

MARINE ELECTRIC MOTOR

YB2—H Totally-Enclosed/Fan-Cooled /Three-Phase Marine Flameproof Motors

ISO9001 Supplier

Class Certificate

Export Supply

Introduction YB2—H Series are totally-enclosed, fan-cooled three-phase marine flameproof motors of the squirrel-cage type. The motors are designed and manufactured according to National Standard IEC60079-0 《Electri...



Key Highlights

Category	Marine Electric Motor
Standard	DIN
Weight / Size	IEC60034 Rotating electrical machines IEC60068 Basic environmental testi...
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-H-Totally-Enclosed-Fan-Cooled-Three-Phase-Marine-Flameproof-Motors
Standard	DIN	Weight / Size	IEC60034 Rotating electrical machines IEC60068 Basic environmental testing procedures IEC60072 Dimensions and output ratings for rotating electrical machines IEC60092 Electrical installation in ships Type Designation The type designation consists of several letters and digits.
Certificate	CCS/LR/DNV/KR	Warranty	12 Months unless specified otherwise
Origin	China		

CONTENTS	■ Introduction ■ Type Designation ■ Mounting Arrangement ■ Mounting Arrangements (IM)	■ The motors is also accordance with the following standards and specifications: ■ perating Conditions ■ Table 1 Frame Size ■ Technical Data and Mounting and Overall Dimensions
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Introduction

YB2—H Series are totally-enclosed, fan-cooled three-phase marine flameproof motors of the squirrel-cage type. The motors are designed and manufactured according to National Standard IEC60079-0 《Electrical apparatus for explosive gas atmosphere-Part 0 : General requirements 》 and IEC60079-1 《Electrical apparatus for explosive gas atmosphere-Part 1 : Flameproof enclosure"d"》. The protection type of the motor is ExdIIBT4 or ExdIICT4. They have the features of good function, low noise , and convenient protection.

The motors can be used to drive various machines, such as pumps, ventilator, separators and hydraulic machines which placed in areas where flameproof grade is IIA、 IIB and IIC, temperature class T1~T4, easy-ignition and explosive gas ,steam and air mixtures.

The motors is also accordance with the following standards and specifications:

- IEC60034 Rotating electrical machines
- IEC60068 Basic environmental testing procedures
- IEC60072 Dimensions and output ratings for rotating electrical machines
- IEC60092 Electrical installation in ships

Type Designation

The type designation consists of several letters and digits.



Operating Conditions

- Temperature of Ambient air: -20°C ~+45°C
- Altitude : 0m
- Relative humidity : ≤ 95%
- Dew : exists
- Salt mist : exists
- Oil mist : exists
- Fungus : exists
- Shock : exists
- Vibration : exists
- Inclination and swing : ±22.5°
- Rated Voltage : 380V or 440V
- Rated Frequency : 50Hz or 60Hz
- Connection : 3kW or Less Y、 more than 3kW △
- Duty Type : Continuous
- Insulation : F
- Rise of winding(resistance method) 80K,Permissible working temp of bearing(thermometer method) 90°C

Mounting Arrangement

Mounting arrangements available for various frame sizes are shown in table 1.

Frame Size	Mounting Arrangements (IM)
80 ~160	B3, B5, B6, B7, B8, B35, VI, V3, V5, V6, V15, V36
180~225	B3, B5B35, VI
250 ~355	B3, B35, VI

Technical Data and Mounting and Overall Dimensions

Mounting and overall dimensions are shown respectively by table 2 ~ 5

Table 2

Type	Output kW	Current A		Type	Output kW	Current A	
		380V 50Hz	440V 60Hz			380V 50Hz	440V 60Hz
YB280M1-2-H	0.75	1.8	1.6	YB2315L2-4-H	200	361.3	318.9
YB280M2-2-H	1.1	2.6	2.2	YB2355M-4-H	250	464	410
YB290S-2-H	1.5	3.5	3. 1	YB2355L-4-H	315	582	514.0
YB290L-2-H	2.2	4.9	4.3	YB290S-6-H	0.75	2.2	2.0
YB2100L-2-H	3	6.2	5.4	YB290L-6-H	1.1	3.2	2.9
YB2112M-2-H	4	8.2	7.2	YB2100L-6-H	1.5	4.0	3.5
YB2132S1-2-H	5.5	11	9.6	YB2112M-6-H	2.2	5.8	5.2
YB2132S2-2-H	7.5	14.6	12.9	YB2132S-6-H	3	7.2	6.4

