





Automatic door system

US Series - Curved Sliding Door Resolution

## CURVED SLIDING DOOR

The Elegant Curved Appearance, Another Choice for Esthetic Sensibilities.

This curved sliding door is one kind of "metal curved line dynamic structure", the way using arc material builds the space use. Actually it's a development and transformation to space characteristics of automatic door technology. General smooth type automatic door are linear appearance, showing only a straight line. To enable the internal space of curved sliding door to be utilized, arc constitution relatively draw out straight line factor to appear graceful facade. Letting the contour of linear arc turned into a combination of a beautiful art.

Tronco use metal arc to define space, fully separate from the ordinary linear feel, turned the arc the spatial sketch. Letting automatic door enter into building works, to be feel what it defined beautiful space. Of course the long-short and position of these curved line constitute harmonious rhythm, it is not only an automatic door but also contains different motion style, those arc and straight line constitute a wholly life space.



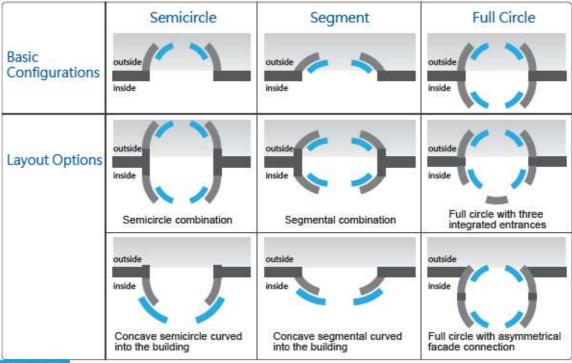


# DIVERSE STRUCTURE WORLD-CLASS ENTRANCE SOLUTION

A variety of structure enable us to offer you a suitable entrance solution for every building. US series is often used in retrofit projects to replace regular sliding doors. Curved sliding doors offer wider entrance openings than ordinary sliding doors.
You will find Tronco US series often in offices, hotels, restaurants, shopping malls, supermarkets, airports and many types of public buildings.

## A variety of designs and options

US series providing aesthetically pleasing custom design, full circles, semicircles, segments, double segments, convex and other styles deriving from theses designs to satisfy either contrast or harmonies with the building entrance.





## Intimate Design for Power Supply System

In conjunction with intelligent CS auto control system which adopted high efficiency changeable power supply unit can input voltage 110V-220VAC and provide extra power source 12VCD/1.5A and 24VDC/1A to satisfy surrounding electrical requirements of other electrical appliances and not need to purchase extra power supply to save cost and space.

## High Efficiency Circuit Design for Electricity Saving

It includes PFC design and power rate tend towards to perfect 100% so as to make utilization rate the optimum and the consumed power of this system is only 25W-40W. This device can operate smoothly only requiring power supply that is equal to an energy saving light Bulb or fluorescent tube.

## Tiny But Ingenious, High Efficiency, Environmental Protection, DC BRUSHLESS MOTOR

US series use high efficiency DC magnetic brushless motor which developed and researched by ourselves with tiny volume, high rotational speed, low electricity consumption and not to give out heat under the temperature 50 degrees centigrade. It runs quietly and possesses the functions of overloading protection and automatic restoration.

## Self-Monitoring

Innovative micro controller comes with built in self monitoring ability, can detect door leaves operating status and corresponding signal. If door leaves out of order during its operation, micro controller will react via signal window display or emit relevant alarm sound, to remind maintenance staff to check door leaves current status, and adopt relevant measurement to ensure US series safety operation.

## Self-Learning Function

US series possess many door motion settings, it can adjust door opening/closing speed and hold open time itself according to user habits. It also can prolong door opening time intelligently based on the pedestrian flow, truly achieved the perfect dialogue between people and door leaves.



## INSTALLATION & SETTING UP

The US series is a fully round door with two sets of curved bi-parting sliding doors and comes with two control panels. The control panels are easy to use and are mounted either on the door itself or at an external location such as a reception desk. Each set of doors can be programmed and operated separately.

#### Various convenient door opening and closing program settings

According to user preference, US series can be set to various door leaf motions through program selector easily to achieve function of security, privacy, health and convenience.

The following modes are available on the control panel.



#### **Automatic Mode**

When approaching the US series the first sliding door set opens automatically to let user enter the door. After entering the US series the second set of sliding doors will automatically open. When a person has passed through the circleslide, it will close automatically.

#### Night Mode (Closed)

In this mode both door sets are closed. The door sets can be opened once by turning the key switch on the outside or by using the push button on the inside (optional).

#### Permanently Open Mode

The US series moves to the open position and remains in this position.

## Interlocking Mode (Optional)

The US series can be fitted with a microprocessor-controlled interlocking function. During normal operation only one door set at a time will be opened. The second door set will only open after the first one has closed. To achieve control effect while to reduce the loss of air conditioning environment.

## **CUSTIMIZED DESIGN**

The US series owns various automatic door designs, including a single or bi-parting sliding door and its surface finishing. It can be customized with a variety of internal and external appearance changes.

The curved walls are available in either solid or glazed version. Combinations are also possible. The solid walls are constructed from high-grade aluminum sandwich panels which provide a spacious and transparent feeling and consist of slim aluminum sections with laminated glass. The frame and door sets can be finished in powder coated or anodized aluminum (natural or color). Certainly US series can also be covered with stainless steel, bronze, brass or other metals.











