

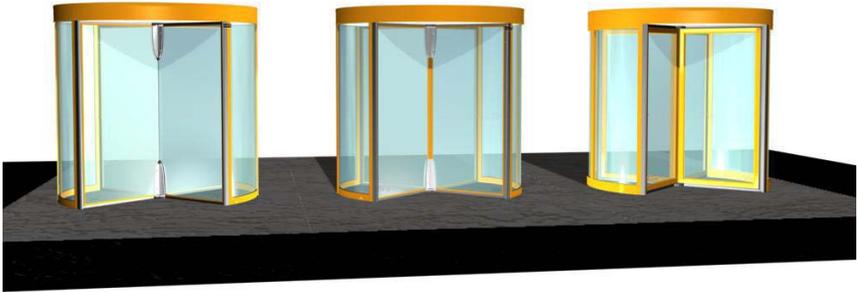
User Manual

Revolving Doors

ASSA ABLOY RD3 A1, RD4 A1, RD4 A2 (CDC 4)

ASSA ABLOY
Entrance Systems

The global leader in
door opening solutions



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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 RD3 A1, ASSA ABLOY RD4 A1 and ASSA ABLOY RD4 A2 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.

This door may be used for escape routes, provided the door leaves are equipped with break-out function, in which case the door leaves are pushed open in the escape direction.

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

For installation and maintenance see Installation and Service manual 1004466.

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 RD3 A1, ASSA ABLOY RD4 A1 and ASSA ABLOY RD4 A2
Mains power supply:	230V, 50/60Hz, mains fuse max. 10AT or 100-120V, 50/60Hz, mains fuse max. 16AT
Power consumption:	Drive unit max. 400W LED panel lights max. 75W
Temperature range:	-20 to +50°C
Degree of protection:	IP20
Degree of protection, control actuators:	IP54
Sound pressure:	$L_{po} \leq 70 \text{ dB}(A)$
Approvals:	Third party approvals from established certification organizations valid for safety in use, see Declaration of Conformity.

How the ASSA ABLOY RD3 A1, ASSA ABLOY RD4 A1 and ASSA ABLOY RD4 A2 work

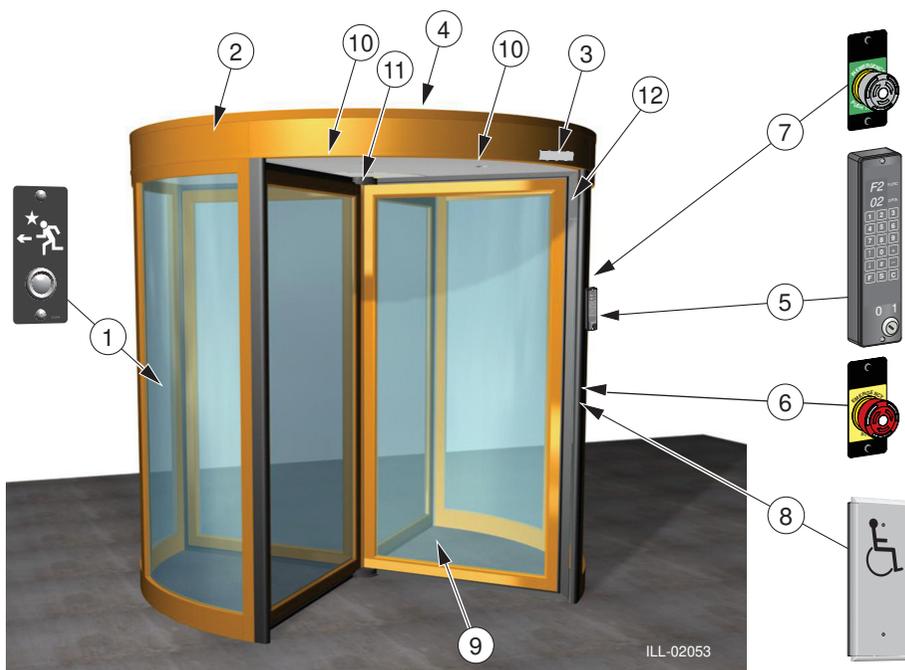
The doors can be ordered in several different configurations depending on the customer's needs. The drive mechanism is fitted on a frame above the laminated ceiling. The drive shaft bearing is fixed to the finished floor. Brushes seal the door tightly.

The control system was developed by ASSA ABLOY Entrance Systems specifically for use with its products. 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 re-

stricted 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.

By adding the emergency break-out system, a clear, unimpeded evacuation path through the revolving door can be achieved.

Main parts



No.	Description
1	Push button inside door. When pressed, the door rotates to position that allows evacuation of closed compartments.
2	Main control unit CDC 4 (behind fascia sheets)
3	Vertical presence photocell sensor PDR (option)
4	Dust protection roof (max. load 0 kg) Do not walk or store any material on the roof!
5	Program Control Device (PCD) with ON/OFF key switch (standard place)
6	Emergency stop button
7	Emergency opening button (option)
8	Activation by disabled people: Recommended, if applicable (option)
9	Door leaves with break-out function (option)
10	Activation units (option)
11	Drive arm release (electrical or mechanical)
12	Pressure sensitive safety edge

Settings and operation PCD

The PCD (Program Control Device) is used to select what operating mode is active when the ON/OFF switch is in the ON position. It is also used to check and set door configuration.

