

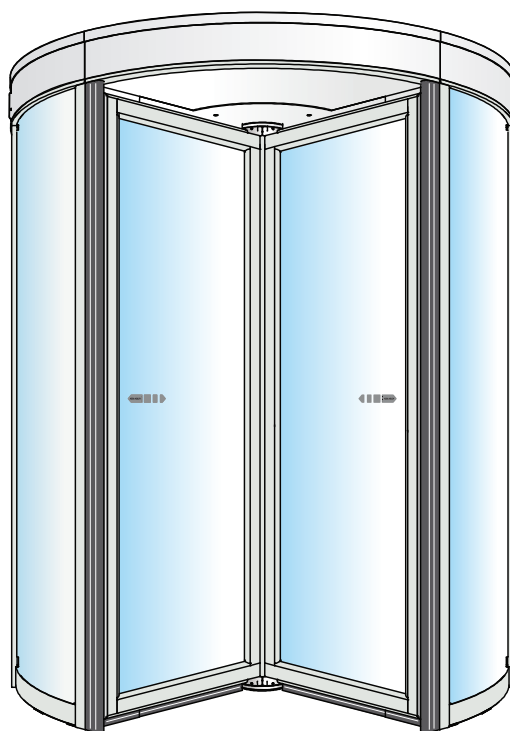
User Manual

Revolving Door



ASSA ABLOY RD150-3, RD150-4

ASSA ABLOY
Entrance Systems

Experience a safer
and more open world



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Instructions for safe operation



- Failure to observe the information in this manual may result in personal injury or damage to equipment.
- To reduce the risk of injury of persons - use this door set only as a pedestrian door.
- Do not use the equipment if repair or adjustment is necessary.
- Disconnect supply when cleaning or other maintenance is to be carried out.
- The operator can be used by children over 8 years of age if they have been instructed by a person in charge of their safety.
- The operator can be used by children 8 years of age or younger if they are supervised by a person responsible for their safety.
- The operator can be used by persons with impaired physical, sensory or mental capacity if they have been instructed by a person in charge of their safety.
- Cleaning and user maintenance shall not be made by children.
- Do not let anyone climb on or play with the door or the fixed/remote controls.
- The doorset can be operated automatically by sensors or manually by activators.

Congratulations on your new automatic door!

ASSA ABLOY Entrance Systems AB has developed automatic doors for more than 50 years. State-of-the-art technology and carefully tested materials and components provide you with a superior product.

As with all other technical products, your automatic door requires periodic maintenance and service. It is essential that you know your automatic door (system) and that you recognize the importance of maintaining it in compliance with applicable standards for safety.

Your local ASSA ABLOY Entrance Systems-authorized representative is familiar with these standards, as well as all applicable local codes and ASSA ABLOY Entrance Systems recommendations for power-operated pedestrian doors. Service and adjustments performed by your ASSA ABLOY Entrance Systems-authorized representative, will ensure safe and proper operation of your automatic door unit.

Electronic equipment reception interference

The equipment may generate and use radio frequency energy and if not installed and used properly, it may cause interference to radio, television reception or other radio frequency type systems.

If other equipment does not fully comply with immunity requirements, interference may occur.

There is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna.
- Relocate the receiver with respect to the equipment.
- Move the receiver away from the equipment.
- Plug the receiver into a different outlet so that equipment and receiver are on different branch circuits.
- Check that protective earth (PE) is connected.

If necessary, the user should consult the dealer or an experienced electronics technician for additional suggestions.

Environmental requirements

ASSA ABLOY Entrance Systems products are equipped with electronics and may also be equipped with batteries containing materials which are hazardous to the environment. Disconnect power before removing electronics and battery and make sure it is disposed of properly according to local regulations (how and where) as was done with the packaging material.

Product liability

According to regulations, the following are the responsibility of the owner or caretaker of the equipment

- that the equipment operates correctly, so that it gives sufficient protection in regard to safety and health
- that the equipment is operated and regularly maintained, inspected and serviced by someone with documented competence in the equipment and in applicable regulations
- that the provided "Service Log Book" and "Site Acceptance Test and Risk Assessment" documents (PRA-0003) are kept available for maintenance and service records
- that inspection covers the emergency opening function (when applicable)
- that the closing force is appropriate for the door size on fire-approved door systems (when applicable).

Warranty

ASSA ABLOY Entrance Systems warrants its products to be free from defects in material and workmanship under intended use and service for a warranty time of 12 months, beginning at time of delivery. This warranty extends only to the original buyer of the equipment.

