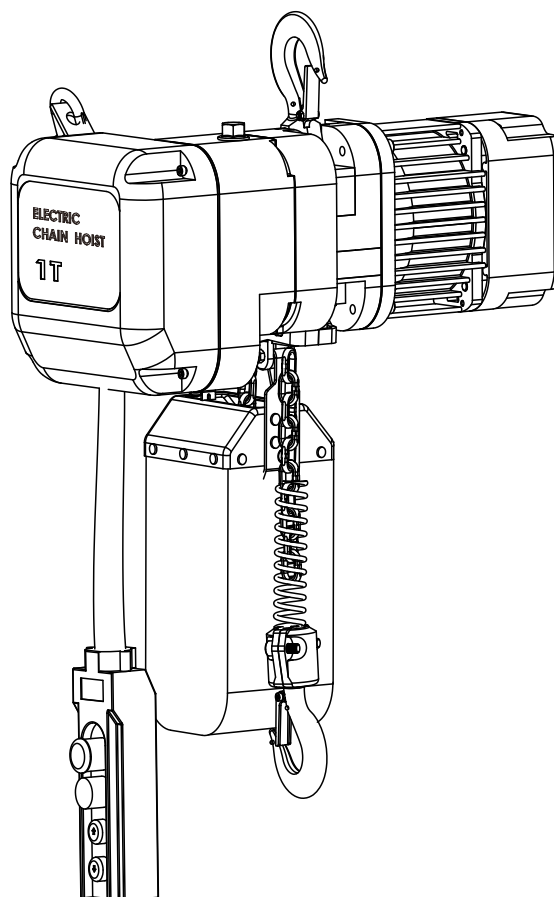

SHH SERIES ELECTRIC CHAIN HOIST

USER MANUAL (OPERATOR)

INSTRUCTION MANUAL



WARNING

This equipment should not be installed, operated or maintained by any person who has not read and understood all the contents of this manual. Failure to read and comply with the contents of this manual can result in serious body injury or death, and property damage.

Contents

Section	Page
1. Mark Definition	1
2. Forbidden Principal	1
2.1 General Rules	1
2.2 Preoperational Check	2
2.3 Operation Caution	2
2.4 Operation Finished	3
2.5 Inspection And Maintenance	3
2.6 Other Item	3
3. Technical Data	3
3.1 Operation Condition And Environment	3
3.2 Technical parameter	4
3.3 Main Characteristic	7
3.4 Mechanical Classification And Use Period	7
4. Safe Operation	7
4.1 Instruction	7
4.2 Install And Test	7
4.3 Load Operation	8
5. Inspection	8
5.1 Frequent Inspection	8
5.2 Periodic Inspection	8
6. Maintenance	10
6.1 General Rules	10
6.2 Lubrication	10
6.3 Common Problem	11
7. Appendix	12
7.1 Parts List-Electric Chain Hoist SHH(0.25T~2T)	12
7.2 Parts List-Electric Chain Hoist SHH(3T~5T)	14
7.3 Parts List-Electric Trolley	16
7.4 Electric Diagram	17
7.5 Wiring Diagram	19

1. MARK DEFINITION

SHH series electric chain hoist was designed to apply in normal work condition, lifting load in vertical direction, it can not lift mankind.

The manual use the below mark to authenticate the lever and grade of danger.



very dangerous status, if it is inevitable, it will lead to human being injury or series human wounded and property loss.



Potential dangerous status, if it is inevitable, if may lead to human being injury or serious human being wounded and property loss.



Potential dangerous status, if it is inevitable, if may lead to human being injury or serious human being wounded and property loss.

According to the operating situation, Caution Mark would lead to series human being injury also, hence, whatever mark you meet, the safe operation is the most important, and you should put the manual in the place where the operator could use conveniently as reference.

2. FORBIDDEN PRINCIPAL

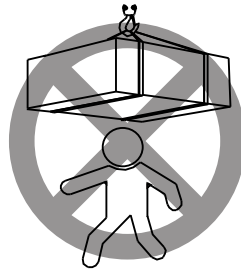
2.1 GENERAL RULES

Wrong use or forget to maintain the hoist, it may lead to dangerous situation. For example, the dangerous situation as lifting load can not land on the earth. Before install operate or maintain, please read all the text of the manual and conform the principal of safety and operating instruction.

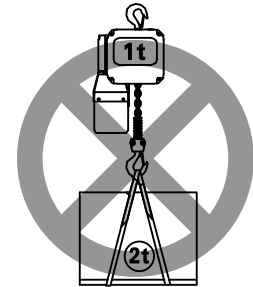
We will not be responsible for the problem which was due to wrong use .If the products was not use in non standard application, please negotiate with the local distributor in advance.



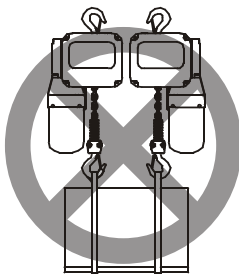
Hoist can not transfer Human being or use as Supporting mechanism



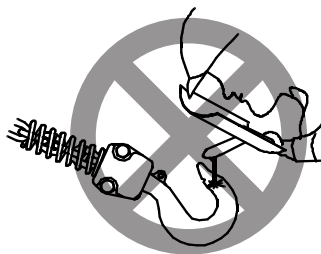
don't pass through the beneath side of lifting weight, Also, don't move the Lifting weight to the up side of human being



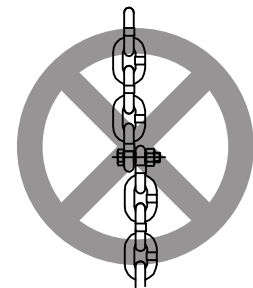
Lifting weight can not over the rated lifting capacity.



Forbidden to use multi pieces of hoists to lift which was over the rated capacity of the single hoist.



forbidden to weld the hook and the lifting chain



do not use bolt, screw screw driver etc to knot or shorten the lifting chain

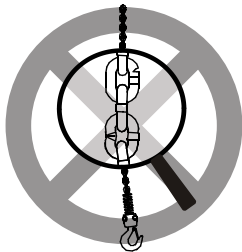
Caution: Before you move the weight, please warn all the human being to be careful in the nearby zone, if it is necessary, please set lifting special operating area, only operator could enter in this zone. The person, who has not known all the text of the manual and the warning mark, can not operate the hoist.

2.2 PREOPERATIONAL CHECK

- ⚠ CAUTION** this manual was formulated for hoist operator. Before operator start to work, he should know all the contents of safety and operation instruction.
- ⚠ WARNING** If the products has deformation of crack problem on the hook, hoop, please do not use, you should contact the seller or our company, change the new parts, please do not change the new parts which were not supplied by our seller or us.
- ⚠ WARNING** forbidden to repair the lifting chain which was installed in the hoist
- ⚠ CAUTION** before load, please fill 0.7 Kg L-CKD-100 close type gear oil into the reducer, L-CKD-100 gear oil or Calcium base grease in chain surface.
- ⚠ CAUTION** the electric hoist must use when it was earth well
- ⚠ CAUTION** When the lifting chains twist, knot; please do not start the machine to lift goods.
- ⚠ CAUTION** Preoperational procedure; please assure carry out all the contents of project inspecting classification.
- ⚠ CAUTION** Asses the weight of the lifting goods; select the hoist which is suitable for your application and capacity.
- ⚠ CAUTION** Check the upper hook shaft and down hook shaft to assure that they have no deformation or loose
- ⚠ CAUTION** Check the position limit work situation manually, to confirm that it is normal.
- ⚠ CAUTION** Load chain was made by special alloy steel can not weld or refit
- ⚠ CAUTION** When the temperate is below 0°C , check the brake whether it has ice or not.

2.3 CAUTIONS IN OPERATION

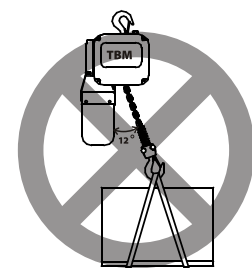
⚠ WARNING



Forbidden to use the hoist which has deformation or crack in lifting chain



do not use lifting chain as have duty rigging



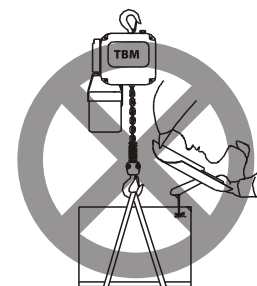
do not lift the goods slant the angle can not over 12 than vertical direction



Can't hang the weight directly on the hook tip



do not let the lifting chain pass through the obstacle surface such as steel plate



Forbidden to do welding or cutting operation when the weight was lifted in the air.

⚠ WARNING

don't wave the lifting goods

⚠ WARNING

don't use hoist which was broken or with abnormal sound

⚠ WARNING

don't do repeat quick up and down operation when lifting the goods.

⚠ CAUTION

forbidden to put the weight in the air without supervisor in long time.

