

1MT8014 系列低压粉尘防爆电机 Low Voltage Motors XP Dust Explosion-proof

产品样本 Catalog
2026. 02





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（Innomotics 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。

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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、粮食加工、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。

特别是在化学工业和石化工业中，当原油和天然气在运输时，或在采矿、碾磨（例如：谷物和固体颗粒）时，爆炸会造成严重的人员受伤和设备损坏。

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。

使用现场必须根据爆炸危险发生的频率，由用户在主管当局的协助下，将其细分为指定区域。不同区域有对应的设备或装置类别。然后针对这些区域分析所需的保护类型，从而选择相应的设备（产品）类型。

In many industrial and public industries, explosion hazards are ever-present, e.g. the chemicals industry, refineries, on drilling platforms, gas stations, food processing, 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.

In the chemical and petrochemical industries in particular, when crude oil and natural gas are being transported, or in mining, milling (e.g. grain and granular solids), explosion can result in serious injury to persons and damage to equipment.

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.

The explosion-protected equipment can be designed in accordance with various types of protection.

The local conditions must be subdivided into specified zones by the user with the assistance of the responsible authorities in accordance with the frequency of occurrence of an explosion hazard. Device (equipment) categories are assigned to these zones. The zones are then subdivided into possible types of protection and therefore into possible equipment (product) types.

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

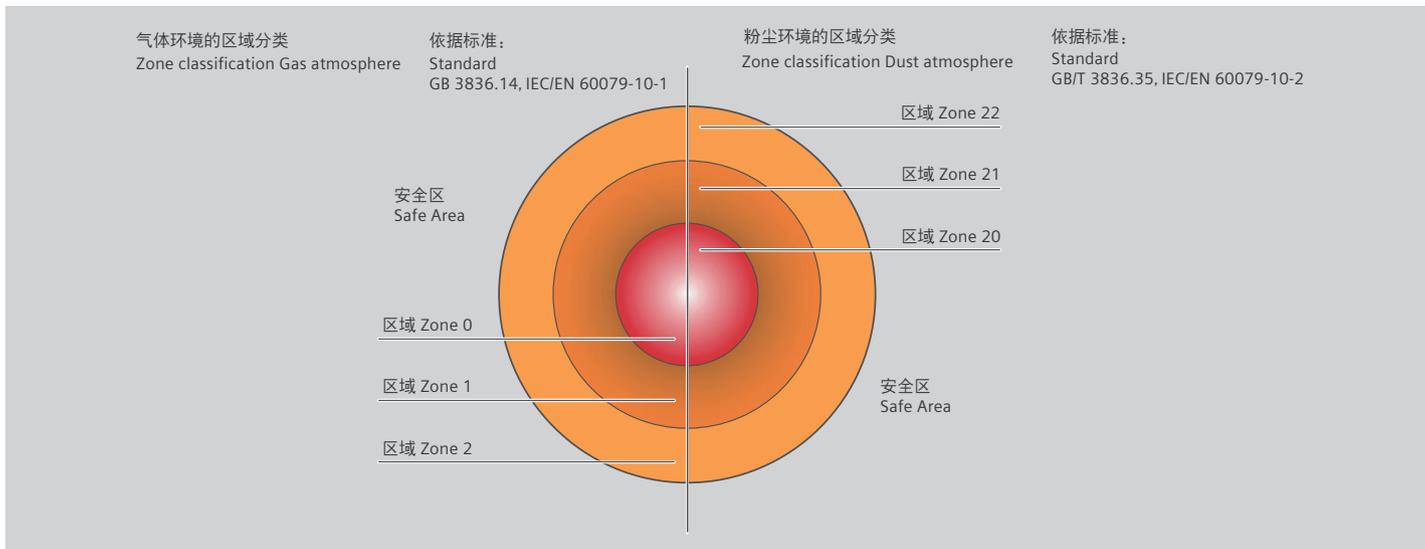
此外，在不同的爆炸分组和温度等级之间进行了分类，这些都包含在危险等级评估中。

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.



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 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 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 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 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

常见可燃性粉尘特性

Characteristics of common flammable dust

粉尘种类 Type of dust	粉尘名称 Type of dust	高温表面堆积粉尘层 (5mm)的引燃温度 (°C) Ignition temperature of dust layer (5mm) at high temperature surface (5mm) (°C)	粉尘云的引 燃温度 (°C) Ignition temperature of dust cloud (°C)	爆炸下限浓度 (g/m ³) Lowest concentration of explosion (g/m ³)	粉尘平均粒径 (μm) Average particle size of dust (μm)	危险性质 Dangerous nature	粉尘 等级 Dust grade
金属 Metal	铝 (表面处理) Aluminum (surface treatment)	320	590	37~50	10~15	导 CONDUCTIVE	III C
	铝 (含脂) Aluminum (containing fat)	230	400	37~50	10~20	导 CONDUCTIVE	III C
	铁 Iron	240	430	153~204	100~150	导 CONDUCTIVE	III C
	镁 magnesium	340	470	44~59	5~10	导 CONDUCTIVE	III C
	红磷 Phosphorus	305	360	48~64	30~50	非 NON-CONDUCTIVE	III B
	炭黑 Carbon	535	> 600	36~45	10~20	导 CONDUCTIVE	III C
	钛 Titanium	290	375	-	-		III C
	锌 Zinc	430	530	212~284	10~15	导 CONDUCTIVE	III C
	电石 Calcium carbide	325	555	-	< 200	非 NON-CONDUCTIVE	III B
	钙硅铝合金 (8% 钙, 30% 硅, 55% 铝) Calcium silicon aluminum alloy (8% calcium, 30% silicon, 55% aluminum)	290	465	-	-	导 CONDUCTIVE	III C
	硅铁合金 (45% 硅) Ferrosilicon alloy (45% silicon)	> 450	640	-	-	导 CONDUCTIVE	III C
	黄铁矿 Pyrite	445	555	-	< 90	导 CONDUCTIVE	III C
锆石 Zircon	305	360	92~123	5~10	导 CONDUCTIVE	III C	
化学 药品 Chemical medicine	硬脂酸锌 Zinc stearate	熔融 Melting	315	-	8~15	非 NON-CONDUCTIVE	III B
	萘 Naphthalene	熔融 Melting	575	28~38	30~100	非 NON-CONDUCTIVE	III B
	蒽 Anthracene	熔融升华 Melting sublimation	505	29~39	40~50	非 NON-CONDUCTIVE	III B
	己二酸 Adipic acid	熔融 Melting	580	65~90	-	非 NON-CONDUCTIVE	III B
	苯二 (甲) 酸 Benzene 2 (a) acid	熔融 Melting	650	61~83	80~100	非 NON-CONDUCTIVE	III B
	无水苯二 (甲) 酸 (粗制品) Anhydrous benzene 2 (a) acid (crude)	熔融 Melting	605	52~71	-	非 NON-CONDUCTIVE	III B
	苯二甲酸腈 Benzoate	熔融 Melting	> 700	37~50	-	非 NON-CONDUCTIVE	III B
	无水马来酸 (粗制品) Anhydrous maleic acid (crude)	熔融 Melting	500	82~113	-	非 NON-CONDUCTIVE	III B
	醋酸钠酯 Sodium acetate	熔融 Melting	520	51~70	5~8	非 NON-CONDUCTIVE	III B
	结晶紫 Crystal violet	熔融 Melting	475	46~70	15~30	非 NON-CONDUCTIVE	III B
	四硝基咪唑 Four nitro carbazole	熔融 Melting	395	92~123	-	非 NON-CONDUCTIVE	III B
	二硝基甲酚 Two nitro cresol	熔融 Melting	340	-	40~60	非 NON-CONDUCTIVE	III B
	阿司匹林 Aspirin	熔融 Melting	405	31~41	60	非 NON-CONDUCTIVE	III B
	肥皂粉 Soap powder	熔融 Melting	575	-	80~100	非 NON-CONDUCTIVE	III B
	青色燃料 Green fuel	350	465	-	300~500	非 NON-CONDUCTIVE	III B
	萘酚燃料 Naphthol fuel	395	415	133~184	-	非 NON-CONDUCTIVE	III B

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合成 树脂 Synthetic resin	聚乙烯 Polyethylene	熔融 Melting	410	26~35	30~50	非 NON-CONDUCTIVE	III B
	聚丙烯 Polypropylene	熔融 Melting	430	25~35	-	非 NON-CONDUCTIVE	III B
	聚苯乙烯 Polystyrene	熔融 Melting	475	27~37	40~60	非 NON-CONDUCTIVE	III B
	苯乙烯 (70%) 与丁二烯 (30%) 粉状聚合物 Styrene (70%) and butadiene (30%) powdery polymerization	熔融 Melting	420	27~37	-	非 NON-CONDUCTIVE	III B
	聚乙烯醇 Polyvinyl alcohol	熔融 Melting	450	42~55	5~10	非 NON-CONDUCTIVE	III B
	聚丙烯腈 Polyacrylonitrile	熔融炭化 Melting carbonization	505	35~55	5~7	非 NON-CONDUCTIVE	III B
	聚氨酯 (类) Polyurethane (class)	熔融 Melting	425	46~63	50~100	非 NON-CONDUCTIVE	III B
	聚乙烯四肽 Polythene four peptide	熔融 Melting	480	52~71	< 200	非 NON-CONDUCTIVE	III B
	聚乙烯氮戊环酮 Polyvinyl amyl ketone	熔融 Melting	465	42~58	10~15	非 NON-CONDUCTIVE	III B
	聚氯乙烯 Polyvinyl chloride (PVC)	熔融炭化 Melting carbonization	595	63~86	4~5	非 NON-CONDUCTIVE	III B
	氯乙烯 (70%) 与苯乙烯 (30%) 粉状聚合物 Chloroethylene (70%) and styrene (30%) powdery polymerization	熔融炭化 Melting carbonization	520	44~60	30~40	非 NON-CONDUCTIVE	III B
	酚醛树脂 (酚醛清漆) Phenolic resin (phenolic varnish)	熔融炭化 Melting carbonization	520	36~40	10~20	非 NON-CONDUCTIVE	III B
	有机玻璃粉 Organic glass powder	熔融炭化 Melting carbonization	485	-	-	非 NON-CONDUCTIVE	III B
天然 树脂 Natural resin	骨胶 (虫胶) Bone glue (shellac)	沸腾 Boiling	475	-	20~50	非 NON-CONDUCTIVE	III B
	硬质橡胶 Hard rubber	沸腾 Boiling	360	36~49	20~30	非 NON-CONDUCTIVE	III B
	软质橡胶 Soft rubber	沸腾 Boiling	425	-	80~100	非 NON-CONDUCTIVE	III B
	天然树脂 Natural resin	熔融 Melting	370	38~52	20~30	非 NON-CONDUCTIVE	III B
	蝼蛄树脂 Mantis palladium resin	熔融 Melting	330	30~41	20~50	非 NON-CONDUCTIVE	III B
	松香 Rosin	熔融 Melting	325	-	50~80	非 NON-CONDUCTIVE	III B
沥青 蜡类 Asphalt waxes	硬蜡 Hard wax	熔融 Melting	400	26~36	80~50	非 NON-CONDUCTIVE	III B
	绕组沥青 Winding asphalt	熔融 Melting	620	-	50~80	非 NON-CONDUCTIVE	III B
	硬沥青 Hard asphalt	熔融 Melting	620	-	50~150	非 NON-CONDUCTIVE	III B
	烧焦油沥青 Charred asphalt	熔融 Melting	580	-	-	非 NON-CONDUCTIVE	III B
农产品 Agricultural products	裸麦粉 Rye flour	325	415	67~93	30~50	非 NON-CONDUCTIVE	III B
	裸麦谷物粉 (未处理) Rye grain flour (untreated)	305	430	-	50~100	非 NON-CONDUCTIVE	III B
	裸麦筛落粉 (粉碎品) Rye powder (crushed)	305	415	-	30~40	非 NON-CONDUCTIVE	III B
	小麦粉 Wheat flour	炭化 Carbonization	410	-	20~40	非 NON-CONDUCTIVE	III B
	小麦谷物粉 Wheat grain powder	290	420	-	15~30	非 NON-CONDUCTIVE	III B
	小麦筛落粉 (粉碎品) Wheat sifting powder (comminuted product)	290	410	-	3~5	非 NON-CONDUCTIVE	III B
	乌麦、大麦、谷物粉 Rye, barley and cereal flour	270	440	-	50~150	非 NON-CONDUCTIVE	III B
	筛米糠 Sieve rice bran	270	420	-	50~150	非 NON-CONDUCTIVE	III B
	玉米淀粉 Corn starch	炭化 Carbonization	410	-	2~30	非 NON-CONDUCTIVE	III B
	马铃薯粉 Potato powder	炭化 Carbonization	430	-	60~80	非 NON-CONDUCTIVE	III B
	布丁粉 Pudding powder	炭化 Carbonization	395	-	10~20	非 NON-CONDUCTIVE	III B
	糊精粉 Dextrin powder		400	71~99	20~30	非 NON-CONDUCTIVE	III B
	砂糖粉 Sugar powder	熔融 Melting	360	77~107	20~40	非 NON-CONDUCTIVE	III B
	乳糖 lactose	熔融 Melting	450	83~115	-	非 NON-CONDUCTIVE	III B

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纤维 鱼粉 Fiber fish meal	可可子粉 (脱脂品) Cocoa seed powder (nonfat)	245	460	-	30~40	非 NON-CONDUCTIVE	III B
	咖啡粉 (精致品) Coffee powder (delicacy)	收缩	600	-	40~80	非 NON-CONDUCTIVE	III B
	啤酒麦芽粉 Beer malt powder	285	405	-	100~500	非 NON-CONDUCTIVE	III B
	紫苜蓿 Purple alfalfa	280	480	-	200~500	非 NON-CONDUCTIVE	III B
	亚麻粕粉 Flax meal powder	285	470	-	-	非 NON-CONDUCTIVE	III B
	菜种渣粉 Dish of slag powder	炭化	465	-	400~500	非 NON-CONDUCTIVE	III B
	鱼粉 Fish meal	炭化	485	-	80~100	非 NON-CONDUCTIVE	III B
	烟草纤维 Tobacco fiber	290	485	-	50~100	非 NON-CONDUCTIVE	III A
	木棉纤维 Kapok fiber	385	-	-	-	非 NON-CONDUCTIVE	III A
	人造短纤维 Artificial short fiber	305	-	-	-	非 NON-CONDUCTIVE	III A
	亚硫酸盐纤维 Sulfite fiber	380	-	-	-	非 NON-CONDUCTIVE	III A
	木质纤维 Wood fiber	250	445	-	40~80	非 NON-CONDUCTIVE	III A
	纸纤维 Paper fiber	360	-	-	-	非 NON-CONDUCTIVE	III A
	椰子粉 Coconut powder	280	450	-	100~200	非 NON-CONDUCTIVE	III B
	软木粉 Cork powder	325	460	44~59	30~40	非 NON-CONDUCTIVE	III B
	针叶树 (松) 粉 Coniferous tree (pine) powder	325	440	-	70~150	非 NON-CONDUCTIVE	III B
	硬木 (丁钠橡胶) 粉 Hard wood (sodium rubber) powder	315	420	-	70~100	非 NON-CONDUCTIVE	III B
燃料 Fuel	泥煤粉 (堆积) Coal dust (packing)	260	450	-	60~90	导 CONDUCTIVE	III C
	褐粉煤 (生褐粉) Lignite (raw brown powder)	260	450	49~68	2~3	非 NON-CONDUCTIVE	III B
	褐煤粉 Brown pulverized coal	230	185	-	3~7	导 CONDUCTIVE	III C
	有烟煤粉 Smoke pulverized coal	235	595	41~57	5~11	导 CONDUCTIVE	III C
	瓦斯煤粉 Pulverized coal gas	225	580	35~48	5~10	导 CONDUCTIVE	III C
	焦炭用煤粉 Pulverized coal for coke	280	610	33~45	5~10	导 CONDUCTIVE	III C
	贫煤粉 Coal powder	285	680	34~45	5~7	导 CONDUCTIVE	III C
	无烟煤粉 Smokeless pulverized coal	> 430	> 600	-	100~130	导 CONDUCTIVE	III C
	木炭粉 (硬质) Charcoal powder (hard)	340	595	39~52	1~2	导 CONDUCTIVE	III C
	泥煤焦炭粉 Peat coke powder	360	615	40~54	1~2	导 CONDUCTIVE	III C
	褐煤焦炭粉 Lignite coke powder	235	-	-	4~5	导 CONDUCTIVE	III C
	煤焦炭粉 Coal coke powder	430	> 750	37~50	4~5	导 CONDUCTIVE	III C

注:

- III A 级为可燃性飞絮;
- III B 级为非导电性粉尘;
- III C 级为导电性粉尘。

Note:

- III A grade is Combustible flyings;
- III B grade is non-conductive dust;
- III C grade is conductive dust.

