

User Manual

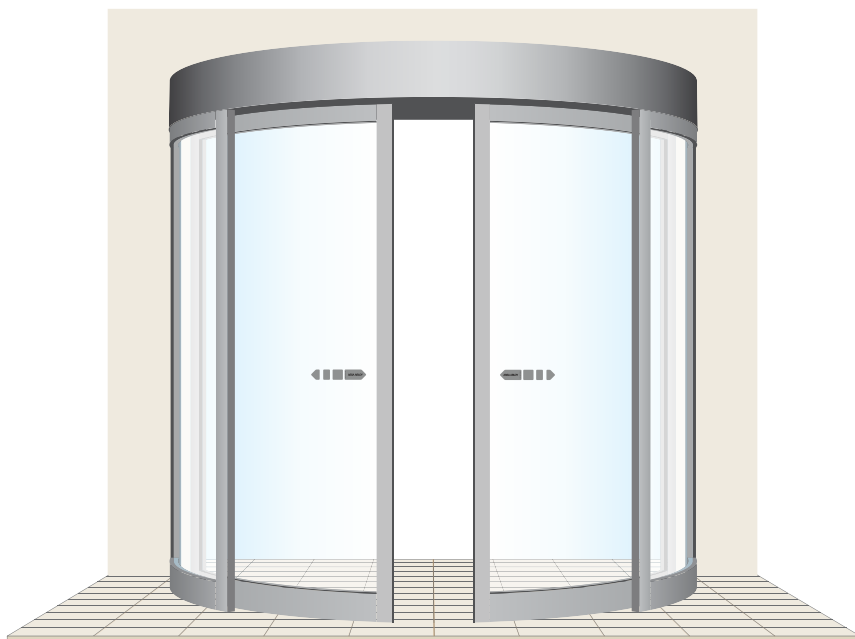
Curved Sliding Door System

ASSA ABLOY CMD

ASSA ABLOY

ASSA ABLOY Entrance Systems

The global leader in
door opening solutions



ILL-00224

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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 operator only with pedestrian doors.
- 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 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-0005) 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 CMD is an automatic sliding door operator developed to facilitate entrances to buildings and within 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 ASSA ABLOY CMD sliding door makes it possible to design the entrance in three dimensions, width, depth and height in addition to the normal width and height. This gives the entrance an elegant and decorative appearance while it remains extremely functional. A curved sliding door gives a wider opening than a flat sliding door.

Ensure that the lock is only activated when there are no persons in the room.

For installation and maintenance see Installation and Service manual 1006491.

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 CMD
Mains power supply:	120 - 240 V AC 50/60 Hz, mains fuse max 10A
Power consumption:	Max. 250 W
Degree of protection:	IP20
Approvals:	Third party approvals from established certification organizations valid for safety in use, see Declaration of Conformity.

How the ASSA ABLOY CMD works

The ASSA ABLOY CMD sliding door system works electromechanically. The drive unit, control unit, transmission, optional emergency unit and electromechanical locking device are all assembled in a support beam with an integrated cover. The motor and gear box transmit movement to the door leaves by means of a tooth belt. The door leaf is fitted to a door adapter/carriage and hangs on a sliding track. The active leaf travel is directed by a floor guide.

When an opening impulse (e.g. from a motion sensor) is received by the control unit, the drive unit starts and transmits movement to the door leaves to open.

The closing starts when no OPENING IMPULSE is received, the HOLD OPEN TIME has ended and no PRESENCE IMPULSE is activated.

Programme selectors

The ASSA ABLOY CMD user can select different modes of operation if a programme selector is installed. See the table below.

- PSMB-5, for control of one operator only.

- PS-5M, for central control of an optional number of operators. In setting AUTO every connected operator are individually controlled by its own programme selector. Reset is not available on PS-5M.
- PSK-6U, surface mounted on the side screen or on the wall close to the door.

Programme selector functions



OFF

This function is only used on emergency escape doors after it is certain that all people have left the building. The door cannot be opened with inner and outer activation units. The door is locked if an electromechanical locking device has been fitted. The door can be opened partially with a key switch (if fitted). With an emergency push-button (if fitted) the door opens fully.



