



## YBE4系列超高效率隔爆型三相异步电动机

YBE4 series super high efficiency flameproof three-phase asynchronous motor



**江苏大中电机股份有限公司**  
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### Brief Introduction

江苏大中电机股份有限公司(简称大中电机)是一家具有现代化生产规模的综合性电机制造企业。位于经济发达的长江三角洲江苏省靖江市，京沪高速、宁通高速、新长铁路贯穿而过，距上海、南京均约1.5小时车程，交通十分便捷。

大中电机是1996年由国营靖江电机电器总厂按现代企业制度要求改制而成，现有员工1860人，工程技术人员460多人，占地面积25万平方米，拥有总资产5.2亿元，年生产能力50万台，1200万千瓦。主要产品有大、中型高压电机、直流电机、同步电机、隔爆电机以及各种交流电动机等。广泛用于电站、冶金、煤矿、机械、石油、化工、船舶、交通、水利、水泥、造纸、环保等厂矿企业，产品畅销全国各地。其中，出口量占生产总量的三分之一，远销世界三十多个国家和地区。

近年来，大中电机坚持科技创新，注重技术改造，不断加大新品开发力度。使原有的大、中型高压电机、直流电机、各种交流电机产品的质量产量都跃上新的台阶，同时成功开发了高速电机、尼玛超高效防爆电机，高温电机、四级隔爆船用电机等新产品，投放市场，深受用户欢迎。

大中电机坚持管理创新，全面提升现代化管理水平，1996年在同行业中率先通过了ISO9001质量管理体系认证，并先后获得了CQC、CCC、CCS证书、美国UL、加拿大CSA、欧盟CE、ATEX等认证。是国家科技部命名的“全国微特电机产业基地”。

大中电机坚持品牌战略，注重产品质量，产品先后荣获“江苏省名牌产品”、“江苏省信得过产品”、国家“质量信得过产品”、“中国名牌产品”、“中国驰名商标”等荣誉。产品质量稳定可靠，部分产品达到了国际同类先进水平。大中电机的规模及综合经济效益排列在全国电机行业前列。

大中电机坚持“发展科技拓市场，强化质量铸品牌，严格管理增效益，诚信为本誉天下”的工厂方针，发扬“诚信、团结、敬业、创新”的企业精神，竭诚为各行各业广大用户提供优质的产品和满意的服务。大中电机全体员工正努力将大中品牌发展成为国际知名品牌。

Jiangsu Dazhong Electric Limited by Share Ltd (referred to as large and medium-sized motor) is a modern production scale integrated motor manufacturing enterprises. Is located in the economically developed Yangtze River Delta -- Jingjiang City, Jiangsu Province, the Beijing Shanghai Expressway, Ningtong expressway, the new long railway runs through, from Shanghai, Nanjing are about 1.5 hours by car, the traffic is very convenient.

Large and medium-sized motor is 1996 by the state-run Jingjiang electrical appliance factory according to the requirements of modern enterprise system reform, the existing staff of 1860 people, engineering and technical personnel more than 460 people, covers an area of 250000 square meters, with total assets of 520000000 yuan, annual production capacity of 500000 units, 12000000 kilowatts. The main products are high, medium high voltage motor, DC motor, synchronous motor, explosion-proof motor and AC motor etc.. Widely used in power plants, metallurgy, coal, machinery, petroleum, chemical, marine, transportation, water conservancy, cement, paper, environmental protection and other industrial enterprises, products sell well all over the country. Among them, exports accounted for 1/3 of total production, exported to the world more than 30 countries and regions.

In recent years, large and medium-sized motor adhere to scientific and technological innovation, focus on technological transformation, increasing new product development efforts. The yield and quality of the large and medium-sized high-voltage motors, DC motor, AC motor products are new step, at the same time, the successful development of the high speed motor, fuck ultra efficient explosion-proof motor, motor, four stage high temperature explosion-proof marine motor and other new products, put on the market, deeply welcomed by the users.

Large and medium-sized electrical adhere to management innovation, improve the modern management level, in 1996 in the same industry in the first through the ISO9001 quality management system certification, and has obtained CQC, CCC, CCS certificate, UL, Canada CSA, American European Union CE, ATEX certification. National Ministry of science and technology was named "national micro motor industry base".

Large and medium-sized electrical adhere to brand strategy, pay attention to product quality, product has won the "brand-name products in Jiangsu province", "trustworthy product of Jiangsu province", "national quality trustworthy product", "Chinese brand-name products", "A Well-Known Trademark in China" and other honorary. Stable and reliable product quality, some products have reached the international advanced level of similar. The size of large and medium-sized motors and integrated economic order in the forefront of the national motor industry.

Large and medium-sized electrical adhere to the "science and technology extension market, strengthen the quality of casting brand, strict management to increase efficiency, integrity world reputation" the factory approach, carry forward the "integrity, unity, professionalism, innovation" the enterprise spirit, dedication to provide quality products and satisfactory service for the vast number of users of all walks of life. Large and medium-sized electrical staff's efforts to become an international famous brand and brand development.



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YBE4 series super high efficiency flameproof three-phase asynchronous motor

### 概述

YBE4系列超高效率隔爆型三相异步电动机是我公司电动机基础产品，本系列电动机的功率等级、安装尺寸符合国际电工委员会(IEC)标准，其对应关系与德国DIN42673标准相同。

本系列电动机隔爆性能符合GB3836.1-2010《爆炸性环境第1部分：设备.通用要求》和GB3836.2-2010《爆炸性环境第2部：由隔爆外壳“d”保护的设备》的规定，防爆标志为Ex d II B T4 Gb、Ex d II C T4 Gb。适用于除煤矿外爆炸性气体环境用设备，具有“高”的保护级别。

在基础系列产品上，可按使用环境、气候、腐蚀等条件制造成特制型。

该系列电动机效率指标符合GB18613-2020《中小型三相异步电动机能效限定值及能效等级》中规定的能效2级的效率值与IEC60034-30的IE4保持一致。

### General Description

YBE4 series superhigh-efficiency motor flameproof three-phase asynchronous motor is our company basic product, the series of the power rating of the motor and installation size are in line with the international electrotechnical commission (IEC) standard and its corresponding relationship with German DIN42673 standard is the same.

Flame-proof performance of this series motor conforms to GB3836.1-2010 《explosive environment, part 1: equipment. General requirements》 and GB3836.2-2010 《explosive environment department: 2 by flame-proof enclosures “d” protect the equipment》 of the provisions of the explosion-proof marks for the Ex d II B T4 Gb、Ex d II C T4 Gb. Suitable for the explosive gas environment use equipment in exceptfor the use of coal mine, has a “high” level of protection.

