MARINE ELECTRIC MOTOR

YB3 Series Three-Phase Flame-Proof Induction Motors

ISO9001 Supplier
Class Certificate
Export Supply

Introduction YB3 ranges of three-phase induction motors are flame□proof motors obtained by renewal and generation-changing of YB2 ranges of motors. The performances of the products have come up to advanced internat...



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	YB3-Series-Three-Phase-Flame-Proof-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

YB3 ranges of three-phase induction motors are flame□proof motors obtained by renewal and generation-changing of YB2 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 temperature : -15℃ ~35℃ (underground coal mine) or -15℃ ~40℃ (the factory).

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 when ordering.

Type Designation

The type designation consists of several letters and digits.

Technical Data（2poles）

Type	Output kW	Rated Speed r/min	Current A		Efficiency η%	Power factor cos φ	Tst Tn	Ist In	Tax Tn	Noise dB(A) No-load	Weight kg
			380V	660V							
Synchronous speed 3000r/min (2poles)											
YB3-63M1-2	0. 18	2720	0.52	—	65.0	0.80	2.3	5. 5	2.2	61	15
YB3-63M2-2	0.25	2720	0. 69	—	68.0	0.81					16
YB3-71M1-2	0.37	2760	0.99	—	69.0	0.81		6. 1		64	18
YB3-71M2-2	0.55	2760	1.38	—	74.0	0.82					19
YB3-80M1-2	0.75	2880	1.77	—	77.5	0.83		6.8	2.3	67	25
YB3-80M2-2	1.1	2880	2. 53	—	82.8	0.83		7.3			26
YB3-90S-2	1.5	2900	3.22	—	84.1	0.84		7.6		72	30
YB3-90L-2	2.2	2890	4.58	—	85.6	0.85		7.8			34
YB3-100L-2	3.0	2890	6. 04	—	86.7	0.87		8.1		76	46
YB3-112M-2	4.0	2910	7.9	4.6	87.6	0.88		8.3		77	57
YB3-132S1-2	5.5	2920	10.7	6.2	88.6	0.88	2.2	8		80	80
YB3-132S2-2	7.5	2920	14.3	8.3	89.5	0.89		7.8			83
YB3-160M1-2	11	2942	20.8	12.0	90.5	0.89		7.9		86	112
YB3-160M2-2	15	2942	28.1	16.2	91.3	0.89		8			128
YB3-160L-2	18.5	2942	34.5	19.8	91.8	0.89		8. 1			158
YB3-180M-2	22	2960	40.8	23.5	92.2	0.89		8.2		88	200
YB3-200L1-2	30	2950	55.1	31.8	92.9	0.89		7.5		90	258
YB3-200L2-2	37	2950	67.7	39.1	93.3	0.89		7.5			273
YB3-225M-2	45	2965	82.0	47.2	93.7	0.89		7.6		92	339
YB3-250M-2	55	2970	100	58	94.0	0.89		7.6		93	455
YB3-280S-2	75	2970	136	78	94.6	0.89	2	6.9		94	633
YB3-280M-2	90	2970	162	94	95.0	0.89		7			634
YB3-315S-2	110	2975	195	113	95.0	0.90		7.1	2.2	96	1000
YB3-315M-2	132	2975	234	134	95.4	0.90					1200
YB3-315L1-2	160	2975	280	161	95.4	0.91				98	1170
YB3-315L2-2	200	2975	350	202	95.4						1230
YB3-355S1-2	185	2980	323.4	186.9	95.4						1560
YB3-355S2-2	200	2980	345.8	199.9	95.4						1560
YB3-355M1-2	220	2980	380.4	219.9	95.4					100	1765
YB3-355M2-2	250	2980	430.5	248.8	95.8						1765
YB3-355L1-2	280	2980	482.0	278.6	95.8						1900
YB3-355L2-2	315	2980	542.3	313.5	95.8						1900