ASSA ABLOY Entrance Systems warrants that the software will operate substantially in accordance with its functional descriptions and that it has been recorded on non-defective media.

The ASSA ABLOY Entrance Systems warranty does not apply to

- That the software will be error-free or operate without interruption
- General wear and tear on the system
- Fuse, disposable batteries and glass damage
- System deviations caused by installer other than ASSA ABLOY Entrance Systems
- System that has been altered or damaged by vandalism or misuse
- System that has been additionally equipped with non-ASSA ABLOY Entrance Systems original branded parts and/or spare parts
- Unrequired visits due to poor client communication (door working when our technician arrives, reset, power discontinuation)
- Adjustments (closing and opening speed and also detection field radars) due to customer requests (excludes operational adjustments thought to create a hazard)
- Water damage
- Adverse weather conditions
- Any damage caused, directly or indirectly, by a circumstance beyond the control of the applicable company within ASSA ABLOY Entrance Systems, such as industrial dispute, fire, natural disaster, war, extensive military mobilization, insurrection, requisition, seizure, embargo, restrictions in the use of power and defects or delays in deliveries by sub-contractors caused by any such circumstances

Please note:

- Non-compliance with manufacturers care and maintenance recommendations may void the warranty.
- ASSA ABLOY Entrance Systems-authorized resellers shall extend this warranty to end-users only, but have no authority to extend a greater or different warranty on behalf of ASSA ABLOY Entrance Systems.
- A service agreement with ASSA ABLOY Entrance Systems will help secure the availability of a fully operational system and will give priority at call-out, thus minimizing the time that the equipment is unusable.

Service

Inspections should be done regularly by a trained and qualified person. The frequency of these inspections should be according to national regulations (or according to industry standard if there are no national regulations). This is especially important when the installation concerns a fire-approved door or a door with an emergency-opening function. To extend the life of your investment and ensure safe and reliable operation of the door, we recommend a minimum of 2 visits per year or more, depending on usage and operating conditions. Environmental aspects shall also be considered.

As your entrances are part of your business flow, there's every reason to keep them working well. ASSA ABLOY Entrance Systems offers you a maintenance and modernization expertise to rely on. Our Maintenance Programs and Modernization Services for entrance automation is backed by a extensive expertise for all types of pedestrian- and industrial door and docking systems, independent of brand. At your disposal is a team of dedicated expert technicians, proven through decades of maintenance, service and satisfied customers.

Intended use

The ASSA ABLOY RD150-3 and ASSA ABLOY RD150-4 are automatic revolving doors developed to provide draught free access to buildings.

The door is designed to offer continuous use, a high degree of safety and maximum lifetime. The system is self-adjusting to the effects caused by normal variations in the weather conditions and to minor friction changes caused by e.g. dust and dirt.

The door can be used indoors or outdoors. Outdoor use with water resistant cover.

For installation and maintenance see Installation and Service manual 1014897.

Save these instructions for future reference.

