

Safe, Stable, Multi-function

HS Series

Heavy Duty Automatic Door Solutions





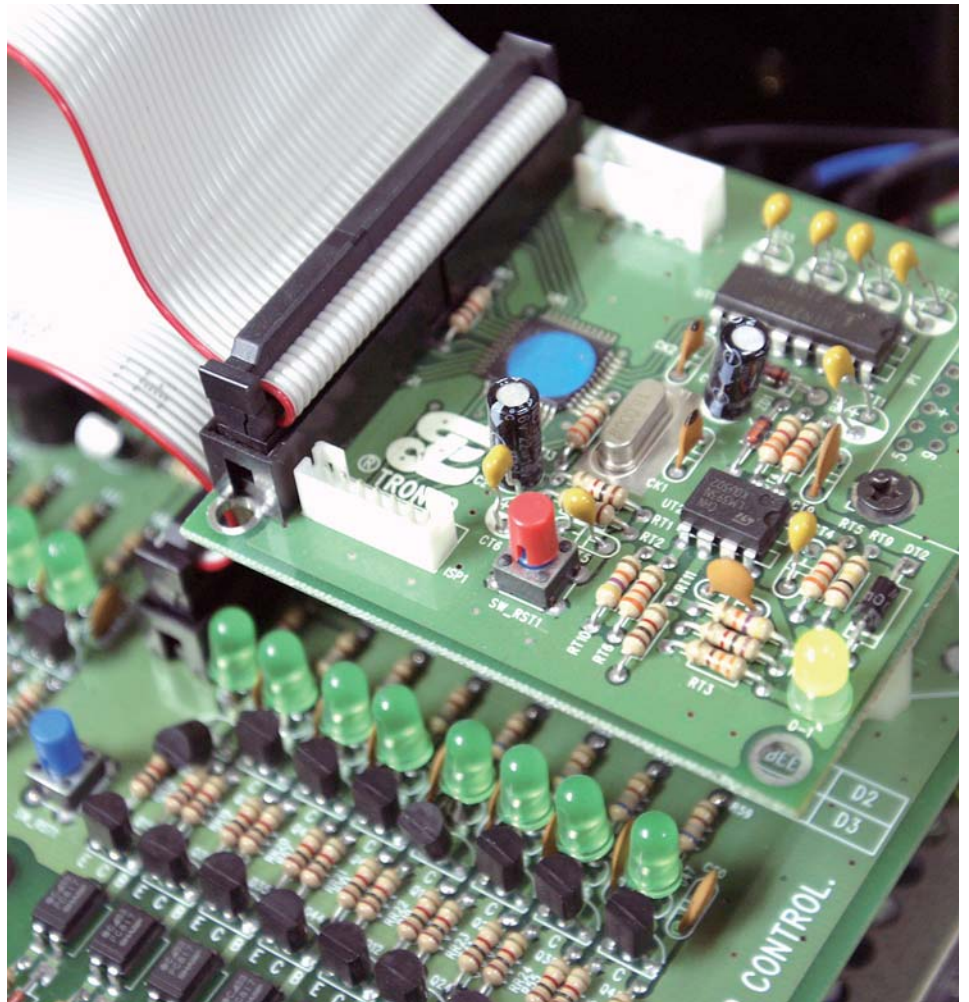
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Pioneer of the field of tonnage automatic sliding door

Tonnage automatic sliding door system is a professional automatic system for special applications, which is usually be used for automatic access system, such as anti-radiation for hospital, nuclear and atomic proof, and large-scale stainless steel door and so on. Tonnage automatic sliding door system have much stricter standards for power system, control system, drive system and safety, Tronco, who has accumulated many years' experience on R&D and manufacture in this field, is one of the rare firms that can manufacture tonnage automatic sliding door system and has participated in countless construction projects, we have won a good reputation in this field.

