

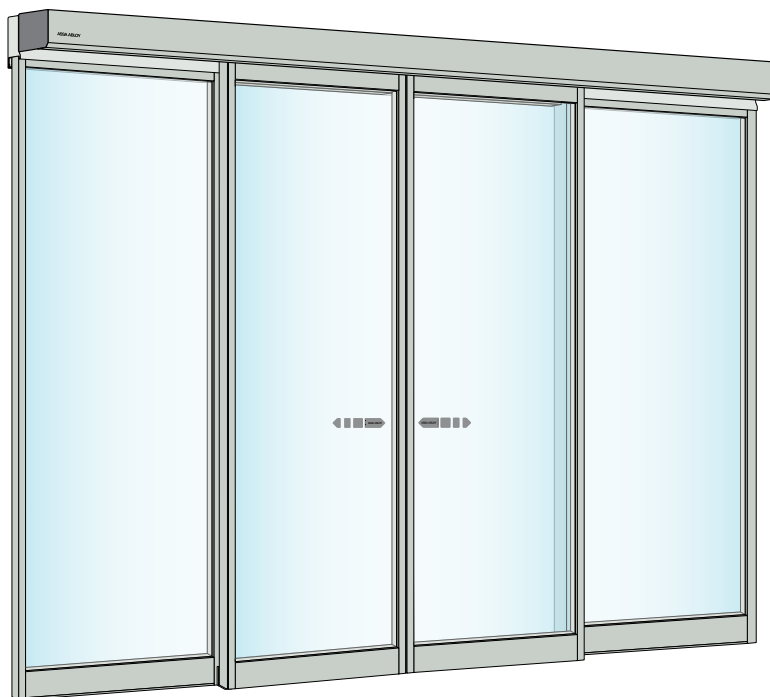
User Manual

Sliding Door Operator

ASSA ABLOY SL300

ASSA ABLOY
Entrance Systems

Experience a safer
and more open world



CONTENTS - Original instructions

Presentation of notes and warning signs	4
Instructions for safe operation	4
Congratulations on your new automatic door!	7
Electronic equipment reception interference	7
Environmental requirements	7
Product liability	7
Warranty	8
Service	8
Intended use	9
.....	9
Technical specification	9
How the ASSA ABLOY SL300 works	9
Locking	10
Unlocking	10
Operation mode selectors	10
PSK-6U - Modes	10
Integrated safety	11
Safety system with presence sensors	11
Technologically advanced sensors	12
How to check inner and outer combined motion and presence detection sensors	13
How to check side presence detector(s)	14
Safety system with photocells	14
Battery unit	14
Regular safety checks	15
Safety accessories	18
General accessories	18
Cover	18
Electrical locks	18
Electrical opening with the battery unit	18
Troubleshooting	18
Service/Maintenance	19

Other products from ASSA ABLOY Entrance Systems 19

Declaration of conformity 20

..... 20

..... 20

..... 20

ASSA ABLOY as word and logo are trademarks owned by the ASSA ABLOY Group

© ASSA ABLOY Entrance Systems, 2022

Technical data subject to change without notice.

Backtrack information: folder:Workspace Main, version:a705, Date:2021-11-30 time:01:59:33, state: Frozen

Presentation of notes and warning signs

Various symbols and texts are used in this manual for easier understanding and identification.

Note! When you see **Note!** it contains useful advice and information to ensure correct and compliant usage of the system.



Potential hazardous situation that can lead to either minor or severe injuries or death and cause either minor or substantial property damage.



Potential hazardous situation that could lead to danger of electric shock and cause serious injury or death.

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.
- The mains power supply shall be installed with protection and an all-pole mains switch with isolating capability of Category III, shall be installed according to local regulations.
- Frequently examine the installation for imbalance where applicable and signs of wear or damage to cables, springs and mounting. Do not use if repair or adjustment is necessary.
- Do not use the equipment if repair or adjustment is necessary.

- **WARNING:** the drive shall be disconnected from its power source during cleaning, maintenance and when replacing parts.
- 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 concerning use of the appliance in a safe way and understand the hazards involved.
- 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 concerning use of the appliance in a safe way and understand the hazards involved.
- Cleaning and user maintenance shall not be made by children.
- Do not let children or 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.
- Do not dash through a closing door.
- This appliance may contain batteries that are only replaceable by skilled persons.
 - The battery must be removed from the appliance before it is scrapped
 - The appliance must be disconnected from the supply mains when removing the battery.
 - The battery is to be disposed of safely.

