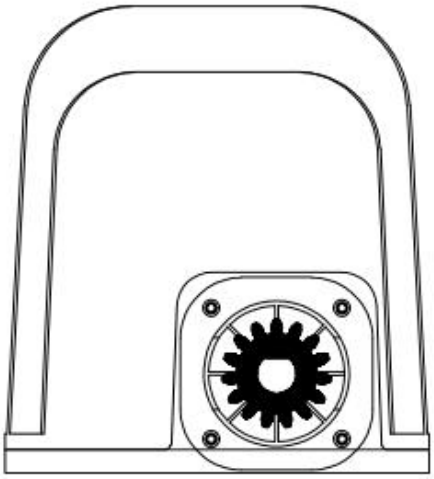
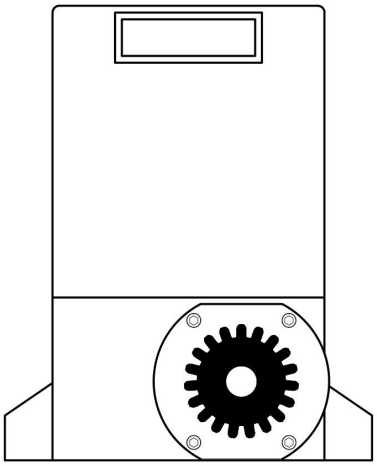
SLIDING GATE OPENERS

PURE COPPER CORE





Designed for residential application

Model : DCK156D/DCK166D/DCK176D/DCK186D/DCK196D

DCK200 Standard type/ DCK200 Industrial type

DCK200 Heavy duty type /DCK200 Industrial heavy duty type

Designed for residential applications

CE This product is CE certified

CCC This product is China CCC certified

Safety Protection and Precautions

DCK series door machine need professional technician for the installation:

（1）All the operations must be implemented according to the instructions, this is very important to personal safety. Improper installation or misuse of the product might cause series damage to personal and property.

（2）Please read instructions carefully before installation.

（3）Installation and machine fittings must comply with standards related.

（4）Power supply should be consistent with the requirements of the machine and well grounding. Electric leakage as well as circuit short protection device should be equipped.

（5）Before system maintenance, cut off the power , and check if the grounding is well connected

（6）Strongly recommended to install safety devices(such as infrared protection),and take frequent check to ensure normal work.

（7）Our company is out of responsibility for any operation or use violating the instructions.

（8）Our company is out of responsibility for the consequences caused by user’s ignoring the process requirements of precision components during operation.

（9）Our product is in strict accordance with the instructions for the design and manufacture. Any violation of the instructions may damage the product or cause danger.

（10）Our company shall not be responsible for safety problems caused by using fittings that isn’t produced by our company.

（11）Any attempts to change the structure of the components is forbidden.

（12）The installation personnel should give detailed operation methods to the users as well as the regulations under emergency, also the “instructions ”should offered.

（13）During installation, keep the children and other unrelated person away from the installation site.

（14）Before electric control system operate, remove all the barriers within the door covering area and any vehicles or person are forbidden to pass.

（15）Both the installation position and height of main control box should be proper, do not be exposed to sunlight and rain, forbidden to let children to operate the remote control as well as control panel switch.

（16）If it is necessary to install a outer shield, consider that if it may shield signal of the remote control.

（17）Place the remote control out of the reach of children in case of accident.

（18）Any attempts to dismantle this machine privately is forbidden, please contact professional technician.

（19) Please save the instructions properly for future use.