产品概述 Product Overview



额定功率：0.55 ~ 315 kW
机座号：80 ~ 355
极数：2, 4, 6, 8
电压与频率：支持多种电压与频率
冷却方式：IC411
防爆标志：Ex tb IIIC T130°C Db
防护等级：IP65
绝缘系统：F级
环境温度：-20 °C ~ +40 °C
海拔高度：不超过1000米

Rated output: 0.55 ~ 315 kW
Frame size: 80 ~ 355
Pole: 2, 4, 6, 8
Voltage and Frequency: Support multiple voltage and frequency
Cooling method: IC411
Frame-proof marking: Ex tb IIIC T130°C Db
Protect degree: IP65
Insulation class: F
Ambient temperature: -20 °C ~ +40 °C
Site altitude above sea level: Not exceed 1000m

贝得 1MT8014 系列粉尘防爆型三相异步电动机是全封闭、自扇冷高效电动机，该系列产品效率满足 GB18613-2020 能效等级 2 级标准要求。

粉尘防爆电机可用于粮食或饲料加工、木材加工、面粉加工或储存，以及金属、化学药品、合成树脂、农产品、各种纤维、燃料等等可燃性粉尘场所。具体粉尘种类见“粉尘特性举例”，但该电机不适用于瓦斯和/或可燃性粉尘引起危险的煤矿井下以及煤矿地面装置用电气设备，也不适用于不需要大气中的氧即可燃烧的炸药粉尘或自燃物质（如磷粉）。

贝得粉尘防爆电动机防爆性能符合 GB/T 3836.1-2021《爆炸性环境第 1 部分：设备 通用要求》和 GB/T 3836.31-2021《爆炸性环境第 31 部分：由防粉尘点燃外壳“t”保护的设备的》的规定，适用爆炸性粉尘环境的 21 区，22 区。

Beide 1MT8014 series dust explosion-proof three-phase asynchronous motor is totally enclosed, self-fan cooled super premium efficiency motor. The products meet the requirements of the GB18613-2020 efficiency of energy efficiency grade 2.

Dust explosion-proof motor can be used for food or forage machine, wood machine, flour machine or storage, as well metal, chemicals, synthetic resin, agricultural products and all kinds of combustible dust places such as fiber, fuel and so on. Detailed types of dust refer to "dust characteristics example,"but this series motors are not suitable for gas or underground coal mine with combustible dust and coal mine ground device with electrical equipment, also can't be used in place with explosive dust and spontaneous combustion substances (e.g. phosphorus powder) but can burn without oxygen from the atmosphere.

Beide dust explosion-proof motor's performance fulfill GB/T 3836.1-2021《Explosive atmospheres-Part I: Equipment General requirements》and GB/T 3836.31-2021《Explosive atmospheres-Part 31: Equipment dust ignition protection by enclosure "t"》，suitable for explosive dust environment Zone 21 or zone 22.

设计参考标准

Reference Standard

名称 Title	中国国家标准 Chinese standard	IEC标准 IEC standard
《可燃性粉尘环境用电气设备 第1部分：通用要求》 Electrical apparatus for use in the presence of combustible dust - Part 1: General requirements	GB/T 3836.1	IEC 61241-0
《可燃性粉尘环境用电气设备 第3部分：存在或可能存在可燃性粉尘的场所分类》 Electrical apparatus for use in the presence of combustible dust - Part3: Classification of areas where combustible dusts are or may be present	GB/T 3836.35	IEC 60079-10-2
《可燃性粉尘环境用电气设备 第5部分：外壳保护型“tD”》 Electrical apparatus for use in the presence of combustible dust Part5: Protection by enclosures “tD”	GB/T 3836.31	IEC 61241-1
1MT8014 系列粉尘防爆型三相异步电动机技术条件（机座号 80-355） 1MT8014 series dust explosion proof three-phase asynchronous motors - Technical specification (frame size 80-355)	Q/321081 KJA019	
《包装储运图示标志》 Packaging - Distribution packaging - Graphical symbols for handling and storage of packages	GB/T 191	ISO 780
《旋转电机 定额和性能》 Rotating electrical machines - Part 1: Rating and performance	GB/T 755	IEC 60034-1
《旋转电机（牵引电机除外）确定损耗和效率的试验方法》 Rotating electrical machines - Part 2: Methods for determining losses and efficiency of rotating electrical machinery from tests (excluding machines for traction vehicles)	GB/T 755.2	IEC 60034-2
《旋转电机结构型式、安装型式及接线盒位置的分类（IM 代码）》 Rotating electrical machines; part 7: classification of types of constructions and mounting arrangements (IM code)	GB/T 997	IEC 60034-7
《三相异步电动机试验方法》 Rotating electrical machines - Part 2-1: Standard methods for determining losses and efficiency from tests (excluding machines for traction vehicles)	GB/T 1032	IEC 60034-2-1
《旋转电机 线端标志与旋转方向》 Rotating electrical machines - Part 8: Terminal markings and direction of rotation	GB/T 1971	IEC 60034-8
《旋转电机冷却方法》 Rotating electrical machines; part 6: methods of cooling (IC code)	GB/T 1993	IEC 60034-6
《电工电子产品环境试验 第2部分：试验方法 试验 Db 交变湿热（12h+12h 循环）》 Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	GB/T 2423.4	IEC 60068-2-30
《旋转电机尺寸和输出功率等级 第1部分：机座号 56 ... 400 和凸缘号 55 ... 1080》 Dimensions and output series for rotating electrical machines; part 1: frame numbers 56 to 400 and flange numbers 55 to 1080	GB/T 4772.1	IEC 60072-1
《旋转电机整体结构的防护等级（IP 代码）- 分级》 Rotating electrical machines - Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code); Classification	GB/T 4942.1	IEC 60034-5
《轴中心高为 56 mm 及以上电机的机械振动 振动的测量、评定及限值》 Rotating electrical machines - Part 14: Mechanical vibration of certain machines with shaft heights 56 mm and higher; Measurement, evaluation and limits of vibration severity	GB/T 10068	IEC 60034-14
《旋转电机噪声测定方法及限值 第1部分：旋转电机噪声测定方法》 Acoustics - Test code for the measurement of airborne noise emitted by rotating electrical machines	GB/T 10069.1	ISO 1680
《旋转电机噪声测定方法及限值 第3部分：噪声限值》 Rotating electrical machines - Part 9: Noise limits	GB/T 10069.3	IEC 60034-9
《中小型旋转电机通用安全要求》 General requirements for safety of small and medium size rotating electrical machines	GB/T 14711	
《中小型三相异步电动机能效限定值及能效等级》 Minimum allowable values of energy efficiency and energy efficiency grades for small and medium three-phase asynchronous motors	GB 18613	IEC 60034-30
《电气绝缘 耐热性和表示方法》 Electrical insulation - Thermal evaluation and designation	GB/T 11021	IEC 60085
《交流低压电机散嵌绕组匝间绝缘 第1部分：试验方法》 Interturn insulation of random-wound winding for AC low-voltage electrical machines- Part 1: Test methods	GB/T 22719.1	
《交流低压电机散嵌绕组匝间绝缘 第2部分：试验限值》 Interturn insulation of random-wound winding for AC low-voltage electrical machines- Part 2: Test limits	GB/T 22719.2	
《电工电子产品自然环境条件 温度和湿度》 Classification of environmental conditions - Part 2-1: Environmental conditions appearing in nature - Temperature and humidity	GB/T 4797.1	IEC 60721-2-1
《标准电压》 IEC standard voltages	GB/T 156	IEC 60038

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。

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

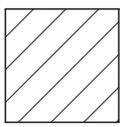
所有电动机转子都使用半键按照 A 级（标准）振动等级进行动态平衡。电动机在空载时测得振动速度有效值不超过下表中的 A 级所列值。电机还可选择B级振动等级设计。

Vibration

The 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.

振动等级 Vibration Grade	机座号 Frame size (mm)	56 ≤ FS ≤ 132		FS > 132	
	安装方式 Mounting	位移 Vibration displacement/ (μm)	速度 Vibration velocity/ (mm/s)	位移 Vibration displacement/ (μm)	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⁾

铭牌示例 Nameplate

		BEST EXPLOSION PROOF THREE-PHASE ASYNCHRONOUS MOTOR 粉尘防爆型三相异步电动机		Ex  Eff.-Grade2 GB18613-2020	
型号 1MT8014-1EC4	3-3AA4-Z	180L	LMH-2504/800003888993/001	Q/321081 KJA019-2024	
⊕ 15 kW	50 Hz	30.5/17.7 A	EFF. 92.9%	204 kg	Th.Cl.155(F) CNEx25.1436X ⊕
380VΔ /660VY	IM B35	986 r/min	COSφ 0.80	IP 65	Ex tb IIIC T130°C Db
驱动端: 6310 C3		非驱动端: 6310 C3			
润滑油: 2# Li Grease		油脂量: 驱动端20g / 非驱动端20g			
润滑周期: 8000h					
茵梦达电机(中国)有限公司 Innomotics Standard Motors Ltd.				二维码含说明书信息	

防爆标志 Ex-Mark

Ex	tb	IIIC	T130°C	Db
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防爆标识

Marking for prevention of explosions

防爆类型 Protection type:

tb = 外壳保护型 Protection by enclosures

粉尘组别 Explosion Group

IIIC = 导电性粉尘 IIIC = Conductive dust

最高表面温度

Maximum surface temperature

设备保护等级 Equipment protection level

Db = 高保护级别 Db = Protection level 'High'

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 FS80 ~ 355	IM B6 FS80 ~ 160	IM B7 FS80 ~ 160	IM B8 FS80 ~ 160	IM V5 ¹⁾ FS80 ~ 160	IM V6 ²⁾ FS80 ~ 160
示意图 Diagram						
电动机订货号第 14 位号 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 FS80 ~ 280	IM V1 ^{1) 3)} FS80 ~ 355	IM V3 ²⁾ FS80 ~ 160	IM B35 FS80 ~ 355	IM V15 ¹⁾ FS80 ~ 160	IM V35 ²⁾ FS80 ~ 160
示意图 Diagram						
电动机订货号第 14 位号 上对应的字母 Letter, position 14 th of Motor code	F	G	H	J	W	Y

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 the end-shield (DE)			机座带底脚，端盖有标准小法兰 With feet and with C-flange on the end-shield (DE)
安装型式 Mounting type	IM B14 FS80 ~ 160	IM V18 ¹⁾ FS80 ~ 160	IM V19 ²⁾ FS80 ~ 160	IM B34 FS80 ~ 160
示意图 Diagram				
电动机订货号第 14 位号 上对应的字母 Letter, position 14 th of Motor code	K	M	L	N

注：

- ¹⁾ 室外使用时推荐使用防雨罩（选项号 H00）；
- ²⁾ 当户外安装时，推荐对电机轴采取防护措施，避免水直接喷射到电机轴上；
- ³⁾ 对于 IMV1 安装方式，第 14 位必须选 G，不能用 F（IMB5）替代。

Notes:

- ¹⁾ At outdoor application, the using of protective cover (option code H00) is recommended;
- ²⁾ At out door application the protection of shaft again jet-water is recommended;
- ³⁾ For IMV1, the 14th digit of MLFB should be selected as G, F (IMB5) cannot be the replacement.

轴承选型

1MT8014 系列电动机标准配置深沟球轴承。

FS80 ~ 160 的电动机驱动端与非驱动端轴承浮动；FS180 ~ 355 电动机驱动端轴承浮动，非驱动端轴承固定。

标准配置的轴承可以承受一定的悬臂力，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 ~ 160 范围电动机标配不带再润滑装置，FS100-160 可选择配置再润滑装置（选件号：L23）；FS180 ~ 355 范围的电动机标配可再润滑轴承，并标配再润滑装置。

Bearing Assignment

1MT8014 series motors are supplied with the ball bearing as standard.

For FS80 ~ 160, the floating bearings are assembled; for FS180 ~ 355, floating bearing at DE, and fixed bearing at NDE assembled.

The standard bearing can endure a maximum cantilever force, the increased cantilever bearing design (Option code: L22) should be considered.

For FS80 ~ 160 standard design, the motors are without regreasing device. the regreasing device can be configured optionally for FS100-160. (Option code L23); but FS180~ 355 motors with regreasable bearing and regreasing device.

