

YAKK, YAKS 系列高压增安型 三相异步电动机

YAKK, YAKS series of high-pressure increased-safety induction motors



一、概述

YAKK、YAKS系列H355~630高压(6、10kV)增安型三相异步电动机是我公司结合市场采用国内外先进技术而开发研制的最新产品。本系列电动机具有结构紧凑、效率高、可靠性强、噪声低、振动小、重量轻、安装维护方便等诸多优点。

本系列电动机符合GB755-2000《旋转电机 定额和性能》、行业标准JB/T10315.2-2002《YKK、YKK-W系列高压三相异步电动机技术条件(机座号H355~630)》、JB/T10315.1-2002《YKS、YKS-W、YQF系列高压三相异步电动机技术条件(机座号H355~630)》及JB/T10446-2004《Y系列10kV三相异步电动机技术条件(机座号H450~630)》。其防爆性能符合GB3836.1-2000《爆炸性气体环境用电气设备第1部分:通用要求》和GB3836.3-2000《爆炸性气体环境用电气设备 第3部分:增安型“e”》。

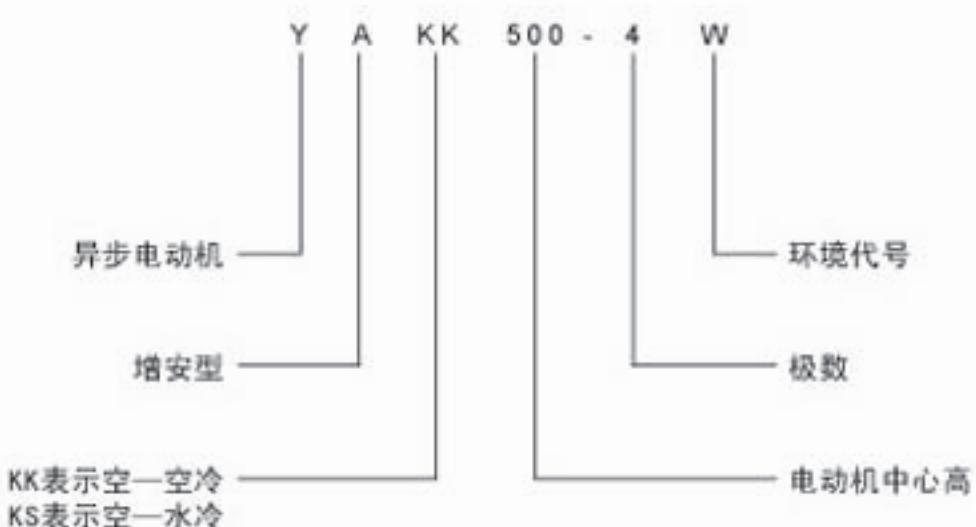
防爆标志为ExeIIT1、ExeIIT2、ExeIIT3。

本系列电动机的外壳防护等级为IP44或IP54，冷却方式为IC611和IC81W，电动机的结构及安装形式为IMB3。在正常的工作条件下，电动机工作定额为连续工作制(S1)。

本系列电动机适用在海拔不超过1000米，周围空气最低为-15℃，最高为40℃的环境中工作。电动机的额定频率为50Hz，额定电压为6000、10000V，电源电压与额定值的偏差不超过±5%，频率与额定值的偏差不超过±2%。

本系列电动机还可制成湿热带型、干热带型、户外型和户外防中等腐蚀型以及户外湿热类型。

型号的含义：



I . Overview

YAKK,YAKS series of high-pressure (6,10kv) increased-safety three-phase induction motors type of H355~630 are latest products developed by our company combining with market and adopting the new technique at home and abroad. This series of motors have many remarkable features such as compact construction, high efficiency, low noise, small vibration, light weight, safe operation and easy maintenance etc.

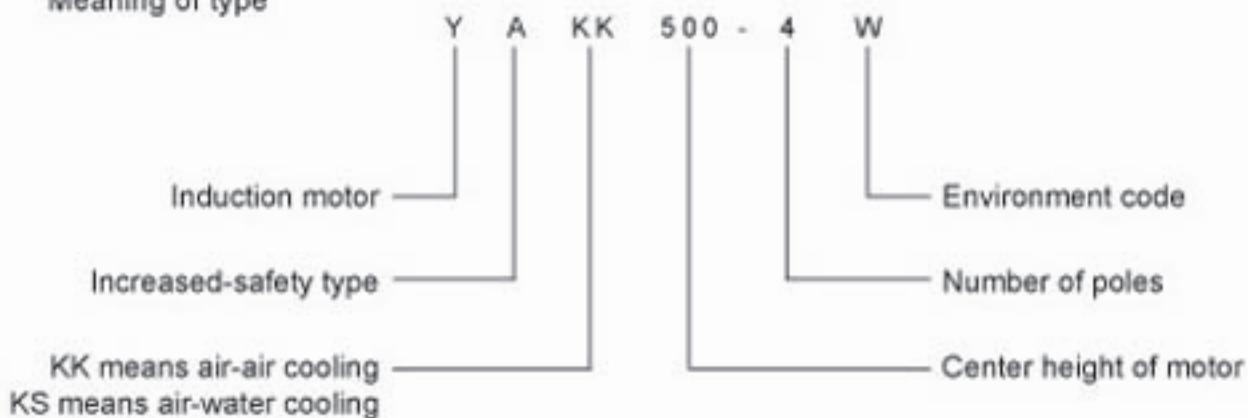
This series of motors meet GB755-2000 "Rotating electrical machines--Rating and performance", trade standards of JB/T10315.2-2002 "technical specification of YKK, YKK-W series of high-pressure three-phase induction motor (Frame Number: H355~630)", JB/T10315.1-2002 "technical specification of YKS, YKS-W and YQF series of high-pressure three-phase induction motor (Frame Number: H355~630)" and JB/T1046-2004 "technical specification of Y series of 10kV three-phase induction motor (Frame Number: H450~630)". Their anti-explosion performance should meet GB3836.1-2000 "Electrical apparatus for explosive gas atmospheres, Part1: General requirements" and GB3836.3-2000 "Electrical apparatus for explosive gas atmospheres, Part3: Increased safety 'e'".