Main Technical Specifications

Model	DCK156D/166D/176D/186D/196D	DCK200 Standard type/ DCK200 Industrial type DCK200 Heavy duty type /DCK200 Industrial heavy duty type
Working voltage	AC single phase 120V/220V ～ 240V 50/60HZ	
Motor Power	370W /450W /750W /900W /1200W	550W /750W /900W /1200W
Starting current	5 A	3 A
Torque	18Nm /22Nm /50Nm /60Nm /75Nm	35Nm /40Nm /50Nm /65Nm
Running Speed	12 m / min	12 m / min
Gate Weight	500 ～ 2500 kg	1200 ～ 3000 kg
Working Temperature	-50℃ ～ +65℃	-50℃ ～ +55℃
Noise	≤ 56 db	≤ 56 db
Certification	CCC / CE	CCC / CE

Working Principle and Main Components and Functions

The door opener mainly consists of a high-strength aluminum alloy box,a high-quality single-phase motor,a frictional overrun clutch, a worm-gear reducer, a gear clutch and an output gear.During the operation,the motor spindle drives both the reducer and output gear by means of the frictional overrun clutch, and the output gear then push racks mounted on the sliding door to move the door horizontally, so that the door can be opened and closed in the energized state.

When the special key is turned clockwise,the gear clutch is engaged and the motor power transmitted by the worm gear drives the output gear to rotate via the gear clutch so as to drive the rack mounted on the door, pushing the door to move (or to open and close) horizontally. Meanwhile because of the reverse self-locking feature of the worm gear mechanism, the door is locked as well, keeping closed against an external force.

When the special key is turned counterclockwise, the left and right parts of the gear clutch are disengaged from each other and the output gear is freed from the influence of the motor, allowing the door to be opened and closed manually.

Install the Metal Base

The door opener should be mounted on a metal base with bolts.As for how to install the metal base, see Fig.1

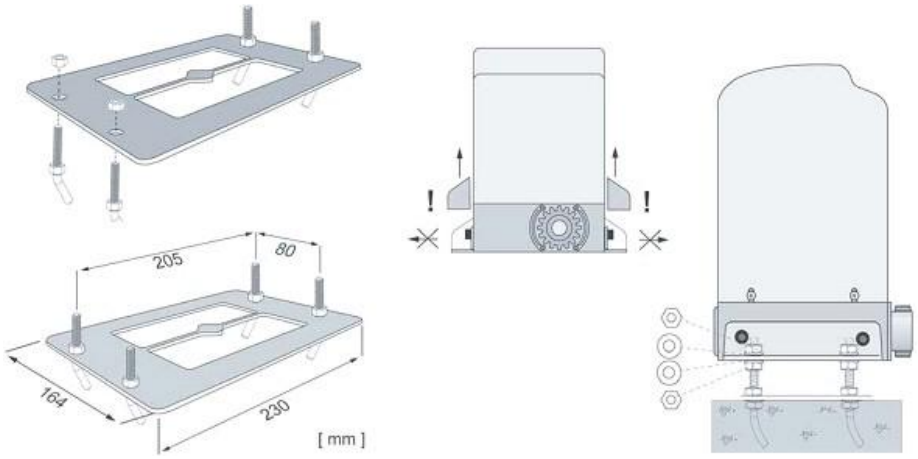


Fig.1

Mount the rack

The easiest way to install a rack is to place it on the gear teeth of the door opener first,disengaged the door opener, and then push the door slowly to move the tack bit by bit to the desired position.In this way, you can make sure that the teeth of the rack are perfectly engaged with the teeth of the gear.When doing so, don’t forget to mark each mounting point. (See Fig.2.) Be noted not to lay the entire weight of the door onto the gear.

