

## YVF2 系列变频调速专用三相异步电动机

### YVF2 SERIES FREQUENCY VARIABLE SPEED REGULATION MOTOR



机座号 80~315

功率 0.55~200kW

基准频率 50Hz

绝缘等级 F

变频范围 ( 3 ) 5~ 100Hz

基准极数 4P

**适用于：**冶金、化工、纺织、制药、印刷、包装、食品等行业的机械，风机、泵类、输送线自动化设备及机床（如数控机床、加工中心）等领域。

**Applications:** various operation systems by which speed-regulation is needed, such as metallurgy, chemistry, textile, pumps, machine tool, etc.

#### 特点：

- 无级调速、调速范围宽
- 系统调速性能好、节能效果显著
- 采用耐高频脉冲电压冲击的绝缘材料和工艺
- 独立风机强制通风冷却

#### Features:

- Stepless adjustable speed operation in a wide range
- Good performance of the system, energy saving
- High-grade insulation material and special technological withstand high frequency pulse impact
- Separate fan for forced-ventilation

#### 性能数据

#### Performance Data

synchronous speed is 1500r/min at 50Hz

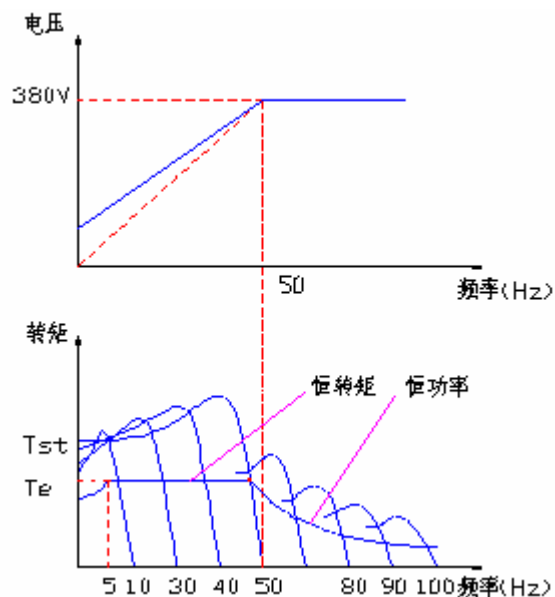
型 号 Type	功 率 kW	额定电流 Current A	额定转矩 Rated Torque N·m	恒转矩调频范围 Constant Torque Frequency Range Hz	恒功率调频范围 Constant Output Frequency Range Hz
YVF2-80M1-4	0.55	1.6	3.8	5~50	50~100
YVF2-80M2-4	0.75	2.0	5.2		
YVF2-90S-4	1.1	2.9	7.5		
YVF2-90L-4	1.5	3.7	10		
YVF2-100L1-4	2.2	5.2	14.9		
YVF2-100L2-4	3	6.8	20		
YVF2-112M-4	4	8.8	26.5		
YVF2-132S-4	5.5	11.8	36.5		
YVF2-132M-4	7.5	15.6	50		
YVF2-160M-4	11	22.3	72		
YVF2-160L-4	15	30.1	98		
YVF2-180M-4	18.5	36.1	120		
YVF2-180L-4	22	42.7	143		
YVF2-200L-4	30	57.6	195		
YVF2-225S-4	37	69.9	240		
YVF2-225M-4	45	84.7	291		
YVF2-250M-4	55	103	355	3~50	50~100
YVF2-280S-4	75	140	484		
YVF2-280M-4	90	167	580		

型 号 Type	功 率 kW	额定电流 Current A	额定转矩 Rated Torque N·m	恒转矩调频范围 Constant Torque Frequency Range Hz	恒功率调频范围 Constant Output Frequency Range Hz
YVF2-315S-4	110	201	710	3~50	50~100
YVF2-315M-4	132	240	852		
YVF2-315L1-4	160	288	1032		
YVF2-315L2-4	200	359	1290		

### 采用 V/f 控制的转矩特性

The torque characteristic under the condition of V/f control  
采用 V/f 控制恒转矩输出时，须采用电压补偿方式，以增大低频力矩。

The voltage needs to be compensated to increase the torque  
at low frequency when the motor is operated under the  
condition of V/f control with constant torque output.



