,000 square meters, is a research and development, manufacturing, marketing in one of the high-tech enterprises, committed to providing quality products and professional services for each customer.

The company has eight series of products, including air cooled permanent magnet synchronous variable frequency motor, liquid cooled permanent magnet synchronous variable frequency motor, servo permanent magnet synchronous variable frequency motor, low speed and high torque permanent magnet synchronous variable frequency motor, high and low voltage permanent magnet synchronous variable frequency motor, permanent magnet auxiliary synchronous reluctance motor, compound explosion-proof permanent magnet synchronous variable frequency motor, hundreds of specifications. Widely used in compressors, fans, pumps, construction machinery, mining equipment, cement equipment, medical and chemical equipment, textile equipment and other fields. Products with excellent quality, by domestic and foreign customers highly praised.

The company has always been customer-centric, adhering to the "energy saving, quality, service" business philosophy, to maintain steady development of enterprises. The company cooperates closely with Xi'an Jiaotong University, Shenyang University of Technology, Shanghai Institute of Electrical Science and other national key universities and research institutions. Through a series of technical exchanges, training and cooperation, the company continuously improves the professional skills of R&D, technology, production and other departments, and has achieved significant results in new product research and development. The enterprise implements ERP digital operation management and ISO9001 quality system management to achieve product delivery with the fastest efficiency.

企业资质 Company qualification

- 河北省专精特新中小企业证书 / 高新技术企业证书 / 河北省科技型中小企业证书
Hebei Province specialized in special new / High-tech enterprise certificate / Hebei Province science and technology



- 质量管理体系认证证书 / 环境管理体系认证证书 / 职业健康安全管理体系认证证书 / 河北省工业企业研发机构证书
Quality management system certification / Environmental management system certification / Occupational health and safety management system certification / Hebei Province industrial enterprise R & D institution certificate



专利证书
Certificates

我们提供电机、发电机、机械传动产品、各项相应服务及专业技术支持，帮助客户在产品的整个使用周期及更长的期限内，实现节能及工艺改进。

We provide motors, generators, mechanical transmission products, services and technical support to help customers achieve energy savings and process improvements throughout the product life cycle and beyond.



产品代码说明

Explanation of the product code

ZCTI-280M-132-1500;B35;ZH;IP55;FAG;(380);(IC416) ;100;128;PT100;Y002-X

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

<p>位置 1-3 产品代码 1) ZC 为河北中磁科技有限公司中的“中磁”汉语拼音首写字母。 2) 第二位为同步、异步之分,同步用 T 代替,异步用 Y 代替。</p> <p>3) 第三位 I: 铁壳电动机 A: 铝壳电动机 K: 箱式高压电动机 G: 紧凑型高压电动机</p>	<p>Positions 1 to 3 Product code 1) ZC is the initial letter of "Zhongci" Chinese pinyin in Hebei Zhongci Technology Co., Ltd. 2) The second place is synchronous and asynchronous, synchronous is replaced by T, asynchronous is replaced by Y. 3) The third place: I: Iron shell motors A: Aluminum shell motors K: Box type high voltage motors G: Compact high voltage motors</p>
<p>位置 4 机座号 112-630</p>	<p>Position 4 Motor size 112-630</p>
<p>位置 5 额定功率 5.5-2000</p>	<p>Position 5 Rated power 5.5-2000</p>
<p>位置 6 额定转速</p>	<p>Position 6 Rated speed</p>
<p>位置 7 安装方式 B3 B35 B5,默认是 B3 的</p>	<p>Position 7 Mounting arrangement B3 B35 B5,the default is B3.</p>
<p>位置 8 出线方式</p>	<p>Position 8 Wiring method</p>
<p>位置 9 防护等级 IP55 IP56 IP65 IP67 IP68</p>	<p>Position 9 Protection grade IP55 IP56 IP65 IP67 IP68</p>
<p>位置 10 轴承品牌 FAG SKF,默认是 FAG</p>	<p>Position 10 Bearing brand FAG SKF,the default is FAG</p>
<p>位置 11 额定电压 110V-10kV</p>	<p>Position 11 Rated voltage 110V-10kV</p>
<p>位置 12 冷却方式 IC411 IC416 IC71W,默认是 IC416</p>	<p>Position 12 Type of cooling IC411 IC416 IC71W, the default is IC416</p>
<p>位置 13 额定频率</p>	<p>Position 13 Rated frequency</p>
<p>位置 14 过载倍数: 该位表征电机的过载能力</p>	<p>Position 14 Overload multiple: This bit represents the overload capacity of the motor</p>
<p>位置 15 热保护器</p>	<p>Position 15 Thermal protector</p>
<p>位置 16 客户代码</p>	<p>Position 16 Customer code</p>

我司产品均为三相电动机。

Our products are three-phase motors.

产品概述 - 安装结构形式

General information - Mounting arrangements

底脚安装型电机

Foot-mounted motor

						<p>说明 Instructions</p> <p>底脚安装型,接线盒在顶部 foot-mounted, terminal box on top</p>
IM B3	IM V5	IM V6	IM B6	IM B7	IM B8	
IM 1001	IM 1011	IM 1031	IM 1051	IM 1061	IM 1071	

凸缘安装型电机

Flange-mounted motor

						<p>说明 Instructions</p> <p>凸缘安装型,大凸缘 flange mounted, large flange</p>
IM B5	IM V1	IM V3	*)	*)	*)	
IM 3001	IM 3011	IM 3031	IM 3051	IM 3061	IM 3071	

底脚和凸缘安装型电机

Foot- and flange-mounted motor with feet

						<p>说明 Instructions</p> <p>B3 派生出 B35 B35 from B3</p>
IM B35	IM V15	IM V35	*)	*)	*)	
IM 2001	IM 2011	IM 2031	IM 2051	IM 2061	IM 2071	

产品概述 - 防护等级:IP 代码

General information - Degrees of protection: IP code

IP 防护

防止人员接触(或接近)带电部件,以及机壳内的运转部件。同时避免外界固体异物侵入机器内,保护机器,避免进水防止受到有害影响。

IP protection

Protection of persons against getting in contact with (or approaching) live parts and against contact with moving parts inside the enclosure. Also protection of the machine against ingress of solid foreign objects. Protection of machines against the harmful effects due to the ingress of water.

IP 代码说明
Explanation of the IP code

特征字母 Ingress protection	对人和机壳内电机部件的保护程度 Degree of protection to persons and to parts of the motors inside the enclosure	机壳防止机器进水, 遭受有害影响的防水程度 Degree of protection provided by the enclosure with respect to harmful effects due to ingress of water
IP	5	5
	1	2

位置 1
Position 1

- 2: 直径 12.5mm 的球形物体试具不得完全进入壳内
The spherical specimen with a diameter of 12.5mm shall not be fully inserted into the shell
- 3: 直径 2.5 mm 的物体试具完全不得进入壳内
Objects with a diameter of 2.5 mm must not enter the shell at all
- 4: 直径 1.0 mm 的物体试具完全不得进入壳内
Objects with a diameter of 1.0 mm must not enter the shell at all
- 5: 不能完全防止尘埃进入, 但进的灰尘量不得影响设备的正常运行, 不得影响安全
The dust cannot be completely prevented from entering the device, but the amount of dust must not affect the normal operation of the device or the safety of the device
- 6: 无灰尘进入
No dust entering