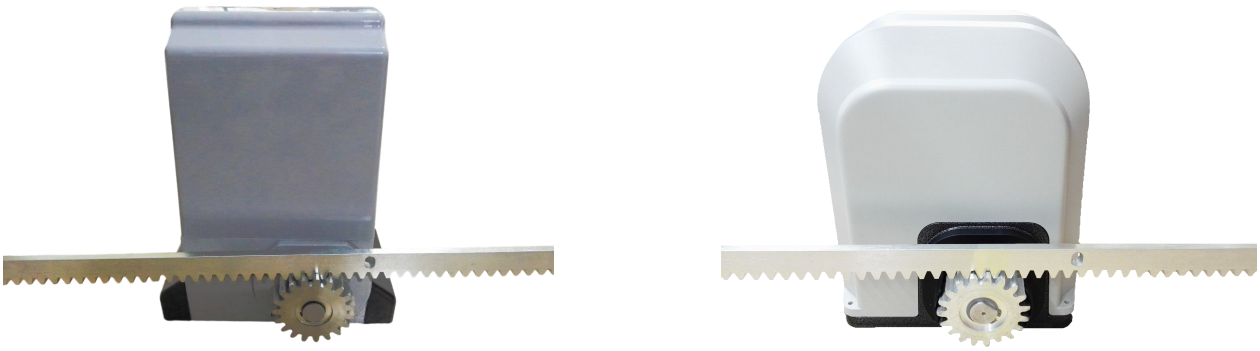


Fig.2

Door Opener Release Device (Open the door manually)

The door opener is designed with a lockable release device which enables you to open the door manually in case of blackout.For the release device and its operations, see Fig.3 and Fig.4



Fig.3



Fig.4

Install the Limit Switch

Install the switch bracket onto the rack by reckoning the final travel position.(See Fig.5 and Fig.6). For a spring switch, adjust until to an inclination that the spring comes into contact with the switch flapper. For a magnetic switch, the magnet should point to the motor and be located according to the position of the magnetic limit switch inside the housing.

