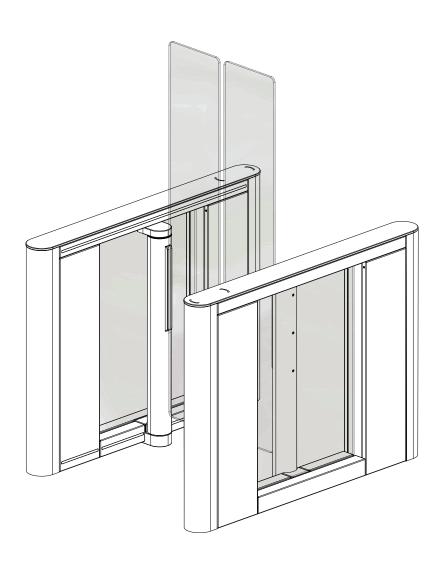
# User manual Security Entrance Control ASSA ABLOY SG100



Experience a safer and more open world



# **Document identification**

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List of abbreviations

User manual

# List of abbreviations

# **BLDC**

Brushless direct current motor

CE

Conformité Européene, which means European Conformity

COM

Serial Interface

DoC

Declaration of conformity

Dol

Declaration of incorporation

**FFL** 

Finished floor level

ΙP

Ingress Protection, degree of protection against the penetration of water and dust. The first number indicates the protection against the penetration of dust ("0" = No protection "6" = Dustproof). The second number indicates the protection against the penetration of water ("0" = No protection "8" = "Protection against permanent submersion).

LED

Light emitting diode

PE

Protective earth

**PLC** 

Programmable logic controller

**RFID** 

Radio frequency identification

RS

Recommended standard

TCP / IP

Transmission Control Protocol / Internet Protocol

User manual 1 Safety

# 1 Safety

# 1.1 Presentation of warning signs



# **DANGER**

Warning against an imminent or latent hazardous situation that can lead to electric shock and cause serious injury or death.



# **DANGER**

Warning against an imminent hazardous situation that can lead to severe injury or death.



# **WARNING**

Warning against a latent hazardous situation that can lead to severe injuries or death and cause substantial property damage.



# **CAUTION**

Warning against a potential hazardous situation that can lead to minor personal injury and property damage.



# **NOTICE**

Useful advice and information to make sure of a correct and efficient workflow of the system.

# 1.2 General hazards

The system can cause the hazards in this section even when it is used as intended.

To reduce the risk of malfunction, damage to property or injury to persons and to avoid dangerous situations, the safety instructions listed here must be observed. Save this manual for future reference.

The specific safety instructions in the other sections of this manual must also be observed.



# **DANGER**

#### Electric current.

In case of contact with live parts, there is an immediate danger to life because of electric shock. Damage to or removal of the insulation or individual components can be life-threatening.

- Make sure that only approved personnel work on the electrical system.
- Make sure that all poles are voltage free and that this is maintained for the duration of the work.
- Disconnect all poles from voltage before you start the work (cleaning, maintenance, replacement) on active parts of the electrical systems and the equipment.
- Keep moisture away from live parts. This can lead to a short circuit.
- Do not bridge fuses or put them out of operation.
- Do not connect the power supply or a battery until all work has been completed.
- Do not use a damaged supply cord. Only the manufacturer, its service agent or a similarly qualified person is permitted to replace a damaged supply cord.

1 Safety User manual



# **DANGER**

# Faulty connection of the mains power supply.

Risk of electric shock and property damage if the mains power supply to the system is not installed with a safe method.

- The mains power supply must be installed with protection (fuse, circuit breaker).
- An all-pole mains disconnection switch with isolating capabilities of Category III must be installed.
- All installation must be done correctly, refer to local regulations.



# **DANGER**

# Fire in an electronic system.

Risk of electric shock if you use a water-based fire extinguisher for a fire in an electrical system.

• Use a fire extinguisher of type carbon dioxide (CO<sub>2</sub>) or ABC dry powder.



# **DANGER**

#### Faulty safety devices of the fire protection system.

Danger to life if the safety devices of the fire protection system do not work. This can cause severe injuries or death.

- Do not disconnect the fire protection system from the power supply overnight.
- Do not disassemble, put out of operation, or manipulate the safety devices.
- Do not remove safety instructions from the system.
- Do not block, hold open, or otherwise prevent the fire doors from closing.
- Inspect and do a service and maintenance of the fire protection system.
- Always follow the local applicable regulations or the regulations in a maintenance contract.
- Examine and maintain the condition of the fire protection system.



