Installation Manual and Owner's Guide



PLEASE READ THE MANUAL CAREFULLY BEFORE INSTALLATION AND OPERATION

Safeties & Cautions:

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.

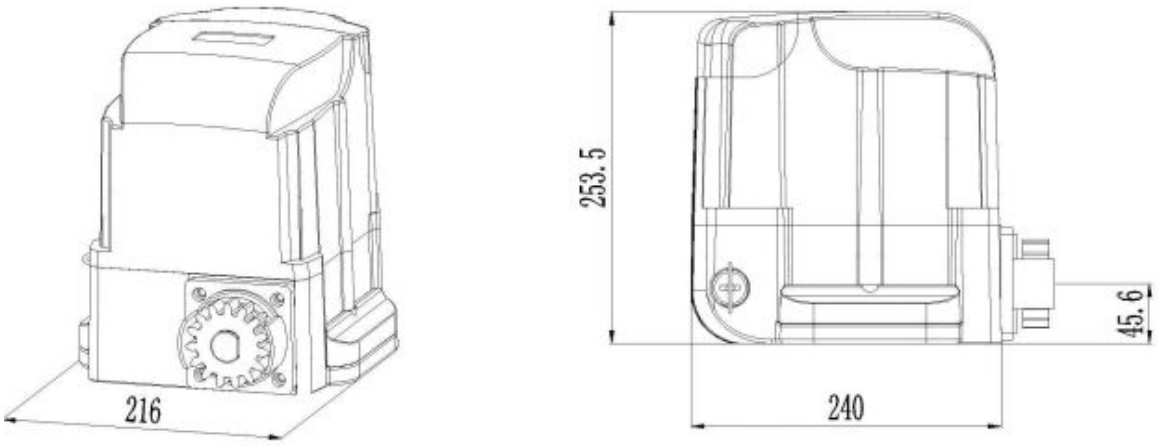
（16）If it is necessary to install a outer shield, consider that if it may shield signal of the remote control.

（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.

Ⅰ.Product introduction:



EXTERNAL SIZE(Fig.1)

Function & Characteristic:

①Install overheat protector in AC motor. The motor will cut off power automatically when the temperature reach rated power after a long time working, in order to extend the using life of motor.

②The product has speedy clutch, inset the release key and turn it 100 degrees to release the clutch when power off,to realized manual operation.(Fig.2)

③Machine running smoothly, parking without inertia, accurate position.

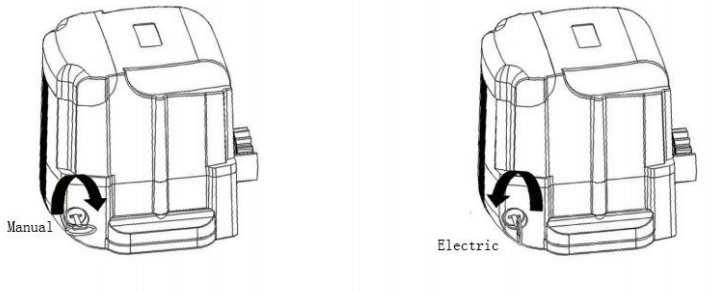
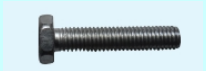


Fig.2

Ⅱ.Technical parameters:

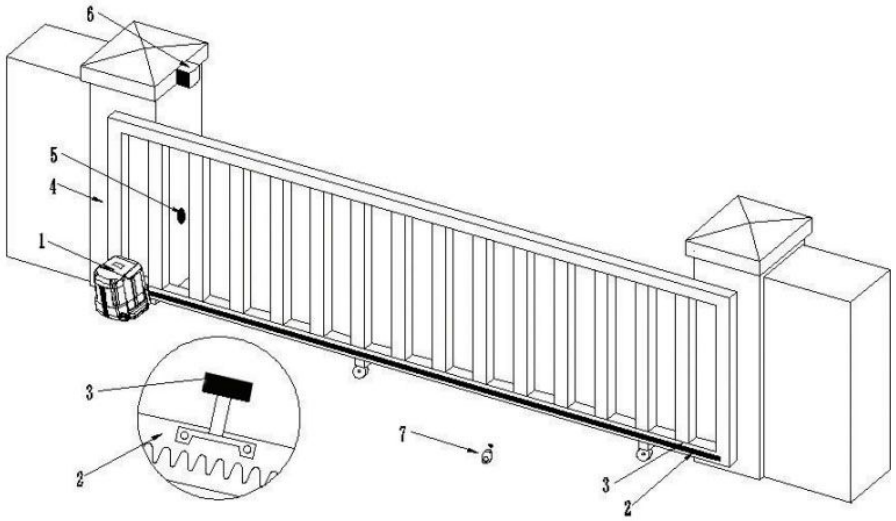
Model	DCK-658	DCK-668	DCK-678	DCK-688
Power supply (Vac)	AC Single-phase 110V/220V～240V	AC Single-phase 110V/220V～240V	AC Single-phase 110V/220V～240V	AC Single-phase 110V/220V～240V
Max. gate weight (KG)	500	800	1200	1600
Max.torque	18Nm	22Nm	35Nm	38Nm
Rated Power (W)	370W	450W	550W	650W
Tooth number of gear	15	15	15	15
Overheat protection (℃)	120	120	120	120
Protection Class	IP44	IP44	IP44	IP44
Speed (m/min)	12	12	12	12
Temperature （℃）	–45～＋65	–45～＋65	–45～＋65	–45～＋65
Noise	≤56dB	≤56dB	≤56dB	≤56dB
Certification	CCC/CE	CCC/CE	CCC/CE	CCC/CE

Ⅲ.Packing list

Picture	Name	Quantity
	Motor	1
	Instruction Manual	1
	Transmitter	2
	Base plate	1
	Screw (M8×30) ,washer, Nut	4
	Limit switch magnet	2
	Bracket for limit switch	2
	Release Key	1
	Expansion Bolt(M12×100)	4

Ⅳ.Installation Diagram:

Note: Before installation please check if the motor meets your demand.



1 Motor
2 Rack
3 Travel positioning magnet
4 Gate post
5 Infrared (optional)
6 Alarm lamp (optional)
7 Transmitter

Notes:(Power wire specification)
Power input: $3\times1.5mm^2$
Alarm lamp input: $2\times1.5mm^2$
Infrared input: $5\times0.5mm^2$

Fig.3

Ⅴ.Installation and Debugging:

5-1 Installation tools

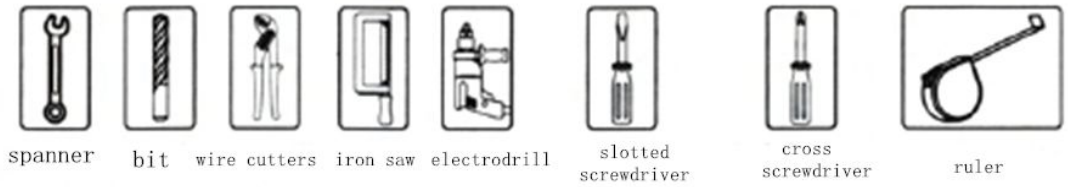


Fig.4

5-2 Gear installation

(Distance between gear and door body is 24mm)

