Jinbo Marine

Marine & Offshore Equipment Datasheet

PRODUCT DATASHEET

MARINE ELECTRIC MOTOR

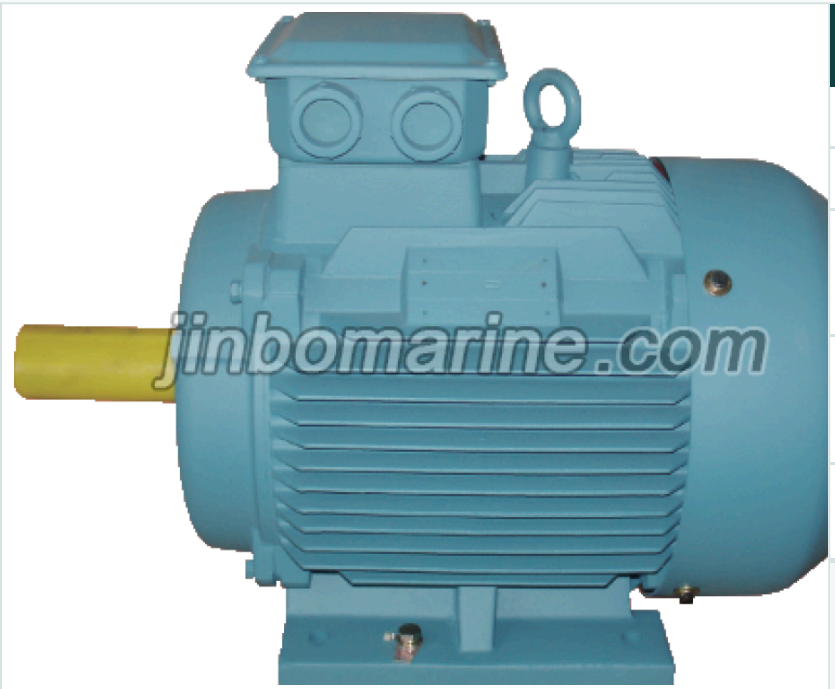
M2E—H Fan-cooled Three-phase Squirrel-cage Marine Electronic Motor

ISO9001 Supplier

Class Certificate

Export Supply

Introduction M2E-H Series are totally-enclosed, fan-cooled high-efficiency three-phase marine motors of the squirrel-cage type. The series motor has the advantage of high efficiency,low noise, reasonable structure,...



Key Highlights

Category	Marine Electric Motor
Standard	DIN
Material	The motors are designed accordance with National Standard IEC60034-1 “Ro...
Weight / Size	IEC60034 Rotating electrical machines IEC60068 Basic environmental testi...
Certificate	ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS

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

Technical Specifications

Category	Marine Electric Motor	**Model / SKU**	M2E-H-Fan-cooled-Three-phase-Squirrel-cage-Marine-Electronic-Motor
Standard	DIN	**Material**	The motors are designed accordance with National Standard IEC60034-1 “Rotating electrical machines-Rating and performance”and the existing “Rules for the construction of sea-going steel ships”and GB18613-2012“ Minimum allowable values of energy efficiency and energy grade for small and medium three-phase induction motors”.
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 The motors are also in conformity with part of the specifications of the following Ships Classification Societies LR Lloyd’s Register of Shipping GL Germanischer Lloyd NK Nippon Kaiji Kyokai BV Bureau Veritas ABS American Bureau of Shipping KR Korean Register of Shipping RINA Register Italiano Navale RS Russian Maritime Register of Shipping DNV Det Norske Veritas Type Designation The type designation consists of several letters and digits.	**Surface**	90℃ Type of starting Direct on full-voltage starting for all sizes ; reduced voltage starting allowable at no-load or light load Driving Method Pulley , spur or flexible coupling can be used for driving Impregnation and Surface Treatment The motor windings impregnated and well treated to obtain the adequate damp-proof , anti-fungus and anti-salt□ mist properties in accordance with the specifications for humid-tropic machines.
Certificate	ABS, LR, BV, DNVGL, NK, KR, IRS, RMRS, CCS	**Warranty**	12 Months unless specified otherwise
Origin	China		

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Introduction

M2E-H Series are totally-enclosed, fan-cooled high-efficiency three-phase marine motors of the squirrel-cage type. The series motor has the advantage of high efficiency,low noise, reasonable structure, beautiful profile,high protection and high insulation. The motors are suitable for driving various machines on ships such as pumps, blowers, separators, hydraulic engines and other auxiliary equipment.

