

I 、 Features and usage

KDJ-E series electronic winch is new products which adopts advanced foreign technology. This product has the features of small volume, light weight, convenient installation, reliable using. It can improve working efficiency greatly.

This product is suitable for using in the medium and small-scale machining one, the warehouse , the goods hang in the high building, construction work, the ideal tool which unloads and hang the shipping parcels in the quay place. .

Using power supply is a single phase of 230V alternating current or three phases of 380V alternating current. The power source is very convenient. So, this product is widely used in lifting equipment.

This product is unsuitable in the following conditions :

1. Working environment temperature lower than - 20℃ or higher than 40℃.
2. The relative temperature is higher than 85% of the places
3. The place has fire hazard, dangerous to explode, full of corrosivity gas.
4. Hang clouds and melt the metal and poisonous explosive article.
5. Weather of raining outdoors or lightning.
6. The using power's voltage is lower than 10% of nameplate voltage.

II、Structure characteristic

This product adopts the single-phase capacitance start motor (or three phases different step motor), NGW planetary transmission, using wire steel hang hook lift the goods and using electromagnetical apply the brake ,etc..

1.Motor : Adopt single-phase insulating B grade capacitance start motor or three phases different step motor , great start power , small inertia .

2.Transmission structure: Adopt secondary NGW planet to speed-down, the sun wheel and planetary wheel adopt the advanced steels which have heat treatment, wearable and durable, long life-span. The gear-box adopts ductility cast iron mould, strong malleability, difficult to rupture, passing accurate machine tooling again, high precision , small obstruction .

3.Electromagnetical apply the brake: Adopt the electromagnetic braking device, select the advanced friction piece. In case of losing electrical power, brake electromagnetically automatic brake immediately, never backfall, safe and reliable.

4.The reel and steel wire rope: The steel wire rope is installed on the reel, fix with the insurance screw, can guarantee to prevent the steel wire rope from coming off, unclamp the insurance screw, can easily change the steel wire rope or adjust the direction of the steel wire rope.

III、Mainly technical data

Model	KDJ-200E	KDJ-250E	KDJ-300E	KDJ-300E1	KDJ-500E1	KDJ-750E1	KDJ-1000E1
Rated load	200	250	300	300	500	750	1000
Speed (m/min)	10-15	10-15	10-15	10-15	12-18	12-18	12-18
Lift (m)	29	29	29	29	58	58	58
Rated power(HP)	0.8	1	1.5	1.5	3	4	5.5
Voltage (v)	Single phase 230VAC			Three Phase 380VAC			
Frequency (Hz)	60Hz						
Electric current (A)	9	9.5	10	2.8	4.8	6.5	8.7
Electric capacity (μF)	150	200	250	.....	.....	.....	.....
Diameter of the cable wire (mm)	6	6	7	7	9	9	11
Weight (kg)	36	40	49	48	136	149	156
Work system	S3-25% 20min						

IV、 Choice and installation of the cable

1.The specification of the cable concerns the life-span of the performance of electric winch and the life of motor, It is very important to read the listed content of following form carefully before using, can't use the power cord which is lower than specification listed in the form .

Single phase 230VAC	0.8HP	1HP	1.5HP	.....	.....	.....
Cable line (mm2)	4	4	6	.....	.....	.....
Three phase 380VAC	.....	.....	1.5HP	3HP	4HP	5.5HP
Cable line (mm2)	.....	.....	2.5	2.5	4	4

2.The listed power cord in the form, its length can't exceed 50 meters , should add the thick of power cord if exceed, in order to prevent producing too big voltage to lower in the cable.

3.The three-phase power, after transmitting power. Should confirm the looks preface first before using, in case that put upside down and caused danger .

4.Using in building site, must use the cable thread.

5.When the cable thread connects the electricity, must connect under the master switch, really fix and lock with screw.

6.Each tie-in of the cable line must locked by screw, if becoming flexible will keep touch badly , and produce the spark, high temperature etc , and then influence the life of a machine.

7.Cable line must fix with end son , when fixing ,every wire of the cable must connect in exactly , if one or two come off, will produce the voltage to lower , will influence the performance of the machine seriously.

8. In order to guarantee the power security when using , the outer cover of electric winch must be grounded , its supply line must add install the circuit breaker additional lest creepage .