Technical Data（4poles）

Type	Output kW	Rated Speed r/min	Current A		Efficiency η%	Power factor cosφ	Tst Tn	Ist In	Tax Tn	Noise dB(A) No-load	Weight kg
			380V	660V							
Synchronous speed 1500r/min (4poles)											
YB3-63M1-4	0. 12	1340	0.44	—	57.0	0.72	2.3	4.4	2.2	52	15
YB3-63M2-4	0. 18	1340	0.59	—	60.0	0.73					16
YB3-71M1-4	0.25	1350	0.78	—	65.0	0.74		5.2		55	18
YB3-71M2-4	0.37	1350	1.08	—	67.0	0.75					19
YB3-80M1-4	0.55	1435	1.42	—	80.7	0.75		6.3	2.3	58	25
YB3-80M2-4	0.75	1435	1.91	—	82.3	0.75		6.5			26
YB3-90S-4	1.1	1435	2.65	—	83.8	0.75		6.6		61	30
YB3-90L-4	1.5	1440	3.57	—	85.0	0.75		6.9			34
YB3-100L1-4	2.2	1450	4.78	—	86.4	0.81		7.5		64	44
YB3-100L2-4	3	1450	6.36	—	87.4	0.82		7.6			46
YB3-112M-4	4	1455	8.4	4.9	88.3	0.82		7.7		65	62
YB3-132S-4	5.5	1460	11.2	6.5	89.2	0.82	2	7.5		71	80
YB3-132M-4	7.5	1460	15.1	8.7	90. 1	0.83		7.4			83
YB3-160M-4	11	1470	21.6	12.5	91.0	0.85	2.2	7.5		75	136
YB3-160L-4	15	1470	28.9	16.7	91.8	0.86		7.5			154
YB3-180M-4	18.5	1475	35.5	20.5	92.2	0.86		7.7		76	202
YB3-180L-4	22	1475	42.0	24.3	92.6	0.86		7.8			220
YB3-200L-4	30	1470	56.9	32.8	93.2	0.86		7.2		79	272
YB3-225S-4	37	1480	69.8	40.2	93.6	0.86		7.3		81	334
YB3-225M-4	45	1480	84.7	48.7	93.9	0.86		7.4			339
YB3-250M-4	55	1480	103	60	94.2	0.86		7.4		83	475
YB3-280S-4	75	1480	137	79	94.7	0.88		6.7		86	635
YB3-280M-4	90	1480	164	95	95.0	0.88		6.9			690
YB3-315S-4	110	1480	199	115	95.4	0.88			2.2	93	1050
YB3-315M-4	132	1480	239	138	95.4	0.88					1200
YB3-315L1-4	160	1480	286	165	95.4	0.89				94	1230
YB3-315L2-4	200	1480	358	206	95.4	0.89					1300
YB3-355S1-4	185	1490	330.7	191.1	95.4	0.89					1560
YB3-355S2-4	200	1490	357.5	206.6	95.4	0.89					1560
YB3-355M1-4	220	1490	388.8	224.8	95.4	0.90				95	1750
YB3-355M2-4	250	1490	440.0	254.3	95.8	0.90					1750
YB3-355L1-4	280	1490	492.8	284.9	95.8	0.90					1950
YB3-355L2-4	315	1490	554.5	320.4	95.8	0.90					1950