Please assure the load was in hook cavity correctly

Before lifting the weight, must assure eliminate the lifting chain clearance, in order to avoid the occurrence of impacting load

2.4 FINISHED OPERATION

⚠ CAUTION

After operation, please make sure the weight was land on the earth safely to avoid the goods drop

⚠ WARNING

when the operation finished, cut off the control pendant in order to avoid wrong operations by others.

2.5 PROJECT INSPECTION AND MAINTAIN

⚠ CAUTION

Assure special inspector inspect and maintain the hoist regularly according to the rules in chapter 4 and chapter 5, otherwise, please contact our seller or us to make sure the inspect and maintain item.

⚠ WARNING

the load chain was made by special alloy steel, do not weld or refit.

2.6 OTHER ITEMS

⚠ CAUTION

if you want to use the hoist in special condition (such as salt water, sea water, acid material, basic material, explosive environment), please contact our seller or us to confirm.

⚠ WARNING

forbidden to use the hoist which has problem or need to be maintained.

3. TECHNICAL DATA

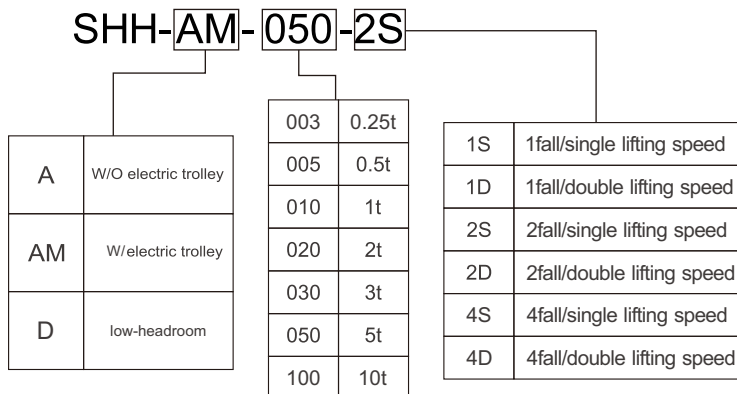
3.1 OPERATION CONDITION AND ENVIRONMENT

TEMPERATURE RANGE: -20°C ~ +40°C, if you need hoist work in extreme work environment, please consult on our seller or us.

Relative humidity ≤85%, this product was not under-water operating product.

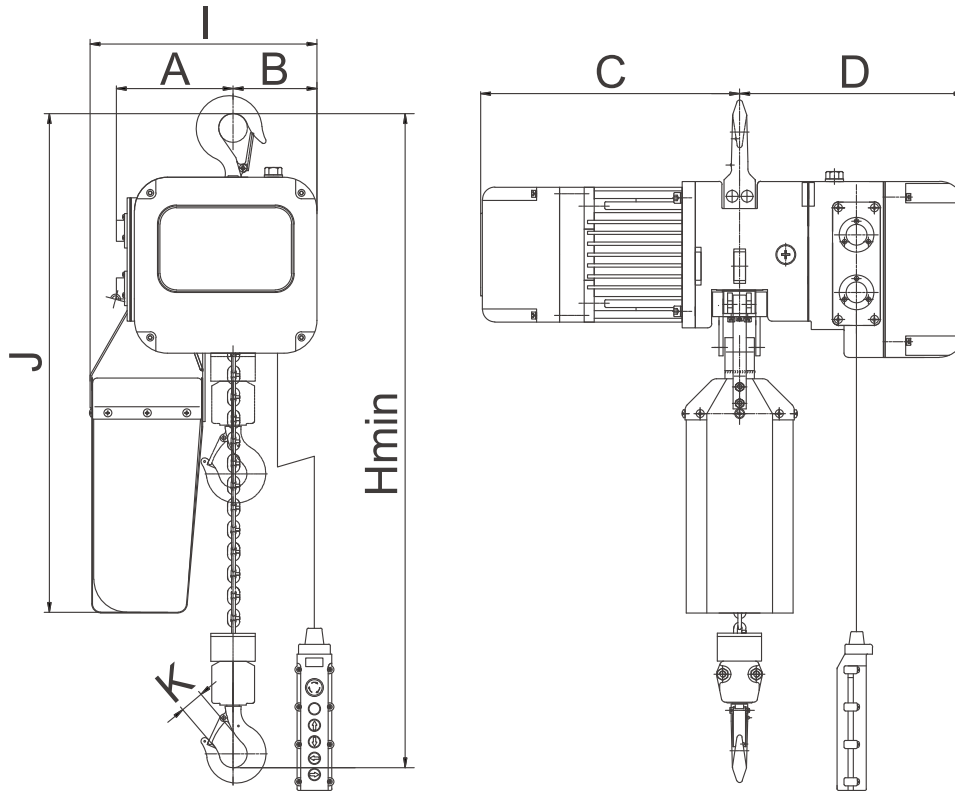
Altitude height: ≤1000m

It was not suitable to use in condition where has fire disaster, explosion risk or corrosive gas, also It can not lifting melted steel and poisonous, inflammable, explosive goods.



3.2 TECHNICAL PARAMETER

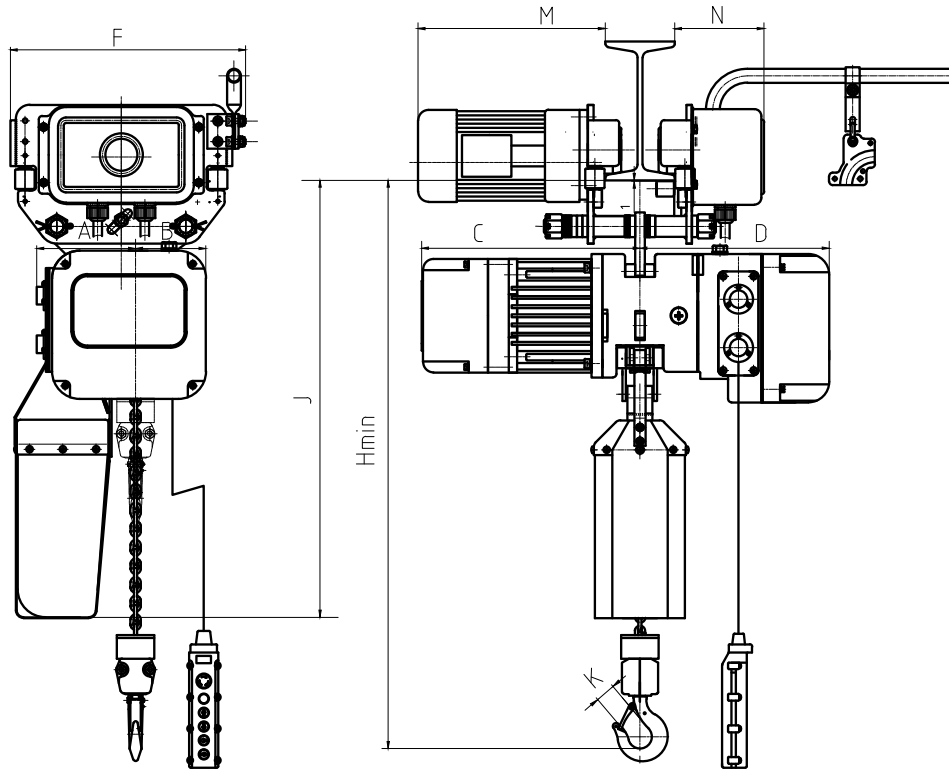
1> ELECTRIC CHAIN HOIST



Model	Capacity (t)	Classification FEM / ISO	Duty Rating (ED)	Lifting Speed (m/min)	Hoist Motor (Kw)	Load Chain Dimension (mm)	Load Chain Falls	Net Weight(Kg) With 3m Load Chain
SHH-A-003-1S	0.25	2m/M5	40%	7.0	0.9	Ø 5x15	1	44
SHH-A-003-1D			26.6%/13.4%	7.0/2.3	0.9/0.3			52
SHH-A-005-1S	0.5	2m/M5	40%	7.6	0.9	Ø 6.3x19	1	46
SHH-A-005-1D			26.6%/13.4%	7.6/2.5	0.9/0.3			54
SHH-A-010-1S	1	2m/M5	40%	5.0	1.1	Ø 8.0x24	1	50
SHH-A-010-1D			26.6%/13.4%	5.0/1.7	1.1/0.37			62
SHH-A-020-2S	2	2m/M5	40%	2.5	1.1	Ø 8.0x24	2	60
SHH-A-020-2D			26.6%/13.4%	2.5/0.85	1.1/0.37			73
SHH-A-030-1S	3	2m/M5	40%	6.0	3.0	Ø 11.2x34	1	102
SHH-A-030-1D			26.6%/13.4%	6.0/2.0	3.0/1.0			124
SHH-A-050-2S	5	2m/M5	40%	3.0	3.0	Ø 11.2x34	2	124
SHH-A-050-2D			26.6%/13.4%	3.0/1.0	3.0/1.0			146