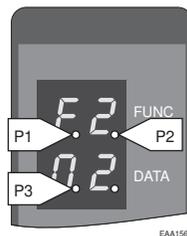
General information PCD

Key	Function
0-9	Numeric inputs
#	Confirm access code input
↑	Setpoint selection upwards
↓	Setpoint selection downwards
+	Setpoint value change upwards
-	Setpoint value change downwards
F	Function selection
S	Setpoint confirmation and storage
C	Error clear (20, 30) Clear display Leave menu
 ILL-01914	ON/OFF switch 1 = ON 0 = OFF



Information prompts on PCD display

Prompt	Description
P1	ON/OFF switch in OFF position.
P2	Service request. Call ASSA ABLOY Entrance Systems for service.
P3	Real time operation ON, see "Real time operation" on page 16.



The door configuration must be set by ASSA ABLOY Entrance Systems Service technicians.

Access code

To be able to operate the PCD it is required to login with an access code.

Login on the PCD

- 1 Press # to clear the display.
- 2 Enter the access code 1234. The display shows ==.
- 3 Press # to confirm the input.

If the access code is correct the display shows

LI (Login)

0 1 (Level 01)

In case of four consecutive failed login attempts, five minutes must pass before a new attempt can be made.

Logout from the PCD

- 1 Press # to clear the display.
- 2 Enter the access code. The display shows ==.
- 3 Press # to confirm the input.
If the access code is correct the display shows
LO (Logout)
0 1 (Level 01)
- 4 Automatic logout ten minutes after the last key press.
- 5 Automatic logout can be inhibited by typing **F561** on the PCD.

Change access code

At delivery the access code is 1234. To change, follow the procedure below.

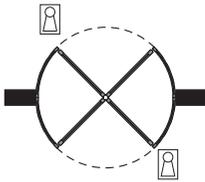
- 1 Type **#1234#**. If the access code is correct the display shows
LI (Login)
0 1 (Level 01)
- 2 Type **F41**. The display shows
F 4
L 1
- 3 Enter new code (4 digits).
- 4 Press **S** to confirm.
- 5 Enter the new access code a second time.
- 6 Press **S** to confirm.

The ON/OFF switch

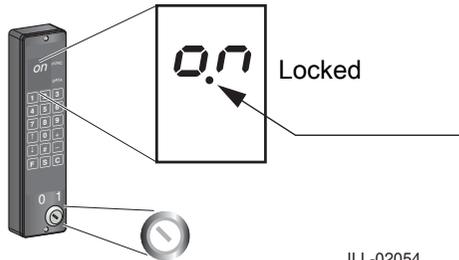
The ON/OFF switch can be used in any of the operating modes 01-06. In the ON (1) position, the door operates according to selected operating mode.

Setting the switch to OFF (0) is indicated by prompt P1 on the display and is equivalent to selecting the operating mode Locked (OFF) 01 (see page 12).

Master access switch



Master access switch



ON/OFF switch

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Master access switch

If the door is locked with the ON/OFF switch it can be opened with a master access switch (ask your local ASSA ABLOY Entrance Systems Service). When the master access switch is activated, the door unlocks, runs 360° and locks again.

Changing operating mode

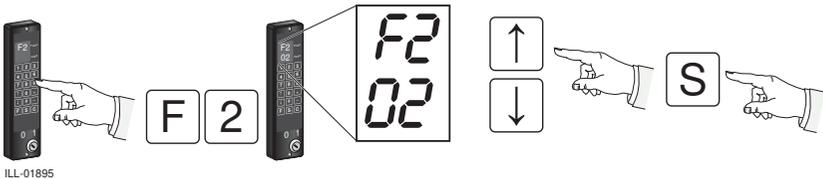
- 1 Login on the PCD.



ILL-01894

#Access code#

- 2 Type F2. (The display shows F2 plus current operating mode.)
- 3 Use the up or down arrow to change the operating mode 01-07.
- 4 Confirm the change and exit the operating mode selection function by pressing S.



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- 5 Logout from the PCD



ILL-01894

#Access code#

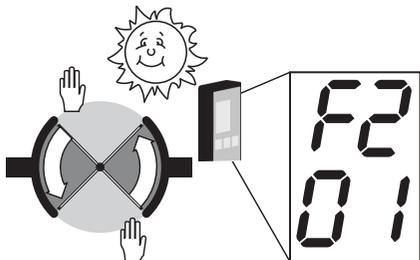
The different operating modes

Locked (Off) 01

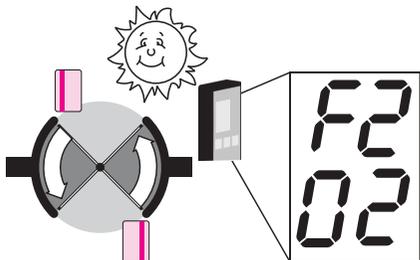
The door rotates to its home position. The door can be opened with the Master access switch, see page 11.

