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

DHBY Explosion-proof Electric Chain Hoist

OPERATING INSTRUCTIONS

HEIBEI XIONGAN SHARE TECHNOLOGY CO., LTD.

1. Product Introduction

The explosion-proof chain electric hoist is widely used in potentially hazardous environments such as oil, petrochemical, oil stations, oil depots, gas extraction, chemical industry, military, power, mining, electronics, and railways. During operation, the product does not produce mechanical sparks from friction and impact, and does not ignite gas in flammable and explosive locations, effectively preventing fire accidents and ensuring the safety of national property and personnel.

The explosion-proof stainless steel ring chain electric hoist has a rated voltage of 380V, frequency of 50HZ, and a rated power of 0.75KW. The installation and disassembly of the product are very convenient, safe, and quick. It is strictly forbidden to be used for lifting personnel and to be overloaded.

The electric hoist should be guaranteed to work under the following conditions:

1. Altitude does not exceed 2000m;
2. Relative humidity of the surrounding air does not exceed 95% (+25℃);
3. Ambient temperature: -5℃ to +40℃;
4. In coal mines with marsh gas mixture;
5. In places without significant shaking and impact vibration;
6. Pollution level: Grade 3;
7. Installation type: Class II.

2. Technical Parameters

Capacity (Ton)	1	2		3	5
Test Load (Ton)	1.25	2.5		3.5	5.5
Motor Model (W)	YHPE 750	YHPE 750		YHPE 750	YHPE 750
Power Supply (Voltage)	380V	380V		380V	380V
Lifting Speed (m/min)	2.5	2	1.25	1.25	1
Falls of Chain	1	1	2	2	2
Gross Weight (KG)	3m 36kg 6m 40kg	3m 35kg 6m 52kg		3m 40kg 6m 50kg	3m 57kg 6m 70kg
Packing (L×W×H) cm	50×32×28	50×32×30		50×32×30	60×32×32

3. Structure and Performance Overview

This product is a small chain lifting tool, using 380V power supply, consisting of an electric motor, reducer, and lifting mechanism.

The electric motor adopts an explosion-proof brake motor, which has the characteristics of large braking torque and instant braking when power is cut off. After the electric motor is decelerated by gears, it drives the lifting chain wheel and chain to raise and lower the hook.

4. Usage and Maintenance

1. Before using the ring chain hoist, check if there is a certificate of conformity and check for any damage during transportation. If any issues are found, handle them in a timely manner, otherwise it should not be used.
2. Before use, check if the motor, switches, and buttons are in normal and good condition to ensure correct, reliable, and safe operation.
3. Before work, check if the upper and lower hooks are securely fastened, if the chain has any twists or incorrect fastening, and lubricate the chain. When using the hoist for dragging work, there should be a dedicated person to adjust the chain.
4. During the lifting process of heavy objects, whether lifting or lowering, it is not allowed to reverse the motor suddenly. Stop first and then reverse to avoid damaging the motor or hanging attachment. It is not allowed to suspend heavy objects in the air for a long time to prevent accidents.
5. In addition to complying with these regulations, the use of the equipment should also strictly adhere to the equipment lifting safety technical operation regulations formulated by each unit.

5. Safety Warning

1. The lifting weight of the electric hoist must not exceed the rated load.
2. The supporting motor of the electric hoist must be a stainless steel special motor that meets the requirements of this manual.
3. The cable used with the electric hoist must meet stainless steel requirements.
4. To ensure the safety of personnel and equipment, it is strictly prohibited to stand under the hoist during lifting.
5. Overloading work is strictly prohibited.
6. When lifting heavy objects, operators must control the ascending and descending processes since this machine does not have upper and lower limit switches (to avoid damage to the machine body when lifting too high or chain detachment when descending).

6. **Troubleshooting and Solutions for Electric Hoist**

Malfunction	Main Reasons	Solutions
Motor does not turn on or cannot lift heavy objects after starting	- Excessive overload; - Voltage drop exceeding 10%; - Electrical circuit is broken or poor contact; - Brake disc is stuck and cannot be disengaged;	-- Lift within the rated load; - Wait for voltage to return to normal; - Repair electrical components; - Adjust the gap of the disc brake device to 0.6-1.5mm.
Unreliable braking, sliding distance	- Fatigue failure of spring; - Excessive clearance between brake disc and pads; - Excessive wear of brake pads;	- Replace with qualified spring; - Check and adjust the disc brake device, replace brake pads.
High motor temperature rise, loud noise	- Overload operation; - Frequent start-up; - Gap of disc brake less than 0.6mm;	- Reduce load, operate no more than 120 times/h, adjust the gap of the disc brake.
Abnormal noise in the reducer	- Poor lubrication; - Gear wear; - Bearing damage;	- Dismantle and repair.