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船用三相异步电动机

MARINE SERIES THREE PHASE INDUCTION MOTORS

东元船用标准电机

Teco Marine Standard Motor

东元船用变极双速电机

Teco Marine 2 Speeds Motor

东元船用高效率电机

Teco Marine High Efficiency Motor

东元船用自冷变频电机

Teco Marine Inverter Motor



TECO

CE  ISO9001:2000



东元集团
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东元集团简介

Since its founding in 1956, Teco Electric & Machinery Co., Ltd has engaged in the manufacture of industrial motor at the beginning. After rollercoaster ride for half a century, it has successfully diversified into a conglomerate with world business operations including heavy electrical, home appliance, telecommunications equipment, IT system, electromechanical components, finance investment and food services. TECO, a famous globalize enterprise group, has about 30 subsidiaries and affiliations across Asia, America and Europe, and the total employee amount is over tens of thousands.

In motor industry, TECO group has obtained quite great progress, besides merged Westinghouse motor company of USA in 1995. Now there are several manufactories around the world, such as Texas of USA, Manchester of UK, Sydney of Australia, Singapore, Malaysia, Indonesia, Thailand, Chung-li and Tan-shui of Taiwan and Wuxi, Suzhou and Nanchang of mainland China. TECO has been designing and manufacturing products with our "Quality-First" commitment in mind to meet and exceed international industrial standards, such as CNS, JIS, BS, IEC, NEMA, IEEE, CSA and UL. Our product line includes low, medium and high voltage (up to 13,800 volts) premium efficiency and high performance motors, ranging from 1/4 HP to 60,000 HP.

Wuxi Teco Electric & Machinery Ltd., was founded in 4th April, specializing in designing, manufacturing and marketing various motors and inverters. The company has Global R&D center, FA division and SA division. Global R&D center is engaged in researching and designing new serial products. FA division markets 3 phase squirrel induction motors with 63~630mm mid-center height, rating from 1/4~4000HP and ranging from 220~13,800V in electric power.

东元电机创立于1956年，初期从事电动机生产，历经了半个世纪的风雨，至今已跨入重电、家电、信息、通讯、电子、关键零组件、基础工程建设、金融投资及餐饮等多元化的发展领域，东元电机集团目前分布在全球员工达万人以上，事业版图已由台湾拓展至亚洲，美洲和欧洲，成为知名的世界级集团之一。

在电机领域，继1995年并购美国西屋电机公司以后，有了长足的发展。目前在全球的电动机生产厂有：美国的德州、英国的曼彻斯特、澳大利亚的悉尼、新加坡、马来西亚、印尼、泰国、台湾的中坜市和淡水镇、中国大陆的无锡市、苏州市和南昌市。东元电机始终贯彻“品质第一”的理念，产制符合世界各国国家标准规范的产品，拥有承制功率从1/4HP到60,000HP，电压可达13.8kV的电动机，成为世界电动机的主要供货商。

无锡东元电机有限公司成立于2002年4月，是专业研制、生产、销售各类电动机、变频器的企业。公司内设有全球研发中心，FA事业部，SA事业部。全球研发中心负责重大新系列产品的开发设计。FA事业部产品为中心高63~710mm，其功率范围为0.18~3150kW，电压等级为220~13,800V三相异步电动机。

所列产品内容仅供您参考，如有变更将不另行通知。
All data presented is for reference only and subject to change without notice.



东元历史

稳健、创新、突破

- 1956年 东元电机股份有限公司成立于重庆市
- 1965年 新庄厂设置为全国第一座自动化马达生产工厂
- 1966年 工具工厂成立(现为生产技术处)
- 1973年 淡水厂启用,生产冷气机、电视机、电冰箱等家电产品
- 1979年 中坜一厂建厂完成,导入最新自动化设备生产马达。
- 1983年 观音厂启用,生产电视、高级电子产品及电脑周边设备。
- 1987年 中坜二厂建厂完成,与百屋合作生产超大型马达。
- 1991年 观音冷气厂建厂完成,导入全新自动化生产家电产品。
- 1991年 马来西亚厂建厂完成。
- 1994年 观音压缩机厂建厂完成。
- 1995年 并购美国西屋(WESTINGHOUSE)马达厂。
- 2000年 苏州东元电机建厂。
- 2002年 无锡东元电机建厂。
- 2003年 无锡东元正式投产。
- 2004年 无锡东元金一厂建厂。

认证证书



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Teco Marine Three Phase Induction Motors

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东元船用电机 自冷式变频电机

Teco Marine motor Marine Inverter motor—IC411

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东元船用高效率电机

Teco Marine High Efficiency Motor

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东元船用变极双速电机

Teco Marine 2 Speeds Motor

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■ 技术数据

- 额定电压及频率：380V,50Hz
或440V,60Hz及其他
- 输出功率：0.18kW~315kW
- 工作制：连续工作制—S1 (S.F. 1.0), 风水力自冷变频电机, 适用运行范围5Hz~50Hz为
递减转矩, 50Hz~100Hz为恒功率, 但不可超过铭牌额定电流
- 机座号：80M~355L (能效等级三级IE1; 能效等级二级IE2)
- 防护等级：IP55 (全封闭型, 采用金属拉不脱, 密封性及保护性强大)
- 冷却方式：IC411 (自带外扇冷却)
- 绝缘等级：F级绝缘
- 温升：不超过90K (2, 4P F#315L2, F#355 不超过100K)
- 安装方式：IMB3 IMB5 IMB35 IMV1 IMV5及其他
- 电动机参数和安装尺寸见参数表
- 接线方式：3kW及以下：人
4kW及以上：△

■ Technical data

- Rated voltage and frequency: 380V,50Hz or 440V,60Hz and others
- Output range: 0.18kW~315kW
- Time duty: Continuous S1 (S.F 1.0) Inverter motor suitable Pump & Blower application, Motors frequency variable from 5 Hz~50Hz, gives a reduced torque, while frequency variable from 50Hz~100Hz,gives a constant power, the running current doesn't exceed the rated current
- Frame Nos.: 80M~355L(GB3,IE1;GB2,IE2)
- Protection enclosure: Totally enclosed (IP55), adopt metal cable gland, good leak tightness and protectiveness.
- Cooling method: Self external fan, Surface cooling (IC411)
- Stator insulation: Class F insulation system
- Temperature rise: Not to exceed 90K(2,4P F#:315L2, F#:355 not to exceed 100K) by resistance method
- Mounting: IMB3 IMB5 IMB35 IMV1 IMV5 and others
- For typical performance and dimensions of motors see table 1 and table 2
- Connection: 3kW and below 人
4kW and upside △

■ 适用条件

- 电源条件：电压波动率±10%以内, 频率波动率±5%以内
电压及频率综合波动率±5%以内
- 使用场所：适用于油雾、盐雾、霉菌影响的环境；有船舶正常营运中产生的冲击和振动影响
- 环境温度：-25℃~50℃
- 环境湿度：相对湿度95%以下 (有凝露)
- 摇摆和倾斜：倾斜：有
摇摆：22.5°
- 传动方式：皮带轮传动, 但2极45kW和4极160kW及以上使用联轴器传动
- 旋转方向：可双向旋转。
当电源相序与电动机出线端标志字母一致时, 面向轴伸端看为顺时针方向旋转。

■ Application

- Power source conditions: Rate of voltage variation between $\pm 10\%$, Rate of frequency variation between $\pm 5\%$. Rate of voltage and frequency variation between $\pm 10\%$,but frequency variation does not exceed $\pm 5\%$
- Place: Can be used under the environment of Oil mist, Salt mist, Mildew. A Normal Impact and Vibration to Vessel During a Voyage.
- Ambient temperature: -25℃~50℃
- Relative humidity: Less than 95%RH (Dewiness)
- Inclination and swing: Inclination: Yes Swing:22.5°
- Drive method: Belt service, However 2 pole 45kW & above, 4 pole 160kW & above for direct coupling only
- Direction of rotation: Bi-directional rotation
Clockwise when facing the drive end side and the alphabetical sequence of the terminal letters of a phase group corresponds with the time sequence of the terminal voltages

■ 电机特点

- 依据国家标准GB/T 7060船用旋转电机技术要求, 经国家船检局认可, 符合ABS、BV、DNV、GL、KR、LR、NK、CCS等标准及相关船级设计要求。



■ Character

- According to GB/T 7060, the Specification rotary electrical machine in ships, all types of product approvals are carried out by Marine Inspection Bureau, reaches the standards of ABS, BV, DNV, GL, KR, LR, NK, CCS and requirements of the relevant Classification Clause.

选用：依客户需要可搭配热保护器、PTC、空间加热器、RTD、PT100及其他

PS: the thermistor, PTC, Heater, RTD, PT100 or others can be provided according to the needs of purchaser.

特性表 Data Sheet 380V 50HZ

适用船用标准、自冷式变频电机 (Standard&Inverter Motors)