- Ensure that controls that can be set for a locked position are only activated when there are no other persons in the room.

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 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 battery opening function (when applicable)
- that the closing force is appropriate for the door size

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 door with a battery 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 SL300 is an automatic sliding door operator developed to facilitate entrances to buildings and within buildings through sliding doors.

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.

It is to be used indoors where it is suitable for almost all types of external and internal sliding doors. The product is not intended for usage in an Escape route.

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

For installation and maintenance see Installation and Service manual 1021504.

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 SL300
Mains power supply:	100 V AC -10% to 240 V AC +10%, 50/60 Hz, fuse 10 AT (building installation)
Power consumption:	Max. 200 W
Degree of protection:	IP20
Sound pressure:	$L_{pa} \leq 70 \text{ dB}(A)$
Approvals:	Third party approvals from established certification organizations valid for safety in use.

How the ASSA ABLOY SL300 works

The ASSA ABLOY SL300 works electromechanically. The drive unit, control unit, transmission, optional battery unit and electromechanical locking device are all assembled in a support beam. 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 is received by the control unit the motor starts and transmits movement to the door leaves, which move to the open position.

The closing starts when no OPENING IMPULSE is received and the HOLD OPEN TIME has expired.

The ASSA ABLOY SL300 user can select five different modes of operation if a programme selector is installed. See [Operation mode selectors on page 10](#).

Locking

Make sure that all people have left the building before locking the door.

Unlocking

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

Operation mode selectors

The door functions are set with operation mode selector.

The operation mode selector is available with 5 positions (plus RESET).

PSK-6U - Modes

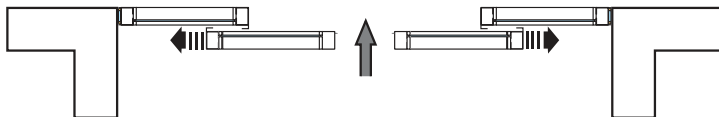
OPEN, AUTO PARTIAL, AUTO, EXIT and OFF modes can be obtained.



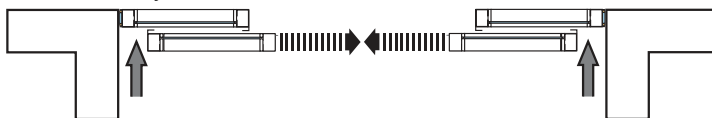
Symbol	Text	Mode
	OPEN	The door is permanently open. The door can be moved by hand e.g. for window cleaning. All activation units are disconnected.
	AUTO PARTIAL	Two-way traffic, AUTO PARTIAL is obtained. The door can be opened partially with the inner and outer activation units and with a key switch (if fitted).
	AUTO	Two-way traffic, normal operation of the door. The door can be opened fully with the inner and outer activation units and with a key switch (if fitted).
	EXIT (ONE WAY)	One-way traffic 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 (if fitted).
	OFF	The door is closed and locks (if an electromechanical lock is fitted). The door cannot be opened with inner and outer activation units. The door can be opened partially with a key switch (if fitted).
	RESET	<p>Turn the key clockwise to the position "R" (six o'clock) and insert a narrow object in the small hole on the operation mode selector and push briefly. The operator will RESET, then turn the key counter-clockwise back to the requested setting. The operator will start-up again, the doors will return to closed position with low speed (if operation mode selection is not OPEN). If the operator is equipped with battery unit, the operator will test the battery unit by opening with battery after the doors have closed with low speed (if operation mode selection is not OPEN or OFF).</p> <p>Note! The key cannot be removed in the "R" position.</p>

Integrated 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.

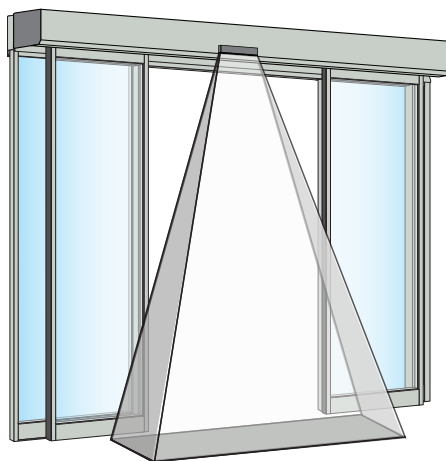


If an obstruction is detected while the door is opening, the doors stop immediately, and then close after a time delay.



