TS-TB306 swing turnstile manual book



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1.product description

TS-TB306 series intelligent swing turnstile adopts modern and simple style; the chassis is made of 304 stainless steel, which is durable. The movement part adopts DC brushless motor and brushless servo control technology to realize fast, precise and stable door swing rotation, low power consumption, energy saving and environmental protection. The TS-TB306 movement and its control system have passed 10 million life time. The swing turnstile can integrate access control, face, QR code scanning and other systems to more efficiently achieve standardized management of pedestrian passages.

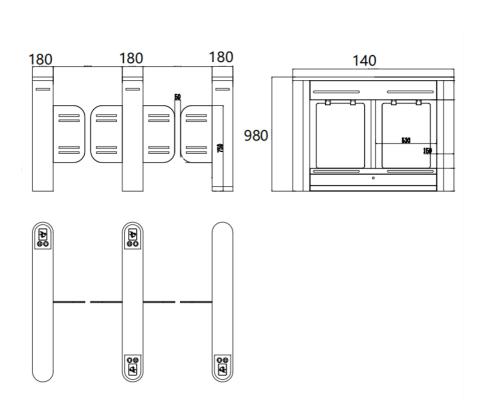
Feature

- ♦ Using 6 pairs of infrared detectors, it can detect the passing position of pedestrians in the channel, and realize anti-tailing + anti-reverse traffic, anti-pinch and other functions.
- ♦ The width of the aisle can be widened, which is convenient for people with luggage and wheelchairs to pass.
- ♦ Configure dry contact signal input interface, RS232 interface, RS485 / TCP/IP interface (customizable), compatible with various access control controllers.

Applications

Suitable for commercial office buildings, schools, subways, airports, customs, exhibition halls, government buildings, senior clubs and other indoor occasions.

2.Product Size (unit:mm)



3.Product parameters

D	204
Box material	304 stainless steel
surface treatment	Brushed / Snowflake
Door material	Acrylic/stainless steel swing door (optional)
MCBF	10 million
Normal pass	30 ~ 45 persons/minute (Depends on pedestrian traffic)
emergency pass	60 persons/minute (Depends on pedestrian traffic)
Open/close door speed	0.5-2s
Open/close door angle	±90° (50°~90°set)
Operating temperature	−30°C~70°C
working voltage	100-240VAC, 50/60Hz
Controller working voltage	Controller input power working range 20V-30VDC
rated power	35W (Switching power supply requires 24V/5A)
input/output signal	11 input signals (active high), 8 output signals (active low)
Communication Interface	RS232; RS485 / TCP/IP (customizable)
motor	DC brushless motor
Dimension	1400 x 185 x 1020 mm
Targeting	Precise positioning with linear Hall (4096 pulses per motor revolution, 62760 pulses for door panel 90° stroke)
Motor control method	Adopt high-performance ARM chip (servo control algorithm of position loop + speed loop + current loop)

4.Product features

★ basic feature

- **pass mode switching function**: Nine pass modes can be set independently of each other in the direction of entry and exit.
- Automatic homing function: The turnstile receives a legal door opening signal in the standby state, and the turnstile op ens the door; the door swing will automatically return to the blocking zero position under the following conditions:

 (1) Within the allowable passage time, it is detected that the person has passed through the passage in the designated directed.
 - (1) Within the allowable passage time, it is detected that the person has passed through the passage in the designated direction;
 - (2) When the allowable passage time is exceeded, it is detected that there is no person passing through the passage.
- Automatic reset function: The door swing is at the non-blocking zero position due to human interference, and the door swing automatically returns to the blocking zero position after the human intervention is cancelled.
- Auto-adjustment function: When the turnstile has mechanical wear and needs to be readjusted, the control board can be used for automatic adjustment, which is accurate and convenient.

Pass request memory function: When more than 2 legal pass signals are given at the same time (including the same direction and reverse direction), the system will memorize all pass requests and complete each pass action in turn. The number of memories can be up to 255.

Passage indication function:

- > (1) Direction of passage indication: Installed on the top of the chassis to indicate the legal passage direction of the turnstile. When the indicator light is green, this direction is the traffic direction, otherwise the indicator light is red.
- > (2) Channel status indication: Installed on the outside of the chassis, indicating whether the gate can open the door for passage after receiving the legal door opening signal. When the indicator light is green, this direction can pass normally after receiving the legal door opening signal.
- ➤ **Compatibility**: Equipped with dry contact signal input interface, RS232 interface, RS485 / TCP/IP interface (customized), compatible with various access control controllers.

★ Security design

- **Power-on self-check function**: After the power is turned on, the system performs routine self-check and alarm prompts, intelligently detects key hardware and functions, and finds hidden dangers in the shortest time!
- **Power off open door function**: When the power is off, the system will automatically unlock the door, which can be manually pushed and swing into an open state, which is convenient for crowd evacuation and meets fire protection requirements.

> Anti-pinch function:

- Infrared anti-pinch: Install multiple pairs of infrared detectors in the channel. Once a person or object is detected in the channel, the door stops automatically; the door will not continue to move until the person or object leaves the channel.
 Mechanical anti-pinch: the door will automatically stop when it encounters obstacles during its movement; the impact force during the movement of the door is within a safe range.
 - **Emergency escape function**: Equipped with an emergency escape control device, so that the system automatically opens the door to facilitate crowd evacuation.
 - > Intelligent linkage alarm: illegal pass events can be linked with other alarm monitoring equipment: such as access control system, video management system

Lane width

The channel width can be customized to other wider dimensions. When the channel length is unchanged, the channel width is 60-100cm; when the channel length changes, the maximum channel width can be 120cm.

5. Controller manual

1.Installation and Wiring Diagram

1.1 Turnstile system frame diagram