The anti-explosion marks are ExeIT1, ExeIT2, and ExeIT3.

The protection degree of this series of motors' shell is IP44 or IP54, the cooling system is IC611 or IC81W, and the structure & installation type of this series of motors is IMB3. The performance rating of this series of motors is continuous duty (S1) under the normal working condition.

The operation condition of this series of motors include: the altitude less than 1000m and the temperature of ambient air in -15°C~40°C. The rated frequency of the motors: 50Hz. The rated voltage: 6000, 10000V. The deviation between the rated voltage and the power voltage is less than ±5% and the deviation between the rated frequency and the frequency is less than ±2%. This series of motors have the following types: humid tropics type, dry tropics type, outdoor type, outdoor medium-anticorrosion type and outdoor humid type.

Meaning of type



二、电气性能

本系列电动机符号国家标准GB755《旋转电机 定额和性能》，和国际电工委员会IEC的规定，完全采用CAD计算机优化设计，电动机体积小、重量轻、性能稳定、工作可靠、使用寿命长。

II. Behavior of electricity

This series of motors meet the national standard of GB755 "Rotating electrical machines-rating and performance" and the specification of International Electrotechnical Committee (IEC). The complete computer-aided optimization design is introduced. This series of motors have many merits such as small size, light weight, steady performance, reliable work and long service life.

三、结构及安装尺寸

本系列电动机采用箱式机座，定子外装压结构，F级绝缘，并具有有效的防电晕措施。转子采用铸铝或铜条结构，制成单轴伸，也可根据用户要求制成双轴伸。电动机采用滚动轴承或滑动轴承，定子采用VPI真空浸漆，绝缘性能可靠，使用寿命长。

本系列电动机采用高导磁、低损耗的DW470-50冷轧无取向硅钢片，效率高，噪音低。

III. Dimensions of structure and installation

This series of motors have box-type base, stator-external structure, insulation class F and effective anti-corona measures. The rotors of the motors are cast-aluminum or copper rod structure. This series of motors are single shaft extension type and can also be made to double shaft extension type according to user's requirement. The motors are fitted with rolling bearings or sliding bearings. Their stators are treated with vacuum dipping paint so the insulation property is reliable and the service life is long.

This series of motors are made from the high permeability and low loss cold rolling non-oriented silicon-steel sheet type of DW470-50, so having high efficiency and low noise.

四、订货须知

用户在订货时须注明电动机的型号、额定功率、额定电压、额定频率、极数、防爆等级、防护等级、安装方式、工作制以及配套机械设备的使用要求。

本系列电动机旋转方向从轴伸端看为顺时针，也可根据用户要求制成逆时针，请在订货时注明。

本系列电动机可根据用户要求埋置定子测温元件，一般为六个，三备三用，其电阻元件为Pt100，三线制，请在订货时注明。

电动机可根据用户要求配置轴承测温元件(Pt100)，请在订货时注明。

电动机需加装加热器时，请在订货时注明。

样本提供的技术数据和安装尺寸仅供用户订货时参考，用户订货时以我厂提供的外形图为准。

随着技术的不断进步，数据可能有所变动，恕不另行通知。

IV. Ordering instructions

The user should give the following parameters at the time of ordering goods: model of the motor, rated power, rated voltage, rated frequency, number of poles, anti-explosion class, protection degree, installation type, working form and operation requirements of matching mechanical equipment.

The rotation direction of this series of motors is clockwise seeing from the shaft extension end. The direction can also be changed into anti-clockwise according to user's requirement which should be given at the time of ordering goods.

The temperature-measurement elements of stator can be installed on this series of motors according to user's requirement. The number of the elements generally is six. Three among them are using and the other three are reserved. The resistance elements are Pt100 type and three-wire system. The requirements should be given at the time of ordering goods.

The motor bearings can be fitted with temperature-measurement elements and the user should give the correlated requirement at the time of ordering goods.

The heater can be installed on the motor and the user should give the requirement at the time of ordering goods.

The technical data and installation dimensions offered in this sample book can only be referred to and the outline drawing offered by our company at the time of ordering goods is exact.

The data maybe change with the progress of technology. If there are any changes, we won't inform you separately.

五、电动机主要技术数据

V. Main technical data of motor

表1 YAKK系列(6kV) 增安型三相异步电动机技术数据(保证值)

Table 1 Technical data of YAKK series (6kV) of increased-safety three-phase induction motors (guaranteed value)

型 号 Type	额定功 率 (kW) Rated output	定子电 流 (A) Rated current	额定转速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因 数 (cosφ) Power Factor	最大转距 额定转距 Pull-out Torque Rated torque	堵转转距 额定转距 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电机 转动惯量 (J) (kg·m ²) Moment of inertia	TE (S) TE (S)	重 量 (kg) Weight						
YAKK355-2	185	22.7	2973	92.3	0.85	0.6	7.0	3.5	2400	5.0	2400						
	200	24.5		92.4													
	220	26.9		92.5													
	250	30.6		92.6													
	280	33.8		92.8													
YAKK400-2	315	37.9	2978	93.1	0.86	1.8	7.0	5.0	3420	5.5	3420						
	355	42.5		93.4													
	400	47.8		93.7													
YAKK450-2	450	52.9	2980	94.0	0.87	0.6	7.0	13.0	4480	5.0	4480						
	500	58.7		94.2													
	560	65.6		94.4													
	630	73.7		94.6													
YAKK500-2	710	83.0	2981	94.7	0.88	1.8	7.0	20.0	6040	5.0	6040						
	800	93.3		94.8													
	900	105		95.0													
	1000	116		95.1													
YAKK560-2	1120	128.6		95.2	0.88	0.6	7.0	30.0	7520	5.0	7520						
	1250	143		95.3													
	1400	160		95.4													
YAKK630-2	1600	183	2982	95.5	0.88	1.8	7.0	35.0	7840	5.0	7840						
	1800	206		95.6													
	2000	229		95.7													
	185	22.6	1482	92.8	0.85	0.7	6.5	4.0	2090	5.5	2090						
YAKK355-4	200	24.4		92.9													
	220	26.8		93.0													
	250	30.0		93.1													
YAKK400-4	280	33.6		93.2	0.86												
	315	37.8		93.3													

