概况

1 YZR、YZ系列冶金及起重用绕线转子与鼠笼转子三相异步电动机，系用于各种类型的起重机械及其他类似设备的电力驱动，具有较高的过载能力和机械强度，适用于短时或断续周期性工作制，频繁起动、制动、及有显著的振动与冲击的设备。

2 电动机的功率等级和安装尺寸符合IEC72推荐标准，功率等级与安装尺寸的相互关系与日本JEM1202及德国DIN42681相似，大多数可以互换。

3 电动机在海拔不超过1000米，能保证正常运行。

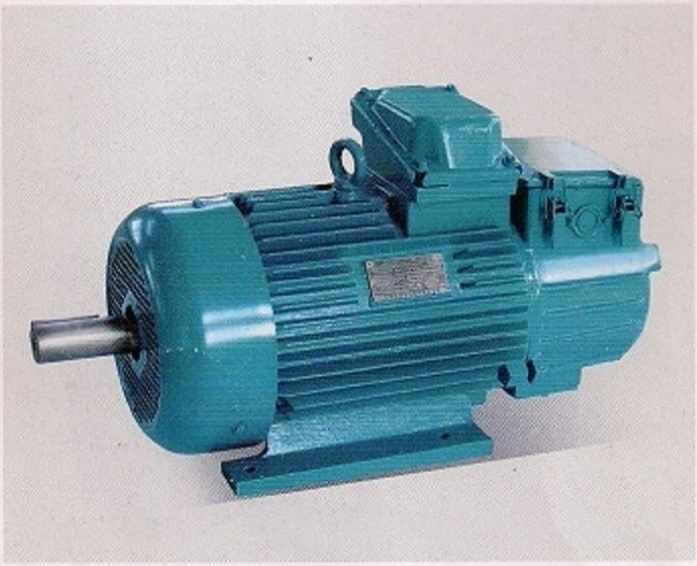
4 电动机的绝缘等级分为F级和H级两种。F级适用于环境空气温度不超过40℃的一般场所；H级适用于环境空气温度不超过60℃的冶金场所。两种电动机具有相同的参数。

5 电动机具有良好的密封性。用于一般场所的电动机防护等级为IP44，用于冶金场所的电动机防护等级为IP54。

6 YZR系列为冶金及起重用绕线转子三相异步电动机产品，符合专业标准ZBK26008-89规定，YZ系列为冶金及起重用鼠笼转子三相异步电动机产品，符合专业标准ZBK26007-89。

7 电动机额定频率为50赫兹，额定电压为380伏。

YZR 系列电机
YZR series



Introduction

1 These series of 3φ metallurgical industrial and crane motors, with wound or squirrel cage rotor are specially designed to drive metallurgical industrial cranes and other similar machines, it has excellent overload capability and high mechanical strength. Therefore,it is well suited for short duty cycle, or intermittent periodic duty, and on equipments with frequent starting and braking or are subject to vibration and shock.

2 The standard range of power output and mounting dimensions complies with the reconmmended standard of (IEC 72). The relation between range of power output and mounting dimensions is similar to the Japanese standard (JEM 1202) and German standard (DIN42681),therefore most of them can be interchanged.

3 The motor can be operated well up to altitude of 1,000m.

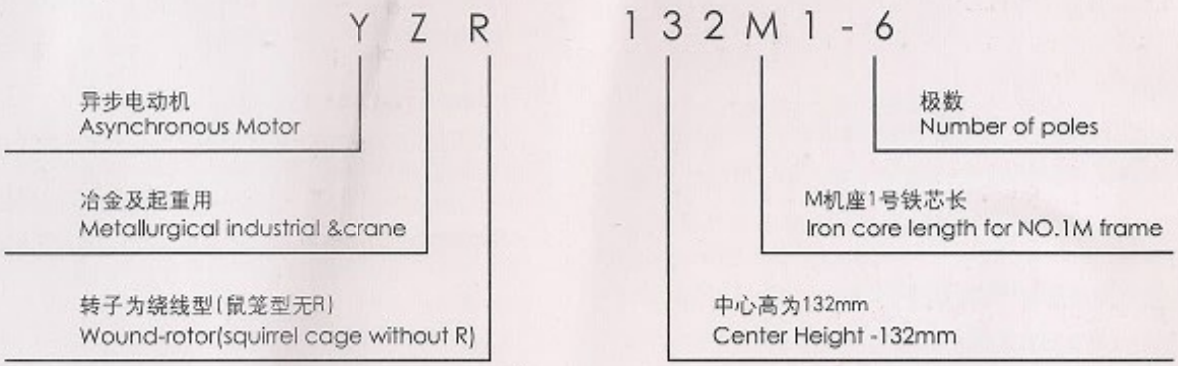
4 There are two classes of insulation F and H. Class F applies to temperature condition not exceeding 40°C. Class H is suitable for metallurgical industrial sites where ambient temperature is below 60°C. Both have the same technical data.

5 The motors possess better enclosure, with protection standard of IP44 for normal site condition, and IP54 for metallurgical industrial condition.

6 The YZR series 3φ induction metallurgical industrial and crane motor with wound rotor is compling with the standard ZBK26008-89. The YZ series 3φ induction metallurgical industrial and crane motor with squirrel cage rotor compling with the standard ZBK26007-89.

7 Motor' s rated voltage and frequency is 380V/50Hz.

8 电动机符号的意义
8 Symbol definitions



9 电动机基准工作制为S_3—40%，机座号与容量等级对应关系见表1
9 The basic mortor duty is S_3-40%. See table 1 for the relationship between frame size and rating.

机座号与同步转速及功率对应关系
Relations of frame size with synchronous speed and power

表1 Table 1

机座号 Frame size		同步转速 Synchr speed 1000转/分r/min	750转/分r/min	600转/分r/min
112	M	1.5	–	–
132	M1	2.2	–	–
	M2	3.7	–	–
160	M1	5.5	–	–
	M2	7.5	–	–
	L	11	7.5	–
180	L	15	11	–
200	L	22	15	–
225	M	30	22	–
250	M1	37	30	–
	M2	45	37	–
280	S	55	45	37
	M	75	55	45
315	S	–	75	55
	M	–	90	75
355	M	–	–	90
	L1	–	–	110
	L2	–	–	132
400	L1	–	–	160
	L2	–	–	200

YZ系列电机制造色块内的规格
YZ motors series are shown in the coloured block.

电动机的工作制及技术数据

电动机适用于断续周期性工作制，根据负荷的不同性质、电动机的工作制分为：

1 短时工作制(S_2)：
在恒定负载下按给定时间运行，未达到热稳定状态时即停机和断能一段时间，使电机再度冷却到与冷却介质温度之差在2K以内。

2 断续周期性工作制(S_3)：
按一系列相同的工作周期运行，每周期由一段恒定负载运行时间和一段停机和断能的时间所组成(见图1)，但这些时间较短，均不足以使电机达到热稳定状态，并且每一周期的起动电流对温升无明显的影响。

3 包括起动的断续周期性工作制(S_4)：
按一系列相同的工作周期运行，每周期由一段起动时间，一段恒定负载运行时间和一段停机和断能时间所组成(见图2)，但这些时间较短，均不足以使电机达到热稳定状态。

4 包括电制动的断续周期性工作制(S_5)：
按一系列相同的工作周期运行，每一周期由一段起动时间，一段恒定负载运行时间，一段快速电制动时间和一段停机和断能的时间所组成(见图3)，但这些时间较短均不足以使电机达到热稳定状态。

5 选用电动机时，各种起动及制动状态均需按等效发热折算成每小时等效起动次数，以该等效起动次数确定电动机的定额。折算例子见表2。

6 折算方法：
6.1 点动终了时电动机的转速不超过额定转速的25%，四次相当于一次起动。
6.2 电制动(制动到额定转速的1/3)一次相当于0.8次起动。

7 电动机的基准工作制为S_3-40%，各工作制下电动机技术数据见表3、表4-1及表4-2。电动机铭牌上给出交货状态的数据。如果用户不指定工作制时，电动机铭牌上仅给出基准工作制时的数据，当电动机需要按S_2—S_5之外的工作制运行时，需与制造厂协商。

Motors duty and technical data

These motors are well suited to intermittent heavy duty operation. It can be classified into the following categories according to different load characteristics:

1 Short Time Duty (S_2):
Operation is under constant load in fixed time and the motor is resting or deenergizing when the heat balance is not reached. In a period of time, the motor is cooled and the temperature difference between motor and medium is limited within 2K.

2 Intermittent Periodic Duty (S_3):
To run according to a series of identical cycles ,the running time under constant load and the time of rest deenergized are included in period of one cycle (see fig.1), but the time is shorter and does not make motor to a heat balance condition. The starting current shouldn' t be enough to affect the temperature rise obviously.

3 Intermittent Periodic Duty with Starting (S_4):
To run according to a series if identical cycles ,each cycle is formed by a starting time, a constant load' s time & a rest or deenergized time,(see fig.2). But the time is short without condition making motor to a heat balance.

4 Intermittent Periodic Duty with starting and Electric Braking (S_5):
It runs according to a series of identical cycles, there are starting time, constant load' s time, electric quick braking time and a rest or deenergized time in each cycle. But the motor can not reach the condition of heat balance in such short time (Fig.3)

5 When you choose motor, various conditions of starting and braking have to be contained into a equivalent data of starts/hour according to equivalent data of starts/hour according to equivalent heat, then the motor quota is determined by the equivalent data.

6 Conversion
2.6.1 When the touch starting is end,the speed does not exceed 25% of rated speed, i.e.four times equal once of starting.
2.6.2 Once electric braking (to brake to one third of rated speed) is equal to 80% starting.

7 The duty type S_3-40% is basic duty,the motor technical data is in the Table 3, Table 4-1 and 4-2. The data of delivery condition on the name plate only under basic duty.If you need a duty type out of S_2 to S_5, the consultation with manufacturer must be needed.

