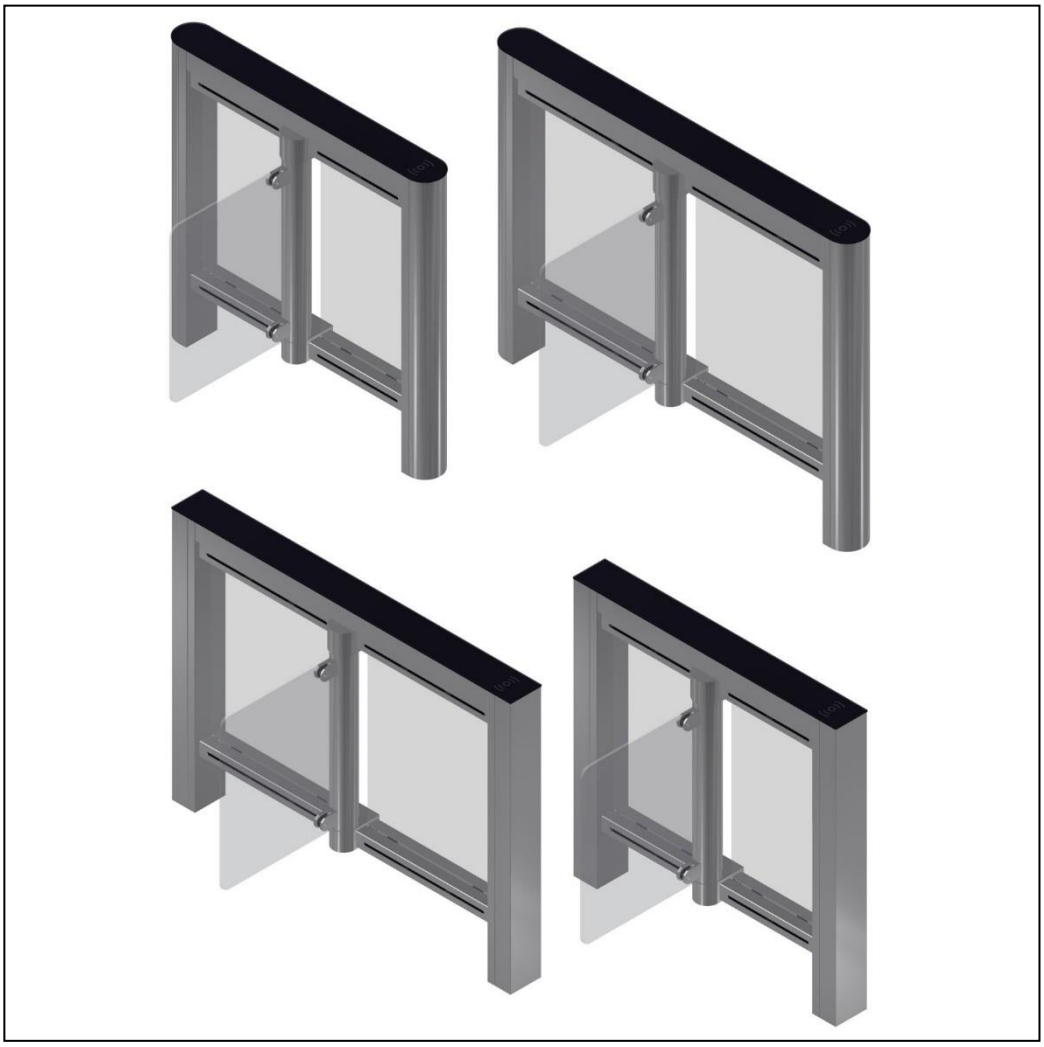


INSTRUCTIONS FOR USE OF THE TURNSTILE TYPE:

EASYGATE

(EASYGATE-SG, EASYGATE-SR with electronics MLU5)

Appendices at the end of these installation instructions:

- Passage Animations

1. INTRODUCTION

This instruction guide is intended for the operating employees and contains all the necessary information to successfully run an installed and operational turnstile. It is very important that the operator is thoroughly acquainted with this instruction guide prior to the device usage.

The installation of the turnstile, connection to the mains supply or the connection of the electrical control circuits of the turnstile are not a subject of this guide.

A Troubleshooting chapter which serves to help you analyze malfunctions before contacting the service department at COMINFO a.s. is a part of this guide. Analyzing malfunctions with this chapter will help to quickly eliminate the problem and put the turnstile into operation.

The Instructions employ the following categories of safety instructions:

DANGER!
Mechanical danger. Omission of these instructions may cause personal injuries or device damage.

WARNING!
Important information or procedure.

NOTICE!
Information or procedure recommending how to use the device or its equipment optimally and thus prolong its lifetime, prevent potential damage and optimize work in relation to the safety standards.

2. PURPOSE - USE

The **EasyGate - SG and SR** type turnstile is a device that enables to control the passage of persons and to separate areas with free movement from areas accessible only to persons with defined access rights. In general, it is used to control the movement of persons in various facilities such as:

- Industrial businesses
- State offices
- Schools
- Transport systems
- Airports
- Sports and entertainment centres
- Administration buildings and complexes
- Chemical industries
- Power plants

This turnstile is intended for indoor installation.

IT IS THE OPERATOR'S OBLIGATION TO ENSURE THAT PERSONS WHO WILL BE USING THIS TURNSTILE ARE WELL ACQUAINTED AND EDUCATED ABOUT USAGE OF THIS DEVICE ACCORDING TO THIS MANUAL.

This device may be used by children aged 8 years and older and persons with reduced physical, sensory or mental abilities or lack of experience and knowledge, provided they are under supervision or have been instructed in the safe use of the device and understand the potential dangers. Children must not play with the device. Cleaning and maintenance carried out by the user must not be carried out by unsupervised children. When a person under 8 years of age passes through the turnstile, it is necessary to be accompanied by a person over 18 years of age to ensure safe passage.