On the basic series of products, it can be made into a special type according to the environment, climate andcorrosion conditions and so on.

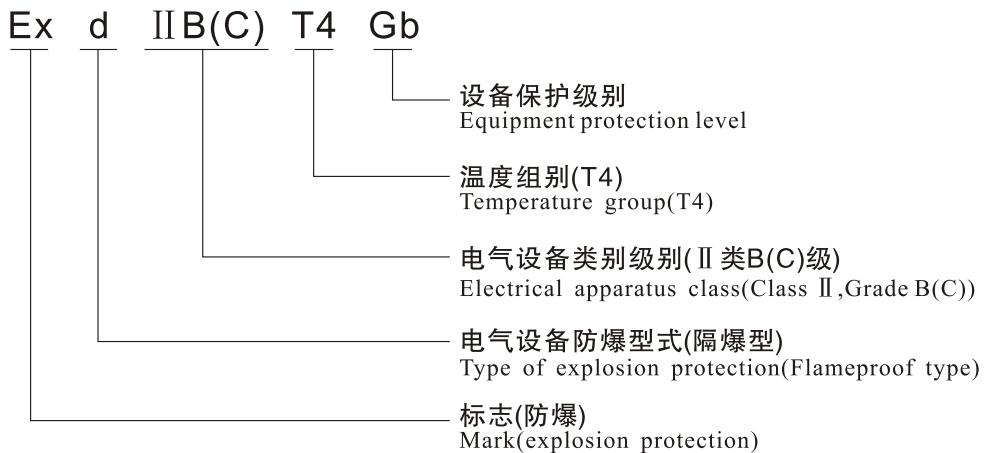
The efficiency index of this series of motors accords with the efficiency value of grade 2 stipulated in GB18613-2020"limited value and grade of energy efficiency of medium and small-sized three-phase asynchronous motors" , which is consistent with IE4 of IEC60034-30.



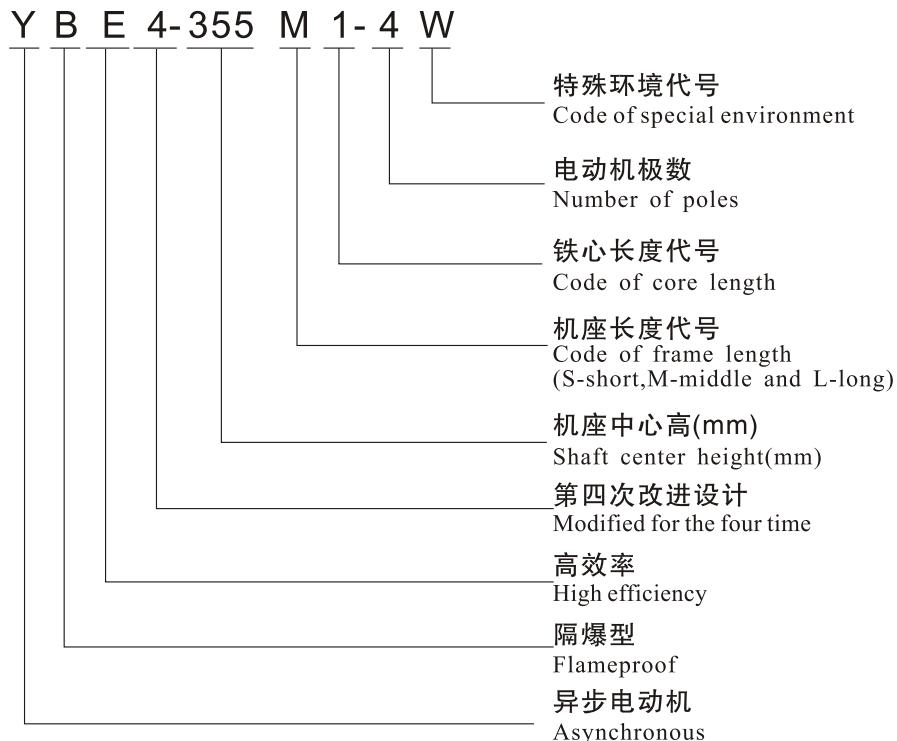
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### 电动机防爆标志代表的意义 Explanation of Ex marking and designation



### 电动机型号代表的意义 Explanation of type designation





# YBE4系列超高效率隔爆型三相异步电动机

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### 结构及使用条件 Construction and using condition

#### ◆ 电动机结构 Motor construction

##### Motor construction

1. 电动机的防爆等级为 Ex d II B T4 Gb、Ex d II C T4 Gb，适用于 II 类A级、II类B级及 II类C级、温度组别为T1、T2、T3和T4组爆炸性混合物存在的环境。
2. 电动机主体外壳防护等级为IP55，可按要求制成IP65，IP56、IP66。
3. 电动机的冷却方式为IC411。
  1. The explosive grade of the motor is Ex d II B T4 Gb、Ex d II C T4 Gb, which is suitable for the environment Class II grade A, Class II grade B and Class II grade C, temperature grade T1,T2,T3 and T4 with explosive mixture.
  2. The protection grade of the motor frame is IP55、Can be made according to the requirement IP65, IP56、IP66.
  3. The cooling method of the motor is IC411.

#### ◆ 电动机使用电气条件 Electrical Condition

1. 额定电压：220/380V、230/400V、240/415V、380/660V、400/690V、415/720V、660/1140V、440V、460V、480V、525V、575V、600V。
2. 额定频率 :50&60Hz。
3. 定额：连续工作制S1。
  1. Rating voltage: 220/380V、230/400V、240/415V、380/660V、400/690V、415/720V、660/1140V、440V、460V、480V、525V、575V、600V.
  2. Rating frequency: 50&60Hz.
  3. Load duty: Continuous duty S1

#### ◆ 电动机使用环境条件 Circumstance Conditions

海拔不超过1000m，环境空气温度随季节而变化，为-20℃~+40℃的户内环境  
Less than 1000m sea level, the ambient air temperature varies with the season, for indoor user ranging from -20℃to +40℃ for indoor use.

