MARINE ELECTRIC MOTOR

YB2 Ranges of Three-Phase Induction Motors

Introduction YB2 ranges of three-phase induction motors are flame□proof motors obtained by renewal and generation-changing of YB ranges of motors. The performances of the products have come up to advanced internati...

ISO9001 Supplier

Class Certificate

Export Supply



Key Highlights

Category	Marine Electric Motor
Standard	DIN
Weight / Size	The outputs, mounting dimensions and their corresponding relationships c...
Certificate	CCS/LR/DNV/KR

We can supply according to your requirement, drawings, class certificate needs, and delivery schedule.

Technical Specifications

Category	Marine Electric Motor	Model / SKU	YB2-Ranges-of-Three-Phase-Induction-Motors
Standard	DIN	Weight / Size	The outputs, mounting dimensions and their corresponding relationships comply with IEC standards.
Certificate	CCS/LR/DNV/KR	Warranty	12 Months unless specified otherwise
Origin	China		

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Introduction

YB2 ranges of three-phase induction motors are flame□proof motors obtained by renewal and generation-changing of YB ranges of motors. The performances of the products have come up to advanced international standards. The motors have the advantages of higher efficiency,

energy saving, higher locked-rotor torque, lower noise, smaller vibration, safe and reliable operation and beautiful appearance, etc. The outputs, mounting dimensions and their corresponding relationships comply with IEC standards.

Ambient Conditions

Ambient air temperature changes with season, but does not exceed 35℃ (underground coal mine) or 40℃ (the factory), and is not lower than -15℃ .

Altitude above sea level: up to 1000m.

Note: when ambient air temperature and altitude are different from the above, refer to GB755.In the moistest month, the monthly-average maximums relative humidity is 90%, and the minimum temperature does not exceed 25℃ in this month (in the factory). In the underground coal mine, the highest relative humidity does not exceed 95%.

In the underground coal mine (non-excavating working) or the factory have easy-ignition and explosive gas , steam and air mixtures , which temperature class T1~T4.

Rated frequency: 50Hz.

Rated voltage: 380V, 660V and 380/660V.

Note: If you have special requirements for frequency, voltage, ambient air temperature and altitude, etc. Please put forward them when ordering.

Type Designation

The type designation consists of several letters and digits.

Mounting Arrangement

Three basic mounting arrangements and nine variant mounting arrangements, See the following table:

Technical Data

Type	Output kW	Rated Speed r/min	Current A		Efficiency %	Power factor cos φ	Locked-rotor current / Rated current	Locked-rotor toraue / Rated torque	Breakdown toraue / Rated torque	Noise dB(A)	
			380V	660V						No-load	Load
Synchronous speed 3000r/min (2poles)											
80M1-2	0.75	2850	1.8	—	75	0.83	6.0	2.2	2.3	67	69
80M2-2	1.1	2840	2.6		78	0.84					
90S-2	1.5	2850	3.4		79	0.84	7.0			72	74
90L-2	2.2	2850	4.8		81	0.85					
100L-2	3.0	2870	6.2		83	0.88				76	78
112M-2	4.0	2890	8.1	4.7	85	0.88				77	79
132S1-2	5.5	2900	11.1	6.3	86	0.88	7.5			80	82
132S2-2	7.5	2900	14.8	8.6	87	0.88					
160M1-2	11	2910	21.6	12.5	88.4	0.88			2.4	86	88
160M2-2	15	2940	28.8	16.6	89.4	0.89					
160L-2	18.5	2940	35.5	20.5	90	0.89					
180M-2	22	2950	41	23.7	90.5	0.90		2.0	2.3	89	91
200L1-2	30	2950	55.5	32.1	91.4	0.90			2.4	92	94
200L2-2	37	2950	67.9	/39.2	92	0.90					
225M-2	45	2960	82.1	47.4	92.5	0.90			2.3		
250M-2	55	2970	99.7	57.5	93	0.90		2.1		93	95
280S-2	75	2970	135	78	93.6	0.91		2.0		94	96
280M-2	90	2970	160	93	93.9	0.91		2.1			

315S-2	110	2984	195	113	94	0.91	7.0	1.8	2.2	96	98
315M-2	132	2984	232	134	94.5	0.91					
315L1-2	160	2984	280	162	94.6	0.91				99	101
315L2-2	200	2984	348	201	94.8	0.92					
355M-2	250	2984	338	250	95.2	0.92		1.6		103	105
355L-2	315	2984	544	314	95.4	0.92					

