

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

I. Product instruction:

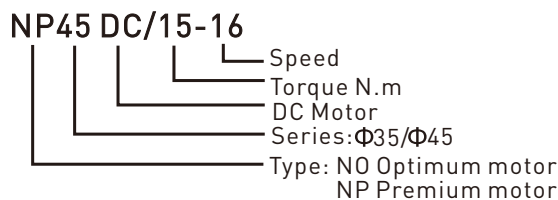
The current product is recommended for Roller Shutters and Slide track system.

II. Warnings:

1. The motors must be installed and adjusted by a qualified installer, who must read these instructions carefully.
2. Use the power supply according to the rating labels.
3. During installation, installer/customer can choose to install the motor on the right or the left of the shutter according to the needs of the application.
4. **WARNING: Important safety instructions. It is important for the safety of persons to follow these instructions:**
 - Save these instructions.
 - The drive shall be disconnected from its power source during cleaning and maintenance.
 - Follow all instructions, since incorrect installation can lead to severe injury.
5. Do not allow children to play with fixed controls. Keep remote controls away from children;
 - Frequently examine the installation for imbalance and signs of wear or damage to cables and springs. Do not use if repair or adjustment is necessary;
 - Do not operate when maintenance, such as window cleaning, is being carried out in the vicinity;
 - Before installing the drive, remove any unnecessary cords or components and disable any equipment not needed for powered operation;
 - The characteristics of the driven part must be compatible with the rated load and rated operating time;
 - The mass and the dimension of the driven part shall be compatible with the rated torque and rated operating time;
 - Fixed controls should be clearly visible after installation;
6. Before the installation, please verify the mechanical performance of the motor.
7. The motor should be firmly fixed. The shutter should move in the guide smoothly without any obstacles.
8. The control box should be installed within the guidelines of the relevant authority.
9. The torque is calculated in order to select the correct motors for the shutter.
10. Keep children away from the fixed control.
11. If the cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid hazards.
12. The appliance is only to be used with the power supply unit provided with the appliance.
Supply power current must be $\leq 5.5A$, DC voltage 12V-14.4V.

III. Product type instruction:

1. Type instruction:



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

Rated Voltage: DC12V	Rated operate time: 4min
Rated Power: 54W	Protection class: III
Rated Current: 4.5A	Moisture protection : IP44
Rated Torque: 15N.m	
Rated Speed: 16rpm	



: Read instruction before installation

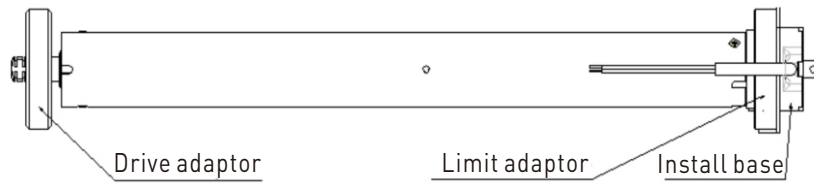


: Motors must not be disposed with general household waste.

Drop them off at a recognized recycling organization.

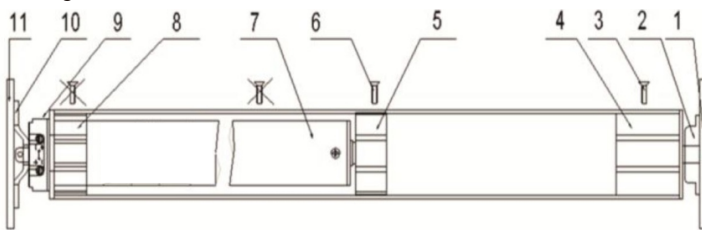
IV. Structure characteristic:

1. Insert the motor into the roller ($\Phi \geq 50\text{mm}$), the motor will deliver the torque to the roller through the adaptor, then drive the Roller Shutters in a up and down rotation.
2. Regulate the open and close position of the shutter through the limit switch unit inside the motor.
3. Product scheme:



V. Installation:

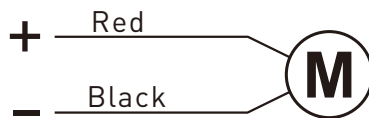
1. Ensure the supplied power is in accordance with the specification (see III. 2).
2. Check the dimensions and the shapes of the limit and drive adaptor. Before the installation, if they are both in accordance with the roller, make sure that all the accessories are fixed and will not cause any mechanical obstruction to the motor. In the case of the diameter 35 motor a maximum screw length of 8mm must be used on the spring clip. To use longer will interfere with the operation of the motor and void warranty. In the case of diameter 45 motors no screw can be used along the length of motor as the clearance is only 1mm.
3. During installation, installer/customer can choose to install the motor on the right or the left of the shutter according to the real condition.
4. If the roller is round, make a slot at the end of the roller to allow the limit switch unit to work properly; if it is the other shape, then inset the motor directly into the roller. (Applicable for Dia.45)
5. After inserting the motor into the roller, use the screw to fix the adaptor to the roller to ensure the normal functioning of the motor. avoid drilling or screwing directly into motor as this will void warranty.
6. During the installation, keep the motor and the roller horizontal, and the roller should be vertical to each side of the door/window.
7. Fix the mounting brackets on each side to the wall firmly with screws.
8. Fix the mounting bracket above the door/window.
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 on controls to check the direction of rotation. If the direction of the movement is not in accordance with the control button, reverse the connection of the red and black wire.

VI. Electrical scheme:

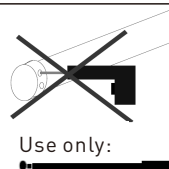
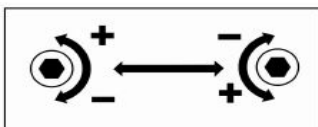


The motor will turn in anticlockwise direction when viewed from the drive wheel end.

VII. Limit setting:

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

1. The customer can set limit position according to different situations.
2. According to the motor's rotating direction and the adjusting instructions, insert the limit adjusting tool into the adjusting worm to adjust end limit : turn toward the direction of "+" will increase the shutter's up or down position; turn the direction of "-" will decrease it.



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.

3. After setting the limits, start the motor to make the shutter go up-and-down once, to check if the end limit is well set.