#### ◆ 特殊使用环境 Special using environment

1. YBE4-W适用于室内环境 suitable for indoor environment
2. YBE4-TH适用于室内湿热带环境 suitable for humid tropical environment
3. YBE4-THW适用于户外湿热带环境 suitable for outdoor humid tropical environment
4. YBE4-TA适用于户内干热带型环境 suitable for indoor dry tropical environment
5. YBE4-TAW适用于户外干热带型环境 suitable for outdoor dry tropical environment
6. YBE4-F1适用于户内中等腐蚀环境 suitable for indoor medium corrosive environment
7. YBE4-WF1适用于户外中等腐蚀环境 suitable for outdoor medium corrosive environment
8. YBE4-F2适用于户内强腐蚀环境 suitable for indoor strong corrosive environment

### 电动机技术数据 Technical Data

- 1.电动机机座号与功率及转速对应关系见表1
  - 2.电动机电性能参数见表2
- 1.The correlation between frame size, output and speed are shown in Table 1  
2.The electrical property parameters are shown in Table 2



**YBE4系列超高效率隔爆型三相异步电动机**  
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表1 Table 1

机座号 Frame size	同步转速 Synchronous speed(r/min)					
	3000	1500	1000	750	600	
	功率 Output(kW)					
63M 1 2	0.18	0.12	—	—	—	
	0.25	0.18				
71M 1 2	0.37	0.25	0.18	—	—	
	0.55	0.37	0.25			
80M 1 2	0.75	0.55	0.37	0.18	0.25	
	1.1	0.75	0.55	0.18		
90S	1.5	1.1	0.75	0.37	0.55	
90L	2.2	1.5	1.1			
100L 1 2	3	2.2	1.5	0.75	1.1	
		3		0.75		
112M	4	4	2.2	1.5	2.2	
132S 1 2	5.5	5.5	3	2.2		
	7.5					
132M 1 2	—	7.5	4	3	—	
			5.5			
160M 1 2	11	11	7.5	4	5.5	
	15			4		
160L	18.5	15	11	7.5	—	
180M	22	18.5	—	—		
180L	—	22	15	11	15	
200L 1 2	30	30	18.5	15		
	37		22			
225S	—	37	—	18.5	22	
225M	45	45	30	22		
250M	55	55	37	30		
280S	75	75	45	37	45	
280M	90	90	55	45		
315S	110	110	75	55	45	
315M	132	132	90	75	55	
315L 1 2	160	160	110	90	75	
	(185)	(185)	—	—	—	
355S 1 2	200	200	132	110	90	
355S 1 2	(185)	(185)	160	132	(90)	
	(200)	(200)				
355M 1 2	(220)	(220)	(185)	160	110	
	250	250	200		132	
355L 1 2	(280)	(280)	(220)	(185)	160	
	315	315	250	200	(185)	

注：1、63.71机座号防爆等级为Exd II BT4Gb； 2、带括号的为不优先推荐规格；

3、S、M、L后面的数字1、2分别代表同一机座号和转速下不同的功率。

Note: 1. 63.71 seat number explosion-proof grade is Exd II BT4Gb ;

2. Parentheses is not the preferred recommended specification;

3.S. M.L after the number 1.2 represent the same seat number and different power under the rotating speed respectively.



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表2 Table 2

型 号 Type	额 定 Rated		效 率 Efficiency %	功 率因数 Power factor $\cos\phi$	堵 转 转速 堵转转距 额定转距 Locked torque Rated torque		堵转电流 额定电流 Locked current Rated current	最 大 转距 额定转距 Pull out torque Rated torque		噪 声 Noise (L <sub>W</sub> ) dB(A)	振 动 等 级 Vibration class (mm/s)	转 动 惯量 Inertia movement (kg · m <sup>2</sup> )
	功 率 Output kW	电 流 Current (380V)A			Syn- chronous speed r/min	3000r/min		3000r/min	3000r/min			
同 步 转 速 Synchronous speed												
YBE4-63M1-2	0.18	0.5	2720	70.8	0.80	2.3	5.5	2.2	61	1.3	0.00038	
YBE4-63M2-2	0.25	0.6	2720	74.3	0.81	2.3	5.5	2.2	61	1.3	0.00049	
YBE4-71M1-2	0.37	0.9	2760	78.1	0.81	2.3	6.1	2.2	64	1.3	0.00060	
YBE4-71M2-2	0.55	1.3	2760	81.5	0.82	2.3	6.1	2.3	64	1.3	0.00075	
YBE4-80M1-2	0.75	1.6	2890	83.5	0.83	2.2	8.5	2.3	62	1.3	0.0013	
YBE4-80M2-2	1.1	2.4	2890	85.2	0.83	2.2	8.5	2.3	62	1.3	0.0017	
YBE4-90S-2	1.5	3.1	2900	86.5	0.85	2.2	9.0	2.3	67	1.3	0.0024	
YBE4-90L-2	2.2	4.4	2900	88.0	0.86	2.2	9.0	2.3	67	1.3	0.0033	
YBE4-100L-2	3	5.9	2900	89.1	0.87	2.2	9.5	2.3	74	1.3	0.0052	
YBE4-112M-2	4	7.7	2910	90.0	0.88	2.2	9.5	2.3	77	1.3	0.009	
YBE4-132S1-2	5.5	10.4	2945	90.9	0.88	2.0	9.5	2.3	79	1.3	0.026	
YBE4-132S2-2	7.5	14.0	2945	91.7	0.89	2.0	9.5	2.3	79	1.3	0.0322	
YBE4-160M1-2	11	20.3	2955	92.6	0.89	2.0	9.5	2.3	81	1.8	0.0649	
YBE4-160M2-2	15	27.4	2955	93.3	0.89	2.0	9.5	2.3	81	1.8	0.0795	
YBE4-160L-2	18.5	33.7	2955	93.7	0.89	2.0	9.5	2.3	81	1.8	0.0962	
YBE4-180M-2	22	40.0	2965	94.0	0.89	2.0	9.5	2.3	83	1.8	0.1494	
YBE4-200L1-2	30	54.2	2970	94.5	0.89	2.0	9.0	2.3	84	1.8	0.2436	
YBE4-200L2-2	37	66.6	2970	94.8	0.89	2.0	9.0	2.3	84	1.8	0.2784	
YBE4-225M-2	45	80.9	2975	95.0	0.89	2.0	9.0	2.3	86	1.8	0.364	
YBE4-250M-2	55	98.5	2980	95.3	0.89	2.0	9.0	2.3	89	1.8	0.9654	
YBE4-280S-2	75	133.9	2980	95.6	0.89	1.8	8.5	2.3	91	1.8	1.148	
YBE4-280M-2	90	160.4	2980	95.8	0.89	1.8	8.5	2.3	91	1.8	1.3632	
YBE4-315S-2	110	195.6	2985	96.0	0.89	1.8	8.5	2.3	92	2.3	1.8792	
YBE4-315M-2	132	234.2	2985	96.2	0.89	1.8	8.5	2.3	92	2.3	2.1728	
YBE4-315L1-2	160	283.6	2985	96.3	0.89	1.8	8.5	2.2	92	2.3	2.5252	
YBE4-315L2-2	200	353.8	2985	96.5	0.89	1.8	8.5	2.2	92	2.3	3.0537	
YBE4-355S1-2	(185)	332.4	2985	96.5	0.89	1.8	8.5	2.2	97	2.3	3.3220	
YBE4-355S2-2	(200)	353.8	2985	96.5	0.89	1.8	8.5	2.2	97	2.3	3.5641	
YBE4-355M1-2	(220)	380.6	2985	96.5	0.91	1.6	8.5	2.2	97	2.3	3.8107	
YBE4-355M2-2	250	432.5	2985	96.5	0.91	1.6	8.5	2.2	97	2.3	4.1547	
YBE4-355L1-2	(280)	484.4	2985	96.5	0.91	1.6	8.5	2.2	97	2.3	4.9134	
YBE4-355L2-2	315	545.0	2985	96.5	0.91	1.6	8.5	2.2	97	2.3	5.2242	