Tronco HS Series tonnage sliding door system has professional drive system especially designed for tonnage door, which can ensure the stable operation of door. The control system is intelligent and there are various anti-pinch modes available, the related facilities can be installed to add functions according to requirements. The system is equipped with DC brushless motor, which is developed and manufactured ourselves, has the features of heatless, noiseless and efficient. All the parts for system are modular in order to make the installation and maintenance conveniently. All the parameters can be configured according to clients' requirements.

Tronco tonnage automatic sliding door system combines power and intelligence perfectly; hence we established technical standards so that can stand out from competitions.



Excellent electric properties

Professional design of circuit system

Tronco HS Series tonnage automatic sliding door system adopts efficient switch power supply and universal voltage is acceptable. The eco-friendly and efficient circuit design can improve the stability in operation. It can also coordinate with emergency power supply system for escape in accidents.

Green, efficient DC brushless motor

Tronco HS series automatic sliding door system adopts the efficient DC brushless motor that both developed and manufactured by Tronco ourselves, which is small size, high rotation speed, low power consumption and heatless under persistent working, thus the temperature will be less than 50 centigrade degree all the time. It runs quietly and possesses the function of overloading protection and automatic restoration.

Customization available

Tronco HS Series tonnage automatic sliding door system, in order to make sure our products totally meet clients' requirements, can be customized according to fitting-on environment.

AI motor with deceleration function

Because of the heavy weight of tonnage door, the acceleration of gravity of door leaf is enormous. If the design is defective, there possibly can be the collision between door leaves and the loss can be caused easily for power transmission system when the brake is not fast enough. This system can make the AI motor speed down to keep the motion of door at steady speed so that to prolong the life-span of it.

Compulsory reversal

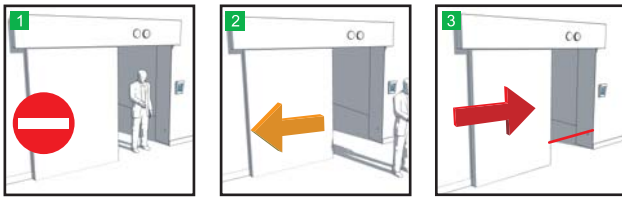
When there is an emergency case during the operation of door leaf, this function can be used to be emergency button.

Controlled by microprocessor and the safety is considered to be the first-rate importance

Four kinds of anti-pinch set up

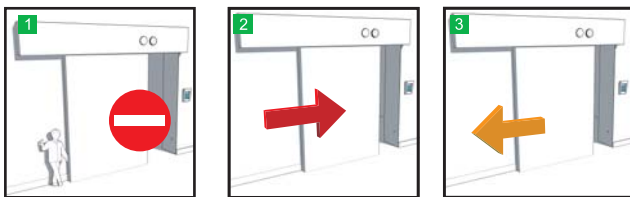
Tronco HS Series tonnage automatic sliding door offer 4 kinds of anti-pinch set up to ensure the safety of users.

A. To stop(Bidirectional)



a-1 Closing

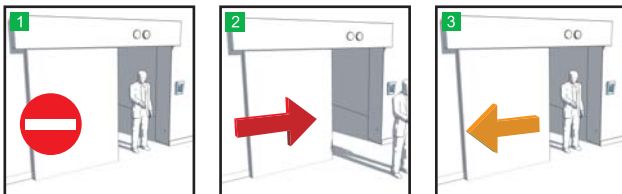
Pic.1 Once the sensor detects foreign body or abnormal situation in closing process, the system will stop immediately.
 Pic.2 The opening instruction remains acceptable but the closing instruction will force the closing instruction invalid.
 Pic.3 Press closing button to resume normal operation when the problem caused abnormal signal is settled.



a-2 Opening

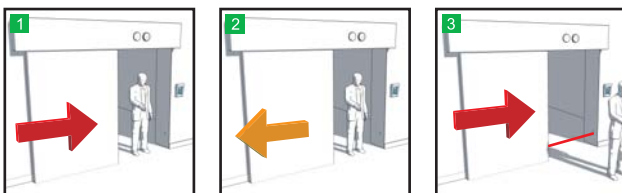
Pic.1 Once the sensor detects foreign body or abnormal situation in opening process, the system will stop immediately.
 Pic.2 The closing instruction remains acceptable but the intelligent kit will force the opening instruction invalid.
 Pic.3 Press opening button to resume normal operation when the problem caused abnormal signal is settled.

