

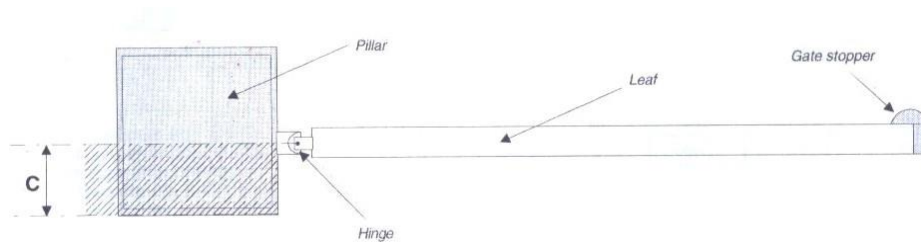
# **EXTERNAL AUTOMATIC OPENING SYSTEM FOR SWING GATES**

## **USER'S MANUAL**

**Hangzhou Fuyang Taomen Gate Operators  
Fuyang, Hangzhou, China**



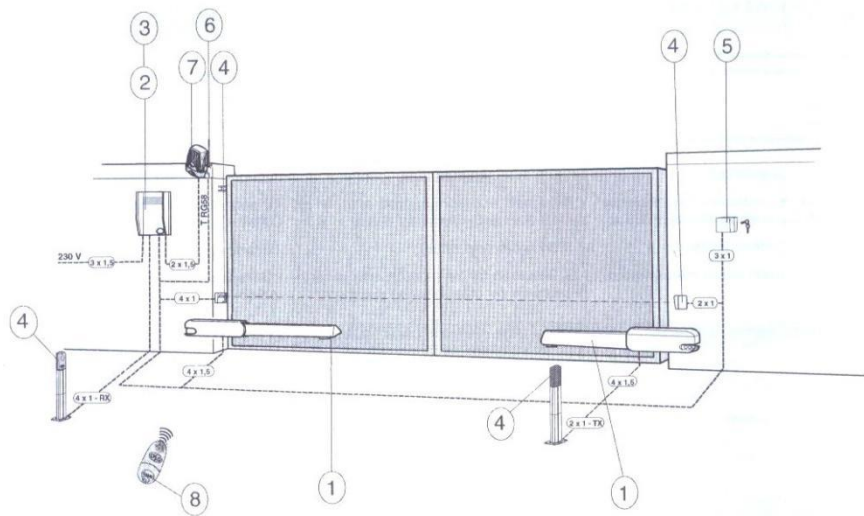
# ATTENTION



Before beginning installation of the automation system, check the following:

1. The structure of the gate must be sufficiently strong; the hinges must function efficiently and there must be no friction between the moving parts and fixed parts;
2. Measurement C must not be greater than the value shown in Tab. 2. If this is the case, it is necessary to modify the pillar so that the measurement corresponds;
3. The electrical wiring path according to the position of the control and safety instruments;
4. Presence of a mechanical gate stop (securely anchored to the ground) in the closed position in order to prevent the gate and the reduction gear from moving beyond the correct close position.
5. Keep additional accessories away from children. Do NOT allow children to play with pushbutton or remote controls. A gate can cause serious injuries as it closes.

# Standard Installation



Wiring for microswitches:  $5 \times 1 \text{ m}^2$

Power wires to motor:

$2 \times 1.5 \text{ m}^2$  up to 20m

$2 \times 2.5 \text{ m}^2$  up to 30m

Notes:

1. Irreversible gear motor
2. control panel
3. Radio receiver
4. Safety photocells
5. Key-operated selector switch
6. Antenna
7. Flashing light indicating gate movement
8. Radio transmitter

