

重在安全 赢在节能



浙江永发机电有限公司

Zhejiang Yongfa Electromechanics Co.Ltd

COMPANY

Brife Introduction 企业简介



浙江永发机电有限公司建于一九六七年，是设计制造各种三相异步电动的专业企业，公司占地面积12.5万 m^2 ，建筑面积为7.2万 m^2 ，公司拥有各种精良先进的加工制造设备517台/套，并在国内电机行业中第一家建立了三条优质的自动化数控检测线。公司年生产能力250万KW，主要生产的产品有YE3系列，YB3系列，YPF变频调速系列，YD变极多速系列，YH高转差率系列等，0.55KW-560KW低压三相异步电动机，YKK系列220KW-1400KW（6000V 10000V）高压三相异步电动机，公司是国家中小型电机行业常务理事单位，多次参与国家中小型的联合设计和标准起草单位，企业在国内机械机电行业中享有较高的声誉。

公司专门成立技术研发中心，中心具有强大的设计团队，曾为国内外许多企业及配套项目，根据不同的要求，设计很多特殊规格和型号的特种电机，在国内率先研发制造高效电机的企业，也是高效电机标准起草单位和制定的单位，由于我们在高效电机的研发制造中和推广应用成绩突出，在2013年中，被国家工信部授予能效之星企业。我们企业一贯注重产品的质量，企业80年代就建立全面质量管理体系，产品从原料的进厂到产品的出厂都有一套规范有序的控制系统，对每道工序的操作都有相应的操作规范和工艺纪律的考核。并对每道工序每个产品的质量状况用图表的形式进行记录分析，确保每个产品的质量在加工过程中都处于手控状态。由于我们对产品质量的重视，使我们永发牌电机几十年来无论受市场抽查还是国家监督抽查均为合格产品。为此，我们永发牌电机一直以来被业内人士称为优等产品，产品被国家质检总局评为全国免检产品，浙江省质量技术监督总局评为浙江省名牌产品。

虽然我们曾得到过许多的荣誉，但我们并不由此而满足，我们企业现在已经在国内率先开发YE4一级能效的电机。同时，也在着手研究永磁电机与控制融为一体的控制系统产品，向世界电机技术领先领域进军。

50年电机制造的悠久历史培养众多的技术精辟，积累了许多深奥的电机制造经验，精英汇聚的浙江永发以浓厚的技术底蕴，独特前瞻的设计思路和设计能力，诚信乐意为广大配套用户提供优质高效的电机，使每位用户在使用过程中买的放心，用的称心。欢迎各位新老客户相聚永发进行商贸合作，我们将一起携手，共创未来。



Zhejiang Yongfa electromechanical Co., Ltd. was founded in 1967, is the design and manufacture all kinds of three-phase asynchronous electric professional enterprise, the company covers an area of 125000 square meters, construction area of 72000 square meters of meters, the company has a variety of sophisticated advanced processing equipment 517 / sets, and in the domestic electric machine industry in the first set up three quality automatic numerical control the detection line. Company annual production capacity of 2500000 KW, The main production of products YE3 series, YB3 series, series of YPF frequency control of motor speed, YD pole-changing multi-speed series, YH series high slip, etc., 0.55KW-560KW low voltage three-phase asynchronous motor, YKK series of 220KW1400KW (6000V 10000V) high voltage three phase asynchronous motor, the company is a national medium-sized motor industry executive director of the unit, several participating countries in the joint design and standard of small unit of drafting, the enterprise enjoys the high reputation in domestic mechanical and electrical industry.