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续表2 Table 2 (continued) <

型 号 Type	额 定 Rated		效 率 Efficiency %	功 率 Power factor $\cos\phi$	堵 转 转速 堵转转距 额定转距 Locked torque		堵转电流 额定电流 Locked current	最 大 转距 额定转距 Pull out torque		噪 声 Noise (L <sub>W</sub> ) dB(A)	振 动 等 级 Vibration class (mm/s)	转 动 惯 量 Inertia movement (kg · m <sup>2</sup> )
	功 率 Output kW	电 流 Current (380V)A			Syn- chronous speed r/min	堵转转速 Synchronous speed 1500r/min		堵转转距 Rated torque	堵转转距 Rated torque			
同 步 转 速 Synchronous speed 1500r/min												
YBE4-63M1-4	0.12	0.4	69.8	0.72	2.3	4.4	2.2	52	1.3	0.00047		
YBE4-63M2-4	0.18	0.5	1340	1340	74.7	0.73	2.3	4.4	2.2	52	1.3	0.00052
YBE4-71M1-4	0.25	0.7	1350	77.9	0.74	2.3	5.2	2.2	55	1.3	0.00075	
YBE4-71M2-4	0.37	0.9	1350	81.1	0.75	2.3	5.2	2.3	55	1.3	0.00081	
YBE4-80M1-4	0.55	1.4	1435	83.9	0.74	2.3	6.3	2.3	56	1.3	0.0024	
YBE4-80M2-4	0.75	1.8	1435	85.7	0.74	2.3	8.5	2.3	56	1.3	0.0024	
YBE4-90S-4	1.1	2.6	1445	87.2	0.75	2.3	8.5	2.3	59	1.3	0.0045	
YBE4-90L-4	1.5	3.4	1445	88.2	0.76	2.3	9.0	2.3	59	1.3	0.0061	
YBE4-100L1-4	2.2	4.7	1460	89.5	0.79	2.3	9.0	2.3	64	1.3	0.0123	
YBE4-100L2-4	3	6.3	1460	90.4	0.80	2.3	9.5	2.3	64	1.3	0.0172	
YBE4-112M-4	4	8.3	1460	91.1	0.80	2.3	9.5	2.3	65	1.3	0.0222	
YBE4-132S-4	5.5	11.4	1475	91.9	0.80	2.0	9.5	2.3	71	1.3	0.0586	
YBE4-132M-4	7.5	15.2	1475	92.6	0.81	2.0	9.5	2.3	71	1.3	0.069	
YBE4-160M-4	11	21.6	1475	93.3	0.83	2.0	9.5	2.3	73	1.8	0.136	
YBE4-160L-4	15	28.9	1475	93.9	0.84	2.0	9.5	2.3	73	1.8	0.173	
YBE4-180M-4	18.5	35.1	1480	94.2	0.85	2.0	9.5	2.3	76	1.8	0.2465	
YBE4-180L-4	22	41.6	1480	94.5	0.85	2.0	9.5	2.3	76	1.8	0.2817	
YBE4-200L-4	30	56.5	1485	94.9	0.85	2.0	9.0	2.3	76	1.8	0.5275	
YBE4-225S-4	37	69.5	1485	95.2	0.85	2.0	9.0	2.3	78	1.8	0.7363	
YBE4-225M-4	45	84.3	1485	95.4	0.85	2.0	9.0	2.3	78	1.8	0.8071	
YBE4-250M-4	55	101.5	1485	95.7	0.86	2.0	9.0	2.3	79	1.8	1.3369	
YBE4-280S-4	75	136.4	1490	96.0	0.87	2.0	8.5	2.3	80	1.8	1.963	
YBE4-280M-4	90	161.7	1490	96.1	0.88	2.0	8.5	2.3	80	1.8	2.1771	
YBE4-315S-4	110	195.0	1490	96.3	0.89	1.8	8.5	2.2	88	2.3	3.6446	
YBE4-315M-4	132	233.8	1490	96.4	0.89	1.8	8.5	2.2	88	2.3	4.1342	
YBE4-315L1-4	160	279.6	1490	96.6	0.90	1.8	8.5	2.2	88	2.3	4.8958	
YBE4-315L2-4	200	349.2	1490	96.7	0.90	1.8	8.5	2.2	92	2.3	5.8749	
YBE4-355S1-4	(185)	323.0	1490	96.7	0.90	1.8	8.5	2.2	92	2.3	6.3237	
YBE4-355S2-4	(200)	349.2	1490	96.7	0.90	1.8	8.5	2.2	92	2.3	7.1527	
YBE4-355M1-4	(220)	384.1	1490	96.7	0.90	1.8	8.5	2.2	92	2.3	8.2643	
YBE4-355M2-4	250	436.4	1490	96.7	0.90	1.8	8.5	2.2	92	2.3	10.5792	
YBE4-355L1-4	(280)	488.8	1490	96.7	0.90	1.8	8.5	2.2	92	2.3	11.3641	
YBE4-355L2-4	315	549.9	1490	96.8	0.90	1.8	8.5	2.2	93	2.3	12.0642	