V、 Use safely notice

1. This machine is installed and worked in any workplace, should regard safety first as the first principle.

2. The machine is operated and should be gone on by the skilled technical staff, the attenbant should know safe knowledge

3. During this machine is using , personnel can't be work and working and do any thing else at hook frame , lift platform, under the machine or under lifting article .

4. This machine can't alter or install other company's part in, lest derogate the machine performance .

5. The using hang tools (the hang hook , the pulley, steel wire rope , hanging flower basket ,etc.) should be checked frequently, if damage or rupture , should change and repair in time , so as to avoid the danger.

6. Must operate empty load before using each time , check the following projects.

a. Whether the switch is flexible , can control rising, drop and run correctly, and can stop at any time.

b. whether there are unusual noises while operating.

c. whether the steel wire rope has steel wire ruptures , if there is a whole section burst, please change immediately , guarantee the security.

d. Whether the steel wire rope is twines on the rope tube correctly, and keep three circles at least, prevent the slip.

e. Whether the fastener of every position of machine becomes flexible.

7. Please use according to the operation method of the manual, please use according to the specification while sending the power and hanging heavily, overload is forbid, ensure the safety of personnel and machine.

8. Contained article or hanging basket while lifting, can't touch or pull with hands definitely.

9. Go up each time and move a bit more first while hanging, after making the heavy object and steel wire rope strain then hanging.

10. During working find the apply the brake failure, as heavy object falling rapidly, should hand press switch rise immediately, and then press switch hands to drop. After unloading, check whether there is grease in a level to apply the brake, use after repairing.

11. Should not hang the heavy object in sky for a long time, in case beyond part for ever out of shape and happened accident.

12. Machine this is support carry cargo only, is it forbid to take person.

13. While changing the steel wire rope, must pay attention to the head of steel wire rope, so as not to stab personnel

14. Attention: the motor work system of this electric winch is S3-25% 20min. (one cycle of work system is 20 minutes, namely work for five minutes, have a rest for 15 minutes, it is the intermission work.).

VI、 Install and experiment

1. In the work place, base on install this machine firm in hanger or fix.

2. Testing

a. Whether the working voltage of testing installation site accords with the demand stipulated on the data plate of the products, lest makes the machine burn out because the power sends mistake, its voltage should be range in specified value $\pm 10\%$.

b. Whether the circuit of the electric apparatus connection reliable, the direction of the rising and dropping should according to the direction of the switch.

c. Unload testing ----Hoisting or lower the number of times, there can't be vibration and unusual sound.

d. The load is testing ---Go up and down rated load for several times, check machinery its rotate, electric attachment and connection normal and reliable.

e. when the rated load drops, applies the brake hang in the air , its gliding amount should not exceed 1 of the length of the steel wire rope involved in for less than one minute 1.5%.

VII、 Maintenance of winch

1. This machine adopts the planet gear to speed down power of transfer , it is guarantee have good lubricate state, please put grease to lubricate in the filler hole in every three months.

2. Steel wire rope is for go up and down contained article, if get rusty or rainwater corrode, please pull out the whole steel wire rope and wipe the lubricate grease and keep maintain.

3. The electric winch should be followed and used the frequent degree. Overhaul in an all-round way through certain time, should generally go on once every year.

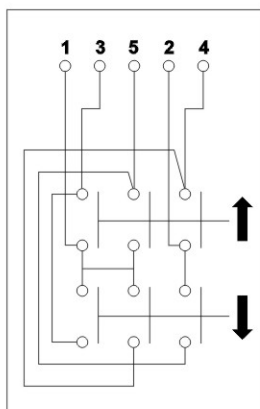
VIII、Common trouble and method of getting rid of :

Common troubles	Mainly reason	Method of get rid of
Hands press the lifting switch , The motor can't rotate	1、 the power has not put through 2、 wiring is break or take off loose 3、 the switch don't work #4、 The condenser burns out	1、 put through the power 2、 check the wiring and repair 3、 repair or adjust the switch #4、 change the condenser
Short out	*Rectifier damaged	*Change the rectifier
The gliding amount is too big after cutting out	1、 The automatic spring is out of shape 2、 Grit slice wearing and tearing 3、 It is series greasy with the grit slice 4、 overload	1、 change the automatic spring 2、 check or change the gear and bearing 3、 remove the greasy of grit slice 4、 lighten load
The noise unusually increases	1、 It is bad to lubricate 2、 The gear and bearing damaged after using for a long time 3、 Fasten position to loose and take off	1、 put more lubricating grease 2、 check or change the gear and bearing 3、 check whether the assemble one fasten or not
Electric leakage	1、 Do not work in earth or have no earth 2、 Interior wiring touches the shell	1、 check earth or connect the earth 2、 check or remove the interior wiring
Hands press the lifting switch big noise with motor , the spark of the switch is too big , can't lift the height article	1、 The voltage of the power is on the low side 2、 The input cable section is too long too thin , the voltage lower too much 3、 The interval is too narrow between grit slice and Apply the brake block 4、 The coil of apply the brake burn out	1、 check the voltage of the power . 2、 check whether the cable section meet the requestments 3、 change the grit slice or adjust the interval , keep 0.35-0.45mm .. 4、 change the coil of the apply the brake .