Type	Output kW	Rated Speed r/min	Current A		Efficiary %	Power factor cos φ	Locked-rotor current / Rated current	Locked-rotor toraue / Rated torque	Breakdown toraue / Rated torque	Noise dB(A)	
			380V	360V						No-load	Load
Synchronous speed 1500r/min (4 poles)											
80M1-4	0.55	1390	1.5	—	71	0.75	5.0	2.4	2.3	58	63
80M2-4	0.75	1390	2.0		73	0.77					
90S-4	1.1	1390	2.9		76.2	0.77	6.0	2.3		61	66
90L-4	1.5	1390	3.7		78.5	0.79					
100L1-4	2.2	1420	5.1		81	0.81			2.4	64	69
100L2-4	3.0	1420	6.8		82.6	0.82					
112M-4	4.0	1430	8.8	5.1	84.2	0.82				65	70
132S-4	5.5	1450	11.5	6.7	86	0.84	7.0			71	76
132M-4	7.5	1450	15.4	8.9	87	0.85					
160M-4	11	1460	22.3	12.9	88.4	0.85		2.2		75	80
160L-4	15	1460	30.1	17.4	89.4	0.85					79
180M-4	18.5	1470	36.5	21.2	90.5	0.85			2.3	76	80
180L-4	22	1470	43.1	24.9	91.2	0.85					
200L-4	30	1470	57.6	33.3	92	0.86	7.2		2.4	79	83
225S-4	37	1480	37.6	21.7	92.5	0.87				81	85
225M-4	45	1480	84.7	48.9	92.8	0.87					84
250M-4	55	1480	103	59.3	93	0.87				83	86
280S-4	75	1480	140	81	93.8	0.87				86	89
280M-4	90	1480	167	97	94.2	0.87					
315S-4	110	1484	201	116	94.5	0.88	7.0	2.1	2.2	93	96
315M-4	132	1484	239	138	94.8	0.88					
315L1-4	160	1484	288	116	94.9	0.89				97	100
315L2-4	200	1484	359	207	94.9	0.89					
355M-4	250	1484	495	255	95.2	0.90		1.6		101	104
355L-4	315	1484	556	322	95.2	0.90					

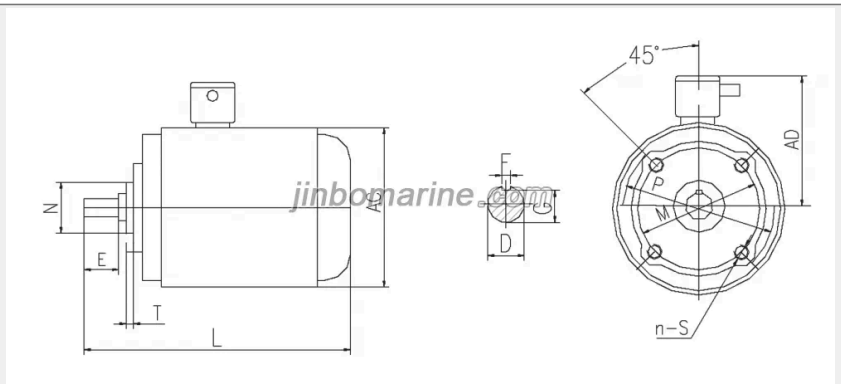
Type	Output kW	Rated Speed r/min	Current A		Efficiency %	Power factor cos φ	Locked-rotor current/ Rated current	Locked-rotor toraue / Rated torque	Breakdown toraue / Rated torque	Noise dB(A)	
			380V	660V						No-load	Load
Synchronous speed 1000r/min (6 poles)											
80M1-6	0.37	890	1.3	—	63	0.7	4.0	1.9	2.1	55	62
80M2-6	0.55	890	1.7		66	0.72					
90S-6	0.75	910	2.3		69	0.72		2.1		57	64
90L-6	1.1	910	3.1		73	0.73	5.0				
100L-6	1.5	930	3.9		76	0.76				61	68
112M-6	2.2	940	6.5		79	0.76				65	72
132S-6	3.0	970	7.3		81	0.77	6.0		2.4	69	76
132M1-6	4.0	970	9.4	5.4	83	0.78					
132M2-6	5.5	970	12.6	7.2	85	0.78	6.5				
160M-6	7.5	970	16.8	9.7	86	0.79				73	80
160L-6	11	970	24.3	14	87.5	0.79					
180L-6	15	980	31.6	18.3	89	0.81	7.0		2.1		84
200L1-6	18.5	980	37.6	21.7	90	0.83		2.2	2.4	76	82
200L2-6	22	980	44.7	25.8	90	0.83					
225M-6	30	980	57.6	33.3	92	0.86		2.1			
250M-6	37	980	69.8	40.3	92	0.86				78	84
280S-6	45	990	85.9	49.6	92.5	0.86				80	85
280M-6	55	990	105	60.5	92.8	0.86			2.2		
315S-6	75	987	140	80.9	93.5	0.86		2.0	2.0	85	90
315M-6	90	987	166.9	96.4	93.8	0.86					
315L1-6	110	987	202	117	94	0.86					
315L2-6	132	987	242	140	94.2	0.87					89
355S-6	160	980	292	168	94.5	0.88		1.9		92	96
355M-6	200	980	365	210	94.5	0.88					
355L-6	250	980	454	263	94.5	0.88					