The company specializes in the establishment of technology research and development center, the center has a strong design team, has many foreign and domestic enterprises and supporting the project, according to different requirements, special motor design a lot of special specifications and models, to take the lead in R & D and manufacturing of high performance motor business in China, but also the high efficiency motor standards drafting unit and the formulation of the unit, because we are in high efficiency motor R & D and manufacturing of neutralizing the popularization and application of outstanding achievements, in 2013, the State Ministry of energy efficiency was awarded the star enterprise. Our enterprise always pay attention to product quality, enterprise 80 years on the establishment of a comprehensive quality management system, products from raw materials into the factory to product the factory has a set of normative and orderly control system, each process of operation have relevant operation specification and process discipline assessment. And the quality status of each process for each product in the form of a graph of log analysis, to ensure the quality of each product are in manual state during processing. Because we attach great importance to product quality, make we Yongfa brand motor for decades both by the market spot checks or state supervision and inspection are qualified products. To this end, we Yongfa unlicensed motor has been the industry known as the excellent products, products by the state quality inspection administration as national Mianjian products, rated as brand-name products in Zhejiang province quality and Technical Supervision Bureau of Zhejiang province. Although we have won many honors, but we are not so satisfied, motor we enterprise now has pioneered the development of the domestic YE4 level energy efficiency. At the same time, also in the product control system to begin research on permanent magnet motor and control integration, to enter the world top motor technology field.

A long history of cultivation technology penetrating many 50years motor manufacturing, accumulated many esoteric motor manufacturing experience, the elite Zhejiang Yongfa in technology rich details, unique prospective design ideas and design ability, good faith for the majority of customers willing to motor provides high quality and high efficiency, so that every user in the use of the process to buy rest assured that the use of the heart. Welcome to the new and old customers together Yongfa for trade cooperation, we will be together hand in hand, create a better future.





INFORMATION YB3 系列详细技术资料

Series YB3 detailed technical information

YB3 系列隔爆型三相异步电动机 (H80~H355)

YB3 Series Flameproof Three-phase Induction Motor(H80-H355)



PRODUCTION

General 产品概述

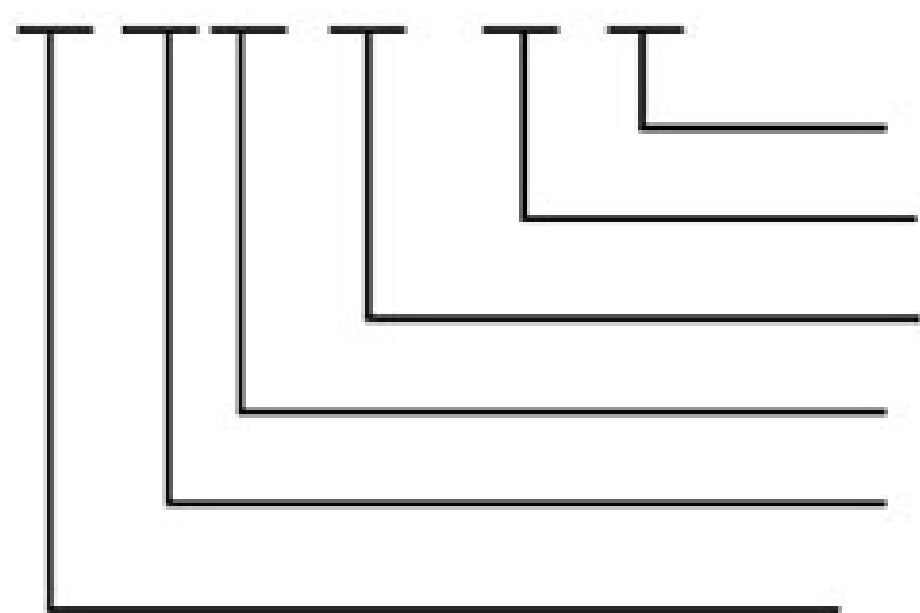
YB3系列隔爆型三相异步电动机(机座号80-355),按照JB/T7565.1-2011隔爆型三相异步电动机技术条件第1部分:YB3系列隔爆型三相异步电动机制成。电动机效率指标达到GB18613-2012中规定的2级效率,符合IEC标准中IE3效率指标。防爆标志位Exd I Mb、Eed II AT4Gb、Exd II BT4Gb。适用于含有甲烷或煤尘的煤矿井下固定式设备上(Exd I)或含有II类A、B级T1~T4组可燃性气体或蒸气与空气形成的爆炸性混合物的场所内的设备上,作为一般动力设备使用。