3. TECHNICAL DESCRIPTION OF THE TURNSTILE

3.1. BASIC DESCRIPTION OF THE TURNSTILE

EasyGate-SG and SR, hereinafter referred to as the turnstile, is a device meant for identification and separation of persons at the entrance/exit to/from a secured area using a moving wing.

Passage of a person is enabled based on the identification (verification) of the person by the superior system.

The turnstile can consist of the following components (depending on the configuration):

1. MLU Control Electronics
2. Set of optical IR sensors
3. Electromechanical drive unit
4. Optical and sound signaling elements

All of the above-mentioned components are located inside the turnstile cabinet, which may be fitted with additional design elements made from various materials.

Individual types of turnstiles are always supplied in two basic versions, SIDE and MIDDLE, usage of which is explained in the following chapter.

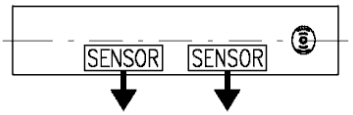
During maintenance or when replacing parts, the turnstile must be disconnected from the power supply.

All service works may be only carried out by a COMINFO service department employee or worker, who possess the certificate of installation schooling from the COMINFO Company.

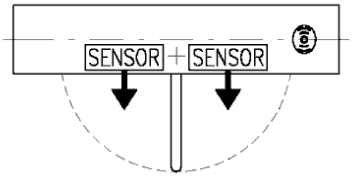
Unprofessional manipulation can lead to damaging the turnstile or endangering people.

3.2. TYPES OF TURNSTILES ACCORDING TO USE

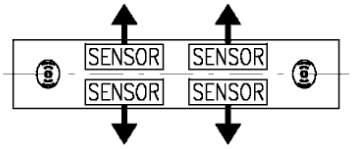
1. EasyGate-SG/SR-S-0W
   - SIDE turnstile without wing for use in one-wing versions



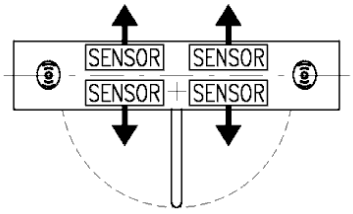
2. EasyGate-SG/SR-S-1W
   - SIDE turnstile with one wing for use in one-wing and two-wing versions



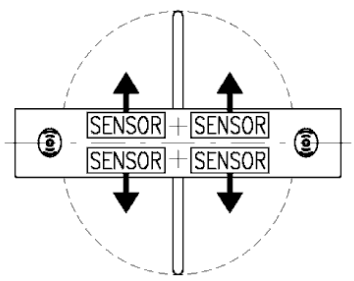
3. EasyGate-SG/SR-M-0W
   - MIDDLE turnstile without wing for use in one-wing versions



4. EasyGate-SG/SR-M-1W
   - MIDDLE turnstile with one wing for use in one-wing and two-wing versions



5. EasyGate-SG/SR-M-2W
   - MIDDLE turnstile with two wings for use in one-wing and two-wing versions



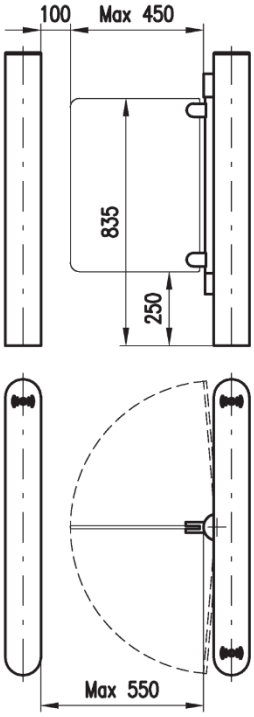
3.3. TYPES OF TURNSTILES BASED ON THE DESIGN

Type type	Turnstile image	Number of sensors	Height of the glass bottom edge from the	Height of the glass top edge from the floor
EasyGate-SG-1000		24	250mm	835mm
EasyGate-SR-1000				
EasyGate-SG-1320		36		
EasyGate-SR-1320				

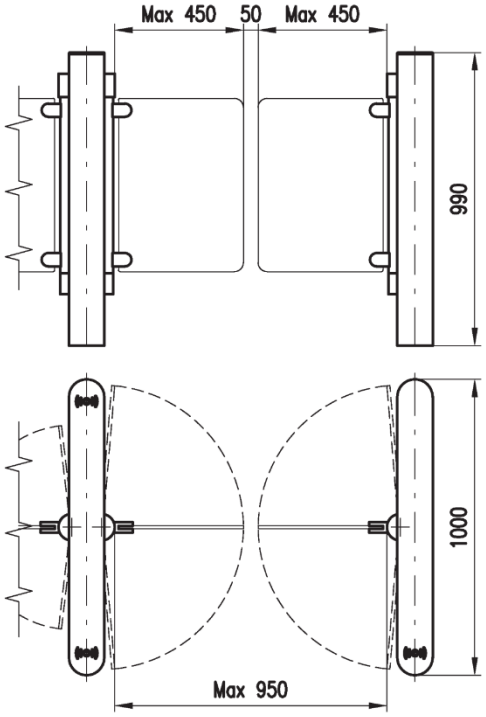
3.4. TURNSTILE PASSAGE GATES WIDTHS

EasyGate-SG/SR-1000:

ONE-WING VERSION:

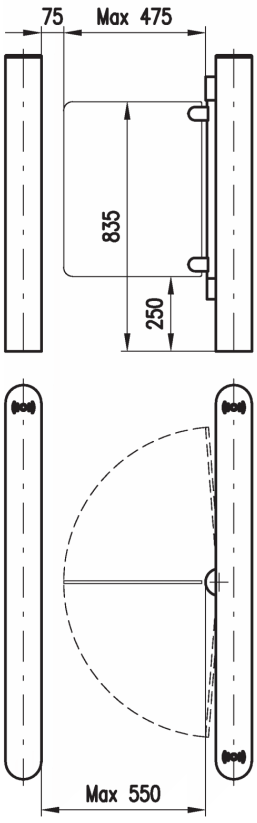


TWO-WING VERSION:

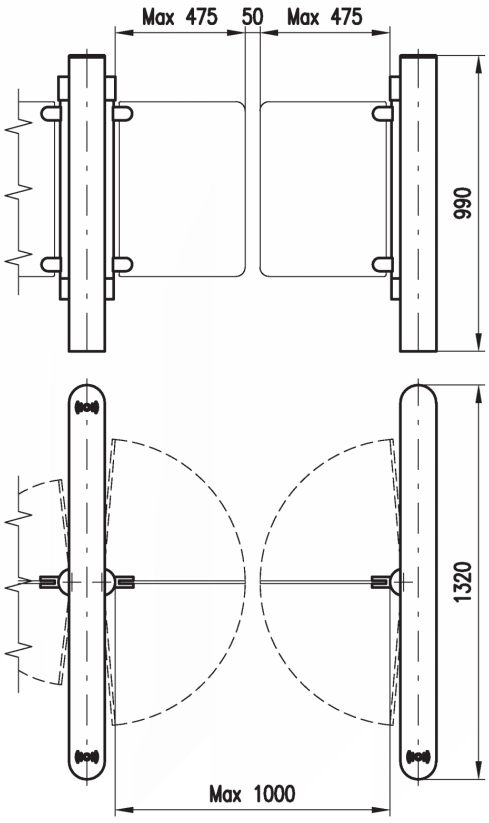


EasyGate-SG/SR-1320:

ONE-WING VERSION:



TWO-WING VERSION:



4. BASIC TECHNICAL PARAMETERS

4.1. TECHNICAL PARAMETERS OF THE TURNSTILE

- Standard range of operating temperatures: **+10°C… +50°C**
- Range of storage temperatures: **0°C… +50°C**
- Maximum relative humidity: **80%** (non-aggressive environment)
- MCBF: **3 000 000** cycles (number of cycles prior to error)
- Number of passages ranges from **15 to 30 persons per minute** for one passage depending on the mode of operation and method of identification of passing persons
- Number of optical sensors per one passage gate:
  EasyGate-SG/SR-1000: **24**
  EasyGate-SG/SR-1320: **36**
- The turnstiles are intended for indoor use.
- The level of sound pressure generated by the device shall not exceed **70 dB** (A).
- Materials the turnstile is made from:
  (stainless-steel materials are standardly of a brush type, AISI 304)
  - Inner steel parts are galvanized or blackened
  - Top cover: 6mm toughened glass
  - External covers: 0.8mm and 2mm stainless-steel sheet
  - Inner panel: 6mm safety glass
  - Glass wing: 10mm toughened glass

4.2. TURNSTILE POWER SUPPLY OPTIONS

The required turnstile input power supply must be defined in the turnstile order, including the required optional accessories.

Turnstile input voltage:	**13VDC [2])**	**24VAC [2])**
Supercapacitors [1])	✗	✓
Backup accumulator [3])	✓	✗

[1]) For description, please see chapter *Optional Accessories*.
[2]) Powered by an external backup source that meets the SELV power supply network requirements.
[3]) Backup accumulator located in external power supply.

The operator shall ensure that the supply line is equipped with a safety device to disconnect all poles (circuit breaker, residual-current protective device). The choice of the circuit breaker value must comply with the circuit selectivity. Recommended residual-current protective device is for example HAGER CDA 216D, 16A/I_{Δ}N=0,03A.

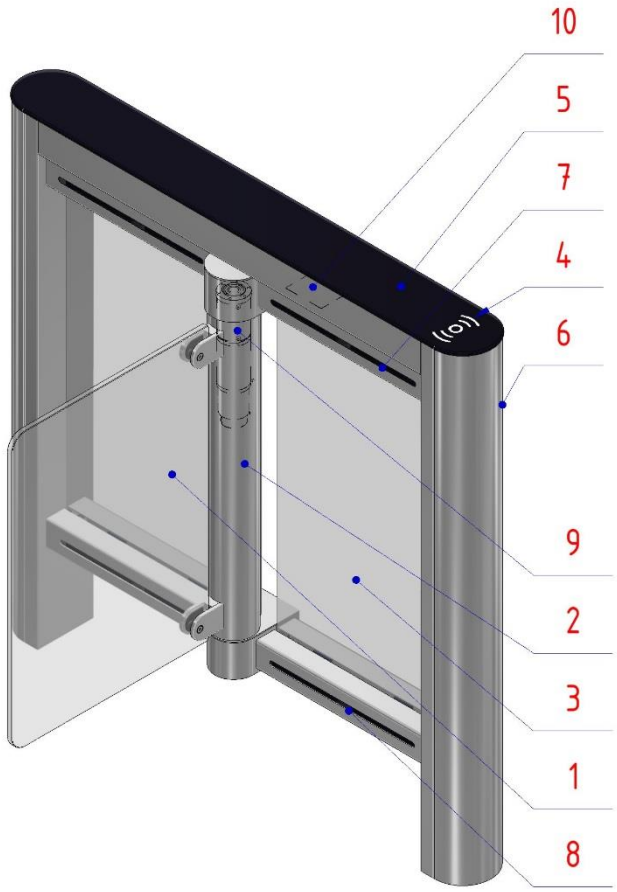
The input power of the turnstile depends on the mode of operation and optional accessories used.