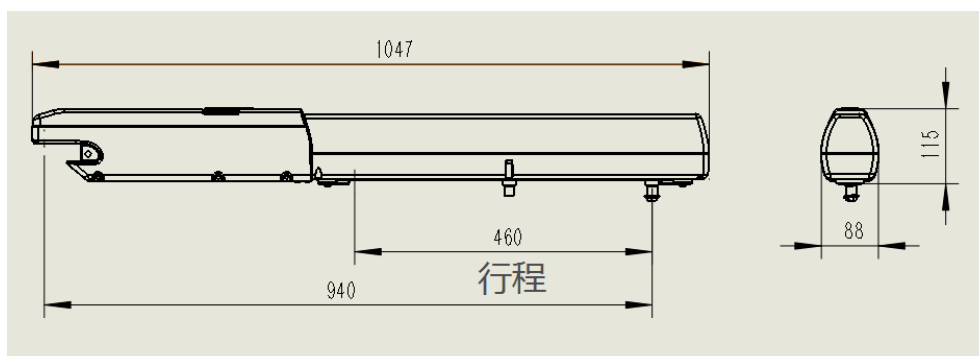
## I . Technical characteristics

1. Power supply: AC 230V	AC 120V	24V
2. Frequency: 50Hz	60Hz	
3. Nominal current: 1.2A	2.4A	5A
4. Power: 150W	150W	120W
5. Duty cycle: 50%	工作循环50%	不停机
6. Reduction ratio: 1/36	1/36	1/36
7. Travel time: 25seconds	25seconds	23seconds
8. Capacitor: 10 $\mu$ F	30 $\mu$ F	
9. Protection class: IP44	IP44	IP44
10. Weight: 14.7KG	14.7KG	14KG

Notes:

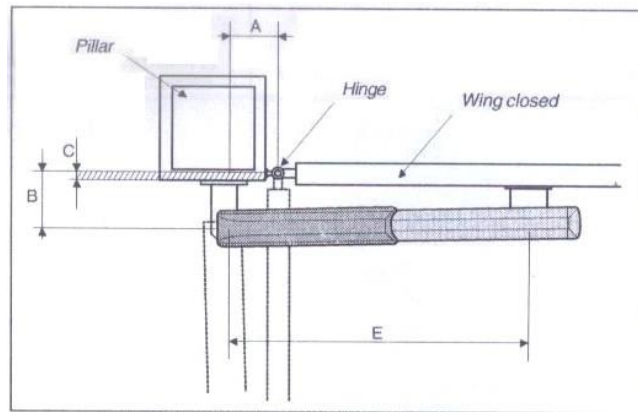
- 1) All the data refers to nominal power supply and standard conditions of aperture;
- 2) Can be adjusted by using control panels.

## II . Overall dimensions and use limits



WIDTH OF WING	WEIGHT OF WING
<u>m</u>	<u>Kg</u>
2.00	1000
2.50	800
3.00	600
4.00	500
5.00	400