YB3 series flameproof three-phase asynchronous motor (frame size 80 / 355), according to JB/T7565.1-2011 flameproof three-phase asynchronous motor technology conditions - part first: series YB3 flameproof three-phase asynchronous motor is made. Motor efficiency goal to achieve specified in GB18613-2012 2 stage efficiency, conforms to the IE3 efficiency index in IEC standard. Explosion proof mark Exd I Mb, Eed II AT4Gb, Exd II BT4Gb. Suitable for coal mine fixed equipment containing methane or coal dust (Exd on I) or with II class A, class B T1 ~ T4 group of flammable gas or vapor and air to form explosive mixture in the places where the device, used as a general power equipment.

电动机型号和防爆标志含义

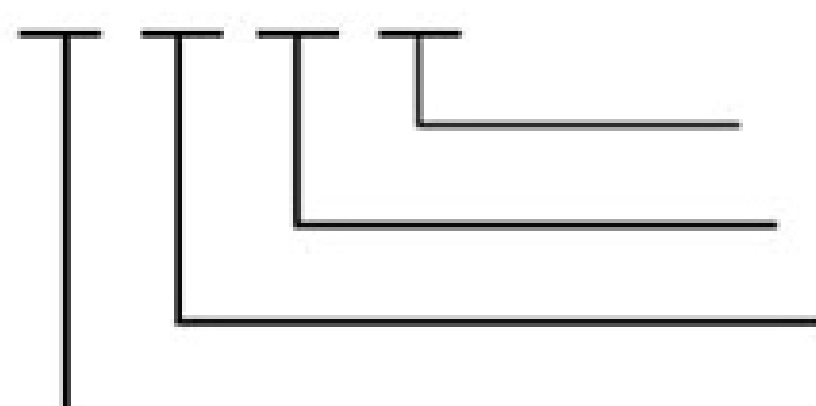
Designations of types and explosion-proof marks

Y B 3- 280 M- 4



电动机极数
Pole number
机座长度代号
Frame length code
机座中心高 (mm)
Shaft height
第三次改型设计
Second modification design
隔爆型
Flameproof
三相异步电动机
Three-phase induction motor

Ex d II B T4



温度组别 (T4)
Temperature class (T4)
电气设备类别级别 (II类B级)
Group and class of electrical equipments (Group II, Class B)
电气设备隔爆型式 (隔爆型)
Explosion-proof type of electrical equipments (Flameproof)
隔爆标志
Explosion-proof mark



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YB3 系列隔爆型三相异步电动机 (H80~H355)

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电动机机座号、功率及转速关系

The Relation Between Frame Size, Rated Output and Speed



机座号 Frame Size	同 步 转 速 Synchronous Speed (r/min)				
	3000	1500	1000	750	600
	功 率 Power (kw)				
80M 1 2	0.75	0.55	0.37	0.18	—
	1.1	0.75	0.55	0.25	
90S	1.5	1.1	0.75	0.37	
90L	2.2	1.5	1.1	0.55	
100L 1 2	3	2.2	1.5	0.75	
		3		1.1	
112M	4	4	2.2	1.5	
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	
	15			5.5	
160L	18.5	15	11	7.5	
180M	22	18.5	—	—	
180L	—	22	15	11	
200L 1 2	30	30	18.5	15	
	37		22		
225S	—	37	—	18.5	
225M	45	45	30	22	
250M	55	55	37	30	
280S	75	75	45	37	
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
	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：带括号的为不推荐规格

Notes: The values in bracket are the specifications not to be recommended



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电动机的安装型式

Mounting Arrangements



本系列电动机的安装型式符合GB997《电机结构及安装型式代号》的规定，本系列电机有以下几种基本结构形式：

- B3—机座带底脚、端盖无凸缘、卧式安装；
- B5—机座不带底脚、端盖有凸缘、卧式或立式安装；
- 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基本结构上，派生了多种结构及安装形式的电动机，其制造范围见表1，结构及安装形式见表2。

The mounting arrangements of this series motors comply with GB997 "Symbol for Types of Construction and Mounting Arrangement of Rotating Electric Machinery", and have following basic structure types:

- B3-Frame with feet, end bracket without flange, foot-mounting;
- B5-Frame without feet, end bracket with flange, foot-mounting or flange-mounting;
- B35-Frame with feet, end bracket with flange;
- B14-Frame without feet, end bracket with small flange;
- B34-Frame with feet, end bracket with small flange;

Motors of various structure types and mounting arrangements have been derived on the basis of this basic series motors. The product scope, structure and mounting arrangements are shown in Table 1 and Table 2 respectively.