Input power of the turnstile in case of two-wing version:
- 3W minimum input power in standby (idle) mode without optional accessories
- 300W maximum input power including all optional accessories

5. GENERAL DESCRIPTION AND BASIC DIMENSIONS

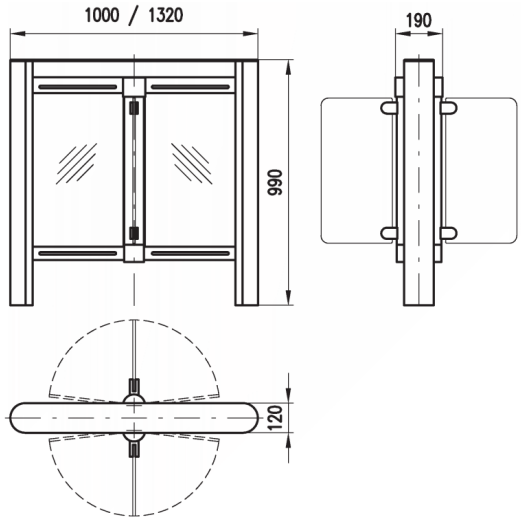
5.1. DESCRIPTION OF THE TURNSTILE

1. Glass turnstile wing
2. Wing tube with the glass holders
3. Inner glass filling
4. Top signaling LED display (Back Light)
   (it may also contain identification system sensor)
5. Top cover
6. Front cover
7. Top optical sensors
8. Bottom optical sensors
9. Drive unit
10. Location of the production label (under the front cover)