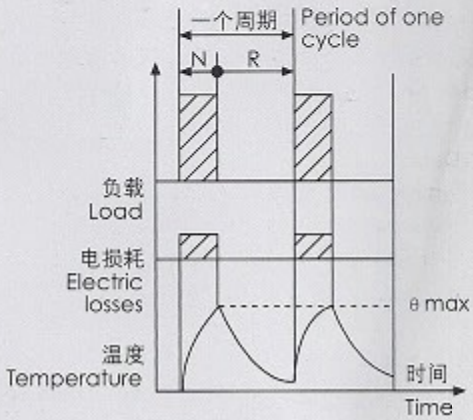


图1 断续周期性工作制S_3

N–在额定条件下运行

R–停机和断能时间

θ max–在工作周期中达到的最高温度

负载持续率：

$$FC=\frac{N}{N+R}\cdot 100\%$$

Fig.1 Intermittent periodic duty type S_3

N=operation under rated condition

R=at rest and deenergized

θ max=maximum temperature attained during the duty cycle

Intermittent rate:

$$FC=\frac{N}{N+R}\cdot 100\%$$

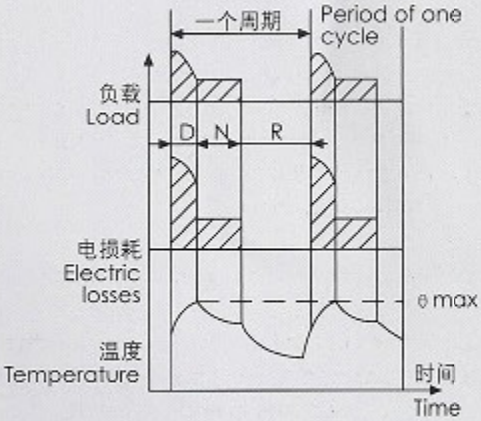


图2 包括起动的断续周期性工作制S_4

D–起动

R–停机和断能时间

N–在额定条件下运行

θ max–在工作周期中达到的最高温度

负载持续率：

$$FC=\frac{D+N}{D+N+R}\cdot 100\%$$

Fig.2 Intermittent periodic duty with starting type S_4

D=starting

R=at rest and deenergized

N=operation under rated condition

θ max=maximum temperature attained during the duty cycle

Intermittent rate:

$$FC=\frac{D+N}{D+N+R}\cdot 100\%$$

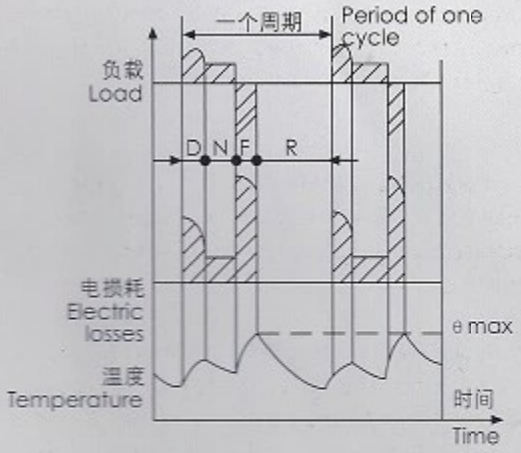


图3 包括电制动的断续周期性工作制S_5

D–起动

N–在额定条件下运行

F–电制动时间

R–停机和断能时间

θ max–在工作周期中达到的最高温度

负载持续率：

$$FC=\frac{D+N+F}{D+N+F+R}\cdot 100\%$$

Fig.3 Intermittent periodic duty with starting & electric braking type S_5

D=starting

R=at rest and deenergized

F=electric braking

N=operation under rated condition

θ max=maximum temperature attained during the duty cycle

Intermittent rate:

$$FC=\frac{D+N+F}{D+N+F+R}\cdot 100\%$$

等效起动次数与点动、制动及起动次数对应关系
Relations of equivalent starting number with touch starting, braking and starting number

表2 Table 2

工作制 Duty type	起制动状态 Starting & Braking Condition				每小时等效起动次数 Equivalent starts/h
	每小时起动次数 No.of starts/h	每小时点动次数 No. of tuch starts/h	每小时制动次数 No. of brakes/h	每小时制动并反转次数 No.of brakes & reverses/h	
S3	6	0	0	0	6
S3	4	8	0	0	
S3	2	8	2	0	
S4	150	0	0	0	150
S4	100	200	0	0	
S5	80	0	80	0	
S5	65	130	65	0	
S5	30	160	30	30	
S4	300	0	0	0	300
S4	200	400	0	0	
S5	160	0	160	0	
S5	130	260	130	0	
S5	60	320	60	60	
S4	600	0	0	0	600
S4	400	800	0	0	
S5	320	0	320	0	
S5	260	520	260	0	
S5	120	640	120	120	

YZ 系列技术数据
YZ series technical date

表3 Table 3

机座号 Frame size	工作制 Duty type	S_2						S_3 6次/时 Stars/h																				转动惯量 Jm(kg·m²)	重量 Weight(kg)
	FC	30分钟 minutes			60分钟 minutes			15%			25%			40%								60%			100%				
	项目 Items	kW	I_1 (A)	n (r/min)	kW	I_1 (A)	n (r/min)	kW	I_1 (A)	n (r/min)	kW	I_1 (A)	n (r/min)	kW	I_1 (A)	n (r/min)	Mmax/Mn	Mst/Mn	Ist/I_1	η %	cosΦ	kW	I_1 (A)	n (r/min)	kW	I_1 (A)	n (r/min)		
1000转/分 r/min																													
YZ	112M	1.8	4.9	892	1.5	4.25	920	2.2	6.5	810	1.8	4.9	892	1.5	4.25	920	2.7	2.44	4.47	69.5	0.75	1.1	2.7	946	0.8	3.5	980	0.022	58
	132M1	2.5	6.5	920	2.2	5.9	935	3	7.5	804	2.5	6.5	920	2.2	5.9	935	2.9	3.1	5.16	74	0.76	1.8	5.3	950	1.5	4.9	960	0.056	80
	132M2	4.0	9.2	915	3.7	8.8	912	5	11.6	890	4	9.2	915	3.7	8.8	912	2.8	3	5.54	78	0.79	3	7.5	940	2.5	7.2	945	0.062	92
	160M1	6.3	14.1	922	5.5	12.5	933	7.5	16.8	903	6.3	14.1	922	5.5	12.5	933	2.7	2.5	4.9	80	0.82	5	11.5	940	4	10	953	0.114	119
	160M2	8.5	18	943	7.5	15.9	948	11	25.4	926	8.5	18	943	7.5	15.9	948	2.9	2.4	5.52	81	0.83	6.3	14.2	956	5.5	13	961	0.143	132
	160L	15	32	920	11	24.6	953	15	32	920	13	28.7	936	11	24.6	953	2.9	2.7	6.17	83	0.84	9	20.6	964	7.5	18.8	972	0.192	152
750转/分 r/min																													
YZ	160L	9	21.1	694	7.5	18	705	11	27.4	675	9	21.1	694	7.5	18	705	2.7	2.5	5.1	80	0.76	6	15.6	717	5	14.2	724	0.192	152
	180L	13	30	675	11	25.8	694	15	35.3	654	13	30	675	11	25.8	694	2.5	2.6	4.9	81	0.79	9	21.5	710	7.5	19.2	718	0.352	205
	200L	18.5	40	697	15	33.1	710	22	47.5	686	18.5	40	697	15	33.1	710	2.8	2.7	6.1	82.5	0.8	13	28.1	714	11	26	720	0.622	276
	225M	26	53.5	701	22	45.8	712	33	69	687	26	53.5	701	22	45.8	712	2.9	2.9	6.2	84	0.82	18.5	40	718	17	37.5	720	0.820	347
	250M1	35	74	681	30	63.3	694	42	89	663	35	74	681	30	63.3	694	2.54	2.7	5.47	85	0.84	26	56	702	22	45	717	1.432	462

www.dlldmotor.com.cn 06 大连电机0411-66368522

机座号 Frame size	工作制 Duty type	S2															
	FC	30分钟 minutes				60分钟 minutes				15%				25%			
	项目Items	kW	I_1	I_2	n	kW	I_1	I_2	n	kW	I_1	I_2	n	kW	I_1	I_2	n
YZR	112M	1.8	5.3	13.4	815	1.5	4.63	12.5	866	2.2	6.6	18.4	725	1.8	5.3	13.4	815
	132M1	2.5	6.5	12.9	892	2.2	6.05	12.6	908	3.0	8.0	16.1	855	2.5	6.5	12.9	892
	132M2	4.0	9.7	14.2	900	3.7	9.2	14.5	908	5.0	12.3	18.2	875	4.0	9.7	14.2	900
	160M1	6.3	16.4	29.4	921	5.5	15	25.7	930	7.5	18.5	35.4	910	6.3	16.4	29.4	921
	160M2	8.5	19.6	29.8	930	7.5	18	26.5	940	11	24.6	39.6	908	8.5	19.6	29.8	930
	160L	13	28.6	31.6	942	11	24.5	27.6	957	15	34.7	39	920	13	28.6	31.6	912
	180L	17	36.7	49.8	955	15	33.8	46.5	962	20	42.6	58.7	946	17	36.7	49.8	955
	200L	26	56.1	82.4	956	22	49.1	69.9	964	33	62	103	942	26	56.1	82.4	956
	225M	34	70	85	957	30	62	74.4	962	40	80	101	917	34	70	85	957
	250M1	42	80	103	960	37	70.5	91.5	965	50	99	123	950	42	80	103	960
	250M2	52	97	110	958	45	84.5	95	965	63	121	134	947	52	97	110	958
	280S	63	118	142	966	55	101.5	129.8	969	75	144	169.5	960	63	118	142	966
	280M	85	157	140	966	75	139	124	970	100	185	166	960	85	157	140	966
YZR	160L	9	22.4	28.1	694	7.5	19.1	23	705	11	27.5	35.3	676	9.0	22.4	28.1	694
	180L	13	29.1	47.8	700	11	27	44	700	15	34	56	690	13	29.1	47.8	700
	200L	18.5	40	67.2	701	15	33.5	53.5	712	22	48	81	690	18.5	40	67.2	701
	225M	26	55	71.2	708	22	46.9	59.1	715	33	70	92	696	26	55	71.2	708
	250M1	35	64	80	715	30	63.4	67.7	720	42	75	97.5	710	35	64	80	715
	250M2	42	86	79	716	37	78	70	720	52	103	98	706	42	86	79	716
	280S	52	108	106	712	45	96.5	92	717	63	129	130	704	52	108	106	712
	280M	63	126	110	722	55	110.5	92.5	725	75	150	132	715	63	126	110	722
	315S	85	164.8	177.8	722	75	146.7	156.7	725	100	200	162	715	85	164.8	177.8	722
	315M	100	190	183.5	715	90	172	160.9	720	125	250	232	717	100	190	183.5	715
YZR	280S	42	92	177.1	571	37	84.8	153.2	560	55	112	235.2	564	42	92	177.1	571
	280M	55	127	207	556	45	103.8	165	560	63	146	241	548	55	127	207	556
	315S	63	132	161.9	580	55	118.3	138.7	580	75	154	194	574	63	132.5	161.9	580
	315M	85	179	171	576	75	160	149.3	579	100	210	203	570	85	179	171	576
	355M	110	218	207	581	90	180	166.6	585	132	266	252	576	110	218	207	581
	355L1	132	257	213	576	110	217	172	582	160	314	261	571	132	257	213	578
	355L2	150	293	194	588	132	262	167.5	588	185	353	241	585	150	293	194	588
	400L1	190	390	290	585	160	338	244	587	220	445	336	581	190	390	290	584
	400L2	240	490	302	585	200	427	252	588	270	540	340	582	240	490	302	586

