

YE2 系列高效率三相异步电动机

YE2 series high efficiency three-phase asynchronous motor

一:概 述, Summary

YE2 系列高效率三相异步电动机是我公司根据 JB/T11707-2017 《YE2 系列高效率三相异步电动机技术条件 63-355》，IEC60034-30 最新标准的能效等级，按照 IEC60034-2 旋转电机第二部分“旋转电机损耗和效率的试验测定方法”，自主开发设计的。该系列产品效率高，节能环保，新产品集中了我公司二十多年生产电机的先进技术和生产经验，采用了新技术、新工艺和新材料，使电机的效率指标完全达到 GB18613-2012 中小型三相异步电动机能效限定值(即 3 级能效)，产品设计新颖、造型美观、噪声低、效率高、结构紧凑、使用维护方便等特点，电机采用 F 级绝缘，全系列温升按 B 级考核，是 Y2 系列产品的替代品。从而大大提高了安全可靠。电机的安装尺寸符合 IEC 标准规定，外壳防护等级为 IP54(IP55)。

YE2 系列(80-280)电机在 2014 年 6 月经过中国能效标识中心备案，效率等级为 3 级。

YE2 系列电动机可广泛用于机床、风机、水泵、压缩机、包装机械、矿山机械、建筑机械等各类机械传动设备

YE2 series high efficiency three phase asynchronous motors are developed according to JB/T11707-2013 《specification for high efficiency three-phase induction motor (frame size 80-355)》，the latest efficiency standard of IEC60034-30, and IEC60034-2 Part 2: losses and testing method of rotating motor, and also complies with Grade 3 efficiency of GB18613-2012: energy efficiency rating for medium-small three-phase asynchronous motor. This series motor has such characteristics as new structure, modern model, low noise level and vibration, compact structure and easy maintenance. Complying with international conventions, standard motors have class F insulation, with a class B temperature rise to offer more reliability and security in operation. YE2 series motor mounting dimension conforms to IEC standard and IP54(IP55) protection class.

YE2 series high efficiency three phase asynchronous motors can be widely used in transmission industry such as machine tool, pump, ventilator, compressor, transport machinery, construction machinery.

二:产品使用条件 (Conditions of Operation):

额定功率(Rate output): 0.75~90kW 基本极数(Basic poles): 2、4、6、8 极(pole)

额定电压(Rate voltage): 380V 额定频率(Rate frequency): 50Hz

冷却方式(Cooling method): IC411 定额(Duty): 连续 continuous (S1)

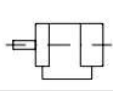





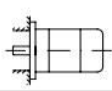


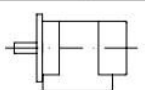


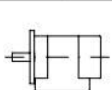
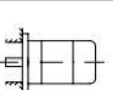


接法(Connection): 3kW 及以下为 Y 接法(Y for 3kW and lower);
3kW 以上为△接法 (△ for over 3kW)

环境温度(Coolant temperature): -15℃~+40℃

海拔 Site altitude: 不超过(no more than) 1000m

三:产品结构安装形式 Structure And Mounting

产品结构安装形式 Structure and Mounting

基本结构 Fundamental arrangement	派生的安装型式 Derivation					基本结构 Fundamental arrangement	派生的安装型式 Derivation	
B3	B6	B7	B8	V5	V6	B5	V1	V3
								
YE2-80~280	YE2-80~160					YE2-80~280	YE2-80~280	YE2-80~160
基本结构 Fundamental arrangement	派生的安装型式 Derivation		基本结构 Fundamental arrangement	派生的安装型式 Derivation				
B35	V15	V36	B34	B14	V18	V19		
								