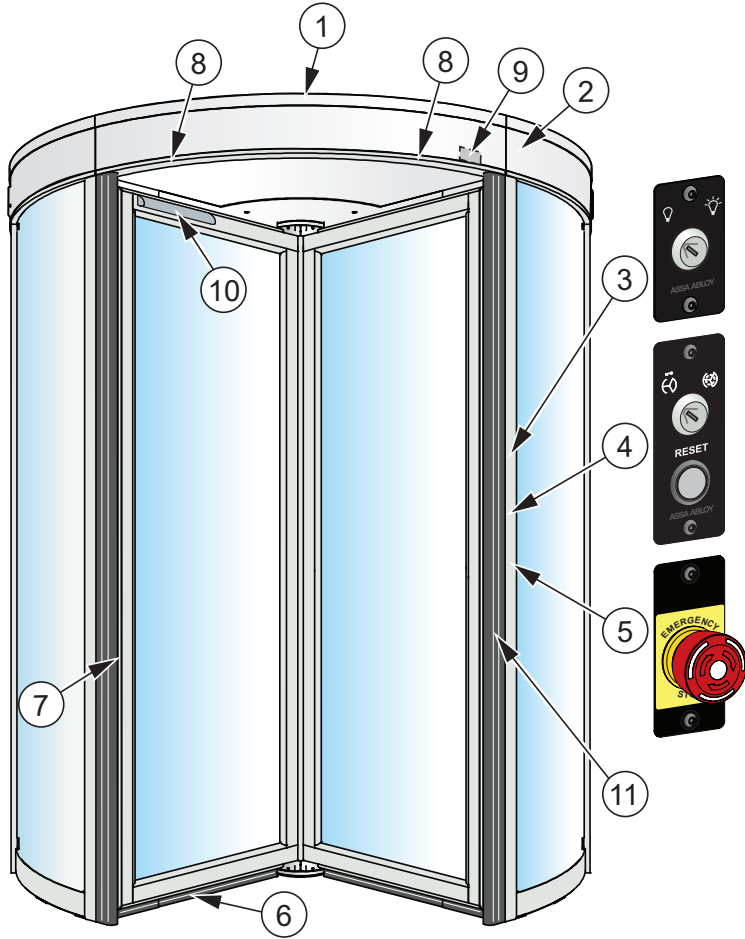
Technical specification

Manufacturer:	ASSA ABLOY Entrance Systems AB
Address:	Lodjursgatan 10, SE-261 44 Landskrona, Sweden
Type:	ASSA ABLOY RD150-3 and ASSA ABLOY RD150-4
Mains power supply:	100-240 V AC +10/-15%, 50/60 Hz
Power consumption:	360W including LED spot lights max. 30W
Temperature range:	-20 to +50°C
Degree of protection:	IP20
Degree of protection, control actuators:	IP54
Sound pressure:	$L_{pa} \leq 70 \text{ dB}(A)$
Approvals:	Third party approvals from established certification organizations valid for safety in use, see Declaration of Conformity.

How the ASSA ABLOY RD150-3 and ASSA ABLOY RD150-4 work

The door is designed so that operation is not affected or interrupted by winds or by users pushing the doors. The unique control system was developed by ASSA ABLOY Entrance Systems 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, highest safety and best availability.

Main parts



No.	Description
1	Dust protection roof (max. load 0 kg) Do not walk or store any material on the roof!
2	Control unit CDC100 (behind fascia sheets)
3	Lighting LED with control (option)
4	ON/OFF switch
5	Emergency stop button
6	Horizontal pressure sensitive safety edges on the door leaves (option)
7	Vertical pressure sensitive safety edges on the door leaves (option)
8	Activation units
9	Vertical presence photocell sensor PDR (option)
10	Infrared presence sensing system
11	Pressure sensitive safety edges placed on the drum edges

ON/OFF switch



Start up

- Check that the door emergency stop button is released. If not, release the emergency stop button by rotating it in the direction of the arrows and press the reset button.

ON

- Turn the ON/OFF switch to ON.
- Auto start: The door stands still. When the door is activated by the inner or outer activation unit or by pushing (Push and Go), the door rotates at normal speed through three compartments and then stops.

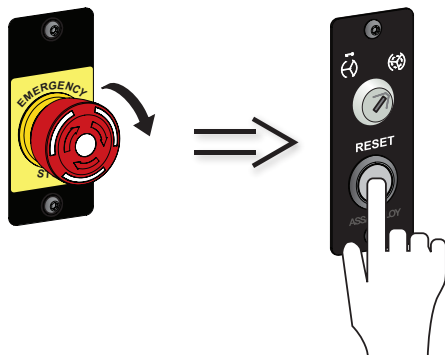
OFF

- Check there is no traffic.
- Turn the ON/OFF switch to OFF.

The door rotates to its home position.

Reset

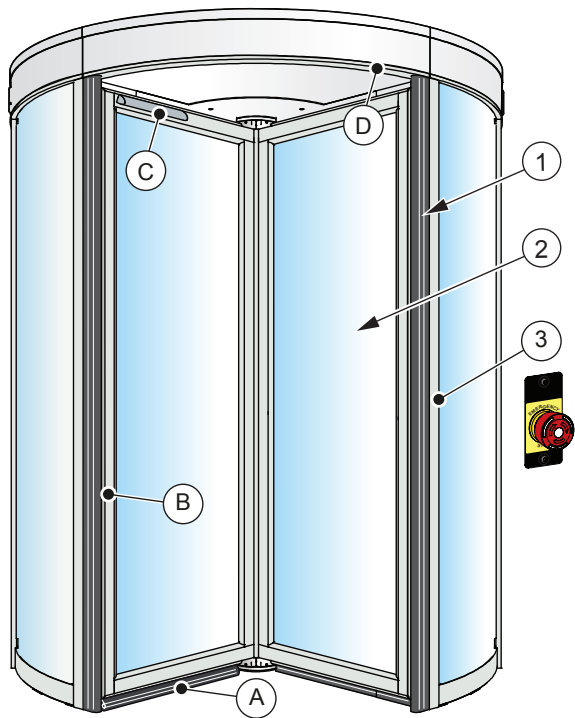
To reset the door to normal operation - release the emergency stop button by rotating it in the direction of the arrows and press reset button.



