

## Y2 系列低压三相异步电动机技术文件

### Y2 Series Low Voltage 3-phase Asynchronous Motor

( 机座号 80 ~ 355 )

( Frame size 80 ~ 355 )

工业应用感应电动机

Answers for industry.



产品样本 Catalog • 2015



web : [www.starmot.com](http://www.starmot.com)  
Five Star Motor Co., Ltd.  
Henan Hiya Mechanical Equipment Co., Ltd.

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# 公司概况

## Company Profile



郑州五星电机有限公司始创于 1984 年，是从事电机研发与制造为一体的中国领先的电动机生产企业。五星专业于 YEZ、ZD 锥形转子电机，YZE 电磁制动三相异步电动机，YZR 绕线转子三相异步电动机，YZTD 塔式起重机用变极多速三相异步电动机，YD 变极多速三相异步电动机，Y、Y2 系列三相异步电动机，YE3 高效节能三相异步电动机九大系列电机产品，设计生产能力为：600 台/天，年产能力 1 8 0 万千瓦。

2001 年位于河南历史文化名城荥阳市新 310 国道，占地面积 7 万余平米的五星电机公司现代化新工厂投入使用，迅速发展壮大。目前拥有在线员工 300 余人，81 人拥有中高级职称，18 人从事工艺研发。五星坚信品质是撬动市场的根本依靠，从产品开发与验证、采购、生产制造、检验与测试、包装与装运、服务等实行全过程严格的质量管理控制，拥有 MT-D 电机综合测试系统、

Zhengzhou Five Star Motor Co., Ltd. (hereinafter referred to as FSM), founded in 1984, as one of China's most prestigious electric motor manufacturers, is specialized in motor R&D and manufacturing. FSM devotes itself to the manufacturing of YEZ, ZD conical rotor motor, YZE electromagnetic brake three-phase asynchronous motor, YZR wound rotor three-phase asynchronous motor, YZTD series tower crane motor, YD change-poles multi-speed asynchronous motor, Y and Y2 series three-phase asynchronous motor, YE3 high efficiency motor, etc. Its design production capacity is 600 units / day, and annual production capacity is 1.8 million kilowatts.

Located on 310 National Road, Xinyang City, Henan Province, the new factory, covering more than 70,000 square meters, was put into use in 2001. FSM has been developing stably and rapidly. Now it has more than 300 employees, 81 employees are granted with senior titles, 18 employees are engaged in technology research and development. Upholding such a belief that quality is the fundamental guarantee to open up the market, FSM takes serious quality management and supervision through the whole process from motors' design and manufacturing, inspection and testing, packing, delivering and service. It has a full set of testing equipments such as MTD-motors testing system, withstanding voltage tester, turn impulse breakdown voltage tester, its products' high quality is then guaranteed. In 2003, it passed the accreditation of ISO 9001:2000 International Quality Management Systems. It won the title of Chinese Brand Enterprises in 2004. Then it passed the accreditation of China Compulsory Certification (CCC) in 2006. Upgrading its quality management system to ISO9001:2008 in 2010, FSM also won the title of Henan Province Excellent Enterprises in both aspects of quality assurance and after-sales service. In the same year, it was rated AA+ grade credit businesses by China Construction Bank Xinyang Branch. In 2011, it won the title of Henan Province Famous Brand. In December 2012, YE3 motor, which is energy efficient, was approved by China Quality Certification Center. And in December 2013, FSM was selected by NDRC and MOF P.R.China in the high efficiency motor promoting catalog for Energy-saving Project.

An enterprise must fulfill its social responsibility for its long-term development. Five Star Motor Co., Ltd, devoting itself to environmental causes, is willing to be a responder and supporter to China's energy-saving and low-carbon economy. In the process of marketization, with its integrity and top grade quality, FSM firmly stood the test of time. Five Star Motor, five-star quality!