表1 Table 1 能效等级三级 IE1

输出 OUTPUT	满载 转数 r/min	机 架 号	效率 EFFICIENCY			功率因素 POWER FACTOR			电流 CURRENT			转矩 TORQUE				转子惯量 ROTOR GD ²	噪声 NOISE SOUND POWER NO-LOAD dB(A)	振动 VIB RAT ION	重量 APPROX. WEIGHT kg
			FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD (A)	LOCKED ROTOR %FLC	FULL LOAD kg·m	LOCKED ROTOR %FLC	PULL UP %FLC	BREAK DOWN %FLC					
0.25	0.18	845	80M	51.0	51.0	44.0	81.0	81.5	40.5	0.88	330	0.272	180	130	190	0.008	52	1.8	16
0.33	0.25	845	80M	54.0	54.0	48.0	81.0	81.0	40.0	1.16	330	0.377	180	130	190	0.010	62	1.8	17
0.5	0.37	890	80M	62.0	62.0	51.5	70.0	80.5	49.0	1.30	470	0.405	190	150	200	0.007	54	1.8	15
		870	90S	62.0	62.0	55.0	81.0	81.0	39.5	1.49	420	0.537	180	130	190	0.018	56	1.8	24
0.75	0.55	1380	80M	71.0	71.0	61.0	75.0	87.0	55.5	1.57	520	0.385	240	170	230	0.008	58	1.8	15
		885	80M	65.0	65.0	55.5	72.0	83.0	51.2	1.79	470	0.805	190	150	210	0.009	54	1.8	16
		870	90L	63.0	63.0	55.5	81.0	80.5	38.5	2.17	420	0.799	180	130	200	0.020	56	1.8	26
1	0.75	2845	80M	75.0	75.0	69.0	81.0	73.5	61.5	1.88	610	0.257	220	150	230	0.003	67	1.8	15
		1385	80M	73.0	73.0	64.0	75.0	86.5	53.5	2.05	520	0.527	230	160	230	0.007	58	1.8	16
		815	90S	69.0	69.0	64.0	71.0	80.0	45.0	2.33	560	0.798	200	150	210	0.015	57	1.8	24
		880	100L	71.0	67.5	59.5	85.0	83.5	43.0	2.47	420	1.873	180	130	200	0.028	59	1.8	33
1.5	1.1	2845	80M	77.0	77.0	73.0	82.0	75.5	63.0	2.85	700	0.378	220	150	230	0.004	67	1.8	16
		1390	90S	79.2	78.2	73.5	77.0	88.8	54.0	2.85	800	0.770	230	160	230	0.009	61	1.8	22
		815	90L	72.0	72.0	67.5	71.0	80.0	44.5	3.27	580	1.170	200	130	210	0.021	57	1.8	27
		880	100L	73.0	71.5	65.5	80.0	86.0	43.5	3.32	520	1.574	180	120	200	0.034	59	1.8	34
2	1.5	2845	90S	79.0	79.0	74.5	84.0	78.5	69.0	3.43	700	0.513	220	150	230	0.008	72	1.8	22
		1390	90L	78.5	78.5	74.5	79.0	71.5	58.0	3.87	820	1.050	230	160	230	0.013	61	1.8	27
		810	100L	78.0	78.0	75.5	74.0	85.5	52.5	4.05	840	1.804	200	130	210	0.037	61	1.8	36
		709	112M	75.0	75.0	73.5	69.0	88.5	44.0	4.40	520	2.585	180	120	200	0.058	61	1.8	39
3	2.2	2840	90L	81.0	81.0	78.5	80.0	79.5	69.5	4.85	700	0.754	220	140	230	0.008	72	1.8	20
		1410	100L	81.0	81.0	78.5	81.0	74.0	62.0	5.08	700	1.518	230	150	230	0.024	64	1.8	34
		840	112M	79.0	79.0	78.0	75.0	87.0	53.0	5.84	820	2.277	200	130	210	0.060	64	1.8	43
		710	132S	78.0	78.0	73.5	71.0	80.5	45.5	6.04	820	3.015	180	120	200	0.121	64	1.8	62
4	3	2845	100L	83.0	83.0	80.5	87.0	82.5	72.5	6.31	750	1.628	220	140	230	0.013	78	1.8	33
		1410	100L	82.8	82.8	80.0	82.0	74.5	62.0	6.73	700	2.870	230	150	230	0.032	64	1.8	35
		860	132S	81.0	81.0	78.5	76.0	89.0	56.0	7.40	820	3.041	210	130	210	0.121	69	1.8	56
		710	132M	79.0	79.0	78.0	73.0	84.5	50.5	7.80	820	4.111	180	120	200	0.184	64	1.8	66
5.5	4	2880	112M	83.0	83.0	83.0	88.0	84.0	75.0	8.12	750	1.247	220	140	230	0.024	77	1.8	40
		1440	112M	84.2	84.2	82.5	82.0	75.5	64.0	8.80	700	2.703	230	150	230	0.052	65	1.8	44
		860	132M	82.0	82.0	78.0	76.0	89.0	57.0	8.75	820	4.054	210	130	210	0.164	69	1.8	71
		720	160M	81.0	81.0	78.0	73.0	88.0	53.0	10.3	820	5.408	180	120	200	0.265	68	2.8	84
7.5	5.5	2915	132S	89.0	89.0	84.0	86.0	84.0	78.0	11.0	750	1.838	220	120	230	0.047	80	1.8	59
		1445	132S	85.7	85.7	85.0	83.0	78.0	68.0	11.7	700	3.703	230	140	230	0.108	71	1.8	81
		860	132M	84.0	84.0	80.5	77.0	71.5	60.0	12.9	820	5.574	210	130	210	0.221	69	1.8	75
		720	160M	83.0	83.0	81.5	74.0	86.5	54.0	13.6	820	7.433	200	120	200	0.374	68	2.8	108
10	7.5	2950	132S	87.0	87.0	85.0	86.0	85.0	79.5	14.9	750	2.512	220	120	230	0.054	80	1.8	82
		1480	132M	87.0	87.0	86.5	84.0	78.5	69.5	15.6	700	5.833	230	140	230	0.148	71	1.8	73
		870	160M	88.0	88.0	83.5	77.0	88.0	52.0	17.2	850	7.523	200	130	210	0.374	73	2.8	108
		720	180L	85.5	85.5	84.5	75.0	88.0	55.5	17.8	820	10.14	200	120	200	0.530	68	2.8	128
15	11	2935	160M	88.5	88.5	88.5	89.0	86.5	83.0	21.2	750	3.847	220	120	230	0.167	88	2.8	107
		1480	160M	88.5	88.5	88.0	84.0	80.0	71.0	22.5	780	7.331	220	140	230	0.297	75	2.8	113
		870	180L	87.8	87.8	85.5	78.0	70.5	58.0	24.5	850	11.03	200	120	210	0.530	73	2.8	131
		730	180L	87.5	87.5	87.0	76.0	89.0	53.0	25.1	880	14.88	200	110	200	0.884	70	2.8	178
20	15	2935	160M	89.4	89.4	88.5	89.0	86.5	80.5	28.8	750	4.973	220	120	230	0.204	88	2.8	117
		1480	180L	90.3	90.3	89.0	85.0	80.5	71.0	29.7	740	8.897	220	140	230	0.398	75	2.8	133
		870	180L	89.0	89.0	88.0	81.0	74.5	61.0	31.6	700	15.05	200	120	210	0.800	73	2.8	171
		730	200L	88.0	88.0	87.0	76.0	88.0	58.0	34.1	880	19.39	200	110	200	1.456	73	2.8	220
25	18.5	2935	180L	90.0	90.0	89.5	90.0	86.0	82.0	34.7	750	6.133	220	110	230	0.255	86	2.8	134
		1470	180M	90.7	90.7	90.5	86.0	85.0	76.5	36.0	750	12.25	220	120	230	0.607	78	2.8	187
		875	200L	90.0	90.0	89.0	81.0	75.5	64.0	38.6	700	18.48	210	120	210	1.331	76	2.8	218
		730	225S	90.0	90.0	89.0	75.0	88.5	55.0	41.1	880	24.68	190	110	200	2.180	73	2.8	278
30	22	2940	180M	90.5	90.5	89.5	90.0	88.5	83.5	41.0	750	7.281	200	110	230	0.348	89	2.8	188
		1470	180L	91.0	91.0	91.0	86.0	84.5	78.5	42.7	750	14.58	220	120	230	0.879	78	2.8	181
		875	200L	90.1	90.1	90.0	83.0	78.0	67.6	44.7	700	21.95	210	120	210	1.539	76	2.8	225
		730	225M	90.8	90.8	90.0	78.0	71.5	59.0	47.3	880	29.32	190	110	200	2.588	73	2.8	295

要求: 安装联轴器或皮带轮请利用轴端攻牙压进迫入, 禁止以外力敲打轴端安装

特性表 Data Sheet 380V 50HZ

适用船用标准、自冷式变频电机 (Standard&Inverter Motors)

续表1 Table 1 (continued) 能效等级三级 IE1

输出 OUTPUT	满载 转数 r/min	机 架 号	效率 EFFICIENCY			功率因素 POWER FACTOR			电流 CURRENT			转矩 TORQUE				转子惯量 ROTOR GD ²	噪声 NOISE SOUND POWER NO-LOAD dB(A)	振动 VIB RAT ION	重量 APPROX. WEIGHT kg
			FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD (A)	LOCKED ROTOR %FLC	FULL LOAD kg·m	LOCKED ROTOR %FLC	PULL UP %FLC	BREAK DOWN %FLC					
40	30	2945	200L	91.4	91.4	89.5	90.0	88.5	83.5	55.4	700	8.812	200	110	230	0.558	92	2.8	220
		1470	200L	92.8	92.8	90.5	88.0	83.0	75.0	57.8	720	19.88	220	120	230	1.111	79	2.8	232
		980	225M	91.5	91.5	91.0	84.0	79.0	68.0	59.3	700	29.78	200	120	210	2.452	78	2.8	286
		730	250M	90.8	90.8	90.0	79.0	72.0	59.0	63.5	860	39.99	180	110	200	3.938	75	3.5	370
50	37	2945	200L	92.0	92.0	90.5	90.0	89.0	84.5	67.8	750	12.22	200	110	230	0.880	92	2.8	238
		1470	225S	92.5	92.5	91.0	87.0	85.0	78.5	69.8	720	24.41	220	120	230	1.811	81	2.8	287
		980	250M	92.0	92.0	91.0	86.0	83.0	74.5	71.1	700	36.74	210	120	210	3.741	78	3.5	380
		735	280S	91.5	91.5	91.0	79.0	73.5	61.5	77.8	860	48.98	180	110	200	6.333	78	3.5	475
60	45	2950	225M	92.5	92.5	91.0	90.0	88.5	83.5	82.1	750	14.84	200	100	230	0.977	92	2.8	287
		1475	225M	92.8	92.8	91.5	87.0	85.0	78.0	84.7	720	29.68	220	110	230	2.335	81	2.8	322
		980	280S	92.5	92.5	91.5	88.0												