Type	Output kW	Rated Speed r/min	Current A		Efficiency %	Power factor cos φ	Locked-rotor current / Rated current	Locked-rotor toraue / Rated torque	Breakdown toraue / Rated torque	Noise dB(A)	
			380V	660V						No-load	Load
Synchronous speed 750r/min (8 poles)											
80M1-8	0.18	650	0.8	—	52	0.61	3.3	1.8	1.9	52	60
80M2-8	0.25	650	1.1		55	0.61					
90S-8	0.37	670	1.4		63	0.62	4.0		2.0	56	64
90L-8	0.55	670	2.1		64	0.63					
100L1-8	0.75	670	2.4		71	0.68				59	67
100L2-8	1.1	690	3.3		73	0.69					
112M-8	1.5	690	4.4		75	0.69				61	69
132S-8	2.2	710	5.6		79	0.73	5.5		2.2	64	72
132M-8	3.0	710	7.6		81	0.73					
160M1-8	4.0	720	10.2	5.9	81	0.73	6.0	1.9		68	76
160M2-8	5.5	720	13.4	7.8	83	0.75					
160L-8	7.5	720	17.5	10.1	85	0.76					
180L-8	11	720	25.3	14.6	87	0.76				70	78
200L-8	15	730	33.7	19.5	89	0.76	6.5	2.0		73	80
225S-8	18.5	740	40	23.1	90	0.78					
225M-8	22	740	47.4	27.3	90.5	0.78					
250M-8	30	740	63.4	36.7	91	0.79		1.9	2.0	75	82
280S-8	37	740	77.8	44.9	91.5	0.79	6.0	1.8		76	83
280M-8	45	740	94.1	54.3	92	0.79					82
315S-8	55	740	110	64	92.8	0.81	6.5			82	88
315M-8	75	740	148	86	93.5	0.81					
315L1-8	90	740	178	102	93.8	0.82					
315L2-8	110	740	216	125	94	0.82					
355S-8	132	740	260	150	94.2	0.82	90	95			
355M-8	160	740	313	181	94.2	0.82					
355L-8	200	740	386	223	94.5	0.83					
Synchronous speed 600r/min (10 poles)											

315S-10	45	580	95.1	55	91.5	0.75	6.0	1.5	2.0	8.2	89
315M-10	55	580	117	67	92	0.75					
315L1-10	75	580	156	90	92.5	0.76					
315L2-10	90	580	187	108	93	0. 77					
355M1-10	110	580	275	132	93.2	0.78	5.5	1.3		90	
355M2-10	132	580	333	158	93.5	0.78					96
355L-10	160	580	385	192	93.5	0.78					

Mounting and overall dimensions

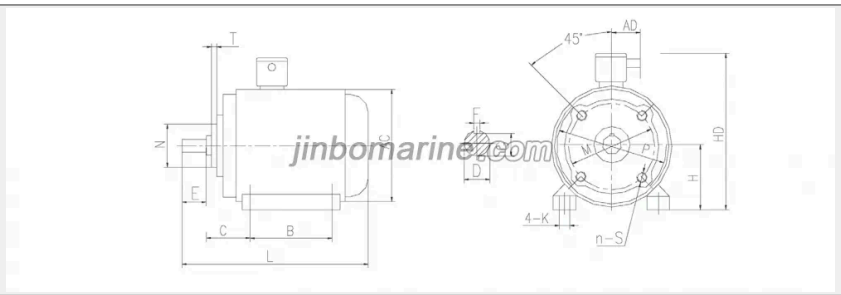
The motor of frame without feet, end-shield with flange(with threaded holes)



