

TECHNICAL DATA

Model	HH200	HH250	HH300	HH400	HH500	HH600
Voltage	230V , 50Hz					
Current (A)	2.0	2.2	2.4	3.3	4.0	4.6
Input power (W)	450	500	550	750	900	1050
Rated load (kg)	100/200	125/250	150/300	200/400	250/500	300/600
Lifting height(m)	12/6	12/6	12/6	12/6	12/6	12/6
*Rated speed(m/min)	8/4	8/4	8/4	8/4	8/4	8/4
Cable diameter(mm)	3.0	3.0	3.0	3.8	4.2	4.5
Cable tensile strength (N/mm ²)	≥1870	≥1870	≥1870	≥1770	≥1770	≥1770
Insulating grade	B					
Protecting grade	IP54					
Group of mechanisms	M1					
Recommend of Beam diameter(mm)	40-50					
*Work rate	S3 25%	S3 20%	S3 20%	S3 25%	S3 25%	S3 20%
Net weight (kg)	13	13.5	14	18.5	19	20

*Rating speed is lowest speed of the hoist.

*Work rate e.g. S3-25%-10min: S3=intermittent periodic duty. Means during a period of 10 minutes the machine may run max. 25%(2.5min).

GENERAL

The HH Type - Electric Hoist, Adopt the single-phase AC as a power source. Top of the fixed installation, to have emergency brake and limit function, Use safe and reliable.

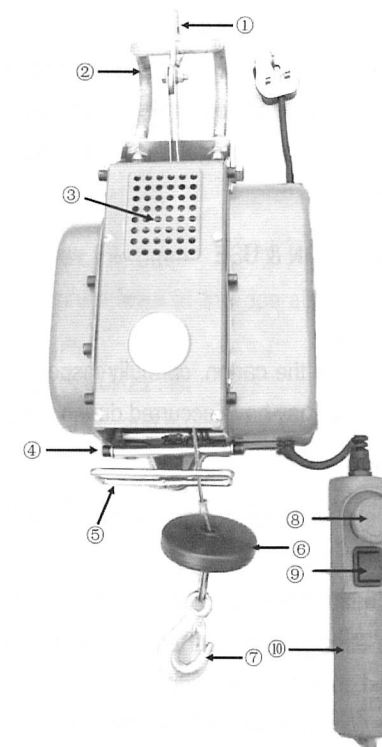
1. The electric rope hoist is intended for indoor use.
2. The electric rope hoist is an ideal appliance in your garage, shed or similar location for hoisting all kinds of loads.
3. This rope hoist is not used for transporting hot molten masses. It is not used for operating in aggressive environment and low temperatures.
4. Group of mechanisms is M1.

5. The useful life of the hoist is above 8000 cycles (except wearing parts). If the hoist has run 8000 cycles, it must have all mechanisms inspected and maintained.
6. Read and understood the instruction manual completely and clearly, before using the hoist.
7. Ensure that operator know how the machine works, and how it should be operated.
8. The user shall always work in compliance with the operating instructions.
9. The hoist is not designed for continuous use. The work rate is intermittent periodic duty.
10. The rated capacity of the machine does not vary with the position of the load.

PARTS BRIEF

1. Mousing-Hook
2. Hanger Rod
3. Motor (inner)
4. * Down Limit Device
5. Limit Lever Assy
6. Limit Block
7. Hook
8. Emergency Stop Switch
9. Positive and Negative Switch
10. Handle

*The HH200A-HH600A Type Electric not have Down Limit Device.



SAFETY INSTRUCTIONS

1. Always check that the voltage corresponds to the voltage on the rating plate. In case the mains voltage is not suitable may cause working abnormally or personal injury.
2. Your socket plug must be grounded and your electric system must be supplied with an earth leakage circuit breaker.
3. It is forbidden to lift loads above the rated load of the hoist.
4. Use the device only for its intended purpose. Never carry persons with the hoist.