表1 Table 1

输出 OUTPUT	满载 转速 r/min	机 座 号 FRAME NO.	效率 EFFICIENCY			功率因素 POWER FACTOR			电流 CURRENT			转矩 TORQUE				转子惯量 ROTOR GD ² kg·m ²	重量 APPROX WEIGHT kg
			FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD (A)	1054F# %FLC	LOCKED LOAD kg·m	PULL UP %FLC	BREAK DOWN %FLC	FULL LOAD %FLC	LOCKED LOAD %FLC		
0.28	0.21	790	80M	51.0	51.0	44.0	60.0	50.0	40.0	0.90	350	0.258	180	130	190	0.008	16
0.39	0.29	790	80M	54.0	54.0	47.0	61.0	51.0	40.0	1.16	380	0.357	170	130	190	0.010	17
0.58	0.43	1090	80M	62.0	62.0	52.0	69.0	60.0	50.0	1.32	530	0.384	180	150	200	0.007	15
		810	90S	62.0	62.0	55.5	61.0	51.0	40.0	1.49	430	0.517	170	130	190	0.018	24
0.84	0.63	1695	80M	71.0	71.0	61.0	75.0	67.0	55.5	1.85	970	0.382	230	170	230	0.006	15
		1090	80M	65.0	65.0	56.0	71.0	62.0	51.0	1.79	500	0.562	190	150	210	0.009	16
		820	90L	64.0	64.0	57.0	61.0	50.0	38.0	2.12	440	0.748	170	130	200	0.020	26
1.15	0.85	3445	80M	75.0	75.0	70.0	80.0	73.0	61.0	1.88	640	0.243	210	150	230	0.003	15
		1695	80M	73.0	73.0	64.0	78.0	66.0	53.0	2.03	660	0.497	210	160	230	0.007	16
		1120	90S	70.0	70.0	65.0	71.0	61.0	46.0	2.27	590	0.747	185	150	210	0.015	26
1.7	1.27	830	100L	72.0	71.0	60.0	65.0	53.0	40.0	2.41	430	1.008	170	130	200	0.026	33
		3445	80M	77.0	77.0	74.0	81.0	75.0	64.0	2.67	720	0.359	210	150	230	0.004	16
		1695	90S	76.2	76.2	72.0	78.0	65.0	54.0	2.88	650	0.731	210	160	230	0.009	22
2.32	1.75	1120	90L	73.0	73.0	68.0	71.0	60.0	45.0	3.22	600	1.103	185	130	210	0.021	27
		830	100L	74.0	73.0	68.0	68.0	57.0	43.0	3.31	540	1.488	170	120	200	0.034	34
		3440	90S	78.0	78.0	73.0	84.0	75.0	70.0	3.46	700	0.489	200	150	230	0.006	22
3.36	2.53	1695	90L	79.5	79.5	77.0	78.0	70.0	58.0	3.66	630	0.996	220	160	230	0.013	27
		1110	100L	76.5	76.5	74.0	74.0	65.0	52.0	4.01	660	1.518	190	130	210	0.037	36
		850	112M	76.0	76.0	73.0	68.0	59.0	45.0	4.33	530	1.980	180	120	200	0.066	38
4.62	3.45	3440	90L	81.0	81.0	77.0	85.0	80.0	70.0	4.82	720	0.716	200	140	230	0.008	25
		1715	100L	81.5	81.5	78.5	80.0	73.0	61.0	5.09	750	1.436	210	160	230	0.024	34
		1190	112M	80.0	80.0	79.0	75.0	66.0	54.0	5.53	670	2.141	180	130	210	0.068	43
6.17	4.6	860	132S	79.0	78.0	75.5	71.0	60.5	45.5	5.92	630	2.862	170	120	200	0.121	62
		3445	100L	83.0	83.0	80.5	88.0	84.0	75.0	6.13	770	0.974	200	140	230	0.013	33
		1720	100L	83.0	83.0	82.0	81.0	74.0	62.0	6.73	730	1.952	200	150	230	0.032	35
8.5	6.33	1180	132S	82.0	81.5	77.5	76.0	70.0	58.0	7.28	670	2.894	190	130	210	0.121	58
		860	132M	80.0	80.0	78.5	73.0	65.0	51.0	7.75	620	3.903	170	120	200	0.164	68
		3490	112M	85.5	85.0	83.0	88.0	85.5	77.5	7.93	790	1.262	200	140	230	0.024	40
11.0	8.6	1740	112M	84.5	84.5	83.0	82.0	76.5	66.0	8.66	740	2.572	210	150	230	0.052	44
		1180	132M	83.0	82.0	80.0	78.5	70.0	58.0	9.51	690	3.858	190	130	210	0.164	71
		870	150M	82.0	82.0	80.0	73.0	66.0	53.0	10.1	620	5.146	180	120	200	0.286	94
17	12.7	3520	132S	86.5	86.0	84.0	88.0	86.0	80.0	10.8	780	1.750	190	120	230	0.047	58
		1745	132S	86.0	86.0	85.5	84.0	80.0	70.0	11.5	750	3.530	200	140	230	0.106	61
		1185	132M	84.0	83.0	80.0	78.0	73.0	62.0	12.7	670	5.267	190	130	210	0.221	75
23	17.3	870	160M	84.0	84.0	83.0	74.5	67.0	56.0	13.3	610	7.079	180	120	200	0.374	106
		3510	132S	87.5	87.0	85.0	89.5	87.0	82.0	14.4	770	2.364	190	120	230	0.064	62
		1790	132M	87.5	87.5	86.0	85.0	80.0	70.0	19.2	720	4.762	210	140	230	0.146	73
28.5	21.3	1170	160M	87.0	86.0	84.5	78.0	70.0	60.0	16.6	690	7.152	180	130	210	0.374	106
		870	160L	87.0	87.0	86.0	75.0	68.0	56.5	17.3	600	9.92	180	120	200	0.530	128
		3540	160M	89.0	88.5	86.0	90.0	87.0	81.0	20.8	770	3.461	220	120	230	0.167	107
39	28.7	1780	160M	89.0	89.0	88.0	85.0	81.0	72.0	22.0	780	7.021	220	140	230	0.297	113
		1170	160L	87.6	87.6	85.5	79.0	72.0	68.0	24.1	660	10.56	170	120	210	0.530	131
		880	180L	88.5	88.5	87.5	77.0	70.5	67.0	24.5	660	14.04	180	110	200	0.864	170
52	38.5	3535	160M	90.0	90.0	89.5	90.0	87.0	81.0	26.0	770	4.762	210	120	230	0.204	117
		1785	160L	91.0	91.0	90.0	89.0	81.0	72.0	29.3	780	9.937	220	140	230	0.336	133
		1170	180L	90.0	90.0	88.0	82.0	78.0	68.0	30.8	720	14.39	210	120	210	0.890	171
75	55.5	890	200L	88.5	88.5	87.5	76.5	70.5	67.0	33.5	650	19.13	180	110	200	1.456	220
		3540	160L	90.5	90.5	90.0	90.0	88.0	82.0	34.3	760	5.854	210	110	230	0.255	134
		1770	180M	91.0	91.0	90.5	86.5	80.0	78.0	35.5	770	11.71	220	120	230	0.607	167
100	75	1175	200L	90.5	90.5	89.5	82.0	79.5	69.5	37.7	730	17.64	200	120	210	1.331	216
		890	220S	90.5	90.5	89.5	77.0	70.0	67.0	40.1	650	23.55	180	110	200	2.180	270

要求: 安装联轴器或皮带轮请利用轴端攻牙压进迫入, 禁止以外力敲打轴端安装

续表1 Table 1 (continued)

输出 OUTPUT	满载 转速 r/min	机 座 号 FRAME NO.	效率 EFFICIENCY			功率因素 POWER FACTOR			电流 CURRENT		转矩 TORQUE				转子惯量 ROTOR GD ² kg·m ²	重量 APPROX WEIGHT kg	
			FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD (A)	LOCKED LOAD %FLC	FULL LOAD kg·m	LOCKED LOAD %FLC	PULL UP %FLC	BREAK DOWN %FLC			
34	26.3	3540	180M	90.5	90.5	88.0	91.0	89.0	85.0	40.3	800	6.954	225	110	230	0.348	169
		1770	180L	91.5	91.5	91.0	86.5	85.5	78.0	41.9	780	13.91	220	120	230	0.679	181
		1175	200L	90.5	90.5	90.0	83.5	78.5	69.0	43.9	720	20.95	200	120	210	1.539	225
46	34.5	890	220M	91.0	91.0	90.5	78.5	72.5	67.5	45.5	660	27.97	180	110	200	2.058	295
		3540	200L	91.4	91.4	88.5	91.0	89.5	86.0	54.4	750	9.483	175	110	230	0.558	220
		1770	200L	92.0	92.0	90.5	87.0	84.0	77.0	56.6	700	18.97	220	120	230	1.111	232
57	42.6	1180	225M	92.0	92.0	91.0	85.0	81.0	71.0	57.9	700	28.45	200	120	210	2.452	286
		890	250M	90.5	90.0	89.0	81.0	70.0	63.0	61.8	690	38.15	170	110	200	3.938	370
		3545	200L	92.0	92.0	90.0	90.5	89.5	86.0	67.1	755	11.69	180	110	230	0.680	239
69.5	51.8	1790	225S	92.5	92.5	90.5	87.5	86.0	80.5	69.1	700	33.29	210	120	230	1.911	287
		1180	250M	92.0	92.0	91.0	87.0	84.5	76.0	69.8	710	35.13	190	120	210	3.741	380
		885	280S	92.0	92.0	91.0	79.5	74.0	62.5	60.0	670	60.00	170	110	200	6.333	475
84.5	63	3545	220M	92.5	92.5	90.5	90.5	89.5	85.0	81.2	700	14.22	180	100	225	0.977	287
		1780	225M	93.0	93.0	91.5	88.0	86.0	80.0	83.1	720	28.32	200	110	230	2.335	323
		1180	280S	92.5	92.5	91.5	87.0	84.0	76.0	64.5	710	42.71	185	110	200	5.985	465
115	86	885	280M	92.5	92.5	92.0	79.5	74.0	62.0	62.4	680	56.95	170	100	200	7.813	555
		3565	250M	93.0	93.0	90.0	90.5	89.0	84.0	68.2	770	17.19	190	100	230	1.397	380
		1775	250M	93.0	93.0	91.0	88.0	86.0	81.0	101	730	34.53	190	110	230	2.756	385
139	104	1180	280M	92.8	92.8	92.0	86.5	84.0	76.0	103	720	51.95	190	110	200	7.149	540
		885	315S	92.8	92.0	91.5	82.0	78.5	69.5	109	670	69.28	160	100	200	15.946	905
		3565	280S	93.6	93.6	90.0	90.0	89.5	86.0	134	780	23.47	190	90	230	2.268	510

