



# YSM SERIES AC SERVO MOTOR

(0.75~315kW)



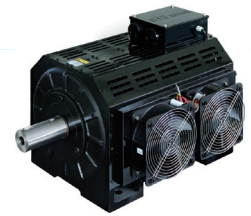
北京超同步伺服股份有限公司  
BEIJING CTB SERVO CO.,LTD.





# YSM-SERIES AC SERVO MOTOR

Frame: YE Central height: 200mm



## ◆ AC induction servo motor Performance parameters

Rated voltage: 380V Connection method:  $\Delta$  Fan voltage: 220V Fan power: 38WX4

Motor type	Rated power (kW)	Rated current (A)	Rated torque (N·m)	pole (P)	Rated frequency (Hz)	rated speed (r/min)	Max speed (r/min)	power factor (cos $\Phi$ )	moment of inertia (kg·m <sup>2</sup> )	weight (gross weight) (kg)	B (mm)	BB (mm)	D (mm)	G (mm)	L (mm)
CTB-4013YRE05-L3X	13	25.6	248	4	17.6	500	1500	0.86	0.361	208	285	420	60	53	700
CTB-4015YRE05-L3X	15	29.4	287	4	17.6			0.87	0.412	385	325	460	60	53	740
CTB-4022YRE05-L3X	22	42.7	420	4	17.6			0.89	0.559	445	415	550	65	58	830
CTB-4026YRE05-L3X	26	50.1	497	4	17.6			0.88	0.618	520	485	620	65	58	900
CTB-4018YRE07-L3X	18.5	35.3	236	4	25.9	750	2000	0.87	0.361	208	285	420	60	53	700
CTB-4022YRE07-L3X	22	41.6	280	4	25.9			0.86	0.412	385	325	460	60	53	740
CTB-4030YRE07-L3X	30	57.1	382	4	25.9			0.87	0.559	445	415	550	65	58	830
CTB-4037YRE07-L3X	37	69.5	471	4	25.9			0.88	0.618	520	485	620	65	58	900
CTB-4026YRE10-L3X	26	48.5	248	4	34.4	1000	3000	0.86	0.361	208	285	420	60	53	700
CTB-4030YRE10-L3X	30	55.3	287	4	34.4			0.87	0.412	385	325	460	60	53	740
CTB-4045YRE10-L3X	45	82.9	430	4	34.4			0.88	0.559	445	415	550	65	58	830
CTB-4050YRE10-L3X	50	91.9	458	4	34.4			0.86	0.618	520	485	620	65	58	900
CTB-4037YRE15-L3X	37	68.9	236	4	51.0	1500	4500	0.87	0.361	208	285	420	60	53	700
CTB-4045YRE15-L3X	45	83.3	287	4	51.1			0.88	0.412	385	325	460	60	53	740
CTB-4060YRE15-L3X	60	108.7	382	4	51.0			0.89	0.559	445	415	550	65	58	830
CTB-4075YRE15-L3X	75	138.6	478	4	51.1			0.88	0.618	520	485	620	65	58	900

## ◆ AC permanent-magnet synchronous servo motor performance parameters

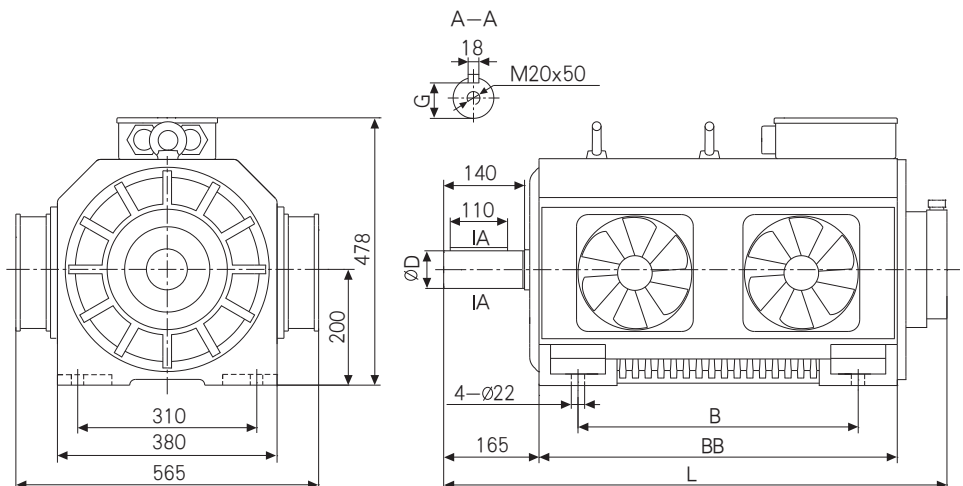
Rated voltage: 380V Connection method:  $\Upsilon$  Fan voltage: 220V Fan power: 38WX4

