

# Revolving Doors with Access Control

## Besam RD3A1, RD4A1 and RD4A2

**ASSA ABLOY**

ASSA ABLOY Entrance Systems

The global leader in  
door opening solutions



Besam revolving door systems with access control are designed to handle the somewhat contradictory demands of restricted access in one or both direction(s)

### **Sustainable Entrances**

Besam revolving doors can reduce the amount of energy needed to heat or cool a building, resulting in optimal energy savings and smaller carbon footprint. Regular maintenance, additional sensors and add-on products can further increase saving capabilities while prolonging the equipment's life.

### **Comfort, safety and economy**

Besam revolving door systems with access control are the answer to many demands full of contradictions: the door needs to be open, but locked, or the door needs to be open without sacrificing climate control or increasing energy costs. The door is designed to allow authorised persons to pass whilst preventing unauthorised passage. The door functions perfectly as a supervised main entrance, a staff entrance or as the entrance to a restricted area.

### **Technical specifications**

Power supply	230 V, 50 Hz, mains fuse max 10 A, 100-120 V, 50/60 Hz, mains fuse max 16 A
Power consumption	200 W /30 W resting
Lighting LED 5 W	30 W

Because it is a revolving door, it maintains complete separation between the indoor and outdoor climates. This improves the internal environment by reducing draughts and can also result in energy savings.

### **Safety the highest priority**

The door range combines safety with security and practicality.

To prevent injury, the drum edges are equipped with soft safety edges. The rotating section is "force sensitive". This means that if something prevents the door leaves from rotating, the rotation will stop for a brief time before starting again.

### **Safety features**

- If an obstacle prohibits the rotation of the door (the resistance is higher than the pre-set value), the rotation will cease
- Compressible vertical safety switches placed on the drum edges
- Speed control
- Electromechanical as well as mechanical drive arm release allows the door to rotate free when activated
- Electromechanical drive arm release can be integrated with a fire alarm system



Frame system



Slim system with shaft



Slim system without shaft

### Design

The doors can be ordered in several different configurations depending on the customer's needs. There are two options for the outer drum and three different types of door leaves to choose from, each with a different look and feel. Depending on the rail and panel options selected, the door can produce varying degrees of interior privacy.

The doors are available in various sizes with flexible internal height and fascia height to match any building.

All of our revolving door systems are made from Besam-designed aluminium profiles, which can be anodized, powder-coated or stainless steel-clad. The drive mechanism is fitted on a frame above the laminated ceiling. The drive shaft bearing is fixed to the finished floor. Brushes seal the door tightly. The doors are designed to be placed and fixed directly onto the finished floor surface. No special foundations are required. For unfinished floors, a ground ring is available as an option.

### Access control system

The control system was developed by Besam specifically for use with its products, and the result is a fully integrated entrance solution with no compromise in design or function. The system ensures lowest operating/maintenance cost, high safety and best availability.

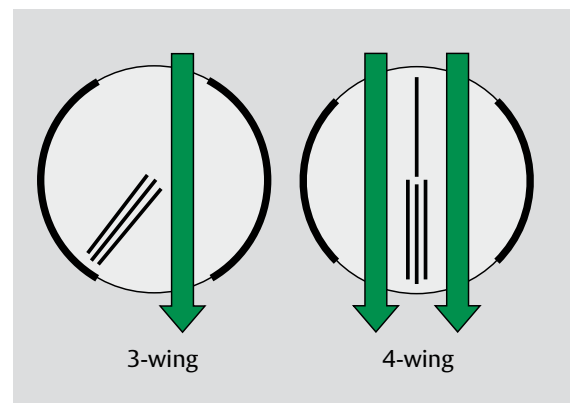
On receipt of a validated authorisation signal from the access control system, the door starts to rotate. The authorised person enters the door and the detection system allows him/her to pass. If an unauthorised person tries to follow in the next compartment, the door allows the authorised person through, then stops and reverses leaving the unauthorised person without access to the restricted area. If many people want to go through the door at the same time, the system can queue up to 10 persons between the access control device and the door.