表3 Table 3

能效等级二级 IE2

输出 OUTPUT	满载 转速 FULL LOAD RPM	机座 号 FRAME NO.	效率 EFFICIENCY			功率因素 POWER FACTOR			电流 CURRENT		转矩 TORQUE				转子惯量 MOTOR GD ² kg-m ²
			FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (A)	LOCKED ROTOR %FLT	FULL LOAD kg-m	LOCKED ROTOR %FLT	PULL UP %FLT	BREAK DOWN %FLT	
0.75	0.55	1425 80M	80.7	80.0	76.5	77.5	70.0	58.0	1.34	670	0.376	285	240	290	0.013
		940 80M	75.4	76.0	73.5	74.0	66.0	52.5	1.50	615	0.569	170	125	200	0.019
1	0.75	2875 80M	80.5	79.0	75.5	87.5	83.0	73.5	1.82	765	0.254	245	210	295	0.005
		1415 80M	82.3	82.0	79.5	78.5	72.0	59.5	1.78	620	0.516	260	220	270	0.014
		920 90S	77.7	78.5	76.5	71.5	63.0	50.5	2.05	445	0.790	215	200	220	0.016
1.5	1.1	2870 80M	82.8	82.0	79.5	87.0	82.0	72.0	2.32	755	0.373	230	200	285	0.007
		1425 90S	83.8	84.0	82.0	80.5	72.5	59.5	2.48	760	0.751	300	285	320	0.016
		930 90L	79.9	79.5	77.0	65.5	58.5	44.0	3.19	500	1.151	265	250	270	0.024
2	1.5	2885 90S	84.1	84.5	83.0	88.0	83.0	72.5	3.08	620	0.506	230	170	230	0.008
		1420 90L	85.0	86.0	85.0	85.5	78.5	64.0	3.21	725	1.028	280	240	300	0.020
		940 100L	81.5	82.0	79.5	71.0	62.5	49.5	3.94	555	1.553	255	245	265	0.050
3	2.2	2880 90L	85.8	85.5	84.0	88.5	83.0	72.0	4.41	675	0.743	245	140	290	0.010
		1440 100L	86.4	87.0	86.0	88.0	84.0	74.5	4.40	760	1.487	215	145	290	0.045
		955 112M	83.4	82.0	80.0	72.0	64.0	51.5	5.57	610	2.241	235	215	285	0.086
4	3	2885 100L	86.7	87.0	85.5	90.5	85.5	72.0	5.81	780	1.019	245	235	310	0.025
		1440 100L	87.4	87.5	86.5	86.5	82.0	72.0	6.03	790	2.027	230	155	275	0.054
		970 132S	84.9	84.5	82.5	79.0	71.5	59.5	6.80	700	3.009	190	150	275	0.171
5.5	4	2905 112M	87.8	87.5	85.5	88.5	82.5	72.5	8.02	740	1.340	170	155	290	0.033
		1440 112M	88.3	88.0	86.5	85.0	79.5	69.0	8.10	810	2.703	255	155	270	0.085
		970 132M	86.1	86.0	84.0	78.5	71.5	59.5	8.96	720	4.012	190	150	280	0.214
7.5	5.5	2915 132S	88.8	89.0	88.0	89.0	82.0	74.0	11.1	675	1.836	225	200	290	0.054
		1450 132S	89.2	89.5	87.5	84.0	78.0	66.5	11.2	790	3.691	265	225	320	0.145
		970 132M	87.4	87.5	85.5	78.5	71.5	59.0	12.2	720	5.517	165	145	280	0.271
10	7.5	2910 132S	89.5	89.5	88.0	83.5	80.0	70.5	15.2	680	2.508	245	195	285	0.095
		1455 132M	90.1	90.0	88.5	82.0	76.0	64.5	15.4	765	5.015	260	225	330	0.175
		975 160M	89.0	89.0	87.5	77.5	71.0	59.5	16.5	665	7.465	280	250	305	0.420
15	11	2940 160M	90.6	90.5	90.0	89.0	87.0	80.0	20.7	745	3.640	215	175	280	0.154
		1480 160M	91.0	91.5	91.0	87.0	84.5	77.0	21.1	740	7.301	245	200	280	0.352
		970 160L	90.0	90.5	90.0	81.0	76.5	67.0	22.9	670	11.05	270	240	295	0.618
20	15	2935 160M	91.3	91.5	90.5	91.0	89.0	82.5	27.4	765	4.973	225	175	300	0.183
		1480 160L	91.8	92.0	91.5	88.0	86.0	79.5	28.2	765	9.967	240	185	270	0.482
		990 180L	91.0	90.5	89.0	80.5	73.5	60.5	31.1	725	14.89	205	120	220	1.100
25	18.5	2930 160L	91.8	92.0	91.5	92.0	90.0	85.5	33.3	785	6.144	255	190	275	0.237
		1485 180M	92.2	92.5	92.0	88.5	86.5	78.5	34.4	690	12.29	185	155	270	0.750
		990 200L	91.5	91.0	90.0	83.5	78.5	67.5	36.8	755	18.57	225	125	225	1.913
30	22	2945 180M	92.2	92.3	92.5	93.0	92.0	89.0	39.0	700	7.269	165	135	255	0.443
		1485 180L	92.6	93.0	92.5	88.5	86.5	79.0	40.8	700	14.61	190	160	270	0.875
		990 200L	92.0	92.0	91.5	84.5	80.0	69.5	43.0	755	21.84	230	130	230	2.288
40	30	2960 200L	92.9	92.8	91.0	92.5	91.5	88.0	53.0	735	9.895	180	150	260	0.785
		1475 200L	93.2	93.0	92.0	88.0	85.0	78.5	55.8	760	19.79	225	120	230	1.453
		985 225M	92.5	92.0	90.5	75.5	67.5	53.5	65.3	710	29.63	235	140	290	2.793
50	37	2980 200L	93.3	93.0	92.0	93.0	92.5	89.0	64.8	730	12.20	180	150	290	0.942
		1480 225S	93.6	93.5	92.5	88.0	85.0	77.0	68.2	765	24.38	225	120	240	2.441
		985 250M	93.0	93.0	92.5	85.5	83.5	76.0	69.9	615	38.55	175	150	245	4.194
60	45	2970 225M	93.7	93.8	92.5	92.5	91.0	89.0	78.9	765	14.74	170	110	235	1.283
		1480 225M	93.9	93.5	93.0	88.0	85.5	78.5	82.7	765	29.58	220	110	230	2.919
		985 280S	93.5	93.5	93.0	85.5	83.0	74.5	84.5	710	44.45	195	100	200	6.941
75	55	2985 250M	94.0	93.8	92.5	97.0	93.5	75.0	102	720	18.05	145	130	300	1.410
		1485 250M	94.2	94.0	93.5	97.0	94.5	78.0	102	680	36.04	230	210	295	3.821
		985 280M	93.9	94.0	93.5	85.5	83.5	75.5	103	705	54.33	195	110	200	7.970
100	75	2970 280S	94.6	94.0	93.0	90.0	87.5	81.0	134	765	24.67	190	95	235	2.253
		1480 280S	94.7	94.5	93.5	87.5	85.0	77.5	138	730	49.51	220	100	230	5.123
		985 315S	94.4	94.5	93.5	84.0	80.0	71.0	144	700	74.09	185	100	200	14.43
125	90	2970 280M	95.0	95.0	94.0	91.0	89.0	84.0	158	770	29.48	190	95	235	2.819
		1485 280M	95.0	95.0	94.5	88.5	83.0	75.0	166	720	58.97	220	110	235	6.433
		985 315M	94.8	95.0	94.0	85.0	81.5	73.0	170	700	88.90	185	100	200	17.08
150	110	2975 315S	95.1	94.5	93.5	91.0	89.5	84.5	193	715	35.98	180	90	220	5.942
		1485 315S	95.4	95.5	94.5	88.5	86.0	79.0	198	690	72.07	210	100	220	12.38
		990 315L	95.1	95.0	94.5	86.0	83.5	75.5	204	675	108.1	185	100	200	21.21
175	132	2975 315M	95.4	95.0	94.0	91.0	89.5	85.5	231	710	43.17	180	90	220	6.543
		1485 315M	95.5	95.5	95.0	88.5	86.0	79.0	237	690	86.49	210	100	220	13.93
		990 315L	95.4	95.5	95.0	86.0	83.0	74.5	244	680	129.7	185	100	200	24.45
215	160	2975 315L	95.5	95.0	94.5	92.0	91.5	89.0	277	705	51.79	180	95	220	7.945
		1485 315L	95.7	95.5	95.0	88.5	87.5	82.0	284	690	104.8	210	100	220	16.38
		990 330M	95.6	95.5	94.5	88.5	86.0	80.0	287	675	157.3	175	100	200	35.02
270	200	2975 315L	95.5	95.0	94.5	92.0	91.5	89.0	346	705	65.41	180	75	220	8.890
		1485 315L	95.7	95.5	95.0	88.5	88.0	82.5	365	690	131.0	210	85	220	19.24
		990 330M	95.6	95.5	95.0	88.5	86.0	80.0	359	675	196.6	175	80	200	41.65
336	250	2980 330M	95.8	95.0	94.0	92.5	92.5	90.5	428	710	81.63	160	90	220	13.61
		1490 330M	95.8	95.5	95.0	90.5	89.5	84.5	438	705	163.3	200	95	220	31.86
		990 355L	95.6	95.5	94.5	88.5	86.5	80.5	449	670	245.7	175	90	200	53.01
420	315	2980 355L	95.8	95.5	94.5	92.5	92.5	91.0	540	705	102.9	160	90	220	16.43
		1490 355L	95.8	95.5	95.0	90.5	89.5	85.5	552	700	205.7	200	85	220	39.19