YE2-80~280	YE2-80~160		YE2-80~160					

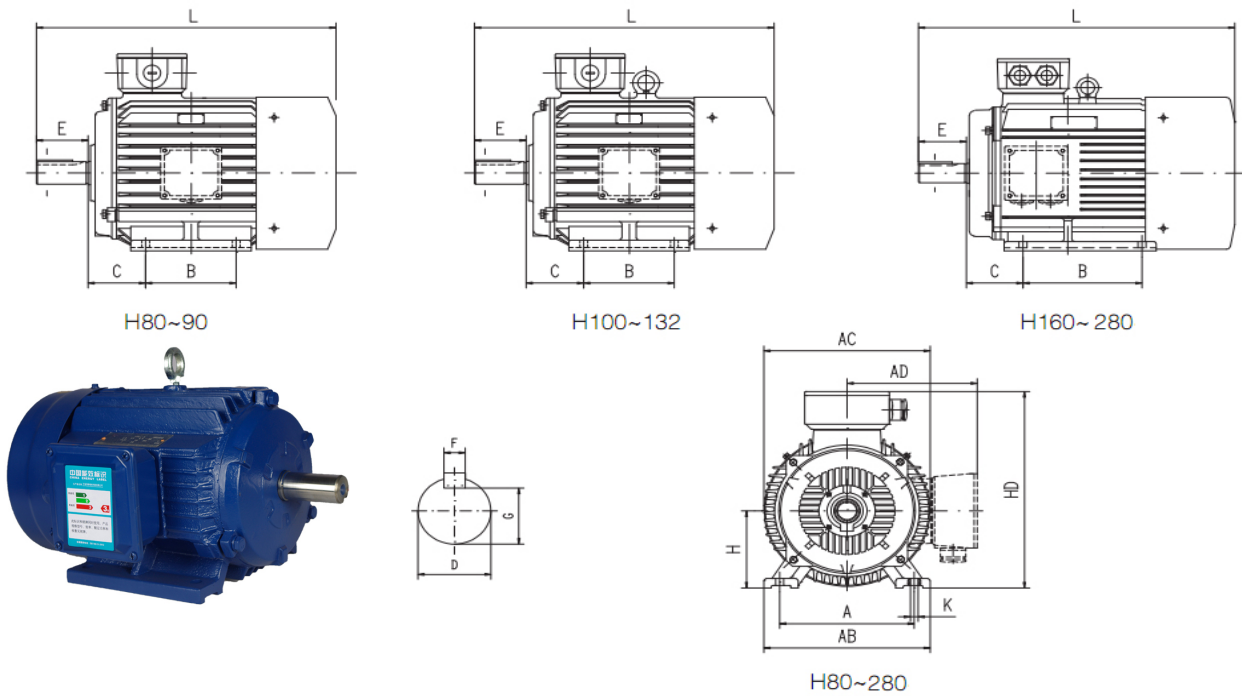
四:产品技术参数 Technical Data(220/380V 50Hz)