### Models

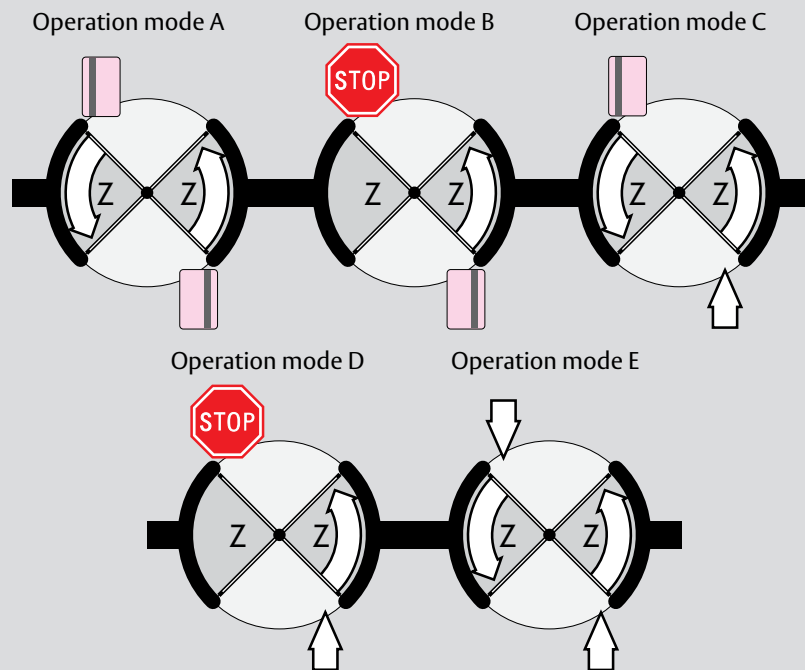
Besam revolving door systems with one-way access control (Besam RD3A1 and RD4A1) are available in 3- or 4-wing models. The revolving door system with two-way access control (Besam RD4A2) is available in a 4-wing model.

### Evacuation path

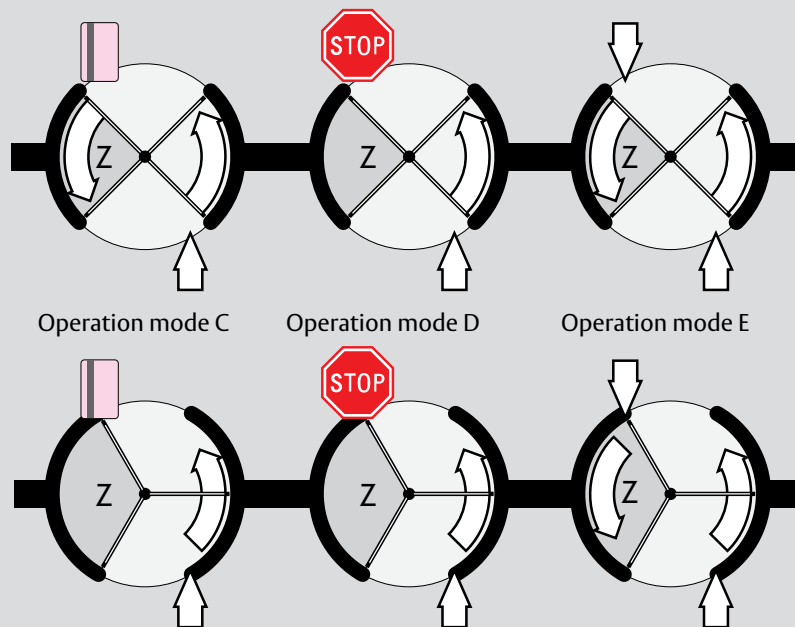
By adding the emergency break-out system, a clear, unimpeded evacuation path through the revolving door can be achieved. The break-out system can be integrated with a fire alarm system. The unique design also ensures that the door leaves collapse only when required and not under wind pressure. The break-out system can also be very useful under less dramatic circumstances, for example when bringing long objects through the entrance.



