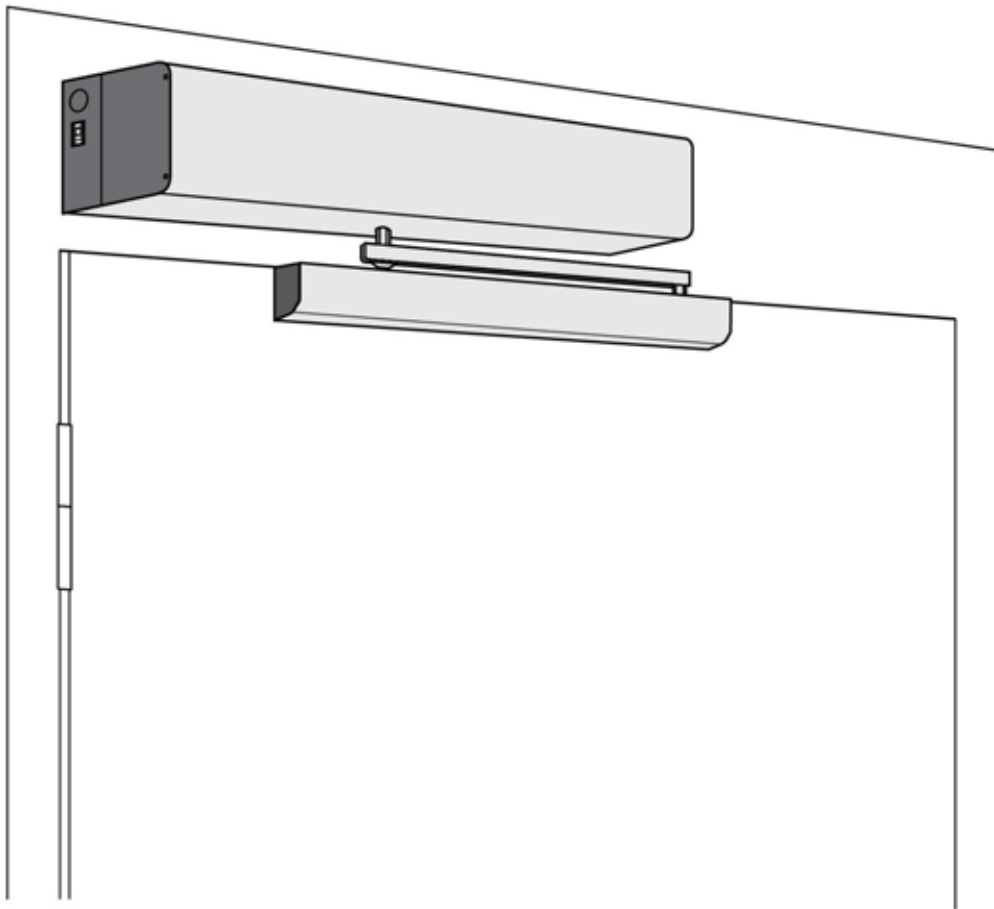


# INSTALLATION MANUAL

DSW-160



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AUTOMATIC ENTRANCE SPECIALISTS

# 1 TECHNICAL PARAMETERS

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Supply power: AC100-240V,50/60Hz

Power consumption:  $\leq 75W$

For door width:700mm-1200mm

For door weight:45-160kgs

Opening angle:pull arm:80°-110°

:push arm:80°-110°

Opening time:3-6s

Closing time:3-6s

Hold-open time:1.5-30s

Ambient temperature:-20°C - +45°C

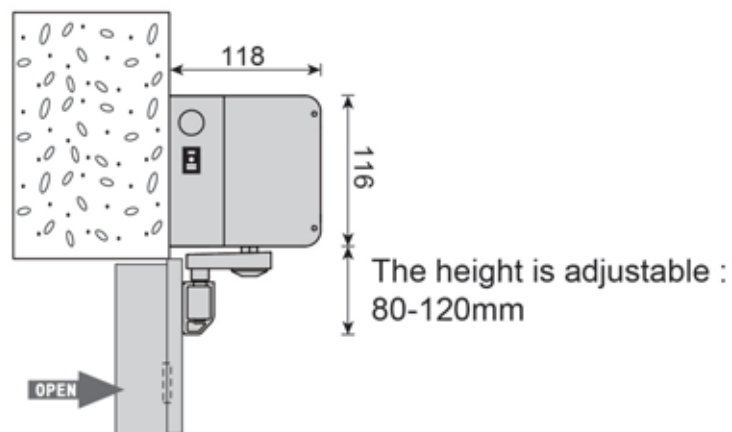
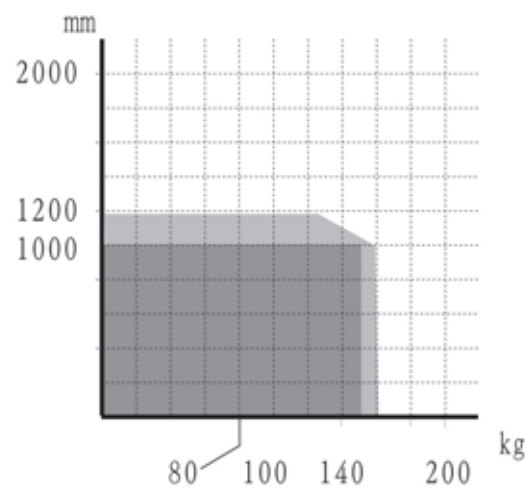
Relative humidity: $\leq 85\%$

mm=door width

kg=door weight

 Suitable range

 Range limit



## 2 COMPONENTS

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Base plate



Controller

Motor and gear box



Casing



Pull arm (alternatively: push arm)



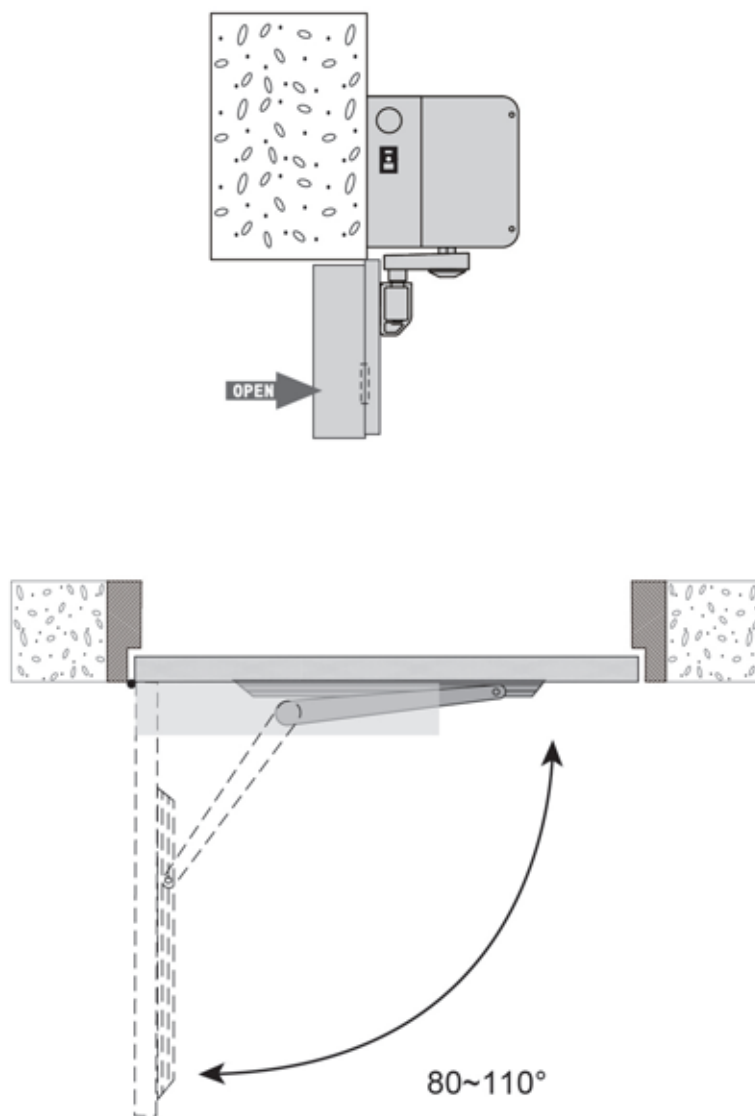
Push arm (alternatively: pull arm)