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.



Technologically advanced sensors

The ASSA ABLOY Entrance Systems sensors have been tested and approved by the ASSA ABLOY Entrance Systems test laboratory for use on ASSA ABLOY Entrance Systems's automatic sliding doors. These presence sensors further improve the already high obstruction detection obtained with the built in self-monitored crush force limitation.

Monitored sensors have built-in monitoring for error detection.

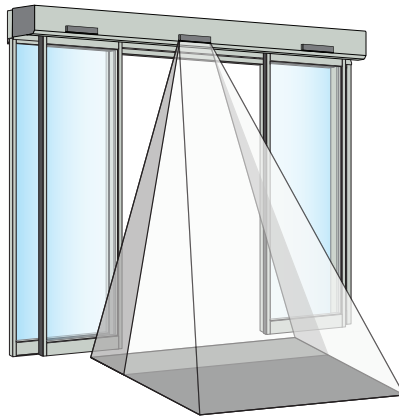
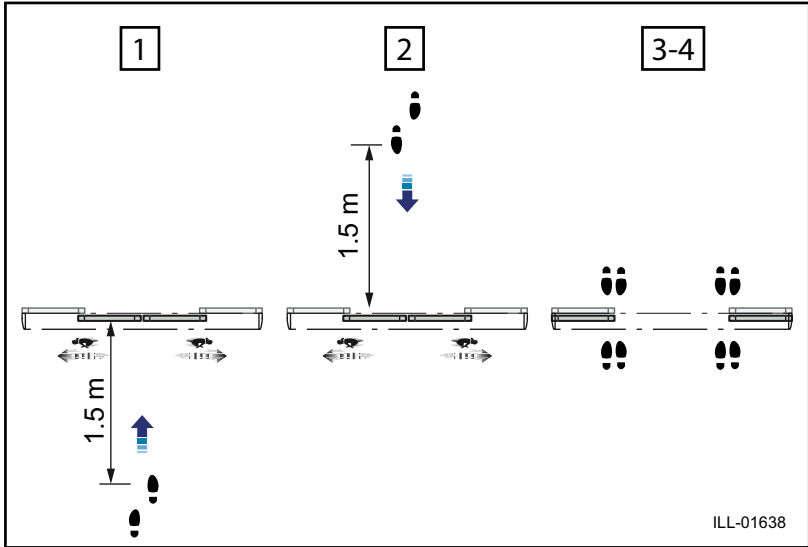


If you have a problem you cannot correct, turn off the automatic door immediately and call your ASSA ABLOY Entrance Systems service representative for assistance.

How to check inner and outer combined motion and presence detection sensors

Combined sensors are used when you want both a motion sensor and a presence sensor integrated into the same unit.

- 1 Walk towards the door opening, the door shall start to open when you are about 1.5 meter from the door and the door shall stop in open position.
- 2 When the door has closed, repeat the same procedure from the other side of the door opening.
- 3 Open the door, stand still close to the face of the open door leaf on the left side for more than 5 s. The door shall remain open. Repeat on the right side.
- 4 Repeat step 3 in the other side of the door opening.

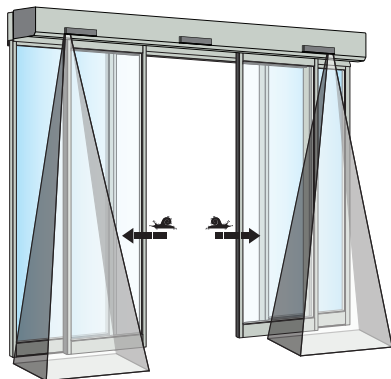


How to check side presence detector(s)

Side presence sensors can be used for example if higher door speed is required or for installations in homes for elderly/disabled or childcare centres, to protect users from being struck by the doors during their opening cycle. When a side presence sensor detects an obstacle the door operator will not stop, but slow down the door movement to a safe speed. With this safe speed the door will try to push the obstruction away, to ensure that the person passing through the door will not walk into the door.