耐压测试仪、匝间冲击耐压试验仪等一整套测试设备，保证了五星电机的美好品质。2003 年通过 ISO9001:2000 质量管理体系认证，2004 年获“中国名优企业”称号，2006 年通过中国国家强制性认证（CCC 认证）；2010 年升级到 ISO9001:2008 质量管理体系，同年荣获河南省质量保证和售后服务“双优企业”，五星公司被中国建设银行荥阳支行评定为 AA+ 级信用企业。2011 年荣获河南省著名商标称号；2012 年 12 月，YE3 电机通过中国质量认证中心节能产品认证；2013 年 12 月，入选财政部、国家发改委“节能产品惠民工程”高效电机推广目录。

一个企业的长远存在必需担负一定的社会责任，五星公司愿意成为高效节能、低碳经济事业的响应者和支持者，并积极投身于环保事业。在市场化浪潮的洗礼中，五星用诚信，用质量接受时间的考验，铸造电机五星品质！

## Y2 系列低压三相异步电动机 Y2 series Low Voltage 3-phase Induction Motor

### 概述 Overview



额定功率: 0.55 ~ 315 kW	Rated output: 0.55 ~ 315 kW
机座号: 80 ~ 355	Frame Size: 80 ~ 355
额定电压: 380 V	Rated voltage: 380 V
额定频率: 50 Hz	Rated frequency: 50 Hz
冷却方式: ICO411	Cooling method: ICO411
防护等级: IP44	Protection degree: IP44/IP54
绝缘等级: B	Insulation class: B/F
环境温度: -15 ~ +40 °C	Coolant temperature: -15 ~ +40 °C
海拔高度: 不超过 1000 m	Site altitude: Up to 1000 m above sea level

### Y2 系列电机技术特性 Features of FIVE STAR Y2 series motor

Y2 系列电动机是全封闭自扇冷却式三相异步电动机，其防护等级为 IP44 或 IP54。Y2 系列电机设计生产符合 ISO9001-2008，IEC60034-1:2004、IEC60034-30, GB755-2008、GB18613-2012 等相关标准的要求。Y2 系列为铸铁机壳通用型电动机，适用于连续工作制 ( S1 )，恒转速，或一定速度范围内的变频调速应用。

The Y2 series of 3 phase asynchronous motors are Totally Enclosed Fan Cooled (TEFC) with IP44 environmental protection. These motors are designed and manufactured in accordance with ISO, IEC standards, GB standards.

The Y2 series is a General Purpose Motor with cast iron frame designed for constant or adjustable speed with continuous duty operation (S1) torque over a speed range.

- ◇ 机壳与接线盒材料：灰铸铁 Frame and terminal box material: Cast iron
- ◇ 2、4、6、8、10 极电机达到 GB 18613.2012 标准能效等级 3 级以及 IEC60034-30 标准的 IE2 效率等级要求。 Available in 2,4,6,8,10 pole variants with efficiency class 3 according to GB18613-2012, and efficiency class IE2 according to IEC60034-30
- ◇ 特定绕组设计可支持多种输入电压 ( 50Hz 或 60Hz ) Specific wound stators supporting multiple 3PH mains voltages at 50Hz or 60Hz
- ◇ 标准安装结构型式(GB/T 997-2008) Standard mounting types and variations (IEC 60034-7)
- ◇ 电动机接线盒：电动机接线盒的位置默认为侧面，从电机的驱动端看，接线盒安在电机的右侧。 Terminal box : Terminal boxes are as default on the Left Hand Side of the motor. This box can be rotated by 4 X 90° to allow for cable entry from each direction.

