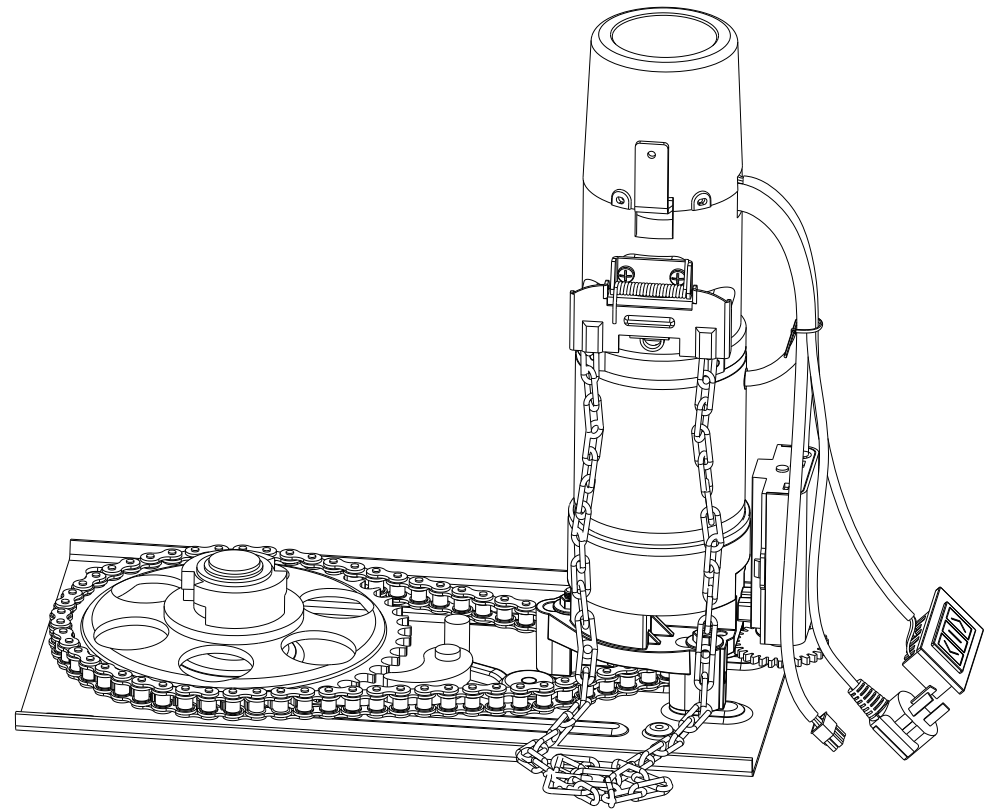


# ROLLING DOOR OPERATOR USER'S MANUAL



# OUTLINE

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## **WARNING:**

This is not a toy.

- Please keep away from the baby and child.
- Keep remote controls away from children.
- The power should be installed at the place where the child can't touch.
- The intellectual disabilities and child is forbidden to use the motor.

### **1. Important safety information**

Carefully read and follow all safety precaution and warnings before attempting to install and use rolling door operator, incorrect installation can lead to severe injury.

- The rolling door operator should be installed by a qualified technician; otherwise, serious personal injury or property damage may occur.
- Do not wear ring, watch, and loose clothes while installing the motor. Please use the solid wooden staircase to go up and down.
- Notify users that the door operator is never to be operated unless it is in full view.
- Before any job on the door operator, cut out electrical power.
- DO NOT in any way modify the components of the rolling door operator, otherwise serious personal injury or property damage may occur. We do not accept responsibility for damage or injury resulting from installing this door operator.
- Do not attempt to walk or drive through the door during open or close the door. The operator should not leave away before the motor stop working.
- Before finishing installing all parts of the motor, please don't operate the motor.
- The rolling door operator must be grounded, connect grounding wire to the sprocket bracket.
- DO NOT pull the hand chain or release lever during opening or closing the door.
- DO NOT closing the door by pulling the release lever as normal working mode, otherwise, serious personal injury or property damage may occur. (It's only an emergency mode)
- Our company reserves the right to change the design and specification without prior notification.
- Keep the remote control away from child (it says: to install the manual operate high enough so that child can't touch it.), in case of the motor works automatic.
- The motor is not the appliance which is for continuous working.
- To exchange the battery, must be the professional staff.
- The height position to install the motor should exceed 2.5 meters from ground.
- Please install the motor as these instructions. Or else, our company won't be responsible of any damage about motor.
- Regularly check the rolling door motor operator, if any problem happened, please contact our agent.