位置 2
Position 2

- 3: 当外壳的垂直面在 60°C 范围内淋水无有害影响
When the vertical surface of the shell is in the range of 60 °C, there is no harmful effect
- 4: 向外壳各方向溅水无有害影响
Splashing water in all directions of the housing has no harmful effect
- 5: 向外壳各方向喷水无有害影响
Spraying water in all directions of the housing has no harmful effect
- 6: 向外壳各个方向强烈喷水无有害影响
Strong spraying of water in all directions to the housing has no harmful effect
- 7: 浸入规定压力的水中经规定时间后外壳进水量不致达有害度
The amount of water in the shell will not reach harmful degree after being immersed in the water under the specified pressure for the specified time
- 8: 按生产厂和用户双方同意的条件 (应比特征数字为 7 时严酷) 持续潜水后外壳进水量不致达有害程度
According to the conditions agreed by the manufacturer and the user (which should be harsher than the characteristic number of 7), the water intake of the shell will not reach harmful levels after continuous diving

铭牌
Rating plates

 三相永磁同步电机 THREE PHASE PM SYNCHRONOUS MOTOR			
型号TYPE	产品编号CCN	日期DATE	
额定功率POWER kW	额定电压VOLT V	额定转矩TORQUE Nm	
额定电流AMP A	额定频率FRE Hz	额定转速SPEED rpm	
服务系数S.F	反电势EMF V	工作制DUTY	
绝缘等级INS. CLASS	防护等级ENCL	重量WGT kg	
出厂编号S/N	效率EFF		
河北中磁科技有限公司 Hebei Zhongci Technology Co., Ltd.			

说明:
铭牌图片仅供参考, 最终数据以实际铭牌为准。

轴承与加脂牌		
前轴承型号	加脂时间	加脂量
后轴承型号	加脂时间	加脂量
油脂 牌号 MoBil Polyrex EM		

Remark:
The nameplate picture is for reference only. The final figure will be subject to the actual rating plate.

电气特性
Electrical characteristic

额定输出

电机的额定功率是指电机运行在 S1- 连续工作制的情况下 (IEC60034-1), 此时周围环境温度范围为 -20°C ~ 40°C, 海拔高度不超过 1000m。

Rated Output

Motors rated outputs means that the motor runs under continuous duty S1 (IEC60034-1) operation at ambient temperature from -20°C ~ 40°C and at altitudes of up to 1000 m above sea level.

电压、频率

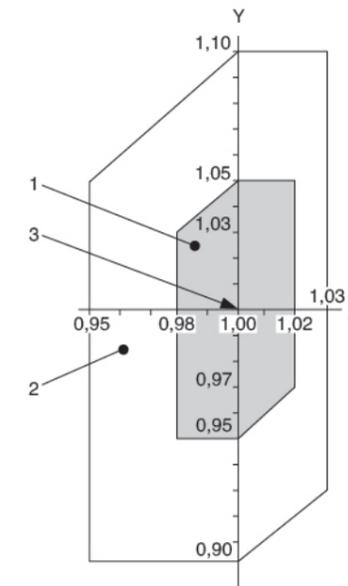
IEC60034-1 定义了电压和频率的波动对温升的影响。标准将电压和频率的综合变化分为 A 和 B 两个区域。区域 A 是电压偏差 ±5% 和频率偏差 ±2% 的情况; 区域 B 是电压偏差 ±10% 和频率偏差 +3%/-5% 的情况。

Voltage and Frequency

The impact on temperature rise caused by voltage and frequency fluctuation is defined in IEC60034-1. The standard divides the combinations into two zones, zone A and B. Zone A is the combination of voltage deviation ±5% and frequency deviation ±2%. Zone B is the combination of voltage deviation ±10% and frequency deviation +3%/-5%.

电机均能在 A 和 B 两区域内提供额定转矩, 但温升会高于在额定电压和频率情况下的值。电机只允许在区域 B 中短时间运行。

The motors are capable of supplying the rated torque in both zone A and B, but the temperature rise will be higher than at rated voltage and frequency. The motors are to be in operation only for a short period of time in zone B.



- X 轴 频率标么值
 - Y 轴 电压标么值
 - 1 区域 A
 - 2 区域 B (区域 A 外)
 - 3 额定点
- X axis frequency p.u.
 - Y axis voltage p.u.
 - 1 zone A
 - 2 zone B (outside zone A)
 - 3 rating point

电气特性 Electrical characteristic

绝缘系统

中磁采用 F 级绝缘材料, B 级温升, 是当今业界通用的要求。

F 级绝缘系统 B 级温升的采用, 使中磁产品可获得 25°C 的安全裕度。这使电机在短时间内过载使用, 或在较高环境温度和海拔, 或在高电压和频率容差下使用成为可能。这一设计同样可用于延长绝缘寿命。例如, 温度降低 10K, 绝缘寿命延长。

B 级绝缘 (130°C)

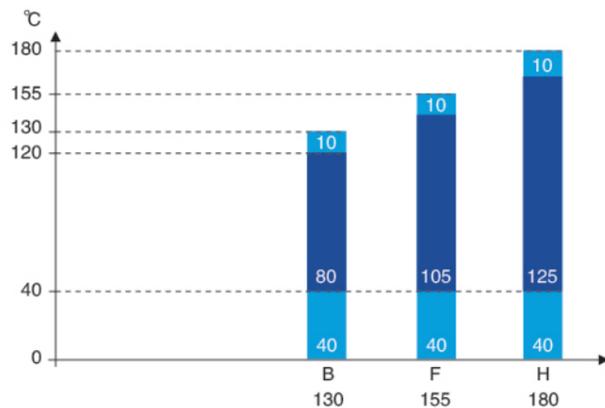
- 额定环境温度 40°C
- 最大允许温升 80K
- 热点温升裕度 10K

F 级绝缘 (155°C)

- 额定环境温度 40°C
- 最大允许温升 105K
- 热点温升裕度 10K

H 级绝缘 (180°C)

- 额定环境温度 40°C
- 最大允许温升 125K
- 热点温升裕度 10K



各绝缘等级的安全裕度
Safety margins per thermal class

Insulation

Zhongci uses class F insulation, which with temperature rise B, is the common requirement among industry today. The use of class F insulation with class B temperature rise gives Zhongci products a 25°C safety margin. This can be used to increase the loading for limited periods, to operate at higher ambient temperatures or altitudes, or with greater voltage and frequency tolerances. It can also be used to extend insulation life. For instance, a 10 K temperature reduction will extend the insulation life.

Thermal class 130 (B)

- Nominal ambient temperature 40°C
- Max permissible temperature rise 80K
- Hot spot temperature margin 10K

Thermal class 155 (F)

- Nominal ambient temperature 40°C
- Max permissible temperature rise 105K
- Hot spot temperature margin 10K

Thermal class 180 (H)

- Nominal ambient temperature 40°C
- Max permissible temperature rise 125K
- Hot spot temperature margin 10K

