

# YCT 系列电磁调速电动机

## YCT Serles Electromagnetic Adjustable Speed Motor

### □ 概述

YCT 系列电磁调速电动机是机械工业部组织设计的 Y 系列异步电动机的主要派生系列。电磁调速电动机由拖动电机（Y 系列电动机）、电磁转差离合器和控制器三部份组成，可用于恒转矩负载场合，特别适宜在递减转矩负载中使用（例如离心式水泵和风机），有较明显的节能效果。

YCT 系列电磁调速电动机能在规定的调速范围内均匀地、连续地无级调速，并能输出额定转矩，电机在运行中当负载转矩变动时可通过控制器的速度负反馈系统自动调节离合器的励磁电流，使输出转速基本上保持不变。

本系列电机有全国统一的技术条件，并且外形安装尺寸、拖动电机及其它易损件全国各生产厂均为统一，可以互换。

### □ Description

The YCT series electromagnetic adjustable speed motor is one of the derived series from Y series asynchronous motor, which is designed under the organization of the Ministry of Mechanical & Electronic Industries of the PRC. The electromagnetic adjustable speed motor is composed of three parts, i.e. The driving motor (Y series motor) electromagnetic slip coupling and controller. It is usually used under a constant torque load and is particularly suitable for the use under the load with a decreasing torque such as the centrifugal pump and blower, etc. featuring evident energy-saving efficiency.

The speed of the electromagnetic adjustable speed motor can be adjusted uniformly continuously and steplessly within the specified adjustable speed range with an output of rated torque. When the loading torque is changed during the running of the motor, the exciting current of the coupling can be regulated automatically by the speed negative feedback system of the controller so as to keep the output speed free of any variation basically.

There is a State Standard for the technical specifications of YCT series motor. Besides, the overall & installation dimensions, driving motor, other easy-wearing parts of the motor in YCT series are the same even if they are made by different domestic manufacturers, featuring high exchangeability.

### □ YTC 系列电机的特点：

1. 无失控区；
2. 调速范围广，速度调节平稳；
3. 具有速度负反馈自动调节系统，转速变化率小；
4. 起动力矩大，起动平稳；
5. 结构简单、可靠、使用维护方便；
6. 控制功率小，并能实现多种方式控制。

### □ Features of YCT series motor:

- a. Free of out-of-control zone;

- b. Wide adjustable speed range and stable speed adjustment;
- c. With speed negative feedback automatic regulation system, small speed variation ratio;
- d. Large start torque and smooth start performance;
- e. Simple construction, reliable and easy for operation and maintenance;
- f. Small control power, multi-way control.

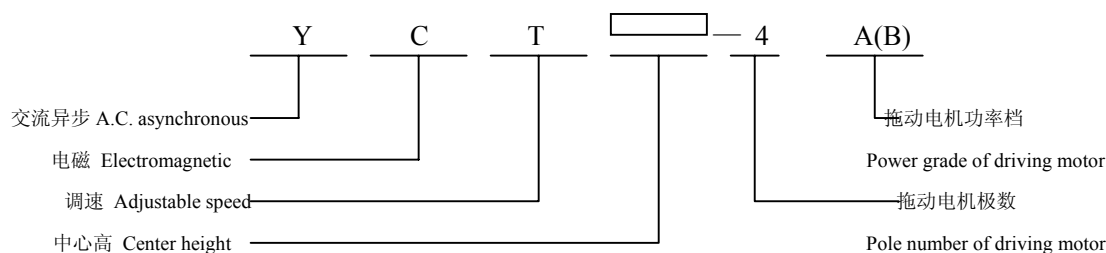
□ **应用范围:**

YCT 系列电磁调速电动机，可用于油漆流水线、装配流水线的传输带、注塑机、印染机、印刷机、水泵、鼓风机、回转炉、拉线机、卷纸机、卷板机、压延机、空调设备、输送设备等。

□ **Applications:**

The YCT series electromagnetic adjustable speed motor can be used in painting lines, transmission belts of assembly lines, plastic injecting machines, dyeing machines, printing machines, pumps, blowers rotary furnaces, wire drawing machines, calendars, airconditioning equipments, transfer equipments, etc.

□ **型号说明 Model instruction**



□ **订货须知**

- 1、用户选用于本系列电机时，应使选用电机的额定转矩大于或等于负载转矩。
- 2、订购时须说明产品型号，标准功率，调速范围，是否需要控制器，测速发电机为何种等。  
例：YCT160-4B, 3KW.1250~125r/min 单机运行，不需附控制器，中频测速发电机。  
又例：YCT250-4A,18.5KW.1320~132r/min 四台齐速运行，脉冲测速发电机。
- 3、如需要特殊型式或特殊规格的 YCT 系列电机，请先于联系，根据具体情况可以另行设计，试制。

□ **Ordering information**

- 1) It is suggested that the user should select the YCT series motor. The rated torque of which should be larger than or equal to the load torque.
- 2) All the informations about the model, nominal power. Adjustable speed range. Whether the controller required. Variety of tachogenerator. etc, must be clearly indicated in the contract.  
For example: YCT160-4B, 3KW. 1250-125r/min, single-motor running without controller, medium-frequency tachogenerator.  
Another example: YCT250-4A, 18.5KW. 1320-132r/min, 4-motor running, pulse tachogenerator.
- 3) Special types and specifications of YCT series motors can be designed and arranged in a trial production upon negotiation.

