

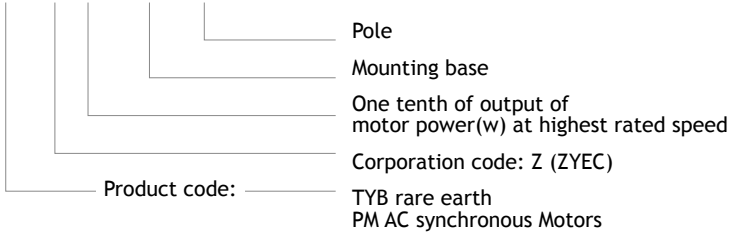
# SYNCHRONOUS MOTORS

TYBZ

SERIES.

## TYPE DESCRIPTION

TYBZ-37-71M-4



## MAIN CHARACTERISTICS

**TYBZ** Series. Rare Earth PM AC Synchronous Motors have been widely applied for Textile and chemical fiber Machinery:

- combing machine
- DTY machine
- godet motor
- heated draw roller
- knitting machine
- metering pump motor
- oil pump motor
- ribbon lap machine
- roller motor
- texturing machine
- two-for-one twister
- warp-knitting machine
- winder motor
- More.....

&:

- Cement
- Metallurgy
- Military
- Packaging machinery
- Glasswork, bottle making
- Paper making
- Petrochemical
- Plastic machinery
- Presswork
- Printing and dyeing
- Transportation
- More.....

■ **High precision for speed regulation:**

Error within 1/30000, which improves the technology of users products.

■ **High performance:**

The rotor uses rare earth PM material. High magnetic field density, big starting torque, small starting current, and wide speed range.

■ **Small size and light weight:**

Its frame size is one to two frame sizes smaller than that of AC asynchronous motor of same HP.

■ **Simple and reliable control system:**

It uses open loop control, which reduces the possible area of fault and the cost. The full automatic control system consisting of inverter and computer has better performance than other types of traditional variable speed motor.

■ **High efficient and high power factor, effective in saving energy:**

It is 5% to 12% more efficient than asynchronous motor of same HP. As the motor does not need the exciting current, the power factor is close to 1.

■ **Long durability:**

As a result of reduced current and less heating of motor.

■ **Compatibility:**

It has same frame structure with AC asynchronous motor and can be used to substitute AC asynchronous motor.

■ **Wide applicability:**

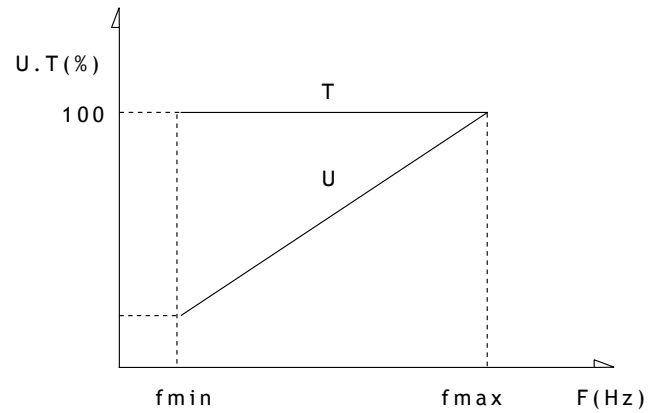
It can be used in various tough conditions. It can even be used in the place where running at low speed for a long time or frequent starting is necessary.

■ **Additional Options are available:**

Heat resistances, Oil injection inlet, Anti-dust & anti-oil sealing rings, special flange & special bearing.

TYBZ-37-71M





Voltage-Frequency and Torque Characteristics of Vary Speed Control System

## PRODUCT APPLICATION

- Working mode: S1;
- Voltage: 3-phase 380V;
- Insulation level: class F;
- Protection level: IP44, IP54 (IP55 if required);
- Cooling method: IC410; IC06
- Installation type: B14, B3, B34, B35, B5, B6, B7, B8, V1, V15, V18, V3, V36, V5, V6.
- Design Options: Installation Mounting type, Voltage, Protection Class, Insulation Class, Cooling method, Shaft options.....