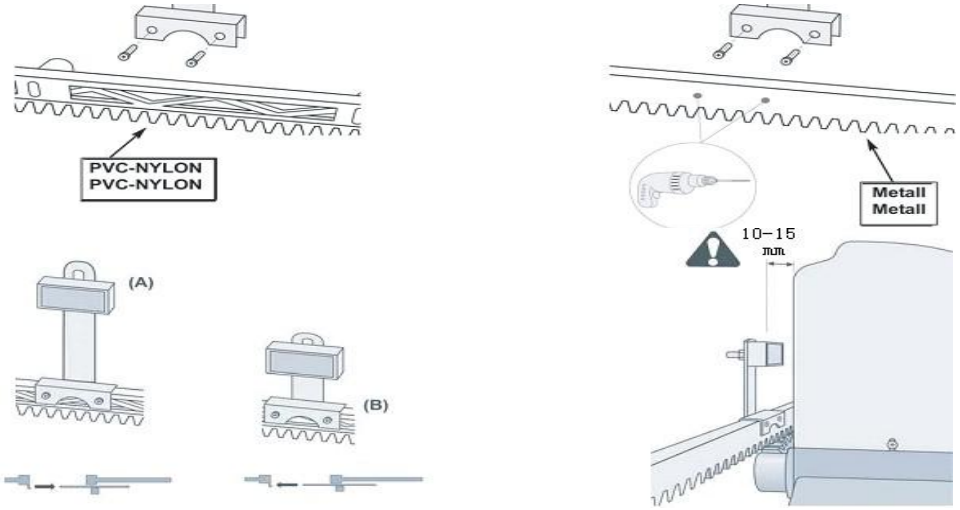


Fig.5 Magnetic Limit Switch

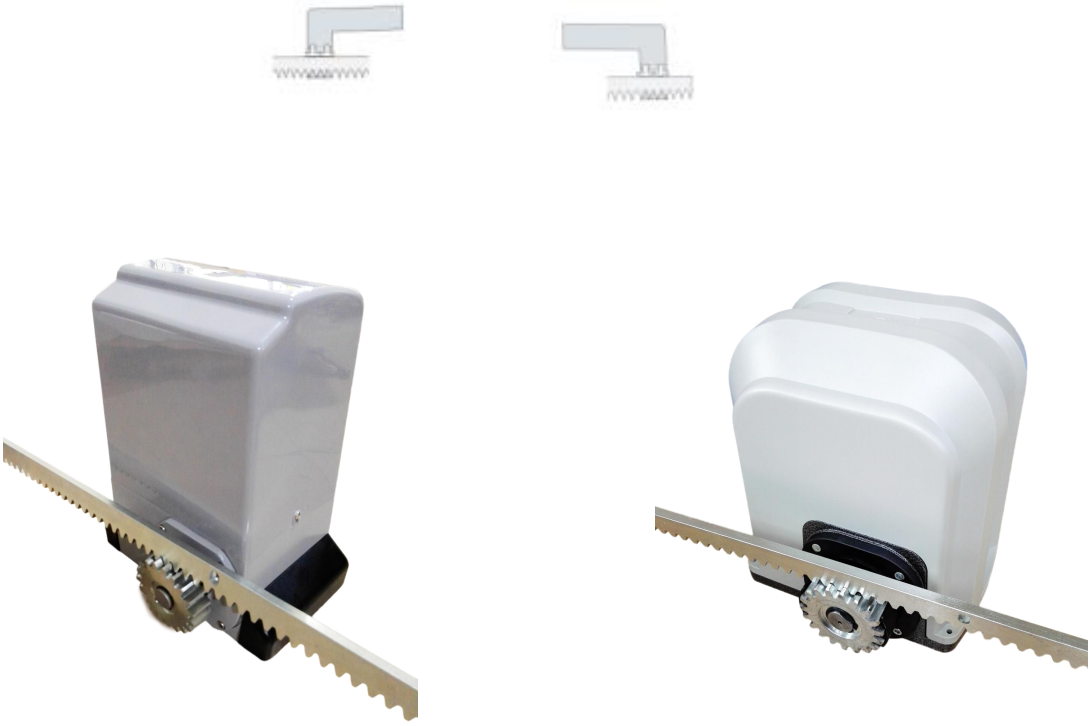


Fig.6 Spring Limit Switch

For wiring, see Fig.7

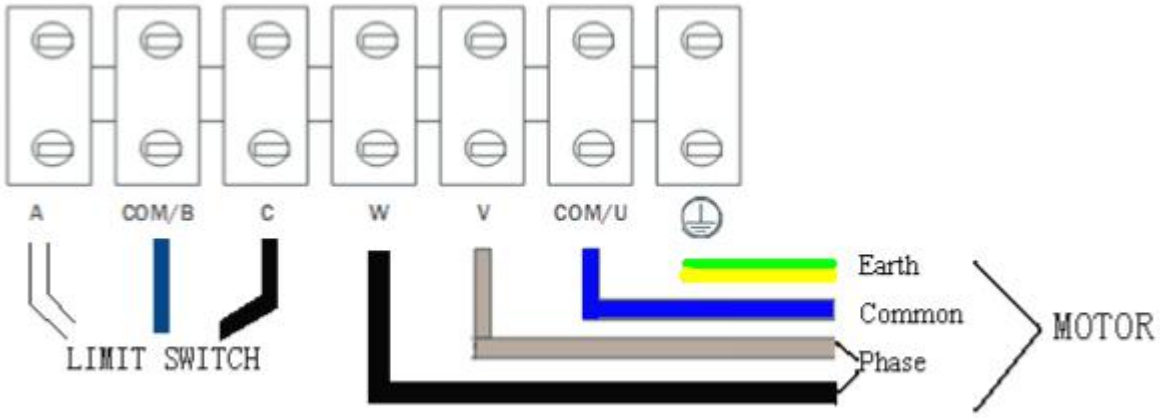


Fig.7

Energizing and Trial Run

1. Before use, check the power supply voltage,frequency and the other data carefully and make sure they are in line with the requirements, and check if the ground wire is in good condition and the electrical wiring is correct.
2. A special key is provide along with the shipment of the door opener.Turn the key counterclockwise (to disengage the clutch), push the sliding door and let the door opener to operate without load. If the door opener works properly, then turn the key clockwise (to engage the clutch).
3. Turn on the power, start the door opener,and observe the sliding operation of the sliding door.
4. Adjust the magnet’s position until the door is able to open and close in positions to your satisfaction.

Care and Maintenance

1. Apply some anti-rust grease to the end of the worm gear spindle located inside the hole of the special key.
2. Check frequently if the electrical grounding is in good condition.
3. Check frequently if all parts and components are in good condition.
4. The device uses advanced lubricant that requires no replacement or replenishment.