Note! If the door is placed in an escape route, selecting operating mode Locked or setting the ON/OFF switch in the OFF (0) position, disables by default the escape function.

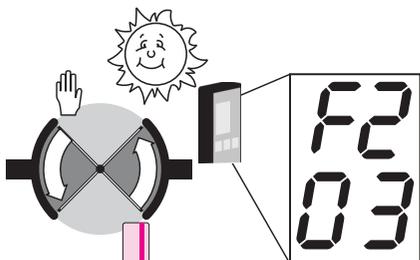
The door may however be configured to make escape possible, also when the door is locked. See How to check break-out configuration on page 18.



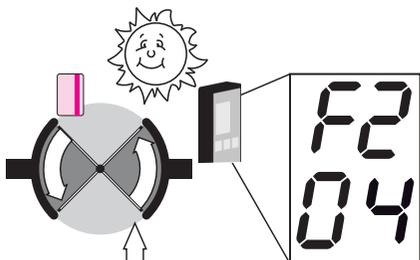
Access control Entry and Exit 02



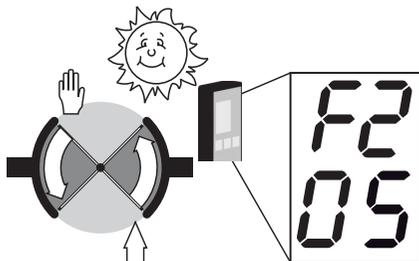
No Entry - Access control Exit 03



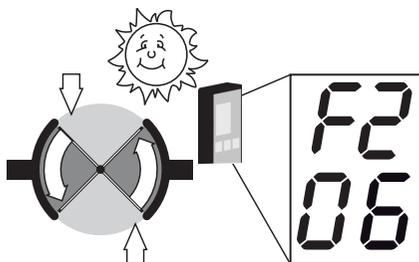
Access control Entry - Free Exit 04



No Entry - Free Exit 05



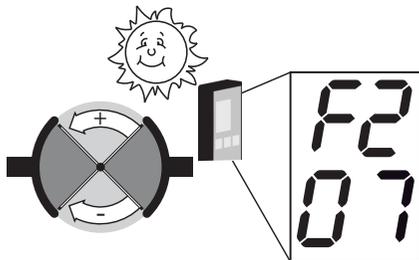
Free Entry - Free Exit 06



Manual operation 07

The door rotates forward as long as the + key is held down and backwards as long as the - key is held down.

Note! During manual operation safety devices are disconnected.



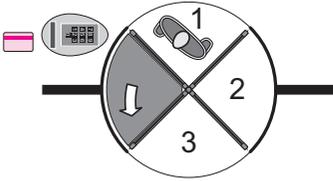
Access control

Access through a door equipped with card reader, code lock etc.

This chapter explains access control operation of the door. The access control system can be other than described, but the principal functions are identical for all systems.

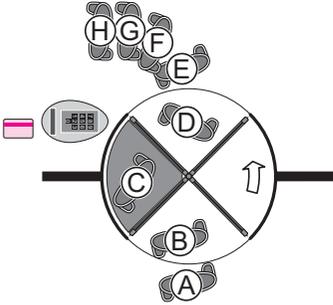
Single access

From when the door starts to rotate after an access impulse, 3 compartments are allowed for entry.



Multi access

The door can handle up to 10 access registrations in queue for continuous traffic flow.



Access validation

For enhanced security the system can be configured to use an additional card/ID tag reader, accessible only from inside the secured compartment.

To ensure that the card/ID tag used to gain access through the door actually completes the passage, it must also be used to give a validation impulse before the passage has completed, otherwise the door reverses back to the starting point.

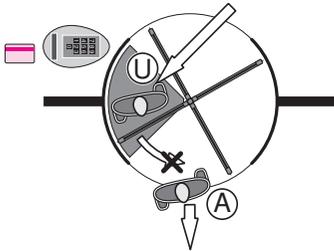
Optionally the door stops and plays back a recorded message, prompting the user to give a validation impulse within a configurable time limit.

The door completes the access cycle as soon as the impulse is received, alternatively reverses back to the starting point if the time limit expires.

Control of unauthorized access

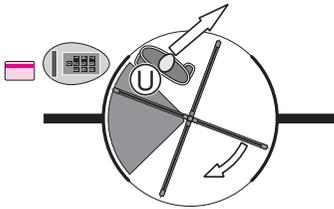
Phase 1

The security system is activated and the door stops its rotation. The unaccepted access (U) is prohibited.



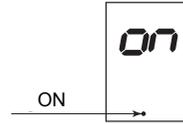
Phase 2

After stopping, the door reverses automatically and the unauthorized person (U) has to return to the starting position.



Real time operation

Programming of real time operation must be done by ASSA ABLOY Entrance Systems service technicians. Fill in form on next page.
The CDC-system has three different day schedules. Each day schedule may contain up to 10 different operating modes. The week schedule informs the system of which day schedule to run and in what order during a week. It is possible to make up to 16 exceptions from this week schedule for e.g. public holidays etc.



Activation

Type **F556** (Real time operation ON).
Prompt P3 lights up.
The door operates according to schedule.