Technical Data（6poles）

Type	Output kW	Rated Speed r/min	Current A		Efficiency η%	Power factor cos φ	Tst Tn	Ist In	Tax Tn	Noise dB(A) No-load	Weight kg
			380V	660V							
Synchronous speed 1000r/min (6poles)											
YB3-71M1-6	0.18	880	0.67	—	56.0	0.66	1.9	4	2.0	52	18
YB3-71M2-6	0.25	880	0.88	—	59.0	0.68					19
YB3-80M1-6	0.37	950	1.31	—	62.0	0.70		4.7		54	25
YB3-80M2-6	0. 55	950	1.68	—	75.4	0.72			27		
YB3-90S-6	0.75	950	2.03	—	77.7	0.72	2.1	5.8	2.1	57	31
YB3-90L-6	1.1	955	2.86	—	79.9	0.73		5.9			34
YB3-100L-6	1.5	970	3.78	—	81.5	0.74		6		61	43
YB3-112M-6	2.2	955	5.3	—	83.4	0.74				65	63
YB3-132S-6	3	970	7.9	—	84.9	0.74	2.0	6.2		69	80
YB3-132M1-6	4	976	8.4	4.9	86.1	0.74		6.8			86
YB3-132M2-6	5.5	976	12.7	7.4	87.4	0.75		7.1			88
YB3-160M-6	7.5	980	16.5	9.5	89.0	0.78	2.1	6.7		73	129
YB3-160L-6	11	980	23.5	13.6	90.0	0.79		6.9			153
YB3-180L-6	15	980	31.0	17.9	91.0	0.81	2.0	7.2			205
YB3-200L1-6	18.5	980	37.9	21.9	91.5	0.81	2.1			76	250
YB3-200L2-6	22	980	44.3	25.6	92.0	0.82		7.3			273
YB3-225M-6	30	985	60.8	35.0	92.5	0.81	2.0	7.1			337
YB3-250M-6	37	990	72	42	93.0	0.84	2.1			78	477
YB3-280S-6	45	990	85	49	93.5	0.86		7.2	2.0	80	640
YB3-280M-6	55	990	104	60	93.8	0.86					691
YB3-315S-6	75	985	142	81.9	94.2	0.85	2.0	6.7		85	980
YB3-315M-6	90	985	172	99.2	94.5	0.84					1100
YB3-315L1-6	110	985	207	119	95.0	0.85					1150
YB3-315L2-6	132	985	245	141	95.0	0.86					1260
YB3-355S-6	160	990	296.7	171.5	95.0	0.87				92	1560
YB3-355M1-6	185	990	343.0	198.3	95.0	0.87					1790
YB3-355M2-6	200	990	370.9	214.4	95.0	0.87					1790
YB3-355L1-6	220	990	408.0	235.0	95.0	0.87					2030
YB3-355L2-6	250	990	463.6	267.9	95.0	0.87					2030

Technical Data（8poles）

Type	Output kW	Rated Speed r/min	Current A		Efficiency η%	Power factor cos φ	Tst Tn	Ist In	Tax Tn	Noise dB(A) No-load	Weight kg
			380V	660V							

Synchronous speed 750r/min (8poles)

YB3-80M1-8	0.18	650	0.86	—	51.0	0.61	1.8	3.3	1.9	52	26
YB3-80M2-8	0.25	650	1.13	—	54.0	0.61					28
YB3-90S-8	0.37	670	1.46	—	62.0	0.61		4.0		56	32
YB3-90L-8	0.55	670	1.85	—	63.0	0.61			2.0		35
YB3-100L1-8	0.75	690	2.42	—	70.0	0.67				59	46
YB3-100L2-8	1.1	690	3.36	—	72.0	0.69		5.0			48
YB3-112M-8	1.5	690	4.00	—	74.0	0.70				61	64
YB3-132S-8	2.2	710	5.78	—	79.0	0.71		6.0		64	81
YB3-132M-8	3	710	7.69	—	80.0	0.73					88
YB3-160M1-8	4	720	10.5	6.0	81.0	0.73	1.9			68	111
YB3-160M2-8	5.5	720	13.6	7.9	83.0	0.74					129
YB3-160L-8	7.5	720	17.8	10.3	85.5	0.75					158
YB3-180L-8	11	720	24.5	14.7	87.5	0.75	2.0	6.5		70	205
YB3-200L-8	15	730	34.1	19.6	88.0	0.76		6.6		73	263
YB3-225S-8	18.5	730	41.1	23.7	90.0	0.76	1.9				337
YB3-225M-8	22	730	47.4	27.3	90.5	0.78					337
YB3-250M-8	30	740	64	37	91.0	0.79		6.5		75	478
YB3-280S-8	37	740	78	45	91.5	0.79		6.6		76	605
YB3-280M-8	45	740	95	55	92.0	0.79					680
YB3-315S-8	55	740	111	64	92.8	0.81	1.8			82	960
YB3-315M-8	75	740	150	86.6	93.5	0.81		6.2			1120
YB3-315L1-8	90	740	178	102	93.8	0.82		6.4			1190
YB3-315L2-8	110	740	217	125	94.0	0.82					1270
YB3-355S-8	132	740	259.6	150.1	93.7	0.82				90	1560
YB3-355M-8	160	740	314.7	181.9	94.2	0.82					1820
YB3-355L1-8	185	740	363.9	210.3	94.2	0.82					2030
YB3-355L2-8	200	740	387.0	223.7	94.5	0.83					2030