# **DANGER**

#### Faulty safety devices.

Risk of personal injuries that can lead to death or material damages if the safety devices are faulty, manipulated, or put out of operation.

- Make sure that all safety devices (breakouts, sensors, lock release, and so on) operate correctly.
- Do not disassemble, put out of operation, or manipulate the safety devices.
- Examine and perform service and maintenance of the safety devices.
- Always follow the local applicable regulations or the regulations in a maintenance contract.

User manual 1 Safety



# **DANGER**

#### Moving system.

If the system moves, careless behaviour can lead to severe personal injuries to limbs or severance of limbs.

- Do not reach in when parts of the system move.
- Keep a distance when parts of the system move.
- Do not bump into or touch the system when it moves.
- Do not open or remove protective covers during operation.
- Do not permanently remove covers from the system.
- Only carry out inspection, service, maintenance, or cleaning when the system is stationary and the power is OFF.
- Danger points must be safeguarded up to a height of 2500 mm from the floor level.



# **WARNING**

# Maintenance and checks during operation.

Risk of personal injuries if the system is in operation during service and maintenance.

- Make sure that the power is OFF and that the system is stationary before you do checks, repairs, service, maintenance, and cleaning.
- Before you start the work, make sure that there are no persons in the system or in the close area of the system..



# **WARNING**

#### Incorrect use and/or installation.

Incorrect use and/or installation can lead to severe injuries and/or cause substantial material damage.

- Read and obey all instructions regarding safe use and/or assembly.
- Make sure that all connection points between the door system and the building are sufficiently strong, even and level.
- Only use ASSA ABLOY approved components. Other components may have a negative effect on the safety of the system.



# **WARNING**

## Heavy parts.

Lifting the heavy parts can cause personal injuries.

- Always be at least two persons when you lift and handle the heavy parts. Refer to local regulations.
- Use the tools provided for lifting.

1 Safety User manual



# **WARNING**

# Unapproved persons without supervision using the system.

Risk of personal injuries, malfunction, or material damage to the property if unapproved persons use the system.

- Infants and children under 8 years of age are not allowed to be within the opening area of the system without supervision of an adult.
- Children must not play, climb on, clean, or maintain the system or the fixed/remote controls.
- Children must not play with the system, the fixed controls, or the remote controls.
- Keep children away from the fixed controls and the remote controls.
- Persons with limited physical, sensory, or mental abilities can only use the system under supervision.
- Unapproved persons must have received and understood the instructions on how to use the system.



#### WARNING

#### Locked in persons in the building.

Risk of personal injuries and material damage.

• Before the system is set to locked, make sure that the locked area is empty and that no persons are locked in.



# **WARNING**

# The system can open, close, or turn unexpectedly.

Risk of material damage or personal injuries because of unforeseen opening, closing, or turning of the system.

- No persons can be present in the opening area of the system.
- Ensure that moving objects such as flags or parts of plants do not enter the detection range of the sensors.
- Do not make any settings on the control unit when the system is in use.
- Make sure that approved personnel immediately correct the errors.
- Remove objects from the opening area.
- Do not disassemble, put out of operation, or manipulate the safety devices.
- Do not dash through a closing system.



# **CAUTION**

#### Incorrect settings.

Incorrect settings can lead to malfunctions, material damage, or personal injuries.

- Do not disconnect the system from the power supply overnight.
- Make sure that only approved personnel adjust the settings.
- Do not disassemble, put out of operation, or manipulate the safety devices.
- Make sure that only approved personnel correct errors.
- Follow locally applicable regulations, or make sure to have a maintenance contract for service and maintenance.

User manual 1 Safety



# **CAUTION**

#### Insufficient cleaning or care.

Insufficient or inattentive cleaning or care of the system can lead to malfunctions, material damage or personal injuries.

- Examine the sensors regularly for dirt and clean them if necessary.
- Regularly remove dirt accumulations from the product and its close surroundings, for example the floor, in the floor rail, or under the floor mat.
- Keep the system free from moisture like water, snow and ice.
- Do not use aggressive or caustic cleaning agents.
- Use road salt or loose chippings only conditionally.
- Put the floor mat without folds and flush with the floor.
- Do not lean or attach equipment required for cleaning purposes, such as ladders or similar, to the system.



# **CAUTION**

# Imbalance and damaged parts.

Imbalance, wear, or damage to cables, springs, and fastening parts can cause material damages.

- Inspect the installation during the function- and safety check for imbalance and damaged parts.
- Do not use the equipment if repair or adjustment work needs to be carried out.



# **CAUTION**

#### Product damage.

If the product packages are not properly stored the product this can lead to personal injuries, material damage or malfunction.