## TECHNICAL PARAMETER

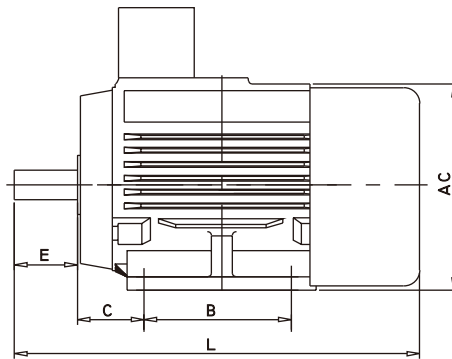
Product Type	Power (kW)	Voltage (V)	Frequency (Hz)	Speed (rpm)	Current (A)	Torque (N*m)
TYBZ-18-63M-4	0.018-0.18	38-380	5-50	150-1500	0.45	1.15
TYBZ-25-63M-4	0.04-0.25	76-380	10-50	300-1500	0.6	1.59
TYBZ-25-63J-4	0.04-0.25	76-380	20-100	600-3000	0.5	0.8
TYBZ-37-71M-4	0.01-0.37	76-380	10-50	300-1500	1.1	2.36
TYBZ-75-80M-2	0.75	380	50	3000	1.2	2.4
TYBZ-75-80M-4	0.15-0.75	76-380	10-50	300-1500	1.9	4.78
TYBZ-110-80M-4	0.22-1.1	76-380	20-100	600-3000	2.3	3.5
TYBZ-75-80M-4	0.112-0.75	57-380	15-100	450-3000	1.43	2.39
TYBZ-55-80M-6	0.55	380	50	1000		5.25
TYBZ-75-80M-6	0.075-0.75	38-380	15-150	300-3000	1.5	2.39
TYBZ-75-80M-6	0.06-0.75	19-380	5-100	100-2000	2.5	3.58
TYBZ-110-80M-6	0.075-1.1	38-380	10-100	200-2000	1.4	5.25
TYBZ-150-90L-4	0.15-1.5	38-380	10-100	300-3000	2.3	4.8
TYBZ-150-90L-4	0.3-1.5	76-380	10-50	300-1500	3.8	9.55
TYBZ-150-90L-6	0.3-1.5	76-380	10-50	200-1000	3	14.33
TYBZ-150-90L-6	0.075-1.5	19-380	5-100	100-2000	3.2	7.2
TYBZ-300-100L-4	3	76-380	10-50	300-1500	5.45	19.1
TYBZ-300-100L-4	0.23-3	29-380	10-150	300-4500	6.2	6.37
TYBZ400-100L-4	4	38-380	10-100	300-3000	8.5	12.73
TYBZ-220-100L-4	0.22-2.2	38-380	10-100	300-3000	4.07	7
TYBZ-220-100L-6	0.8-2.2	152-380	20-50	400-1000	4.5	21
TYBZ-550-112M-4	1.1-5.5	76-380	10-50	300-1500	12.8	35
TYBZ-550-112M-4	0.275-5.5	19-380	5-100	150-3000	10.49	17.51
TYBZ-220-112M-6	0.8-2.2	152-380	20-50	400-1000	3.8	19.1
TYBZ-400-112M-6	0.67-4.0	63-380	10-50	200-1000	9.5	38.2
TYBZ-300-112M-8	0.24-3.0	30-380	8-100	120-1500	6.4	19.1
TYBZ-300-112M-8	0.36-3.0	46-380	6-50	90-750	6.08	38.2
TYBZ-400-112M-8	0.4-4.0	38-380	10-100	150-1500	7.9	25.5
TYBZ-550-132S-4	0.55-5.5	38-380	5-50	150-1500	10.06	35
TYBZ-550-132S-4	0.55-5.5	38-380	10-100	300-3000	9.8	17.5
TYBZ-750-132S-6	7.5	380	10-100	200-2000	15	35.8
TYBZ-550-132M-4	1.5-5.5	76-380	10-50	300-1500	10	35
TYBZ-550-132M-6	0.66-5.5	38-380	6-50	120-1000	13	52.5
TYBZ-750-132M-6	0.75-7.5	38-380	6-50	120-1000	15	71.63
TYBZ-300-132M-6	3	380	50	1000	6	28.65

