Y series (H355-630) medium-sized high-voltage three-phase asynchronous motor

The power levels, electrical performance, installation dimensions, and tolerances of the Y, YKS, and YKK series medium-sized high-voltage three-phase induction motors (frame sizes 355-630) comply with the national standard GB755 "Rotating Electrical Machines - Rating and Performance", the International Electrotechnical Commission standard IEC34-1 "Rotating Electrical Machines - Rating and Performance", and the mechanical industry standards JB/T7593, JB/T10315.1, and JB/T10315.2

The enclosure protection levels of this series of motors are classified into four types: IP23, IPW24, IP44, and IP54, according to the standards of GB4942.1 and IEC34-5 (Degree of Protection Provided by Enclosures for Rotating Electrical Machines). IP23 motors can be customized to IP44 (duct ventilation) according to user requirements. If users require other protection levels, additional supply can be arranged

The cooling methods for this series of motors include IC01, IC611, and IC81W, according to the standards of GB/T1993 and IEC34-6 (Cooling Methods for Rotating Electrical Machines). If users require other cooling methods, they can be provided separately

The structure and installation type of this series of motors are IMB3 (horizontal with feet), which complies with GB997 and IEC34-7 "Code for Construction and Installation Types of Electric Machines"

I. Organization Description

The motor frame is made of welded steel plates and adopts an integral square box structure, featuring light weight and strong rigidity

The stator adopts an external press-fit structure, with the stator winding utilizing Class F insulation. The ends are securely bound, and the entire stator undergoes a vacuum pressure impregnation process using solvent-free paint, (∨ *P*|) making it a sturdy whole with excellent electrical and moisture-resistant properties.

The rotor can be made of cast aluminum or copper bars. The cast aluminum rotor is made of pure aluminum through pouring, while the copper bar rotor is formed by wedging copper bars into the slot, with the copper bars and end rings being reliably welded together

The motor bearing can be either a rolling bearing or a sliding bearing, with the bearing protection level designed according to IP54. If it is a rolling bearing, it is lubricated with grease and equipped with oil filling and draining devices, allowing for oil filling without stopping the motor. If it is a sliding bearing, the oil supply system is generally provided by the user, and the motor efficiency may be slightly lower than the values in the technical data sheet according to relevant standards. The main outlet box is designed according to German DIN standards, with a protection level of IP54, and is generally installed on the right side of the motor (when viewed from the shaft end). According to user requirements, it can also be installed on the left side, and the outlet hole of the box can be switched to face up, down, left, or right. The main outlet box has a separate grounding device inside

Motors are generally designed with a single shaft extension, and the shaft extension key is a flat key. However, they can also be customized to have a dual shaft extension if required by the user

If required by the user, temperature measurement components for stator windings and bearings, as well as moisture-proof space heaters for shutdown purposes, can be installed

II. Model Description

The motor model is composed of two parts in sequence: the product code and the specification code, as stipulated in GB4831. The product code is represented by the motor series code, with the following meanings

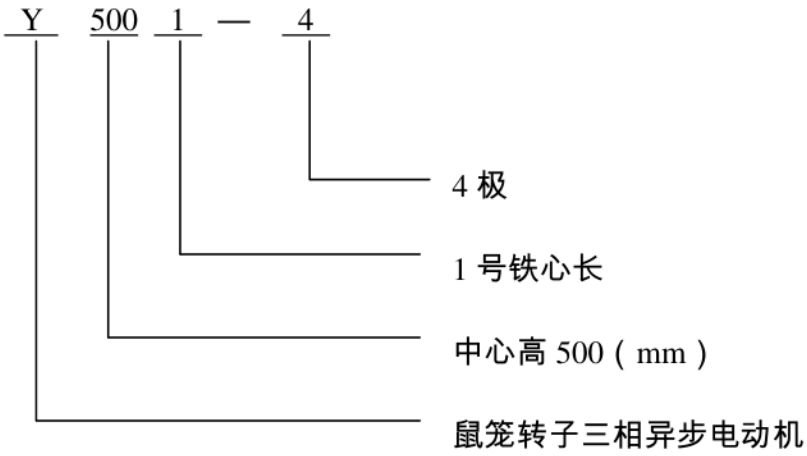
Y squirrel-cage rotor three-phase asynchronous motor

YKS enclosed squirrel-cage rotor three-phase asynchronous motor with air-water cooler

YKK enclosed squirrel-cage rotor three-phase asynchronous motor with air-to-air cooler

The specification code consists of the center height, core length sequence number, and number of poles

Example



III. Structure description

Y is the basic series, with a protection level of IP23 and a cooling method of IC01. By removing the protective cover on the top of its frame and installing different protective covers (or coolers), various motors with different protection levels and cooling methods can be derived, such as the YKS (air-water cooling) and YKK (air-air cooling) series motors

The motor adopts the internationally popular box-type structure, with the frame and end covers welded from steel plates, providing good rigidity and light weight. After removing the protective cover (or cooler), the interior of the motor can be observed and accessed, facilitating the installation and maintenance of the motor