- Always store the packages indoors, in a dry condition at all times during transportation and reloading.
- The package has plastic tarpaulin around it and can be stored outdoors for a shorter while during installation, at the installation site.



# **NOTICE**

Observe and comply with the country-specific regulations.



# **NOTICE**

To prevent not wanted activations of the system, keep the area around the system clear. Moving objects such as flags or parts of plants must not be allowed to enter the detection range of the sensors.

1 Safety User manual

# 1.3 Electronic equipment reception interference

The equipment can generate and use radio frequency energy. If the equipment is not installed and used properly it can 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 the equipment causes interference to radio or television reception, try to correct the interference:

- 1. Turn the equipment ON and OFF to determine interference.
- 2. Reorient the receiving antenna.
- 3. Move the receiver with respect to the equipment.
- 4. Move the receiver away from the equipment.
- 5. Connect the receiver into a different outlet so that equipment and receiver are on different branch circuits.
- 6. Make sure that protective earth (PE) is connected.

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

# 1.4 State of technology



# **NOTICE**

Installation, commissioning, inspection, and maintenance must only be done by approved technicians. We recommend you to have a service agreement.

Record the work in the check list and give it to the customer for safe keeping.

This system was developed using state of the art technology and officially recognized technical safety regulations. The system, depending on its options and diameter, comply with the requirements of the Machine Guidelines 2006/42/EG as well as EN 17352:2022.

Nevertheless, danger can occur if not used as intended.

# 1.5 Compliance information

This product complies with European directives, regulations and standard EN 17352:2022.

The CE marking on the product indicates conformity with European directives and regulations together with the Declaration of conformity (DoC) or the Declaration of incorporation (DoI), accompanying the product.

The full DoC and the full DoI is available for download on our website.

# 1.6 Personal protective equipment

Use personal protective equipment to protect persons from adverse effects on health. Personnel must wear personal protective equipment during the various work activities on and with the system.

Depending on the place of work and the working environment, the protective equipment varies and must be adapted to the situation. In addition to the protective equipment for specific work, the work site can require other protective equipment (for example a harness).

In hygiene-protected areas, special or additional requirements of personal protective equipment can be necessary. These requirements must be thought of when choosing personal protective equipment. If there is any uncertainty regarding the choice of personal protective equipment, the safety officer must be consulted at the place of work.

User manual 1 Safety

# 1.7 Product liability

To guarantee a reliable and trouble-free operation of the system, only use parts that the manufacturer recommends. The manufacturer declines any liability for damages as a result of unapproved modifications to the system or the use of parts that are not permitted.

Refer to regulations, the responsibility of the owner or caretaker of the equipment are as follows:

- That the equipment operates correctly, so that it gives sufficient protection in regard to safety and health.
- That someone with documented competence in the equipment and in applicable regulations operates and regularly maintains, inspects, and services the equipment.
- That the provided Service log book and Site acceptance test and risk assessment are kept available for maintenance and service records.
- That the inspection covers the emergency opening function (when applicable).
- That the closing force is appropriate for the system size on fire-approved systems (when applicable).

# 1.8 Warranty

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

The ASSA ABLOY warranty does not apply to:

- That the software is error-free or operates without interruption.
- General wear and tear on the system.
- Fuses, disposable batteries and glass damage.
- System deviations caused by installers other than ASSA ABLOY.
- System that has been altered or damaged by vandalism or misuse.
- System that has been additionally equipped with non ASSA ABLOY original branded parts and/or spare parts.
- Unnecessary visits due to poor client communication (system 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. Damages can be for example 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.
- Non-compliance with the manufacturers care and the maintenance recommendations may void the warranty.
- ASSA ABLOY approved resellers must extend this warranty to the end-users only, but have no authority to extend a greater or different warranty on behalf of ASSA ABLOY.
- A service agreement with ASSA ABLOY helps to secure the availability of a fully operational system and gives priority at call-out, thus minimizing the time that the equipment is unusable.