Product Type	Power (kW)	Voltage (V)	Frequency (Hz)	Speed (rpm)	Current (A)	Torque (N*m)
TYBZ-750-160M-4	1.5-7.5	76-380	10-50	300-1500	14	47.75
TYBZ-1100-160M-4	1.1-11	38-380	10-100	300-3000	29.5	35.02
TYBZ-550-160M-8	0.48-5.5	38-380	5-50	75-750	9.22	70
TYBZ-1100-160L-4	2.2-11	76-380	10-50	300-1500	18.83	70
TYBZ-1500-160L-4	3.0-15	76-380	10-50	300-1500	31	95.5
TYBZ-1850-160L-4	1.8-18.5	38-380	5-50	150-1500	38	117.8
TYBZ-550-180M-8	0.48-5.5	38-380	5-50	75-750	11.6	70
TYBZ-2200-180L-4	1.833-22	32-380	5-50	150-1500	47	140
TYBZ-1850-180L-6	1.54-18.5	31.7-380	5-50	100-1000	33.4	176.7
TYBZ-1500-180L-8	1.2-15	30-380	8-100	120-1500	31	96
TYBZ-1850-180L-8	1.125-18.5	24-380	6.25-100	94-1500	33.3	117.8
TYBZ-3000-200L-4	6.0-30	76-380	10-50	300-1500	53	191
TYBZ-2200-225S-8	1.37-22	24-380	6.25-100	94-1500	47	140
TYBZ-3000-225S-8	1.87-30	24-380	6.25-100	94-1500	63.3	191
TYBZ-3700-225S-8	2.3-37	24-380	6.25-100	94-1500	80	234
TYBZ-7500-280S-4	15-75	76-380	10-50	300-1500	158	477.5

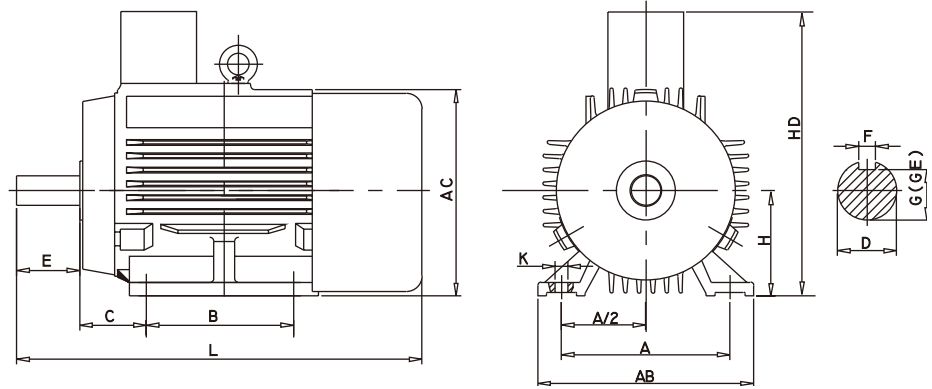
MOUNTING DIAGRAM OVERALL DIMENSIONS

# IM B3

FRAME SIZE: H63-90MM



FRAME SIZE: H100-132MM



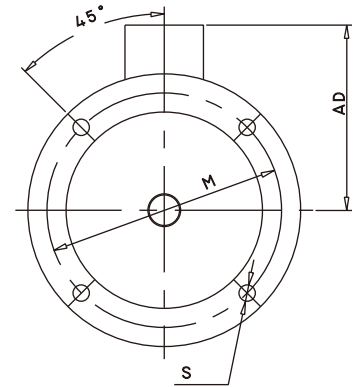
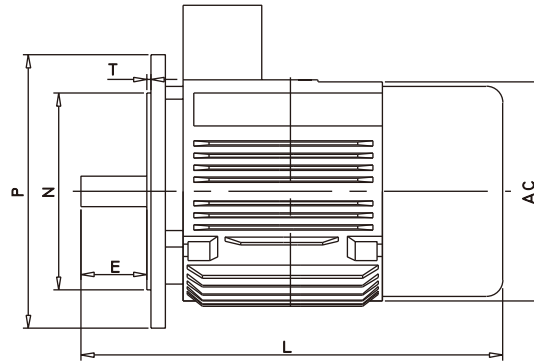
Mounting base	Poles	Mounting dimensions (mm)										Overall dimensions (mm)						
		A	A/2	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L		
63M	2, 4	100	50	80	40	11	23	4	8.5	63	7	135	130	70	180	230		
71M	2, 4, 6	112	56	90	45	14	30	5	11	71		150	145	80	195	255		
80M	2, 4, 6, 8	125	62.5	100	50	19	40	6	15.5	80	10	165	175	145	220	295		
90S		140	70	100	56	24	50	8	20	90		180	195	155	250	320		
90L		125	80	125	63	28	60		24	100	112	12	345					
100L		160		70				140					63	28	60	24	100	112
112M		190	95	140	70	28	60	24	112	12	12	400						
132S		216	108	140	89	38	80	10	33	132	15	270	275	210	345	470		
132M		178	254	178	89	38	80	10	33	132		510						
160M		254		127	210	108	42	110	12	37	160	15	320	330	255	420	615	
160L		254		139.5	254	121	48		14	42.5	180		180	15	670			
180M		279			241	121	48	14				42.5			180	355	380	280
180L	279	159		279	121	48	16	49	200	200	19	740						
200L	318			305	133	55						16	49	200	395	420	305	505
225S	4, 8	356		178	286	60	140	18	53	225	19	815						
225M	2				311	149	55	110	16			49	225	435	470	335	560	820
225M	4, 6, 8				60	168	58	250	24			550	580	410	680	1035		
250M	2	406		203	349					60	53						250	490
250M	4, 6, 8	457	228.5	368	65	140	18	58	280	24	985							
280S	2											75	20	67.5	280	550	580	410
280M	4, 6, 8			419	75	20	67.5	280	550	580	410	680	1035					
280M	2			65	18	58	280	550	580	410	680	1035						
280M	4, 6, 8	75	20	67.5	280	550	580	410	680	1035								

