

YEJVF

YEJVF 系列变频调速电磁制动电动机 series frequency-variable and electromagnetic-brake motor

YEJVF系列电动机是我公司研制开发的新型产品之一，其产品结构为YEJ和YVF两系列相结合，即在YVF系列电动机的非轴伸端将轴延伸出来装有电磁制动器；其性能满足YVF系列电机技术标准，要产品与电子变频器联合使用，可实现转速150~2750r/min范围内的无极调速并带电磁制动，电机在任意转速下，当电磁制动电源失电时电机在短时间内停转，空载制动时间随机座号由大到小，约为0.5~0.45秒，该系列电动机广泛应用于各类无极调速并需制动的机械设备，交通运输、冶金、纺织、印染、化工、矿工、建筑等行业的设备作为驱动力。

YEJVF series motor is one of the new products developed by our company. Its product structure is the combination of Yej and Yvf, that is, the non-shaft extension of YVF series motor is equipped with electromagnetic brake. Its performance meets the YVF series motor technical standard, and it can realize the stepless speed regulation and electromagnetic brake in the range of 150 ~ 2750r/min when the product is used with the electronic frequency converter, when the electromagnetic braking power supply is out of power, the motor will stop in a short time, and the no-load braking time is from large to small, about 0.5 ~ 0.45 seconds. This series of motors are widely used in all kinds of mechanical equipment with no-pole speed regulation and need braking, transportation, metallurgy, textiles, printing and dyeing, chemical, miners, construction and other industries as the driving force of equipment.



产品相关参数:

机座中心高: 80~225mm
 控制器电源: 机座中心高 ≤ 100mm; 交流220V (整流后直流99V)
 机座中心高 ≥ 112mm; 交流380V (整流后直流170V)
 功率范围: 0.55~45kW
 额定电压: 380V (其他电压需另订协议)
 额定频率: 50Hz (或60Hz)
 防护等级: IP54
 绝缘等级: F级
 工作制: S1

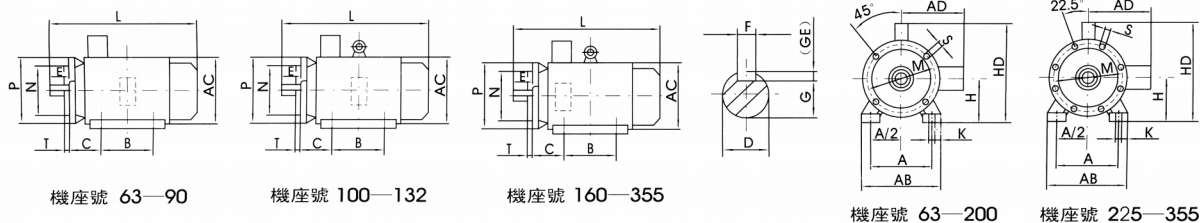
Technical Data:

Centre height of frame: 80~225mm
 Controller's power: centre height of frame < 100mm, AC 220V (after commutate 99V)
 centre height of frame ≥ 112mm, AC 380V (after commutate 170V)
 Power range: 0.55~45kW
 Rated voltage: 380V or order
 Rated frequency: 50Hz OT 60Hz
 Protection class: IP54
 Insulation class: F
 Duty type: S1