The stator adopts an external press-fit structure. The stator winding utilizes Class F insulation materials and anti-corona materials, and the winding ends are fixed using a special binding process, ensuring firmness and reliability. The entire stator is treated with vacuum pressure impregnation (VPI) Class F solvent-free varnish. As a result, the motor exhibits excellent and reliable insulation performance, as well as moisture resistance and impact resistance

The squirrel cage rotors for this series of motors are available in two types: cast aluminum and copper bar. The cast aluminum rotor is made of pure aluminum through casting, eliminating the risk of rotor bar breakage and ensuring reliable use. When the motor rotor is a copper cage rotor, the rotor bars and end rings are welded using medium frequency welding, and the rotor copper bars undergo a slot fastening process, thus providing high reliability

Bearings come in two types: rolling bearings and sliding bearings, depending on the motor power and speed. The basic type of bearing has a protection level of IP54. If the motor has a higher protection level, the protection level of the bearing will also be increased accordingly

Motors with rolling bearing structures are equipped with devices for refueling and draining oil without stopping the machine

The main outlet box is of a sealed structure with a protection level of IP54. It is generally installed on the right side of the motor (when viewed from the shaft end), but can also be installed on the left side according to user needs. The inlet hole of the outlet box can be rotated to face up, down, left, or right. There is a separate grounding terminal inside the box

Y(IP23) Series motor model spectrum (6kV)

Y(IP23) series motor model composition(6kV)

机座号 Frame		同步转速 r/min					
		3000	1500	1000	750	600	500
		功率 kW					
355	1	220	—	—	—	—	—
	2	250					
	3	280	220				
	4	315	250				
	5	355	280	220			
	6	400	315	250			
400	1	450	355	—			
	2	500	400	280			
	3	560	450	315	220		
	4	630	500	355	250		
	5	—	560	400	280		
450	1	710	630	450	315	220	
	2	800	710	500	355	250	
	3	900	800	560	400	280	
	4	1000	900	630	450	315	220
	5	—	—	—	—	355	250
500	1	1120	1000	710	500	400	280
	2	1250	1120	800	560	450	315
	3	1400	1250	900	630	500	355
	4	1600	1400	1000	710	560	400
	5	—	—	—	—	630	450
560	1	1800	1600	1120	800	710	500
	2	2000	1800	1250	900	800	560
	3	2240	2000	1400	1000	900	630
630	1	2500	2240	1600	1120	1000	710
	2	2800	2500	1800	1250	1120	800
	3	3150	2800	2000	1400	1250	900
	4	—	—	—	1600	1400	1000

Y(IP23) series motor model composition (10kV)

机座号		同步转速 r/min					
		3000	1500	1000	750	600	500
		功率 kW					
450	1	355	355	—	—	—	—
	2	400	400				
	3	450	450	315			
	4	500	500	355			
	5	560	560	400			
	6	630	630	450			
500	1	710	710	500	315		
	2	800	800	560	355		
	3	900	900	630	400	280	
	4	1000	1000	710	450	315	
	5	1120	1120	800	500	355	
	6	—	—	—	560	400	
560	1	1250	1250	900	630	450	315
	2	1400	1400	1000	710	500	355
	3	1600	1600	1120	800	560	400
	4	—	—	1250	900	630	450
	5	—	—	—	—	710	500
630	1	1800	1800	1400	1000	800	560
	2	2000	2000	1600	1120	900	630
	3	2240	2240	1800	1250	1000	710
	4	—	—	—	—	1120	800

Technical data for Y(IP23) series (6□ □)

Y(IP23) series technical data(6kV)