## ROLLING DOOR OPERATOR USER'S

Please install the motor according to the Manual Specification, otherwise we don't be responsible of the motor's damage.

### 2.Main technical parameters

Table 1

Model	Input voltage(V)	Output Power(w)	Output torque (N.m)	Max.lift (kg)	Rotate speed (r/min)	Max.operating range (high:m)	Roll (inch)	Chain (ANSI standard)
AC-300-1P	220	180	168	300	5.3	6	4"	08B
AC-600-1P	220	370	412	600	5.2	6	5"	10A
AC-800-1P	220	400	647	800	4.5	9	6"	10A
AC-1000-1P	220	550	809	1000	4.4	9	6"	12A
AC-600-3P	380	250	412	600	5.2	6	6"	10A
AC-800-3P	380	370	647	800	4.5	9	6"	10A
AC-1000-3P	380	400	809	1000	4.4	9	6"	12A
AC-1300-3P	380	600	1400	1300	4.5	9	8"	12A
AC-1500-3P	380	800	1617	1500	4.5	9	8"	16A
AC-300kg	220	150	168	300	5.3	6	5"	10A
AC-500kg	220	250	343	500	5.2	6	5"	10A
AC-600kg	220	370	412	600	5.2	6	5"	10A

Note: the 'Max. lift' listed above is not the max door weight, and the door weight should less than 'Max. lift'. Wind load resistance, guide and door resistance and other factors must be taken into account

- 1.The wire connecting way between the BVR and the appliance is X type.
- 2.There is overheating protection inside AC motor. When the motor's temperature grow up to 130 degree, the overheating protection starting work. After 15 minutes, the motor will rebuild automatic.
- 3.AC-3P means three phase

## ROLLING DOOR OPERATOR USER'S

### 3.Introduction

#### Main features

1. Compact design, attractive appearance, safe and reliable performance.
2. It has the advantages of light weight, low noise, convenient to install, safe and reliable performance.
3. Manual operation in case of power failure.

#### Main structure (see Fig.1)

Note: the pawl is the main device for braking, don't put it off.

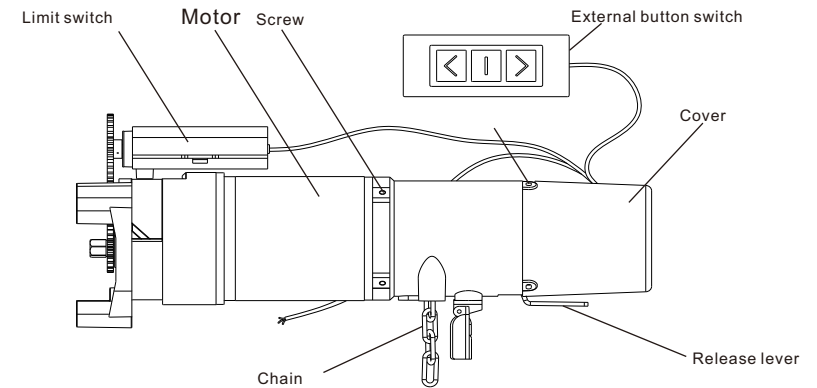


Fig.1

### 4.Installation and adjustment

#### Right hand and left hand installation

You may install the rolling door operator to left or right side. Operator is normally delivered right hand. (View from inside the opening), If you need to change it to the left processed as follows: undo the four screws on the housing, then turn the upper housing 180° and ensure the chain hangs vertically, finally tighten the screws. Make sure there is no clearance between upper housing and lower housing. If the operator has pawl (see Table 3), turn the pawl 180° at the same time.

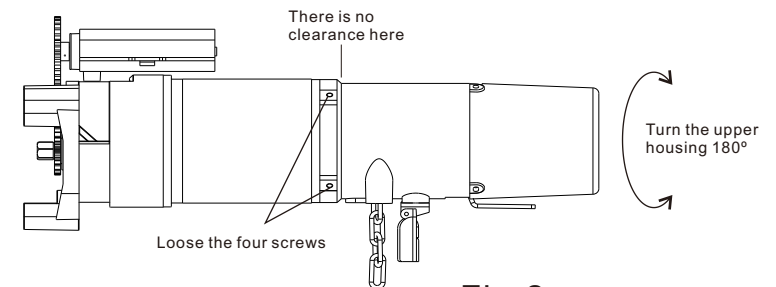


Fig.2

**Install the rolling door operator to right side.**

Right side sprocket bracket

Install the sprocket bracket on the wall or wall bracket horizontally; if the distance is not sufficient the bracket angle may need to be adjusted (The installation angle can be adjusted to between 0° and 44°, ensure the chain hangs vertically.)