表1 YAKK系列(6KV) 增安型三相异步电动机技术数据(保证值)

Table 1 Technical data of YAKK series (6kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 1)

表1 YAKK系列(6kV) 增安型三相异步电动机技术数据(保证值)

Table 1 Technical data of YAKK series (6kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 1)

型 号 Type	额定功 率 (kW) Rated output	定子电 流 (A) Rated current	额定转速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因数 (cosφ) Power Factor	最大转矩 额定转矩 Pull-out Torque Rated torque	堵转转距 额定转距 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电机转动惯量 (J) (kg·m ²) Moment of inertia	TE (S)	重 量 (kg) Weight
YAKK450-8	250	32.7	740	93.0	0.79					33.0	4800
	280	36.6		93.2						34.0	
	315	41.0		93.4						35.0	
YAKK500-8	355	45.7	742	93.5	0.80					45.0	5760
	400	51.3		93.7						50.0	
	450	57.7		93.9						55.0	
	500	63.8		94.2						60.0	
YAKK560-8	560	69.6	744	94.4	0.82					80.0	6880
	630	78.2		94.5						80.	
	710	88.0		94.6						100	
YAKK630-8	800	98.8	744	94.7	0.84					130	8520
	900	109		94.8						140	
	1000	121		94.9						150	
	1120	135		95.0						160	
YAKK450-10	200	27.9	594	91.9	0.75					29.5	4020
	220	30.6		92.1						33.5	
	250	34.8		92.3						35.0	
	280	38.8		92.5						40.0	6.0
YAKK500-10	315	43.0		92.8	0.76					45.0	4400
	355	48.3		93.0						50.0	
	400	54.3		93.3						55.0	
	450	61.0		93.4						60.0	
YAKK560-10	500	65.9	594	93.6	0.78					95.0	7320
	560	73.3		93.7						102.5	
	630	82.9		93.8						110	
	710	93.2		94.0						122	
YAKK630-10	800	102	495	94.2	0.80					150	9400
	900	115		94.3						160	
	1000	127		94.4						170	
	1120	140.1		94.6						180	
YAKK500-12	200	29.5	495	92.0	0.71					47.5	5760
	220	31.9		92.2						50.0	
	250	38.1		92.5						52.0	
	280	40.4		92.7						54.0	
	315	45.4		92.8						60.0	

表1 YAKK系列(6kV) 增安型三相异步电动机技术数据(保证值)

Table 1 Technical data of YAKK series (6kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 1)

型 号 Type	额定功 率 (kW) Rated output	定子电 流 (A) Rated current	额定转速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因 数 (cosφ) Power Factor	最大转距 额定转距 Pull-out Torque Rated torque	堵转转距 额定转距 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电机转 动惯量 (J) (kg m ²) Moment of inertia	TE (S)	重 量 (kg) Weight
						额定转距 Pull-out Torque Rated torque	堵转转距 Locked Torque Rated torque	堵转电流 Locked Current Rated current			
YAKK500-12	355	49.6	495	93.0	0.74	1.8	0.7	6.0	95.0	6.0	7320
	400	55.7		93.3					100		7650
	450	62.7		93.4					105		7980
	500	69.4		93.7					112		8520
YAKK630-12	560	75.6		93.8	0.76				160		9400
	630	84.9		93.9					170		9600
	710	95.6		94.0					180		9800
	800	107.5		94.2					192		10020

表2 YAKS系列(6kV) 增安型三相异步电动机技术数据(保证值)

Table 2 Technical data of YAKS series (6kV) of increased-safety three-phase induction motors (guaranteed value)

型 号 Type	额定功 率 (kW) Rated output	定子电 流 (A) Rated current	额定转速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因 数 (cosφ) Power Factor	最大转距 额定转距 Pull-out Torque Rated torque	堵转转距 额定转距 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电机转 动惯量 (J) (kg m ²) Moment of inertia	TE (S)	重 量 (kg) Weight
						额定转距 Pull-out Torque Rated torque	堵转转距 Locked Torque Rated torque	堵转电流 Locked Current Rated current			
YAKS355-2	220	26.7	2973	92.8	0.86	0.87	7.0	6.5	3.5	5.0	1950
	250	30.1		92.9					3.6		2080
	280	33.7		93.1					3.7		2120
	315	37.7		93.4					3.8		2200
YAKS400-2	355	41.9	2976	93.7	0.87	1.8	7.0	6.5	4.0	5.0	3200
	400	47.0		94.1					5.5		3300
	450	52.7		94.4					6.0		3400
	500	58.5		94.6					6.5		3600
YAKS450-2	560	65.4	2978	94.7	0.88	1.8	7.0	6.5	13.0	5.5	3480
	630	73.4		94.9					14.0		3570
	710	82.7		95.0					15.0		3720
	800	92.9		95.2					16.0		3970
YAKS500-2	900	103.3	2980	95.3	0.88	1.8	7.0	6.5	20.0	5.5	4720
	1000	114.6		95.4					21.5		4980
	1120	128.2		95.5					23.0		5210
	1250	142.9		95.6					24.5		5420
YAKS560-2	1400	159.9		95.7	0.89	1.8	7.0	6.5	30.0	5.5	6720
	1600	182.6		95.8					35.0		7050
	1800	205.2		95.9					40.0		7320
	2000	225.2		96.0					50.0		9010
YAKS630-2	2240	252.0	2982	96.1	0.89	1.8	7.0	6.5	54.0	5.5	9520
	2500	280.9		96.2					58.0		10120
	220	26.4	1480	93.3					4.6	5.5	2040
YAKS355-4	250	30.0		93.4					5.3		2120

表2 YAKS系列(6kV) 增安型三相异步电动机技术数据(保证值)

Table 2 Technical data of YAKS series (6kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 2)