B.Intelligent(only for closing)



Pic.1 Once the sensor detects foreign body or abnormal situation in closing process, the system will stop action immediately to wait for the anomalous problem be settled.
 Pic.2 The door leaf will continue the closing action if the abnormal situation be settled in 2 seconds.
 Pic.3 If the anomalous problem remains over 2 seconds, the door leaf will turn back to the full-opened place automatically. The closing button must be pressed to make the door leaf to close again.

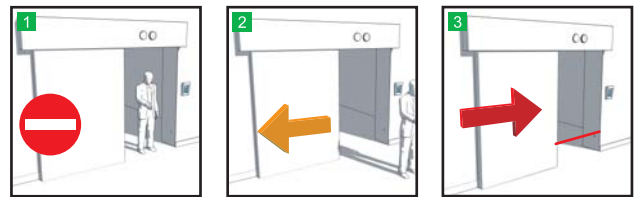
C.Safe (only for closing)



Pic.1 The sensor has detected foreign body and abnormal situation in closing process.
 Pic.2 The system forces door leaf to turn back to the full-opened place and the closing signal will be invalid.
 Pic.3 The closing switch will restore the normal operation when the abnormal situation is settled and then the door leaf will close once the button is pressed.

D.Closing(Single direction only)

The anti-pinch needs can be only considered in the closing direction when the door just under simple use.



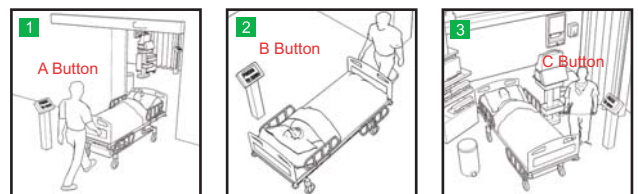
Pic.1 Once the sensor detects foreign body or abnormal situation in closing process, the system will stop immediately.
 Pic.2 The opening instruction remains acceptable but the closing instruction invalid.
 Pic.3 Door leaf can be turned back to the full-opened place and the closing button cannot resume normal operation until the problem caused abnormal signal is settled.

Support access control system



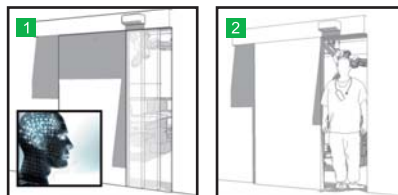
Tronco HS series tonnage automatic sliding door system can coordinate with various security systems to assist access control, people must use access card to open the door. The related facilities can also be installed according to access control level, such as remote controller, induction card machine, the card swipe machine, Encryption fingerprint access and etc.

“One-time opening and closing” mode available



This function makes the hospital staffs to push the sickbed into ward conveniently, which is usually applied to isolation wards or barrier-free space.
 Pic.1 Press button “A” to open the door when the hospital staff pushes the sickbed into ward.
 Pic.2 Press button “B” to close the door when the sickbed has entered ward.
 Pic.3 Press button “C” to open the door again when examination is finished.

Partial open mode



The opened distance can be adjusted according to personal needs, so this function can meet the requirements of privacy protection, energy conservation and hygiene, this function can be used for the essential entrance of a sickroom and laboratory.



Modular design, easy maintenance

Modular design

Tronco HS Series tonnage automatic sliding door system adopts modular design to enable the installation person to customize it in accordance with the fitting-on environment and the failed part can be changed apart to make the maintenance conveniently.