Model	Capacity (t)	Hmin	A	B	C	D	I	J	K
SHH-A-003-1S	0.25	400	142	102	329	307	276	610	31
SHH-A-003-1D					334				
SHH-A-005-1S	0.5	410	142	102	329	307	276	610	31
SHH-A-005-1D					334				
SHH-A-010-1S	1	460	142	102	329	307	276	630	38
SHH-A-010-1D					354				
SHH-A-020-2S	2	650	185	59	329	307	276	720	45
SHH-A-020-2D					354				
SHH-A-030-1S	3	525	185	165	358	336	430	780	45
SHH-A-030-1D					471				
SHH-A-050-2S	5	860	240	110	358	336	430	870	61
SHH-A-050-2D					471				

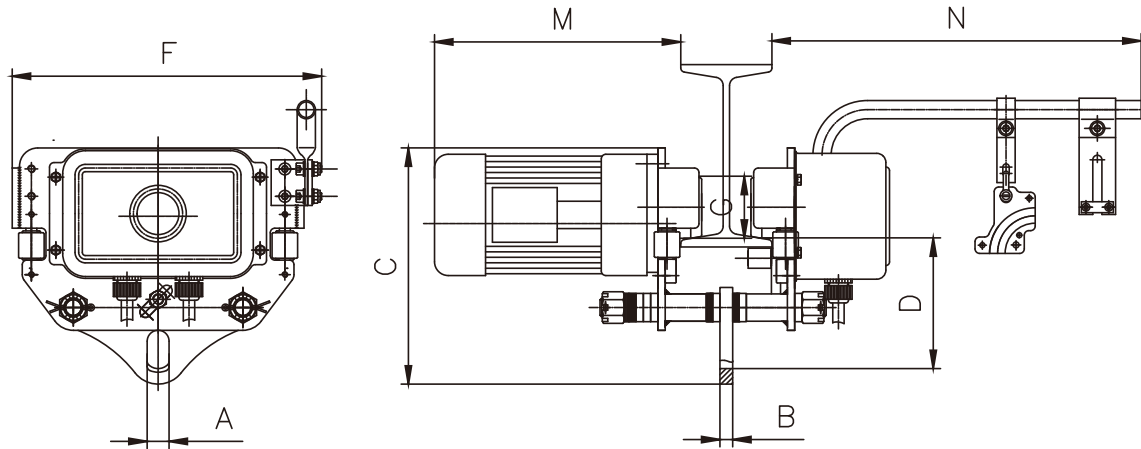
2> ELECTRIC CHAIN HOIST WITH ELECTRIC TROLLEY



Model	Capacity (t)	Classification FEM / ISO	Duty Rating (ED)	Lifting Speed (m/min)	Hoist Motor (kw)	Traveling Speed (m/min)	Trolley Motor (kw)	Beam Flange (mm)	Load Chain Dimension (mm)	Load Chain Falls	Net Weight(Kg) With 3m Load Chain
SHH-AM-003-1S	0.25	3m/M6	50%	7.0	0.9	13.5	0.2	135	Ø 5x15	1	71
SHH-AM-003-1D			33.4%/16.6%	7.0/2.3	0.9/0.3	20/6.7	0.2/0.067				95
SHH-AM-005-1S	0.5	2m/M5	40%	7.6	0.9	13.5	0.2	135	Ø 6.3x19	1	72
SHH-AM-005-1D			26.6%/13.4%	7.6/2.5	0.9/0.3	20/6.7	0.2/0.067				96
SHH-AM-010-1S	1	2m/M5	40%	5.0	1.1	13.5	0.2	135	Ø 8.0x24	1	76
SHH-AM-010-1D			26.6%/13.4%	5.0/1.7	1.1/0.37	20/6.7	0.2/0.067				100
SHH-AM-020-2S	2	2m/M5	40%	2.5	1.1	13.5	0.4	135	Ø 8.0x24	2	97
SHH-AM-020-2D			26.6%/13.4%	2.5/0.85	1.1/0.37	20/6.7	0.4/0.13				111
SHH-AM-030-1S	3	2m/M5	40%	6.0	3.0	13.5	0.4	140	Ø 11.2x34	1	154
SHH-AM-030-1D			26.6%/13.4%	6.0/2.0	3.0/1.0	18/6	0.4/0.13				180
SHH-AM-050-2S	5	2m/M5	40%	3.0	3.0	13.5	0.75	142	Ø 11.2x34	2	192
SHH-AM-050-2D			26.6%/13.4%	3.0/1.0	3.0/1.0	18/6	0.75/0.25				222

Model	Capacity (t)	Hmin	A	B	C	D	F	J	K	M	N
SHH-AM-003-1S	0.25	398	142	102	319	273	340	650	31	310	135
SHH-AM-003-1D					329					336	
SHH-AM-005-1S	0.5	398	142	102	319	273	340	650	31	310	135
SHH-AM-005-1D					329					336	
SHH-AM-010-1S	1	460	142	102	319	273	340	650	38	310	135
SHH-AM-010-1D					349					336	
SHH-AM-020-2S	2	650	185	59	319	273	340	650	45	312	135
SHH-AM-020-2D					349					338	
SHH-AM-030-1S	3	525	185	165	358	336	370	810	45	314	140
SHH-AM-030-1D					471					340	
SHH-AM-050-2S	5	860	240	110	358	336	410	850	61	360	142
SHH-AM-050-2D					471					410	

3> DC-C ELECTRIC TROLLEY



Model	Capacity (t)	Traveling Speed	Traveling Motor	Beam Flange	Net Weight (Kg)
DC-C-010-S	1	13.5	0.2	74-140	26
DC-C-010-D		20.0/6.7	0.2/0.67		33
DC-C-020-S	2	13.5	0.4	74-140	36
DC-C-020-D		20.0/6.7	0.4/0.13		40
DC-C-030-S	3	13.5	0.4	100-170	52
DC-C-030-D		18.0/6.0	0.4/0.13		56
DC-C-050-S	5	13.5	0.75	100-170	68
DC-C-050-D		18.0/6.0	0.75/0.25		76

Model	Capacity (t)	A	B	C	D	F	G	M	N
DC-C-010-S	1	24	14	260	145	340	68	310	405
DC-C-010-D								336	
DC-C-020-S	2	30	14	280	140	340	75	312	410
DC-C-020-D								338	
DC-C-030-S	3	36	16	340	210	370	96	314	410
DC-C-030-D								340	
DC-C-050-S	5	40	22	380	205	410	110	360	410
DC-C-050-D								410	

- beam flange request is for optional.
- single phase is for optional.
- above parameter is for 380V~415V/50HZ/3PH standard.

3.3 MAIN CHARACTERISTIC

This hoist has overload limited mechanism, could avoid the bad effect due to overload.

Lifting hook has self lock mechanism; it could prevent the rigging to slide.

The electric motor has thermal protector, when the electric motor temperature rise too high by over use, this mechanism would cut down the motor in order to protect the motor would not be burn out.

The hoist has hooked upper and down position limit mechanism.

The hoist has sudden stop button, could let the operation cut down the power when he was in extremely dangerous situation.

3.4 MACHINE CLASSIFICATION AND USE PERIOD

You could protect the safety and use period of hoist only if you operate the equipment as demand grade .TBM SHH series electric chain hoist was suitable for the ISO/JIS and FEM classification

1> ISO/JIS CLASSIFICATION

Load Spectrum	Cubic Mean Value	Average Daily Operating Time (Hour)							
		≦0.12	≦0.25	≦0.5	≦1	≦2	≦4	≦8	≦16
Light	$K \leq 0.125$	/	/	M1	M2	M3	M4	M5	M6
Moderate	$0.125 < K \leq 0.25$	/	M1	M2	M3	M4	M5	M6	/
Heavy	$0.25 < K \leq 0.50$	M1	M2	M3	M4	M5	M6	/	/
Very Heavy	$0.50 < K \leq 1.00$	M2	M3	M4	M5	M6	/	/	/

1> FEM CLASSIFICATION

Load Spectrum	Cubic Mean Value	Average Daily Operating Time (Hour)							
		≦0.12	≦0.25	≦0.5	≦1	≦2	≦4	≦8	≦16
L1	$K \leq 0.5$	/	/	1Dm	1Cm	1Bm	1Am	2m	3m
L2	$0.50 < K \leq 0.63$	/	1Dm	1Cm	1Bm	1Am	2m	3m	4m
L3	$0.63 < K \leq 0.80$	1Dm	1Cm	1Bm	1Am	2m	3m	4m	5m
L4	$0.80 < K \leq 1.00$	1Cm	1Bm	1Am	2m	3m	4m	5m	/

4、SAFE OPERATION

4.1 DECLARATION

Operating the overload weight may lead to dangerous situation. Before operation, please read all the contents of this chapter and forbid principal of chapter 1.2, then you could operate.

Before operating the hoist, please make sure the work space meet the follow demand

Ensure the work space could let the hoist work stably.

Ensure with good eye sight, and arrange special person to observe.