**YBE4系列超高效率隔爆型三相异步电动机**  
**YBE4 series super high efficiency flameproof three-phase asynchronous motor**

续表2 Table 2 (continued) <

型 号 Type	额 定 Rated		效 率 Efficiency %	功 率 Power factor $\cos\phi$	堵 转 转 速 Synchronous speed 1000r/min		堵转转距 额定转距 Locked torque	堵转电流 额定电流 Locked current	最大转距 额定转距 Pull out torque	噪音 Noise (L <sub>W</sub> ) dB(A)	振动等级 Vibration class (mm/s)	转动惯量 Inertia movement (kg · m <sup>2</sup> )
	功 率 Output kW	电 流 Current (380V)A			Sync speed r/min	额定转距 Rated torque						
同 步 转 速 Synchronous speed 1000r/min												
YBE4-71M1-6	0.18	0.6	880	70.1	0.66	1.9	4.0	2.0	52	1.3	0.00095	
YBE4-71M2-6	0.25	0.8	880	74.1	0.68	1.9	4.0	2.0	52	1.3	0.0014	
YBE4-80M1-6	0.37	1.3	890	62.6	0.69	1.9	4.7	2.0	54	1.3	0.0023	
YBE4-80M2-6	0.55	1.6	890	73.6	0.71	1.9	4.7	2.1	54	1.3	0.0030	
YBE4-90S-6	0.75	2.0	955	82.7	0.70	2.1	7.5	2.1	57	1.3	0.0057	
YBE4-90L-6	1.1	2.8	955	84.5	0.70	2.1	7.5	2.1	57	1.3	0.0083	
YBE4-100L-6	1.5	3.7	960	85.9	0.71	2.1	7.5	2.1	61	1.3	0.0159	
YBE4-112M-6	2.2	5.4	970	87.4	0.71	2.1	7.5	2.1	65	1.3	0.0286	
YBE4-132S-6	3	7.2	975	88.6	0.71	2.0	7.5	2.1	69	1.3	0.0457	
YBE4-132M1-6	4	9.4	975	89.5	0.72	2.0	8.0	2.1	69	1.3	0.0564	
YBE4-132M2-6	5.5	12.8	975	90.5	0.72	2.0	8.0	2.1	69	1.3	0.0806	
YBE4-160M-6	7.5	16.4	980	91.3	0.76	2.0	8.0	2.1	73	1.8	0.1401	
YBE4-160L-6	11	23.5	980	92.3	0.77	2.0	8.5	2.1	73	1.8	0.2081	
YBE4-180L-6	15	30.7	985	92.9	0.80	2.0	8.5	2.1	73	1.8	0.3384	
YBE4-200L1-6	18.5	37.6	985	93.4	0.80	2.0	8.5	2.1	73	1.8	0.433	
YBE4-200L2-6	22	44.0	985	93.7	0.81	2.0	8.5	2.1	73	1.8	0.5292	
YBE4-225M-6	30	59.0	985	94.2	0.82	2.0	8.3	2.1	74	1.8	0.8085	
YBE4-250M-6	37	71.7	990	94.5	0.83	2.0	8.3	2.1	76	1.8	1.5204	
YBE4-280S-6	45	86.9	990	94.8	0.83	2.0	8.5	2.0	78	1.8	2.1302	
YBE4-280M-6	55	104.6	990	95.1	0.84	2.0	8.5	2.0	78	1.8	2.4757	
YBE4-315S-6	75	142.2	990	95.4	0.84	1.6	8.0	2.0	83	2.3	4.0861	
YBE4-315M-6	90	168.3	990	95.6	0.85	1.6	8.0	2.0	83	2.3	4.8746	
YBE4-315L1-6	110	205.2	990	95.8	0.85	1.6	8.0	2.0	83	2.3	5.8782	
YBE4-315L2-6	132	242.9	990	96.0	0.86	1.6	8.0	2.0	83	2.3	7.0252	
YBE4-355S-6	160	293.8	990	96.2	0.86	1.6	8.0	2.0	85	2.3	11.1414	
YBE4-355M1-6	185	339.7	990	96.2	0.86	1.6	8.0	2.0	85	2.3	12.2834	
YBE4-355M2-6	200	293.8	990	96.3	0.86	1.6	8.0	2.0	85	2.3	13.9627	
YBE4-355L1-6	220	403.6	990	96.3	0.86	1.6	8.0	2.0	85	2.3	14.6547	
YBE4-355L2-6	250	457.7	990	96.5	0.86	1.6	8.0	2.0	85	2.3	15.7837	



**YBE4系列超高效能隔爆型三相异步电动机**  
**YBE4 series super high efficiency flameproof three-phase asynchronous motor**

续表2 Table 2 (continued) <

型 号 Type	额 定 Rated			效 率 Efficiency %	功 率因数 Power factor $\cos\phi$	堵 转转距 Locked torque	堵 转电流 Locked current	最大转距 额定转距 Pull out torque	噪 声 Noise (L <sub>W</sub> ) dB(A)	振 动等 级 Vibration class (mm/s)	转 动惯 量 Inertia movement (kg · m <sup>2</sup> )
	功 率 Output kW	电 流 Current (380V)A	转 速 Sync speed r/min								
同 步 转 速 Synchronous speed 750r(600r)/min											
YBE4-100L1-8	0.75	2.2	710	78.4	0.67	2.0	7.0	2.0	59	1.3	0.0080
YBE4-100L2-8	1.1	3.1	710	80.8	0.67	2.0	7.0	2.0	59	1.3	0.0092
YBE4-112M-8	1.5	4.0	710	82.6	0.69	2.0	7.0	2.0	61	1.3	0.0141
YBE4-132S-8	2.2	5.7	725	84.5	0.70	1.8	7.5	2.0	64	1.3	0.0209
YBE4-132M-8	3	7.6	725	85.9	0.70	1.8	7.8	2.0	64	1.3	0.0457
YBE4-160M1-8	4	9.8	730	87.1	0.71	1.8	7.9	2.0	68	1.8	0.0591
YBE4-160M2-8	5.5	13.1	730	88.3	0.72	1.8	8.1	2.0	68	1.8	0.0849
YBE4-160L-8	7.5	17.2	730	89.3	0.74	1.8	7.8	2.0	68	1.8	0.1104
YBE4-180L-8	11	25.0	735	90.4	0.74	1.8	7.9	2.0	70	1.8	0.1614
YBE4-200L-8	15	33.3	735	91.2	0.75	1.8	8.0	2.0	73	1.8	0.2629
YBE4-225S-8	18.5	40.9	740	91.7	0.75	1.8	8.1	2.0	73	1.8	0.3849
YBE4-225M-8	22	47.8	740	92.1	0.76	1.8	8.3	2.0	73	1.8	0.6427
YBE4-250M-8	30	63.9	740	92.7	0.77	1.8	7.9	2.0	75	1.8	0.7671
YBE4-280S-8	37	77.4	740	93.1	0.78	1.8	7.9	2.0	76	1.8	1.2924
YBE4-280M-8	45	93.8	740	93.4	0.78	1.8	7.9	2.0	76	1.8	1.9575
YBE4-315S-8	55	111.4	745	93.7	0.80	1.6	8.2	2.0	82	2.3	2.4118
YBE4-315M-8	75	151.2	745	94.2	0.80	1.6	7.6	2.0	82	2.3	3.8577
YBE4-315L1-8	90	178.8	745	94.4	0.81	1.6	7.7	2.0	82	2.3	5.1955
YBE4-315L2-8	110	217.9	745	94.7	0.81	1.6	7.7	2.0	82	2.3	6.2058
YBE4-355S-8	132	260.9	745	94.9	0.81	1.6	7.7	2.0	89	2.3	7.7992
YBE4-355M-8	160	311.7	745	95.1	0.82	1.6	7.7	2.0	89	2.3	12.7935
YBE4-355L1-8	185	360.4	745	95.1	0.82	1.6	7.7	2.0	89	2.3	15.6365
YBE4-355L2-8	200	388.4	745	95.4	0.82	1.6	7.8	2.0	89	2.3	18.4795
YBE4-315S-10	45	100.0	590	91.2	0.75	1.3	6.2	2.0	82	2.3	3.8772
YBE4-315M-10	55	121.4	590	91.8	0.75	1.3	6.2	2.0	82	2.3	4.7846
YBE4-315L1-10	75	162.4	590	92.3	0.76	1.3	6.2	2.0	82	2.3	6.1870
YBE4-315L2-10	90	191.2	590	92.9	0.77	1.3	6.2	2.0	82	2.3	7.2595
YBE4-355S-10	90	191.2	585	92.9	0.77	1.3	6.0	2.0	82	2.3	9.3540
YBE4-355M1-10	110	230.1	585	93.1	0.78	1.3	6.0	2.0	90	2.3	11.4481
YBE4-355M2-10	132	275.0	585	93.5	0.78	1.3	6.0	2.0	90	2.3	13.9612
YBE4-355L1-10	160	333.3	585	93.5	0.78	1.3	6.0	2.0	90	2.3	17.3118
YBE4-355L2-10	185	385.4	585	93.5	0.78	0.8	6.0	2.0	90	2.3	19.9645