型 号 Type	额定功 率 (kW) Rated output	定子电 流 (A) Rated current	额定转速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因 数 (cosφ) Power Factor	最大转矩 额定转矩 Pull-out Torque Rated torque	堵转转矩 额定转矩 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电机特 动惯量 (J) (kg·m ²) Moment of inertia	TE (S)	重 量 (kg) Weight
YAKS400-4	280	33.1	1482	93.5	0.87					7.0	2500
	315	37.2		93.6						8.0	
	355	41.9		93.8						9.0	
	400	47.1		94.0						10.0	
	450	52.8		94.2						11.0	
YAKS450-4	500	58.6	1484	94.3	0.7					20.0	3500
	560	65.5		94.5						21.0	
	630	73.5		94.8						22.0	
	710	83.6		95.0						23.0	
YAKS500-4	800	92.0	1488	95.1	0.88					40.0	4730
	900	103.4		95.2						42.5	
	1000	114.7		95.3						45.0	
	1120	128.4		95.4						47.5	
YAKS560-4	1250	143	1488	95.5	0.6					55.0	6720
	1400	160		95.6						57.5	
	1600	182.8		95.7						60.0	
YAKS630-4	1800	203.1	989	95.8	0.89					100	9010
	2000	225.5		95.9						105	
	2240	252.3		96.0						110	
YAKS400-6	220	27.4	988	93.0	0.83					13.5	2530
	250	31.1		93.3						15.0	
	280	34.7		93.5						16.0	
	315	39.0		93.7						17.0	
	355	43.8		93.9						18.0	
YAKS450-6	400	48.7	989	94.0	0.84					24.5	3520
	450	54.7		94.3						25.5	
	500	60.6		94.5						26.5	
	560	67.7		94.7						27.5	
YAKS500-6	630	75.2	990	94.8	0.85					45.0	4890
	710	84.6		95.0						50.0	
	800	95.2		95.1						55.0	
	900	107.0		95.2						65.0	
YAKS560-6	1000	117.4	991	95.3	0.86					70.0	6720
	1120	131.4		95.4						75.0	
	1250	148.5		95.5						82	
YAKS630-6	1400	163.9	991	95.6	0.86					115	9010
	1600	187.1		95.7						120	
	1800	210.2		95.8						128	

表2 YAKS系列(6KV) 增安型三相异步电动机技术数据(保证值)

Table 2 Technical data of YAKS series (6kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 2)

型号 Type	额定功率 (kW) Rated output	定子电流 (A) Rated current	额定转速 (r/min) Rated speed	效率 (%) Efficiency	功率因数 (cosφ) Power Factor	最大转距	堵转转距	堵转电流	电机转动惯量 (J) (kg·m ²) Moment of inertia	TE (S) TE (S)	重量 (kg) Weight
						额定转距 Pull-out Torque	额定转距 Locked Torque	额定电流 Locked Current			
YAKS450-8	220	28.8	740	92.9	0.79	0.8	5.5	30	3120		
	250	32.7		93.0				31.0	3260		
	280	36.1		93.2				32.0	3520		
	315	40.6		93.4				33.0	3730		
	355	45.7		93.5				34.0	3910		
	400	51.3		93.7				35.0	4130		
YAKS500-8	450	56.3	742	93.8	0.82	0.7	6.0	45.0	4890		
	500	62.2		94.3				50.0	5160		
	560	67.6		94.4				55.0	5350		
	630	78.2		94.5				60.0	5520		
YAKS500-8	710	86	742	94.6	0.84	1.8	5.5	80.0	6720		
	800	96.8		94.7				90.	7050		
	900	108.8		94.8				100	7320		
YAKS630-8	1000	120.7	744	94.9	0.84	0.7	6.0	130	8520		
	1120	135.1		95.0				140	9010		
	1250	150.6		95.1				150	9520		
	1400	168.5		95.2				160	10120		
YAKS450-10	220	29.1	594	92.1	0.79	0.8	5.5	29.5	3680		
	250	33.0		92.3				33.5	3720		
	280	36.9		92.5				35.0	3800		
	315	41.4		92.6				40.0	4020		
	355	46.6		92.8				45.0	4210		
YAKS500-10	400	51.6	594	93.3	0.80	0.7	6.0	50.0	4620		
	450	58.0		93.4				55.0	4890		
	500	64.3		93.6				60.0	5160		
	560	71.9		93.7				65.0	5350		
	630	80.8		93.8				71.0	5520		
YAKS560-10	710	88.6	594	94.0	0.82	1.8	5.5	98.0	6720		
	800	99.7		94.2				104	7050		
	900	112.0		94.3				113	7320		
YAKS630-10	1000	124.3	495	94.4	0.82	0.7	6.0	140	8520		
	1120	138.9		94.6				150	9010		
	1250	154.7		94.8				160	9520		
	1400	173.1		94.9				173	10120		
YAKS450-12	220	31.7	495	91.4	0.73	0.8	5.5	37.5	4180		
	250	35.9		91.7				40.0	4420		

表2 YAKS系列(6KV) 增安型三相异步电动机技术数据(保证值)

Table 2 Technical data of YAKS series (6kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 2)

型 号 Type	额定功 率 (kW) Rated output	定子电 流 (A) Rated current	额定转 速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因 数 (cosφ) Power Factor	最大转矩 额定转矩 Pull-out Torque Rated torque	堵转转矩 额定转矩 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电 机 特 动 惯 量 (J) (kg m ²) Moment of inertia	TE (S)	重 量 (kg) Weight
YAKS500-12	280	38.8	495	92.7	0.75	1.8	0.8	5.5	45.0	6.0	4660
	315	43.6		92.8					50.0		4890
	355	49.0		93.0					55.0		5160
	400	55.0		93.3					60.0		5350
	450	61.8		93.4					66.0		5520
YAKS560-12	500	65.0	495	93.7	0.77	1.8	0.7	6.0	90	6.0	6720
	560	72.7		93.8					100		7050
	630	81.7		93.9					110		7320
YAKS630-12	710	92.0	495	94.0	0.77	1.8	0.7	6.0	160	6.0	8520
	800	103.5		94.2					175		9010
	900	116.3		94.3					190		9520
	1000	129		94.4					200		10120

表3 YAKK系列(10KV) 增安型三相异步电动机技术数据(保证值)

Table 3 Technical data of YAKK series (10kV) of increased-safety three-phase induction motors (guaranteed value)