2 General information User manual

# 2 General information

# 2.1 Terms and definitions

| Term                    | Definition  |
|-------------------------|---|
| Approved personnel      | Authorised personnel are entitled to perform the following work:  |
|                         | Disassembly   |
|                         | Assembly  |
|                         | Commissioning   |
|                         | Operation   |
|                         | Audit   |
|                         | Maintenance   |
|                         | Troubleshooting   |
|                         | Decommissioning   |
|                         | The approved personnel have several years of professional experience in the technical field, for example, as mechanics or machine fitters.  |
|                         | The approved personnel are aware of the residual risks arising from the installation site and, due to their professional training, knowledge, and experience, can carry out the work assigned to them and to independently identify and avoid possible danger points.                 |
| Approved representative | The approved representative takes over certain parts of the manufacturer's obligations about fulfilling the requirements of the Machinery Directive. In particular, the approved representative can also place the system on the market and/or sign EC declarations of incorporation. |
| Life phases             | All phases of the system's condition and use are referred to as life phases. This applies from the time the system leaves the factory until it is disposed of.  |
| Manufacturer            | The manufacturer is whoever designs and/or builds machinery or incomplete machinery under the scope of the Machinery Directive.   |
| Personnel               | All persons who carry out activities on and with the system are referred to as personnel. Personnel can be, for example, the operator, the cleaning staff, or the security staff. The personnel meet the personnel qualifications required by the manufacturer.                       |
| Service technician      | Experts and specialists or representatives approved by the manufacturer to perform commissioning, maintenance, and servicing.   |
| System                  | The term is used in these instructions as a synonym for the product. Door operators, revolving doors, sliding doors, gates, and so on are referred to as a system.  |
|                         | If information in these instructions refers to a specific type, this is shown accordingly in the text.  |
| System operator         | The respective owner is referred to as the system operator, regardless of whether they operate the system as the owner or pass it on to third parties.  |
| User                    | Users are all the persons who use the system.   |

User manual 2 General information

# 2.2 Purpose and use of the instructions



# **NOTICE**

A replacement of the instruction is available from the supplier or on the website.

These instructions are an integral part of the system and enable efficient and safe handling of the system. In order to ensure proper functioning, the instructions must be accessible at all times and kept in the immediate area of the system.

Only the male form has been chosen for reasons of better legibility.

The operator must have read and understood the manual before starting any work. The basic requirement for safe working is to follow the safety instructions and the handling instructions. In addition, the local regulations and safety rules apply.

The manual can be handed over in extracts to instructed personnel who are familiar with the operation of the system.

The illustrations are for basic understanding and may differ from the actual presentation. Specific representations are contained in the drawings.

# 2.3 Manufacturer

ASSA ABLOY Entrance Systems AB Box 131 SE-261 22 Landskrona Sweden

Phone: +46 10 4747 000

# 2.4 Target groups



# WARNING

#### Risk of injury if the personnel are not approved.

If unapproved personnel work on the system or are in the danger zone of the system, dangers can occur. Severe injuries and substantial material damages can be the consequence.

- Only approved personnel must carry out work on the system.
- Keep unapproved personnel away from danger areas.

This manual is intended for the target groups listed below:

- The person who is responsible for the technical maintenance of this system.
- The person who operates the system every day and has been instructed.

3 Description User manual

# 3 Description

# 3.1 Intended use of the product

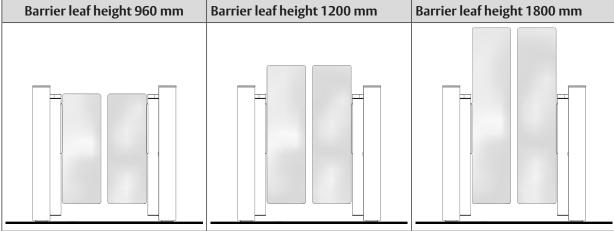
The system is designed exclusively for use as a pedestrian passage. The installation must only occur in dry areas.

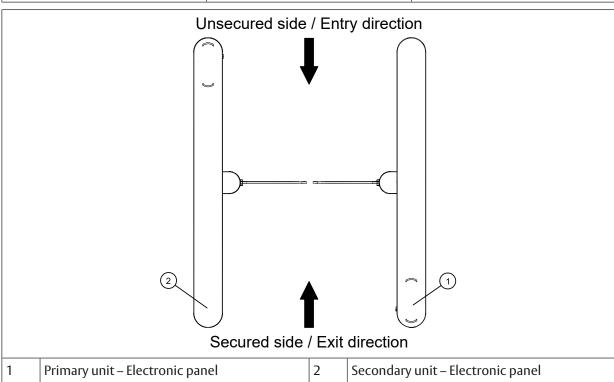
Any other application or use beyond this purpose is not considered to be an intended purpose. The manufacturer bears no liability for any resulting damage; the operator alone shall bear the associated risk.

The intended purpose also includes observation of the operating conditions specified by the manufacturer, in addition to regular care, maintenance, and repair.