YZR 系列技术数据
YZR series technical data

表4-1 Table 4-1

S3 6次/时 Stars/h																转子电压 Rotor voltage (v)	转动惯量 Rotary Inertia Jm (kg·m²)	重量 Weight (kg)
40%								60%				100%						
kW	I1	I2	Tm	I0	n	η%	cosΦ	kW	I1	I2	n	kW	I1	I2	n			
1000转/分 r/min																		
1.5	4.63	12.5	2.5	3.37	866	65	0.77	1.1	3.8	7.32	912	0.8	3.5	5.16	940	100	0.03	74
2.2	6.05	12.6	2.86	4.04	908	70	0.77	1.8	5.4	8.96	921	1.5	5.0	7.3	940	132	0.06	97
3.7	9.2	14.5	2.51	5.58	908	75.5	0.78	3.0	7.9	10.2	937	2.5	7.5	8.4	950	185	0.07	108
5.5	15	25.7	2.56	7.95	930	75.5	0.78	5.0	14	22.9	935	4.0	12.5	18.2	944	138	0.12	154
7.5	18	26.5	2.78	11.2	940	79	0.8	6.3	16	21.7	949	5.5	15	18.8	956	185	0.15	160
11	24.9	27.6	2.47	13	945	82	0.8	9.0	21	22.3	952	7.5	18.8	18.5	970	250	0.20	174
15	33.8	46.5	3.2	18.8	962	84	0.81	13	29.7	37.3	968	11	25.5	31.4	975	218	0.39	230
22	49.1	69.9	2.88	26.6	964	86	0.8	19	44.5	60.5	969	17	40.5	52.6	973	200	0.67	320
30	62	74.4	3.3	29.9	962	88	0.82	26	55	64.5	968	22	50	54.2	975	250	0.84	398
37	70.5	91.5	3.13	26.5	960	89	0.89	32	61	79	970	28	55	69	975	250	1.52	512
45	84.5	95	3.48	28.2	965	90.5	0.89	39	73	83	969	33	64	71	974	290	1.78	559
55	101.5	119.8	3.0	34	969	91	0.9	48	88	107.1	972	40	76	88.9	976	280	2.35	747
75	139	124	3.2	47.5	970	91.8	0.89	63	118	104	975	50	96.3	82	980	370	2.86	848
750转/分 r/min																		
7.5	19.1	23	2.73	12.7	705	78.5	0.72	6.0	16.4	18.2	712	5.0	14	15	724	205	0.20	172
11	27	44	2.72	14.8	700	81	0.77	9.0	21.9	32.1	720	7.5	19.6	26.6	726	172	0.39	230
15	33.5	53.5	2.94	17.75	712	85	0.78	13	30	46	718	11	27	38.7	723	178	0.67	317
22	46.9	59.1	2.96	24.17	715	86	0.79	18.5	41	49.5	721	17	38	45	723	232	0.82	390
30	63.4	68.8	2.64	31.4	720	87	0.8	26	52	59.1	725	22	46	49.7	729	272	1.52	515
37	78.1	70	2.73	36.9	720	88	0.82	32	68	60	725	27	60	51	729	335	1.79	563
45	96.5	92	3.17	48	717	88.8	0.80	39	86.2	79.4	722	33	76.3	67	726	305	2.35	747
55	110.5	92.5	2.85	52.3	725	89	0.84	48	103	82.8	730	40	93	68.7	732	360	2.86	848
75	146.7	156.7	2.94	62	725	89	0.85	63	126.4	130.7	729	55	105.4	104.3	731	302	7.22	1050
90	172	160.9	3.13	57.7	720	90	0.87	75	140	136	725	63	124	113.8	728	372	8.68	1170
600转/分 r/min																		
37	84.8	153.2	2.8	44.2	572	86	0.76	32	77	133.4	578	27	69	111.8	582	150	3.58	767
45	103.8	165	3.16	63.6	560	86	0.77	37	90	136	569	33	89.6	118	587	172	3.98	840
55	118.3	138.7	3.11	62.5	580	88.5	0.79	48	106.6	122	585	40	95.2	101	588	242	7.22	1026
75	160	149.3	3.45	85.3	579	89	0.79	63	140	124.8	584	50	125	98.5	587	325	8.68	1156
90	180	166.6	3.33	83	589	90	0.81	75	154	140	588	63	136	117	589	330	14.32	1520
110	217	172	3.1	90	582	91	0.82	90	181	143	585	75	157	119	588	388	17.08	1764
132	262	167.5	3.48	126	588	92	0.82	110	226	141.8	591	90	191	115.6	592	475	19.18	1810
160	338	244	3.02	175	587	91.5	0.79	135	294	206	592	115	268	174	591	395	24.52	2400
200	423	252	2.85	213	588	92.2	0.77	170	372	214	591	145	332	183	592	460	28.10	2950

YZR 系列技术数据
YZR series technical data

机座号 Frame size	工作制 Duty type	S4 和 S5															
		150次/时 Stars/h															
	FC	25%				40%				60%				40%			
	项目 Items	kW	I_1	I_2	n	kW	I_1	I_2	n	kW	I_1	I_2	n	kW	I_1	I_2	n
													1000转/分 r/min				
YZR	112M	1.6	4.75	11.3	845	1.3	4.2	8.85	890	1.0	3.75	6.57	920	1.2	4.0	8.0	900
	132M1	2.2	6.0	11.2	908	2.0	5.7	10	913	1.7	5.3	8.4	931	1.8	5.4	8.95	926
	132M2	3.7	9.7	13.1	915	3.5	9.2	11.2	925	2.8	8.5	9.65	940	3.3	9.4	11.9	925
	160M1	5.8	15.5	27.3	927	5.0	14.1	23.4	935	4.8	13.8	22.7	937	4.8	14.1	23.4	935
	160M2	7.5	18	27.6	940	7.0	17.1	25.6	945	6.0	15.6	21.8	954	6.0	15.6	21.8	954
	160L	11	28.3	27.8	950	10	23	25	957	8.0	19.5	19.8	969	9.0	19.5	19.8	969
	180L	15	33	43.7	960	13	29.5	37.7	965	12	28	34.6	969	12	28	34.6	969
	200L	21	47	55.4	965	18.5	42.5	48.5	970	17	40.5	53.8	973	17	40.5	52.6	973
	225M	28	58	70	965	25	53	62.2	969	22	50	54.5	973	22	50	54.5	973
	250M1	33	63	82.6	970	30	58	74.9	973	28	54	69.8	975	26	52	64.6	977
–	250M2	42	78	90.5	967	37	70	79.3	971	33	63	70.5	975	31	60	66.1	976
	280S	52	95	116	970	45	83	100	974	42	80	93.6	975	40	76	89	977
	280M	70	130	115	972	62	114	102	975	55	90.5	104	978	52	98	85.5	979
													750转/分 r/min				
YZR	160L	7.5	19	22.8	712	7.0	18.1	21.2	716	58	16.4	17.3	724	6.0	16.7	18	722
	180L	11	25.4	406	711	10	23.5	36.6	717	8	20.5	28.8	728	8.0	20.5	28.8	728
	200L	15	34	54.1	713	13	30	46.6	718	12	28.2	43	720	12	28.2	43	720
	225M	21	45	56.8	718	18.5	41	49.7	721	17	38	45.6	724	17	38	45.6	724
	250M1	29	61.5	68.5	700	25	54	58.7	705	22	49	51.9	712	22	49	51.9	712
	250M2	33	70	62.5	725	30	64	56.6	727	28	61	52.8	728	26	58	48.9	730
	280S	42	91	85.8	719	37	83	75.6	723	33	76.3	67	726	31	74	63.5	728
	280M	52	104	90.2	727	45	93	77.7	730	42	89	72.4	732	42	89	72.4	732
	315S	64	118	132.7	731	60	110.5	124.2	733	56	106	115.8	733	52	100	107	735
	315M	75	142	136	725	72	136	130.7	725	65	126	117.4	727	60	120	108	729
													600转/分 r/min				
YZR	280S	33	78.7	141.8	578	30	74	125	579	28	71	116	580	26	68	108	582
	280M	42	98.7	154	565	37	90	136	569	33	84.3	118	573	31	82	110	574
	315S	50	110	128.4	583	45	100	115.3	585	42	96	107.4	586	40	94	102.2	587
	315M	65	144	129	584	63	136	119	585	55	130	109	586	53	126	98.7	587
	355M	80	160.5	149.7	587	72	156	134.5	588	65	140	121	589	60	130	112	590
	355L1	100	185	157	586	90	170	142	588	80	155	126.5	589	75	150	119	590
	355L2	120	250	149.8	588	110	230	137.5	589	95	210	122.7	591	90	205	116.2	591
	400L1	146	314	223	588	130	288	199	589	115	268	175	590	110	260	168	591
	400L2	185	396	223	590	165	365	262	589	145	332	183	592	140	324	176	592

表4-2 Table 4-2

300次/时 Stars/h 60%				600次/时 Stars/h 60%				转子电压 Rotor voltage (V)	转动惯量 Rotary Inertia Jm (kg·m²)	重量 Weight (kg)
kW	I_1	I_2	Tm	kW	I_1	I_2	n			
0.9	3.7	5.87	930	0.7	3.4	4.46	946	100	0.03	74
1.6	5.1	7.87	936	1.35	4.9	6.8	945	132	0.06	97
2.7	8.5	9.65	940	2.3	6.0	7.5	950	185	0.07	108
4.5	13.8	22.4	937	3.8	12.2	17.5	946	138	0.12	154
5.5	14.8	19.8	959	4.0	13	14.2	970	185	0.15	160
7.5	18.7	18.5	971	6.0	16.7	14.2	978	250	0.20	174
11	26.6	31.7	972	9.0	23.6	22.9	978	218	0.39	230
15	37	40	975	11	31.5	28.5	981	200	0.67	320
20	46	49.4	977	15	39	36.8	982	250	0.84	398
25	50	62.1	978	17.5	39	43.2	984	250	1.52	512
30	58	63.9	977	24	49	50.9	981	290	1.78	559
37	71	82.2	978	30	64	66.5	980	280	2.35	747
47	92	77.3	981	37	78	61	982	370	2.86	848
5.0	15.5	14.9	727	3.8	13.7	11.2	732	205	0.20	172
7.5	19.7	26.9	729	5.8	17.8	20.6	736	172	0.39	230
11	27	39.1	724	9	23	28.1	731	178	0.67	317
15	35.1	40	727	11	31	29.1	733	232	0.82	390
20	46	46.2	716	15	39	34.2	725	272	1.52	515
25	57	47	731	18.5	45	34.4	736	335	1.79	563
30	72	61.5	732	24	64	49.1	733	305	2.35	747
37	83	63.5	735	30	73	51.4	737	360	2.86	848
48	94	98.8	736	35	80	71.7	740	302	7.22	1050
55	116	99	729	41	100	73.7	732	372	8.68	1170
25	66	103	583	17	56	69.8	588	150	3.58	767
28	78.5	98	577	22	72.5	75	582	172	3.98	840
37	90	94.5	587	30	84	76.3	589	242	7.22	1026
48	124	94.7	588	37	114	73	589	325	8.68	1156
55	124	102.4	590	41	104	76.19	591	330	14.32	1520
70	145	111	591	50	120	78.4	594	388	17.08	1764
80	190	130.2	592	60	165	77.1	594	475	19.18	1810
97	247	148	592	75	220	114	594	410	24.52	2400
123	298	155	592	95	265	122	594	480	28.10	2950

注：表中数据是当负荷的转动惯量与电动机转动惯量相等情况下的数据，由于电动机允许的输出功率随负荷的转动惯量而变化，选择电动机时对S_4及S_5工作制应根据负荷的实际转动惯量进行校验。

Note: The data in the Table is based on the rotary inertia of the load being equal to the rotary inertia of the motor. The selection of motors for S_4 or S_5 operation must be test checked according to the real load rotary inertia.