型 号 Type	额定功 率 (kW) Rated output	定子电 流 (A) Rated current	额定转 速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因 数 (cosφ) Power Factor	最大转矩 额定转矩 Pull-out Torque Rated torque	堵转转矩 额定转矩 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电 机 特 动 惯 量 (J) (kg m ²) Moment of inertia	TE (S)	重 量 (kg) Weight			
YAKK450-2	200	14.8	2978	92.1	0.85	1.8	0.6	7.0	7.5	5.0	4310			
	220	16.2		92.4					8.4		4360			
	250	18.3		92.6					9.3		4410			
	280	20.5		92.8					10.2		4480			
	315	23.0		93.1					11.0		4570			
	355	25.5		93.5	0.86				11.7		4720			
	400	28.6		93.8					12.4		4970			
	450	31.8		94.0					13.0		5180			
YAKK500-2	500	35.3	2980	94.1	0.87	1.8	0.6	7.0	19.1	5.0	6040			
	560	39.5		94.2					20.2		6260			
	630	44.3		94.3					21.5		6510			
	710	50.0		94.4					22.5		6720			
	800	55.5		94.5	0.88				23.5		6950			
YAKK560-2	900	62.4		94.6					35.5		7840			
	1000	69.3		94.7					38.3		8250			
	1120	76.6		94.9					40.4		8480			
YAKK630-2	1250	85.3	2982	95.1	0.89	1.8	0.6	7.0	49.0	5.5	9950			
	1400	95.4		95.2					52.2		10530			
	1600	108.9		95.3					56.1		11610			
YAKK450-4	200	14.9	1484	92.0	0.84			0.6	6.5	5.5	3890			

表3 YAKK系列(10KV) 增安型三相异步电动机技术数据(保证值)

Table 3 Technical data of YAKK series (10KV) of increased-safety three-phase induction motors (guaranteed value) (continue table 3)

型 号 Type	额定功率 (kW) Rated output	定子电流 (A) Rated current	额定转速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因 数 (cosφ) Power Factor	最 大 转距 额定转距 Pull-out Torque Rated torque	堵转转距 额定转距 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电 机 转 动 惯 量 (J) (kg·m ²) Moment of inertia	TE (S)	重 量 (kg) Weight			
YAKK450-4	220	16.4	1484	92.2	0.84	6.5	1.8	0.6	16	5.5	4020			
	250	18.6		92.5					17		4280			
	280	20.8		92.7					18		4350			
	315	23.0		92.9	0.85				19		4600			
	355	25.9		93.0					21		4800			
	400	28.8		93.2	0.86				23		5000			
YAKK500-4	450	32.3	1486	93.6	0.87	6.5	1.8	0.6	16.3	6.0	5630			
	500	35.4		93.7					31.5		5860			
	560	39.6		93.9					35.4		6020			
	630	44.4		94.1					37.4		6240			
	710	49.4		94.2					41.3		6440			
YAKK560-4	800	55.7	1488	94.3	0.88	6.5	1.8	0.6	45.5	6.0	7320			
	900	62.2		94.9					51.0		7650			
	1000	69.1		95.0	0.88				54.2		7930			
YAKK630-4	1120	77.3	1488	95.1	0.88	6.5	1.8	0.6	66.8	6.0	9010			
	1250	86.1		95.2					78.0		9520			
	1400	96.3		95.4					89.0		10120			
YAKK450-6	200	15.7	988	91.8	0.80	6.5	1.8	0.6	17.0	6.0	4220			
	220	17.3		92.0					19.0		4370			
	250	19.3		92.2					21.0		4430			
	280	21.6		92.4	0.81				23.0		4610			
	315	24.2		92.6					25.0		4830			
	355	26.6		92.9					28.0		5100			
YAKK500-6	400	29.8	990	93.3	0.83	6.5	1.8	0.7	42.0	6.0	5890			
	450	33.5		93.5					47.0		6060			
	500	37.1		93.7					51.0		6150			
	560	41.0		93.9					57.0		6270			
YAKK560-6	630	46.0	991	94.2	0.84	6.5	1.8	0.7	59.0	6.0	7980			
	710	51.7		94.4					69.0		8220			
	800	58.2		94.5					73.3		8550			
	900	64.6		94.7					94.6		8730			
YAKK630-6	1000	71.6	991	94.9	0.85	6.5	1.8	0.7	102	6.0	9010			
	1120	80.0		95.1					110		9520			
	1250	89.2		95.2					121		10120			
	200	16.5	742	91.9	0.76	6.5	1.8	0.7	31	6.0	5280			
YAKK500-8	220	18.1		92.1					36		5410			
	250	20.6		92.3					42		5530			

表3 YAKK系列(10kV) 增安型三相异步电动机技术数据(保证值)

Table 3 Technical data of YAKK series (10kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 3)

型 号 Type	额定功 率 (kW) Rated output	定子电 流 (A) Rated current	额定转速 (r/min) Rated speed	效 率 (%) Efficiency	功 率 因 数 (cosφ) Power Factor	最大转矩 额定转矩 Pull-out Torque Rated torque	堵转转矩 额定转矩 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电机特 动惯量 (J) (kg·m ²) Moment of inertia	TE (S) TE(S)	重 量 (kg) Weight
YAKK500-8	280	22.7	742	92.5	0.77	0.8	5.5	47	5650	5650	
	315	25.5		92.7				53			
	355	28.3		93.0				58			
	400	30.5		93.1				62			
YAKK560-8	450	34.3		93.6	0.81	0.7	5.5	71	6420	6420	
	500	38.0		93.7				79			
	560	42.6		93.8				87			
	630	47.8		93.9				93.0			
	710	53.0		94.4				101			
YAKK630-8	800	59.5	744	94.6	0.82	0.8	5.5	112	9010	9010	
	900	66.9		94.7				127			
	1000	74.2		94.9				140			
YAKK500-10	220	19.2	594	91.9	0.72	0.8	5.5	48	5790	5790	
	250	21.8		92.1				53			
	280	24.0		92.4				58			
	315	26.9		92.6				64			
YAKK560-10	355	29.4	495	92.8	0.75	1.8	6.0	95	7080	7080	
	400	33.1		93.0				102			
	450	36.7		93.2				111			
	500	40.7		93.4				135			
	560	45.5		93.5				158			
YAKK630-10	630	49.8	495	93.7	0.78	0.7	6.0	146	9110	9110	
	710	56.0		93.9				160			
	800	62.8		94.3				175			
	900	70.5		94.5				182			
YAKK560-12	220	20.7	495	91.7	0.67	0.7	6.0	98	6420	6420	
	250	23.4		91.9				105			
	280	25.8		92.1				110			
	315	29.0		92.3				121			
	355	32.1		92.5				132			
	400	36.1		92.7				145			
YAKK630-12	450	38.8	495	92.9	0.72	0.72	6.0	152	9110	9110	
	500	43.0		93.2				163			
	560	48.0		93.5				178			
	630	53.9		93.7				190			