Technical Data（10poles）

Type	Output kW	Rated Speed r/min	Current A		Efficiacy η%	Power factor cos φ	Tst Tn	Ist In	Tax Tn	Noise dB(A) No-load	Weight kg
			380V	660V							
Synchronous speed 600r/min (10poles)											

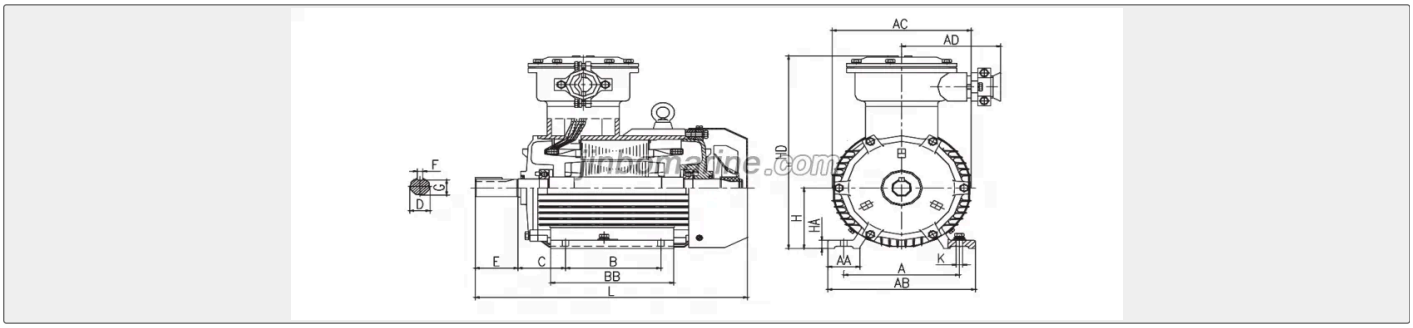
YB3-315S-10	45	592	99.6	57.4	91.5	0.75	1.5	6.2	2	82	930
YB3-315M-10	55	592	121	69.7	92.0	0.75					950
YB3-315L1-10	75	592	162	93.3	92.5	0.76		5.8			1150
YB3-315L2-10	90	592	191	110	93.0	0.77		5.9			1260
YB3-355S-10	90	590	190.3	110	93.0	0.77					1560
YB3-355M1-10	110	590	229.6	132.7	93.2	0.78	1.3	6.0		90	1670
YB3-355M2-10	132	590	274.7	158.8	93.5	0.78					1820
YB3-355L1-10	160	590	332.9	192.4	93.5	0.78					2030
YB3-355L2-10	185	590	385.0	222.5	93.5	0.78					2030

Conventional mounting type and suitable frame size are given in following table (with"√")