Safety

Safety device on the door

The safety systems are monitored to ensure the high safety level of the door.
The condition of the safety equipment is periodically tested. This monitoring is made during normal running conditions and it does not affect the normal day-to-day operations of the door.



Standard

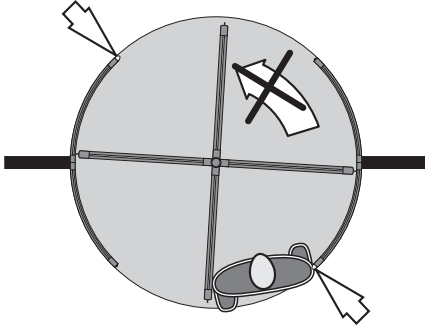
No.	Description
1	Pressure sensitive safety edges placed on the drum edges, see page 11.
2	Force sensitive door leaves, see page 11.
3	Emergency stop button, see page 12.

Options

No.	Description
A	Horizontal pressure sensitive safety edges placed on the door leaves, see page 20.
B	Vertical pressure sensitive safety edges placed on the door leaves, see page 20.
C	Infrared presence sensing system, see page 19.
D	Vertical presence photocell sensor PDR, see page 21.

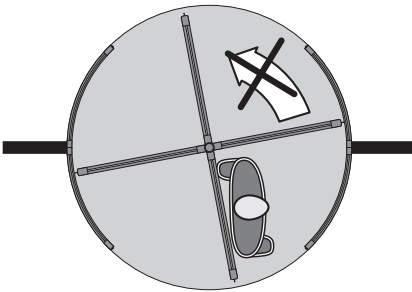
Pressure sensitive safety edges

Pressure sensitive safety edges on the drum edges. These stop the rotation if compressed. When the obstacle is removed, the rotation continues.



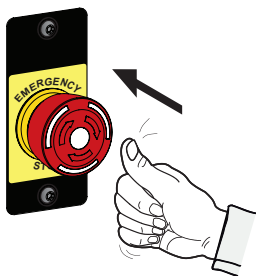
Force sensitive door leaves

- The door makes three attempts to start with two seconds pause between each attempt.
- If the obstacle is cleared and the door pushed forward more than ½ section in any direction during the waiting period, operation is resumed.

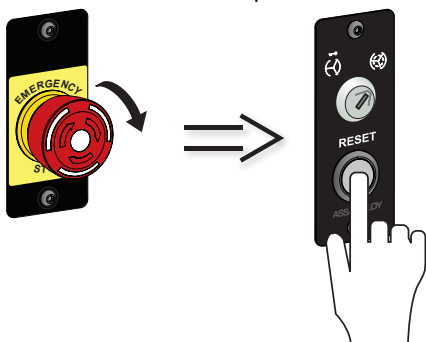


Emergency stop button

- The door rotation can be stopped by pressing the emergency stop button.



- To reset the door to normal operation - release the emergency stop button by rotating it in the direction of the arrows and press reset button.

