

**\*\* Warning:** Read the safety instructions before you start installation. If these instructions are not followed, the Manufacturer's liability and warranty are forfeited. Manufacturer is not liable for any change in the regulations and standards introduced after the publication of this manual.

## I . Product instruction:

The current product can be used as an electrical drive and automatic control for the rolling doors, the awnings or the similar equipments. With the advantages of compact structure, easy operation, convenience installation and high liability, the product is wildly used in residences, stores and hotels.

## II . Warnings:

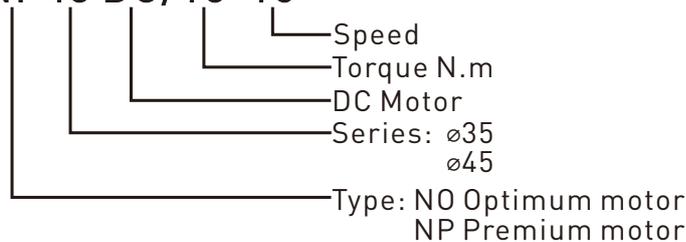
1. The installation and the regulation of the motor must be carried out by the professional staff.
2. Before the installation, please verify the mechanical performance of the motor's transmission part.
3. The motor should be firmly fixed. The shutter should move in the rail smoothly without any obstacles.
4. Children can't recognize the risks of electrical appliances. Therefore use or keep the appliance only under supervision of adults or out of the reach of children.

**\*\* Important safety instructions. It is important to follow and keep these instructions for the sake of safety.**

5. The control box should be installed at a height of 1.5m, all the wires have to be kept out of the way that the shutter moves.
6. On the electric outlet, there must be a grounding hole which is connected to earth.
7. The torque and the functioning time must be calculated in order to select the proper motors for the shutter, the awning and the rolling doors.
8. Keep the children away from the fix and remote control.
9. While functioning, there is an area of about 0.4m in the middle of the motor is the high-temp area which the wires should be kept away from.
10. Make sure there is no one around before close the door or the shutter.
11. Cut the power of the motor and the control before any maintenance or repair.
12. If the cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.

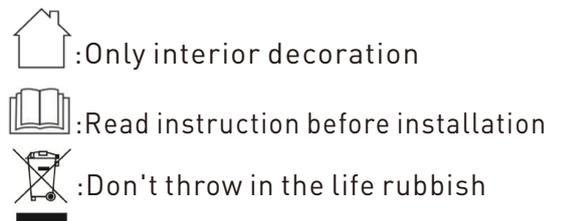
## III . Product type instruction:

1. Type instruction: **NP45 DC/15-16**



2. Motor label instruction: eg. NP45 DC/15-16

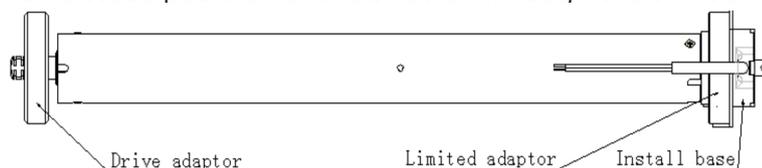
Rated Voltage: DC12V	Rated operate time: 4min
Rated Power: 48W	Protection class: I
Rated Current: 4A	Moisture protection : IP44
Rated Torque: 15N.m	
Rated Speed: 16rpm	



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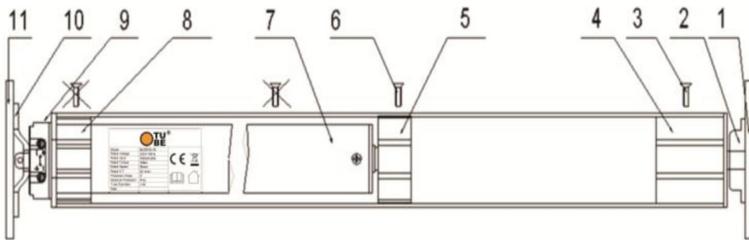
## IV. Structure characteristic:

1. Insert the motor into the roller, the motor will pass the torque onto the roller through the adaptor, and to drive the rolling doors or the similar equipment up and down.
2. Regulate the open and close position of the shutter through the limit switch unit inside the motor.
3. Product scheme:



## V. Installation:

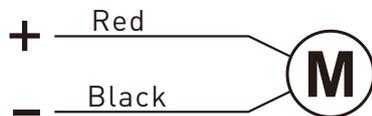
1. Ensure the supplied power is in accordance with the specification.
2. Check the dimensions and the shapes of the limit adaptor and the drive adaptor if they are both in accordance with the roller, before the installation, be sure that all the accessories are fixed and will not cause any mechanical obstruction to the motor.
3. While defining the position of installation, the customer can choose to install the motor on the right or the left of the shutter according to the real condition.
4. If it is a round roller, make a slot at the end of the roller to allow the Limit switch unit work properly; if it is the other shape, then inset the motor directly into the roller.
5. After inserting the motor into the roller, use the screw to fix the limit adaptor to the roller to ensure the normal functioning of the motor.
6. During the installation, keep the motor and the roller horizontal, and the roller should be vertical to each side of the door or window.
7. Fix the mounting brackets on each side to the wall firmly with the screws.
8. Fix the mounting bracket above the window or the door.
9. Mounting scheme:



- |                      |                   |
|----------------------|-------------------|
| 1. Mounting surface  | 2. Idle bracket   |
| 3. Fixing screw      | 4. Plug end       |
| 5. Drive Wheel       | 6. Fixing screw   |
| 7. Tubular Motor     | 8. Crown          |
| 9. Motor head        | 10. Motor bracket |
| 11. Mounting surface |                   |

10. After the installation, power on the motor, push the button rapidly to check if the up and down movements are good.
11. If the direction of the movement is not in accordance with the signs on the button box, switch the Connection of the brown and black wire.

## VI. Electrical scheme:

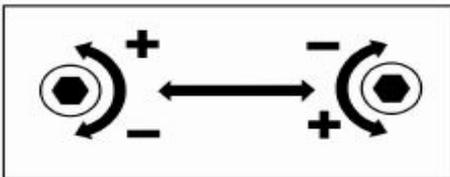


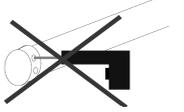
The motor will turn in an anticlockwise direction when viewed from the drive wheel end.

## VII. Limit setting:

**Remark: the programming should be done after the motor be installed completely.**

1. The customer can set limit positions according to their situations.
2. According to the motor's rotating direction and the adjusting instruction, Insert travel limit pole into its travel limit hole to adjust limit travel: the direction of "+" will increase the shutter's travel; the direction of "-" will reduce the shutter's travel:





**Warning:**  
Both limit setting & manual override with cordless drill are forbidden. If the motor is damaged due to the use of the drill, the manufacturer will not be responsible for the warranty liability.

Use only: 

3. After setting the limits, start motor to make the shutter go up-and-down once, to see if the positions are well set.