5. Do not pull cord to disconnect the plug. Keep cord from heat, oil and sharp edges.
6. Do not try to lift fixed or obstructed loads.
7. Pull out the mains plug when not in use.
8. Keep children and other unauthorized persons away from the machine.
9. Do not side-pull loads. Avoid swinging the load or hook.
10. Make sure hook travel is in the same direction as shown on the controls.
11. Inspect the hoist regularly; check the switches are in good operating conditions.
12. Have your tool repaired by an expert; otherwise it may cause danger for the user.
13. Avoid switch-on / switch-off quickly sequences.
14. Not allow your attention to be diverted from operating the hoist.
15. Do not stand or work under a lifted load.
16. When drinking, drugs, illness, and danger of external conditions, do not operating electric hoist.

INSTALLATION & USE

Unpacking

After opening the carton, carefully inspect the hoist frame, cords, hooks and control station for damage that may have occurred during shipment.

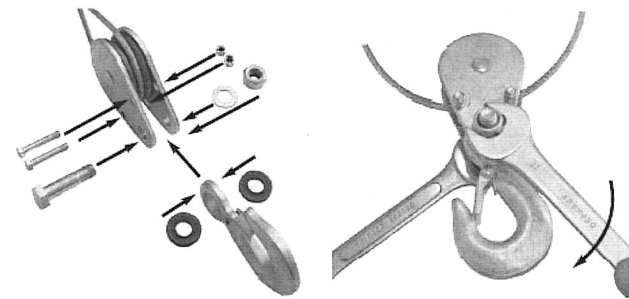
Mounting

1. The electric hoist provided with a derrick boom system, Recommend the system fixed in the round solid beam.
2. The beam dimensions must be in accordance with the distance between the derrick boom and its strength can hold the rating load. We recommend contacting a skilled technician for help and checking the solidity of the beam construction.
3. The Mousing-Hook should be right hooked into the derrick boom. Before the start-up a skilled technician should check that the support and the coupling of the hoist are well sized.

Pulley block using

The electric rope hoist is provided with an extra pulley and hook. When used correctly, the machine can hoist double load.

Assemble the pulley with help of the bolts as shown in the next picture.

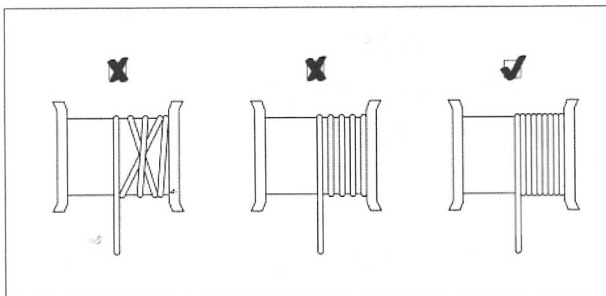


The fixed hook on the machine can be attached on the hanging rod (Reference parts list: 66): there is a special hole for that purpose. The load is now lifted with help of 2 steel cables: the machine can hoist a double load.

Operating instructions

1. Before first using, remove the adhesive tape from the cable drum.
2. The value of the A-weighted emission sound pressure level at the operator's position is lower than 70dB.
3. Supplying power need: voltage $230V \pm 10\%$, frequency $50Hz \pm 1\%$.
4. The hoist is used at ambient temperatures, among $0^{\circ}C$ and $40^{\circ}C$, relative humidity below 85%, height above sea below 1000 meters.
5. The hoist's transportation and storage temperature may be above $-25^{\circ}C$, below $55^{\circ}C$. It's highest temperature cannot exceed $70^{\circ}C$.
6. The user shall lift the loads from the ground with the minimum speed available at the hoist. Shall be tightened and shall not be in the slack-condition when the load is being lifted from the ground.
7. The electric motor of the hoist is equipped with a thermostat switch for protection. During operating the hoist may stop, it will only become operational again after a break for cooling.
8. The hoist electric rope hoist is not supplied with any rated capacity limiter. Therefore, if you are unable to hoist a load do not insist and let the motor cool down. It means the load exceeds the hoist max capacity.
9. Not leave load supported by the hoist unattended unless specific precautions have been taken.
10. Be supplied with a 10 A fuse or 10 A over-current circuit-breaker to protect your electric system.