The motors are designed accordance with National Standard IEC60034-1 “Rotating electrical machines-Rating and performance”and the existing “Rules for the construction of sea-going steel ships”and GB18613-2012“ Minimum allowable values of energy efficiency and energy grade for small and medium three-phase induction motors”. The product is approved by CCS.

The motors also comply with the relevant requirements of 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

The motors are also in conformity with part of the specifications of the following Ships

Classification Societies

LR Lloyd’s Register of Shipping

GL Germanischer Lloyd

NK Nippon Kaiji Kyokai

BV Bureau Veritas

ABS American Bureau of Shipping

KR Korean Register of Shipping

RINA Register Italiano Navale

RS Russian Maritime Register of Shipping

DNV Det Norske Veritas

Type Designation

The type designation consists of several letters and digits.

Frame Size	No. of Poles	Bearings		
		Driving end		Non-Driving end
		B3、 B5、 B35	VI	

80	2.4	6204-2RS/Z2		6204-2RS/Z2
90	2, 4, 6	6205-2RS/Z2		6205-2RS/Z2
100	2, 4, 6	6206-2RS/Z2		6206-2RS/Z2
112	2, 4, 6, 8	6306-2RS/Z2		6306-2RS/Z2
132	2, 4, 6, 8	6308-2RS/Z2		6308-2RS/Z2
160	2//4, 6, 8	6209/Z2//6309/Z2		6209/Z2
180	2//4, 6, 8	6211/Z2//6311/Z2		6211/Z2
200	2//4, 6, 8	6212/Z2//6312/Z2		6212/Z2
225	2//4, 6, 8	6312/Z2//6313/Z2		6312/Z2
250	2//4, 6, 8	6313/Z2//6314/Z2		6313/Z2
280	2//4, 6, 8	6314/Z2//6317/Z2		6314/Z2
315	2//4, 6, 8	6317/Z2//N319/Z2	7317AC/7319AC	6317/Z2
355	2//4, 6, 8	6319/Z2//N322/Z2	7319AC/7322AC	6319/Z2

Operating Conditions

Factors	Temperature of Ambient air	Altitude	Relative humidity	Dew	Salt mist	Oil mist	Fungus	Shock	Vibration	Inclination	Swing
Operating Conditions	0℃ ~45℃	0m	≤ 95%	exists	exists	exists	exists	exists	exists	±22.5°	±22.5°

Voltage and Frequency

Rated Voltage 380V or 440V

Rated Frequency 50Hz or 60Hz

Duty Type

Continuous（S1）

Insulation， Temperature Rise

Insulation : F

Temp。Rise of winding（resistance method）: 100K

Permissible working temp. of bearing（thermometer method）: 90℃

Type of starting

Direct on full-voltage starting for all sizes；reduced voltage starting allowable at no-load or light load

Driving Method

Pulley，spur or flexible coupling can be used for driving

Impregnation and Surface Treatment

The motor windings impregnated and well treated to obtain the adequate damp-proof，anti-fungus and anti-salt□ mist properties in accordance with the specifications for humid-tropic machines.

Vibration

The effective values of vibration velocity，measured at the no-load conditions，does not exceed those given in table .

Frame size		80~132	160 ～225	250 ～355
Vibration Velocity （mm/s）	Free-mount	1.6	2.2	2.8
	Rigid-mount	1.3	1.8	2.3

Technical Data

Type	Output kW	Electric Current/A		Rotating Speed/r/min		Eff.%	P.F	Rated torque N.m	Tst Tn	Tst In	Tax Tn	dB(A)
		380V50Hz	440V60Hz	380V50Hz	440V60Hz							
M2E-80M1-2-H	0.75	1.7	1.5	2870	3480	80.7	0.82	2.5	2.3	7.0	2.3	66
M2E-80M2-2-H	1.1	2.4	2.1	2875	3485	82.7	0.83	3.7	2.2	7.3	2.3	66