机械设计 Mechanical design

机座

包括底脚在内的电机机座是铸铁制成的。整体式铸铁底脚能够实现稳固的安装及降低振动。可提供底脚安装型、凸缘安装型及二者结合的电机。

排水孔

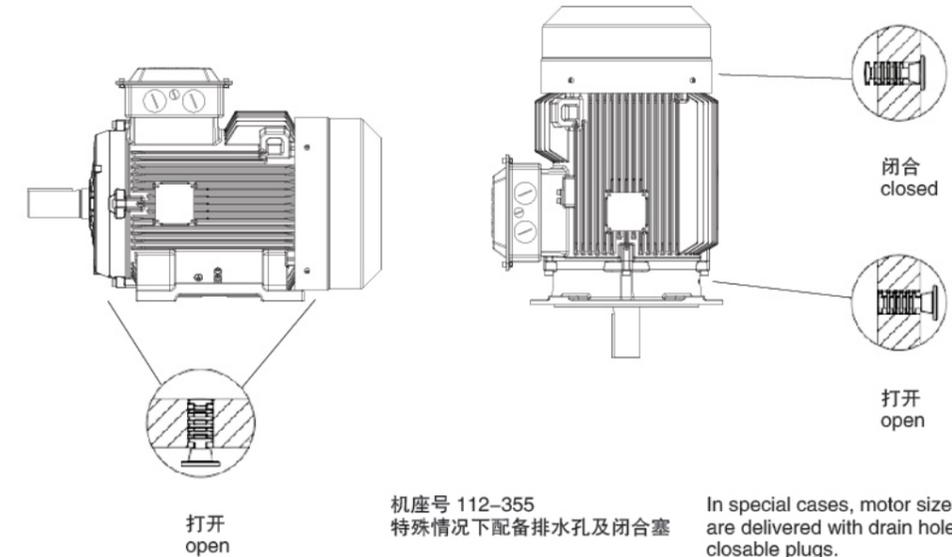
如果在非常湿润或潮湿的环境下, 特别是在断续负载下操作电机, 则应设置排水孔。

Motor frame

The motor frame is made of cast iron, and the standard design includes cast iron feet. Integrated cast iron feet provide rigid mounting, and lower vibration. Motors can be supplied for foot mounting, flange mounting, and combinations of these.

Drain holes

Motors that will be operated in very humid or wet environments, and especially under intermittent duty, should be provided with drain holes.



机座号 112-355
特殊情况下配备排水孔及闭合塞

In special cases, motor sizes 112-355 are delivered with drain holes and closable plugs.

标准接线盒交付

标准接线盒的防护等级为 IP55。标准情况下, 接线盒安装在电机 D 端顶部。此外, 还可以将接线盒安装在左侧或右侧, 请参考订购信息。机座号 112-355 的电机, 采用分体式接线盒。

如果未另行规定, 则采用标准交付。

注意: 对于 500V 及 / 或侧面安装的电机, 请联系中磁!

Standard terminal box

The degree of protection for the standard terminal box is IP 55. By default, terminal boxes are mounted on top of the motor at D-end. In motor sizes 112-355, the terminal box is separate from motor frame.

Standard delivery if no other information is provided.

Note: For other network voltages and/or side-mounted motors, contact your Zhongci sales office.

机座号 Motor size	螺纹孔 Threaded holes	电缆外径 mm Cable outer diameter mm	单芯横截面 平方毫米 / 相 Single core cross-section mm ² /phase	端子螺栓尺寸 6x terminal bolt size 6x
112-132	2xM25x1.5	Ø11.8-16	10	M5
160-180	2xM36x1.5	Ø18-15	35	M6
200-225	2xM45x1.5	Ø24-30	70	M8
250-280	2xM64x1.5	Ø36-44	2x150	M10
315	2xM64x1.5	Ø36-44	2x240	M12
355	2xM72x1.5	Ø40-46	4x240	M16

机械设计 Mechanical design

电机接地 Earthing	机座接地 Earthing on frame
112-132	M5
160-250	M8
280-355	M8

轴承
电机通常安装以下单列深沟球轴承。

标准及可选设计

机座号	极数	标准设计	
		深沟球轴承	
		D 端	N 端
112	2-8	6206-2Z/C3	6206-2Z/C3
132	2-8	6308-2Z/C3	6308-2Z/C3
160	2-8	6309-2Z/C3	6209-2Z/C3
180	2-8	6311/C3	6211/C3
200	2-8	6312/C3	6212/C3
225	2-8	6313/C3	6312/C3
250	2-8	6314/C3	6313/C3
280	2	6314/C3	6314/C3
	4-8	6317/C3	6314/C3
315	2	6317/C3	6317/C3
	4-8	6319/C3	6319/C3
355	2	6319/C3	6319/C3
	4-8	6322/C3	6322/C3

说明：
电机铭牌上显示轴承型号及描述方式仅供客户更换、维修轴承作参考，不代表轴承品牌，具体的轴承品牌及型号以公司实际使用的为准。

轴向锁定轴承

所有电机在 D 端标配轴向锁定轴承。

Bearings

General performance motors are normally fitted with single-row deep-groove ball bearings, as shown in the table below.

Standard and alternative designs

Motor size	Poles	Standard design	
		Deep groove ball bearings	
		D-end	N-end
112	2-8	6206-2Z/C3	6206-2Z/C3
132	2-8	6308-2Z/C3	6308-2Z/C3
160	2-8	6309-2Z/C3	6209-2Z/C3
180	2-8	6311/C3	6211/C3
200	2-8	6312/C3	6212/C3
225	2-8	6313/C3	6312/C3
250	2-8	6314/C3	6313/C3
280	2	6314/C3	6314/C3
	4-8	6317/C3	6314/C3
315	2	6317/C3	6317/C3
	4-8	6319/C3	6319/C3
355	2	6319/C3	6319/C3
	4-8	6322/C3	6322/C3

Remark:
The bearing type and description displayed on the motor nameplate are only for customers to replace and repair bearings for reference, and do not represent the bearing brand. The specific bearing brand and model are subject to the actual use of the company.

Axially-locked bearings

All motors are equipped as standard with an axially locked bearing. General at D-end.

机械设计 Mechanical design

轴承寿命

根据 ISO 281, 轴承的正常寿命 L_{10h} 定义为在特定条件下 90% 的相同轴承在一系列测试中所达到或超过的运行小时数。50% 的轴承至少达到这一数字的五倍。

润滑

电机交货时, 已经使用优质的润滑脂对电机进行润滑。机座号 112-160 电机可采用永久性润滑轴承。机座号 132-355 电机可采用再润滑轴承。

以下数值可作为轴承使用寿命指导值, 具体寿命取决于应用和负载情况: 2-8 极电机约为 40000 小时。

皮带轮直径

所需轴承寿命确定后, 最小允许皮带轮直径可使用 F_R 计算, 如下所示:

$$D = \frac{1.9 \cdot 10^7 \cdot K \cdot P}{n \cdot F_R}$$

其中:

D: 带轮直径, 单位 (mm)

P: 功率要求, kW

n: 电机转速, r/min

K: 皮带张力因数, 取决于皮带类型和负载类型。V 形皮带通用值为 2.5。

F_R : 允许径向力

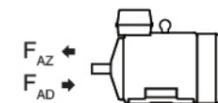
轴上允许负载

允许轴向力

表中提供了环境温度为 25°C 时, 50Hz 的正常条件下, 径向力为零时的轴伸允许轴向力 (N)。分别对轴承寿命满足 20000 和 40000 小时进行计算。

给定轴向力 F_{AD} , 假设 D 端轴承由锁环锁定。

需提供同时存在径向力和轴向力的允许负载值, 请联系中磁。



安装方式 IM B3

Bearing life

The nominal life L_{10h} of a bearing is defined according to ISO 281 as the number of operating hours achieved or exceeded by 90% of identical bearings in a large test series under specified conditions. 50% of bearings achieve at least five times this lifetime.

Lubrication

When the motor is delivered, the motor has been lubricated with high-quality grease.

Permanent lubricated bearings are available for the 112-160 motor.

Relubricated bearings are available for motors with frame size 132-355.

The following values can be used as a guide to the service life of the bearing, depending on the application and load: about 40,000 hours for 2-8 pole motors.

