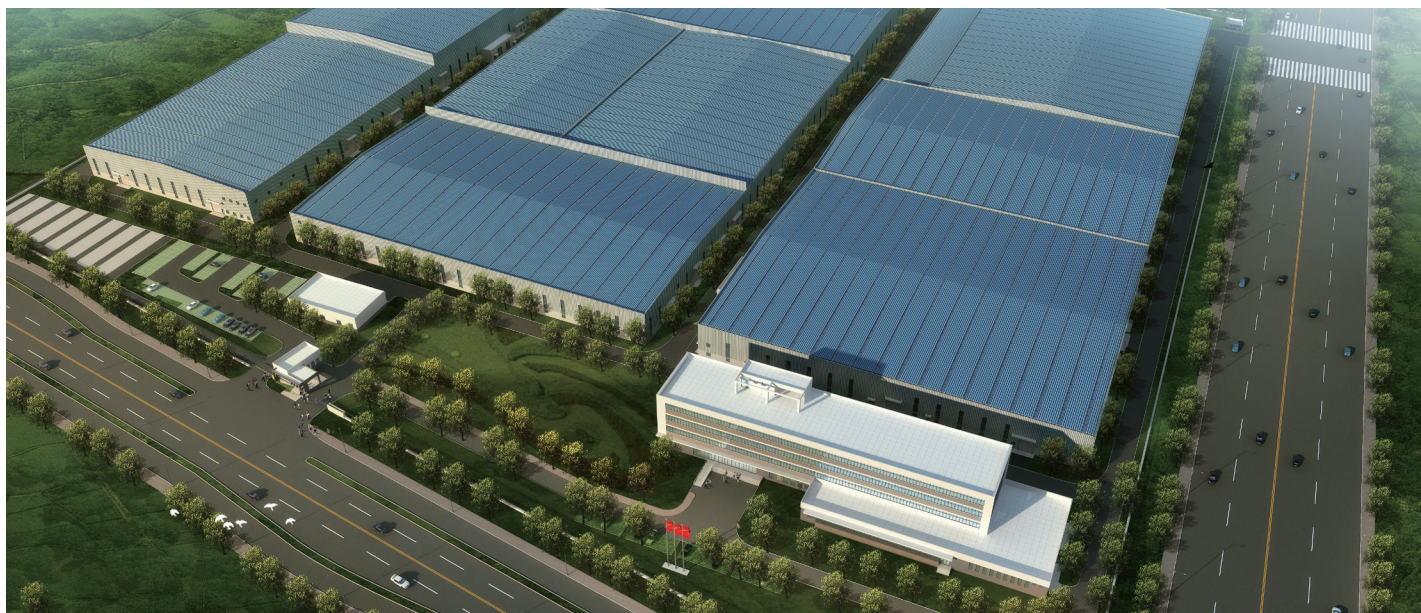


1MT0003 隔爆型三相异步电动机

产 品 样 本



公司概况 Company Profile



西门子电机（中国）有限公司 Siemens Standard Motors Ltd. (SSML)

西门子电机（中国）有限公司是西门子在中国的独资企业，位于江苏省仪征市，公司主要致力于研发和生产中小型低压三相异步电动机。目前生产符合 IEC 标准的西门子品牌三相异步电动机、以及按中国标准设计的贝得品牌系列三相异步电动机。

作为西门子在全球中小型低压电机产品的重要生产基地之一，公司坚持秉承西门子 100 多年的电动机设计和生产经验和先进技术，拥有先进的生产设备和生产工艺，采用西门子特色的现代化管理模式，严格按照国际标准 ISO9001:2015 实施全面质量管理，竭诚为广大客户提供优质的产品和服务！

Siemens Standard Motors Ltd. (SSML) is a Siemens-owned company in China. SSML is located in Yizheng City, Jiangsu Province. The company focuses on developing and producing small and medium low-voltage motors. Currently, SSML mainly produce Siemens brand low voltage AC motors according to IEC standards, and Beide brand low voltage motors designed according to China local standards.

As one of Siemens main low-voltage motor production facilities worldwide, SSML uses the knowledge and experience of more than 100 years in motor design and manufacturing, owns the advanced manufacture equipment and process, adopts the SIEMENS modern management model, and implements comprehensive quality control according to ISO9001 2015. SSML will continuously serve customers with high quality products and good service.

公司概况 Company Profile



质量方针

- 质量从我做起，第一次把事情做对。
- 鼓励员工发现问题并勇于承担责任。
- 拒不接受不合格产品。
- 持续改进我们的流程，超越客户期望。

Quality Guideline

- Quality starts with me, Do it right in the first time.
- Encourage our employee to address problem openly and take responsibility.
- Refuse to accept defective product.
- Continuously improve our process to exceed customer's expectation.

环境方针

西门子电机（中国）有限公司的环境、职业健康和安全方针是：

- 我们依据 ISO14001:2015 和 ISO 45001-2018 标准的要求，有效建立、实施环境和职业健康安全管理体系，不断提高，持续改进。
- 我们承诺遵守环境、职业健康安全相关的法律法规，履行环境保护及职业健康安全防护职责。
- 我们致力于履行应负的社会责任和义务，合理使用资源，保护环境，加强职业健康安全管理，实现安全生产零伤害。

Environmental Guideline

EHS Policy of Siemens Standard Motors Ltd. is as follows:

- We institute and implement a continuously improving management system addressing our environment, occupational health and safety in compliance with the requirements of ISO14001:2015 and ISO 45001-2018 criteria.
- We commit ourselves to abiding by the environmental, occupational health and safety laws and regulations, and fulfilling our duties in environmental protecting and occupational health safeguarding.
- We commit ourselves to the fulfillment of our social responsibility and obligation, properly harnessing resources, protecting our environment, enhancing occupational health and safety management with the ultimate goal of zero harm in our production process.

目录 Contents

概览 Overview	5
产品概述 Product overview	8
机械特性 Mechanical design	10
电气特性 Electrical design	15
订货号和型号 Order No. and Motor type	16
选型技术数据表 Technical data table	17
选件 Options	21
外形尺寸 Dimension drawings	24
认证 Certificates	31

概览 Overview

在许多工业和公共部门，爆炸危险一直存在，例如在化学工业、炼油厂、钻井平台、加油站、饲料制造和污水处理厂。当爆炸性的气体、烟雾、雾气或尘埃与空气中的氧气以一定的易爆比例混合时，如果有接近于能够释放所谓最小点火能量的着火源，会存在爆炸的风险。

为了保证在这些地区的安全性，大多数国家的立法者都根据国家和国际的标准，以法律和法规的形式制定和实施了适当的规定。防爆设备的设计可以使正确使用这些设备时避免爆炸。

防爆设备可以根据不同类型的保护来设计。

区域的分类

有爆炸风险的场所被划分为不同的区域。划分区域的标准取决于危险物质存在的时间以及发生危险的概率。各个区域分类的信息和规则遵循以下标准：

- GB 3836.14, IEC/EN 60079-10-1 适用于气体环境
- GB 12476.3, IEC/EN 60079-10-2 适用于粉尘环境

此外，在不同的爆炸分组和温度等级之间进行了分类，这些都包含在危险等级评估中。

In many industrial and public industries, explosion hazards are ever-present, e.g. the chemicals industry, refineries, on drilling platforms, gas stations, feed manufacturing and sewage treatment plants. The risk of explosion is always present when gases, fumes, mist or dust are mixed with oxygen in the air in an explosive ratio close to sources of ignition that are able to release the so-called minimum ignition energy.

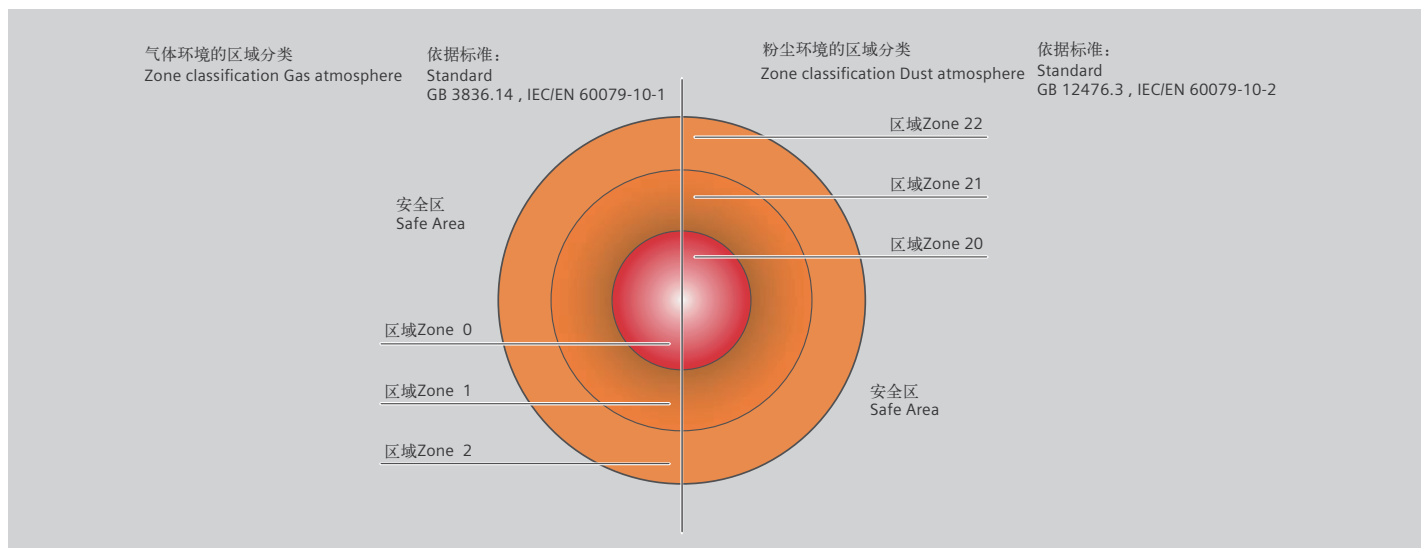
To ensure safety in these areas, legislators in most countries have implemented appropriate stipulations in the form of laws and regulations based on national and international standards. Explosion-protected equipment is designed such that an explosion can be prevented when it is used properly.

Classification of zones

Areas subject to explosion hazard are divided into zones. Zoning is based on the presence time of explosive substances and probability of explosion. Information and specifications for classification of the zones are laid down in the following standards:

- GB 3836.14, IEC/EN 60079-10-1 for gas atmospheres
- GB 12476.3, IEC/EN 60079-10-2 for dust atmospheres

Furthermore, a distinction is made between various explosion groups as well as temperature classes and these are included in the hazard assessment.



根据各区域的分类和存在的危险，所使用的设备必须满足最低防护要求。设备必须在符合要求的工况下使用，以避免点燃外部的爆炸性环境。

Depending on the particular zone and therefore the associated hazard, operating equipment must comply with defined minimum requirements regarding the type of protection. The different types of protection require corresponding measures to prevent ignition that should be implemented at the motor in order to prevent a surrounding explosive atmosphere from being ignited.

区域 Zone		区域定义的标准: Zone definition acc. to GB3836.14 & IEC/EN 60079-10-1 用于气体环境 for gas atmospheres GB 12476.3 & IEC/EN 60079-10-2 用于粉尘环境 for dust atmospheres	分配 保护类型 Assigned types of protection	分类根据 Category according to 2014/34/EU	设备保护等级根据 Equipment protection level acc. to GB3836.1 & IEC/EN 60079-0
气体 Gas 1) 2)	粉尘 Dust 1) 2)				
0	–	持续、长时间或频繁存在爆炸性气体环境的区域 An area in which there is an explosive gas atmosphere constantly, over a long period or frequently.	不允许低压电机使用 Low-voltage motors not permitted	1	Ga
1	–	在正常运行过程中, 预计偶尔会出现爆炸性气体环境的 An area in which it is expected that an explosive gas atmosphere will occur occasionally during normal operation.	Ex e(GB) 或 or Ex eb(IEC), Ex de, Ex d(GB) 或 or Ex db(IEC)	2	Gb
2	–	在正常运行过程中, 预计很少或只短暂出现爆炸性气体环境的区域 An area in which it is expected that an explosive gas atmosphere will occur only rarely and then only briefly during normal operation.	Ex nA(GB) 或 Ex ec(IEC)	3	Gc
–	20	持续、长时间或频繁存在由粉尘-空气混合物组成的爆炸性气体环境的区域 An area in which there is an explosive gas atmosphere comprising a dust-air mixture constantly, over a long period or frequently.	不允许低压电机使用 Low-voltage motors not permitted	1	Da
–	21	在正常运行的过程中, 预计会偶尔存在由粉尘-空气混合物组成的爆炸性气体环境的区域 An area in which it is expected that an explosive gas atmosphere comprising a dust-air mixture will occur occasionally during normal operation.	Ex tb	2	Db
–	22	在正常运行的过程中, 预计很少或只短暂在空气中形成一团易燃尘埃的爆炸性气体环境的区域 An area in which it is expected that an explosive gas atmosphere in the form of a cloud of flammable dust in air will occur only rarely and then only briefly during normal operation.	Ex tc ³⁾	3	Dc

¹⁾ 电机用于

- 区域 1 也可以用于区域 2.
- 区域 21 也可以用于区域 22.