型 号 (Type)	额定功率 (kW)	定子电流 (A)	转速 (r/min)	效率 (%)	功率因数 Cos Φ	最大转矩/额定转矩 Tm/Tn	堵转转矩/额定转矩 Tst/Tn	堵转电流/额定电流 Ist/In	转动惯量		重 量 (kg)	
									电 机 J m (kg.m^2)	负载 J (kg.m^2)	Y	YKS
Y3551-2	220	26.5	2990	92.8	0.86	1.8	0.6	7	2.2	16	1850	2100
Y3552-2	250	30.1	2990	92.9	0.86	1.8	0.6	7	2.4	18	1870	2120
Y3553-2	280	33.7	2990	93.1	0.86	1.8	0.6	7	2.6	20	1890	2140
Y3554-2	315	37.7	2990	93.4	0.86	1.8	0.6	7	2.8	22	1920	2170
Y3555-2	355	42.4	2990	93.7	0.86	1.8	0.6	7	3.0	24	1980	2230
Y3556-2	400	47.6	2990	94.1	0.86	1.8	0.6	7	3.2	27	2030	2280
Y4001-2	450	53.3	2990	94.4	0.86	1.8	0.6	7	4.8	30	2340	2620
Y4002-2	500	58.5	2990	94.6	0.87	1.8	0.6	7	5.2	33	2420	2700
Y4003-2	560	64.5	2990	94.7	0.87	1.8	0.6	7	5.6	36	2510	2790
Y4004-2	630	73.4	2990	94.9	0.87	1.8	0.6	7	6.0	39	2640	2920
Y4501-2	710	82.7	2990	95.0	0.87	1.8	0.6	7	7.4	43	3410	4060
Y4502-2	800	92.9	2990	95.2	0.87	1.8	0.6	7	7.8	51	3460	4110
Y4503-2	900	104.5	2990	95.3	0.87	1.8	0.6	7	8.2	55	3510	4160
Y4504-2	1000	114.6	2990	95.4	0.88	1.8	0.6	7	8.6	57	3590	4240
Y5001-2	1120	128.2	2990	95.5	0.88	1.8	0.6	7	10.2	58	4590	5290
Y5002-2	1250	143.0	2990	95.6	0.88	1.8	0.6	7	10.8	67	4650	5350
Y5003-2	1400	160.0	2990	95.7	0.88	1.8	0.6	7	11.2	73	4730	5430
Y5004-2	1600	182.6	2990	95.8	0.88	1.8	0.6	7	11.8	80	4820	5520
Y5601-2	1800	205.2	2990	95.9	0.88	1.8	0.6	7	20.0	100.0	7900	8650
Y5602-2	2000	227.8	2990	96.0	0.88	1.8	0.6	7	23.0	102.0	8150	8900
Y5603-2	2240	254.9	2990	96.1	0.88	1.8	0.6	7	26.0	104.0	8400	9150
Y6301-2	2500	281.0	2990	96.2	0.89	1.8	0.6	7	35.0	110.0	9150	9950
Y6302-2	2800	314.4	2990	96.3	0.89	1.8	0.6	7	40.0	115.0	9550	10350
Y6303-2	3150	353.7	2990	96.3	0.89	1.8	0.6	7	45.0	120.0	9950	10750
Y3553-4	220	26.7	1490	93.3	0.85	1.8	0.8	6.5	3.0	78	1720	2080
Y3554-4	250	30.3	1490	93.4	0.85	1.8	0.8	6.5	4.0	88	1760	2120
Y3555-4	280	33.5	1490	93.5	0.86	1.8	0.8	6.5	4.0	97	1800	2160
Y3556-4	315	37.7	1490	93.6	0.86	1.8	0.8	6.5	4.0	108	1860	2220
Y4001-4	355	42.3	1490	93.8	0.86	1.8	0.8	6.5	6.0	120	2280	2740
Y4002-4	400	47.6	1490	94.0	0.86	1.8	0.8	6.5	6.0	133	2350	2810
Y4003-4	450	53.5	1490	94.2	0.86	1.8	0.8	6.5	7.0	147	2430	2890
Y4004-4	500	58.6	1490	94.3	0.87	1.8	0.8	6.5	7.0	161	2520	2980
Y4005-4	560	65.5	1490	94.5	0.87	1.8	0.8	6.5	8.0	178	2610	3070
Y4501-4	630	73.5	1490	94.8	0.87	1.8	0.8	6.5	11	197	3170	3700
Y4502-4	710	82.7	1490	95.0	0.87	1.8	0.8	6.5	12	218	3250	3780
Y4503-4	800	93.0	1490	95.1	0.87	1.8	0.8	6.5	13	241	3370	3900
Y4504-4	900	104.6	1490	95.2	0.87	1.8	0.8	6.5	14	266	3590	4120
Y5001-4	1000	116.1	1490	95.3	0.87	1.8	0.7	6.5	24	290	4150	4790
Y5002-4	1120	128.4	1490	95.4	0.88	1.8	0.7	6.5	26	318	4300	4940
Y5003-4	1250	143.1	1490	95.5	0.88	1.8	0.7	6.5	30	347	4600	5240
Y5004-4	1400	160.1	1490	95.6	0.88	1.8	0.7	6.5	32	380	4770	5410

□ (□ □ 23) Series Technical Data (6□ □) Y(IP23) Series Technical Data (6kV)