### 3 MECHANICAL INSTALLATION

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#### 3.1 Installation Diagram:

##### 3.1.1 Left open with pull arm

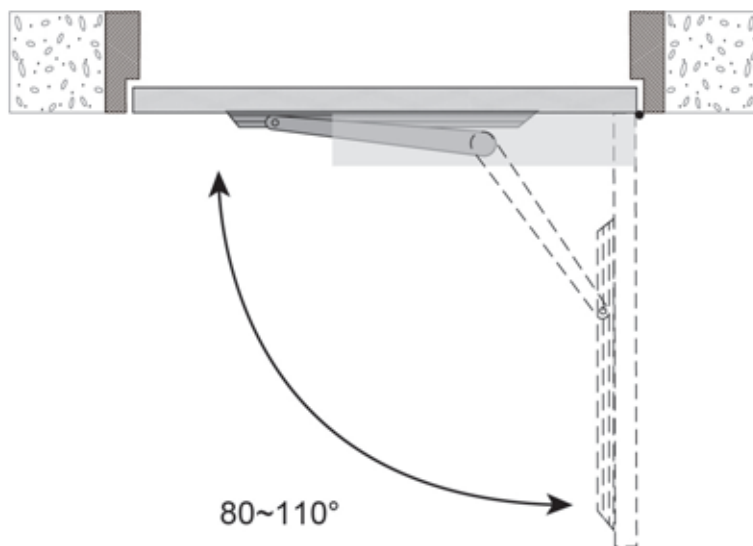
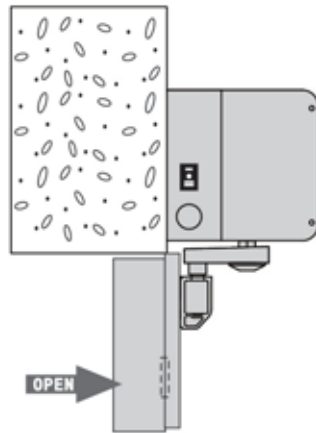


### 3 MECHANICAL INSTALLATION

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#### 3.1 Installation Diagram:

##### 3.1.2 Right open with pull arm

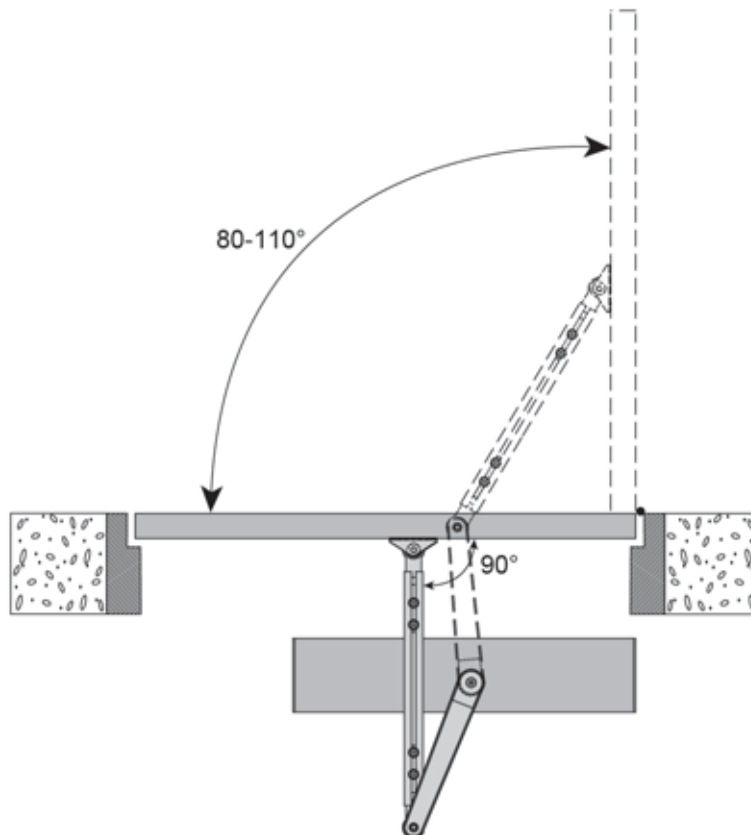
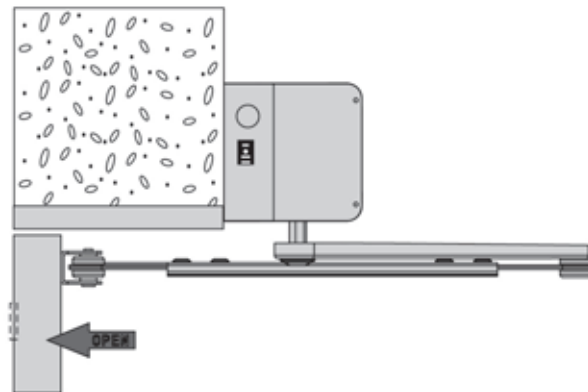


### 3 MECHANICAL INSTALLATION

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#### 3.1 Installation Diagram:

##### 3.1.3 Left open with push arm

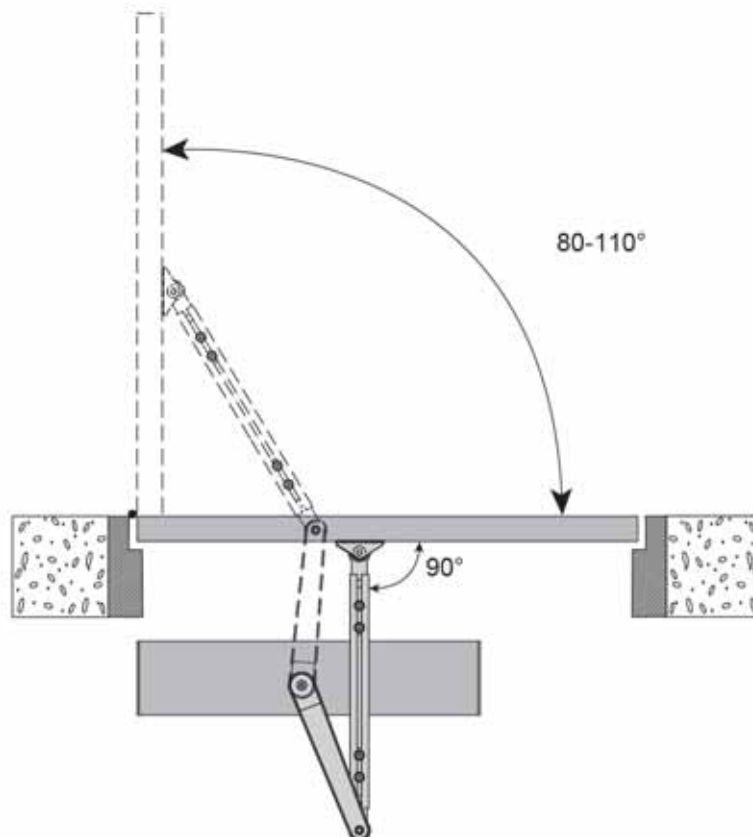
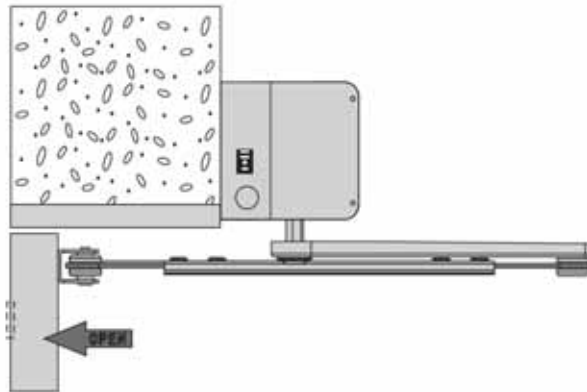