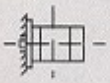
电动机的结构

1 冷却方式：
112-132机座号为自然冷却(IC410)；
160-400机座号为自扇冷却(IC411)；
400机座号也可为具有内循环通风的扇冷却(IC511)。

2 电动机安装结构型式：见表5。

安装结构型式
Type of installation

表5 Table 5

安装型式 Installation type	代号 Symbol	制造范围(机座号) Range (Frame size)
	IM1001	112-160
	IM1003	180-400
	IM1002	112-160
	IM1004	180-400
	IM3001	112-160
	IM3003	180
	IM3011	112-160
	IM3013	180-315

3 电动机的轴伸可以按用户提出的尺寸或要求制造。

4 传动方式：
电动机采用联轴器或正齿轮传动，若采用正齿轮传动时，其齿轮节圆最小直径应不小于轴伸直径的2倍。

5 电动机定子出线盒位于电动机顶部，可沿电动机两侧方向出线，转子可以从端盖的两侧出线。

6 电动机上的各紧固螺栓都有防松措施。

7 电刷型号为J201，规格如表6。

8 轴承见表7。

Construction of motor

1 Mode of cooling:
a.Frame 112-132 adopt natural cooling (IC410);
b.Frame 160-400 use the form of fan cooling (IC411);
C.Frame 400 cooling can use fan for internal circulation either(IC511)

2 For installation, see Table 5.

3 The shaft extension can be made according to customers' request.

4 Transmission through shaft coupling or spur wheel may be uses. If the latter is taken ,the minimum pitch circle diameter should not be less than double the diameter of the shaft extension end.

5 Terminal box on top of the frame has two directions along both sides of the motor for stator,but the rotor`s outlet position may be from both sides of the end cover.

6 The measures are taken to prevent slack on the fastener of the motor.

7 The brush type is J201, for specifications, see table 6.

8 Bearings:see Table 7.

机座号与电刷规格对应关系
Relations of frame size with carbon brush

表6 Table 6

机座号 Frame size	电刷尺寸 The dimensions of brush (mm)	集电环外径 The outer diameter of Slip-ring (mm)
YZR112	20×8×32	100
YZR132	20×8×32	100
YZR160	25×10×40	112
YZR180	25×10×40	125
YZR200	32×12.5×50	140
YZR225	32×12.5×50	140
YZR250	40×12.5×50	160
YZR280	40×20×60	200
YZR315	40×20×60	200
YZR355	50×20×60	250
YZR400	2(40×20×60)	250

机座号与轴承对应关系
Relations of frame size with bearing

表7 Table 7

安装型式 Mounting type / 机座号 Frame size	IM1		IM3	
	负载端 Load end	非负载端 Non—Load end	负载端 Load end	非负载端 Non—Load end
112	6308	6308	6308	6308
132	6309	6309	6309	6309
160	6311	6311	6311	6311
180	6313	6313	6313	6313
200	NU315	6315	NU315	7315
225	NU315	6315	NU315	7315
250	NU316	6316	NU316	7316
280	NU320	6320	NU320	7320
315	NU322	6322	NU322	7322
355	NU326	6326		
400	NU330	6330		

9电动机的结构

a. YZ 160-250见图4
b. YZR 160-400见图5

9 The construction of motor

a. The construction of YZ 160-250 see Fig.4
b. The construction of YZR 160-400 see Fig.5

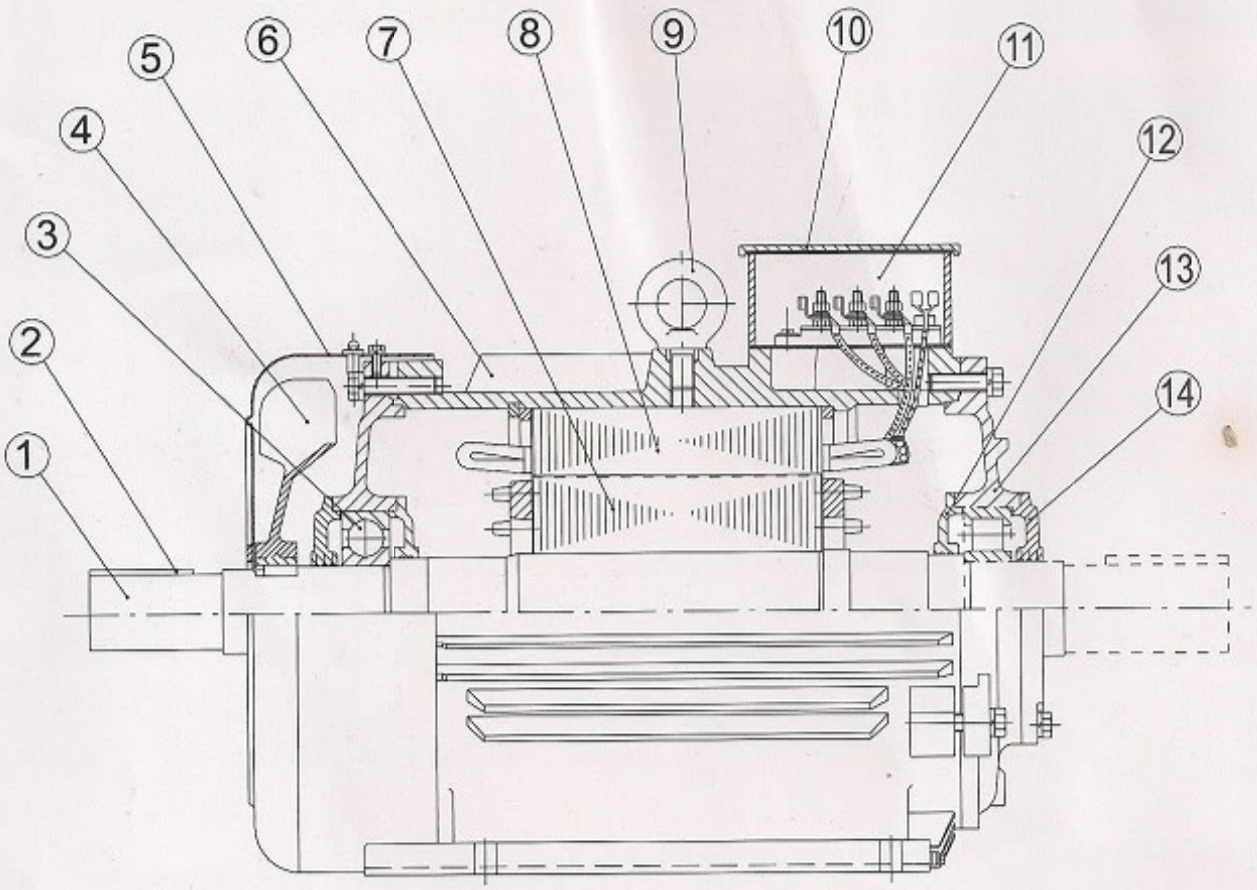


图4 YZ 160-250电动机结构图

1.转　轴
2.键
3.轴　承
4.风　扇
5.端　罩
6.机　座
7.转　子
8.定　子
9.吊　环
10.接线盒盖
11.接线盒座
12.轴承内盖
13.端　盖
14.轴承外盖

Fig.4. Construction scheme of YZ 160-250

1.shaft
2.shaft end key
3.bearing
4.cooling fan
5.fan cover
6.frame
7.rotor
8.stator
9.eyebolt
10.terminal box cover
11.terminal box frame
12.inner bearing cover
13.end cover
14.outer bearing cover