### 安装型式 Mounting type

示意图 Diagram															
安装型式 (IM) Mounting type (IM)	B3	B5	B35	V1	V3	V5	V6	B6	B7	B8	V15	V36	B14	B34	V18
机座号 Frame size	80 ~ 355	80 ~ 280	80 ~ 355	80 ~ 355	80 ~ 160						80 ~ 112				

⇒ 技术数据 Technical data

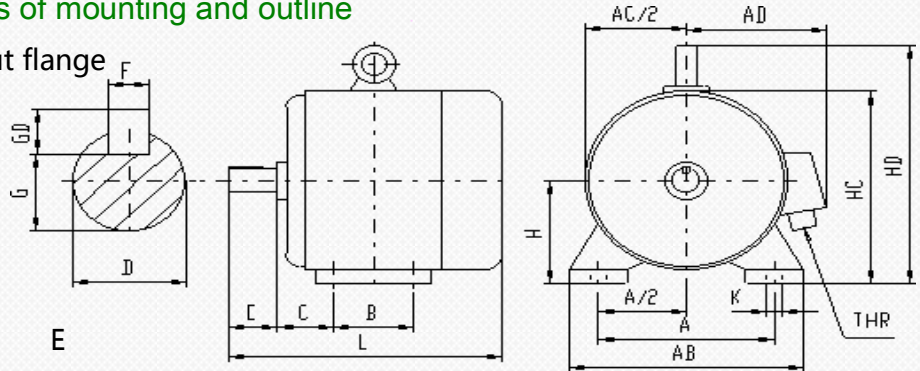
Model 型号	Power 功率(kw)	Currents 电流(A)	Speed 转速(r/min)	Efficiency 效率(%)	Power factor 功率因数 cosφ	Weight 重量(kg)
Y <sub>2</sub> 80M1-2	0.75	1.8	2825	75.0	0.84	17
Y <sub>2</sub> 80M2-2	1.1	2.5		77.0	0.86	18
Y <sub>2</sub> 90S-2	1.5	3.4	2840	78.0	0.85	22
Y <sub>2</sub> 90L-2	2.2	4.8		80.5	0.86	27
Y <sub>2</sub> 100L-2	3	6.4	2880	82.0	0.87	37
Y <sub>2</sub> 112M-2	4	8.2	2890	85.5	0.87	46
Y <sub>2</sub> 132S1-2	5.5	11	2900	85.5	0.88	68
Y <sub>2</sub> 132S2-2	7.5	15		86.2	0.88	74
Y <sub>2</sub> 160M1-2	11	21.8	2930	87.2	0.88	116
Y <sub>2</sub> 160M2-2	15	29.3		88.2	0.88	131
Y <sub>2</sub> 160L-2	18.5	35.5		89.0	0.89	151
Y <sub>2</sub> 180M-2	22	42.2	2940		0.89	172
Y <sub>2</sub> 200L1-2	30	56.9	2950	90.0	0.89	240
Y <sub>2</sub> 200L2-2	37	69.8		90.5	0.89	260
Y <sub>2</sub> 225M-2	45	84	2970	91.5	0.89	310
Y <sub>2</sub> 250M-2	55	102.6			0.89	400
Y <sub>2</sub> 280S-2	75	139.2		92	0.89	544
Y <sub>2</sub> 280M-2	90	166.1		92.5	0.89	620
Y <sub>2</sub> 315S-2	110	203	2980	92.5	0.89	980
Y <sub>2</sub> 315M-2	132	242.3		93.0	0.89	1080
Y <sub>2</sub> 315L1-2	160	292		93.5	0.89	1160
Y <sub>2</sub> 315L2-2	200	265.2			0.89	1190
Y <sub>2</sub> 355M1-2	220	398.7	2981	94.2	0.89	1750
Y <sub>2</sub> 355M2-2	250	446.6		94.5	0.9	1770
Y <sub>2</sub> 355L1-2	280	499.2		94.7	0.9	1830
Y <sub>2</sub> 355L2-2	315	559.8		95	0.9	1900
Y <sub>2</sub> 80M2-4	0.75	2.2	1390	74.5	0.76	18
Y <sub>2</sub> 90S-4	1.1	2.7	1400	78.0	0.78	23
Y <sub>2</sub> 90L-4	1.5	3.7		19.0	0.79	27
Y <sub>2</sub> 100L1-4	2.2	5	1420	81.0	0.82	36
Y <sub>2</sub> 100L2-4	3	6.8		82.5	0.81	40
Y <sub>2</sub> 112M-4	4	8.8	1440	84.5	0.82	50
Y <sub>2</sub> 132S-4	5.5	11.6		85.5	0.84	70
Y <sub>2</sub> 132M-4	7.5	15.4		87.0	0.85	86
Y <sub>2</sub> 160M-4	11	22.6	1460	88.0	0.84	126
Y <sub>2</sub> 160L-4	15	30.3		88.5	0.85	146
Y <sub>2</sub> 180M-4	18.5	35.9	1470	91.0	0.86	172
Y <sub>2</sub> 180L-4	22	42.5		91.5	0.86	196
Y <sub>2</sub> 200L-4	30	56.8		92.2	0.87	270
Y <sub>2</sub> 225S-4	37	70.4	1480	91.8	0.87	300
Y <sub>2</sub> 225M-4	45	84.2		92.3	0.88	320
Y <sub>2</sub> 250M-4	55	102.6		92.6	0.88	427
Y <sub>2</sub> 280S-4	75	139.7		92.7	0.88	562
Y <sub>2</sub> 280M-4	90	164.3		93.5	0.89	667