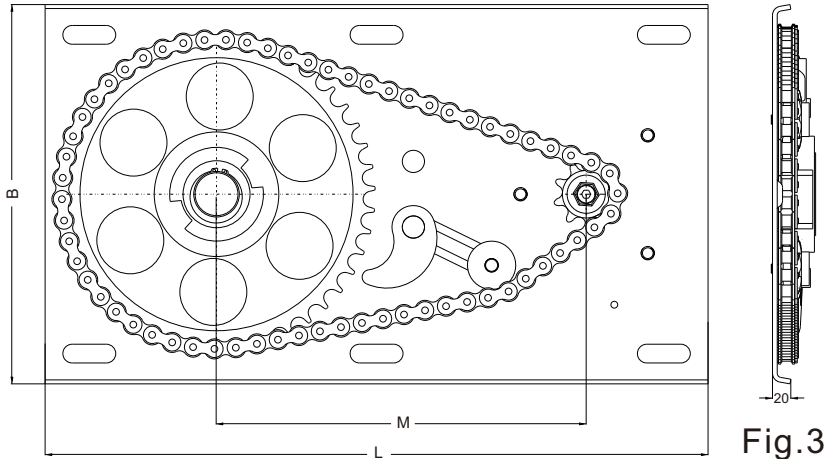
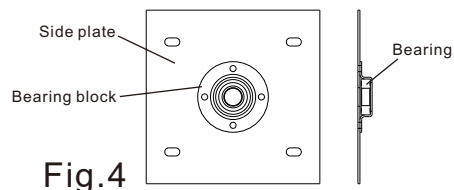


Table 2

Model	Center distance (m)	Length (L)	Width (B)
AC-3001P、DC-300KG	304	515	300
DC-500kg	304	530	320
AC-6001P/6003P	304	515	300
AC-8001P/8003P	345.5	580	320
AC-10001P/10003P	339	600	360
AC-13003P	364	550	250
AC-15003P	364	550	250

Left side square plate

Solder the bearing bracket on the square plate as shown in Fig.4. Fix the square plate on the wall or wall bracket.



5

Roller installation

Install the roller as shown in Fig.5. (make sure that the bearing's central is at

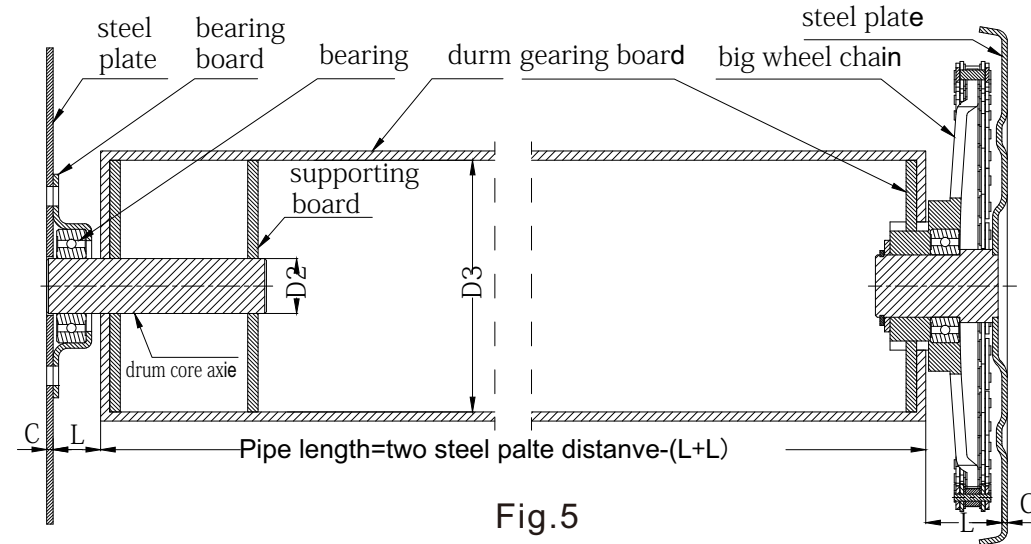


Fig.5

Installation and Adjustment

1. Install the motor on the bracket board which has been fixed on the wall. First, turn the nuts into the screws on the bracket and the motor. Adjust the transmission belt to be best condition, then tighten nuts.
2. After installed the motor, pull the manual chain up and down first, view the whole training part to confirm whether it works normally.
3. Access the power, press the up, down and stop manual button. Confirm whether it works well, llung up the door's slats, then adjust the motor's limit switch to the desired position. Inspect the motor to be sure whether it's in normal condition when it nms up and down.

