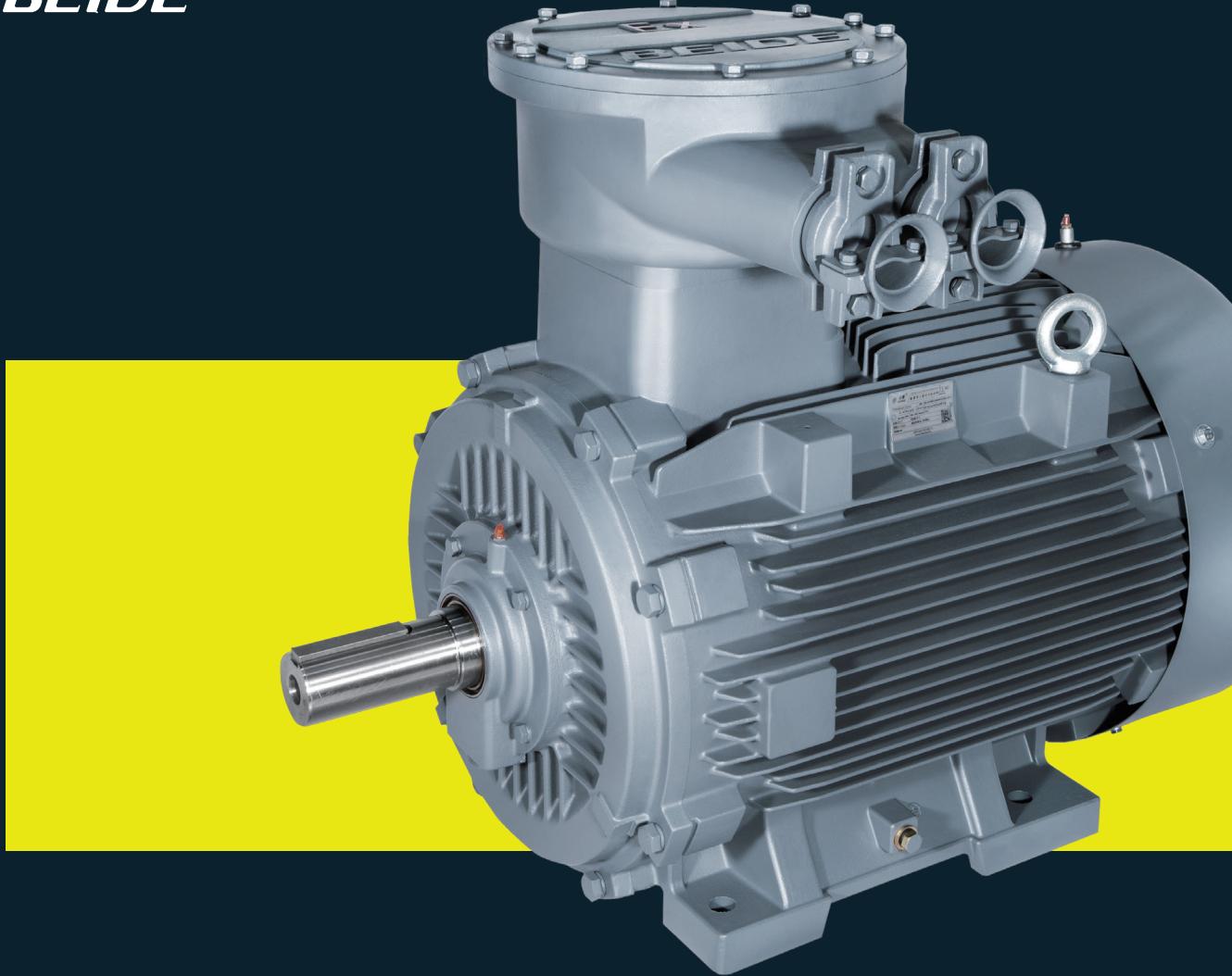




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BEIDE



**1MT8004 隔爆型**

**三相异步电动机**

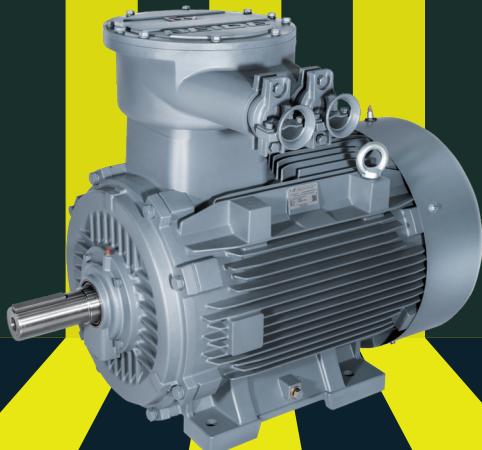
**1MT8004 series Flameproof Low Voltage**

**Three-phase Asynchronous Motor**

产品样本 Catalog

2025.03

# INNOMOTICS



为更好应对气候变化，快速响应市场需求，聚焦提升能效与可靠性的创新，推动产业绿色低碳转型和可持续发展。2023年7月1日，西门子将其低压至高压电机、齿轮电机、中压变频器和电主轴领域等相关业务进行整合，成立了茵梦达（Innomotors GmbH）。茵梦达总部位于德国纽伦堡，业务遍及全球49个国家，拥有16家工厂，全球员工约15000名。

凭借百余年技术积淀和创新，茵梦达将专注于电机和大型传动专业领域。作为行业领军企业，茵梦达将不断推动工业化进程和可持续发展。

茵梦达在华拥有5家运营公司（包括一家区域总部和4家工厂），13家分公司和6家研发中心，其中在南京设立了“茵梦达低压电机事业部全球研发中心”，员工总数约3500人，是茵梦达在全球主要的研发和制造基地。



茵梦达电机（中国）有限公司原名西门子电机（中国）有限公司，于2006年3月1日正式运营，  
2024年5月正式更名。

从2018年荣获国家绿色工厂，到2019年被认定为国家高新技术企业，再到累计五次荣获西门子中国最佳运营工厂殊荣，茵梦达电机（中国）有限公司一直致力于为客户提供创新、高效、可持续的电机解决方案。

公司拥有员工约2000余人，占地面积18.2万平方米，年产电机约100万台，为茵梦达在华最大的低压、高效电机研发和生产基地。

# 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 .....	17
订货号和型号 Order No. and Motor type .....	18
选型技术数据表 Technical data table .....	19
选件 Options .....	23
外形尺寸 Dimension drawings .....	26
认证 Certificates .....	33

# 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炸比例混合时，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。

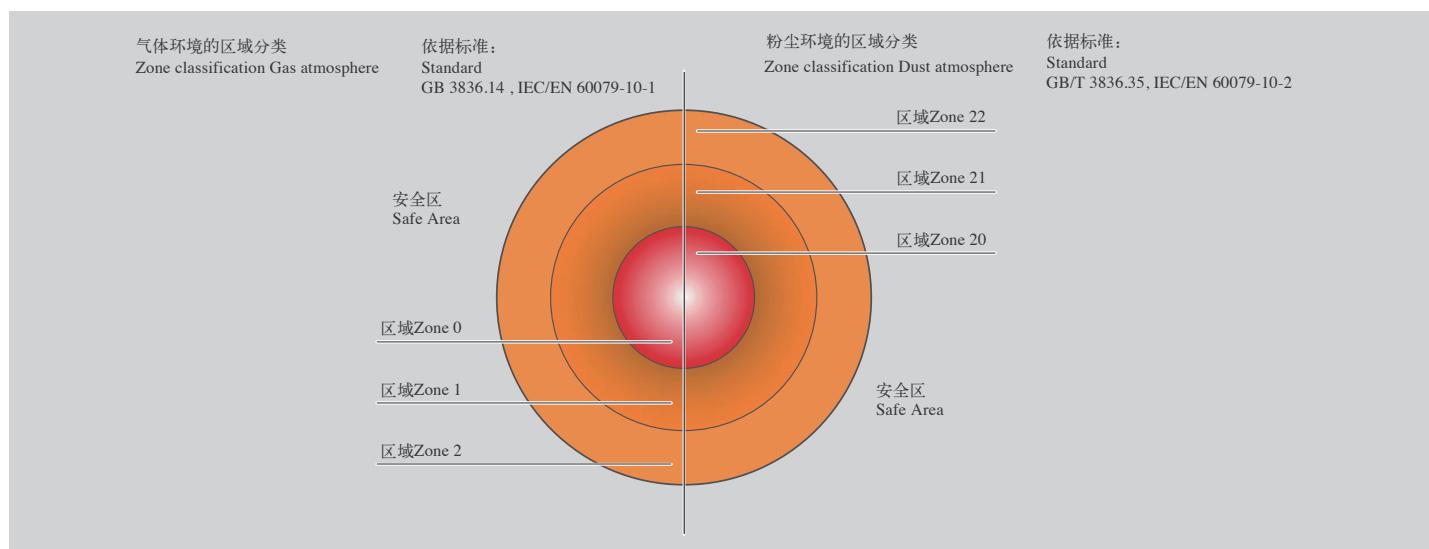
防爆设备可以根据不同类型的保护来设计。

## 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/T 3836.35, 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。



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。

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/T 3836.35, 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.