EXIT

Passage from inside only. The door is normally locked if an electromechanical locking device has been fitted. The door can only be opened with the inner activation unit or with a key switch/emergency push-button (if fitted).



AUTO

Two-way traffic, normal operation of the door. The door can be opened with the inner and outer activation units and with a key switch/emergency push-button (if fitted).



AUTO
PARTIAL

Two-way traffic, AUTO PARTIAL is obtained. The door can be opened partially with the inner and outer activation units and with a key switch (if fitted). With an emergency push-button the door opens fully.



OPEN

The door is permanently open. The door can be moved by hand e.g. for window cleaning. All activation units except for the emergency push button (if fitted) are disconnected.



RESET

Set the programme selector to AUTO. Insert a narrow object in the small hole on the programme selector and push briefly. The operator makes a system test of the emergency unit (if selected), electromechanical lock, watchdog relay and closed door position. The operator is after closing reset and ready for normal operation.



RESET

Note! The RESET is not available on programme selector PS-5M.

Turn the key clockwise to the position "R" (six o'clock) and insert a narrow object in the small hole on the programme selector and push briefly. Then turn the key counter-clockwise back to the requested setting. The operator makes a system test of the emergency unit (if selected), electromechanical lock, watchdog relay and closed door position. The operator is after closing reset and ready for normal operation.

Note! The key cannot be removed in the "R" position.

Note! If monitored emergency unit is a demand, a test of the emergency unit is performed when the programme selector is turned from OFF or OPEN to any other position.

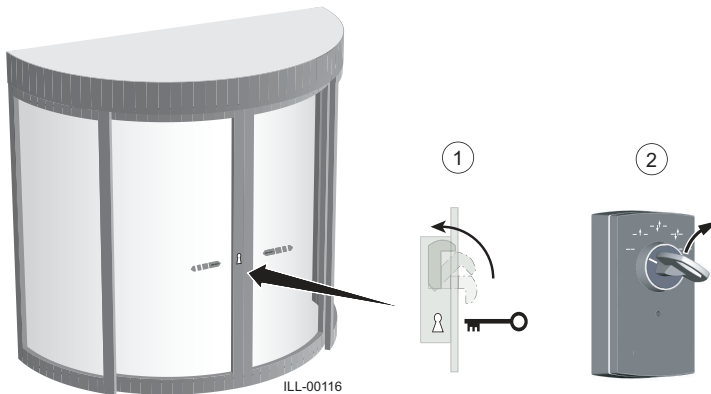
Locking

Doors used for emergency escape in buildings such as hospitals and homes for elderly people may not be locked or put in programme selection OFF mode. In other buildings emergency escape doors may be locked or put in programme selection OFF mode after it has been secured and all people have left the building.

Unlocking

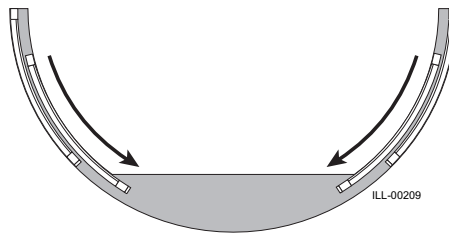
Unlock *all* the mechanical locks before activating the operator.

Note that more than one lock may be fitted.

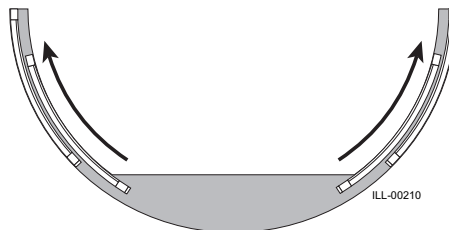


Standard safety

To permit a safe passage between closing doors, the doors reverse immediately if an obstruction is detected. They then resume their interrupted movement at low speed to check whether the obstruction has disappeared or not.



If an obstruction is detected while the door is opening, the doors stop immediately, and then close after a time delay.