Five kinds of signal for door leaf's condition can be displayed

The displayed signal helps user to operate this system safely and maintenance people to know the condition conveniently.

- A.Opening
- B.Closing
- C.Opened
- D.Closed
- E.Abnormal

Centralized wiring for easy maintenance








The control system and external wiring groove are gathered in a control case to make the maintenance and repair convenient.

Specification

Type	H1	H2	H3	H4	H5	H6
Max. door panel weight	1-2 ton	2-4 ton	4-6 ton	6-8 ton	8-10 ton	special
Power supply	110V-130Vac or 200V-230Vac					
Frequency of input power	50HZ / 60HZ					
System	1. Microprocessor control: Opening speed, closing speed, brake power, anti-pinch power, actuating twist power. 2. Power supply 3. Opening speed 4. Closing speed 5. The closing distance of low speed 6. Hold-open time 7. Protection facility for motor (The hold-open time can be adjusted automatically if the continual operation causes overmuch heat) 8. Gear of motor is made of wearable material 9. There are visible or hidden wiring grooves in control case 10. Depth of chassis cover (This parameter can be configured according to user's requirement)					
Phase	3Ø					
Rated output	90W	120W	180W	250W	370W	↘
Max. output	200W	300W	400W	550W	700W	↘
Rated torque (kgcm)	4.4	5.8	8.8	12	18	↘
RPM	1650 / 2000 / 3000					
Max. efficiency	> 80%					

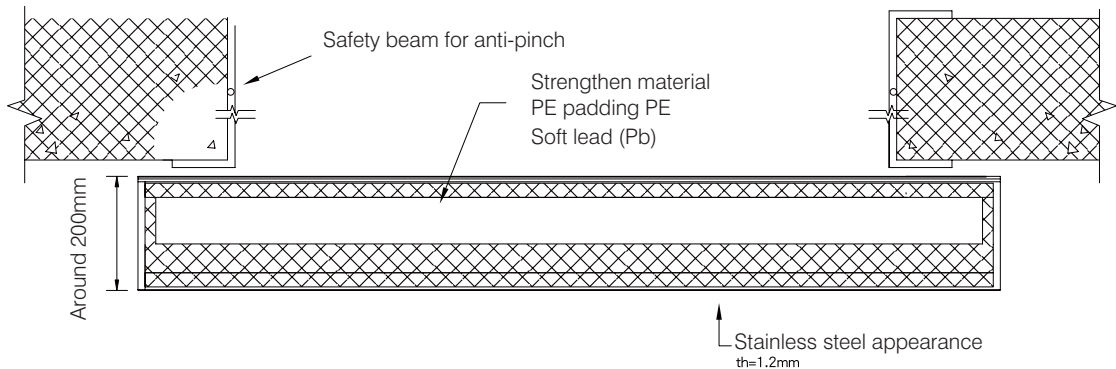
Purchase procedure

Tronco HS Series Heavy duty automatic sliding door system can be installed and tested by our well-trained technician team that has more than 10 years' experience, please refer to the standard procedure as below.