²⁾ 若电机仅有气体防爆认证或粉尘防爆认证, 不允许在混合环境中使用。混合环境: 爆炸性的气体和粉尘同时在大气环境中存在。

³⁾ Ex tc 电机不允许在含有导电粉尘的环境中运行。

¹⁾ Motors of

- Zone 1 can also be used in Zone 2.
- Zone 21 can also be used in Zone 22.

²⁾ Motors which are certified for gas or dust protection must not be used in hybrid mixtures! Hybrid mixtures: when explosive gas and dust atmospheres occur simultaneously.

³⁾ Ex tc motors are not approved for operation in environments containing conductive dust.

应用

以下情况常常需要选用防爆电机, 以防止爆炸对人造成严重伤害和对财产造成严重损失。

- 化工和石化行业
- 矿物油和天然气生产
- 煤气产业
- 煤气供应公司
- 加油站
- 焦化厂
- 磨粉厂(例如: 玉米, 固体)
- 污水处理厂
- 木材加工(例如: 木屑, 树脂)
- 其他易受爆炸危害的行业

Application

The explosion-proof motors are often used in the following industries to prevent explosion hazards that result in serious injury to persons and severe damage to property.

- Chemical and petrochemical industry
- Production of mineral oil and gas
- Gas works
- Gas supply companies
- Petrol stations
- Coking plants
- Mills (e.g. corn, solids)
- Sewage treatment plants
- Wood processing (e.g. sawdust, tree resin)
- Other industries subject to explosion hazards

气体和蒸汽的隔爆等级 Flameproof class of gases and vapors

使用场所 Location	标准代号 Code of standard GB3836.1 / GB3836.2 / IEC60079-0 / IEC60079-1 隔爆等级 Flameproof class
矿用 For Mines	d I
除煤矿以外的爆炸性气体环境 Explosive gas environment except mines	d II A
	d II B
	d II C

按爆炸性混合物的自然温度 (°C) 分组 Temperature classes

电子设备的温度等级 Temperature class of electrical equipment	电子设备的最大表面温度 IMaximum surface temperature of electrical equipment	气体或蒸汽的点燃温度 Ignition temperature of gases or vapors
T1	450°C	> 450°C
T2	300°C	> 300°C
T3	200°C	> 200°C
T4	135°C	> 135°C
T5	100°C	> 100°C
T6	85°C	> 85°C

根据爆炸组别和温度等级对气体和蒸汽分类

Classification of gases and vapors into explosion groups and temperature classes

爆炸性 气体分组 explosion group	按爆炸性混合物的自然温度 (°C) 分组 Temperature classes					
	T1 (450)	T2 (300)	T3 (200)	T4 (135)	T5 (100)	T6 (85)
	材料名称 Material designation	材料名称 Material designation	材料名称 Material designation	材料名称 Material designation	材料名称 Material designation	材料名称 Material designation
IIA (MESG≥0.9mm)	丙酮 Acetone	醋酸戊酯 i-amyl acetate	汽油 Benzine	乙醛 Acetaldehyde		
	乙烷 Ethane	正丁烷 n-butane	汽油 Gasoline			
	乙酸乙酯 Ethyl acetate	正丁醇 n-butyl alcohol	特殊汽油 Special benzine			
	氯乙烷 Ethyl chloride	环己酮 Cyclohexanone	柴油燃料 Diesel fuel			
	氨 Ammonia	二氯乙烷 1,2- dichloroethane	民用燃油 Heating oils			
	苯 Benzene	乙酸酐 / 醋酸酐 Acetic acid anhydride	n-正己烷 n-hexane			
	醋酸 Acetic acid					
	一氧化碳 Carbon monoxide					
	甲烷 Methane					
	甲醇 Methanol					
	氯甲烷 Methyl chloride					
	萘 Naphthalene					
	苯酚 Phenol					
	丙烷 Propane					
甲苯 Toluene						
IIB (0.5mm<MESG <0.9mm)	城市煤气 (照明气) Town gas (illuminating gas)	乙醇 Ethyl alcohol	硫化氢 Hydrogen sulfide	乙基醚 Ethyl ether		
		乙烯 Ethylene				
		环氧乙烷 Ethylene oxide				
IIC (MESG≤0.5mm)	氢 Hydrogen	乙炔 Acetylene				二硫化碳 Carbon disulfide

MESG, GB 3836.11和IEC 60079-20-1中规定的最大试验安全间隙, 是指在规定的条件下, 壳内所有浓度的被试验气体或蒸气与空气的混合物点燃后, 通过25 mm长的接合面均不能点燃壳外爆炸性气体混合物的外壳空腔两部分之间的最大间隙。

MESG值越小, 意味着设备的防爆等级越高, 对设备的要求越严苛。当设备可以满足在IIC气体组别下运行时, 同时也满足IIA和IIB的要求。

MESG, maximum experimental safe gap (for an explosive mixture). It's maximum gap of a joint of 25 mm in width which prevents any transmission of an explosion during 10 tests made under the conditions specified in GB 3836.11 and IEC 60079-20-1.

The smaller the MESG value, the higher the explosion-proof level of the equipment, and the more stringent requirements for the equipment. If the equipment can run under the IIC gas group, it also meets the requirements of IIA and IIB.

产品概述 Product overview



额定功率：0.55 ~ 315 kW
机座号：80 ~ 355
电压与频率：380V 50Hz
380/660V 50Hz，其他常用电压可选

标准颜色：RAL7011
冷却方式：IC411
隔爆标志：Ex d IIB T4 Gb
防护等级：IP55
绝缘系统：F级
注油装置：机座号280 ~ 355的电机标配，
机座号160 ~ 250可选配
环境温度：-20°C ~ +40°C标配设计

Rated output: 0.55 ~ 315 kW
Frame size: 80 ~ 355
Voltage and Frequency: 380V 50Hz
380/660V 50Hz, Other common voltage can be
provide as option design
Standard color: RAL7011
Cooling method: IC411
Frame-proof marking: Ex d IIB T4 Gb
Protect degree: IP55
Insulation class: F
Re-greasing device: FS 280 ~ 355 motor as standard,
FS 160 ~ 250 motor as option design
Ambient temperature: -20°C ~ 40°C as standard

1MT0003系列高效隔爆型全封闭、自扇冷三相异步电动机是一款全新产品。该系列防爆电机完全符合IEC 60079-0:2017 / IEC 60079-1:2017以及GB 3836.1-2010 / GB 3836.2-2010等设计标准，防爆等级为 Ex d IIB T4 Gb且防爆性能通过CQST认证。其效率达到IEC 60034-30 IE3高效等级要求(50Hz)，符合GB 18613-2020能效等级三级。

具有性能优良，使用安全可靠，安装灵活，维护方便，振动小，噪音低等特点。

1MT0003系列高效隔爆型电动机可广泛应用于石油、化工及油气等危险领域和场所。电机的设计使得电机内部的爆炸不会波及外界环境，内部由爆炸产生的能量在被称作“隔爆腔”的空间内消散，使得这些能量不足以点燃外部的爆炸性环境。

1MT0003 series flameproof motors is newly designed totally enclosed fan cooling (TEFC) high efficiency motor. This series flameproof motor completely meet the standard of IEC 60079- 0:2017/IEC 60079-1:2017 and GB 3836.1-2010/GB 3836.2-2010. The type of protection for this motor is Ex d IIB T4 Gb. And its efficiency fulfill efficiency grade IE3 (50Hz) of IEC 60034-30, and also Grade 3 efficiency of GB 18613-2020.

This series products have excellent performance, safe and reliable to use, simple and flexible installation, easy to maintain, low vibration, low noise.

1MT0003 series high-efficiency flameproof motors can be widely used in petroleum, chemical industry, oil and gas and other hazardous areas and places. These motors are designed such that an explosion within the housing cannot result in an explosion in the environment. The energy that is generated internally by an explosion is dissipated in the so-called “flameproof enclosure” so far that the energy is no longer sufficient for ignition outside the casing.

噪声

噪声值

噪声值根据 DIN EN ISO 1680 标准在噪音室测得。表面声压级噪声 L_{pfa} 计算表示单位为 dB (A)。声压级噪声的空间平均值是在其测量面上测得的。测量面是距离电机1米的测量包络面。声功率级噪声用 L_{WA} 来表示，单位为 dB (A)。噪音值见选型数据表，选型数据表中的噪声值仅适用于全封闭自扇冷却（冷却方式：IC411）。电动机在 50 Hz 电源供电空载运行时，噪音容差为 +3 dB。当在 60 Hz 电源下空载运行时，噪音容差大约为 +4 dB。

振动

所有电动机转子都使用半键按照 A 级（标准）振动等级进行动态平衡。电动机在空载时测得振动速度有效值不超过下表中的 A 级所列值。电机还可选择B级振动等级设计。

振动等级 Vibration Grade	机座号 Frame size (mm)	56 ≤ FS ≤ 132		H>132	
	安装方式 Mounting	位移 Vibration displacement/um	速度 Vibration velocity/(mm/s)	位移 Vibration displacement/um	速度 Vibration velocity/(mm/s)
A	自由悬置 Free suspension	45	2.8	45	2.8
	刚性安装 Rigid mounting	-	-	37	2.3 2.8 ¹⁾
B	自由悬置 Free suspension	18	1.1	29	1.8
	刚性安装 Rigid mounting	-	-	24	1.5 1.8 ¹⁾

注：

¹⁾ 该值为GB/T 10068-2020 中定义的轴中心高H>132mm的两极电机，当两倍电网频率占主导时的振动速度限值。

Noise levels

Noise levels for mains-fed operation

The noise levels are measured in accordance with DIN EN ISO 1680 in a anechoic room. It is specified as the A-valued measuring-surface sound pressure level L_{pfa} in dB (A). This is the spatial mean value of the sound pressure levels measured on the measuring surface. The measuring surface is a cube 1 m away from the motor surface. The sound power level is also specified as L_{WA} in dB (A). Please find the noise value in technical data table, the specified values are only valid for totally enclosed fan cooling (cooling method: IC411) motor with no load at 50 Hz with no load, and the tolerance is +3 dB. While motor operating 60 Hz with no load, the values are approximately +4 dB (A) higher.

Vibration

1MT0003 rotors are dynamically balanced to severity grade A using a half key. Table below contains the effective vibration values for unloaded motors. Vibration grade B can be provided as option.

Note:

¹⁾ The level are vibration velocity limit when the twice line frequency vibration level is dominant defined by GB/T 10068-2020, for 2p motors that frame size bigger than 132mm.

防爆标志 Ex-Mark







	Ex	d	IIB	T4	Gb
防爆标识 Marking for prevention of explosions					
防爆类型 Protection type d = 由隔爆外壳保护的 设备 d = Protection by flameproof enclosures					
电器设备类别级别 (II类B) Equipment group (IIB)					
II类电气设备最高表面温度 Maximum allowable surface temperature for Group II electrical equipment T4 = 135°C					
设备保护级别 Protection level Gb = “高” 的保护级别 Gb = "high" level of protection					






铭牌样例 Nameplate example





 FLAMEPROOF THREE-PHASE ASYNCHRONOUS MOTOR 隔爆型三相异步电动机 Ex			
型号 TYPE	1MT0003-3AA0	3-3AA4-Z	LMH-2106/800003888993/003
315S	IM B3	IP55	380V△/660VY
110 kW	50Hz	980 kg	195/112 A
驱动端轴承: 6316 C3		非驱动端轴承: 6316 C3	
润滑脂: 2# Li Grease		润滑周期: 3000h 油脂量: 驱动端30g / 非驱动端30g	
EFF.95.2% 2975 r/min Th.Cl.155(F) COSφ 0.90 GB18613-2020-Grade3 Ex d II B T4 Gb CNEx20.0517			
西门子电机(中国)有限公司 Siemens Standard Motors Ltd.			