表4 YAKS系列(10KV) 增安型三相异步电动机技术数据(保证值)

Table 4 Technical data of YAKS series (10KV) of increased-safety three-phase induction motors (guaranteed value)

Type	额定功率(KW) Rated output	定子电流(A) Rated current	额定转速(r/min) Rated speed	效率(%) Efficiency	功率因数(cosφ) Power Factor	最大转距 额定转距 Pull-out Torque Rated torque	堵转转距 额定转距 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电机转动惯量(J) (kg·m ²) Moment of inertia	TE(S)	重量(kg) Weight			
YAKS450-2	200	14.5	2978	92.5	0.86	0.6	7.0	19.1	5.0	3200				
	220	15.9		92.8						3260				
	250	18.1		92.9						3310				
	280	20.2		93.1						3360				
	315	22.6		93.4						3410				
	355	25.1		93.8	0.87					3480				
	400	28.2		94.1						3570				
	450	31.7		94.3						3720				
	500	34.8		94.4						3970				
	560	38.9		94.5						4480				
YAKS500-2	630	43.7	2980	94.6	0.88	1.8	6.5	18.2	5.5	4720				
	710	49.2		94.7						4980				
	800	55.4		94.8						5210				
	900	61.5		94.9						5500				
	1000	68.3		95.0						5720				
YAKS560-2	1120	76.3	2981	95.2	0.89					7050				
	1250	85.0		95.4						7320				
	1400	94.0		95.5						7570				
YAKS630-2	1600	107.4	2982	95.6	0.9					9010				
	1800	120.7		95.7						9520				
	2000	133.9		95.8						10120				
	200	14.7	1482	92.2	0.85	0.6	6.5	18.2	5.5	2850				
	220	16.2		92.5						3070				
	250	18.3		92.7						3190				
	280	20.5		92.9						3320				
	315	23.0		93.1						3580				
	355	25.5		93.3	0.86					3750				
	400	28.7		93.5						3900				
	450	32.2		93.9						4100				
	500	35.3		94.0						4370				
	560	39.5		94.2						4590				
YAKS500-4	630	44.3	1488	94.4	0.87	1.8	6.5	18.2	5.5	4960				
	710	49.6		95.0						5120				
	800	55.8		95.1						5340				
	900	62.0		95.2						5580				
	1000	68.8		95.3	0.88					5730				
YAKS560-4	1120	77.0		95.4						7050				
	1250	85.9		95.5						7320				

表4 YAKS系列(10kV) 增安型三相异步电动机技术数据(保证值)

Table 4 Technical data of YAKS series (10kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 4)

Type	额定功率 (kW) Rated output	定子电流 (A) Rated current	额定转速 (r/min) Rated speed	效率 (%) Efficiency	功率因数 (cosφ) Power Factor	最大转距 额定转距 Rated torque	堵转转距 额定转距 Locked Torque	堵转电流 额定电流 Rated current	电机转动惯量 (J) (kg m²) Moment of inertia	TE (S)	重量 (kg) Weight
YAKS560-4	1400	94.9	1488	95.7	0.89	0.6	6.5	78.4	5.5	7570	
	1600	108.3		95.8							
	1800	121.8		95.9							
	2000	135.1		96.0							
YAKS450-6	200	15.5	968	92.0	0.82	0.7	6.5	15.0	6.0	3400	
	220	16.8		92.2							
	250	19.0		92.4							
	280	21.3		92.6							
	315	23.9		92.8							
	355	26.8		93.1							
	400	29.5		93.3							
YAKS500-6	450	33.1	990	93.5	0.84	0.7	6.5	28.0	6.0	4890	
	500	36.6		93.9							
	560	40.9		94.1							
	630	45.9		94.4							
	710	51.0		94.6							
YAKS550-6	800	57.4	991	94.7	0.85	1.8	6.5	39.0	6.0	5160	
	900	64.4		94.9							
	1000	71.4		95.1							
	1120	78.9		95.3							
YAKS630-6	1250	88.0	991	95.4	0.86	0.7	6.0	42.0	6.0	5350	
	1400	98.2		95.7							
	1600	112.1		95.8							
YAKS450-8	200	16.6	740	91.7	0.76	0.8	5.5	24	6.0	3220	
	220	18.2		92.0							
	250	20.6		92.2							
	280	22.4		92.4							
YAKS500-8	315	25.1	740	92.8	0.78	0.7	6.0	26	6.0	3480	
	355	28.2		93.1							
	400	31.8		93.2							
	450	35.2		93.4							
	500	39.0		93.8							
	560	42.0		93.9							
YAKS550-8	630	47.0	740	94.4	0.82	0.7	6.0	38	6.0	3640	
	710	52.8		94.6							
	800	59.5		94.7							

表4 YAKS系列(10KV) 增安型三相异步电动机技术数据(保证值)

Table 4 Technical data of YAKS series (10kV) of increased-safety three-phase induction motors (guaranteed value) (continue table 4)