M2E-90S-2-H	1.5	3.2	2.8	2880	3490	84.2	0.84	5.0	2.2	7.6	2.3	71
M2E-90L-2-H	2.2	4.6	4.0	2880	3490	85.9	0.85	7.3	2.2	7.6	2.3	71
M2E-100L-2-H	3	6.0	5.2	2880	3490	87.1	0.87	9.9	2.2	7.8	2.3	76
W2E-112M-2-H	4	7.8	6.7	2915	3535	88.1	0.88	13.1	2.2	8.3	2.3	79
M2E-132S1-2-H	5.5	10.6	9.2	2930	3540	89.2	0.88	17.9	2.0	8.3	2.3	81
M2E-132S2-2-H	7.5	14.4	12.4	2930	3540	90.1	0.88	24.4	2.0	7.9	2.3	81
M2E-160M1-2-H	11	20.6	17.8	2945	3550	91.2	0.89	35.7	2.0	8.1	2.3	81
M2E-160M2-2-H	15	27.9	24.1	2945	3550	91.9	0.89	48.6	2.0	8.1	2.3	81
M2E-160L-2-H	18.5	34.2	29.5	2945	3550	92.4	0.89	60.0	2.0	8.2	2.3	81
M2E-180M-2-H	22	40.5	35.0	2950	3555	92.7	0.89	71.2	2.0	8.2	2.3	83
M2E-200L1-2-H	30	54.9	47.4	2965	3575	93.3	0.89	96.6	2.0	7.6	2.3	84
M2E-200L2-2-H	37	67.4	58.2	2965	3575	93.7	0.89	119	2.0	7.6	2.3	84
M2E-225M-2-H	45	80.8	69.8	2965	3575	94.0	0.90	145	2.0	7.7	2.3	86

M2E-250M-2-H	55	98.5	85.1	2975	3585	94.3	0.90	177	2.0	7.7	2.3	89
M2E-280S-2-H	75	134	115.7	2975	3585	94.7	0.90	241	1.8	7.1	2.3	91
M2E-280M-2-H	90	160	138.2	2975	3585	95.0	0.90	289	1.8	7.1	2.3	91
M2E-315S-2-H	110	195	168.4	2985	3585	95.2	0.90	352	1.8	7.1	2.3	92
M2E-315M-2-H	132	234	202.1	2985	3585	95.4	0.90	422	1.8	7.1	2.3	92
M2E-315L1-2-H	160	279	241.0	2985	3585	95.6	0.91	512	1.8	7.2	2.3	93
M2E-315L2-2-H	200	349	301.4	2985	3585	95.8	0.91	640	1.8	7.2	2.3	93
M2E-355M-2-H	250	436	376.5	2985	3585	95.8	0.91	800	1.6	7.2	2.2	102
M2E-355L-2-H	315	549	474.0	2985	3585	95.8	0.91	1008	1.6	7.2	2.2	106
M2E-80M1-4-H	0.55	1.4	1.2	1430	1740	80.8	0.75	3.7	——	——	——	——
M2E-80M2-4-H	0.75	1.8	1.6	1430	1740	82.5	0.75	5.0	2.3	6.6	2.3	56

M2E-90S-4-H	1.1	2.6	2.2	1430	1740	84.1	0.76	7.3	2.3	6.8	2.3	59
M2E-90L-4-H	1.5	3.5	3.0	1430	1740	85.3	0.77	10.0	2.3	7.0	2.3	59
M2E-100L1-4-H	2.2	4.8	4.1	1440	1750	86.7	0.81	14.6	2.3	7.6	2.3	64
M2E-100L2-4-H	3	6.3	5.4	1440	1750	87.7	0.82	19.9	2.3	7.6	2.3	64
M2E-112M-4-H	4	8.4	7.3	1455	1755	88.6	0.82	26.3	2.2	7.8	2.3	65
M2E-132S-4-H	5.5	11.2	9.7	1465	1765	89.6	0.83	35.9	2.0	7.9	2.3	71
M2E-132M-4-H	7.5	15.0	13.0	1465	1765	90.4	0.84	48.9	2.0	7.5	2.3	71
M2E-160M-4-H	11	21.5	18.6	1470	1770	91.4	0.85	71.5	2.2	7.7	2.3	73
M2E-160L-4-H	15	28.8	24.9	1470	1770	92.1	0.86	97.4	2.2	7.8	2.3	73
M2E-180M-4-H	18.5	35.3	30.5	1470	1770	92.6	0.86	120	2.0	7.8	2.3	76
M2E-180L-4-H	22	41.8	36.1	1470	1770	93.0	0.86	143	2.0	7.8	2.3	76
M2E-200L-4-H	30	56.6	48.9	1475	1775	93.6	0.86	194	2.0	7.3	2.3	76
M2E-225S-4-H	37	69.6	60.1	1480	1780	93.9	0.86	239	2.0	7.4	2.3	78

