



# REVOLVING DOOR

## AUTOMATIC TWO-WING REVOLVING DOOR



### ABOUT REVOLVING DOORS

Revolving doors offer an impressive aesthetic appearance and effectively separate indoor and outdoor conditions. IDC/KBB's superior designs provide an imposing entrance to any building, while serving as an airlock as well, to minimize a building's heating and air conditioning losses, therefore maximizing energy savings. There are numerous variations and functions according to the needs passing.

Revolving doors are categorized in two different categories according to the way they revolve: two-wing doors and three-four-wing doors. Each door consists of a glass body with an aluminum frame. The operation of the doors can be manual or automatic.

### KA022

Comparing with ordinary revolving doors, the KA022 revolving doors provide the highest safety assurance as they adopt IDC/KBB's exclusive "drum wall load-bearing" structure. It is the firmest two-wing door across the world and has the strongest ability to evacuate. The unique design allows the doors to bear even and run steady providing superior safety. A key feature included is the panic breakout exit function for safe and efficient evacuations.

### THREE IN ONE

#### Revolving Door:

The revolving door design effectively controls indoor and outdoor air exchange. Energy consumption is lowered due to the controlled environments in air conditioning and heat preservation. Other benefits of these doors are the wind proofing, ash proofing and noise reduction



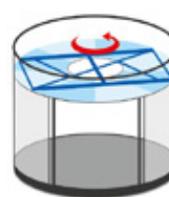
#### Sliding Door:

Sliding door Incorporated within a revolving door can provide a more efficient flow for faster and heavier pedestrian traffic.



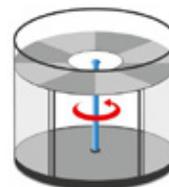
#### Balanced Door:

Balanced door is able to provide maximum opening width for peak flows, large cargo and evacuation situations.



#### Two-wing automatic revolving doors

The door wings of two-wing doors are fixed to the H-girder which can drive the door wings.



#### Three/four-wing revolving doors

The door wings of the three/four wings revolving doors are fixed to the central axis which can drive the door wings.



### DRUM WALL LOAD-BEARING

The KA022 doors use IDC/KBB's exclusive "drum wall load-bearing" structure. This is the essential element to keep the structure safe and of superior quality. Compared with other two-wing doors that are pole-bearing, the KA022 provides a door with better stability.



IDC/KBB drum wall load-bearing



Other pillar-bearing

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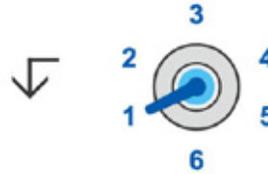
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# REVOLVING DOOR

## AUTOMATIC TWO-WING REVOLVING DOOR

### Program Selector



The switch allows the user to control the operating state of the door through six programs depending on their needs.



#### Emergency Stop Button:

The emergency stop button is able to stop movement of the automatic door under any circumstance, ensuring safety of the passerby in case of emergency.



#### Key Switch:

The key switch has three modes: Revolving Door, Sliding Door and Remote Controlled Door.



#### LED:

The LED lighting panel displays the operating state of the door, and shows possible error codes for troubleshooting.



#### Disabled Push Button:

The disabled button can control the speed of the door and stow it down for the safety of younger, older and disabled passersby.



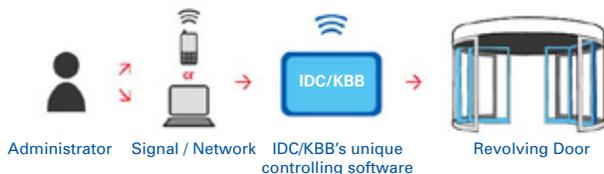
#### Backup Battery:

The backup battery ensures normal operations when the door is powered off.



#### Mobile Phone/Internet Monitoring:

IDC/KBB's unique control software can be used to facilitate the management of the door through mobile phones or the Internet. With this feature, the manager has remote operation functions and is able to monitor the operation status and alarms.



#### Night lock

In this position, the door stops after automatically revolving to the Night Lock position. The electromechanical lock is then triggered to lock the door, keeping the building safe.



#### Opening Position Stop/Start

The key switch has three modes: Revolving Door, Sliding Door and Remote Controlled Door.



#### Closing Position Stop/Start

In this position, the door will automatically stop in the closing position when nobody passes by. When the door is approached upon, infrared radars will be activated and the door will revolve for one circle (and continue when people walk through). This setting is ideal for difficult weather conditions and when the temperature difference is more significant.



#### Low/High Speed

In this position, the automatic door will revolve slowly (0.5~2.5 c/min, adjustable) when no one is passing by. When the door is approached upon, infrared radars will be activated and the door will revolve for one circle (in a higher speed, to allow a more efficient passage). This setting is ideal for difficult weather conditions and when the temperature difference is more significant.