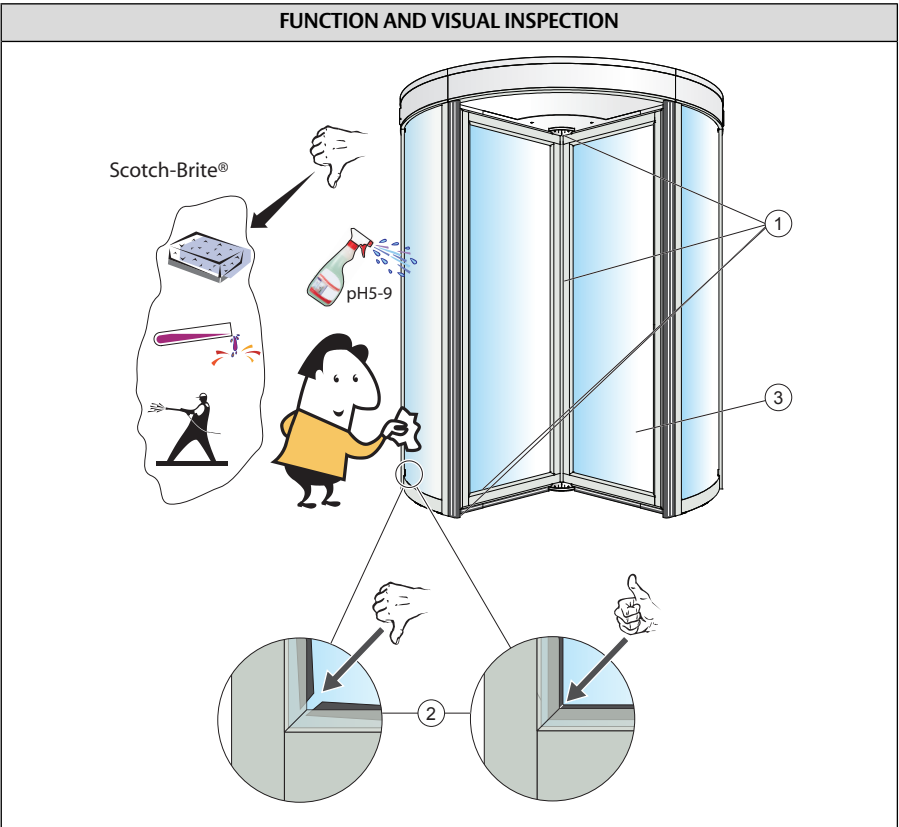


Regular safety checks

To help you fulfil the national/international requirements and to avoid malfunction and risk for injuries, we have provided the following checklist.



Do not use the door if repair or adjustment is necessary.
Disconnect supply when cleaning or other maintenance is to be carried out.



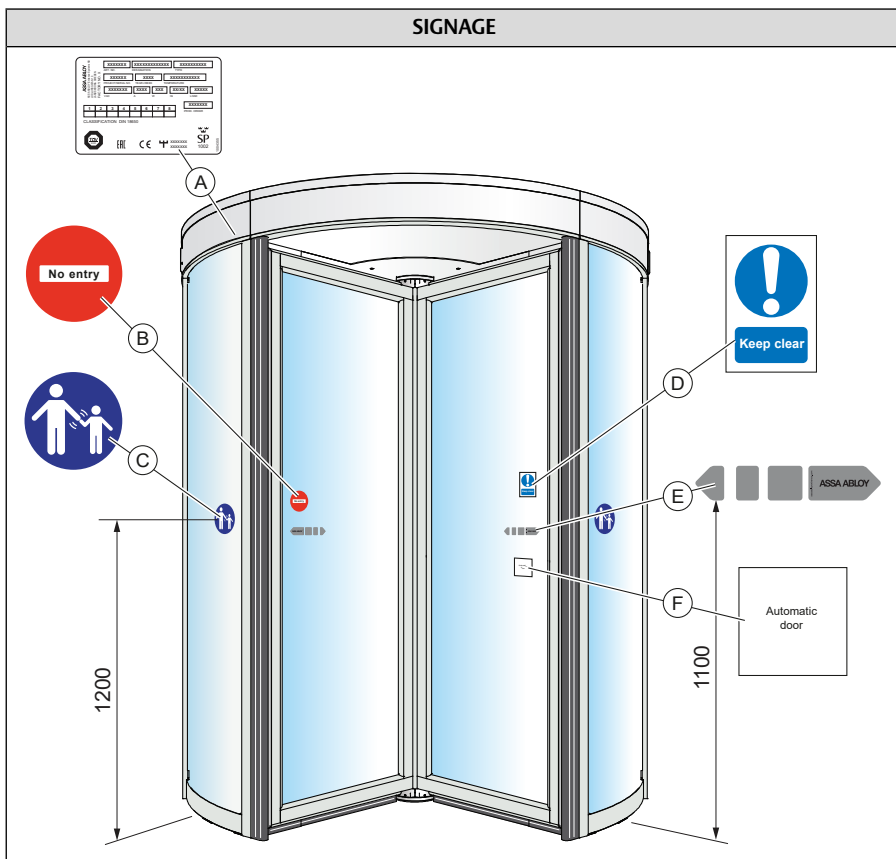
Daily Action		If problem occurs
Inspect your door and check <i>visually</i> for <ul style="list-style-type: none">condition of door seals and weather stripping ①condition of glazing rubbers ②③		
Check the safety sensors if any. If you are unsure of which type of sensor you have, please contact your ASSA ABLOY Entrance Systems representative.		
If equipped with break-out, test that all door leaves can be released and are not mechanically jammed.		
Escape doors	Note! If the door is placed in an escape route, tests must be performed regularly by trained personnel or fire department, according to local laws.	