4.2 INSTALL AND TEST

Put the hoist into a reliable frame, connect power plant, then push the up or down button of control pendant, observe the hoist work situation. if the hook move up or down, it means that the connection of electrical wire is correct. if push the control pendant button, the hook did not move, it means the electrical wire phase was connected wrong, then just switch the two phase wire, and the hoist would run correctly.

4.3 LOADED OPERATION

The hoist which was running first time (or it has been a long time to be used), first run 15 minutes with load, observe the hoist work situation, if it is running normally, then you could use with load.

5. PROJECT INSPECTION

If you want to operate continually and satisfied, you have to inspect the hoist at period, change the broken parts, so that it will not be the potential danger of safe operation.

The project inspection interval should determine according to the use situation and work classification, also should check according to the use environment and the broken, ageing level of key parts, the inspection type is separated as daily inspection, periodic inspection.

Daily inspection: Before daily use, operator or specialist to visual inspect.

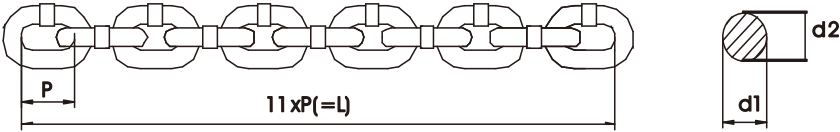
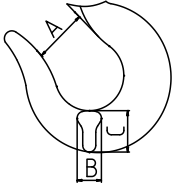
Periodic Inspection: Check by the special engineer or technical staff according to the user work situation.

5.1 FREQUENT INSPECTION

Project	Method	Judge Standard	Solution
Label Warning Mark	Visual inspection	Stick correctly clean and clearly read	Change
Control Pendant	Visual inspection	Without fraction	Change
	Push stop button without load	Hoist stop, right direction rotate, after push stop button, hoist could run	Change
	Push start button without load	Bottom hook could lift and land	Repair or change
Brake	Lift and land 2 or 3 times without load	Brake effect is good or not	Repair or change
Up Down position limiter	Operate the hook into the limit position without load	When touch the down position limit, the electric motor stop, but could work in the reverse direction	Repair or change
Lifting chain	Visual inspection	Surface with lubricate grease Without deformation, without crackle	Clean, lubricate,if necessary,change
Hook	Visual inspection function inspection	Without deformation could move slide and rotate	Change
Position limit spring	Visual inspection	Without deformation	Change


5.2 PERIODIC INSPECTION PROJECT

Project	Method	Judge Standard	Solution
Control pendant	Push button in turn stop function	Push button stable, no problem	Repair
Power plant	Measure by voltmeter	$\pm 10\%$ rated voltage	Check the power plant and wire
Earth	Check earth point	Smaller than 0.1 ohm	Adjust change
Insulation	Measure by ohmmeter	Bigger than 1.5 ohm	Change defect parts

Hoist frame	Visual inspection	Without broken and crack	Change																												
Nameplate	Visual inspection	Load capacity could be clearly visible	Change																												
Screw	Visual inspection	Screw should not be loosen or missed	Fasten																												
Abnormal situation on operation	Lifting and landing operation with small capacity load	Hoist machine or lifting motor should not have abnormal sound	Repair																												
Gear oil	Visual inspection	Should be in accordance with use frequency	add gear oil or change new oil																												
Brake	Lifting, landing, stopping operation with rated capacity load	Stop when landing, the down slide speed can not over 1% of lifting speed	repair																												
Load limiter	Lifting earthed load, let the chain slide(less than 5 seconds),then lift with rated capacity load	Can slide Can lift rated capacity load	Adjust and change																												
Position limit switch	Lift to the limit position with rated capacity load	Hoist could stop, could move the reverse direction, the spring has Certain allowance	Repair or change																												
Lifting chain wear	Measure  <table border="1" data-bbox="402 1131 1190 1373"> <thead> <tr> <th rowspan="2">Capacity (t)</th> <th colspan="2">D=(d1+d2)/2</th> <th colspan="2">L (mm)</th> </tr> <tr> <th>standard</th> <th>rejected</th> <th>standard</th> <th>rejected</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>5</td> <td>≤4.5</td> <td>165.8</td> <td>≥170.5</td> </tr> <tr> <td>0.5</td> <td>6.3</td> <td>≤5.7</td> <td>210</td> <td>≥217.36</td> </tr> <tr> <td>1、2</td> <td>8</td> <td>≤7.2</td> <td>265.3</td> <td>≥274.56</td> </tr> <tr> <td>3、5</td> <td>11.2</td> <td>≤10.1</td> <td>375.8</td> <td>≥388.96</td> </tr> </tbody> </table> caution: if the lifting chain was wear out, ensure check the chain guider	Capacity (t)	D=(d1+d2)/2		L (mm)		standard	rejected	standard	rejected	0.25	5	≤4.5	165.8	≥170.5	0.5	6.3	≤5.7	210	≥217.36	1、2	8	≤7.2	265.3	≥274.56	3、5	11.2	≤10.1	375.8	≥388.96	change
Capacity (t)	D=(d1+d2)/2		L (mm)																												
	standard	rejected	standard	rejected																											
0.25	5	≤4.5	165.8	≥170.5																											
0.5	6.3	≤5.7	210	≥217.36																											
1、2	8	≤7.2	265.3	≥274.56																											
3、5	11.2	≤10.1	375.8	≥388.96																											
Lifting chain deformation	Visual inspection	* without deformation(such as distortion). * without deeper scratch and indent	change																												
Lifting chain welding scar	Visual inspection	Warning without welding scar	change																												
Lifting chain rust	Visual inspection	Warning without obviously rust, lubricate the lifting chain with lubricating grease	change																												
hook 	Measure record the below size when you buy、B、C	<table border="1" data-bbox="412 1891 1156 2144"> <thead> <tr> <th colspan="2">First use size</th> <th colspan="4">Rejected standard</th> </tr> </thead> <tbody> <tr> <td colspan="2">A、B、C</td> <td colspan="4">More than 5% decrease of measured size</td> </tr> <tr> <th>Capacity (t)</th> <th>A*(mm)</th> <th colspan="2">B(mm)</th> <th colspan="2">C(mm)</th> </tr> <tr> <td></td> <td>Normal</td> <td>Standar</td> <td>Rejecte</td> <td>Standar</td> <td>Rejected</td> </tr> </tbody> </table>	First use size		Rejected standard				A、B、C		More than 5% decrease of measured size				Capacity (t)	A*(mm)	B(mm)		C(mm)			Normal	Standar	Rejecte	Standar	Rejected	change				
First use size		Rejected standard																													
A、B、C		More than 5% decrease of measured size																													
Capacity (t)	A*(mm)	B(mm)		C(mm)																											
	Normal	Standar	Rejecte	Standar	Rejected																										

		d	d	d	
0.25、0.5	30	18	≤17.1	21	≤19.95
1	37	20	≤19	24	≤22.8
2、3	45	26	≤24.7	42	≤39.9
5	61	35	≤33.3	50	≤47.5

* these values are standard value, because these size can not be controlled in general tolerance range. when you buy you could use the measure value as standard value, you could judge the deformation and extension of the hook by judge the later measuring size with the first size

Hook deformation	Visual inspection	Without obvious deformation and crack, hook neck wear well mixed。 Without deeper crackle、 screw and bolt can not be loose, without welding scar	change
Hook rotation	Visual inspection	Hook should rotate normally	change
Hook	Visual inspection function inspection	Hook pin should be in the hook tip	change
Gasal plate	Visual inspection function inspection	Should work normally  WARNING missing hook safe clip, please do not use	change

 **CAUTION**

Add No 1 lithium base grease to all bearings annually when maintained

 **CAUTION**

the assessment of inspection result should made by specialist so that the hoist can reach safe work condition after maintained

 **WARNING**

Forbidden to use the parts which is not conform to standard or we do not accept.

6. MAINTAIN

6.1 GENERAL RULES

Wrong maintenance may lead to human being injury or death, only qualified person could maintain the electric chain hoist, if you do not have qualified person, please contact with our sell or us.

 **CAUTION**

forbidden to use the hoist which was under maintained

 **CAUTION**

After operation, if find the hoist was abnormal, please check all the items as the inspection demand of chapter 5

 **CAUTION**

don't store the hoist with load

 **CAUTION**

clean the dirty of hoist

store the hoist in place where is clear and dry

 **CAUTION**

lifting chain explosion may lead to human being injury or death; please maintain the lifting

 **CAUTION**

chain carefully, including correct operation, good maintenance and inspection.

