B

BARCLAYS

SW200-Slim
SWING DOOR INSTALLATION MANUAL

- Installation of automatic door should be entrusted to the appointed distributer or professional installation personnel, or it may be dangerous.
- Installation must be performed by professional installation personnel according to local law.
- This manual must be kept well for maintenance.

V20220530
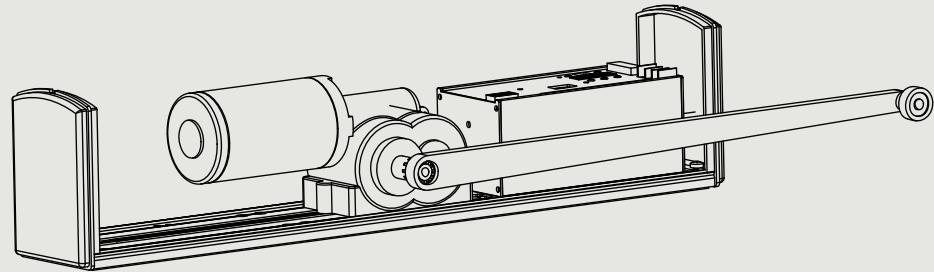
Contents

1. Introduction of product

Application: suitable for wooden door,metal door,frame door open to one direction(both single or double open,special

Glass clamp is request for glass door installation)

Speed/opening time/open degree/ close force adjustable

Door width ： ≤ 1800mm

Door weight ： ≤ 200kgs

Open degree:60-115 adjustable

Installation: open to inside /open to outside (pull/push bar)

Voltage: AC2100-240V,Input 220V AC Output 24 DC

Open device ： wireless push button/remote control

Working times: About 2 million times.

① Swing door mechanism
② Microwave sensor
③ E-lock
④ Access control
⑤ Touchless sensor
⑥ Footkick sensor
⑦ Remote control
⑧ Keypad Integration Access Control
⑨ Push button
⑩ Touchless sensor
⑪ Wireless push button
⑫ Top Scan
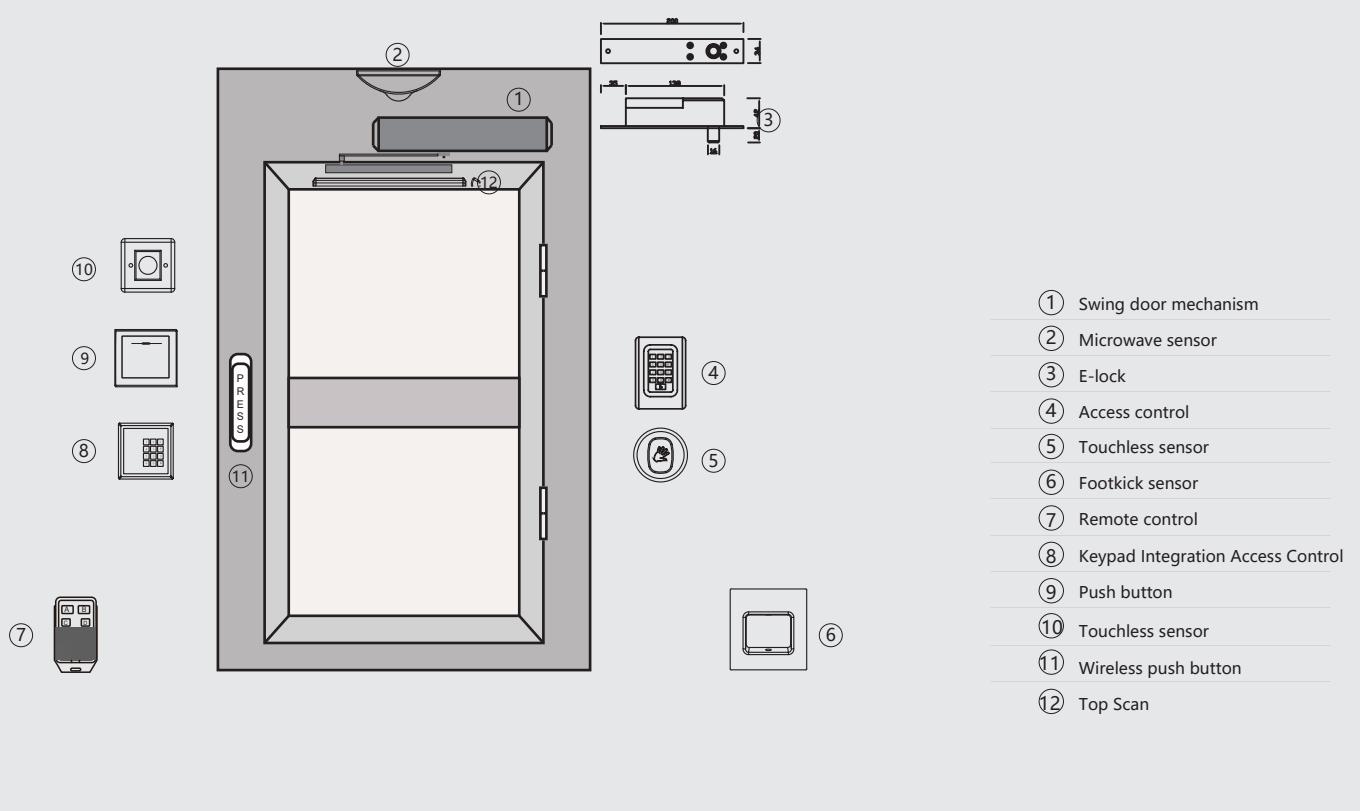
1.55w high speed dc brushless motor，long service life，low noise.

2.Imported control chip, reliable performance，digital display design，mechanism is easy to adjust and fine adjust is allowed.

3. In main and slave mode. Sequence will not change because of encounter an obstacle.

4.Double gear box design，high speed ratio，high strength，can work with 180kgs door（work with E-lock will more safe）.

5.Push and go function.

6.ccc certificated transformer,220v/110v optional， power 50w.

2.Technical data

|	
Szie：	518*81*115mm(L*W*H)
Weight：	6kgs
Working temperature：	-20℃ ~ +50℃
Input voltage：	AC 100V -240V
Output voltage：	24V DC (±10%),3A
Open degree：	Max 115°
Open speed：	45°/S
Close speed：	45°/S
Opening time：	0-60S （adjustable）
Protection Class：	IP21

door weight/ kg
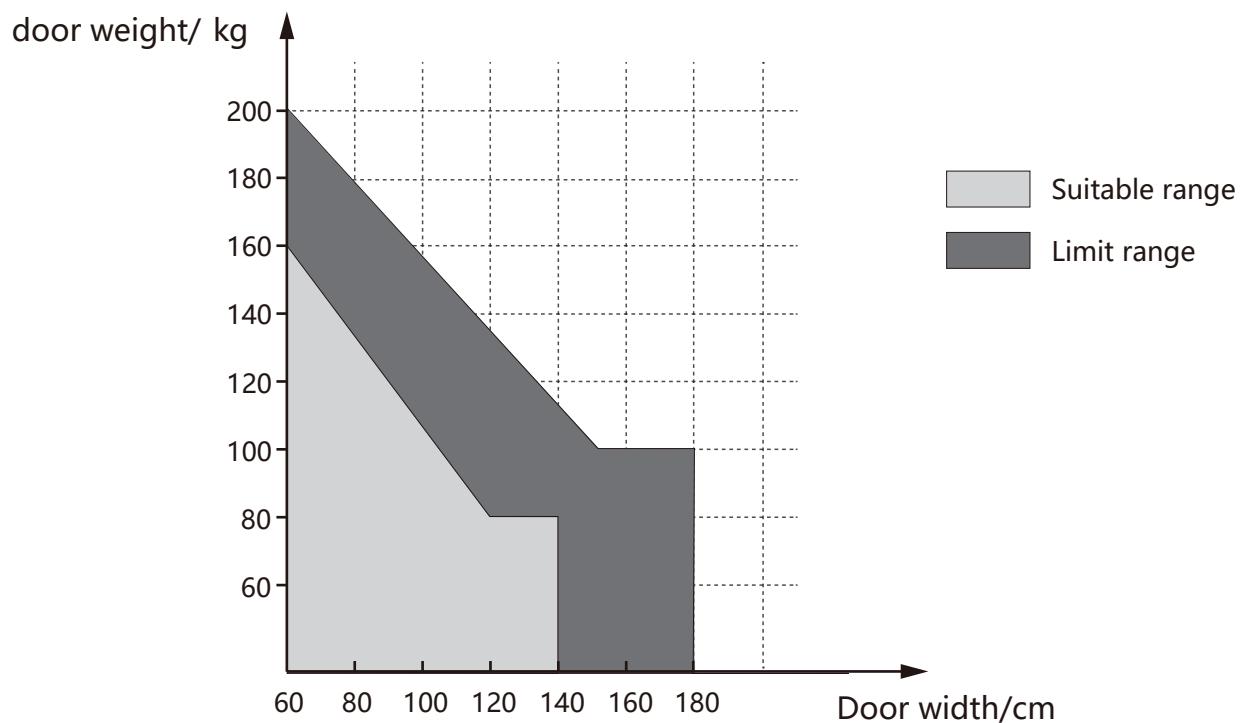
Tip：Data is record under Zero wind pressure
Door leaf over weight is not allowed， Service life will getting short because of it

3.Swing door mechanism
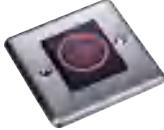
Design for Barrier-Free Accessibility,Convenient for disabled and children.