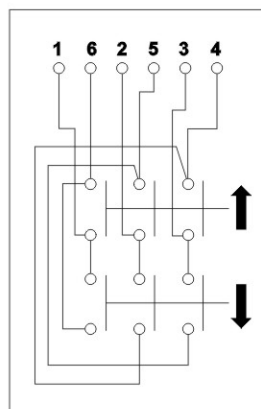
Note: have take No “#” ahead is suit for single phase electric winch , have take the No “*” ahead is suit for take direct current apply the brake the line electric winch.

IX、WIRING DIAGRAM:

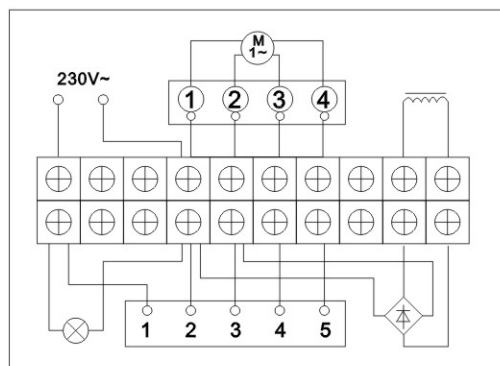
SWITCH WIRING FOR SINGLE PHASE



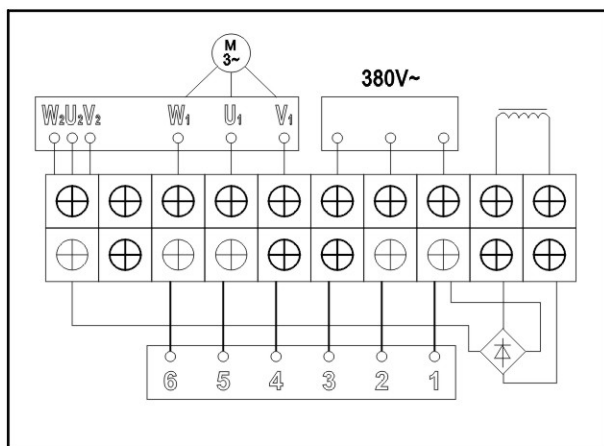
SWITCH WIRING FOR 3 PHASE



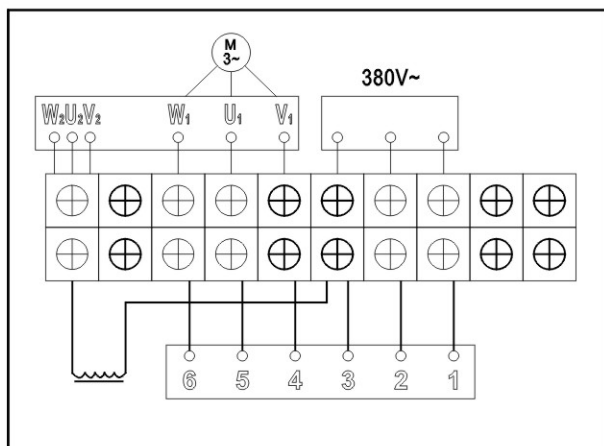
KDJ-200E/250E/300E MOTOR WIRING FOR SINGLE PHASE



