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RVU300/RVU400 RVU300C/RVU400C

Automatic Revolving Door



# RVU300/RVU400 RVU300C/RVU400C

The entry into any building is the first element which welcomes its visitors. Architects "celebrate" the design of an Entrance to all buildings. The entrance being the building's focal point, must therefore guarantee the essentials: durability, safety and service. With today's technology, revolving doors are believed to be the most environmentally-friendly and energy-saving solutions. This is due to the fact that this type of entrance follows the "always-open, always- closed" rule. This means that there will be a barrier between the air inside and outside the building which, in turn, results in less noise, dust and draught. Conclusion:

- Less Noise Pollution
- Lower Air Pollution
- Less Energy Loss
- Less Draughts
- Lower Carbon Footprint

Ambient lobby and environmental temperatures maintain overall comfort and promote a better working and living environment.



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The RVU revolving door, which is available in 3 and 4 leaf models, is a Contemporary Design while offering the highest levels of energy-saving by reducing energy exchange between the inside and outside of buildings. This model is either available with minimal frame profiles (RVU300C/RVU400C) or bold frame profiles (RVU300/RVU 400). Deutschtec RVU revolving systems will bring elegance to the entry area of any building and enhance all façade types and overall building design. The operating system is concealed under floor to provide an uninterrupted view both from inside and outside the entrance. This system includes a turnstile with 3 or 4 leaves, an operator which is concealed underneath the floor, a structural frame as well as activation and safety sensors.

Available as 3 or 4 leaf revolving doors with glass canopy and concealed in-ground drive unit:



The R&D and final engineering has produced an Intelligent Operator using State-of-the-Art engineered components, sourced and manufactured in Germany.

Our highly qualified team of engineers has produced a brushed DC motor with enhanced functionality that is highly efficient and versatile using the latest technologies. Whilst this motor is very innovative, it is so quiet that while in action, you will hear nothing but a whisper.

Our drive unit incorporates a high reduction ratio gearbox that makes it possible to produce enhanced output torque for driving large and oversized doors braking in the least possible distance, exceeding EN Standards. R&D has produced a unique silent chain drive providing near silent performance with a unique corresponding chain wheel are housed in each operator. Therefore, Deutschtec's RVU operators have significant lower noise levels in comparison with other revolving door operators(Please refer to our technical specification data for comparison). Also this operator can be equipped with a unique High Security electromechanical lock for high wind pressure situations or other applications.

# OPERATION MODES

Our RVU revolving system has five different operation modes, which can be set by the mechanical or digital key switch. It is possible to adjust the setting via our wireless DMS application. The five different modes of operation are:

# Off / Close

In this mode, the turnstile is in a fixed position and the door can be locked. The locking of the door can be automatic by electronical means or manual with a key, depending on the choice of lock. The position in which the door stops is in Y position for a 3-leaf door and in X position for a 4-leaf door. The lock is located on one rotating door leaf.

### Constant

The door revolves slowly without any external activation caused by people movement. When activated by a person the door speeds up to normal rotational speed. The normal rotation is continued until there are no more external activation impulses, (people activity). If there are no further activation signals, (people activity) the rotating leaves will return to its energy saving slow rotational mode.

### Automatic

The door starts to rotate when it is activated by people movement. When there is no further activation signal the door stop in a specific position.

### Summer

In this mode the door leaves stop in a specific position to prevent external air from entering the building between the movable and fixed leaves while the door stops. This option prevents wasting precious energy during summer and winter months.

### Manual

In this mode the door can be rotated by hand. This mode is intended for regular cleaning and maintenance.













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# **ACTIVATION & SAFETY SENSORS**

We constantly strive to engineer State-of-the-Art products. Safety is of paramount concern and leads our R&D process. As such we have developed a safety system which monitors in a "Pro-active Safety" System. This means that all our revolving doors do NOT require individual physical contact before the emergency stop is activated and the revolving leaves STOP.

Our "Proactive Safety" System:

Using 3D laser scanning technology ALL critical safety zones are monitored 24/7. Via our unique drive system, rotational speed is controlled and adjusted constantly depending solely on people activity. Simply get too close, the doors slow down. Get even closer, the doors will STOP.

We have taken revolving door safety to another level.

No physical "crunch" contact with rubber bumpers necessary to STOP our revolving doors in an emergency.

The door control system reacts to different impulses received from sensors and switches. These are outlined below showing the pinch zones on a revolving door and the sensors used to safeguard these areas.



# Activators (yellow)

Activation sensors are used to observe people activity inside and outside the entrance area of the revolving door. If a person is within scanning zone the door will start rotating.

# Safety sensors (red)

State of the art laser technology is used at the critical areas shown in red inside and outside the door, as shown above.

# Bumper (blue)

Vertical rubber bumpers with built in safety sensor cables are only activated by physical contact with the rubber bumper.

We have developed an elegant minimal solution to address this critical "pinch" zone.

NO physical touch or "pinch" is necessary to STOP the revolving door in an emergency.

Our engineering development together with 3D laser technology means:

'get close and the door will slow down, get even closer and the door will stop'.



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This mode cannot be interrupted until the slower speed cycle is completed. The only possible way to interrupt the handicapped mode is to push the emergency

# Emergency Stop Button

**Disabled Push Pad** 

stop button.

This button overrides all other modes & activities. The door stops immediately. Our drive unit reverts to manual push operation only. This default is integrated in the main control panel. That means the controller is in a stop state and can only be re-activated again by qualified personnel (reset switch).

# safety warnings

- The RVU system has been designed, manufactured and tested in accordance with strict international regulations

- To ensure correct operation regular maintenance by an authorized engineer must be undertaken at regular intervals, and depends on the frequency of use.

If you have any queries regarding the installation manual, please contact DEUTSCHTEC GmbH.



RVU300/RVU400

RVU300C/RVU400C

Once this button is pressed, the door rotates at a reduced speed.







unique design and dimensions appropriate for the size and weight of door leaves.



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