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 (水平安装) NDE bearing (Horizontal mounting)	非驱动端轴承 (立式安装) NDE bearing (vertical mounting)	驱动端轴承 DE bearing	非驱动端轴承 (水平安装) NDE bearing (Horizontal mounting)	非驱动端轴承 (立式安装) NDE bearing (vertical mounting)
80	2 to 6	6204 2RZC3	6204 2RZC3	6204 2RZC3	—	—	—
90	2 to 6	6205 2RZC3	6205 2RZC3	6205 2RZC3	—	—	—
100	2 to 6	6206 2RZ C3	6206 2RZ C3	6206 2RZ C3	6306 2RZ C3	6206 2RZ C3	6206 2RZ C3
112	2 to 6	6206 2RZ C3	6206 2RZ C3	6206 2RZ C3	6306 2RZ C3	6206 2RZ C3	6206 2RZ C3
132	2 to 8	6208 2RZ C3	6208 2RZ C3	6208 2RZ C3	6308 2RZ C3	6208 2RZ C3	6208 2RZ C3
160	2 to 8	6309 2RZ C3	6309 2RZ C3	6309 2RZ C3	NU309	6309 2RZ C3	6309 2RZ C3
180	2 to 8	6310 C3	6310 C3	6310 C3	NU310	6310 C3	6310 C3
200	2 to 8	6312 C3	6312 C3	6312 C3	NU312	6312 C3	6312 C3
225	2 to 8	6313 C3	6313 C3	6313 C3	NU313	6313 C3	6313 C3
250	2 to 8	6314 C3	6314 C3	6314 C3	NU314	6314 C3	6314 C3
280	2	6315 C3	6315 C3	6315 C3	NU315	6315 C3	6315 C3
	4 to 8	6316 C3	6316 C3	6316 C3	NU316	6316 C3	6316 C3
315	2	6316 C3	6316 C3	6316 C3	NU316	6316 C3	6316 C3
	4 to 8	6319 C3	6319 C3	6319 C3	NU319	6319 C3	6319 C3
355	2	6317 C3	6317 C3	7317	NU317	6317 C3	O.R.
	4 to 8	6322 C3	6322 C3	7322	NU322	6322 C3	O.R.

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。但是，这只能是在电机严格按照本样本中规定的技术数据运行。

对于以规定间隔再润滑的电机，轴承寿命可以延长，从而补偿不利因素，诸如温度、安装条件、转速、轴承规格和机械载荷造成的影响。

Grease life and re-greasing interval

For permanent lubrication, the bearing grease lifetime is matched to the bearing lifetime. This can, however, only be achieved if the motor is operated in accordance with the catalog specifications.

For motors which can be regreased at defined regreasing intervals, the bearing lifetime can be extended and/or unfavorable factors such as temperature, mounting conditions, speed, bearing size and mechanical load can be compensated.

润滑脂寿命和再润滑周期（电动机水平安装） Grease life (Horizontal installation)

机座号 Frame size	极数 Poles	润滑脂寿命 Grease lifetime up to CT 40 °C ¹⁾
持久润滑型轴承的润滑脂 Grease for permanent lubrication bearing		
80 ~ 160	2, 4, 6, 8	20000h
可再润滑型轴承的润滑脂 Grease for regreasable bearing		
100 ~ 160	2, 4, 6, 8	8000h
180 ~ 280	2	4000h
	4, 6, 8	8000h
315	2	3000h
	4, 6, 8	5000h
355	2	3000h
	4, 6, 8	4000h

注：

¹⁾ 当环境温度每升高 10 °C，润滑脂寿命以及再润滑时间缩短一半。

Note:

¹⁾ If the coolant temperature is increased by 10 K, the grease lifetime and regreasing interval are halved.

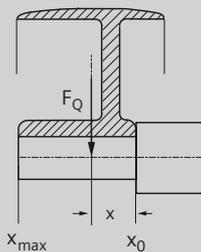
当电动机在非正常的条件下运行时，轴承的寿命会缩短。如下面几种情况：

- 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；
- 当环境温度每升高 10 °C，润滑脂寿命以及再润滑时间缩短一半。

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;
- If the coolant temperature is increased by 10 °C, the grease lifetime and regreasing interval is halved.

电动机轴驱动端允许的最大悬臂力 Permissible cantilever forces on DE shaft



为了计算径向负载的最大悬臂力，据轴肩处的悬臂力 F_Q (N) 必须位于轴伸端以内，（长度为 x ）。长度 x [mm] 是距离轴肩的距离。长度最长为 x_{max} ，与轴伸长度相同。总的悬臂力 F_Q 使用以下公式计算。

$$F_Q = c \cdot F_U$$

预紧力系数 c 是从皮带制造商那得到的经验数值，下面的估算值可以应用。

- 对于一般扁平的皮带， $c = 2$ ；
- 对于 V 型皮带， $c = 2 \sim 2.5$ ；
- 对于特殊的皮带（取决于皮带类型和负载）， $c = 2 \sim 2.5$ 。

计算切向力 F_U (N) 使用下列公式：

$$F_U = 2 \cdot 10^7 \frac{P}{n \times D}$$

- F_U 切向力 (N)
- P 额定功率 (kW)
- n 额定转速
- D 滑轮直径 (mm)

In order to calculate the admissible cantilever forces for a radial load, the line of force (i.e. the centerline of the pulley) of the cantilever force F_Q (N) must lie within the free shaft extension (dimension x). Dimension x [mm] is the distance between the point of application of force F_Q and the shaft shoulder. Dimension x_{max} . Corresponds to the length of the shaft extension. Total cantilever force is calculated using the following equation.

$$F_Q = c \cdot F_U$$

The pre-tension factor c is a value gained from experience from the belt manufacturer. The following approximate value can be assumed.

- For normal flat leather belts with an idler pulley, $c = 2$.
- For v-belts, $c = 2$ to 2.5.
- For special synthetic belts (depending on the type and load), $c = 2$ to 2.5.

The circumferential force F_U (N) is calculated using the following equation.

$$F_U = 2 \cdot 10^7 \frac{P}{n \times D}$$

- F_U circumferential force in N
- P rated motor power (transmitted power) in kW
- n rated motor speed
- D pulleys in mm.

假设电动机不受任何轴向力，下面的表格中列出了允许的径向悬臂力值（单位：牛顿）。

The table below contains the permissible Radial Force values in Newtons with the assumption of zero axial forces.

标准电机最大悬臂力 Admissible cantilever forces for standard version				增强悬臂力的轴向设计（编号 L22） Bearing design for increased cantilever forces Order code L22	
机座号 Frame size	极数 Number of poles	悬臂力范围 ¹⁾ Admissible cantilever force ¹⁾		悬臂力范围 ¹⁾ Admissible cantilever force ¹⁾	
		for x_0 N	for x_{max} N	for X_0	for X_{max}
80	2	620	510	—	—
	4	790	640	—	—
	6	910	740	—	—
90	2	700	560	—	—
	4	880	720	—	—
	6	1020	820	—	—
100	2	1000	850	1520	1300
	4	1100	950	1760	1500
	6	1300	1100	2050	1750
112	2	980	840	1500	1270
	4	1150	970	1800	1520
	6	1300	1100	2060	1740
132	2	1500	1205	2190	1750
	4	1820	1490	2690	2210
	6	1955	1605	2960	2420
	8	2225	1785	3320	2660
160	2	2850	2300	8000	3000
	4	3450	2800	9000	3200
	6	3800	3100	11000	3300
	8	4300	3450	12000	3400
180	2	3400	2800	9000	4000
	4	4250	3500	11000	4200
	6	4800	3990	12500	4200
	8	5320	4400	13500	4300
200	2	4550	3790	12220	7400
	4	5650	4750	15520	7400
	6	6340	5290	17360	7400
	8	6850	5700	19050	7400

¹⁾ 对于安装型式为 IM B6, IM B7, IM B8, IM V5, IM V6 时，在电动机底脚的支撑力足够的情况下，皮带张力垂直于或指向安装平面。采用底脚安装的电动机两个底脚必须牢固。

¹⁾ It should be considered that for types of construction IM B6, IM B7, IM B8, IMV5 and IM V6 the belt tension is only permitted to act parallel to the mounting plane or towards the mounting plane and the feet must be supported. Both feet must be secured for foot-mounting types of construction.

标准电机最大悬臂力 Admissible cantilever forces for standard version				增强悬臂力的轴向设计 (编号 L22) Bearing design for increased cantilever forces Order code L22	
机座号 Frame size	极数 Number of poles	悬臂力范围 ¹⁾ Admissible cantilever force ¹⁾		悬臂力范围 ¹⁾ Admissible cantilever force ¹⁾	
		for x_0 N	for x_{max} N	for X_0	for X_{max}
225	2	4930	4140	15260	7000
	4	6075	4950	18700	5780
	6	6825	5495	20900	5780
	8	7835	6310	23100	5780
250	2	5420	4425	16000	6800
	4	6630	5415	20700	6800
	6	7470	6105	23280	6800
	8	8630	7058	25800	6800
280	2	5950	4950	19900	8900
	4	7750	6520	25700	11200
	6	8800	7310	28800	11200
	8	9980	8300	31700	11200
315	2	6150	5200	21350	9050
	4	8790	7350	34240	13200
	6	10350	8550	38600	13100
	8	11450	9450	42200	12950
355	2	6430	5700	22920	12300
	4	12000	10400	44450	20800
	6	13050	11300	49500	20500
	8	14500	12550	54000	20500

¹⁾ 对于安装型式为 IM B6, IM B7, IM B8, IM V5, IM V6 时, 在电动机底脚的支撑力足够的情况下, 皮带张力垂直于或指向安装平面。采用底脚安装的电动机两个底脚必须牢固。

¹⁾ It should be considered that for types of construction IM B6, IM B7, IM B8, IMV5 and IM V6 the belt tension is only permitted to act parallel to the mounting plane or towards the mounting plane and the feet must be supported. Both feet must be secured for foot-mounting types of construction.

接线盒技术参数 Connection boxes technical data

机座号 Frame Size	主接线端子数 Number of main terminals	最多可容纳的辅助端子数 Max. allowable auxiliary terminals	接线螺钉螺纹 Contact screw thread	引接线最大截面积 (mm ²) Max. connectable cross-section	外接电缆直径 (mm) Outer cable diameter (sealing range)	进线孔尺寸 (葛兰+螺塞) Cable entry size (Gland+Screwed plug)
80	6	12	M4	1.5	13 ~ 18	M25 × 1.5+M16 × 1.5
90	6	12	M4	1.5	13 ~ 18	M25 × 1.5+M16 × 1.5
100	6	12	M4	4	18 ~ 25	M32 × 1.5+M32 × 1.5
112	6	12	M4	4	18 ~ 25	M32 × 1.5+M32 × 1.5
132	6	12	M4	6	18 ~ 25	M32 × 1.5+M32 × 1.5
160	6	14	M5	16	22 ~ 32	M40 × 1.5+M40 × 1.5
180	6	14	M5	16	22 ~ 32	M40 × 1.5+M40 × 1.5
200	6	14	M6	25	32 ~ 38	M50 × 1.5+M50 × 1.5
225	6	14	M8	35	32 ~ 38	M50 × 1.5+M50 × 1.5
250	6	14	M10	120	37 ~ 44	M63 × 1.5+M63 × 1.5
280	6	14	M10	120	37 ~ 44	M63 × 1.5+M63 × 1.5
315	6	16	M12	240	37 ~ 44	M63 × 1.5+M63 × 1.5
355	6	24	M16	240	44 ~ 57	M72 × 2+M72 × 2

辅助端子进线孔尺寸 Cable entry size	允许外接电缆直径范围 (mm) Allowed outer cable diameter range (mm)	允许电缆的芯数范围 Allowed core number range of cable	引接线(导体)标称截面积 (mm ²) Nominal section area of connection (conductor) (mm ²)
M16 x 1.5	8-11	2-7	1 mm ²
M20 x 1.5	11-14.3	8-10	1 mm ²
M25 x 1.5	13-20.2	12-27	1 mm ²

注意:

1. 电力电缆建议使用 YJV (GB/17206) 交联聚乙烯绝缘及聚氯乙烯护套 3+1 铜芯电缆;
2. 弱电信号控制电缆建议使用 KVV (GB/T9330) 聚氯乙烯绝缘聚乙烯护套铜芯截面 1mm² 的多芯控制电缆;
3. 加热带线路为强电信号控制, 请使用 KVV 铜芯截面 2 x 1mm² 的控制电缆单独进线;
4. 如果使用电缆直径不在防爆葛兰线径范围内, 电机将失去防爆性能。

Note:

1. Power cables are recommended to use YJV (GB/17206) crosslinked polyethylene insulation and PVC sheath 3+1 copper core cable;
2. The control cable of weak current signal is recommended to use KVV (GB/T9330) polyvinyl chloride insulated sheath copper core section 1 mm² multi-core control cable;
3. The heating line is a strong signal control, please use the KVV copper core section 2 x 1mm² control cable to enter the line alone;
4. If the cable diameter is not in the range of explosion protection, the electric motor will lose the explosion-proof property.