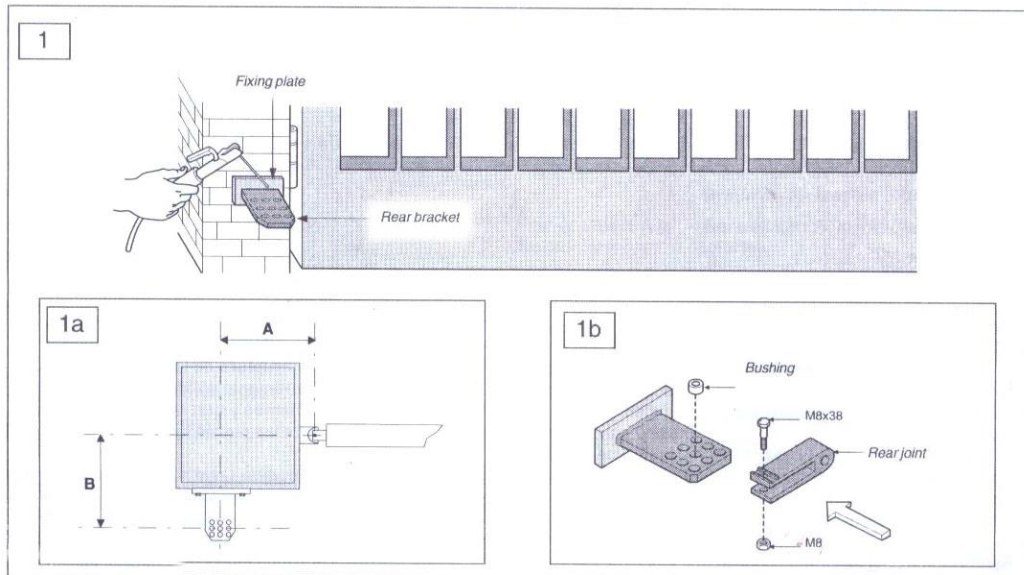
Tab.1



### III. Installation

	A	B	C <sub>max</sub>	E
OPENING	mm	mm	mm	mm
90°	200	200	120	920
130°	200	140	70	920

Tab.2



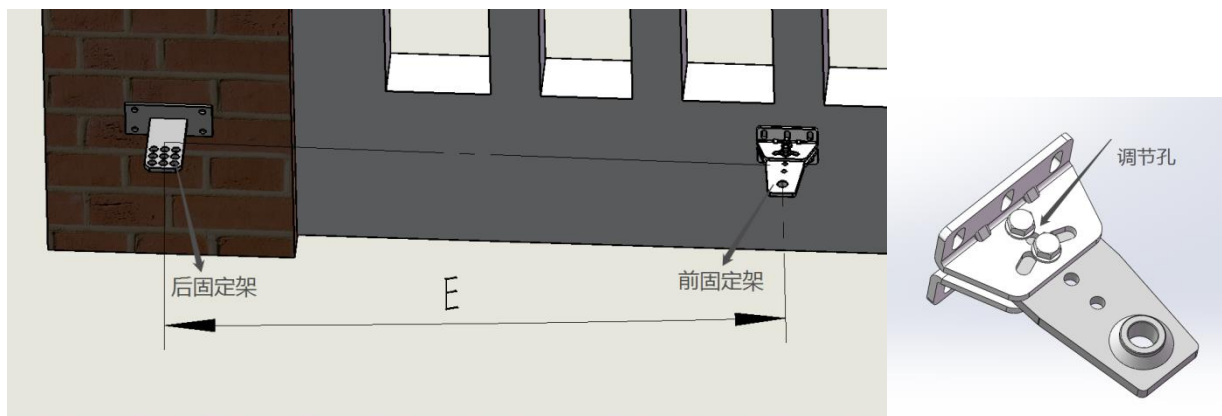
Attach the fixing plate and the rear bracket (Fig.1)

1 to the pillar observing measurement A and B shown in Tab. 2, between the hinge pin and the central hole in the bracket. The rear bracket is equipped with additional holes to change the opening angle of the gate.

Notes:

If measurement B is increased, the opening angle is reduced. This reduces the peripheral speed and increases the thrust exerted by the motor on the gate. If measurement A is increased, the angle of aperture is increased.

Therefore, this increases the peripheral speed and reduces the thrust exerted by the motor on the gate.