型 号 (Type)	额定功率 (kW)	定子电流 (A)	转速 (r/min)	效率 (%)	功率因数 Cos Φ	最大转矩 / 额定转矩 Tm / Tn	堵转转矩 / 额定转矩 Tst / Tn	堵转电流 / 额定电流 Ist / In	转动惯量		重 量 (kg)	
									电 机 J m (kg.m^2)	负载 J (kg.m^2)	Y	YKS
Y5601-4	1600	180.8	1490	95.7	0.89	1.8	0.6	6.5	57	420	6350	6990
Y5602-4	1800	203.2	1490	95.8	0.89	1.8	0.6	6.5	60	460	6580	7220
Y5603-4	2000	225.5	1490	95.9	0.89	1.8	0.6	6.5	66	498	6750	7390
Y6301-4	2240	252.3	1490	96.0	0.89	1.8	0.6	6.5	102	540	8760	9270
Y6302-4	2500	281.3	1490	96.1	0.89	1.8	0.6	6.5	112	584	9170	9680
Y6303-4	2800	314.7	1490	96.2	0.89	1.8	0.6	6.5	119	631	9390	9900
Y3555-6	220	27.8	990	93.0	0.82	1.8	0.8	6	6.0	210	1850	2210
Y3556-6	250	31.4	990	93.3	0.82	1.8	0.8	6	7.0	236	1910	2280
Y4002-6	280	34.7	990	93.5	0.83	1.8	0.8	6	10	262	2300	2750
Y4003-6	315	39.0	990	93.7	0.83	1.8	0.8	6	11	291	2360	2820
Y4004-6	355	43.8	990	93.9	0.83	1.8	0.8	6	11	324	2440	2900
Y4005-6	400	49.3	990	94.0	0.83	1.8	0.8	6	12	361	2530	2980
Y4501-6	450	54.7	990	94.1	0.84	1.8	0.8	6	15	401	3130	3660
Y4502-6	500	59.9	990	94.5	0.85	1.8	0.8	6	16	440	3210	3740
Y4503-6	560	66.9	990	94.7	0.85	1.8	0.8	6	17	487	3310	3840
Y4504-6	630	75.2	990	94.8	0.85	1.8	0.8	6	20	540	3540	4070
Y5001-6	710	84.6	990	95.0	0.85	1.8	0.7	6	32	599	4070	4710
Y5002-6	800	95.2	990	95.1	0.85	1.8	0.7	6	34	665	4210	4850
Y5003-6	900	107.0	990	95.2	0.85	1.8	0.7	6	40	736	4500	5140
Y5004-6	1000	118.8	990	95.3	0.85	1.8	0.7	6	47	805	4630	5270
Y5601-6	1120	131.4	990	95.4	0.86	1.8	0.7	6.5	70	886	6100	6740
Y5602-6	1250	146.5	990	95.5	0.86	1.8	0.7	6.5	75	972	6400	7030
Y5603-6	1400	163.9	990	95.6	0.86	1.8	0.7	6.5	82	1068	6530	7170
Y6301-6	1600	187.1	990	95.7	0.86	1.8	0.7	6.5	147	1192	8490	9000
Y6302-6	1800	210.2	990	95.8	0.86	1.8	0.7	6.5	162	1312	8930	9440
Y6303-6	2000	233.4	990	95.9	0.86	1.8	0.7	6.5	173	1428	9140	9650
Y4003-8	220	29.2	740	92.9	0.78	1.8	0.8	5.5	11	424	2430	2880
Y4004-8	250	32.7	740	93.0	0.79	1.8	0.8	5.5	12	477	2500	2950
Y4005-8	280	36.6	740	93.2	0.79	1.8	0.8	5.5	13	529	2590	3050
Y4501-8	315	40.6	740	93.4	0.80	1.8	0.8	5.5	16	588	3200	3730
Y4502-8	355	45.7	740	93.5	0.80	1.8	0.8	5.5	17	656	3280	3810
Y4503-8	400	51.3	740	93.7	0.80	1.8	0.8	5.5	18	731	3400	3940
Y4504-8	450	57.0	740	93.8	0.81	1.8	0.8	5.5	19	813	3510	4050
Y5001-8	500	63.0	740	94.3	0.81	1.8	0.8	5.5	30	894	3930	4560
Y5002-8	560	69.6	740	94.4	0.82	1.8	0.8	5.5	34	989	4170	4800
Y5003-8	630	78.2	740	94.5	0.82	1.8	0.8	5.5	38	1099	4340	4980
Y5004-8	710	88.1	740	94.6	0.82	1.8	0.8	5.5	42	1222	4600	5240
Y5601-8	800	96.8	740	94.7	0.84	1.8	0.7	6	87	1357	5910	6550
Y5602-8	900	108.8	740	94.8	0.84	1.8	0.7	6	92	1505	6100	6740
Y5603-8	1000	120.7	740	94.9	0.84	1.8	0.7	6	102	1650	6390	7030

(IP23) Series Technical Data (6kV)

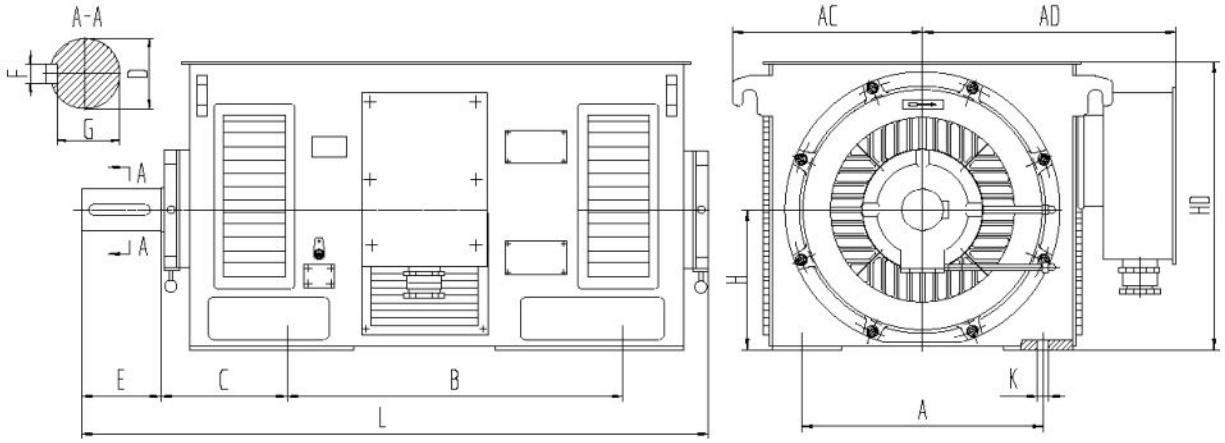
Y(IP23) series technical data(6kV)