要求: 安装联轴器或皮带轮请利用轴端攻牙压入, 禁止以外力敲打轴端安装

船用三相异步电动机

MARINE SERIES THREE PHASE INDUCTION MOTORS



东元船用变极双速电机

1. 依客户要求

外形图 Outline

外形及安装尺寸图

安装方式: IMB3

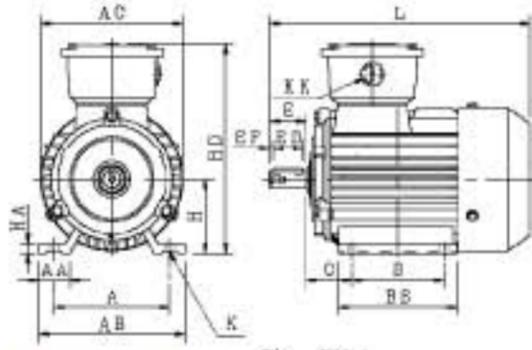


图1 FIG. 1

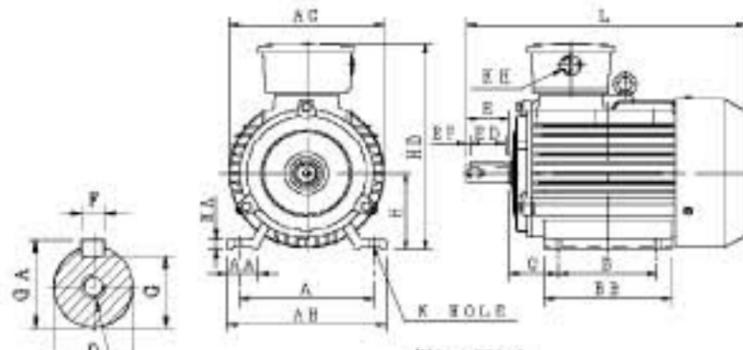


图2 FIG. 2

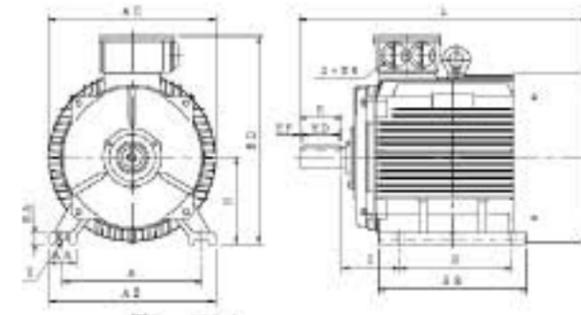


图3 FIG. 3

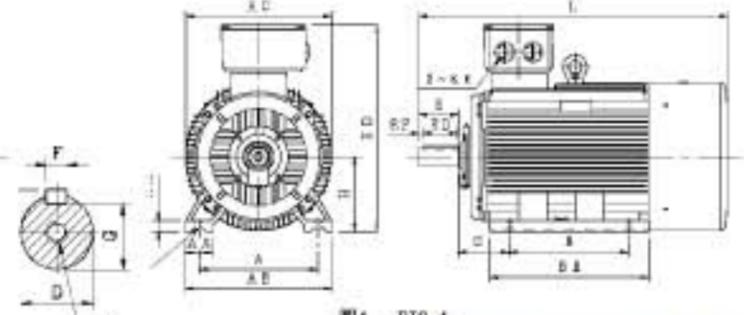


图4 FIG. 4

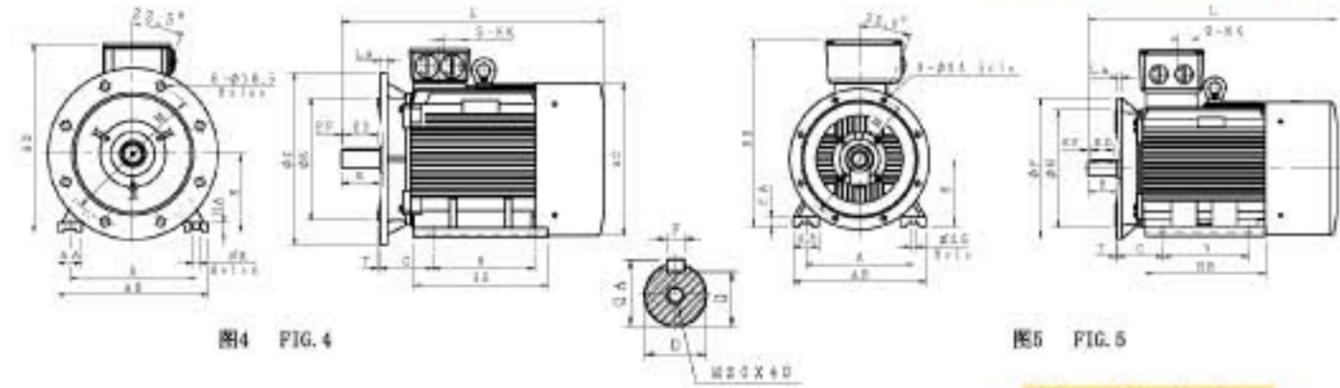
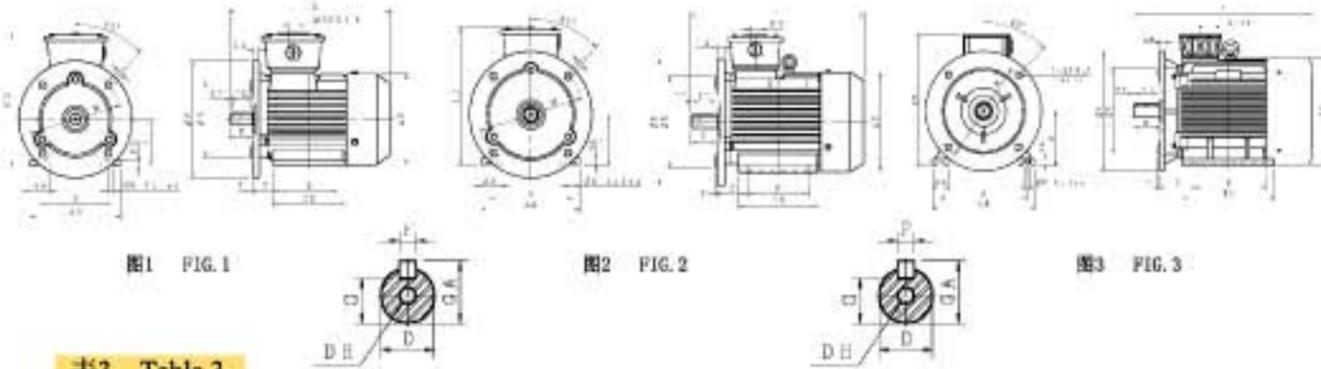
单位:mm Dimensions in mm

表1 Table 1

输出功率 Output (kW)					机座号 Frame No.	图号 FIG. No.	A	AA	AB	AC	B	BB	C	H	HA	
2P	4P	6P	8P	10P												
0.75	0.55	0.37	0.18	--	80M1	1	125	34	160	185/175	100	130	50±1.5	80 ^{+0.02}	10	
1.1	0.75	0.55	0.25	--	80M2	1	125	34	160	185/175	100	130	50±1.5	80 ^{+0.02}	10	
1.5	1.1	0.75	0.37	--	90S	1	140	36	180	175/179	100	140	56±1.5	90 ^{+0.02}	12	
2.2	1.5	1.1	0.55	--	90L	1	140	36	180	175/179	125	165	56±1.5	90 ^{+0.02}	12	
3	2.2	1.5	0.75	--	100L1	2	160	40	200	195/219	140	176	63±1.5	100 ^{+0.02}	14	
	3		1.1	--	100L2	2	160	40	200	195/219	140	176	63±1.5	100 ^{+0.02}	14	
4	4	2.2	1.5	--	112M	2	190	45	226	219	140	180	70±1.5	112 ^{+0.02}	15	
5.5	5.5	3	2.2	--	132S1	2	216	55	262	260	140	186	89±1.5	132 ^{+0.02}	18	
7.5			--	132S2	2	216	55	262	260	140	186	89±1.5	132 ^{+0.02}	18		
--		4	3	--	--	132M1	2	216	55	262	260	178	224	89±1.5	132 ^{+0.02}	18
				--	--	132M2	2	216	55	262	260	178	224	89±1.5	132 ^{+0.02}	18
11	11	7.5	4	--	160M1	3	254	65	314	314	210	260	108±3.0	160 ^{+0.02}	20	
15			5.5	--	160M2	3	254	65	314	314	210	260	108±3.0	160 ^{+0.02}	20	
18.5	15	11	7.5	--	160L	3	254	65	314	314	254	304	108±3.0	160 ^{+0.02}	20	
22	--	--	--	--	180M	3	279	70	355	355	241	311	121±3.0	180 ^{+0.02}	22	
--	18.5	--	--	--	180M	3	279	70	355	355	241	311	121±3.0	180 ^{+0.02}	22	
--	22	15	11	--	180L	3	279	70	355	355	279	349	121±3.0	180 ^{+0.02}	22	
30	--	--	--	--	200L1	3	318	70	388	398	305	369	133±3.0	200 ^{+0.02}	25	
37	--	--	--	--	200L2	3	318	70	388	398	305	369	133±3.0	200 ^{+0.02}	25	
--	30	18.5	15	--	200L1	3	318	70	388	398	305	369	133±3.0	200 ^{+0.02}	25	
--				22	--	200L2	3	318	70	388	398	305	369	133±3.0	200 ^{+0.02}	25
--	37	--	18.5	--	225S	3	356	75	431	446	286	368	149±4.0	225 ^{+0.02}	28	
45	--	--	--	--	225M	3	356	75	431	446	311	393	149±4.0	225 ^{+0.02}	28	
--	45	30	22	--	225M	3	356	75	431	446	311	393	149±4.0	225 ^{+0.02}	28	
55	--	--	--	--	250M	3	406	80	484	485	349	445	168±4.0	250 ^{+0.02}	30	
--	55	37	30	--	250M	3	406	80	484	485	349	445	168±4.0	250 ^{+0.02}	30	
75	--	--	--	--	280S	3	457	85	542	547	368	485	190±4.0	280 ^{+0.02}	35	
--	75	45	37	--	280S	3	457	85	542	547	368	485	190±4.0	280 ^{+0.02}	35	
90	--	--	--	--	280M	3	457	85	542	547	419	536	190±4.0	280 ^{+0.02}	35	
--	90	55	45	--	280M	3	457	85	542	547	419	536	190±4.0	280 ^{+0.02}	35	
110	--	--	--	--	315S	4	508	120	628	620	406	570	216±4.0	315 ^{+0.02}	45	
--	110	75	55	45	315S	4	508	120	628	620	406	570	216±4.0	315 ^{+0.02}	45	
132	--	--	--	--	315M	4	508	120	628	620	457	680	216±4.0	315 ^{+0.02}	45	
--	132	90	75	55	315M	4	508	120	628	620	457	680	216±4.0	315 ^{+0.02}	45	
160	--	--	--	--	315L1	4	508	120	628	620	508	680	216±4.0	315 ^{+0.02}	45	
200	--	--	--	--	315L2	4	508	120	628	620	508	680	216±4.0	315 ^{+0.02}	45	
--	160	110	90	75	315L1	4	508	120	628	620	508	680	216±4.0	315 ^{+0.02}	45	
--	200	132	110	90	315L2	4	508	120	628	620	508	680	216±4.0	315 ^{+0.02}	45	
250	--	--	--	--	355M	4	610	116	726	710	560	750	254±4.0	355 ^{+0.02}	52	
--	250	--	--	--	355M	4	610	116	726	710	560	750	254±4.0	355 ^{+0.02}	52	
--	--	160	132	110	355M1	4	610	116	726	710	560	750	254±4.0	355 ^{+0.02}	52	
--	--	200	160	132	355M2	4	610	116	726	710	560	750	254±4.0	355 ^{+0.02}	52	
315	--	--	--	--	355L	4	610	116	726	710	630	750	254±4.0	355 ^{+0.02}	52	
--	315	250	200	160	355L	4	610	116	726	710	630	750	254±4.0	355 ^{+0.02}	52	