YB2160M12-H	11	21.6	18.7	YB2132M1-6-H	4	9.5	8.2
YB2160M2-2-H	15	28.9	25.1	YB2132M2-6-H	5.5	12.5	10.7
YB2160L-2-H	18.5	35.7	30.3	YB2160M-6-H	7.5	17.1	14.8
YB2180M-2-H	22	42.2	36.9	YB2160L-6-H	11	25.0	21.7
YB2200L1-2-H	30	57.9	50.3	YB2180L-6-H	15	33.0	29.3
YB2200L2-2-H	37	69.4	60.3	YB2200L1-6-H	18.5	37.6	32.7
YB2225M-2-H	45	85.9	76.3	YB2200L2-6-H	22	44.7	38.9
YB2250M-2-H	55	103.2	91.7	YB2225M-6-H	30	61.1	53.1
YB2280S-2-H	75	139.2	120.9	YB2250M-6-H	37	71.0	61.3
YB280M-2-H 90		167.1	143.5	YB2280S-6-H	45	86.4	74.6
YB2315S-2-H	110	203.0	180.2	YB2280M-6-H	55	103.2	89.7
YB2315M-2-H	132	242.3	215.1	YB2315S-6-H	75	141.1	123.9
YB2315L12-H	160	292.1	259.3	YB2315M-6-H	90	168.6	148.1
YB2315L2-2-H	200	365.1	324.1	YB2315L1-6-H	110	205.4	180.4
YB2355M-2-H	250	451	401	YB2315L2-6-H	132	245.7	215.8
YB2355L-2-H	315	566	502	YB2355M1-6-H	160	302.0	265.3
YB280MI-4-H	0.55	1.5	1.4	YB2355M2-6-H	200	377	331
YB280M2-4-H	0.75	2.1	1.8	YB2355L-6-H	250	469	412
YB290S-4-H 1.1		2.7	2.4	YB2132S-8-H	2.2	5.8	5.2
YB290L-4-H 1.5		3.6	3.2	YB2132M-8-H	3	7.6	6.8
YB2100L1-4-H	2.2	5.0	4.5	YB2160MI-8-H	4	10.5	9.1
YB2100L2-4-H	3	6.8	5.9	YB2160M2-8-H	5.5	13.4	11.5
YB2112M-4-H	4	8.9	7.7	YB2160L-8-H	7.5	17.7	15.5
YB2132S-4-H	5.5	11.7	10	YB2180L-8-H	11	25.6	22.2
YB2132M-4-H	7.5	15.4	13.2	YB2200L-8-H	15	33.3	29.2

YB2160M-4-H	11	22.6	19.5	YB2225S-8-H	18.5	40.3	35.6
YB2160L-4-H	15	30.5	26.3	YB2225M-8-H	22	47.4	41.7
YB2180M-4-H	18.5	35.9	30.8	YB2250M-8-H	30	64.7	57.1
YB2180L-4-H	22	42.2	36.9	YB2280S-8-H	37	79.8	68.9
YB2200L-4-H	30	57.3	49.8	YB2280M-8-H	45	94.8	80.8
YB2225S-4-H	37	70.2	60.3	YB2315S-8-H	55	113.5	98.59
YB2225M-4-H	45	84.0	73.4	YB2315M-8-H	75	152.1	132.0
YB2250M-4-H	55	103.8	88.7	YB2315L1-8-H	90	179.3	155.6
YB2280S-4-H	75	139.2	120	YB2315L2-8-H	110	218.4	189.6
YB2280S-4-H	90	164.3	141.9	YB2355M1-8-H	132	265	230
YB2315S-4-H	110	200.8	177.3	YB2355M2-8-H	160	320	278
YB2315M-4-H	132	239.7	211.6	YB2355L-8-H	200	399	347
YB2315L1-4-H	160	289.0	255.1				

