

## **SDC400 SDC600 SDC800 GATE OPERATOR USER'S MANUAL**

### **Main functions and working conditions:**

The device is used to drive the sliding gates, with the moving speed of 12 meters per minute. SDC400, SDC600, SDC800 gate-operator is powered by AC 220V, 50 Hz. It is featured with powerful starting strength, capable of overload in a short time. When overloaded, it will be protected electrically. In case of power failure, a key could be used to release the device and the gate could be moved manually.

The device can be installed in gates or out of gates.

### **Main specifications and technical parameters:**

- power supply: AC 220±10%V, 50Hz
- motor speed : 1250 r/min
- starting current: ≤4 A
- gate moving speed : 12 m/min
- opening strength : SDC400≥290 N SDC600≥375 N SDC800≥500 N
- environmental temperature:-40 to 70°C
- net weight : 8.5kg (including accessories)

### **Working principle and main structure**

The size of the figuration can be seen in Fig.1. The device is composed of a single-phase motor, worm and worm gear. The main shaft of the motor rotates the worm with the clutch engaged, the worm rotates the worm gear and output gear, which pushes racks attached to the sliding gates, thus the gate will be moved.

The device is lubricated by No. 1 lithium grease.

The control box of the device is installed with a time-delay equipment, the delay time should be more 5 seconds than the moving time of the gate.



**Fig.1**

**Installation and adjustment:**

\* The gate-operator and the sliding gate should be installed according to Fig.2, and controlled by the button controllers. To guarantee the safety, it is highly recommended to install a limit device to prevent the gate from sliding out of the rails. The rails must be installed horizontally.

\* Installation of the gate operator:

The foundation of the gate operator is shown in Fig.3, and the position between the gate operator and the sliding gate is shown in Fig.4. When cements have solidified, put the gate operator on the installation plate and press it in the direction as shown in Fig.4. Adjust it to the proper position and fix it with screws and nuts.

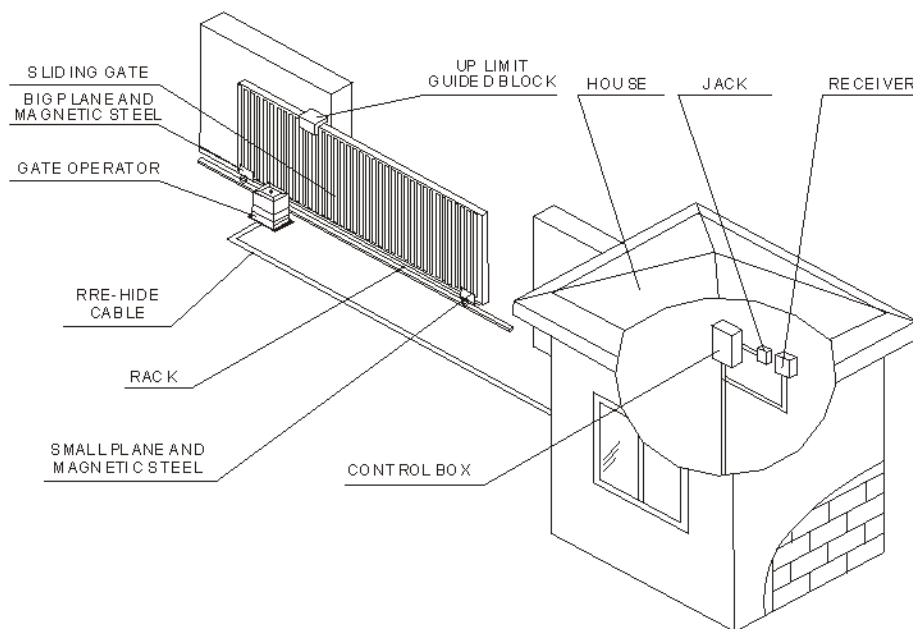


Fig.2

\* Installation of racks:

- 1) Solder the fixing shaft (inside the racks packing ) to the gates;
- 2) Fix the racks to the fixing shaft with crews and adjust the position of the racks so that the racks can be engaged correctly with gear and the space is 0.5ram.
- 3) Install the magnetic switch as shown in Fig.4 .A magnetic- sensitive switch is installed to control the position of the gate. Then release the gear clutch and push the sliding gates manually to confirm the required position. Solder the magnetic fixed plane to the racks and tighten the gear clutch. Finally, adjust the magnetic switch to the proper position by moving the gate with the motor. The switch box should be within 10 to 15 mm away from the magnetic steel, if the distance is excessive. The switch would fail to work. (See Fig.4)