要求: 安装联轴器或皮带轮请利用轴端攻牙压进迫入, 禁止以外力敲打轴端安装
上述表中同栏内后面的数据为高效率电机

HD	K	KK	L	轴端 Shaft Extension							轴承 Bearings		
				D	E	ED	EF	F	G	GA	DH	驱动端 DE	非驱动端 ODE
225/235	10 ^{+0.02}	M20×1.5	284/321	19 ^{+0.02}	40±0.31	32	4	6 ^{+0.02}	15.5 ^{+0.12}	21.5	M6×12	6204ZZ	6204ZZ
225/235	10 ^{+0.02}	M20×1.5	284/321	19 ^{+0.02}	40±0.31	32	4	6 ^{+0.02}	15.5 ^{+0.12}	21.5	M6×12	6204ZZ	6204ZZ
245/260	10 ^{+0.02}	M20×1.5	319/321	24 ^{+0.02}	50±0.31	40	5	8 ^{+0.02}	20 ^{+0.12}	27	M8×16	6205ZZ	6205ZZ
245/260	10 ^{+0.02}	M20×1.5	344/348	24 ^{+0.02}	50±0.31	40	5	8 ^{+0.02}	20 ^{+0.12}	27	M8×16	6205ZZ	6205ZZ
269/281	12 ^{+0.02}	M20×1.5	389/398	28 ^{+0.02}	60±0.37	50	5	8 ^{+0.02}	24 ^{+0.12}	31	M10×20	6206ZZ	6206ZZ
269/281	12 ^{+0.02}	M20×1.5	389/398	28 ^{+0.02}	60±0.37	50	5	8 ^{+0.02}	24 ^{+0.12}	31	M10×20	6206ZZ	6206ZZ
302	12 ^{+0.02}	M25×1.5	398	28 ^{+0.02}	60±0.37	50	5	8 ^{+0.02}	24 ^{+0.12}	31	M10×20	6206ZZ	6206ZZ
342	12 ^{+0.02}	M25×1.5	462	38 ^{+0.02}	80±0.37	70	5	10 ^{+0.02}	33 ^{+0.12}	41	M12×24	6208ZZ	6208ZZ
342	12 ^{+0.02}	M25×1.5	462	38 ^{+0.02}	80±0.37	70	5	10 ^{+0.02}	33 ^{+0.12}	41	M12×24	6208ZZ	6208ZZ
342	12 ^{+0.02}	M25×1.5	500	38 ^{+0.02}	80±0.37	70	5	10 ^{+0.02}	33 ^{+0.12}	41	M12×24	6208ZZ	6208ZZ
342	12 ^{+0.02}	M25×1.5	500	38 ^{+0.02}	80±0.37	70	5	10 ^{+0.02}	33 ^{+0.12}	41	M12×24	6208ZZ	6208ZZ
408	14.5 ^{+0.02}	M32×1.5	611	42 ^{+0.02}	110±0.43	100	5	12 ^{+0.02}	37 ^{+0.12}	45	M16×32	6309ZZ	6309ZZ
408	14.5 ^{+0.02}	M32×1.5	611	42 ^{+0.02}	110±0.43	100	5	12 ^{+0.02}	37 ^{+0.12}	45	M16×32	6309ZZ	6309ZZ
408	14.5 ^{+0.02}	M32×1.5	655	42 ^{+0.02}	110±0.43	100	5	12 ^{+0.02}	37 ^{+0.12}	45	M16×32	6309ZZ	6309ZZ
448	14.5 ^{+0.02}	M32×1.5	690	48 ^{+0.02}	110±0.43	100	5	14 ^{+0.02}	42.5 ^{+0.12}	51.5	M16×32	6311ZZ	6311ZZ
448	14.5 ^{+0.02}	M32×1.5	690	48 ^{+0.02}	110±0.43	100	5	14 ^{+0.02}	42.5 ^{+0.12}	51.5	M16×32	6311ZZ	6311ZZ
448	14.5 ^{+0.02}	M32×1.5	728	48 ^{+0.02}	110±0.43	100	5	14 ^{+0.02}	42.5 ^{+0.12}	51.5	M16×32	6311ZZ	6311ZZ
504	18.5 ^{+0.02}	M50×1.5	782	55 ^{+0.02}	110±0.43	100	5	16 ^{+0.02}	49 ^{+0.12}	59	M20×40	6312C3	6312C3
504	18.5 ^{+0.02}	M50×1.5	782	55 ^{+0.02}	110±0.43	100	5	16 ^{+0.02}	49 ^{+0.12}	59	M20×40	6312C3	6312C3
504	18.5 ^{+0.02}	M50×1.5	782	55 ^{+0.02}	110±0.43	100	5	16 ^{+0.02}	49 ^{+0.12}	59	M20×40	6312	6312
504	18.5 ^{+0.02}	M50×1.5	782	55 ^{+0.02}	110±0.43	100	5	16 ^{+0.02}	49 ^{+0.12}	59	M20×40	6312	6312
553	18.5 ^{+0.02}	M50×1.5	824	60 ^{+0.02}	140±0.50	125	7.5	18 ^{+0.02}	53 ^{+0.12}	64	M20×40	6313	6313
553	18.5 ^{+0.02}	M50×1.5	819	55 ^{+0.02}	110±0.43	100	5	16 ^{+0.02}	49 ^{+0.12}	59	M20×40	6313C3	6313C3
553	18.5 ^{+0.02}	M50×1.5	849	60 ^{+0.02}	140±0.50	125	7.5	18 ^{+0.02}	53 ^{+0.12}	64	M20×40	6313	6313
609	24 ^{+0.02}	M63×1.5	931	60 ^{+0.02}	140±0.50	125	7.5	18 ^{+0.02}	53 ^{+0.12}	64	M20×40	6314C3	6314C3
609	24 ^{+0.02}	M63×1.5	931	65 ^{+0.02}	140±0.50	125	7.5	18 ^{+0.02}	58 ^{+0.12}	69	M20×40	6314	6314
668	24 ^{+0.02}	M63×1.5	981.5	65 ^{+0.02}	140±0.50	125	7.5	18 ^{+0.02}	58 ^{+0.12}	69	M20×40	6314C3	6314C3
668	24 ^{+0.02}	M63×1.5	1004.5	75 ^{+0.02}	140±0.50	125	7.5	20 ^{+0.02}	67.5 ^{+0.12}	79.5	M20×40	6317	6317
668	24 ^{+0.02}	M63×1.5	1032.5	65 ^{+0.02}	140±0.50	125	7.5	18 ^{+0.02}	58 ^{+0.12}	69	M20×40	6314C3	6314C3
668	24 ^{+0.02}	M63×1.5	1055.5	75 ^{+0.02}	140±0.50	125	7.5	20 ^{+0.02}	67.5 ^{+0.12}	79.5	M20×40	6317	6317
875	28 ^{+0.02}	M63×1.5	1185	65 ^{+0.02}	140±0.50	125	7.5	18 ^{+0.02}	58 ^{+0.12}	69	M20×40	6317C3	6317C3
875	28 ^{+0.02}	M63×1.5	1215	80 ^{+0.02}	170±0.50	160	5	22 ^{+0.02}	71 ^{+0.12}	85	M20×40	6319	631



单位:mm Dimensions in mm

表3 Table 3

输出功率 Output (kW)					机座号 Frame No.	图号 FIG. No.	机座号													
2P	4P	6P	8P	10P			A	AA	AB	AC	B	BB	C	II	HA	HD	K	KK		
0.75	0.55	0.37	0.18	—	80M1	1	125	34	160	155/183	100	130	50 ± 1.5	80	10	225/235	10	M20×1.5		
1.1	0.75	0.55	0.25	—	80M2	1	125	34	160	155/183	100	130	50 ± 1.5	80	10	225/235	10	M20×1.5		
1.5	1.1	0.75	0.37	—	90S	1	140	36	180	175/177	100	140	56 ± 1.5	90	12	245/250	10	M20×1.5		
2.2	1.5	1.1	0.55	—	90L	1	140	36	180	175/177	125	165	56 ± 1.5	90	12	245/250	10	M20×1.5		
3	2.2	1.5	0.75	—	100L1	2	160	40	200	195/208	140	176	63 ± 1.5	100	14	268/281	12	M20×1.5		
	1.1		—	100L2	2	160	40	200	195/208	140	176	63 ± 1.5	100	14	268/281	12	M20×1.5			
4	4	2.2	1.5	—	112M	2	190	45	225	219	140	180	70 ± 1.5	112	15	302	12	M25×1.5		
5.5	5.5	3	2.2	—	132S1	2	216	55	262	260	140	186	89 ± 1.5	132	18	342	12	M25×1.5		
7.5				—	132S2	2	216	55	262	260	140	186	89 ± 1.5	132	18	342	12	M25×1.5		
—	7.5	4	3	—	132M1	2	216	55	262	260	178	224	89 ± 1.5	132	18	342	12	M25×1.5		
—				—	132M2	2	216	55	262	260	178	224	89 ± 1.5	132	18	342	12	M25×1.5		
11	11	7.5	4	—	160M1	3	254	65	314	314	210	260	108 ± 3.0	160	20	408	14.5	M32×1.5		
15				—	160M2	3	254	65	314	314	210	260	108 ± 3.0	160	20	408	14.5	M32×1.5		
18.5	15	11	7.5	—	160L	3	254	65	314	314	254	304	108 ± 3.0	160	20	408	14.5	M32×1.5		
22	—	—	—	—	180M	3	279	70	355	355	241	311	121 ± 3.0	180	22	448	14.5	M32×1.5		
—	18.5	—	—	—	180M	3	279	70	355	355	241	311	121 ± 3.0	180	22	448	14.5	M32×1.5		
—	22	15	11	—	180L	3	279	70	355	355	279	349	121 ± 3.0	180	22	448	14.5	M32×1.5		
30	—	—	—	—	200L1	3	318	70	388	398	305	369	133 ± 3.0	200	25	504	18.5	M50×1.5		
37	—	—	—	—	200L2	3	318	70	388	398	305	369	133 ± 3.0	200	25	504	18.5	M50×1.5		
—	30	18.5	15	—	200L1	3	318	70	388	398	305	369	133 ± 3.0	200	25	504	18.5	M50×1.5		
—				—	200L2	3	318	70	388	398	305	369	133 ± 3.0	200	25	504	18.5	M50×1.5		
—	37	—	18.5	—	225S	4	356	75	431	446	286	368	149 ± 4.0	225	28	553	18.5	M50×1.5		
45	—	—	—	—	225M	4	356	75	431	446	311	393	149 ± 4.0	225	28	553	18.5	M50×1.5		
—	45	30	22	—	225M	4	356	75	431	446	311	393	149 ± 4.0	225	28	553	18.5	M50×1.5		
55	—	—	—	—	250M	4	406	80	484	485	349	445	168 ± 4.0	250	30	609	24	M63×1.5		
—	55	37	30	—	250M	4	406	80	484	485	349	445	168 ± 4.0	250	30	609	24	M63×1.5		
75	—	—	—	—	280S	4	457	85	542	547	368	485	190 ± 4.0	280	35	668	24	M63×1.5		
—	75	45	37	—	280S	4	457	85	542	547	368	485	190 ± 4.0	280	35	668	24	M63×1.5		
90	—	—	—	—	280M	4	457	85	542	547	419	536	190 ± 4.0	280	35	668	24	M63×1.5		
—	90	55	45	—	280M	4	457	85	542	547	419	536	190 ± 4.0	280	35	668	24	M63×1.5		
110	—	—	—	—	315S	5	508	120	630	620	406	570	216 ± 4.0	315	45	875	28	M63×1.5		
—	110	75	55	45	315S	5	508	120	630	620	406	570	216 ± 4.0	315	45	875	28	M63×1.5		
132	—	—	—	—	315M	5	508	120	630	620	457	680	216 ± 4.0	315	45	875	28	M63×1.5		
—	132	90	75	55	315M	5	508	120	630	620	457	680	216 ± 4.0	315	45	875	28	M63×1.5		
160	—	—	—	—	315L1	5	508	120	630	620	508	680	216 ± 4.0	315	45	875	28	M63×1.5		
200	—	—	—	—	315L2	5	508	120	630	620	508	680	216 ± 4.0	315	45	875	28	M63×1.5		
—	160	110	90	75	315L1	5	508	120	630	620	508	680	216 ± 4.0	315	45	875	28	M63×1.5		
—	200	132	110	90	315L2	5	508	120	630	620	508	680	216 ± 4.0	315	45	875	28	M63×1.5		
250	—	—	—	—	355M	5	610	116	730	710	560	750	254 ± 4.0	355	52	1005	28	M75×1.5		
—	250	—	—	—	355M	5	610	116	730	710	560	750	254 ± 4.0	355	52	1005	28	M75×1.5		
—	—	160	132	110	355M1	5	610	116	730	710	560	750	254 ± 4.0	355	52	1005	28	M75×1.5		
—	—	200	160	132	355M2	5	610	116	730	710	560	750	254 ± 4.0	355	52	1005	28	M75×1.5		
315	—	—	—	—	355L	5	610	116	730	710	630	750	254 ± 4.0	355	52	1005	28	M75×1.5		
—	315	250	200	160	355L	5	610	116	730	710	630	750	254 ± 4.0	355	52	1005	28	M75×1.5		