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 GB 3836.14 & IEC/EN 60079-10-1 用于气体环境 for gas atmospheres GB/T 3836.35 & 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 GB/T 3836.1 & IEC/EN 60079-0
气体 Gas <sup>1) 2)</sup>	粉尘 Dust <sup>1) 2)</sup>				
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 eb, Ex db eb, Ex db	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 ec	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 <sup>3)</sup>	3	Dc

<sup>1)</sup> 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。

<sup>2)</sup> 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。

<sup>3)</sup> Ex tc 电机不允许在含有导电粉尘的环境中运行。

<sup>1)</sup> Motors of

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

<sup>2)</sup> 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.

<sup>3)</sup> 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 GB/T 3836.1 / GB/T 3836.2 / 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 Maximum 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	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						
IIB (0.5mm<MESG <0.9mm)	丙烷 Propane						
	甲苯 Toluene						
	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/T 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/T 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 II A and II B.

# 产品概述 Product overview

	额定功率: 1.5 ~ 315 kW 机座号: 100 ~ 355 电压与频率: 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 db IIB T4 Gb 防护等级: IP55 绝缘系统: F级 注油装置: 机座号160 ~ 355的电机标配 环境温度: -20°C ~ +40°C标配设计	Rated output: 1.5 ~ 315 kW Frame size: 100 ~ 355 Voltage and Frequency: 380/660V 50Hz, Other common voltage can be provide as option design Standard color: RAL7011 Cooling method: IC411 Frame-proof marking: Ex db IIB T4 Gb Protect degree: IP55 Insulation class: F Re-greasing device: FS 160 ~ 355 motor as standard Ambient temperature: -20°C ~ 40°C as standard
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1MT8004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/T 3836.1-2021 / GB/T 3836.2-2021等设计标准，防爆等级为Ex db IIB T4 Gb且防爆性能通过CQST认证。其效率达到IEC 60034-30 IE4高效等级要求(50Hz)，符合GB 18613-2020能效等级二级。

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。

1MT8004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。

## 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，选型数据表中的噪音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。

1MT8004 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/T 3836.1-2021/GB/T 3836.2-2021. The type of protection for this motor is Ex db IIB T4 Gb. And its efficiency fulfill efficiency grade IE4 (50Hz) of IEC 60034-30, and also Grade 2 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.

1MT8004 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.

### 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.

## 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
A	自由悬置 Free suspension	45	-	2.8	45
	刚性安装 Rigid mounting	-	-	-	37
B	自由悬置 Free suspension	18	-	1.1	29
	刚性安装 Rigid mounting	-	-	-	24

注：

<sup>1)</sup> 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。

## Vibration

1MT8004 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:

<sup>1)</sup> 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	db <sup>1)</sup>	IIB	T4	Gb
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防爆标识

Marking for prevention of explosions

防爆类型 Protection type

db = 由隔爆外壳保护的设备 db = 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

注：

<sup>1)</sup> 最新标准IEC60079-0. 2017和GB/T 3836.1-2021中防爆类型标识为db。

Note:

<sup>1)</sup> Protection type is db in IEC60079-0. 2017 and GB/T 3836.1-2021.

## 铭牌样例 Nameplate example



# 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)					
	IM B3 FS100~355	IM B6 FS100~160	IM B7 <sup>3)</sup> FS100~160	IM B8 FS100~160	IM V5 <sup>1)</sup> FS100~160	IM V6 <sup>2)</sup> FS100~160
示意图 Diagram						
电动机订货号第14位号 上对应的字母 Letter, position 14 <sup>th</sup> 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)	
	IM B5 FS100~280	IM V1 <sup>1)</sup> FS100~355	IM V3 <sup>2)</sup> FS100~160	IM B35 FS100~355	IM V15 <sup>1)</sup> FS100~160
示意图 Diagram					
电动机订货号第14位号 上对应的字母 Letter, position 14 <sup>th</sup> 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)	
	IM B14 FS100~160	IM V18 <sup>1)</sup> FS100~160	IM V19 <sup>2)</sup> FS100~160	IM B34 FS100~160	
示意图 Diagram					
电动机订货号第14位号 上对应的字母 Letter, position 14 <sup>th</sup> of Motor code	K	M	L	N	

<sup>1)</sup> 标配防雨罩。

<sup>2)</sup> 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。

<sup>3)</sup> 当接线盒位于机座顶部时, 进线口默认朝下。

<sup>1)</sup> Protection cover provided as standard.

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

<sup>3)</sup> When terminal box is on the top of the motor, the cable entry will be downwards.

## 轴承系统

1MT8004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。FS100 ~ 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）。

FS100 ~ 132 范围电动机标配不带再润滑装置。FS160~355 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。

## Bearing Assignment

1MT8004 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 ~ 355 motors; For FS100 ~ 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, FS100 ~ 132 motors are without regreasing device. FS160~355 motors with regreasable bearing and regreasing device is configured as standard.

The following table lists the standard bearing configuration.

## 轴承选配

## Bearing Assignment

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
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 C3	6309 C3	NU309	6309 C3
180	2 ~ 8	6310 C3	6310 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	6316 C3	6316 C3	NU316	6316 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

## 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）

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 <sup>1)</sup>
100 ~ 132	2-8	20000 或 (or) 40000 <sup>2)</sup>

<sup>1)</sup> 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。

<sup>2)</sup> 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。

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

<sup>2)</sup> 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 NU309	4000
	4~8P		8000
180	2P	6310 C3 NU310	4000
	4~8P		8000
200	2P	6312 C3 NU312	4000
	4~8P		8000
225	2P	6313 C3 NU313	4000
	4~8P		8000
250	2P	6315 C3 NU315	4000
	4~8P		8000
280	2P	6315 C3 NU315	4000
	4~8P		5000
315	2P	6316 C3 NU316	3000
	4P		4000
	6~8P		6000
355	2P	6317 C3 NU317	3000
	4P		4000
	6~8P		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：

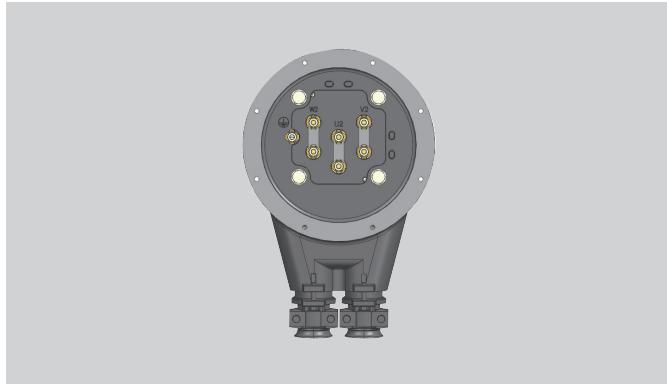
- 当电动机的运行速度高于额定速度时，由于电动机的振动增大，使得轴承受到额外的径向力和轴向力，导致其寿命减少；
- 当环境或设备等因素引起电动机振动加大时，同样轴承也会因此受到额外的径向力和轴向力，而导致其寿命减少；

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

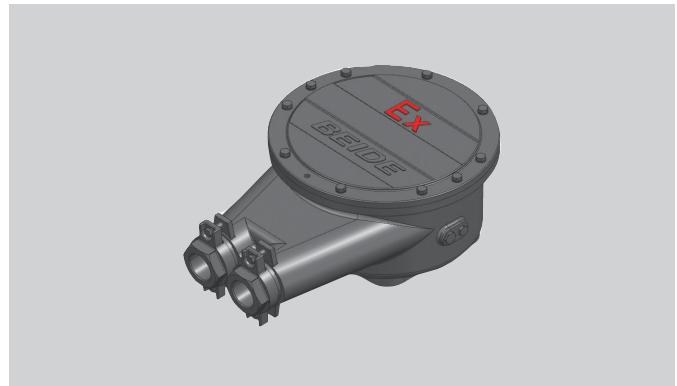
接线盒标准位置位于机座顶端，且自身可 $4 \times 90^\circ$ C旋转，从而使电缆可以从各个方向进入。当选择进线口朝向电机驱动端时，须留意电机安装环境前方是否留有足够的空间供电缆走线。标准接线盒使用喇叭口型进线斗，机座号80~225的电机有一个进线斗，机座号250~355的电机有两个进线斗。



标准配置接线盒 Standard connection box

## Connection box

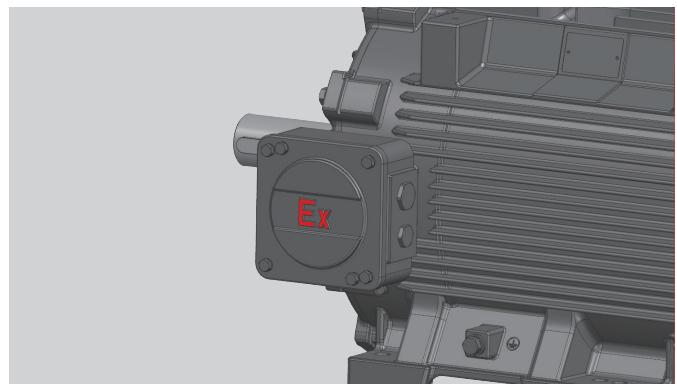
The connection box is located on the top of motor housing as standard, and can be rotated by  $4 \times 90^\circ$  to allow for cable entry from each direction. When selecting the entrance to the motor drive end, please notice whether there is enough space in front of the installation for the cable line. 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.