Motor type	Rated power (kW)	Rated current (A)	Rated torque (N·m)	pole (P)	Rated frequency (Hz)	rated speed (r/min)	Max speed (r/min)	power factor (cos $\Phi$ )	moment of inertia (kg·m <sup>2</sup> )	weight (gross weight) (kg)	B (mm)	BB (mm)	D (mm)	G (mm)	L (mm)
CTB-4410TYRE05-L3X	405	12	50	36.8	21.2	500	11.0	713	0.428	385	325	460	60	53	740
CTB-4550TYRE05-L3X	545	12	50	49.5	28.5		11.0	710	0.566	445	415	550	65	58	830
CTB-4640TYRE05-L3X	640	12	50	58.1	33.5		11.0	708	0.673	520	485	620	65	58	900
CTB-4410TYRE07-L3X	405	12	75	55.1	31.8	750	7.3	469	0.428	385	325	460	60	53	740
CTB-4550TYRE07-L3X	545	12	75	74.2	42.8		7.3	465	0.566	445	415	550	65	58	830
CTB-4640TYRE07-L3X	640	12	75	87.1	50.3		7.3	463	0.673	520	485	620	65	58	900
CTB-4410TYRE10-L3X	405	12	100	73.5	42.4	1000	5.5	345	0.428	385	325	460	60	53	740
CTB-4550TYRE10-L3X	545	12	100	98.9	57.1		5.5	340	0.566	445	415	550	65	58	830
CTB-4640TYRE10-L3X	640	12	100	116.2	67.0		5.5	337	0.673	520	485	620	65	58	900

## ◆ Performance index

Name	Index
Encoder (optical)	RZ-1024 (Resolve)
	CE9-2500(incremental)
	SC-2048 (Sin-Cos)
Shaft extension structure (X)	G: optical shaft
	J: with key
Protection class	IP55
Insulation class	F Class
Rated Temperature Rise	90 K
Vibration level	S
Noise	$\leq 70$ dB (A)
Temperature	-15 ~ 45°C
Environment humidity	$\leq 95\%$ RH

## ◆ Shape and mounting dimension



# YSM—SERIES AC SERVO MOTOR

Frame: YF Central height: 250mm



## ◆ AC induction servo motor Performance parameters

Rated voltage: 380V Connection method:  $\Delta$  Fan voltage: 220V Fan power: 38WX4