Pulley diameter

When the desired bearing life has been determined, the minimum permissible pulley diameter can be calculated with F_R as follows:

$$D = \frac{1.9 \cdot 10^7 \cdot K \cdot P}{n \cdot F_R}$$

Where:

D: Pulley diameter, mm

P: Power requirement, kW

n: Motor speed, r/min

K: Belt tension factor, dependent on belt type and type of duty. A common value of V-belts is 2.5

F_R : Permissible radial force

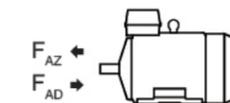
Permissible loading on the shaft

Permissible axial forces

The following table gives the permissible axial forces on shaft in Newton, assuming zero radial force, ambient temperature of 25°C, and normal conditions at 50Hz. The values are given for calculated bearing life of 20000 and 40000 hours per motor size.

For axial force F_{AD} , it is assumed that the D-bearing is locked with a locking ring.

Permissible loads of simultaneous radial and axial forces can be supplied on request.



Mounting arrangement IM B3

机械设计 Mechanical design

机座号 Motor size	极数 Poles	轴伸长度 Length of shaft extension E(mm)	深沟球轴承 Basic design with deep groove ball bearings			
			20,000 小时 20,000 h		40,000 小时 40,000 h	
			F _{AD} (N)	F _{AZ} (N)	F _{AD} (N)	F _{AZ} (N)
112	2	60	1175	615	935	375
	4	60	1460	900	1170	610
	6	60	1635	1075	1300	740
	8	60	1845	1325	1465	945
132	2	80	1675	795	1415	535
	4	80	2110	1230	1665	785
	6	80	2450	1570	1950	1070
	8	80	2795	1915	2185	1305
160	2	110	2905	2205	2280	1580
	4	110	3815	3115	2905	2205
	6	110	4415	3715	3360	2660
	8	110	5245	4545	4015	3115
180	2	110	3430	2550	2700	1820
	4	110	4405	3525	3425	2545
	6	110	5195	4315	3960	3080
	8	110	5780	4900	4405	3525
200	2	110	4325	3445	3375	2495
	4	110	5585	4705	4320	3440
	6	110	6630	5750	5015	4135
	8	110	7375	6495	5585	4705
225	2	110	4905	3965	3820	2880
	4	140	6345	5405	4900	3960
	6	140	7535	6595	5690	4750
	8	140	8390	7450	6340	5400
250	2	140	6125	4605	4810	3290
	4	140	7860	6340	6120	4600
	6	140	9325	7805	7075	5555
	8	140	10350	8830	7855	6335
280	2	140	6060	4060	4530	2530
	4	140	7380	5380	6010	4010
	6	140	8850	6850	6710	4710
	8	140	12065	10055	9560	7965
315SM	2	140	6180	4180	4820	2820
	4	170	9370	7370	7170	5170
	6	170	10820	8820	8230	6230
	8	170	14760	12185	11685	9645
315ML	2	140	6120	4120	4760	2760
	4	170	9280	7280	7080	5080
	6	170	10700	8700	8110	6110
	8	170	14925	12585	11805	9960
355SM	2	140	5782	4070	4432	2720
	4	210	11372	9660	8572	6860
	6	210	13172	11460	9852	8140
	8	210	18805	15530	14870	12275

机械设计 Mechanical design

允许径向力

表中提供了环境温度为 25℃时, 50Hz 的正常条件下, 轴向力为零时的轴伸允许径向力 (N)。分别对轴承寿命满足 20000 小时和 40000 小时进行计算。

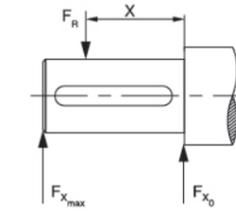
电机为底座安装型 IM B3, 并且含横向力。在某些情况下, 轴的强度影响允许负载力。

需提供同时存在径向力和轴向力的允许负载值, 请联系中磁。

如果径向力作用于点 X₀ 和 X_{max} 之间, 则允许负载力 F_R 可以通过以下公式计算:

$$F_R = F_{X_0} - \frac{X}{E} (F_{X_0} - F_{X_{max}})$$

E: 基本型号中的轴伸长度



机座号 Motor size	极数 Poles	轴伸长度 Length of shaft extension E(mm)	深沟球轴承 Basic design with deep groove ball bearings			
			20,000 小时 20,000 h		40,000 小时 40,000 h	
			F _{X₀} (N)	F _{X_{max}} (N)	F _{X₀} (N)	F _{X_{max}} (N)
112	2	60	1120	925	885	730
	4	60	1405	1160	1105	915
	6	60	1615	1335	1275	1050
	8	60	1795	1470	1420	1165
132S	2	80	1630	1270	1285	1000
	4	80	2055	1600	1620	1260
	6	80	2360	1840	1860	1450
	8	80	2690	2155	2130	1710
132M	4	80	2075	1665	1630	1310
	6	80	2375	1905	1865	1495
	8	80	2690	2155	2130	1710
160	2	110	3265	2535	2590	2010
	4	110	4155	3295	3290	2610
	6	110	4760	3775	3770	2990
	8	110	5260	4255	4250	3370
180	2	110	3905	3175	3095	2515
	4	110	4920	3995	3900	3165
	6	110	5680	4715	4505	3735
	8	110	6260	5190	4960	4115
200	2	110	5165	4360	4095	3460
	4	110	6500	5490	5150	4350
	6	110	7355	6025	5830	4780
	8	110	8200	6930	6500	5495

Permissible radial forces

The following table gives the permissible radial forces on shaft in Newton, assuming zero axial force, ambient temperature of 25℃, and normal conditions at 50Hz. The values are given for calculated bearing life of 20,000 and 40,000 hours per motor size.

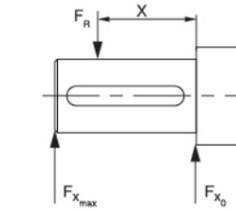
These calculated values further assume mounting position IM B3 (foot-mounted), with force directed sideways. In some cases, the strength of the shaft affects the allowable load.

Permissible loads of simultaneous radial and axial forces can be supplied on request.

If the radial force is applied between points X₀ and X_{max}, the permissible force F_R can be calculated with the following formula:

$$F_R = F_{X_0} - \frac{X}{E} (F_{X_0} - F_{X_{max}})$$

E: Length of the shaft extension in the standard version



机座号 Motor size	极数 Poles	轴伸长度 Length of shaft extension E(mm)	深沟球轴承 Basic design with deep groove ball bearings			
			20,000 小时 20,000 h		40,000 小时 40,000 h	
			F _{X₀} (N)	F _{X_{max}} (N)	F _{X₀} (N)	F _{X_{max}} (N)
225	2	110	5865	4910	4650	3890
	4	140	7390	5920	5855	4690
	6	140	8455	6775	6700	5370
	8	140	9310	7460	7380	5915
250	2	140	7185	5825	5695	4620
	4	140	9090	7475	7205	5925
	6	140	10410	8560	8255	6785
	8	140	11460	9425	9085	7470
280	2	140	6590	5500	5100	4250
	4	140	8310	6930	6430	5360
	6	140	9460	7890	7310	6090
	8	140	12065	10055	9560	7965
315SM	2	140	6610	5630	5060	4310
	4	170	10390	8580	7980	6590
	6	170	11740	9690	8980	7420
	8	170	14760	12185	11685	9645
315ML	2	140	6540	5670	4970	4310
	4	170	10300	8690	7860	6630
	6	170	11610	9790	8810	7430
	8	170	14925	12585	11805	9960
355SM	2	140	6030	5280	4460	3910
	4	210	13240	10930	10030	8280
	6	210	14900	12310	11240	9280
	8	210	18805	15530	14870	12275

变频器驱动 Frequency changer

轴承电流

功率大于等于 90kW 的电机应该采用消除轴承电流的电压的防护措施,使用镀陶轴或绝缘轴承。

运行速度

低压一般用途电机设计为可在较宽的转速范围内工作,并且转速也大大高于标称值。最高转速为电机铭牌额定转速的 110%。特殊情况,请联系中磁。

变频器驱动的电动机负载能力

变频器驱动和直接启动的电动机的运行温升存在差异,其受到诸如以下因素的影响:取决于电动机的轴流风扇的冷却效果,变频器谐波导致损耗增加,和在弱磁点上磁通量的降低。所有这些因素的影响都体现在负载曲线中。

Bearing current

$P \geq 90\text{kW}$ motors should adopt protect measures to eliminate bearing current and voltage, either by ceramic coated shaft or by insulated bearing.