机械特性 Mechanical design

安装结构型式 Construction and mounting type

结构型式 Construction type	机座带底脚, 端盖无法兰 With feet and without flange on the end-shield (DE)					
安装型式 Mounting type	IM B3 FS 80~355	IM B6 FS 80~160	IM B7 ³⁾ FS80~160	IM B8 ⁴⁾ FS80~160	IM V5 ¹⁾ FS80~160	IM V6 ²⁾ FS 80~160
示意图 Diagram						
电机编号第14位上对应的字母 Letter, position 14 th of Motor code	A	T	U	V	C	D

结构型式 Construction type	机座不带底脚, 端盖有法兰 Without feet and with flange on the end-shield (DE)			机座带底脚, 端盖有法兰 With feet and with flange on the end-shield (DE)	
	安装型式 Mounting type	IM B5 FS 80~280	IM V1 ¹⁾ FS 80~355	IM V3 ²⁾ FS80~160	IM B35 FS80~355
示意图 Diagram					
电机编号第14位上对应的字母 Letter, position 14 th of Motor code	F	G	H	J	W

结构型式 Construction type	机座不带底脚, 端盖有标准小法兰 Without feet and with C-flange on driven end-shield (DE)			机座带底脚, 端盖有标准小法兰 With feet and with C-flange on driven end-shield (DE)
	安装型式 Mounting type	IM B14 FS 80 ~ 160	IM V18 ¹⁾ FS 80 ~ 160	IM V19 ²⁾ FS 80 ~ 160
示意图 Diagram				
电机编号第14位上对应的字母 Letter, position 14 th of Motor code	K	M	L	N

¹⁾ 标配防雨罩。

²⁾ 当户外使用时, 建议采取防护措施, 以避免水直接喷射到电机轴上。

³⁾ 当接线盒位于机座顶部时, 进线口默认朝上, 如需朝下, 请选择选项代码R12。

⁴⁾ 不可同时选用再润滑装置 (选项号L23)。

¹⁾ Protection cover provided as standard.

²⁾ When used outdoors, please take some protection measures to prevent water from spraying on the shaft.

³⁾ When terminal box is on the top of the motor, the cable entry will be upwards, if downwards is needed, please select option code R12.

⁴⁾ Regreasing devise (option code L23) is not allowed.

轴承系统

1MT0003系列电动机标准配置深沟球轴承，这些轴承是密封的或可再润滑型的，轴承设计满足防爆要求。FS160 ~ 355范围的电动机标准设计非驱动端轴承固定。FS80 ~ 132范围的电动机标准设计轴承浮动，可以选配驱动端轴承固定，选件号 L20。

当电动机轴端承受的悬臂力较大时，可以考虑选择增强悬臂力的轴承设计（选件号：L22）。

FS80 ~ 250 范围电动机标配不带再润滑装置，但 FS160 ~ 250 可选择配置再润滑装置（选件号：L23）。FS280 ~ 355 范围的电动机标配再润滑装置。

下表列出了标准配置下的轴承型号。

轴承选配

机座号 Frame size	极数 Number of poles	标准配置 Standard design		选项配置 Optional design	
		水平/竖直安装 Horizontal / Vertical mounting		增强悬臂力的设计（选项代码L22） Increased cantilever force (option code L22)	
		驱动端轴承 DE bearing	非驱动端轴承 NDE bearing	驱动端轴承 DE bearing	非驱动端轴承 NDE bearing
80	2 ~ 6	6204-2RZ C3	6204-2RZ C3	-	-
90	2 ~ 6	6205-2RZ C3	6205-2RZ C3	-	-
100	2 ~ 6	6306-2RZ C3	6306-2RZ C3	-	-
112	2 ~ 6	6306-2RZ C3	6306-2RZ C3	-	-
132	2 ~ 8	6308-2RZ C3	6308-2RZ C3	-	-
160	2 ~ 8	6309-2RZ C3	6309-2RZ C3	NU309	6309 C3
180	2 ~ 8	6310-2RZ C3	6310-2RZ C3	NU310	6310 C3
200	2 ~ 8	6312 C3	6312 C3	NU312	6312 C3
225	2 ~ 8	6313 C3	6313 C3	NU313	6313 C3
250	2 ~ 8	6315 C3	6315 C3	NU315	6315 C3
280	2	6315 C3	6315 C3	NU315	6315 C3
	4 ~ 8	6317 C3	6317 C3	NU317	6317 C3
315	2	6316 C3	6316 C3	NU316	6316 C3
	4 ~ 8	6319 C3	6319 C3	NU319	6319 C3
355	2	6317 C3	6317 C3	NU317	6317 C3
	4 ~ 8	6320 C3	6320 C3	NU320	6320 C3

Bearing Assignment

1MT0003 series motor are supplied with ball bearing as standard, these bearings are either sealed or regreasable type. Bearing design meets the requirements of explosion protection. Fixed bearing at NDE is as standard configuration for FS160 ~ 3 55 motors; For FS80 ~ 132 motors the bearings are floating, fixed bearing at DE can be ordered with option code L20.

If higher cantilever force on the shaft required, the increased cantilever bearing design (Option code: L22) should be considered.

As standard, FS80 ~ 250 motors are not with regreasing device, but re-greasing device (Option code: L23) can be configured in FS160~250. FS280 ~ 355 motors with regreasable bearing and regreasing device is configured as standard.

The following table lists the standard bearing configuration.

Bearing Assignment

润滑脂寿命和再润滑周期

对于不可再润滑的轴承，其润滑脂寿命与轴承寿命相当。

Grease life and re-greasing interval

For permanent lubrication, the bearing grease lifetime is matched to the bearing lifetime.

润滑脂寿命和再润滑周期（电动机水平安装）

Grease lifetime and re-grease interval (Horizontal installation)

使用持久润滑型轴承时 Using permanent lubrication bearing		
机座号 Frame size	极数 Poles	润滑脂寿命 Grease lifetime up to CT 40°C ¹⁾
80 ~ 250	2-8	20000 或 (or) 40000 ²⁾

¹⁾ 标准的最高环境温度为40°C，对于持久润滑型轴承，环境温度每升高10°C，润滑脂寿命缩短一半。

²⁾ 40000小时适用于电动机水平安装，且轴不受额外轴向力的工作情况。

¹⁾ Maximum ambient temperature is 40°C under standard conditions. For permanent lubrication bearings, grease lifetime will be halved for each 10K ambient temperature rising.

²⁾ The 40000h grease lifetime is suited for horizontal mounting motors without additional axial force.

使用可再润滑型轴承时 Using re-greasable bearing			
机座号 Frame size	极数 Poles	轴承 Bearing	标准环境温度下的润滑周期（小时） Interval under standard ambient temperature(h)
160	2P	6309 C3	4000
	4~8P	NU309	8000
180	2P	6310 C3	4000
	4~8P	NU310	8000
200	2P	6312 C3	4000
	4~8P	NU312	8000
225	2P	6313 C3	4000
	4~8P	NU313	8000
250	2P	6315 C3	4000
	4~8P	NU315	8000
280	2P	6315 C3	4000
	4P	6317 C3	6000
	6~8P	NU317	8000
315	2P	6316 C3	3000
	4P	6319 C3	4000
	6~8P	NU319	6000
355	2P	6317 C3	3000
	4P	6320 C4	4000
	6~8P	NU320	6000

当电动机在非正常的条件下运行时，轴承的寿命会缩短。如下面几种情况：

- 当电动机的运行速度高于额定速度时，由于电动机的振动增大，使得轴承受到额外的径向力和轴向力，导致其寿命减少；
- 当环境或设备等因素引起电动机振动加大时，同样轴承也会因此受到额外的径向力和轴向力，而导致其寿命减少；

When the motor runs outside of normal conditions, the bearing life will be reduced, such as the following conditions.

- When motor runs beyond the rated speed, the increase of motor vibration will result in the extra radial and axial force on bearing. This will reduce the life of bearing;
- When the motor vibration increase due to the environment or other equipment, the bearing also will endure more radial and axial force. This also will reduce the life of bearing;

接线盒

接线盒标准位置位于机座顶端，且自身可4x90°旋转，从而使电缆可以从各个方向进入。当选择进线口朝向电机驱动端时，须留意电机安装环境前方是否有足够空间供电缆走线。标准接线盒使用喇叭口型进线斗，机座号80~225的电机有一个进线斗，机座号250~355的电机有两个进线斗。

Connection box

The connection box is located on the top of motor housing as standard, and can be rotated by $4 \times 90^\circ$ to allow for cable entry from each direction. When selecting the entrance to the motor drive end, please notice whether there is enough space in front of the installation for the cable line. For the standard connection box with hoop gland, the motor of FS 80~225 has one hoop gland, and the motor of FS250~355 has two.

标准接线盒 Standard main terminal box

机座号 Frame Size	主接线端子数 No. of main terminal	主接线端子螺纹 Main terminal thread	主进线孔数量 No. of main cable entry	接线斗直径 Hoop gland dia. (mm)	外接电缆直径 ²⁾ Cable diameter (mm)	最大辅助端子数 ¹⁾ Max. auxiliary terminal	辅助电缆进线孔 ³⁾ Auxiliary cable entry
80	3	M5	1	1xΦ42	13 ~ 14 19 ~ 20 24 ~ 25	8	1xM16x1.5 或/or 1xM20x1.5
90							
100							
112	6	M5	1	1xΦ42	13 ~ 14 19 ~ 20 24 ~ 25	8	1xM16x1.5 或/or 1xM20x1.5 或/or 2xM16x1.5 或/or 1xM16x1.5 + 1xM20x1.5
132							
160	6	M6	1	1xΦ58	13 ~ 14 19 ~ 20 25 ~ 26 30 ~ 31 34 ~ 35	20	1xM16x1.5 或/or 1xM20x1.5 或/or 1xM25x1.5 或/or 2xM16x1.5 或/or 1xM16x1.5 + 1xM20x1.5 1xM16x1.5 + 1xM25x1.5
180							
200	6	M8	1	1xΦ72	19 ~ 20 25 ~ 26 31 ~ 32 37 ~ 38 41 ~ 42	20	1xM16x1.5 或/or 1xM20x1.5 或/or 1xM25x1.5 或/or 2xM16x1.5 或/or 1xM16x1.5 + 1xM20x1.5 1xM16x1.5 + 1xM25x1.5
225							
250	6	M10	2	2xΦ72	19 ~ 20 25 ~ 26 31 ~ 32 37 ~ 38 41 ~ 42	20	1xM16x1.5 或/or 1xM20x1.5 或/or 1xM25x1.5 或/or 2xM16x1.5 或/or 1xM16x1.5 + 1xM20x1.5 1xM16x1.5 + 1xM25x1.5
280							
315	6	M16	2	2xΦ90	30 ~ 31 35 ~ 36 44 ~ 45 49 ~ 50	20	1xM16x1.5 或/or 1xM20x1.5 或/or 1xM25x1.5 或/or 2xM16x1.5 或/or 1xM16x1.5 + 1xM20x1.5 1xM16x1.5 + 1xM25x1.5
355							

注：

- ¹⁾ 每个辅助接线端子所能适配的电缆接头不超过 2.5 mm²。
- ²⁾ 请根据进线电缆直径可选尺寸选择电缆，并保证所选电缆允许的电缆直径处于此列数据范围内。
- ³⁾ 当同时选用测温元件和防潮加热带时会配备两个辅助进线孔。孔的螺纹尺寸是根据所需的辅助端子数量决定的。

Notes:

- ¹⁾ The adaptable diameter to each auxiliary terminal can not exceed 2.5mm².
- ²⁾ Please choose the cable entry diameter according to the cable diameter can be selected column. And ensure the allowed cable entry diameter is within the range in this column.
- ³⁾ If both temperature sensor and heater are selected, 2 auxiliary cable entries will be configured. The dimensions of the cable entries will be configured according to the quantity of the terminals.

选项-标准接线盒带钢管布线孔 (选项代码X97) Option-Standard terminal box with conduit entry (Option code X97)

机座号 Frame Size	钢管布线进线孔螺纹 Size of Main Conduit entry
80	M30 × 2
90	
100	
112	M30 × 2
132	
160	M36 × 2
180	
200	M48 × 2
225	
250	M48 × 2
280	
315	M64 × 2
355	

电动机保护

防潮加热保护

当电动机处于较为恶劣的环境时，比如湿度非常大或者昼夜温差比较大，电动机的绕组很可能出现凝露的现象，这样会带来电动机烧毁的风险。对于这种情况，建议对电动机绕组配置防潮加热带（选件号：Q04）进行保护。

电动机防潮加热带必须在电动机工作过程中处于不工作状态；当电动机停机时，防潮加热带必须启动工作，为绕组加热。

防潮加热带的电气参数如下表所示。

防潮加热带电气参数

机座号 Frame size	功率和电压 Power (W) & voltage (V)
	Q04
80 ~ 90	20 W / 220 V
100 ~ 112	30 W / 220 V
132 ~ 160	40 W / 220 V
180 ~ 200	50 W / 220 V
225 ~ 280	60 W / 220 V
315	80 W / 220 V
355	100 W / 220 V

电动机过热保护

电动机热保护是指将温度保护传感器或温度检测传感器嵌入电动机定子绕组或其他适当的地方，从而使其不会因为过热而受到破坏。

不同的电动机热保护方式可以在电动机订货号的第 15 位采用不同的字母或者选件号来表示。

Motor protection

Anti-condensation heater

Motors whose windings are at risk of condensation due to the climatic conditions, e.g. inactive motors in humid atmospheres or motors that are subjected to widely fluctuating temperatures can be equipped with anti-condensation heaters (Option code: Q04).