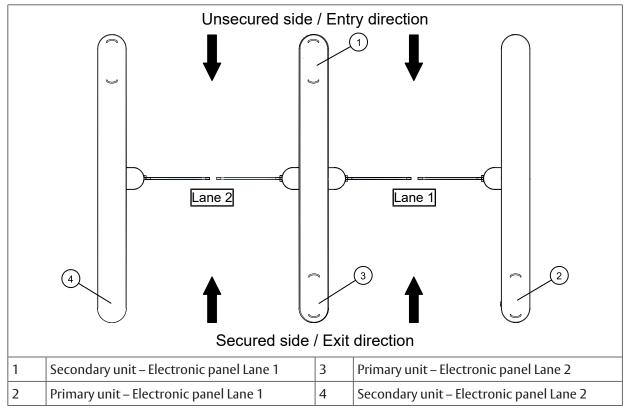
Interventions in or alterations to the installation performed by unapproved maintenance technicians exclude the manufacturer's liability for consequential damages.

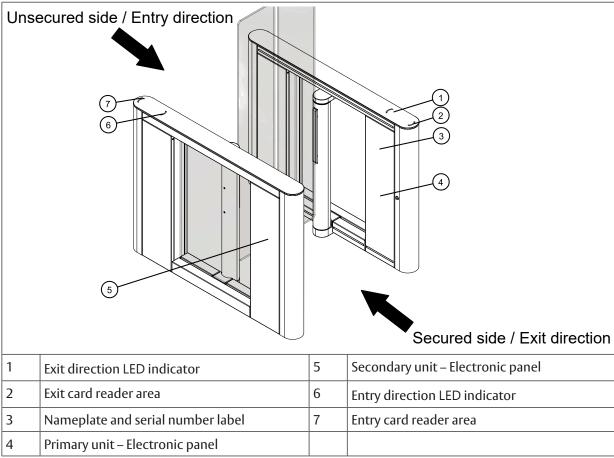
# 3.2 Overview



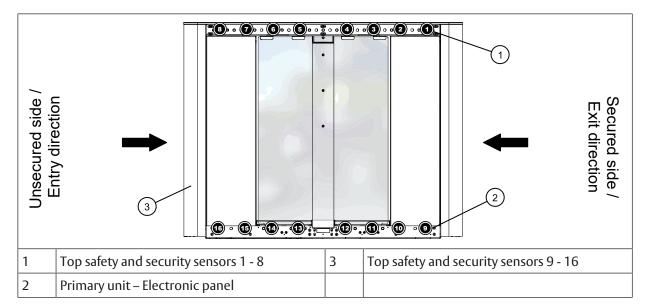


User manual 3 Description

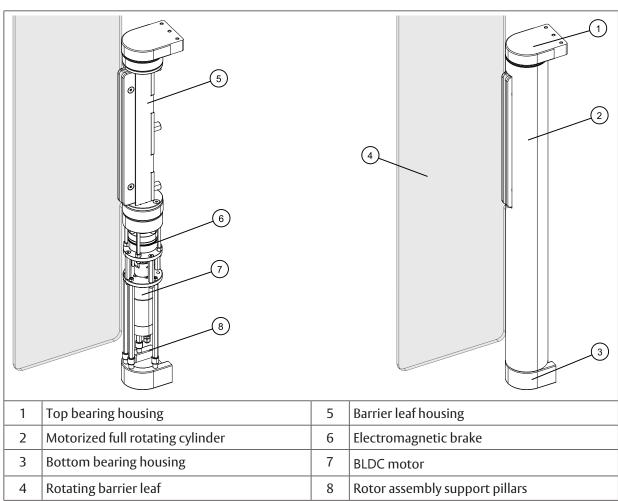




3 Description User manual



# 3.2.1 Leaf



User manual 3 Description

# 3.3 Signage



#### **CAUTION**

Without marking on the moving leaf the glass pane is difficult to see.

Risk of personal injuries or material damages.

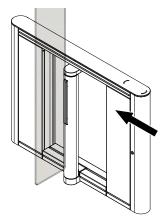
- It is a requirement in EN 17352 that the glass surface is clearly recognizable, for example with markings or stickers. Always place marking on the moving leaf.
- If the operator of the system does not want visible glass marking, the operator must confirm this in writing to the installer!

The signs must be attached from both the inside and the outside. To avoid malfunctions, there must be no signs or shading (for example smoked glass) in the detection range of the sensors.

Do a visual check that all necessary signage is applied and intact. Mandatory in the table indicates that the signage is mandatory by European directives and equivalent national legislation outside the European Union.

When the system is correctly installed and adjusted:

1. A product label, with the name and the serial number, is attached on the electronic board at the factory. Do a visual check that all necessary signage is applied and intact.