Operating speed

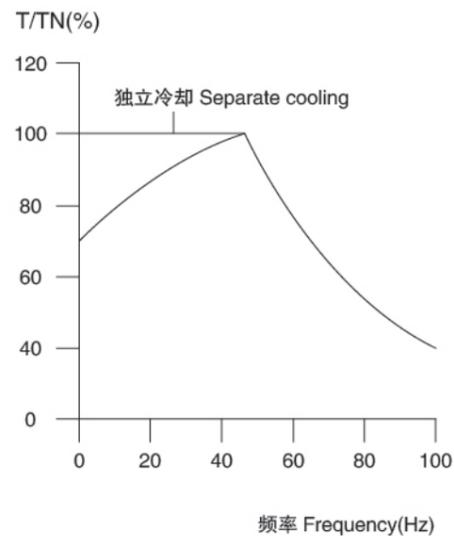
General performance motors are designed to work over a wide speed range and also at speeds significantly higher than nominal. The maximum speed is 110% of the fixed speed of the motor nameplate. In special circumstances, please contact Zhongci.

Motor loadability with frequency converter drives

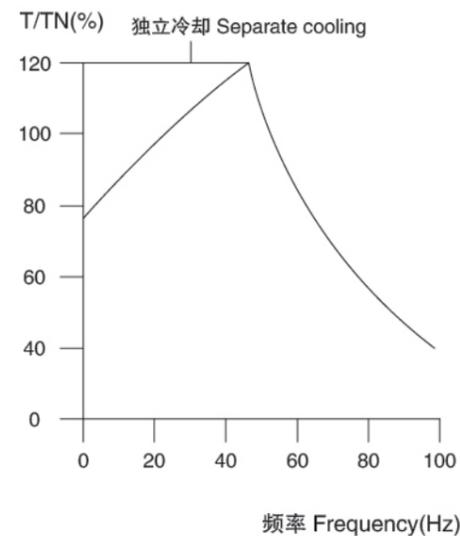
The difference in the temperature rise of a motor run direct on line compared to the same motor run with a converter is influenced by factors such as the cooling effect of a shaft-mounted fan depending on the speed of the motor, increased losses due to harmonics generated by the converter and reduced flux above the field weakening point. The effects of all these factors are combined in the loadability curves.

负载曲线图

B 级温升
Temperature rise B



F 级温升
Temperature rise F



订购信息 Ordering information

订购时,请按照示例在订单中说明以下数据。电机产品代码根据以下示例编写。

When ordering, specify the following data in the order form as shown in the example. The motor product code is written according to the following example.

示例		Example	
电机型号	ZCTI-315M-160-1500	Motor type	ZCTI-315M-160-1500
机座号	315M	Motor size	315M
额定功率	160	Rated power	160
额定转速	1500	Rated speed	1500
安装方式	B3	Mounting arrangement(IM-code)	B3
冷却方式	IC411	Type of cooling	IC411
绝缘等级	F	Insulation grade	F
防护等级	IP55	Level of protection	IP55
额定电压	380V	Rated voltage	380V
应用设备	水泵	Application apparatus	Water pump
其他要求		Other requirements	

如有疑问联系技术人员:
电话: 0311-85461111

If in doubt, contact the technician:
Telephone:0311-85461111

风冷永磁同步变频电机 Air-cooled permanent magnet synchronous variable frequency motor

产品介绍

本系列产品通过安装在电机上的同轴风扇或独立风机，在电机运行时，风扇或风机会将空气吹到电机外壳表面散热筋上，通过对电机外表面进行强制散热来稳定电机温度。这种冷却方式简单易行、稳定可靠，无需额外的冷却介质，且散热效果较为理想。因此，在一些小型和中型永磁同步电机中，风冷方式被广泛采用。

风扇冷却



功率范围：5.5kW-630kW
电压范围：AC110V-1140V
转速范围：400rpm-10000rpm
绝缘等级：F级 H级
防护等级：IP55 IP56 IP65

产品优势及应用

优势：效率高、功率因数高、宽转速
温升低、体积小、重量轻、噪音低
标准化设计、通用性强、可靠性高
可为客户提供特殊定制化服务
应用产品：风机、水泵、压缩机、减速机等
各类通用工业设备

风机冷却



Power range: 5.5kW-630kW
Voltage range: AC110V-1140V
Speed range: 400rpm-10000rpm
Insulation grade: Class F and Class H
Protection level: IP55 IP56 IP65

Product advantages and applications

Advantage: High efficiency, high power factor, wide speed
Low temperature rise, small size, light weight, low noise
Standardized design, strong versatility, high reliability
Can provide customers with special customized services
Application product: Fan, pump, compressor, reducer and
other general industrial equipment

液冷永磁同步变频电机 Liquid cooled permanent magnet synchronous variable frequency motor

产品介绍

本系列产品通过冷却介质（通常是冷却液，油或水）在电机外壳的夹层内循环流动来进行电机散热。液冷方式直接接触于发热面，可以快速的将热量带走，冷却效果非常好，因此可以更好地控制电机的温度，从而保持电机的高效运行。对于大功率、大转矩的永磁同步电机，液冷方式具有更好的散热效果，能够更好地满足高负载和长时间运行的要求。

铸铝合金结构



功率范围：5.5kW-2000kW
电压范围：AC110V-10kV
转速范围：400rpm-10000rpm
绝缘等级：F级 H级
防护等级：IP55 IP56 IP65 IP67 IP68

产品优势及应用

优势：效率高、过载能力强、高可靠性
体积小、重量轻、噪音低
宽频范围内大扭矩输出
可为客户提供特殊定制化服务
应用产品：工程机械设备、新能源重卡、密炼机、
磨机、造纸机械等设备

钢板焊接结构



Power range: 5.5kW-2000kW
Voltage range: AC110V-10kV
Speed range: 400rpm-10000rpm
Insulation grade: Class F and Class H
Protection level: IP55 IP56 IP65 IP67 IP68