11. Not use limit switches as routine operating stops. They are emergency devices only.
12. Before starting the work, make sure that the steel cable is correctly wound around the drum and the pitch is equal to the cable diameter. (See next picture)



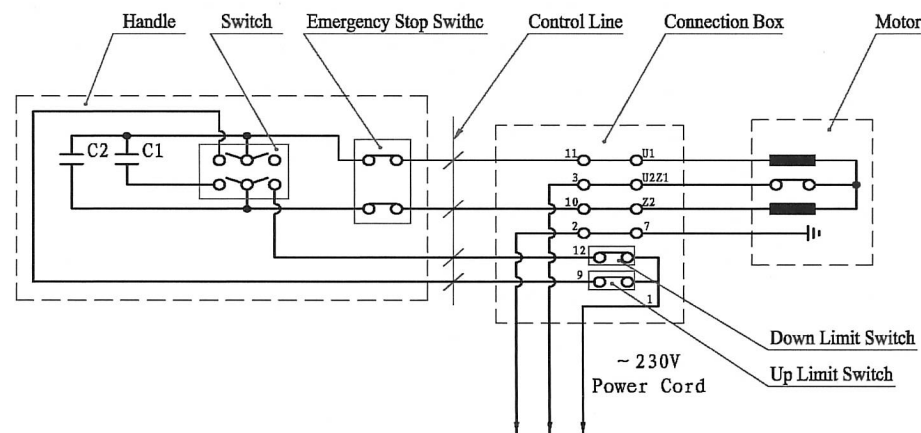
13. Make sure that the load is properly secured to the lifting hook or return pulley and always stay at a distance from the load and the steel cable.

Operation

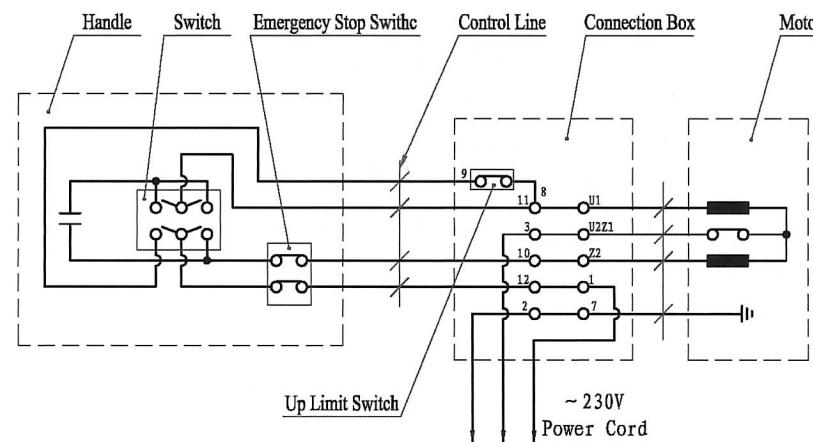
1. Check if the (emergency) stop switch is pressed. Turn the red stop switch clockwise to engage.
2. Press the push button ▲ to lift the load.
3. Press the push button ▼ to lower the load.
4. For up limited system, when the hoisted load is almost in top position, the limit block will move the lever upward. A switch on the motor is now engaged and the motor up direction moving will stop running.
5. For down limited system, when the load is almost in low position (about two turns of cable around the drum), the down limit pole will move. A switch on the motor is now engaged and the motor down direction moving will stop running. In case the cable moving direction is not as shown on the controls, which caused by the cable hold down by the side cable, the down limited system may work also.
6. When the push button is pressed, the machine will stop. In case of an emergency, immediately press the red stop switch to stop the machine. Operating the machine is not possible when this red switch is pressed.

CIRCUIT DIAGRAM

HH200D-HH600D:



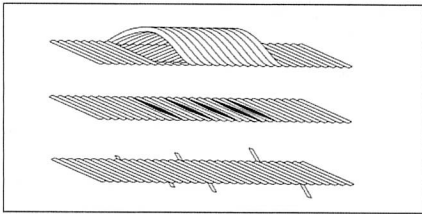
HH200A-HH600A:



PERIODIC INSPECTION & MAINTENANCE

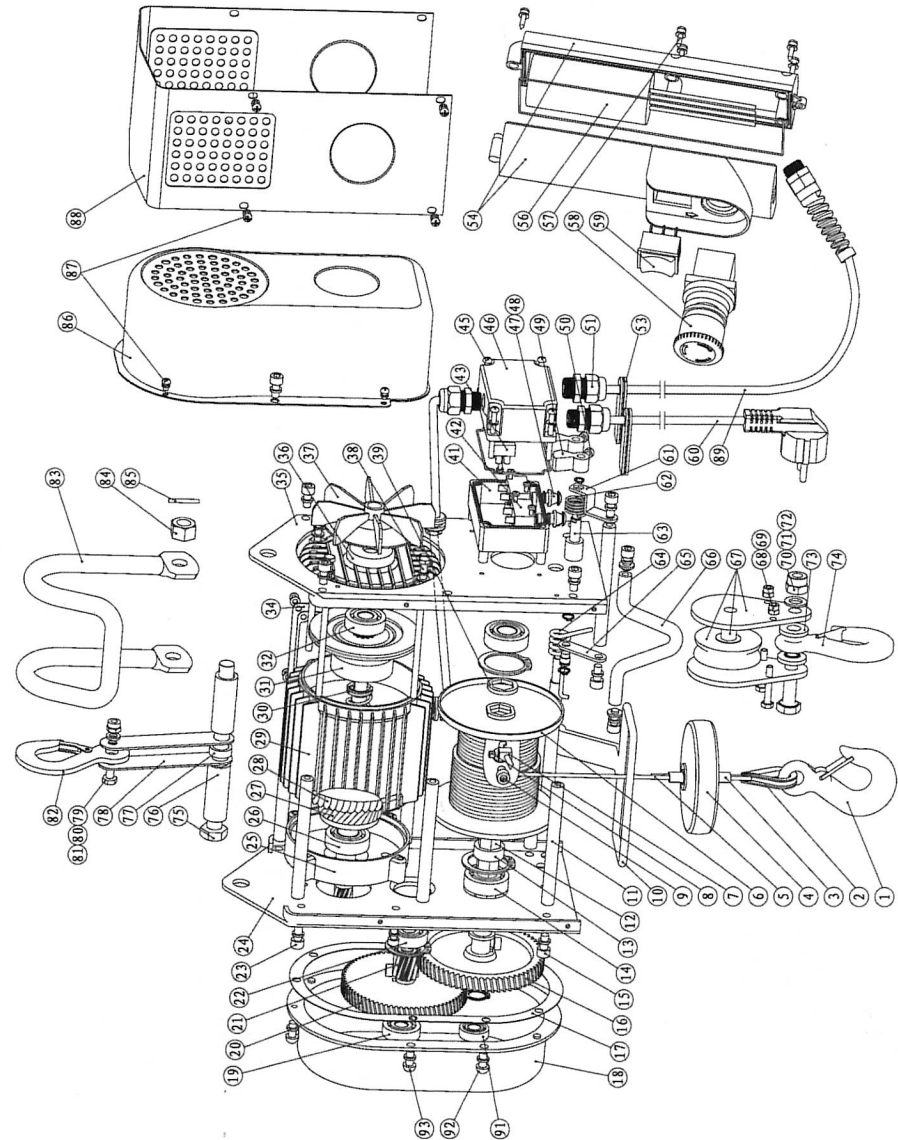
Attention! Always make sure that the machine is not connected to the mains electricity when you carry out any maintenance of the mechanism.

1. Hereinafter, per cycle means that the operator operates the load up and down one time. Periodically checking usually means it has checked after the hoist work per 100 cycles.
2. Periodically make sure the hoist limit switches function properly. Testing see below.
When the hoist is hoist, moves the lever upward lifting direction. The motor must be stopping running. (With no load). When the hoist is lower, moves the down limit pole, the motor must be stopping running.
3. Periodically check power cord and control cord.
4. Per 200 cycles may lubricate the steel cable and pulley.
5. Per 30 cycles check that the entire steel cable is in good condition. If the cable is damaged (See next picture) , replace the cable immediately according the technical data form.