Anti-condensation heaters must be switched off during operation. When motor shut down, the heaters must be switched on.

The electrical parameters of anti-condensation heaters are shown in the following table.

Electrical data of Anti-condensation heater

Motor thermal overload protection

Motor thermal protection means to use of thermal protectors and thermal detectors incorporated into the stator windings or placed in other suitable positions in motor in order to protect them against serious damage due to thermal overloads.

The order variants for motor protection are coded with letters in the 15th position of the Motor Order No., or ordered with Option code.

电气特性 Electrical design

额定输出

1MT0003 电动机的额定功率是指电动机在连续运行的情况下 S1 (IEC 60034-1)，此时周围环境温度为 $-20\text{ }^{\circ}\text{C} \sim 40\text{ }^{\circ}\text{C}$ ，海拔高度不超过 1000 m。

电压、频率

IEC 60034-1 将电压和频率的偏差分为 A 类 (电压偏差 $\pm 5\%$ ，频率偏差 $\pm 2\%$) 和 B 类 (电压偏差 $\pm 10\%$ ，频率偏差 $+3\% / -5\%$)。电动机均能够在 A 类和 B 类提供额定转矩。在 A 类中，温度比正常运行下温度大约提升 10 K。

Rated Output

1MT0003 motors rated output powers means that the motor runs under continuous duty S1 (IEC 60034 - 1) operation when operated at ambient temperature from $-20\text{ }^{\circ}\text{C}$ to $40\text{ }^{\circ}\text{C}$ and at altitudes of up to 1000 m over sea.

Voltage and Frequency

IEC 60034-1 differentiates between Category A (combination of voltage deviation $\pm 5\%$ and frequency deviation $\pm 2\%$) and Category B (combination of voltage deviation $\pm 10\%$ and frequency deviation $+3\% / -5\%$) for voltage and frequency fluctuations. The motors can supply their rated torque in both Category A and B. In Category A, the temperature rise is approximately 10 K higher than during normal operation.

标准 Standard 60034 - 1	类别 Category A	类别 Category B
电压偏差 Voltage deviation	$\pm 5\%$	$\pm 10\%$
频率偏差 Frequency deviation	$\pm 2\%$	$+3\% / -5\%$

根据标准，不推荐电动机在 B 类情况下长时间运行
According to the standard, longer operation is not recommended for Category B.

电气数据公差

■ 效率 η

$$P_{\text{rated}} \leq 150 \text{ kW: } -0.15 \times (1 - \eta)$$

$$P_{\text{rated}} > 150 \text{ kW: } -0.10 \times (1 - \eta)$$

效率 η 为小于 1 的值

■ 功率因数: $(1 - \cos \phi) / 6$

最小绝对值: 0.02

最大绝对值: 0.07

■ 转差率: $\pm 20\%$ (电动机的偏差 $< 1 \text{ kW} \pm 30\%$ 时是允许的)

■ 堵转电流: $+20\%$

■ 堵转转矩: $-15\% \sim +25\%$

■ 最大转矩: -10%

■ 转动惯量: $\pm 10\%$

过载倍数

根据 IEC60034 标准要求，1MT0003 系列电动机能够在额定电压和频率下承受 1.5 倍的额定电流达 2 分钟。

Tolerance for electrical data

■ Efficiency η at

$$P_{\text{rated}} \leq 150 \text{ kW: } -0.15 \times (1 - \eta)$$

$$P_{\text{rated}} > 150 \text{ kW: } -0.10 \times (1 - \eta)$$

With η being a decimal number

■ Power factor - $(1 - \cos \phi) / 6$

Minimum absolute value: 0.02

Maximum absolute value: 0.07

■ Slip $\pm 20\%$ (for motors $< 1 \text{ kW} \pm 30\%$ is admissible)

■ Locked-rotor current $+20\%$

■ Locked-rotor torque -15% to $+25\%$

■ Breakdown torque -10%

■ Moment of inertia $\pm 10\%$

Overload times

According to IEC60034, 1MT0003 series motors are designed to withstand overload capacity of 1.5 times rated current for 2 minutes at rated voltage and frequency.

订货号和电机型号 Order No. and Motor Type

订货号 Order No.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	M	T	0	0	0	3	1	E	A	2	3	3	A	A	4

电机系列 Motor family

1MT000系列隔爆型三相异步电动机
1MT000 series explosion protected three-phase asynchronous motors

效率 Efficiency

3 = 中国能效等级 3 级, IE3 效率等级
3 = China energy efficiency grade 3, IE3 efficiency

机座号 Frame size

0D = 080 0E = 090
1A = 100 1B = 112 1C = 132 1D = 160 1E = 180
2A = 200 2B = 225 2C = 250 2D = 280
3A = 315 3B = 355

极数 Pole

A = 2 B = 4 C = 6 D = 8

铁芯长度编号 Code of stator length

0, 1 = Short 2, 3 = Medium 4, 5, 6, 7 = Long

电压、连接方式和频率编号 Code of voltage, connections and frequency

2-2 = 50Hz 230V Δ /400VY; 60Hz 460VY
3-4 = 50Hz 400V Δ /690VY; 60Hz 460V Δ
2-1 = 50Hz 220V Δ /380VY; 60Hz 440VY
0-1 = 50Hz 230V Δ
3-3 = 50Hz 380V Δ /660VY; 60Hz 440V Δ
2-3 = 50Hz 240V Δ /415VY; 60Hz 480VY
3-5 = 50Hz 415V Δ ; 60Hz 480V Δ
9-0 = 特殊电压和频率 Special voltage & frequency ¹⁾

结构和安装方式编号 Code of construction and mounting type

A = IM B3 T = IM B6 U = IM B7 V = IM B8 D = IM V6 C = IM V5
F = IM B5 G = IM V1 H = IM V3 J = IM B35 W = IM V15
K = IM B14 M = IM V18 L = IM V19 N = IM B34

绕组保护编号 Code of winding protection

A = 无绕组保护 Without winding protection
B = 一组三个PTC热敏电阻用于跳闸 3 PTC thermistors for tripping
C = 两组三个PTC热敏电阻用于报警和跳闸 6 PTC thermistors for alarm and tripping
H = 一组三个PT100温度传感器 3 PT100 resistance thermometers
J = 两组三个PT100温度传感器 6 PT100 resistance thermometers

接线盒位置编号 (从驱动端看) Code of terminal box position (view from drive end)

4 = 顶出线 On top

附注:

¹⁾ 用电压编号 90 及相应选件号来定制其它电压 (参见选项描述);

Foot note:

¹⁾ Order other voltages with voltage code 90 and the corresponding Option code (see under "Option").

选型技术数据表 Technical data table

中国能效等级 3 级, IE3

机座号 Frame Size	型号 Order No.	额定 功率 Rated Output	额定 转速 Rated Speed	效率 — 参照 GB18613-2020, 即 IEC 60034-30 Efficiency is in accordance with GB18613-2020, IEC 60034-30				额定 转矩 Rated torque	起 动 电 流 Starting Current	起 动 转 矩 Starting torque	最 大 转 矩 Max torque	转 动 惯 量 Moment of inertia(J)	噪 音 ¹⁾ Noise LpfA	噪 音 ¹⁾ Noise LWA	重 量 Weight IMB3
				效率 Efficiency at (50 HZ) 4/4 load	效率 Efficiency at (50 HZ) 3/4 load	功 率 因 数 Power factor	额 定 电 流 (380V) Rated current								
				KW	rpm	%	%								
3000rpm 2 - pole															
380VY ²⁾ 50HZ															
80M	1MT0003-0DA29-0 □□□□	0.75	2835	80.7	82.9	0.86	1.64	2.5	6.0	2.4	3.0	0.0010	51	62	29
80M	1MT0003-0DA39-0 □□□□	1.1	2870	82.7	84.0	0.83	2.45	3.7	6.5	2.4	3.4	0.0013	51	62	31
90S	1MT0003-0EA09-0 □□□□	1.5	2900	84.2	84.8	0.86	3.15	4.9	7.0	2.0	3.4	0.0024	55	67	37
90L	1MT0003-0EA49-0 □□□□	2.2	2910	85.9	87.2	0.88	4.4	7.2	7.5	2.3	3.6	0.0030	55	67	42
100L	1MT0003-1AA49-0 □□□□	3	2875	87.1	88.3	0.87	6	10.0	7.8	2.6	3.6	0.0046	62	74	54
3000rpm 2 - pole															
380VD/660VY 50HZ															
112M	1MT0003-1BA23-3 □□□□	4	2925	88.1	89.6	0.90	7.7	13.1	7.8	2.6	3.6	0.0087	65	77	67
132S	1MT0003-1CA03-3 □□□□	5.5	2930	89.2	90.2	0.89	10.5	17.9	7.5	2.3	3.6	0.018	67	79	84
132S	1MT0003-1CA13-3 □□□□	7.5	2925	90.1	91.5	0.90	14.1	24.5	7.5	2.3	3.6	0.022	67	79	92
160M	1MT0003-1DA23-3 □□□□	11	2935	91.2	92.0	0.89	20.5	35.8	7.5	2.3	2.5	0.037	69	81	140
160M	1MT0003-1DA33-3 □□□□	15	2930	91.9	92.6	0.89	28	48.9	7.5	2.4	3.4	0.045	69	81	150
160L	1MT0003-1DA43-3 □□□□	18.5	2940	92.4	93.0	0.89	34	60.1	7.8	2.4	3.4	0.054	69	81	170
180M	1MT0003-1EA23-3 □□□□	22	2950	92.7	93.0	0.89	40.5	71.2	7.8	2.4	3.4	0.088	70	83	207
200L	1MT0003-2AA43-3 □□□□	30	2955	93.3	93.4	0.87	56	97.0	7.8	2.4	3.4	0.156	71	84	290
200L	1MT0003-2AA53-3 □□□□	37	2955	93.7	93.9	0.89	67	120	7.8	2.4	3.4	0.183	71	84	321
225M	1MT0003-2BA23-3 □□□□	45	2960	94.0	94.3	0.89	82	145	7.8	2.4	3.2	0.301	72	85	401
250M	1MT0003-2CA23-3 □□□□	55	2975	94.3	94.1	0.89	100	177	7.8	2.4	3.2	0.507	75	89	483
280S	1MT0003-2DA03-3 □□□□	75	2975	94.7	94.8	0.89	135	241	7.2	2.4	3.0	0.856	77	91	600
280M	1MT0003-2DA23-3 □□□□	90	2975	95.0	95.3	0.90	160	289	7.2	2.4	3.4	1.029	77	91	665
315S	1MT0003-3AA03-3 □□□□	110	2975	95.2	95.1	0.90	195	353	7.9	1.8	2.6	1.75	78	92	980
315M	1MT0003-3AA23-3 □□□□	132	2980	95.4	95.3	0.90	235	423	7.9	2.1	2.6	1.77	78	92	1030
315L	1MT0003-3AA53-3 □□□□	160	2978	95.6	95.7	0.91	280	513	7.9	2.1	2.6	2.10	78	92	1130
315L	1MT0003-3AA63-3 □□□□	185	2978	95.7	95.9	0.92	320	593	7.9	2.3	2.6	2.52	78	92	1210
315L	1MT0003-3AA73-3 □□□□	200	2982	95.8	95.9	0.92	345	641	7.9	2.6	3.2	2.52	78	92	1230
355M	1MT0003-3BA23-3 □□□□	220	2986	95.8	95.4	0.90	390	704	8.5	2.2	2.8	2.65	85	100	1600
355M	1MT0003-3BA33-3 □□□□	250	2985	95.8	95.7	0.90	440	800	8.0	2.2	2.8	2.65	85	100	1600
355L	1MT0003-3BA53-3 □□□□	280	2988	95.8	95.7	0.90	495	896	8.5	2.2	2.8	3.24	85	100	1730
355L	1MT0003-3BA63-3 □□□□	315	2982	95.8	95.8	0.90	560	1009	8.0	2.2	2.8	3.24	85	100	1780

注:

¹⁾ 当电动机在50Hz电源供电空载运行时, 噪音容差为+3dB。当在60Hz电源下空载运行时, 噪音容差为+4dB。

²⁾ 380VY 50Hz, 电动机订货号第 12、13 位代码为 90, 且须带选项 M3F。

Note:

¹⁾ Noise value is only applicable to the direct power supply and the condition of no-load operation. If the motor in 50Hz power supply, the tolerance is +3dB. If the motor in 60Hz power supply, the tolerance is +4dB.

²⁾ 380VY 50Hz, the 12th,13th digit of motor order No. must be "90", with option code M3F.