YE2 高效率三相异步电动机

型号 Type	额定功率 Rated Output		额定转速 Rated RPM	效率 Efficiency $\eta\%$	功率因数 Power factor $\cos\phi$	额定电流 Rated current A		额定转矩 Rated Toque Nm	堵转转矩/额定转矩 Ts/Tn	最大转矩/额定转矩 Tmax/Tn	堵转电流/额定电流 Is/In	重量 Weight
	Kw	HP				220V	380V					
	YE2-80M1-2	0.75				1	2875					
YE2-80M2-2	1.1	1.5	2875	79.6	0.84	4.3	2.5	3.65	2.3	2.3	7.3	19.5
YE2-90S-2	1.5	2	2890	81.3	0.84	5.7	3.3	4.96	2.3	2.3	7.6	21.3
YE2-90L-2	2.2	3	2890	83.2	0.85	8.2	4.7	7.27	2.3	2.3	7.8	25.5
YE2-100L-2	3	4	2891	84.6	0.87	10.7	6.2	9.91	2.3	2.3	8.1	39
YE2-112M-2	4	5.5	2914	85.8	0.88	13.9	8.0	13.11	2.3	2.3	8.3	53
YE2-132S1-2	5.5	7.5	2937	87	0.86	19.3	11.2	17.88	2.2	2.3	8.0	67.5
YE2-132S2-2	7.5	10	2940	88.1	0.88	25.2	14.6	24.36	2.2	2.3	7.8	70.6
YE2-160M1-2	11	15	2930	89.4	0.89	36.3	21.0	35.85	2.2	2.3	7.9	108
YE2-160M2-2	15	20	2930	90.3	0.89	49.1	28.4	48.89	2.2	2.3	8.0	122
YE2-160L-2	18.5	25	2937	90.9	0.89	59.9	34.7	60.15	2.2	2.3	8.1	145
YE2-180M-2	22	30	2940	91.3	0.88	71.9	41.6	71.46	2.2	2.3	8.2	182
YE2-200L1-2	30	40	2950	92	0.88	97.1	56.2	97.12	2.2	2.3	7.5	235
YE2-200L2-2	37	50	2950	92.5	0.89	117.8	68.2	119.78	2.2	2.3	7.5	268
YE2-225M-2	45	60	2960	92.9	0.89	142.5	82.5	145.19	2.2	2.3	7.6	326
YE2-250M-2	55	75	2965	93.2	0.9	171.9	99.5	177.15	2.2	2.3	7.6	395
YE2-280S-2	75	100	2970	93.8	0.9	233.2	135	241.16	2.0	2.3	6.9	520
YE2-280M-2	90	125	2970	94.1	0.91	276.4	160	289.39	2.0	2.3	7.0	580
YE2-80M2-4	0.75	1	1400	79.6	0.76	3.2	1.9	5.12	2.3	2.3	6.3	19.2
YE2-90S-4	1.1	1.5	1440	81.4	0.77	4.6	2.7	7.3	2.3	2.3	6.5	23.5
YE2-90L-4	1.5	2	1445	82.8	0.77	6.2	3.6	9.91	2.3	2.3	6.6	29.1
YE2-100L1-4	2.2	3	1440	84.3	0.81	8.4	4.9	14.6	2.3	2.3	6.9	35.2
YE2-100L2-4	3	4	1440	85.5	0.82	11.2	6.5	19.9	2.3	2.3	7.5	39.2
YE2-112M-4	4	5.5	1445	86.6	0.82	14.8	8.6	26.4	2.3	2.3	7.6	51.5
YE2-132S-4	5.5	7.5	1455	87.7	0.83	19.9	11.5	36.1	2.0	2.3	7.7	62.8
YE2-132M-4	7.5	10	1455	88.7	0.84	26.4	15.3	49.2	2.0	2.3	7.5	76.3
YE2-160M-4	11	15	1460	89.8	0.84	38.2	22.1	71.9	2.2	2.3	7.4	115
YE2-160L-4	15	20	1460	90.6	0.85	51.1	29.6	98.1	2.2	2.3	7.5	140
YE2-180M-4	18.5	25	1470	91.2	0.86	61.8	35.8	120.2	2.2	2.3	7.5	181
YE2-180L-4	22	30	1470	91.6	0.86	73.1	42.3	142.9	2.2	2.3	7.7	199
YE2-200L-4	30	40	1470	92.3	0.86	99.0	57.3	194.9	2.2	2.3	7.8	252
YE2-225S-4	37	50	1480	92.7	0.87	120.4	69.7	238.8	2.2	2.3	7.2	320
YE2-225M-4	45	60	1480	93.1	0.87	145.6	84.3	290.4	2.2	2.3	7.3	340
YE2-250M-4	55	75	1480	93.5	0.87	177.9	103	354.9	2.2	2.3	7.4	421
YE2-280S-4	75	100	1480	94	0.87	240.1	139	484	2.2	2.3	7.4	570
YE2-280M-4	90	125	1480	94.2	0.87	288.5	167	580.7	2.2	2.3	6.7	640
YE2-90S-6	0.75	1	934	75.9	0.72	3.6	2.1	7.67	2.1	2.1	5.8	24.2
YE2-90L-6	1.1	1.5	945	78.1	0.72	5.1	3.0	11.1	2.1	2.1	5.9	31.1
YE2-100L-6	1.5	2	945	79.8	0.75	6.6	3.8	15.2	2.1	2.1	6.0	38.2
YE2-112M-6	2.2	3	960	81.8	0.76	9.3	5.4	21.9	2.1	2.1	6.0	51.2
YE2-132S-6	3	4	964	83.3	0.76	12.4	7.2	29.7	2.0	2.1	6.2	56.1
YE2-132M1-6	4	5.5	965	84.6	0.76	16.3	9.4	39.6	2.0	2.1	6.8	63.9
YE2-132M2-6	5.5	7.5	965	86	0.77	21.8	12.6	54.4	2.0	2.1	7.1	76.4
YE2-160M-6	7.5	10	970	87.2	0.78	28.8	16.7	73.8	2.1	2.1	6.7	109
YE2-160L-6	11	15	970	88.7	0.78	42.8	24.8	108.3	2.1	2.1	6.9	101
YE2-180L-6	15	20	975	89.7	0.81	54.2	31.4	146.9	2.0	2.1	7.2	191
YE2-200L1-6	18.5	25	980	90.4	0.81	66.2	38.3	180.3	2.1	2.1	7.2	245
YE2-200L2-6	22	30	980	90.9	0.83	76.5	44.3	214.4	2.1	2.1	7.3	250
YE2-225M-6	30	40	980	91.7	0.84	102.3	59.2	292.3	2.0	2.1	7.1	300
YE2-250M-6	37	50	980	92.2	0.86	122.3	70.8	36.6	2.1	2.1	7.1	373
YE2-280S-6	45	60	980	92.7	0.86	148.2	85.8	438.5	2.1	2.0	7.2	513
YE2-280M-6	55	75	980	93.1	0.86	179.6	104	536	2.1	2.0	7.2	560