电气特性

额定输出

贝得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。

Electrical design

Rated Output

Beide 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 60034 - 1 Standard 60034 - 1	类别 A 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
 $-0.15 \times (1 - \eta)$
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: $\pm 10\%$

Tolerance for electrical data

- Efficiency η
 $-0.15 \times (1 - \eta)$
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 $\pm 10\%$

MLFB 介绍



电机系列 Motor series
 粉尘防爆电机 Dust explosion proof motors

能耗等级 Efficiency grade
 4 = IE4, 中国能效等级 2 级 China Energy Efficiency Grade 2

机座号编号 Code of frame size
 0D = 80; 0E = 90
 1A = 100; 1B = 112; 1C = 132; 1D = 160; 1E = 180
 2A = 200; 2B = 225; 2C = 250; 2D = 280
 3A = 315; 3B = 355

极数编号 Code of poles
 A = 2; B = 4; C = 6; D = 8

机座长度编号 Code of frame length
 0 or 1 = S (短机座 Short) / 2 or 3 or 4 = M (中机座 Medium) / 4 or 5 or 6 or 7 = L (长机座 Long)

电压, 连接方式和频率编号 Code of voltage, connections and frequency
 22 = 230VD/400VY 50Hz 35 = 415VD 50Hz
 21 = 220VD/380VY 50Hz 23 = 240VD/415VY 50Hz 90 = 特殊电压与频率 special voltage & frequency
 33 = 380VD/660VY 50Hz 34 = 400VD/690VY 50Hz

结构和安装方式编号 Code of construction and mounting type
 A = IM B3 J = IM B35 T = IM B6 V = IM B8 N = IM B34 W = IM V15 G = IM V1 M = IM V18
 F = IM B5 K = IM B14 U = IM B7 C = IM V5 D = IM V6 Y = IM V35 H = IM V3 L = IM V19

绕组保护编号 Code of winding protection
 A = 无绕组保护 without winding protection
 B = 绕组带一组三芯串联的 PTC 热敏电阻用于跳闸 3 PTC thermistors for tripping
 C = 绕组带两组三芯串联的 PTC 热敏电阻用于报警和跳闸 6 PTC thermistors for alarm and tripping
 H = 绕组带 3 个 Pt100 测温元件 3 resistance thermometers Pt100
 J = 绕组带 6 个 Pt100 测温元件 6 resistance thermometers Pt100

接线盒位置编号 (从驱动端看) Code location of connection box (view from drive end)
 4 = 顶端出线 top / 5 = 右端出线 on RHS / 6 = 左端出线 on LHS

选型技术数据表 Technical data table

中国能效等级 2 级, IE4

机座号 Frame Size	订货号 Order No.	额定 功率 Rated Output	额定 转速 Rated Speed	效率 (100%负载) Effeciency at (50HZ) 4/4 load	效率 (75%负载) Effeciency at (50HZ) 3/4 load	功率 因数 Power factor	额定 电流 Rated current	额定 转矩 Rated torque	起动电流/ 额定电流 Starting Current/ Rated current	起动转矩/ 额定转矩 Starting torque/ Rated torque	最大转矩/ 额定转矩 Max torque/ Reted torque	转动惯量 Moment of inertia (J)	重量 Weight IMB3	噪声 Noise
		kW	r/m	%	%		A	Nm	I_{LR}/I_{rated}	T_{LR}/T_{rated}	T_{max}/T_{rated}	kgm ²	kg	L_{pta}/L_{WA}
3000rpm 2极2- pole 220VD/380VY 50HZ														
80M	1MT8014-0DA22-1□□□	0.75	2885	83.5	84.3	0.83	1.64	2.5	8.5	3	3.2	0.00125	19	51/62
80M	1MT8014-0DA32-1□□□	1.1	2890	85.2	86	0.83	2.35	3.6	8.5	3.2	3.5	0.00154	21	51/62
90S	1MT8014-0EA02-1□□□	1.5	2905	86.5	87.6	0.85	3.1	4.9	8.5	2.6	3.2	0.00304	26	55/67
90L	1MT8014-0EA42-1□□□	2.2	2900	88.0	89.3	0.86	4.4	7.2	9	3.1	3.5	0.00390	31	55/67
100L	1MT8014-1AA42-1□□□	3	2925	89.1	90.0	0.87	5.9	9.8	8.5	2.8	3.3	0.00871	43	61/73
3000rpm 2极2- pole 380VD/660VY 50HZ														
112M	1MT8014-1BA23-3□□□	4	2940	90.0	90.7	0.88	7.7	13	8.5	2.7	3	0.0123	56	62/74
132S	1MT8014-1CA03-3□□□	5.5	2950	90.9	91.5	0.88	10.4	17.8	8.5	2.6	3.6	0.023	70	66/78
132S	1MT8014-1CA13-3□□□	7.5	2950	91.7	92.3	0.89	14	24.3	8.5	2.8	3.8	0.027	78	66/78
160M	1MT8014-1DA23-3□□□	11	2955	92.6	93.0	0.89	20.5	35.5	8	2.6	3	0.0645	132	66/79
160M	1MT8014-1DA33-3□□□	15	2960	93.3	93.6	0.89	27.5	48.4	8.5	2.8	3.5	0.0735	142	66/79
160L	1MT8014-1DA43-3□□□	18.5	2960	93.7	94.1	0.89	33.5	59.7	8.5	3	3.5	0.0804	158	66/79
180M	1MT8014-1EA23-3□□□	22	2972	94.0	94.1	0.89	40	70.7	8.5	2.6	3.4	0.1738	213	67/80
200L	1MT8014-2AA43-3□□□	30	2970	94.5	94.6	0.89	54	96.5	8.5	2.6	3.1	0.266	287	71/84
200L	1MT8014-2AA53-3□□□	37	2972	94.8	94.8	0.89	67	119	8.5	2.6	3.1	0.281	296	71/84
225M	1MT8014-2BA23-3□□□	45	2979	95.0	94.9	0.89	81	144	8.5	2.8	3.2	0.561	355	72/85
250M	1MT8014-2CA23-3□□□	55	2982	95.3	95.3	0.89	99	176	8.5	2.8	3.0	0.813	454	72/86
280S	1MT8014-2DA03-3□□□	75	2978	95.6	95.6	0.9	132	241	8.5	2.8	3.2	0.897	553	75/89
280M	1MT8014-2DA23-3□□□	90	2978	95.8	95.9	0.9	159	289	8.5	2.7	3.6	1.01	578	75/89
315S	1MT8014-3AA03-3□□□	110	2982	96.0	95.9	0.89	196	352	8.5	2.1	2.4	1.85	820	77/92
315M	1MT8014-3AA23-3□□□	132	2982	96.2	96.2	0.89	235	423	8.5	2.5	2.7	2.15	895	77/92
315L	1MT8014-3AA53-3□□□	160	2982	96.3	96.4	0.89	285	512	8.5	2.5	2.6	2.47	970	77/92
315L	1MT8014-3AA63-3□□□	185	2982	96.5	96.6	0.89	325	592	8.5	2.7	2.6	2.85	1080	77/92
315L	1MT8014-3AA73-3□□□	200	2975	96.5	96.8	0.89	355	642	7.5	2.3	2.2	2.85	1100	77/92
355M	1MT8014-3BA23-3□□□	220	2986	96.5	96.3	0.91	380	704	8.5	2.6	2.6	2.91	1430	82/97
355M	1MT8014-3BA33-3□□□	250	2982	96.5	96.4	0.91	435	801	8.5	2.4	2.4	2.91	1430	82/97
355L	1MT8014-3BA53-3□□□	280	2985	96.5	96.4	0.91	485	896	8.5	3.0	3.1	3.41	1570	82/97
355L	1MT8014-3BA63-3□□□	315	2982	96.5	96.4	0.91	550	1009	8.5	3.0	3.1	3.41	1600	82/97

机座号 Frame Size	订货号 Order No.	额定功率 Rated Output	额定转速 Rated Speed	效率 (100%负载) Effeciency at (50HZ) 4/4 load	效率 (75%负载) Effeciency at (50HZ) 3/4 load	功率 因数 Power factor	额定 电流 Rated current	额定 转矩 Rated torque	起动电流/ 额定电流 Starting Current/ Rated current	起动转矩/ 额定转矩 Starting torque/ Rated torque	最大转矩/ 额定转矩 Max torque/ Reted torque	转动惯量 Moment of inertia (J)	重量 Weight IMB3	噪声 Noise
		kW	r/m	%	%		A	Nm	I_{LR}/I_{rated}	T_{LR}/T_{rated}	T_{max}/T_{rated}	kgm ²	kg	L_{pta}/L_{WA}
1500rpm 4极4-pole 220VD/380VY 50HZ														
80M	1MT8014-0DB22-1□□□□	0.55	1450	83.9	84.5	0.75	1.33	3.6	8.5	2.8	3.2	0.0031	21	45/56
80M	1MT8014-0DB32-1□□□□	0.75	1455	85.7	86	0.75	1.77	4.9	8.5	3	3.5	0.00378	23	45/56
90S	1MT8014-0EB02-1□□□□	1.1	1465	87.2	87.5	0.75	2.55	7.2	8.5	2.8	3.5	0.00500	27	47/59
90L	1MT8014-0EB42-1□□□□	1.5	1465	88.2	88.6	0.76	3.4	9.8	8.5	2.8	3.5	0.00644	32	47/59
100L	1MT8014-1AB42-1□□□□	2.2	1470	89.5	89.6	0.79	4.75	14.3	8.5	2.4	3.8	0.01847	50	52/64
100L	1MT8014-1AB52-1□□□□	3	1470	90.4	90.6	0.8	6.3	19.5	8.9	2.8	3.8	0.02022	53	52/64
1500rpm 4极4-pole 380VD/660VY 50HZ														
112M	1MT8014-1BB23-3□□□□	4	1470	91.1	91.5	0.8	8.3	26	8.5	2.9	3.8	0.0244	61	53/65
132S	1MT8014-1CB03-3□□□□	5.5	1475	91.9	92.4	0.8	11.4	35.6	8	2.6	3.2	0.047	79	56/68
132M	1MT8014-1CB23-3□□□□	7.5	1475	92.6	93.0	0.81	15.2	48.6	8	2.8	3.5	0.059	94	56/68
160M	1MT8014-1DB23-3□□□□	11	1482	93.3	93.6	0.82	22	70.9	8.5	3.2	3.3	0.1413	145	58/71
160L	1MT8014-1DB43-3□□□□	15	1482	93.9	94.2	0.82	29.5	96.7	8.5	2.9	3.5	0.1639	163	58/71
180M	1MT8014-1EB23-3□□□□	18.5	1480	94.2	94.6	0.82	36.5	119	7.9	2.6	3.2	0.2545	220	61/74
180L	1MT8014-1EB43-3□□□□	22	1480	94.5	94.8	0.82	43	142	8.5	2.8	3.6	0.2715	230	61/74
200L	1MT8014-2AB53-3□□□□	30	1486	94.9	95.4	0.82	59	193	8	2.8	3	0.506	283	61/74
225S	1MT8014-2BB03-3□□□□	37	1486	95.2	95.6	0.85	69	238	8.5	2.6	3	0.744	366	63/76
225M	1MT8014-2BB23-3□□□□	45	1488	95.4	95.7	0.85	84	289	8.5	2.8	3	0.935	410	63/76
250M	1MT8014-2CB23-3□□□□	55	1488	95.7	96.0	0.86	102	353	8.5	2.5	3.3	1.428	483	62/76
280S	1MT8014-2DB03-3□□□□	75	1488	96	96.3	0.87	136	481	8.5	2.8	3.0	1.848	603	66/80
280M	1MT8014-2DB23-3□□□□	90	1488	96.1	96.5	0.88	162	578	8.5	2.8	3.0	2.156	683	66/80
315S	1MT8014-3AB03-3□□□□	110	1491	96.3	96.5	0.86	200	705	8.5	2.8	2.5	3.35	915	69/84
315M	1MT8014-3AB23-3□□□□	132	1490	96.4	96.7	0.86	240	846	7.8	2.6	2.3	3.53	955	69/84
315L	1MT8014-3AB53-3□□□□	160	1490	96.6	96.9	0.87	290	1026	8.5	3.0	2.2	4.24	1120	71/86
315L	1MT8014-3AB63-3□□□□	185	1490	96.7	97.0	0.87	335	1186	8.5	3.1	2.2	4.64	1180	71/86
315L	1MT8014-3AB73-3□□□□	200	1490	96.7	97.0	0.87	360	1282	8.5	3.2	2.3	4.92	1220	71/86
355M	1MT8014-3BB23-3□□□□	220	1490	96.7	96.9	0.88	395	1410	8.5	2.5	2.8	5.7	1630	76/91
355M	1MT8014-3BB33-3□□□□	250	1490	96.7	96.9	0.88	445	1602	8.5	2.3	2.8	5.92	1670	76/91
355L	1MT8014-3BB53-3□□□□	280	1490	96.7	96.9	0.88	500	1795	8.5	2.4	2.6	6.19	1760	76/91
355L	1MT8014-3BB63-3□□□□	315	1490	96.7	97.0	0.88	560	2019	8.5	2.3	2.6	6.67	1840	76/91

选型技术数据表 Technical data table

中国能效等级 2 级, IE4

机座号 Frame Size	订货号 Order No.	额定功率 Rated Output	额定转速 Rated Speed	效率 (100%负载) Effeciency at (50HZ) 4/4 load	效率 (75%负载) Effeciency at (50HZ) 3/4 load	功率 因数 Power factor	额定 电流 Rated current	额定 转矩 Rated torque	起动电流/ 额定电流 Starting Current/ Rated current	起动转矩/ 额定转矩 Starting torque/ Rated torque	最大转矩/ 额定转矩 Max torque/ Reted torque	转动惯量 Moment of inertia (J)	重量 Weight IMB3	噪声 Noise
		kW	r/m	%	%		A	Nm	I_{LR}/I_{rated}	T_{LR}/T_{rated}	T_{max}/T_{rated}	kgm ²	kg	L_{pfa}/L_{WA}
1000rpm 6极6-pole 220VD/380VY 50HZ														
80M	1MT8014-0DC32-1□□□□	0.55	950	80.9	81.2	0.67	1.54	5.5	7.5	2.9	3	0.00471	24	44/55
90S	1MT8014-0EC02-1□□□□	0.75	965	82.7	83.2	0.7	1.97	7.4	7.5	2.1	3	0.00636	28	45/57
90L	1MT8014-0EC42-1□□□□	1.1	965	84.5	85	0.7	2.85	10.9	7.5	2.5	3	0.00813	33	45/57
100L	1MT8014-1AC42-1□□□□	1.5	975	85.9	86.0	0.71	3.75	14.7	7.5	2.9	3.6	0.01846	50	49/61
112M	1MT8014-1BC22-1□□□□	2.2	965	87.4	87.8	0.71	5.4	21.8	7.5	3.6	3.8	0.0233	56	51/63
132S	1MT8014-1CC02-1□□□□	3	982	88.6	88.9	0.71	7.2	29.2	8	2.7	3.5	0.047	71	55/67
1000rpm 6极6-pole 380VD/660VY 50HZ														
132M	1MT8014-1CC23-3□□□□	4	984	89.5	89.6	0.72	9.4	38.8	8	2.8	4	0.059	79	55/67
132M	1MT8014-1CC33-3□□□□	5.5	982	90.5	90.9	0.72	12.8	53.5	8	3.1	4	0.078	96	55/67
160M	1MT8014-1DC23-3□□□□	7.5	984	91.3	91.6	0.76	16.4	72.8	7.5	3	3	0.1501	137	56/69
160L	1MT8014-1DC43-3□□□□	11	985	92.3	92.4	0.77	23.5	107	8	3.6	3.3	0.2007	168	56/69
180L	1MT8014-1EC43-3□□□□	15	986	92.9	93.4	0.8	30.5	145	7.6	2.7	3	0.3095	207	57/70
200L	1MT8014-2AC43-3□□□□	18.5	988	93.4	93.8	0.8	37.5	179	8	2.5	3	0.555	258	59/72
200L	1MT8014-2AC53-3□□□□	22	988	93.7	94.2	0.81	44	213	8	2.8	3	0.638	279	59/72
225M	1MT8014-2BC23-3□□□□	30	988	94.2	94.7	0.82	59	290	8	2.9	3	1.035	375	60/73
250M	1MT8014-2CC23-3□□□□	37	988	94.5	95.1	0.83	72	358	8.0	2.5	3.0	1.879	468	55/69
280S	1MT8014-2DC03-3□□□□	45	992	94.8	95.1	0.83	87	433	8.0	3.6	3.6	2.023	548	62/76
280M	1MT8014-2DC23-3□□□□	55	991	95.1	95.5	0.84	105	530	8.0	3.0	3	2.249	568	62/76
315S	1MT8014-3AC03-3□□□□	75	991	95.4	95.8	0.83	144	723	8.0	2.1	2.1	3.95	825	66/81
315M	1MT8014-3AC23-3□□□□	90	992	95.6	95.9	0.83	172	866	8.0	2.6	2.1	4.52	885	66/81
315L	1MT8014-3AC53-3□□□□	110	992	95.8	96.1	0.83	210	1059	8.0	2.8	2.3	5.02	965	66/81
315L	1MT8014-3AC63-3□□□□	132	992	96.0	96.2	0.82	255	1271	8.0	2.6	2.6	5.71	1030	66/81
355M	1MT8014-3BC23-3□□□□	160	993	96.2	96.5	0.84	300	1539	8.0	2.5	2.5	10.52	1610	76/91
355M	1MT8014-3BC33-3□□□□	185	993	96.3	96.6	0.84	345	1779	7.8	2.5	2.5	10.52	1630	76/91
355M	1MT8014-3BC43-3□□□□	200	992	96.3	96.6	0.84	375	1925	7.7	2.4	2.5	11.11	1680	76/91
355L	1MT8014-3BC53-3□□□□	220	994	96.4	96.6	0.84	415	2114	8.0	2.5	2.7	11.53	1760	76/91
355L	1MT8014-3BC63-3□□□□	250	993	96.5	96.7	0.84	470	2404	8.0	2.9	2.9	13.02	1880	76/91