M2E-225M-4-H	45	84.4	72.9	1480	1780	94.2	0.86	290	2.0	7.4	2.3	78
M2E-250M-4-H	55	103	89.0	1485	1785	94.6	0.86	354	2.2	7.4	2.3	79
M2E-280S-4-H	75	136	117.5	1490	1795	95.0	0.88	481	2.0	6.9	2.3	80
M2E-280M-4-H	90	163	140.8	1490	1795	95.2	0.88	577	2.0	6.9	2.3	80
M2E-315S-4-H	110	197	170.1	1490	1795	95.4	0.89	705	2.0	7.0	2.2	88
M2E-315M-4-H	132	236	203.8	1490	1795	95.6	0.89	846	2.0	7.0	2.2	88
M2E-315L1-4-H	160	285	246.1	1490	1795	95.8	0.89	1026	2.0	7.1	2.2	88
M2E-315L2-4-H	200	352	304.0	1490	1795	96.0	0.90	1282	2.0	7.1	2.2	88
M2E-355M-4-H	250	440	380.0	1495	1795	96.0	0.90	1597	2.0	7.1	2.2	95
M2E-355L-4-H	315	554	478.5	1495	1795	96.0	0.90	2012	2.0	7.1	2.2	102
M2E-80M1-6-H	0.37	1.2	1.1	910	1130	67.0	0.68	3.9	——	——	——	——

M2E-80M2-6-H	0.55	1.6	1.4	925	1140	74.0	0.70	5.7	——	——	——	——
M2E-90S-6-H	0.75	2.0	1.7	945	1155	78.9	0.71	7.6	2.0	6.0	2.1	57
M2E-90L-6-H	1.1	2.8	2.4	950	1160	81.0	0.73	11.1	2.0	6.0	2.1	57
M2E-100L-6-H	1.5	3.8	3.3	950	1160	82.5	0.73	15.1	2.0	6.5	2.1	61
M2E-112M-6-H	2.2	5.4	4.7	965	1170	84.3	0.74	21.8	2.0	6.6	2.1	65
M2E-132S-6-H	3	7.2	6.2	975	1180	85.6	0.74	29.4	2.0	6.8	2.1	69
M2E-132M1-6-H	4	9.5	8.2	975	1180	86.8	0.74	39.2	2.0	6.8	2.1	69
M2E-132M2-6-H	5.5	12.7	11.0	975	1180	88.0	0.75	53.9	2.0	7.0	2.1	69
M2E-160M-6-H	7.5	16.2	14.0	980	1185	89.1	0.79	73.1	2.0	7.0	2.1	73
M2E-160L-6-H	11	23.1	20.0	980	1185	90.3	0.80	107	2.0	7.2	2.1	73
M2E-180L-6-H	15	30.9	26.7	980	1185	91.2	0.81	146	2.0	7.3	2.1	73
M2E-200L1-6-H	18.5	37.8	32.6	985	1190	91.7	0.81	179	2.0	7.3	2.1	73
M2E-200L2-6-H	22	44.8	38.7	985	1190	92.2	0.81	213	2.0	7.4	2.1	73
M2E-225M-6-H	30	59.1	51.0	985	1190	92.9	0.83	291	2.0	6.9	2.0	74

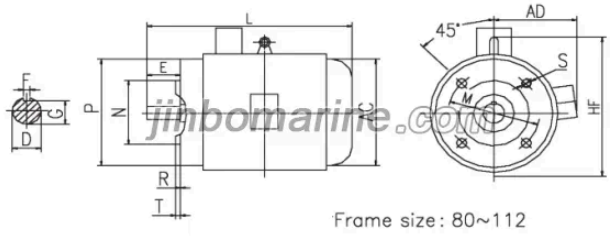
M2E-250M-6-H	37	71.7	61.9	985	1190	93.3	0.84	359	2.0	7.1	201	76
M2E-280S-6-H	45	85.8	74.1	990	1190	93.7	0.85	434	2.0	7.3	201	78
M2E-280M-6-H	55	103	89.0	990	1190	94.1	0.86	531	2.0	7.3	2.0	78
M2E-315S-6-H	75	143	123.5	990	1190	94.6	0.84	723	2.0	6.6	2.0	83
M2E-315M-6-H	90	170	146.8	990	1190	94.9	0.85	868	2.0	6.7	2.0	83
M2E-315L1-6-H	110	207	178.8	990	1190	95.1	0.85	1061	2.0	6.7	2.0	83
M2E-315L2-6-H	132	244	210.7	990	1190	95.4	0.86	1273	2.0	6.8	2.0	83
M2E-355M1-6-H	160	296	255.6	995	1190	95.6	0.86	1536	1.8	6.8	2.0	85
M2E-355M2-6-H	200	365	315.2	995	1190	95.8	0.87	1920	1.8	6.8	2.0	85
M2E-355L-6-H	250	456	393.8	995	1190	95.8	0.87	2399	1.8	6.8	2.0	91