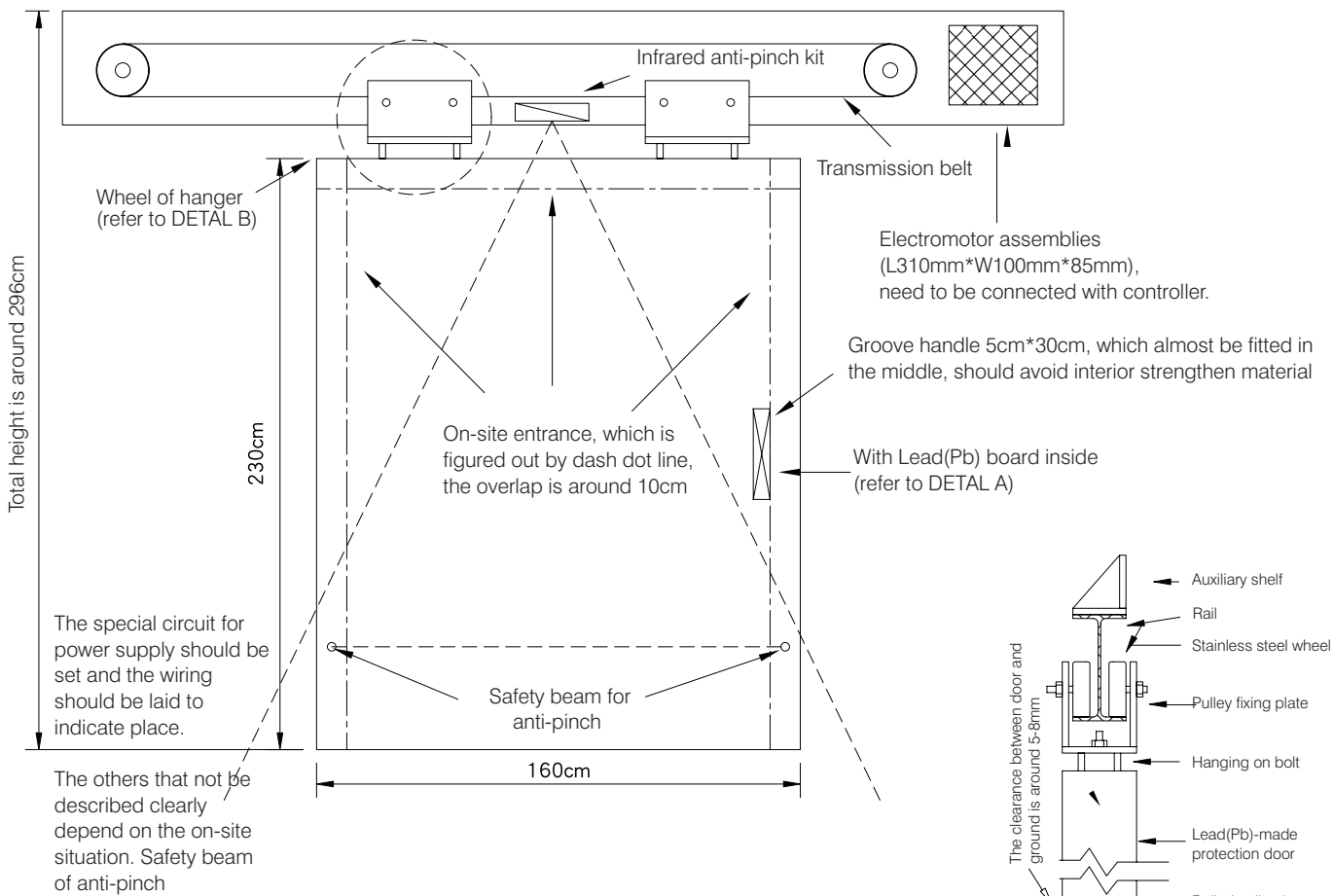
	Stage	Item
	Estimate	1. Estimate a possible price
↓		
	Preliminary reconnaissance	1. Structure design 2. Electric machine design 3. Spec. confirmation
↓		
	Contract (sign project agreement in detail)	1. Record fitting-on environment 2. Double-check basic drawing 3. Check the power source and wiring condition in construction site Manufacture in factory
↓		
	Manufacture in factory	1. Structure 2. Control system collocation 3. Program design
↓		
	Construction and acceptance	1. check specification 2. check appearance
↓		
	Correction of faults	1. List fault 2. On-site double-check
↓		
	Records of finished construction	1. Guarantee 2. Certification 3. File the on-site records of finished construction

Detailed drawing of Heavy duty automatic sliding door

anti-radiation automatic door



Anti-radiation automatic door panel and cross-section of frame



Anti-radiation automatic door and cross-section of door opener

Detailed drawing of door opener



The More Invention, The More Pleasure

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