机座号 Frame Size	订货号 Order No.	额定 功率 Rated Output	额定 转速 Rated Speed	效率 (100%负载) Effeciency at (50HZ) 4/4 load	效率 (75%负载) Effeciency at (50HZ) 3/4 load	功率 因数 Power factor	额定 电流 Rated current	额定 转矩 Rated torque	起动电流/ 额定电流 Starting Current/ Rated current	起动转矩/ 额定转矩 Starting torque/ Rated torque	最大转矩/ 额定转矩 Max torque/ Reted torque	转动惯量 Moment of inertia (J)	重量 Weight IMB3	噪声 Noise
		kW	r/m	%	%		A	Nm	I_{LR}/I_{rated}	T_{LR}/T_{rated}	T_{max}/T_{rated}	kgm ²	kg	L_{pfa}/L_{WA}
750rpm 8极8- pole 380VD/660VY 50HZ														
132S	1MT8014-1CD02-1□□□	2.2	725	84.5	85.1	0.7	5.7	29	6	2.2	2.8	0.052	73	50/62
132M	1MT8014-1CD22-1□□□	3	725	85.9	86.3	0.7	7.6	39.5	6.5	2.6	3.2	0.064	81	50/62
160M	1MT8014-1DD23-3□□□	4	736	87.1	87.4	0.71	9.8	51.9	6.5	2.5	2.5	0.1279	125	55/68
160M	1MT8014-1DD33-3□□□	5.5	736	88.3	88.6	0.72	13.1	71.4	6.5	2.5	2.6	0.1494	137	55/68
160L	1MT8014-1DD43-3□□□	7.5	734	89.3	89.8	0.74	17.2	97.6	6.5	2.5	2.5	0.1819	158	55/68
180L	1MT8014-1ED43-3□□□	11	734	90.4	91.1	0.74	25	143	6	2	2.5	0.3637	225	57/70
200L	1MT8014-2AD53-3□□□	15	736	91.2	92.0	0.75	33.5	195	7	2.8	3.2	0.64	277	59/72
225S	1MT8014-2BD03-3□□□	18.5	738	91.7	92.4	0.76	40.5	239	7	2.6	3	0.74	304	59/72
225M	1MT8014-2BD23-3□□□	22	737	92.1	92.8	0.76	48	285	7	2.7	3	0.836	324	59/72
250M	1MT8014-2CD23-3□□□	30	739	92.7	93.3	0.77	64	388	7.0	2.7	2.8	1.247	406	61/75
280S	1MT8014-2DD03-3□□□	37	740	93.1	93.6	0.78	77	478	7.0	2.4	2.6	1.621	492	62/76
280M	1MT8014-2DD23-3□□□	45	740	93.4	94.1	0.8	92	581	7.0	2.5	2.6	1.992	543	62/76
315S	1MT8014-3AD03-3□□□	55	738	93.7	94.7	0.80	111	712	7.7	1.8	2.0	3.62	805	73/88
315M	1MT8014-3AD23-3□□□	75	740	94.2	95.0	0.80	151	968	7.7	2.1	2.1	4.14	865	73/88
315L	1MT8014-3AD53-3□□□	90	741	94.4	95.1	0.81	179	1160	7.7	2.2	2.2	4.92	965	73/88
315L	1MT8014-3AD63-3□□□	110	742	94.7	95.2	0.81	220	1416	7.7	2.5	2.5	5.62	1040	73/88
355M	1MT8014-3BD23-3□□□	132	743	94.9	95.5	0.81	260	1697	7.7	2.2	2.2	9.67	1560	73/88
355M	1MT8014-3BD33-3□□□	160	743	95.1	95.7	0.82	310	2057	7.7	2.3	2.3	11.26	1690	73/88
355L	1MT8014-3BD53-3□□□	185	743	95.3	95.8	0.82	360	2378	7.7	2.3	2.3	11.87	1790	73/88
355L	1MT8014-3BD63-3□□□	200	744	95.4	95.9	0.82	390	2567	7.8	2.5	2.5	12.75	1870	73/88

选件 Options

选件号 Option Code	描述 Description	应用范围 Frame size scope
电压和频率 Voltage and Frequency		
1MT8014- □□□□ 2-1 □□□	220VD / 380VY 50Hz	FS80-280
1MT8014- □□□□ 3-3 □□□	380VD / 660VY 50Hz	FS80-355
1MT8014- □□□□ 2-2 □□□	230VD / 400VY 50Hz	FS80-280
1MT8014- □□□□ 3-4 □□□	400VD / 690VY 50Hz	FS80-355
1MT8014- □□□□ 2-3 □□□	240VD / 415VY 50Hz	FS80-280
1MT8014- □□□□ 3-5 □□□	415VD 50Hz	FS80-355
M1C	440VY 60Hz (60Hz output 60Hz 输出)	FS80-280
M1D	440VD 60Hz (60Hz output 60Hz 输出)	FS80-355
M1E	460VY 60Hz (60Hz output 60Hz 输出)	FS80-280
M1F	460VD 60Hz (60Hz output 60Hz 输出)	FS80-355
M2C	440VY 60Hz (50Hz output 50Hz 输出)	FS80-280
M2D	440VD 60Hz (50Hz output 50Hz 输出)	FS80-355
M2E	460VY 60Hz (50Hz output 50Hz 输出)	FS80-280
M2F	460VD 60Hz (50Hz output 50Hz 输出)	FS80-355
绕组保护 Winding protection		
1MT8014- □□□□□ - □□ A □	无绕组保护 Without winding protection	FS80-355
1MT8014- □□□□□ - □□ B □	三个 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 3 embedded temperature sensors for tripping, need 2 terminals	FS80-355
1MT8014- □□□□□ - □□ C □	六个 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 6 embedded temperature sensors for alarm and tripping, need 4 terminals	FS80-355
1MT8014- □□□□□ - □□ H □	三个 PT100 传感器监测绕组温度, 需用 6 个辅助端子 Installation of 3 PT100 resistance thermometers in stator winding, need 6 terminals	FS80-355
1MT8014- □□□□□ - □□ J □	六个 PT100 传感器监测绕组温度, 需用 12 个辅助端子 Installation of 6 PT100 resistance thermometers in stator winding, need 12 terminals	FS100-355
N10	H 级绝缘系统 (180 °C) 180 °C (H) class insulation system	FS80-355
Q04	220V 防潮加热带 Anti-condensation heaters for 220V	FS80-355
接线盒 Connection box		
1MT8014- □□□□□ - □□□ 4	接线盒在顶端 Connection box on top 进线孔在右侧 (从驱动端看) (默认配置) cable entry on right (view from DE) (Standard version)	FS80-355
1MT8014- □□□□□ - □□□ 5	接线盒在右边 (从驱动端看) Connection box on RHS (view from DE)	FS80-355
1MT8014- □□□□□ - □□□ 6	接线盒在左边 (从驱动端看) Connection box on LHS (view from DE)	FS80-355
R10 ¹⁾	接线盒旋转 90 度, 出线口朝驱动端 Rotation of terminal box by 90°, entry from DE	FS132-355
R11	接线盒旋转 90 度, 出线口朝非驱动端 Rotation of terminal box by 90°, entry from NDE	FS80-355
R12	接线盒旋转 180 度 Rotation of terminal box by 180°	FS80-355
R15	配备一个金属葛兰和一个金属闷盖 1 metal cable glands+1 metal cover	FS80-355
V9D	配置一个尼龙葛兰和一个尼龙闷盖 1 nylon cable gland+1 nylon cover	FS80-355

选件号 Option Code	描述 Description	应用范围 Frame size scope
轴承 Bearing		
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
L80	SKF 轴承 SKF bearings	FS80-355
L81	其他进口品牌轴承 Other imported brand bearing	FS80-355
L22 ²⁾	增强悬臂力轴承设计 Bearing design for increased cantilever forces	FS100-355
L23 ³⁾	再润滑装置 Re-greasing device	FS100-160
L20	驱动端轴承固定 Located bearing at DE	FS80-160
机械设计和防护等级 Mechanical design and protection grade		
H00 ⁴⁾	电动机带防雨罩 Motor with protective cover	FS80-355
H70	第二外部接地 2nd External grounding	FS80-355
L72 ⁵⁾	第二标准轴伸 2nd standard shaft extension	FS80-355
L04	光轴设计，不带键槽和键 Shaft without key and keyway	FS80-355
F76	金属风扇 Metal fan	FS80-355
铭牌和测试报告 Nameplate and Testing Certificate		
B80	出厂检验报告 Acceptance test certificate 3.1 in accordance with EN 10204	FS80-355
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	FS80-355
油漆 Paint finish		
S01	不喷漆，只带底漆 Unpainted, only primed	FS80-355
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	FS80-355
包装 Packing		
B90	包装 (FS80 ~ 132 电动机采用纸箱包装, FS160 ~ 355 电动机采用木箱包装) Packing (FS80 ~ 132 motors adopt the carton packaging, FS160 ~ 355 motors adopt the wooden cases packaging)	FS80-355
V9N	法兰安装电机用简易托盘 Simple tray for flange mounted motors	FS160-280

¹⁾ 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；

²⁾ 对于立式安装的FS355 电动机，需要咨询茵梦达；

³⁾ 对于 FS180-355，加排油装置是标配；

⁴⁾ 仅适用于 IMV1、IMV5、IMV15、IMV18 安装结构型；

⁵⁾ 带防雨罩 (H00) 的电动机不能选此选件；非驱动端上的第二轴伸尺寸与驱动端轴伸一致。

¹⁾ When ordering this option, please take care about the installation location that whether there is enough space for cable inserting;

²⁾ For vertical mounting of FS355 motor, please inquire INNOMOTICS;

³⁾ FS180-355 motor with the regreasing device as standard;

⁴⁾ It is applicable only for IMV1, IMV5, IMV15 and IMV18;

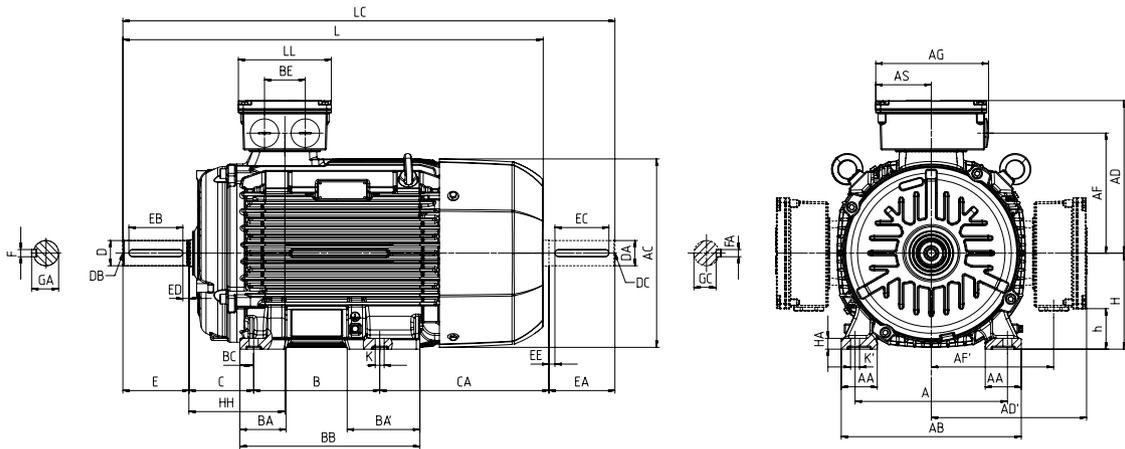
⁵⁾ Not possible in combination with canopy H00; Second standard shaft extension on NDE has same dimension on DE side.