Note: 1, If the motor is 3P(three phase), please stop the motor working when you find that the limit switch can't position during you adjust the limit switch. Please exchange the 3-phasc lines.

2, The 3P motor should connect with null line.

## ROLLING DOOR OPERATOR USER'S

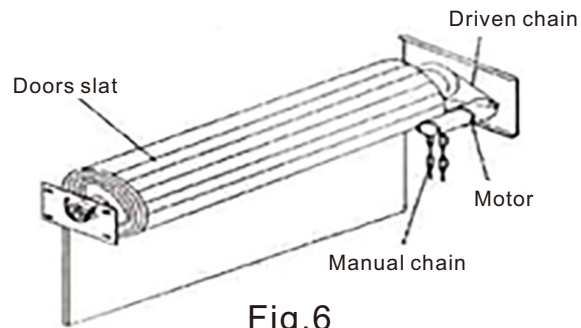


Fig.6

Limit switch see Fig.7

Limit switches are needed to stop the door at the correct opened and closed positions. Rotate the screw to free the limit cam wheel, open the door to desired position, turn the limit cam wheel until OPEN limit switch clicks, finally tighten the screw.

Rotate the screw to free its limit cam wheel, close the door to desired position, turn the limit cam wheel until CLOSE limit switch clicks, finally tighten the screw.

After adjusting, you can open the door then close the door and observe whether the door has successfully reached the opened and closed positions. If the door does not reach the opened or closed position, fine adjust the limit cam wheel to suit the desired distance. The process is the same as the adjusting as above.

functions may occur when the hand chain is used.

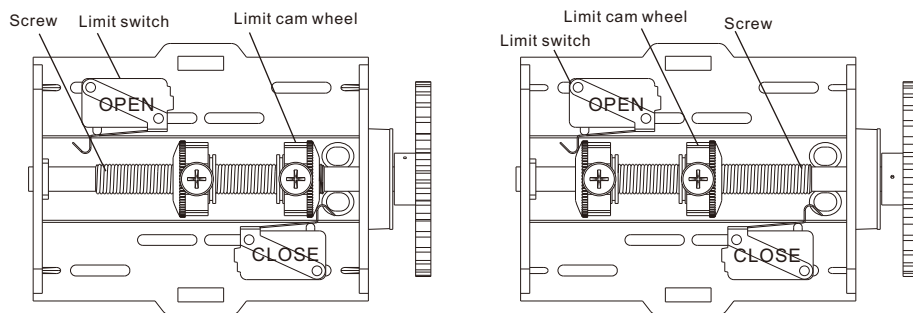


Fig.7

### Chain

In case of power failure, you can open or close the door manually by pulling the hand chain. It is important to ensure that the chain is not fitted twisted. If the chain is twisted, malfunctions may occur when the hand chain is used.

Please do not pull the chain during closing or opening the door, otherwise, serious personal injury or property damage may occur. Do not pull the chain too hard, otherwise the chain components will be damaged.

If the operator have pawl see Fig.1, the chain can only be pulled in one direction to

## ROLLING DOOR OPERATOR USER'S

open the door, pull the release lever to disengage the door quickly (warning: when pulling the release lever to disengage the door, do not attempt to go through the gate). If the operator is not equipped with a pawl, the chain can be pulled in two directions to open or close the door.

Table 3

Model	Pawl	Chain
AC-3001P. DC-300kg / 500kg	No	Pull in two directions
AC-6001P/6003P	No	Pull in two directions
AC-8001P/8003P	Have	Pull in one direction
AC-10001P/ 10003P	Have	Pull in one direction
AC-13003P	Have	Pull in one direction
AC-15003P	Have	Pull in one direction

### Release lever

Pull the release lever to disengage the door quickly. Suggestion: pull the release lever little by little in order to keep the motor and the door from damage as the door falling down too fast.