= Contact your ASSA ABLOY Entrance Systems service representative. For contact information, see last page.

CLEANING

The best way to remove dust and dirt from the ASSA ABLOY RD150-3 and ASSA ABLOY RD150-4 and to maintain the quality of the enamel layer, the surfaces should be cleaned three times/year (once/four months period) with gentle (pH 5-9), non-polishing detergent and water. Use a soft non-abrasive sponge. The cleaning should be documented. To avoid damages to the profiles the brushes must be vacuum-cleaned weekly.

- Do not expose windows, doors or profiles to alkalis. Both aluminium and glass are sensitive to alkalis.
- Do not clean with high-pressure water. Operator, programme selector and sensor may be damaged and water may enter the profiles.
- Do not use detergents or abrasive additives.
- Do not scrub with materials like Scotch-brite, as this will cause mechanical damage.



Action		If problem occurs
Check that all required signage is applied and intact. Mandatory indicates that the signage is required by European directives and equivalent national legislation outside the European Union.		
(A)	Product label: Mandatory	
(B)	No entry, identifying one-way traffic: Mandatory in GB and US, if applicable, not included in the product.	
(C)	Supervision of child (applied to both sides of the door): Mandatory according to national regulations. Recommended, if the risk analysis shows use by children.	
(D)	Keep clear	
(E)	ASSA ABLOY Entrance Systems door sticker: Mandatory, if applicable to highlight the presence of the glass (applied to all glass sections that are moving).	
(F)	Automatic door	

= Contact your ASSA ABLOY Entrance Systems service representative. For contact information, see last page.

Troubleshooting

What's wrong?	Remedies
The motor does not start	Make sure that mains power to the door is on.
	Check ON/OFF switch , see page 9.
	Check whether the emergency stop button is released.
	Check the main switch and fuse in the building.
The motor starts but door will not rotate	Check that nothing is jammed beneath the door.
	Unlock the mechanical locks.
The door does not close	Check that nothing is jammed beneath the door.
	Check whether the emergency stop button is released.
	Check that there are no objects in the safety detection zone.
If the problem continues, please contact your ASSA ABLOY Entrance Systems representative.	

Service/Maintenance

Service and adjustments performed by your ASSA ABLOY Entrance Systems-authorized representative will ensure safe and proper operation of your automatic door unit.

Remember to keep “Service Log Book” and “Site Acceptance Test and Risk Assessment” documents (PRA-0003) available. These are used together.

The table below shows the recommended interval in revolutions, when to replace parts during preventive maintenance. Talk to your ASSA ABLOY Entrance Systems representative to learn more about our service offering.

Minimum maintenance interval of once a year. See EN16005.

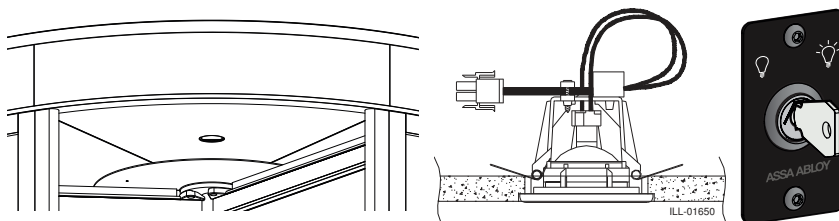
Part	Revolutions	Action
Drive unit	300.000/1.500.000	Check/Replace
Safety devices	300.000	Check
Impulse devices	300.000	Check
Emergency stop button (Not used in US and Canada)	minimum once a year	Check

Check all parts to be replaced if necessary.

Options

Even though the ASSA ABLOY RD150-3 and ASSA ABLOY RD150-4 are installed to comply with all applicable safety regulations, it is possible to enhance safety/comfort with the following add-ons (please contact your local ASSA ABLOY Entrance Systems company for detailed description).