Deactivation

Type **F557** (Real time operation OFF).
Prompt P3 extinguishes.
The door operates according to manually set operating mode.



ON/OFF switch

The OFF (0) position overrides real time operation. The door will be locked. When set to the ON (1) position, the door resumes operation according to schedule.

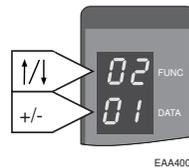


Manual setting of operating mode

If the door is running in real time operation and the operating mode is manually changed, real time operation is automatically deactivated. To resume real time operation type **F556**.

Summertime/Wintertime

To change from summertime to wintertime, type **F53** and select option number 02 with arrow \downarrow/\uparrow keys. Press + or - to select setting 00 or 01, (summertime off (wintertime) is value 00 and summertime on is value 01) and press S (select). To check the time change, see Real time clock.



Day schedule

Day schedule 1	Day schedule 2	Day schedule 3
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10

Week schedule

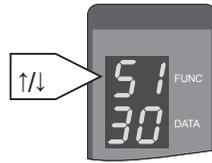
Week day	Schedule
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

Exceptions

Start exception	End exception	Exception schedule
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16

Read speed settings

Type **F3**. The display shows S1.
Use \uparrow or \downarrow to select setpoint number to read.
Press **C** to leave the menu.

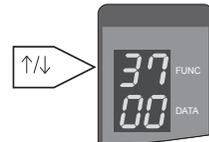


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Setpoint	Description	Setpoint value
S1	High speed setpoint	1.0-6.0 rpm
S2	Low (handicap) and alert reverse speed setpoint	0.2-4.0 rpm
S3	Creep speed setpoint	Fixed at 0.5 rpm
S4	Continuous speed setpoint	1.0-2.5 rpm
S5	Manual speed setpoint	0.2-2.0 rpm
S9	Door size parameter	01-09

How to check break-out configuration

Type **F53** and step to number 37 with \uparrow or \downarrow .
Read the value at the bottom of the display.
00 = Escape function is disabled when the door is locked. (default)
01 = Escape function is enabled when the door is locked.

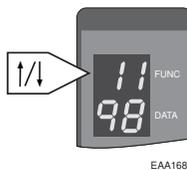


Real time clock

The CDC system has a real time clock built in. The clock is used for event log recording and when the door is running according to a real time operation schedule.

Read real time clock

Type **F71**. The display shows 11 and the parameter value corresponding to year.
Use \uparrow or \downarrow to select parameter number and display the parameter value.
Press **C** to leave the menu.
Summer and wintertime, see Summertime/Wintertime on page 16.



EAA168

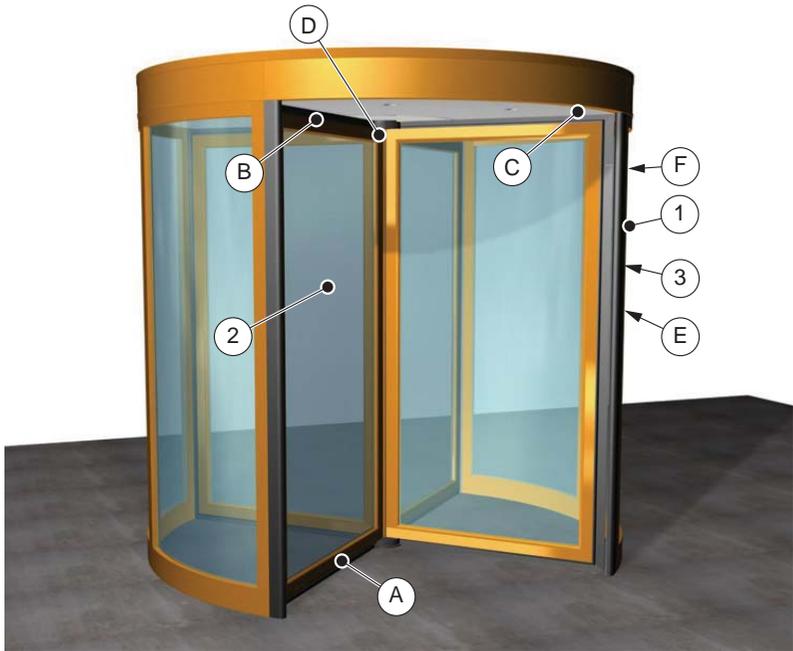
11	Year
12	Month
13	Day
14	Hour
15	Minute
16	Second

Safety

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.

Safety devices on the door



Standard

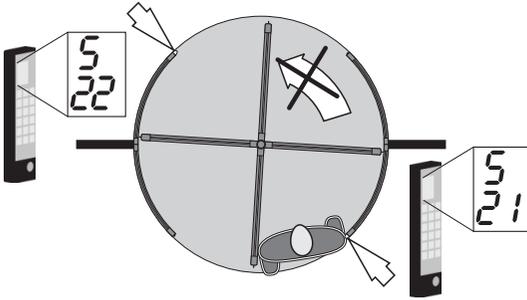
No	Description
1	Pressure sensitive safety edges placed on the drum edges, see page 20.
2	Force sensitive door leaves, see page 20.
3	Emergency stop push button, see page 20.