## PERFECT SAFETY PROTECTION

US series comes with various safety mode, can add-in many kinds of safety devices. CS Series controller can power-on self-learning, failure self-detection, abnormal self-protection, providing safe environment for user is the one goal we are aiming to.

## Motion and Presence Sensor

The sensor has two functions:

- Detect the presence of people standing between the sliding doors in order to prevent persons or objects being hit by the sliding doors.
- Detect the motion of people in the US seriers. If the sensor is activated the sliding door opens automatically.

#### **Emergency Push Button**

US series can be used as an escape route in emergency situations. The door sets will open or close automatically in case of an emergency. Both sliding door mechanisms have been equipped with an emergency power supply so that the US series remains operational during a power failure.

## **Emergency Push Button**

When the button is activated, both door sets will stop immediately. Visitors leaving the building can press an emergency button in the event of emergency, which will immediately stop both door sets.

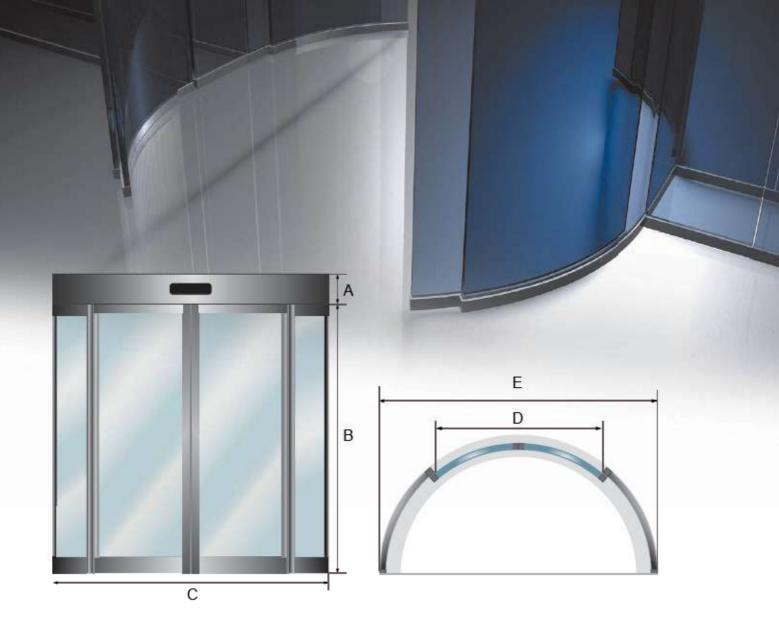
## Side Wing Sensor (Optional)

The curved sliding movement of the US series is protected by a special sensor, which gives an acoustic signal to advise people who are standing inside the door, in order to prevent an accident caused by the moving sliding door.

#### Collision-proof Anti-clamping and Foreign Body Detection

When sliding doors encounter an obstacle while they are opening or closing respectively, the stop and reverse mechanism will activate to ensure sliding doors stop and open immediately. The sliding doors will then slowly check their path for obstacles after which they will return to their normal speed. The purpose of this function is to prevent people from getting hurt if infrared ray sensor doesn't work.





## **US Series Standard Dimensions**

(A)	(B)	(C)	(D)	(E)
Canopy Height	Height Under Canopy	Installation Width	Entrance Opening Width	Diameter
350-650mm	2250-2650mm	1938mm	1078mm	1850mm
350-650mm	2250-2650mm	2138mm	1220mm	2050mm
350-650mm	2250-2650mm	2338mm	1362mm	2250mm
350-650mm	2250-2650mm	2538mm	1505mm	2450mm
350-650mm	2250-2650mm	2118mm	1647mm	2650mm
350-650mm	2250-2650mm	2938mm	1789mm	2850mm
350-650mm	2250-2650mm	3138mm	1930mm	3050mm
350-650mm	2250-2650mm	3338mm	1394mm	3250mm
350-650mm	2250-2650mm	3538mm	1494mm	3450mm
350-650mm	2250-2650mm	3738mm	1594mm	3650mm
350-650mm	2250-2650mm	3938mm	1694mm	3850mm

Other options apart from the standard dimensions are also available, please contact Tronco or our distributor for more information.



## FREE EXTENSION, FUNCTION PROMOTION

US series owns high compatibility and strong function extension, it can be installed related accessories according to customer actual needs to promote door leaf function. Also it can connect with building security system to assist people inside building to escape upon fire alarm or other escape signal emits. Door leaf also can add other accessories, such as canopy down lamp, low energy lamp, watertight roof and glass protection railing etc.

## **US Series Technical Specifications**

Feature	Data
Opening Width	1000-2000 mm
Height Under Canopy	2650mm
Door Leaf Weight	Max: 2*120kg
Minimum Radius	900mm
Opening Speed	0.7 m/s
Closing Speed	0.4 m/s
Hold Open Time	0~60sec
Power Input	110V/220VAC 50/60Hz
Power Supply	100W
Output Power	DC12V/1.5A DC24V/1A
Motor	Brushless DC Electric
Motor Rated Wattage	40~60W
Level of Protection	IP20
Ambient Temperature	-20℃~+45℃

## **QUALITY & CERTIFICATION**

## **High Quality**

Tronco, taking quality seriously. Quality of our employees, the materials we use, the quality of our partners as well as the quality of all Tronco products.

Whether you opt for a merely functional product or for classic elegance with ultimate functions, Tronco automatic doors always offer you a high degree of safety and comfort while ensuring an unobstructed pedestrian flow and satisfying diversified architectural design requirements.









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