型号 Type	额定功率 (kW) Rated output	定子电流 (A) Rated current	额定转速 (r/min) Rated speed	效率 (%) Efficiency	功率因数 (cosφ) Power Factor	最大转矩 额定转矩 Pull-out Torque Rated torque	堵转转矩 额定转矩 Locked Torque Rated torque	堵转电流 额定电流 Locked Current Rated current	电机惯量 (J) (kg·m ²) Moment of inertia	TE (S) TE (S)	重量 (kg) Weight
YAKS500-8	900	66.0	740	94.8	0.83		0.7	6.0	119		7570
	1000	73.2		95.0					127		9010
	1120	81.8		95.2					140		9520
	1250	91.2		95.3					151		10120
YAKS500-10	200	17.3	594	91.5	0.73		0.8	5.5	39		4360
	220	19.0		91.8					42		4520
	250	21.5		92.1					45		4730
	280	23.6		92.4					48		4890
	315	26.5		92.6					53		5090
	355	29.4		92.8					58		5260
	400	33.1		93.0					64		5420
	450	36.2		93.2	0.77		0.7	6.0	95	6.0	6280
YAKS500-10	500	40.1		93.4					102		6450
	560	44.3		93.5					111		6720
	630	49.8		93.7					135		7050
	710	56.0		93.9					146		7320
	800	61.2		94.3	0.80		1.8	6.0	160	6.0	8520
YAKS500-10	900	68.7		94.5					175		9010
	1000	76.3		94.6					182		9520
	1120	85.4		94.7					203		10120
YAKS500-12	200	18.0	495	90.3	0.71		0.8	5.5	40		4890
	220	19.7		90.6					46		5090
	250	22.4		90.9					52		5260
	280	25.0		91.2					58		5420
YAKS500-12	315	27.0	495	92.3	0.73		0.7	6.0	93		6280
	355	30.4		92.5					105		6450
	400	34.1		92.7					110		6720
	450	38.3		92.9					121		7050
	500	42.4		93.2					152		7320
YAKS630-12	560	46.7		93.5	0.74		0.7	6.0	163		8520
	630	52.5		93.7					178		9010
	710	59.0		93.9					190		9520
	800	66.2		94.3					216		10120

TE时间为交流绕组在最高环境温度下达到额定运行稳定温度后,从开始通过最初起动电流I_a时计起直至上升到极限温度所需要的时间,其数值不小于5s。

Time TE is a period from the first starting current I_a passed to limiting temperature reached after the AC winding reaches the rated running steady temperature at the maximum ambient temperature and the value isn't less than 5s.

六、电动机外形安装尺寸表5~6

VI. Table 5~6 Outline installation dimensions of motor

YAKK系列高压(6、10KV)增安型三相异步电动机外形安装尺寸

Outline installation dimensions of YAKK series of high-pressure (6,10KV) increased-safety three-phase induction motors

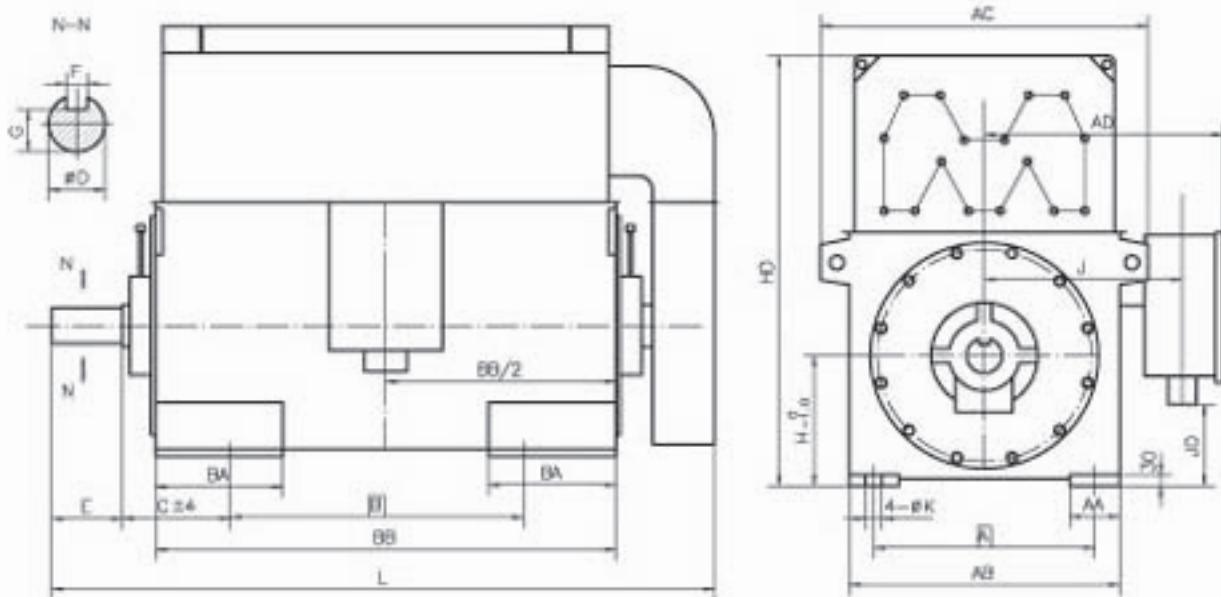


表5 YAKK系列高压(6KV)增安型三相异步电动机外形安装尺寸

Table 5 Outline installation dimensions of YAKK series of high-pressure (6kv) increased-safety three-phase induction motors

H-级数 Frame size No.of poles	A	AA	AB	AC	AD	B	BA	BB	C	D	E	F	G	HD	J	JD	K	L	mm
355-2	630	160	820	990	750	900	560	1420	315	80	170	22	71	1505	600	215	28	2040	
355-4~6										100	210	28	90					2130	
400-2	710	180	920	1080	800	1000	600	1500	375	90	170	25	81	1660	650	245	35	2220	
400-4~8									335	110		28	100					2350	
450-2	800	200	1000	1200	840	1120	615	1640	400	100	210	28	90	1760	690	300	35	2500	
450-4									355	120		32	109					2500	
450-6~12									130	250		119							
500-2	900	220	1120	1360	900	1250	650	1800	560	110	210	28	100	2000	750	400	42	2750	
500-4									475	130		32	119					2670	
500-6~12									140	250		36	128						
560-2									560	130		32	119					2980	
560-4	1000	220	1200	1440	940	1400	725	1920	500	150		36	138	2235	790	470	42	2900	
560-6~12									160	300		40	147						
630-2									560	140		250	36						
630-4	1120	220	1360	1620	1020	1600	760	2100	530	170		300	40	2500	870	500	48	3440	
630-6~12									180	45		45	165					2750	

表6 YAKK系列高压(10KV)增安型三相异步电动机外形安装尺寸

Table 6 Outline installation dimensions of YAKK series of high-pressure (10kv) increased-safety three-phase induction motors