型 号 Type	额定功率 (kW)	定子电流 (A)	转速 (r/min)	效率 (%)	功率因数 Cos Φ	最大转矩 / 额定转矩 Tm/Tn	堵转转矩 / 额定转矩 Tst/Tn	堵转电流 / 额定电流 Ist/In	转动惯量		重 量 (Kg)	
									电 机 J m ($kg.m^2$)	负载 J ($kg.m^2$)	Y	YKS
Y6301-8	1120	135.1	740	95.0	0.84	1.8	0.7	6	137	1820	8230	8740
Y6302-8	1250	150.6	740	95.1	0.84	1.8	0.7	6	151	2001	8490	9000
Y6303-8	1400	168.5	740	95.2	0.84	1.8	0.7	6	160	2204	8820	9330
Y6304-8	1600	192.3	740	95.3	0.84	1.8	0.7	6	168	2468	9020	9530
Y4501-10	220	29.9	590	92.1	0.77	1.8	0.8	5.5	19	729	3020	3550
Y4502-10	250	33.4	590	92.3	0.78	1.8	0.8	5.5	20	820	3100	3630
Y4503-10	280	37.3	590	92.5	0.78	1.8	0.8	5.5	22	910	3190	3720
Y4504-10	315	41.4	590	92.6	0.79	1.8	0.8	5.5	24	1014	3290	3830
Y4505-10	355	46.6	590	92.8	0.79	1.8	0.8	5.5	25	1131	3390	3920
Y5001-10	400	51.6	590	93.3	0.80	1.8	0.8	5.5	36	1261	3880	4510
Y5002-10	450	58.0	590	93.4	0.80	1.8	0.8	5.5	38	1404	3980	4620
Y5003-10	500	64.3	590	93.6	0.80	1.8	0.8	5.5	42	1544	4120	4760
Y5004-10	560	71.9	590	93.7	0.80	1.8	0.8	5.5	45	1711	4260	4890
Y5005-10	630	80.8	590	93.8	0.80	1.8	0.8	5.5	52	1902	4580	5220
Y5601-10	710	88.6	590	94.0	0.82	1.8	0.7	6	79	2116	5840	6580
Y5602-10	800	99.7	590	94.2	0.82	1.8	0.7	6	88	2355	6010	6750
Y5603-10	900	112.0	590	94.3	0.82	1.8	0.7	6	93	2615	6170	7810
Y6301-10	1000	124.3	590	94.4	0.82	1.8	0.7	6	140	2870	7830	8340
Y6302-10	1120	138.9	590	94.6	0.82	1.8	0.7	6	152	3170	8120	8630
Y6303-10	1250	154.7	590	94.8	0.82	1.8	0.7	6	167	3489	8430	8940
Y6304-10	1400	173.1	590	94.9	0.82	1.8	0.7	6	175	3850	8630	9140
Y4504-12	220	31.7	490	91.4	0.73	1.8	0.8	5.5	24	1135	3280	3910
Y4505-12	250	35.9	490	91.7	0.73	1.8	0.8	5.5	26	1277	3390	3920
Y5001-12	280	39.3	490	92.7	0.74	1.8	0.8	5.5	40	1418	3900	4540
Y5002-12	315	43.6	490	92.8	0.75	1.8	0.8	5.5	42	1580	3990	4630
Y5003-12	355	49.0	490	93.0	0.75	1.8	0.8	5.5	43	1764	4030	4660
Y5004-12	400	55.0	490	93.3	0.75	1.8	0.8	5.5	47	1967	4180	4820
Y5005-12	450	61.8	490	93.4	0.75	1.8	0.8	5.5	50	2191	4340	4980
Y5601-12	500	65.0	490	93.7	0.79	1.8	0.7	6	103	2411	5660	6330
Y5632-12	560	72.7	490	93.8	0.79	1.8	0.7	6	114	2673	5850	6490
Y5603-12	630	81.7	490	93.9	0.79	1.8	0.7	6	127	2974	6050	6690
Y6301-12	710	92.0	490	94.0	0.79	1.8	0.7	6	191	3312	7620	8130
Y6302-12	800	103.4	490	94.2	0.79	1.8	0.7	6	208	3688	7910	8420
Y6303-12	900	116.3	490	94.3	0.79	1.8	0.7	6	227	4098	8220	8730
Y6304-12	1000	129.0	490	94.4	0.79	1.8	0.7	6	239	4502	8410	9920

Note：These property data shown in table which in correspondence with these guaranteed values are shown in the additive table.