6.2 LUBRICATION

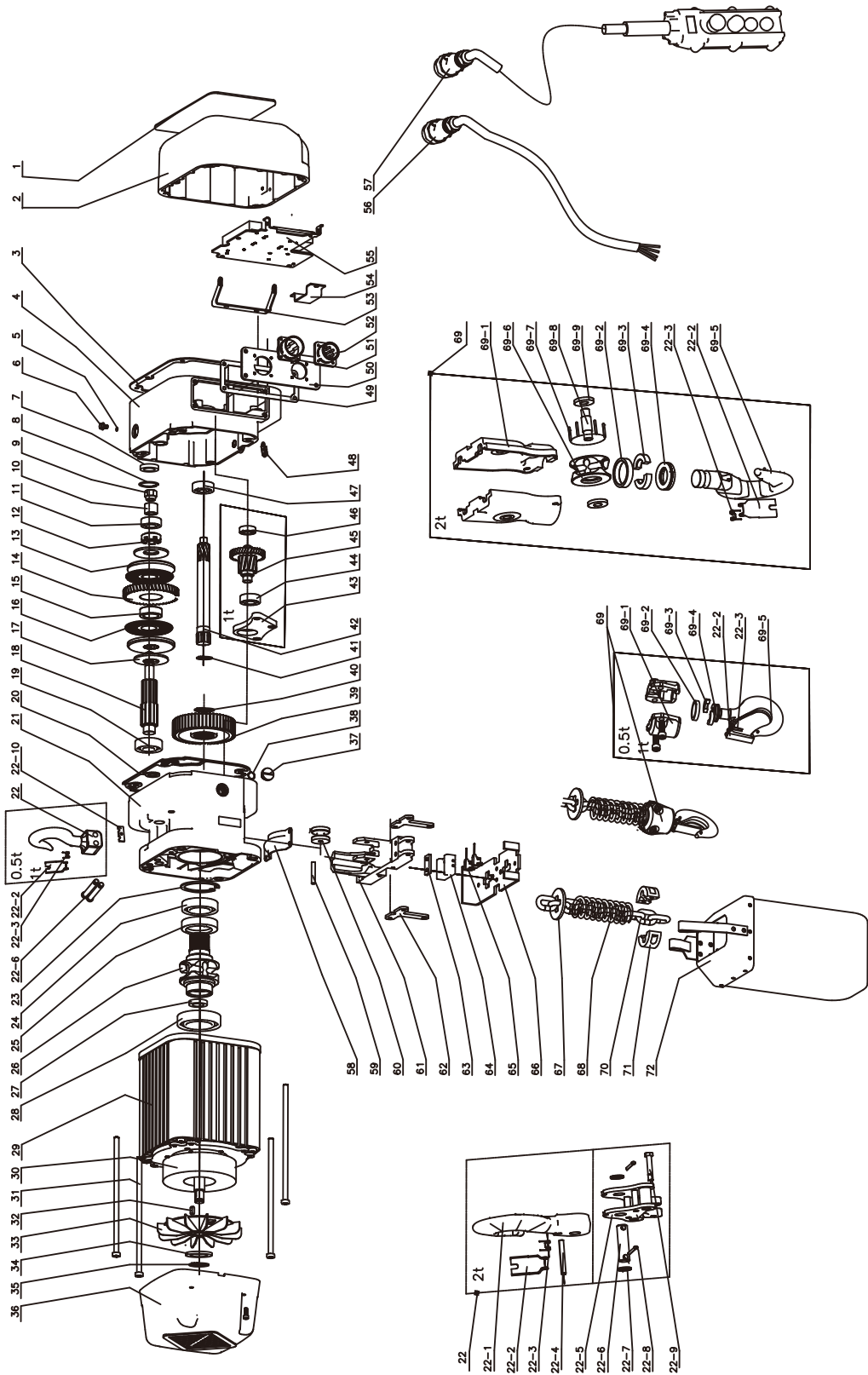
Make sure lubricate the parts as lifting chain, hook neck. Lifting chain was important parts of hoist, should use mechanical oil (effect as butter) to lubricate the lifting chain

6.3 MALFUNCTIONS AND SOLUTIONS

Malfunctions	Causes	Solution
The hoist refuse to operate under switch on	Wire unconnected or loose result power off	Check and fasten all the wire connection points
	Electrical parts damaged	Replace the damaged parts
After switch off, the load drop while braked	Dust or oil in brake disc	Clean the disc
	Severe abrasion of disc	Replace the disc
Chain run with strange noise	The chain is without lubrication	Lubricate chain by oil or grease
	Load guider broken	change load guider
Leakage of electricity	It is not good earth	Ensure good earth connection
	High humidity in the air	Not work in the high humidity environment
	Too many dust on the electrical parts	Keep electrical parts clean
Skid when lifting the load	Load limiter flexible	Screw down load limiter
Hook extension	Sustain the load with hook tip	Sustain the load in middle of hook
	The chain sling of load is not correct	Select the right chain sling
Inverter alarm	Please read the inverter instruction	