型号 Type	标准功率 Output	标准电流 Current	额定转矩 Rated Torque	恒转矩 变频范围 Torque range	恒功率 变频范围 Power factor	静制动转矩 Static Braking Torque	空载 制动时间 No-load brake Log time	励磁功率 Energizing power	堵转转矩 Locked-rotor torque	堵转电流 Locked-rotor current	最大转矩 Pull-out torque	最小转矩 Minimum torque
	HP	KW	(N.m)	(%)	(CosΦ)	(N.m)	(S)	(W)	额定转矩 Rated torque Tst/TN	额定电流 Rated Current Ist/TN	额定转矩 Rated torque Tmax/TN	额定转矩 Rated torque Tmin/TN
YEJVF-80M1-4	0.55	1.5	3.5	5-50	50-100	7.5	0.2	30	2	9	2.8	1.7
YEJVF-S0M2-4	0.75	2	4.7			7.5	0.2	30				1.6
YEJVF-90S-4	1.1	2.8	7			15	0.2	50				
YEJVF-90L 4	1.5	3.7	9.5			15	0.2	50				1.5
YEJVF-100L 4	2.2	5.1	14			30	0.2	65				
YEJVF-100L2-4	3	6.8	19			30	0.2	65				1.4
YEJVF-112M-4	4	8.7	25.4			40	0.25	80				
YEJVF-132S-4	5.5	11.4	35			75	0.25	90				1.2
YEJVF-132M-4	7.5	15.3	47.7			75	0.25	90				
YEJVF-160M-4	11	22.1	70			150	0.35	150				1.1
YEJVF-160L-4	15	30.1	95.5			150	0.35	150				
YEJVF-180M-4	18.5	35.4	117.1			200	0.35	150				1.1
YEJVF-180L-4	22	41.6	140.9			200	0.35	150				
YEJVF-200L-4	30	55.9	190.9			300	0.45	200				1.1
YEJVF-225S-4	37	68.2	235.5			450	0.45	200				
YEJVF-225M-4	45	82.5	286.4			450	0.45	200				

附录 II - YX3、YE3、YD2、YEJ2、YVF2 系列电动机外形及安装尺寸

Appendix II-YX3、YE3、YD2、YEJ2、YVF2 series motor shapes and installation dimensions



機座帶底脚，端蓋上有凸緣(帶通孔)的電動機

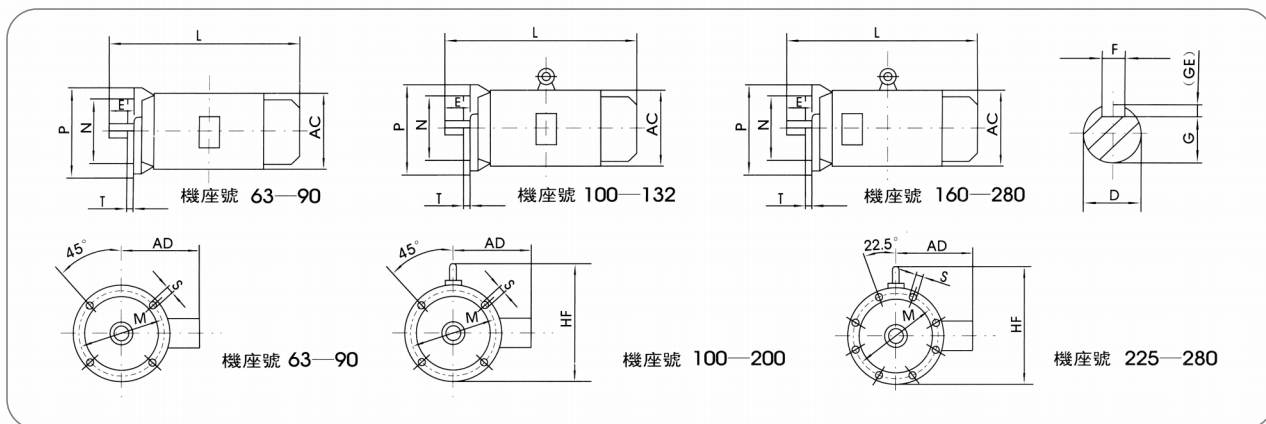
Frame with foot end, shield with flange(with through hole)