Swing door mechanism

Pull bar

Push bar
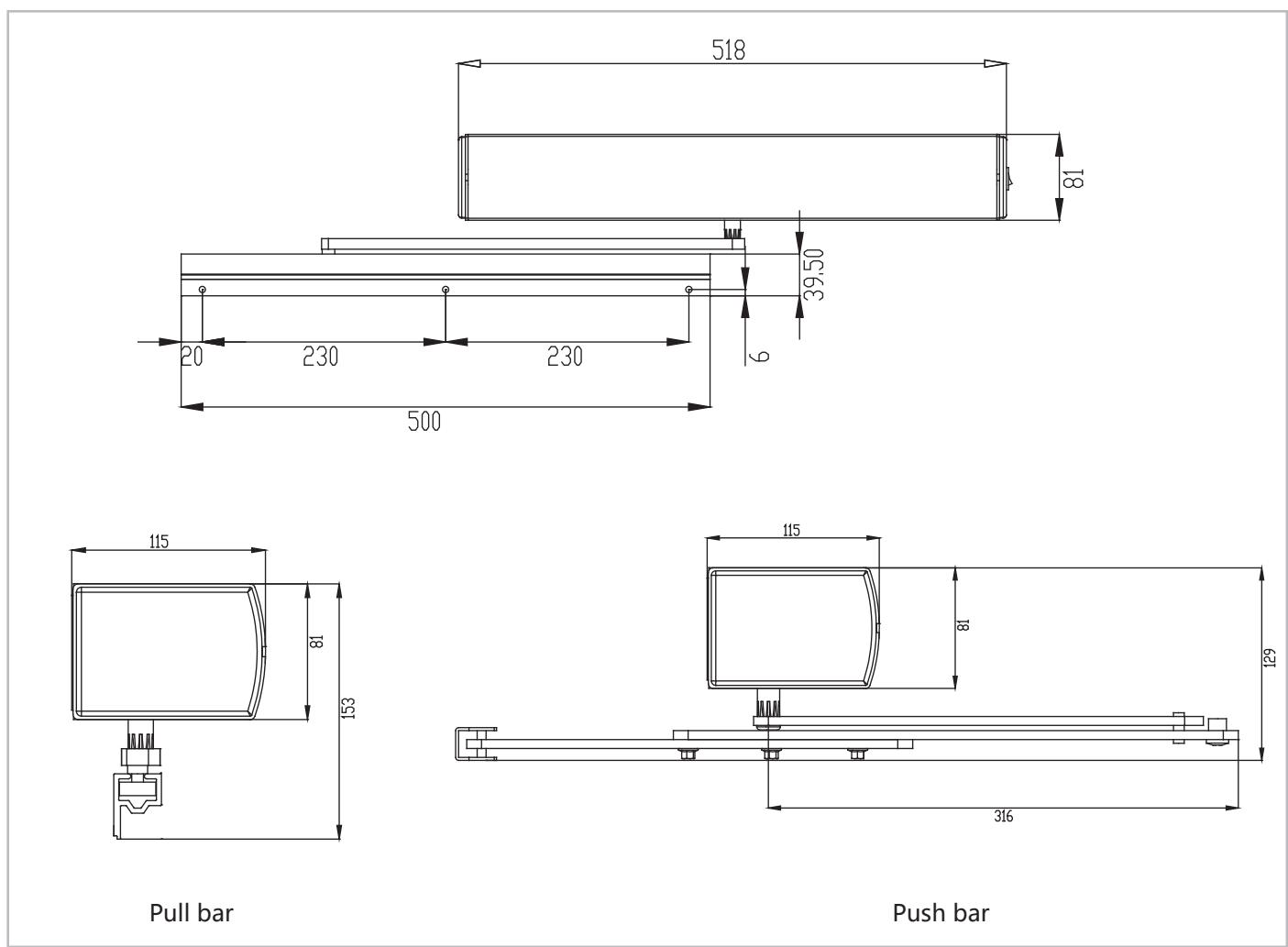
4.Standard and Optional accessories

Standard package (Pull/Push bar)				
	Mechanism	Pull bar /Push bar	Remote control	
Optional accessories	Microwave sensor	Top scan	wireless push button	Push button
	Touchless sensor	Touchless sensor	Waterproof access control	Disabled push button
	E-LOCK	Access keypad	Footkick sensor	
	UPS	Glass door slider	Glass clamp (Pull bar)	

Operation

Power switch

O = Power off

I = Power on

5.Components

Right side cover

Controller

Motor

Left side cover

100V-240V input

Pull bar

SW200slim
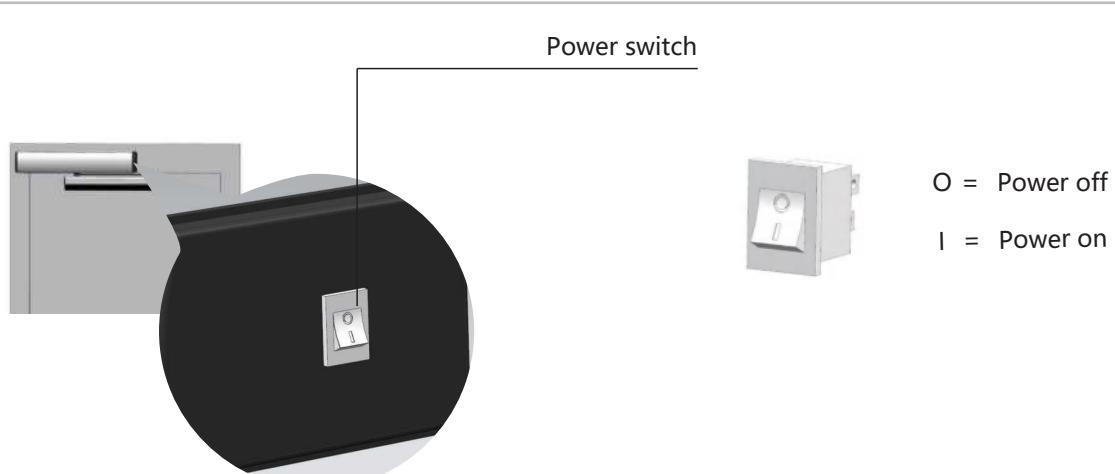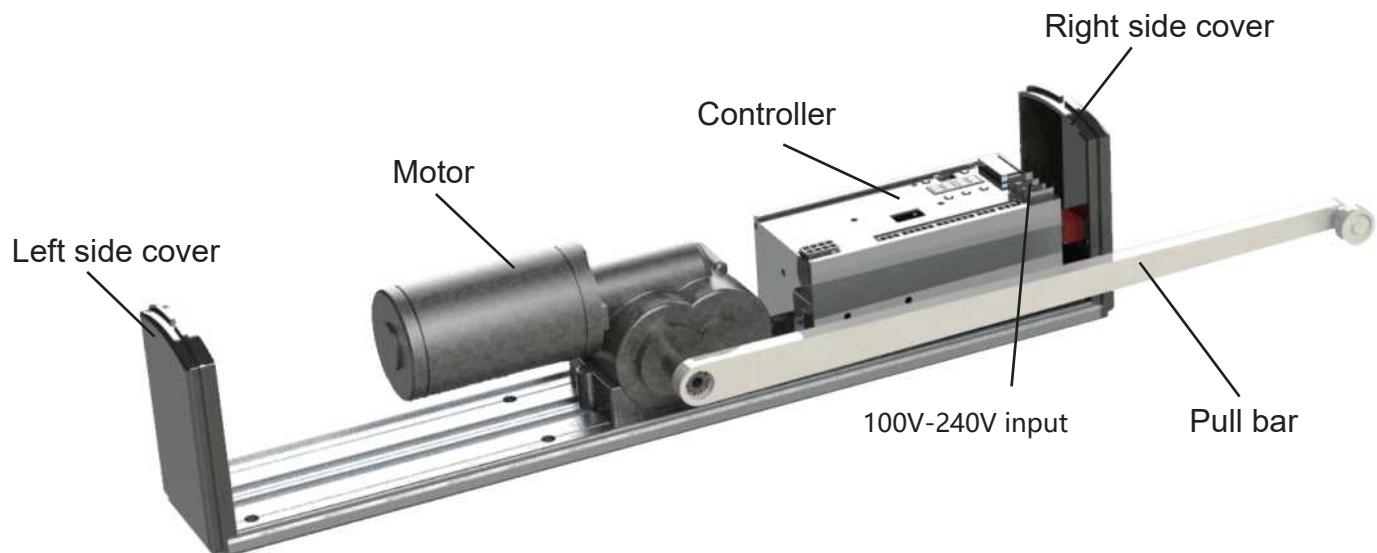
	Bottom plate
	Pull bar
	Cover
	Pull guider
	Mechanism
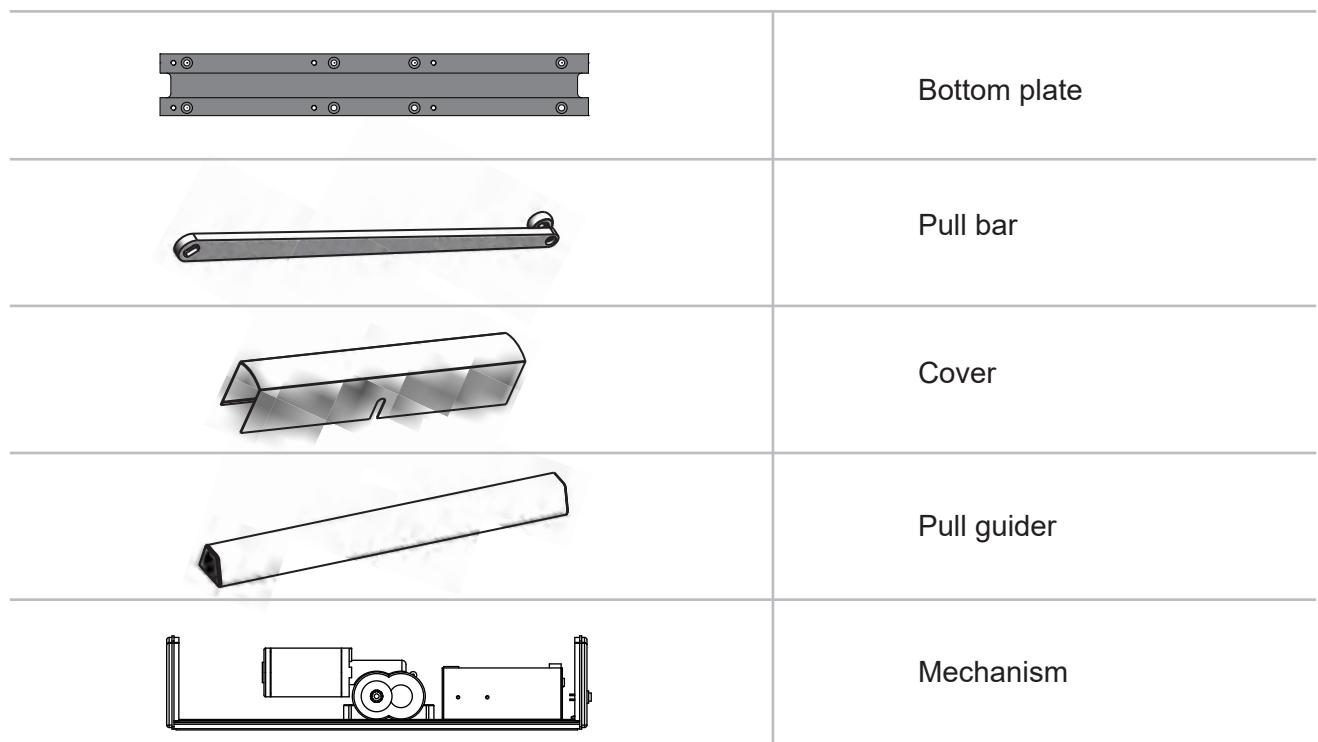
6.Mechanical installation