表1 (Table 1)

机座号 Frame Size	结构及安装型式代号 Structure and Mounting Arrangements
H80~H112	B3、B5、B6、B7、B8、B14、B34、B35、V1、V3、V5、V6、V15、V18、V36
H132~H160	B3、B5、B6、B7、B8、B35、V1、V3、V5、V6、V15、V36
H180~H280	B3、B5、B35、V1
H315~H355	B3、B35、V1

表2 (Table 2)

安装结构型式 Mounting Arrangements	B3	B5	B6	B7	B8
示意图 Diagram					
安装结构型式 Mounting Arrangements	B14	B34	B35	V1	V3
示意图 Diagram					
安装结构型式 Mounting Arrangements	V5	V6	V15	V18	V36
示意图 Diagram					



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Series YB3 detailed technical information

YB3 系列隔爆型三相异步电动机 (H80~H355)

YB3 Series Flameproof Three-phase Induction Motor(H80-H355)

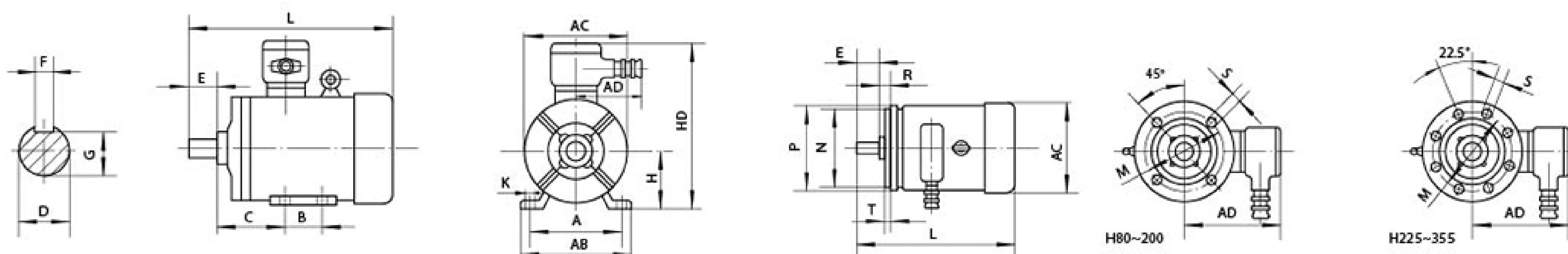
外形及安装尺寸

Structure and Mounting Dimensions



B3、B5、V1 结构外形及安装尺寸

B3、B5、V1 Structure and Mounting Dimensions



mm

机座号 Frame Size	极 数 Pole number	安 装 尺 寸 Mounting Dimensions																外形尺寸 Overall Dimensions																												
		A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	凸缘孔数 Flange Number	进线口管螺纹 Thread of conduit entry	AB	AC	AD	HD	L																							
80M	2, 4, 6, 8	125	100	50	19	40	6	15.5	80	10	165	130	200	0	12	3.5	4	M30X2	165	165	180	320	330																							
90S		140		125	56	24	50	8	20										90	10		165	130	200	12	3.5	165	180	350	360																
90L		160	140	63	28	60	24		100	12	215	180	250		15	4			200	205	400	440																								
100L				190		70			112		265	230	300						245	230	420	460																								
112M		216	178	89	38	80	10	33	132	15	4	280	270		200	450			510	550																										
132S		254	210	108	42	110	12	37	160	15	300	250	350		8	M36X2			330	325	220	520	655																							
132M			254				70	112	265									230	300	355		360	550	730	750																					
160M		279	241	121	48		14	42.5	180	19	400	350	400			M48X2		390	400	250	645	805																								
160L			279				121	48	14									42.5	180		435	450	690	860	890																					
180M		318	305	133	55	140	18	53	225	19	400	350	450			19		5	8	M64X2	490	500	300	730	945																					
180L							279	121													48	14		42.5	180	435	450	690	860	890																
200L		318	305	133	55	140	18	53	225	19	400	350	450								M48X2	435	450	250	690	860	890																			
225S	4, 8	286	149	55	110	16	49	225														19	400		350	450	435	450	250	690	860	890														
225M	2	356	311	149	60	140	18	53	225	19	400	350	450								19	5	8	M64X2	490	500	300	730	945																	
250M	4, 6, 8	406																							349	168		65	18	58	250	24	500	450	550	545	565	810	1010							
	2	457	368	190	75		20	67.5	280	24	500	450	550							545					565	810	1010																			
280S	2				419		368	190	65	18	58	280	24							500					450	550	545	565	810	1010																
280M	4, 6, 8	419	368	190		75			20	67.5	280	24	500							450					550	545	565	810	1010																	
315S	2	508	406	216	65	140	18	58	315	600	550	660	24							6					8	M72X2	640	630	400	1020	1250															
	4, 6, 8, 10				457	406	65	140																18			58	640			630	400	1020	1280												
315M	2	508	406		216	80	170	22	71	315	600	550												660			24	6	8	M72X2	640	630	400	1020	1320											
315L	4, 6, 8, 10					457	406	80	170																						22	71			640	630	400	1020	1350							
355S	2	610	500	254		75	140	20	67.5	610	740	680												800							24	6	8	M72X2	740	750	500	1080	1410							
	4, 6, 8, 10					560	254	75	140																										20	67.5			740	750	500	1080	1440			
355M	2	610	500		254	95	170	25	86	610	740	680												800		24									6	8	M72X2	740	750	500	1080	1510				
355L	4, 6, 8, 10					630	254	95	170					25			86																					740	750			500	1080	1570		
355S	2	610	500	254		75	140	20	67.5	610	740	680		800			24							6						8								M72X2	740	750	500	1080	1690			
	4, 6, 8, 10					560	254	75	140																														20	67.5			740	750	500	1080
355M	2	610	500		254	95	170	25	86	610	740	680		800																				24					6	8	M72X2	740	750	500	1080	1690
355L	4, 6, 8, 10					630	254	95	170																																	25	86			740



INFORMATION YB3 系列详细技术资料

Series YB3 detailed technical information

YB3 系列隔爆型三相异步电动机 (H80~H355)