Outline and installation dimensions of Y series (IP23) medium-sized motors (6kV) (mm)

Y series (IP23) medium type asynchronous motor overall and mounting dimensions figure



机座号	极数	安装尺寸及公差 mm																外形尺寸 mm			
		A		B		C[a]		D		E		F		G		H		K					
		基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	AC	AD	HD	L
355	2	630	± 1.4	900	± 1.4	315	± 4.0	80	+0.030 +0.011	170	± 0.50	22	0 −0.052	71	0 −0.2	355	0 −1.0	28	+ 0.52 0	505	760	750	1640
	4、6							100	+0.035 +0.013	210	± 0.57	28		90									1680
400	2	710	± 1.75	1000	± 1.75	375		90		170	± 0.50	25		81		400		35	+ 0.62 0	555	810	850	1850
	4~8					335		110		210	± 0.50	28		100									1860
450	2	800		1120		400		100		210		28		90		450				595	850	950	2090
	4					355		120				32	0 −0.062	109									2120
	6~12							130	+0.040 +0.015	250		32		119									
500	2	900	± 2.1	1250	± 2.1	560		110	+0.035 +0.013	210	± 0.50	28	0 −0.052	100		500		42		670	910	1050	2320
	4					475		130	+0.040 +0.015	250		32	0 −0.062	119									2280
	6~12							140				36		128	0 −0.3								
560	2	1000		1400		560		130		250		32		119	0 −0.2	560				800	1200	1200	2750
	4					500		150				36		138	0 −0.3								2600
	6~12							160		300	± 0.65	40		147									
630	2	1120		1600		560		140		250	± 0.57	36		128		630		48		860	1250	1350	2900
	4					530		170		300	± 0.65	40		157									2750
	6~12							180				45		165									

a 当采用滑动轴承时，极限偏差不包括轴向串动量。

Y series technical data（10□ □）

Y series technical data （10kV）

型 号 (Type)	额定功率（kW）	定子电流（A）	转速（r/min）	效率（%）	功率因数 Cos Φ	最大转矩/额定转矩 Tm/Tn	堵转转矩/额定转矩 Tst/Tn	堵转电流/额定电流 Ist/In	转动惯量		重 量 (kg)	
									电 机 J m（kg.m^2）	负载 J（kg.m^2）	Y	YKS
Y4501-2	355	25.1	2990	93.8	0.87	1.8	0.6	7	6.5	34.5	3000	3480
Y4502-2	400	28.2	2990	94.1	0.87	1.8	0.6	7	7.5	35.1	3130	3610
Y4503-2	450	31.7	2990	94.3	0.87	1.8	0.6	7	8.4	37.2	3260	3740
Y4504-2	500	35.2	2990	94.4	0.87	1.8	0.6	7	9.0	41.2	3390	3870
Y4505-2	560	39.3	2990	94.5	0.87	1.8	0.6	7	9.7	45.2	3520	4000
Y4506-2	630	44.2	2990	94.6	0.87	1.8	0.6	7	10.3	50.1	3650	4130
Y5001-2	710	49.2	2990	94.7	0.88	1.8	0.6	7	13.7	68.8	4250	4830
Y5002-2	800	55.4	2990	94.8	0.88	1.8	0.6	7	14.7	75.5	4370	4950
Y5003-2	900	62.2	2990	94.9	0.88	1.8	0.6	7	16.7	78.4	4530	5110
Y5004-2	1000	69.1	2990	95.0	0.88	1.8	0.6	7	17.7	90.0	4680	5260
Y5005-2	1120	77.2	2990	95.2	0.88	1.8	0.6	7	18.7	97.0	4830	5410
Y5601-2	1250	85.0	2990	95.4	0.89	1.8	0.6	7	30.8	98.0	7850	8450
Y5602-2	1400	95.1	2990	95.5	0.89	1.8	0.6	7	34.7	99.0	8100	8700
Y5603-2	1600	108.6	2990	95.6	0.89	1.8	0.6	7	38.8	100.0	8350	8950
Y6301-2	1800	120.7	2990	95.7	0.90	1.8	0.6	7	39.0	108.0	9350	9950
Y6302-2	2000	133.9	2990	95.8	0.90	1.8	0.6	7	44.0	110.0	9750	10350
Y6303-2	2240	149.7	2990	96.0	0.90	1.8	0.6	7	51.0	114.0	10150	10750
Y4501-4	355	25.5	1490	93.3	0.86	1.8	0.7	7	12	119	2685	3165
Y4502-4	400	28.7	1490	93.5	0.86	1.8	0.7	7	12.9	132	2765	3245
Y4503-4	450	32.2	1490	93.9	0.86	1.8	0.7	7	12.9	147	2845	3325
Y4504-4	500	35.7	1490	94.0	0.86	1.8	0.7	7	13.8	161	2925	3405
Y4505-4	560	39.9	1490	94.2	0.86	1.8	0.7	7	13.8	178	3005	3485
Y4506-4	630	44.8	1490	94.4	0.86	1.8	0.7	7	14.7	196	3085	3565
Y5001-4	710	49.6	1490	95.0	0.87	1.8	0.7	7	22	217	3950	4530
Y5002-4	800	55.8	1490	95.1	0.87	1.8	0.7	7	23	240	4100	4680
Y5003-4	900	62.2	1490	95.2	0.88	1.8	0.7	7	25	265	4250	4830
Y5004-4	1000	68.8	1490	95.3	0.88	1.8	0.7	7	27	289	4400	4980
Y5005-4	1120	77.0	1490	95.4	0.88	1.8	0.7	7	29	317	4550	5130
Y5601-4	1250	84.9	1490	95.5	0.89	1.8	0.7	7	40	347	8270	9070
Y5602-4	1400	94.9	1490	95.7	0.89	1.8	0.7	7	43	379	8490	9290
Y5603-4	1600	108.3	1490	95.8	0.89	1.8	0.7	7	46	421	8710	9510
Y6301-4	1800	121.8	1490	95.9	0.89	1.8	0.6	7	86	460	8580	9165
Y6302-4	2000	135.2	1490	96.0	0.89	1.8	0.6	7	91	498	8930	9515
Y6303-4	2240	151.2	1490	96.1	0.89	1.8	0.6	7	96	540	9280	9865
Y4503-6	315	23.9	990	92.8	0.82	1.8	0.7	6	14.7	291	2960	3440
Y4504-6	355	26.5	990	93.1	0.83	1.8	0.7	6	15.7	324	3040	3520
Y4505-6	400	29.8	990	93.3	0.83	1.8	0.7	6	17.1	361	3120	3600
Y4506-6	450	33.5	990	93.5	0.83	1.8	0.7	6	18.2	400	3200	3680
Y5001-6	500	37.0	990	93.9	0.83	1.8	0.7	6	23	440	3930	4510
Y5002-6	560	40.9	990	94.1	0.84	1.8	0.7	6	25	486	4070	4650
Y5003-6	630	45.9	990	94.4	0.84	1.8	0.7	6	27	539	4230	4810
Y5004-6	710	51.6	990	94.6	0.84	1.8	0.7	6	29	599	4420	5000
Y5005-6	800	58.1	990	94.7	0.84	1.8	0.7	6	31	664	4610	5190