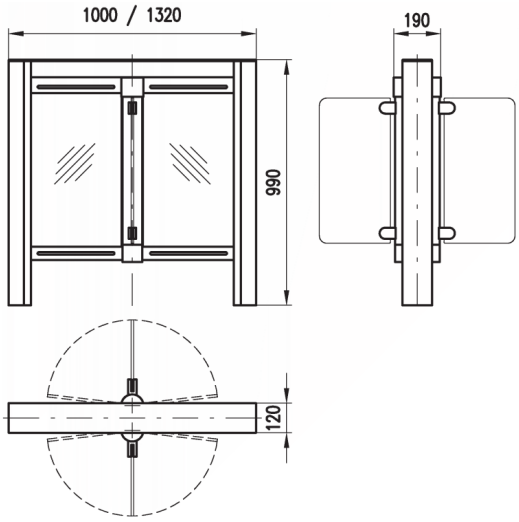


5.2. DIMENSIONS ACCORDING TO TURNSTILE DESIGN

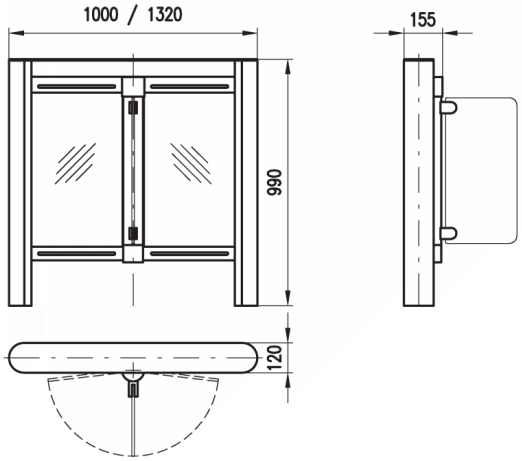
EasyGate-SG-2W



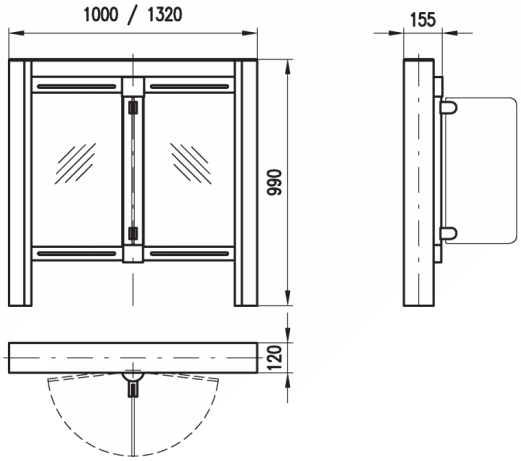
EasyGate-SR-2W



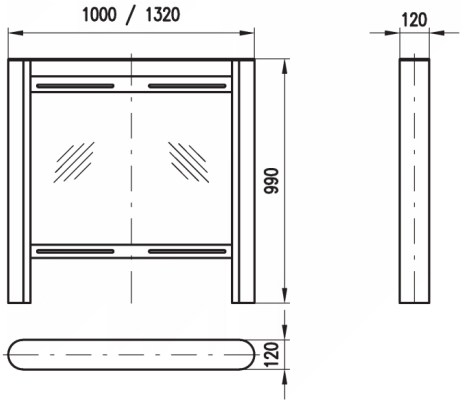
EasyGate-SG-1W



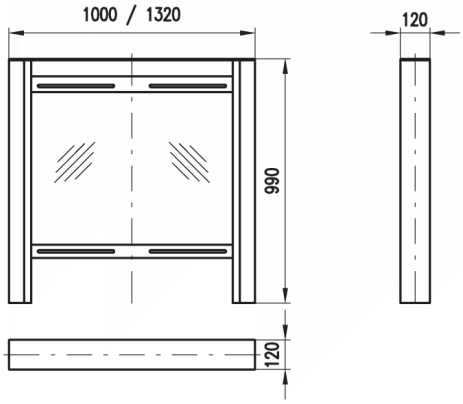
EasyGate-SR-1W



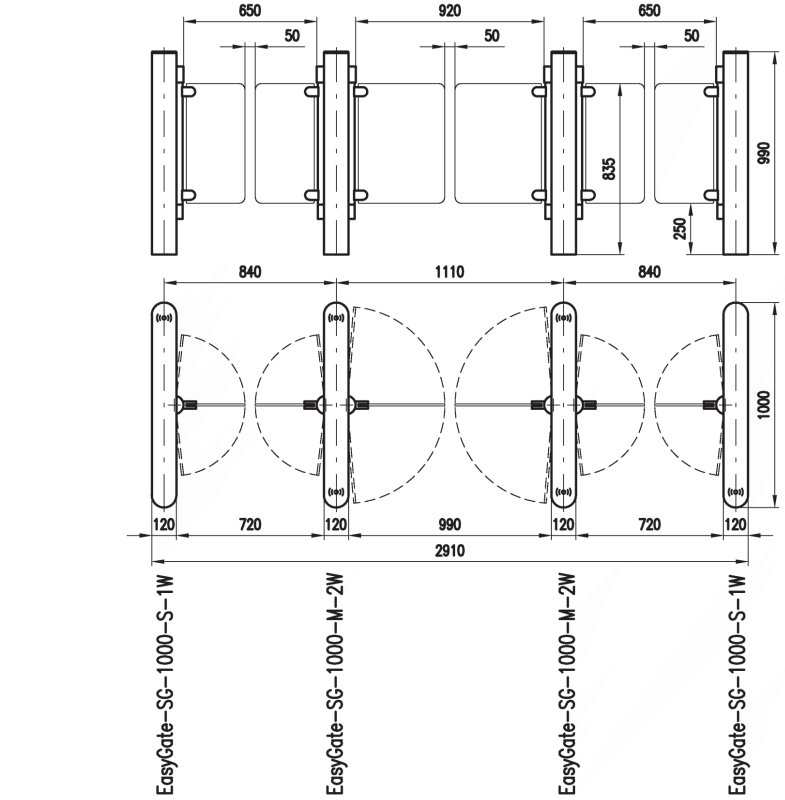
EasyGate-SG-0W

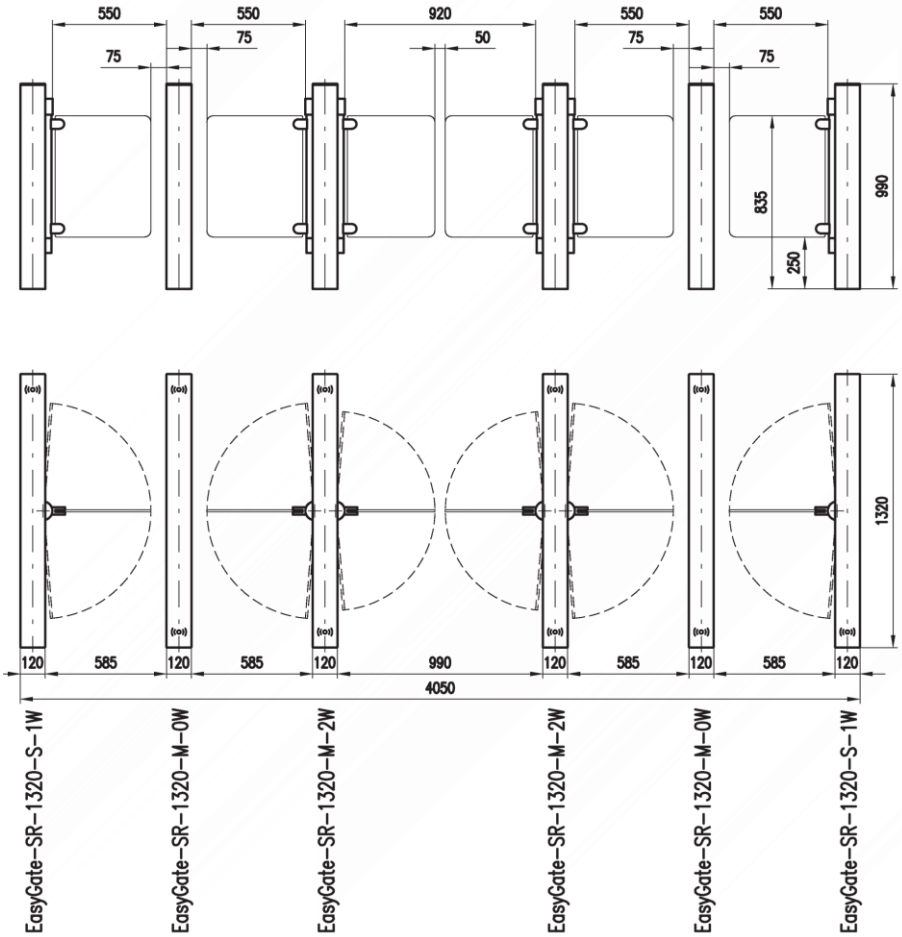


EasyGate-SR-0W



5.3. EXAMPLES OF TURNSTILES ARRANGEMENT





6. OPTIONAL ACCESSORIES

- **Back Light** [1]) (Top signaling LED display):
  Serves for signaling the location for use of the contactless cards.
  Displays information on the turnstile passage mode in the given direction.

- **Digital Lane Light** [1]) (Front status signaling):
  Information on the given turnstile state:
  On / Off / Blocked / EMERGENCY / ALARM.
  Digital Lane Light can only be integrated into **EasyGate-SR** type turnstiles.

- **Wing Light** [1]) (optical status signaling):
  Serves for backlighting of the turnstile wings and displaying states of the given turnstile:
  Idle State / Passage / Off / EMERGENCY / ALARM

- **Hinge Capping:**
  Covered attachment of the glass wing.

- **Wav Player:**
  Acoustic signaling of turnstile states

- **Adjustable holder for the identification system sensor:**
  Located directly under the top glass plate or under the Back Light.

- **Touch Panel:**
  - Remote cable control and display of statuses of three to four turnstiles from one control panel
  - Activation of the following functions:
  Passage / Permanent Passage / Blocking / On / Off / EMERGENCY

- **Easy Touch:**
  - Remote cable control and display of statuses of any number of turnstiles from one control panel
  - Activation of the following functions:
  Passage / Permanent Passage / Blocking / On / Off / EMERGENCY

- **Supercapacitors:**
  Supercapacitors ensure transition of the turnstile to the EMERGENCY state in case of power failure (automatic opening of the turnstile wings in the exit direction).