Frame size	Mounting and overall dimensions													
	D	E	F	G	M	N	P	S	T	n	Pipe thread for cable entry	AC	AD	L
80M	19	40	6	15.5	100	80	120	M6	3	4	M30X2	165	240	330
90S	24	50	8	20	115	95	140	M8	3.5			180	260	360
90L														385
100L	28	60		24	130	110	160					205	300	440
112M												230	310	460

Note : The numerators of fractions in the table give the data of 2ix)le motors and the dencminators of fractions the data motors more than 2-pole。

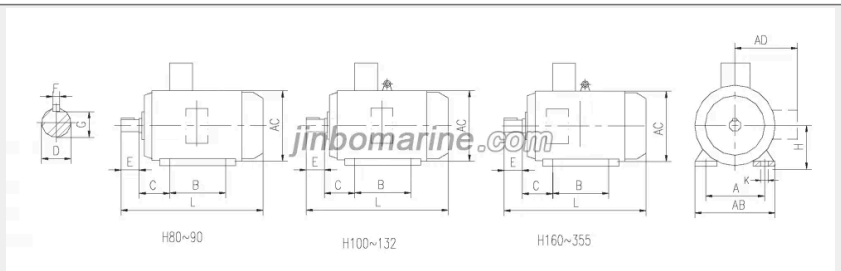
B14 The motor of frame with feet, end-shield with flange(with threaded holes)



Frame size	Mounting and overall dimensions																			
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	n	Pipe thread for cable entry	AB	AC	AD	HD	L
80M	125	100	50	19	40	6	15.5	80	10	100	80	120	M6	3	4	M30 X2	165	165	180	230	330
90S	140		56	24	50	8	20	90		115	95	140					180	180		350	360
90L		125																			385
100L	160	140	63	28	60		24	100	12	130	110	160	M8	3.5			200	205		400	440
112M	190		70					112									245	230	200	420	460

Note ：The numerators of fractions in the table give the data of 2-pole motors and the denominators of fractions the data motors more than 2-pole。

Mounting arrangements **B3**, frame with feet, end-shield without flange

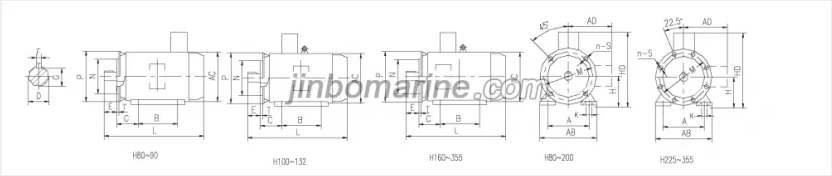


Frame size	Mounting and overall dimensions														
	A	B	C	D	E	F	G	H	K	Pipe thread for cable entry	AB	AC	AD	HD	L

80M	125	100	50	19	40	6	15.5	80	10	M30X2	165	165	180	230	330
90S	140		56	24	50	8	20	90			180	180		350	360
90L		125													385
100L	160	140	63	28	60		24	100	12		200	205		400	440
112M	190		70					112			245	230	200	420	460
132S	216		89	38	80	10	33	132			280	270		450	510
132M		178													550
160M	254	210	108	42	110	12	37	160	15	M36X2	330	325	220	520	670
160L		254													710
180M	279	241	121	48		14	42.5	180			355	360		550	730
180L		279													750
200L	318	305	133	55		16	49	200	19	M48X2	390	400	250	645	805
225S	356	286	149	55/60	110/140	16/18	49/53	225			435	450		690	865
225M		311													860/890
250M	406	349	168	60/65	140	18	53/58	250	24	M64X2	490	500	300	730	945
280S	457	368	190	65/75		18/20	58/67.5	280			545	560		810	1010
280M		419													1060
315S	508	406	216	65/80	140/170	18/22	58/71	315	28		640	630	400	1020	1320/1350
315M		457													1350/1380
315L		508													1490/1520
355S	610	500	254	75/95		20/25	67.5/86	355	28	M72X2	740	750	500	1080	1570
355M		560													165
355L		630													1750

Note ：The numerators of fractions in the table give the data of 2-pole motors and the denominators of fractions the data motors more than 2-pole。

Mounting arrangements **B35**, frame with feet, end-shield with flange(with through holes)