Microprocessor for precise control

The microprocessor has a routine for self-monitoring, which detects any interference or faulty signals in door operation. If an input signal does not correspond to the preprogramming, the microprocessor automatically takes necessary actions to ensure a safe operation.

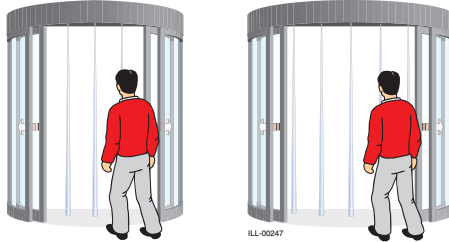
Safety system with presence sensors

Usually the safety system incorporates presence sensors installed above the door opening. A presence sensor detects an object in the doorway, while the doors are closing, the doors reverse immediately. The doors will start to close when the object is removed.



Optional safety

Two or four **extra** safety presence sensors can be included. The number of extra sensors are depending on the opening width. The distance between the photocells is 400 mm.



Emergency escape

The ASSA ABLOY CMD can be combined with an emergency unit that automatically opens or closes¹ the doors in the event of a power failure and can also be interfaced with the fire alarm or smoke detector. For further information, see General accessories on page 14.

Doors used for emergency escape in buildings such as hospitals and homes for elderly people may not be locked or put in programme selection OFF.

¹ Electrical emergency unit only

Electrical emergency unit

The door is opened by means of a rechargeable battery unit in the event of a power failure. The door remains in this position until the power is restored. The operator will then resume the function set by the programme selector. The emergency unit is monitored by the operator control unit. A monitoring error means that the door opens and remains open until the error is cleared.

For further information, see General accessories on page 14.

The electrical emergency function can also be used to close the door in the event of power failure. The fire authorities make this a requirement to stop fire or smoke from spreading throughout the building.

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 operator if repair or adjustment is necessary.

Disconnect supply ^⑫ when cleaning or other maintenance is to be carried out.

Daily Action			If problem occurs
Activate your operator and <i>visually</i> check, fastening and any damage of <ul style="list-style-type: none"> operator and cover ^① cables ^② operator mode selector(s) ^③ door and glass (stability) ^④ 			
Also inspect your operator and check <i>visually</i> for <ul style="list-style-type: none"> condition of door seals and weather stripping ^⑤ condition of glazing rubbers ^⑥ finger protection ^⑦ proper operation; closes slowly and smoothly any ventilation being obstructed 			
Set the mode selector to OFF and check that the operator and electromechanical lock (if fitted) work together. Also check that the lock ^⑧ really secures the door.			
Activate the manual activation units ^⑨ , if any, and walk towards the door. Check that the door has opened appropriately while you pass the entrance/exit. Then proceed with the automatic activation units ^⑩ in the same way.			
Check the safety sensors ^⑪ if any. See page 10. If you are unsure of which type of sensor you have, please contact your ASSA ABLOY Entrance Systems representative.			
Escape doors	By law, these tests must be performed regularly by trained personnel.	If the operator is equipped with automatic opening system, shut off the power and the door should open and remain open. Restore power and the door should close.	
Fire doors		Let the door close after an impulse ensuring nothing prevents the door from closing and locking (if regulations require it).	

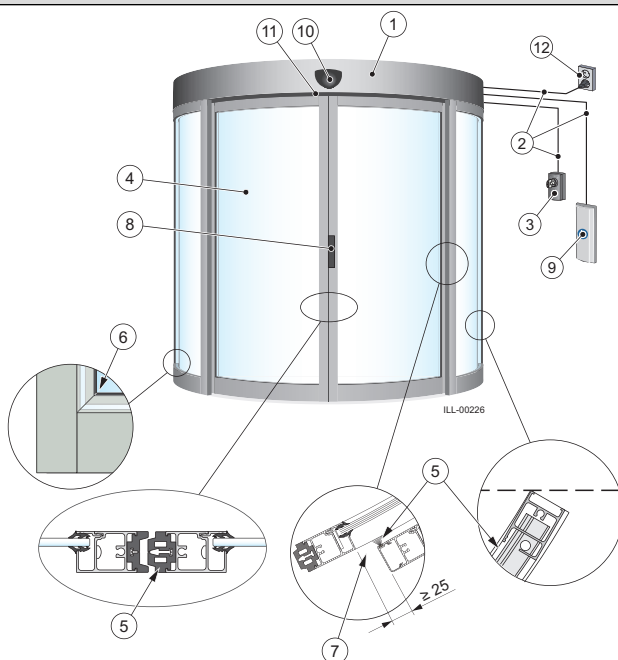


= Take appropriate measures.