**MOUNTING DIAGRAM**

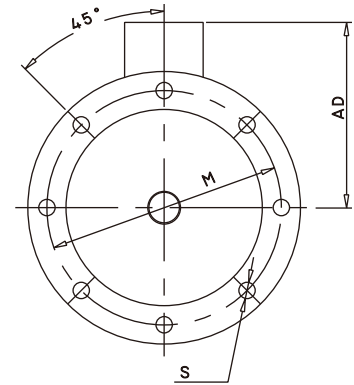
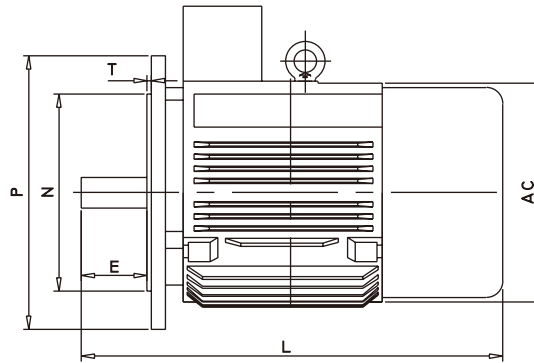
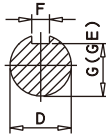
**OVERALL DIMENSIONS**

# IM B5

FRAME SIZE: H63-90MM



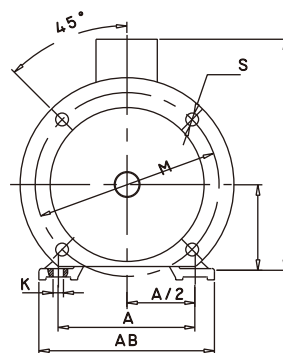
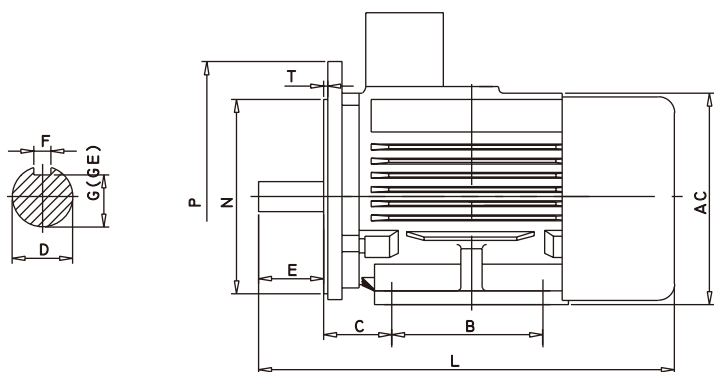
FRAME SIZE: H100-280MM