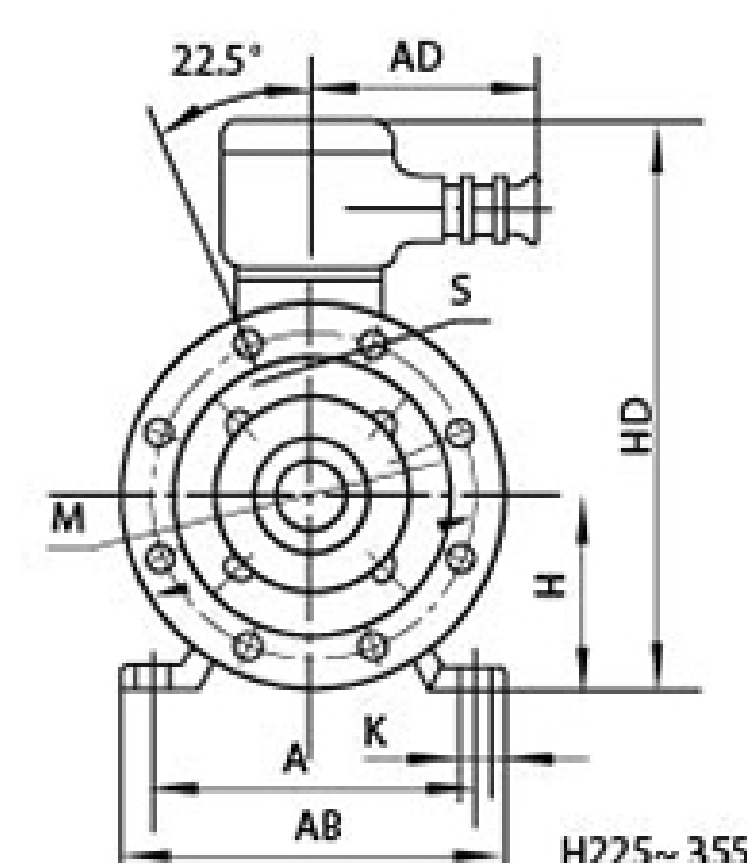
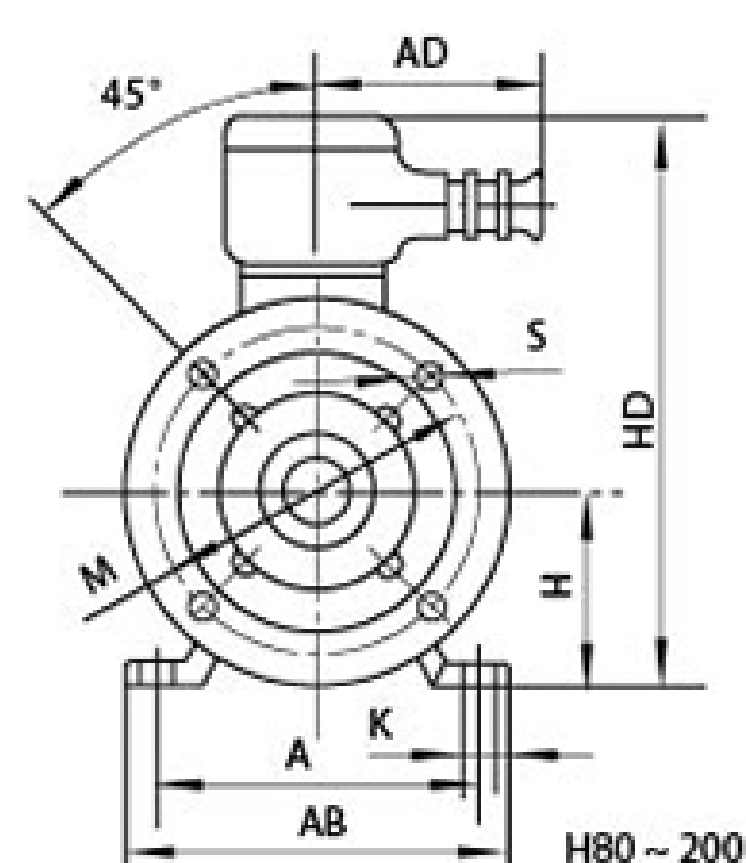