### 与变频电机配套的部件参数

Specifications of cooling blower and brake for the motor

电 机 Motor	机座号 Frame	80	90	100	112	132	160	180	200	225	250	280	315
冷却风机 Cooling Fan	功 率 (W) Power	60 (10)*	60 (25)*	60 (25)*	60 (25)*	40	40	230	230	230	230	370	500
	电 压 Voltage	单相 220V 或三相 220V, 380V 1-PH 220V or 3-PH 220V, 380V					三相 380V 3-PH 380V						
制 动 器 Brake	制动力矩 (N·m) Braking Torque	7.5	15	30	40	75	150	200	300	450	-	-	-
	励磁功率 (W) Excitation Power	50	60	80	110	130	150	150	200	200	-	-	-
	励磁电压 Excitation Voltage	DC24V, AC220V, AC380V										-	-
光电编码器 Encoder	增量型编码器 Incremental Encoder												

\* 括号内为内转子轴流风机功率。The power of the internal-rotor axial flow ventilator.

常用的安装结构型式，以及适用的机座号见下表

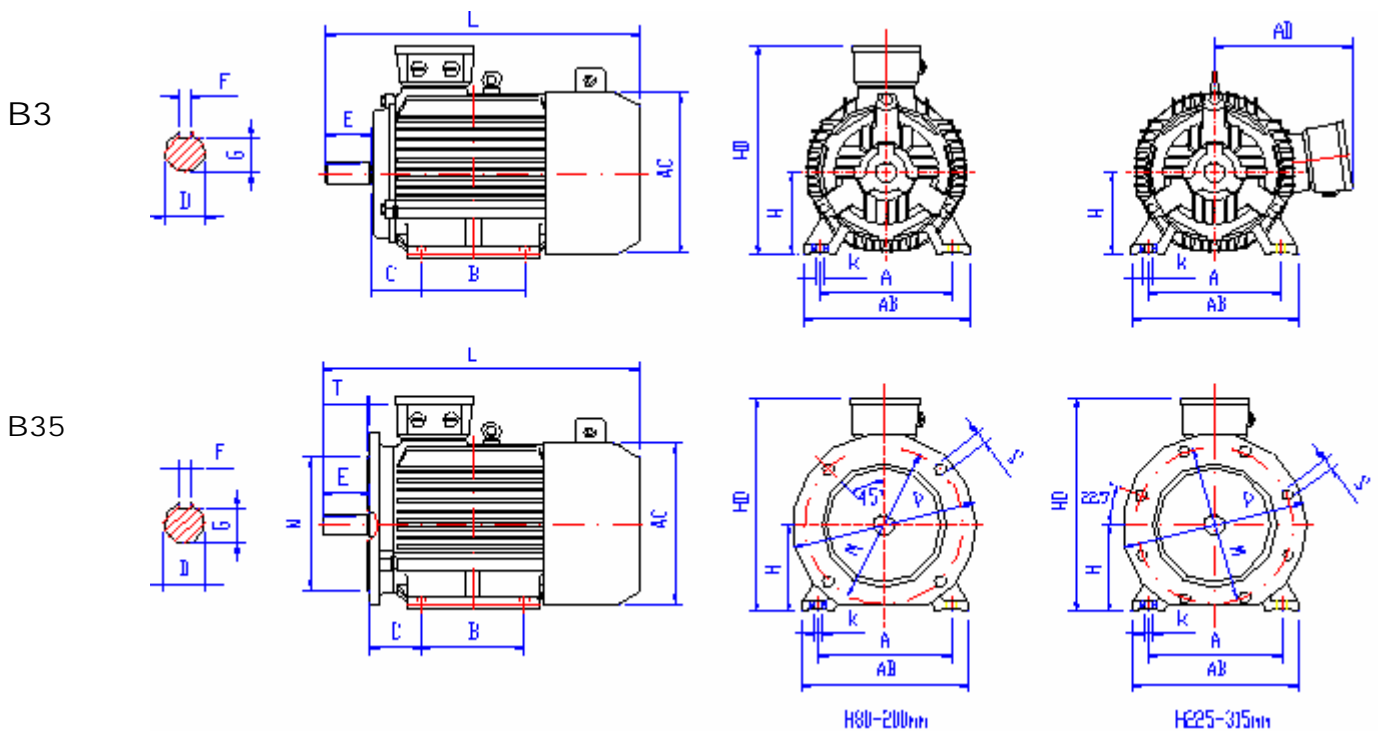
Conventional mounting type and suitable frame size are given in following table (with “√”)

