



Techmate  
Engineering & Automation

---

# CAPTAIN 801-S

SLIDING GATE OPENER



Caption

## **WARNING**

Instructions must be read before beginning installation. Please follow these instructions carefully, incorrect installation could affect gate operation.

## PREFACE

First of all, thank you for Purchasing from us. In order to ensure that you are fully familiar with the various functions of the machine, please read this manual carefully, so that you can install and use it safely.

## Security & Protection

1. Power supply voltage must meet the requirements, do not over voltage or under-voltage use; Please ensure that the input voltage used matches with the supply voltage of gate opener (AC240V 50Hz).

2. When installing or repairing the gate, please cut off the input power first;

**Warning: Incorrect or improper use of this product can cause damage to persons, animals or properties.**

3. Please make sure that the door opener is grounded reliably, the grounding resistance is less than 4, and there are leakage and short circuit protection.

4. At the proper position of the side of the door opening machine on the track, a limit iron should be firmly welded, which should be outside the range of the electric appliance limit, so that it is appropriate to block the two sides of the walking wheel and the door body does not leave the guide wheel constraint. To prevent the electrical limit failure gate from both sides of the guide wheel constraints caused by overturning,

5. Before the door is opened, obstacles should be cleared; vehicles and pedestrians are strictly prohibited from passing through the gate while it is in operation.

6. Avoid children playing operate remote control and control box switch;

7. The motor shall not be disassembled on its own, and the maintenance shall be carried out by professional person

8. This machine uses high-grade lubricating grease, no need to replace or add lubricating oil.

## GENERAL SAFETY:

- All modifications to wiring or electrics, and any adjustment or maintenance to 240VAC MUST be done by a qualified electrician.
- To avoid damaging gas, power or other underground utility lines, contact the relevant authority BEFORE digging.
- All potential hazards and exposed pinch points of the gate must be eliminated or guarded prior to installation of this gate motor.
- Never mount any device that operates the gate motor where the user can reach over, under, around or through the gate to operate the controls. These must be placed at least 1.8m from any moving part of the moving gate.
- Ensure power plug is disconnected from the power socket during installation or maintenance.
- Keep remote control and other control devices out of children's reach, in order to avoid unintentional activation.
- Never allow anyone to hang onto the gate while moving.
- Please ensure a warning sign provided is fitted to the structure.
- To ensure safety, before installing the main motor, mount a Gate End Stop (GTR017) and a Gate Stopper (GTR017 or GTR018) at each end of the rail to prevent the gate travelling off the track.
- If required, install infrared photocells (GTR051, sold separately) to detect obstructions and prevent injury or damage.
- Instruct all users about the control systems provided and the manual opening operation in case of emergency.
- Ensure that the power cable is connected to a RCD protected weatherproof power outlet installed by a qualified electrician.
- Do not install the product in an explosive atmosphere or where there is any danger of flooding.
- This product was exclusively designed and manufactured for the use specified in the present documentation. Any other use not specified in this documentation could damage the product and be dangerous.
- Only use original parts for any maintenance or repair operation. Richmond Wheel & Castor Co declines all responsibility with respect to the automation safety and correct operation when other supplier's components are used.
- Do not modify the automation components, unless explicitly authorised by Richmond Wheel & Castor Co.
- The user must avoid any attempt to carry out any works or repairs on the motor, and should

always request the assistance of qualified personnel.

- This motor is suitable for use on one sliding gate only.
- Anything which is not expressly provided for in these instructions is not allowed and will void warranty.
- Dispose of all packing materials (plastic, cardboard, polystyrene etc.) according to current guidelines. Keep plastic bags and polystyrene out of children's reach.
- Save these instructions for future use.

## TECHNICAL SPECIFICATIONS

1. Power supply: 220V/50Hz	2. Motor power :370W/550W/750W/900W
3. Starting current; 3A;	4. Motor speed: 1400r/min;
5. Running speed: 12m/min;	6. Suitable door weight: 400-2000kg
7. Environment temperature: -25°C~+55°C	8. Motor net weight: 12.7kg-16.7kg