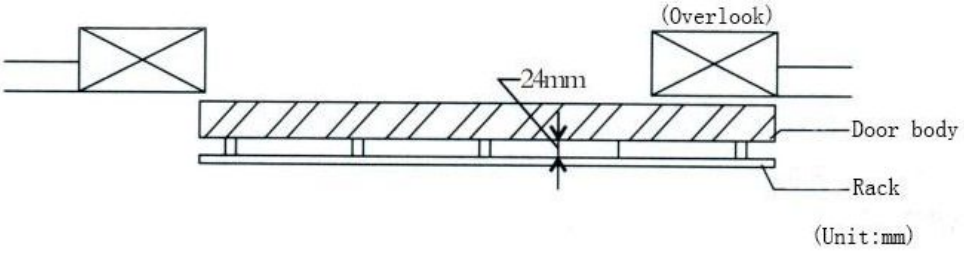


Fig.5

5-3 Base installation：

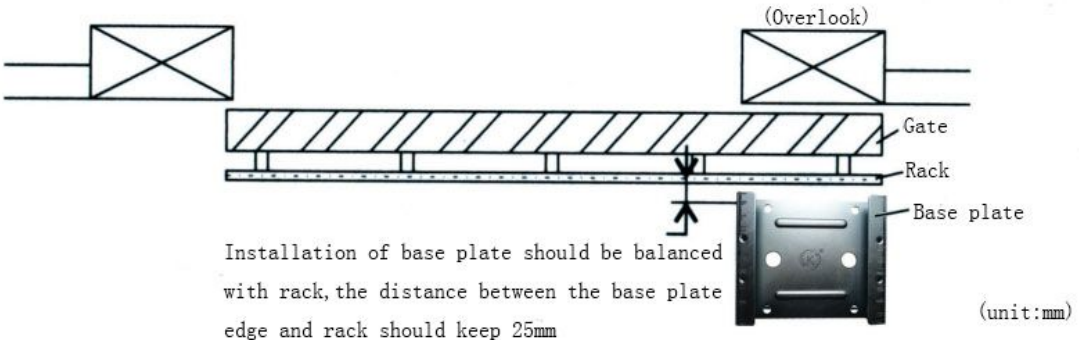


Fig.6

5-4 Rack installation:

(Remark: Please check whether the sliding gate can be moved smoothly before installation;relase the clutch with the release key)

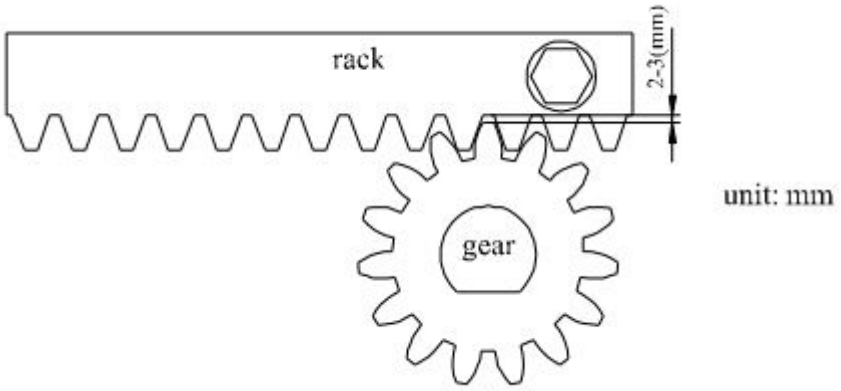


Fig.7

Warning: There must be a clearance between the rack and gear as Fig. 7, in case the motor function and manual operation may be effected.

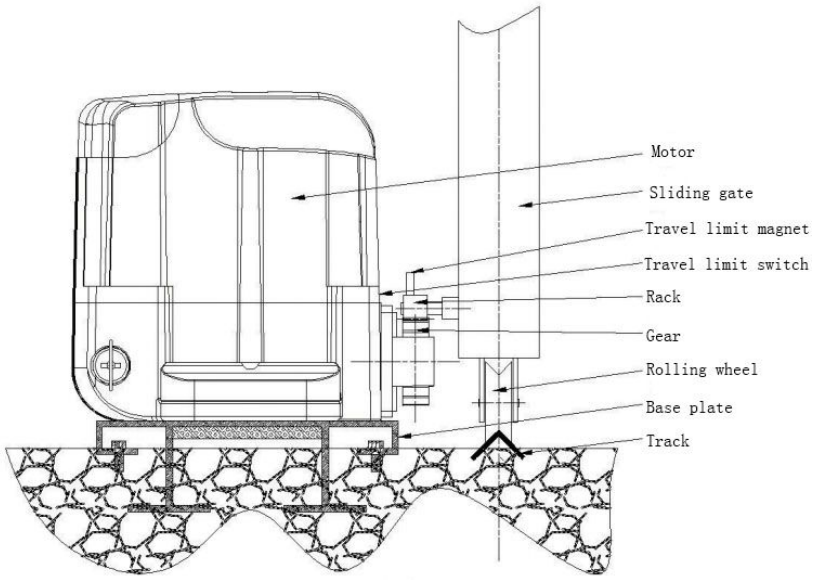


Fig.8

5-5 Limit switch bracket installation:

Move the gate manually to the open limit and close limit,mark the points on the rack,then fix the magnet bracket at the limit points on the rack.

Pay attention to the direction of limit switch bracket: if it is anti-installed, the motor can not be positioned .