Lighting LED with control



Colour temp. 3000 K

Lamp 5W

Additional emergency stop button

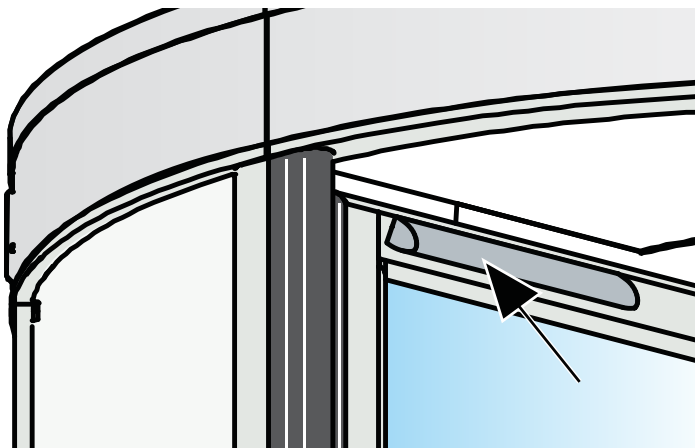
In case of an emergency, door rotation can be stopped by pressing the emergency stop button.

To reset the door to normal operation after the emergency situation has ceased, [see Emergency stop button on page 12](#).



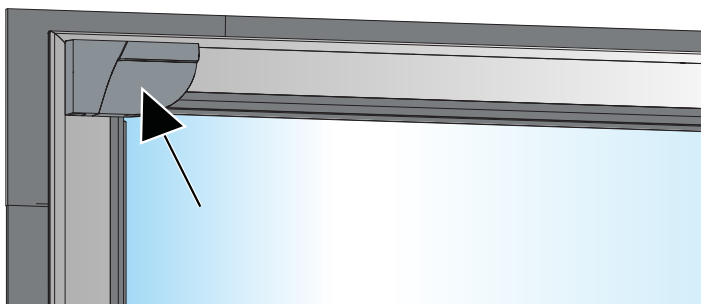
Infrared presence sensing system

Installed on the top of the door leaves-provides safety over the whole height of the door. If the sensor detects an obstacle the door stops or reduces speed to 0.5 rpm (configurable). When the obstacle is removed, the rotation starts.



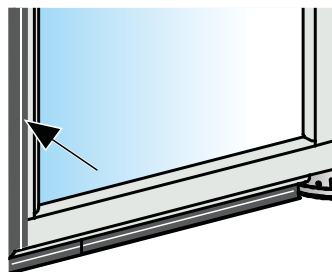
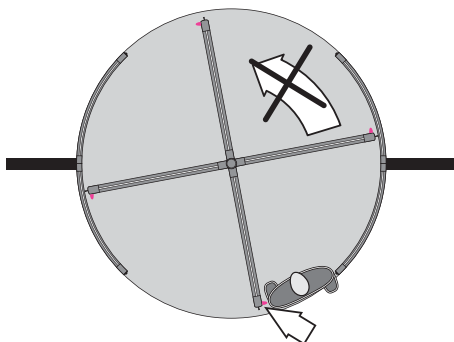
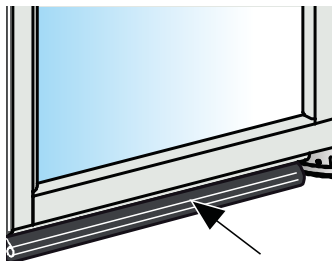
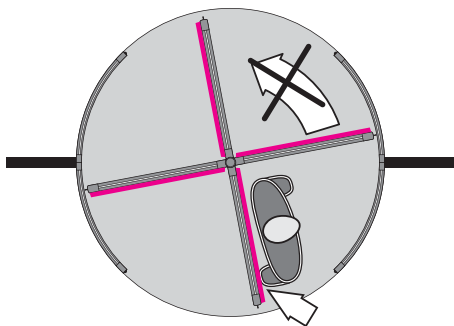
Laser presence sensing system

Installed on the top of the door leaves-provides safety over the whole height of the door. If the sensor detects an obstacle the door stops or reduces speed to 0.5 rpm (configurable). When the obstacle is removed, the rotation starts.



Pressure sensitive safety edges

If one of the safety edges, mounted on the door leaves, is compressed, the door stops. When the obstacle is removed, the rotation starts.



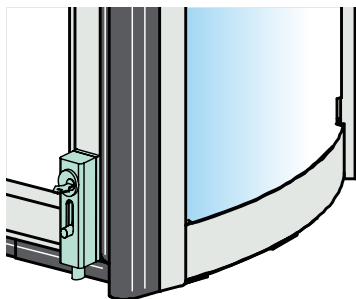
Mechanical lock

Lock the door leaf:

- Turn the ON/OFF switch to OFF.
- Use the key to lock the door leaf.