要求: 安装联轴器或皮带轮请利用轴端攻牙压进, 禁止以外力敲打轴端安装
上述表中同栏内后面的数据为高效率电机

L	LA	M	N	P	S	T	轴伸 Shaft Extension						轴承 Bearings			
							D	E	ED	EF	F	G	GA	DH	滚动端 DE	非滚动端 OEG
284/334	12	165	130	200	4-φ12	3.5	19 ^{+0.009} _{-0.014}	40 ± 0.31	32	4	6 ^{+0.009} _{-0.014}	15.5 ^{+0.018} _{-0.023}	21.5	M6×12	6204ZZ	6204ZZ
284/334	12	165	130	200	4-φ12	3.5	19 ^{+0.009} _{-0.014}	40 ± 0.31	32	4	6 ^{+0.009} _{-0.014}	15.5 ^{+0.018} _{-0.023}	21.5	M6×12	6204ZZ	6204ZZ
318/321	12	165	130	200	4-φ12	3.5	24 ^{+0.009} _{-0.014}	50 ± 0.31	40	5	8 ^{+0.009} _{-0.014}	20 ^{+0.026} _{-0.031}	27	M8×16	6205ZZ	6205ZZ
344/348	12	165	130	200	4-φ12	3.5	24 ^{+0.009} _{-0.014}	50 ± 0.31	40	5	8 ^{+0.009} _{-0.014}	20 ^{+0.026} _{-0.031}	27	M8×16	6205ZZ	6205ZZ
388/388	15	215	180	250	4-φ14.5	4	28 ^{+0.009} _{-0.014}	60 ± 0.37	50	5	8 ^{+0.009} _{-0.014}	24 ^{+0.026} _{-0.031}	31	M10×20	6206ZZ	6206ZZ
388/388	15	215	180	250	4-φ14.5	4	28 ^{+0.009} _{-0.014}	60 ± 0.37	50	5	8 ^{+0.009} _{-0.014}	24 ^{+0.026} _{-0.031}	31	M10×20	6206ZZ	6206ZZ
398	15	215	180	250	4-φ14.5	4	28 ^{+0.009} _{-0.014}	60 ± 0.37	50	5	8 ^{+0.009} _{-0.014}	24 ^{+0.026} _{-0.031}	31	M10×20	6206ZZ	6206ZZ
462	16	265	230	300	4-φ14.5	4	38 ^{+0.009} _{-0.014}	80 ± 0.37	70	5	10 ^{+0.009} _{-0.014}	33 ^{+0.026} _{-0.031}	41	M12×24	6208ZZ	6208ZZ
462	16	265	230	300	4-φ14.5	4	38 ^{+0.009} _{-0.014}	80 ± 0.37	70	5	10 ^{+0.009} _{-0.014}	33 ^{+0.026} _{-0.031}	41	M12×24	6208ZZ	6208ZZ
500	16	265	230	300	4-φ14.5	4	38 ^{+0.009} _{-0.014}	80 ± 0.37	70	5	10 ^{+0.009} _{-0.014}	33 ^{+0.026} _{-0.031}	41	M12×24	6208ZZ	6208ZZ
500	16	265	230	300	4-φ14.5	4	38 ^{+0.009} _{-0.014}	80 ± 0.37	70	5	10 ^{+0.009} _{-0.014}	33 ^{+0.026} _{-0.031}	41	M12×24	6208ZZ	6208ZZ
611	16	300	250	350	4-φ18.5	5	42 ^{+0.009} _{-0.014}	110 ± 0.43	100	5	12 ^{+0.009} _{-0.014}	37 ^{+0.026} _{-0.031}	45	M16×32	6309ZZ	6309ZZ
611	16	300	250	350	4-φ18.5	5	42 ^{+0.009} _{-0.014}	110 ± 0.43	100	5	12 ^{+0.009} _{-0.014}	37 ^{+0.026} _{-0.031}	45	M16×32	6309ZZ	6309ZZ
655	16	300	250	350	4-φ18.5	5	42 ^{+0.009} _{-0.014}	110 ± 0.43	100	5	12 ^{+0.009} _{-0.014}	37 ^{+0.026} _{-0.031}	45	M16×32	6309ZZ	6309ZZ
690	16	300	250	350	4-φ18.5	5	48 ^{+0.009} _{-0.014}	110 ± 0.43	100	5	14 ^{+0.009} _{-0.014}	42.5 ^{+0.026} _{-0.031}	51.5	M16×32	6311ZZC3	6311ZZC3
690	16	300	250	350	4-φ18.5	5	48 ^{+0.009} _{-0.014}	110 ± 0.43	100	5	14 ^{+0.009} _{-0.014}	42.5 ^{+0.026} _{-0.031}	51.5	M16×32	6311ZZ	6311ZZ
728	16	300	250	350												

外形图 Outline
外形及安装尺寸图

安装方式: IMV1

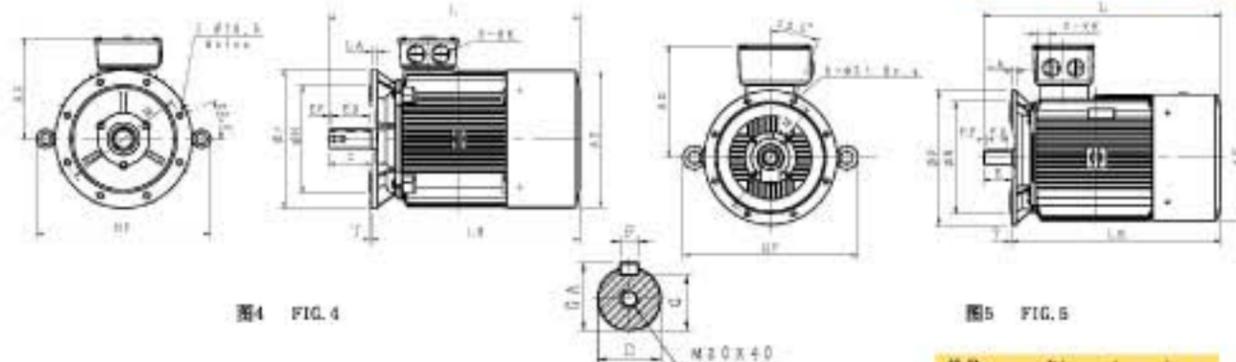
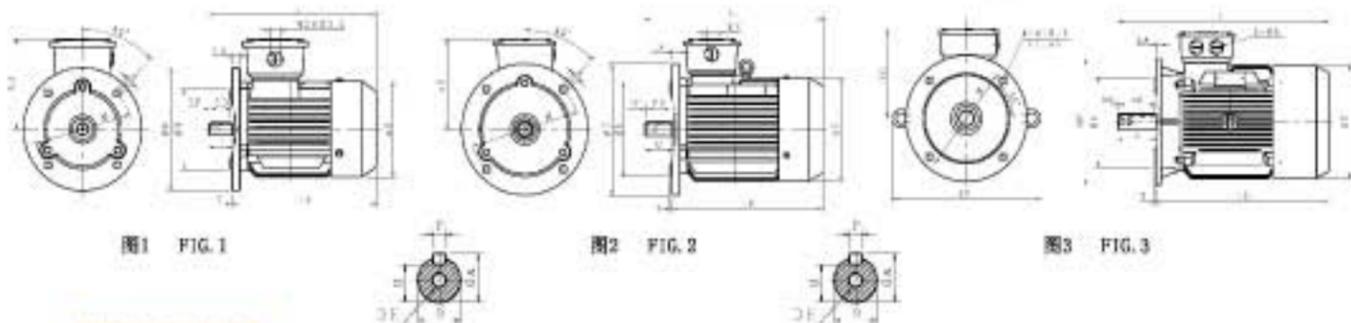