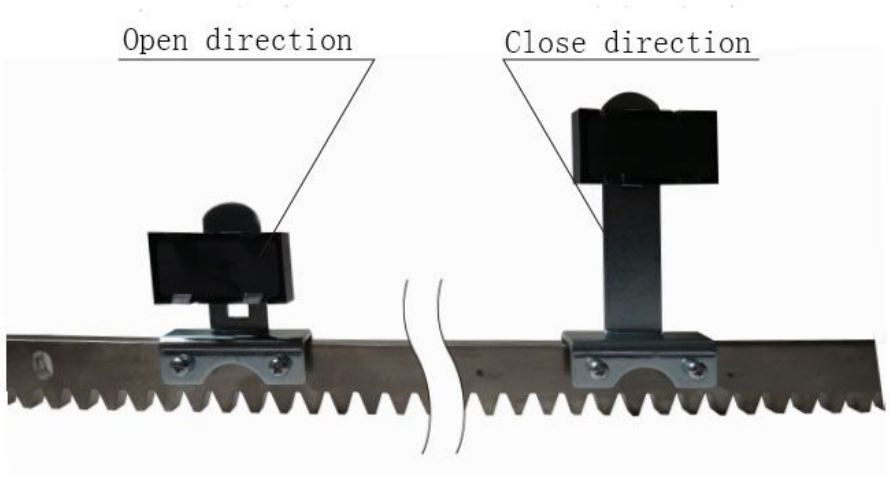


Fig.9

5-6 Clutch lock:

When the motor is out of electricity or has faults, can not work normally, customer can use clutch key to release clutch lock then realize manual operation to open or close the door.

Note: Engage the clutch when the motor resume normal work.

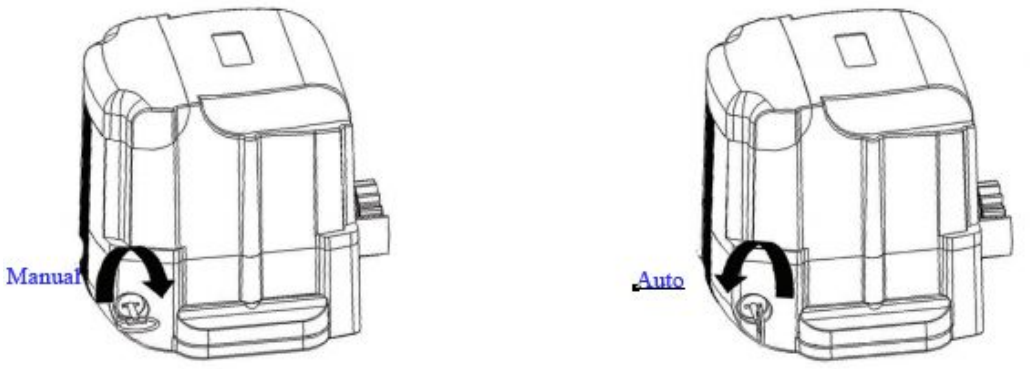


Fig.10

Install the electricity plug to an appropriate position according to safety standard.
Install the mounting plate as fig.11.
Note: ensure the base board is in horizontal.