**YBE4系列超高效率隔爆型三相异步电动机**  
**YBE4 series super high efficiency flameproof three-phase asynchronous motor**

表3 Table 3

机座号 Frame size	结构与安装型式代号 Code of constructions and mounting arrangements(IM)
80~112	B3,B5,B6,B7,B8,B14,B34,B35,V1,V3,V5,V6,V15,V18,V35,V37
132~160	B3,B5,B6,B7,B8,B35,V1,V3,V5,V6,V15,V35,V37
180~280	B3,B5,B35,V1
315~355	B3,B35,V1

表4 Table 4

安装结构型式 Constructions and mounting arrangements	B3	B5	B6	B7	B8
示意图 Illustrated diagram					
安装结构型式 Constructions and mounting arrangements	B14	B34	B35	V1	V3
示意图 Illustrated diagram					
安装结构型式 Constructions and mounting arrangements	V5	V6	V15	V18	V35
示意图 Illustrated diagram					

表5 Table 5

接线盒规格 Specifications of terminal box	适用机座号 For frame size	进线口数 Number of entry	进线口螺纹 Inlet's thread	进线电缆最大外径 The max.outer diameter of inlet cable	正常供货范围 Scope of supply
小M5	80~100	单 One	M30×2	Φ25	正常 Normal
M5	112~132	单 One	M30×2	Φ25	正常 Normal
M6	160~180	单 One	M36×2	Φ35	正常 Normal
M8	200~225	单 One	M48×2	Φ42	正常 Normal
M10	250~280	单 One	M64×2	Φ50	正常 Normal
M10	250~280	双 Two	M48×2	Φ42	正常 Normal
M16	315~355	双 Two	M64×2	Φ50	正常 Normal
M16	315~355	双 Two	M80×1.5	Φ64	正常 Normal



**YBE4系列超高效率隔爆型三相异步电动机**  
**YBE4 series super high efficiency flameproof three-phase asynchronous motor**

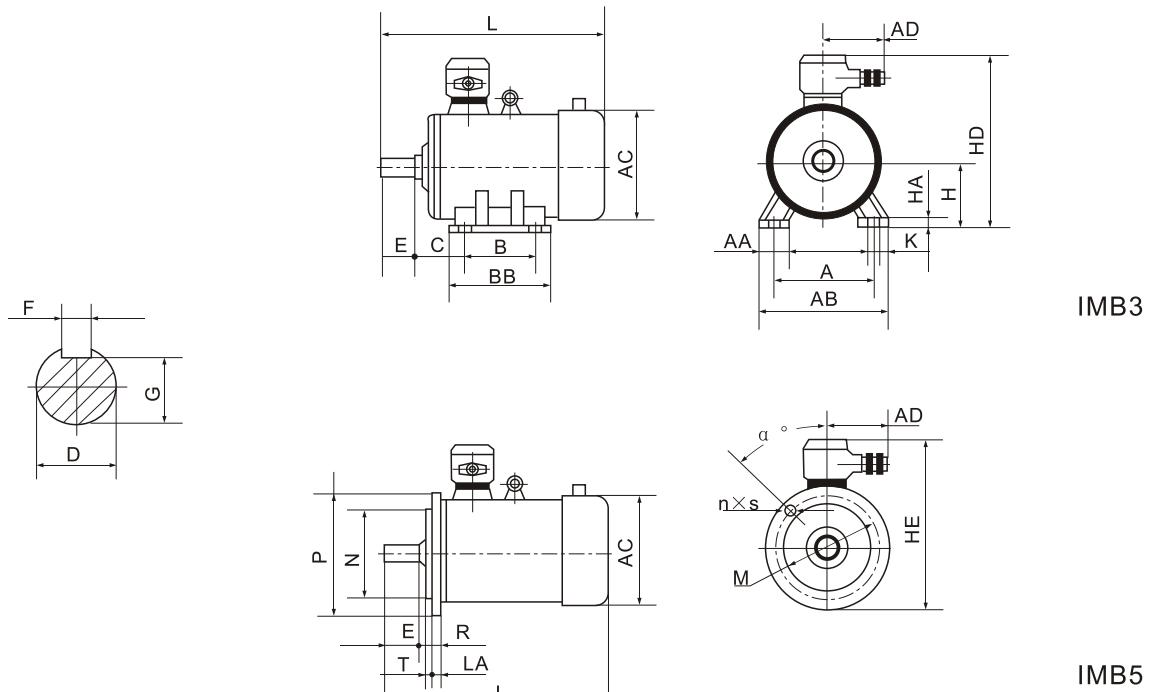
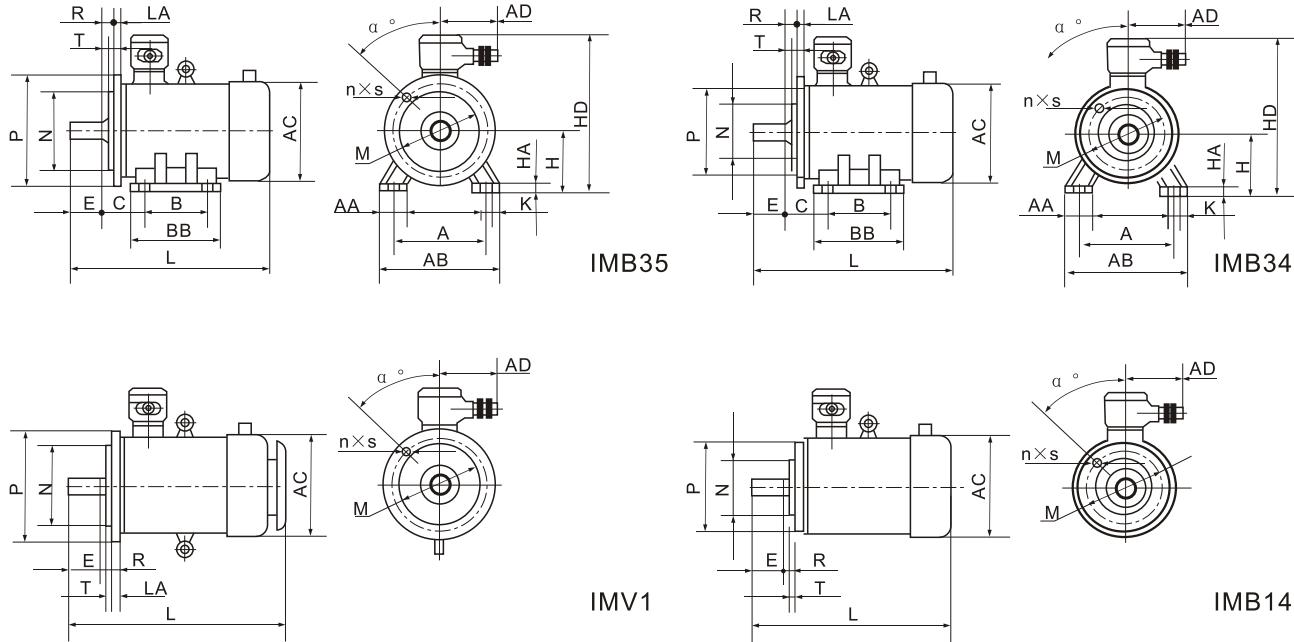