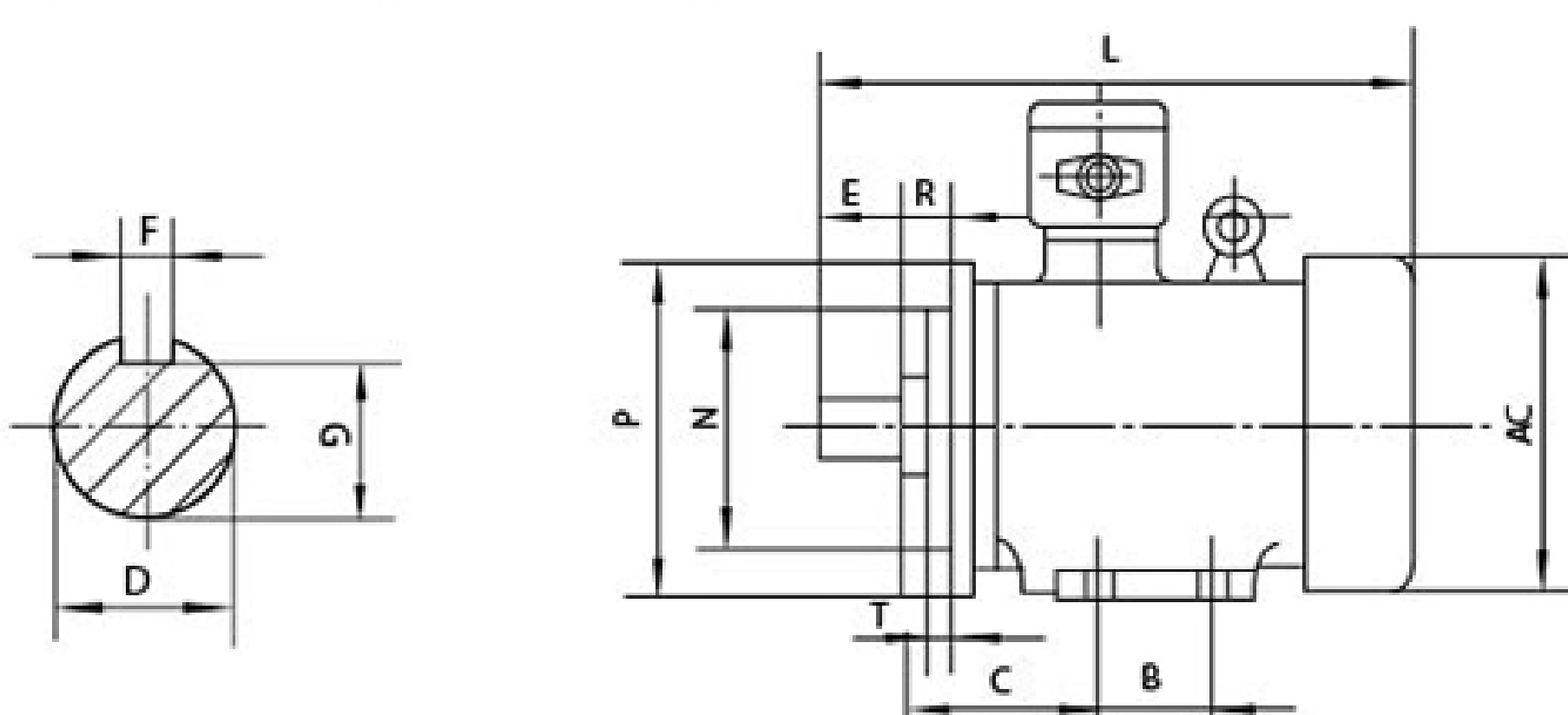
YB3 Series Flameproof Three-phase Induction Motor(H80-H355)