### 3 MECHANICAL INSTALLATION

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#### 3.1 Installation Diagram:

##### 3.1.4 Right open with push arm

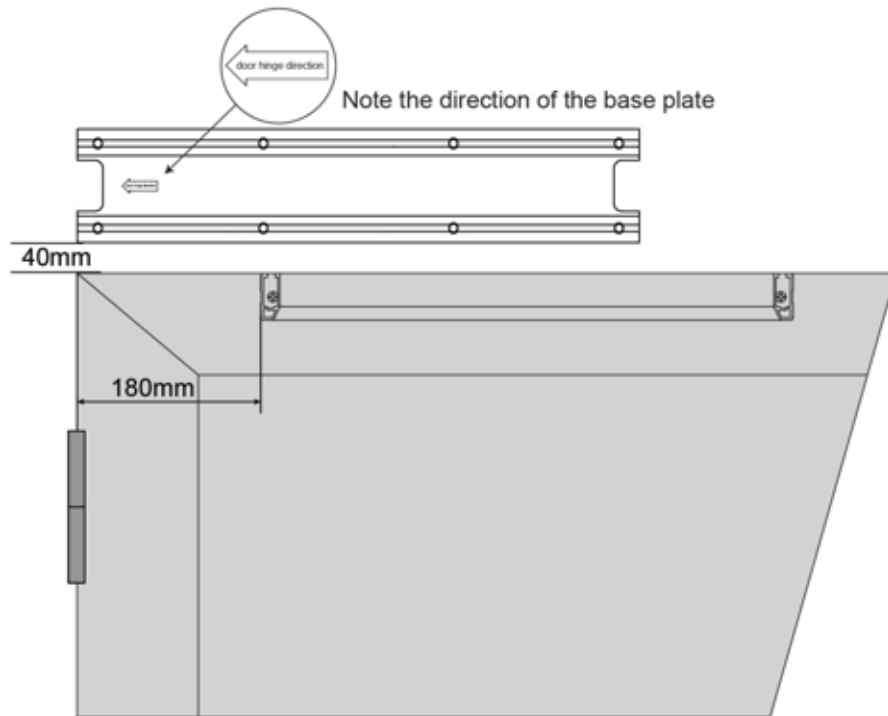


### 3 MECHANICAL INSTALLATION

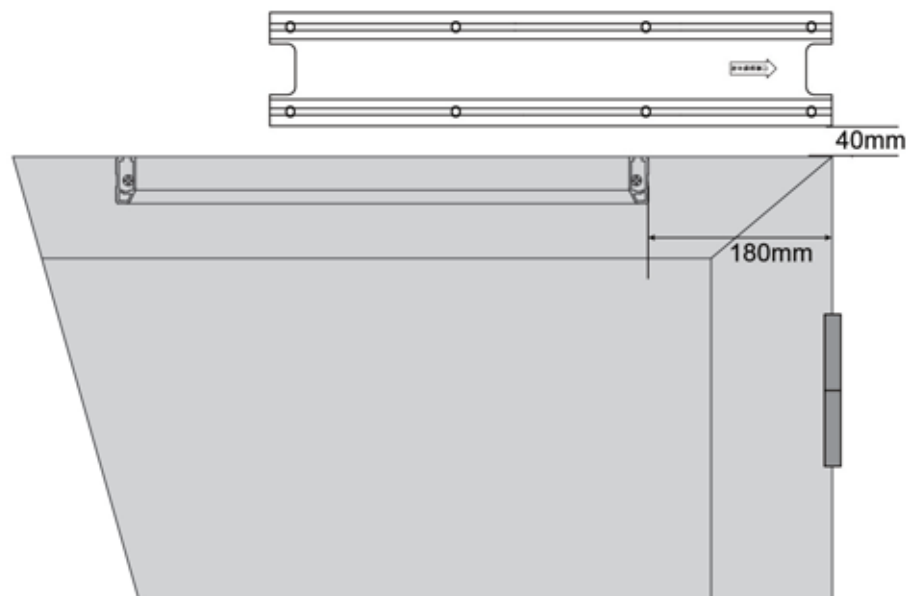
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#### 3.2 Install base plate and sliding guide slot

##### 3.2.1 Left open with pull arm



##### 3.2.2 Right open with pull arm



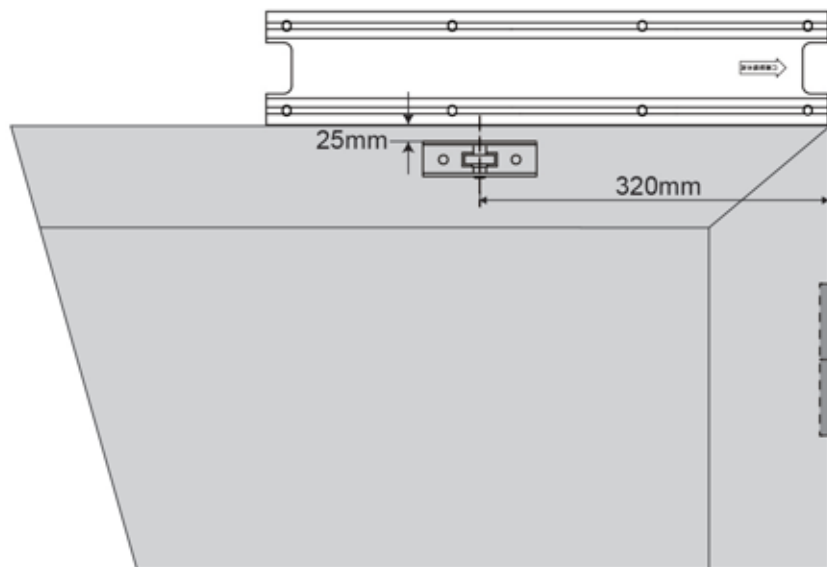


### 3 MECHANICAL INSTALLATION

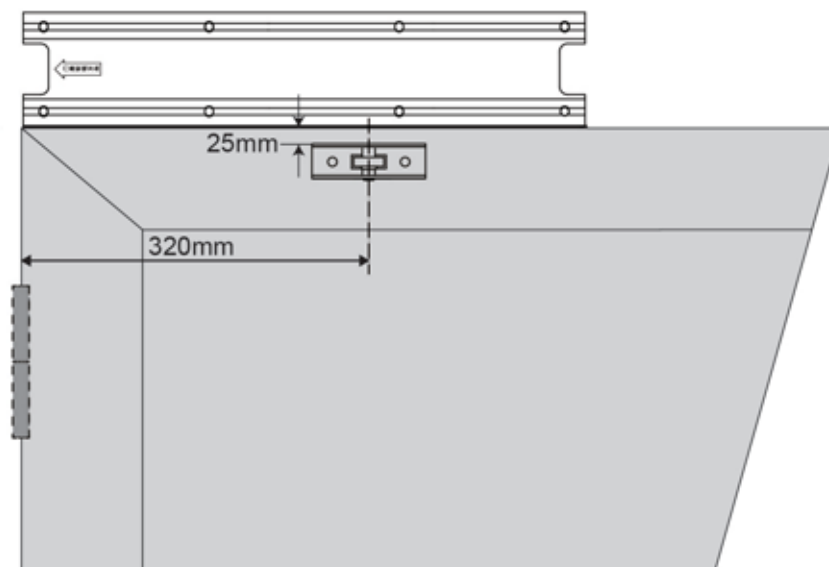
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#### 3.2 Install base plate and arm connector