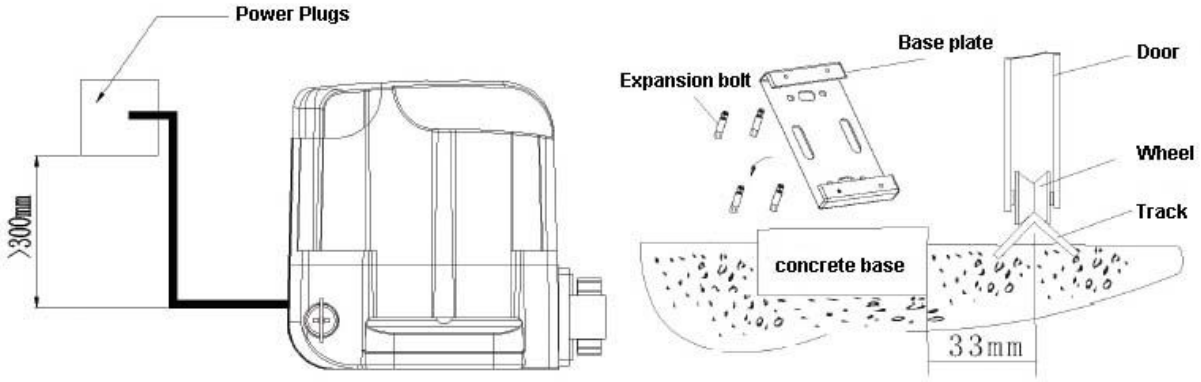


Fig.11

Fix the base plate onto the frame with four expansion bolts (Fig.11) and put the motor on the base plate, regulate the output gear to match the gear rack, then fasten the nuts. (fig.12)

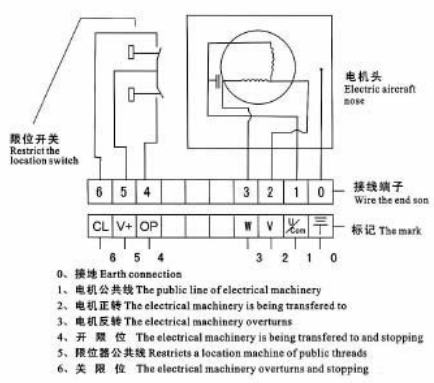


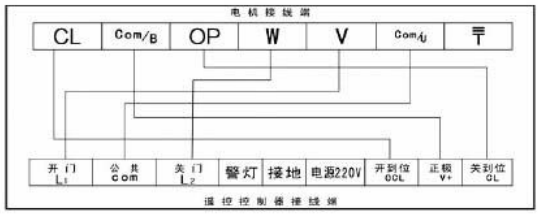
Fig.12

Weld the cylindrical nuts for gear rack fixed on proper position in the lower part of door(Fig. 8), then fasten the gear rack onto the cylindrical nut by bolts or welding. Regulate the washer behind the base plate base to make the gear match the the rack. (Note: the distance between gear and gear rack should keep1-2mm)

The limit way of this model is through electrical magnetic limit switch. Please follow fig. 7 and fig.

9 to install fixed-plate for limit magnetic steel.
Installation of fixed-plate for limit magnetic steel: use clutch key to release clutch like fig.10. Move the gate manually to the open limit and close limit,mark the points on the rack, then fix the magnet bracket at the limit points on the rack, then close clutch for automatic control. Regulate the position of fixed plate for limit magnetic steel till the door can open and close properly, and fasten the fixed-plate for limit magnetic steel finally.





Segregated Control box and motor wiring diagram

Warning: Maintenance operations and repairs can be only performed by qualified technicians. Our company will not bear any legal liability for non-technicians operations.

Ⅵ. USER GUIDE:

6-1 User need to have a regular check whether the door is sliding smoothly, add lubrication grease on the sliding rack regularly.

Ⅷ. Common faults and removal methods:

Faults	Possible reason	Removal method
Door not move when press remote control	1.Plug not connect well 2.Clutch loose 3.Infrared fault 4.Fuse wire burn 5.Remote controller eliminated code	1.Let qualified technician connect the power well 2.Lock the clutch well 3.Check the infrared rays, change new if broken 4.Change new fuse wire 5.Remote controller re-study code
Door can't stop when open or close	Limit switch install reverse fixed-plate for magnetic steel install reverse	1.Re-connect motor wire 2.Exchange fixed-plate for magnetic steel
Failed to open or close when up to limit position	Improper position of magnetic steel and fixed-plate	Regulate the magnet , make the magnetic steel on the high plate higher and the low one lower
Weaker force after a period of working	Lowe voltage of power supply	Check voltage
Normal use for some time, then fail to work in one direction	Circuit or limit switch	Re-connect circuit or replace limit magnetic switch
Inadequate remote control distance	Low battery Remote controller locked Wrong study code or damage Same frequency interference The receiving template broken	Replace battery Press any key and hear a sound means locked, just make it unlocked. Replace Eliminate the interference Change receiving template
Motor fails to work after frequent open and close	The motor reach the temperature of overheat protection.	Stop door open and close, use again after the motor cooling down.
Door can't open or close completely	Travel study failure	Re-study travel protection time following circuit board instruction

（Non professional is forbidden to touch the line and components on the control board so as to avoid unnecessary damage)