单位: mm

机座号 Frame size	凸 缘 号 Flange size	极数 Poles	安 装 尺 寸 Fixing Measurement																外 形 尺 寸 Figure size																	
			A	A/2	B	C	D	E	F	G	H	K	M	N	P	R	S	T	凸緣孔數 Range holes	AB	AC	AD	HD	L												
																								YE2, YD3, YE3, YD2	YVF2	YEJ2										
63M	FF115	2、4	100	50	80	40	11	23	4	8.5	63	7	115	95	140		10	3		135	130	70	180	230	/	/										
71M	FF130	2、4、6	112	56	90	45	14	30	5	11	71		130	110	160					150	145	80	195	255												
80M	FF165	2、4、6、8	125	62.5	100	50	19	40	6	15.5	80	10	165	130	200		12	3.5		165	175	145	220	295	370	390										
90S			140	70	100	56	24	50	8	20	90		180	195	155					250	320	380	420													
90L				125							345		410	445																						
100L	FF215		160	80	140	63	28	60		24	100	205	215	180	270	385	465	480																		
112M			190	95	140	70			112	12	230	240	190	300	400	480	510																			
132S	FF265		216	108	140	89	38	80	10	33	132	12	265	230	300		15	4	4	270	275	210	345	470	530	585										
132M				178									510	570	625																					
160M	FF300		254	127	210	108	42	110	12	37		15	300	250	350					320	330	255	420	615	660	720										
160L				254										670	715					765																
180M			279	139.5	241	121	48		14	42.5	180		355	380	280					455	700	775	825													
180L			279										740	815	875																					
200L	FF350		318	159	305	133	55		16	49	200		350	300	400					395	420	305	505	770	850	900										
225S	FF400	4、8			286		60	140	18	53	19					0	19	5						815	885	1000										
225M		2	356	178		149	55	110	16	49		225	400	350	450					820	915	1000														
		4、6、8			311										845					1030																
250M	FF500	2	406	203	349	168				18		250								490	510	370	615	910	980											
280S		4、6、8					65				58	24	500	450	550					550	580	410	680	985	1085											
		2			368		75	140	20	67.5	280														1035		1135									
280M		4、6、8	457	228.5		190	65			18	58																									
315S	FF600	2			406		65			18	58	315							8		635	645	490	800	1178	1285	/									
		4、6、8、10					80	170	22	71																		1208								
315M		2	508	254	457	216	65	140	18	58	600		550	660																				1290	1395	
315L		4、6、8、10					80	170	22	71																								1320		
		2			508		65	140	18	58	28						24	6					730	710	530	880	1290									
355M	FF740	4、6、8、10					80	170	22	71																										1500
		2	610	305		254	75	140	20	67.5		355	740	680	800																				1530	
355L		4、6、8、10			630		75	140	20	67.5																									1500	/
		2					95	170	25	86													1530													

附录 III - YX3、YE3、YD2、YEJ2、YVF2系列电动机外形及安装尺寸

Appendix III-YX3, YE3, YD2, YEJ2, YVF2 series motor shapes and installation dimensions