KDJ-300E1 MOTOR WIRING FOR 3 PHASE

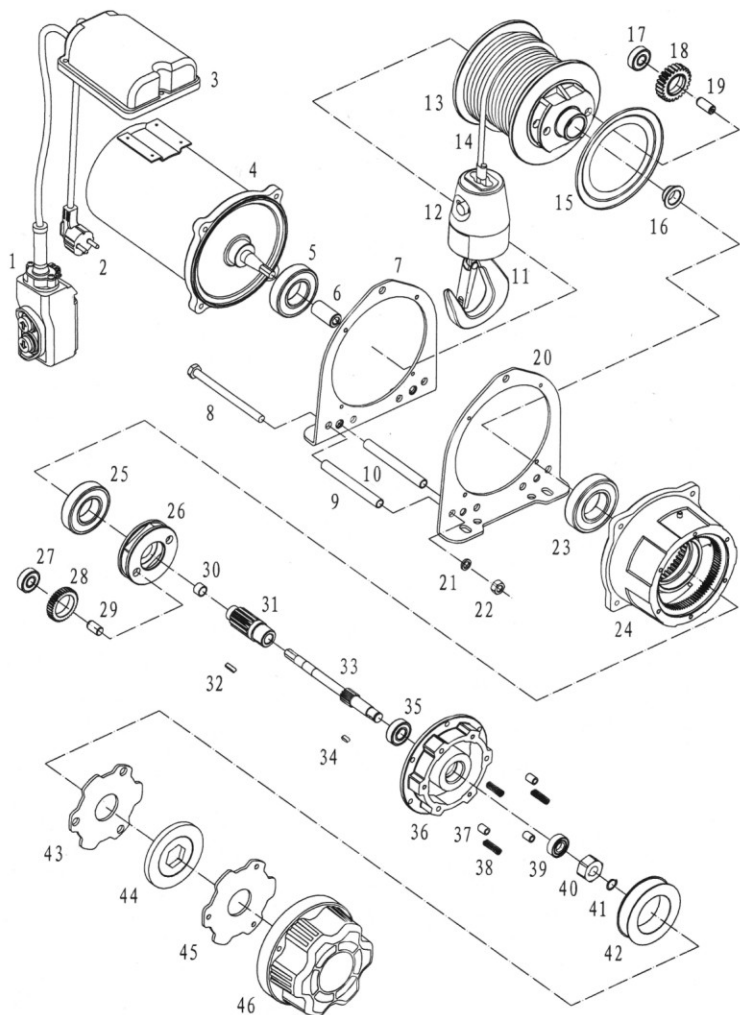


KDJ-500E1/750E1/1000E1 MOTOR WIRING FOR 3 PHASE



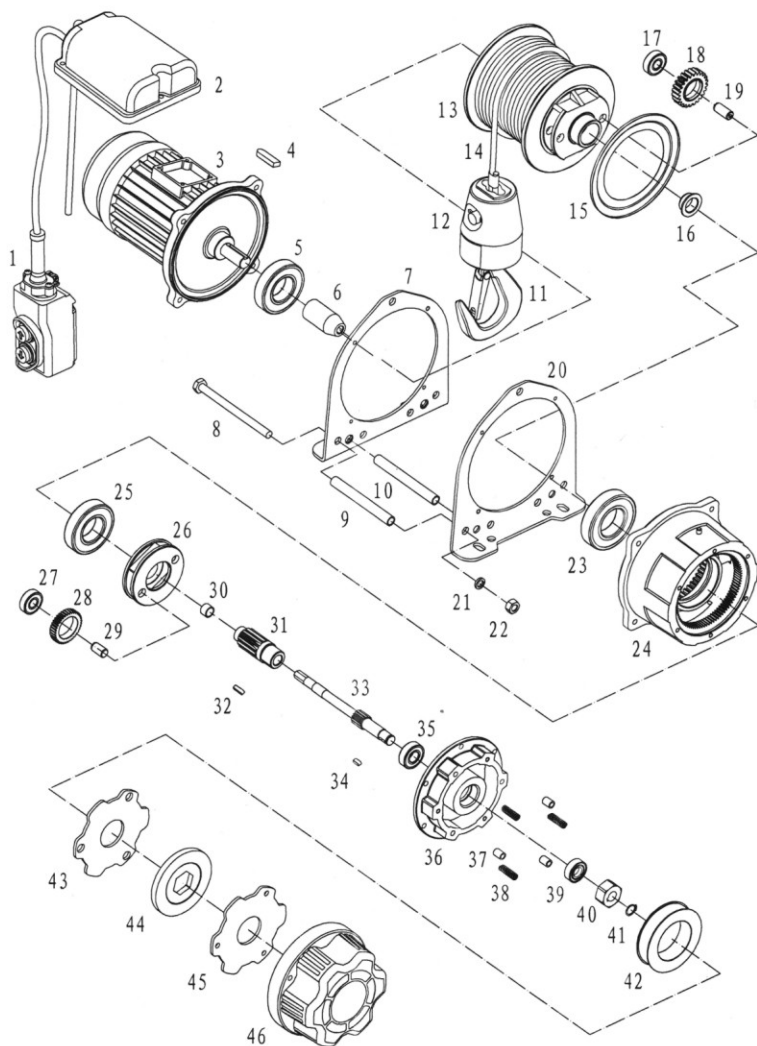
X. SPARE PARTS LIST

KDJ-200E/250E/300E SPARE PARTS LIST



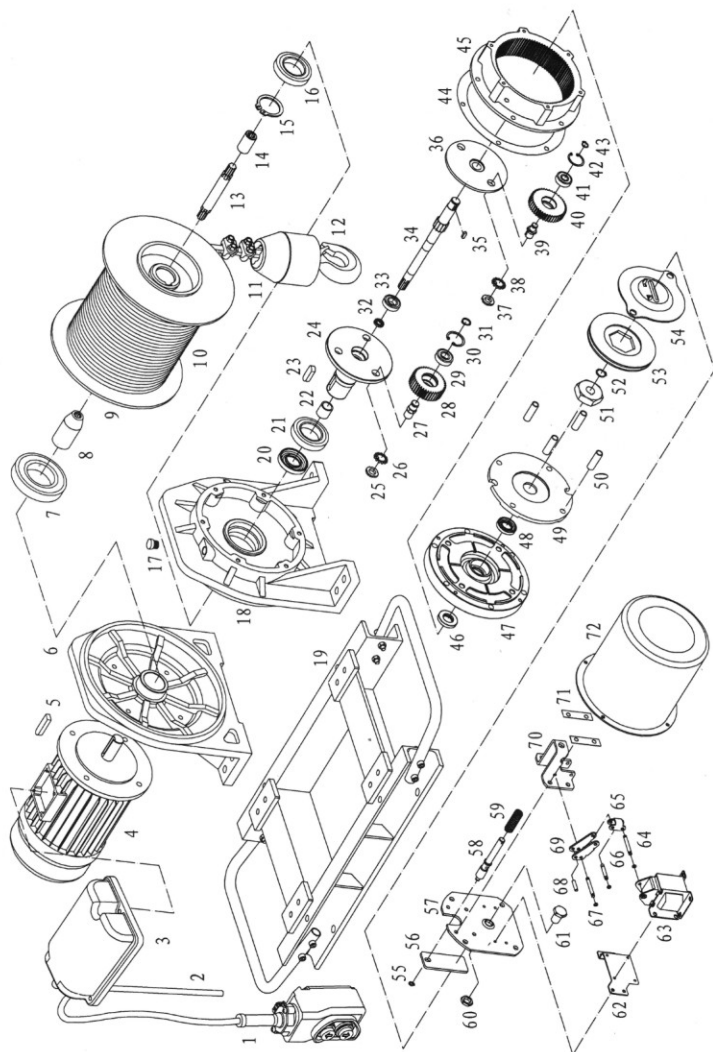
No.	Description	Q' ty	No.	Description	Q' ty
1	Control ass'y	1	24	Gear box	1
2	Power plug	1	25	Bearing	1
3	Electric box	1	26	Gear shelf	1
4	Induction motor	1	27	Bearing	2
5	Bearing	1	28	1rd gear	2
6	Sleeve	1	29	1rd gear shaft	2
7	Motor support rack	1	30	Axle collar	1
8	Bolt	3	31	2rd shaft	1
9	Rack fixed tube	3	32	Flat key	1
10	Tube	1	33	1rd shaft	1
11	Hook	1	34	Flat key	1
12	Block	1	35	Bearing	1
13	Drum	1	36	Gear box cover	1
14	Wire rope	1	37	Brake fixed tube	3
15	Plate	1	38	Brake spring	3
16	Axle collar	1	39	Oil seal	1
17	Bearing	2	40	Brake sleeve	1
18	2rd gear	2	41	Axle elastic collar	1
19	2rd gear shaft	2	42	Winding	1
20	Gear box support rack	1	43	Active brake flake	1
21	Spring washer	3	44	Friction flake	1
22	Nut	3	45	Static brake flake	1
23	Bearing	1	46	Plastic back cover	1