##### 3.2.3 Left open with push arm



##### 3.2.4 Right open with push arm



### 3 MECHANICAL INSTALLATION

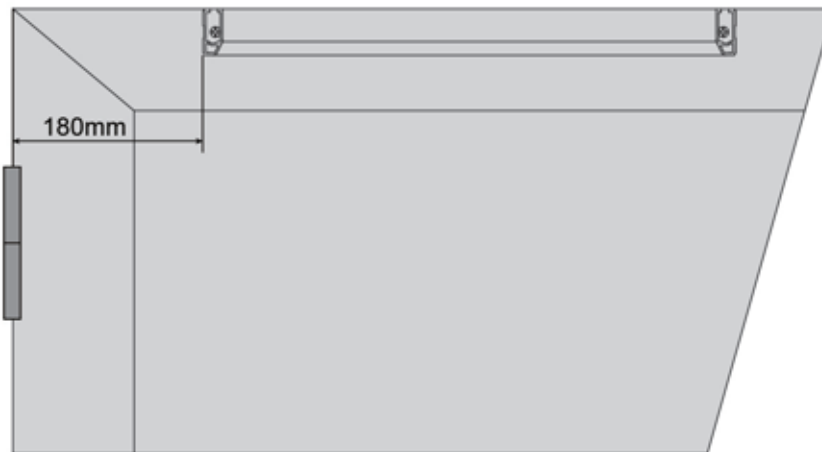
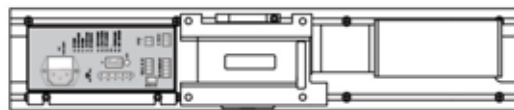
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#### 3.3 Install motor and gearbox

##### 3.3.1 Left open with pull arm



The face with the stopper is upward.



Our factory setting of the door system(motor,gearbox and controller unit) is left open with pull arm. Other installation situation request to adjust the components position of the door system according to the relative diagrams.

### 3 MECHANICAL INSTALLATION

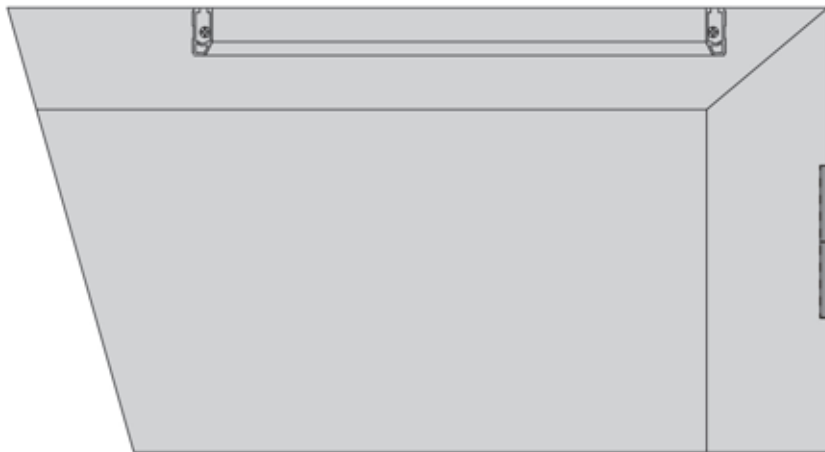
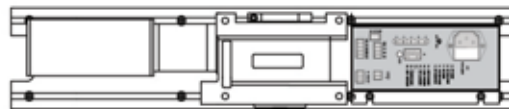
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#### 3.3 Install motor and gearbox

##### 3.3.2 Right open with pull arm



The face with the stopper is upward.



Our factory setting of the door system(motor,gearbox and controller unit) is left open with pull arm. Other installation situation request to adjust the components position of the door system according to the relative diagrams.

### 3 MECHANICAL INSTALLATION

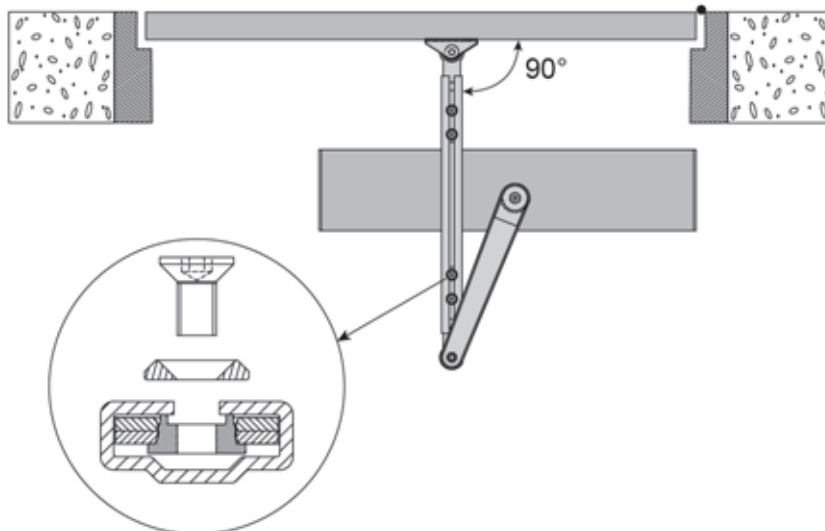
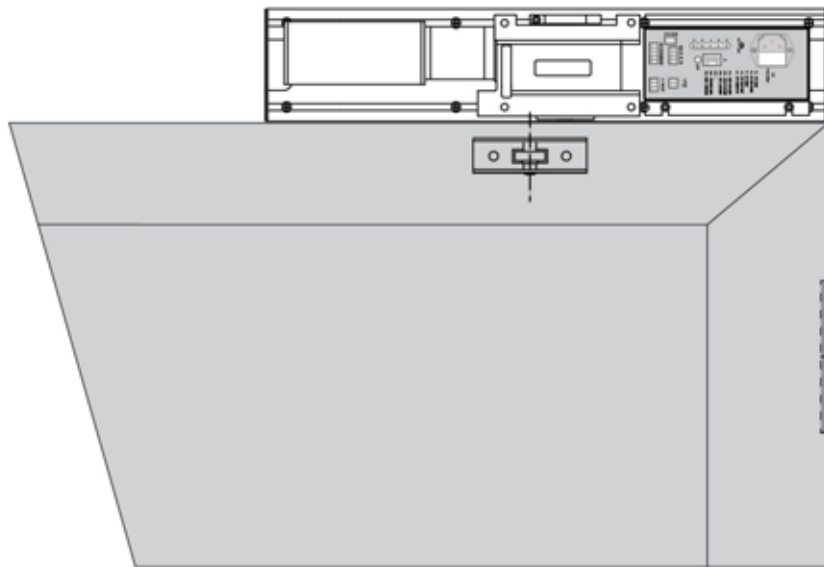
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#### 3.3 Install motor and gearbox

##### 3.3.3 Left open with push arm



The face with the stopper is upward.