五:外形及安装形式 (Frame Dimension & Mounting)

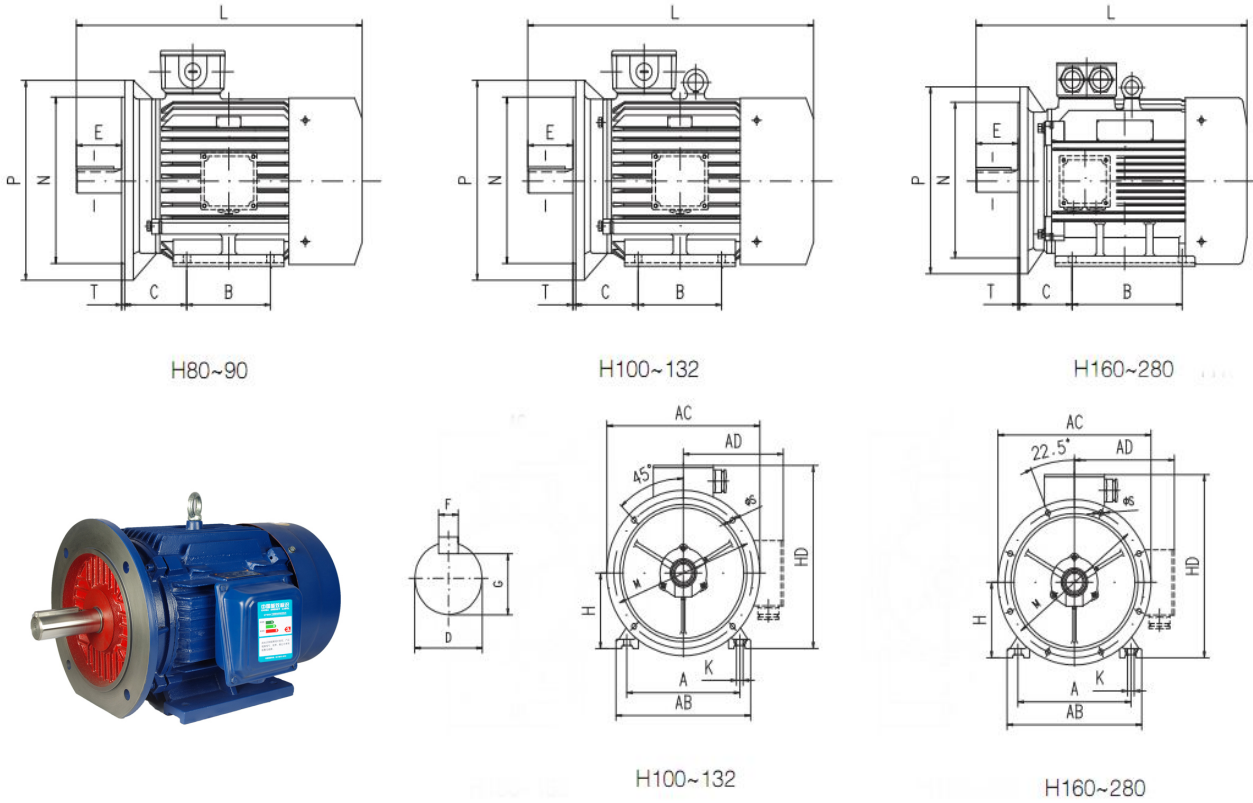
5.1 IMB3 形式 (Mounting Dimension B3)



