



河北雄安盛蕴科技有限公司
HEBEI XIONGAN SHARE TECHNOLOGY CO., LTD

BCD Electric Hoist Winch

OPERATING INSTRUCTIONS



HEIBEI XIONGAN SHARE TECHNOLOGY CO., LTD.

Thank you for choosing our company's products, and hope it can serve you safely and efficiently.

1. Introduction

Hoists currently on the market have the following problems:

The structure is bulky, takes up a lot of space when used, the transportation cost is high, the installation is laborious, the mechanical transmission efficiency is low, the solid grease is lubricated, the gear noise is loud, and the wear is fast. High power consumption, high temperature, short working time, and easy burning of motors have become problems in the industry. Under the national policy and modern development, with the concept of environmental protection, energy saving, technology and innovation, our company launched a new, environmentally friendly, efficient and cost-effective product within one year.

Features

1. The casing is made of high-strength aluminum alloy, the surface is anodized, environmentally friendly, high-strength, lightweight and has excellent heat dissipation characteristics.

2. The horizontal arrangement of the two-stage gear set made of chromium titanium alloy reduces the height of the whole machine and improves the safety. The first closed gear oil lubrication, low noise, low wear, low transmission loss.

Note: (High configuration models are lubricated with gear oil).

3. The drive motor adopts high-energy-efficiency YE3 motor technology, which endows the product with an energy-saving, high-efficiency, durable, and strong power core, which meets the requirements of continuous work, and saves more than 10% energy than similar products.

4. Brand-new design concept, compact and reasonable, wide applicability and more convenient installation.

Technical Data

Model	Usage	Voltage (v)	Motor (kw)	Capacity (kg)	Lifting Speed (m/min)	Lifting Height (mm)	Wire Rope Diameter (mm)	Net weight (kg)
BCD 300-600	Single Rope	380V/50HZ	1.7	300	24	1-100	5.0	32
	Double Rope	380V/50HZ		600	12	1-100		
BCD 300-600	Single Rope	220V/50HZ	3.0	300	28	1-100	5.0	34
	Double Rope	220V/50HZ		600	14	1-100		
BCD 350-700	Single Rope	380V/50HZ	2.2	350	24	1-100	5.0	34
	Double Rope	380V/50HZ		700	12	1-100		
BCD 350-700	Single Rope	220V/50HZ	3.0	350	24	1-100	5.0	36
	Double Rope	220V/50HZ		700	12	1-100		
BCD 400-800	Single Rope	220V/50HZ	4.0	400	24	1-100	6.0	42
	Double Rope	220V/50HZ		800	12	1-100		
BCD 500-1000	Single Rope	380V/50HZ	1.7	500	16	1-100	6.0	32
	Double Rope	380V/50HZ		1000	8	1-100		
BCD 500-1000	Single Rope	220V/50HZ	3.0	500	16	1-100	6.0	34
	Double Rope	220V/50HZ		1000	8	1-100		
BCD 600-1200	Single Rope	380V/50HZ	2.2	600	14	1-100	6.0	34
	Double Rope	380V/50HZ		1200	7	1-100		
BCD 600-1200	Single Rope	220V/50HZ	3.0	600	14	1-100	6.0	36
	Double Rope	220V/50HZ		1200	7	1-100		
BCD 750-1500	Single Rope	220V/50HZ	4.0	750	14	1-100	7.0	42
	Double Rope	220V/50HZ		1500	7	1-100		
BCD 1000-2000	Single Rope	380V/50HZ	2.5	1000	10	1-100	8.0	
	Double Rope	380V/50HZ		2000	5	1-100		
BCD 1000-2000	Single Rope	220V/50HZ	4.5	1000	10	1-100	8.0	
	Double Rope	220V/50HZ		2000	5	1-100		

Warning: The single-phase hoist uses a special motor, and it is not allowed to reverse and lift heavy objects. It is strictly forbidden to change the winding direction of the wire rope on the drum, otherwise the motor will be burned.

The maximum rated lifting capacity of the single-phase 220V model corresponds to a steel wire rope length of 12 meters. Increasing the length of the steel wire rope must reduce the lifting capacity.

2. Matters needing attention

1. Please check the grease before use.
2. Please read the product operation manual in detail.
3. It is strictly forbidden to use in violation of regulations, and it is strictly forbidden to stand under the lifting objects.

Special attention: leakage circuit breaker and overload protection control must be used to access the power supply.

3. Safety operating procedures

Please pay attention to safety when using the hoist and follow the following operating procedures:

1. Before using the hoist, please read and understand the operation manual of this product carefully.

The installation position of the hoist must be selected in a place that meets the needs and is easy to operate. Regularly check whether the installation of the hoist is firm.

2. The lifting capacity of the hoist is limited. Please don't overload it, and don't use it when the weight of the lifted object is unclear (including lifting buried objects, cable-staying, oblique hanging, etc.)! Overloading will damage the hoist and wire rope, increasing unsafe factors during operation. When lifting heavy objects, it is recommended to use pulleys for double-rope operation, which can reduce the load on the wire rope and other major components by 50%.

3. The rated lifting capacity of the hoist corresponds to the standard length of the wire rope is 30 meters. When increasing the length of the wire rope, the lifting weight must be reduced. For example, the safe lifting weight of a 100-meter hoist with a single rope is equal to

$$500\text{KG} \div (100\text{m} \div 30\text{m}) \div 1.2 = 125\text{KG}$$

4. Please do not "pull" the hoisted object when the hoist is working, otherwise it will increase the load on the hoist and easily overload the hoist and wire rope.