- **Identification systems:**
  Any type of identification terminal with relay / OC outputs can be connected to the turnstiles for the purpose of identification of a passing person.

- **Anchoring bases:**
  For anchoring into interlocking paving or sandwich floor or uneven surfaces.

- **TCONF:**
  Configuration SW for setting the parameters and diagnostics of the turnstile.
  – see manual: *Instructions for the TCONF application*

- **TMON:**
  SW application for controlling and monitoring of the turnstile's activity.
  - see manual: *Instructions for the TMON application*

- **WAV Player Config:**
  SW application for administration of sound files on the WAV Player memory card.

1) In course of LED diodes lifespan in lighting devices, slight changes in colour shade of individual LEDs may occur. This is a standard feature of LEDs and therefore cannot be considered a defect.

7. INSTALLATION OF THE TURNSTILE

Turnstile can only be installed by a COMINFO service department employee or worker, who possess the certificate of installation schooling from the COMINFO Company.

Connection to the mains power supply may only be performed by an authorized person with the appropriate qualifications.

8. PUTTING THE TURNSTILE INTO OPERATION

Turnstile can only be put into operation by a COMINFO service department employee or worker, who possess the certificate of installation schooling from the COMINFO Company.

When putting the turnstile into operation, initialization of the turnstile takes place after each connection or loss of power supply. During the initialization, the turnstile wings slowly move to the stop ends in both directions and then stop in a closed position. It is forbidden to enter the turnstile corridor and manipulate the wings during initialization.

9. DESCRIPTION OF THE TURNSTILE OPERATION

The turnstile, is a device meant for identification and separation of persons at the entrance/exit to/from a secured area using a moving wing. Passage of a person is enabled based on the identification (verification) of the person by the superior system.

In the Appendix at the end of these Instructions you can find animations of passages through the turnstile.

Turnstile behavior during passage may be adjusted using configurable parameters, which are divided into several groups:

- Safety functions
- Dynamic functions (drive unit)
- Passage functions
- Signaling functions
- Functions of input and output signals

Turnstile is controlled by the following control signals:

- INL / INR – signal used for opening of the turnstile in the required direction
- EMERGENCY – signal used for permanent emergency opening of the turnstile
- ON / OFF – signal for turnstile activation / deactivation

Explanation of terms used in the following chapters:

Authorized person:
- Person who performed correct identification and the superior system allowed their entry.
- Person who passes through the turnstile in a permanently released direction.
- Person who was allowed to pass by remote control.

Unauthorized person:
- Person who did not perform correct identification and the superior system did not allow the passage.

Tailgating:
- Situation when an unauthorized person follows an authorized person.

Crossover:
- Situation where unauthorized person passes from the opposite direction of the authorized person.

Using safety parameters, it is possible to set the turnstile behavior in case of unauthorized passage. Passage safety / security may be set at 5 levels from high security of the guarded space (low safety of passing persons) up to high safety of passing persons (low security of the guarded space).

1. **Maximum security** - detection of unauthorized persons when entering the turnstile, complete closing of glasses, without authorized person protection
2. **Low safety** - detection of unauthorized persons inside the turnstile, complete closing of glasses, without authorized person protection
3. **Middle safety** - detection of unauthorized persons when entering the turnstile, closing of glasses to the safety angle, authorized person protection
4. **High safety** - detection of unauthorized persons inside the turnstile, closing of glasses to the safety angle, authorized person protection
5. **Maximum safety** - detection of unauthorized persons inside the turnstile, glasses do not close, protection of all persons in the turnstile

Configuration of parameters must be specified in advance when ordering the turnstile and may be performed only by the manufacturer or a trained equipment supplier. The safety parameters setting may be changed to a level, when turnstile wings can close in case of an attempt for unauthorized passage and injury of authorized and unauthorized persons may be caused! The turnstile owner must be provably notified about this. In such case, the manufacturer shall not be responsible for potential bodily harm and property damage.

9.1. DESCRIPTION OF OPERATION IN THE RECOMMENDED FACTORY SETTINGS

The following text contains description of operation in the recommended factory configuration of the turnstile. The setting is designed to prioritize safety of authorized persons, but it also takes into account safety of the premises against unauthorized persons and their safety.

The following tables contain descriptions of statuses of Back Light, Lane Light, DIgital Lane Light and Wing Light displays, which are optional accessories and may not be fitted.

Chapters are listed in order of probability that described situations will occur.

Turning on the power supply:

- Initialization of the turnstile takes place after each connection or loss of power supply. During the initialization, the turnstile wings slowly move to the stop ends in both directions and then stop in a closed position.
- For correct initialization it is forbidden to enter the turnstile corridor or manipulate the wings.
- Turnstile does not respond to control signals during initialization.
- The turnstile is ready to operate after correct initialization.

Deactivating the turnstile by the ON / OFF signal:

- If the control signal ON / OFF is deactivated, the turnstile wings are locked in the home position.
- The INL / INR opening function is deactivated.
- The EMERGENCY function is enabled.

Optional accessories	entry side	exit side
Back light	red	red
Digital Lane Light	red cross	red cross
Wing Light	Wings backlit in red	

Activating the turnstile by the ON / OFF signal:

- If the control signal ON / OFF is activated, the turnstile wings are locked in the home position.
- The INL / INR opening function is enabled.
- The EMERGENCY function is enabled.

Optional accessories	entry side	exit side
Back light	white	white
Digital Lane Light	green arrow	green arrow
Wing Light	Wings backlit in white	

Single passage:

- The wings will open in the entry direction after receiving control signal INL / INR. From this moment, the preset Timeout of **6s** for realizing the passage starts to count down.
- The wings will close after completing the passage and leaving all the sensors.