**WARNING:** When pulling the release lever to disengage the door, do not attempt to walk or drive through the door. Otherwise, serious personal injury or property damage may occur.

## 5.Electrical

How to connect with the remote control when Install the rolling door operator to right side, wiring see Fig.8 (note: there's left and right reverse switch inside the remote control, please press the lock key when the door is closed. To be sure of the appliance in safety)

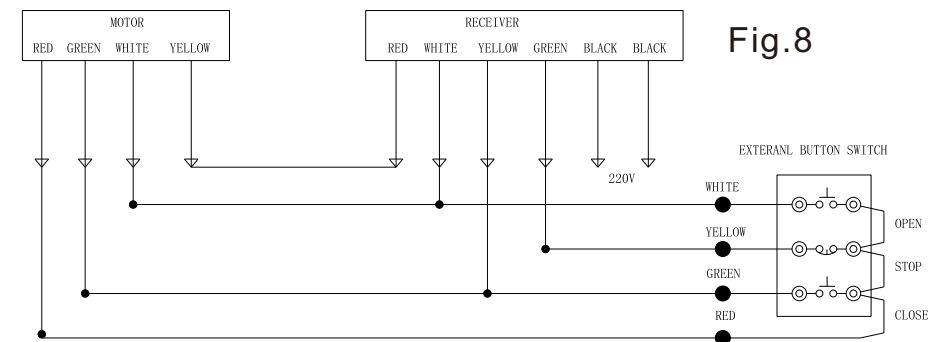


Fig.8

## ROLLING DOOR OPERATOR USER'S

External button switch (see Fig.9)

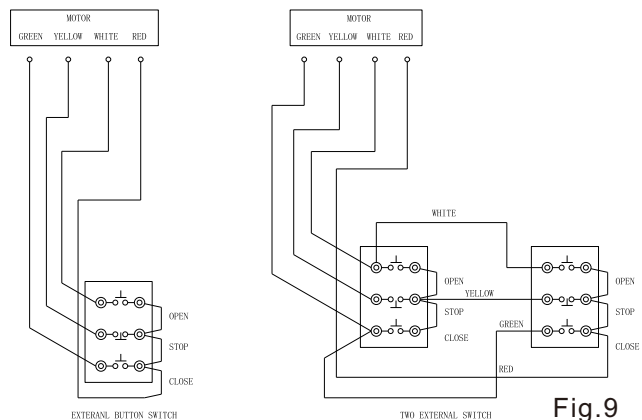


Fig.9

The rolling door operator must be grounded, connect grounding wire to the sprocket bracket. If the door's running direction is wrong, please change phase wires.

## 6.Maintenance

Check the door and the drive part every three month. Meanwhile, Lubricate driving chain(No.40/No.50) The door must be in good working order.

Regularly check the limit switch.

For service, call an experienced technician.

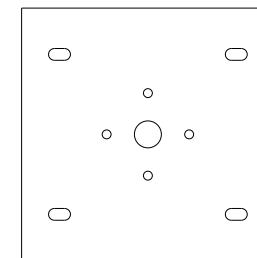
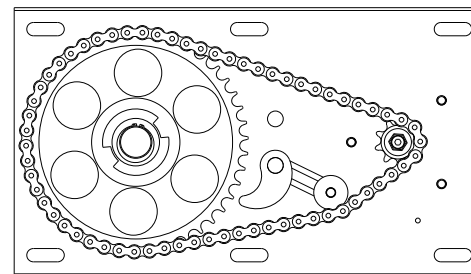
Our company reserves the right to change the design and specification without prior notification.

## 7.Troubleshooting

Problem	Possible causes	Remedy
Door fails to stop in expected position.	Limit switch	Re-adjust the limit switch again
Motor only runs in one direction.	Low voltage	Check the power supply, and the wiring
The operator fails to run if press the external button switch.	Poolcontact Electromagnet	Check the braking wire and the fuse
The operator fails to stop if press the stop button.	Relay	Replace the relay.
After stopping the door, the door creeps down.	Brake block in the operator wears off.	Check the compressed spring in the operator, add spacer if necessary.