## 3 MECHANICAL INSTALLATION

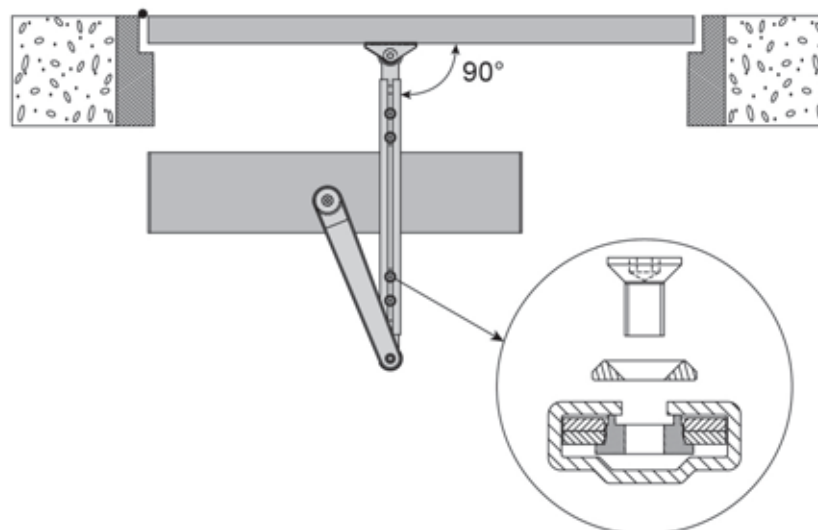
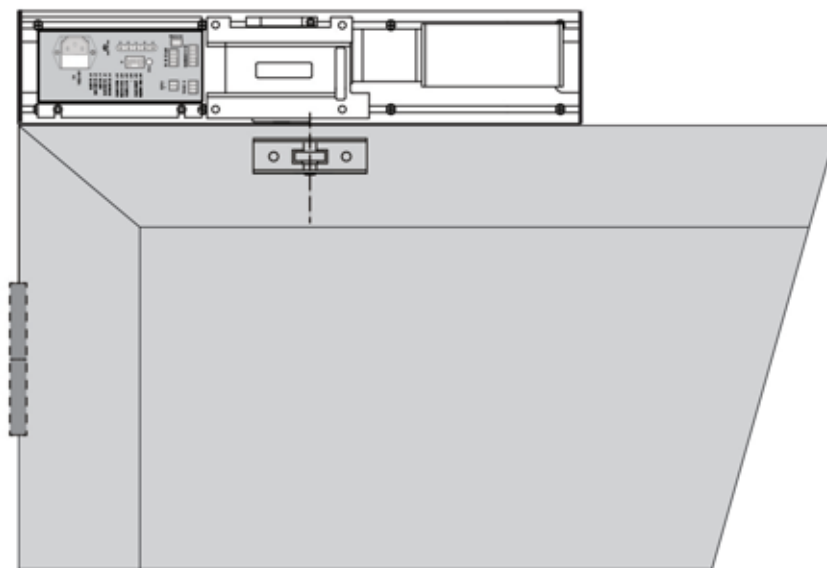
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### 3.3 Install motor and gearbox

#### 3.3.4 Right open with push arm



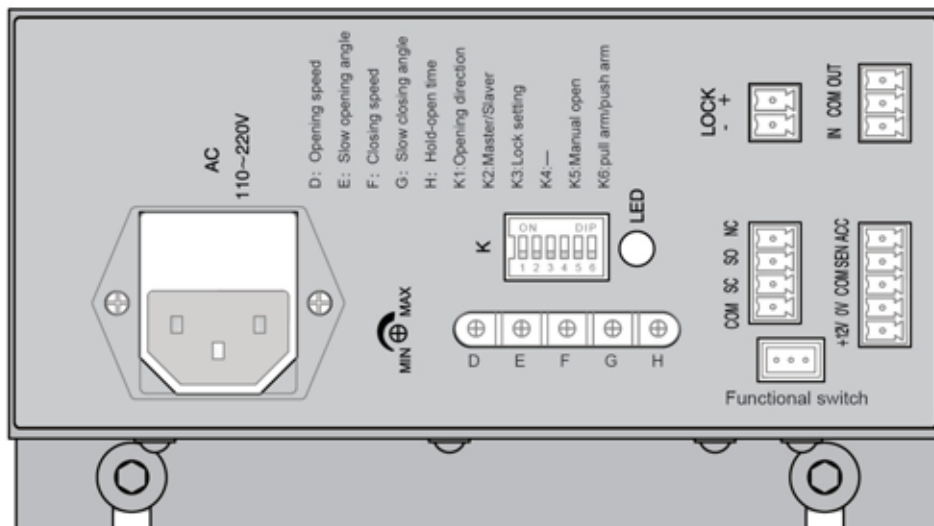
The face with the stopper is upward.



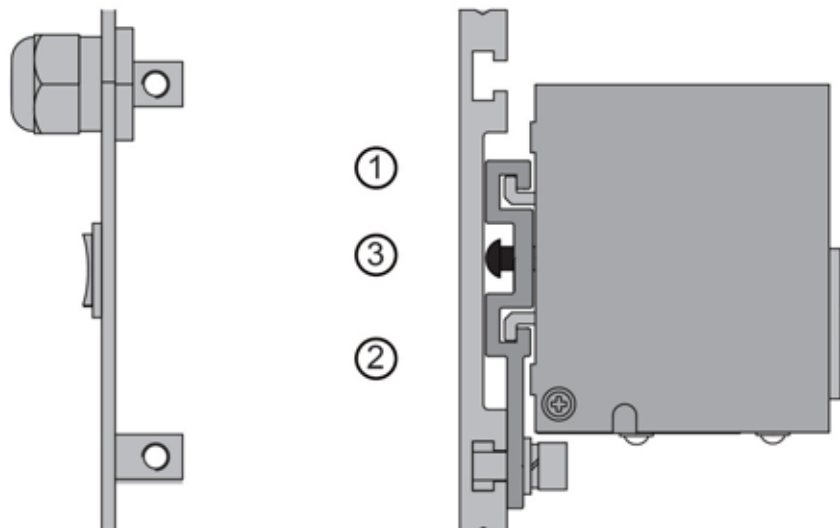
### 3 MECHANICAL INSTALLATION

#### 3.4 Install controller unit

3.4.1 The controller unit and power connector are at the left end of the door system.



(Dia.1)

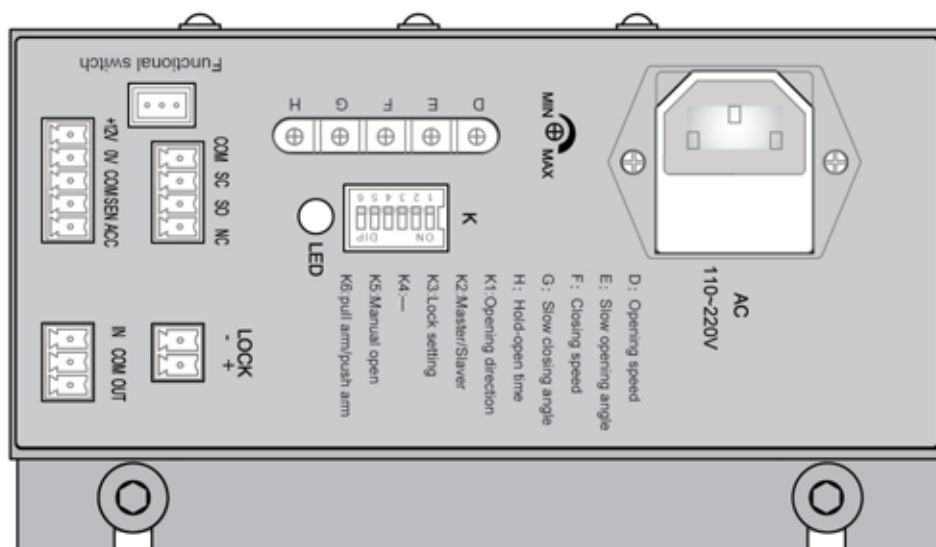


Our factory setting is at the left end as above diagram 1.