选型技术数据表 Technical data table

中国能效等级 3 级, IE3

机座号 Frame Size	型号 Order No.	额定 功率 Rated Output	额定 转速 Rated Speed	效率—参照 GB18613-2020, 即 IEC 60034-30 Efficiency is in accordance with GB18613-2020, IEC 60034-30				额定 转矩 Rated torque	起动 电流 Starting Current	起动 转矩 Starting torque	最大 转矩 Max torque	转动惯量 Moment of inertia(J)	噪音 ¹⁾ Noise LpFA	噪音 ¹⁾ Noise LWA	重量 Weight IMB3
				效率 Efficiency at (50 HZ) 4/4 load	效率 Efficiency at (50 HZ) 3/4 load	功率 因数 Power factor	额定 电流 (380V) Rated current								
				KW	rpm	%	%								
1500rpm 4 - pole															
380VY ²⁾ 50HZ															
80M	1MT0003-0DB29-0 □□□□	0.55	1440	80.8	81.8	0.76	1.36	3.6	5.5	2.2	3.2	0.0021	45	56	30
80M	1MT0003-0DB39-0 □□□□	0.75	1445	82.5	82.9	0.75	1.84	5.0	6.0	2.7	3.7	0.0024	45	56	31
90S	1MT0003-0EB09-0 □□□□	1.1	1430	84.1	85.1	0.79	2.5	7.3	6.5	2.7	3.7	0.0039	47	59	37
90L	1MT0003-0EB49-0 □□□□	1.5	1440	85.3	86.0	0.79	3.4	9.9	6.5	2.7	3.8	0.0050	47	59	42
100L	1MT0003-1AB49-0 □□□□	2.2	1440	86.7	87.1	0.82	4.7	14.6	8.3	3.0	4.0	0.0112	52	64	57
100L	1MT0003-1AB59-0 □□□□	3	1450	87.7	88.1	0.82	6.3	19.9	8.3	3.0	4.0	0.0132	52	64	61
1500rpm 4 - pole															
380VD/660VY 50HZ															
112M	1MT0003-1BB23-3 □□□□	4	1450	88.6	89.6	0.82	8.4	26.3	8.3	3.7	4.6	0.0148	53	65	72
132S	1MT0003-1CB03-3 □□□□	5.5	1455	89.6	90.9	0.84	11.1	36.1	7.8	2.4	3.8	0.028	59	71	91
132M	1MT0003-1CB23-3 □□□□	7.5	1455	90.4	91.7	0.85	14.8	49.2	7.8	2.4	3.8	0.035	59	71	105
160M	1MT0003-1DB23-3 □□□□	11	1465	91.4	92.4	0.86	21.5	71.1	7.8	2.4	3.8	0.063	61	73	150
160L	1MT0003-1DB43-3 □□□□	15	1465	92.1	92.9	0.86	29	97.8	8.2	2.6	3.8	0.078	61	73	173
180M	1MT0003-1EB23-3 □□□□	18.5	1470	92.6	93.0	0.83	36.5	120	7.8	2.6	3.6	0.134	63	76	208
180L	1MT0003-1EB43-3 □□□□	22	1470	93.0	93.7	0.83	43.5	143	7.8	2.6	3.6	0.153	63	76	228
200L	1MT0003-2AB43-3 □□□□	30	1470	93.6	94.3	0.84	58	195	7.8	2.6	3.6	0.247	63	76	302
225S	1MT0003-2BB03-3 □□□□	37	1478	93.9	94.1	0.83	72	239	8.3	3.3	3.6	0.495	65	78	366
225M	1MT0003-2BB23-3 □□□□	45	1478	94.2	94.2	0.85	85	291	8.3	3.3	3.6	0.549	65	78	402
250M	1MT0003-2CB23-3 □□□□	55	1482	94.6	95.0	0.86	103	354	7.6	2.6	3.3	0.892	66	79	500
280S	1MT0003-2DB03-3 □□□□	75	1485	95.0	95.3	0.86	139	482	7.6	2.6	3.0	1.463	66	80	635
280M	1MT0003-2DB23-3 □□□□	90	1485	95.2	95.6	0.87	165	579	7.6	2.6	3.0	1.862	66	80	740
315S	1MT0003-3AB03-3 □□□□	110	1488	95.4	95.7	0.87	200	706	7.9	3.3	3.0	2.32	74	88	990
315M	1MT0003-3AB23-3 □□□□	132	1488	95.6	95.9	0.87	240	847	7.9	3.3	3.0	3.17	74	88	1140
315L	1MT0003-3AB53-3 □□□□	160	1488	95.8	96.1	0.87	290	1027	7.9	3.3	3.0	3.31	74	88	1170
315L	1MT0003-3AB63-3 □□□□	185	1488	95.9	96.2	0.87	335	1187	7.9	3.3	3.0	3.66	74	88	1220
315L	1MT0003-3AB73-3 □□□□	200	1490	96.0	96.3	0.88	360	1282	7.9	3.3	3.0	4.00	74	88	1280
355M	1MT0003-3BB23-3 □□□□	220	1490	96.0	96.0	0.88	395	1410	8.0	2.0	3.2	5.20	81	95	1780
355M	1MT0003-3BB33-3 □□□□	250	1490	96.0	96.0	0.88	450	1602	7.8	1.8	2.9	5.20	81	95	1780
355L	1MT0003-3BB53-3 □□□□	280	1490	96.0	96.1	0.88	500	1795	7.8	1.8	2.9	5.50	81	95	1810
355L	1MT0003-3BB63-3 □□□□	315	1490	96.0	96.1	0.88	570	2019	8.0	1.8	2.9	5.95	81	95	1930

注:

¹⁾ 当电动机在50Hz电源供电空载运行时, 噪音容差为+3dB。当在60Hz电源下空载运行时, 噪音容差为+4dB。

²⁾ 380VY 50Hz, 电动机订货号第 12、13 位代码为 90, 且须带选项 M3F。

Note:

¹⁾ Noise value is only applicable to the direct power supply and the condition of no-load operation. If the motor in 50Hz power supply, the tolerance is +3dB. If the motor in 60Hz power supply, the tolerance is +4dB.

²⁾ 380VY 50Hz, the 12th,13th digit of motor order No. must be "90", with option code M3F.

选型技术数据表 Technical data table

中国能效等级 3 级, IE3

机座号 Frame Size	型号 Order No.	额定 功率 Rated Output	额定 转速 Rated Speed	效率—参照 GB18613-2020, 即 IEC 60034-30 Efficiency is in accordance with GB18613-2020, IEC 60034-30				额定 转矩 Rated torque	起动 电流 Starting Current	起动 转矩 Starting torque	最大 转矩 Max torque	转动惯量 Moment of inertia(J)	噪音 ¹⁾ Noise LpFA	噪音 ¹⁾ Noise LWA	重量 Weight IMB3
				效率 Efficiency at (50 HZ) 4/4 load	效率 Efficiency at (50 HZ) 3/4 load	功率 因数 Power factor	额定 电流 (380V) Rated current								
				KW	rpm	%	%								
1000rpm 6 - pole															
380VY ²⁾ 50HZ															
80M	1MT0003-0DC39-0 □□□□	0.55	935	77.2	77.5	0.67	1.62	5.6	5.0	2.7	3.4	0.0030	44	55	33
90S	1MT0003-0EC09-0 □□□□	0.75	940	78.9	80.3	0.70	2.05	7.6	5.0	2.4	3.2	0.0042	45	57	39
90L	1MT0003-0EC49-0 □□□□	1.1	945	81.0	81.6	0.69	3	11.1	5.5	2.7	3.5	0.0050	45	57	42
100L	1MT0003-1AC49-0 □□□□	1.5	950	82.5	84.1	0.74	3.75	15.1	5.5	2.5	3.5	0.0113	49	61	58
112M	1MT0003-1BC29-0 □□□□	2.2	945	84.3	86.1	0.74	5.4	22.2	6.0	2.7	3.4	0.0136	53	65	70
132S	1MT0003-1CC09-0 □□□□	3	965	85.6	86.6	0.75	7.1	29.7	6.0	2.7	4.0	0.026	57	69	87
1000rpm 6 - pole															
380VD/660VY 50HZ															
132M	1MT0003-1CC23-3 □□□□	4	955	86.8	88.5	0.75	9.3	40.0	6.0	2.3	3.4	0.030	57	69	97
132M	1MT0003-1CC33-3 □□□□	5.5	960	88.0	89.2	0.76	12.5	54.7	6.5	2.3	4.0	0.040	57	69	111
160M	1MT0003-1DC23-3 □□□□	7.5	965	89.1	90.4	0.78	16.4	74.2	7.0	2.3	3.6	0.119	61	73	149
160L	1MT0003-1DC43-3 □□□□	11	970	90.3	90.3	0.77	24	108	7.0	2.3	3.6	0.169	61	73	180
180L	1MT0003-1EC43-3 □□□□	15	975	91.2	92.1	0.80	31	147	7.0	2.3	3.0	0.206	59	73	212
200L	1MT0003-2AC43-3 □□□□	18.5	978	91.7	92.5	0.80	38.5	181	7.0	2.3	3.0	0.312	59	73	284
200L	1MT0003-2AC53-3 □□□□	22	978	92.2	93.1	0.80	45.5	215	7.0	2.4	3.0	0.357	59	73	299
225M	1MT0003-2BC23-3 □□□□	30	982	92.9	93.9	0.83	59	292	7.6	2.4	3.0	0.761	60	74	410
250M	1MT0003-2CC23-3 □□□□	37	985	93.3	94.1	0.84	72	359	7.6	2.4	3.0	1.070	62	76	487
280S	1MT0003-2DC03-3 □□□□	45	985	93.7	94.5	0.84	87	436	7.8	3.0	3.0	1.484	64	78	580
280M	1MT0003-2DC23-3 □□□□	55	988	94.1	94.6	0.84	106	532	7.8	3.0	3.0	1.748	64	78	645
315S	1MT0003-3AC03-3 □□□□	75	990	94.6	95.0	0.84	143	723	7.8	2.6	3.0	2.92	69	83	980
315M	1MT0003-3AC23-3 □□□□	90	990	94.9	95.3	0.84	172	868	7.8	2.6	3.0	3.47	69	83	1060
315L	1MT0003-3AC53-3 □□□□	110	991	95.1	95.3	0.85	205	1060	7.8	2.6	3.0	4.43	69	83	1180
315L	1MT0003-3AC63-3 □□□□	132	991	95.4	95.7	0.85	245	1272	7.8	2.6	3.0	4.75	69	83	1230
355S	1MT0003-3BC23-3 □□□□	160	994	95.6	95.7	0.84	305	1537	8.5	3.0	2.4	10.57	71	85	1800
355M	1MT0003-3BC33-3 □□□□	185	993	95.7	95.8	0.84	350	1779	8.5	3.0	2.4	10.60	71	85	1870
355M	1MT0003-3BC43-3 □□□□	200	993	95.8	95.9	0.84	380	1923	8.5	3.0	2.4	11.09	71	85	1910
355L	1MT0003-3BC53-3 □□□□	220	993	95.8	96.0	0.84	415	2116	8.5	3.0	2.4	13.09	71	85	2080
355L	1MT0003-3BC63-3 □□□□	250	992	95.8	96.1	0.84	470	2407	8.5	3.0	2.4	13.09	71	85	2110

注:

¹⁾ 当电动机在50Hz电源供电空载运行时, 噪音容差为+3dB。当在60Hz电源下空载运行时, 噪音容差为+4dB。

²⁾ 380VY 50Hz, 电动机订货号第 12、13 位代码为 90, 且须带选项 M3F。

Note:

¹⁾ Noise value is only applicable to the direct power supply and the condition of no-load operation. If the motor in 50Hz power supply, the tolerance is +3dB. If the motor in 60Hz power supply, the tolerance is +4dB.

²⁾ 380VY 50Hz, the 12th,13th digit of motor order No. must be "90", with option code M3F.