6. Per 1000 cycles checks that the screws securing the brackets and pulley are well tightened.
7. Per 1000 cycles check that the hook and the pulley are in good condition.
8. Check that the (emergency) stop switch and push button panel are in good operating conditions before every using the hoist.
9. Per 1000 cycles check brake function system. If motor with abnormal noise, or hoist without hold the rated load, the brake function system may have some overhaul.
10. Replace damaged or worn parts, and keep appropriate records of maintenance.
11. For extraordinary maintenance contact an authorized service center.

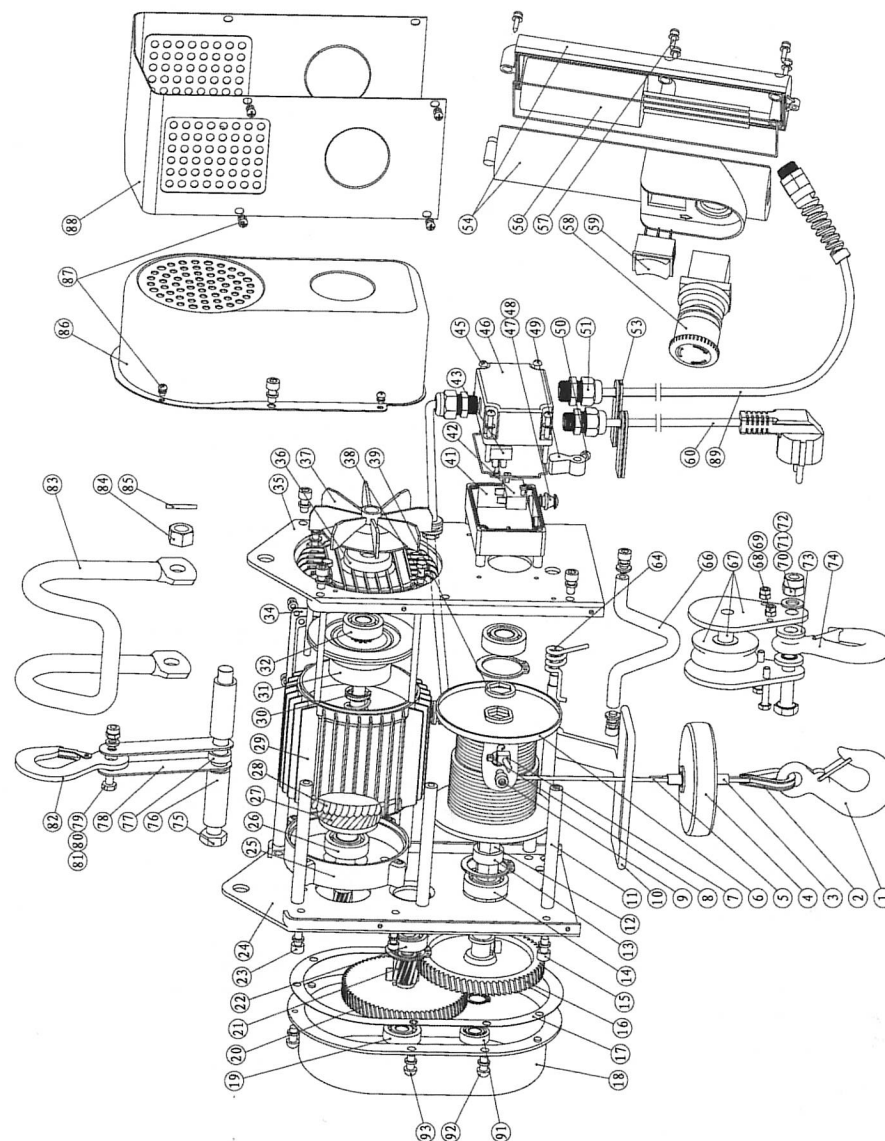
HH200D/ HH250D/ HH300D:



Parts List (HH200D/HH250D/HH300D)