6.1 Installation

Pull bar type-Open to inside （Mechanism inside）

Open direction
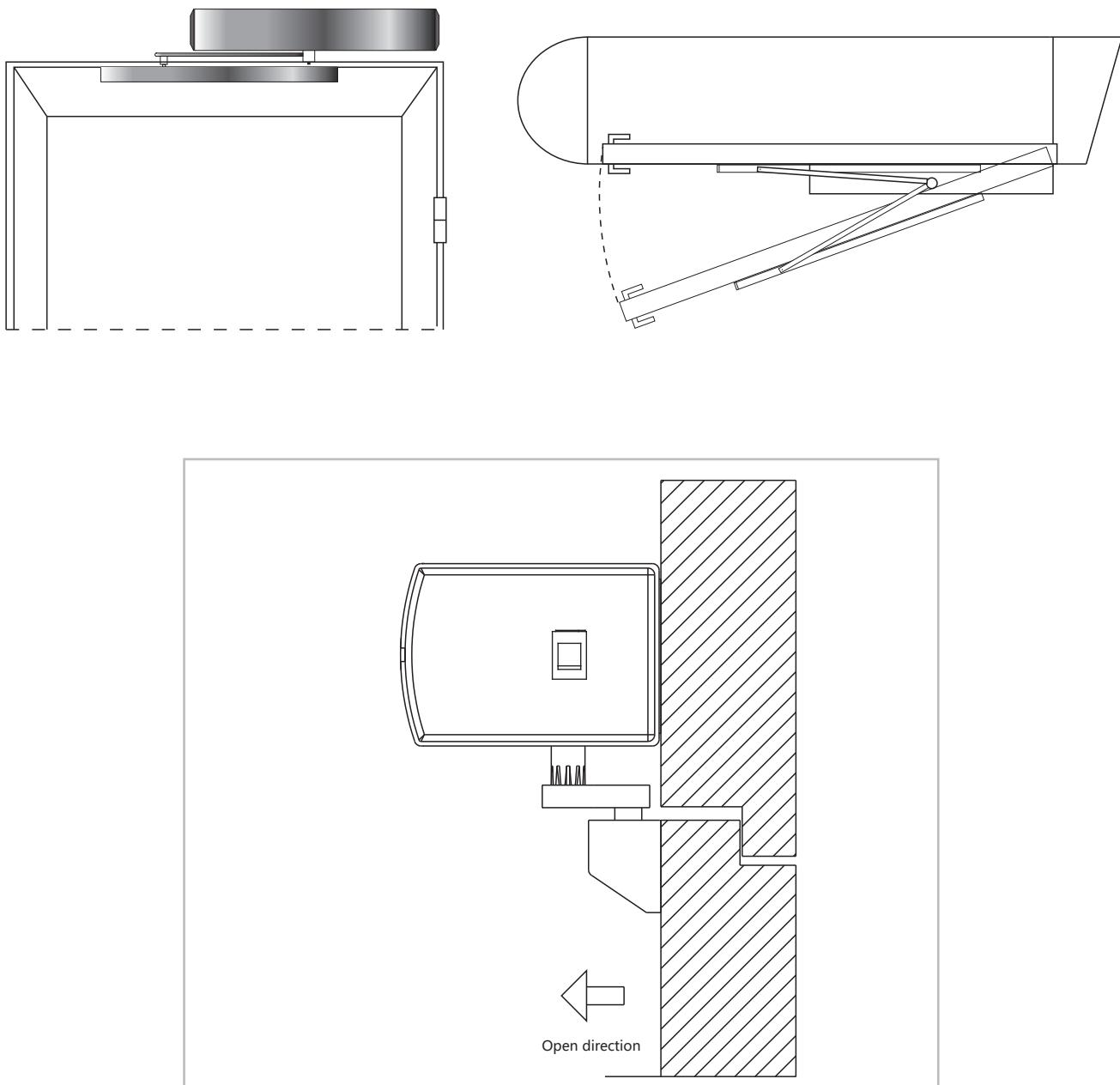
6.Mechanical installation

6.1 Installation

Push bar type-Open to outside （Mechanism inside）
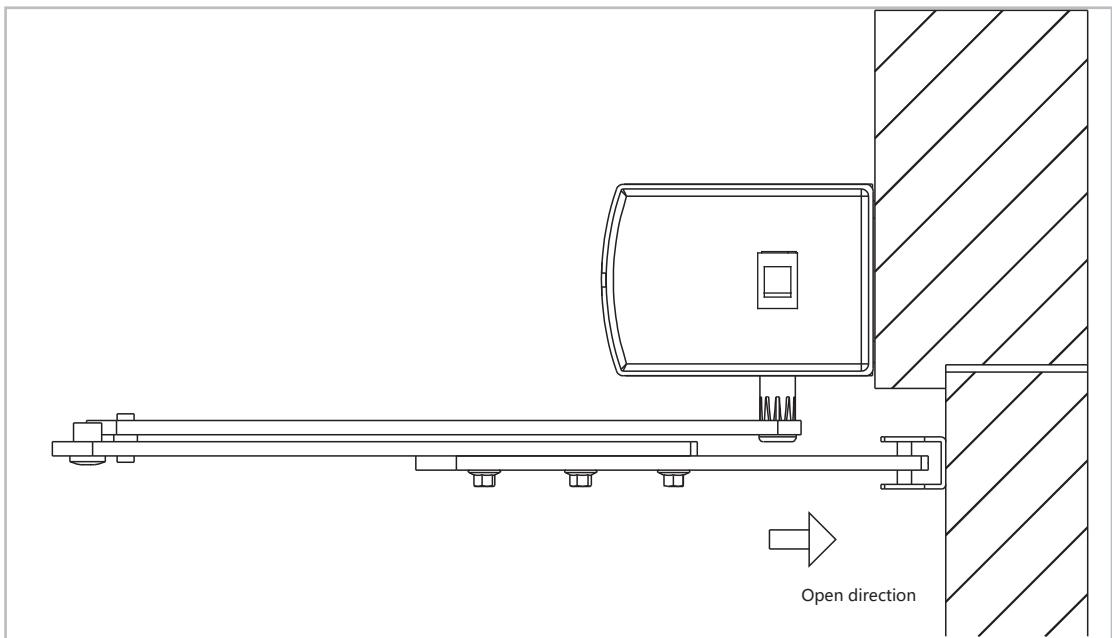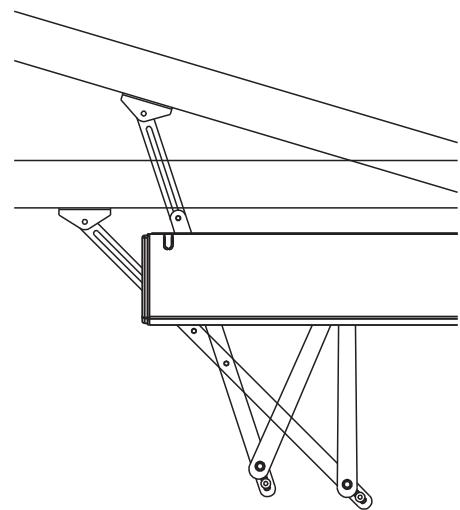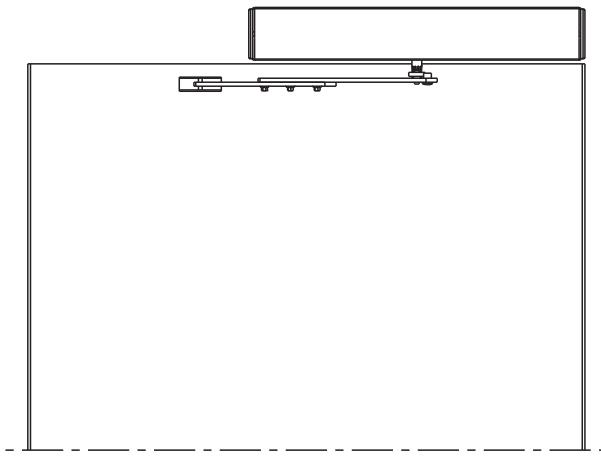
Open direction

6.Mechanical installation

6.2 Installation of bar guider

Installation of Pull bar guide

Other cable

495

31 170 93 170 31

52

Power cable
Controller cable

35

Fix the bottom plate on to door frame
by 8Pcs screw (Steel material M6 *15
Inner hexagonal screw)

Right side installation

Other cable

495

31 170 93 170 31

52

Power cable
Controller cable

35

Fix the bottom plate on to door frame
by 8Pcs screw (Steel material M6 *15
Inner hexagonal screw)

Left side installation

6.Mechanical installation

6.3 Installation of bottom Plate

Installation of Push bar guide

Other cable

Power cable
Controller cable

495

31   170   93   170   31

52

The distance between the bottom of the
mounting plate and the door hole is 6mm

Fix the bottom plate on to door frame
by 8Pcs screw (Steel material M6 *15
Inner hexagonal screw)

Right side installation

Mechanism position

Open direction

Other cable

Power cable
Controller cable

495

31   170   93   170   31

52

The distance between the bottom of the
mounting plate and the door hole is 6mm

Fix the bottom plate on to door frame
by 8Pcs screw (Steel material M6 *15
Inner hexagonal screw)

Left side installation

Mechanism position

Open direction

Tip：Push bar installation，Mechanism and open direction is same
Pull bar installation，Mechanism and open direction is opposite.

6.Mechanical installation

6.4 Installation of pull bar
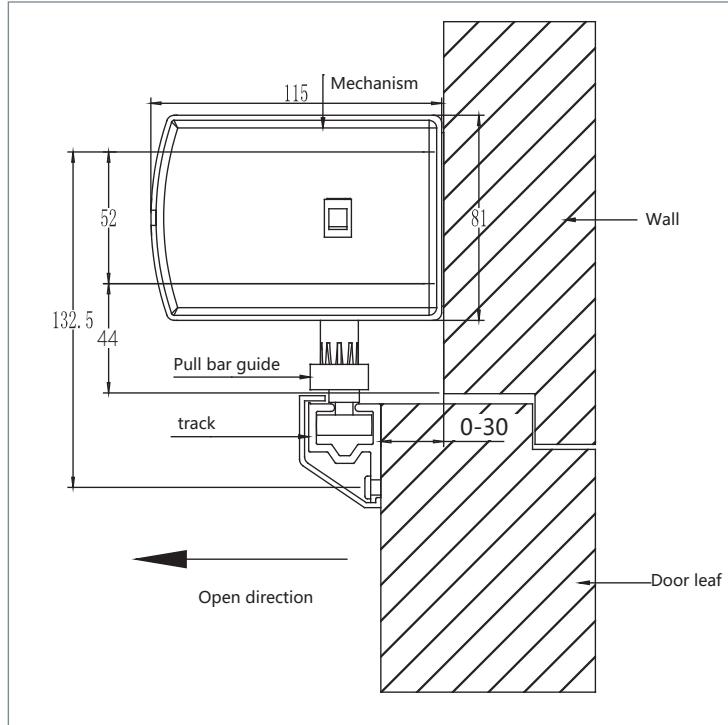
1.Open the door to 90°，slide the pull guide roller
  into track.
2.Fix the Pull bar plate as shown.
3.Move the plate ensure the wheel at the middle
  position of track as shwon.
4.Hold the plate postion,fix the first screw near
  Center of the shaft.
5.Close the door ,repeat step 3，fix another screw
  at another side.
6.Manually move the door to ensure pull bar work
  smoothly， adjustment is requested if any resistance
  during the operating.
7.Fix the last screw.