Mounting base	FlngNo.	Poles	Mounting dimensions (mm)											Overall dimensions (mm)																							
			D	E	F	G	M	N	P	R	S	T	Flangehole	AC	AD	HF	L																				
63M	FF115	2,4	11	23	4	8.5	115	95	140						130	70	130	230																			
71M	FF130	2,4,6	14	30	5	11	130	110	160		10				145	80	145	255																			
80M	FF165		19	40	6	15.5									175	145	185	295																			
90S			24	50		20	165	130	200		12	3.5			195	155	195	320																			
90L					8														345																		
100L	FF215		28	60		24	215	180	250						215	180	245	385																			
112M															240	190	265	400																			
132S	FF265	2,4,6,8	38	80	10	33	265	230	300		15	4	4		275	210	315	470																			
132M																			510																		
160M	FF300		42	110	12	37	300	250	350	0																											
160L																																	615				
180M																																		670			
180L						48															14	42.5												700			
200L	FF350		55		16	49	350	300	400						420	305	480	770																			
225S	FF400	4,8	60	140	18	53	400	350	450		19	5																									
225M		2	55	110	16	49																										815					
		4,6,8	60			53													820																		
250M	FF500	2	140		18	58	500	450	550																												
		4,6,8																																		845	
		2																																			910
280S		4,6,8																		65			20	67.5													985
		2			18	58														1035																	
280M		4,6,8	75		20	67.5																															

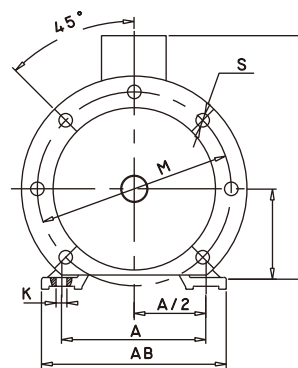
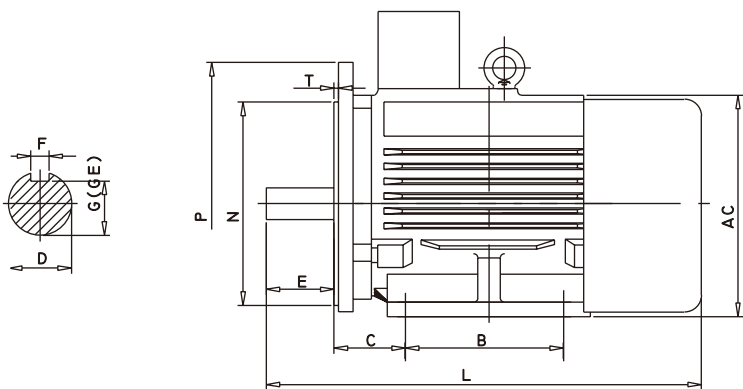
# IM B35

FRAME SIZE: H63-90MM



FRAME SIZE: H63-200MM

FRAME SIZE: H100-280MM



FRAME SIZE: H225-280MM



**MOUNTING DIAGRAM    OVERALL DIMENSIONS**

Mounting base	Flang No.	Poles	Mounting dimensions (mm)																	Overall dimensions (mm)																								
			A	A/2	B	C	D	E	F	G	H	K	M	N	P	R	S	T	Flange hole	AB	AC	AD	HD	L																				
63M	FF115	2,4	100	50	80	40	11	23	4	8.5	63	7	115	95	140	10	3	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		125	62.5	100	50	19	40	6	15.5	80	10	165	130	200	12	3.5	165	175	145	220	295																						
90S			140	70	100	56	24	50		20	90		180	195	155			250	320																									
90L				125															345																									
100L	FF215		160	80	140	63	28	60	8	24	100	12	215	180	250	15	4	4	205	215	180	270	385																					
112M			190	95	140	70		112			230								240	190	300	400																						
132S	FF265	2,4,6,8	216	108	140	89	38	80	10	33	132	12	265	230	300	15	4	4	270	275	210	345	470																					
132M					178														510																									
160M	FF300		254	127	210	108	42	110	12	37	160	15	300	250	350	0			320	330	255	420	615																					
160L					254														670																									
180M					279														139.5	241	121	48	14	42.5	180	355	380	280	455	700														
180L					279														740																									
200L	FF350		318	159	305	133	55		16	49	200		350	300	400			395	420	305	505	770																						
225S	FF400	4,8	356	178	286	149	55	110	16	49	225	19	400	350	450	19	5						815																					
225M		2			311																		820																					
		4,6,8			845																																							
250M	FF500	2	406	203	349	168	65	140	18	58	250	24	500	450	550			8					490																					
		4,6,8																					910																					
280S		2																					457	228.5	368	190	75	20	67.5	280														985
		4,6,8																							550																			
280M	2	419	65	18	58	280	550	680	1035																																			
	4,6,8		75	20	67.5																																							