KDJ-300E1 SPARE PARTS LIST



No.	Description	Q' ty	No.	Description	Q' ty
1	Control ass'y	1	24	Gear box	1
2	Electric box	1	25	Bearing	1
3	Induction motor	1	26	Gear shelf	1
4	Flat key	1	27	Bearing	2
5	Bearing	1	28	1rd gear	2
6	Sleeve	1	29	1rd gear shaft	2
7	Motor support rack	1	30	Axle collar	1
8	Bolt	3	31	2rd shaft	1
9	Rack fixed tube	3	32	Flat key	1
10	Tube	1	33	1rd shaft	1
11	Hook	1	34	Flat key	1
12	Block	1	35	Bearing	1
13	Drum	1	36	Gear box cover	1
14	Wire rope	1	37	Brake fixed tube	3
15	Plate	1	38	Brake spring	3
16	Axle collar	1	39	Oil seal	1
17	Bearing	2	40	Brake sleeve	1
18	2rd gear	2	41	Axle elastic collar	1
19	2rd gear shaft	2	42	Winding	1
20	Gear box support rack	1	43	Active brake flake	1
21	Spring washer	3	44	Friction flake	1
22	Nut	3	45	Static brake flake	1
23	Bearing	1	46	Plastic back cover	1

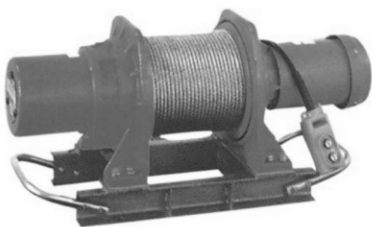
KDJ-500E1/750E1/1000E1 SPARE PARTS LIST



No.	Description	Q'ty	No.	Description	Q'ty	No.	Description	Q'ty	No.	Description	Q'ty
1	Control ass'y	1	19	Base plate	1	37	Round nut	2	55	Axle elastic collar	1
2	Power cord	1	20	Oil seal	1	38	Lock washer	2	56	Brake depressor	1
3	Electric box	1	21	Bearing	1	39	1rd gear shaft	2	57	Brake setting plate	1
4	Induction motor	1	22	Axle collar	1	40	1rd gear	2	58	Brake shaft	1
5	Flat key	1	23	Flat key	1	41	Bearing	2	59	Brake spring	1
6	Motor support rack	1	24	Strength shaft	1	42	Hole elastic collar	2	60	Nut	1
7	Bearing	1	25	Round nut	3	43	Axle elastic collar	2	61	Adjusting bolt	1
8	Sleeve	1	26	Lock washer	3	44	Paper enclose	1	62	Setting plate	1
9	Drum	1	27	2rd gear shaft	3	45	Gear box	1	63	Electromagnet	1
10	Wire rope	1	28	2rd gear	3	46	Bearing	1	64	Connection pin	2
11	Block	1	29	Bearing	3	47	Gear box cover	1	65	Connection plate	1
12	Hook	1	30	Hole elastic collar	3	48	Oil seal	2	66	Connection pin	1
13	Coupling	1	31	Axle elastic collar	3	49	Static tray	1	67	O ring	6
14	Sleeve	1	32	Oil seal	1	50	Brake fixed tube	4	68	Connection pin	1
15	Axle elastic collar	1	33	Bearing	1	51	Brake sleeve	1	69	Connection plate	1
16	Bearing	1	34	1rd shaft	1	52	Axle elastic collar	1	70	Setting shelf	1
17	Oil plug	1	35	Flat key	1	53	Friction flake	1	71	Stopping race	2
18	Gear box support rack	1	36	2rd shaft	1	54	Active brake flake	1	72	Plastic back cover	1

ELECTRIC WINCH

INSTRUCTIONS



LVD0505079
LVD0504080

**FOR FACTORIES、STROEROOM
LIFTING GOD BUILDING SITE.**

CERTIFICATE OF INSPECTION

This product meets the enterprise standard of Q/RKX 06-2004. It has been examined and accord with the standard and allowed to leave the factory.

Model No:

Inspector:

Date:

PACKING LIST

1. Winch whole machine 1 set
2. Clump weight, hook 1 set
3. Instruction manual 1 copy
4. Certificate of Inspection 1 copy
5. Packing list 1 copy
6. Special wrench 2 pieces

Note: Special wrench is only equipped with the model which is over 500 kgs.