X97 接线盒（可选） Connection box of option code X97



X98接线盒(可选) Connection box of option code X98



R57/R58接线盒（可选） Connection box of option code R57/R58

## 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 <sup>2)</sup> Cable diameter (mm)	最大辅助端子数 <sup>1)3)4)</sup> Max. auxiliary terminal
100	6	M5	1	1x φ 42	13~14 19~20 24~25	12
112						
132						
160	6	M6	1	1x φ 58	13~14 19~20 25~26 30~31 34~35	24
180						
200						
225	6	M8	1	1x φ 72	19~20 25~26 31~32 37~38 41~42	24
250						
280						
315	6	M10	2	2x φ 72	19~20 25~26 31~32 37~38 41~42	24
355						

注:

- <sup>1)</sup> 每个辅助接线端子所能适配的电缆接头不超过  $2.5 \text{ mm}^2$ 。
- <sup>2)</sup> 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。
- <sup>3)</sup> 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。
- <sup>4)</sup> 辅助电缆进线孔尺寸请咨询茵梦达。

Notes:

- <sup>1)</sup> The adaptable diameter to each auxiliary terminal can not exceed  $2.5 \text{ mm}^2$ .
- <sup>2)</sup> 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.
- <sup>3)</sup> 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.
- <sup>4)</sup> For the size of the Auxiliary cable entry, please inquire INNOMOTICS.

## 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
100	
112	M30 × 2
132	
160	
180	M36 × 2
200	
225	M48 × 2
250	
280	M48 × 2
315	
355	M64 × 2

选项 - 配备闷盖的接线盒 (选项代码 X98) Option - Main terminal box with plug (option code X98)

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	外接电缆直径 Cable diameter (mm)	主进线孔螺纹规格 Main cable entry	最大辅助端子数 <sup>1)</sup> Max. auxiliary terminal
100	6	M5	18~25	2xM32x1.5	12
112					
132					
160	6	M6	22~32	2xM40x1.5	24
180					
200	6	M8	32~28	2xM50x1.5	24
225					
250	6	M10	37~44	2xM63x1.5	24
280					
315	6	M16	44~57	2xM72x2	24
355	6				

选项 - 带辅助接线盒 (选项代码 R57/R58)<sup>2)</sup><sup>3)</sup>

Option - auxiliary terminal box (option code R57/R58)

机座号 Frame Size	接线端子数 No. of terminals	电缆进线孔 Cable entry
160~355	1~4	1xM16x1.5
	5~9	1xM20x1.5
	10~18	1xM25x1.5
	19~27	1xM25x1.5+1xM20x1.5
	28~36	1xM25x1.5+1xM25x1.5

注:

- <sup>1)</sup> 每个辅助接线端子所能适配的电缆接头不超过 2.5 mm<sup>2</sup>。
- <sup>2)</sup> 选用一个辅助接线盒时, 测温元件可接入辅助接线盒中, 防潮加热带默认接入主接线盒中。若需将防潮加热带接入辅助接线盒中, 请咨询茵梦达。
- <sup>3)</sup> FS315/FS355可选双辅助接线盒, 其中一个辅助接线盒用来接防潮加热带, 另一个用来接测温元件。选项代码R58。

Notes:

- <sup>1)</sup> The adaptable diameter to each auxiliary terminal can not exceed 2.5mm<sup>2</sup>.
- <sup>2)</sup> When select R57 and Q02/Q04 and winding thermal protections, the terminals of winding thermal protections will be put into the auxiliary terminal box, and the terminals of Q02/Q04 will be still put into main terminal box. If Q02/Q04 is requested to put into the auxiliary terminal box, please inquire INNOMOTICS.
- <sup>3)</sup> For FS315 & FS355, 2 terminal boxes can be One for Q02/Q04, the other for thermal protectors. optional, option code R58.

## 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
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

1MT8004 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 °C ~ 40 °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

1MT8004 motors rated output powers means that the motor runs under continuous duty S1 (IEC 60034 - 1) operation when operated at ambient temperature from -20 °C to 40 °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 $\eta$

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

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

效率  $\eta$  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: $\pm 10\%$

## Tolerance for electrical data

### ■ Efficiency $\eta$ at

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

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

With  $\eta$  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 $-15\% \sim +25\%$

### ■ Breakdown torque $-10\%$

### ■ Moment of inertia $\pm 10\%$

## Overload times

According to IEC60034, 1MT8004 series motors are designed to withstand overload capacity of 1.5 times rated current for 2 minutes at rated voltage and frequency.

## 过载倍数

根据 IEC60034 标准要求, 1MT8004 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。

# 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	8	0	0	4	1	E	A	2	3	3	A	A	4

电机系列 Motor family

1MT800系列隔爆型三相异步电动机  
1MT800 series explosion protected three-phase asynchronous motors

效率 Efficiency

4 = 中国能效等级 2 级, IE4 效率等级  
4 = China energy efficiency grade 2, IE4 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  
3-4 = 50Hz 400V Δ/690VY  
2-1 = 50Hz 220V Δ/380VY  
0-1 = 50Hz 230V Δ  
3-3 = 50Hz 380V Δ/660VY  
2-3 = 50Hz 240V Δ/415VY  
3-5 = 50Hz 415V Δ  
9-0 = 特殊电压和频率 Special voltage & frequency <sup>1)</sup>

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:

<sup>1)</sup> 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:

<sup>1)</sup> 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 2 级, IE4

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 <sup>1)</sup> Noise LpfA	噪音 <sup>1)</sup> 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	%	%	A	Nm	直接起动对额定转矩 ( 电流 ) 的倍数 For direct-on-line starting as multiple of the rated				kNm <sup>2</sup>	dB(A)	dB(A)	kg								
3000rpm 2 - pole																									
220VD/380VY 50HZ																									
100L	1MT8004-1AA42-1 □□□	3	2925	89.1	90.0	0.87	5.9	9.8	8.5	2.8	3.3	0.0087	61	73	63										
3000rpm 2 - pole																									
380VD/660VY 50HZ																									
112M	1MT8004-1BA23-3 □□□	4	2940	90.0	90.7	0.88	7.7	13	8.5	2.7	3	0.0129	62	74	84										
132S	1MT8004-1CA03-3 □□□	5.5	2950	90.9	91.5	0.88	10.4	17.8	8.5	2.6	3.6	0.0242	66	78	104										
132S	1MT8004-1CA13-3 □□□	7.5	2950	91.7	92.3	0.89	14	24.3	8.5	2.8	3.8	0.0287	66	78	111										
160M	1MT8004-1DA23-3 □□□	11	2955	92.6	93.0	0.89	20.5	35.5	8	2.6	3	0.0619	66	79	181										
160M	1MT8004-1DA33-3 □□□	15	2960	93.3	93.6	0.89	27.5	48.4	8.5	2.8	3.5	0.0741	66	79	190										
160L	1MT8004-1DA43-3 □□□	18.5	2960	93.7	94.1	0.89	33.5	59.7	8.5	3	3.5	0.0852	66	79	208										
180M	1MT8004-1EA23-3 □□□	22	2972	94.0	94.1	0.89	40	70.7	8.5	2.6	3.4	0.1825	67	80	270										
200L	1MT8004-2AA43-3 □□□	30	2970	94.5	94.6	0.89	54	96.5	8.5	2.6	3.1	0.268	71	84	366										
200L	1MT8004-2AA53-3 □□□	37	2972	94.8	94.8	0.89	67	119	8.5	2.6	3.1	0.283	71	84	375										
225M	1MT8004-2BA23-3 □□□	45	2979	95.0	94.9	0.89	81	144	8.5	2.8	3.2	0.563	72	85	445										
250M	1MT8004-2CA23-3 □□□	55	2982	95.3	95.3	0.89	99	176	8.5	2.8	3.0	0.817	72	86	595										
280S	1MT8004-2DA03-3 □□□	75	2978	95.6	95.6	0.9	132	241	8.5	2.8	3.2	0.899	75	89	710										
280M	1MT8004-2DA23-3 □□□	90	2978	95.8	95.9	0.9	159	289	8.5	2.7	3.6	1.014	75	89	740										
315S	1MT8004-3AA03-3 □□□	110	2982	96.0	95.9	0.89	196	352	8.5	2.1	2.4	2.089	77	92	1090										
315M	1MT8004-3AA23-3 □□□	132	2982	96.2	96.2	0.89	235	423	8.5	2.5	2.7	2.428	77	92	1150										
315L	1MT8004-3AA53-3 □□□	160	2982	96.3	96.4	0.89	285	512	8.5	2.5	2.6	2.806	77	92	1320										
315L	1MT8004-3AA63-3 □□□	185	2982	96.5	96.6	0.89	325	592	8.5	2.7	2.6	3.212	77	92	1400										
315L	1MT8004-3AA73-3 □□□	200	2975	96.5	96.8	0.89	355	642	7.5	2.3	2.2	3.212	77	92	1400										
355M	1MT8004-3BA23-3 □□□	220	2986	96.5	96.3	0.91	380	704	8.5	2.6	2.6	2.995	82	97	1590										
355M	1MT8004-3BA33-3 □□□	250	2982	96.5	96.4	0.91	435	801	8.5	2.4	2.4	2.995	82	97	1590										
355L	1MT8004-3BA53-3 □□□	280	2985	96.5	96.4	0.91	485	896	8.5	3	3.1	3.569	82	97	1740										
355L	1MT8004-3BA63-3 □□□	315	2982	96.5	96.4	0.91	550	1009	8.5	3.0	3.1	3.569	82	97	1750										

注:

<sup>1)</sup> 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。

Note:

<sup>1)</sup> 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.