IMB3 机座带底脚、端盖无凸缘的电动机 (Frame with foot, endshield without flange)

机座号 Frame	极数 Poles	安装尺寸 Mounting Dimension									外形尺寸 Overall Dimension				
		A	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L
80M	2、4、6	125	100	50	19	40	6	15.5	80	10	165	175	145	220	305
90S		140		56	24	50	8	20	90		180	195	165	260	360
90L			125	63	28	60		24	100		112	205	215	180	275
100L		160	70				80			10					
112M		190		140	12	12		37	160		320	330	255	420	670
132S		216	178				14			42.5					
132M		178		110	16	49		200	395		420	305	505	790	
160M		254	210				19			53					225
160L		254		149	55	110		16	49		225	435	470	335	
180M		279	241				60			140					18
180L		279		18	58	24		20	67.5		280	550	580	410	
200L		318	305				65			140					18
225S	4	356		149	55	110		16	49		225	435	470	335	
225M	2		311				60			140					18
250M	4、6	406		349	168	65		140	18		58	250	490	510	
280S	2		457				368			190					75
280M	4、6	419		190	75	140		18	58		280	550	580	410	

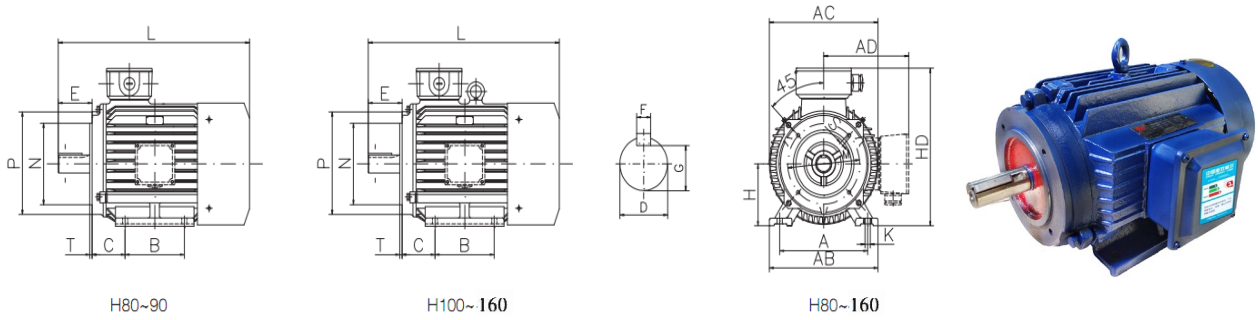
5.2 IMB35 形式 (Mounting Dimension B35)



IMB35 机座带底脚、端盖有凸缘(带通孔) (Frame with foot, endshield with flange)

机座号 Frame	凸缘号 Flange No.	极数 Poles	安装尺寸 Mounting Dimension													外形尺寸 Overall Dimension																											
			A	B	C	D	E	F	G	H	K	M	N	P	S	T	凸缘 孔数	AC	AD	HF	L																						
80M	FF165	2、4 、6	125	100	50	19	40	6	16	80	10	165	130	200	12	3.5	4	175	145		305																						
90S					56	24	50		20	90																195	165		360														
90L				125				8																					390														
100L	FF215		160	140	63	28	60			100	12	215	180	250	14.5	4		4	215	180	245	435																					
112M					190	70			24	112																	240	190	265	470													
132S	FF265		216	178	89	38	80	10	33	132										265	230	300				275	210	315	510														
132M																								560																			
160M	FF300		254	210 254	108	42	110	12	37	160	14.5	300	250	350	18.5	5			8	330	255	385	670																				
160L																																					700						
180M				279	241	121														48	14	43	180									380	280	430	740								
180L				279	279																														790								
200L	FF350		318	305	133	55		16	49	200											350	300	400				420	305	480	790													
225S	FF400	4	286	60	140	18	53	225	18.5	400							350			450	18.5	5	8	8				830															
225M		2			356	149	55																		110	16	49												825				
		4、6		311																																		855					
250M	FF500	2	406	349	168	140	18	53	250									24							500	450	550	24	5	8													
		4、6																																									
280S		2	457	368	190		75	140	20																						68	280											985
		4、6																																									
280M	2				65		18	58																																			
	4、6				75		20	68																											1035								