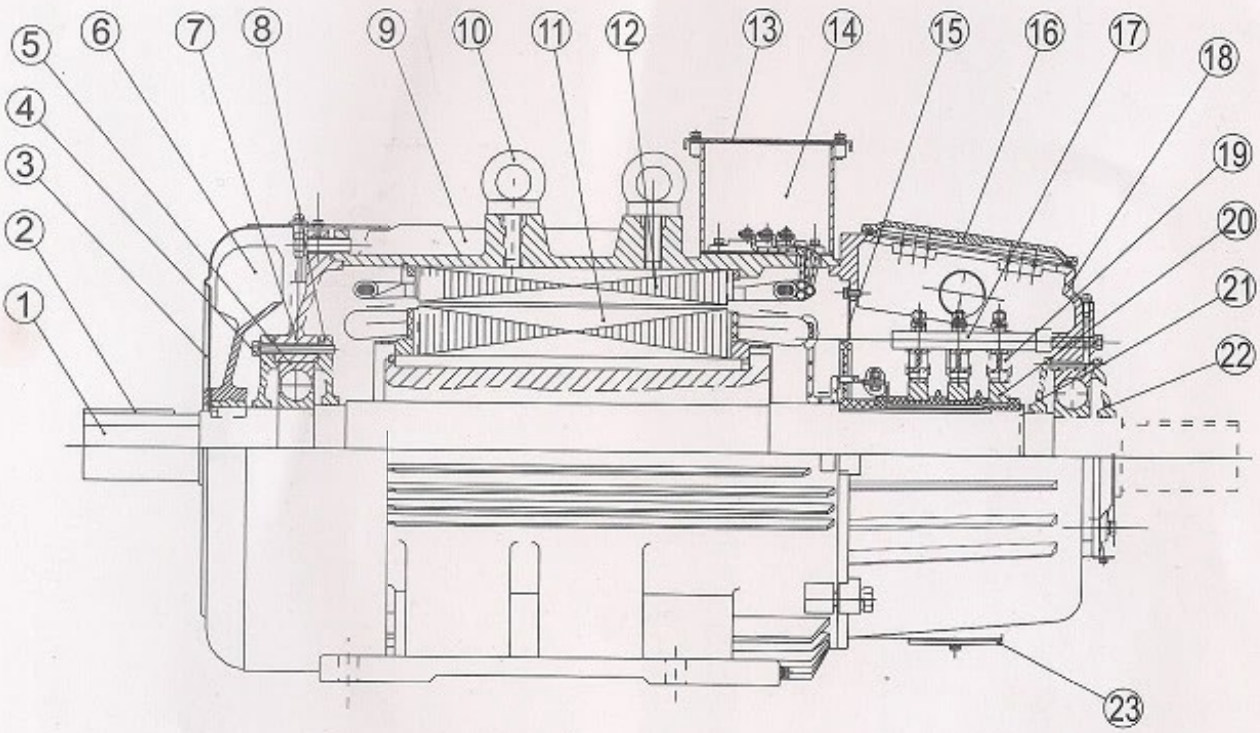


图5 YZR 160-400电动机结构图

1.转　　轴	7.端　　盖	13.接线盒盖	19.刷　　握
2.键	8.轴承内盖	14.接线盒座	20.集 电 环
3.端　　罩	9.机　　座	15.挡 尘 板	21.轴承内盖
4.轴承外盖	10.吊　　环	16.观察窗盖	22.轴承外盖
5.轴　　承	11.转　　子	17.刷　　杆	23.排尘孔盖
6.风　　扇	12.定　　子	18.端　　盖	

Fig.5. Construction scheme of YZR 160-400

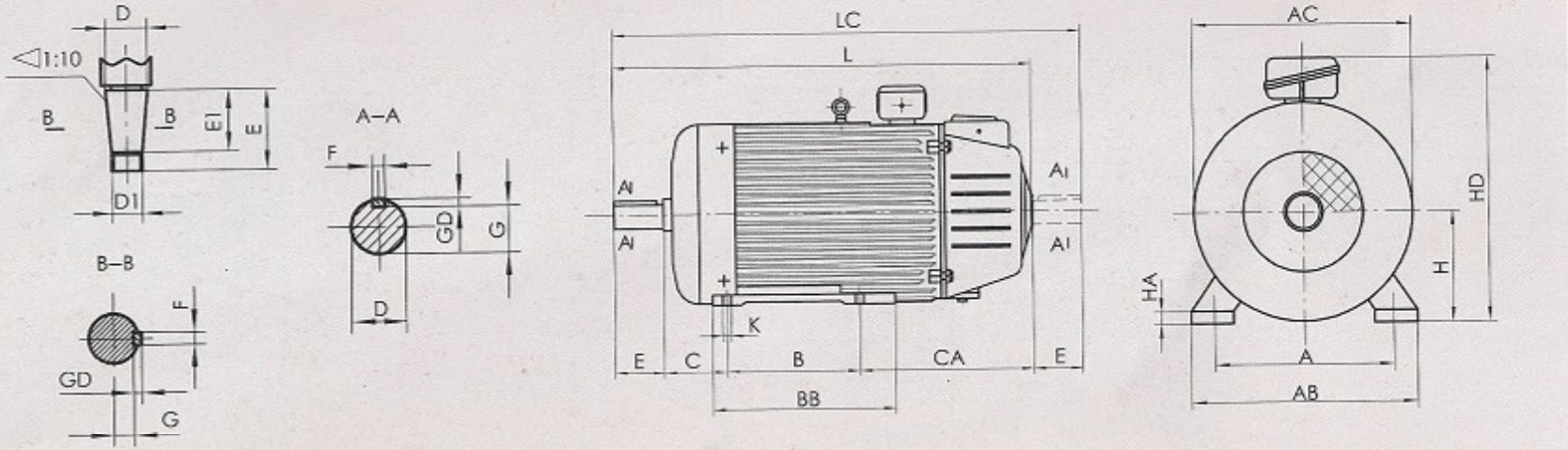
1.shaft	7.end cover	13.terminal box cover	19.brush holder
2.shaft end key	8.inner bearing cover	14.terminal box frame	20.slip ring
3.fan cover	9.frame	15.dust shield (divider shield)	21.inner bearing cover
4.outer bearing cover	10.eyebolt	16.inspection cover	22.outer bearing cover
5.bearing	11.rotor	17.brush holder mounting rod	23.dust-vent cover
6.cooling fan	12.stator	18.end cover	

YZR 112-400 IM1安装尺寸与外形尺寸表

Installation and dimensions of series YZR 112–400 IM1

表8 Table 8

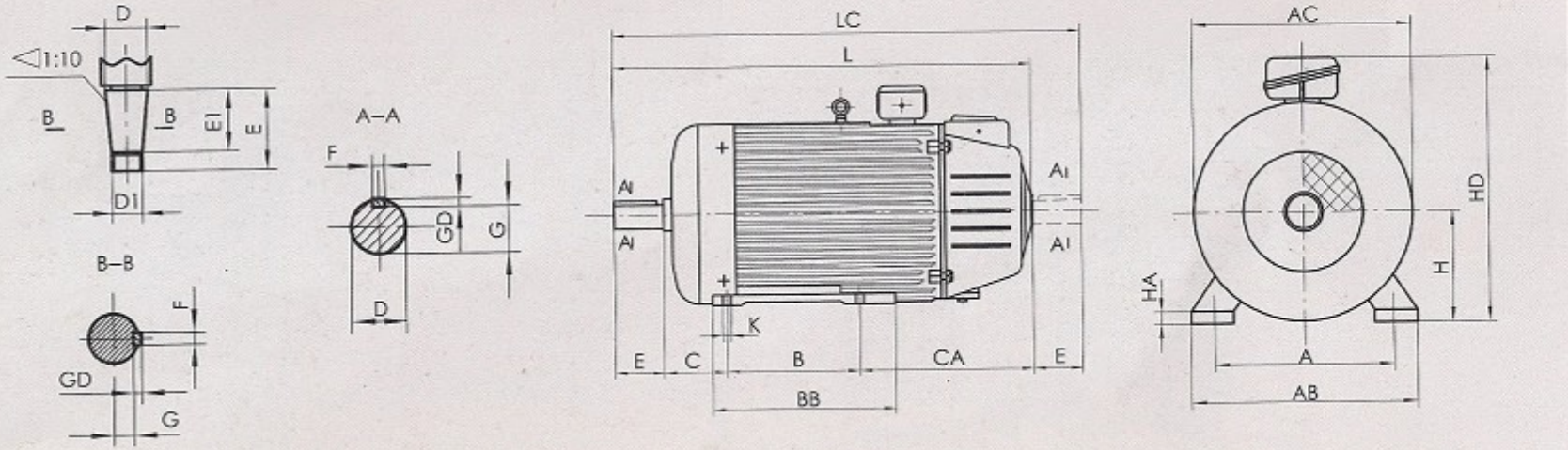
机座号 Frame size / 代号 Symbols / 项目 Items	安装尺寸 Dimensions of installation																		外形尺寸 Overall dimensions						
	H	A	B	C	CA	K	螺栓直径 Diameter Of screw	D	D1	E	E1	F	G	GD	AC	AB	HD	BB	L	LC	HA
112M	112	190	140	70	300	12	M10	32	—	80	—	10	27	8	245	250	330	235	590	670	15
132M	132	216	178	89				38					33		285	275	360	260	645	727	17
160M	160	254	210	108	330	15	M12	48		110		14	42.5	9	325	320	420	290	758	868	20
160L			254															335	800	912	
180L	180	279	279	121	360			55	M36×3	82			19.9		360	360	460	380	870	980	22
200L	200	318	305	133	400	19	M16	60	M42×3	140	105	16	21.4	10	405	405	510	400	975	1118	25
225M	225	356	311	149	450			65					23.9		430	455	545	410	1050	1190	28
250M	250	406	349	168	540	24	M20	70	M48×3			18	25.4	11	480	515	605	510	1195	1337	30
280S	280	457	368	190				85	M56×4	170	130	20	31.7	12	535	575	665	530	1265	1438	32
280M			419															580	1315	1489	
315S	315	508	406	216	600	28	M24	95	M64×4			22	35.2	14	620	640	750	630	1440	1613	35
315M			457																1390	1562	
355M	355	610	560	254	630			110	M80×4	210	165	25	41.9	16	710	740	840	730	1650	1864	38
355L			630															800	1720	1934	
400L	400	686	710	280		35	M30	130	M100×4	250	200	28	50		840	855	950	945	1865	2120	45