# 选型技术数据表 Technical data table

## 中国能效等级 2 级, IE4

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 <sup>①</sup> Noise LpfA	噪音 <sup>①</sup> 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	%	%	A	Nm	直接起动对额定转矩 ( 电流 ) 的倍数 For direct-on-line starting as multiple of the rated	kNm <sup>2</sup>	dB(A)	dB(A)	kg			
<b>1500rpm 4 - pole</b>																	
<b>220V/380VY 50HZ</b>																	
100L	1MT8004-1AB42-1 □□□	2.2	1470	89.5	89.6	0.79	4.75	14.3	8.5	2.4	3.8	0.0185	52	64	70		
100L	1MT8004-1AB52-1 □□□	3	1470	90.4	90.6	0.8	6.3	19.5	8.9	2.8	3.8	0.0201	52	64	73		
<b>1500rpm 4 - pole</b>																	
<b>380V/660VY 50HZ</b>																	
112M	1MT8004-1BB23-3 □□□	4	1470	91.1	91.5	0.8	8.3	26	8.5	2.9	3.8	0.0245	53	65	88		
132S	1MT8004-1CB03-3 □□□	5.5	1475	91.9	92.4	0.8	11.4	35.6	8	2.6	3.2	0.0467	56	68	111		
132M	1MT8004-1CB23-3 □□□	7.5	1475	92.6	93.0	0.81	15.2	48.6	8	2.8	3.5	0.0593	56	68	127		
160M	1MT8004-1DB23-3 □□□	11	1482	93.3	93.6	0.82	22	70.9	8.5	3.2	3.3	0.1419	58	71	193		
160L	1MT8004-1DB43-3 □□□	15	1482	93.9	94.2	0.82	29.5	96.7	8.5	2.9	3.5	0.1594	58	71	214		
180M	1MT8004-1EB23-3 □□□	18.5	1480	94.2	94.6	0.82	36.5	119	7.9	2.6	3.2	0.2636	61	74	282		
180L	1MT8004-1EB43-3 □□□	22	1480	94.5	94.8	0.82	43	142	8.5	2.8	3.6	0.2811	61	74	292		
200L	1MT8004-2AB53-3 □□□	30	1486	94.9	95.4	0.82	59	193	8	2.8	3	0.508	61	74	366		
225S	1MT8004-2BB03-3 □□□	37	1486	95.2	95.6	0.85	69	238	8.5	2.6	3	0.789	63	76	429		
225M	1MT8004-2BB23-3 □□□	45	1488	95.4	95.7	0.85	84	289	8.5	2.8	3	0.937	63	76	487		
250M	1MT8004-2CB23-3 □□□	55	1488	95.7	96.0	0.86	102	353	8.5	2.5	3.3	1.439	62	76	630		
280S	1MT8004-2DB03-3 □□□	75	1488	96.0	96.3	0.87	136	481	8.5	2.8	3	1.914	66	80	775		
280M	1MT8004-2DB23-3 □□□	90	1488	96.1	96.5	0.88	162	578	8.5	2.8	3	2.154	66	80	820		
315S	1MT8004-3AB03-3 □□□	110	1491	96.3	96.5	0.86	200	705	8.5	2.8	2.5	3.375	69	84	1190		
315M	1MT8004-3AB23-3 □□□	132	1490	96.4	96.7	0.86	240	846	7.8	2.6	2.3	3.396	69	84	1220		
315L	1MT8004-3AB53-3 □□□	160	1490	96.6	96.9	0.87	290	1026	8.5	3.0	2.2	5.121	71	86	1430		
315L	1MT8004-3AB63-3 □□□	185	1490	96.7	97.0	0.87	335	1186	8.5	3.1	2.2	5.162	71	86	1500		
315L	1MT8004-3AB73-3 □□□	200	1490	96.7	97.0	0.87	360	1282	8.5	3.2	2.3	5.189	71	86	1540		
355M	1MT8004-3BB23-3 □□□	220	1490	96.7	96.9	0.88	395	1410	8.5	2.5	2.8	5.931	76	91	1780		
355M	1MT8004-3BB33-3 □□□	250	1490	96.7	96.9	0.88	445	1602	8.5	2.3	2.8	6.093	76	91	1810		
355L	1MT8004-3BB53-3 □□□	280	1490	96.7	96.9	0.88	500	1795	8.5	2.4	2.6	6.441	76	91	1910		
355L	1MT8004-3BB63-3 □□□	315	1490	96.7	97.0	0.88	560	2019	8.5	2.3	2.6	6.861	76	91	2000		

注:

<sup>①</sup> 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。

Note:

<sup>①</sup> 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.

# 选型技术数据表 Technical data table

## 中国能效等级 2 级, IE4

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 <sup>1)</sup> Noise LpfA	噪音 <sup>1)</sup> 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	%	%	A	Nm	直接起动对额定转矩 ( 电流 ) 的倍数 For direct-on-line starting as multiple of the rated	kNm <sup>2</sup>	dB(A)	dB(A)	kg			
<b>1000rpm 6 - pole</b>																	
<b>220V/380VY 50HZ</b>																	
100L	1MT8004-1AC42-1 □□□	1.5	975	85.9	86.0	0.71	3.75	14.7	7.5	2.9	3.6	0.0185	49	61	70		
112M	1MT8004-1BC22-1 □□□	2.2	965	87.4	87.8	0.71	5.4	21.8	7.5	3.6	3.8	0.0238	51	63	84		
132S	1MT8004-1CC02-1 □□□	3	982	88.6	88.9	0.71	7.2	29.2	8	2.7	3.5	0.0481	55	67	104		
<b>1000rpm 6 - pole</b>																	
<b>380V/660VY 50HZ</b>																	
132M	1MT8004-1CC23-3 □□□	4	984	89.5	89.6	0.72	9.4	38.8	8	2.8	4	0.0605	55	67	117		
132M	1MT8004-1CC33-3 □□□	5.5	982	90.5	90.9	0.72	12.8	53.5	8	3.1	4	0.0797	55	67	131		
160M	1MT8004-1DC23-3 □□□	7.5	984	91.3	91.6	0.76	16.4	72.8	7.5	3	3	0.1506	56	69	186		
160L	1MT8004-1DC43-3 □□□	11	985	92.3	92.4	0.77	23.5	107	8	3.6	3.3	0.2012	56	69	217		
180L	1MT8004-1EC43-3 □□□	15	986	92.9	93.4	0.8	30.5	145	7.6	2.7	3	0.3182	57	70	270		
200L	1MT8004-2AC43-3 □□□	18.5	988	93.4	93.8	0.8	37.5	179	8	2.5	3	0.556	59	72	339		
200L	1MT8004-2AC53-3 □□□	22	988	93.7	94.2	0.81	44	213	8	2.8	3	0.639	59	72	360		
225M	1MT8004-2BC23-3 □□□	30	988	94.2	94.7	0.82	59	290	8	2.9	3	1.087	60	73	466		
250M	1MT8004-2CC23-3 □□□	37	988	94.5	95.1	0.83	72	358	8.0	2.5	3.0	1.638	55	69	605		
280S	1MT8004-2DC03-3 □□□	45	992	94.8	95.1	0.83	87	433	8	3.6	3.6	2.024	62	76	710		
280M	1MT8004-2DC23-3 □□□	55	991	95.1	95.5	0.84	105	530	8	3	3	2.251	62	76	725		
315S	1MT8004-3AC03-3 □□□	75	991	95.4	95.8	0.83	144	723	8	2.1	2.1	4.626	66	81	1110		
315M	1MT8004-3AC23-3 □□□	90	992	95.6	95.9	0.83	172	866	8	2.6	2.1	4.869	66	81	1170		
315L	1MT8004-3AC53-3 □□□	110	992	95.8	96.1	0.83	210	1059	8	2.8	2.3	5.896	66	81	1330		
315L	1MT8004-3AC63-3 □□□	132	992	96.0	96.2	0.82	255	1271	8	2.6	2.6	6.699	66	81	1390		
355S	1MT8004-3BC23-3 □□□	160	993	96.2	96.5	0.84	300	1539	8	2.5	2.5	10.83	75	90	1790		
355M	1MT8004-3BC33-3 □□□	185	993	96.3	96.6	0.84	345	1779	7.8	2.5	2.5	10.83	75	90	1790		
355M	1MT8004-3BC43-3 □□□	200	992	96.3	96.6	0.84	375	1925	7.7	2.4	2.5	11.429	75	90	1850		
355L	1MT8004-3BC53-3 □□□	220	994	96.4	96.6	0.84	415	2114	8	2.5	2.7	11.868	75	90	1920		
355L	1MT8004-3BC63-3 □□□	250	993	96.5	96.7	0.84	470	2404	8	2.9	2.9	13.329	75	90	2050		

注:

<sup>1)</sup> 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。

Note:

<sup>1)</sup> 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.