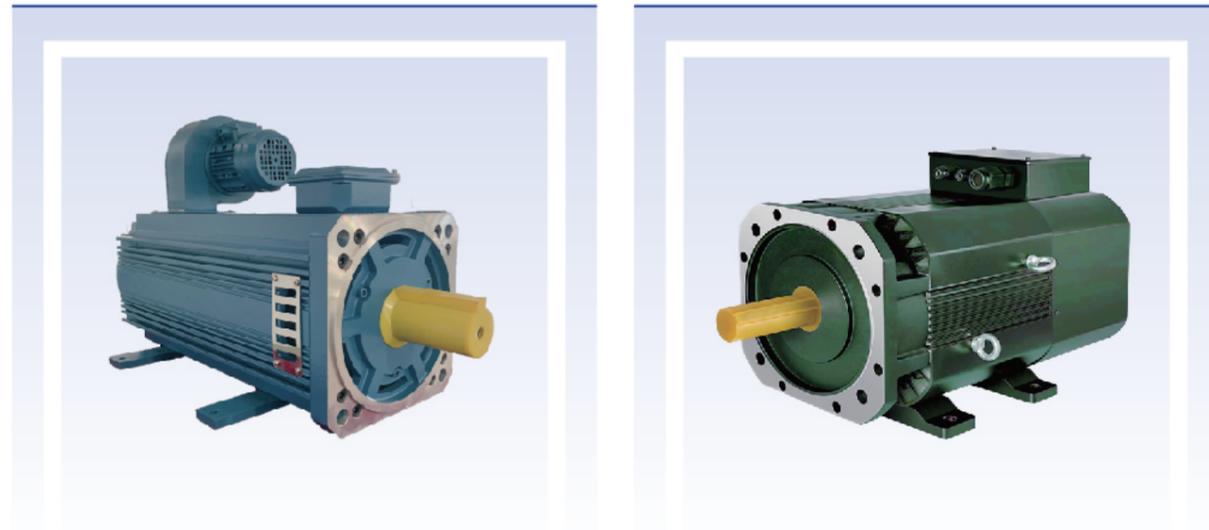
Product advantages and applications

Advantage: High efficiency, strong overload capacity, high reliability
Small size, light weight, low noise
High torque output in wide band range
Can provide customers with special customized services
Application product: Construction machinery equipment,
new energy heavy truck, mixer, mill,
paper machinery and other equipment

伺服永磁同步变频电机 Servo permanent magnet synchronous variable frequency motor

产品介绍

本系列产品每接收到 1 个脉冲，就会旋转 1 个脉冲对应的角度，从而实现位移。伺服永磁同步变频电机本身也具备发出脉冲的功能，当其每旋转一个角度时，都会发出对应数量的脉冲，于是，便和伺服电机接受的脉冲形成了闭环，如此一来，就能够很精确的控制电机的转动，从而实现精确的定位。



功率范围：5.5kW-355kW
电压范围：AC110V-660V
转速范围：400rpm-10000rpm
绝缘等级：F 级 H 级
防护等级：IP55 IP56 IP65 IP67 IP68

产品优势及应用

优势：高精度、低惯量、快速定位
体积小、重量轻、噪音低、温升低
宽频大扭矩、过载能力强、耐冲击
可为客户提供特殊定制化服务
应用产品：高精度工业自动化设备、风电变桨、测功试验台、包装设备等专业领域

Power range: 5.5kW-355kW
Voltage range: AC110V-660V
Speed range: 400rpm-10000rpm
Insulation grade: Class F and Class H
Protection level: IP55 IP56 IP65 IP67 IP68

Product advantages and applications

Advantage: High precision, low inertia, fast positioning
Small size, light weight, low noise, low temperature rise
Broadband high torque, strong overload capacity, impact resistance
Can provide customers with special customized services
Application product: High-precision industrial automation equipment, wind power variable pitch, dynamometer test bench, packaging equipment and other professional fields

低速大扭矩永磁同步变频电机 Low speed high torque permanent magnet synchronous variable frequency motor

产品介绍

本系列产品采用特殊电磁与结构设计，优化电机制造工艺，根本上改变电机设计思路，在很宽的负载变化范围内，能保持良好且稳定的转矩性能。减速机 + 异步电机的传统驱动模式存在结构复杂、维护成本高以及整体效率低等缺点，因此低速大扭矩永磁电机替代传统驱动模式具有明显的节能优势，是高耗能领域应用的理想选择。



功率范围：5.5kW-630kW
电压范围：AC110V-10kV
转速范围：0rpm-400rpm
绝缘等级：F 级 H 级
防护等级：IP55 IP56 IP65 IP67 IP68

产品优势及应用

优势：启动力矩大、过载能力强
体积小、噪音低、维护成本极低
宽频大扭矩、节能效果极佳
可为客户提供特殊定制化服务
应用产品：拉丝机、磨机、橡塑机械、搅拌设备等，电机+皮带、电机+减速机等高能耗传动设备的首选替代品

Power range: 5.5kW-630kW
Voltage range: AC110V-10kV
Speed range: 0rpm-400rpm
Insulation grade: Class F and Class H
Protection level: IP55 IP56 IP65 IP67 IP68

Product advantages and applications

Advantage: Large starting torque, strong overload capacity
Small size, low noise, very low maintenance cost
Broadband high torque, energy saving effect is excellent
Can provide customers with special customized services
Application product: Wire drawing machine, mill, rubber and plastic machinery, mixing equipment, etc., motor + belt, motor + reducer and other high energy consumption transmission equipment preferred alternative

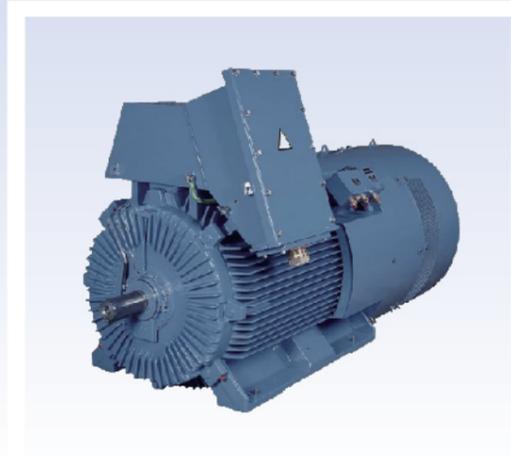
高压永磁同步变频电机

High voltage permanent magnet synchronous variable frequency motor

产品介绍

本系列电机与传统的高压异步电机相比,减少了能量损耗,产品节能效果显著,尤其在变频应用方面,节能效果更加明显,符合国家节能减排政策,能有效降低设备能耗,提高企业经济效益,具有推广和应用价值。

紧凑型



功率范围: 200kW-2000kW
电压范围: AC3300V-10kV
转速范围: 400rpm-3600rpm
绝缘等级: F级 H级
防护等级: IP55 IP56 IP65

产品优势及应用

优势: 效率高、功率因数高、节能率高
温升低、体积小、重量轻、噪音低
标准化设计、通用性强、可靠性高
可为客户提供特殊定制化服务
应用产品: 大型风机、水泵、压缩机, 减速机等
各类大功率工业设备

箱式



Power range: 200kW-2000kW
Voltage range: AC3300V-10kV
Speed range: 400rpm-3600rpm
Insulation grade: Class F and Class H
Protection level: IP55 IP56 IP65

Product advantages and applications

Advantage: High efficiency, high power factor, high energy saving rate
Low temperature rise, small size, light weight, low noise
Standardized design, strong versatility, high reliability
Can provide customers with special customized services
Application product: Large fan, pump, compressor, reducer
and other kinds of high-power industrial equipment

高低压永磁变频工控系统

High and low voltage permanent magnet frequency conversion industrial control system

产品介绍

本系列产品由专业化服务团队,为客户提供产品全生命周期内服务保障,提供从系统设计(电机及驱动系统解决方案)到科学实施(设备生产制造及采购,安装及现场调试)再到贴心交付(包括使用培训、售后维护、改造升级等),全套 EPC 总包式服务,实现对用户的一站式服务。



产品优势及应用

节能: 动力系统采用电机与控制集成化设计,配置更合理,性能更优越,节能效果更突出;

品质: 永磁电机、矢量控制器,西门子 PLC,施耐德接触器、触摸屏等高品质配件;

服务: 动力系统全生命周期内我们提供管家式维保服务,让您在使用中无任何后顾之忧;

应用: 水泥、化工、电力、纺织、医药、橡胶、钢铁等领域。

Product advantages and applications

Energy saving: The power system adopts the integrated design of motor and control, the configuration is more reasonable, the performance is better, and the energy saving effect is more prominent;

Quality: Permanent magnet motor, vector controller, Siemens PLC, Schneider contactor, touch screen and other high quality accessories;

Service: We provide butler maintenance service during the whole life cycle of the power system, so that you have no worries in use;

Application: Cement, chemical, electric power, textile, medicine, rubber, steel and other fields.