YZR 112-400 IM1安装尺寸与外形尺寸表
Installation and dimensions of series YZR 112–400 IM1

表8 Table 8

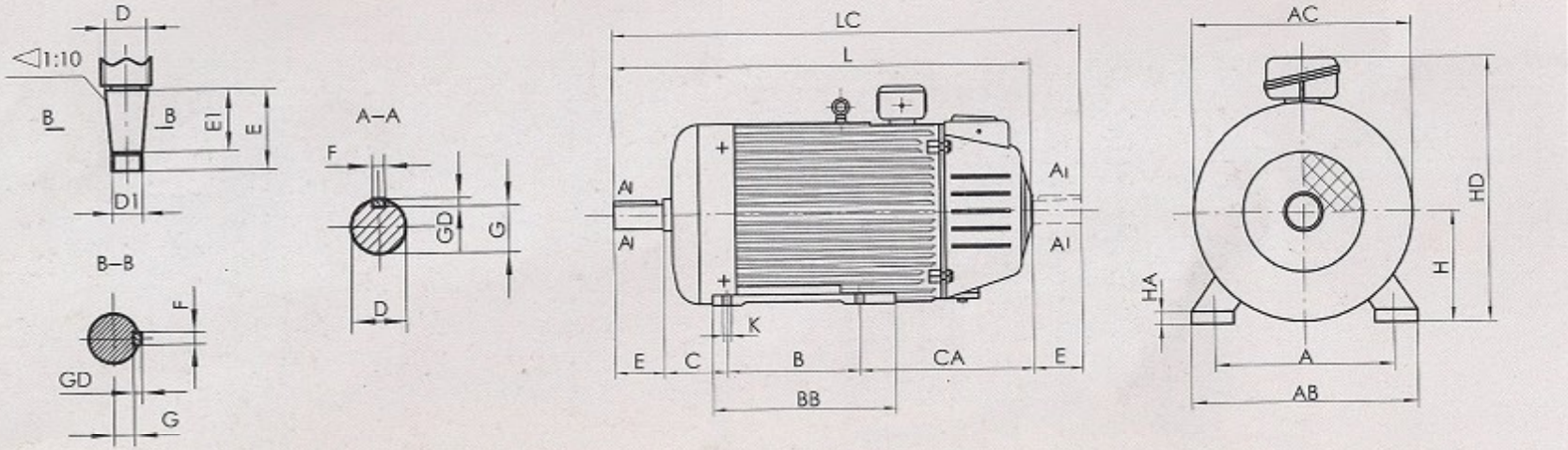
项目 Items / 机座号 Frame size / 代号 Symbols	安装尺寸 Dimensions of Installation														外形尺寸 Overall dimensions						
	H	A	B	C	CA	K	螺栓直径 Diameter Of screw	D	D1	E	E1	F	G	GD	AC	AB	HD	BB	L	LC	HA
112M	112	190	140	70	300	12	M10	32	—	80	—	10	27	8	245	250	330	235	590	670	15
132M	132	216	178	89				38					33		285	275	360	260	645	727	17
160M	160	254	210	108	330	15	M12	48		110		14	42.5	9	325	320	420	290	758	868	20
160L			254															335	800	912	
180L	180	279	279	121	360			55	M36×3		82		19.9		360	360	460	380	870	980	22
200L	200	318	305	133	400	19	M16	60	M42×3	140	105	16	21.4	10	405	405	510	400	975	1118	25
225M	225	356	311	149	450			65					23.9		430	455	545	410	1050	1190	28
250M	250	406	349	168	540	24	M20	70	M48×3			18	25.4	11	480	515	605	510	1195	1337	30
280S	280	457	368	190				85	M56×4	170	130	20	31.7	12	535	575	665	530	1265	1438	32
280M			419															580	1315	1489	
315S	315	508	406	216	600	28	M24	95	M64×4			22	35.2	14	620	640	750		1390	1562	35
315M			457															630	1440	1613	
355M	355	610	560	254	630			110	M80×4	210	165	25	41.9		710	740	840	730	1650	1864	38
355L			630															800	1720	1934	
400L	400	686	710	280		35	M30	130	M100×4	250	200	28	50	16	840	855	950	945	1865	2120	45



YZR 112-400 IM1安装尺寸与外形尺寸表
Installation and dimensions of series YZR 112–400 IM1

表8 Table 8

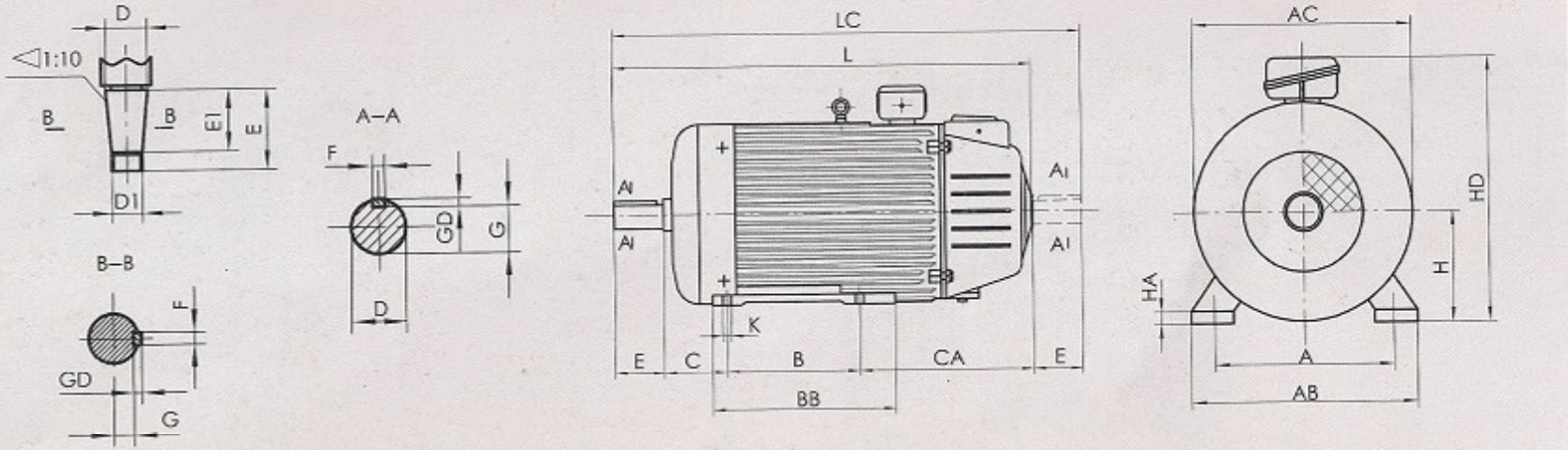
机座号 Frame size / 代号 Symbols	安装尺寸 Dimensions of Installation														外形尺寸 Overall dimensions						
	H	A	B	C	CA	K	螺栓直径 Diameter Of screw	D	D1	E	E1	F	G	GD	AC	AB	HD	BB	L	LC	HA
112M	112	190	140	70	300	12	M10	32	—	80	—	10	27	8	245	250	330	235	590	670	15
132M	132	216	178	89				38					33		285	275	360	260	645	727	17
160M	160	254	210	108	330	15	M12	48		110		14	42.5	9	325	320	420	290	758	868	20
160L			254															335	800	912	
180L	180	279	279	121	360			55	M36×3		82		19.9		360	360	460	380	870	980	22
200L	200	318	305	133	400	19	M16	60	M42×3	140	105	16	21.4	10	405	405	510	400	975	1118	25
225M	225	356	311	149	450			65					23.9		430	455	545	410	1050	1190	28
250M	250	406	349	168	540	24	M20	70	M48×3			18	25.4	11	480	515	605	510	1195	1337	30
280S	280	457	368	190				85	M56×4	170	130	20	31.7	12	535	575	665	530	1265	1438	32
280M			419															580	1315	1489	
315S	315	508	406	216	600	28	M24	95	M64×4			22	35.2	14	620	640	750		1390	1562	35
315M			457															630	1440	1613	
355M	355	610	560	254	630			110	M80×4	210	165	25	41.9		710	740	840	730	1650	1864	38
355L			630															800	1720	1934	
400L	400	686	710	280		35	M30	130	M100×4	250	200	28	50	16	840	855	950	945	1865	2120	45



YZR 112-400 IM1安装尺寸与外形尺寸表
Installation and dimensions of series YZR 112–400 IM1

表8 Table 8

项目 Items / 机座号 Frame size / 代号 Symbols	安装尺寸 Dimensions of Installation														外形尺寸 Overall dimensions						
	H	A	B	C	CA	K	螺栓直径 Diameter Of screw	D	D1	E	E1	F	G	GD	AC	AB	HD	BB	L	LC	HA
112M	112	190	140	70	300	12	M10	32	—	80	—	10	27	8	245	250	330	235	590	670	15
132M	132	216	178	89				38					33		285	275	360	260	645	727	17
160M	160	254	210	108	330	15	M12	48		110		14	42.5	9	325	320	420	290	758	868	20
160L			254															335	800	912	
180L	180	279	279	121	360			55	M36×3		82		19.9		360	360	460	380	870	980	22
200L	200	318	305	133	400	19	M16	60	M42×3	140	105	16	21.4	10	405	405	510	400	975	1118	25
225M	225	356	311	149	450			65					23.9		430	455	545	410	1050	1190	28
250M	250	406	349	168	540	24	M20	70	M48×3			18	25.4	11	480	515	605	510	1195	1337	30
280S	280	457	368	190				85	M56×4	170	130	20	31.7	12	535	575	665	530	1265	1438	32
280M			419															580	1315	1489	
315S	315	508	406	216	600	28	M24	95	M64×4			22	35.2	14	620	640	750		1390	1562	35
315M			457															630	1440	1613	
355M	355	610	560	254	630			110	M80×4	210	165	25	41.9		710	740	840	730	1650	1864	38
355L			630															800	1720	1934	
400L	400	686	710	280		35	M30	130	M100×4	250	200	28	50	16	840	855	950	945	1865	2120	45



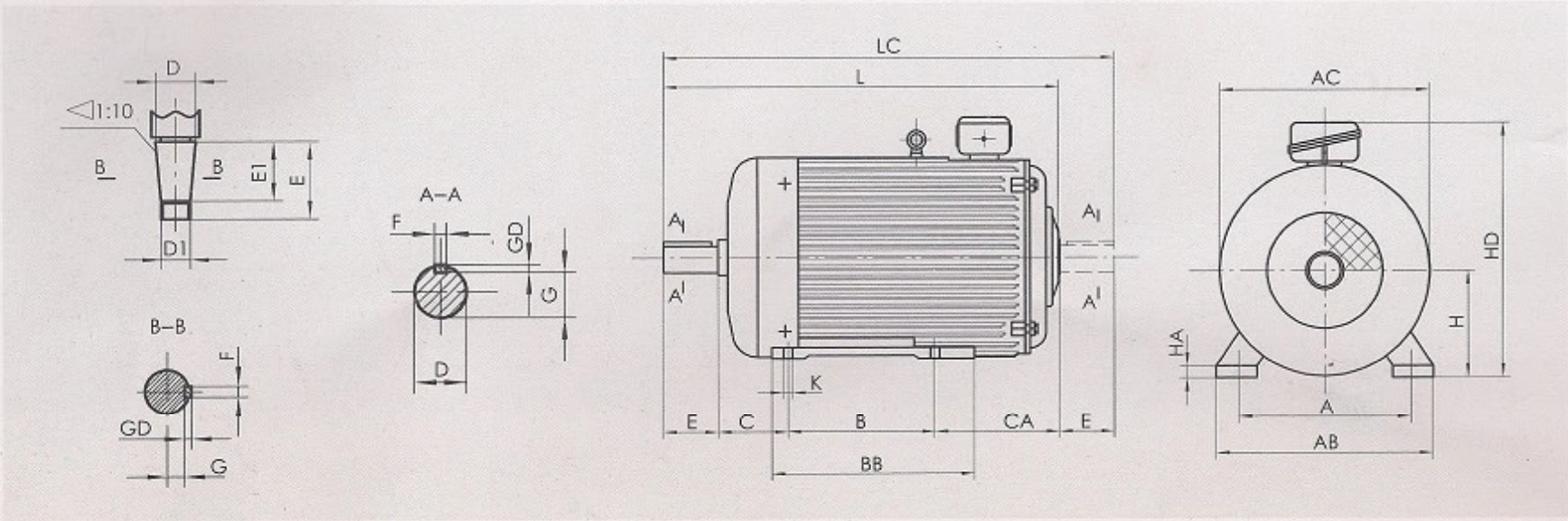
YZR 112-400 IM1安装尺寸与外形尺寸表
Installation and dimensions of series YZR 112–400 IM1