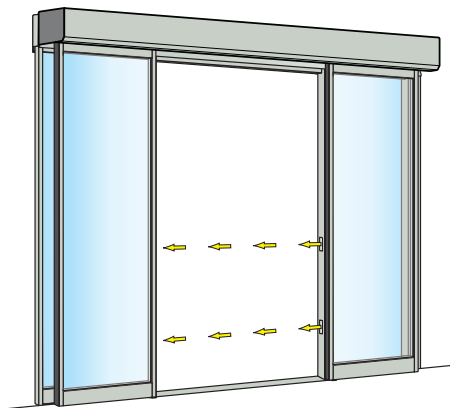
Walk into the detection field of the side presence sensor on one side. Activate the impulse on the operator, the door shall not stop, but slow down to safe speed during the opening.

If you have a bi-parting (double) door then repeat the procedure above on the other side.



Safety system with photocells

Alternatively the safety system can incorporate presence photocells in the door opening. If an object is breaking the infrared ---- (invisible) beam between the photocell units, while the doors are closing, the doors reverse immediately. The door will close when the object is removed.



Battery 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 mode selector.

For further information, [see General accessories on page 18](#).

Regular safety checks







To help you fulfill 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 mains power 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 12 . If you are unsure of which type of sensor you have, please contact your ASSA ABLOY Entrance Systems representative.	

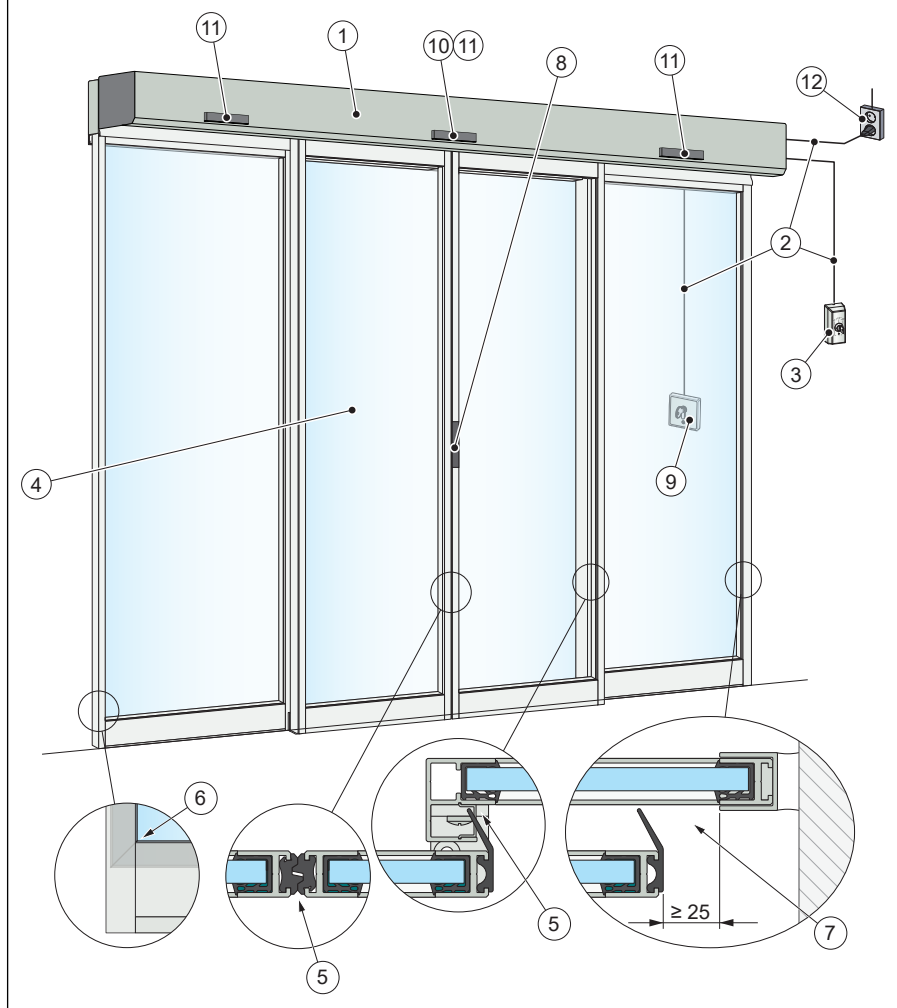


= Take appropriate measures.



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

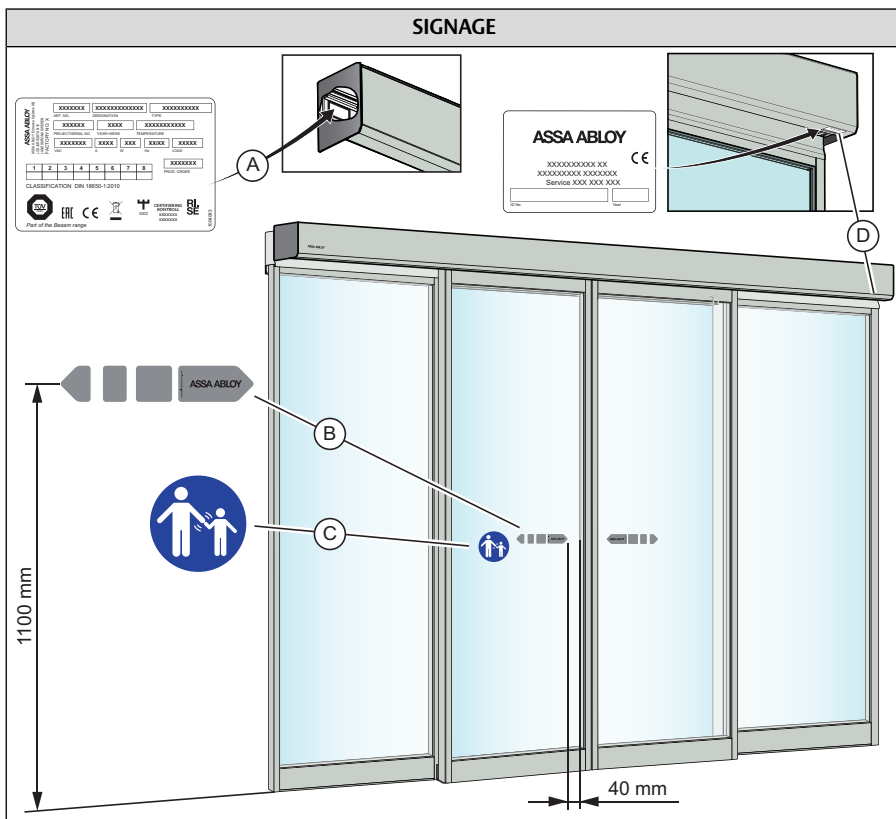
FUNCTION AND VISUAL INSPECTION



CLEANING

The best way to remove dust and dirt from the ASSA ABLOY SL300 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, mode 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)	Local product label	

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

Safety accessories

- 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

Cover

Made in clear anodized aluminium .

Electrical locks

The following locks are available to the operator:

- Locked with power (LDP), fail safe

Electrical opening with the battery unit

Used if a door is required to be opened by means of a rechargeable battery unit and remain in this position in the event of power failure. The battery can be monitored.

Troubleshooting

What's wrong?	Remedies
The door does not open	
The motor does not start	Change the setting of the mode selector.
	Check the mains power 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 mode 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.
	Reset the operator by briefly pushing the reset button (see page 10).
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.

This product may contain batteries that should only be replaced by an ASSA ABLOY Entrance Systems-trained and skilled technician.

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	Cycles/hour in operation			Abusive Environment
	<10	<100	>100	
	Low traffic	Medium traffic	High traffic	
Battery	24	24	24	24
Door carriage	36	24	12	12
Tooth belt	48	48	48	36
Door stop	24	24	24	24
Tension wheel	36	36	36	36
Detachment guard	60	60	60	60

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

Declaration of conformity

ASSA ABLOY
Entrance Systems

Experience a safer
and more open world

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

declare under our sole responsibility that the type of equipment:
SL300

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 61000-6-2:2005

EN 16005:2012/AC:2015

EN 60335-2-103:2015

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

EN 60335-1:2012/AC:2014+A11:2014+A13:2017

+A1:2019+A14:2019+A2:2019

Other standards or technical specifications, which have been applied:

IEC 60335-2-103 ed.2 1:2011

IEC 60335-1 ed. 5:2010

DIN 18650-1:2010

Certificate issued by a notified or competent body (for full address, please contact ASSA ABLOY Entrance Systems AB) concerning the equipment:
B 058029 0043 **B.08490/20**

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 2020-09-10

Compilation of technical file:

Anders Forslind

ASSA ABLOY Entrance Systems AB

Lodjurgatan 10

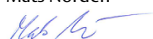
SE-261 44 Landskrona

Sweden

Place
Ferahltoft

Date
2021-10-18

Signature
Mats Nordén



Position
Head of Product Development Product Area
Door Automation

DoC 1021503-en-4.0

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



ASSA ABLOY Entrance Systems

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