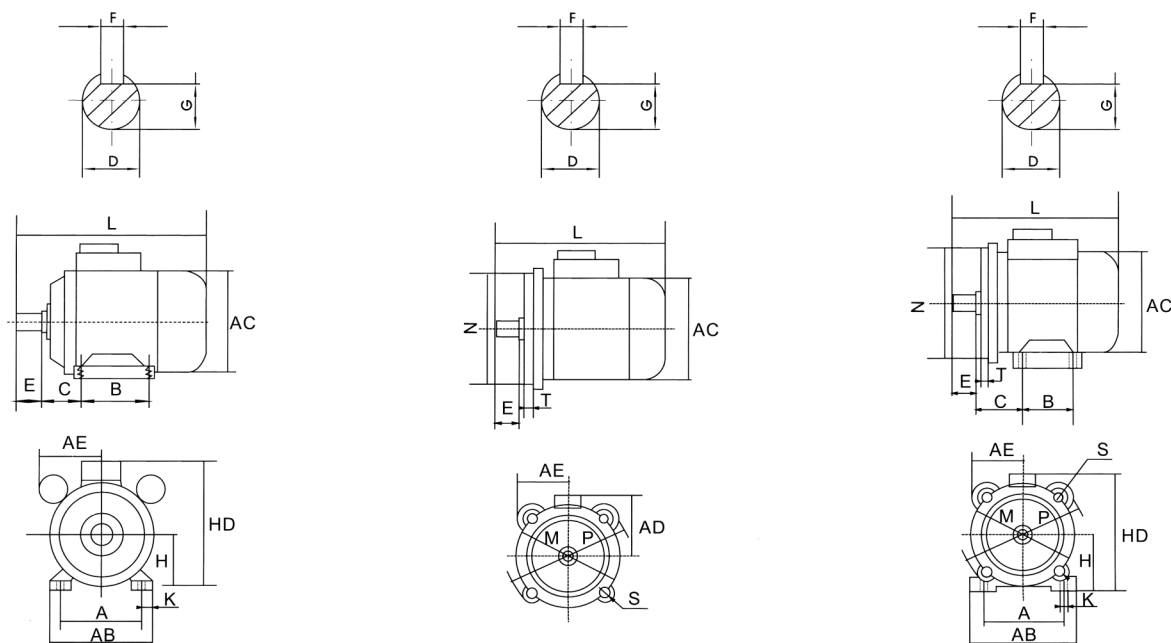


单位: mm

机座号 Frame size	凸缘号 Flange size	极数 Poles	安 装 尺 寸 Fixing Measurement											外 形 尺 寸 Figure size									
			D	E	F	G	M	N	P	R	S	T	凸缘孔数 Flange holes	AC	AD	HD	L						
																	YE2、YX3、YE3、YD2	YVF2	YEJ2				
63M	FF115	2、4	11	23	4	8.5	115	95	140		10	3		130	70	130	230	／	／				
71M	FF130	2、4、6	14	30	5	11	130	110	160			145		80	145	255							
80M	FF165	2、4、6、8	19	40	6	15.5	165	130	200	0	12	3.5	4	175	145	185	295	370	390				
90S			24	50	8	20								195	155	195	320	380	420				
90L														345	410	445							
100L	FF215		28	60		24	215	180	250		215	180		245	385	465	480						
112M											240	190		265	400	480	570						
132S	FF265		38	80	10	33	265	230	300		15	4	4	275	210	315	470	530	585				
132M														510	570	625							
160M	FF300		42	110	12	37	300	250	350		19	5	8	330	255	385	615	660	720				
160L														670	715	765							
180M			48		14	42.5								380	280	430	700	775	825				
180L														740	815	875							
200L	FF350		55		16	49	350	300	400					420	305	480	770	850	900				
225S	FF400	4、8	60	140	18	53	400	350	450		19	5		8	470	335	535	815	880	1000			
225M		2	55	110	16	49												820	915	1000			
		4、6、8	60	140	18	53												845		1030			
250M	2	4、6、8					65	58	510						370	595	910	980	／				
	280S		2		4、6、8	75			20						67.5	500	450	550		985	1085		
280M		2	65				18	58												1035	1135		
			4、6、8				75	20												67.5			

附录 VI - YL系列单相双值电容异步电动机

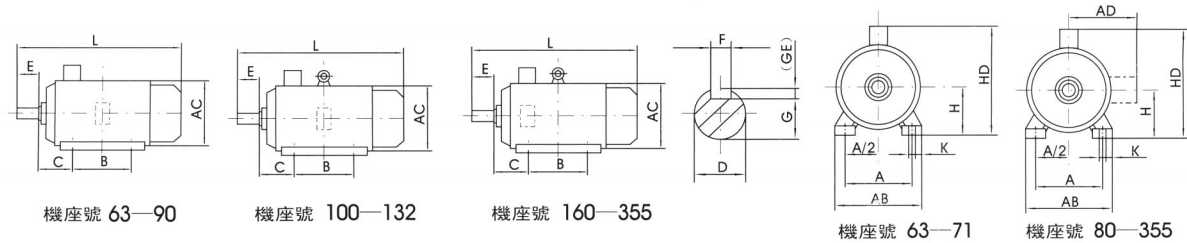
Appendix VI-YL series single-phase dual-value Capacitor Induction Motors