表8 Table 8

机座号 Frame size / 代号 Symbols	安装尺寸 Dimensions of Installation														外形尺寸 Overall dimensions						
	H	A	B	C	CA	K	螺栓直径 Diameter Of screw	D	D1	E	E1	F	G	GD	AC	AB	HD	BB	L	LC	HA
112M	112	190	140	70	300	12	M10	32	—	80	—	10	27	8	245	250	330	235	590	670	15
132M	132	216	178	89				38					33		285	275	360	260	645	727	17
160M	160	254	210	108	330	15	M12	48		110		14	42.5	9	325	320	420	290	758	868	20
160L			254															335	800	912	
180L	180	279	279	121	360			55	M36×3		82		19.9		360	360	460	380	870	980	22
200L	200	318	305	133	400	19	M16	60	M42×3	140	105	16	21.4	10	405	405	510	400	975	1118	25
225M	225	356	311	149	450			65					23.9		430	455	545	410	1050	1190	28
250M	250	406	349	168	540	24	M20	70	M48×3			18	25.4	11	480	515	605	510	1195	1337	30
280S	280	457	368	190				85	M56×4	170	130	20	31.7	12	535	575	665	530	1265	1438	32
280M			419															580	1315	1489	
315S	315	508	406	216	600	28	M24	95	M64×4			22	35.2	14	620	640	750		1390	1562	35
315M			457															630	1440	1613	
355M	355	610	560	254	630			110	M80×4	210	165	25	41.9		710	740	840	730	1650	1864	38
355L			630															800	1720	1934	
400L	400	686	710	280		35	M30	130	M100×4	250	200	28	50	16	840	855	950	945	1865	2120	45

www.dlldmotor.com.cn

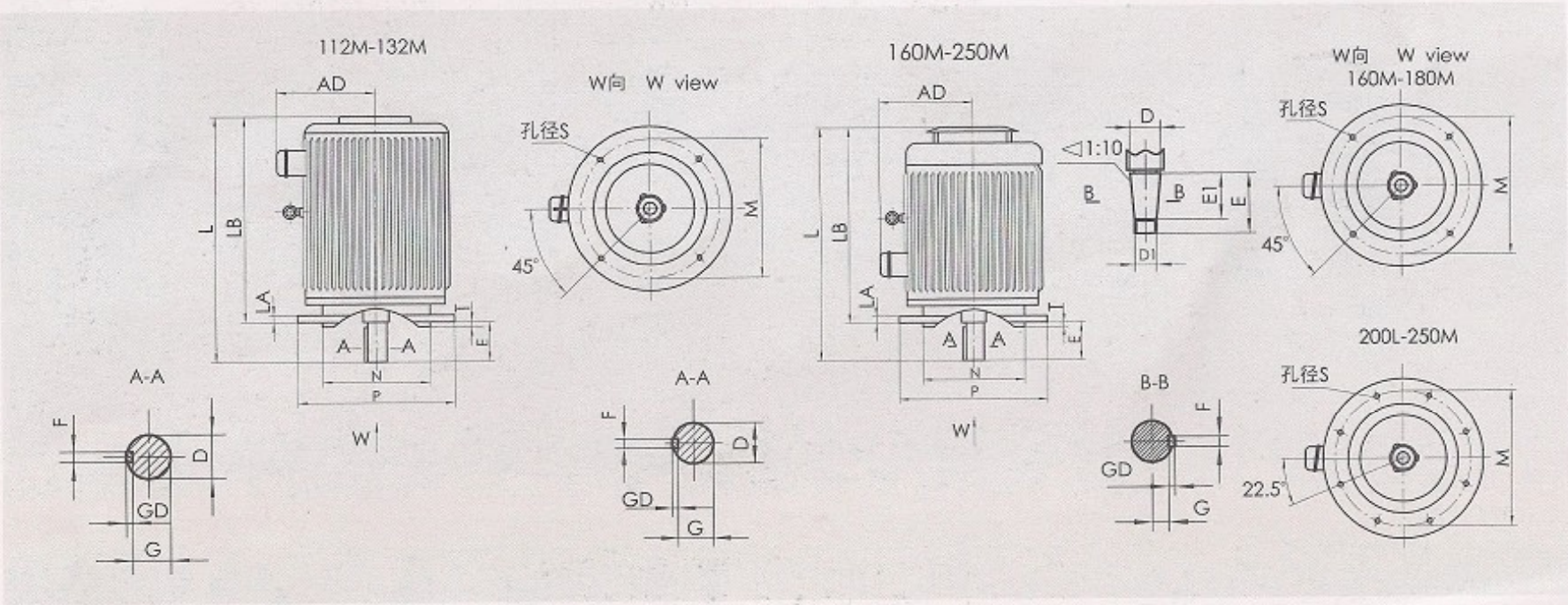
大连电机 0411-66368522



YZ 112-250 IM1安装尺寸与外形尺寸表
Installation and dimensions of series YZ 112–250 IM1

表9 Table 9

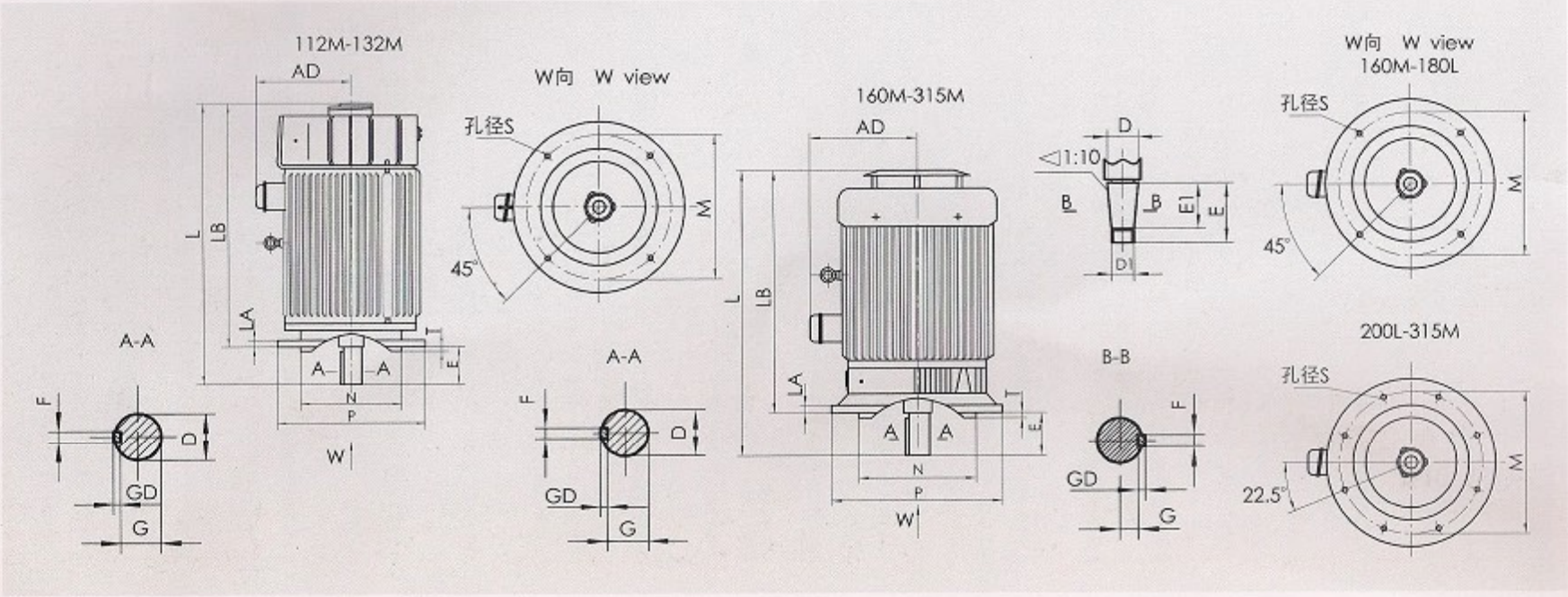
机座号 Frame size / 代号 Symbols / 项目 Items	安装尺寸 Dimensions of Installation														外形尺寸 Overall dimensions						
	H	A	B	C	CA	K	螺栓直径 Diameter of screw	D	D1	E	E1	F	G	GD	AC	AB	HD	BB	L	LC	HA
112M	112	190	140	70	135	12	M10	32	—	80	—	10	27	8	245	250	330	235	420	505	15
132M	132	216	178	89	150			38					33		285	275	355	260	495	577	17
160M	160	254	210	108	180	15	M12	48		110		14	42.5	9	325	320	420	290	608	718	20
160L			254															335	650	762	
180L	180	279	279	121				55	M36×3		82		19.9		360	360	460	380	685	800	22
200L	200	318	305	133	210	19	M16	60	M42×3	140	105	16	21.4	10	405	405	510	400	780	928	25
225M	225	356	311	149	258			65					23.9		430	455	545	410	850	998	28
250M	250	406	349	168	295	24	M20	70	M48×3			18	25.4	11	480	515	605	510	935	1092	30



YZ 112-250 IM3安装尺寸与外形尺寸表
Installation and dimensions of series YZ 112-250 IM3

表10 Table 10

机座号 Frame size / 代号 Symbols	凸缘代号 The symbol of flange	安装尺寸 Dimensions of Installation																外形尺寸 Overall dimensions		
		M	N	P	LA	T	S	螺栓直径 Diameter of screw	孔(个) Hole number	D	D1	E	E1	F	G	GD	L	AD	LB
112M	F215	215	180	250	14	4	15	M12	4	32	—	80	—	10	27	8	430	220	350
132M	F265	265	230	300						38					33		495	230	415
160M	F300	300	250	350	18	5	19	M16		48		110		14	42.5	9	700	250	590
160L																	743		633
180L										55	M36×3		82		19.9		735	280	625
200L	F400	400	350	450	20				8	60	M42×3	140	105	16	21.4	10	855	310	715
225M										65					23.9		915	320	775
250M	F500	500	450	550	22					70	M48×3			18	25.4	11	1005	355	865