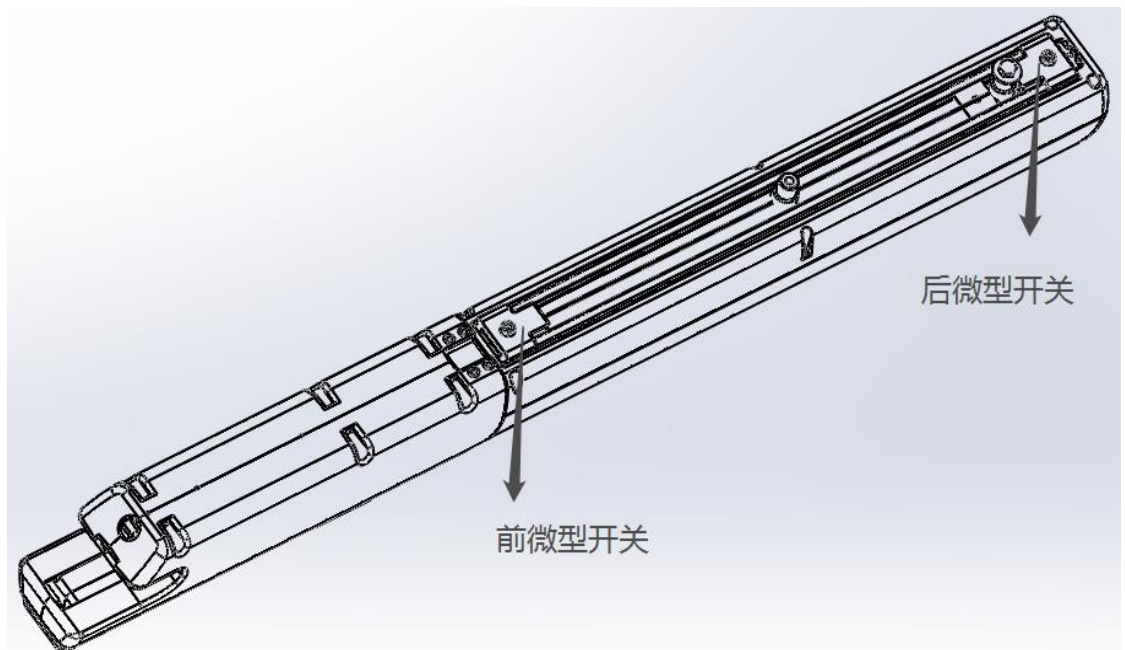


With the gate closed, attach the fixing plate with the front bracket to the gate wing. The anchor plate must be horizontally aligned with the rear bracket and measurement E must be observed.

Notes:

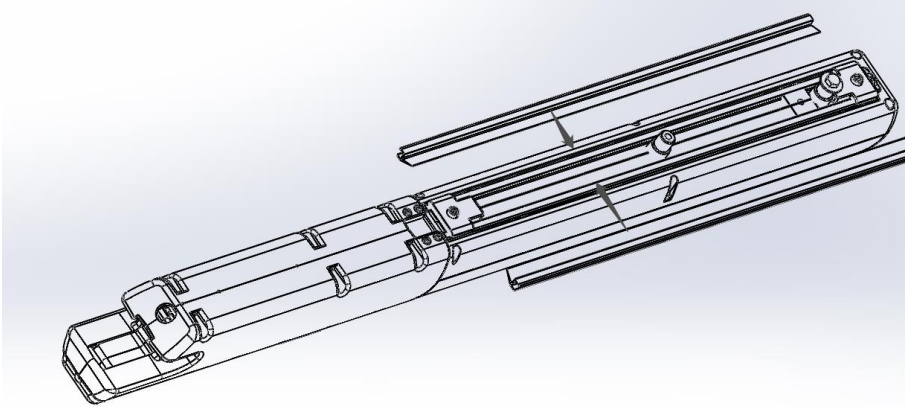
Use neutral grease to lubricate the worm gear and washer at the moment of installation.