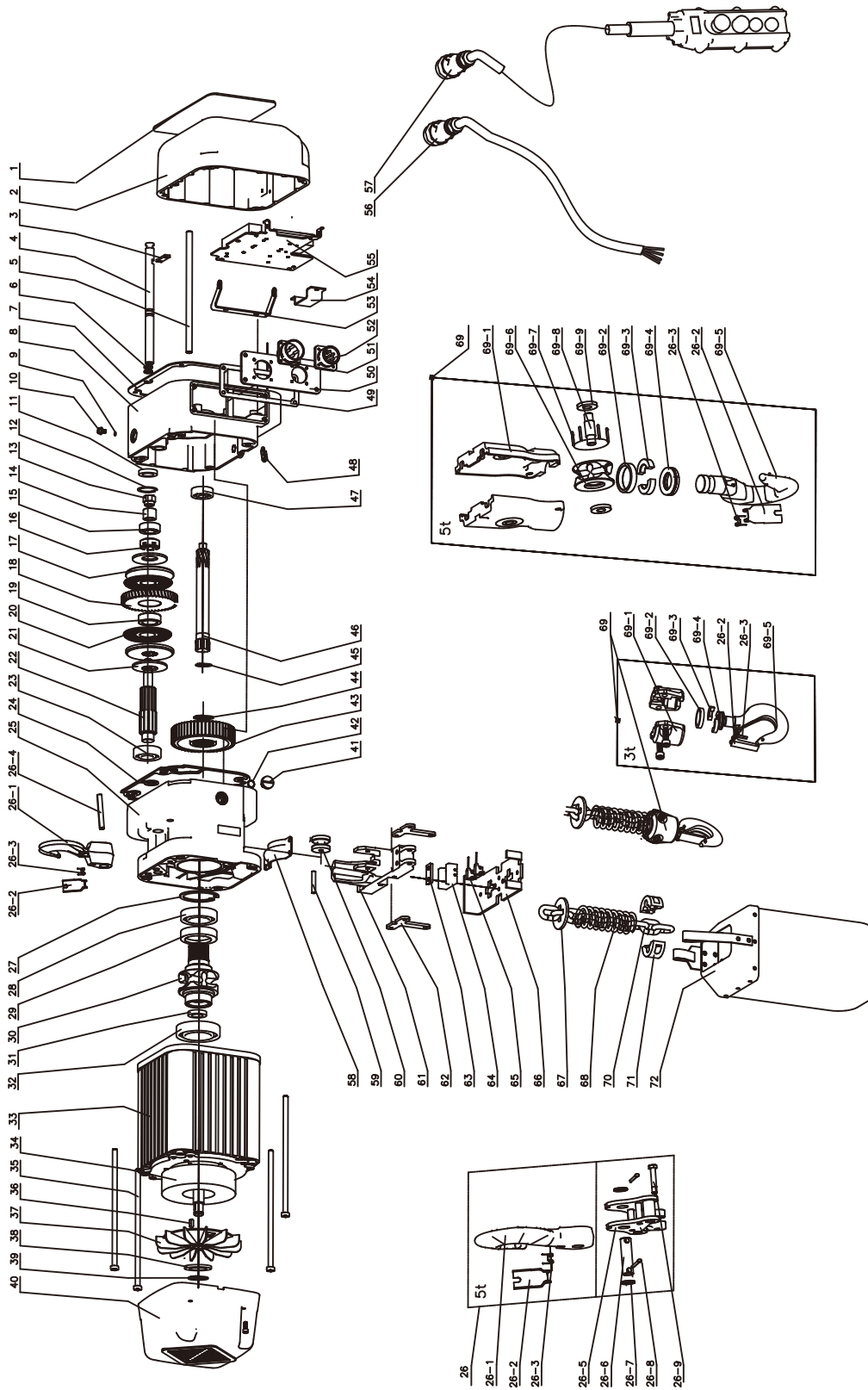
7. APPENDIX

7.1 PART LIST - ELECTRIC CHAIN HOIST SHH(0.25T~2T)



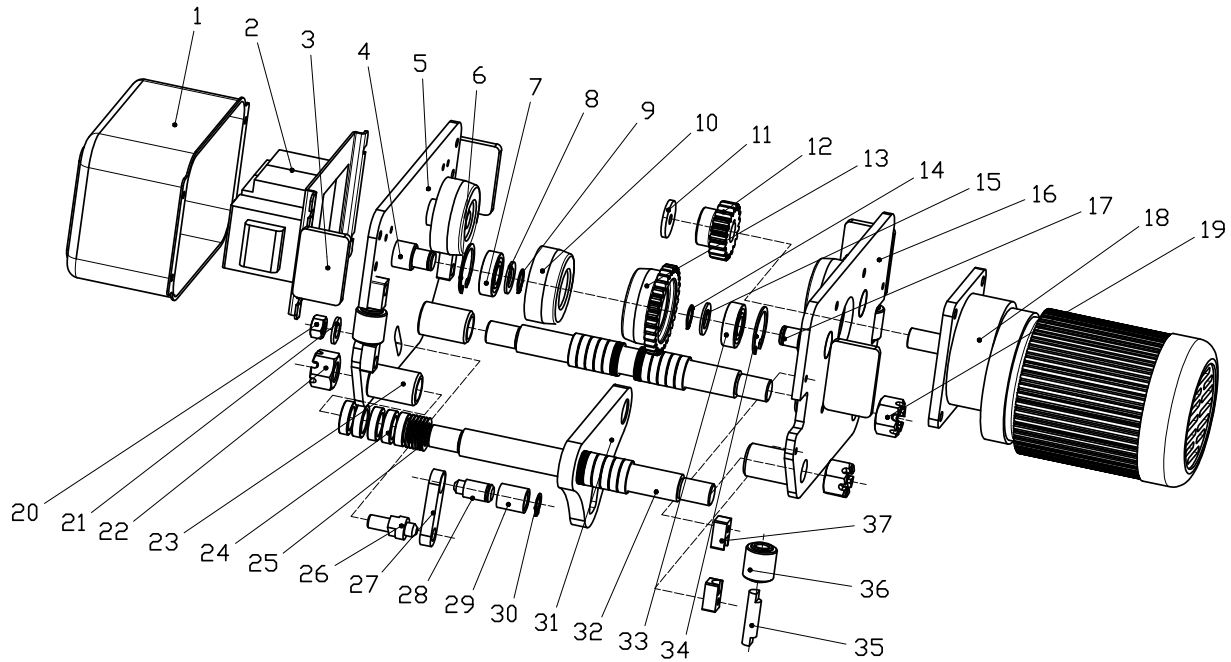
1	label	23	circlip for hole	55	electrical components
2	electric control box cover	24	bearing	56	power cable
3	rubber pad	25	lip type sealing ring	57	control pendant assembly
4	gearbox cover	26	load chain sprocket	58	load chain baffle
5	O type sealing ring	27	lip type sealing ring	59	guide roller shaft
6	core vent	28	bearing	60	guide roller
7	lip type sealing ring	29	motor	61	load chain guide frame
8	circlip for hole	30	brake assembly	62	fixed plate C
9	self-locking nut	31	motor screw	63	micro switch fixed plate
10	spacer sleeves A	32	flat key	64	micro switch seat
11	bearing	33	flat washer	65	micro switch
12	spacer sleeves B	34	motor fan	66	limit position bottom plate
13	friction pressing plate	35	circlip for shaft	67	limit position baffle
14	gear 2	36	motor cover	68	limit position spring
15	shaft sleeve	37	plug screw	69	bottom hook assembly
16	friction disk assembly	38	O type sealing ring	69-1	bottom hook frame
17	coned disc spring	39	spline gear	69-2	snap ring sleeve
18	pinion shaft 3	40	circlip for shaft	69-3	snap ring
19	bearing	41	circlip for shaft	69-4	bearing
20	gearbox seal	42	pinion shaft 1	69-5	bottom hook
21	gearbox	43	shaft bracket	69-6	pulley
22	top hook assembly	44	bearing	69-7	needle
22-1	top hook	45	pinion shaft 2	69-8	pulley shaft
22-2	safety latch	46	bearing	69-9	pulley shaft washer
22-3	spring	47	bearing	70	load chain
22-4	spring pin	48	cable hanging plate	71	safety load chain baffle
22-5	top hook frame	49	rubber pad	72	chain bucket
22-6	hook shaft	50	aviation plug		
22-7	hook shaft circlip	51	aviation socket		
22-8	split pin	52	aviation socket		
22-9	top hook frame pin	53	connection frame		
22-10	hook shaft plate	54	sealing plate		

7.2 PART LIST - ELECTRIC CHAIN HOIST SHH(3T~5T)



1	label	26-7	hook shaft circlip	56	power cable
2	electric control box cover	26-8	split pin	57	control pendant assembly
3	hook shaft baffle	26-9	top hook frame pin	58	load chain baffle
4	hook shaft	27	circlip for hole	59	guide roller shaft
5	hand ring shaft	28	bearing	60	guide roller
6	O type sealing ring	29	lip type sealing ring	61	load chain guide frame
7	rubber pad	30	load chain sprocket	62	fixed plate C
8	gearbox cover	31	lip type sealing ring	63	micro switch fixed plate
9	O type sealing ring	32	bearing	64	micro switch seat
10	core vent	33	motor	65	micro switch
11	lip type sealing ring	34	brake assembly	66	limit position bottom plate
12	circlip for hole	35	motor screw	67	limit position baffle
13	self-locking nut	36	flat key	68	limit position spring
14	spacer sleeves B	37	flat washer	69	bottom hook assembly
15	bearing	38	motor fan	69-1	bottom hook frame
16	spacer sleeves A	39	circlip for shaft	69-2	snap ring sleeve
17	friction pressing plate	40	motor cover	69-3	snap ring
18	gear	41	plug screw	69-4	bearing
19	shaft sleeve	42	O type sealing ring	69-5	bottom hook
20	friction disk assembly	43	spline gear	69-6	pulley
21	coned disc spring	44	circlip for shaft	69-7	needle
22	pinion shaft 3	45	circlip for shaft	69-8	pulley shaft
23	bearing	46	pinion shaft 1	69-9	pulley shaft washer
24	gearbox seal	47	bearing	70	load chain
25	gearbox	48	cable hanging plate	71	safety load chain baffle
26	top hook assembly	49	rubber pad	72	chain bucket
26-1	top hook	50	aviation plug		
26-2	safety latch	51	aviation socket		
26-3	spring	52	aviation socket		
26-4	spring pin	53	connection frame		
26-5	top hook frame	54	sealing plate		
26-6	hook shaft	55	electrical components		