Conventional mounting type and suitable frame size are given in following table

Frame	Basic type			Derived type										
	B3	B5	B35	VI	V3	V5	V6	B6	B7	B8	V15	V36	B14	B34	V18
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	—										

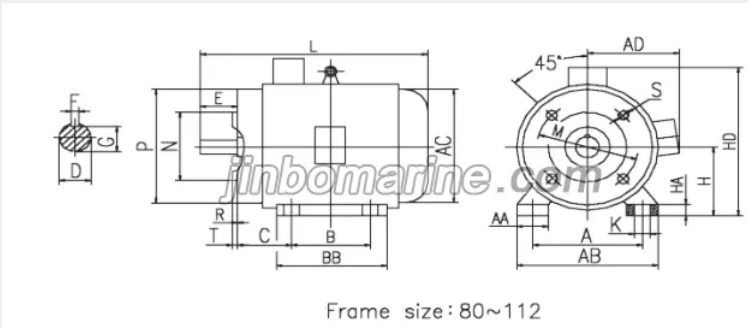
Mounting type marked with“√”as above shown, terminal box position should be right side viewed from driven end when order ignored that.

B14 The motor of frame without feet,end-shield with flange (with threaded holes)



Frame size	Poles	Mounting Dimension										Over Dimension			
		D	E	F	G	M	N	P	R	S	T	AC	AD	HF	L
80M	2,4,6	19	40	6	15.5	100	80	120	0	4-M6	3.0	175	145	—	305
90S		24	50	8	20	115	95	140		4-M8		195	165		360
90L															390
100L		28	60		24	130	110	160			3.5	215	180	245	435
112M												240	200	275	435

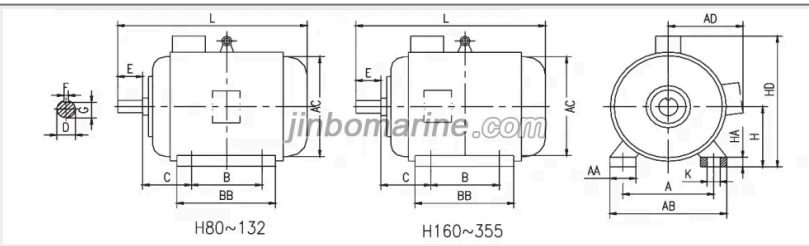
B34 The motor of frame with feet,end-shield with flange（with threaded holes）



Frame size：80~112

Frame size	Poles	Mounting Dimension															Over Dimension							
		A	B	C	D	E	F	G	H	K	M	N	P	R	s	T	AA	BB	HA	AB	AC	AD	HD	L
80M	2,4,6	125	100	50	19	40	6	15.5	80	10	100	80	120	4-M6	3	34	142	12	165	175	145	225	305	
90S		140	100	56	24	50	8	20	90		115	95	140	4-M8		34	185	12	180	195	165	260	360	
90L			125														0						210	390
100L		160	140	63	28	60		24	100	12	130	110	160		3.5	39	233	14	205	215	180	270	435	
112M		190	140	70	28	60			112							45	216		226	240	200	310	435	

B3 The motor of frame with feet,end-shield without flange

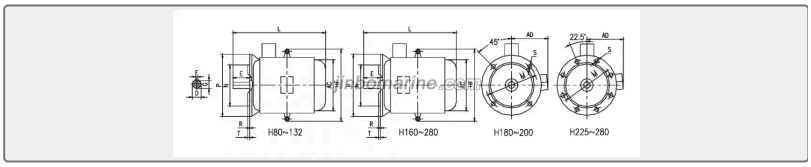


Frame size	poles	Mounting Dimension									Over Dimension							
		A	B	C	D	E	F	G	H	K	AA	BB	HA	AB	AC	AD	HD	L