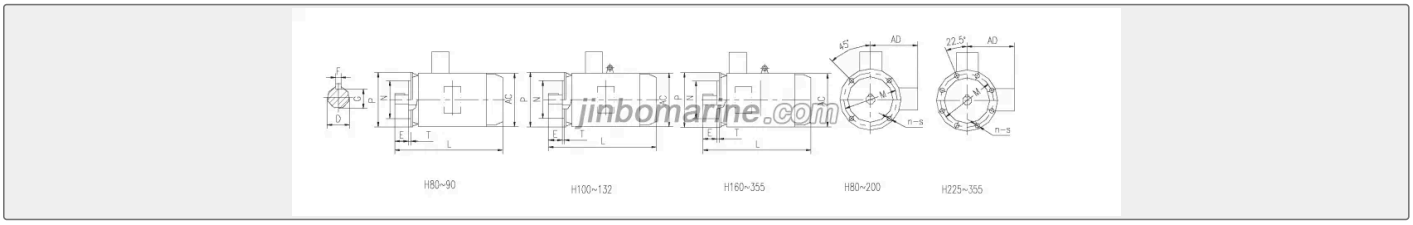


Frame size	Mounting and overall dimensions																				
	A	B	C	D	E	F	G	H	K	M	N	P	S	T	n	Pipe thread for cable entry	AB	AC	AD	HD	L
80	125	100	50	19	40	6	15.5	80	10	165	130	200	12	3.5	4	M30 X2	165	165	180	320	330
90S	140		56	24	50	8	20	90									180	180		350	360
90L		125																			385
100L	160	140	63	28	60		24	100	12	215	180	250	15	4			205	205		400	440
112M	190		70					112									245	230	200	420	460
132S	216		89	38	80	10	33	132		265	230	300					280	270		450	510
132M		178																			550
160M	254	210	108	42	110	12	37	160	15	300	250	350	19	5		M36 X2	330	325	220	520	670
160L		254																			710
180M	279	241	121	48		14	42.5	180									355	360		550	730
180L		279																			750
200L	318	305	133	55		16	49	200	19	350	300	400				M48 X2	390	400	250	645	805

225S	356	286	149	55/60	110/140	16/18	49/53	225		400	350	450			8		435	450		690	865
225M		311																			860/890
250M	406	349	168	60/65	140	18	53/58	250	24	500	450	550				M64 X2	490	500	300	730	945
280S	457	368	190	65/75		18/20	58/67.5	280									545	565		810	1010
280M		419																			1060
315S	508	406	216	65/80	140/170	18/22	58/71	315	28	600	550	660	24	6			640	630	400	1020	1320/1350
315M		457																			1350/1380
315L		508																			1490/1520
355S	610	500	254	75/95		20/25	67.5/86	355		740	680	800				M72 X2	740	750	500	1080	1570
355M		560																			1650
355L		630																			1750

Note ：The numerators of fractions in the table give the data of 2-pole motors and the denominators of fractions the data motors more than 2-pole。

Mounting arrangements **B5 or V1**, frame without feet, end-shield with flange(with through holes)



Frame size	Mounting and overall dimensions														
	D	E	F	G	M	N	P	S	T	n	Pipe thread for cable entry	AC	AD	L	
														B5	VI

80	19	40	6	15.5	165	130	200	12	3.5	4	M30X2	165	240	330	375
90S	24	50	8	20								180	260	360	405
90L														385	430
100L	28	60		24	215	180	250	15	4			205	300	440	485
112M											M36X2	230	310	460	520
132S	38	80	10	33	265	230	300					270	320	510	590
132M														550	630
160M	42	110	12	37	300	250	350	19	5			325	360	670	730
160L											M48X2			710	770
180M	48		14	42.5								360	370	730	800
180L														750	820
200L	55		16	49	350	300	400					400	445	805	875
225S	55/60	110/140	16/18	49/53	400	350	450			8	M64X2	450	465	865	935
225M														860/890	930/960
250M	60/65 65/75 65/80 75/95	140	18	53/58	500	450	550					500	500	945	1035
280S			18/20	58/67.5								560	550	1010	1100
280M														1060	1150
315S		140/170	18/22	58/71	600	550	660	24	6			630	705	_	1340/1370
315M															1420/1450
315L															1510/1540
355S			20/25	67.5/86	740	680	800				M72X2	750	725		1600
355M															
355L															1780