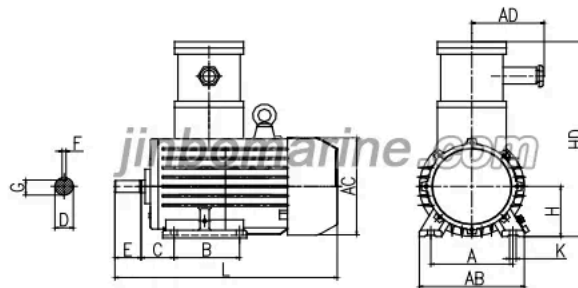


Table 3

Frame Size	Pole	A	AB	AC	AD	B	C	H	HD	L	K	Bearings	
												Driving end	Non-Driving
80M	2、4、6	125	165	175	160	100	50	80	340	360		6204-2RS	6204-2RS
90S	2、4、6					100				390	10		
90L	2、4、6	140	180	180	160	125	56	90	350	440		6205-2RS	6205-2RS
100L	2、4、6	160	205	205	160	140	63	100	400	470	12	6206-2RS	6206-2RS
112M	2、4、6	190	245	230	160	140	70	112	420	470		6306-2RS	6306-2RS
132S	2、4、6、8					140				590			
132M	2、4、6、8	216	280	280	200	178	89	132	450	590	12	6308-2RS	6308-2RS
160M	2、4、6、8					210				680			
160L	2、4、6、8	254	330	325	220	254	108	160	560	720	15	6309-2RS	6309-2RS
180M	2、4、6、8					241				830			
180L	2、4、6、8	279	355	360	220	279	121	180	580	830	15	6311-2RS	6311-2RS

200L	2、 4、 6、 8	318	395	420	250	305	133	200	650	850		6312-2RS	6312-2RS
225S	2			450		286							
	4、 6、 8	356	435		250		149	225	690	970	19	6313-2RS	6313-2RS
225M	2			450		311							
	4、 6、 8												
250M	2												
	4、 6、 8	406	495	500	300	349	168	250	800	1100		6314	6314
280S	2											6314	6314
	4、 6、 8					368				1140	24	6317	6317
280M	2	457	550	565	300		190	280	860			6314	6314
	4、 6、 8					419				1190		6317	6317
315S	2											6317	6317
	4、 6、 8					406				1255		6319	6319
315M	2											6317	6317
	4、 6、 8	508	640	645	300	457	216	315	1050	1315		6319	6319
315L	2											6317	6317
	4、 6、 8					508				1460	28	6319	6319
355M	2											6319	6319
	4、 6、 8					560				1580		6322	6322
355L	2	610	740	750	350		254	355	1150			6319	6319
	4、 6、 8					630				1620		6322	6322