Two-way Access Control Door: Besam RD4A2



One-way Access Control Door: Besam RD3A1 or RD4A1



### Detection system

The detection system is a contact mat detection system or ceiling mounted sensors. The areas covered by the contact mats are marked with Z.

### Operation modes

The following modes of operation are built into the system:

- A Access-controlled traffic in both directions (Besam RD4A2 only)
- B Access-controlled traffic in one direction and no traffic in the other direction (Besam RD4A2 only)

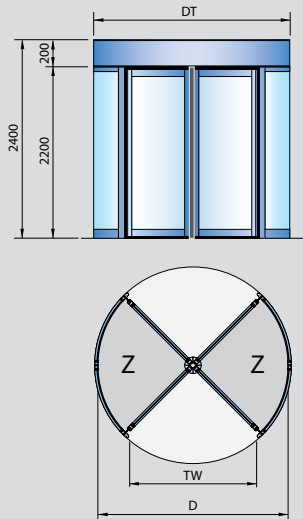
C Access-controlled traffic in one direction and free traffic in the other direction

D Free traffic in one direction and no traffic in the other direction

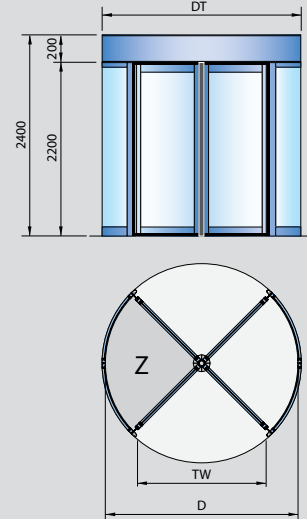
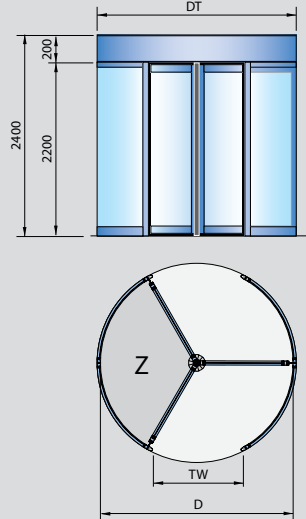
E Free traffic in both directions

With all these different operational modes, the different systems are well-suited to work as a normal revolving door as well as an access controlled entrance.

## Two-way Access Control



## One-way Access Control



Access Control doors are available in sizes 1800-2400.

For detailed information please see Product Sheet 1003724 for Besam RD3 and RD4.

### Standard equipment

Automatic drive
Control unit built-in behind the fascia above the inside entrance
Microprocessor controlled with plug-in modules and status display
Vertical safety switches
Glass wall 4 + 4 mm clear laminated (Frame/Slim)
Glass door leaves 3 + 3 mm laminated (Frame) 6 + 6 mm laminated and tempered (Slim)
Other types of glass available
Door sections made from aluminium profiles
Ceiling made from white laminated panels
Dust protection roof made from white laminated panels
Connections for detection systems
Electromechanical drive arm release
Mechanical drive arm release

### Accessories and Options

Besam activators
Powder-coated finish (RAL colours)
Anodizing, clear or bronze
Stainless steel cladding
Night closing doors (NCD), manual or automatic
Emergency stop
Mechanical lock NCD
Fascia, non-standard height (200 - 1250 mm)
Internal height non-standard (2100 - 2600 mm)
Sheet metal sandwich panel instead of glass (Frame only)
Spotlights/Downlights
Water-resistant cover
Emergency break-out system with electromechanical release
Midrails on door leaves or and/or outer walls
Hang sensor on the rotating part
Detection system
Additional safety on rotating part
Ground ring for unfinished floor
Remote program selectors
Various options for ceiling surface
Modem for remote operation

This equipment should be installed, regularly inspected, maintained and serviced by trained and authorized personnel. Preventive maintenance plans are highly recommended for a proper and safe operation. Talk to your ASSA ABLOY Entrance Systems representative to learn more about our service offering!