Motor type	Rated power (kW)	Rated current (A)	Rated torque (N·m)	pole (P)	Rated frequency (Hz)	rated speed (r/min)	Max speed (r/min)	power factor (cos $\Phi$ )	moment of inertia (kg·m <sup>2</sup> )	weight (gross weight) (kg)	B (mm)	BB (mm)	L (mm)
CTB-4026YRF05-L3X	26	50	497	4	17.2	500	1500	0.88	0.987	590	315	460	810
CTB-4030YRF05-L3X	30	54.4	573	4	17.2			0.88	1.324	650	365	510	860
CTB-4037YRF05-L3X	37	66.8	707	4	17.2			0.89	1.539	750	425	570	920
CTB-4045YRF05-L3X	45	81	860	4	17.2			0.88	1.324	830	495	640	990
CTB-4037YRF07-L3X	37	70	471	4	25.6	750	2000	0.88	0.987	590	315	460	810
CTB-4045YRF07-L3X	45	79.7	573	4	25.6			0.86	1.324	650	365	510	860
CTB-4055YRF07-L3X	55	96.9	700	4	25.6			0.87	1.539	750	425	570	920
CTB-4065YRF07-L3X	65	115	828	4	25.6			0.88	1.324	830	495	640	990
CTB-4055YRF10-L3X	55	105	525	4	33.9	1000	3000	0.88	0.987	590	315	460	810
CTB-4065YRF10-L3X	65	114	621	4	33.9			0.87	1.324	650	365	510	860
CTB-4075YRF10-L3X	75	131	716	4	33.9			0.88	1.539	750	425	570	920
CTB-4090YRF10-L3X	90	157	860	4	34.0			0.88	1.324	830	495	640	990
CTB-4075YRF15-L3X	75	139	478	4	50.5	1500	4500	0.88	0.987	590	315	460	810
CTB-4090YRF15-L3X	90	156	573	4	50.6			0.88	1.324	650	365	510	860
CTB-4110YRF15-L3X	110	190	700	4	51.5			0.89	1.539	750	425	570	920
CTB-4132YRF15-L3X	132	227	840	4	51.5			0.88	1.324	830	495	640	990

## ◆ AC permanent-magnet synchronous servo motor performance parameters

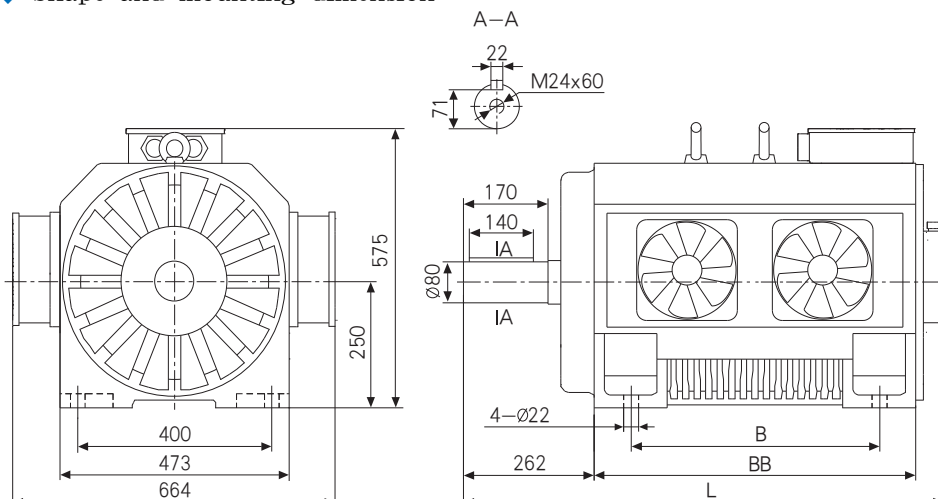
Rated voltage: 380V Connection method: Y Fan voltage: 220V Fan power: 38WX4

Motor type	Rated power (kW)	Rated current (A)	Rated torque (N·m)	pole (P)	Rated frequency (Hz)	rated speed (r/min)	Max speed (r/min)	power factor (cos $\Phi$ )	moment of inertia (kg·m <sup>2</sup> )	weight (gross weight) (kg)	B (mm)	BB (mm)	L (mm)
CTB-4730TYRF05-L3X	730	20	83.3	66.3	38.0	500	11.0	707	1.636	650	365	510	860
CTB-4880TYRF05-L3X	880	20	83.3	79.9	46.0		11.0	704	1.866	750	425	570	920
CTB-41100TYRF05-L3X	1100	20	83.3	99.9	57.6		11.0	700	2.193	830	495	640	990
CTB-4730TYRF07-L3X	730	20	125.0	99.4	57.0	750	7.3	460	1.636	650	365	510	860
CTB-4880TYRF07-L3X	880	20	125.0	119.8	69.0		7.3	456	1.866	750	425	570	920
CTB-41100TYRF07-L3X	1100	20	125.0	149.8	86.4		7.3	450	2.193	830	495	640	990
CTB-4730TYRF10-L3X	730	20	166.6	132.5	76.4	1000	5.5	334	1.636	650	365	510	860
CTB-4880TYRF10-L3X	880	20	166.6	159.7	92.0		5.5	328	1.866	750	425	570	920
CTB-41100TYRF10-L3X	1100	20	166.6	199.6	115.0		5.5	320	2.193	830	495	640	990