单位: mm

机座号 Frame size	安 装 尺 寸 Fixing Measurement																			外 形 尺 寸 Figure size							
										IMB14.IMB34						IMB5.IMB35											
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	AE	HD	L
71	112	90	45	14	30	5	11	71	7	85	70	1.5	0	M6	2.5	-	-	-	-	-	-	145	145	140	105	180	255
80	125	100	50	19	40	6	15.5	80	10	100	80	120	0	M6	2.5	-	-	-	-	-	-	160	165	150	120	200	295
90S	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3	-	-	-	-	-	-	180	185	160	130	240	370
90L	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3	-	-	-	-	-	-	180	185	160	130	240	400
100L	160	140	63	28	60	8	24	100	12	-	-	-	-	-	-	215	180	250	0	15	4	205	220	180	130	260	430
112M	190	140	70	28	60	8	24	112	12	-	-	-	-	-	-	215	180	250	0	15	4	245	250	190	140	300	455
132S	216	140	89	38	60	10	33	132	12	-	-	-	-	-	-	215	180	250	0	15	4	280	290	210	155	300	525

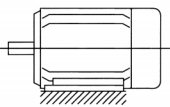
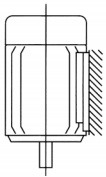
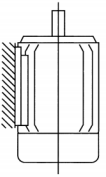
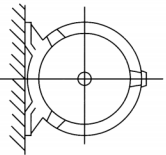
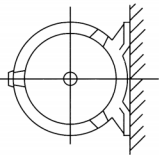
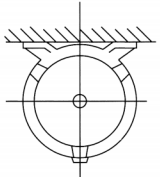
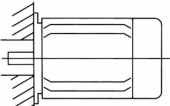
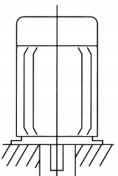
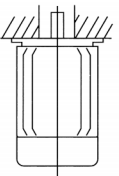
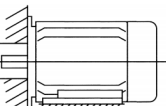
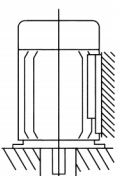
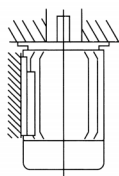
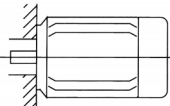
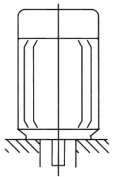
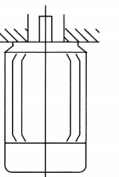
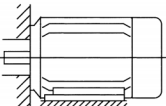
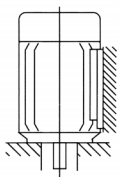
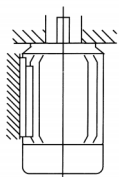
附录 I - YX3、YE3、YD2、YEJ2、YVF2系列电动机外形及安装尺寸