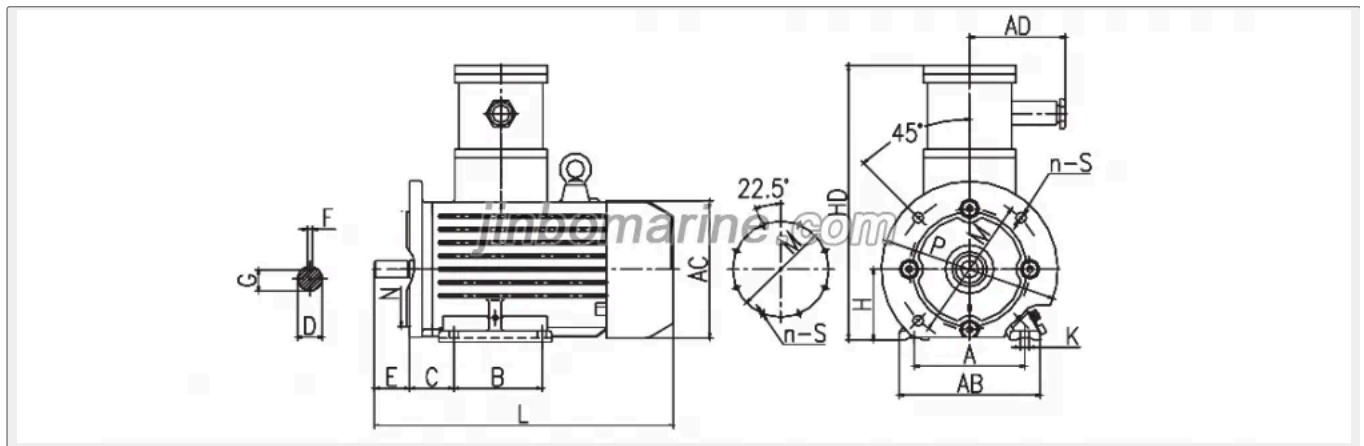


Table 4

Frame Size	Pole																bearings			
		A	AB	AC	AD	B	C	H	HD	L		K	M	N	P	S	T	n	Driving end	Non-Drivin end
80M	2、 4、 6	125	165	175	160	100	50	80	340	360			165	130	200	12	3.5		6204-2RS	6204-2RS
90S	2、 4、 6	140	180	180	160	100	56	90	350	390	10		165	130	200	12	3.5		6205-2RS	6205-2RS
90L	2、 4、 6					125				440										
100L	2、 4、 6	160	205	205	160	140	63	100	400	470		12	215	180	250	15	4		6206-2RS	6206-2RS
112M	2、 4、 6	190	245	230	160	140	70	112	420	470		12	215	180	250	15	4		6306-2RS	6306-2RS
132S	2、 4、 6、 8					140				590										
132M	2、 4、 6、 8	216	280	280	200	178	89	132	450	590	12	265	230	300	15	4	4		6308-2RS	6308-2RS
160M	2、 4、 6、 8					210				680										
160L	2、 4、 6、 8	254	330	325	220	254	108	160	560	720	15	300	250	350	19	5			6309-2RS	6309-2RS
180M	2、 4、 6、 8					241				830										
180L	2、 4、 6、 8	279	355	360	220	279	121	180	580	830	15	300	250	350	19	5			6311-2RS	6311-2RS
200L	2、 4、 6、 8	318	395	420	250	305	133	200	650	850	19	350	300	400	19	5			6312-2RS	6312-2RS
225S	2	356	435		250		149	225	690	970			400	350	450	19	5	8	6313-2RS	6313-2RS
	4、 6、 8			450		286														

Technical drawing of a 100W 12VDC marine pump. The drawing includes three views: a side view, a front view, and a detail view of the pump head. Dimensions are labeled as follows:

- Side View:** Shows the pump's profile with dimensions F (height of the mounting bracket), D (width of the mounting bracket), G (height of the pump body), E (height of the base), I (height of the pump head), N (width of the base), L (total length), and AC (length of the pump head).
- Front View:** Shows the pump's face with dimensions AD (height of the pump head), 45° (angle of the pump head), 22.5° (angle of the pump head), $n-S$ (width of the pump head), and HF (total height).
- Detail View:** Shows the pump head with dimensions AD (height of the pump head), 45° (angle of the pump head), 22.5° (angle of the pump head), $n-S$ (width of the pump head), and HF (total height).

Frame Size Pole		AC	AD	L	M	N	P	S	T	n	HF	Bearings	
												Driving end	Non-Driving end
80M	2、4、6	175	160	400	165	130	200	12	3.5		340	6204-2RS	6204-2RS
90S	2、4、6	180	160	430	165	130	200	12	3.5		350	6205-2RS	6205-2RS
90L	2、4、6			470									
100L	2、4、6	205	160	500	215	180	250	15	4		400	6206-2RS	6206-2RS
112M	2、4、6	230	160	520	215	180	250	15	4		420	6306-2RS	6306-2RS
132S	2、4、6、8	280	200	630	265	230	300	15	4	4	450	6308-2RS	6308-2RS
132M	2、4、6、8			630									
160M	2、4、6、8	325	220	770	300	250	350	19	5		560	6309-2RS	6309-2RS
160L	2、4、6、8			810									
180M	2、4、6、8	360	220	860	300	250	350	19	5		580	6311-2RS	6311-2RS
180L	2、4、6、8			860									
200L	2、4、6、8	420	250	950	350	300	400	19	5		650	6312-2RS	6312-2RS
225S	2	450	250	1020	400	350	450	19	5	8	690	6313-2RS	6313-2RS
	4、6、8												
225M	2	500	300	1250							800	6314	6314
	4、6、8												
250M	2	565	300	1250	500	450	550	19	5		860	6314	6314
	4、6、8												
280S	2	565	300	1300								6317	6317
	4、6、8												
280M	2	750	350	1820	740	680	800	24	6		1200	6319	6319
	4、6、8												
315S	2	750	350	1820	740	680	800	24	6		1200	6319	6319
	4、6、8												
315M	2	750	350	1820	740	680	800	24	6		1200	6319	6319
	4、6、8												
315L	2	750	350	1820	740	680	800	24	6		1200	6319	6319
	4、6、8												
355M	2	750	350	1820	740	680	800	24	6		1200	6319	6319
	4、6、8												
355L	2	750	350	1820	740	680	800	24	6		1200	6319	6319
	4、6、8												