5. Keep the working area of the hoist clean and tidy. Do not let anyone approach, do not let anyone touch the tensioned wire rope, and strictly prohibit anyone standing under the hoist that is in operation.

6. If the steel wire rope needs to be replaced, its model specification direction must be consistent with the original steel wire rope. And do not change the winding direction of the wire rope on the drum.

7. When operating the wire rope, please wear thick fur gloves and do not let the wire rope slip through your hands, otherwise the damaged part of the wire rope may stab your hand.

8. After the operation of the hoist is completed, when the wire rope is put into the rope, please do not directly guide the arrangement of the wire rope by hand.

9. Do not hook the wire rope itself with a hook, and do not use the wire rope of the hoist to tie or tie the suspended object, otherwise the wire rope will be damaged. When tying the suspended object, please use other suitable ropes.

10. The limiter is configured as a safety device, which can ensure that the ascending circuit is automatically cut off when the hook rises to the limit position. Please do not use the limiter as a travel switch (the travel switch is optional)

11. Do not use the hoist to lift people or use it as a passenger elevator. This hoist is not used for hoisting people.

12. When choosing the installation location of the hoist, the warning signs and indicative signs should be in a conspicuous state, because it is necessary to operate correctly according to the relevant signs.

13. Make sure to operate the hoist without obstacles.

14. Please do not operate the hoist while drinking, taking medicine or being sick.

15. When the hoist is working, please do not work under and around the hoist.

16. Please use the fixed accessories provided with the hoist, otherwise it may put you in an unsafe state.

17. Do not modify or weld the parts of the hoist at will, otherwise it will reduce the safety of the hoist and put you in an unsafe state.

18. When hoisting objects with a hoist, make sure to keep at least 3 turns of wire rope on the rope drum to prevent the wire rope from falling off the rope drum when the force is too large.

19. Any installation form must ensure that the hoist and wire rope drum work in a horizontal state.

4. Troubleshooting

Symptom	Cause	Remedy
Motor does not start when no load When the load is heavy, the motor turns to lift and does not turn	-The power is not connected -Damaged motor	-Overhaul power and control lines -Replace or repair the motor
The motor does not run normally	A certain phase of the power supply is cut off	Check the power supply
Brake failure or excessive brake slippage after lifting heavy objects	-Brake friction oil or wear is too large -Compression spring failure	-Clean or replace the brake assembly -Replace the brake spring
Unusual sounds from reel or gearbox	-faulty gear or bearing -Gearbox oil shortage and poor lubrication -damaged coupling -Loose connecting or fixing bolts	Timely inspection, repair, adjustment and replacement
The case of the hoist is charged live	-a phase circuit is short-circuited with the case of the motor - The safety ground protection wire is disconnected or poorly connected	-Check and replace the motor -Check and repair the safety ground wire
Motor heating up too high	-overloaded use -Too much dust and oil on the heat plate of the motor -Brake clearance too small	-Overloading not allowed -Remove dust or oil -modulating brake
It is difficult to restart after the heavy object is lifted to mid-air and stopped	The power supply voltage is too low	Restart after the power supply voltage returns to normal.

Make handling easier!

No.	Fault condition	Cause of fault	Remedy
1	The motor cannot start when it is unloaded	- the power line -One of the three phases of the stator is cut off -Low power supply	-Check voltage across power wires -Check fuses and phases of power -check the voltage -Check the spring and shaft hole for jamming
2	The motor cannot start when it is loaded	-open circuit between stator winding boxes -overload -Voltage is too low	-Check the resistance of each phase and the circuit of each phase -Check motor load current -check the voltage
3	Motor overheating	-open circuit between motor stator windings - Mains voltage too high or too low -motor overload -Brake action sluggish	-Motor stator winding -Check motor load battery -Check the supply voltage -Check spring and shaft hole for flexibility
4	Warranty wire blown	-short circuit between two phases -overloaded -low voltage	-repair winding -Lighten the load - Increased voltage
5	Low insulation resistance or breakdown	-phase-to-ground short circuit -Insulation aging or damage -unclean -The cord set or wiring is damp -motor overheating	-repair windings -check insulation -Blow out the interior with dry compressed air -Disassemble and dry or dispose before reuse -Disassemble and check to prevent continued heating
6	The motor brakes loudly or the noise is too loud	-the clearance of the shaft hole is too large -Improper assembly -Damaged or bad bearings -rotor unbalance -uneven clearance	-check the size of the shaft hole -Check fit and make adjustments -Replace the bearing -check balance -Check the relevant size and shape tolerances, adjust the air gap
7	Brake failure	-the brake environment is more worn -spring failure -The friction surface is not clean	-Replace the brake ring -Adjust spring or replace -Clean the friction surface

5. product installation

Open the package and check whether the product is damaged or damp. The tape wrapped on the wire rope must be removed before the machine can be tested. The

installation position of the hoist depends on the needs of the work. It must be installed on a special base and bracket. When used with a sports car, it must be ensured that

the wire rope drum is in a horizontal state and must be firm and reliable. Do not place the machine in a humid or acidic place. The access power supply must have a reliable ground wire and leakage and overload protection devices.

6. maintenance

1. Regularly check the bolts and power cords that fix the hoist.
2. Timely remove the dust and oil accumulated on the cables and hoist casing.
3. Lubricating grease: The new product has been added with lubricating grease, regularly inspected and replaced every six months
4. Wire rope: Check the status of the wire rope at any time, and replace it immediately if it is found to be worn.

Note: It is necessary to replace the steel wire rope with the same diameter and the same rotation direction as the original wire rope. It is strictly forbidden to change the winding direction of the wire rope on the rope barrel.