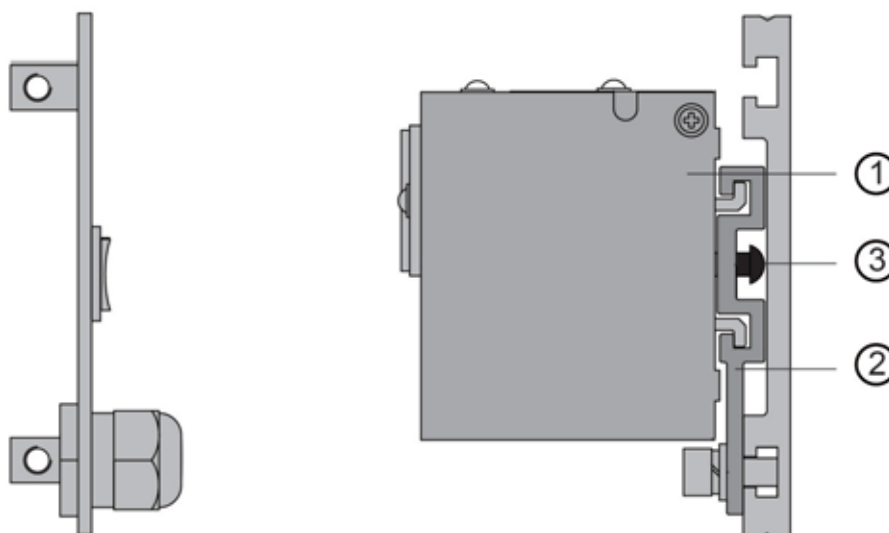
### 3 MECHANICAL INSTALLATION

#### 3.4 Install controller unit

3.4.2 The controller unit and power connector are at the right end of the door system.



( Dia.2 )



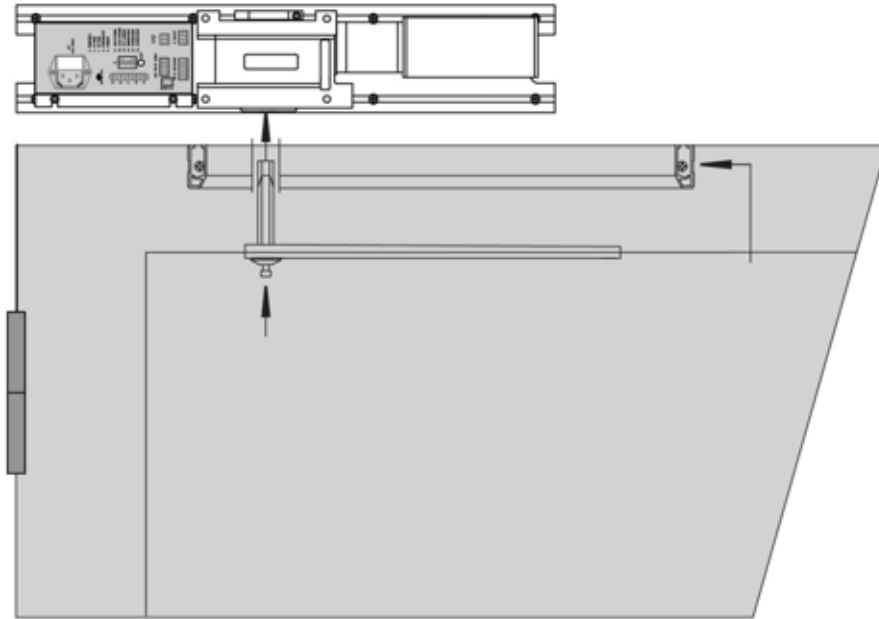
If the controller unit is at the left, please change the direction as follows:  
Loosen screw ③, remove the controller ① and fixing plate ②, turn the controller 180° and fix it, And move the power connector to the right end also.

### 3 MECHANICAL INSTALLATION

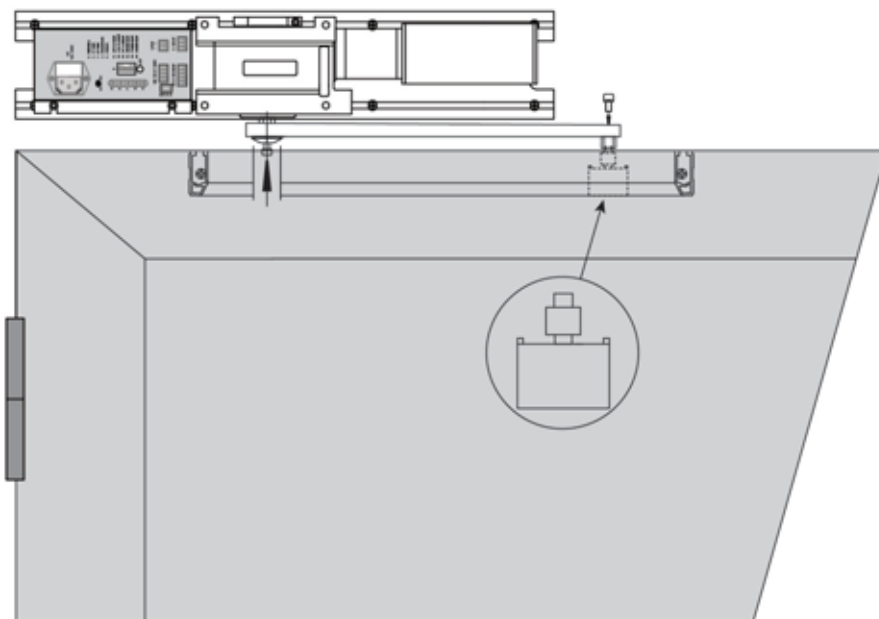
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#### 3.4 Install the arm

Installation of the door system with pull arm, step 1



Installation of the door system with pull arm, step 2



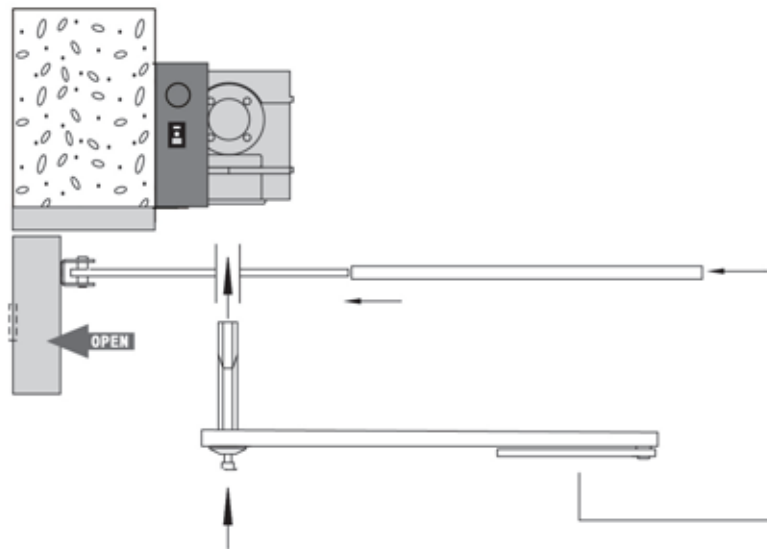


### 3 MECHANICAL INSTALLATION

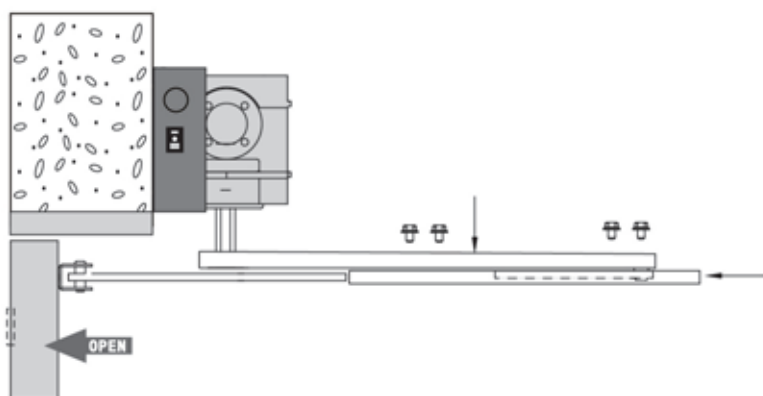
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#### 3.4 Install the arm