Options

No	Description
A	Pressure sensitive safety edges placed on the door leaves, see page 32.
B	Infrared presence sensing system, see page 32.
C	Vertical presence photocell sensor PDR, see page 32.
D	Break-out kit, see page 31.
E	Push button for disabled, see page 32.
F	Emergency opening push button, see page 31.

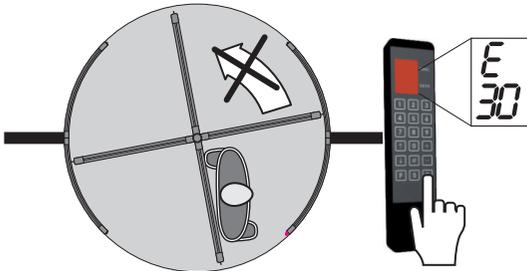
Pressure sensitive safety edges on drum edges

- If one of these safety edges is compressed the rotation stops and reverses in the safety zone. When the obstacle is removed, the rotation continues.



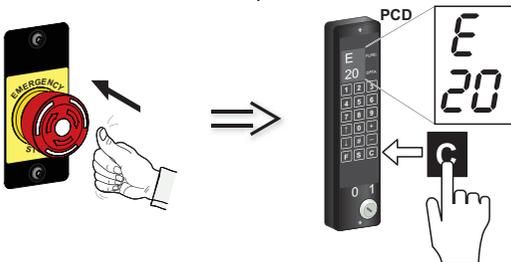
Force sensitive door leaves

- If the system detects an obstacle blocking the door, the motor is de-energized.
- The door makes three attempts to start with two seconds pause between each attempt and then waits another 30 seconds before a final attempt is made.
- If the obstacle is cleared during the waiting period, operation is resumed. In case the blocking persists, E30 is shown on the PCD and the door remains stationary. To resume operation after the obstacle has been removed, the error can be cleared by pressing one of the push buttons inside the door or pressing C on the PCD.



Emergency stop push 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 C on the PCD.



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Push button inside door

In case somebody is trapped in a compartment, the door can be activated for rotation (forward or reverse, depending on mode of operation) by pushing this button.



Drive arm release

In some cases it can be useful to disengage the motor/gearbox from the drive shaft and let the door rotate freely. When the motor/gearbox is disengaged from the drive shaft the display shows status code 43.

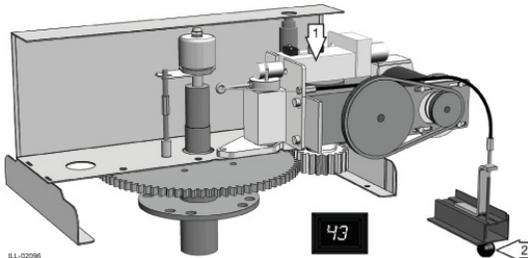
Electrical drive arm release

Operated with a key switch (1).

Mechanical drive arm release

Pull down the knob (2).

Push the knob to the side to keep the motor/gearbox disconnected



Battery back-up

The CDC system has a built in battery that allows the door to travel to emergency position in case of power failure.

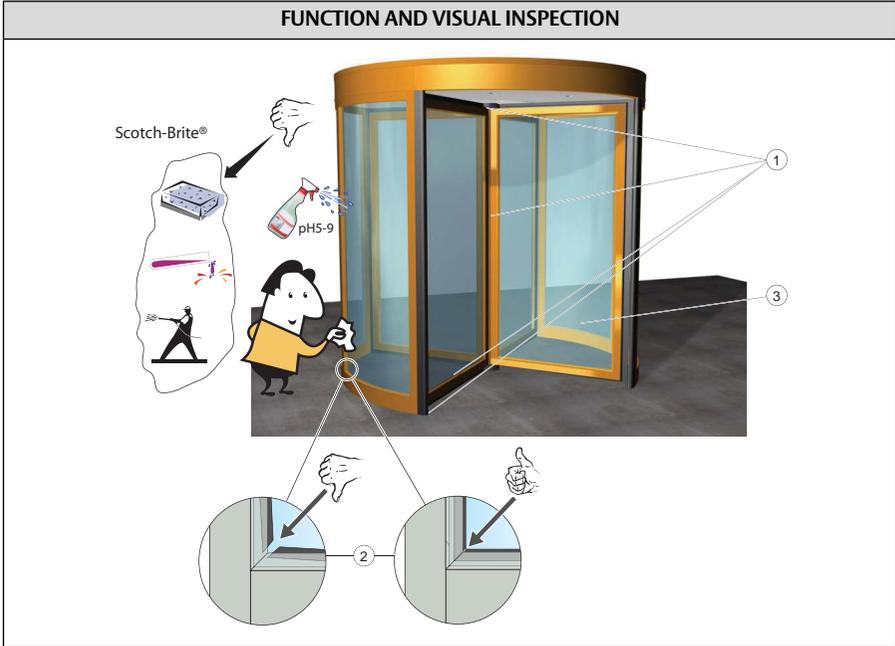
After 90 seconds the system is powered down, pressing one of the push buttons inside the door will wake up the system for a new period of 90 seconds.

