

KDJ-500E1 AC Winch Operating Instructions



CERTIFICATE OF INSPECTION

This product meets the enterprise standard of O/RKX 05-2010.

	Q/RKX 05-2010.	
Model No.		
Inspector:		
Date:		

1.General

This manual contains important information for the correct installation, operation and maintenance of the equipment described. All persons involved in such installation, operation and maintenance should be thoroughly familiar with the contents of this manual. To safeguard against the possibility of property damage or personal injury follow the recommendations and instructions of this manual and keep it for further reference.

Winch series KDJ-B are designed explicitly for performance, efficiency and safety and offer many advantages and options. Their extremely compact, practical cube design and universal rope lead-offs allow individual applications in almost any position and make them powerful aids for lifting and pulling loads. The winches are designed to DIN 15020 classification 1Bm, safety regulation VGB8(winch, lift and pull equipment) and of course, the EC machinery directives.

Features

- Compact dimensions due to internal brake motor, Standard:Euro-voltage 230/380V,50HZ,3-phase, protected to IP54, Insulation class F.
- Single-phase A.C.motor 230V,50Hz,for mobile application of the winch.
- Spur gear transmission with helical first gear ensures

smooth motion lubricated by grease and can therefore be used in any position.

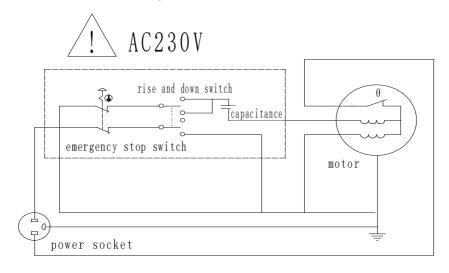
- Spring pressure disc brake incorporated in the motor holds the load secure even in the event of a power failure.
- Plain rope drum standard.
- The rope is secured to the drum in a recess so that the rope can be wound onto the drum in several layers without damage.
- Direct control as standard.
- Every winch is factory tested with overload.

The units are supplied with a test certificate showing the unit's serial-no and an operating instructions manual which contains a manufactures declaration.

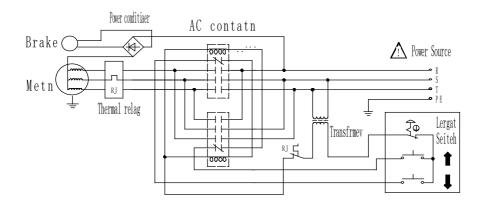
2.Specification

Model	Rated Capacity (kg)	Lifting Speed (m/min)	Rope (mm)	Motor Power (kw)	Voltage (V)	Lifting height (m)	G.W./ N.W. (kg)
KDJ-250B-15	250	15	5	0.55	230V/50Hz	60	70/66
KDJ-500B-15	500	15	6	1.1	230V/50Hz	60	111/107
KDJ-250B1-30	250	30	5	1.1	380V/50Hz	60	70/66
KDJ-500B1-30	500	30	6	2.2	380V/50Hz	60	111/107

Electric Circuit Diagram for KDJ-250B-15, KDJ-500B-15

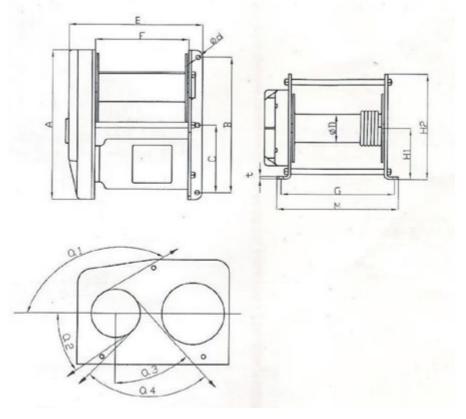


Electric Circuit Diagram for KDJ-250B1-30, KDJ-500B1-30



Line Pulling Force and useable rope length by Layer

Rated Line Pull dan			Useable rope length m					
Rope	I/D I	KDI	KDJ-	KDJ-	I/D I	I/D I	KDJ-	KDJ-
Layer	KDJ-	KDJ-	250B1-	500B1-	KDJ-	KDJ-	250B1-	500B1-
	250B-15	500B-15	30	30	250B-15	500B-15	30	30
1st	250	500	250	500	13.7	16.4	13.7	16.4
2nd	200	400	200	400	28.5	34	28.5	34
3rd	167	335	167	335	45	53	45	53
4th	145	285	145	285	62.5	73.4	62.5	73.4



Dimension	KDJ-250B-15	KDJ-500B-15	KDJ-250B1-30	KDJ-500B1-30
Α	430	515	430	515
В	292	480	292	480
С	1	/	240	240
D	80	120	80	120
d	13	15	13	15
Е	380	415	380	415
F	265	270	265	270
G	322	336	322	336
G1	145	176	145	176
G2	300	365	300	365
М	345	370	345	370
t	8	10	8	10
a1	149°	150°	149°	150°
z2	36°	33°	36°	33°
a3	42°	39°	42°	39°
a4	86°	89°	86°	89°

3.Installation

Estimate the load that is to be lifted or pulled and make sure it does not exceed the rated load of the winch.