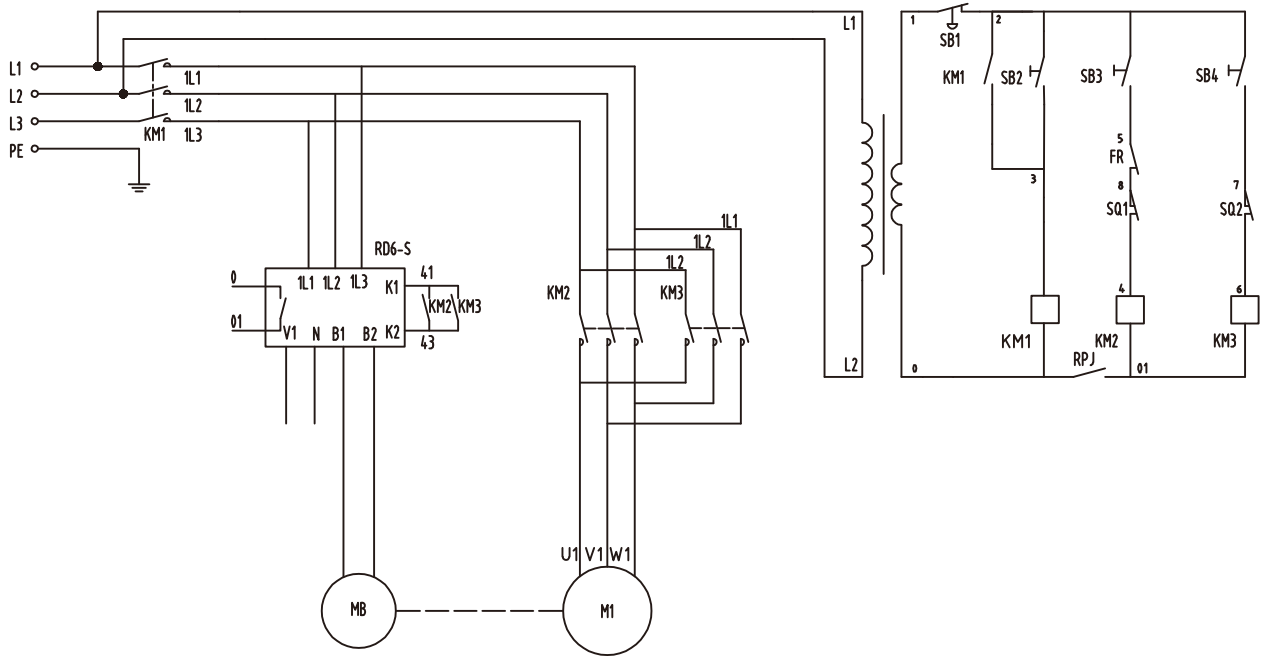
7.3 PART LIST - ELECTRIC TROLLEY



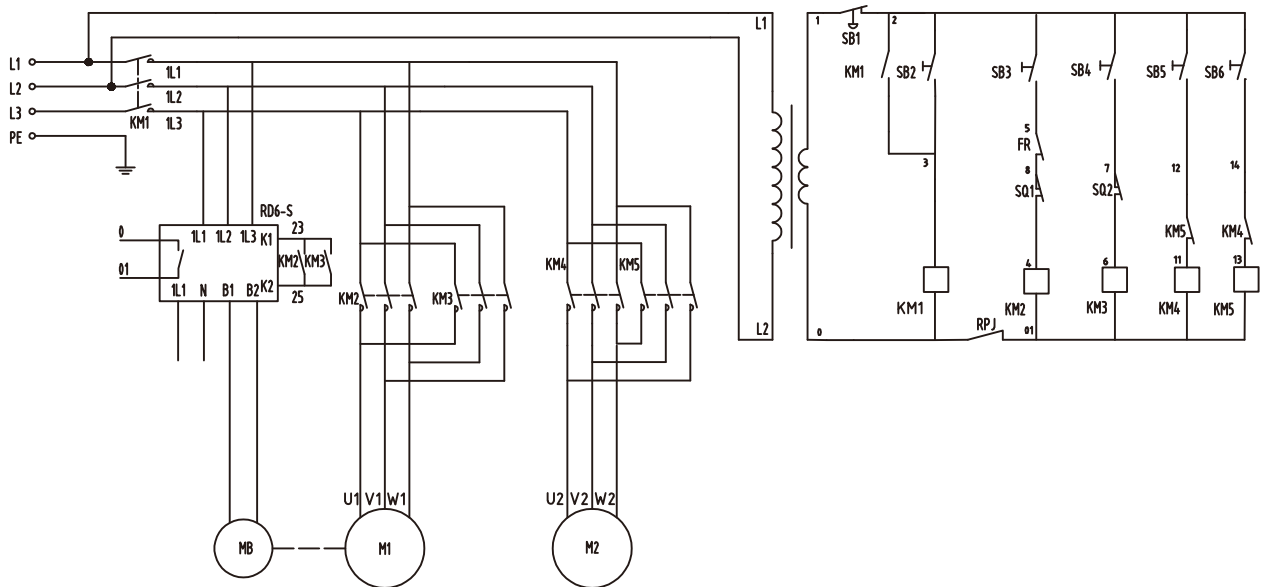
1	control box	20	locknut
2	electrical compenents	21	flat washer
3	safety block	22	hexagon socket head screw nut
4	wheel shaft	23	bushing
5	right side plate	24	thick washer
6	hole spring	25	thin washer
7	rolling bearing	26	limit switch pin
8	flat washer	27	connect block
9	shaft ring	28	rolling sleeve
10	passive wheel	29	rolling sleeve shaft
11	block	30	shaft ring
12	gear	31	connect plate
13	active wheel	32	hanger
14	shaft ring	33	rolling bearing
15	flat washer	34	hole spring
16	left side plate	35	guider wheel
17	wheel shaft	36	guider wheel shaft
18	gearbox	37	fixed block
19	hexagon socket head screw nut		