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.



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 ① condition of glazing rubbers ② ③ 		☎
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. Press Emergency opening button and fold the door leaves.		☎
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.	☎

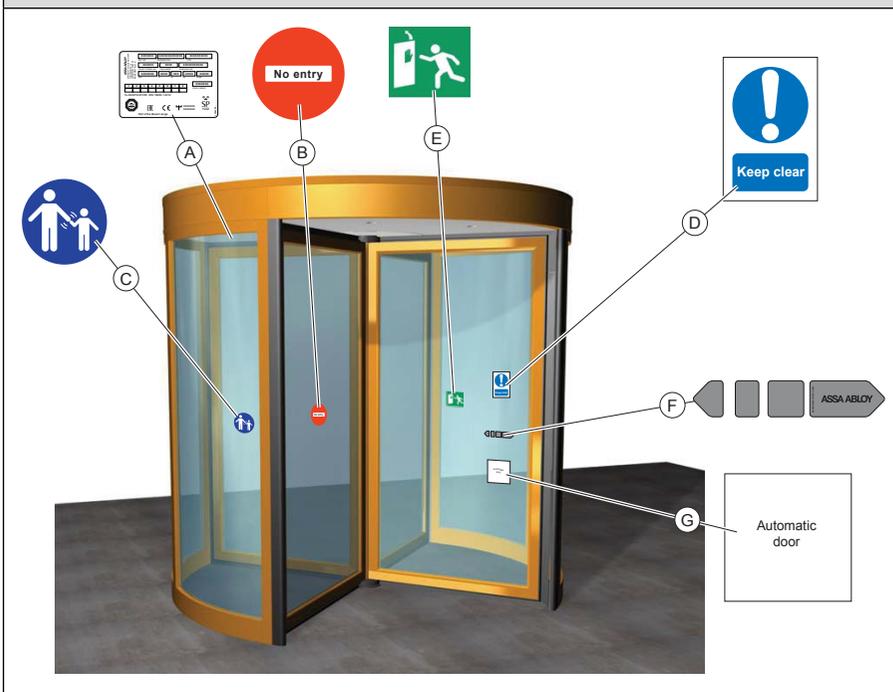
☎ = Contact your ASSA ABLOY Entrance Systems service representative. For contact information, see last page.

CLEANING

The best way to remove dust and dirt from the ASSA ABLOY RD3 A1, ASSA ABLOY RD4 A1 and ASSA ABLOY RD4 A2 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.

SIGNAGE



Action	If problem occurs
<p>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.</p>	
(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) Emergency break-out: Mandatory, if approved for escape route.	
(F) ASSA ABLOY Entrance Systems door sticker: Mandatory, if applicable to highlight the presence of the glass (applied to all glass sections that are moving).	
(G) 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 up	Make sure that the PCD display shows "ON", and that mains power to the door is on.
	Check the operating mode, see page 11.
	Check that there are no objects in the safety detection zone.
The motor starts but door will not rotate	Check that nothing is jammed beneath the door.
The door does not close	Change the setting of the program selector.
	Check that there are no objects in the safety detection zone.
	Check that nothing is jammed beneath the door.
If the problem continues, please contact your ASSA ABLOY Entrance Systems representative.	

Supervision system

The ASSA ABLOY RD3 A1, ASSA ABLOY RD4 A1 and ASSA ABLOY RD4 A2 have a built-in supervision system.

If an error occurs, the PCD display will show an error or status code. During normal operation the display will show "ON".

To reset the door to normal operation after an error code, press C on the PCD. See code list below.

Code List

Code	Status	Cause	Remedy
ON	The revolving door is functioning normally		
10	Stop	Safety edge activated	Check for obstacles between the wing and the floor and between the wing and the inside of the drum. Check safety edges.
20	Emergency stop	Emergency stop button pressed down	Release the button by turning it in the direction of the arrows, then restore function by pressing C on the PCD.
21	Response from the PDR sensor fitted above the opening on the inside	Inner PDR sensor or vertical safety edge on drum edge activated	Remove obstacle in the inner detection zone
22	Response from the PDR sensor fitted above the opening on the outside	Outer PDR sensor or vertical safety edge on drum edge activated	Remove obstacle in the outer detection zone.
30	Blocked door	The wing is blocked by an obstacle	Check for obstacles between the wing and the floor and between the wing and the inside of the drum. After checking, press C on the PCD.
31	Fire alarm	The fire alarm system has, if connected, been activated	Check the fire alarm system.
32	Power fail input	Mains power lost	Check mains fuse. Check external power supply.
36	Battery error	Battery pack not charged	Allow the battery pack to recharge (30 min.)
37	Emergency Open	Emergency open push button pressed down.	Release the button by turning it in the direction of the arrows, then restore function by pressing C on the PCD.
39	Access alert (Unauthorized passage)	Contact mat, touch-less access control sensors or hang sensor activated.	Check contact mat. Check hang sensor. If touch-less access control sensors are installed, select Free Entry - Free Exit (F206) and let door rotate a full turn to clear.
43	Drive arm release	Mech. or electrical drive arm release activated.	Reset the drive arm release.
47	Anti-Piggyback sensor Entry	"System OK" has dropped	Select Free Entry - Free Exit (F206) and let door rotate a full turn to clear.
48	Anti-Piggyback sensor Exit	"System OK" has dropped	Select Free Entry - Free Exit (F206) and let door rotate a full turn to clear.
C2	Break-out failure	No current to break-out magnet	Call for service.
C3	Break-out	Break-out released	Close the door leaves. Reset function by pressing C on the PCD.