□ 主要技术数据 Main Technical Data

表 1 Table 1

型号 Model	标称 功率 Nominal power kw	额定 转矩 Rated torque Nm	调速 范围 Adjustable speed range r/min	转速变化率 Speed variation ratio %	轴承 Bearing		噪音 Noise [dB(A)] (≤)	重量 Weight Kg
					离合器 Coupling	拖动电机 Driving motor		
YCT112-4A	0.55	3.6	1250~125	≤2.5	205Z1 204Z1	180205Z1 180204Z1	75	55
YCT112-4B	0.75	4.9			205Z1 204Z1	180205Z1 180204Z1	75	60
YCT132-4A	1.1	7.1			306Z1 205Z1	180306Z1 180205Z1	75	85
YCT132-4B	1.5	9.7			306Z1 205Z1	180306Z1 180205Z1	78	90
YCT160-4A	2.2	14			307Z1 206Z1	180308Z1 180206Z1	78	120
YCT160-4B	3	19			307Z1 206Z1	180308Z1 180206Z1	82	125
YCT180-4A	4	25			307Z1 306Z1	180308Z1 180306Z1	82	162
YCT200-4A	5.5	35			309Z1 308Z1	310Z1 180308Z1	82	220
YCT200-4B	7.5	47.7			309Z1 308Z1	310Z1 180308Z1	86	230
YCT225-4A	11	69			310Z1 309Z1	311Z1 309Z1	86	465
YCT225-4B	15	94	310Z1 309Z1	311Z1 309Z1	90	475		
YCT250-4A	18.5	115	1320~132		312Z1 311Z1	312Z1 311Z1	90	490
YCT250-4B	22	137			312Z1 311Z1	312Z1 311Z1	90	510
YCT280-4A	30	189			313Z1 312Z1	313Z1 312Z1	97	750
YCT315-4A	37	232			314Z1 313Z1	315Z1 313Z1	97	800
YCT315-4B	45	282			314Z1 313Z1	315Z1 313Z1	99	800
YCT355-4A	55	344			318Z1 317Z1	318Z1 317Z1	99	1900
YCT355-4B	75	469	1320~440		318Z1 317Z1	318Z1 317Z1	103	1980
YCT355-4C	90	564			1320~600	318Z1 317Z1	318Z1 317Z1	103

□ 外形安装尺寸 Overall Installation dimensions (mm)

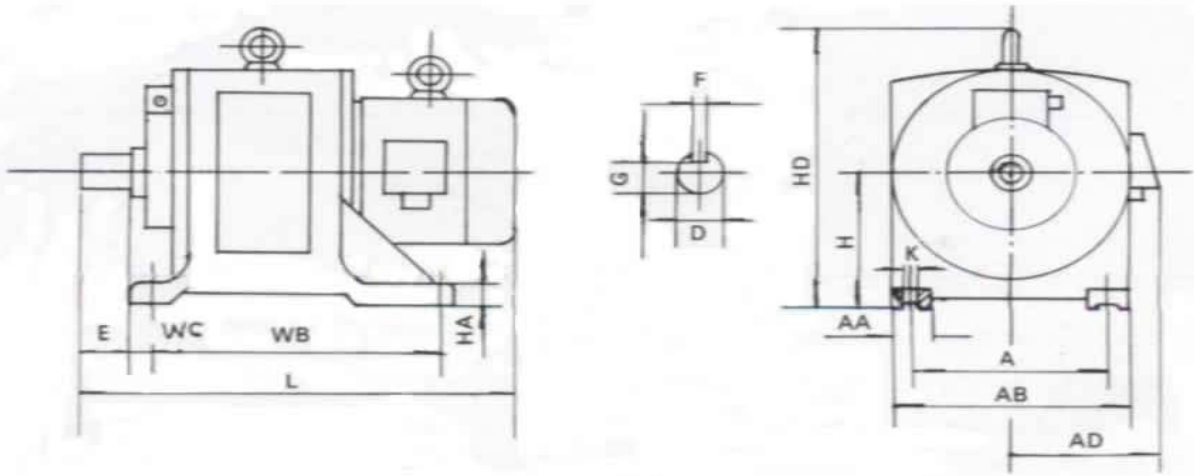


表 2 Table2

型号 Model	安装尺寸 Installation dimensions (mm)									外形尺寸 Overall dimensions (mm)					
	A	WB	WC	D	E	F	G	H	K	AB	AD	HD	HA	AA	L
YCT112- <sup>4A</sup> / <sub>4B</sub>	190	210	40	19	40	6	15.5	112	12	273	150	275	16	40	515
YCT132- <sup>4A</sup> / <sub>4B</sub>	216	241	40	24	50	8	20	132	12	305	158	330	20	55	540 565
YCT160- <sup>4A</sup> / <sub>4B</sub>	254	267	45	28	60	8	24	160	15	340	185	375	20	65	615 660
YCT180-4A	279	305	45	28	60	8	24	180	15	375	188	430	30	70	680
YCT200- <sup>4A</sup> / <sub>4B</sub>	318	356	50	38	80	10	33	200	19	420	230	485	30	80	800 840
YCT225- <sup>4A</sup> / <sub>4B</sub>	356	406	56	42	110	12	37	225	19	485	255	530	30	94	950 1000
YCT250- <sup>4A</sup> / <sub>4B</sub>	406	457	63	48	110	14	42.5	250	24	540	285	570	35	105	1130 1170
YCT280-4A	457	508	70	55	110	16	49	280	24	580	320	655	40	110	1260
YCT315- <sup>4A</sup> / <sub>4B</sub>	508	560	89	60	140	18	53	315	28	630	350	720	45	130	1400 1425
YCT355-4A	610	630	108	65	140	18	58	355	28	780	410	765	55	130	1660
YCT355-4B	610	630	108	75	140	20	67.5	355	28	780	410	765	55	130	1660
YCT355-4C	610	630	108	75	140	20	67.5	355	28	780	410	765	55	130	1660