Optional accessories	entry side	exit side
Back light	green red during closing	red
Digital Lane Light	green arrow	green arrow
Wing Light	During opening and passage: wings backlit in green During closing: wings backlit in red	

Multiple passages – passage memory:

- The control electronics allows reception of multiple control signals from both directions and passage of additional persons without closing the turnstile wings.
- Memory of the number of control signals is unlimited.
- The electronics evaluates the control signals and, using the Back Light signaling, puts the passages from both directions in order so that all persons pass through the turnstile in the shortest possible time.
- The electronics enables passage to a person, who has permission to pass and enters the turnstile without regard to the Back Light signaling.
- In this mode, the time interval between the person leaving the turnstile and another person entering the turnstile must not be longer than **5s**. After this interval, the memory of passages is deleted.

Unrealized passage

- If passage is not realized within the **6s** Timeout period from receiving the INL / INR control signal, the wings are automatically closed.

Person stops during the passage:

- If a person stops and stands in the **entry** zone, the wings are closed after the **6s** Timeout period.
- If a person stops and stands in the **exit** zone, the wings are closed only after the person leaves the turnstile.

Entry of unauthorized person to the turnstile corridor:

- If a person enters the entry zone, the turnstile will generate an acoustic alarm with **1s** delay. If a person enters and reaches the wings, the acoustic alarm is generated immediately.
- Person standing in the turnstile corridor is able to activate the control signal for opening of the wings.
- The person standing in the turnstile corridor is blocking reception of control signal from the opposite direction.
- If there are persons on both sides of the turnstile, reception of control signal is blocked from both directions.
- The EMERGENCY function is enabled.

Optional accessories	entry side	exit side
Back light	white	red
Digital Lane Light	green arrow	green arrow
Wing Light	wings flashing red	

Person returns during the passage:

- If a person returns from the **entry** zone, they can realize the passage within **6s**.
- If a person returns from the **exit** zone, wings will close.

Activation of the control signal during an ongoing passage:

- If a signal is received from the INL or INR direction, wings remain open in the passage direction of the first person.

Activation of the control signal after the passage during closing of the wings:

- If a signal is received from the direction of previous passage, wings are always opened in the passage direction
- If signal is received from the opposite direction when the turnstile wings are closing, they will open:

  a) in the direction of the previous opening if the wings are within the angle interval <45°; 90°>

  b) in the direction of the received signal if the wings are within the angle interval <0°; 44°>

Unauthorized passage of a second person - Tailgating

- The person with authorization is protected against pinching by the wings.
- In case of discreet distance between persons, wings are closed in front of the second person to a safety angle.
- In case of indiscreet distance between persons, a second person may pass without authorization.
- In case of an attempt for unauthorized passage, wings may hit and clasp the trespasser, but the lower wings will not clasp their leg, and the high wings will not clasp their head.
- The turnstile generates an acoustic alarm during an unauthorized passage attempt.
- Turnstile wings will close **3s** after leaving the turnstile.

Unauthorized passage from the opposite direction - Crossover.

- In case of an attempt for unauthorized passage, the wings are closed to a safety angle.
- The wings may hit and clasp the trespasser, but the lower wings will not clasp their leg, and the high wings will not clasp their head.
- The turnstile generates an acoustic alarm during an unauthorized passage attempt.
- Turnstile wings will close **3s** after leaving the turnstile.

Unauthorized passage during closing of wings from the direction of passage or from the opposite direction

- The turnstile wings are closing regardless of presence of a person.
- In case of an attempt for unauthorized passage, the wings may hit or clasp a person.
- The turnstile generates an acoustic alarm during an unauthorized passage attempt.

Attempt to forcibly open the wings:

- If a person attempts to forcibly open the wings, they will lock.
- The turnstile generates an acoustic alarm upon an attempt to forcibly open the wings.
- The turnstile wings will return to the home position **3s** after leaving the turnstile.

Permanent blocking in one passage direction:

- Permanently blocked direction is activated by the Touch Panel, Easy Touch or the TMON program.
- The turnstile is closed in the given direction once this function is activated - reception of the control signal is blocked.

Optional accessories	permanently blocked passage side	the other side
Back light	red	white
Digital Lane Light	red cross	green arrow
Wing Light	Wings backlit in white	

Permanently released passage in the required direction:

- Permanently released direction is activated by means of a permanent control signal brought to the INL / INR input using the Touch Panel, Easy Touch or the TMON application.
- The turnstile wings are in the home position when this function is activated.
- The turnstile wings will open once a person enters the turnstile from the side with permanently released direction.
- Turnstile wings will close after 1s after leaving the turnstile.
- In all other cases, the turnstile behaves as per the previous chapters.

Optional accessories	permanently released passage side	the other side
Back light	green	white
Digital Lane Light	green arrow	green arrow
Wing Light	Wings backlit in white	
	During opening and passage: wings backlit in green During closing: wings backlit in red	

Activation of the EMERGENCY function (emergency state):

- Upon activation of the EMERGENCY signal, the turnstile wings are immediately opened in the exit direction at a safe speed and are locked.
- The EMERGENCY function is superior to all other turnstile modes.
- Upon turning on the power supply and simultaneous activation of the EMERGENCY function, the turnstile will initialize first and then the EMERGENCY function is executed.
- After deactivation of the EMERGENCY signal, the turnstile wings will close after the passing persons exit the turnstile.

Optional accessories	entry side	exit side
Back light	Flashing: red / green	
Digital Lane Light	green arrow (animation)	
Wing Light	flashing: red / green	

THE TURNSTILE MUST BE EQUIPPED WITH SUPERCAPACITORS TO USE THE EMERGENCY FUNCTION IN CONNECTION WITH THE EPS SYSTEM AND THEIR FUNCTION MUST BE REGULARLY TESTED IN ACCORDANCE WITH LOCAL FIRE AND ALARM GUIDELINES.

Optical mode of the turnstile:

- In the optical mode, the turnstile wings are opened in adjustable direction and locked.
- The turnstile operates standardly as per the above description with the exception of wings, which remain open.
- Optical mode can only be activated using the TMON application.