选型技术数据表 Technical data table

中国能效等级 3 级, IE3

机座号 Frame Size	型号 Order No.	额定 功率 Rated Output	额定 转速 Rated Speed	效率 — 参照 GB18613-2020, 即 IEC 60034-30 Efficiency is in accordance with GB18613-2020, IEC 60034-30				额定 转矩 Rated torque	起动 电流 Starting Current	起动 转矩 Starting torque	最大 转矩 Max torque	转动惯量 Moment of inertia(J)	噪音 ¹⁾ Noise LpfA	噪音 ¹⁾ Noise LWA	重量 Weight IMB3
				效率 Efficiency at (50 HZ) 4/4 load	效率 Efficiency at (50 HZ) 3/4 load	功率 因数 Power factor	额定 电流 (380V) Rated current								
				KW	rpm	%	%								
750rpm 8-pole															
380VY ²⁾ 50HZ															
132S	1MT0003-1CD09-0 □□□□	2.2	725	81.9	82.6	0.73	5.6	29.0	6.0	2.4	3.0	0.047	51	64	83
132M	1MT0003-1CD29-0 □□□□	3	725	83.5	84.5	0.74	7.4	39.5	6.0	2.4	3.0	0.062	51	64	97
750rpm 8-pole															
380VD/660VY 50HZ															
160M	1MT0003-1DD23-3 □□□□	4	728	84.8	86.4	0.74	9.7	52.5	5.5	1.7	2.8	0.076	55	68	129
160M	1MT0003-1DD33-3 □□□□	5.5	732	86.2	87.1	0.74	13.1	71.8	6.0	1.7	3.0	0.101	55	68	140
160L	1MT0003-1DD43-3 □□□□	7.5	732	87.3	88.3	0.74	17.6	97.8	6.0	1.8	3.0	0.128	55	68	162
180L	1MT0003-1ED43-3 □□□□	11	725	88.6	89.9	0.74	25.5	145	5.5	2.0	3.0	0.261	60	73	234
200L	1MT0003-2AD53-3 □□□□	15	728	89.6	90.2	0.73	35	197	6.5	2.3	3.5	0.413	61	74	313
225S	1MT0003-2BD03-3 □□□□	18.5	735	90.1	90.9	0.75	41.5	240	5.9	2.0	3.0	0.552	58	72	331
225M	1MT0003-2BD23-3 □□□□	22	732	90.6	91.5	0.75	49	287	5.9	2.0	2.5	0.608	58	72	358
250M	1MT0003-2CD23-3 □□□□	30	735	91.3	92.1	0.79	63	390	6.5	2.0	3.0	0.924	67	80	450
280S	1MT0003-2DD03-3 □□□□	37	736	91.8	92.8	0.79	78	480	5.5	1.7	2.5	1.183	69	82	540
280M	1MT0003-2DD23-3 □□□□	45	738	92.2	93.1	0.80	93	582	6.0	1.8	2.5	1.736	69	82	650
315S	1MT0003-3AD03-3 □□□□	55	739	92.5	93.0	0.81	112	710	6.2	2.0	2.9	2.16	70	83	860
315M	1MT0003-3AD23-3 □□□□	75	738	93.1	93.6	0.81	151	970	6.7	2.2	2.5	2.70	70	83	955
315L	1MT0003-3AD53-3 □□□□	90	738	93.4	93.9	0.82	179	1165	5.9	1.8	2.3	3.40	70	83	1000
315L	1MT0003-3AD63-3 □□□□	110	741	93.7	94.2	0.82	220	1418	7.1	2.3	3.0	4.25	70	83	1150
355S	1MT0003-3BD23-3 □□□□	132	743	94	94.5	0.81	265	1699	7.1	2.2	2.4	8.09	77	90	1630
355M	1MT0003-3BD33-3 □□□□	160	742	94.3	94.8	0.81	320	2059	7.1	2.2	2.4	9.50	77	90	1840
355L	1MT0003-3BD53-3 □□□□	185	742	94.6	95.0	0.82	360	2382	7.1	2.0	2.1	11.25	77	90	2010
355L	1MT0003-3BD63-3 □□□□	200	742	94.6	95.0	0.83	385	2576	7.4	2.0	2.1	12.63	77	90	2120

注:

¹⁾ 当电动机在50Hz电源供电空载运行时, 噪音容差为+3dB。当在60Hz电源下空载运行时, 噪音容差为+4dB。

²⁾ 380VY 50Hz, 电动机订货号第 12、13 位代码为 90, 且须带选项 M3F。

Note:

¹⁾ Noise value is only applicable to the direct power supply and the condition of no-load operation. If the motor in 50Hz power supply, the tolerance is +3dB. If the motor in 60Hz power supply, the tolerance is +4dB.

²⁾ 380VY 50Hz, the 12th,13th digit of motor order No. must be "90", with option code M3F.

选件 Options

电动机订货号 Motor order code	选件号 Option Code ¹⁾	描述 Description	应用范围 Application Scope
电压与频率 Voltages and frequency			
1MT0003-□□□□2-1□□□□	—	220V Δ / 380VY 50 Hz (50Hz output, 50Hz功率输出)	FS112 ~ 280 ³⁾
1MT0003-□□□□3-3□□□□	—	380V Δ / 660VY 50 Hz (50Hz output, 50Hz功率输出, 4 kW ~ 315 kW ²⁾)	FS112 ~ 355 ³⁾
1MT0003-□□□□2-2□□□□	—	230V Δ / 400VY 50 Hz (50Hz output, 50Hz功率输出)	FS112 ~ 280 ³⁾
1MT0003-□□□□3-4□□□□	—	400V Δ / 690VY 50 Hz (50Hz output, 50Hz功率输出)	FS112 ~ 355 ³⁾
1MT0003-□□□□9-0□□□□-Z	M3F ²⁾	380 VY 50 Hz (50Hz output, 50Hz的输出功率)	FS80 ~ 132 ⁴⁾
绕组保护和轴承保护 Winding protection and bearing protection			
1MT0003-□□□□□□-□□A□ ²⁾	—	无绕组保护 Without motor protection	FS80 ~ 355
1MT0003-□□□□□□-□□B□	—	绕组带一组三芯串联的 PTC 热敏电阻用于跳闸, 需用2个辅助接线端子 Motor protection with PTC thermistors with three embedded temperature sensors for tripping, need 2 terminals	FS80 ~ 355
1MT0003-□□□□□□-□□C□	—	绕组带两组三芯串联的 PTC 热敏电阻用于报警和跳闸, 需用4个辅助接线端子 Motor protection with PTC thermistors with six embedded temperature sensors for alarm & tripping, need 4 terminals	FS80 ~ 355
1MT0003-□□□□□□-□□H□-Z	—	绕组带3个单支两线制PT100测温元件, 需用6个辅助接线端子 Installation of 3 single 2 wires PT100 resistance thermometers, need 6 terminals	FS100 ~ 355
1MT0003-□□□□□□-□□J□-Z	—	绕组带6个单支两线制PT100测温元件, 需用12个辅助接线端子 Installation of 6 single 2 wires PT100 resistance thermometers, need 12 terminals	FS180 ~ 355
—	Q04	绕组带 220 V 防潮加热带 Anti-condensation heating for 220 V	FS80 ~ 355
—	Q72 ⁵⁾	轴承带2个单支双线制PT100测温元件, 需用4个辅助接线端子 Installation of 2 single 2 wires PT100 resistance thermometers for bearings, need 4 terminals	FS160 ~ 355
冷却与通风 Ventilation			
—	F76	金属风扇 Metal Fan	FS80 ~ 355

¹⁾ 订货时, 电动机订货号需带“-Z”, 另外附带上选件号。

²⁾ 无需附加费用。

³⁾ 适用于4kW及以上的功率。

⁴⁾ 适用于3kW及以下的功率。

⁵⁾ 适用于2, 4, 6极电机。

¹⁾ When ordering, need supplement "-Z" after order number. Add option code after that.

²⁾ Without additional charge.

³⁾ Apply to 4kW and above.

⁴⁾ Apply to 3kW and below.

⁵⁾ Apply to motors with 2,4,6 poles.

选件 Options

电动机订货号 Motor order code	选件号 Option Code ¹⁾	描述 Description	应用范围 Application Scope
电动机接线盒 Motor connection box			
1MT0003-□□□□□□-□□□□4 ²⁾	—	接线盒在顶端 Connection box on top 进线孔在右侧（从驱动端看）（标准电动机） cable entry on right (view from DE) (Standard version)	FS80 ~ 355
—	R10 ⁶⁾	接线盒顺时针旋转 90° Clockwise rotate the connection box through 90°	FS80 ~ 355
—	R11	接线盒逆时针旋转 90° Counter-clockwise rotate the connection box through 90°	FS80 ~ 355
—	R12	接线盒直接旋转 180° Rotation of the connection box through 180°	FS80 ~ 355
—	X97	钢管布线孔 Conduit entry	FS80 ~ 355
轴承 bearing			
—	L80	SKF轴承 SKF bearings	FS80 ~ 355
—	L81	其他进口品牌轴承 Other import brand bearing	FS80 ~ 355
—	L82	驱动端轴带螺纹孔 DE shaft with threaded hole	FS80 ~ 355
—	L20	驱动端轴承固定 Located bearing at DE	FS80 ~ 132
—	L22	增强悬臂力轴承设计 Bearing design for increased cantilever forces	FS160 ~ 355
—	L23 ⁷⁾	再润滑装置 Regreasing device	FS160 ~ 250

¹⁾ 订货时，电动机订货号需带“-Z”，另外附上选件号。

²⁾ 无需附加费用。

⁶⁾ 选择此项时需留意安装环境，请确认进线孔前方有足够的空间用于接入电缆。

⁷⁾ 对于FS280、FS315、FS355，再润滑装置是标配。加排油装置不可用于B8安装方式。

¹⁾ When ordering, need supplement "-Z" after order number. Add option code after that.

²⁾ Without additional charge.

⁶⁾ When ordering this option, please take care about the installation location that whether there is enough space for cable inserting.

⁷⁾ Re-grease device is configured as standard for FS280, FS315, and FS355. Re-grease device can't be configured together with mounting construction IM B8.

选件 Options

电动机订货号 Motor order code	选件号 Option Code ¹⁾	描述 Description	应用范围 Application Scope
平衡及振动等级 Balance and Vibration quantity			
–	L00	B 级振动等级 Vibration quantity level B	FS80 ~ 355
机械设计和防护等级 Mechanical design and degrees of protection			
–	H70	第二外部接地 2nd External grounding	FS80 ~ 355
–	H22	IP56 防护等级（非高海况） IP56 degree of protection (non-heavy-sea)	FS80 ~ 355
铭牌和测试证书 Rating plate and test certificates			
–	B80	出厂检验报告 Acceptance test certificate 3.1 in accordance with EN 10204	FS80 ~ 355
颜色和喷漆 Colors and Paint finish			
–	S01	不喷漆，只带底漆 Unpainted, only primed	FS80 ~ 355

¹⁾ 订货时，电动机订货号需带“-Z”，另外附上选件号。

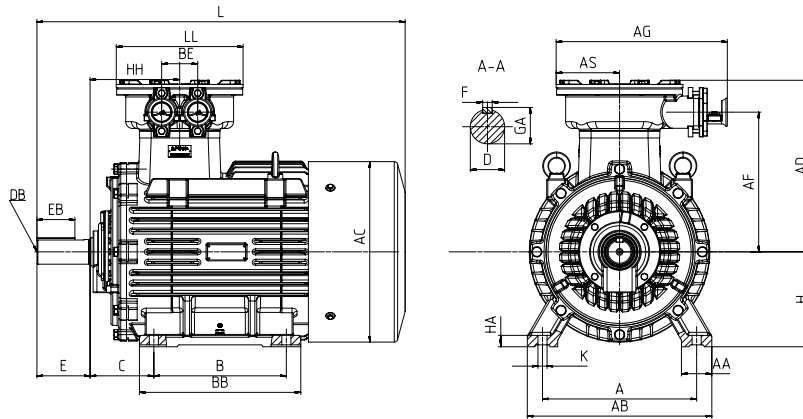
¹⁾ When ordering, need supplement "-Z" after order number. Add option code after that.