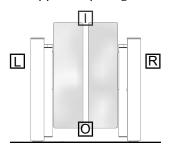
Exemplary position of the product label with the CE marking

2. If problems occur contact your ASSA ABLOY service representative.

# 3.4 Functional description

The definition of right (R) and left (L) is defined as viewed from the outside (O) to the inside (I). The inside (I) represents the area inside the building or the secure area. The Outside (O) represents the public area.

Entry cycle means the approved passage from the outside area (O) to the inside area (I). Exit cycle means the approved passage from the inside area (I) to the outside area (O).



3 Description User manual

#### Features:

- The swing gate with fast-opening leaves is made of 10 mm tempered glass.
- Galvanized coated steel frame and stainless steel housing panels.
- 10 mm tempered glass top lid.
- Illuminated indication pictograms.
- BLDC motor driven.

#### Functions and interface:

- Logic controlled interface, bi-directional operation.
- The entrance and the exit directions can be individually set as controlled, locked, or free before or after the installation.
- In control access mode, the access control system sends a release confirmation. The gate opens the barrier leaves and lets one person access the door in the travel direction. After the passage of each person, the barrier leaves cause a blockage. The barrier leaves do not permit access in the entrance or the exit directions until the access control system sends a new release signal.
- After the release, the gate closes the barrier leaves after an adjusted time if no transition or passage occurs.
- If people from both directions would like to pass through, the first person who activates the gate takes precedence.

Multiple opening: An additional person is able to release the next passage cycle during an ongoing passage cycle in both directions. The gate controller stores up to 255 releases and lets a corresponding number of individuals pass through.

- Relay outputs for counting passages in either direction.
- Modbus TCP / IP / RS485 communication.
- Control for inputs and outputs through a potential-free contact.

#### Emergency and power cut:

In the event of an emergency, the gate opens the barrier leaves (fail-safe). During the power cut, the mechanism and barrier leaves become unlocked and move freely in both directions. The gate resets itself automatically when the emergency alarm stops or the power is switched back on.

#### Access control integration:

- Any kind of access control system can control the system through dry contact or COM ports.
- Card reader area under the glass lid.
- Optional cuts on glass top is available for surface mount readers, reader holders and stands. Standard and custom designed posts for access controller integration can also have optional cuts.
- RFID icon positioned in the middle of reader installation area to indicate the card reader position clearly.
- An additional indicator on the top illuminates in red when the gate is locked. The indicator changes to green for confirmed passages or during free passage.

#### Alarm outputs - Individual dry contact outputs to monitor fraud attempts:

- Tailgating.
- Forced to open manually.
- Wrong way.
- Intrusion time-out.
- Safety zone time-out.
- Climb / jump-over and crawl under (optional).

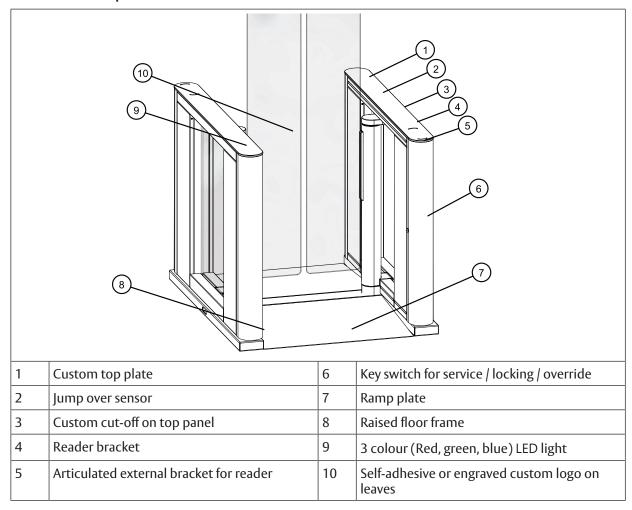
User manual 4 Options

# 4 Options

The system complies with all applicable safety regulations, but it is possible to enhance the safety and comfort with the add-ons.

Contact the local ASSA ABLOY company for a detailed description.

# 4.1 Location of options and accessories



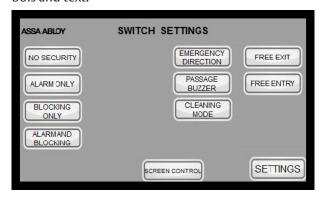
# Additional options

- Remote control touch panel.
- Remote control button panel.
- Acrylic barrier leaves.
- Logo on glass and acrylic barrier leaves.
- Powder-coated housing panels in RAL colour.
- Ramped base plate.
- Card inserter.
- Access controller integration brackets on demand.
- Jump over sensor.