NO.	Name	Qty.	NO.	Name	Qty.
1	Hook	1	50	Hollow- Head Setscrew (M4*6)	2
2	Wire Thimble	1	51	Gland (M16)	3
3	Fastening Sleeve Of Rope	2	53	Cable Retaining Ring	2
4	Limit Block	1	54	Handle	1
5	Rope	12.2m	56	Capacitor	1
6	Rope Tube	1	57	Tapping Screw (ST4.2*18)	5
7	Lock Sleeve	1	58	Emergency Stop Switch	1
8	Hex Socket Screw (M5*5)	1	59	Positive And Negative Switch	1
9	Hex Socket Screw (M6*10)	1	60	Three-core Plug	1
10	Limit Lever Assy	1	61	Right plate	1
11	Anchor Post	7	62	Torsional Spring	1
12	Rope Drum Shaft	1	63	Right Revolution Axis	1
13	Rope Washer (δ4)	1	64	Torsional Spring	1
14	Bearing (6202-2ZN)	2	65	Left-axis Component	1
15	Hex Socket Screw (M6*12)	8	66	Hanging Rod	1
16	Grade 2 Gear	1	67	Assembly Pulley	1
17	Spacer	1	68	Hex Head Bolts (M5*28)	2
18	Gear Box	1	69	Hex Nut (M5)	2
19	Bearing (6200-2RS)	1	70	Hex Head Bolts (M8*32)	1
20	Grade 1 Gear	1	71	Hex Nut (M8)	1
21	Intermediate Shaft	1	72	Plain Washer (d8)	1
22	Bearing (6200-2ZN)	1	73	Washer	2
23	Cruciform Slot Screw (M5*14)	4	74	Hook	1
24	Left Bracket	1	75	Hex Head Bolts (M12*130)	1
25	Front Cover	1	76	Locating Pipe	2
26	Bearing (6202-2RS)	1	77	Backing Ring	1
27	Rotor	1	78	Splint	2
28	Stator	1	79	Hex Head Bolts (M6*20)	1
29	Chassis	1	80	Hex Nut (M6)	1
30	Spring	1	81	Plain Washer (d6)	1
31	Brake Hoop	1	82	Mousing-hook	1
32	Bearing (6201-2RS)	1	83	Hanger Rod	1
34	Chassis Cover	1	84	Hex Nut (M12)	1
35	Right Bracket	1	85	Spring Pin (d2.5*20)	1
36	Gear Cover	1	86	Motor Cover	1
37	Fan Blade	1	87	Cruciform Slot Screw (M4*6)	12
38	Hex Head Bolts	4	88	Outer Casing Housing	1
39	Rope Washer (δ3)	1	89	Cable	1
41	Connection Box	1	91	Bearing (61900-2RS)	1
42	Limit Switch	2	92	Cruciform Slot Screw (M6*16)	3
43	Terminal Block	1	93	Cruciform Slot Screw (M6*20)	2
45	Cruciform Slot Screw (M4*40)	4			
46	Connection Box Cover	1			
47	Moving Limit Contactor	2			
48	Limit Shaft Seal	2			
49	Limit Head	2			