外形及安装尺寸

Structure and Mounting Dimensions



B35 结构外形及安装尺寸 B35 Structure and Mounting Dimensions



mm																																																
机座号 Frame Size	凸缘号 Flange Size	极 数 Pole number	安 装 尺 寸 Mounting Dimensions																外 形 尺 寸 Overall Dimensions																													
			A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	凸缘孔数 Flange Number	进线口管螺纹 Thread of conduit entry	AB	AC	AD	HD	L																								
80M	FF165	2, 4, 6, 8	125	100	50	19	40	6	15.5	80	10	165	130	200	0	12	3.5	4	M30X2	165	165	180	320	330																								
90S			140		56	24	50	8	20	90										180	180		350	360																								
90L				125	63	28	60		24	100										200	205		400	440																								
100L	FF215		160	140	70	38	80	10	33	132	12	215	180	250		14.5	4			M36X2	200	205	200	420	460																							
112M			190		89																280	270		450	510																							
132S	FF265		216	178	108	42	110	12	37	160	15	300	250	350		18.5	5		M48X2		330	325		220	520	655																						
132M																					355	360	550		730																							
160M	FF300		279	279	121	48	110	14	42.5	180	19	400	350	450							M64X2	390	400	250	645	805																						
180M																				435		450	690		860																							
180L	490		500	300	720	945																																										
200L	FF350	318	305	133	55	16	49	200	250	24	500	450	550	8					M72X2	545		565	810	1010																								
225S	FF400	4, 8	356	311	149	60	140	18												53		225		19	400	350	450	640	630	400	1020	1250																
225M		2																			65		140									18	58	280	24	600	550	660	1280									
250M		4, 6, 8																																					75	170	22	71	315	28	740	680	800	1320
280S	FF500	2	457	190	65	140	18	58	280	24	600	550	660							M64X2		640		630	400	1020	1350																					
280M		4, 6, 8																	75		170		22				71					315	28	740	680	800	1410											
315S		FF600																										2	508	216	65						140	18	58	280	24	6	M72X2	740	750	500	1080	1440
315M																												4, 6, 8, 10																				75
315L	2		75	170	22	71	315	28	740	680	800	1570																																				
355S	FF740											4, 6, 8, 10	500	254					75	140	20	67.5	610	28	740	680	800	M72X2				740	750	500	1080	1690												
355M		2										75																	170	22	71					315	28	740	680	800	1510							
355L		4, 6, 8, 10	75	170	22	71	315	28	740	680	800																														1570							
355L		2																																							75	170	22	71	315	28	740	680
355L	4, 6, 8, 10	75										170	22	71					315	28	740	680	800	1690																								