#### **IV . Adjusting the stop microswitch for the aperture movement**

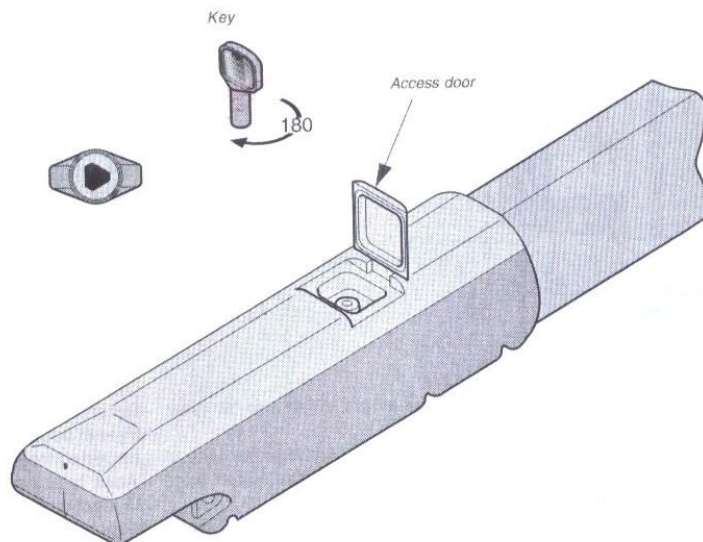


1. Release the gear motor and move the door to the maximum desired open position.
2. Loosen the fixing screws of the microswitch unit. Slide the microswitch unit along the microswitch-support rod until it is inserted by contact on the microswitch unit actuation runner.
3. Fix the microswitch by tightening the respective screws.

## V. Dust-proof strip installation



## VI. Personalized key release



### Releasing the unit

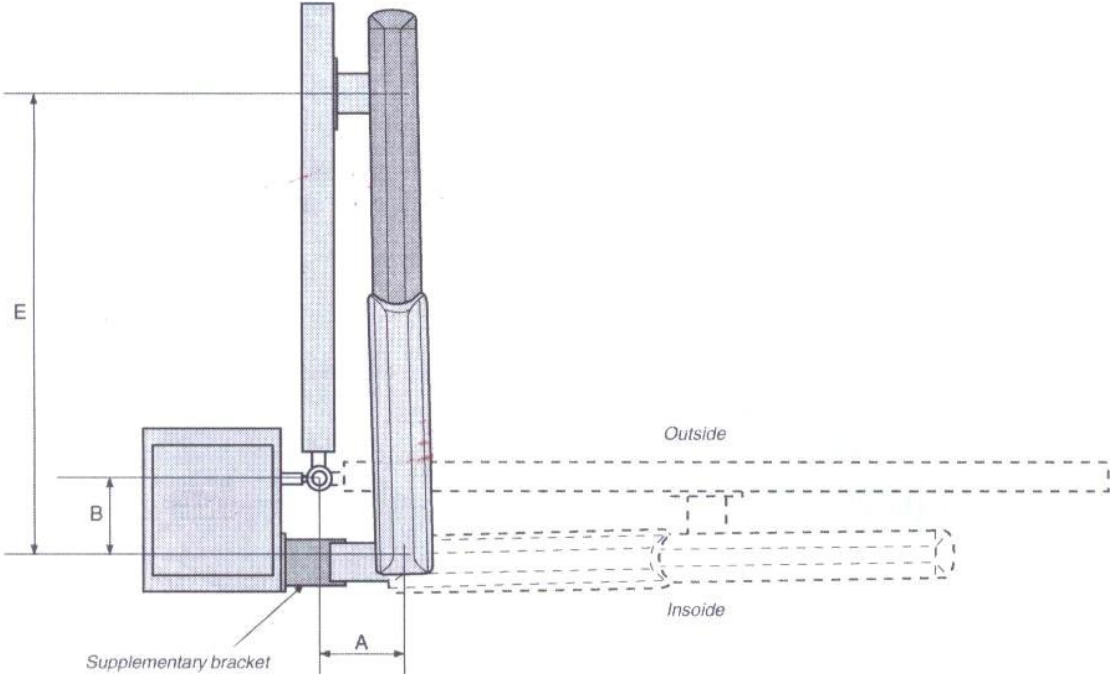
Please perform this step with the motor stopped.

1. Raise the access door;
2. Insert and turn the key. The gate will be released immediately;
3. Push or pull the gate manually.

RE-LOCK the gate, simply insert and turn the key.



# VII. Application for outside aperture



A	200mm
B	200mm
E	920mm

1. Measure the length of “A” and “B” (see Tab.3).
2. Attach the rear bracket together with a supplementary bracket and fasten both to the column.
3. Open the gate (maximum  $90^{\circ}$  )and measure “E” (see Tab.3), then fasten the front bracket to the gate.
4. Reposition and adjust the opening microswitch.

## **VIII. Periodic Maintenance**

1. Lubricate the worm gear screw and the rotation pins;
2. Check the clamps screws;
3. Check the connection cable's soundness.