外形尺寸 Dimension drawings

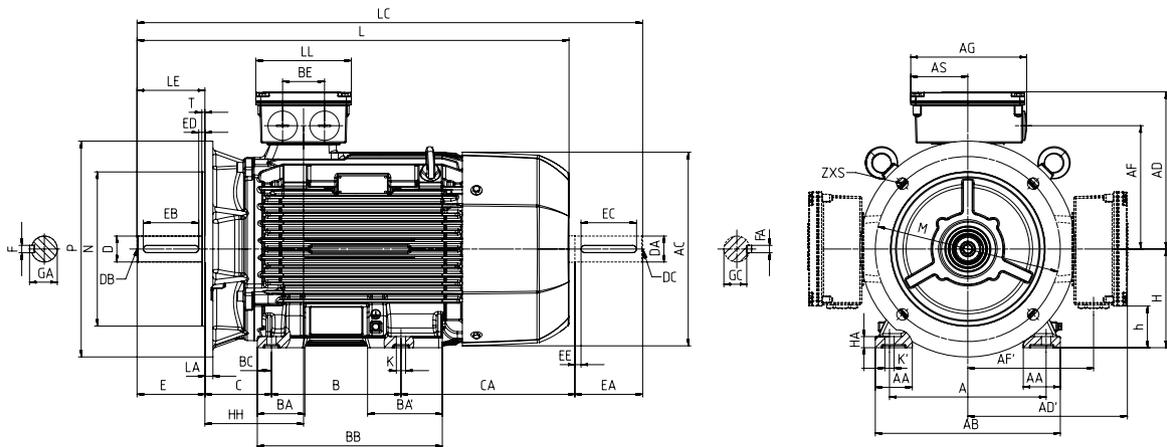
1MT8014 系列电机

机座号从 80M ~ 280M Frame sizes 80M to 280M

IM B3 安装结构方式 Type of construction IM B3



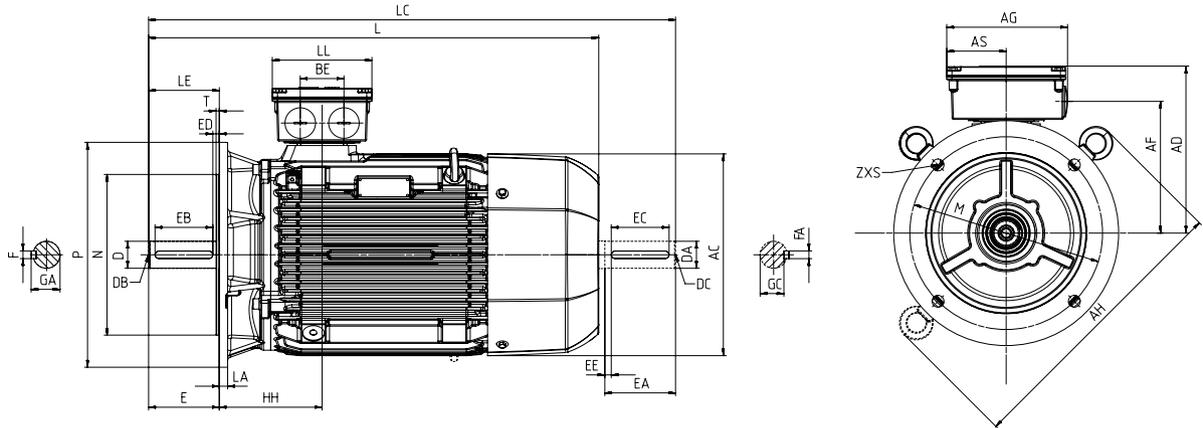
IM B35 安装结构方式 Type of construction IM B35



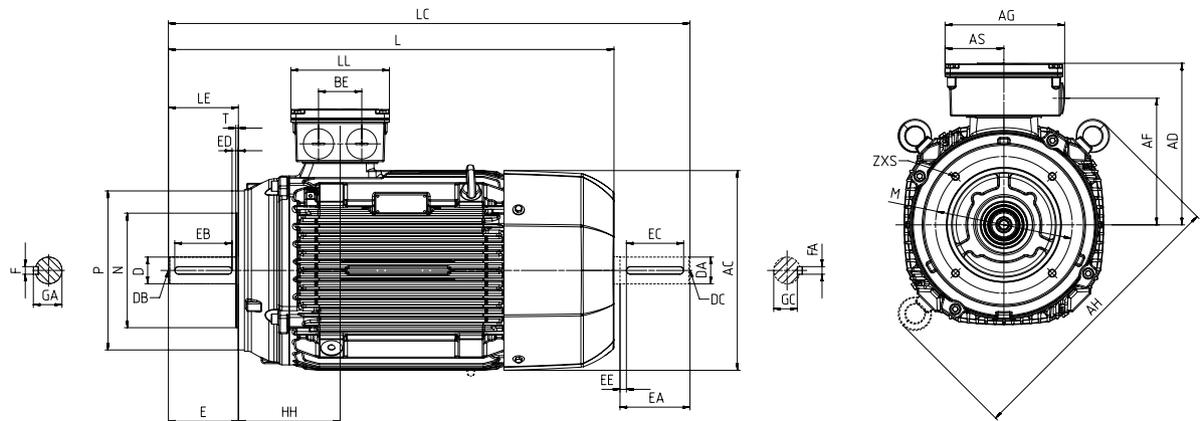
机座号 Frame size	类型 Type 1MT8014	极数 poles	尺寸图依据 IEC 标准 Dimension designation according to IEC standards																			
			A	AA	AB	AC ¹⁾	AD/AD'	AF/AF'	AG	AH	AS	B ²⁾	BA	BA'	BB	BC	BE	C	CA ²⁾	H	h	HA
80 M	0D □ 2	2,4	125	33.5	155	156	155	112.5	137	204	66.5	100	45	46	130	14.5	42	50	180	80	24.5	9
	0D □ 3	2,4,6	125	33.5	155	156	155	112.5	137	204	66.5	100	45	46	130	14.5	42	50	180	80	24.5	9
90 S	0E □ 0	2,4,6	140	33.5	170	174	165	122.5	137	220	66.5	100	45	48	128	12.5	42	56	196	90	34.5	10
90 L	0E □ 4	2,4,6	140	33.5	170	174	165	122.5	137	220	66.5	125	45	73	153	12.5	42	56	211	90	35.5	10
100L	1A □ 4	2,4,6	160	45	196	198	190	145	147	290	71	140	50	78	200	16	54	63	269	100	43	12
	1A □ 5	4	160	45	196	198	190	145	147	290	71	140	50	78	200	16	54	63	269	100	43	12
112M	1B □ 2	2,4,6	190	45	226	222	198	154	147	310	71	140	54	56	174	16	54	70	240	112	55	12
132S	1C □ 0	2,4,6,8	216	50	256	262	223	177	147	376	71	140	55	93	218	20	54	89	221	132	75	15
	1C □ 1	2	216	50	256	262	223	177	147	376	71	140	55	93	218	20	54	89	221	132	75	15
132M	1C □ 2	6,8	216	50	256	262	223	177	147	376	71	178	55	93	218	20	54	89	183	132	75	15
	1CB2 1C □ 3	4,6	216	50	256	262	223	177	147	376	71	178	55	93	218	20	54	89	225	132	75	15

¹⁾ 包含螺栓头的尺寸。 ²⁾ 该尺寸为 DIN EN 50347 标准所列机座号对应尺寸。

IM B5 以及 IM V1 安装方式 Type of construction IM B5 and IM V1



IM B14 安装方式 Type of construction IM B14



机座号 Frame size	类型 Type 1MT8014	极数 poles	尺寸图依据 IEC 标准 Dimension designation according to IEC standards				驱动端轴伸直径 DE shaft extension						非驱动端轴伸 (选项号为 L72) NDE shaft extension (option code L72)								
			HH	K/K'	L	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
80 M	0D □ 2	2,4	82.5	10	370	410	111	19	M6 × 16	40	32	4	6	21.5	19	M6 × 16	40	32	4	6	21.5
	0D □ 3	2,4,6	82.5	10	370	410	111	19	M6 × 16	40	32	4	6	21.5	19	M6 × 16	40	32	4	6	21.5
90 S	0E □ 0	2,4,6	91	10	400	452	111	24	M8 × 19	50	40	5	8	27	24	M8 × 19	50	40	5	8	27
90 L	0E □ 4	2,4,6	91	10	440	492	111	24	M8 × 19	50	40	5	8	27	24	M8 × 19	50	40	5	8	27
100L	1A □ 4	2,4,6	98.5	12	530	592	120	ø28	M10x22	60	50	5	8	31	ø28	M10x22	60	50	5	8	31
	1A □ 5	4	98.5	12	530	592	120	ø28	M10x22	60	50	5	8	31	ø28	M10x22	60	50	5	8	31
112M	1B □ 2	2,4,6	105.5	12	505	570	120	ø28	M10x22	60	50	5	8	31	ø28	M10x22	60	50	5	8	31
132S	1C □ 0	2,4,6,8	122.5	12	525	610	120	ø38	M12x28	80	70	5	10	41	ø38	M12x28	80	70	5	10	41
	1C □ 1	2	122.5	12	525	610	120	ø38	M12x28	80	70	5	10	41	ø38	M12x28	80	70	5	10	41
132M	1CC2;1CD2	6,8	122.5	12	525	610	120	ø38	M12x28	80	70	5	10	41	ø38	M12x28	80	70	5	10	41
	1CB2 1C □ 3	4,6	122.5	12	565	652	120	ø38	M12x28	80	70	5	10	41	ø38	M12x28	80	70	5	10	41

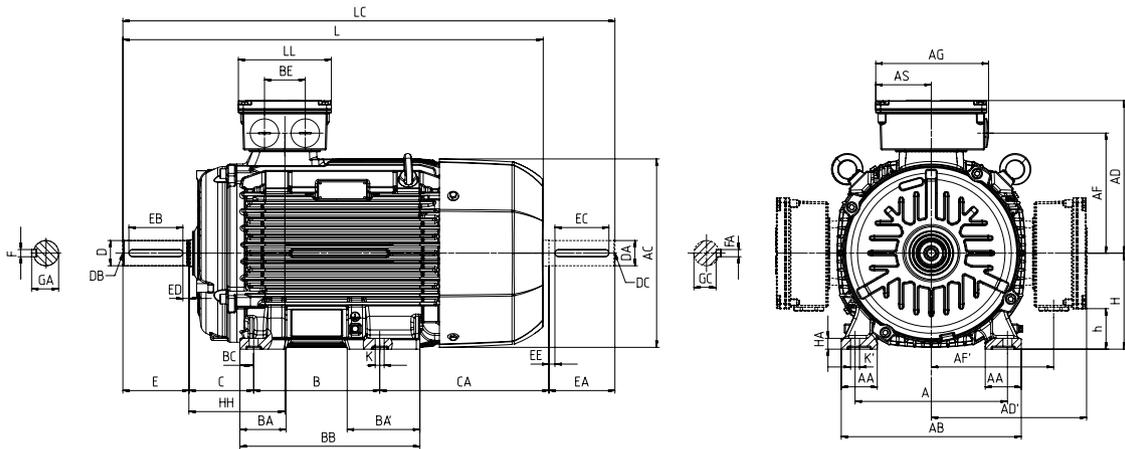
¹⁾ Measured across the bolt heads. ²⁾ This dimension is assigned in DIN EN 50347 to the frame size listed.

外形尺寸 Dimension drawings

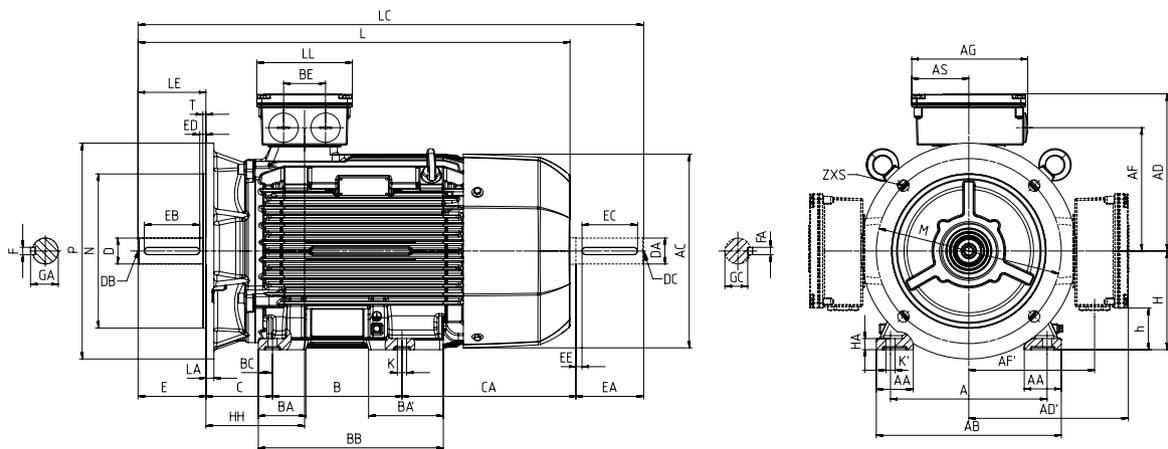
1MT8014 系列电机

机座号从 80M ~ 280M Frame sizes 80M to 280M

IM B3 安装结构方式 Type of construction IM B3



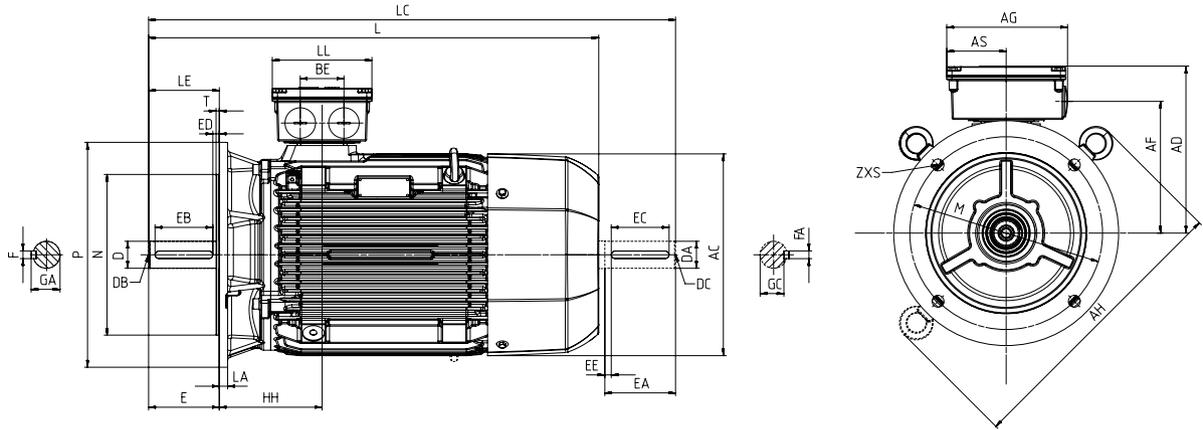
IM B35 安装结构方式 Type of construction IM B35