YZR 112-315 IM3安装尺寸与外形尺寸表
Installation and dimensions of series YZR 112-315 IM3

表11 Table 11

项目 Items / 机座号 Frame size / 代号 Symbols	凸缘代号 The symbol of flange	安装尺寸 Dimensions of Installation															外形尺寸 Overall dimensions		
		M	N	P	LA	T	S	螺栓直径 Diameter of screw	孔(个) Hole number	D	D1	E	E1	F	G	GD	L	AD	LB
112M	F215	215	180	250	14	4	15	M12	4	32	—	80	—	10	27	8	595	220	515
132M	F265	265	230	300						38					33		645	230	565
160M	F300	300	250	350	18	5	19	M16		48		110		14	42.5	9	828	250	718
160L																	872		762
180L										55	M36×3		82		19.9		915	280	805
200L	F400	400	350	450	20				8	60	M42×3	140	105	16	21.4	10	1050	310	910
225M										65					23.9		1110	320	970
250M	F500	500	450	550	22					70	M48×3			18	25.4	11	1266	355	1126
280S										85	M56×3	170	130	20	31.7	12	1370	385	1200
280M																	1420		1250
315S	F600	600	550	660	25	6	24	M20		95	M64×4			22	35.2	14	1475	435	1305
315M																	1525		1355

派生产品

为满足用户的不同需要，在YZR、YZ系列的基础上，可制造如下派生产品：

1 湿热带型电动机——适用于湿热带地区及类似环境中。电动机的参数与YZR、YZ系列相同。

2 60赫兹电动机——电压分380伏和440伏两种。同机座号之功率与基本系列一致。额定电压为380伏的绕线型电动机之转子开路电压允许较50赫兹电机升高10%。

3 户外电机——适用于露天环境，电动机具有如下的防护措施：
a.轴的贯通部分设有防水环，防止雨水的侵入；
b.电动机的外面覆有钢质盖板，防止日晒和外物的打击；
c.电动机各空腔与外面贯通的气隙，均设有密封垫，接线盒口具有专门的防护，以防灰尘和水侵入；
d.电动机的底部设有排水孔，以排除电机内部形成的冷凝水。

4 根据需要，尚可试制如下产品：
4.1 他冷式电动机—YZR系列他冷式电动机适用于工作特别繁重，例如负载持续率高或起动次数特别多，而电动机的功率不能降低的设备，他冷式电动机根据通风方式的不同，又可分为两种：
a.管道通风型电动机：经由管道，从室外采风冷却电动机，环境空气温度不超过40℃；
b.自带风机型电动机：风机就地采风，环境空气温度为60℃。

4.2 多速电机：用于需要变速及准确动作起重机械上。

4.3 冶金及起重用涡流制动三相异步电动机。

4.4 起重专用绕线转子三相异步电动机。

Derivative products

With the various needs of customers, following products can be made,derived from the YZR & YZ series:

1 High humidity type motor-The motor can be adopted for use in a high humidity tropical environment.Their basic specifications are the same as for the YZR & YZ series.

2 60Hz motor-The motor has 2 rated voltage 380V & 440V. The power is same as the basic series when its frame size is the same frame size. For the wound-rotor motor rated voltage being 380V, the open circuit of rotor voltage may exceed 10% of the 50Hz motor.

3 Outdoor type motor-It is applicable to the open environment and has following protections:
a.Waterproof ring device on the shaft;
b.The motor is against the elements by the external cover;
c.The watertight seals prevent ingress of water & dust;
d.For draining of condensation a drainage hole is incorporated into the bottom of the motor.

4 The follwing products can be made according to the customer's request:

4.1 Separate-cooling type motor-This YZR series motor is suited for heavy duty and load condition. For example, it is used in the cases If higher intermittent rate & frequent starts. Ventilation can be divided into two types:

a.Ventilating-duct type-To cool motor, air from outside is taken through the pipe-line, the ambient temperature ≤40℃.
b.Motor with independent ventilator type-The ventilator uses surrounding air to cool motor, the ambient temperature≤60℃.

4.2 Multi-speed motor-It is used where speed change is required and on cranes with accurate movement.

4.3 Three-phase induction eddy-current brake motor used in cranes.

4.4 Three phase induction motor with wound rotor used only for heavy-lift equipment.

电动机的结构

1 冷却方式 IC411
2 安装结构形式 :IM1
3 电动机出线盒位于电动机顶部，可沿电动机两侧方向出线。转子出线可从电动机左右任意一侧(从轴身端看)引出。
4 电刷和集电环尺寸见下表:

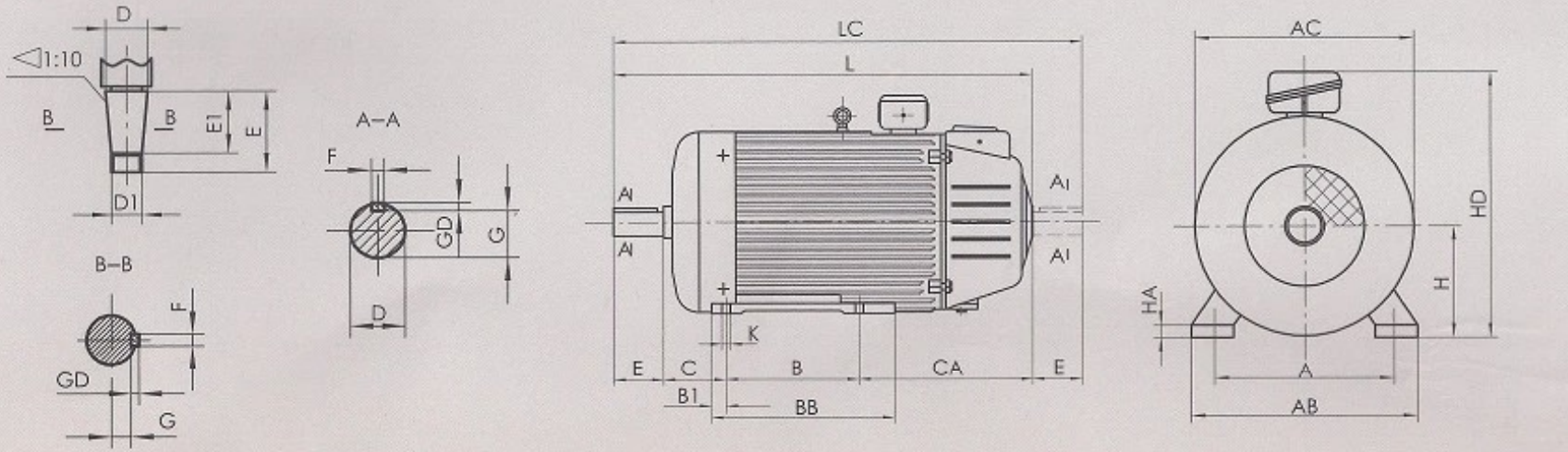
Structure of the motor

1 Mode of cooling: IC411
2 The type of installation: IM1
3 Terminal box for stator on the frame has two directions along both sides of the motor. The rotor's outlet can be at the both sides of the end cover.
4 For dimensions of brush and slip-ring, see following table:

机座号 Frame size	电刷尺寸 The dimensions of brush (mm)	集电环外径 The outer diameter of slip-ring (mm)
400	2(40×20×60)	253
425		
450	2(40×20×50)	
500	3(40×20×50)	
560	3(40×20×50)	

YZR 400-560 性能数据表
Frame 400-560 technical data

型号 Type / 数据 Data / 项目 Items	额定功率 Rated output (kW)	工作制 Duty	额定电流 Rated current (A)	转子电流 Rotor current (A)	最大转矩倍数 Maximum/Rated torque	额定转速 Rated speed (r/min)	转子电压 Rotor voltage (V)
YZR 400L-8	200	S3-60%	400	312	3	743	395
YZR 400L-8	250	S3-60%	491	324	3.1	742	474
YZR 400L1-10	160	S3-60%	335	251	3	591	395
YZR 400L2-10	200	S3-60%	410	269	3	591	460
YZR 425L-8	280	S3-60%	565	327	3.2	742	526
YZR 425L-8	320	S3-40%	629	375	3.0	741	526
YZR 450L1-8	320	S3-60%	622	333	3.4	743	583
YZR 450L2-8	355	S3-60%	678	370	3.0	743	583
YZR 500M-8	375	S3-60%	746	406	3.0	743	550
YZR 560M-8	375	S3-60%	746	406	3.0	743	550
YZR 450L1-10	250	S3-60%	536	317	3.3	593	474
YZR 450L2-10	280	S3-60%	595	322	3.2	593	522
YZR 450L3-10	320	S3-60%	658	370	3.0	593	522
YZR 450L4-10	355	S3-60%	730	367	3.0	593	580
YZR 500M-10	375	S3-60%	797	439	3.1	595	526
YZR 500L1-10	450	S3-60%	933	410	3.0	595	649
YZR 500L2-10	500	S3-60%	1050	435	3.0	595	679
YZR 560M-10	355	S3-60%	772	393	3.0	593	542
YZR 560M-10	375	S3-60%	797	439	3.1	595	526
YZR 560M-10	435	S3-60%	916	477	2.7	594	542



YZR 400-560 安装尺寸与外形尺寸
Frame 400-560 Installation and overall dimensions

型号 Type / 数据 Data / 项目 Items	安装尺寸 Dimensions of Installation													外形尺寸 Overall dimensions							
	H	A	B	C	CA	K	D	D1	E	E1	F	G	GD	AC	AB	HD	BB	L	LC	HA	B1
YZR 400L	400	686	710	280	630	35	130	M100×4	250	200	28	50	16	840	855	980	910	1865	2120	45	70
	400	686	710	280	630	35	130	—	210	—	32	119	18	840	855	980	910	1825	2040	45	70
YZR 425L	425	720	946	280	454	32	130	M100×4	250	200	28	50	16	840	855	1005	1027	1925	2180	70	45
	425	720	946	280	454	32	100	—	210	—	28	92	16	840	855	1005	1027	1885	2100	70	45
YZR 450L	450	750	900	315	650	35	130	M100×4	250	200	28	50	16	900	930	1120	1130	2110	2365	45	63
	450	750	900	315	650	35	130	—	210	—	32	119	18	900	930	1120	1130	2070	2285	45	63
YZR 500M	500	850	900	375	685	42	140	M100×4	290	240	32	55.2	18	1090	1090	1235	1185	2245	2540	40	81
	500	850	900	375	685	42	140	—	250	—	36	128	20	1090	1090	1235	1185	2205	2460	40	81
YZR 500L	500	850	900	425	670	42	150	M100×4	290	240	32	60.2	18	1090	1090	1235	1110	2280	2575	50	110
	500	850	900	425	670	42	150	—	250	—	36	138	20	1090	1090	1235	1110	2240	2495	50	110
YZR 560M	560	850	900	375	685	42	140	M100×4	290	240	32	55.2	18	1090	1090	1295	1185	2245	2540	40	81
	560	850	900	375	685	42	140	—	250	—	36	128	20	1090	1090	1295	1185	2205	2460	40	81