## 8. Packing list

After receiving the control box, you should make an unpack-inspection, in which you should check whether the product was damaged. If you have any problem please contact our sales agent. You should find the following items in our standard packing:



Bracket

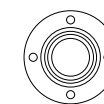
Fig.10 Side plate



Circular plate 2



Circular pin



Bearing block



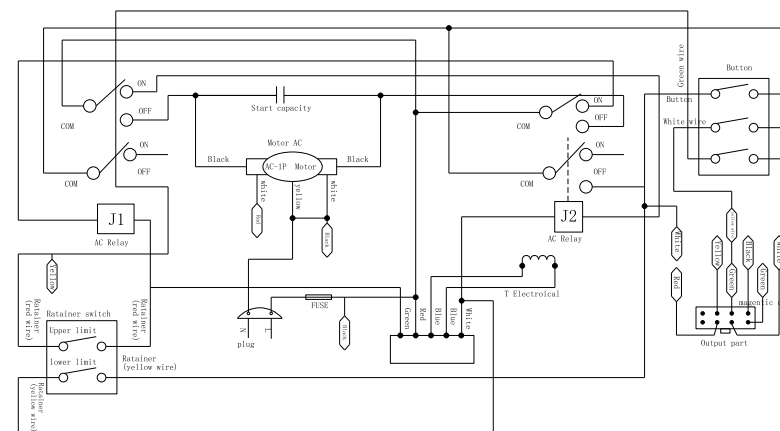
Circular plate 1



Bearing

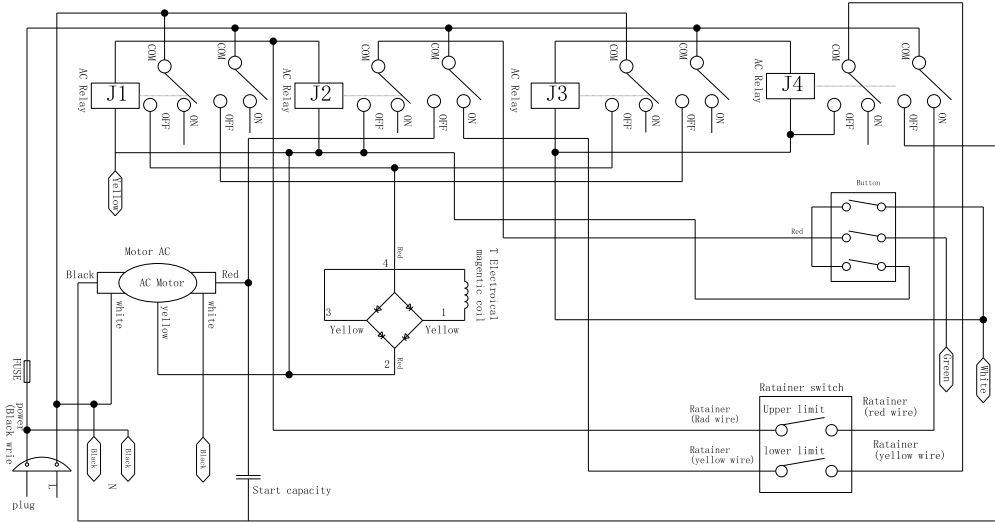
NO.	Item	Qty	NO.	Item	Qty
1	motor	1	7	circular 2	2
2	external button switch	1	8	cvlingdrical pin	1
3	key	2	9	bearing bracket	1
4	sprocket bracket	1	10	bearing	1
5	square plate	1	11	chain	1
6	circular 1	1	12	chain wheel	1