#### Revolving Counter-Clockwise Manually

In this position, the infrared radars are disabled and the door stops revolving. The doors will revolve slowly in a counter clockwise direction when the reset button is pushed. In this position, the door can be pushed to operate (force: 110~150N). This setting is most suitable for cleaning and maintenance.



#### Revolving Clockwise Manually

In this position, the infrared radars are disabled and the door stops revolving. The doors will revolve slowly in a clockwise direction when the reset button is pushed. In this position, the door is to be pushed to operate. This setting is most suitable for cleaning and maintenance. This function also ensures that any trapped object can be safely removed.

## ADVANCED SAFETY DESIGN



### Safety Relay

The safety relay can monitor whether the compressible horizontal safety buffer works at any moment. An alarm will sound when the buffer breaks down.



### Torque Control Function

When the distance between the moving door wing and the fixed one is less than a certain space, the driving force will be reduced. At this point, users entering the space will not be hurt.



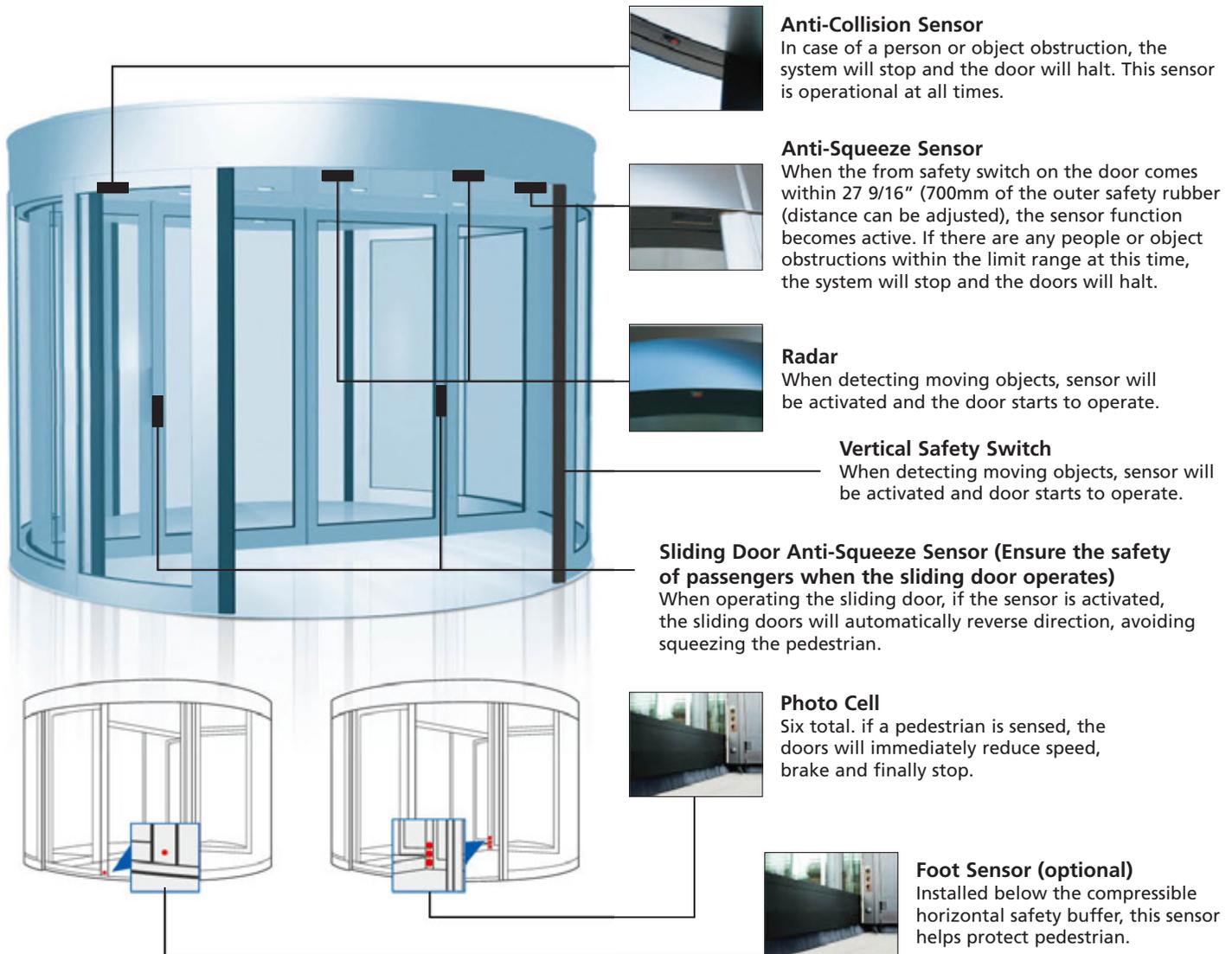
### Mechanical Axis Braking Driving

The rotary table and the motor brake at the same time, providing the passerby complete safety in case of an emergency.