技术数据 Technical data

三相永磁同步变频电机的技术数据

IP 55 - IC 411 - 绝缘等级 F, 温升等级 B
符合 IEC 60034-30-1; 2014 的 IE5 效率等级
IP 55 - IC 411 - Insulation class F, temperature rise class B
IE5 efficiency class according to 60034-30-1; 2014

3000 转 380V							
机座号 Motor size	功率 kW	额定转速 r/min	电流 A	效率 (100%)	功率因数 cosφ	频率 Hz	额定转矩 N.m
112M	4	3000	7.16	93.3%	0.96	150	12.7
132S	5.5	3000	9.77	94.0%	0.96	200	17.5
132S	7.5	3000	13.3	94.5%	0.96	200	23.9
160M	11	3000	19.3	95.0%	0.96	200	35.0
160M	15	3000	26.3	95.3%	0.96	200	47.8
160L	18.5	3000	32.3	95.6%	0.96	200	58.9
180M	22	3000	38.3	95.9%	0.96	200	70.0
200L	30	3000	52.2	96.1%	0.96	200	95.5
200L	37	3000	64.2	96.3%	0.96	200	118
225M	45	3000	78.0	96.4%	0.96	200	143
250M	55	3000	95.2	96.5%	0.96	200	175
280S	75	3000	130	96.6%	0.96	200	239
280M	90	3000	155	96.7%	0.96	200	287
315S	110	3000	190	96.8%	0.96	200	350
315ML	132	3000	228	96.9%	0.96	200	420
315ML	160	3000	276	97.0%	0.96	200	509
315ML	200	3000	344	97.2%	0.96	200	637
355ML	250	3000	430	97.2%	0.96	200	796
355ML	280	3000	481	97.2%	0.96	200	891
355ML	315	3000	541	97.2%	0.96	200	1003
355ML	355	3000	610	97.2%	0.96	200	1130
355ML	400	3000	687	97.2%	0.96	200	1273
355ML	450	3000	773	97.2%	0.96	200	1433
355ML	500	3000	859	97.2%	0.96	200	1592
355ML	560	3000	962	97.2%	0.96	200	1783
355ML	630	3000	1083	97.2%	0.96	200	2006

1500 转 380V							
机座号 Motor size	功率 kW	额定转速 r/min	电流 A	效率 (100%)	功率因数 cosφ	频率 Hz	额定转矩 N.m
112M	4	1500	7.28	91.8%	0.96	75	25.5
132S	5.5	1500	9.93	92.5%	0.96	100	35.0
132M	7.5	1500	13.4	93.2%	0.96	100	47.8
160M	11	1500	19.6	93.8%	0.96	100	70.0
160L	15	1500	26.5	94.4%	0.96	100	95.5
180M	18.5	1500	32.7	94.6%	0.96	100	118
180L	22	1500	38.7	94.9%	0.96	100	140
200L	30	1500	52.6	95.3%	0.96	100	191
225S	37	1500	64.7	95.5%	0.96	100	236
225M	45	1500	78.5	95.8%	0.96	100	287
250M	55	1500	95.7	96.0%	0.96	100	350
280S	75	1500	130	96.2%	0.96	100	478
280M	90	1500	156	96.5%	0.96	100	573
315S	110	1500	189	97.0%	0.96	100	700
315ML	132	1500	227	97.1%	0.96	100	840
315ML	160	1500	275	97.2%	0.96	100	1019
315ML	200	1500	343	97.4%	0.96	100	1273
355ML	250	1500	429	97.4%	0.96	100	1592
355ML	280	1500	480	97.4%	0.96	100	1783
355ML	315	1500	540	97.4%	0.96	100	2006
355ML	355	1500	609	97.4%	0.96	100	2260
355ML	400	1500	686	97.4%	0.96	100	2547

技术数据 Technical data

三相永磁同步变频电机的技术数据

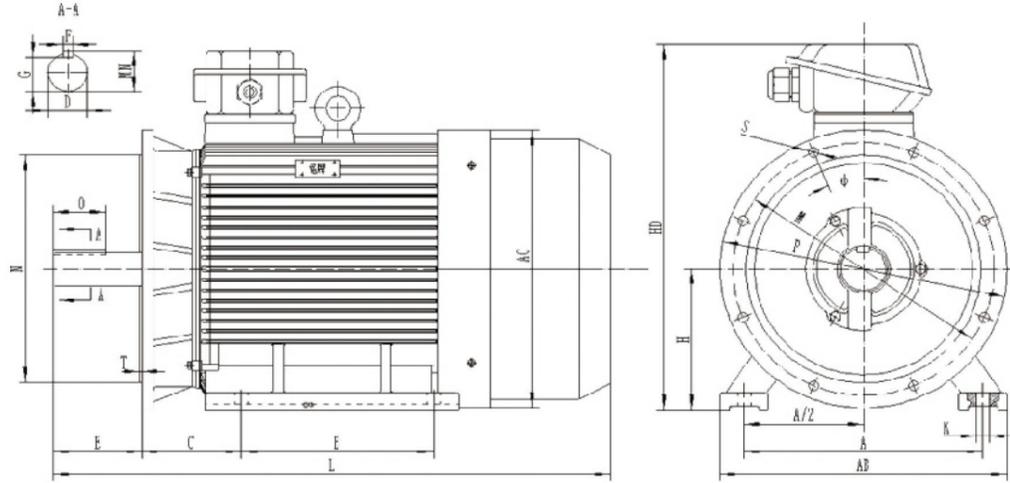
IP 55 - IC 411 - 绝缘等级 F, 温升等级 B
符合 IEC 60034-30-1; 2014 的 IE5 效率等级
IP 55 - IC 411 - Insulation class F, temperature rise class B
IE5 efficiency class according to 60034-30-1; 2014

1000 转 380V							
机座号 Motor size	功率 kW	额定转速 r/min	电流 A	效率 (100%)	功率因数 cosφ	频率 Hz	额定转矩 N.m
132M	4	1000	7.21	92.7%	0.96	66.67	38.2
132M	5.5	1000	9.84	93.4%	0.96	66.67	52.5
160M	7.5	1000	13.3	94.0%	0.96	66.67	71.6
160L	11	1000	19.4	94.5%	0.96	66.67	105
180L	15	1000	26.4	94.9%	0.96	66.67	143
200L	18.5	1000	32.4	95.3%	0.96	66.67	177
200L	22	1000	38.4	95.6%	0.96	66.67	210
225M	30	1000	52.3	95.8%	0.96	66.67	287
250M	37	1000	64.4	96.0%	0.96	66.67	353
280S	45	1000	78.1	96.2%	0.96	100	430
280M	55	1000	95.4	96.3%	0.96	100	525
315S	75	1000	130	96.4%	0.96	100	716
315ML	90	1000	156	96.5%	0.96	100	860
315ML	110	1000	190	96.6%	0.96	100	1051
315ML	132	1000	228	96.7%	0.96	100	1261
355ML	160	1000	276	96.8%	0.96	100	1528
355ML	200	1000	344	97.0%	0.96	100	1910
355ML	250	1000	431	97.0%	0.96	100	2388