# 选型技术数据表 Technical data table

## 中国能效等级 2 级, IE4

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 <sup>1)</sup> Noise LpfA	噪音 <sup>1)</sup> 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	%	%	A	Nm	直接起动对额定转矩 ( 电流 ) 的倍数 For direct-on-line starting as multiple of the rated				kNm <sup>2</sup>	dB(A)	dB(A)	kg								
<b>750rpm 8-pole</b>																									
<b>220VD/380VY 50HZ</b>																									
132S	1MT8004-1CD02-1 □□□	2.2	725	84.5	85.1	0.7	5.7	29	6	2.2	2.8	0.0526	50	62	106										
132M	1MT8004-1CD22-1 □□□	3	725	85.9	86.3	0.7	7.6	39.5	6.5	2.6	3.2	0.0658	50	62	119										
<b>750rpm 8-pole</b>																									
<b>380VD/660VY 50HZ</b>																									
160M	1MT8004-1DD23-3 □□□	4	736	87.1	87.4	0.71	9.8	51.9	6.5	2.5	2.5	0.1285	55	68	175										
160M	1MT8004-1DD33-3 □□□	5.5	736	88.3	88.6	0.72	13.1	71.4	6.5	2.5	2.6	0.1500	55	68	186										
160L	1MT8004-1DD43-3 □□□	7.5	734	89.3	89.8	0.74	17.2	97.6	6.5	2.5	2.5	0.1825	55	68	209										
180L	1MT8004-1ED43-3 □□□	11	734	90.4	91.1	0.74	25	143	6	2	2.5	0.3603	57	70	285										
200L	1MT8004-2AD53-3 □□□	15	736	91.2	92.0	0.75	33.5	195	7	2.8	3.2	0.641	59	72	358										
225S	1MT8004-2BD03-3 □□□	18.5	738	91.7	92.4	0.76	40.5	239	7	2.6	3	0.734	59	72	377										
225M	1MT8004-2BD23-3 □□□	22	737	92.1	92.8	0.76	48	285	7	2.7	3	0.835	59	72	395										
250M	1MT8004-2CD23-3 □□□	30	739	92.7	93.3	0.77	64	388	7.0	2.7	2.8	1.269	61	75	545										
280S	1MT8004-2DD03-3 □□□	37	740	93.1	93.6	0.78	77	478	7	2.4	2.6	1.622	62	76	650										
280M	1MT8004-2DD23-3 □□□	45	740	93.4	94.1	0.8	92	581	7	2.5	2.6	1.993	62	76	690										
315S	1MT8004-3AD03-3 □□□	55	738	93.7	94.7	0.8	111	712	7.7	1.8	2	4.114	71	86	1060										
315M	1MT8004-3AD23-3 □□□	75	740	94.2	95.0	0.8	151	968	7.7	2.1	2.1	4.698	71	86	1120										
315L	1MT8004-3AD53-3 □□□	90	741	94.4	95.1	0.81	179	1160	7.7	2.2	2.2	6.407	71	86	1370										
315L	1MT8004-3AD63-3 □□□	110	742	94.7	95.2	0.81	220	1416	7.7	2.5	2.5	6.407	71	86	1370										
355S	1MT8004-3BD23-3 □□□	132	743	94.9	95.5	0.81	260	1697	7.7	2.2	2.2	10.002	73	88	1730										
355M	1MT8004-3BD33-3 □□□	160	743	95.1	95.7	0.82	310	2057	7.7	2.3	2.3	11.592	73	88	1860										
355L	1MT8004-3BD53-3 □□□	185	743	95.3	95.8	0.82	360	2378	7.7	2.3	2.3	12.228	73	88	1960										
355L	1MT8004-3BD63-3 □□□	200	744	95.4	95.9	0.82	390	2567	7.8	2.5	2.5	13.119	73	88	2030										

注:

<sup>1)</sup> 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。

Note:

<sup>1)</sup> 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.

# 选件 Options

电动机订货号 Motor order code	选件号 Option Code <sup>1)</sup>	描述 Description	应用范围 Application Scope
<b>电压与频率 Voltages and frequency</b>			
1MT8004-□□□□□2-1□□□	—	220V Δ / 380VY 50 Hz (50Hz output, 50Hz功率输出)	FS100 ~ 280
1MT8004-□□□□□3-3□□□	—	380V Δ / 660VY 50 Hz (50Hz output, 50Hz功率输出, 4 kW ~ 315 kW <sup>2)</sup> )	FS100 ~ 355
1MT8004-□□□□□2-2□□□	—	230V Δ / 400VY 50 Hz (50Hz output, 50Hz功率输出)	FS100 ~ 280
1MT8004-□□□□□3-4□□□	—	400V Δ / 690VY 50 Hz (50Hz output, 50Hz功率输出)	FS100 ~ 355
<b>绕组保护和轴承保护 Winding protection and bearing protection</b>			
1MT8004-□□□□□□-□□A□ <sup>2)</sup>	—	无绕组保护 Without motor protection	FS100 ~ 355
1MT8004-□□□□□□-□□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	FS100 ~ 355
1MT8004-□□□□□□-□□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	FS100 ~ 355
1MT8004-□□□□□□-□□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
1MT8004-□□□□□□-□□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	FS100 ~ 355
—	Q72	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
<b>冷却与通风 Ventilation</b>			
—	F76	金属风扇 Metal Fan	FS100 ~ 355

<sup>1)</sup> 订货时，电动机订货号需带“-Z”，另外附带上选件号。

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

<sup>2)</sup> 无需附加费用。

<sup>2)</sup> Without additional charge.

# 选件 Options

电动机订货号 Motor order code	选件号 Option Code <sup>1)</sup>	描述 Description	应用范围 Application Scope
<b>电动机接线盒 Motor connection box</b>			
1MT8004-□□□□□-□□□ <sup>2)</sup>	-	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)	FS100 ~ 355
-	R10 <sup>3)</sup>	接线盒顺时针旋转 90° Clockwise rotate the connection box through 90°	FS100 ~ 355
-	R11	接线盒逆时针旋转 90° Counter-clockwise rotate the connection box through 90°	FS100 ~ 355
-	R12	接线盒直接旋转 180° Rotation of the connection box through 180°	FS100 ~ 355
-	X97	钢管布线孔 Conduit entry	FS100 ~ 355
-	X98	电机通过CNEx认证且接线盒配备闷盖（客户自行安装葛兰） Single main terminal box with plugs, CNEx certified. (Customers prepare and assemble cable glands by themselves)	FS100 ~ 355
-	R57	电机带一个辅助接线盒并配置闷盖（客户自行安装葛兰），位置在机座右侧（从轴伸端看） One auxiliary terminal box with plug (Without cable gland), RHS on housing viewed from drive end.	FS160 ~ 355
-	R58	电机带两个辅助接线盒并配置闷盖（客户自行安装葛兰），位置在机座左右侧各一个（从轴伸端看） Two auxiliary terminal boxes with plugs (Without cable glands), LHS and RHS each on housing viewed from drive end.	FS315 ~ 355
<b>轴承 bearing</b>			
-	L80	SKF轴承 SKF bearings	FS100 ~ 355
-	L81	其他进口品牌轴承 Other import brand bearing	FS100 ~ 355
-	L20	驱动端轴承固定 Located bearing at DE	FS100 ~ 132
-	L22	增强悬臂力轴承设计 Bearing design for increased cantilever forces	FS160 ~ 355

<sup>1)</sup> 订货时，电动机订货号需带“-Z”，另外附带上选件号。

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

<sup>2)</sup> 无需附加费用。

<sup>2)</sup> Without additional charge.

<sup>3)</sup> 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。

<sup>3)</sup> When ordering this option, please take care about the installation location that whether there is enough space for cable inserting.

# 选件 Options

电动机订货号 Motor order code	选件号 Option Code <sup>1)</sup>	描述 Description	应用范围 Application Scope
<b>机械设计和防护等级</b> Mechanical design and degrees of protection			
—	L04	光轴设计, 不带键槽和键 Shaft without key and keyway	FS100 ~ 355
—	H70	第二外部接地 2nd External grounding	FS100 ~ 355
—	H22	IP56 防护等级 (非高海况) IP56 degree of protection (non-heavy-sea)	FS100 ~ 355
—	H20	IP65 防护等级 IP65 degree of protection	FS100 ~ 355
<b>铭牌和测试证书</b> Rating plate and test certificates			
—	B80	出厂检验报告 Acceptance test certificate 3.1 in accordance with EN 10204	FS100 ~ 355
—	W9P	能效标签及合格证不贴, 随机带走 CEL label and quality certificate not pasted, delivered with motors	FS100 ~ 355
<b>颜色和喷漆</b> Colors and Paint finish			
—	S01	不喷漆, 只带底漆 Unpainted, only primed	FS100 ~ 355
—	W88	适用于TH,W,F1,WF1以及海洋性气候环境用电机 Design for TH, W, F1, WF1 and sea-air resistance	FS100 ~ 355
<b>包装</b> Packing			
—	B90	包装 (FS100 ~ 132 电动机采用纸箱包装, FS160 ~ 355 电动机采用木箱包装) Packing(FS100~132 motors adopt the carton packaging, FS160~355 motors adopt the wooden cases packaging)	FS100 ~ 355
—	V9N	法兰安装电机用简易托盘 Simple tray for flange mounted motors	FS160 ~ 280

<sup>1)</sup> 订货时, 电动机订货号需带 “-Z” , 另外附带上选件号。

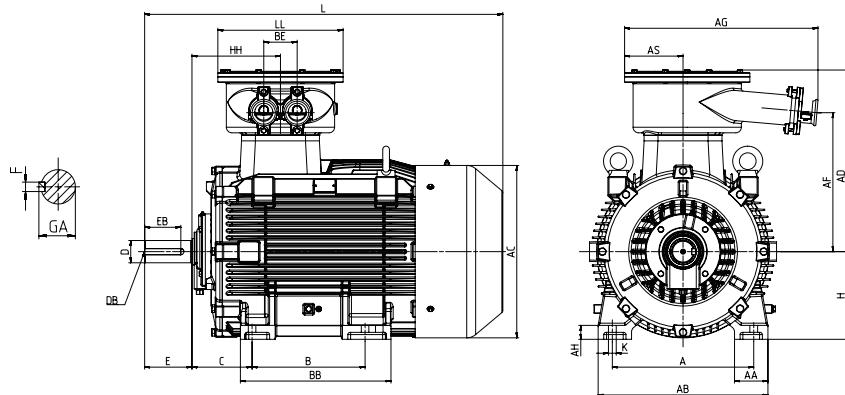
<sup>1)</sup> When ordering, need supplement "-Z" after order number. Add option code after that.