= For all other status codes, contact your ASSA ABLOY Entrance Systems service representative.
For contact information, see last page.

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.

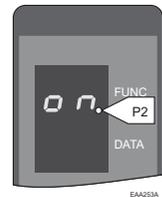
Part	Revolutions	Action
Motor	300.000/1.500.000	Check/Replace
Safety devices	300.000	Check
Impulse devices	300.000	Check
Gear box	3.000.000	Check
Drive belt	300.000/600.000	Check/Replace
Motor carbon brushes	300.000/600.000	Check/Replace
Break-out function	minimum once a year	Check
Emergency stop button	minimum once a year	Check

Check all parts to be replaced if necessary.

Service request

After 300.000 revolutions the prompt P2 indicates that it is time for service.

Minimum maintenance interval of once a year. See EN16005.



Remote Control Operation

To operate the door and perform service checks, the CDC system can be connected to a computer via the RS 232 connection COM port. Ask your local ASSA ABLOY Entrance Systems distributor for more information.



Software communication

Windows 3.1 or higher is required to communicate with the door system. Make following settings.

- 1 Windows 3.1/3.11.

Start terminal under Accessories.

or

- 1 Windows 95/98 and Windows XP.

Start HyperTerminal under Accessories.

- 2 Windows 7, 8 and Vista does not include terminal software. A free alternative, *PuTTY*, can be downloaded from www.putty.org

- 3 Make the following settings.

- VT100
- 8 bits data
- No parity
- One stop bit
- 9600 baud
- No flow control

Communication ON/OFF

Communication via the COM port can be switched ON (default) or OFF from the PCD.

External communication ON: Type **F552** on the PCD.

External communication OFF: Type **F553** on the PCD.

Login

To enable login on the MDT, the PCD must be logged out.

Press **ESC** to display the login prompt.

```
CDC Login:
```

```
Enter Access Code:
```

Type the access code 1234 (displayed as ****) and confirm with the **Enter** key.

If the display shows:!!!! the PCD is logged in.

If the access code was entered successfully the current login level is displayed briefly.

```
Login level = 1
```

Whereupon the CDC main menu appears.

Logout

Automatic logout occurs ten minutes after the last key press. The automatic logout can be inhibited by entering PCD command F561.

To log out manually, select Logout from the main menu by pressing number key **6**.

```
Logout Menu
```

```
Current Access Level = 1
```

```
Logout ? (Y/N)
```

Press **Y** to logout or **N** to return to the main menu.

Main menu

```
CDC Main Menu
```

```
Door Type           : RD3/4 - CDC42 Access APB
```

```
HC11 SW Release     : Ver 1.02.01 P1 #33C1 2013-11-14
```

```
M16C SW Release     : Ver 2.1.10
```

```
Press key to select function:_
```

```
1 : Door Operation
```

```
2 : Configuration
```

```
3 : Diagnostic Functions
```

```
4 : Log Functions
```

```
5 : Development Functions
```

```
6 : Logout
```

Press the NUMBER KEY 1 to go to the door operation page.

Press **ESC** to go to this menu from any submenu.

Door operation

CDC Door Operation Page

Error/Status Display:	ON
Operating Mode:	2
Door Speed (RPM*10):	0
Door Position (deg):	0
Revolution Counter:	0
Date & Time:	Thursday 2013-11-14 07:52:28

Operating modes:

- 1: Lock Door (Off)
- 2: Security In - Security Out
- 3: Closed In - Security Out
- 4: Security In - Free Out
- 5: Closed In - Free Out
- 6: Free In - Free Out
- 7: Manual Operation

Press function key:	C : Error Clear
	I : Access Signal In
	O : Access Signal Out
	R : Real Time Operation ON/OFF
	S : High Security Level ON/OFF

Select operating mode by pressing corresponding number key. Manual Operation is not selectable from MDT.

Press **Enter** to confirm changes.

Press **ESC** to return to main menu.

Other information on screen

Manually locked

The ON/OFF switch is in OFF position. Access signal in and Access signal out from the terminal are disabled.

Service request

The door has been running for 300.000 revolutions.

Call for service.

Real time

Real time operation is active.

Press **R** to toggle real time operation ON/OFF.

External Operating Mode

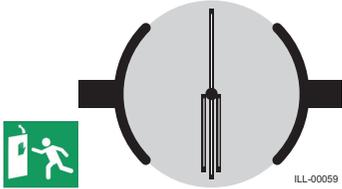
External Operating Mode is active.

Options

Even though the ASSA ABLOY RD3 A1, ASSA ABLOY RD4 A1 and ASSA ABLOY RD4 A2 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).

Break-out function

This function enables the door leaves to be broken outwards in case of emergency.