115 Mechanism

52

132.5 44

Pull bar guide

track   0-30

Wall

Open direction

Door leaf

81
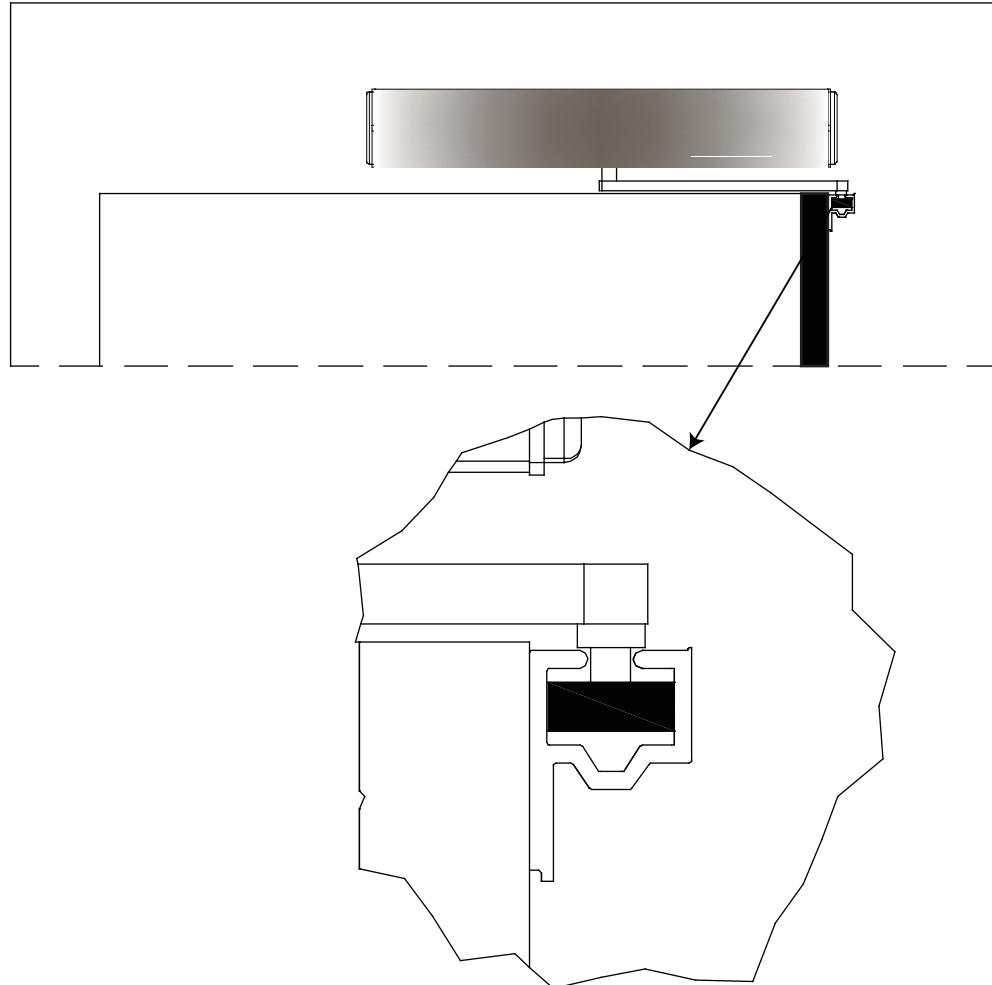
6.Mechanical installation

6.4 Installation of Pull bar

Installation of pull bar fix plate

230   230   20   170

Fix the fix plae with 3 pcs self-tapping screw as shown
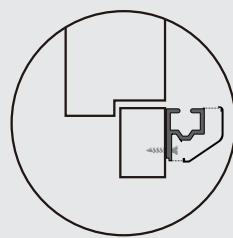
Move position limit to adjust open degree（Position limit is at left while Left installation）

position stopper
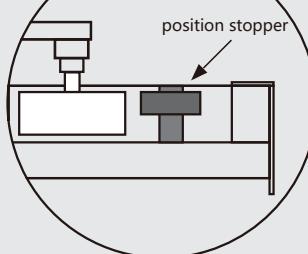
Automaitc door right installation

6.Mechanical installation

6.5 Installation of pull bar for glass door
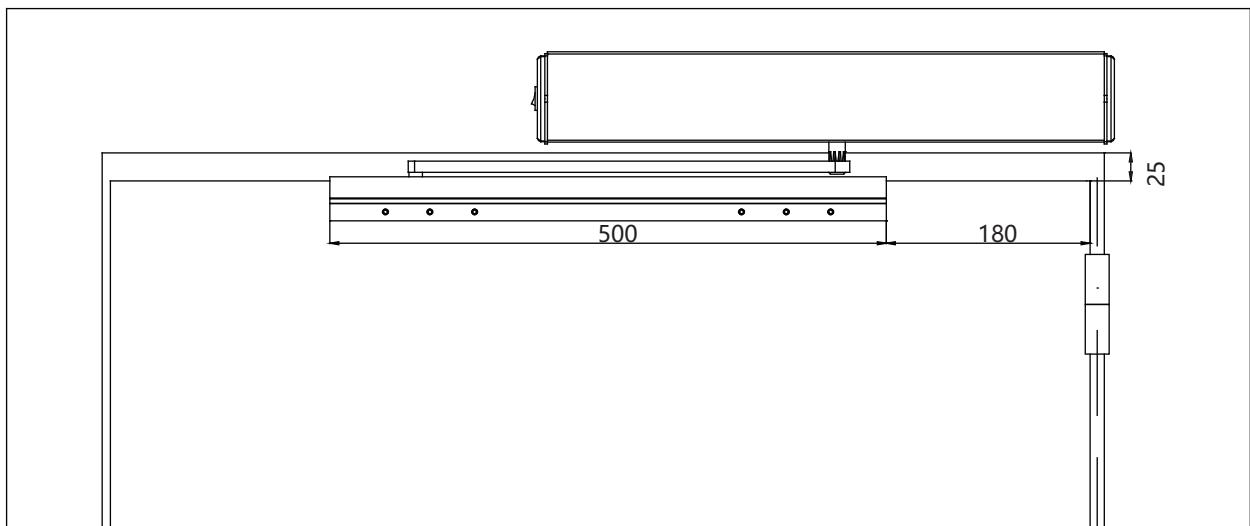
Tip：Ensure 25mm space for glass top to door frame bottom(Glass door installation)

6.Mechanical installation

6.6 Installation of push bar

115	
Mechanism	Wall
52	81
103.5	
Push bar	
15	
≤250	Door leaf

L≤250mm
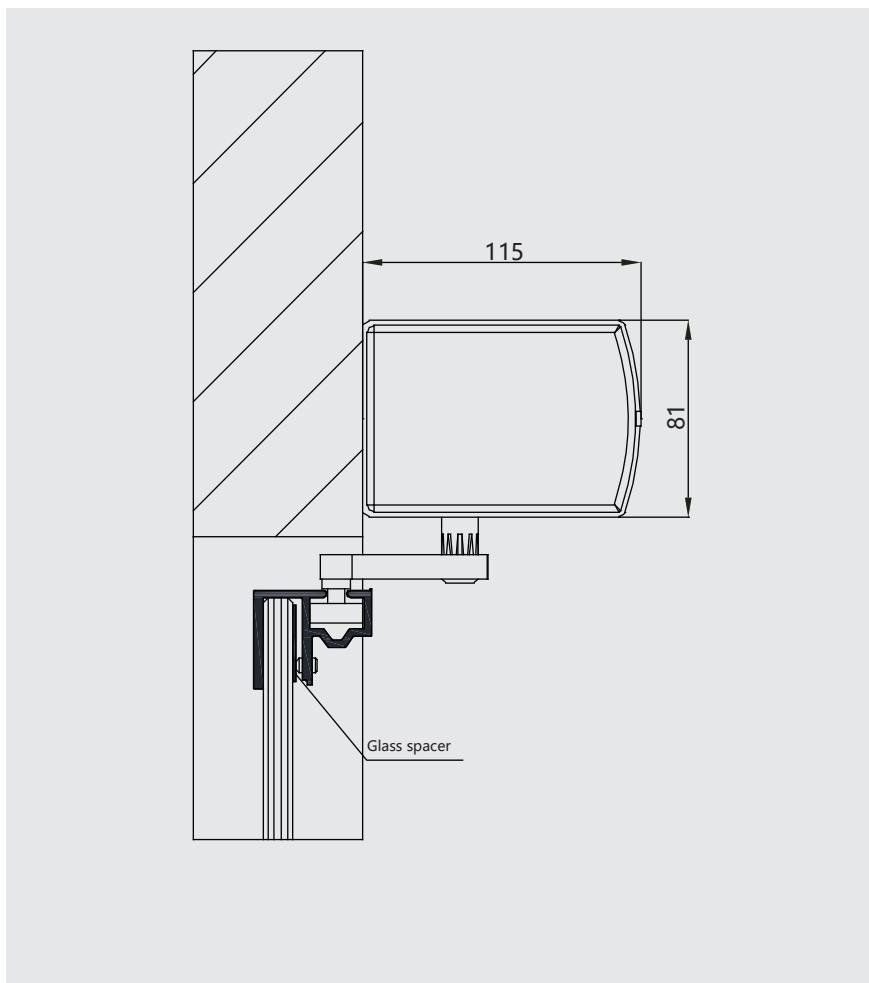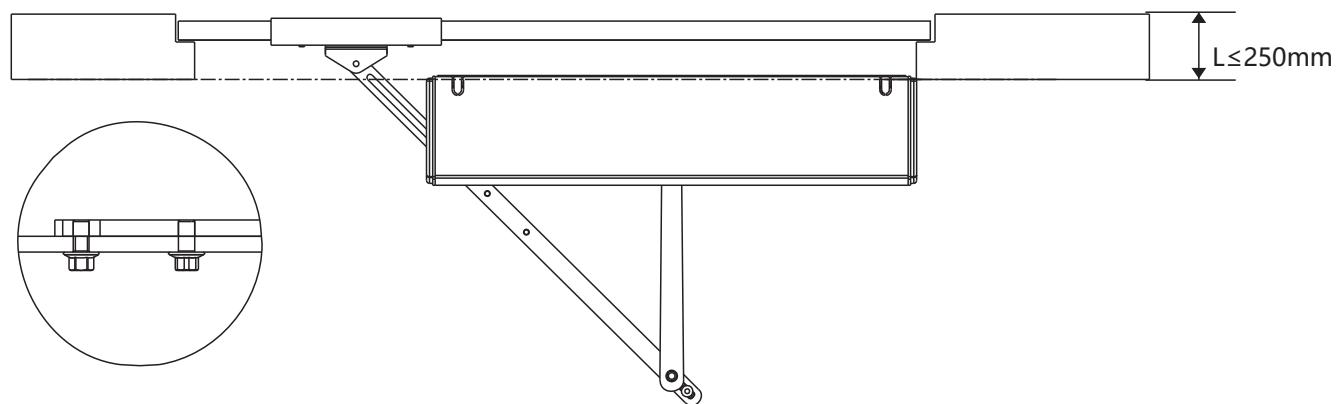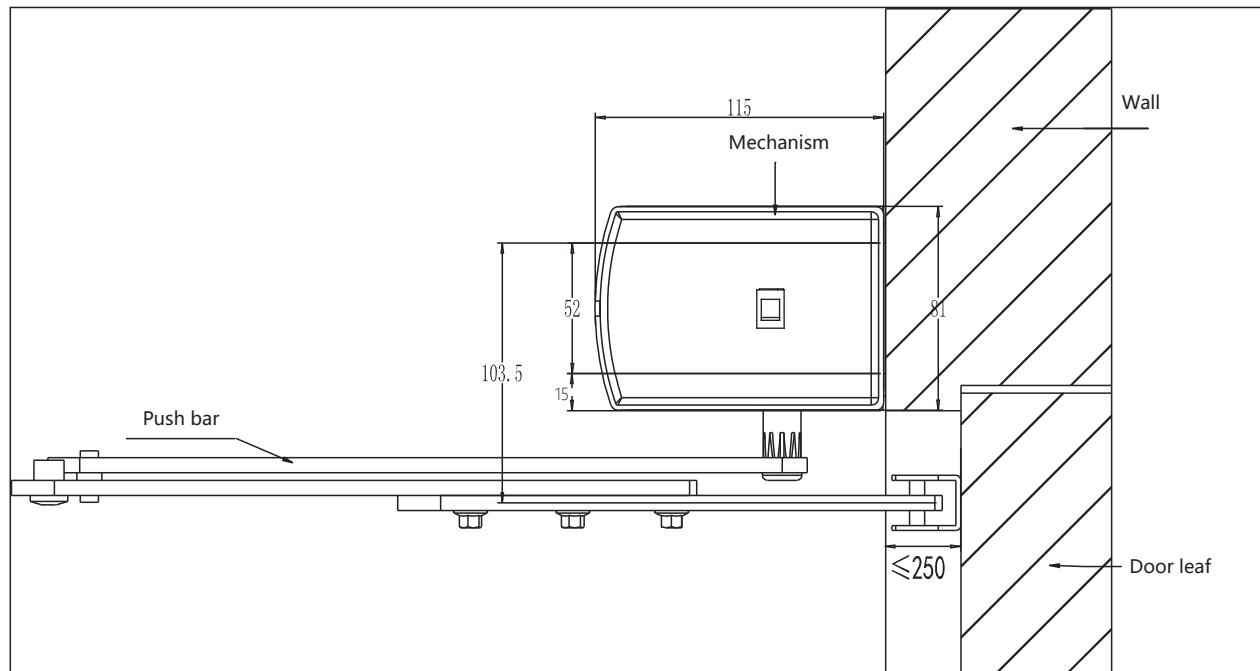
Adjust the push bar lenght by two screw
according to the door frame's depth(L).

Automatic door right installation

6.Mechanical installation

6.6 Installation of Glass clamp for pus
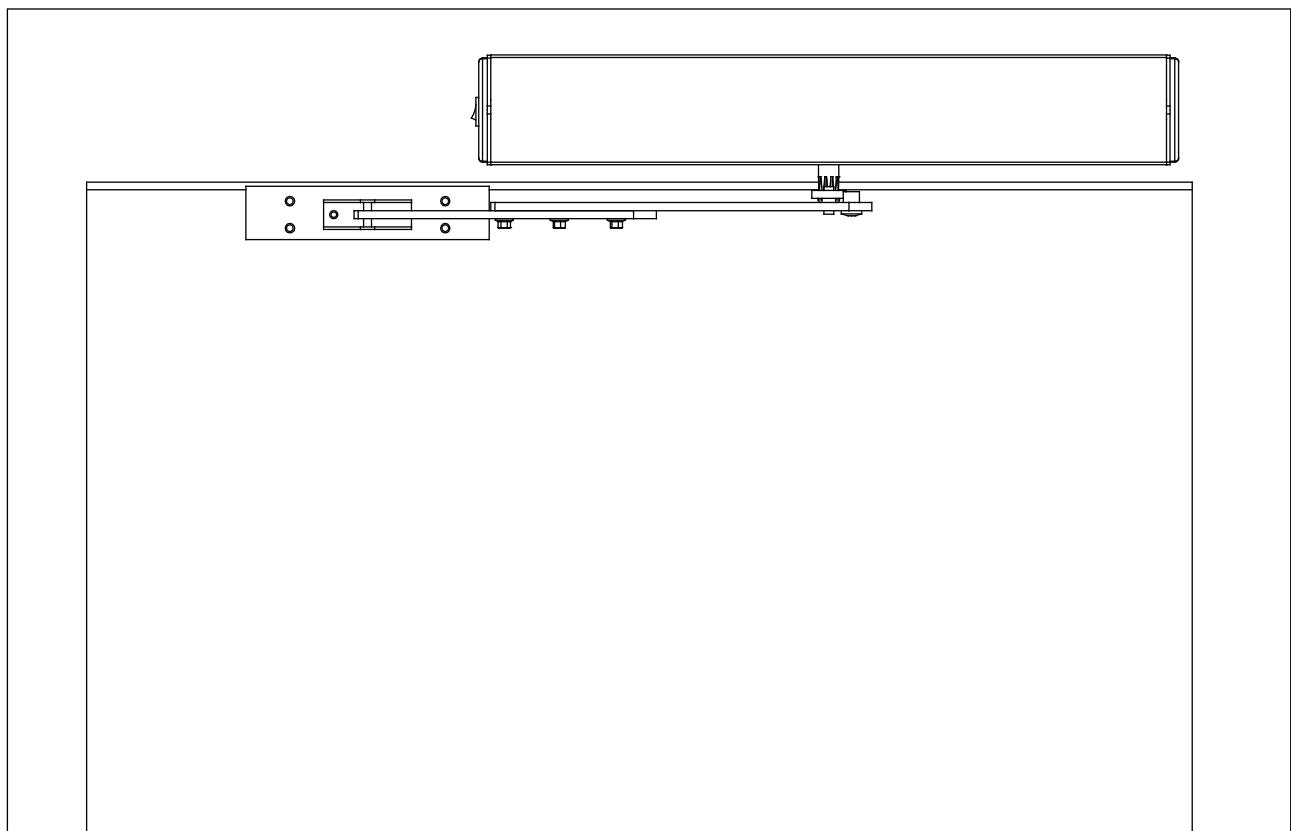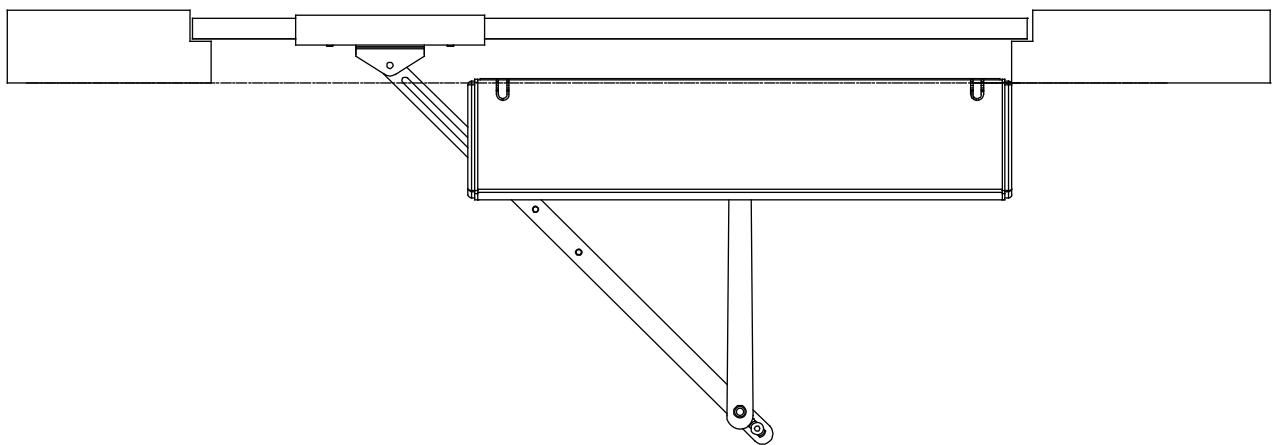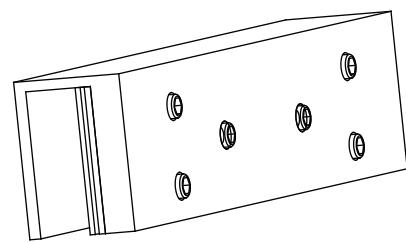
Note: make sure there is a 10mm gap between the top of the glass and the
bottom of the door when using the push arm of the glass door

6.Mechanical installation

6.6 Installation of Glass clamp for push bar
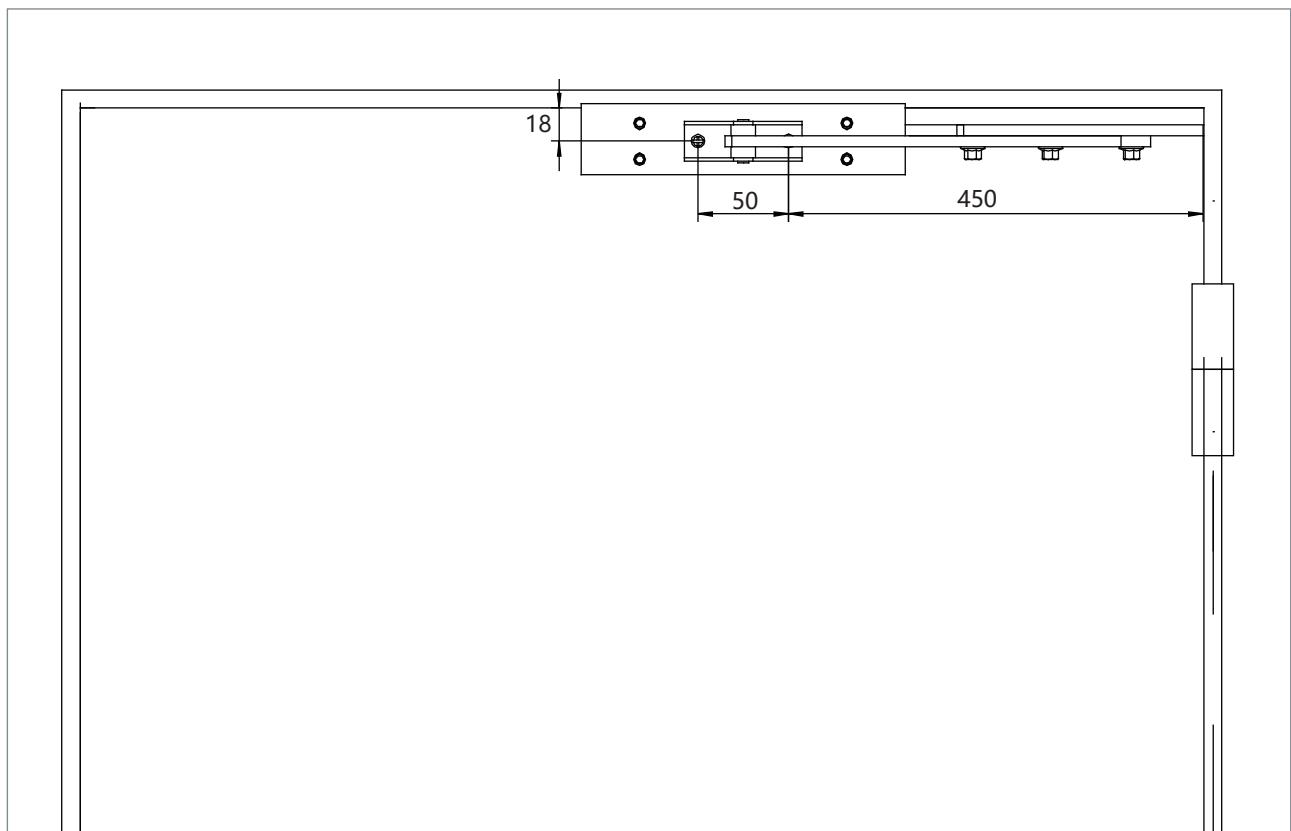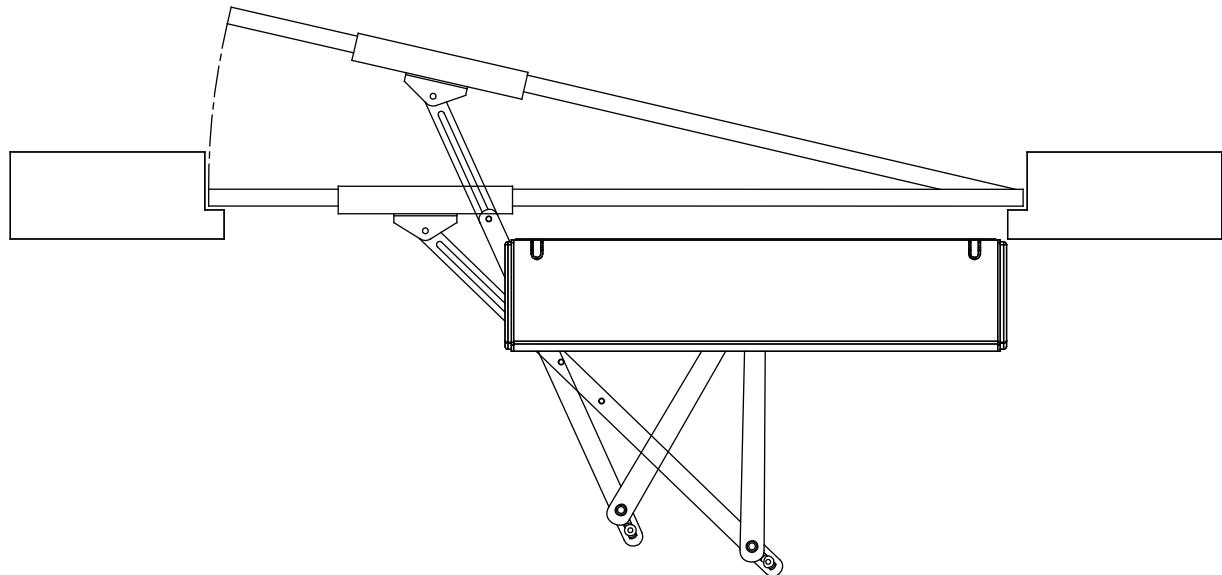
Tip: The glass clamp of the push arm shall be fastened on the door wing with 4 plug screws
 (M6*12) as shown in the figure

6.Mechanical installation

6.6 Installation of Glass clamp for pus
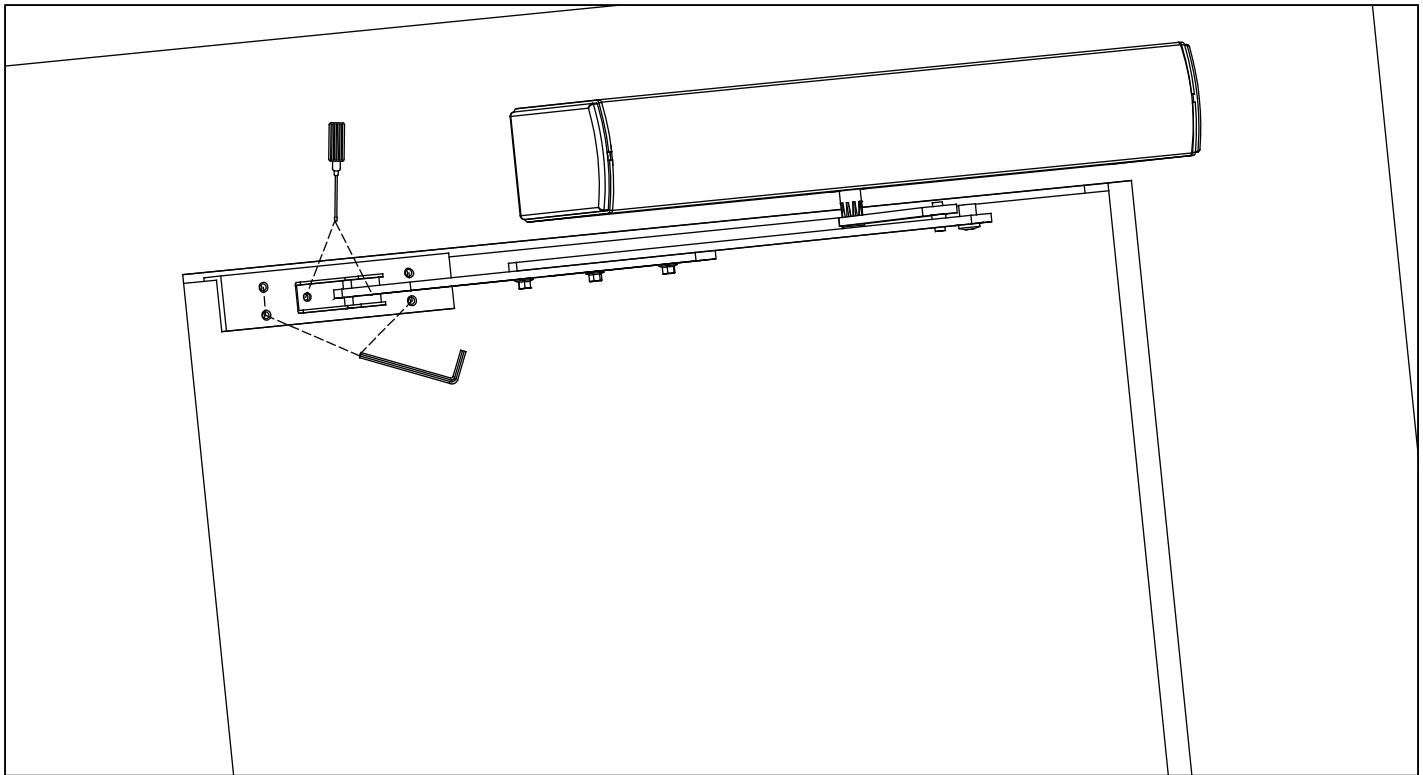
Fix the glass clamp and spacer with 4 screw（M6*12） tightly on glass door. Install the fix plate of push bar with 2 screw (M5*8) on glass clamp.
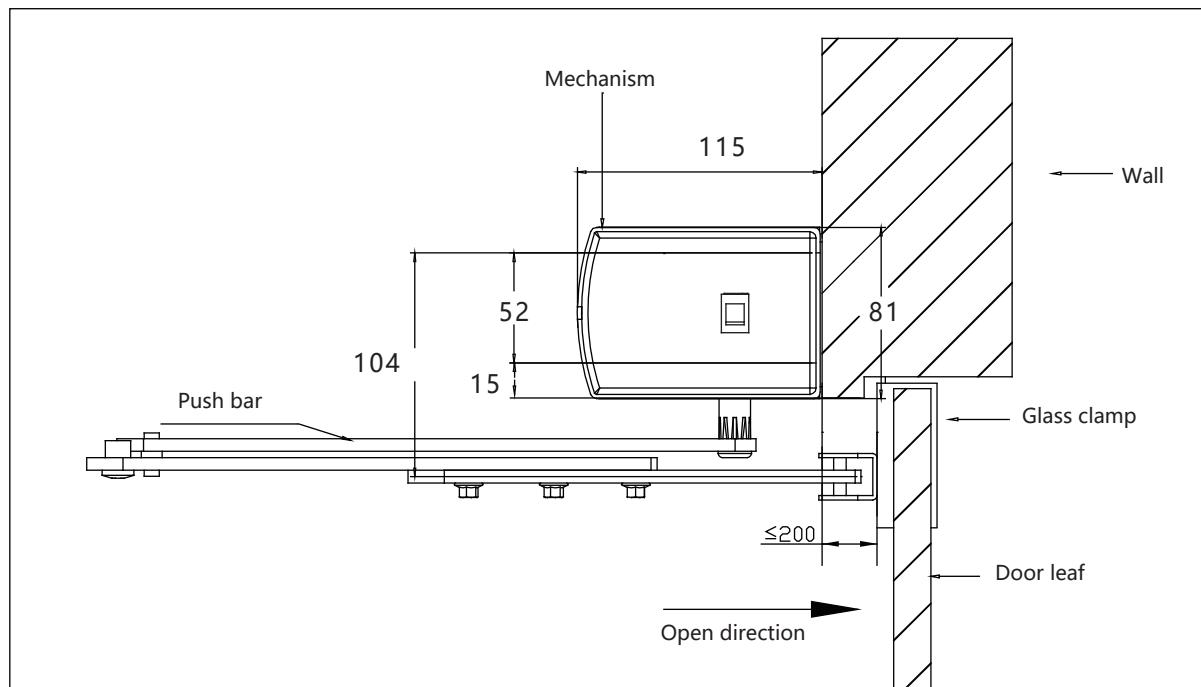
6.Mechanical installation