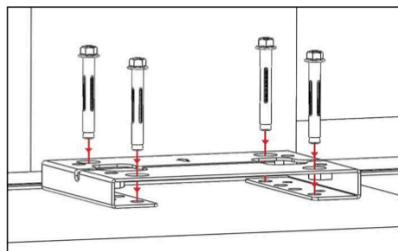


Fig 8

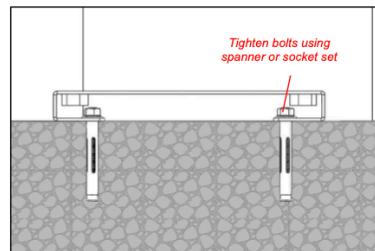


Fig 9



Fig 10



Fig 11



Fig 12

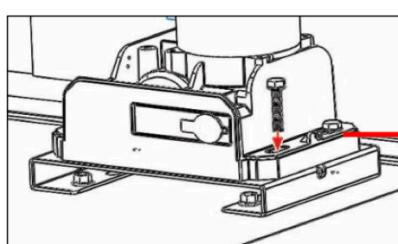


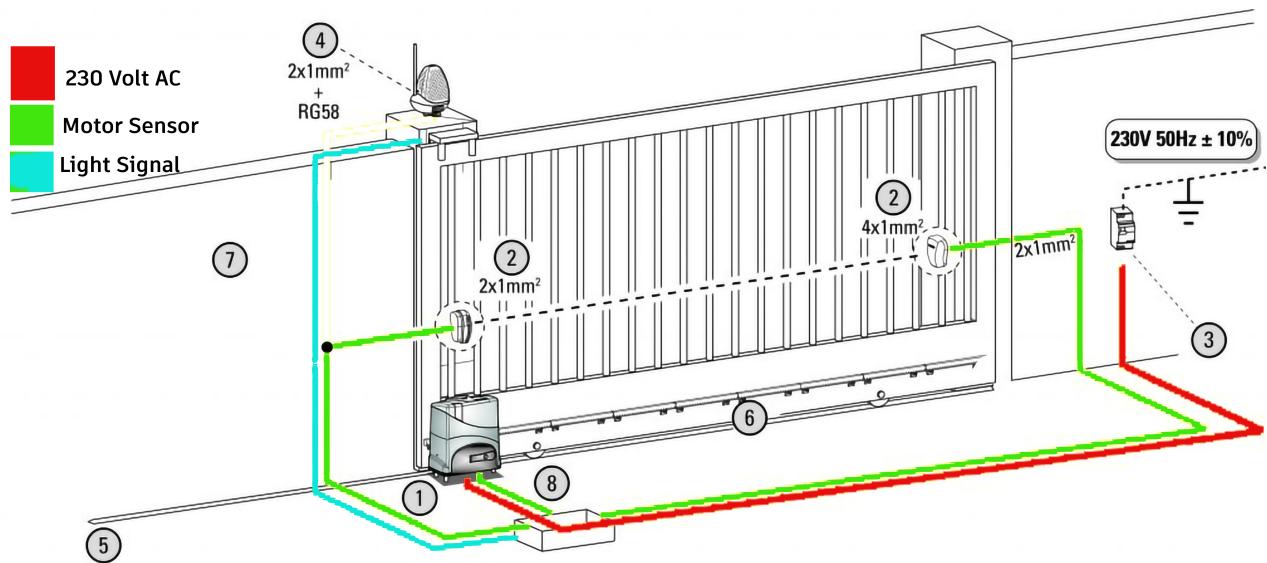
Fig 13

Insert the M10 x 50mm (Part 6d) bolts, spring washers, and flat washers provided through motor housing and screw into welded nut on the baseplate.

Hand-tighten set screws before final adjustment of motor.



## Mounting Drive



Electrical Wiring

#### BEFORE SLIDING GATE OPERATOR INSTALLED

1. Before using the machine, check power supply,

**1-Grounding**

**2- Voltage**

**3-Breaker & ELCB**

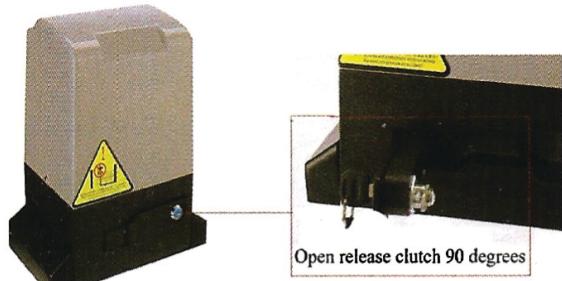
2. Check whether it is connected according to the demand of wiring diagram.
3. The gate should be pulled easily and smoothly manually
4. when the worm gears are released The worm gears will be coupled before power on. \*
5. The product must be installed by professional person

## REMEMBER!

When the power failure, use keys to release the clutch, push door manually (must to open the release clutch to 90 degree).

6

1 - The control box of working voltage for 220 +/- 10%, do not pick up the 380v voltage.



2 - Buried in the ground use coarser double insulation wire, travel switch three core shielding layer should be good grounding, there shall be no joint in the middle. Wire to set into the PVC tube or pipe, waterproof and moisture proof processing.

3 - when leaving the factory, motor protection set for 90 seconds. Transmitter using DC12V, 27A battery, the service life of the year, a transmitter do not be affected with damp be affected with damp, collision, if you would like to change password, please refer to the password set.

4 - If the remote control distance is too short, please check whether the host installation location near covered with metal or metal.

5 - The control box and line amateurs do not install, such as personal safety problems, the company shall not be held responsible.

6 - The control box if there is any quality problem, please put the control box to the agent processing, such as user repair itself, the company is not responsible for the user to fix the damage caused by himself.

## SIMPLE FAULT INSPECTION AND ELIMINATE:

I. when the control box to the motor doesn't work, first distinguish control box or outer line fault.

Discriminant method is: through the controller inside the light emitting light is about judgment of failure parts. Outside line common faults:

1, the line is broken or poor contact, can use a multimeter to check.

2, wet leakage, replaceable wire.

II. The control box burn insurance namely after the power is connected, please check whether the power grid voltage is too high or misconnection 380 v.

III. when your remote control failure, but try to make launchers, otherwise please check transmitter for electricity.

IV. remote control distance nearly:

1, remote control in open > 30 meters, because the radio waves are greatly influenced by the weather, therefore, in the rain, fog, wind, severe weather conditions such as remote control distance is slightly lower, this is a normal phenomenon.

2, old batteries, also can make remote control distance nearly, can try to replace new battery,