Y <sub>2</sub> 315S-4	110	201		93.5	0.89	1000
Y <sub>2</sub> 315M-4	132	240	1490	94.0	0.89	1100
Y <sub>2</sub> 315L1-4	160	289		94.5	0.89	1160
Y <sub>2</sub> 315L2-4	200	361			0.89	1270
Y <sub>2</sub> 315M1-4	220	407	1489	94.4	0.87	1790
Y <sub>2</sub> 315M2-4	250	461		94.7	0.87	1800
Y <sub>2</sub> 355L1-4	280	515.3		94.9	0.87	1880
Y <sub>2</sub> 355L2-4	315	577.9		95.2	0.87	1940
Y <sub>2</sub> 90S-6	0.75	2.2	910	72.5	0.7	23
Y <sub>2</sub> 90L-6	1.1	3.2		73.5	0.7	27
Y <sub>2</sub> 100L-6	1.5	4.0	940	77.5	0.7	36
Y <sub>2</sub> 122M-6	2.2	5.6		80.5	0.7	46
Y <sub>2</sub> 132S-6	3	7.2	960	83.0	0.8	67
Y <sub>2</sub> 132M-6	4	9.4		84.0	0.8	77
Y <sub>2</sub> 160M2-6	5.5	12.6		85.3	0.8	87
Y <sub>2</sub> 160M-6	7.5	17	970	86.0	0.8	120
Y <sub>2</sub> 160L-6	11	24.6		87.0	0.8	146
Y <sub>2</sub> 180L-6	15	31.4		89.5	0.8	183
Y <sub>2</sub> 200L1-6	18.5	37.7		89.8	0.8	220
Y <sub>2</sub> 200L2-6	22	44.6		90.2	0.8	250
Y <sub>2</sub> 225M-6	30	59.5		980	90.2	0.9
Y <sub>2</sub> 250M-6	37	72.0	90.8		0.9	410
Y <sub>2</sub> 280S-6	45	85.4	92.0		0.9	536
Y <sub>2</sub> 280M-6	55	104.4	92.0		0.9	595
Y <sub>2</sub> 315S-6	75	141.0	990	92.8	0.9	1000
Y <sub>2</sub> 315M-6	90	168.6		93.2	0.9	1080
Y <sub>2</sub> 315L1-6	110	205.5		93.5	0.9	1150
Y <sub>2</sub> 315L2-6	132	245.8		93.8	0.9	1210
Y <sub>2</sub> 355M1-6	160	300.4		94.1	0.9	1590
Y <sub>2</sub> 355M2-6	185	346.6		94.3	0.9	1670
Y <sub>2</sub> 355M3-6	200	374.7			0.9	1750
Y <sub>2</sub> 355L1-6	220	411.3	991	94.5	0.9	1870
Y <sub>2</sub> 355L2-6	250	466.4		94.7	0.9	1990
Y <sub>2</sub> 132s-8	2.2	5.80	710	80.5	0.7	65
Y <sub>2</sub> 132M-8	3	7.70		82.0	0.7	76
Y <sub>2</sub> 160M1-8	4	9.9	720	84.0	0.7	110
Y <sub>2</sub> 160M2-8	5.5	13.3		85.0	0.7	110
Y <sub>2</sub> 160L-8	7.5	17.7		86.0	0.8	140
Y <sub>2</sub> 180L-8	11	24.8	730	87.5	0.8	185
Y <sub>2</sub> 200L-8	15	34.0		88.0	0.8	235
Y <sub>2</sub> 225S-8	18.5	41.3		89.5	0.8	276
Y <sub>2</sub> 225M-8	22	47.6		90.0	0.8	303
Y <sub>2</sub> 250M-8	30	63.0		90.5	0.8	402
Y <sub>2</sub> 280S-8	37	78.2	740	91.0	0.8	520
Y <sub>2</sub> 280M-8	45	93.2		91.7	0.8	592
Y <sub>2</sub> 315S-8	55	113.5		92.0	0.8	1100
Y <sub>2</sub> 315M-8	75	152		92.5	0.8	1160