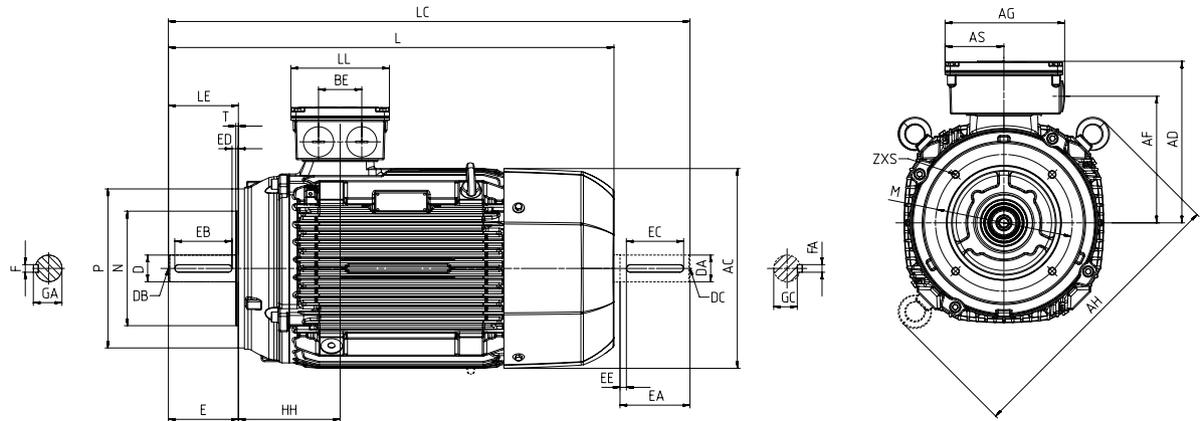
机座号 Frame size	类型 Type 1MT8014	极数 poles	尺寸图依据 IEC 标准 Dimension designation according to IEC standards																			
			A	AA	AB	AC ¹⁾	AD/AD'	AF/AF'	AG	AH	AS	B ²⁾	BA	BA'	BB	BC	BE	C	CA ²⁾	H	h	HA
160M	1D □ 2	2, 4, 6, 8	254	60	300	314	260	201	190	454	93	210	77	77	256	23	68	108	247	160	66	18
	1D □ 3	2, 8	254	60	300	314	260	201	190	454	93	210	77	77	256	23	68	108	247	160	66	18
160L	1D □ 4	2, 4, 6, 8	254	60	300	314	260	201	190	454	93	254	77	121	300	23	68	108	238	160	66	18
180M	1E □ 2	2, 4	279	60	339	354	285	224	190	496	93	241	91	129	328	24.5	68	121	308	180	86	20
	1E □ 4	4, 6, 8	279	60	339	354	285	224	190	496	93	279	91	129	328	24.5	68	121	270	180	86	20
200	2A □ 4	2, 6	318	70	378	393	315	252	245	560	104	305	100	100	355	25	85	133	279	200	67.5	25
	2A □ 5	2, 4, 6, 8	318	70	378	393	315	252	245	560	104	305	100	100	355	25	85	133	279	200	67.5	25
225	2B □ 0 2B □ 2	4, 8	356	80	436	443	355	289	245	612	104	286	100	123	361	25	85	149	327	225	92.5	34
		2	356	80	436	443	355	289	245	612	104	311	100	123	361	25	85	149	302	225	92.5	34
		4	356	80	436	443	355	289	245	612	104	311	100	123	361	25	85	149	342	225	92.5	34
		6, 8	356	80	436	443	355	289	245	612	104	311	100	123	361	25	85	149	302	225	92.5	34

¹⁾ 包含螺栓头的尺寸。 ²⁾ 该尺寸为 DIN EN 50347 标准所列机座号对应尺寸。

IM B5 以及 IM V1 安装方式 Type of construction IM B5 and IM V1



IM B14 安装方式 Type of construction IM B14



机座号 Frame size	类型 Type 1MT8014	极数 poles	尺寸图依据 IEC 标准 Dimension designation according to IEC standards					驱动端轴伸直径 DE shaft extension								非驱动端轴伸 (选项号为 L72) NDE shaft extension (option code L72)					
			HH	K/K'	L	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
160M	1D □ 2	2, 4, 6, 8	160	15	670	785	155	ø42	M16x36	110	90	10	12	45	ø42	M16x36	110	90	10	12	45
	1D □ 3	2, 8	160	15	670	785	155	ø42	M16x36	110	90	10	12	45	ø42	M16x36	110	90	10	12	45
160L	1D □ 4	2, 4, 6, 8	160	15	705	820	155	ø42	M16x36	110	90	10	12	45	ø42	M16x36	110	90	10	12	45
180M	1E □ 2	2,4	166	15	775	890	155	ø48	M16x36	110	100	5	14	51.5	ø48	M16x36	110	100	5	14	51.5
	1E □ 4	4,6,8	166	15	775	890	155	ø48	M16x36	110	100	5	14	51.5	ø48	M16x36	110	100	5	14	51.5
200	2A □ 4	2,6	207	19	825	937	213	ø55	M20x42	110	100	5	16	59	ø55	M20x42	110	100	5	16	59
	2A □ 5	2,4,6,8	207	19	825	937	213	ø55	M20x42	110	100	5	16	59	ø55	M20x42	110	100	5	16	59
225	2B □ 0	4,8	208	19	895	1042	213	ø60	M20x42	140	125	7.5	18	64	ø60	M20x42	140	125	7.5	18	64
		2	208	19	865	982	213	ø55	M20x42	110	100	5	16	59	ø55	M20x42	110	100	5	16	59
	2B □ 2	4	208	19	935	1082	213	ø60	M20x42	140	125	7.5	18	64	ø60	M20x42	140	125	7.5	18	64
		6,8	208	19	895	1042	213	ø60	M20x42	140	125	7.5	18	64	ø60	M20x42	140	125	7.5	18	64

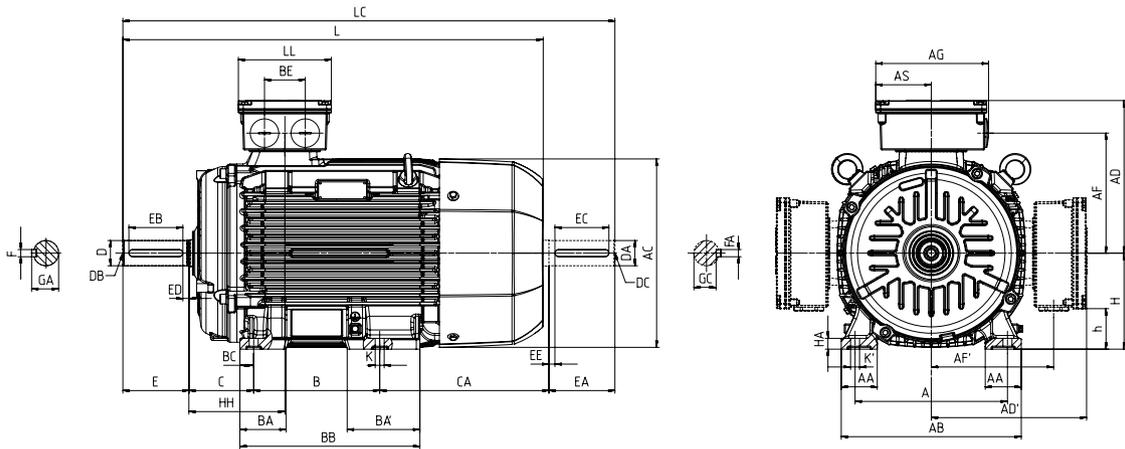
¹⁾ Measured across the bolt heads. ²⁾ This dimension is assigned in DIN EN 50347 to the frame size listed.

外形尺寸 Dimension drawings

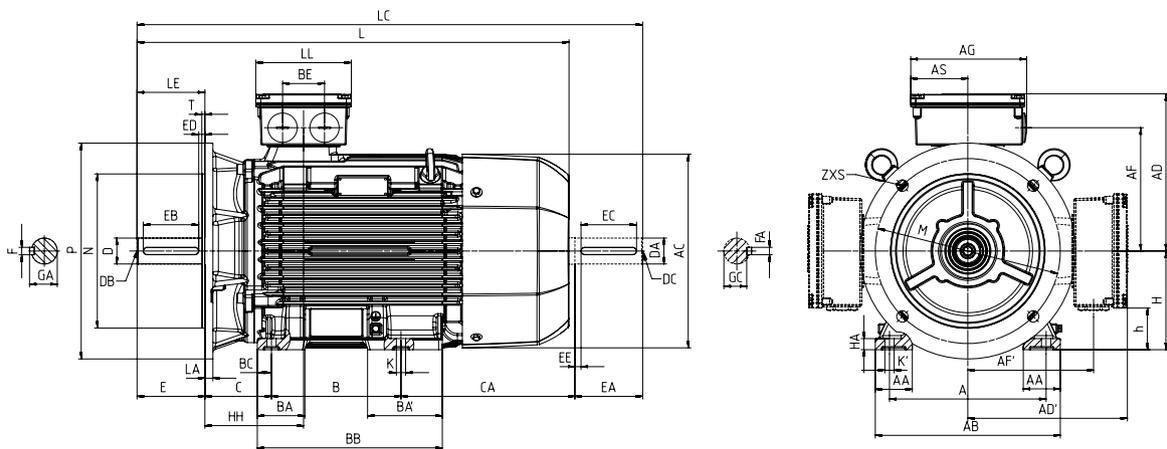
1MT8014 系列电机

机座号从 80M ~ 280M Frame sizes 80M to 280M

IM B3 安装结构方式 Type of construction IM B3



IM B35 安装结构方式 Type of construction IM B35

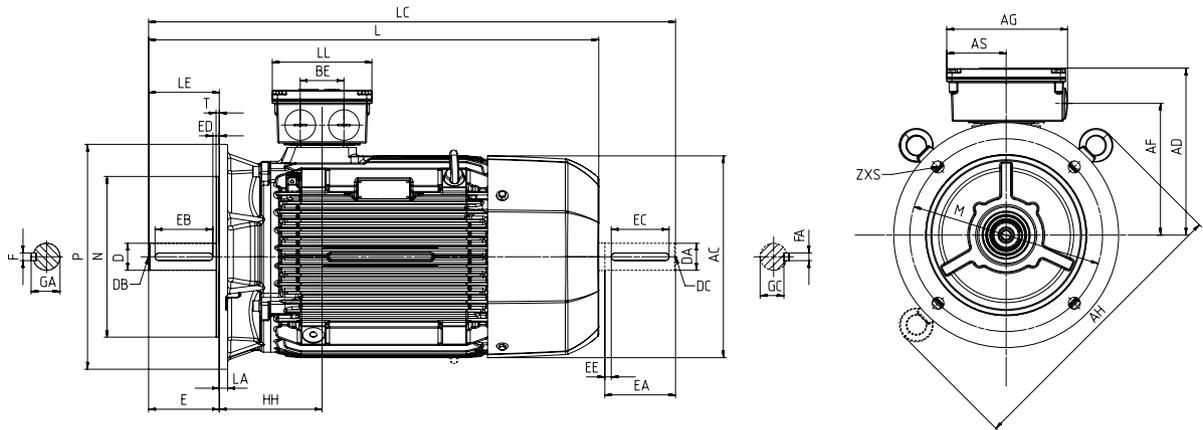


机座号 Frame size	类型 Type 1MT8014	极数 poles	尺寸图依据 IEC 标准 Dimension designation according to IEC standards																			
			A	AA	AB	AC ¹⁾	AD/AD'	AF/AF'	AG	AH	AS	B ²⁾	BA	BA'	BB	BC	BE	C	CA ²⁾	H	h	HA
250M	2C □ 2	2	406	100	490	484	410	334	292	682	119	349	111	111	409	30	84	168	315	250	84	40
		4,6,8	406	100	490	484	410	334	292	682	119	349	111	111	409	30	84	168	315	250	84	40
280 S	2D □ 0	2	457	100	540	557	420	346	292	700	119	368	114	165	479	30	84	190	327	280	114	40
		4,6,8	457	100	540	557	420	346	292	700	119	368	114	165	479	30	84	190	327	280	114	40
280 M	2D □ 2	2	457	100	540	557	420	346	292	700	119	419	114	165	479	30	84	190	276	280	114	40
		4	457	100	540	557	420	346	292	700	119	419	114	114	479	30	84	190	331	280	114	40
		6,8	457	100	540	557	420	346	292	700	119	419	114	165	479	30	84	190	276	280	114	40

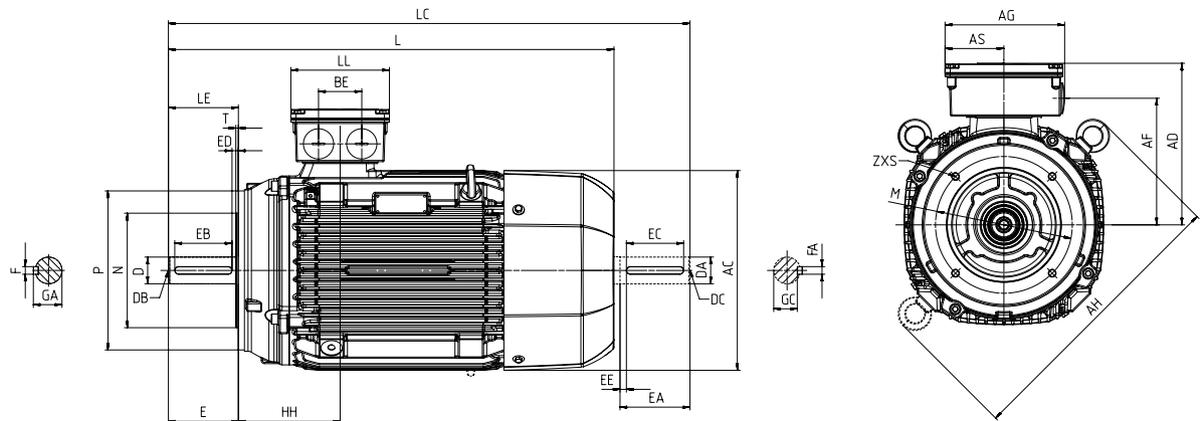
¹⁾ 包含螺栓头的尺寸。

²⁾ 该尺寸为 DIN EN 50347 标准所列机座号对应尺寸。

IM B5 以及 IM V1 安装方式 Type of construction IM B5 and IM V1



IM B14 安装方式 Type of construction IM B14



机座号 Frame size	类型 Type 1MT8014	极数 poles	尺寸图依据 IEC 标准 Dimension designation according to IEC standards					驱动端轴伸直径 DE shaft extension							非驱动端轴伸 (选件号为 L72) NDE shaft extension (option code L72)						
			HH	K/K'	L	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
250M	2C □ 2	2	248	24	965	1112	246	ø60	M20x42	140	125	7.5	18	64	ø60	M20x42	140	125	7.5	18	64
		4,6,8	248	24	965	1112	246	ø65	M20x42	140	125	7.5	18	69	ø65	M20x42	140	125	7.5	18	69
280 S	2D □ 0	2	264	24	1020	1165	246	ø65	M20x42	140	125	7.5	18	69	ø65	M20x42	140	125	7.5	18	69
		4,6,8	264	24	1020	1165	246	ø75	M20x42	140	125	7.5	20	79.5	ø75	M20x42	140	125	7.5	20	79.5
280 M	2D □ 2	2	264	24	1020	1165	246	ø65	M20x42	140	125	7.5	18	69	ø65	M20x42	140	125	7.5	18	69
		4	264	24	1075	1220	246	ø75	M20x42	140	125	7.5	20	79.5	ø75	M20x42	140	125	7.5	20	79.5
		6,8	264	24	1020	1165	246	ø75	M20x42	140	125	7.5	20	79.5	ø75	M20x42	140	125	7.5	20	79.5

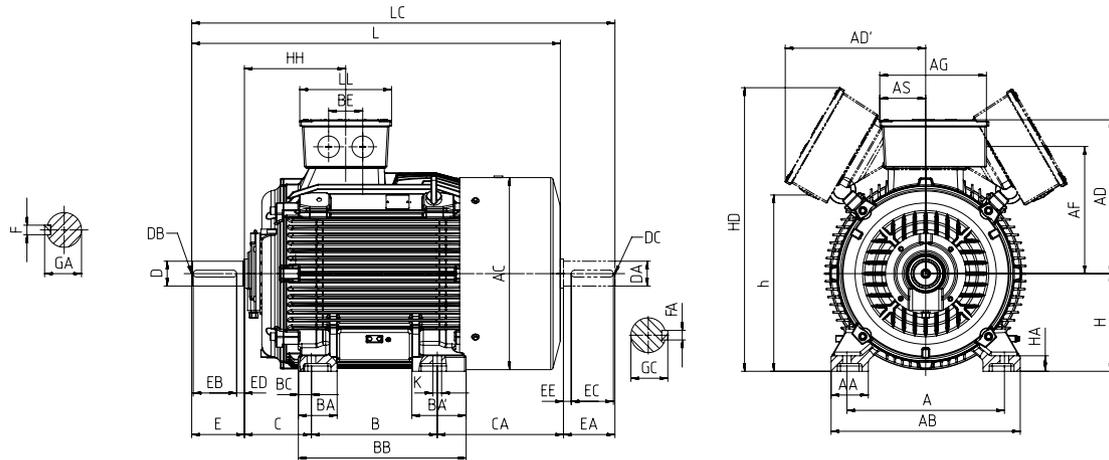
¹⁾ Measured across the bolt heads. ²⁾ This dimension is assigned in DIN EN 50347 to the frame size listed.