机座号 Frame	基本安装结构 Basic type			派生的安装形式 Derived type								
	B3	B5	B35	V1	V3	V5	V6	B6	B7	B8	V15	V36
80~160	√	√	√	√	√	√	√	√	√	√	√	√
180~280	√	√	√	√	-	-	-	-	-	-	-	-
315	√	-	√	√	-	-	-	-	-	-	-	-

“√”表示可以制造生产的结构型式。

外形及安装尺寸 Dimensions

mm



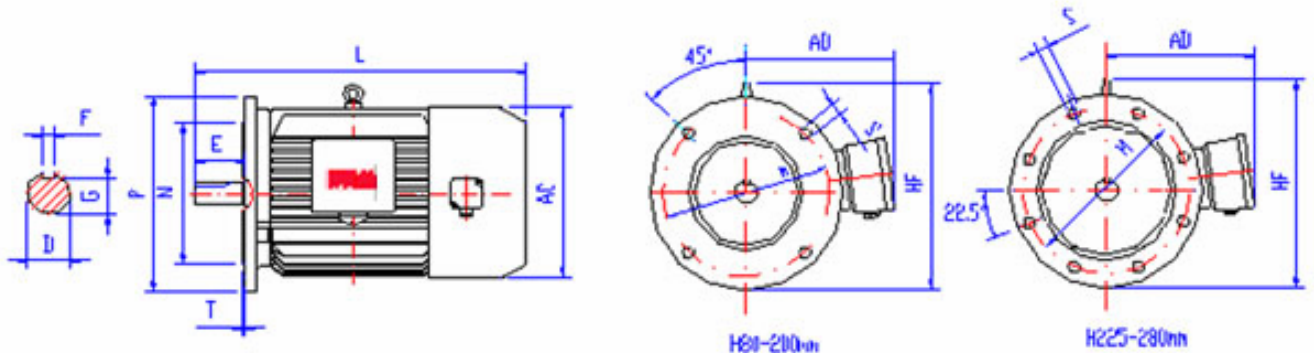
机座号	安装尺寸 Mounting Dimensions															外形尺寸 Overall				
	A	B	C	D	E	F	G	H	M	N	P	R	S	T	K	AB	AC	AD	HD	L
80M	125	100	50	19	40	6	15.5	80	165	130	200	0	12	3.5	10	165	175	145	220	370
90S	140	100	56	24	50	8	20	90	165	130	200	0	12	3.5	10	180	195	155	250	380
90L	140	125	56	24	50	8	20	90	165	130	200	0	12	3.5	10	180	195	155	250	410
100L	160	140	63	28	60	8	24	100	215	180	250	0	15	4	12	205	215	180	270	465
112M	190	140	70	28	60	8	24	112	215	180	250	0	15	4	12	230	240	190	300	480
132S	216	140	89	38	80	10	33	132	265	230	300	0	15	4	12	270	275	210	345	530
132M	216	178	89	38	80	10	33	132	265	230	300	0	15	4	12	270	275	210	345	570
160M	254	210	108	42	110	12	37	160	300	250	350	0	19	5	15	320	330	255	420	660
160L	254	254	108	42	110	12	37	160	300	250	350	0	19	5	15	320	330	255	420	715
180M	279	241	121	48	110	14	42.5	180	300	250	350	0	19	5	15	355	380	280	455	775
180L	279	279	121	48	110	14	42.5	180	300	250	350	0	19	5	15	355	380	280	455	815