# 外形尺寸 Dimension drawings

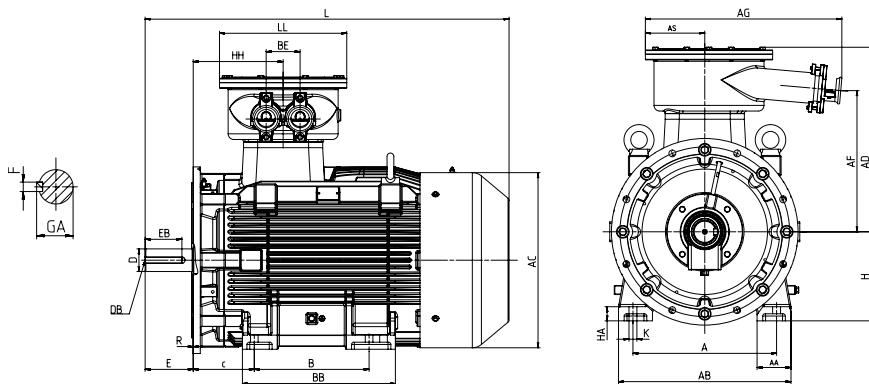
1MT8004隔爆系列电动机 Flameproof series motor 1MT8004

机座号从 100L ~ 355M Frame sizes 100L to 355M

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



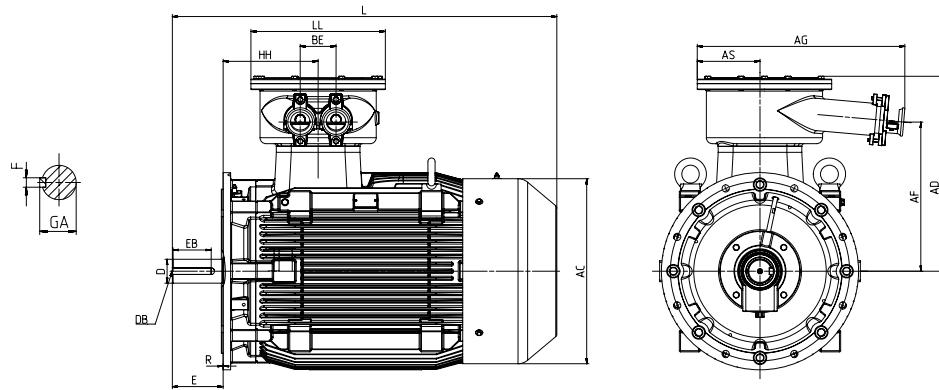
IM B35 安装结构型式 Type of construction IM B35



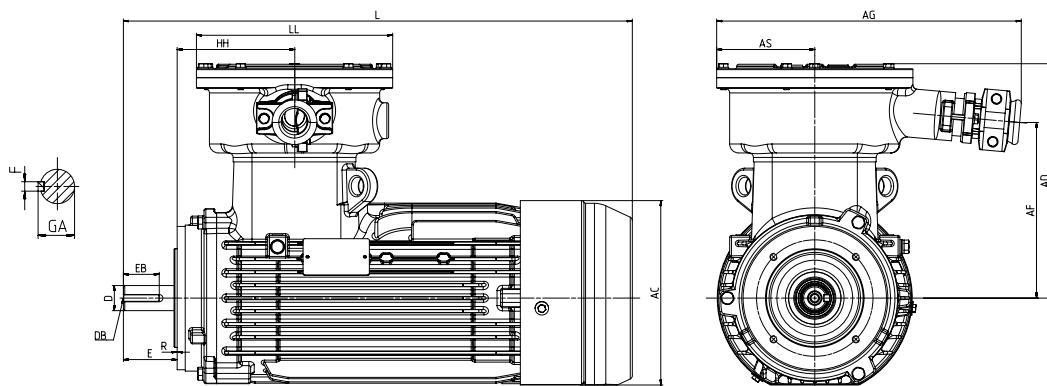
机座号 Frame size	订货号 MLFB 1MT8004-	极数 Poles	尺寸及公差/mm Dimension and tolerance												
			A	B <sup>2)</sup>	C		D		E		F		GA	H	
					基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance		基本尺寸 dimension	极限偏差 tolerance
100L	1AA4,1AB4,1AB5,1AC4	2,4,6	160	140	63	± 2.0	28	+ 0.009 - 0.004	60	± 0.3	8	0 - 0.036	31	100	0 - 0.5
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	112	0 - 0.5
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	132	0 - 0.5
132M	1CB2,1CC2,1CC3,1CD2	4,6,8		178											
160M	1DA2,1DA3,1DB2,1DC2,1DD2, 1DD3	2,4,6,8	254	210	108	± 3.0	42	+ 0.018 + 0.002	110	± 0.43	12	0 - 0.043	45	160	0 - 0.5
160L	1DA4,1DB4,1DC4,1DD4			254											
180M	1EA2,1EB2	2,4	241	121		± 3.0	48	+ 0.018 + 0.002	110	± 0.43	14	0 - 0.043	51.5	180	0 - 0.5
180L	1EB4,1EC4,1ED4	4,6,8	279	279											
200L	2AA4,2AA5,2AB5,2AC4,2AC5, 2AD5	2,4,6,8	318	305	133	± 3.0	55	+ 0.03 + 0.011	110	± 0.43	16	0 - 0.043	59	200	0 - 0.5
225S	2BB0,2BD0	4,8	356	286	149	± 4.0	60	+ 0.03 + 0.011	140	± 0.5	18	0 - 0.043	64	225	0 - 0.5
225M	2BA2	2	356	311	149	± 4.0	55	+ 0.03 + 0.011	110	± 0.43	16	0 - 0.043	59	225	0 - 0.5
	2BB2,2BC2	4,6	356	311	149	± 4.0	60	+ 0.03 + 0.011	140	± 0.5	18	0 - 0.043	64	225	0 - 0.5
	2BD2	8													

<sup>1)</sup> 含螺钉头测量尺寸。 <sup>2)</sup> 该尺寸为DIN EN 50347 标准所列机座号对应尺寸。

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



机座号 Frame size	订货号 MLFB 1MT8004-	极数 Poles	尺寸及公差/mm Dimension and tolerance																AQ	L1	HH	R		
			K		AB	AC <sup>1)</sup>	AD	L	AA	AF	AG	AS	BB	BE	HA	LL	DB	EB						
			基本尺寸 dimension	极限偏差 tolerance														基本尺寸 dimension	极限偏差 tolerance					
100L	1AA4,1AB4,1AB5,1AC4	2,4,6	12	+0.43 0	196	227	265	575	45	196	344.5	109.5	215	-	12	219	M10*22	40	0 -0.62	195	625	131	0	
112M	1BA2,1BB2,1BC2	2,4,6	12	+0.43 0	226	247	268	590	45	197	344.5	109.5	215	-	12	219	M10*22	40	0 -0.62	205	635	136	0	
132S	1CA0,1CA1,1CB0,1CC0,1CD0	2,4,6,8	12	+0.43 0	256	295	303	610 665	50	233	345	109.5	240 299	-	15	219	M12*28	56	0 -0.74	240 710	660 710	137	0	
132M	1CB2,1CC2,1CC3,1CD2	4,6,8		+0.43 0	300	348	360	780 815	60	271	398.5	128.5	325 368	-	18	257	M16*36	80	0 -0.74	295 875	840 875	173	0	
160M	1DA2,1DA3,1DB2,1DC2,1DD2, 1DD3	2,4,6,8	15	+0.43 0	339	402	380	900	60	292	398.5	128.5	328	-	20	257	M16*36	80	0 -0.74	330	955	186	0	
160L	1DA4,1DB4,1DC4,1DD4	2,4,6,8		+0.43 0	436	479	445	960	80	340	448	148	371	-	34	296	M20*42	100	0 -0.87	420	1015	222	0	
180M	1EA2,1EB2	2,4	15	+0.43 0	378	438	420	935	70	315	448	148	401	-	25	296	M20*42	80	0 -0.74	370	995	208	0	
180L	1EB4,1EC4,1ED4	4,6,8		+0.43 0	436	479	445	1010	80	340	448	148	391	-	34	296	M20*42	80	0 -0.74	420	1065	222	0	
200L	2AA4,2AA5,2AB5,2AC4,2AC5, 2AD5	2,4,6,8	19	+0.52 0	436	479	445	960	80	340	448	148	371	-	34	296	M20*42	100	0 -0.87	420	1015	222	0	
225S	2BB0,2BD0	4,8	19	+0.52 0	436	479	445	960	80	340	448	148	371	-	34	296	M20*42	100	0 -0.87	420	1095	222	0	
225M	2BA2	2	19	+0.52 0	436	479	445	1040 960	80	340	448	148	391 371	-	34	296	M20*42	100	0 -0.87	420	1015	222	0	
	2BB2,2BC2	4,6	19	+0.52 0	436	479	445	1040 960	80	340	448	148	391 371	-	34	296	M20*42	100	0 -0.87	420	1095	222	0	
	2BD2	8		+0.52 0	436	479	445	1040 960	80	340	448	148	391 371	-	34	296	M20*42	100	0 -0.87	420	1015	222	0	