Look to see where the drill bit will come through before drilling holes for installation,

Bolt or weld the winch to a structure capable of supporting at least 5 times the load the winch will be pulling. Frame halves must be aligned with min gap.

Always be sure the rope is pulling straight off the winch, not at an angle. This will prevent the rope from rubbing against the sides of the drum which can damage the cable.

With keeper nuts and lock washers outside the drum side, tighten nuts until adequate cable clamping is acquired.

Connect the wiring to the electric terminal and double check each wire connection for correct position.

When testing the winch, push the button on the hand controller one way and then the other to determine that both work in correct direction.

4.Operation



This electric winch is built for multi-purpose hauling and lifting operation. It is not to be used as a hoist for lifting, supporting or transporting people or for loads over areas where people could be present.

Inspect this winch thoroughly. High forces are created when using a winch creating potential safety hazards. It should be operated and maintained in accordance with the instructions. Never allow children or anyone who is not familiar with the operation of the winch to use it. A winch accident could result in personal injury.

Check winch for proper operation on each use. Do not use if damaged. Seek immediate repairs.

Neve exceed rated capacity.

Never apply load on winch with cable fully extended. Keep at least five full turns of cable on the reel.

Do not operate winch under influence of drugs or alcohol.

Always use safety gloves when handling wire rope.

Never hook the cable back upon itself. The cable can break under tension and cause injury and damage.

Stay clear of loads that are not balanced and the holding actions are not secure.

Never use worn, kinked or frayed cable. This is unsafe. Replace the cable immediately.

Never stand alongside the winch cable or guide the cable with your hands.

Never permit anyone on or under the load that is being pulled or lifted.

Never leave a weight hanging by the winch while the winch is unattended. as this may result in an accident.

4.1 Wire Rope Handing

Push the release button of the controller while pulling the wire rope to the desired length, then attach the hook to the item being pulled. Make sure the hook spring-loaded latch is set.

CAUTION

Always leave at least five turns of wire rope on the drum.

Review Winch Safety Warnings before continuing.

- 4.2 The operator may only start to move the load when he is sure the load will not overturn and that all personnel have left the danger zone.
- 4.3 While standing well clear of the tow path, use the remote control to pull the load. If the load will not move check for obstacles blocking the load or check to see if load is too heavy for winch capacity.
- 4.4 Cover the cables and winch when not in use.

5.Maintenance

Lubrication:

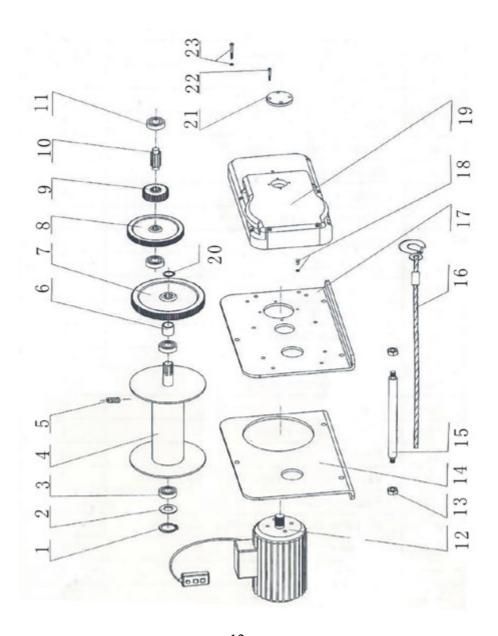
- 1. All moving parts within the winch have been lubricated using high temperature lithium grease at the factory. No internal lubrication is required.
- Lubricate wire rope periodically using a light penetrating oil.

Wire Rope Assembly replacement

(to be performed only by a qualified service technician.)

- 1. Extend wire rope assembly to its full length. Note how the existing wire rope is connected to the inside of the drum.
- 2. Remove old wire rope assembly and attach new one.
- 3. Retract new wire rope onto drum being careful not to allow kinking.

6.Part list



ITEM	Description	Qty.pcs
1	Retaining ring	1
2	Bearing cap	1
3	Bearing	2
4	Assembly Drum	1
5	Screw A	1
6	Spacer	1
7	Wheel-4	1
8	Wheel-2	1
9	Wheel-3	1
10	Splined Shaft	1
11	Bearing	2
12	Motor Assembly	1
13	Nut	6
14	Side plate right	1
15	Studs	3
16	Wire roe assembly with hook	1
17	Side plate lift	1
18	Screw B and spring washer	4
19	Gear cover	1
20	Retaining ring	1
21	Bearing keeper	1
22	Screw C	4
23	Bolt and spring washer	10