外形尺寸 Dimension drawings

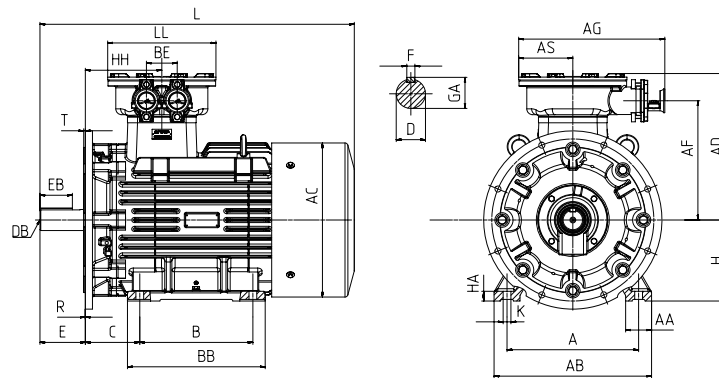
1MT0003隔爆系列电动机 Flameproof series motor 1MT0003

机座号从 80M ~ 355M Frame sizes 80M to 355M

IM B3 安装结构型式 Type of construction IM B3

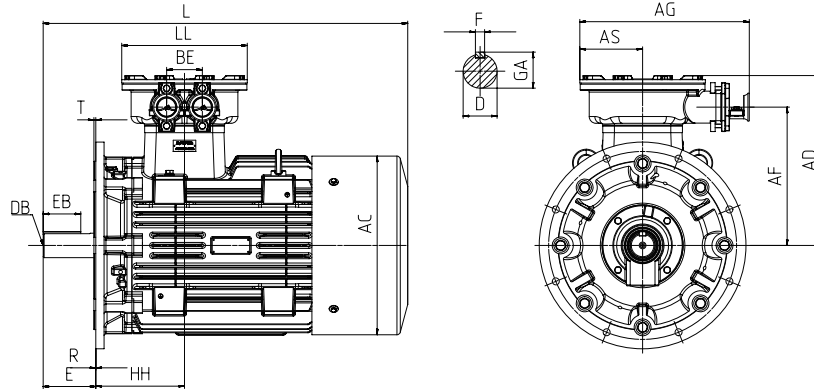


IM B35 安装结构型式 Type of construction IM B35

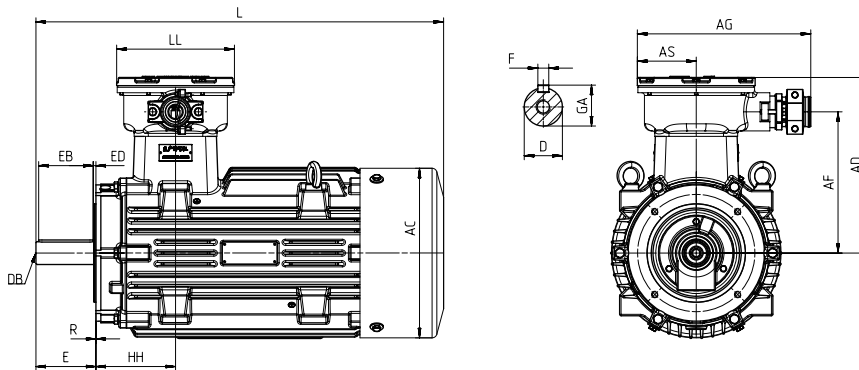


机座号 Frame size	订货号 MLFB 1MT0003-	极数 Poles	尺寸及公差/mm Dimension and tolerance										
			A	B	C		D		E		F		GA
					基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	
80M	0DA2, 0DA3, 0DB2, 0DB3, 0DC3	2,4,6	125	100	50	±1.5	19	+0.009 -0.004	40	±0.3	6	0 -0.030	21.5
90S	0EA0, 0EB0, 0EC0	2,4,6	140	100	56	±1.5	24	+0.009 -0.004	50	±0.3	8	0 -0.036	27
90L	0EA4, 0EB4, 0EC4	2,4,6	140	125	56	±1.5	24	+0.009 -0.004	50	±0.3	8	0 -0.036	27
100L	1AA4, 1AB4, 1AB5, 1AC4	2,4,6	160	140	63	±2.0	28	+0.009 -0.004	60	±0.3	8	0 -0.036	31
112M	1BA2, 1BB2, 1BC2	2,4,6	190	140	70	±2.0	28	+0.009 -0.004	60	±0.3	8	0 -0.036	31
132S	1CA0, 1CA1, 1CB0, 1CC0, 1CD0	2,4,6,8	216	140	89	±2.0	38	+0.018 +0.002	80	±0.3	10	0 -0.036	41
132M	1CB2, 1CC2, 1CC3, 1CD2	4,6,8	216	178	89	±2.0	38	+0.018 +0.002	80	±0.3	10	0 -0.036	41
160M	1DA2, 1DA3, 1DB2, 1DC2, 1DD2, 1DD3	2,4,6,8	254	210	108	±3.0	42	+0.018 +0.002	110	±0.3	12	0 -0.043	45
160L	1DA4, 1DB4, 1DC4, 1DD4	2,4,6,8	254	254	108	±3.0	42	+0.018 +0.002	110	±0.3	12	0 -0.043	45
180M	1EA2, 1EB2	2,4	279	241	121	±3.0	48	+0.018 +0.002	110	±0.3	14	0 -0.043	51.5

IM B5 以及 IM V1 安装结构型式 Type of construction IM B5 and IM V1



IM B14 安装结构型式 Type of construction IM B14



尺寸及公差/mm Dimension and tolerance

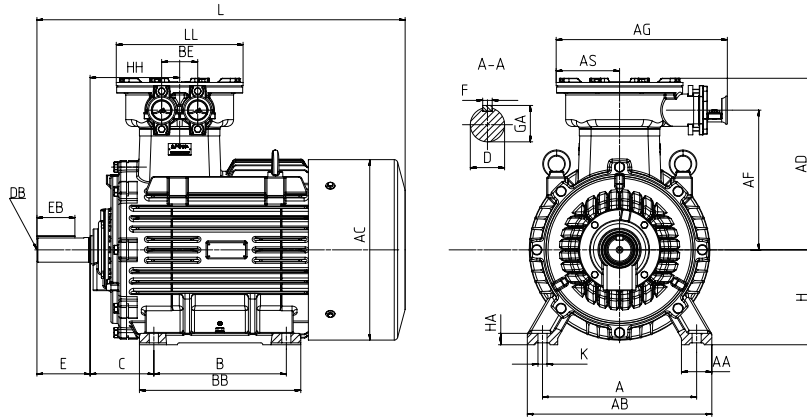
基本尺寸 dimension	H		基本尺寸 dimension	K		AB	AC	AD	L	AA	AF	AG	AS	BB	BE	HA	LL	DB	EB		AQ	LM	HH	R
	极限偏差 tolerance	基本尺寸 dimension		极限偏差 tolerance	基本尺寸 dimension														极限偏差 tolerance					
80	0 -0.5	10	+0.36 0	160	161	215	390	34	159	265	84	130	-	10	168	M6	32	0 -0.62	145	445	108	0		
90	0 -0.5	10	+0.36 0	176	175	225	420	36	167	265	84	130	-	14	168	M8	40	0 -0.62	165	475	111	0		
90	0 -0.5	10	+0.36 0	176	175	225	455	36	167	265	84	155	-	14	168	M8	40	0 -0.62	165	510	111	0		
100	0 -0.5	12	+0.43 0	200	196	245	535	40	187	265	84	174	-	14	168	M10	50	0 -0.62	195	590	131	0		
112	0 -0.5	12	+0.43 0	240	221	255	485	50	187	300	104	180	-	16	208	M10	50	0 -0.62	220	540	125	0		
132	0 -0.5	12	+0.43 0	262	257	285	530	55	215	300	104	190	-	18	208	M12	70	0 -0.74	257	585	127	0		
132	0 -0.5	12	+0.43 0	262	257	285	580	55	215	300	104	230	-	18	208	M12	70	0 -0.74	257	640	127	0		
160	0 -0.5	15	+0.43 0	324	311	330	690	70	259	318	108	258	-	25	216	M16	100	0 -0.87	300	755	146	0		
160	0 -0.5	15	+0.43 0	324	311	330	755	70	259	318	108	302	-	25	216	M16	100	0 -0.87	300	820	146	0		
180	0 -0.5	15	+0.43 0	349	356	350	785	70	280	318	108	321	-	22	216	M16	100	0 -0.87	330	855	169	0		

外形尺寸 Dimension drawings

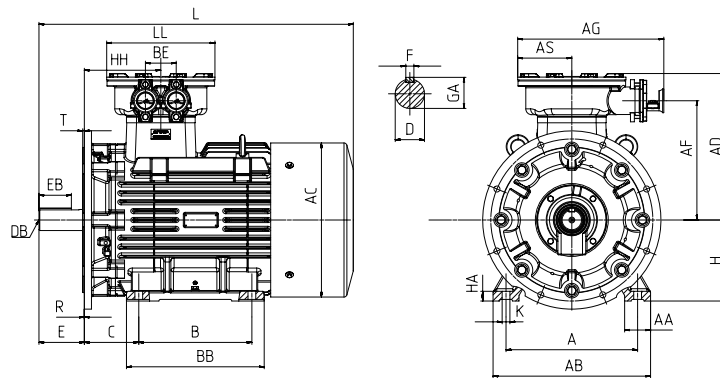
1MT0003隔爆系列电动机 Flameproof series motor 1MT0003

机座号从 80M ~ 355M Frame sizes 80M to 355M

IM B3 安装结构型式 Type of construction IM B3

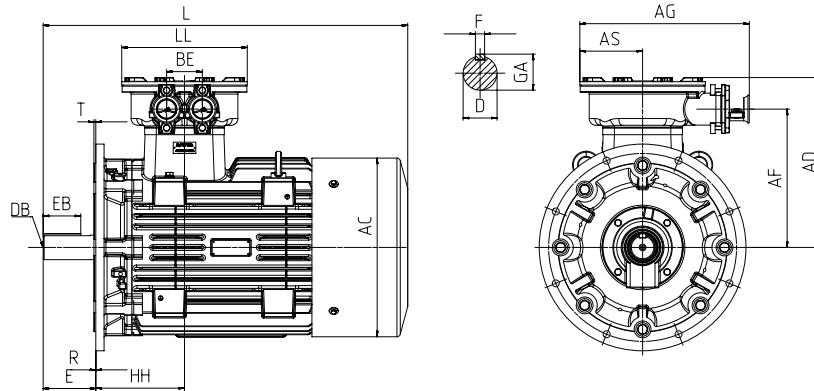


IM B35 安装结构型式 Type of construction IM B35

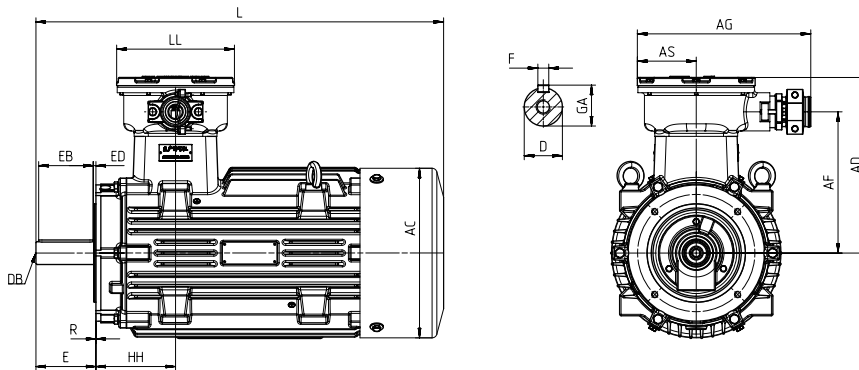


机座号 Frame size	订货号 MLFB 1MT0003-	极数 Poles	尺寸及公差/mm Dimension and tolerance										
			A	B	C		D		E		F		GA
					基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	
180L	1EB4, 1EC4, 1ED4	4,6,8	279	279	121	±3.0	48	+0.018 +0.002	110	±0.3	14	0 -0.043	51.5
200L	2AA4, 2AA5, 2AB4, 2AC4, 2AC5, 2AD5	2,4,6,8	318	305	133	±3.0	55	+0.030 +0.011	110	±0.3	16	0 -0.043	59
225S	2BB0, 2BD0	4,8	356	286	149	±4.0	60	+0.030 +0.011	140	±0.5	18	0 -0.043	64
225M	2BA2	2	356	311	149	±4.0	55	+0.030 +0.011	110	±0.3	16	0 -0.043	59
	2BB2, 2BC2, 2BD2	4,6,8	356	311	149	±4.0	60	+0.030 +0.011	140	±0.5	18	0 -0.043	64
250M	2CA2	2	406	349	168	±4.0	60	+0.030 +0.011	140	±0.5	18	0 -0.043	64
	2CB2, 2CC2, 2CD2	4,6,8	406	349	168	±4.0	65	+0.030 +0.011	140	±0.5	18	0 -0.043	69
280S	2DA0	2	457	368	190	±4.0	65	+0.030 +0.011	140	±0.5	18	0 -0.043	69
	2DB0, 2DC0, 2DD0	4,6,8	457	368	190	±4.0	75	+0.030 +0.011	140	±0.5	20	0 -0.052	79.5