### Emergency switch Function

To ensure complete safety, a UPS power supply is incorporated in case of emergencies. When the passengers are trapped inside a door, this function can make the door open.





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## AUTOMATIC TWO-WING REVOLVING DOOR

IDC/KBB offers different series of two-wing doors to fulfill its consumer's requirements and expectations.

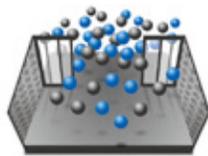
### ENERGY-SAVING AND ENVIRONMENT-FRIENDLY

IDC/KBB's revolving doors use a unique design referred to as windmill revolving body. Its revolving direction is consistent with that of the wind. The design cuts of the exchange of indoor and outdoor air, allowing for cost and energy savings of 10% or more than other revolving doors. It is estimated that the cost of a IDC/KBB two-wing automatic revolving door is equivalent to the money it saves in three years.

Through simple calculation you will find the price difference of revolving doors and sliding doors is equal to the energy consumption cost saving of 2-3 years by using revolving door instead of sliding door.

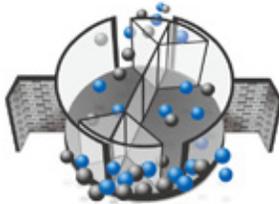
As for the sliding doors, the amount of air exchanged varies according to the size of the area, time of the opening of the door and the speed of airflow.

●● = Air



sliding doors

The air exchange for revolving doors depend only on the inside air volume and the number of times



revolving doors

$$\text{Environment Energy Consumption ( EC )} = \text{Temperature Difference Between Internal \& External ( TD )} \times \text{Air Exchange Volume ( EV )} \times \text{Specific Heat Capacity of Air ( C )}$$

#### KA022

Features the operations of three in one



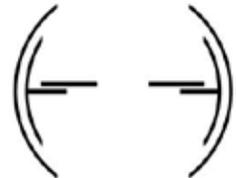
#### KA022-2W

Features two-wing revolving doors with the function swing doors



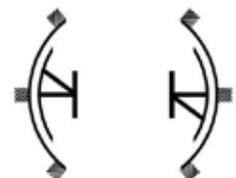
#### KA042

Features two-wing doors without showcases



#### KA062

Features frame decorated with column of different shapes





# REVOLVING DOOR

## TWO-WING REVOLVING DOOR

### TWO-WING REVOLVING DOORS DIMENSION

Names	KA022-2364	KA022-2424	KA022-2484
Inner Diameter	141.73" (3600mm)	165.35" (4200mm)	188.98" (4800mm)
Outer Diameter	145.20" (3688mm)	168.82" (4288mm)	192.44" (4888mm)
Total Height	103 15/16" (2640mm)	103 15/16" (2640mm)	103 15/16" (2640mm)
Clear Passage Height	90.55" (2300mm)	90.55" (2300mm)	90.55" (2300mm)
Opening Width	70.87" (1800mm)	82.68" (2100mm)	94.49" (2400mm)
Opening Width of Sliding Door	43 5/16" (1100mm)	55 1/8" (1400mm)	66.93" (1700mm)
Emergency Escape Passage Width	70.87" (1800mm)	82.68" (2100mm)	94.49" (2400mm)
Canopy Height	13.39" (340mm)	13.39" (340mm)	13.39" (340mm)
Persons/Min	48	64mm	80mm

### TECHNICAL PARAMETERS

Power supply	220 V/AC ± 10% 50Hz
Revolving door motor power consumption	250 W/ACx2=500W/AC
Lighting	12V/AC 420W
Lighting power	12V/AC 600W
High speed adjustment range	1~4r/m
Low speed adjustment range	0.5~2.5r/m
Ambient temperature range	-15°C~50°C

### CONFIGURATION

Standard	Optional
Curved glass: 4+4mm/ 5+5mm laminated glass/ Laminated safety glass/ Aluminum frame Aluminum ceiling/ Control unit Digital display screen/ Emergency stop button/ Drive unit Ceiling spot light: 12V/AC/ Backup battery/ Radar	Surface finish: anodizing, stainless steel cladding, powder coating waterproof cover dust cover Mobile phone monitoring system Fixed door wing safety switch Safety relay/ Electromagnetism brake LED ceiling spot light/ Stainless steel ceiling

Note: Design and specifications are subject to change without notice, as they are based on product development.