单位: mm

机座号 Frame size	极数 Poles	安 装 尺 寸 Fixing Measurement										外 形 尺 寸 Figure size									
		A	A/2	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L					
																YE2、YX3、YE3、YD2	YVF2	YEJ2			
63M	2、4	100	50	80	40	11	23	4	8.5	63	7	135	130	70	180	230	/	/			
71M	2、4、6	112	56	90	45	14	30	5	11	71		150	145	80	195	255					
80M		125	62.5	100	50	19	40	6	15.5	80	10	165	175	145	220	295	370	390			
90S	2.4.6.8	140	70	100	56	24	50	8	20	90		10	180	195	155	250	320	380	420		
90L				125							345						410	445			
100L		160	80	140	63	28	60	24	100	112	12	205	215	180	270	385	465	480			
112M		190	95	140	70							230	240	190	300	400	480	510			
132S		216	108	140	89	38	80	10	33	132	12	270	275	210	345	470	530	585			
132M				178												510	570	625			
160M		254	127	210	108	42	110	12	37	160	15	320	330	255	420	615	660	720			
160L				254												670	715	765			
180M		279	139.5	241	121	48		14	42.5	180	15	355	380	280	455	700	775	825			
180L				279												740	815	875			
200L			318	159	305	133	55		16	49	200		395	420	305	505	770	850	900		
225S	4、8	356	178	286	149	60	140	18	53	225	19	435	470	335	560	815	885	1000			
225M	2			311		55	110	16	49							820	915	1000			
	4、6、8					60	140	18	53							845	915	1030			
250M	2	406	203	349	168	65				140	18	58	250	24	490	510	370	615	910	980	
	4、6、8						65	20	67.5												
280S	2	457	228.5	368	190	75	140	20	67.5	280	24	550	580	410	680	985	1085				
280M	4、6、8			419		65		18	58										1035	1135	
	2					75		20	67.5												
315S	2	508	254	406	216	65	140	18	58	315	28	635	645	490	800	1178	1380	/			
	4.6.8.10					80		170	22							71			1208		
315M	2			457		65		140	18							58			1290	1395	
	4.6.8.10					80		170	22							71			1320		
315L	2			508		508		65	140							18	58		1290		1320
	4.6.8.10							80	170							22	71				
355M	2	610	305	560	254	75	140	20	67.5	355	28	730	710	530	880	1500	/	/			
	4.6.8.10					95	170	25	86							1530					
355L	2			630		630	75	140	20							67.5			1500		
	4.6.8.10						95	170	25							86			1530		

国家电工委员会 IEC 60034-7 标准规定的电机安装方式
Mounting arrangements according to IEC 60034-7 standard

电机安装方式 Mounting arrangements	机座带底脚，端盖上无凸缘的电动机 Feet mounting without Flange					
	B3(IM1001)	V5(IM1011)	V6(IM1031)	B6(IM1051)	B7(IM1061)	B8(IM1071)
制造范围 Range	H63~H355	H63~H160	H63~H160	H63~H160	H63~H160	H63~H160
示意图 Diagram						
电机安装方式 Mounting arrangements	机座不带底脚，端盖上有大凸缘的电动机 Large flange mounting without feet			机座带底脚，端盖上有大凸缘的电动机 Large flange and mounting		
	B5(IM3001)	V1(IM3011)	V3(IM3031)	B35(IM2001)	V15(IM2011)	V36(IM2031)
制造范围 Range						
示意图 Diagram						
电机安装方式 Mounting arrangements	机座不带底脚，端盖上有小凸缘的电动机 Small flange mounting without feet			机座带底脚，端盖上有小凸缘的电动机 Small flange and feet mounting		
	B14(IM3601)	V18(IM3611)	V19(IM3631)	B34(IM2101)	V58(IM2111)	V69(IM2131)
制造范围 Range						
示意图 Diagram						