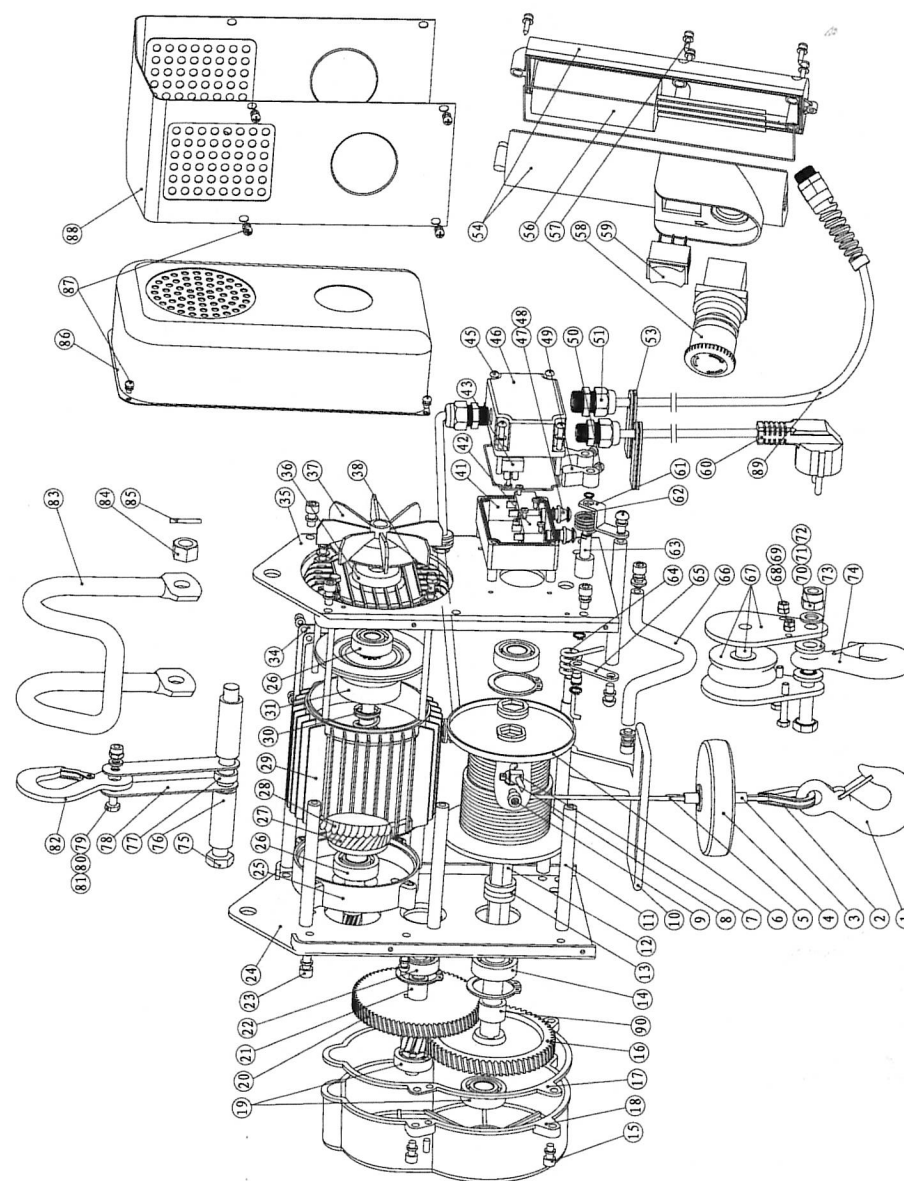
HH200A/ HH250A/ HH300A:



Parts List (HH200A/HH250A/HH300A)

NO.	Name	Qty.	NO.	Name	Qty.
1	Hook	1	50	Hollow- Head Setscrew (M4*6)	1
2	Wire Thimble	1	51	Gland (M16)	3
3	Fastening Sleeve Of Rope	2	53	Cable Retaining Ring	2
4	Limit Block	1	54	Handle	1
5	Rope	12.2m	56	Capacitor	1
6	Rope Tube	1	57	Tapping Screw (ST4.2*18)	5
7	Lock Sleeve	1	58	Emergency Stop Switch	1
8	Hex Socket Screw (M5*5)	1	59	Positive And Negative Switch	1
9	Hex Socket Screw (M6*10)	1	60	Three-core Plug	1
10	Limit Lever Assy	1	64	Torsional Spring	1
11	Anchor Post	6	66	Hanging Rod	1
12	Rope Drum Shaft	1	67	Assembly Pulley	1
13	Rope Washer (δ4)	1	68	Hex Head Bolts (M5*28)	2
14	Bearing (6202-2ZN)	2	69	Hex Nut (M5)	2
15	Hex Socket Screw (M6*12)	8	70	Hex Head Bolts (M8*32)	1
16	Grade 2 Gear	1	71	Hex Nut (M8)	1
17	Spacer	1	72	Plain Washer (d8)	1
18	Gear Box	1	73	Washer	2
19	Bearing (6200-2RS)	1	74	Hook	1
20	Grade 1 Gear	1	75	Hex Head Bolts (M12*130)	1
21	Intermediate Shaft	1	76	Locating Pipe	2
22	Bearing (6200-2ZN)	1	77	Backing Ring	1
23	Cruciform Slot Screw (M5*14)	4	78	Splint	2
24	Left Bracket	1	79	Hex Head Bolts (M6*20)	1
25	Front Cover	1	80	Hex Nut (M6)	1
26	Bearing (6202-2RS)	1	81	Plain Washer (d6)	1
27	Rotor	1	82	Mousing-hook	1
28	Stator	1	83	Hanger Rod	1
29	Chassis	1	84	Hex Nut (M12)	1
30	Spring	1	85	Spring Pin (d2.5*20)	1
31	Brake Hoop	1	86	Motor Cover	1
32	Bearing (6201-2RS)	1	87	Cruciform Slot Screw (M4*6)	12
34	Chassis Cover	1	88	Outer Casing Housing	1
35	Right Bracket	1	89	Cable	1
36	Gear Cover	1	91	Bearing (61900-2RS)	1
37	Fan Blade	1	92	Cruciform Slot Screw (M6*16)	3
38	Hex Head Bolts	4	93	Cruciform Slot Screw (M6*20)	2
39	Rope Washer (δ3)	1			
41	Connection Box	1			
42	Limit Switch	1			
43	Terminal Block	1			
45	Cruciform Slot Screw (M4*40)	4			
46	Connection Box Cover	1			
47	Moving Limit Contactor	1			
48	Limit Shaft Seal	1			
49	Limit Head	1			