4 Options User manual

# 4.2 Remote control touch panel

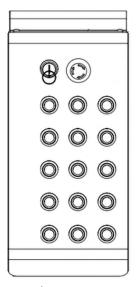
The remote control touch panel is an input and output unit for the operation and limited programming of the system, such as changing operating modes. The display shows information about the system with symbols and text.

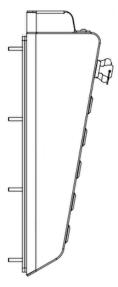


Example

# 4.3 Remote control button panel

The remote control button panel is a unit for the operation of the system, such as changing operating modes.





Example

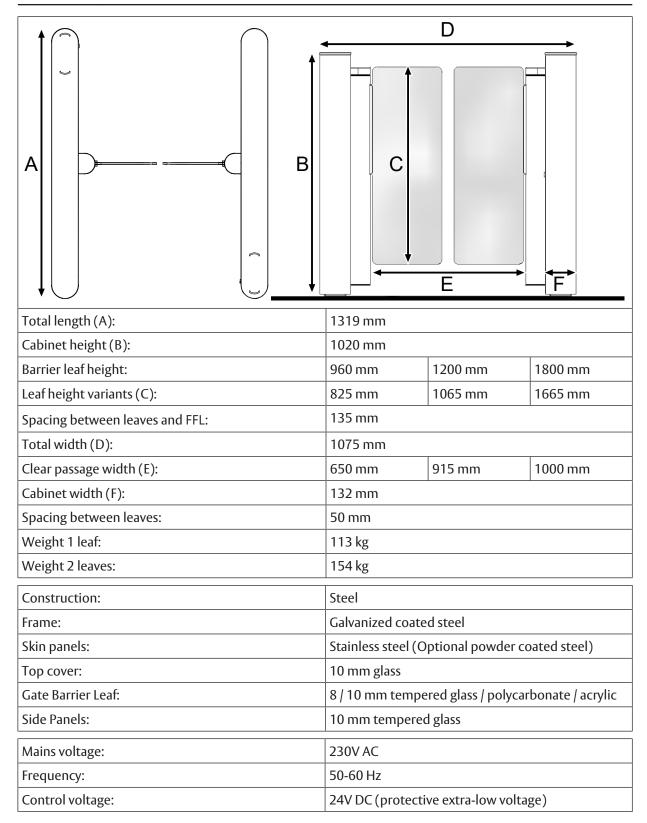
User manual 5 Specifications

# 5 Specifications



# **NOTICE**

The dimensions are only approximate. The dimensions can be different, depending on the product variant and the options.



5 Specifications User manual

| Drive Mechanism:            | <ul><li>BLDC motor and gearbox</li><li>Integrated encoder</li><li>Electromagnetic brake</li></ul> |  |
|-----------------------------|---|--|
| Opening/Closing Time:       | 0.8 – 2.6 sec. (depends on leaf size)   |  |
| Sensors:                    | 16  |  |
| Mean Time Between Failures: | 10.000.000  |  |
| Communication:              | Modbus RS485  |  |
|                             | Modbus TCP / IP   |  |
| Temperature range:          | From 0° to +55° C   |  |
| IP class:                   | IP 44   |  |

# 6 Inspection and maintenance



# **DANGER**

#### Electric current.

In case of contact with live parts, there is an immediate danger to life because of electric shock. Damage to or removal of the insulation or individual components can be life-threatening.

- Make sure that only approved personnel work on the electrical system.
- Make sure that all poles are voltage free and that this is maintained for the duration of the work.
- Disconnect all poles from voltage before you start the work (cleaning, maintenance, replacement) on active parts of the electrical systems and the equipment.
- Keep moisture away from live parts. This can lead to a short circuit.
- Do not bridge fuses or put them out of operation.
- Do not connect the power supply or a battery until all work has been completed.
- Do not use a damaged supply cord. Only the manufacturer, its service agent or a similarly qualified person is permitted to replace a damaged supply cord.



# **CAUTION**

# Safety check necessary

Personal injuries or damages to the equipment can occur.

• Do not use the equipment if repair or adjustments are necessary.

Service and adjustments performed by your ASSA ABLOY approved representative makes sure that there is a safe and proper operation of your automatic system.

Remember to keep the Service Log Book and the Site Acceptance Test and Risk Assessment documents available. The Service log book and the Site acceptance test and risk assessment are used together.

It is important to record any maintenance operation.

Recommended minimum maintenance interval of once a year.