Installation of the door system with push arm, step 1



Installation of the door system with push arm, step 2

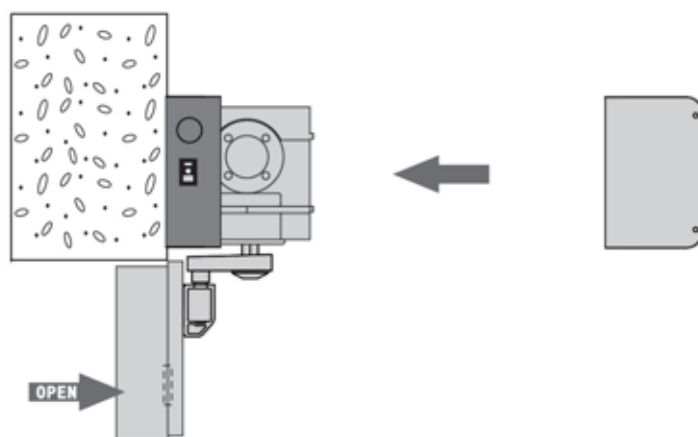


### 3 MECHANICAL INSTALLATION

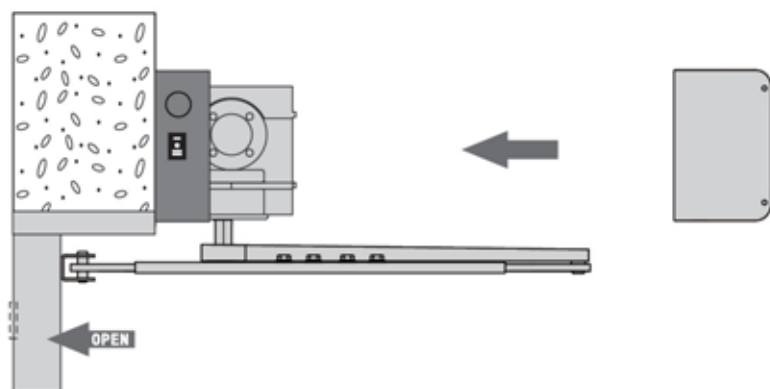
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#### 3.5 Fix the end caps of the casing

With pull arm



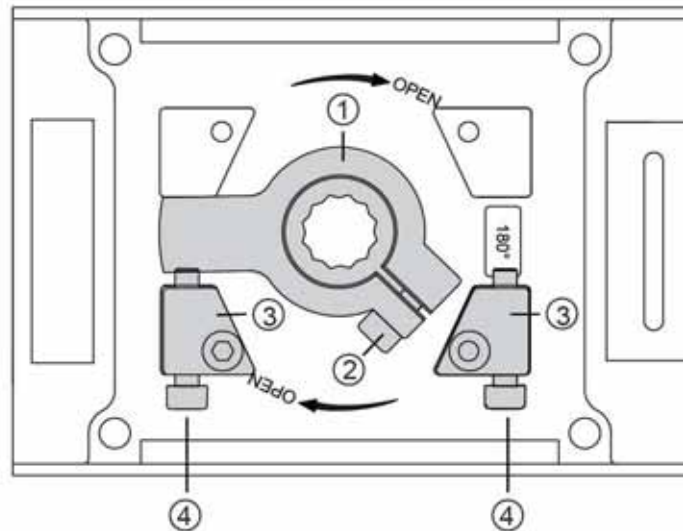
With push arm



### 3 MECHANICAL INSTALLATION

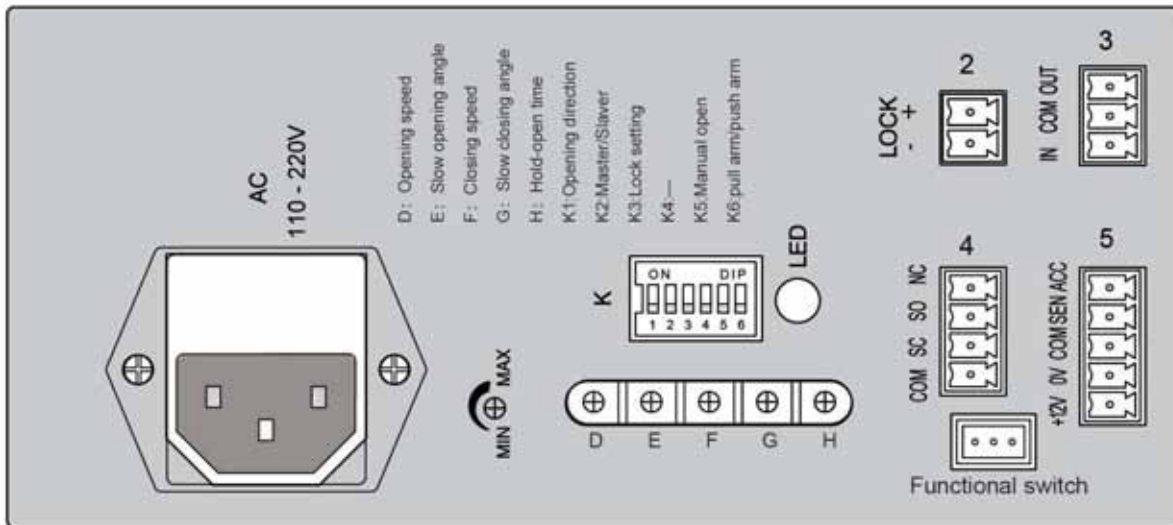
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#### 3.6 Adjust the fully open position

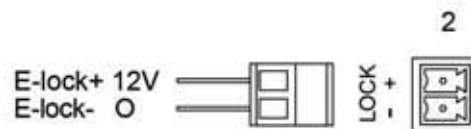


- ① Adjuster: It was used as stopper when door system works with push arm.
- ② Fastening bolt: Loosen this bolt, adjust the stopper, tighten this bolt.
- ③ Stopper: Fixed with the gearbox, no matter what the installation mode is chosen, it is at outside.
- ④ Adjusting bolt: When the door system works with push arm, this bolt can be used to adjust the fully open angle.