电机常见故障及排除方法 Frequent malfunctions and solutions

故 障	可能的原因	检查或校正方法
1、電動機空載時不能啟動	1、饋電路斷線（三相當中的一根） 2、定子三相繞組中的一相斷路（“Y”形連接時） 3、電源電壓或頻率不對	檢查電源電壓和個別連接處。 檢查保險絲，饋電線內電流和每一相繞組的電阻。 檢查電壓及頻率。
2、電動機在負載時不能啟動，在低負載或空載時能啟動，但在負載增加後轉速即大跌或甚至停下來	1、電源電壓低 2、定子繞組有匝間短路 3、定子三相繞組中異相斷線（“Δ”接線法時） 4、過載	檢查線路電壓。 檢查每相繞組和每相空載電流。 檢查每相繞組電阻。 檢查負載。
3、電機停留在低轉速	1、定子繞組一相接反，電動機發響聲 2、轉子端環和導杆中間有斷裂情況	檢查饋電線的電流和引出線標記。 檢查短路電流。
4、定子過熱	1、饋電線路三根中有一根斷線或定子繞組一相斷路 2、電源電壓過大或過低 3、過載 4、定子匝間或相同短路 5、通風不好	檢查保險絲，線間電壓和導線電流。 檢查饋電線內的電流，檢查定子相間和對地絕緣電阻。 檢查繞組電阻，檢查通風孔道。
5、軸承過熱	1、裝配不對 2、電動機軸與被拖動之軸不平行 3、沒有潤滑油，油內有雜物或油質不良 4、皮帶過緊 5、不平衡的磁性吸力大	檢查轉子是否容易轉動。 校正兩軸平衡。 用汽車洗刷更換潤滑油。 松皮帶或移動底腳。 檢查空氣隙偏心率。
6、合閘時保險設備跳閘	1、定子繞組一相接反 2、把應當接成“Y”形的定子三相繞組接成“Δ”形 3、繞組對機座短路或相間短路	檢查引出線標記和接法。 檢查引出線標記和接法。 檢查各相繞組對機座的絕緣以及相同絕緣。
7、機械振動大	1、轉子不平衡只在相當低的轉數時才不振動 2、軸向竄動大 3、傳動皮帶接頭接得不好 4、皮帶輪不平穩	檢查平衡情況。 檢查軸承外的間隙，並加以調整。 重新接皮帶。 檢查皮帶輪。

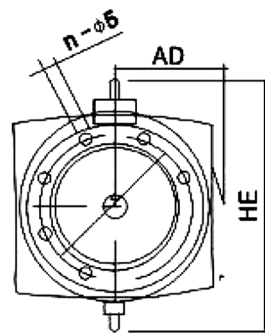
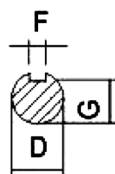
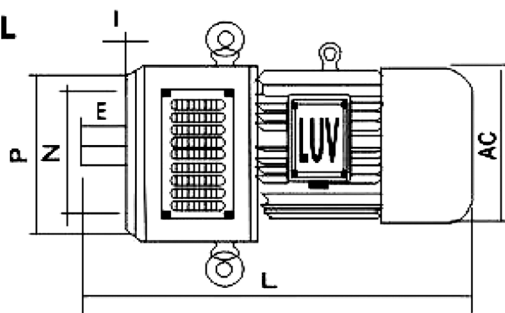
注：電動機的故障及產生的故障的原因很多，有時一個故障可能有幾個原因，一個原因也可以產生幾種故障，上表所列僅為常見的幾種，在檢查如發生疑問可參閱有關檢修維護書或與製造廠聯系。

Stoppage	Possible reasons	Check or calibration methods
1. No-load motor can't start	1. Circuit broken wires (one of the three is the root) 2. When the child three-phase winding of the a phase breakers ("Y" type of connection) 3. The power supply voltage and frequency is wrong	Check the power supply voltage or individual connection. Check the fuse, feeders of current and each phase of the winding resistance. Check voltage and frequency
2. Motor load in cannot begin at low load or no-load to start when, but in load increase speed that are even stop to plunge	1. The low voltage power supply 2. The group turns around the son between short circuit 3. The stator three-phase winding out-of-phase break line ("Δ" then method) 4. Overload	Check the line voltage; Check each phase windings and each phase no-load current; Check each phase winding resistance; Check the load
3. Motor stay in low rotation speed	1. A connect the stator winding, motor hair crosstalk 2. The rotor ring and guide bar among fracture	Check feeders current and lead wire mark; Check short-circuit current
4. Stator overheating	1. Feeders three roots there was a break or stator winding a phase open circuit 2. The power supply voltage too big or too low 3. overload 4. Same stator circle or short circuit 5. And ventilated bad	Check the fuse, line voltage and current between wire; Check the current in a feeders, Check the stator alternate with and ground insulation resistance; Check the winding resistance and stable wa
5. Bearing overheating	1. The assembly wrong 2. The motor shaft and the dragging is not parallel axis 3. No lubricating oil, oil impurities or oily bad there 4. Belts tight 5. Don't balance of magnetic big suction	Check whether the rotor to turn; Correction two axis balance; Use the car wash oil changing; The belt or loose move feet; Check the air gap eccentric degrees
6. When feeder insurance facilities trip	1. A connect the stator winding 2. Put a "Y" shall meet type stator windings to become "Δ" Δ 3. Winding base to short circuit or alternate with short circuit	Check mark and lead wire by law; Check mark and lead wire by law; Check the phase windings of the insulation and the same base of insulation
7. Mechanical vibration	1. Relet not only in balance quite a low speed don't vibration 2. the axial moving there 3. transmission belt joint answered the bad 4. pulley is not even	Check the balance situation; Check the clearance of bearing, and to make adjustments. To meet the belt; Check the pulley