表6 Table 6

机座号 Frame size	凸缘号 Flange number		安装及外形尺寸 Dimensions for installation and appearance																							
	IMB35 IMB5 IMV1	IMB14 IMB34	A	B	C	D		E		F		G		H	K	凸缘尺寸 Dimensions for flange										
						极数 Pole number						IMB35 IMB5 IMV1						M	N	P	R	α°	n x S	T		
						2P	≥4P	2P	≥4P	2P	≥4P	2P	≥4P			M	N	P	R	α°	n x S	T				
63	-	-	100	80	40	11		23		4		8.5		63	7	-	-	-	-	-	-	-				
71	FF130	-	112	90	45	14		30		5		11		71	7	130	110	160	0	45	4×Φ10	3				
80	FF165	FF100	125	100	50	19		40		6		15.5		80	10	165	130	200	0	45	4×Φ12	3.5				
90S	FF165	FF115	140	100	56	24		50		8		20		90	10	165	130	200	0	45	4×Φ12	3.5				
90L	FF165	FF115	140	125	56	24		50		8		20		90	10	165	130	200	0	45	4×Φ12	3.5				
100L	FF215	FF130	160	140	63	28		60		8		24		100	12	215	180	250	0	45	4×Φ14.5	4.0				
112M	FF215	FF130	190	140	70	28		60		8		24		112	12	215	180	250	0	45	4×Φ14.5	4.0				
132S	FF265		216	140	89	38		80		10		33		132	12	265	230	300	0	45	4×Φ14.5	4.0				
132M	FF265		216	178	89	38		80		10		33		132	12	265	230	300	0	45	4×Φ14.5	4.0				
160M	FF300		254	210	108	42		110		12		37		160	14.5	300	250	350	0	45	4×Φ18.5	5.0				
160L	FF300		254	254	108	42		110		12		37		160	14.5	300	250	350	0	45	4×Φ18.5	5.0				
180M	FF300		279	241	121	48		110		14		42.5		180	14.5	300	250	350	0	45	4×Φ18.5	5.0				
180L	FF300		279	279	121	48		110		14		42.5		180	14.5	300	250	350	0	45	4×Φ18.5	5.0				
200L	FF350		318	305	133	55		110		16		49		200	18.5	350	300	400	0	45	4×Φ18.5	5.0				
225S	FF400		356	286	149	55	60	110	140	16	18	49	53	225	18.5	400	350	450	0	22.5	8×Φ18.5	5.0				
225M	FF400		356	311	149	55	60	110	140	16	18	49	53	225	18.5	400	350	450	0	22.5	8×Φ18.5	5.0				
250M	FF500		406	349	168	60	65	140	140	18	18	53	58	250	24	500	450	550	0	22.5	8×Φ18.5	5.0				
280S	FF500		457	368	190	65	75	140	140	18	20	58	67.5	280	24	500	450	550	0	22.5	8×Φ18.5	5.0				
280M	FF500		457	419	190	65	75	140	140	18	20	58	67.5	280	24	500	450	550	0	22.5	8×Φ18.5	5.0				
315S	FF600		508	406	216	65	80	140	170	18	22	58	71	315	28	600	550	660	0	22.5	8×Φ24	6.0				
315M	FF600		508	457	216	65	80	140	170	18	22	58	71	315	28	600	550	660	0	22.5	8×Φ24	6.0				
315L	FF600		508	508	216	65	80	140	170	18	22	58	71	315	28	600	550	660	0	22.5	8×Φ24	6.0				
355S	FF740		610	500	254	75	95	140	170	20	25	67.5	86	355	28	740	680	800	0	22.5	8×Φ24	6.0				
355M	FF740		610	560	254	75	95	140	170	20	25	67.8	86	355	28	740	680	800	0	22.5	8×Φ24	6.0				
355L	FF740		610	630	254	75	95	140	170	20	25	67.5	86	355	28	740	680	800	0	22.5	8×Φ24	6.0				