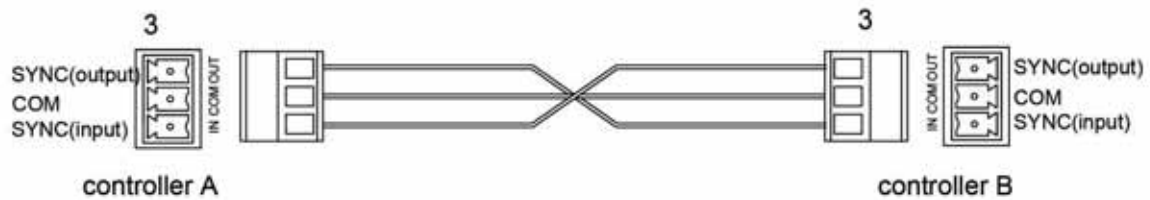
## 4 ELECTRICAL CONNECTION



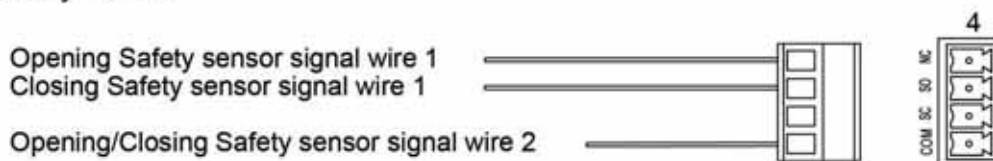
### Electric lock



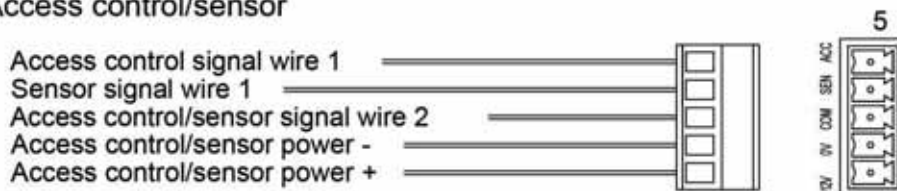
### Two door synchronization



### Safety sensor

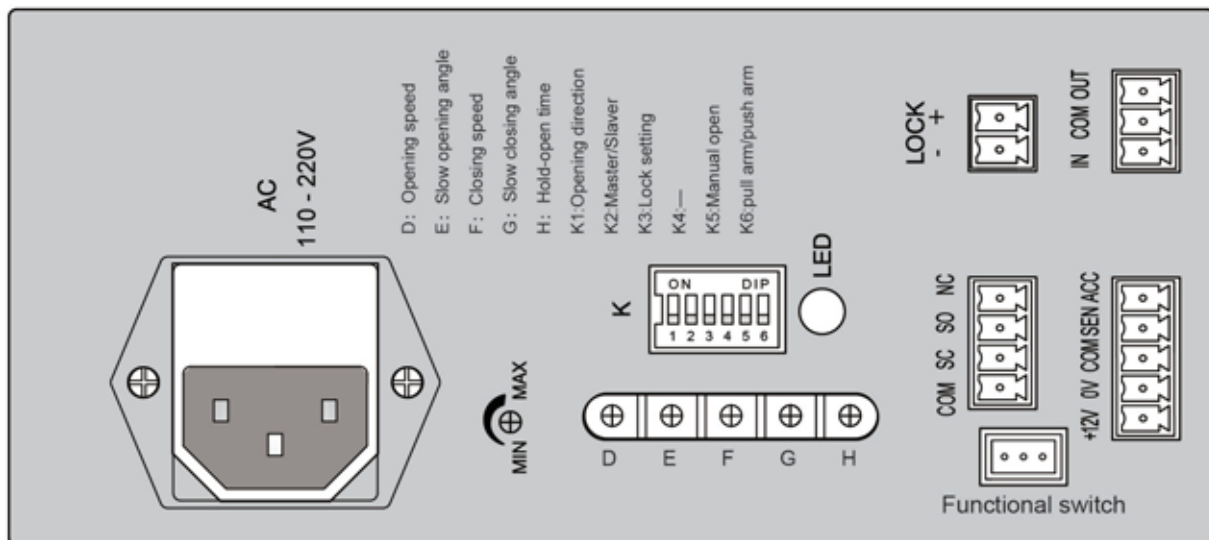


### Access control/sensor



Note: Before and in door learning process, make sure there is no one stand in the area of the door going.

## 5 PARAMETER ADJUSTMENT



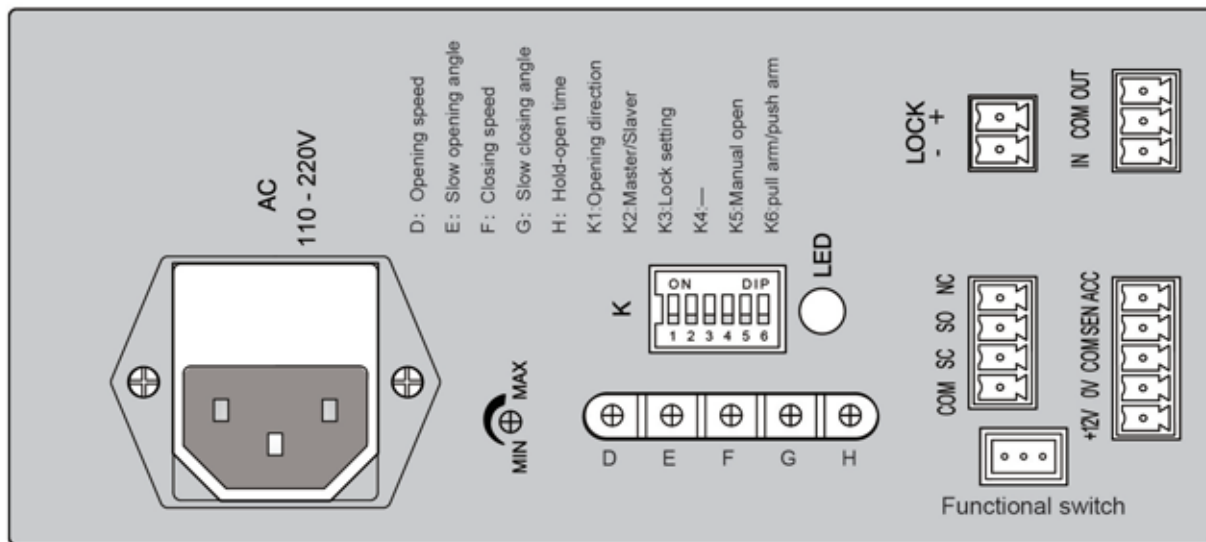
### 5.1 Potentiometer knobs

- D: Opening speed: Screw it clockwise to increase the speed
- E. Slow opening angle: Screw it clockwise to increase the angle
- F. Closing speed: Screw it clockwise to increase the speed
- G. Slow closing angle: Screw it clockwise to increase the angle
- H. Hold-open time: Screw it clockwise to make the time longer, the position of 1/4 is about 7 seconds, the position of 1/2 is about 14 seconds, the position of 3/4 is about 21s .

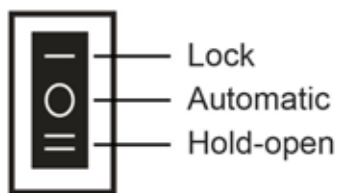
### 5.2 DIP switch(K): After setting, power off then power on to restart for activating the setting.

- K1. Opening direction: power on, the door goes to closing direction is correct, if no, change the switch position.
- K2. Master/Slaver: When the SYNC is set, master door(OFF), slaver door(ON).
- K3. Auto lock/Signal lock: Turn (ON), automatic lock when fully closed; Turn(OFF), signal lock.
- K4. —
- K5. Hand operation: Turn (ON), the door can not be open by hand because of closed force; Turn (OFF), pull or push the door by hand, the door will open automatically.
- K6. Installation mode: Turn (ON), for push arm system; Turn(OFF), for pull arm system .

## 6 PARAMETER ADJUSTMENT, TROUBLESHOOTING



### 5.3 Functional switch



## 6. Troubleshooting

Troubles may happen during operation

Symptom	Reason	Solutions
Door doesn't open / Motor doesn't work	The function is "lock"	Change to "Automatic"
	There is no power	Connect the supply power well
	There is no opening signal	Check the sensor or access
Door doesn't open Motor works	The mechanical lock is locked	Unlock the mechanical lock
	The opening direction is wrong	Change the opening direction
	There is block under the door bottom	Remove the block
Door doesn't close	The functional switch is set "hold-open"	Change to "Automatic" or "Lock"
	There is block under the door bottom	Remove the block

During normal operation:

LED light is on; If the LED light is off means no power

SHANGHAI DEPER AUTOMATIC DOOR & WINDOW CO.,LTD



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The Company Has Passed ISO9001: 2008 Quality Management System Certification .