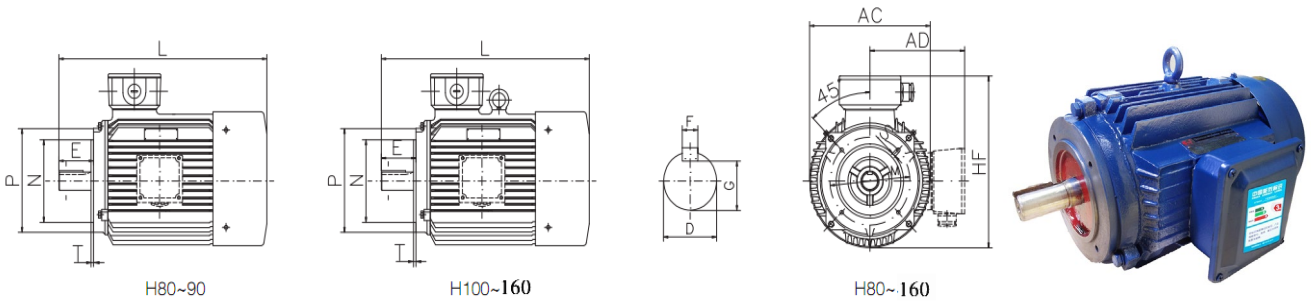
5.3 IMB34 形式 (Mounting Dimension B34)



IMB34 机座带底脚、端盖有凸缘(带螺孔)的电动机 (Frame with foot, endshield with flange)

机座号 Frame	凸缘号 Flange No.	极数 Poles	安装尺寸 Mounting Dimension													外形尺寸 Overall Dimension							
			A	B	C	D	E	F	G	H	K	M	N	P	S	T	AB	AC	AD	HD	L		
80M	FT100	2、4、 6	125	100	50	19	40	6	16	80	10	100	80	120	M6	3	165	175	145	220	305		
90S	FT115		140	56	24	50	8	20	90	24		100	115	95	140		M8	3	180	195	165	260	360
90L				125	390																		
100L	FT130		160	63	28	60	24	100	130	110	160	130	110	160	M8	3.5	205	215	180	275	435		
112M			190	70	112	230											240	190	300	470			
132S	FT165		216	140	89	38	80	10	33	132	12	165	130	200	M10	3.5	270	275	210	315	510		
132M				178	560																		
160M	FT215		254	210	108	42	110	12	37	160	15	215	180	250	M12	4	320	330	255	420	670		
160L				254	700																		