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

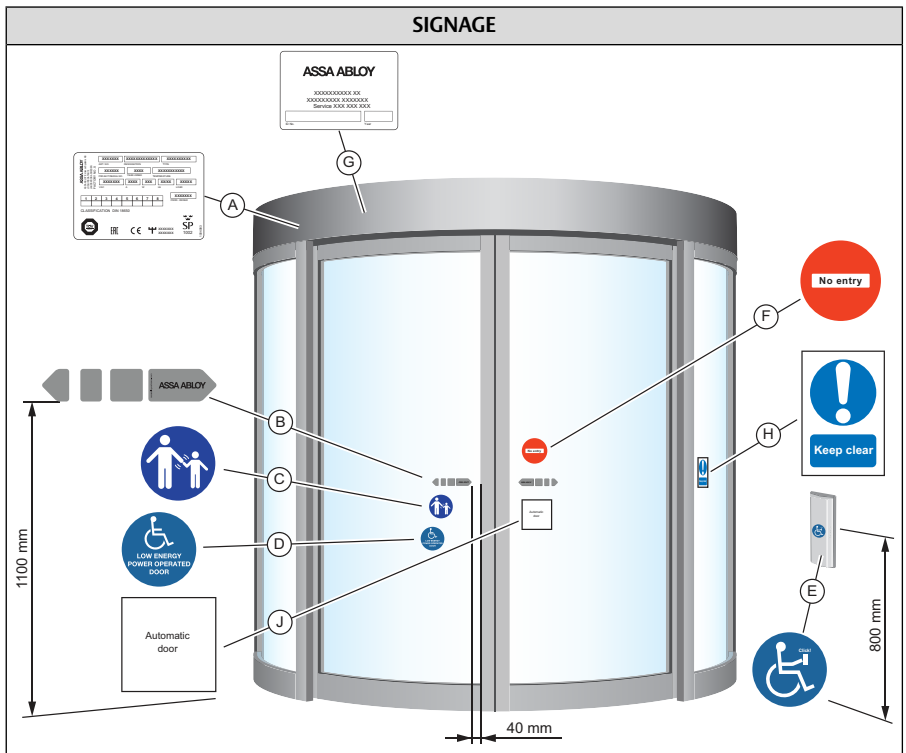
FUNCTION AND VISUAL INSPECTION



CLEANING

The best way to remove dust and dirt from the ASSA ABLOY CMD is to use water and a soft cloth or a sponge. A gentle detergent may be used. To maintain the quality of the surface treatment, the surfaces should be cleaned once/four months period. The cleaning should be documented. To avoid damages to the profiles the brushes/weather stripping 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 polishing detergent.
- 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)	ASSA ABLOY Entrance Systems door sticker: Mandatory, if applicable to highlight the presence of the glass (applied to all glass sections that are moving).	
(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)	Operator designed for disabled people: Recommended, if applicable (applied to both sides of the door).	
(E)	Activation by disabled people: Recommended, if applicable.	
(F)	No entry, identifying one-way traffic: Mandatory in GB and US, if applicable, not included in the product.	
(G)	Local product label	
(H)	Keep clear	
(J)	Automatic door	

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

Safety accessories

Even though the ASSA ABLOY CMD is 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).

- Combined motion and presence sensors
- Separate presence sensors (presence in the door opening or side presence for the trailing edge of the door)

General accessories

Your ASSA ABLOY CMD can be further improved with the following add-ons (please contact your local ASSA ABLOY Entrance Systems dealer for detailed description).