机座号	安 装 尺 寸 Mounting Dimensions															外 形 尺 寸 Overall				
	A	B	C	D	E	F	G	H	M	N	P	R	S	T	K	AB	AC	AD	HD	L
200L	318	305	133	55	110	16	49	200	350	300	400	0	19	5	19	395	420	305	505	850
225S	356	286	149	60	140	18	53	225	400	350	450	0	19	5	19	435	470	335	560	885
225M	356	311	149	60	140	18	53	225	400	350	450	0	19	5	19	435	470	335	560	915
250M	406	349	168	65	140	18	58	250	500	450	550	0	19	5	24	490	510	370	615	980
280S	457	368	190	75	140	20	67.5	280	500	450	550	0	19	5	24	550	580	410	680	1085
280M	457	419	190	75	140	20	67.5	280	500	450	550	0	19	5	24	550	580	410	680	1135
315S	508	406	216	80	170	22	71	315	600	550	660	0	24	6	28	635	645	530	845	1285
315M	508	457	216	80	170	22	71	315	600	550	660	0	24	6	28	635	645	530	845	1395
315L	508	508	216	80	170	22	71	315	600	550	660	0	24	6	28	635	645	530	845	1395

外形及安装尺寸 Dimensions

mm

B5



机座号	安 装 尺 寸 Mounting Dimensions												外 形 尺 寸 Overall Dimensions			
Frame	C	D	E	F	G	H	M	N	P	R	S	T	AC	AD	HF	L
80M	50	19	40	6	15.5	80	165	130	200	0	12	3.5	175	145	185	370
90S	56	24	50	8	20	90	165	130	200	0	12	3.5	195	155	195	380
90L	56	24	50	8	20	90	165	130	200	0	12	3.5	195	155	195	410
100L	63	28	60	8	24	100	215	180	250	0	15	4	215	180	245	465
112M	70	28	60	8	24	112	215	180	250	0	15	4	240	190	265	480
132S	89	38	80	10	33	132	265	230	300	0	15	4	275	210	315	530
132M	89	38	80	10	33	132	265	230	300	0	15	4	275	210	315	570
160M	108	42	110	12	37	160	300	250	350	0	19	5	330	255	385	660
160L	108	42	110	12	37	160	300	250	350	0	19	5	330	255	385	715
180M	121	48	110	14	42.5	180	300	250	350	0	19	5	380	280	430	775
180L	121	48	110	14	42.5	180	300	250	350	0	19	5	380	280	430	815

机座号	安 装 尺 寸 Mounting Dimensions												外 形 尺 寸 Overall Dimensions			
Frame	C	D	E	F	G	H	M	N	P	R	S	T	AC	AD	HF	L
200L	133	55	110	16	49	200	350	300	400	0	19	5	420	305	480	850
225S	149	60	140	18	53	225	400	350	450	0	19	5	470	335	535	885
225M	149	60	140	18	53	225	400	350	450	0	19	5	470	335	535	915
250M	168	65	140	18	58	250	500	450	550	0	19	5	510	370	595	980
280S	190	75	140	20	67.5	280	500	450	550	0	19	5	580	410	650	1085
280M	190	75	140	20	67.5	280	500	450	550	0	19	5	580	410	650	1135

表中外形尺寸为电机最大外形尺寸，实际情况以实物为准。

The dimensions are the maximum values. Use only certified data for construction.

- 变频电机一般选用 4 极电机。Normally the motor designed with the basic pole of 4 (i.e. the synchronous speed is 1500RPM at 50Hz).
- 可根据用户需求设计 6、8 及 2 极变频电机。Poles can also be designed with 6, 8 or 2 according to the requirement of the order.