YB3 Series Flameproof Three-phase Induction Motor(H80-H355)

外形及安装尺寸

Structure and Mounting Dimensions



B14、B34 结构外形及安装尺寸 B14、B34 Structure and Mounting Dimensions



机座号 Frame Size	凸缘号 Flange Size	极数 Pole number	安 装 尺 寸 Mounting Dimensions																外 形 尺 寸 Overall Dimensions					
			A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	凸缘孔数 Flange Number	进线口管螺纹 Inlet's Thread	AB	AC	AD	HD	L
80M	FT100	2、4、 6、8	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	3	4	M24×1.5	165	165	180	320	330
90S	FT115		140		56	24	50	8	20	90		115	95	140		M8			3.5	M30×2	180	180	180	350
90L				125							63						28							
100L	FT130		160	140	70	28	60	24	112	12		130	110	160		3.5			200		205	400	440	
112M			190								245						230							200



INFORMATION YB3 系列详细技术资料

Series YB3 detailed technical information

YB3 系列隔爆型三相异步电动机 (H80~H355)

YB3 Series Flameproof Three-phase Induction Motor(H80-H355)

电动机接线盒

Terminal Box



电动机接线盒具有优良的隔爆结构性能和较高防护等级，且具有较大的空腔以便于接线，进线分为橡胶套电缆，钢管布线及防爆挠性管（铠装电缆）三种。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）。接线盒进线口及适用范围见表。

The terminal box has good flameproof property, high protection degree, and has a big cavity for wire connection. The inlet wire is classified into three main types: rubber-sheathed cable, steel pipe wiring, and explosion-proof flexible pipe (armored cable). According to different requirements, it can be designed to have one inlet (for direct start) or two inlets (for Y-△ start). The following table shows the inlet information and the scope of application.

接线盒规格 Specification of Terminal Box	适用机座号 Frame Size of Application	进线口数 Inlet Number	进线电缆 最大外径 Maximum Outer Diameter of Inlet Wire	钢管布线 进线口螺纹 Thread of conduit entry
M5	80~132	单 one	Φ25	M30×2
M6	160~180	单 one	Φ35	M36×2
M8	200~225	单 one	Φ42	M48×2
M8	200~225	双 two	Φ42	M48×2
M10	250~280	单 one	Φ50	M64×2
M10	250~280	双 two	Φ42	M48×2
M16	315	双 two	Φ50	M64×2
M16	355	双 two	Φ65	M72×2



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订货注意事项

Notice on order



- 1) 订货时请注明电动机的型号、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。
- 2) 用户如有特殊要求，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。

- 1) When placing an order, please specify motor's type, output power, synchronous speed, voltage, frequency, structure and mounting arrangement, explosion-proof mark, flameproof grade, inlet wiring and rotation direction.
- 2) If you have any special requirement, such as voltage, frequency, protection degree, rotation direction, double shaft-extension, limitation value of noise and vibration, speed (two-, three-, or four-speed), etc, a technical agreement must be signed before manufacturing.