## ◆ Performance index

Name	Index
Encoder (optical)	RZ-1024 (Resolve)
	CE9-2500(incremental)
	SC-2048 (Sin-Cos)
Shaft extension structure(X)	G:optical shaft
	J:with key
Protection class	IP55
Insulation class	F Class
Rated Temperature Rise	90 K
Vibration level	S
Noice	≤70dB(A)
Temperature	-15~45°C
Environment humidity	≤95%RH

## ◆ Shape and mounting dimension





# YSM-SERIES AC SERVO MOTOR

Frame: YG Central height: 355mm



## ◆ AC induction servo motor Performance parameters

Rated voltage: 380V Connection method:  $\Delta$  Fan voltage: 220V Fan power: 38WX6

Motor type	Rated power (kW)	Rated current (A)	Rated torque (N·m)	pole (P)	Rated frequency (Hz)	rated speed (r/min)	Max speed (r/min)	power factor (cos $\Phi$ )	moment of inertia (kg·m <sup>2</sup> )	weight (gross weight) (kg)	B (mm)	BB (mm)	L (mm)	K (mm)
CTB-4055YRG05-L3X	55	106	1051	4	17.1	500	1500	0.91	3.85	1155	333	595	995	4- $\phi$ 28
CTB-4065YRG05-L3X	65	112	1242	4	17.1			0.93	4.66	1155	333	595	995	4- $\phi$ 28
CTB-4080YRG05-L3X	80	138	1528	4	17.0			0.91	5.67	1385	2-284	830	1230	6- $\phi$ 28
CTB-4100YRG05-L3X	100	172	1910	4	17.0			0.91	6.91	1385	2-284	830	1230	6- $\phi$ 28
CTB-4080YRG07-L3X	80	151	1019	4	25.4	750	2000	0.91	3.85	1155	333	595	995	4- $\phi$ 28
CTB-4100YRG07-L3X	100	171	1273	4	25.4			0.93	4.66	1155	333	595	995	4- $\phi$ 28
CTB-4120YRG07-L3X	120	204	1528	4	25.4			0.91	5.67	1385	2-284	830	1230	6- $\phi$ 28
CTB-4160YRG07-L3X	160	272	2037	4	25.4			0.91	6.91	1385	2-284	830	1230	6- $\phi$ 28
CTB-4110YRG10-L3X	110	198	1051	4	33.8	1000	3000	0.91	3.85	1155	333	595	995	4- $\phi$ 28
CTB-4132YRG10-L3X	132	223	1261	4	33.7			0.93	4.66	1155	333	595	995	4- $\phi$ 28
CTB-4160YRG10-L3X	160	270	1528	4	33.8			0.91	5.67	1385	2-284	830	1230	6- $\phi$ 28
CTB-4200YRG10-L3X	200	335	1910	4	33.8			0.91	6.91	1385	2-284	830	1230	6- $\phi$ 28
CTB-4160YRG15-L3X	160	297	1019	4	50.5	1500	4500	0.91	3.85	1155	333	595	995	4- $\phi$ 28
CTB-4200YRG15-L3X	200	334	1273	4	50.4			0.93	4.66	1155	333	595	995	4- $\phi$ 28
CTB-4250YRG15-L3X	250	416	1592	4	50.5			0.91	5.67	1385	2-284	830	1230	6- $\phi$ 28
CTB-4315YRG15-L3X	315	523	2006	4	50.4			0.91	6.91	1385	2-284	830	1230	6- $\phi$ 28