7.4 ELECTRIC DIAGRAM

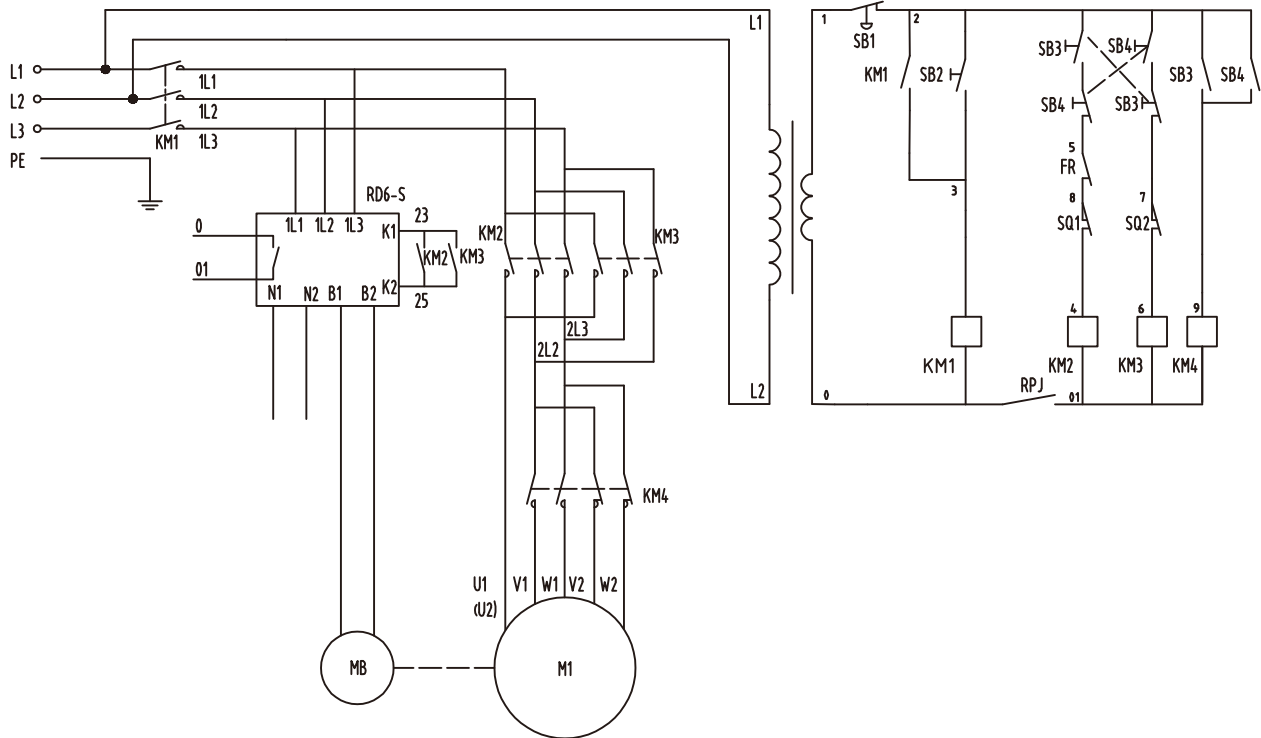
1>ELECTRIC CHAIN HOIST - SINGLE SPEED



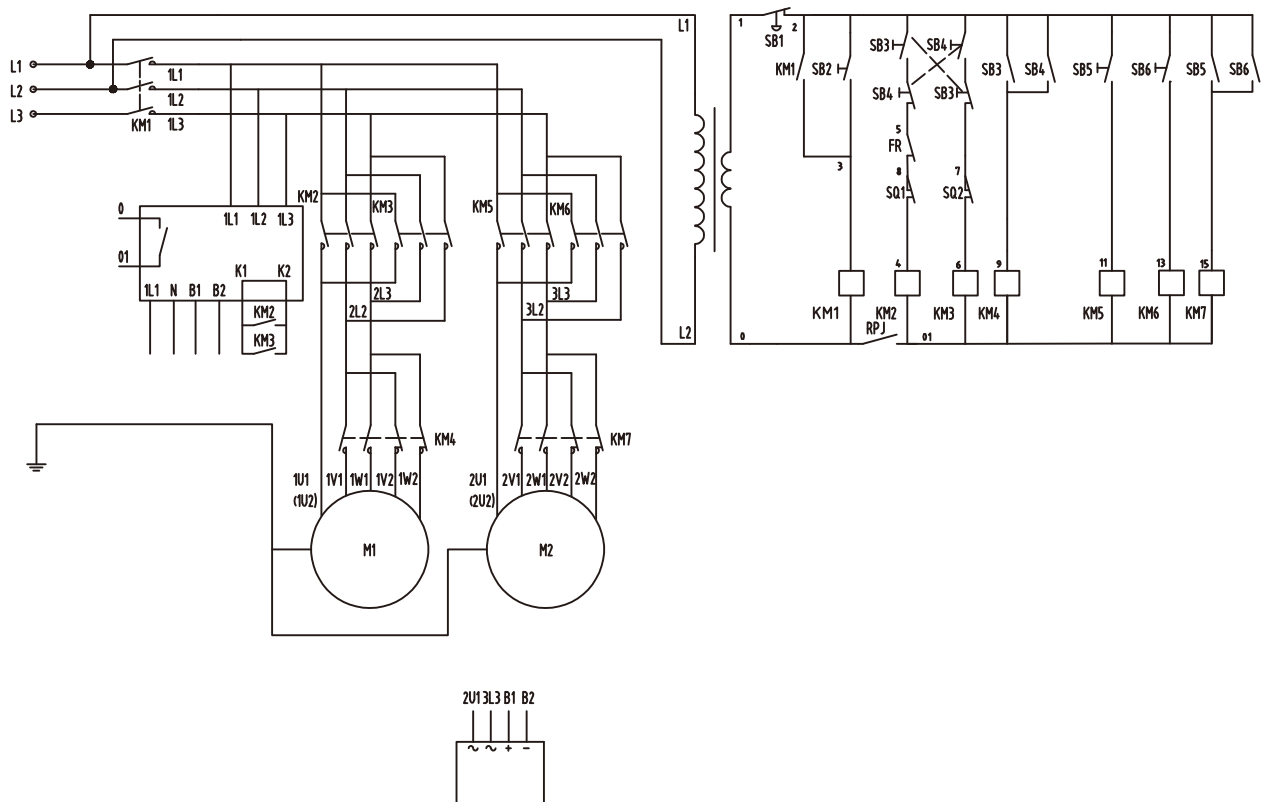
2>ELECTRIC CHAIN HOIST WITH ELECTRIC TROLLEY - SINGLE SPEED



3>ELECTRIC CHAIN HOIST - DOUBLE SPEED

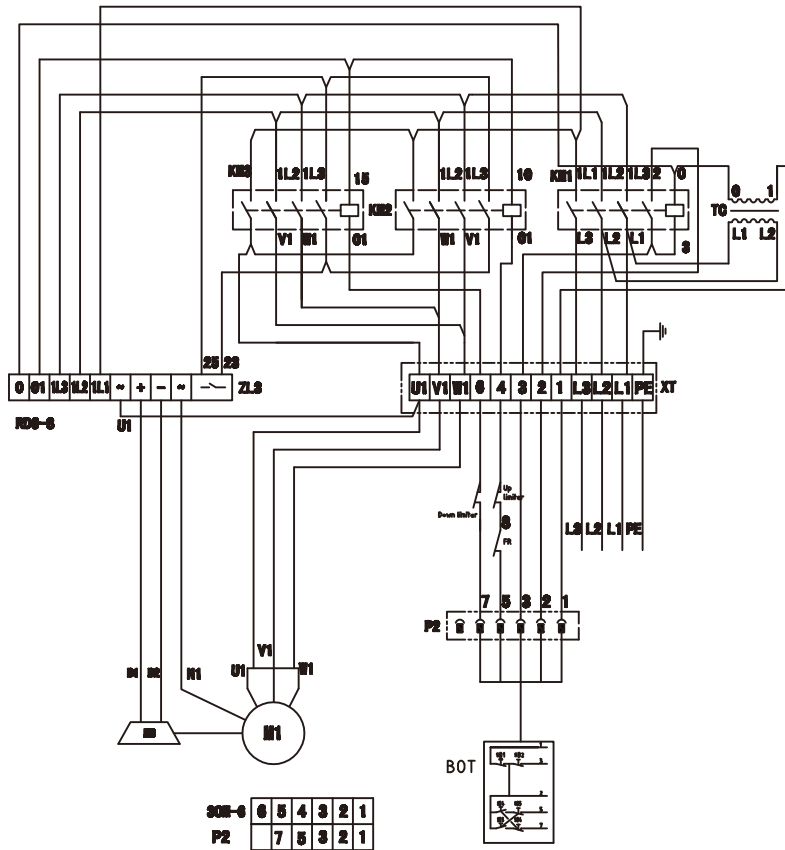


4>ELECTRIC CHAIN HOIST WITH ELECTRIC TROLLEY - DOUBLE SPEED

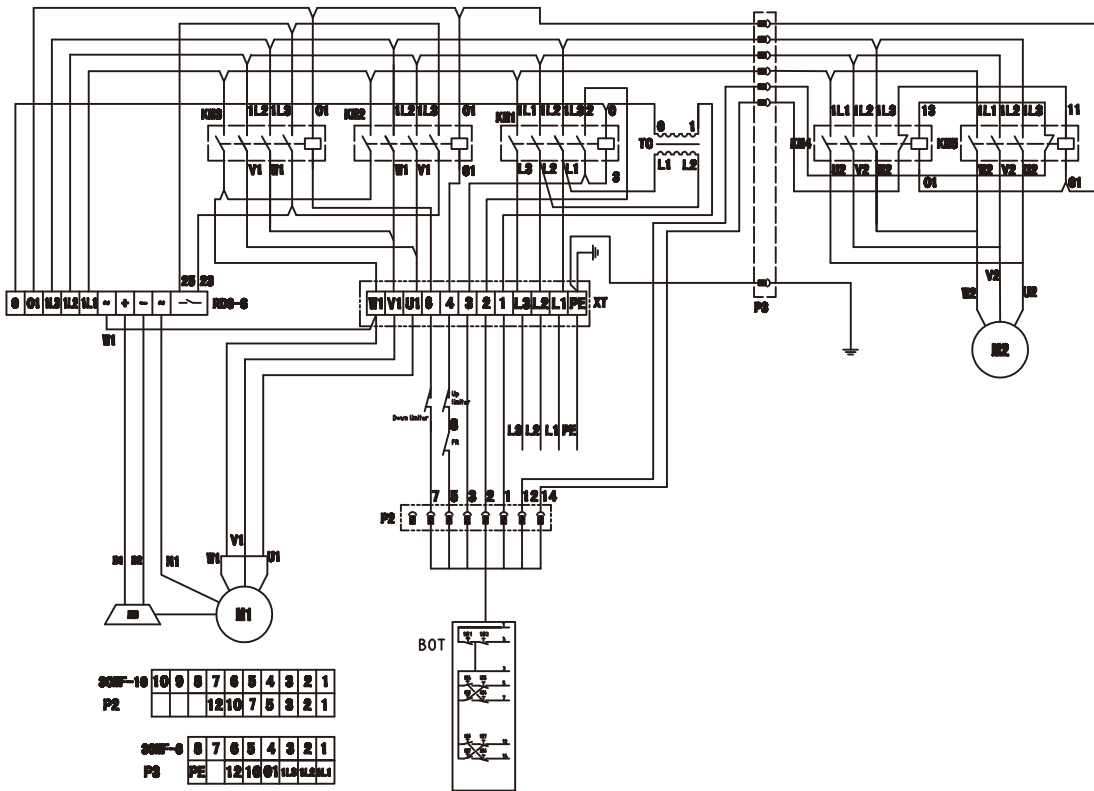


7.5 WIRNG DIAGRAM

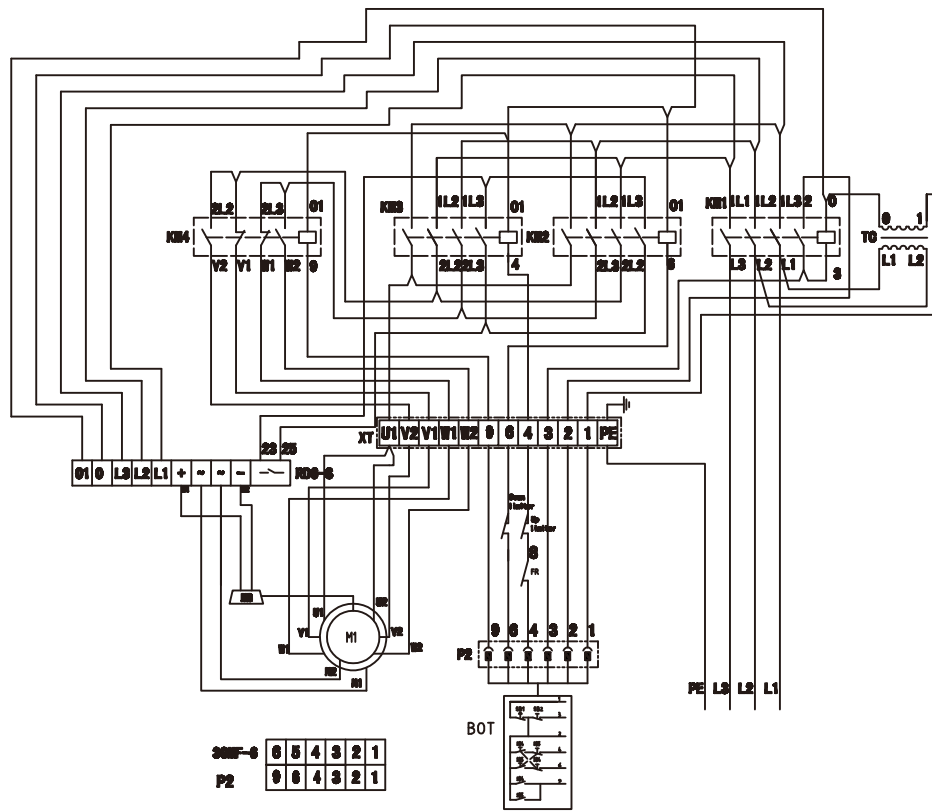
1>ELECTRIC CHAIN HOIST - SINGLE SPEED



2>ELECTRIC CHAIN HOIST WITH ELECTRIC TROLLEY - SINGLE SPEED



3>ELECTRIC CHAIN HOIST - DOUBLE SPEED



4>ELECTRIC CHAIN HOIST WITH ELECTRIC TROLLEY - DOUBLE SPEED