Technical data of Y series (10kV)

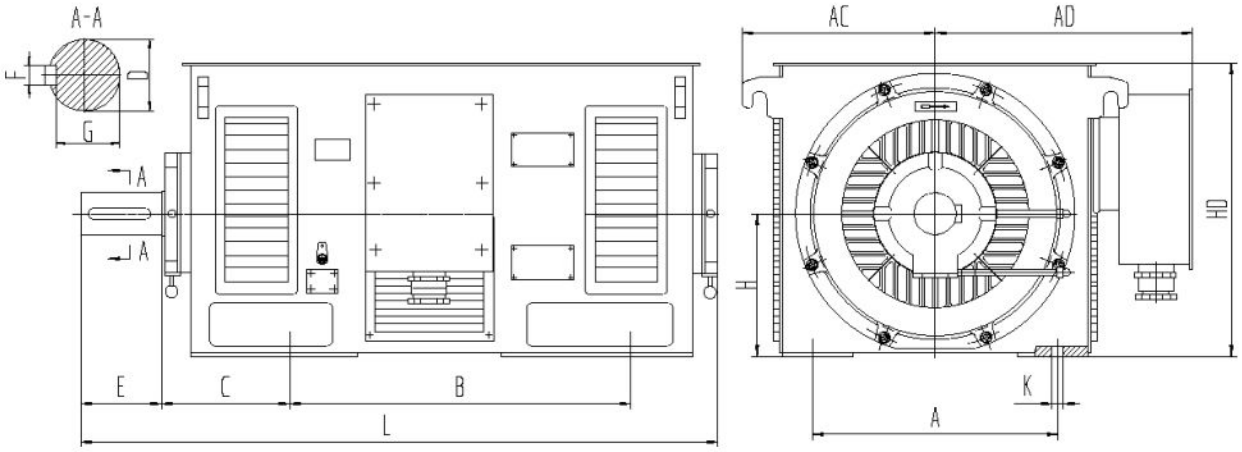
Y series technical data （10kV）

型 号 (Type)	额定功率 （kW）	定子电流 （A）	转速 （r/min）	效率 （%）	功率因数 Cos Φ	最大转矩 / 额定转矩 Tm / Tn	堵转转矩 / 额定转矩 Tst / Tn	堵转电流 / 额定电流 Ist / In	转动惯量		重 量 (kg)	
									电 机 J m （kg.m^2）	负载 J （kg.m^2）	Y	YKS
Y5601-6	900	64.4	990	94.9	0.85	1.8	0.7	6	49	735	5150	5950
Y5602-6	1000	71.4	990	95.1	0.85	1.8	0.7	6	53	805	5320	6120
Y5603-6	1120	79.8	990	95.3	0.85	1.8	0.7	6	56	886	5490	6290
Y5604-6	1250	88.0	990	95.4	0.86	1.8	0.7	6	60	972	5660	6460
Y6301-6	1400	98.2	990	95.7	0.86	1.8	0.6	6	114	1068	7825	8410
Y6302-6	1600	112.1	990	95.8	0.86	1.8	0.6	6	121	1192	8055	8640
Y6303-6	1800	126.0	990	95.9	0.86	1.8	0.6	6	128	1312	8285	8870
Y5001-8	315	25.5	740	92.8	0.77	1.8	0.7	6	22	588	3500	4010
Y5002-8	355	28.6	740	93.1	0.77	1.8	0.7	6	24	656	3550	4060
Y5003-8	400	31.8	740	93.2	0.78	1.8	0.7	6	26	730	3670	4180
Y5004-8	450	35.7	740	93.4	0.78	1.8	0.7	6	28	812	3820	4330
Y5005-8	500	39.0	740	93.8	0.79	1.8	0.7	6	30	893	3960	4470
Y5006-8	560	43.6	740	93.9	0.79	1.8	0.7	6	32	989	4100	4610
Y5601-8	630	47.0	740	94.4	0.82	1.8	0.7	6	56	1098	5140	5940
Y5602-8	710	52.8	740	94.6	0.82	1.8	0.7	6	60	1221	5310	6110
Y5603-8	800	59.5	740	94.7	0.82	1.8	0.7	6	63	1357	5480	6280
Y5604-8	900	66.8	740	94.8	0.82	1.8	0.7	6	67	1505	5650	6450
Y6301-8	1000	73.2	740	95.0	0.83	1.8	0.7	6	141	1650	8115	8700
Y6302-8	1120	81.8	740	95.2	0.83	1.8	0.7	6	149	1820	8235	8820
Y6303-8	1250	91.2	740	95.3	0.83	1.8	0.7	6	157	2001	8355	8940
Y5003-10	280	23.6	590	92.4	0.74	1.8	0.7	5.5	28	910	4100	4610
Y5004-10	315	26.5	590	92.6	0.74	1.8	0.7	5.5	30	1014	4160	4670
Y5005-10	355	29.4	590	92.8	0.75	1.8	0.7	5.5	32	1131	4230	4740
Y5006-10	400	33.1	590	93.0	0.75	1.8	0.7	5.5	34	1261	4380	4890
Y5601-10	450	36.2	590	93.2	0.77	1.8	0.7	6	75	1403	5050	5850
Y5602-10	500	40.1	590	93.4	0.77	1.8	0.7	6	80	1544	5310	6110
Y5603-10	560	44.3	590	93.5	0.78	1.8	0.7	6	84	1710	5460	6260
Y5604-10	630	49.8	590	93.7	0.78	1.8	0.7	6	89	1902	5600	6400