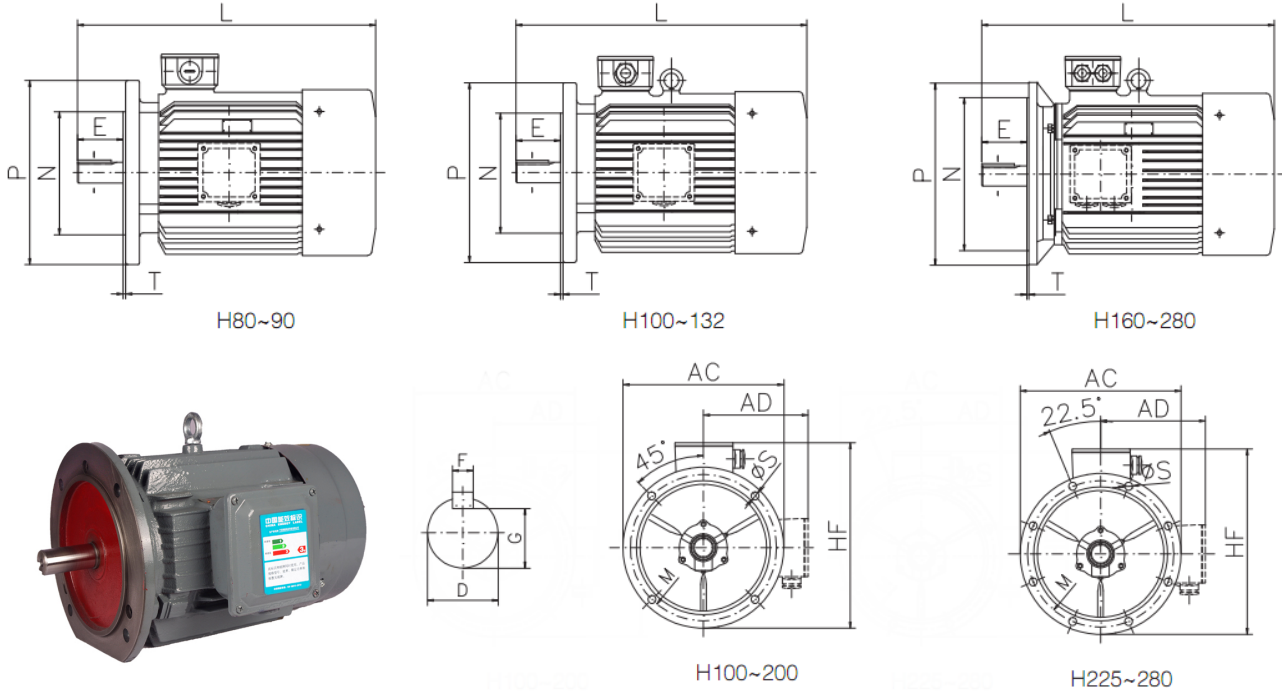
5.4 IMB14 形式 (Mounting Dimension B14)



IMB14 机座无底脚、端盖有凸缘(带螺孔)的电动机 (Frame without foot, endshield with flange)

机座号 Frame	凸缘号 Flange No.	极数 Poles	安装尺寸 Mounting Dimension										外形尺寸 Overall Dimension			
			D	E	F	G	M	N	P	S	T	AC	AD	HF	L	
80M	FT100	2、4、 6	19	40	6	16	100	80	120	M6	3	175	145		305	
90S	FT115		24	50	8	20	115	95	140	M8		3	195	165		360
90L																390
100L	FT130		28	60	24	130	110	160	M8	3.5	3.5	215	180	245	435	
112M												240	190	265	470	
132S	FT165		38	80	10	33	165	130	200	M10	3.5	3.5	275	210	345	510
132M																560
160M	FT215		42	110	12	37	215	180	250	M12	4	4	330	255	420	670
160L																700

5.5 IMB5 (Mounting Dimension B5)



IMB5机座无底脚、端盖有凸缘(带通孔)的电动机 (Frame without foot, endshield with flange)

机座号 Frame	凸缘号 Flange No.	极数 Poles	安装尺寸 Mounting Dimension									凸缘孔数 Flange Hole Number	外形尺寸 Overall Dimension								
			D	E	F	G	M	N	P	S	T		AC	AD	HF	L					
80M	FF165	2、4、6	19	40	6	16	165	130	200	12	3.5	4	175	145	245	305					
90S			24	50	8	20							360								
90L			24	50		20							390								
100L	FF215	2、4、6	28	60	10	24	215	180	250	14.5	4	215	180	245	435						
112M			28	60		24	215	180	250	14.5	4	240	190	265	470						
132S	FF265	2、4、6	38	80	10	33	265	230	300	18.5	5	4	275	210	315	510					
132M			38	80	10	33	265	230	300				275	210	315	560					
160M	FF300	2、4、6	42	110	12	37	300	250	350	18.5	5	4	330	255	385	670					
160L			42		37	300							250	350	330	255	385	700			
180M			48		14	43							380	280	430	740					
180L			48		14	43							380	280	430	790					
200L	FF350	2、4、6	55	16	49	350	300	400	420	305	480	790									
225S	FF400	4	60	140	18	53	400	350	450	18.5	5	8	470	335	535	830					
225M		2	55	110	16	49										825					
225L		4、6	60	18	53	855															
250M	FF500	2	140	18	58	500	450	550	18.5	5	8	510	370	595	915						
280S		4、6													65	20	68	985			
280M		2													65	18	58	580	410	650	1035
280L		4、6													75	20	68				