80M	2,4,6	125	100	50	19	40	6	15.5	80	10	34	142	12	165	175	145	225	305
90S		140	100	56	24	50	8	20	90	10	36	185	12	180	195	165	260	360
90L			125	56				24				215						390
100L		160	140	63	28	60			100	12	39	233	14	205	215	180	270	435
112M		190		70				33	112		45	230	14	230	240	190	300	470
132S		216		89	38	80	10		132		55	186	18	270	275	210	345	510
132M			178									224						560
160M		254	210	108	42	110	12	37	160	14.5	65	315	20	314	335	265	420	730
160L			254									355						760
180M		279	241	121	48	14	42.5	180	70		359	22	355	375	280	455	740	
180L			279								394						780	
200L		318	305	133	55	16	49	200	18.5	70	454	25	390	410	335	535	885	
225S	4	356	286	149	60	140	18	53		225	75	431	28	435	470	355	575	895
225M	2		311		55	110	16	49				466	28					890
	4.6				60	140	18	53										925
250M	2	406	349	168	60	140	18	53	250	24	80	445	30	490	545	370	615	915
	4.6				65			58										
280S	2	457	368	190					280		85	510	35	550	660	425	710	990
	4.6				75		20	67.5										
280M	2		419		65		18	58				550						1040
	4.6				75		20	67.5										

315S	2	508	406	216	65		18	58	315	28	120	570	45	635	645	530	845	1200
	4.6				80	170	22	71										1230
315M	2		457		65	140	18	58				680						1350
	4.6				80	170	22	71										1380
315L	2		508		65	140	18	58										1350
	4.6				80	170	22	71										1380
355M	2	610	560	254	75	140	20	67.5	355		120	750	52	726	715	750	1020	1570
	4.6				95	170	25	86										1600
355L	2		630		75	140	20	67.5										1570
	4.6				95	170	25	86										1600

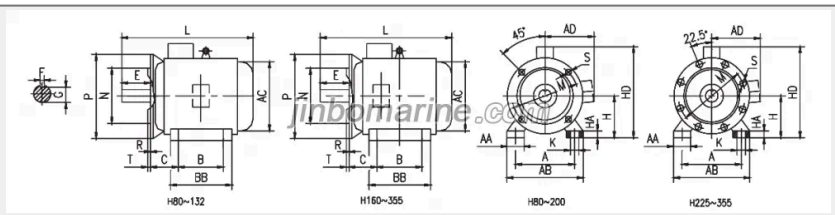
B5 The motor of frame without feet,end-shield with flange （with through holes）



Frame size	Poles	Mounting Dimension										Over Dimension			
		D	E	F	G	M	N	P	R	S	T	AC	AD	HF	L

80M	2,4,6	19	40	6	15.5	165	130	200	0	4-φ12	3.5	175	145	—	305
90S		24	50	8	20							195	165		360
90L															390
100L		28	60		24	215	180	250			4	215	180	230	435
112M												240	200	245	435
132S		38	80	10	33	265	230	300	0			305	235	345	510
132M															560
160M		42	110	12	37	300	250	350	0	W185	5	335	265	360	730
160L															760
180M		48		14	42.5							375	280	470	740
180L															780
200L		55		16	49	350	300	400	0			410	335	520	885
225S	4	60	140	18	53	400	350	450	0	H185		470	355	580	895
225M	2	55	110	16	49										890
	4,6	60	140	18	53										925
250M	2					500	450	550	0			545	415	650	995
	4,6	65			58										
280S	2											600	425	710	990
	4,6	75		20	67.5										
280M	2	65		18	58										1040
	4,6	75		20	67.5										

B35 The motor of frame with feet,end-shield with flange（with through holes）



Frame size	Poles	Mounting Dimension														Over Dimension							
		A	B	C	D	E	F	G	H	K	N	P	R	S	T	AA	BB	HA	AB	AC	AD	HD	L