Frame	Basic type			Derived type											
	B3	B5	B35	V1	V3	V5	V6	B6	B7	B8	V15	V36	B14	B34	V18
63~71	V	V	—	V	V	V	V	V	V	V	—	—	—	—	—
80 ~ 112	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
132~160	V	V	V	V	V	V	V	V	V	V	V	V	—	—	—
180~280	V	V	V	V	—	—	—	—	—	—	—	—	—	—	—
315~355	V	—	V	V	—	—	—	—	—	—	—	—	—	—	—

Mounting and overall dimensions

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

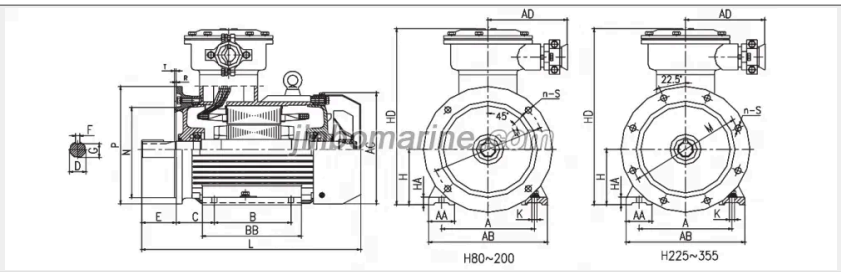


Frame size	Mounting and overall dimensions																
	A	B	C	D	E	F	G	H	K	AA	BB	HA	AB	AC	AD	HD	L
63	100	80	40	11	23	4	8.5	63	7	25	110	8	125	150	170	230	270
71	112	90	45	14	30	5	11	71		28	114		140	155		250	300
80	125	100	50	19	40	6	15.5	80	10	34	130	10	165	165	180	310	330
90S	140		56	24	50	8	20	90		36	130	14	180	180		330	370
90L		125								36	155						395
100L	160	140	63	28	60		24	100	12	43	176	14	200	205		355	450
112M	190		70					112		50	180	16	245	230	200	370	500
132S	216		89	38	80	10	33	132		60	190	18	280	270		430	550
132M		178								60	230						600

160M	254	210	108	42	110	12	37	160	15	70	258	25	330	325	220	520	720
160L		254								70	302						750
180M	279	241	121	48		14	42.5	180		70	311	22	355	360		550	780
180L		279								70	349						800
200L	318	305	133	55		16	49	200	19	70	366	25	390	400	260	645	840
225S	356	286	149	55/60	110/140	16/18	49/53	225		75	355	28	435	450		700	920
225M		311									380						950
250M	406	349	168	60/65	140	18	53/58	250	24	80	420	30	490	500	300	730	965
280S	457	368	190	65/75		18/20	58/67.5	280		85	438	35	545	560		810	1020
280M		419									489						1075
315S	508	406	216	65/80	140/170	18/22	58/71	315	28	120	550	45	640	630	400	980	1190
315M		457									680						1310
315L		508															
355S	610	500	254	75/95		20/25	67. 5/86	355	28	116	636	52	740	750	500	1100	1415/1485
355M		560									696						1495/1565
355L		630									766						1645/1675