表2 Table 2

输出功率 Output (kW)					机座号 Frame No.	图号 FIG. No.	AC	AD	HF	KK	L	LA	LB	M	N	P
2P	4P	6P	8P	10P												
0.75	0.55	0.37	0.18	--	80M1	1	155/175	145/155	--	M20×1.5	284/334	12	244	165	130	200
1.1	0.75	0.55	0.25	--	80M2	1	155/175	145/155	--	M20×1.5	284/334	12	244	165	130	200
1.5	1.1	0.75	0.37	--	90S	1	175/177	155/180	--	M20×1.5	319/321	12	269	165	130	200
2.2	1.5	1.1	0.55	--	90L	1	175/177	155/180	--	M20×1.5	344/346	12	294	165	130	200
3	2.2	1.5	0.75	--	100L1	2	195/208	188/181	--	M20×1.5	369/398	15	309	215	180	250
	3		1.1	--	100L2	2	195/208	188/181	--	M20×1.5	369/398	15	309	215	180	250
4	4	2.2	1.5	--	112M	2	219	190	--	M25×1.5	398	15	338	215	180	250
5.5	5.5	3	2.2	--	132S1	2	260	210	--	M25×1.5	462	16	382	265	230	300
7.5			1.1	--	132S2	2	260	210	--	M25×1.5	462	16	382	265	230	300
--	7.5	4	3	--	132M1	2	260	210	--	M25×1.5	500	16	420	265	230	300
				--	132M2	2	260	210	--	M25×1.5	500	16	420	265	230	300
11	11	7.5	4	--	160M1	3	314	248	426	M32×1.5	611	16	501	300	250	350
15			5.5	--	160M2	3	314	248	426	M32×1.5	611	16	501	300	250	350
18.5	15	11	7.5	--	160L	3	314	248	426	M32×1.5	655	16	545	300	250	350
22	--	--	--	--	180M	3	355	268	466	M32×1.5	690	16	580	300	250	350
--	18.5	--	--	--	180M	3	355	268	466	M32×1.5	690	16	580	300	250	350
--	22	15	11	--	180L	3	355	268	466	M32×1.5	728	16	618	300	250	350
30	--	--	--	--	200L1	3	398	304	524	M50×1.5	782	17	672	350	300	400
37	--	--	--	--	200L2	3	398	304	524	M50×1.5	782	17	672	350	300	400
--	30	18.5	15	--	200L1	3	398	304	524	M50×1.5	782	17	672	350	300	400
--				22	--	200L2	3	398	304	524	M50×1.5	782	17	672	350	300
--	37	--	18.5	--	225S	4	446	328	572	M50×1.5	824	20	684	400	350	450
45	--	--	--	--	225M	4	446	328	572	M50×1.5	819	20	709	400	350	450
--	45	30	22	--	225M	4	446	328	572	M50×1.5	849	20	709	400	350	450
55	--	--	--	--	250M	4	485	359	630	M63×1.5	931	22	791	500	450	550
--	55	37	30	--	250M	4	485	359	630	M63×1.5	931	22	791	500	450	550
75	--	--	--	--	280S	4	547	388	726	M63×1.5	981.5	22	841.5	500	450	550
--	75	45	37	--	280S	4	547	388	726	M63×1.5	1004.5	22	864.5	500	450	550
90	--	--	--	--	280M	4	547	388	726	M63×1.5	1032.5	22	892.5	500	450	550
--	90	55	45	--	280M	4	547	388	726	M63×1.5	1055.5	22	915.5	500	450	550
110	--	--	--	--	315S	5	620	560	870	M63×1.5	1185	22	1045	600	550	660
--	110	75	55	45	315S	5	620	560	870	M63×1.5	1215	22	1045	600	550	660
132	--	--	--	--	315M	5	620	560	870	M63×1.5	1295	22	1155	600	550	660
--	132	90	75	55	315M	5	620	560	870	M63×1.5	1325	22	1155	600	550	660
160	--	--	--	--	315L1	5	620	560	870	M63×1.5	1295	22	1155	600	550	660
200	--	--	--	--	315L2	5	620	560	870	M63×1.5	1295	22	1155	600	550	660
--	160	110	90	75	315L1	5	620	560	870	M63×1.5	1325	22	1155	600	550	660
--	200	132	110	90	315L2	5	620	560	870	M63×1.5	1325	22	1155	600	550	660
250	--	--	--	--	355M	5	711	650	993	M75×1.5	1500	25	1360	740	680	800
--	250	--	--	--	355M	5	711	650	993	M75×1.5	1530	25	1360	740	680	800
--	--	160	132	110	355M1	5	711	650	993	M75×1.5	1530	25	1360	740	680	800
--	--	200	160	132	355M2	5	711	650	993	M75×1.5	1530	25	1360	740	680	800
315	--	--	--	--	355L	5	711	650	993	M75×1.5	1500	25	1360	740	680	800
--	315	250	200	160	355L	5	711	650	993	M75×1.5	1530	25	1360	740	680	800

要求: 安装联轴器或皮带轮请利用轴端攻牙压进迫入, 禁止以外力敲打轴端安装
上述表中同栏内后面的数据为高效率电机

S	T	轴端 Shaft Extension								轴承 Bearings	
		D	E	ED	EF	F	G	GA	DH	驱动端 DE	非驱动端 ODE
4-Φ12	3.5	19 ^{+0.022} _{-0.022}	40±0.31	32	4	6 ^{+0.030} _{-0.030}	15.5 ^{+0.010} _{-0.010}	21.5	M6×12	6204ZZ	6204ZZ
4-Φ12	3.5	19 ^{+0.022} _{-0.022}	40±0.31	32	4	6 ^{+0.030} _{-0.030}	15.5 ^{+0.010} _{-0.010}	21.5	M6×12	6204ZZ	6204ZZ
4-Φ12	3.5	24 ^{+0.022} _{-0.022}	50±0.31	40	5	8 ^{+0.030} _{-0.030}	20 ^{+0.010} _{-0.010}	27	M8×16	6205ZZ	6205ZZ
4-Φ12	3.5	24 ^{+0.022} _{-0.022}	50±0.31	40	5	8 ^{+0.030} _{-0.030}	20 ^{+0.010} _{-0.010}	27	M8×16	6205ZZ	6205ZZ
4-Φ14.5	4	28 ^{+0.022} _{-0.022}	60±0.37	50	5	8 ^{+0.030} _{-0.030}	24 ^{+0.010} _{-0.010}	31	M10×20	6206ZZ	6206ZZ
4-Φ14.5	4	28 ^{+0.022} _{-0.022}	60±0.37	50	5	8 ^{+0.030} _{-0.030}	24 ^{+0.010} _{-0.010}	31	M10×20	6206ZZ	6206ZZ
4-Φ14.5	4	28 ^{+0.022} _{-0.022}	60±0.37	50	5	8 ^{+0.030} _{-0.030}	24 ^{+0.010} _{-0.010}	31	M10×20	6206ZZ	6206ZZ
4-Φ14.5	4	38 ^{+0.022} _{-0.022}	80±0.37	70	5	10 ^{+0.030} _{-0.030}	33 ^{+0.010} _{-0.010}	41	M12×24	6208ZZ	6208ZZ
4-Φ14.5	4	38 ^{+0.022} _{-0.022}	80±0.37	70	5	10 ^{+0.030} _{-0.030}	33 ^{+0.010} _{-0.010}	41	M12×24	6208ZZ	6208ZZ
4-Φ14.5	4	38 ^{+0.022} _{-0.022}	80±0.37	70	5	10 ^{+0.030} _{-0.030}	33 ^{+0.010} _{-0.010}	41	M12×24	6208ZZ	6208ZZ
4-Φ14.5	4	38 ^{+0.022} _{-0.022}	80±0.37	70	5	10 ^{+0.030} _{-0.030}	33 ^{+0.010} _{-0.010}	41	M12×24	6208ZZ	6208ZZ
4-Φ18.5	5	42 ^{+0.022} _{-0.022}	110±0.43	100	5	12 ^{+0.030} _{-0.030}	37 ^{+0.010} _{-0.010}	45	M16×32	6309ZZ	6309ZZ
4-Φ18.5	5	42 ^{+0.022} _{-0.022}	110±0.43	100	5	12 ^{+0.030} _{-0.030}	37 ^{+0.010} _{-0.010}	45	M16×32	6309ZZ	6309ZZ
4-Φ18.5	5	42 ^{+0.022} _{-0.022}	110±0.43	100	5	12 ^{+0.030} _{-0.030}	37 ^{+0.010} _{-0.010}	45	M16×32	6309ZZ	6309ZZ
4-Φ18.5	5	48 ^{+0.022} _{-0.022}	130±0.43	100	5	14 ^{+0.030} _{-0.030}	42.5 ^{+0.010} _{-0.010}	51.5	M16×32	6311ZZC3	6311ZZC3
4-Φ18.5	5	48 ^{+0.022} _{-0.022}	130±0.43	100	5	14 ^{+0.030} _{-0.030}	42.5 ^{+0.010} _{-0.010}	51.5	M16×32	6311ZZ	6311ZZ
4-Φ18.5	5	48 ^{+0.022} _{-0.022}	130±0.43	100	5	14 ^{+0.030} _{-0.030}	42.5 ^{+0.010} _{-0.010}	51.5	M16×32	6311ZZ	6311ZZ
4-Φ18.5	5	55 ^{+0.022} _{-0.022}	150±0.43	100	5	16 ^{+0.030} _{-0.030}	49 ^{+0.010} _{-0.010}	59	M20×40	6312C3	6312C3
4-Φ18.5	5	55 ^{+0.022} _{-0.022}	150±0.43	100	5	16 ^{+0.030} _{-0.030}	49 ^{+0.010} _{-0.010}	59	M20×40	6312C3	6312C3
4-Φ18.5	5	55 ^{+0.022} _{-0.022}	150±0.43	100	5	16 ^{+0.030} _{-0.030}	49 ^{+0.010} _{-0.010}	59	M20×40	6312	6312
4-Φ18.5	5	55 ^{+0.022} _{-0.022}	150±0.43	100	5	16 ^{+0.030} _{-0.030}	49 ^{+0.010} _{-0.010}	59	M20×40	6312	6312
8-Φ18.5	5	60 ^{+0.022} _{-0.022}	140±0.50	125	7.5	18 ^{+0.030} _{-0.030}	53 ^{+0.010} _{-0.010}	64	M20×40	6313	6313
8-Φ18.5	5	55 ^{+0.022} _{-0.022}	110±0.43	100	5	16 ^{+0.030} _{-0.030}	49 ^{+0.010} _{-0.010}	59	M20×40	6313C3	6313C3
8-Φ18.5	5	60 ^{+0.022} _{-0.022}	140±0.50	125	7.5	18 ^{+0.030} _{-0.030}	53 ^{+0.010} _{-0.010}	64	M20×40	6313	6313
8-Φ18.5	5	60 ^{+0.022} _{-0.022}	140±0.50	125	7.5	18 ^{+0.030} _{-0.030}	53 ^{+0.010} _{-0.010}	64	M20×40	6314C3	6314C3
8-Φ18.5	5	65 ^{+0.022} _{-0.022}	140±0.50	125	7.5	18 ^{+0.030} _{-0.030}	58 ^{+0.010} _{-0.010}	69	M20×40	6314	6314
8-Φ18.5	5	65 ^{+0.022} _{-0.022}	140±0.50	125	7.5	18 ^{+0.030} _{-0.030}	58 ^{+0.010} _{-0.010}	69	M20×40	6314C3	6314C3
8-Φ18.5	5	75 ^{+0.022} _{-0.022}	140±0.50	125	7.5	20 ^{+0.030} _{-0.030}	67.5 ^{+0.010} _{-0.010}	79.5	M20×40	6317	6317
8-Φ18.5	5	65 ^{+0.022} _{-0.022}	140±0.50	125	7.5	18 ^{+0.030} _{-0.030}	58 ^{+0.010} _{-0.010}	69	M20×40	6314C3	6314C3
8-Φ18.5	5	75 ^{+0.022} _{-0.022}	140±0.50	125	7.5	20 ^{+0.030} _{-0.030}	67.5 ^{+0.010} _{-0.010}	79.5	M20×40	6317	6317
8-Φ24	6	65 ^{+0.022} _{-0.022}	140±0.50	125	7.5	18 ^{+0.030} _{-0.030}	58 ^{+0.010} _{-0.010}	69	M20×40	6317C3	6317C3
8-Φ24	6	80 ^{+0.022} _{-0.022}	170±0.50	160	5	22 ^{+0.030} _{-0.030}	71 ^{+0.010} _{-0.010}	85	M20×40	6319	6319
8-Φ24	6	65 ^{+0.022} _{-0.022}	140±0.50	125	7.5	18 ^{+0.030} _{-0.030}	58 ^{+0.010} _{-0.010}	69	M20×40	6317C3	6317C3
8-Φ24	6	80 ^{+0.022} _{-0.022}	170±0.50	160	5	22 ^{+0.03}					