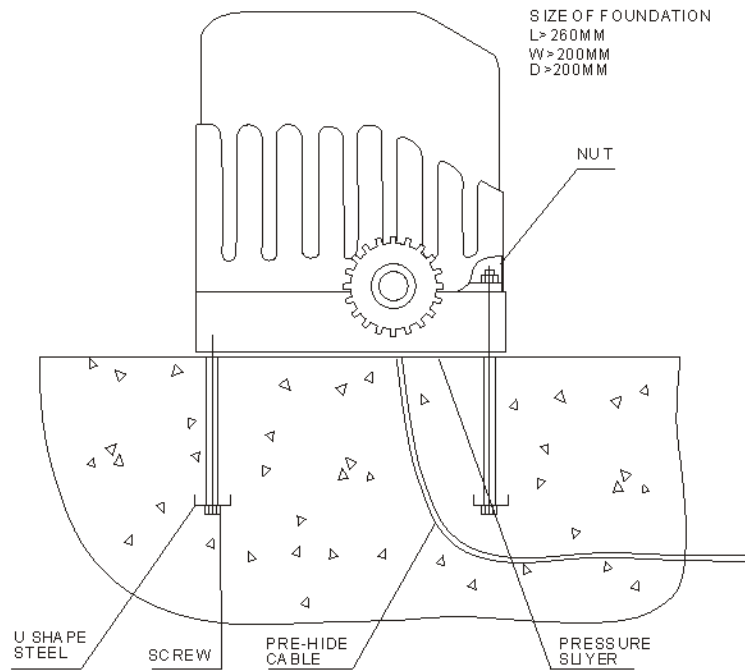


Fig.3

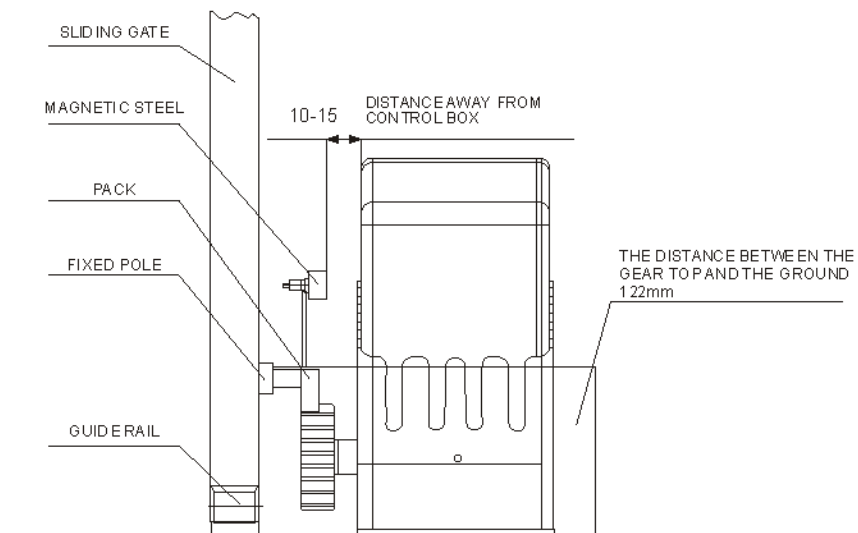


Fig.4

**Installation of the control box:**

Place the control box in the proper position and connect the wires according to the wiring chart.  
(See Fig.5)

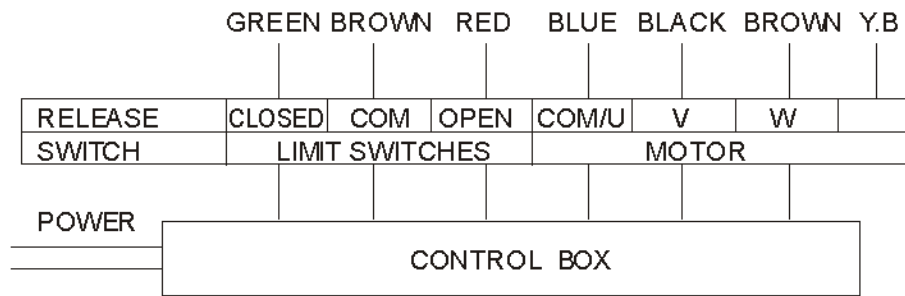


Fig.3

**Operation:**

- Check the power supply and grounding and wires before running the device.
- Release the gear clutch with the release key to make sure whether the gates can be moved manually. If everything runs well, tighten the clutch with the key.
- Switch on the power and run the device to observe whether the gate is sliding smoothly.
- Adjust the position of the magnetic switch until the positions of the opening and closing meet the requirement.
- Adjust the pressure screws to make the output of the gate-operator meet the user's requirement, that is, the device should be powerful enough to move the gates and capable of disintegration from the clutch when it is blocked.
- The special motor for the device is only designed to work for less than 30 minute. If it runs continually for a long time, it would stop working because of the high temperature.