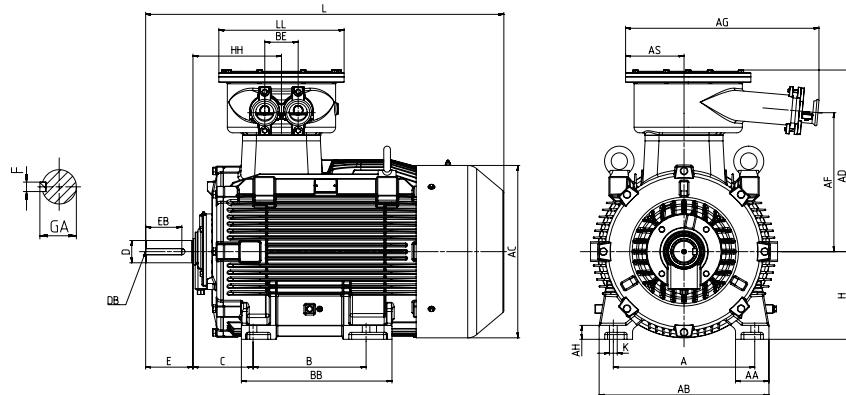
<sup>1)</sup> Measured across the bolt heads. <sup>2)</sup> This dimension is assigned in DIN EN 50347 to the frame size listed.

# 外形尺寸 Dimension drawings

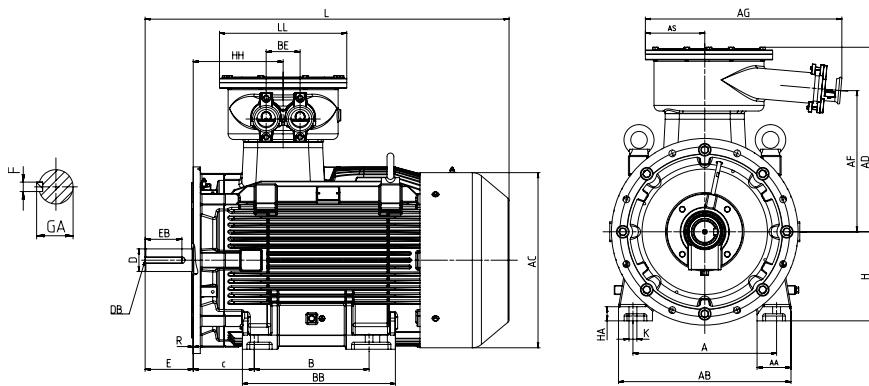
1MT8004隔爆系列电动机 Flameproof series motor 1MT8004

机座号从 100L ~ 355M Frame sizes 100L to 355M

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



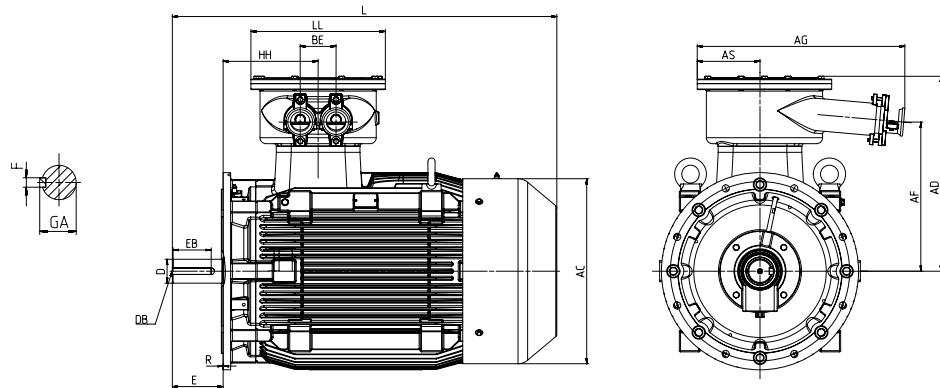
IM B35 安装结构型式 Type of construction IM B35



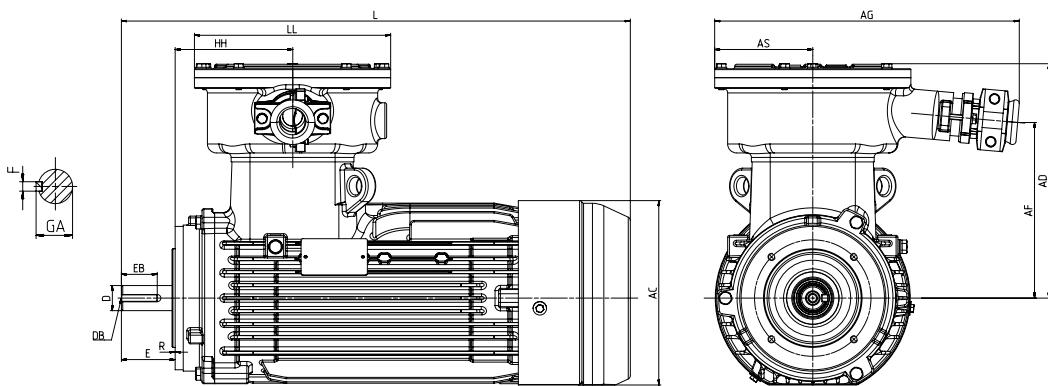
机座号 Frame size	订货号 MLFB 1MT8004-	极数 Poles	尺寸及公差/mm Dimension and tolerance											
			A	B <sup>2)</sup>	C		D		E		F		GA	H
250M	2CA2	2			168	±4.0	60	+0.03 +0.011	140	±0.5	18	0 -0.043	64	250
	2CB2,2CC2,2CD2	4,6,8	406	349	168	±4.0	65	+0.03 +0.011	140	±0.5	18	0 -0.043	69	250
280S	2DA0	2	368	190	±4.0	65	+0.03 +0.011	140	±0.5	18	0 -0.043	69	280	0 -1
	2DB0,2DC0,2DD0	4,6,8				75				20	0 -0.052	79.5		
280M	2DA2	2	457	419	±4.0	65				18	0 -0.043	69		
	2DB2,2DC2,2DD2	4,6,8				75				20	0 -0.052	79.5		
315S	3AA0	2	406		±4.0	65	+0.03 +0.011	140	±0.5	18	0 -0.043	69	315	0 -1
	3AB0,3AC0,3AD0	4,6,8				80				22	0 -0.052	85		
315M	3AA2	2	508	457	216	65				18	0 -0.043	69		
	3AB2,3AC2,3AD2	4,6,8				80				22	0 -0.052	85		
315L	3AA5,3AA6,3AA7	2	508		±4.0	65	+0.03 +0.011	140	±0.5	18	0 -0.043	69	315	0 -1
	3AB5,3AB6,3AB7,3AC5,3AC6, 3AD5,3AD6	4,6,8				80				22	0 -0.052	85		

<sup>1)</sup>含螺钉头测量尺寸。 <sup>2)</sup>该尺寸为DIN EN 50347 标准所列机座号对应尺寸。

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



机座号 Frame size	订货号 MLFB 1MT8004-	极数 Poles	尺寸及公差/mm Dimension and tolerance																		AQ	L1	HH	R
			K		AB	AC <sup>1)</sup>	AD	L	AA	AF	AG	AS	BB	BE	HA	LL	DB	EB		AQ	L1	HH	R	
			基本尺寸 dimension	极限偏差 tolerance														基本尺寸 dimension	极限偏差 tolerance					
250M	2CA2	2	24	+0.52 0	490	528	530	1065	100	410	551.5	166.5	449	-	40	363	M20*42	100	0 -0.87	460	1130	254	0	
	2CB2,2CC2,2CD2	4,6,8		+0.52 0	490	528	530	1065	100	410	551.5	166.5	449	-	40	363	M20*42	100	0 -0.87	460	1130	254	0	
280S	2DA0	2	24	+0.52 0															520	1175	242	0		
	2DB0,2DC0,2DD0	4,6,8			540	564	550	1110	100	428	551.5	166.5	479	95	40	363	M20*42	100	0 -0.87					
280M	2DA2	2																	580	1330	318	0		
	2DB2,2DC2,2DD2	4,6,8			610	634	660	120	499	700	210	541	120	50	450	M20*42	100	0 -0.87						
315S	3AA0	2	28	+0.52 0													100	0 -0.87	1360	1330	318	0		
	3AB0,3AC0,3AD0	4,6,8			1260													130	0 -1.00					
315M	3AA2	2			1290													100	0 -0.87	1360	1330	318	0	
	3AB2,3AC2,3AD2	4,6,8			1260	1290	1410	1440	700	700	210	541	120	50	450	M20*42	100	0 -1.00						
315L	3AA5,3AA6,3AA7	2			1410													100	0 -0.87	1510	1480	318	0	
	3AB5,3AB6,3AB7,3AC5,3AC6, 3AD5,3AD6	4,6,8			1440													130	0 -1.00					

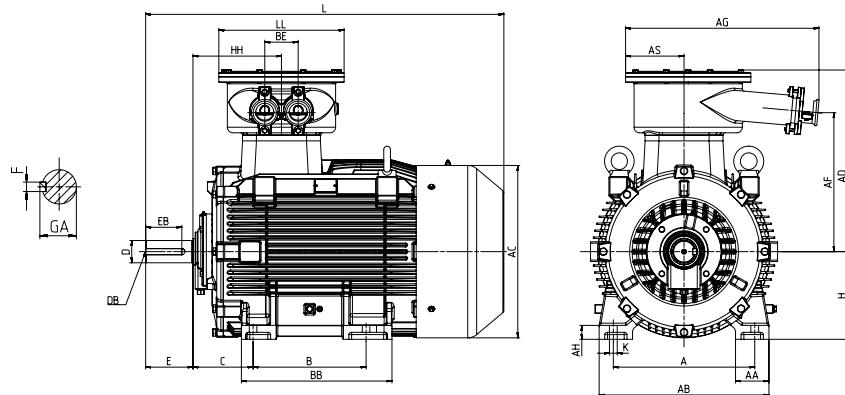
<sup>1)</sup> Measured across the bolt heads. <sup>2)</sup> This dimension is assigned in DIN EN 50347 to the frame size listed.