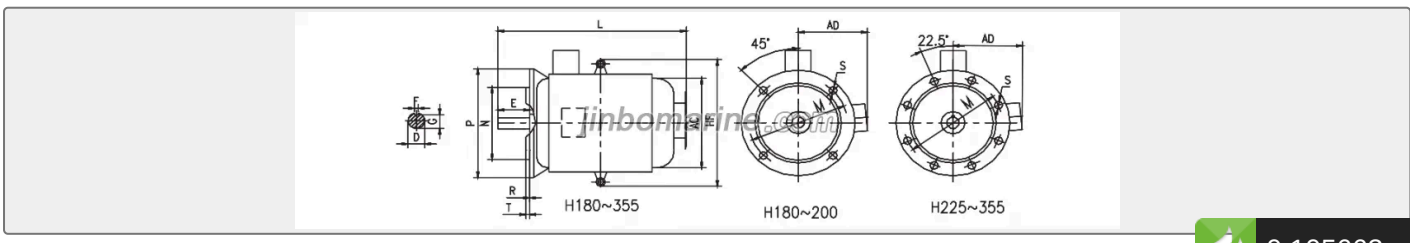
80M	2,4,6	125	100	50	19	40	6	16	80	10	165	130	200	0	4-φ12	3.5	34	142	12	165	175	145	225	305
90S		140		56	24	50	8	20	90								36	180	12	180	195	165	260	360
90L			125															215						390
100L		160	140	63	28	60		24	100	12	215	180	250	0	4-φ14.5	4	39	233	14	205	215	180	270	435
112M		190		70					112								45	230		226	240	200	310	435
132S		216		89	38	80	10	33	132		265	230	300				55	226	18	262	305	235	360	510
132M			178															256						560

160M		254	210	108	42	110	12	37	160	15	300	250	350	0	4-φ18.5	5	65	315	20	314	335	265	420	730
160L			254															355						760
180M		279	241	121	48		14	43	180								70	359	22	355	375	280	455	740
180L			279															394						780
200L		318	305	133	55		16	49	200	19	350	300	400				70	454	25	388	410	335	535	885

225S	4	356	286	149	60	140	18	53	225		400	350	450	0	8-φ18.5		75	431	28	435	470	355	575	895
225M	2		311		55	110	16	49										466						890
	4.6				60	140	18	53																925
250M	2	406	349	168		140		53	250	24	500	450	550				80	515	30	490	545	415	665	995
	4.6				65	58																		
280S	2	457	368	190				280	85								510	35	550	600	425	710	990	
	4.6				75	20	68																	
280M	2		419		65	18	58										550						1040	
	4.6				75	20	68																	

315S	2	508	406	216	65	18	58	315	28	600	550	660	8-φ24		6	120	570	45	635	645	530	845	1200	
	4.6				80	170	22																71	12330
315M	2		457		65	140	18										58						680	13550
	4.6				80	170	22										71							13880
315L	2		508		65	140	18										58							13550
	4.6				80	170	22										71							13880
355M	2	610	560	254	75	140	20	57.5		355	740	680				800	120	750	52	726	715	750	1020	15770
	4.6				95	170	25	86																16000
355L	2		630		75	140	20	57.5																15770
	4.6				95	170	25	86																16000

V1 The motor of frame without feet,end-shield with flange（with through holes）



Frame size	Poles	Mounting Dimension										Over Dimension			
		D	E	F	G	M	N	P	R	S	T	AC	AD	HF	L
180M	2,4,6	48	110	14	42.5	300	250	350	4-φ18.5	5	375	280	500	800	
180L														850	
200L		55		16	49	350	300	400			0	410	335	550	945
225S	4	60	140	18	53	400	350	450	0		8-φ18.5	470	355	610	985
225M	2	55	110	16	49										980
	4.6	60	140	18	53										1015
250M	2					500	450	550	0			545	415	685	1100
	4.6	65			58										
280S	2											600	425	740	1110
	4.6	75		20	67.5										
280M	2	65		18	58										1160
	4.6	75		20	67.5										
315S	2	65		18	58	600	550	660		8-φ24	6	645	530	900	1320
	4.6	80	170	22	71										1350
315S	2	65	140	18	58										1470
	4.6	80	170	22	71										1500
315L	2	65	140	18	58										1470
	4.6	80	170	22	71										1500
355M	2	75	140	20	67.5	740	680	800				415	750	1010	1710
	4.6	95	170	25	86										1740
355L	2	75	140	20	67.5										1710
	4.6	95	170	25	86										1740

Heater

Heater can be mounted in the motor upon agreement, which are shown by table below

Frame size	Volt of space heater	Power of space heater
YE3-80 ～90-H	220 V	20 W
YE3-100 ～112-H	220 V	30 W

YE3-132 〜160-H	220 V	40 W
YE3-180 〜200-H	220 V	50 W
YE3-225 〜280-H	220 V	60 W
YE3-315 〜355-H	220 V	80 W