The break-out function can be connected to the fire alarm system. The function can also be activated with an EMERGENCY OPENING push button.

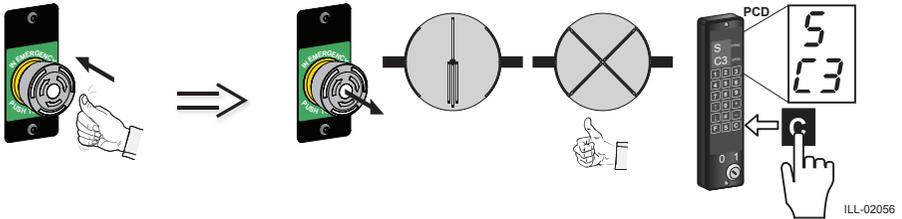
Note! If the door is equipped with the break-out solution, this must be tested minimum once a year. Local regulations needs to be followed.

Reset after the break-out function has been used:

If the escape doors have been opened, the display shows **37** or **C3**.

To make it possible to close the escape doors, do the following:

- 1 Release the emergency opening button by turning it in the direction of the arrows.
- 2 Close the door leaves correctly and press **C** on the PCD.



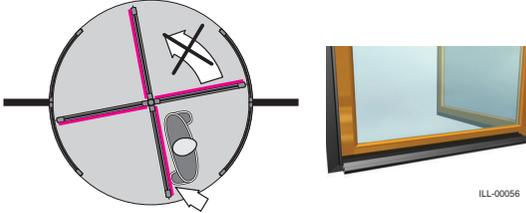
Emergency opening button

Activates the break-out system.



Pressure sensitive safety edges on the door leaves

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



Infrared presence sensor

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.



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.



Push button for disabled

Push button to reduce speed of the door.



Accessories

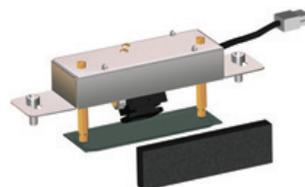
Passive infrared activator PIR

The passive infrared activator PIR triggers opening impulses for all movement within the detection area independent of direction.



Direction sensing radar DSR

The radar DSR is direction sensing i.e. it triggers an opening impulse for *approaching* objects only.



Night closing door NCD

Two versions are available:

- manually operated
- automatically operated



Hang sensor

The “Hang sensor” is used to prevent unauthorized persons to pass through the door by hanging or standing on the door leaves. If somebody tries to do this, the door stops and reverses.



SRST-1 Anti tailgating sensor

When the system detects suspicious behavior like tailgating (an unauthorized person attempting to use an empty compartment) the revolving door is automatically reversed, preventing unauthorized entry.



SPT360 Anti piggyback and anti tailgating sensor

When the system detects suspicious behavior like piggybacking (two people in one chamber) or tailgating (an unauthorized person attempting to use an empty compartment) the revolving door is automatically reversed, preventing unauthorized entry.



ROM-corder/Loudspeaker

The ROM-corder is used to inform people by means of a loudspeaker e.g. about wrong behaviour at the entry.

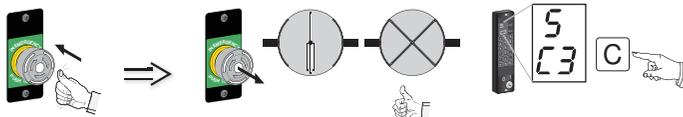
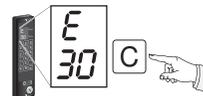
Reception panel

The reception panel contains a Program Control Device (PCD), a Master access and an emergency stop push button. The Master access makes the door rotate 360°. The maximum cable distance from the door to the reception panel is 100 m. The reception panel replaces the standard PCD.



Quick guide changing operating mode





ILL-02095

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

The global leader in
door opening solutions

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

declare under our sole responsibility that the type of equipment:
RD3, RD4, RD3 A1, RD4 A1, RD4 A2

complies with the following directives:

2014/30/EU ElectroMagnetic Compatibility Directive (EMCD)
2006/42/EC Machinery Directive (MD)
RoHS2 2011/65/EU

Harmonized European standards which have been applied:

EN ISO 13849-1:2015	EN 60335-1:2012+A11:2014
EN 60335-2-103:2015	EN 61000-6-2:2005
EN 61000-6-3:2007	EN 16005:2012/AC:2015

Other standards or technical specifications, which have been applied:

IEC 60335-1:2010 ed. 5	IEC 60335-2-103 ed. 2:2006+A1:2010
EN 1627 Class RC3	

EC type examination or 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 08532 TÜV B 12 03 58029 024
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 2004-03-24.

Compilation of technical file:

Anders Forslind
ASSA ABLOY Entrance Systems AB
Lodjursgatan 10
SE-261 44 Landskrona
Sweden

Email: anders.forslind@assaabloy.com

Place
Landskrona

Date
2019-04-26

Signature
Klas Hagelin

Position
Global Quality Manager



DoC 701475-en-20.0

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.

assaabloyentrance.com



ASSA ABLOY Entrance Systems

Tel: +46 10 47 47 000
info.aes@assaabloy.com
assaabloyentrance.com