To help you fulfil the national and international requirements and to avoid malfunction and risk for injuries, perform a check of the following items:

- Inspection on page 24
- Maintenance on page 24
- Signage on page 17

# 6.1 Inspection

# 6.1.1 Daily inspection

| Test / inspection        | Procedure   | Expected result  |
|--------------------------|---|--|
| Function                 | Approach the system at normal speed, both from the inside and from the outside.   | Features and modes work.   |
|                          | Check functions with the control units (optional).  |  |
| Motion detector          | If necessary, clean the sensors<br>(motion detectors), in partic-   | The sensor must cover the entire passage width.  |
|                          | <ul> <li>ular the external sensor(s).</li> <li>Make sure that the inside air is dehumidified. Steam or condense on the sensors can prevent the system from closing. Steam can come from warm moist inside air that condense on the external sensors. Wipe the external sensors dry if necessary.</li> </ul> | System opening takes place at<br>an early stage and at an ap-<br>propriate speed, so that un-<br>hindered passage is possible. |
| Leaves / Panels / Covers | • Examine the condition of the parts.   | No damage.   |

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# 6.1.2 Cleaning

Clean the product on a regular basis to maintain the optimum operation.

- Remove dust and dirt.
- Clean the surfaces three times/year with gentle (pH 5-9) non-polishing detergent and water.
- Use a soft non-abrasive sponge.
- Do not expose the product to alkalis. Both aluminium and glass are sensitive to alkalis.
- Do not clean with too much water. Operator, programme selector and sensor can be damaged and water can enter the profiles.
- Do not use detergents or abrasive additives.
- Do not scrub with materials like Scotch-brite, as this can cause mechanical damage.
- Document when the cleaning event.

# 6.2 Maintenance

# 6.2.1 Maintenance intervals

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

| Part                  | Revolutions            | Action             |
|-----------------------|------------------------|--------------------|
| Signage               | If wear is detected.   | Examine / Replace. |
| Covers                | If wear is detected.   | Examine / Replace. |
| Electrical components | In event of breakdown. | Examine / Replace. |
| Mechanical components | In event of breakdown. | Examine / Replace. |

User manual 7 Troubleshooting

# 7 Troubleshooting



# **NOTICE**

If malfunctions that endanger the safety of individuals occur, the system must be turned off. It may not be turned back on until the problem has been resolved by a professional and the danger no long exists.



# **NOTICE**

The following list shows faults and their causes along with possible remedies that the operator can carry out. If the remedies are unsuccessful, the operator must disconnect the system from the mains supply and call for service.

| Faults  | Remedies  | Causes   |
|---|---|--|
| System without function.                      | <ul> <li>No mains supply.</li> <li>Short circuit.</li> <li>System control defective.</li> <li>Motor damage.</li> <li>PLC control defective.</li> <li>Locking mechanism jammed.</li> </ul> | <ul> <li>Examine the mains supply, call in a specialist if necessary.</li> <li>Remove obstacle.</li> <li>Call Service.</li> </ul>  |
| System does not perform the desired function. | <ul> <li>PLC control is defective or in an undefined state.</li> <li>System control defective.</li> <li>Fuse sensor defective or sensor triggered.</li> </ul>                             | <ul> <li>Disconnect the system from the power supply and reconnect the power supply (Reset).</li> <li>Remove the obstacle in the sensor's protection area.</li> <li>Call Service.</li> </ul> |
| Power failure.                                | <ul><li>Fuse defective.</li><li>Main supply defective.</li></ul>  | <ul><li>Examine the fuse.</li><li>Examine the mains supply.</li></ul>  |

# 8 Taking out of service and disposal

# 8.1 Decommissioning



# **NOTICE**

After each temporary shutdown a new commissioning must be carried out.

When the system is taken out of service:

- 1. Disconnect the system from the mains supply.
- 2. Unplug from any existing battery.

# 8.2 Dismantling and disposal



# **NOTICE**

All parts must be separated, sorted by the type of material, and disposed of. Refer to local regulations and guidelines.



# **NOTICE**

The systems can be completely disassembled in the reverse order.

The installation mainly consists of the following materials:

Metal components (aluminium, steel, and iron)

- Linking profiles, system leaf profiles, side profiles, various profiles, and reinforcement profiles.
- Gearbox, drive panel.
- Gear components and springs.
- Stainless steel casing, floor panel, and box recess for the floor installation.
- Various small parts like fittings, covers, optional spacers, and linking parts.

#### Glass

• Leaves and side panels.

Various electronic and electromechanical components

- Sensors.
- Control components and operator components.
- Batteries and rechargeable batteries.

# Various plastics

- Rollers.
- Sealing profiles.
- Cable clips, coupling and linking parts.
- Casing of electromechanical components and sensors.

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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.