Note: There are many reasons for the malfunctions, sometimes there might be several reasons for one problem, sometimes one reason might come several problems. These listed in the table are just those frequent appeared, please don't hesitate to contact us while in need.

型 号 Type	安 装 尺 寸 Installation dimensions									外形尺寸 External dimensions					
	A	WB	WC	E	H	D	F	G	K	AB	AC	AD	HD	L	
YCT112-4A	190	210	40	40	112	19	6	15.5	12	240	260	150	280	520	
YCT112-4B				50	132	24	8	20		285	310	165	330	570	
YCT132-4A	216	241	45	60	28	24		15	330	350	185	385	665		
YCT132-4B									279	305	180	365	385	195	430
YCT160-4A	318	356	50	80	200	38	10	33	19	410	430	235	485	820	
YCT160-4B										465	485	270	545	860	
YCT180-4A	356	406	56	110	225	42	12	37	24	520	540	295	595	980	
YCT200-4A					250	48	14	42.5		575	595	320	665	1025	
YCT200-4B	406	457	63		280	55	16	49	28	645	670	345	770	1130	
YCT225-4A					315	60	18	53		755	780	420	890	1170	
YCT225-4B	457	508	70		140	355	75	20	67.5	28	755	780	420	890	1280
YCT250-4A															575
YCT250-4B	508	560	89	140	355	75	20	67.5	28	755	780	420	890	1425	
YCT280-4A														575	595
YCT315-4A	610	630	108	140	355	75	20	67.5	28	755	780	420	890	1630	
YCT315-4B														575	595
YCT355-4A	610	630	108	140	355	75	20	67.5	28	755	780	420	890	1680	
YCT355-4B														575	595
YCT355-4C	610	630	108	140	355	75	20	67.5	28	755	780	420	890	1680	
YCT355-4D														575	595

YCTL



型号 Type	安 装 尺 寸 Installation dimensions										外形尺寸 External dimensions			
	D	E	F	G	M	N	P	n	S	T	AC/2	AD	HD	L
YCT112-4A	19	40	6	15.5	215	180	250	4	15	4	125	150	333	515
YCT112-4B				20							142	155	391	580
YCT132-4A	24	50	8	24	265	230	300	6	15	4	165	185	445	620
YCT132-4B				24							180	190	485	670
YCT160-4A	28	60	10	33	300	250	350	6	15	4	205	210	530	840
YCT160-4B											225	255	582	970
YCT180-4A	38	80	40	37	350	300	400	6	15	4	250	285	642	1170
YCT180-4B											286	320	740	1270
YCT200-4A	42	110	12	42.5	400	350	450	8	19	5	250	285	642	1170
YCT200-4B											286	320	740	1270
YCT225-4A	48	110	14	49	450	400	500	8	19	5	250	285	642	1170
YCT225-4B											286	320	740	1270
YCT250-4A	55	110	16	49	450	400	500	8	19	5	250	285	642	1170
YCT250-4B											286	320	740	1270
YCT280-4A	55	110	16	49	450	400	500	8	19	5	250	285	642	1170
YCT280-4B											286	320	740	1270