HH400D/HH500D/HH600D:



Parts List (HH400D/HH500D/HH600D)

NO.	Name	Qty.	NO.	Name	Qty.
1	Hook	1	51	Gland (M16)	3
2	Wire Thimble	1	53	Cable Retaining Ring	2
3	Fastening Sleeve Of Rope	2	54	Handle	1
4	Limit Block	1	56	Capacitor	1
5	Rope	12.2m	57	Tapping Screw (ST4.2*18)	5
6	Rope Tube	1	58	Emergency Stop Switch	1
7	Lock Sleeve	1	59	Positive And Negative Switch	1
8	Hex Socket Screw (M6*8)	1	60	Three-core Plug	1
9	Hex Socket Screw (M8*12)	1	61	Right plate	1
10	Limit Lever Assy	1	62	Torsional Spring	1
11	Anchor Post	7	63	Right Revolution Axis	1
12	Rope Drum Shaft	1	64	Torsional Spring	1
13	Rope Washer	5	65	Left-axis Component	1
14	Bearing (6203-2ZN)	2	66	Hanging Rod	1
15	Hex Socket Screw (M6*20)	4	67	Assembly Pulley	1
16	Grade 2 Gear	1	68	Hex Head Bolts (M5*30)	2
17	Spacer	1	69	Hex Nut (M5)	2
18	Gear Box	1	70	Hex Head Bolts (M10*39)	1
19	Bearing (6201-2RS)	2	71	Hex Nut (M10)	1
20	Grade 1 Gear	1	72	Plain Washer (d10)	1
21	Intermediate Shaft	1	73	Washer	2
22	Bearing (6201-2ZN)	1	74	Hook	1
23	Hex Socket Screw (M6*12)	10	75	Hex Head Bolts (M12*170)	1
24	Left Bracket	1	76	Locating Pipe	2
25	Front Cover	1	77	Backing Ring	1
26	Bearing (6202-2RS)	2	78	Splint	2
27	Rotor	1	79	Hex Head Bolts (M6*20)	1
28	Stator	1	80	Hex Nut (M6)	1
29	Chassis	1	81	Plain Washer (d6)	1
30	Spring	1	82	Mousing-hook	1
31	Brake Hoop	1	83	Hanger Rod	1
34	Chassis Cover	1	84	Hex Nut (M12)	1
35	Right Bracket	1	85	Spring Pin (d2.5*20)	1
36	Gear Cover	1	86	Motor Cover	1
37	Fan Blade	1	87	Cruciform Slot Screw (M4*6)	12
38	Hex Head Bolts (M5*167)	4	88	Outer Casing Housing	1
41	Connection Box	1	89	Cable	1
42	Limit Switch	2	90	Spacer Bush	1
43	Terminal Block	1			
45	Cruciform Slot Screw (M4*40)	4			
46	Connection Box Cover	1			
47	Moving Limit Contactor	2			
48	Limit Shaft Seal	2			
49	Limit Head	2			
50	Hollow- Head Setscrew (M4*6)	2			

HH400A/HH500A/HH600A:

