User Manual

Sliding Door Operator

ASSA ABLOY SL500, SL510, SL520, SL521

ASSA ABLOY
Entrance Systems

Experience a safer
and more open world

CONTENTS - Original instructions

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.

WARNING: Important safety instructions. It is important for the safety of persons to follow these instructions. Save these instructions.

- 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 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 operators are automatic sliding door operators 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.

The operator can be configured to be used in escape route. For a list of directives and standards that the operator complies to, see the Declaration of Conformity.

See Electrical Emergency Unit (EEU) on page 26, Mechanical Emergency Unit (MEU) on page 25, Break-out unit PSB on page 26.

It is to be used indoors where it is suitable for almost all types of external and internal sliding doors.

For installation and maintenance see Installation and Service manual 1009203 (ASSA ABLOY SL500), 1013523 (ASSA ABLOY SL510), 1011076 (ASSA ABLOY SL520), 1020148 (ASSA ABLOY SL521) or 1016068 (ASSA ABLOY M SL).

Save these instructions for future reference.

Technical specification

Manufacturer:	ASSA ABLOY Entrance Systems AB
Address:	Lodjursgatan 10, SE-261 44 Landskrona, Sweden
Type:	Sliding Door Operator ASSA ABLOY SL500, ASSA ABLOY SL510, ASSA ABLOY SL520 and ASSA ABLOY SL521
Mains power supply:	100 V AC -10% to 240 V AC +10%, 50/60 Hz, fuse 10 AT
Power consumption:	Max. 250 W
Degree of protection:	IP20
Sound pressure:	$L_{pa} \leq 70 \quad dB(A)$
Approvals:	Third party approvals from established certification organizations valid for safety in use, see Declaration of Conformity.

How the ASSA ABLOY SL500, ASSA ABLOY SL510, ASSA ABLOY SL520 and ASSA ABLOY SL521 work

The operators work electromechanically.

The motor, control unit, transmission – and 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 wheel fitting and hangs on a sliding track. The guiding at the bottom is carried out by means of floor guides, (Full Break-Out) or Side Panel Guides (Fixed Sidelites).

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 operators user can select five different modes of operation if a mode selector is installed. See Operation mode selectors on page 12.

Locking

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

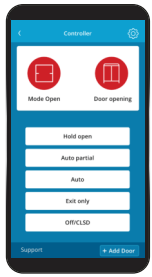
ASSA ABLOY Sliding Door Manager

If the operator is equipped with an OMS BLE, it is possible to change the mode selections with the smartphone app **ASSA ABLOY Sliding Door Manager**.

Installation of the app

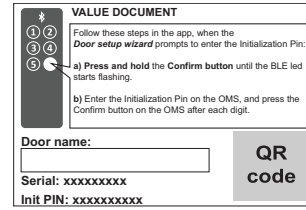
- Download the app **ASSA ABLOY Sliding Door Manager**, at **App Store** or **Google Play**. Make sure to have your value document ready.
- Tap the button "**+ Add Door** " in the app, and follow the door setup wizard. The setup wizard will guide you how to pair the smartphone with the door.

  Note! To be able to pair, you have to be in the range of 10 meters from the door.



Download on the App Store

Google Play



Operation mode selectors

The door functions are set with different operation mode selectors.
The operation mode selector is available with 5 positions (plus RESET).
The key on the PSK-6U, OMS Standard and OMS BLE mode selectors must always be removed on emergency escape doors after changing settings.

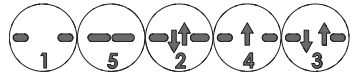
OMS Standard and OMS BLE - Modes

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 except for the emergency push button (if fitted) 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). With an emergency push-button (if fitted) the door opens fully.
	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/emergency push-button (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/emergency push-button (if fitted).
	OFF/CLOSED	The door is closed and locked (if an electromechanical lock is fitted). In an escape route the OFF mode may only be set after it is certain that all people have left the building. The door cannot be opened with inner and outer activation units. The door can be opened partially with a key switch (if fitted). The door can be opened fully with an emergency push button (if fitted). When the mode selector is in OFF mode the OFF button can give a key impulse. The key impulse will open the door to partial open position. There are 3 different ways how the OFF button works, depending on the configuration. 1 It is not possible to give a key impulse. 2 It is always possible to give a key impulse by pressing the OFF button for 2 seconds. 3 The mode selector must first be unlocked then it is possible to give a key impulse by pressing the OFF button for 2 second.
	RESET	By briefly pushing the button (placed in the hole accessible from the underside of the unit) with a narrow object, the door operator will make a RESET function with system test. The door will return to closed position (if not in operating mode selection OPEN or if an error is present) and is then ready for normal operation. If the operator is equipped with emergency unit for escape, the operator will test the emergency unit by opening with battery after the doors have closed with low speed (if operation mode selection is not OPEN or OFF).