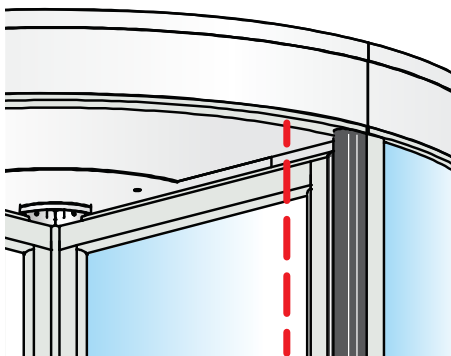
Unlock the door leaf:

- Use the key to unlock the door leaf.
- Lift the lock pin.
- Turn the ON/OFF switch to ON.



Vertical presence photocell sensor PDR

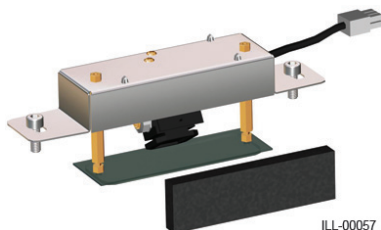
Vertical presence photocell sensor PDR located above the entrance on inner and outer sides. If the beam is broken in the safety zone (approx. 25° from the drum edge) the door stops. When the obstacle is removed the rotation starts.



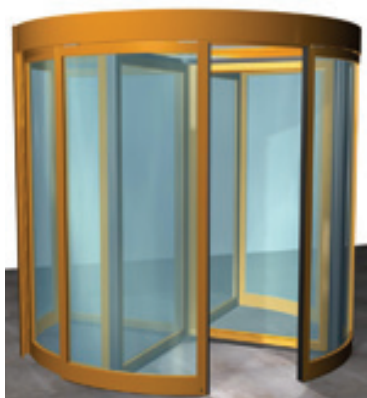
Accessories

Direction sensing radar DSR

The radar DSR is direction sensing i.e. it triggers an opening impulse for approaching objects only, but not for objects leaving the door.



Night closing door (Not used in US and Canada)



Other products from ASSA ABLOY Entrance Systems

- Door Systems
- Balance doors
- Air curtains
- Sliding doors
- Swing doors
- Automatic and manual activation units
- Overhead sectional doors
- Service such as preventive maintenance and upgrade programs, emergency repairs, service advice and door management
- Vertical lifting fabric doors
- Dock levelers
- Dock shelters
- Folding doors
- High speed doors
- Loadhouses

Declaration of conformity

ASSA ABLOY
Entrance Systems

Experience a safer
and more open world

We **ASSA ABLOY Entrance Systems AB**
Lodjursgatan 10
SE-261 44 Landskrona
Sweden

declare under our sole responsibility that the type of equipment:
RD150-3, RD150-4

complies with the following directives:

2014/30/EU ElectroMagnetic Compatibility Directive (EMCD)

2006/42/EC Machinery Directive (MD)

2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment with the applicable amendments (RoHS)

Harmonized European standards which have been applied:

EN 60335-1:2012+A13:2017

EN 60335-2-103:2015

EN 61000-6-2:2005

EN 61000-6-3:2007+A1:2011

EN 16005:2012/AC:2015

EN 62233:2008

Other standards or technical specifications, which have been applied:

IEC 60335-1 ed. 5:2010

IEC 60335-2-103 ed. 2.1:2011

EN 1627:2011 Class RC3

Certificate issued by a notified or competent body (for full address, please contact ASSA ABLOY Entrance Systems AB) concerning the equipment:

BY/112 02.01 020 07601

B 058029 0035

SC0834-14

The manufacturing process ensures the compliance of the equipment with the technical file. The manufacturing process is regularly assessed by 3rd party.

The CE mark was first applied 2017-08-09.

Compilation of technical file:

Anders Forslind

ASSA ABLOY Entrance Systems AB

Lodjursgatan 10

SE-261 44 Landskrona

Sweden

Place
Landskrona

Date
2020-10-08

Signature
Klas Hagelin

Position
Global Quality Manager

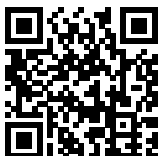


DoC 1017055-en-6.0

ASSA ABLOY Entrance Systems is a leading supplier of entrance automation solutions for efficient flow of goods and people. Building on the long-term success of the Besam, Crawford, Albany and Megadoor brands, we offer our solutions under the ASSA ABLOY brand. Our products and services are dedicated to satisfying end-user needs for safe, secure, convenient and sustainable operations. ASSA ABLOY Entrance Systems is a division within ASSA ABLOY.

ASSA ABLOY

assaabloyentrance.com



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