## ◆ AC permanent-magnet synchronous servo motor performance parameters

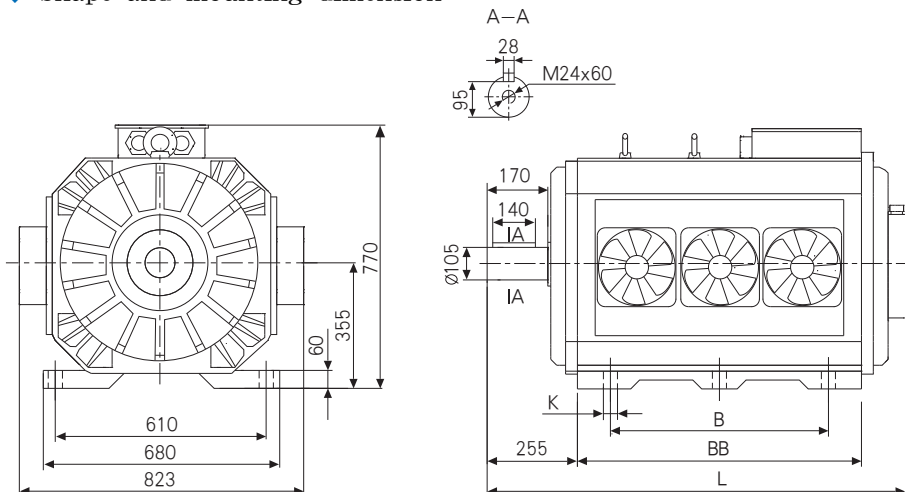
Rated voltage: 380V Connection method: Y Fan voltage: 220V Fan power: 38WX6

Motor type	Rated power (kW)	Rated current (A)	Rated torque (N·m)	pole (P)	Rated frequency (Hz)	rated speed (r/min)	Max speed (r/min)	power factor (cos $\Phi$ )	moment of inertia (kg·m <sup>2</sup> )	weight (gross weight) (kg)	B (mm)	BB (mm)	L (mm)	K (mm)
CTB-41900YRG02-L3X	1900	30	50.0	69.0	40.0	200	27.5	1786	4.21	1614	333	595	995	4- $\phi$ 28
CTB-42500YRG02-L3X	2500	30	50.0	90.8	52.0		27.5	1782	5.55	1680	333	595	995	4- $\phi$ 28
CTB-44000YRG02-L3X	4000	30	50.0	145.2	84.0		27.5	1771	7.85	2040	2-284	830	1230	6- $\phi$ 28
CTB-41900YRG05-L3X	1900	30	125.0	172.5	125.0	500	11.0	666	4.21	1614	333	595	995	4- $\phi$ 28
CTB-42500YRG05-L3X	2500	30	125.0	226.9	131.0		11.0	675	5.55	1680	333	595	995	4- $\phi$ 28
CTB-44000YRG05-L3X	4000	30	125.0	363.1	209.0		11.0	647	7.85	2040	2-284	830	1230	6- $\phi$ 28
CTB-41900YRG07-L3X	1900	30	187.5	258.7	149.2	750	7.3	408	4.21	1614	333	595	995	4- $\phi$ 28
CTB-42500YRG07-L3X	2500	30	187.5	340.4	196.0		7.3	412	5.55	1680	333	595	995	4- $\phi$ 28
CTB-44000YRG07-L3X	4000	30	187.5	544.7	314.0		7.3	371	7.85	2040	2 $\times$ 284	830	1230	6- $\phi$ 28

## ◆ Performance index

Name	Index
Encoder (optical)	RZ-1024 (Resolve)
	CE9-2500 (incremental)
	SC-2048 (Sin-Cos)
Shaft extension structure (X)	G: optical shaft J: with key
Protection class	IP55
Insulation class	F Class
Rated Temperature Rise	90 K
Vibration level	S
Noise	$\leq 70$ dB (A)
Temperature	-15 ~ 45°C
Environment humidity	$\leq 95\%$ RH