6.7 Mechanism installation
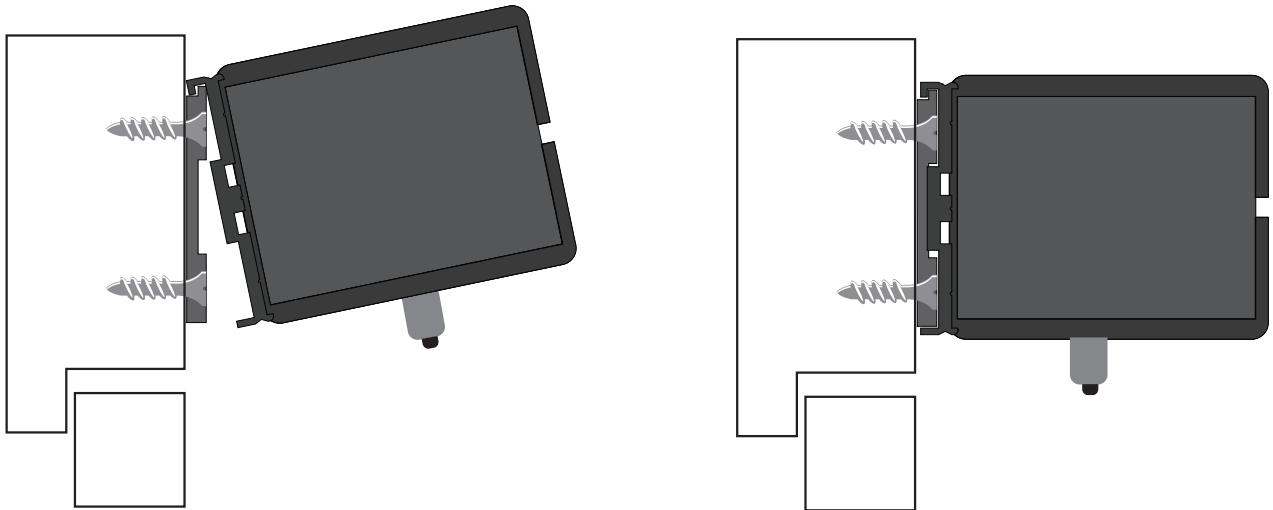
Hang the mechanism on the fixed base cover with screws.

6.8 Assemble and disassemble of the mechanism up cover
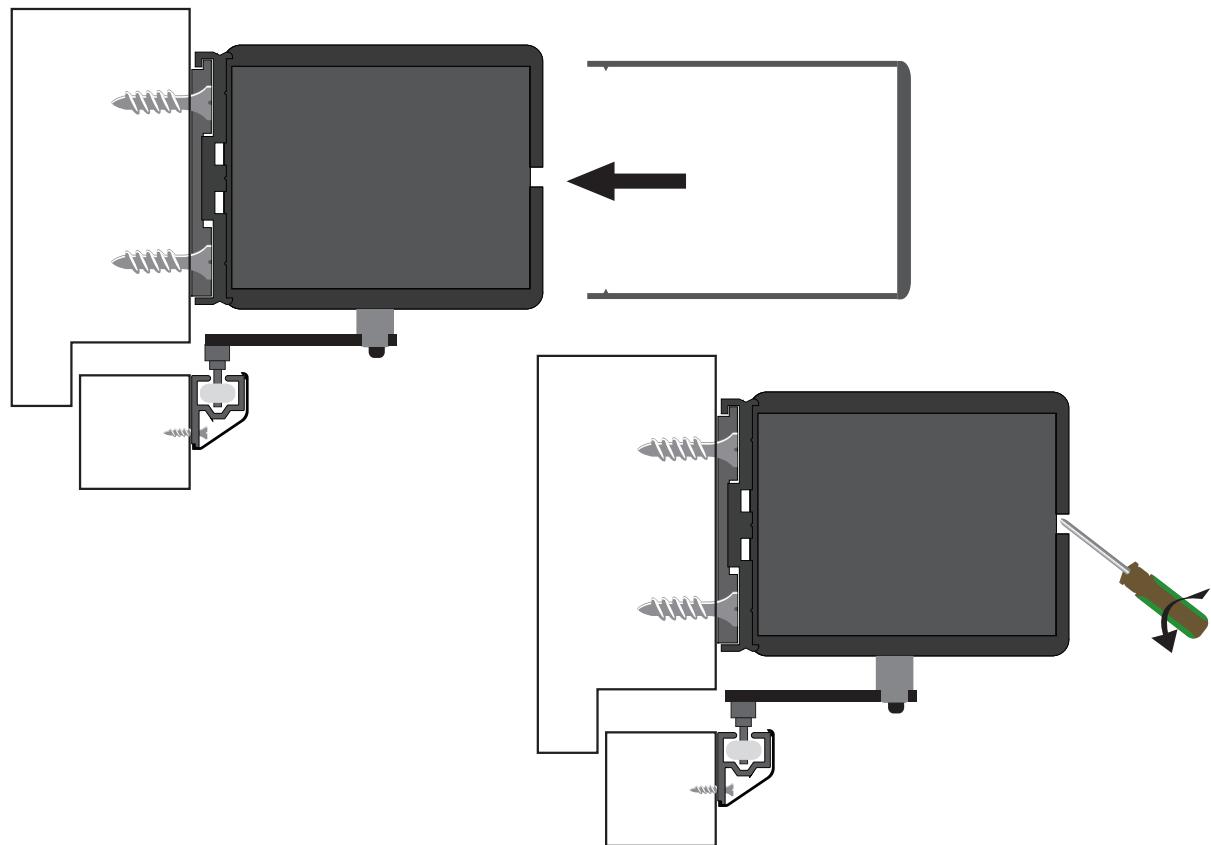
7.Wired Diagram

Terminal details

1: Left--Normal model; Right--Toggle model

2: Left--Master drive; Right--Slave drive

3: Select direction of the door opening

Note:After adjusting the DIP switch, the function
will not take effect until the power is turned off and restarted

LEARN : Remote learning Button

TEST : Test button
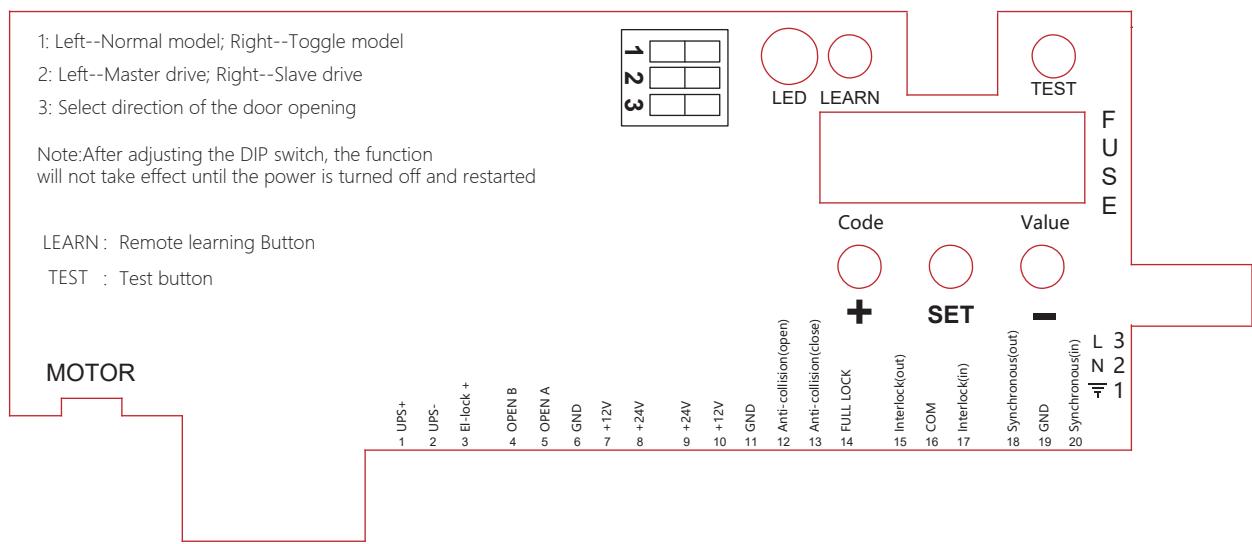
MOTOR

1 2 3

LED   LEARN

TEST

F U S E

Code   Value

+   SET   —

UPS+	UPS-	El-lock +	OPEN B	OPEN A	GND	+12V	+24V	+24V	+12V	GND	Anti-collision(open)	Anti-collision(close)	FULL LOCK	Interlock(out)	COM	Interlock(in)	Synchronous(out)	GND	Synchronous(in)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

L 3
N 2
1

Note:After adjusting the DIP switch, the function will not take effect until the power is turned off and restarted

1. Left--Normal model; Right--Toggle model

2: Left--Master drive; Right--Slave drive

(For double open system)

3: Select direction of the door opening

(Learning methods:Push the door to half open and switch on the power. If the door close, there is no need to adjust this DIP switch; If not, adjust the DIP switch and repeat the appeal operation)

Button
Test： Testing button, press one time, the door open and close one time
Learn: Learning wirless accessories(remotes or wireless push button); One short press of the button can eliminate the sound of the controller buzzer, and another short press
can restore the sound of the controller buzzer

LED Indicator light

L1. Wirless accessories learning (blue)

L2. Master door LED,When setting the master door, flash after 4 seconds (Red)

L3. Slave door LED,When setting the Salve door, flash after 4 seconds (Green)

7.Wired Diagram

Inter-lock

17.inter-lock signal（IN）
16.com
15. inter-lock signal（OUT）

17.inter-lock signal（IN）
16.com
15. inter-lock signal（OUT）

DoorA　　　　　　　　　Door B

Synchronous

20. Synchronous（IN）
19.com
18.Synchronous（OUT）

20. Synchronous（IN）
19.com
18.Synchronous（OUT）

DoorA　　　　　　　Door B
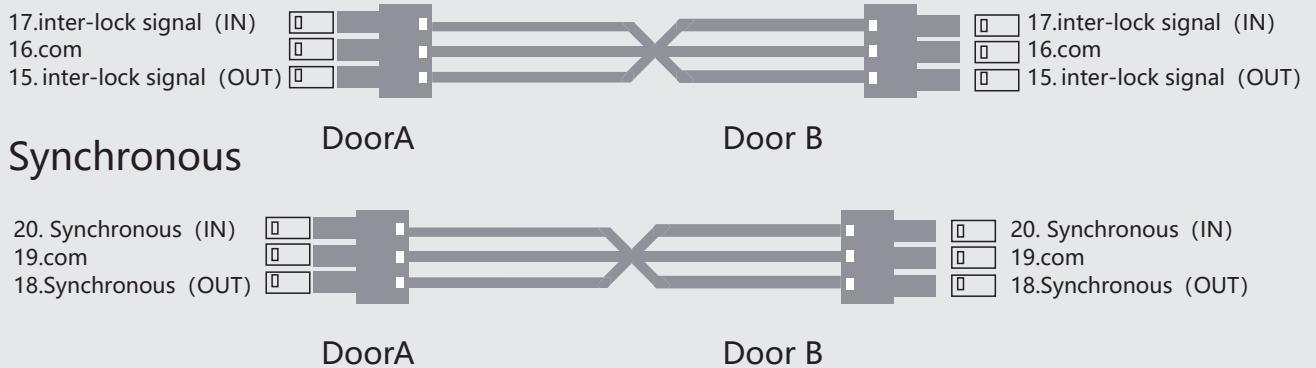
Tip :Er03 mean synchronous cable not well connect

In single open mode： bridge connect terminal 18 and 20

20. Synchronous（IN）
19.com
18.Synchronous（OUT）

Tip：Dr12 Dr 13 mean not bridge connection

Microwave sesnor

Red ———————— 8. 24V
Black———————— 6. GND

Green ———————— 4. OPEN-B
Yellow———————— 6. GND
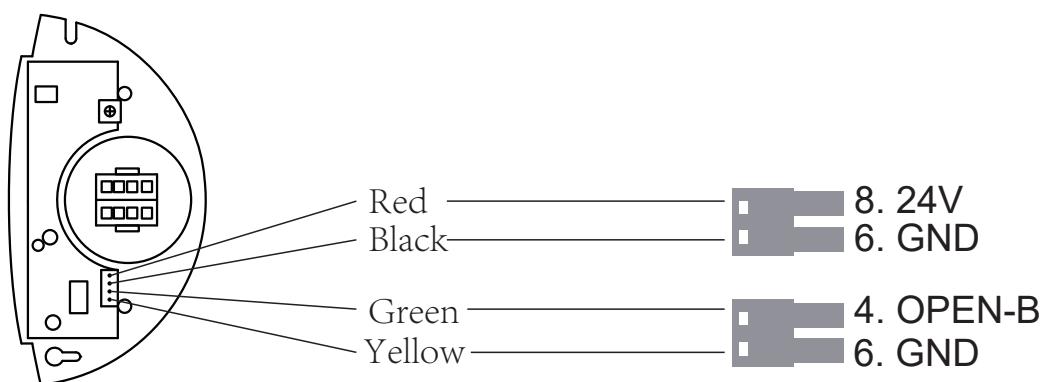
7.Wired Diagram

Foot kick switch

Copper wire in blue wire
White wire in blue wire
Emission 1
E
Blue wire (Emission)

Receive1
R
White wire in red wire
Copper wire in red wire
Red wire (receive)

White wire in red wire
Copper wire in red wire
Receive2
R
Red wire (Emission)

Emission2
E
Copper wire in blue wire
White wire in blue wire
Blue wire (Emission)

8. 24V
6. GND

4. OPEN-B
6. GND

Phtocell

9 +24V
10 +12V
11 GND
12 Anti-collision(open)
13 Anti-collision(close)

Receive2
R

Emission 2
E

Copper wire in blue wire
White wire in blue wire
Emission 1
E
Blue wire (Emission)

Receive1
R
White wire in Black wire
Copper wire in Black wire
Black wire (receive)

7.Wired Diagram

BELL_A	pink
BELL_B	pink
D0	green
D1	white
ALARM	grey
OPEN	yellow
D_IN	brown
+12V	red
GND	black
NO	blue
COM	purple
NC	orange

8 +24V
7 +12V
6 GND
5 Open A
4 Open B

Connect

E-lock and Magnetic lock

Electric lock(Bolt lock)
Black wire-
Red wire +
2 UPS-
3 E-LOCK+

Magnetic lock
Black wire-
Red wire +
2 UPS-
3 E-LOCK+

7.Wired Diagram

Anti-collision of top scan

Anti-collision(Open)（optex：OA-EDGE T）

Power
12~24VAC/DC
Safe/Test output 2
C relay

Pulse-inversion(Close side)

Safe/Test output 1
C relay

Stop pulse(Open side)
Output test

Optical coupler/
Voltage: 10~30VDC

{   (+)
  (-)
  COM
  NC
  NO
  COM
  NC
  NO
  (+)
  (-)

1. White
2. Brown
3. Green
4. Yellow
5. Grey
6. Pink
7. Blue
8. Red
9. Black
10. Purple

9	+24V
10	+12V
11	GND
12	Anti-collision(open)
13	Anti-collision(close)

Anti-collision(Close)

Power
12~24VAC/DC
Safe/Test output 2
C relay

Pulse-inversion(Close side)

Safe/Test output 1
C relay

Stop pulse(Open side)
Output test

Optical coupler/
Voltage: 10~30VDC

{   (+)
  (-)
  COM
  NC
  NO
  COM
  NC
  NO
  (+)
  (-)

1. White
2. Brown
3. Green
4. Yellow
5. Grey
6. Pink
7. Blue
8. Red
9. Black
10. Purple

9	+24V
10	+12V
11	GND
12	Anti-collision(open)
13	Anti-collision(close)

7.Wired Diagram

Operation of Function remote

FC04:

A: Always open

B: Automatic

C: Open and close one time

D: Full lock

Add remote: 1. Keep pressing the learning button LEARN, release the button a till LED become yellow, then press any button on remote , remote will been added after led flash and buzzer rings.

2.Keep pressing any button on remote , and keep pressing button LEARN on remote at same time, release button LEARN till LED become yellow, remote will been added after led flash and buzzer rings

Delete remote: Keep pressing learning button A 5 seconds, all remote memory will delete after LED flash 3 times (Tip: Ensure keep pressing learning button when delet remote memory)

Wirless push button learing and delete mothds same as remotes

Type A

PUSH

AUTO

1 2 3 4   ON
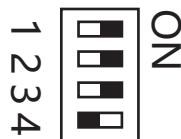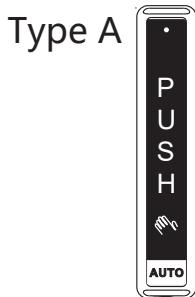
Please check the DIP switch if it's same as the image shown (during setting process) DIP 1、2、3 on the left, DIP 4 on the right

Type B(Optional)

AUTO

PUSH

Button A   Button B

Function selection of wireless push button (work with swing door) 1.Remove battery
2.Keep pressing "Reset" button
3.Insert the battery at same time, the red led flash
4.Keep pressing button A , red led off about 5 second, Then flash again
5.Release Reset button and A button, Setting is done

Notes:

1.Receiver has been built-in. It can be connected wireless accessories directly.
Tip: Wirless push button can't be locked, If need to lock, it need to connect to an external receiver
2.Exit only function:
 Connect outside sensor or button to terminal"Open-B", connect inside sensor or button to terminal "Open-A".Then press "full lock" button on remote
3.When double open, Synchronous cable must be connect refer to manual.Power on, Ensure the setting on both controller is same.If speed is different during operating ,Pls slightly adjust open /close speed, open/close barking speed,opening time
4.When double open, remote control must learn both controller , in order to control two door at same time
5.In double open mode, All accessories connected to the master door only

8.Data setting

Code	Setting range	Default	Description
01	20-99	50	Opening speed(velocity open)
02	20-99	40	Closing speed(velocity close)
03	2-20	5	Braking opening speed
04	2-20	5	Braking closing speed
05	10-50	30	Braking opening angle
06	10-50	30	Braking closing angle
07	0-60	2	Hold-open time (0-60s)
08	1-8	3	Starting delay time (1-4s, 1=0.5s, when lock function working)
09	0-8	2	Locking delay time (0-4s, 1=0.5s)
10	0,1	0	Locking type(0: lock by remote; 1: auto lock when closed)
11	0,1	1	Push and go function (0: working 1: not working)
12	1-5	2	Obstacle detection optimized for exterior(wind loads)
13	1-5	2	Holding force-closed
14	1-5	3	Anti-collision force
15	5-30	15	Auto-learning speed
16	0-30	10	Setting master door start/close wait Angle. (Only in the double open case)When door opening,Mater door open at the set Angle, and the slave door will follow open. When the door closing, the slave door closes first.Mater door shuts off at the set angle, and Mater door does not follow after the slave door is completely closed.
17	0,1	00	Anti-collision(open) and Anti-collision(Close) Access signal selection, 00:NO 01 NC
18	0,1	00	Sensor anti-interference function. 00: not working , 01: working (After function is truned on, when door closing, sensor not working)
19	0,1	00	Turn on/off the door openning angle setting 00: off 01: on
20	30-120	00	Door openning angle setting,Note: the maximum angle of 95 degree for push arm
21	0-3	00	Lock type 00:Fail secure electronic lock 01:Fail safe electronic lock 02: Fail secure strike lock 03:Fail safe strike lock
22	45-99	00	Shielding angle for openning anti-collision singnal setting 00:without this function 45-99:When the door openning to the setting angle, the singal for shielding the anti-collision will work and open the door slowly
23	0,1	00	The openning angle setting for the arm:00:pull arm 01:push arm

9.LED display feedback

Single opening

LED display	Details
Dr11	No problem.
Dr12 or Dr13	Terminal 11 and 13 are not connected.(They should be connected when single opening)
Er01	Over current prote on for controller.
Er02	Motor has problem.

Double opening

LED display	Details
Dr12	Master door
Dr13	Slave door
Er01	Over current prote on for controller.
Er02	Motor has problem.
Er03	Synchronous wired problem.
Er04	Master door and slave door se ng problem.

10.Trouble shooting

Symptoms	Causes	Items Checked	Remedies
Door opened or closed un-smoothly	Opening/closing speed is set too slow	Check the opening/closing speed	Speed up the opening/ closing speed
	learning speed is too fast	Check the learning speed	Slow down the learning speed
	Too much resistance	Check whether there is someting on the door's working way	Clear the obstacle away
Hit the door frame suddenly when closing, door stop suddenly when opening	Buffer speed when opening/closing is too fast		Slow down the buffer speed when opening/closing
	Position stopper is loosen.		Fix the stopper.
Door doesn't work	No power	Check the power switch, connection terminal from motor to controller	Connect the power
	learning speed is too slow		Speed up the learning Speed.
	Door is locked	Check whether the door is locked.	Un-lock the door
	Obstacle in the pull bar's guider.	Check the pull bar guider	Remove the obstacle
	Resistance force is too stronge.		Power off, push the door leaf. Make sure the door work smoothly.
Door can not open	There's an obstacle in the path.		Temove the obstacle
	Learning speed is too slow		Adjust the learning speed faster