# 外形尺寸 Dimension drawings

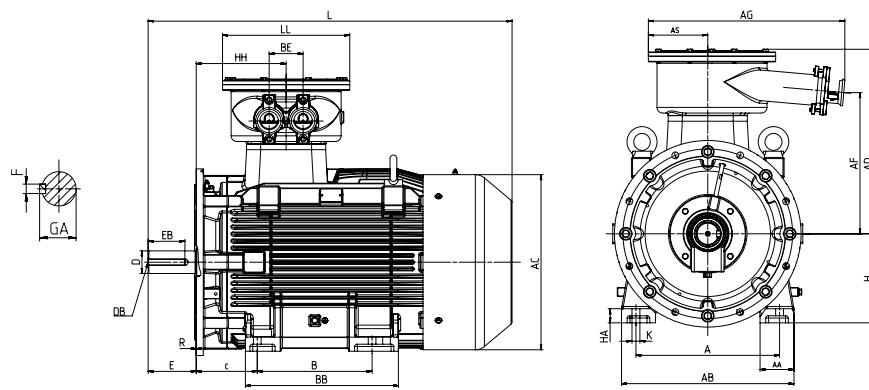
1MT8004隔爆系列电动机 Flameproof series motor 1MT8004

机座号从 100L ~ 355M Frame sizes 100L to 355M

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



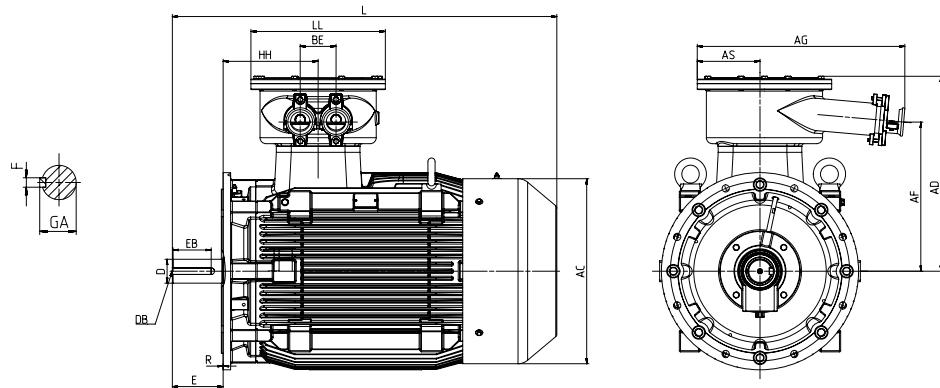
IM B35 安装结构型式 Type of construction IM B35



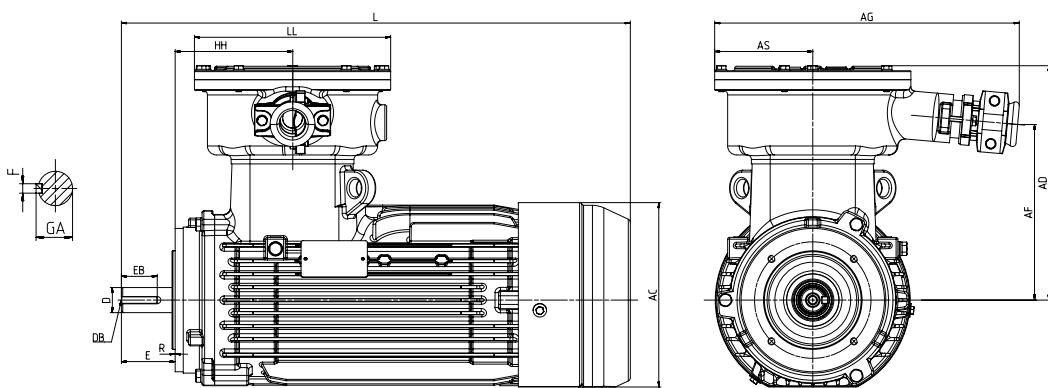
机座号 Frame size	订货号 MLFB 1MT8004-	极数 Poles	尺寸及公差/mm Dimension and tolerance															
			A	B <sup>2)</sup>	C		D		E		F		GA	H				
355S	3BC2,3BD2	2			基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance	基本尺寸 dimension	极限偏差 tolerance		基本尺寸 dimension	极限偏差 tolerance			
		4,6,8		500										79.5		100		
355M	3BA2,3BA3	2	610	560	254	$\pm 4.0$	75	$+0.030$ $+0.011$	140	20	25	20	0	79.5	355	0 -1		
	3BB2,3BB3,3BC3,3BC4,3BD3	4,6,8					95	$+0.035$ $+0.013$	170					100				
	3BA5,3BA6	2					75	$+0.030$ $+0.011$	140	$\pm 0.5$	25	20	$-0.052$					
	3BB5,3BB6,3BC5,3BC6, 3BD5,3BD6	4,6,8					95	$+0.035$ $+0.013$	170				100					

<sup>1)</sup> 含螺钉头测量尺寸。 <sup>2)</sup> 该尺寸为DIN EN 50347 标准所列机座号对应尺寸。

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



机座号 Frame size	订货号 MLFB 1MT8004-	极数 Poles	尺寸及公差/mm Dimension and tolerance																				
			K		AB	AC <sup>1)</sup>	AD	L	AA	AF	AG	AS	BB	BE	HA	LL	DB	EB		AQ	L1	HH	R
			基本尺寸 dimension	极限偏差 tolerance													基本尺寸 dimension	极限偏差 tolerance					
355S	3BC2,3BD2	2						1485									M20*42	125		1555			
		4,6,8															M24*50	140					
355M	3BA2,3BA3	2	28	+0.52 0	730	712	720	1485	120	565	700	210	696	120	53	450	M20*42	125	0	665	1555	319	0
	3BB2,3BB3,3BC3,3BC4,3BD3	4,6,8																M24*50	140				
355L	3BA5,3BA6	2						1515									M20*42	125	0	665	1585		
	3BB5,3BB6,3BC5,3BC6, 3BD5,3BD6	4,6,8																M24*50	140				

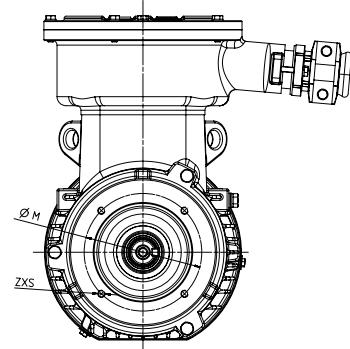
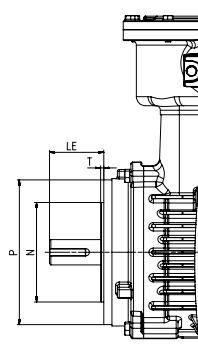
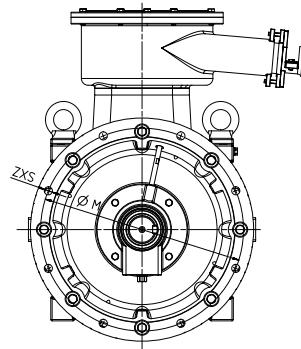
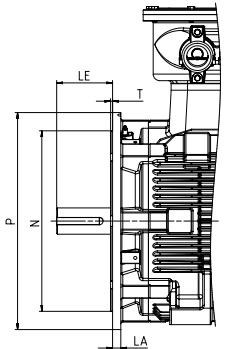
<sup>1)</sup> Measured across the bolt heads. <sup>2)</sup> This dimension is assigned in DIN EN 50347 to the frame size listed.

# 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
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	法兰带通孔 (FF/A) Flange with blind holes	尺寸 Dimension								
		DIN / EN 50347	LA	LE	M	N	P	T	S	Z
100	FT130		-	60	130	110	160	3.5	M8x17	4
112	FT130		-	60	130	110	160	3.5	M8 x 17	4
132	FT165		-	80	165	130	200	3.5	M10x20	4
160	FT215		-	110	215	180	250	4	M12x25	4

<sup>1)</sup> 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）。

<sup>1)</sup> 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



如有变动，恕不事先通知

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