750 转 380V							
机座号 Motor size	功率 kW	额定转速 r/min	电流 A	效率 (100%)	功率因数 cosφ	频率 Hz	额定转矩 N.m
160M	4	750	7.41	90.2%	0.96	50	50.9
160M	5.5	750	10.1	90.9%	0.96	50	70.0
160L	7.5	750	13.7	91.5%	0.96	50	95.5
180L	11	750	19.8	92.7%	0.96	50	140
200L	15	750	26.9	93.3%	0.96	50	191
225S	18.5	750	32.9	94.0%	0.96	50	236
225M	22	750	38.9	94.5%	0.96	50	280
250M	30	750	52.9	94.7%	0.96	50	382
280S	37	750	65.1	95.0%	0.96	75	471
280M	45	750	79.0	95.2%	0.96	75	573
315S	55	750	96.3	95.4%	0.96	75	700
315ML	75	750	131	95.6%	0.96	75	955
315ML	90	750	157	95.6%	0.96	75	1146
315ML	110	750	192	95.7%	0.96	75	1401
355ML	132	750	230	95.9%	0.96	75	1681
355ML	160	750	278	96.1%	0.96	75	2037
355ML	200	750	347	96.3%	0.96	75	2547

机械参数 Mechanical parameter

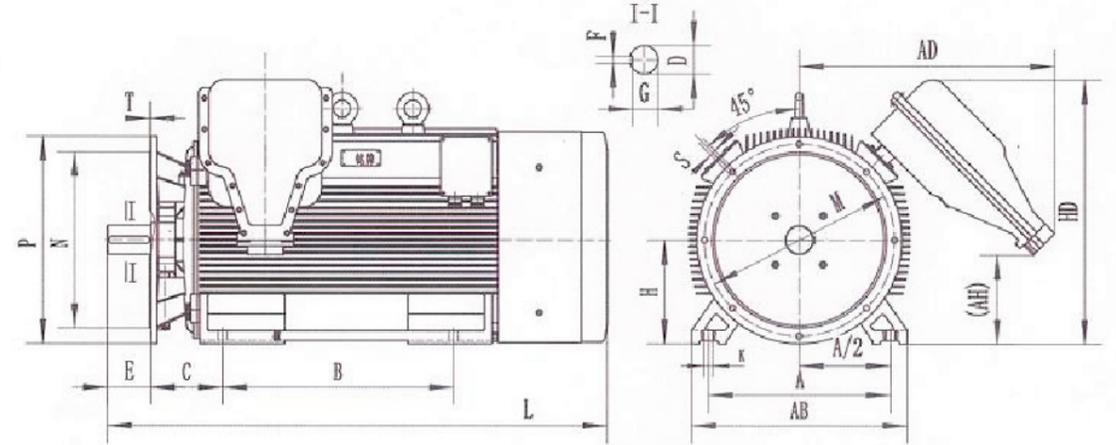
低压系列 Low voltage series



机座号 Motor size	额定 转速 (r/min)	安装尺寸及公差 Installation dimensions and tolerances																						
		A	A/2	B	C	D	E	F	G	H	K	M	N	O	P	θ	S	T	AB	AC	HD	MN	L	
112M		190	95		70	28	60	8	24	112		φ215	φ180	40	φ250				230	φ240	300	31	400	
132S		216	108	140	89	38	80	10	33	132	4xφ12	φ265	φ230	56	φ300		4xφ14.5	4	270	φ275	345	41	470	
132M	3000			178																			510	
160M	1500	254	127	210	108	42		12	37	160	4xφ14.5	φ300	φ250		φ350		45°		320	φ330	420	45	615	
160L	1000			254																			670	
180M	750	279	139.5	241	121	48	110	14	42.5	180		φ350	φ300		φ400		4xφ18.5		355	φ380	455	51.5	700	
180L				279										80									740	
200L		318	159	305	133	55		16	49	200		φ350	φ300		φ400				395	φ420	505	59	770	
225S	1500			286		60	140	18	53													64	815	
225M	750																						815	
225M	3000	356	178		149	55	110	16	49	225	4xφ18.5	φ400	φ350		φ450				435	φ470	560	59	820	
225M	1500			311																			820	
225M	1000					60																64	845	
225M	750																						845	
250M	3000							18										5						
250M	1500	406	203	349	168					250									490	φ510	615		910	
250M	1000					65																69		
250M	750						140																	
280S	3000																							
280S	1500			368		75		20	67.5		4xφ24	φ500	φ450		φ550							79.5	985	
280S	1000																							
280S	750	457	228.5		190	65		18	58	280									550	φ580	680	69		
280M	3000																							
280M	1500			419		75		20	67.5					100								79.5	1035	
280M	1000																							
280M	750																							
315S	3000					65		18	58									22.5°				69	1240	
315S	1500			406		80	170	22	71													85	1270	
315S	1000																							
315S	750																					69	1350	
315M	3000																							
315M	1500	508	254	457	216	80	170	22	71	315		φ600	φ550		φ660				635	φ645	845	85	1380	
315M	1000																							
315M	750																							
315L	3000					65	140	18	58															
315L	1500			508		80	170	22	71		4xφ28											85	1380	
315L	1000																							
315L	750																							
355M	3000					75	140	20	67.5													79.5	1500	
355M	1500			560		95	170	25	86					140								100	1530	
355M	1000																							
355M	750																							
355L	3000	610	305		254	75	140	20	67.5	355		φ740	φ680	100	φ800				730	φ710	1010	79.5	1500	
355L	1500																							
355L	1000			630		95	170	25	86					140								100	1530	
355L	750																							

机械参数/电气参数 Mechanical parameter / Electrical parameter

高压系列 High voltage series



机座号 Motor size	转速 (r/min)	机械参数 Mechanical parameter																						
		安装尺寸 Mounting dimension														外形尺寸 Overall dimension								
		A	A/2	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AD	AH	HD	L			
3551																								
3552	1500	630	315	900	254	100	170	28	90	355	28	740	680	800	24	6	760	960	250	950	1810			
3553																								
3554																								
3555	1500	610	305	900	254	100	170	28	90	355	28	740	680	800	24	6	760	960	250	950	1880			
3556																								
400	1500	710	355	900	280	110	170	28	100	400	35	740	680	800	24	6	840	1000	340	1020	1960			

电气参数 Electrical parameter					
IP55-10kV					
机座号 Motor size	额定功率 (kW)	额定转速 (r/min)	额定电流 (A)	效率 (%)	功率因数 (cos φ)
3551	200	1500	12.7	94.4	0.96
3552	220	1500	14.0	94.6	0.96
3553	250	1500	15.9	94.7	0.96
3554	280	1500	17.7	94.9	0.96
3555	315	1500	19.9	95.2	0.96
3556	355	1500	22.4	95.4	0.96
4001	400	1500	25.2	95.4	0.96
4002	450	1500	28.3	95.7	0.96
4003	500	1500	31.4	95.9	0.96
4004	560	1500	35.5	94.9	0.96