Y <sub>2</sub> 315L1-8	90	179	742	93.0	0.8	1230
Y <sub>2</sub> 315L2-8	110	218.5		93.3	0.8	1380
Y <sub>2</sub> 355M1-8	132	264		93.8	0.8	1660
Y <sub>2</sub> 355M2-8	160	319.3		94.0	0.8	1740
Y <sub>2</sub> 355L1-8	185	368.4		94.2	0.8	1880
Y <sub>2</sub> 355L2-8	200	397.8		94.3	0.8	1980

⇒ 安装及外形尺寸 Dimensions of mounting and outline

B3: Frame with foot but without flange



机座号 Frame Size	极数 Pole	安装尺寸 Mounting dimension										外形尺寸 Overall dimension								
		A	B	C	D	E	F	G1)	H	K2)	AB	AC	AD	HD	L					
80M	2,4	125	100	50	19	40	6	15.5	80	10	165	175	150	175	290					
90S	2,4,6	140	100	56	24	50	8	20	90		10	180	195	160	195	315				
90L			125							340										
100L		160	140	63	28	60		24	100	12	205	215	180	245	380					
112M		190	140	70	28	60		24	112	12	245	240	190	265	400					
132S	2,4,6,8	216	140	89	38	80	10	33	132	12	280	275	210	315	475					
132M			178												515					
160M		254	210	108	42	110	12	37	160	15	330	335	265	385	605					
160L			254												650					
180M		279	241	121	48	110	14	42.5	180	15	355	380	285	430	670					
180L			279												710					
200L		318	305	133	55	110	16	49	200	19	395	420	315	475	775					
225S		4,8	356	286	149	60	140	18	53	225	19	435	475	345	530	820				
225M	2	311		55		110	16	49	53							815				
250M	2	406	349	168	60	140	18	53	250	24	490	515	385	575	930					
	4,6,8				58			930												
280S	2	457	368	190	65	140	20	67.5	280	24	550	580	410	640	1000					
280M	4,6,8							75							67.5	1000				
	2		419		65		18	58	280	550	580	410	640	1050						
4,6,8	75				20		67.5	1050												
315S	2	508	406	216	65	140	18	58	315	28	744	645	576	865	1240					
315M	4,6,8				80			170							22	71	1240			
	2		457		65		140	18	58	315	744	645	576	865	1310					
4,6,8	80				170		22	71	1310											
315L	2	508	406	216	65	140	18	58	315	28	744	645	576	865	1310					
4,6,8	80				170			22							71	1340				
355M	2	610	560		245		75	140	20	67.5	355	28	740	750	680	1035	1540			
	4,6,8	610	560		254		95	170	25	86							1570			
355L	2	610	630	254	75	140	20	67.5	28	740							750	680	1035	1540
	4,6,8	610	630	254	95	170	25	86	28	740							750	680	1035	1570