The schematic diagram of two relays 1P

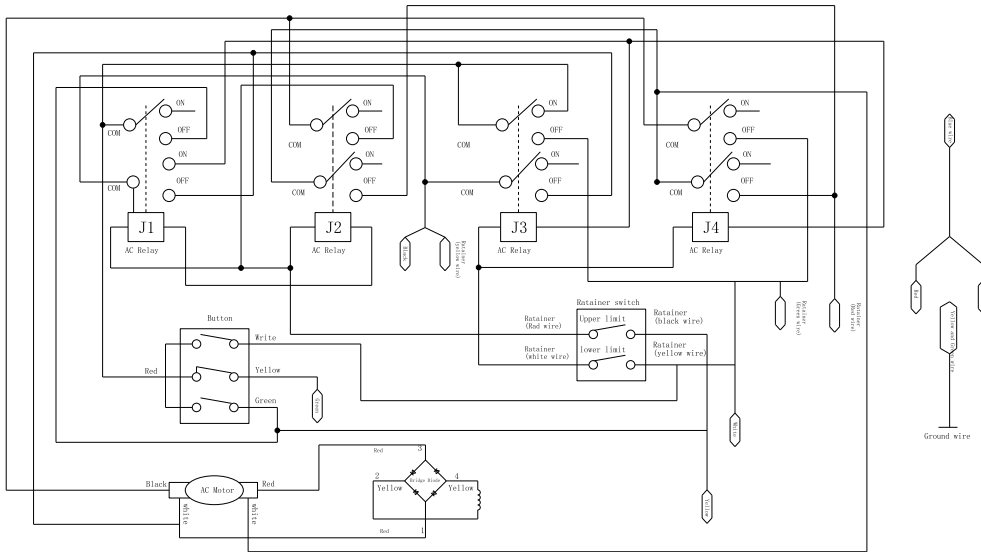


# ROLLING DOOR OPERATOR USER'S

The schematic diagram of four relays 1P



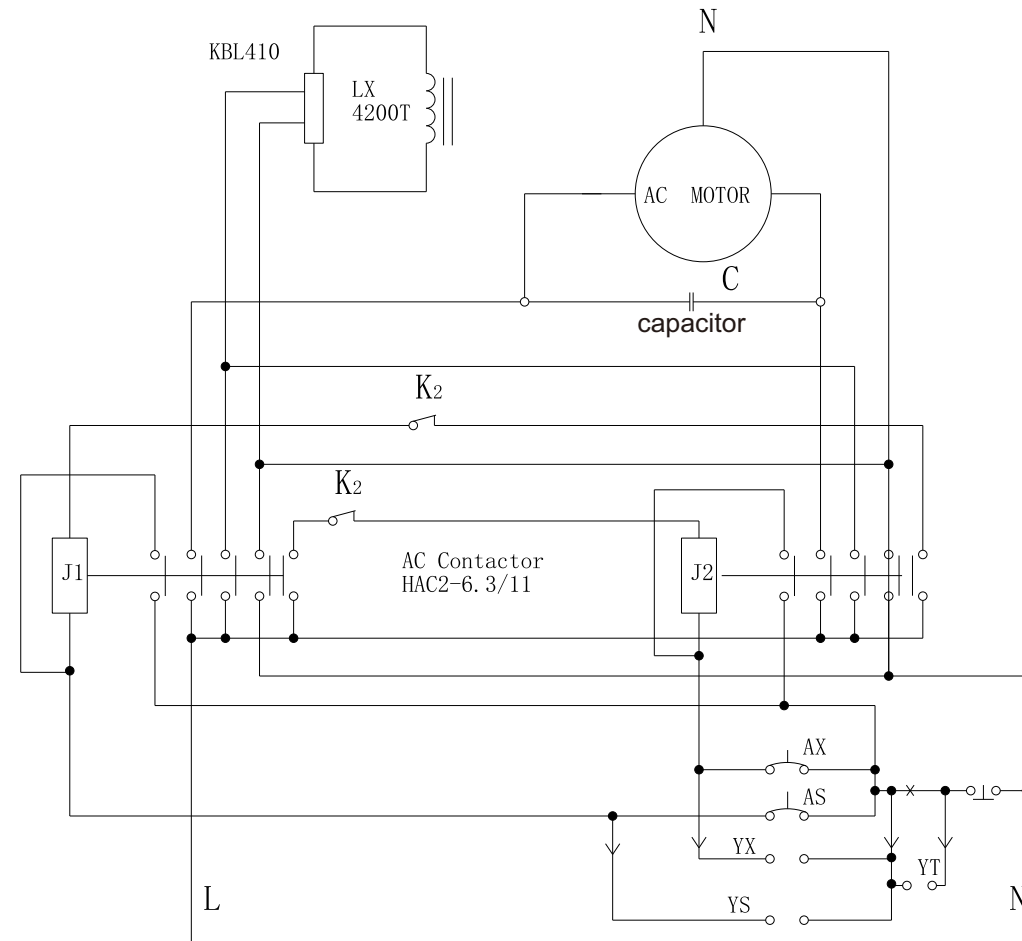
The schematic diagram of four relays 3P



(The schematic diagram subject to change without notice.)

# ROLLING DOOR OPERATOR USER'S

The schematic diagram of AC Contactor control motor 1P



# ROLLING DOOR OPERATOR USER'S

The schematic diagram of AC Contactor control motor 3P