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

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



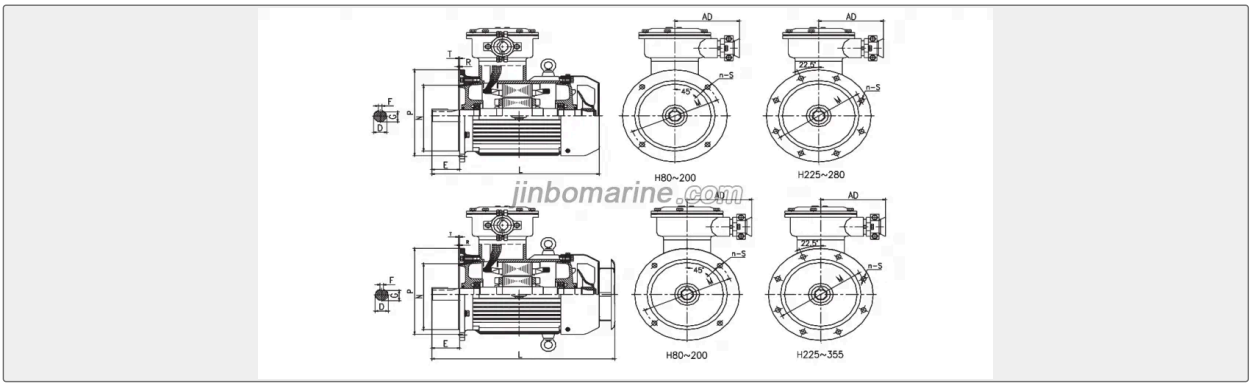
Mounting and overalL dimensions

Frame size	A	B	C	D	E	F	G	H	K	M	N	P	S	T	n	AA	BB	HA	AB	AC	AD	HD	L
80	125	100	50	19	40	6	15.5	80	10	165	130	200	12	3.5	4	34	130	10	165	165	180	310	330
90S	140		56	24	50	8	20	90								36	130	14	180	180		330	370
90L		125														36	155						395
100L	160	140	63	28	60		24	100	12	215	180	250	15	4		43	176	14	200	205		355	450
112M	190		70					112								50	180	16	245	230	200	370	500
132S	216		89	38	80	10	33	132		265	230	300				60	190	18	280	270		430	550
132M		178														60	230						600

160M	254	210	108	42	110	12	37	160	15	300	250	350	19	5		70	258	25	330	325	220	520	720
160L		254														70	302						750
180M	279	241	121	48		14	42.5	180								70	311	22	355	360		550	780
180L		279														70	349						800
200L	318	305	133	55		16	49	200	19	350	300	400				70	366	25	390	400	260	660	840
225S	356	286	149	55/60	110/140	16/18	49/53	225		400	350	450			8	75	355	28	435	450		690	920
225M		311															380						950
250M	406	349	168	60/65	140	18	53/58	250	24	500	450	550				80	420	30	490	500	300	730	965
280S	457	368	190	65/75		18/20	58/67. 5	280								85	438	35	545	560		810	1020
280M		419															489						1075
315S	508	406	216	65/80	140/170	18/22	58/71	315	28	600	550	660	24	6		120	550	45	640	630	400	980	1190
315M		457															680						1310
315L		508																					
355S	610	500	254	75/95		20/25	67. 5/86	355		740	680	800				116	636	52	740	750	500	1100	1415/1485
355M		560															696						1495/1565
355L		630															766						1645/1675

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-poleo

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



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Frame size	Mounting and overall dimensions													
	D	E	F	G	M	N	P	S	T	n	AC	AD	L	
													B5	V1
63	11	23	4	8.5	115	95	140	10	3	4	130	180	270	310
71	14	30	5	11	130	110	160				145		300	340

80	19	40	6	15.5	165	130	200	12	3.5	4	165		330	375
90S	24	50	8	20							180		370	415
90L													395	445
100L	28	60		24	215	180	250	15	4		205		450	500
112M											230	200	500	565
132S	38	80	10	33	265	230	300				270		550	640
132M													600	690
160M	42	110	12	37	300	250	350	19	5		325	220	720	790
160L													750	820
180M	48		14	42.5							360		780	850
180L													800	870
200L	55		16	49	350	300	400				400	260	840	920
225S	55/60	110/140	16/18	49/53	400	350	450			8	450		920	970
225M													950	1000
250M	60/65	140	18	53/58	500	450	550				500	300	965	1070
280S	65/75		18/20	58/67.5							560		1020	1090
280M													1075	1180
315S	65/80	140/170	18/22	58/71	600	550	660	24	6		630	400	—	1370
315M														1540
315L														
355S	75/95		20/25	67.5/86	740	680	800				750	500		1550/1620
355M														1630/1700
355L														1780/1810

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