IM B5 以及 IM V1 安装结构型式 Type of construction IM B5 and IM V1



IM B14 安装结构型式 Type of construction IM B14



尺寸及公差/mm Dimension and tolerance

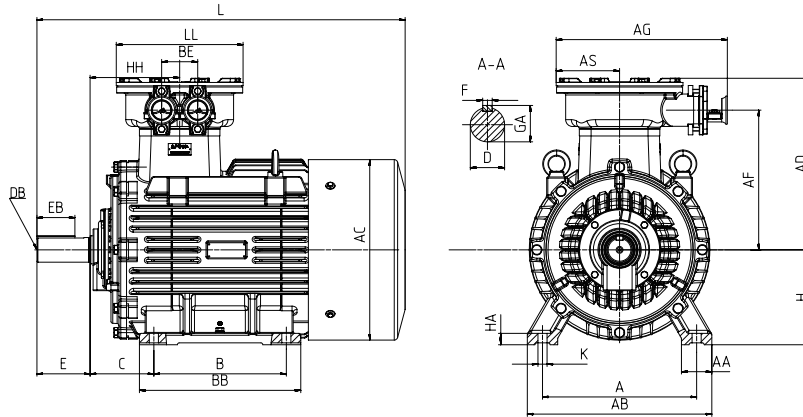
基本尺寸 dimension	H		K		AB	AC	AD	L	AA	AF	AG	AS	BB	BE	HA	LL	DB	EB		ED	AQ	LM	HH	R
	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension														极限偏差 tolerance						
180	0 -0.5	15	+0.43 0	349	356	350	825	70	280	318	108	359	-	22	216	M16	100	0 -0.87	5	330	890	169	0	
200	0 -0.5	19	+0.52 0	388	398	390	905	70	311.5	371	129	369	-	25	258	M20	100	0 -0.87	5	370	970	200	0	
225	0 -0.5	19	+0.52 0	431	429	405	925	75	332	371	129	355	-	28	258	M20	125	0 -1	10	415	900	205	0	
225	0 -0.5	19	+0.52 0	431	429	405	980	75	332	371	129	380	-	28	258	M20	100	0 -0.87	5	415	1045	205	0	
225	0 -0.5	19	+0.52 0	431	429	405	1010	75	332	371	129	380	-	28	258	M20	125	0 -1	10	415	1075	205	0	
250	0 -0.5	24	+0.52 0	486	475	455	975	80	368	451	167	425	95	30	334	M20	125	0 -1	10	465	1055	236	0	
250	0 -0.5	24	+0.52 0	486	475	455	975	80	368	451	167	425	95	30	334	M20	125	0 -1	10	465	1055	236	0	
280	0 -1.0	24	+0.52 0	542	530	485	1020	85	398	451	167	445	95	35	332	M20	125	0 -1	10	505	1100	235	0	
280	0 -1.0	24	+0.52 0	542	530	485	1020	85	398	451	167	445	95	35	332	M20	125	0 -1	10	505	1100	235	0	

外形尺寸 Dimension drawings

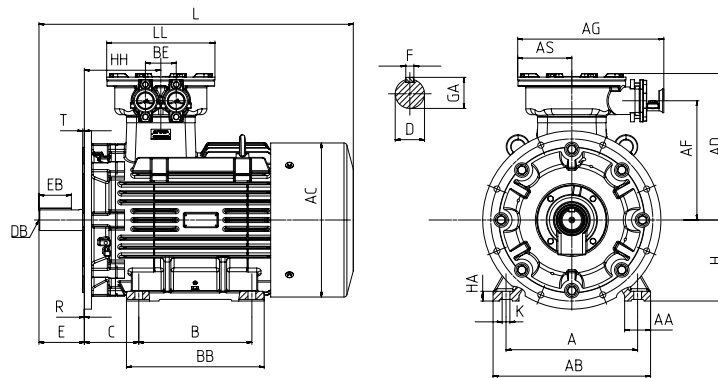
1MT0003隔爆系列电动机 Flameproof series motor 1MT0003

机座号从 80M ~ 355M Frame sizes 80M to 355M

IM B3 安装结构型式 Type of construction IM B3

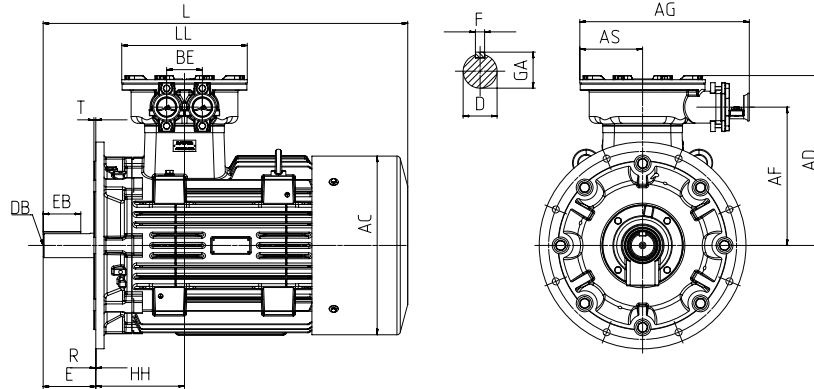


IM B35 安装结构型式 Type of construction IM B35

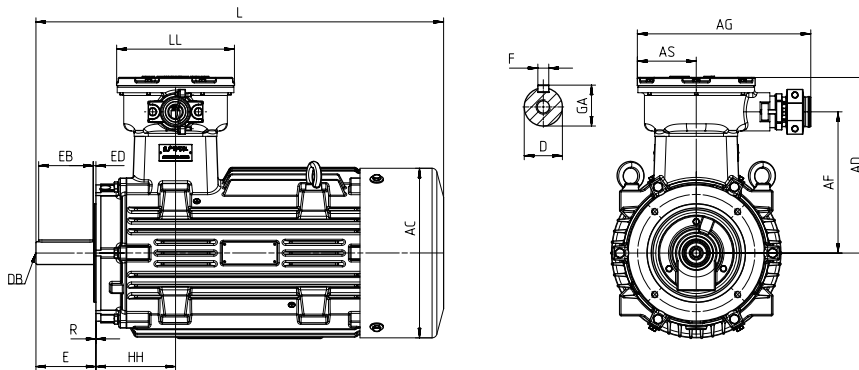


机座号 Frame size	订货号 MLFB 1MT0003-	极数 Poles	尺寸及公差/mm Dimension and tolerance										
			A	B	C		D		E		F		GA
					基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	
280M	2DA2	2	457	419	190	±4.0	65	+0.030 +0.011	140	±0.5	18	0 -0.043	69
	2DB2, 2DC2, 2DD2	4,6,8	457	419	190	±4.0	75	+0.030 +0.011	140	±0.5	20	0 -0.052	79.5
315S	3AA0	2	508	406	216	±4.0	65	+0.030 +0.011	140	±0.5	18	0 -0.043	69
	3AB0, 3AC0, 3AD0	4,6,8,10	508	406	216	±4.0	80	+0.030 +0.011	170	±0.5	22	0 -0.052	85
315M, L	3AA2, 3AA5, 3AA6, 3AA7	2	508	457/508	216	±4.0	65	+0.030 +0.011	140	±0.5	18	0 -0.043	69
	3AB2, 3AC2, 3AD2, 3AB5, 3AB6, 3AB7, 3AC5, 3AC6, 3AD5, 3AD6	4,6,8,10	508	457/508	216	±4.0	80	+0.030 +0.011	170	±0.5	22	0 -0.052	85
355S	3BC2, 3BD2	6,8,10	610	500	254	±4.0	95	+0.035 +0.013	170	±0.5	25	0 -0.052	100
355M, L	3BA2, 3BA3, 3BA5, 3BA6	2	610	560/630	254	±4.0	75	+0.030 +0.011	140	±0.5	20	0 -0.052	79.5
	3BB2, 3BB3, 3BB5, 3BB6, 3BC3, 3BC4, 3BC5, 3BC6, 3BD3, 3BD5, 3BD6	4,6,8,10	610	560/630	254	±4.0	95	+0.035 +0.013	170	±0.5	25	0 -0.052	100

IM B5 以及 IM V1 安装结构型式 Type of construction IM B5 and IM V1



IM B14 安装结构型式 Type of construction IM B14



尺寸及公差/mm Dimension and tolerance

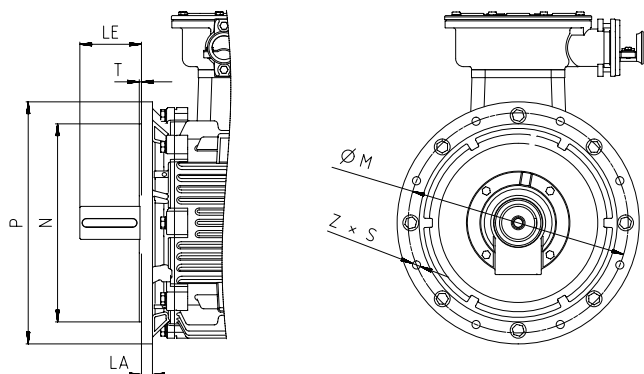
H		K		AB	AC	AD	L	AA	AF	AG	AS	BB	BE	HA	LL	DB	EB		ED	AQ	LM	HH	R
基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance														基本尺寸 dimension	极限偏差 tolerance					
280	0 -1.0	24	+0.52 0	542	530	485	1085	85	398	451	167	505	95	35	332	M20	125	0 -1	10	505	1165	235	0
280	0 -1.0	24	+0.52 0	542	530	485	1085	85	398	451	167	505	95	35	332	M20	125	0 -1	10	505	1165	235	0
315	0 -1.0	28	+0.52 0	628	581	605	1280	120	483	557	211	546	120	45	422	M20	125	0 -1	10	590	1350	299	0
315	0 -1.0	28	+0.52 0	628	581	605	1310	120	483	557	211	546	120	45	422	M20	140	0 -1	25	590	1380	299	0
315	0 -1.0	28	+0.52 0	628	581	605	1440	120	483	557	211	648	120	45	422	M20	125	0 -1	10	590	1510	299	0
315	0 -1.0	28	+0.52 0	628	581	605	1470	120	483	557	211	648	120	45	422	M20	140	0 -1	25	590	1540	299	0
355	0 -1.0	28	+0.52 0	730	697	690	1455	120	570	557	211	630	120	50	422	M24	140	0 -1	25	665	1525	294	0
355	0 -1.0	28	+0.52 0	730	697	690	1585	120	570	557	211	780	120	50	422	M20	125	0 -1	10	665	1655	294	0
355	0 -1.0	28	+0.52 0	730	697	690	1615	120	570	557	211	780	120	50	422	M24	140	0 -1	25	665	1685	294	0

外形尺寸 Dimension drawings

法兰尺寸 Flange dimension

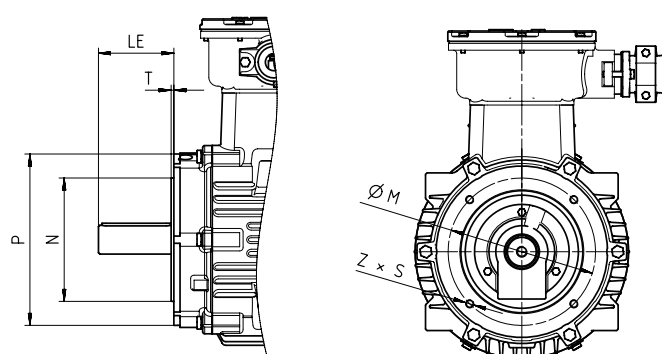
IM B5、IM B35、IM V1、IM V3 安装结构型式

Type of construction IM B5, IM B35, IM V1, IM V3



IM B14、IM V18、IM V19 安装结构型式

Type of construction IM B14, IM V18, IM V19



IM B5法兰尺寸 IM B5 flange dimensions

机座号 Frame size	法兰带通孔(FF/A) Flange with holes	尺寸 Dimension							
	DIN / EN 50347	LA	LE	M	N	P	T	S	Z
80	FF165	12	40	165	130	200	3.5	12	4
90	FF165	10	50	165	130	200	3.5	12	4
100	FF215	13	60	215	180	250	4	14.5	4
112	FF215	13	60	215	180	250	4	14.5	4
132	FF265	15	80	265	230	300	4	14.5	4
160	FF300	18	110	300	250	350	5	18.5	4
180	FF300	18	110	300	250	350	5	18.5	4
200	FF350	20	110	350	300	400	5	18.5	4
225	FF400	20	110/140	400	350	450	5	18.5	8
250	FF500	22	140	500	450	550	5	18.5	8
280	FF500	25	140	500	450	550	5	18.5	8
315	FF600	25	140/170	600	550	660	6	24	8
355	FF740	25	140/170	740	680	800	6	24	8

IM B14法兰尺寸 IM B14 flange dimensions

机座号 Frame size	法兰带盲孔(FT/C) Flange with blind holes	尺寸 Dimension							
	DIN / EN 50347	LA	LE	M	N	P	T	S	Z
80	FT100	—	40	100	80	120	3	M6 × 15 ¹⁾	4
90	FT115	—	50	115	95	140	3	M8 × 15	4
100	FT130	—	60	130	110	160	3.5	M8 × 17	4
112	FT130	—	60	130	110	160	3.5	M8 × 17	4
132	FT165	—	80	165	130	200	3.5	M10 × 19	4
160	FT215	—	110	215	180	250	4	M12 × 23	4

¹⁾ 上表中S尺寸为螺纹规格 × 孔深（例：M12 × 23表示螺纹规格M12，螺纹孔深度23mm）。

¹⁾ Dimension S in the table includes screw thread x depth. (eg: M12 x 23 means screw thread is M12 and the depth is 23 mm)

认证 Certificates



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