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

OMS Standard and OMS BLE - Access codes and flashing light description

Codes	
One of four access codes can be used.	
1	No access code.
2	The access is obtained by pushing any mode selection button for 2 seconds. Once unlocked, it will stay unlocked if no button has been pushed for 5 seconds.
3	A passcode can be selected where the access is obtained by briefly pushing the buttons in the correct order. The entire code must be entered within 10 seconds. Default passcode is  Once unlocked, the unit will be locked 15 seconds after entering the passcode. When selecting a new mode it must be confirmed by pressing  , after which the mode selector will be locked. **Note!** The passcode can be changed by an authorized service technician.
4	Give access with an internal/built in key. Once unlocked, the unit will be locked 15 seconds after activating the key. When selecting a new mode it must be confirmed by pressing  , after which the mode selector will be locked.
The different operation modes are selected by pushing their respective symbol. If selected, the symbol shines blue.	

Flashing light	
Red	A flashing red light is indicating an error in the operator. If the error remains after a RESET then service is needed.
Magenta	A magenta light every other second indicates a status or condition that can be cleared by the owner e.g. a break-out door is broken out.
Yellow	A yellow light every other second indicates that maintenance is needed.
Green	• A green light will flash whenever a button is pressed while typing the passcode. • When correct passcode is entered, the green led is continuously lit. • A green light will flash four times per second when a new operation mode has been selected but not yet confirmed.

Bluetooth LED (For OMS BLE)	
No light 	Bluetooth is disabled
Lit 	Bluetooth is active
Flashing light 	OMS BLE module is paring with the app **ASSA ABLOY Sliding Door Manager**

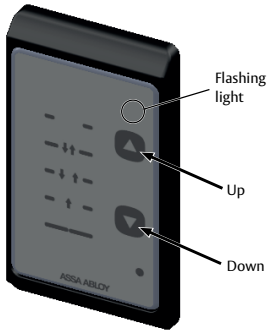
OMS Basic and PSK-6U - Modes

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 except for the emergency push button (if fitted) 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). With an emergency push-button (if fitted) the door opens fully.
	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/emergency push-button (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/emergency push-button (if fitted).
	OFF	The door is closed and locks (if an electromechanical lock is fitted). 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 can be opened partially with a key switch (if fitted). The door can be opened fully with an emergency push button (if fitted). **OMS Basic:** When the mode selector is in OFF mode the arrow down button can give a key impulse. The key impulse will open the door to partial open position. There are 3 different ways how the arrow down button works, depending on configuration. 1 It is not possible to give a key impulse. 2 It is always possible to give a key impulse by pressing the arrow down button for 2 seconds. 3 The mode selector must first be unlocked then it is possible to give a key impulse by pressing the arrow down button for 2 second.
	RESET	By briefly pushing the dot, placed in the lower right corner of the operation mode selector, with a narrow object, the operator will RESET. 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 emergency unit for escape, the operator will test the emergency unit by opening with battery after the doors have closed with low speed (if operation mode selection is not OPEN or OFF).
	RESET	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 emergency unit for escape, the operator will test the emergency unit by opening with battery after the doors have closed with low speed (if operation mode selection is not OPEN or OFF). **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 operation mode selector is set from OFF or OPEN to any other operation mode.

OMS Basic - Access codes and flashing light description

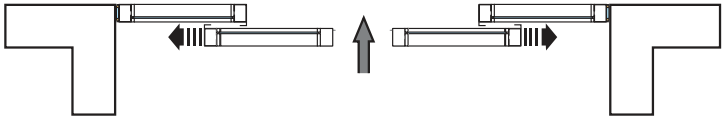


Codes	
Three alternative selectable codes are used.	
1	The access is obtained by pushing the arrow symbol pointing up or down for 2 seconds.
2	The access code is obtained by briefly pushing in turn the arrow up symbol, followed by the arrow down, arrow down again and the arrow up symbol. The entire code must be entered within 3 seconds.
3	No access code.
The different operation modes are selected by pushing the arrow symbols pointing upwards or downwards. When a button is pushed a buzzer will sound. The present selection is indicated by a blue light to the left of the function symbol or text. When an arrow symbol has not been pushed for 5 seconds the access will be locked.	

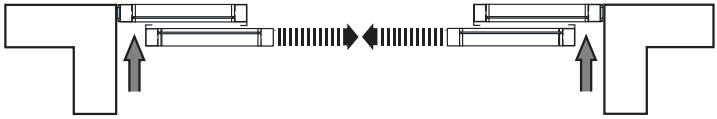
Flashing light	
Red	• When a red light is flashing it is indicating an error in the door operator. If the error remains after a RESET then service is needed. • When an external key is connected and activated, the indication LED on the OMS Basic will be steady red for 15 seconds and it will be possible to change mode selection.
Orange	An orange light every other second indicates a status or condition that can be cleared by the owner e.g. a break-out door is broken out.
Yellow	A yellow light every other second indicates that maintenance is needed.

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.

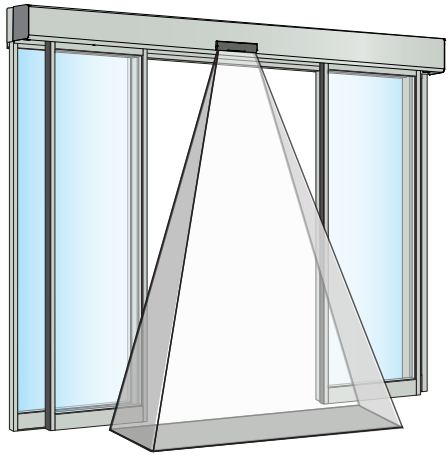


If an obstruction is detected while the door is opening, the doors stop immediately, and then close after a time delay.



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

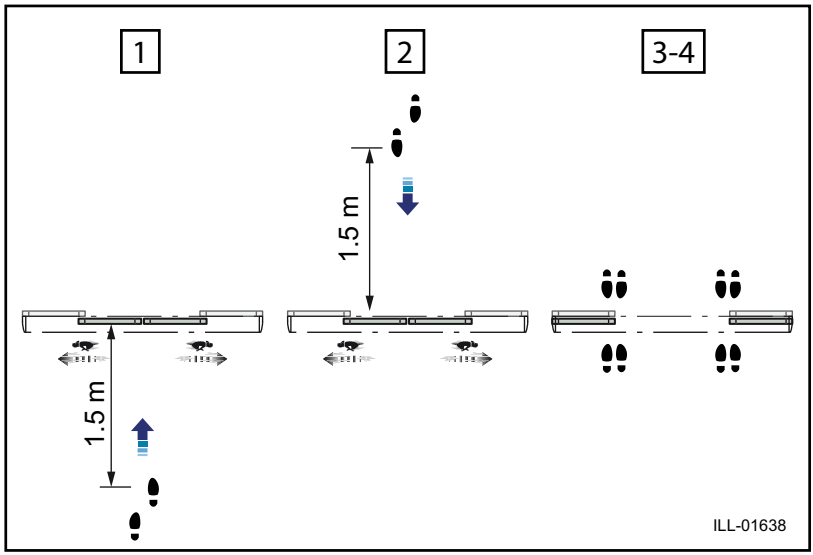
Combined sensors are used when you want both a motion sensor and a presence sensor integrated into the same unit.

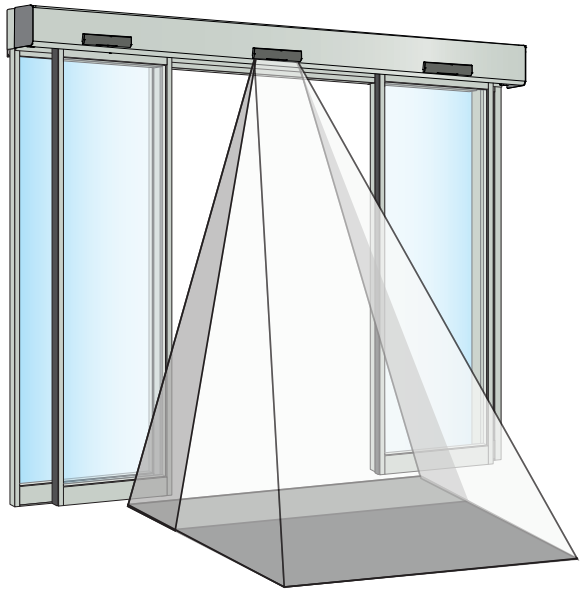
1 Walk towards the door opening, the door shall start to open when you are about 1.5 meter from the door and the door shall stop in open position.

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.



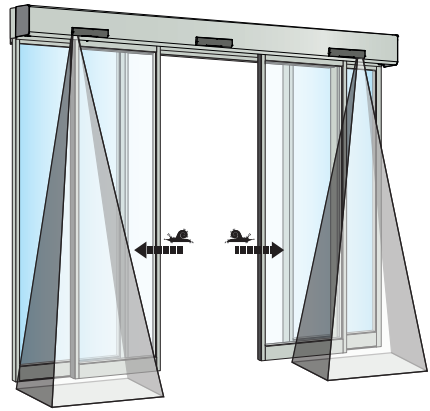


How to check side presence detector(s)

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.

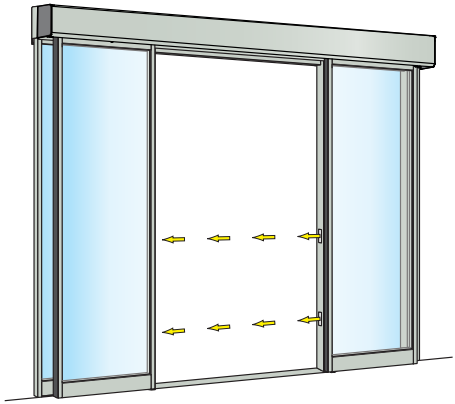
Walk into the detection field of the side presence sensor on one side. Activate the impulse on the operator, the door shall not stop, but slow down to safe speed during the opening.

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.



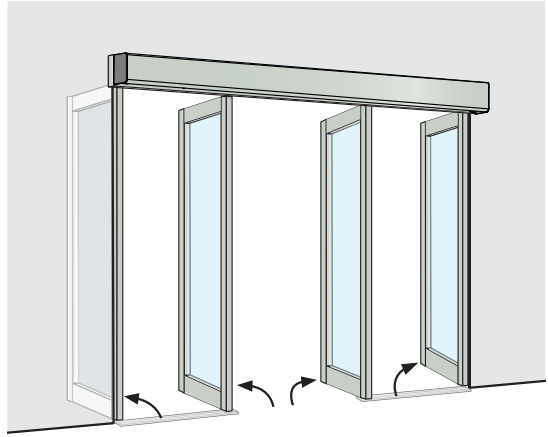
Emergency escape

The operator can be fitted with different emergency escape units to ensure a safe evacuation of the building.

Break-out unit PSB

The door leaves and the side screens are swung outwards when a defined pressure is applied.

The break-out function can also be used to create a wider opening. From the fully swung out position, the door leaves can be manually slid sideways, offering the possibility to transport wide objects through the opening, or to make a shop entrance more inviting during good weather.



Mechanical emergency unit (MEU)

An elastic cord is used to open the door in the event of power failure. Until the power is restored, the door remains open. The operator will then resume the function set by the mode 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 25.

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 mode selector. The battery unit is monitored by the operator control unit. A monitoring error is indicated by flashing red LED on the operation mode selector (OMS) and the door remains in open position until the error is cleared.

For further information, see General accessories on page 25.

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 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.

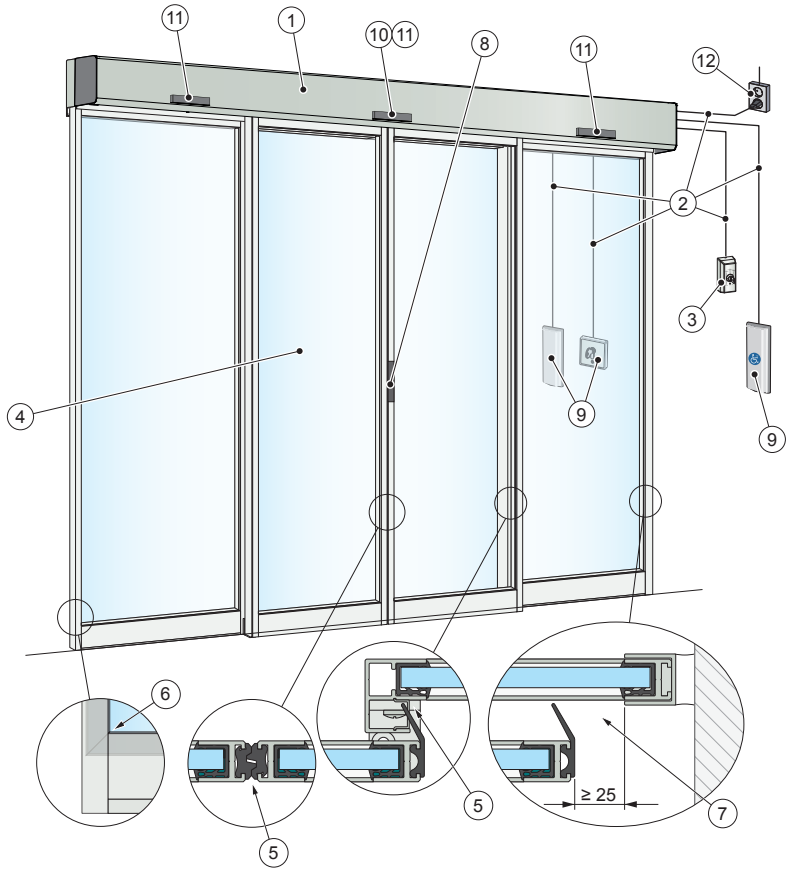
Disconnect mains power supply ⑫ when cleaning or other maintenance is to be carried out.

Daily Action			If problem occurs
Activate your operator and *visually* check, fastening and any damage of • operator and cover ① • cables ② • operator mode selector(s) ③ • door and glass (stability) ④			
Also inspect your operator and check *visually* for • 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 17. If you are unsure of which type of sensor you have, please contact your ASSA ABLOY Entrance Systems representative.			
Doors in escape doors	By law, these tests must be performed regularly by trained personnel.	If the operator is equipped with break-out system, set the mode selector to AUTO mode. Push the door(s) manually in the escape direction to ensure that nothing prevents the door(s) from being open. The door(s) shall stop its operation and it shall be possible to move the door(s) manually. After the test, restore the door(s) to their normal mode of operation.	
		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 resume its normal operation.	
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

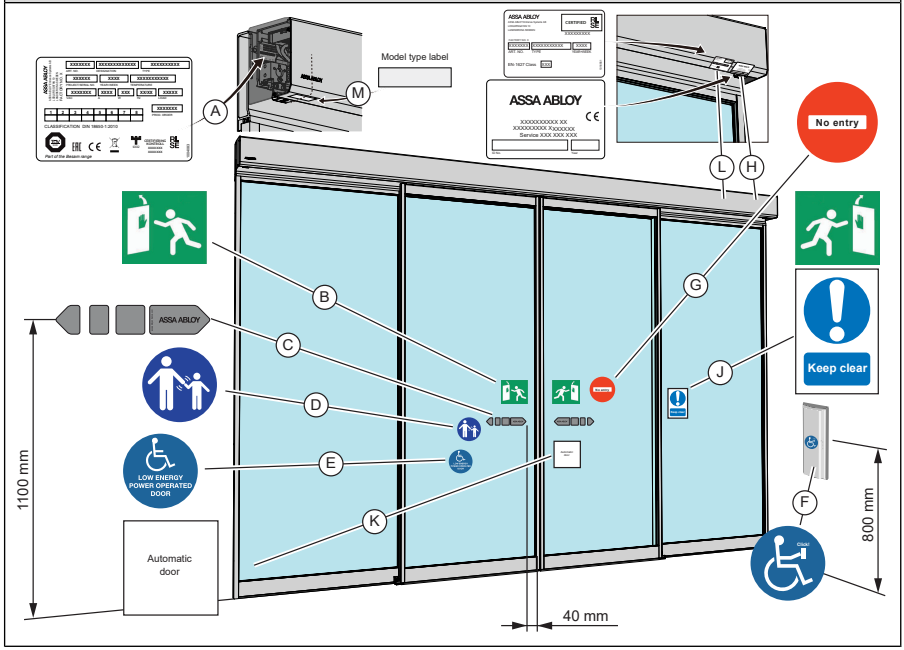


CLEANING

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.

SIGNAGE



Action	
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.	
Ⓐ	Product label: Mandatory
Ⓑ	Emergency break-out: Mandatory, if approved for escape route.
Ⓒ	ASSA ABLOY Entrance Systems door sticker: Mandatory, if applicable to highlight the presence of the glass (applied to all glass sections that are moving).
Ⓓ	Supervision of child (applied to both sides of the door): Mandatory according to national regulations. Recommended, if the risk analysis shows use by children.
Ⓔ	Operator designed for disabled people: Recommended, if applicable (applied to both sides of the door).
Ⓕ	Activation by disabled people: Recommended, if applicable.
Ⓖ	No entry, identifying one-way traffic: Mandatory in GB and US, if applicable, not included in the product.
Ⓗ	Local product label
Ⓙ	Keep clear: Mandatory in GB, if applicable, not included in the product.
Ⓚ	Automatic door: Mandatory in GB, if applicable, not included in the product.
Ⓛ	Burglary resistant label: Mandatory, if Protect (burglary resistant system).
Ⓜ	Model type label: Mandatory.

Safety accessories

Even though the operators 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).

- 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 SL500, ASSA ABLOY SL510, ASSA ABLOY SL520 and ASSA ABLOY SL521 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.

Operation mode selectors

See page 12.

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)
- Espagnolette lock (LDE) (Only available for ASSA ABLOY SL500 equipped with Slim Eco LDE door system)

Manual Opening Lock device, MOLD

For manual locking and unlocking of the electro-mechanical lock.

Micro switch kit - Limit Switch Kit (LSK) / Lock Indication Switch (LIS)

For indication of door and lock position.

Locked door indicator, LDI/LIS

For indication of locked lock and closed door for connection to alarm system.

Mechanical Emergency Unit (MEU)

MEU consist of rubber band.
MEU can be used in escape route.

Notes regarding MEU

The MEU can be equipped with a 12 V or 24 V battery. The battery will only help to open and brake the doors when the mains power is lost. The battery is not a part of the escape system and will not be monitored when monitoring of the emergency unit is performed, only the elastic cord will be monitored.

Note! To test that the battery is functional, set the mode selection to AUTO and then break the power to the operator. Observe the door, the elastic cord will open the door and the battery will brake the door before reaching fully opened position (the doors will not slam into the door stops).

If the operator does not decrease the speed of the door, the battery needs to be replaced by an ASSA ABLOY Entrance Systems-authorized representative.

Electrical Emergency Unit (EEU)

EEU consist of rechargeable batteries.

EEU can be used in escape route.

Emergency monitoring with EEU and MEU

According to standard it is a demand that the EEU or MEU shall be monitored on a regular time basis. The monitoring is performed by opening the door with help of the emergency unit. Half an hour before this time has elapsed the following opening impulse generates an emergency opening test. If there is no opening impulse within this half hour, the operator control unit generates a monitoring test itself.

If the emergency unit opens the door within the limited time the test is successful and the door resumes the function set by the operation mode selector.

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

Fire closing

When the power is lost the door will close. This demands 12 or 24 V battery.

Fire closing with repeated closing

If the mains power is lost and the door is opened by hand after an electrical emergency closing, it will close again. This demands 12 V or 24 V battery and a LSK.

Break-out unit PSB

Can be used in escape route and enables door and side screens to be broken outwards in case of emergency.

See page 21.

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).

Convenience battery UPS

Stand-by supply which gives continued operation during short power failure, the operator can run without mains power for 20 minutes.

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 operation mode 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.

Synchronization

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

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.

Fire alarm connection

Used to emergency open or fire close the door with mains power on.

Nurse function

Used mostly in combination as a Nurse - Bed function. Nurse opens the door to partial open position, and bed (connected to inner or outer impulse) opens to full open position.

Nurse works in operation mode selections Exit, Auto.

The Nurse impulse has the same hold open time as partial open.

Remote Exit mode

Remotely put door into Exit via an remote system, like timer.

Emergency open impulse

Used to give opening impulse to the door in any operation mode selector setting as long as the operator has power.

PASS (previously Flow)

The PASS function enables the operator to count how many people that pass through the door, in and out. The value can be presented in the ASSA ABLOY Sliding Door Manager app.

The PASS function aids in controlling the amount of people that can enter the building. The max restriction limit is 1 000 persons.

PASS will work in all operation mode selections (except OFF which will reset the counter).

PASS Exit Only - a function that will prevent the door from opening for incoming people when the user defined restriction limit has been reached - will work in EXIT, AUTO and AUTO PARTIAL.

To be able to change the PASS parameters, you have to use the Sliding Door Manager app. Therefore it is needed that the operator is equipped with an OMS BLE.
In the app it is possible to set a restriction limit for PASS Exit Only. It is also possible to set value(s) for when to receive notifications when i.e. 50% or 75% of the restriction limit is reached. Notifications are only received when connected to the operator through Bluetooth.

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 12).
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	
Electrical emergency unit battery (with 10 AT fuse)	24	24	24	24
Floor guide shoe Standard Felt padded Break-out	24	12	6	6
Door carriage Plastic wheels Steel wheels Anti-riser device	36	24	12	12
Sliding track	36	36	36	24
Tooth belt	48	48	48	36
Drive unit (SL521)	42	12	6	6
Drive unit damper kit	60	60	60	60
Lock ramp	60	60	60	60
Belt clamp	60	48	36	24
Plastic protector center shaft kit	60	60	60	48
Door stop rubber kit	24	24	24	24
Tension wheel assembly	36	36	36	36
Detachment guard	60	60	60	60
Brush/sealing	12	12	12	12

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
- Vertical lifting fabric doors
- Dock levelers
- Dock shelters
- Folding doors
- High speed doors
- Loadhouses

- Service such as preventive maintenance and upgrade programs, emergency repairs, service advice and door management

Declaration of conformity

ASSA ABLOY
Entrance Systems

Experience a safer
and more open world

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

declare under our sole responsibility that the type of equipment:
SL500, SL500 T, SL500 SL, SL510, SL520, SL500 ADS, SL500 T ADS, SL500 SL ADS, SL510 ADS, SL520 ADS. With or without emergency unit

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)
2014/53/EU Radio Equipment Directive (RED)

Harmonized European standards which have been applied:

EN 61000-6-2:2005
EN ISO 13849-1:2015
EN 60335-2-103:2015
EN 61000-6-3:2007+A1:2011
EN 16005:2012/AC:2015
EN 300 328 V 2.1.1
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:

FCC 47 CFR Part 15 B + Part 15C
IEC 60335-2-103 ed.2 1:2011
DIN 18650-1/-2:2010
EN 301 489-1 V 2.2.0
UL 325
IEC 60335-1 ed. 5:2010
AutSchR:1997
EN 301 489-1 V 2.2.0

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

B.01999/19
B 050829 0049
UL File E47833
SC1319-13

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 2013-10-10

Compilation of technical file:
Anders Forslind
ASSA ABLOY Entrance Systems AB
Lodjursgatan 10
SE-261 44 Landskrona
Sweden

Place	Date	Signature	Position
Ferahltorf	2021-11-19	Mats Nordén	Head of Product Development Product Area Door Automation

DoC 1010292-en-17.0

Declaration of conformity

ASSA ABLOY
Entrance Systems

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

declare under our sole responsibility that the type of equipment:
SL521 and SL521 ADS

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)
2014/53/EU Radio Equipment Directive (RED)

Harmonized European standards which have been applied:

EN 61000-6-2:2005
EN ISO 13849-1:2015
EN 60335-2-103:2015
EN 61000-6-3:2007+A1:2011
EN 16005:2012/AC:2015
EN 300 328 V 2.1.1
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:

FCC 47 CFR Part 15 B + Part 15C
IEC 60335-2-103 ed.2 1:2011
DIN 18650-1/-2:2010
EN 301 489-1 V 2.2.0
UL 325
IEC 60335-1 ed. 5:2010
AutSchR:1997
EN 301 489-1 V 2.2.0

Certificate issued by a notified or competent body (for full address, please contact ASSA ABLOY Entrance Systems AB) concerning the equipment:
B 058029 0048

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 2020-11-01

Compilation of technical file:
Anders Forslind
ASSA ABLOY Entrance Systems AB
Lodjursgatan 10
SE-261 44 Landskrona
Sweden

Place	Date	Signature	Position
Ferahltorf	2021-11-19	Mats Nordén	Head of Product Development Product Area Door Automation

DoC 1020247-en-6.0

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

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