Cover

Made in clear anodized aluminium as standard. Paint finished in RAL colours or anodizing optional.

Motion sensor and presence sensors

Add motion and presence sensors to improve comfort and safety.

Programme selectors

See page 7.

Electrical locks

The following locks are available to the operator:

- Locked with power (LDP), fail safe
- Locked without power (LD), fail secure
- Bistable lock (LDB)

Micro switch kit, LSK/LIS

For indication of door and lock position.

Electrical emergency unit with batteries

Used if a door is required to be opened or closed by means of a rechargeable battery unit and remain in this position in the event of power failure. Authorities can demand that the emergency units are monitored on a regular time basis. Half an hour before this time has elapsed the following opening impulse generates an emergency opening test. If there is no opening impulse within the next half hour, the operator control unit generates the opening impulse itself.

If the battery opens the door within the limited time the test is successful and the door resumes the function set by the programme selector.

Note! The test is never performed in programme selector setting OPEN. In setting OFF it can be selected. The test is always performed after a RESET and after changing program selection, from a position where a test is not done to a position where the test is a demand.

Emergency closing with repeated closing

If the door is opened by hand after an electrical emergency closing, it will close again.

Mechanical emergency unit with elastic cord

Used if a door is required to be opened and remain opened by means of an elastic cord in the event of power failure. Authorities can demand that the emergency unit is monitored on a regular time basis. Half an hour before this time has elapsed the following opening impulse generates an emergency opening test. If there is no opening impulse within half an hour, the operator control unit generates the opening impulse itself.

If the elastic cord opens the door within the limited time the test is successful and the door resumes the function set by the programme selector.

Note! The test is never performed in programme selector setting OPEN. In setting OFF it can be selected. The test is always performed after a Reset and after changing program selection, from a position where a test is not done to a position where the test is a demand.

Interlocking

Used between two operators when the first operator must close before the other one can open (typical to reduce energy losses and not for security reasons).

Synchronization

Used between the operators of two single sliding doors, working together in very large openings.

Convenience battery UPS

Stand-by supply which gives continued operation during short power failure.

External error indication

Obtained if a lamp or a buzzer is connected.

Key switches (flush and/or surface mounted)

Used to give opening impulse to the door in any programme selector setting.

The key switch can also open the door when power is switched off, if a battery is fitted.

Push button

Used to give opening impulse to the door.

Emergency open impulse

Used to give opening (fireman's opening) impulse to the door in any operation mode selector setting. With electrical emergency unit also during power failure.

Open / Close function

One button impulse, will alternate between Open and Close. The door will stand open until next impulse or can after an adjustable time delay automatically start to close even if a new impulse is not received.

Troubleshooting

What's wrong?	Remedies
The door does not open	
The motor does not start	Change the setting of the program selector.
	Check the mains switch and fuse in the building.
The motor starts but stops during opening	Unlock the mechanical locks.
	Clean the floor guide.
	Check for objects jammed under the door.
The door does not close	
The motor does not start	Change the setting of the program selector.
	If a presence sensor is installed, check for and remove objects placed in the presence zone.
The motor starts but stops during opening	Clean the floor guide.
	Check for objects jammed under the door.
The door moves slowly	
	Prevent traffic from using the door and allow it to close completely.
	Allow the operator to control the closed position without interruption.
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-0005) available. These are used together.

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

Part	Part Number	Cycles/hour in operation			Abusive Environment
		<10	<100	>100	
		Low Traffic	Medium Traffic	High Traffic	
Electrical emergency unit battery	33550475	24	24	24	24
Mechanical emergency unit elastic cord	331700121	12	12	12	12
Floor guide shoe Felt padded	33831622	24	12	6	6
Carriage wheel Single Anti-derailing	830060 246313	36	24	12	12
Tooth belt	33735251	60	48	36	24

Check that all required signage is applied and intact, see page 13. Also check other consumable parts, such as brushes, door stops and glazing rubbers.

Other products from ASSA ABLOY Entrance Systems

- Door Systems
- Balance doors
- Air curtains
- Revolving 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

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

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