H-极数	A	AA	AB	AC	AD	B	BA	BB	C	D	E	F	G	HD	J	JD	K	L	mm						
450-2	800	200	1000	1200	940	1120	690	1640	400	90	170	25	81	1760	795	300	35	2500							
450-4									355	110	210	28	100												
450-6~12									475	120															
500-2	900	220	1120	1360	1000	1250	650	1800	560	100	32	90	109	2000	855	320	42	2750							
500-4									475	130															
500-6~12									500	150	250	36	138												
560-2	1000	220	1200	1420	1040	1400	725	1920	560	140	250	36	128	2240	895	470	42	2950							
560-4									530	170	300	40	157												
560-6~12									530	180		45	165												
630-2	1120	220	1360	1620	1120	1600	760	2100	560	140	250	36	128	2480	975	440	48	3500							
630-4									530	170	300	40	157												
630-6~12									530	180		45	165												

YAKS系列高压(6、10KV)增安型三相异步电动机外形安装尺寸

Outline installation dimensions of YAKS series of high-pressure (6,10KV) increased-safety three-phase induction motors

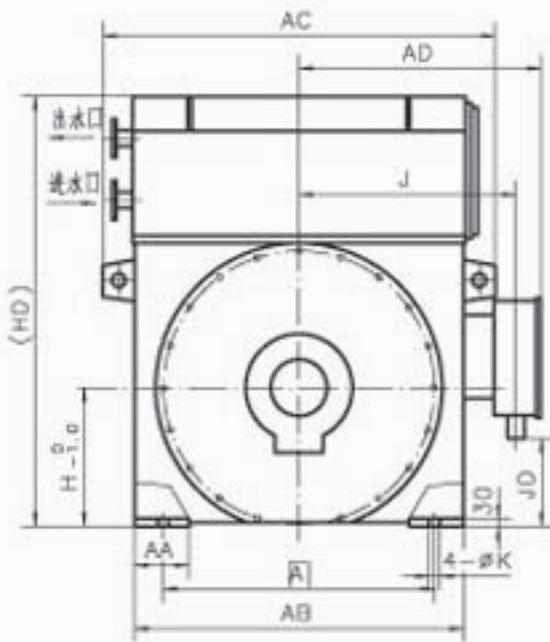
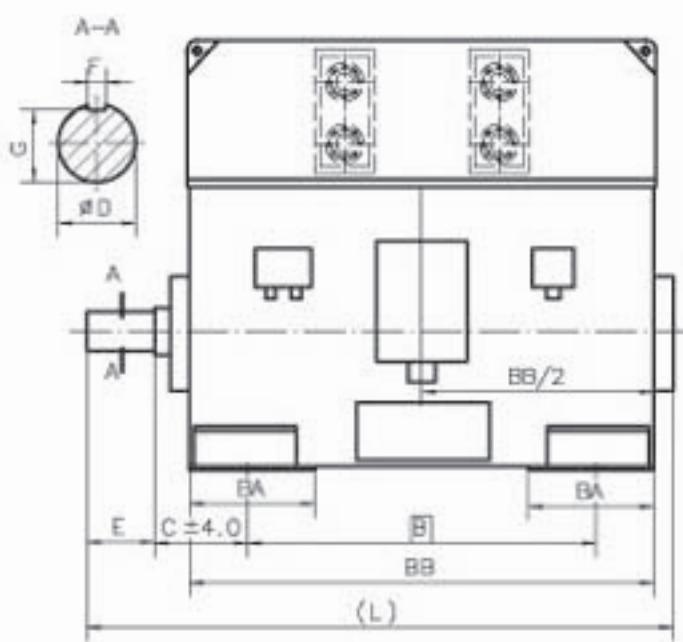


表7 YAKS系列高压(6KV)增安型三相异步电动机外形安装尺寸

Table 7 Outline installation dimensions of YAKS series of high-pressure (6KV) increased-safety three-phase induction motors

H-极数 Frame size No. of poles	A	AA	AB	AC	AD	B	BA	BB	C	D	E	F	G	HD	J	JD	K	L
355-2	630	160	820	990	750	900	560	1420	315	80	170	22	71	1430	600	180	28	1730
355-4~6										100	210	28	90					1770
400-2	710	160	820	1080	800	1000	550	1500	375	90	170	25	81	1460	650	245	35	1885
400-4~8										335	110	210	100					1950
450-2	800	200	1000	1200	840	1120	615	1640	400	100	210	28	90	1600	690	300	35	2060
450-4										355	120	210	109					2060
450-6~12										130	250	210	119					2060
500-2										560	110	210	28	100	1650	750	390	42
500-4	900	250	1120	1360	900	1250	690	1800	475	130	210	32	119	2350				
500-6~12										140	210	36	128	2400				
560-2										560	130	210	32	119				2650
560-4	1000	220	1200	1440	940	1400	725	1920	500	150	210	36	138	2000	790	500	42	2500
560-6~12										160	300	40	147					2550
630-2										560	140	250	36	128	2200	870	500	48
630-4	1120	220	1360	1620	1020	1600	760	2100	530	170	210	40	157	2800				
630-6~12										180	210	45	165	2750				

表8 YAKS系列高压(10KV)增安型三相异步电动机外形安装尺寸

Table 8 Outline installation dimensions of YAKS series of high-pressure (10kv) increased-safety three-phase induction motors

H-极数	A	AA	AB	AC	AD	B	BA	BB	C	D	E	F	G	HD	J	JD	K	L
450-2	800	200	1000	1200	940	1120	615	1640	400	90	170	25	81	1600	795	190	35	2060
450-4										355	110	210	100					2060
450-6~12	900	220	1120	1300	1000	1250	690	1800	560	100	210	90	1600	855	320	42	2600	
500-2										120	210	109	1600					2350
500-4	1000	220	1200	1420	1040	1400	720	1920	500	130	210	119	1600	995	470	42	2600	
500-6~12										150	210	36	138				2500	
560-2										160	300	40	147				2550	
560-4	1120	220	1360	1620	1120	1600	760	2100	530	140	250	36	128	2200	975	450	48	2800
560-6~12										170	210	40	157					2750
630-2										180	210	45	165					2750