**YBE4系列超高效率隔爆型三相异步电动机**  
**YBE4 series super high efficiency flameproof three-phase asynchronous motor**



mm

Mounting and overall dimensions																										
Flange dimensions							AA	AB	AC	AD	BB	HA	HD	HE	L <sub>A</sub>	L										
IMB14			IMB34												2P		≥4P									
M	N	P	R	α°	n×S	T									其它 Other	V <sub>1</sub>	其它 Other	V <sub>1</sub>								
100	80	120	0	45	4×M6	3.0	25	130	135	165	110	8	200	212	12	240	270	240	270							
115	95	140	0	45	4×M8	3.0	30	141	158	165	112	8	200	220	12	275	305	275	305							
115	95	140	0	45	4×M8	3.0	34	180	205	165	155	14	310	330	12	320	320	320	345							
130	110	160	0	45	4×M8	3.5	36	180	205	165	190	14	320	345	14	395	395	395	420							
130	110	160	0	45	4×M8	3.5	43	200	225	165	176/220 (4-3KW)	14	340	380	14	425	425	425	450							
							50	245	245	175	280	16	365	405	14	525	525	525	555							
							60	280	297	175	245	18	430	490	14	550	550	550	590							
							60	280	297	175	285	18	430	490	14	590	590	590	630							
							70	330	330	202	305	20	500	520	15	710	71	710	760							
							70	330	330	202	350	20	500	520	15	750	750	750	800							
							70	355	375	202	370	25	535	535	18	815	815	815	875							
							70	355	375	202	390	25	535	535	18	835	835	835	895							
							70	390	426	230	380	25	610	610	18	850	850	850	920							
							75	435	470	230	390	28	645	645	18	-	-	930	1020							
							75	435	470	230	420	28	645	645	18	930	930	930	1050							
							80	490	540	270	440	30	720	745	20	1000	1000	1000	1105							
							85	545	550	270	465	35	800	795	22	1065	1065	1085	1200							
							85	545	550	270	520	35	800	795	22	1120	1120	1140	1255							
							120	635	620	310	630	45	930	945	25	1220	1220	1290	1410							
							120	635	620	310	780	45	930	945	25	1370	1370	1440	1560							
							120	635	620	310	880	45	930	945	25	1470	1470	1540	1660							
							150	735	700	310	710	52	1000	1115	25	1450	1450	1490	1630							
							150	735	700	310	810	52	1000	1115	25	1550	1550	1590	1730							
							150	735	700	310	940	52	1000	1115	25	1680	1680	1720	1860							



# YBE4系列超高效率隔爆型三相异步电动机

## YBE4 series super high efficiency flameproof three-phase asynchronous motor

### 电动机结构及安装型式和安装外形尺寸

#### ◆ 电动机结构及安装型式

本系列电动机的安装方式符合GB997《电机结构及安装型式代号》及IEC34-7的规定。本系列电动机有5种基本结构型式：

- B3—机座带底脚、端盖无凸缘；
- B5—机座不带底脚、端盖有凸缘；
- B35—机座带底脚、端盖有凸缘；
- B14—机座不带底脚、端盖有小凸缘；
- B34—机座带底脚、端盖有小凸缘。

本系列电动机在上述5中基本结构上，可派生15种常用结构及安装型式，其制造范围见表3。结构及安装型式示意图见表4。

#### ◆ 电动机接线盒结构

电动机接线盒结构具有优良的隔爆性能和较高防护等级，且具有较大的空腔以便于接线，进线为橡套电缆和钢管布线(螺纹接口)2种。按不同起动要求，可分别制成一个进线口(适用于电动机直接起动)和两个进线口(适用于电动机Y-△起动)。接线盒进线口及使用范围见表5。

#### ◆ 电动机安装外形尺寸见表6。

### Constructions,Mounting Arrangements and Overall Dimensions

#### ◆ Constructions and Mounting Arrangements

The mounting arrangements of this series motors conform to China Standards GB997 Sample for types of construction and mounting arrangement of rotating electrical machinery and IEC Publication 34-7.

- Five basic constructions are available:
- B3-with foot mounted and flangeless;
  - B5-with flange mounted and footless;
  - B35-with both foot and flange mounted;
  - B14-with small flange mounted and footless;
  - B34-with both foot and small flange mounted.

Based on five constructions mentioned above, this series motors can be modified into 15 constructions and mounting arrangements. For the manufacture range, see Table 3. And for the constructions and mounting arrangements, see Table 4.

#### ◆ Motor Terminal Construction

The motor junction box structure is with excellent flameproof performance and high protection level, it has larger cavity to facilitate wiring. There are two kinds of incoming wirings: rubber-sheathed cable steel pipe wiring. As per different starting requirement, it can be made into one inlet (applicable for motor direct starting) and two inlets(applicable for motor Y-? starting). Please refer to table 5 for junction box inlet and scope of Application.

#### ◆ For the mounting and overall dimensions, see Table 6.



## YBE4系列超高效率隔爆型三相异步电动机

YBE4 series super high efficiency flameproof three-phase asynchronous motor



3C认证证书



节能产品证书



防爆合格证

### 订货指南

- 1、本样本中的数据随着技术进步允许有变动，不另行通知，请注意样本的出版日期。
- 2、如有特殊要求，如电压、频率、防护等级、旋转方向、双轴伸、噪声振动限值、转速(双速、三速或四速)等必须签订技术协议后，方可制造。
- 3、订货时请按样本中所标明的电动机的型号、功率、同步转速、电压、频率结构及安装型式、防爆标志、隔爆等级和接线盒进线方式以及旋转方向等。

例：机座中心高为355,220KW, 2P, 机座带底脚, 端盖无凸缘, 工厂用ⅡB类T4组隔爆型, 380V, 顺时针转向, 电动机标注如下:

YBE4-355M1-2 220KW 380V 50HZ IMB3 Ex dⅡB T4 Gb,

顺时针旋转。

### Ordering Requirements

1. Since the technique is developing continuously, the data in this catalogue may be subject to attention without prior notice. Pls note the publication date by month and year.
2. For the special requirements. Such as voltage ,frequency, protection degree, rotating direction, two shaft extension ends, limiting values of noise and vibration, speed(two-speed, three-speed or four-speed)etc, the motors will not be manufactured until a technical specification being signed.
3. When placing orders, Pls follow motor model, power, synchronous speed, voltage, frequency, structure and installation type, explosive-proof mark, flameproof grade and terminal box incoming way and rotating direction etc. specified in brochure.

Example: base center height of 355, 220KW, 2P, frame with feet, end cover without flange, Factories with class Ⅱ B group T4 flameproof type, 380V, veering, rubber sets of cables into linear motor marked as follows:

YBE4-355M1-2, 220KW, 380V, 50Hz, IMB3, Ex dⅡB T4 Gb, rubber-insulated cable entry and clockwise rotation.