## ◆ Shape and mounting dimension



# YSM—SERIES AC SERVO MOTOR

AC induction servo motor used for slider



## ◆ Motor performance parameters

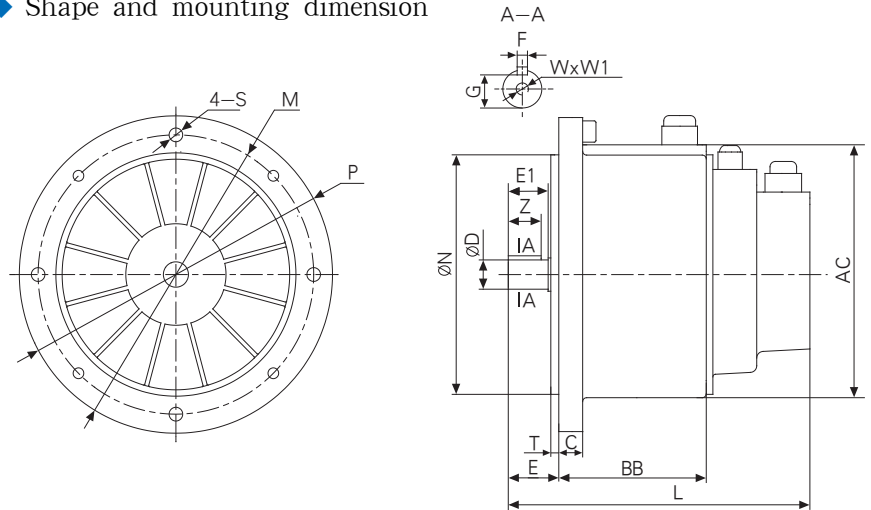
Rated voltage: 380V Connection method: Y

Motor type	Rated power (kW)	Rated current (A)	Rated torque (N·m)	pole (P)	Rated frequency (Hz)	rated speed (r/min)	Max speed (r/min)	power factor (cosΦ)	moment of inertia (kg·m <sup>2</sup> )	weight (gross weight) (kg)
CTB-40P7H15-L3XB	0.75	2.2	4.8	8	105	1500	0.72	22	0.0053	28
CTB-41P5H15-L3XB	1.5	4.0	9.6	8	103		0.72	40	0.0099	45

## ◆ Performance index

Name	Index
Encoder (optical)	RZ-1024 (Resolve)
	CE9-2500 (incremental)
	SC-2048 (Sin-Cos)
Shaft extension structure (X)	G: optical shaft
	J: with key
Protection class	IP55
Insulation class	F Class
Rated Temperature Rise	90 K
Vibration level	S
Noise	≤70dB(A)
Temperature	-15~45°C
Environment humidity	≤95%RH

## ◆ Shape and mounting dimension



Motor type	BB (mm)	C (mm)	D (mm)	E (mm)	E1 (mm)	F (mm)	G (mm)	M (mm)	L (mm)	N (mm)	P (mm)	S (mm)	T (mm)	W (mm)	W1 (mm)	Z (mm)	AC (mm)
CTB-40P7H15-L3XB	111	18	22	38	30	6	18.5	215	245	180	236	14	6	6	18	28.0	185
CTB-41P5H15-L3XB	133	24	24	50	50	7	20.0	360	267	230	300	13	4	8	18	38.5	220

## ● New type precise servo motor with high torque , big power

YSM-series servo motor adopts integrated high compact structure, good aseismic performance, especially suitable for high vibration place. With compact structure and small shape, axial dimension lower than other same power Y-series motor, our motor is superior in smaller mounting space.

This series include induction servo motor and PMSM, large power and torque range, high electrical performance index, which can meet demands in different working conditions. We can design motor speed as per the client requirements for ease of low speed direct-drive. Our motor equipped with high precision speed sensor, matching with high performance servo driver can realize speed, position, torque control with high precision.

## ● High-end industry application

General press machine, screw press machine, servo press machine, brick machinery, vibration machinery, forging and pressing device, extruder, blow molding machine, draw bench, heavy-duty machine tool.



Surpass selfhood  
keep pace with the world



OMIN SYSTEM

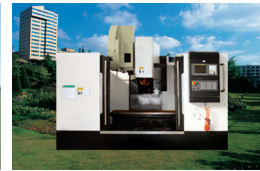


BK SERVICE



CTB MOTOR

PROVIDE THE PERFECT MECHANICAL CONTROL COMBINATION



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