Y5605-10	710	56.0	590	93.9	0.78	1.8	0.7	6	94	2117	5750	6550
Y6301-10	800	61.2	590	94.3	0.80	1.8	0.7	6	144	2355	7935	8520
Y6302-10	900	68.7	590	94.5	0.80	1.8	0.7	6	153	2614	8165	8750
Y6303-10	1000	76.3	590	94.6	0.80	1.8	0.7	6	161	2870	8365	8950
Y6304-10	1120	85.4	590	94.7	0.80	1.8	0.7	6	169	3170	8565	9150
Y5601-12	315	27.0	490	92.3	0.73	1.8	0.7	6	73	1580	5050	5820
Y5602-12	355	30.4	490	92.5	0.73	1.8	0.7	6	77	1763	5170	5970
Y5603-12	400	34.1	490	92.7	0.73	1.8	0.7	6	82	1967	5310	6110
Y5604-12	450	38.3	490	92.9	0.73	1.8	0.7	6	87	2190	5450	6250
Y5605-12	500	42.4	490	93.2	0.73	1.8	0.7	6	92	2411	5590	6390
Y6301-12	560	46.7	490	93.5	0.74	1.8	0.7	6	119	2672	8120	8705
Y6302-12	630	52.5	490	93.7	0.74	1.8	0.7	6	136	2974	8320	8905
Y6303-12	710	59.0	490	93.9	0.74	1.8	0.7	6	152	3313	8520	9105
Y6304-12	800	66.2	490	94.3	0.74	1.8	0.7	6	160	3688	8720	9305

Note：These property data shown in table which in correspondence with these guaranteed values are shown in the additive table.

Outline and installation dimensions of Y series medium-sized motors (10kV) (mm)

Y series medium sized motor overall and mounting dimension figure



机座号	极数	安装尺寸及公差 mm																		外形尺寸 mm			
		A		B		C		D		E		F		G		H		K		AC	AD	HD	L
		基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差	基本尺寸	极限偏差				
450	2	800	± 1.75	1120	± 1.75	400	± 4.0	90	+0.035 +0.013	170	± 0.50	25	0 − 0.052	81	0 −0..2	450	0 − 1.0	35	+ 0.62 0	595	1050	950	2090
	4					355		110		210	± 0.57	28	0 − 0.052	100									2080
	6																						
500	2	900	± 2.1	1250	± 2.1	560		100				32	0 − 0.062	90		500		42		660	1110	1050	2320
	4					475		120						109									2280
	6~10							130	+0.040 +0.015	250				119									
560	2	1000		1400		560								138	0 −0..3	560				800	1200	1200	2750
	4					500		150				36											2600
	6~12							160		300	± 0.65	40		147									
630	2	1120		1600		560		140		250	± 0.57	36		128		630		48		860	1250	1350	2900
	4					530		170		300	± 0.65	40		157									2750
	6~12							180				45		165									

a 当采用滑动轴承时，尺寸偏差不包括轴向串动量