外形尺寸 Dimension drawings

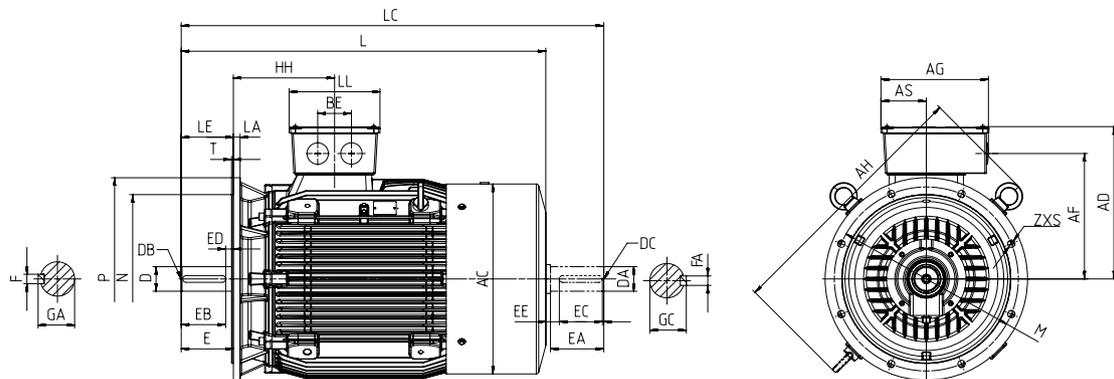
1MT8014 系列电机

机座号从 315S ~ 355L Frame sizes 315S to 355L

IM B3 安装结构方式 Type of construction IM B3



IM B5/IMV1 安装结构方式 Type of construction IM B5/IMV1

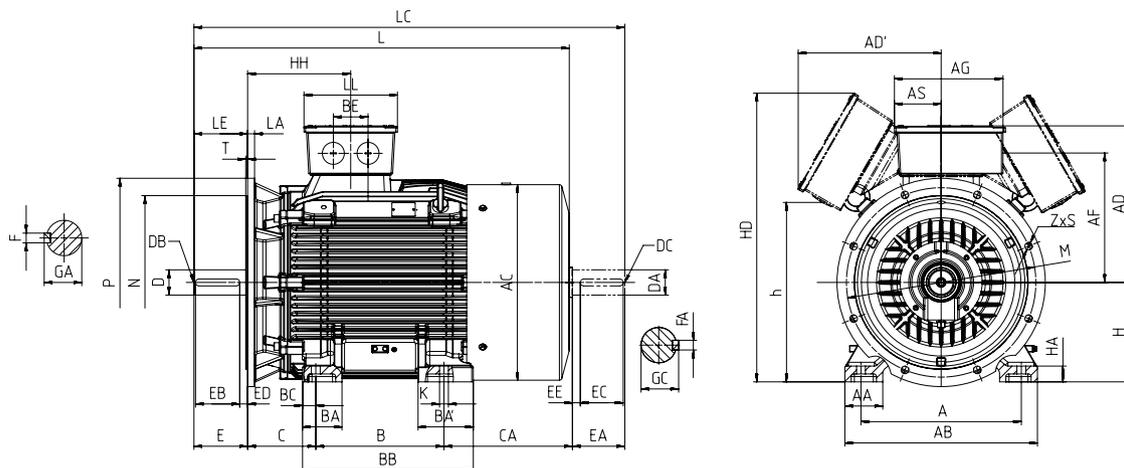


机座号 Frame size	类型 Type 1MT8014	极数 poles	尺寸图依据 IEC 标准 Dimension designation according to IEC standards																				
			A	AA	AB	AC ¹⁾	AD	AD'	AF	AG	AH	AS	B ²⁾	BA	BA'	BB	BC	BE	C	CA ²⁾	H	h	HA
315 S	3A □ 0	2	508	120	610	640	500	455	409	352	860	148	406/457	125	175	541	42	110	216	413	315	607	50
		4,6,8	508	120	610	640	500	455	409	352	860	148	406/457	125	175	541	42	110	216	413	315	607	50
315 M	3A □ 2	2	508	120	610	640	500	455	409	352	860	148	406/457	125	175	541	42	110	216	362	315	607	50
		4,6,8	508	120	610	640	500	455	409	352	860	148	406/457	125	175	541	42	110	216	362	315	607	50
315 L	3AA5	2	508	120	610	640	500	455	409	352	860	148	508	125	125	592	42	110	216	361	315	607	50
	3AA6/3AA7	2	508	120	610	640	500	455	409	352	860	148	508	125	125	592	42	110	216	456	315	607	50
	3AB5/3AB6/3AB7	4	508	120	610	640	500	455	409	352	860	148	508	125	125	592	42	110	216	456	315	607	50
	3A □ 5/3A □ 6	6,8	508	120	610	640	500	455	409	352	860	148	508	125	125	592	42	110	216	361	315	607	50
355 M	3B □ 2	2	610	120	730	710	640	535	533	397	975	174	560	153	153	696	68	130	254	506	355	746	53
		4,6,8	610	120	730	710	640	535	533	397	975	174	560	153	153	696	68	130	254	506	355	746	53
355 M	3B □ 3	2	610	120	730	710	640	535	533	397	975	174	560	153	153	696	68	130	254	506	355	746	53
		4,6,8	610	120	730	710	640	535	533	397	975	174	560	153	153	696	68	130	254	506	355	746	53
355 M	3B □ 4	6	610	120	730	710	640	535	533	397	975	174	560	153	153	696	68	130	254	506	355	746	53
355 L	3B □ 5/3B □ 6	2	610	120	730	710	640	535	533	397	975	174	630	153	153	750	68	130	254	516	355	746	53
		4,6,8	610	120	730	710	640	535	533	397	975	174	630	153	153	750	68	130	254	516	355	746	53

¹⁾ 包含螺栓头的尺寸。

²⁾ 该尺寸为 DIN EN 50347 标准所列机座号对应尺寸。

IM B35 安装方式 Type of construction IM B35



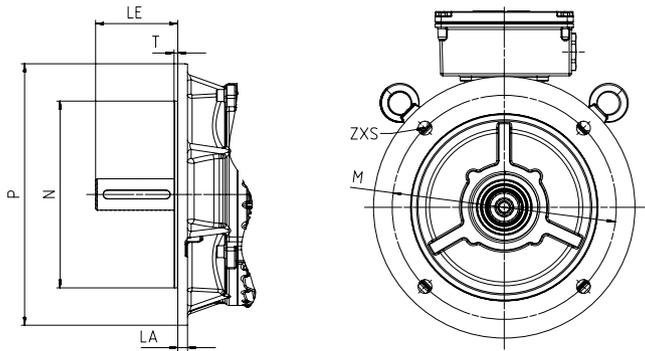
机座号 Frame size	类型 Type 1MT8014	极数 poles	尺寸图依据 IEC 标准 Dimension designation according to IEC standards						驱动端轴伸直径 DE shaft extension						非驱动端轴伸 (选项号为 L72) NDE shaft extension (option code L72)							
			HD	HH	K	L	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
315 S	3A □ 0	2	915	330	ø28	1165	1315	296	ø65	M20×42	140	125	10	18	69	ø65	M20×42	140	125	10	18	69
		4,6,8	915	330	ø28	1195	1375	296	ø80	M20×42	170	140	25	22	85	ø80	M20×42	170	140	25	22	85
315 M	3A □ 2	2	915	330	ø28	1165	1315	296	ø65	M20×42	140	125	10	18	69	ø65	M20×42	140	125	10	18	69
		4,6,8	915	330	ø28	1195	1375	296	ø80	M20×42	170	140	25	22	85	ø80	M20×42	170	140	25	22	85
315 L	3AA5	2	915	330	ø28	1215	1365	296	ø65	M20×42	140	125	10	18	69	ø65	M20×42	140	125	10	18	69
	3AA6/3AA7	2	915	330	ø28	1310	1460	296	ø65	M20×42	140	125	10	18	69	ø65	M20×42	140	125	10	18	69
	3AB5/3AB6/3AB7	4	915	330	ø28	1340	1520	296	ø80	M20×42	170	140	25	22	85	ø80	M20×42	170	140	25	22	85
	3A □ 5/3A □ 6	6,8	915	330	ø28	1245	1425	296	ø80	M20×42	170	140	25	22	85	ø80	M20×42	170	140	25	22	85
355 M	3B □ 2	2	1095	322	ø28	1440	1600	347	ø75	M20×42	140	125	10	20	79.5	ø75	M20×42	140	125	10	20	79.5
		4,6,8	1095	322	ø28	1470	1660	347	ø95	M24×50	170	140	25	25	100	ø95	M24×50	170	140	25	25	100
355 M	3B □ 3	2	1095	322	ø28	1440	1600	347	ø75	M20×42	140	125	10	20	79.5	ø75	M20×42	140	125	10	20	79.5
		4,6,8	1095	322	ø28	1470	1660	347	ø95	M24×50	170	140	25	25	100	ø95	M24×50	170	140	25	25	100
355 M	3B □ 4	6	1095	322	ø28	1470	1660	347	ø95	M24×50	170	140	25	25	100	ø95	M24×50	170	140	25	25	100
355 L	3B □ 5/3B □ 6	2	1095	322	ø28	1520	1680	347	ø75	M20×42	140	125	10	20	79.5	ø75	M20×42	140	125	10	20	79.5
		4,6,8	1095	322	ø28	1550	1740	347	ø95	M24×50	170	140	25	25	100	ø95	M24×50	170	140	25	25	100

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

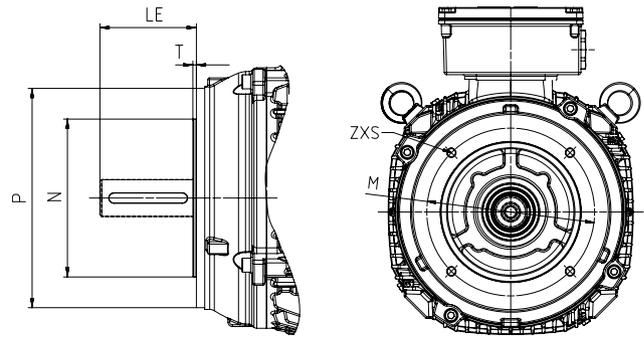
外形尺寸 Dimension drawings

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



机座号 Frame size	安装结构形式 Type of construction	法兰带通孔 (FF/A) / 带内螺纹孔 (FT/C) Flange with through holes (FF/A) / tapped holes (FT/C)	尺寸图依据 IEC 标准 Dimension designation according to IEC standards							
		按照 DIN EN 50347 标准 According to DIN EN 50347	LA ¹⁾	LE	M	N	P ²⁾	S	T	Z
80	IM B5,IM B35,IM V1,IM V3	FF165	10	40	165	130	200	12	3.5	4
	IM B14,IM V18,IM V19	FT100	-	40	100	80	120	M6	3	4
90	IM B5,IM B35,IM V1,IM V3	FF165	10	50	165	130	200	12	3.5	4
	IM B14,IM V18,IM V19	FT130	-	50	115	95	140	M8	3	4
100	IM B5, IM B35, IM V1, IM V3	FF215	11	60	215	180	250	14.5	4	4
	IM B14, IM V18, IM V19	FT130	-	60	130	110	160	M8	3.5	4
112	IM B5, IM B35, IM V1, IM V3	FF215	11	60	215	180	250	14.5	4	4
	IM B14, IM V18, IM V19	FT130	-	60	130	110	160	M8	3.5	4
132	IM B5, IM B35, IM V1, IM V3	FF265	12	80	265	230	300	14.5	4	4
	IM B14, IM V18, IM V19	FF165	-	80	165	130	200	M10	3.5	4
160	IM B5, IM B35, IM V1, IM V3	FF300	13	110	300	250	350	18.5	5	4
	IM B14, IM V18, IM V19	FT215	-	110	215	180	250	M12	4	4
180	IM B5, IM B35, IM V1, IM V3	FF300	13	110	300	250	350	18.5	5	4
200	IM B5, IM B35, IM V1, IM V3	FF350	15	110	350	300	400	18.5	5	4
225	IM B5, IM B35, IM V1, IM V3	FF400	16	110/140	400	350	450	18.5	5	8
250	IM B5, IM B35, IM V1, IM V3	FF500	18	140	500	450	550	18.5	5	8
280	IM B5, IM B35, IM V1, IM V3	FF500	18	140	500	450	550	18.5	5	8
315	IM B5, IM B35, IM V1, IM V3	FF600	22	140/170	600	550	660	24	6	8
355	IM B35, IM V1	FF740	25	140/170	740	680	800	24	6	8

¹⁾ 法兰厚度 LA 尺寸是指法兰安装孔处的厚度;

²⁾ 请注意, IM B35 安装方式全圆法兰外圆可能会低于机座底脚。

¹⁾ Flange LA size refers to the thickness at the flange mounting hole;

²⁾ Please note, the outer circle dimension maybe lower than the base foot in IM B35.

认证 Certificates



茵梦达电机（中国）有限公司

地址：江苏省仪征市汽车工业园众鑫路99号

电话：+86 514 85718108

传真：+86 514 85718083

邮编：211400

邮箱：motorservice.ssml.cn@innomotics.com

网址：www.beide-motor.cn

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