Free Mode of the turnstile:

- Permanent release from both directions. Wings are opening based on sensors input, passages are monitored and counted.
- Free mode can be activated using Easy::Touch and TMON application.

Group Mode of the turnstile:

- Wings are opened and turnstile passage gates are not monitored. This mode serves for letting bigger groups of people in without counting and alarms.
- Group mode can be activated using Easy::Touch and TMON application.

Lock Down Mode of the turnstile:

- This mode serves for permanent blocking from both sides. Turnstile acts as if it was turned off except that "push - through" or "low resistant" functions may be performed, provided that these functions are set in the TCONF application.
- Lock Down mode can be activated using Easy::Touch and TMON application.

Collision of wings with a permanent obstacle that does not cover any optical sensor:

- In case of collision during opening, the turnstile wings push such obstacle with small force for 5s and then automatically close.
- In case of collision during closing, the turnstile wings permanently push such obstacle with small force.

Loss of supply power:

In case of power supply loss, the turnstile wings are released and may be freely moved.

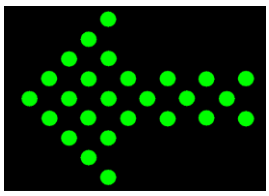
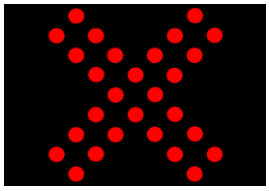
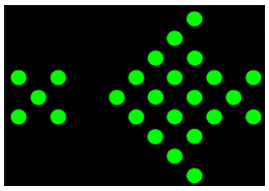
Operation of the turnstile on the backup power supply accumulator:

if using a backup power supply, the supply voltage of the turnstile is decreased in case of a power failure, due to running on the the backup power supply accumulator. In this case, the movement speed of both turnstile wings is decreased, while all of the above turnstile operations are preserved.

Displayed Back Light symbols:

White backlight	Red backlight	Green backlight	EMERGENCY flashing: red / green
			

Displayed Digital Lane Light symbols:

Green arrow	Red cross	EMERGENCY Green arrow (animation)
		

10. DESCRIPTION OF ADJUSTABLE TURNSTILE FUNCTIONS

This chapter describes the functions that affect turnstile behavior.

It is possible to adjust the behavior of the turnstile to the customer's requirements. These settings can be made only by a COMINFO service department employee or worker, who possess the certificate of installation schooling from the COMINFO Company.

10.1. SAFETY FUNCTIONS

10.1.1. Security / safety level

Parameter name in the TCONF configuration application:
Security / safety level

The following levels may be set:

Maximum security

- Detection of unauthorized persons when entering the turnstile, complete closing of glasses, without authorized person protection.
- Any body part of both authorized and unauthorized person may be clasped injury may occur.

Low safety

- Detection of unauthorized persons inside the turnstile, complete closing of glasses, without authorized person protection
- Any body part of both authorized and unauthorized person may be clasped injury may occur.

Medium safety

- Detection of unauthorized persons when entering the turnstile, closing of glasses to the safety distance, authorized person protection
- Unauthorized person may be clasped, except for their head. Injury may occur.

High safety

- Detection of unauthorized persons inside the turnstile, closing of glasses to the safety distance, authorized person protection
- Unauthorized person may be clasped, except for their head. Injury may occur.

Maximum safety

- Detection of unauthorized persons inside the turnstile, glasses do not close, protection of all persons in the turnstile

Factory setting – **Maximum safety** (recommended factory setting – Medium safety)

Unlike all other parameters that are set to recommended factory settings, the level **Maximum safety** is set during manufacturing. This level is used to protect persons during installation and putting the turnstile into operation. When the turnstile is put into operation, the level of security/safety is set according to customer's requirements.

10.1.2. Safety distance between the wings during an attempt for unauthorized passage

Parameter name in the TCONF configuration application:
Safety distance
Barrier width
Passage width

- Safety distance is the distance, to which the turnstile wings close, if Tailgating or Crossover are detected.
- Barrier width is the dimension of glass (in mm) in horizontal direction from the axis of rotation to the glass edge.
- Passage width is the distance (in mm) between axes of rotation of the wings.

Factory setting – According to dimensions of given turnstile, the distance is set, so that legs cannot be clasped by lower wings, and head cannot be clasped by high wings.

10.2. DYNAMIC FUNCTIONS

10.2.1. Motor unit type

Parameter name in the TCONF configuration application:
Type of motor unit

- For EasyGate-SG/SR turnstiles, the parameter must always be set to **Dunker GR 53x30**

10.2.2. Speed of wings opening and closing

Parameter name in the TCONF configuration application:
Opening speed

- Common parameter for setting the opening and closing speed of the wings.
- Adjustable range: **1-9**

Factory setting – Opening speed – **3**

If the dimensions of the glass wing do not allow the speed to be set to **5**, then lower speed is set according to the table in chapter *Turnstile passage gates widths*.

10.2.3. Activation of the brakes in the home position

Parameter name in the TCONF configuration application:
Brakes activation in the basic position

- When the brakes are activated in the home position, the wings cannot be moved.
- When the brakes are deactivated in the home position, the wings will lock only when you try to open them.
- Adjustable range: **OFF, ON**

Factory setting – **ON**

10.3. PASSAGE FUNCTIONS

10.3.1. Delay of acoustic signaling when entering the corridor

Parameter name in the TCONF configuration application:
Timeout of entry sensor

- Time period after which the acoustic signaling starts when entering the first sensor.
- Adjustable range: **1-10s**.

Factory setting – **1s**

10.3.2. Timeout to pass through

Parameter name in the TCONF configuration application:
Timeout of unblocking

- Time for which the turnstile is released, during which it is possible to realize a passage.
- The countdown starts when the control signal is received. The turnstile wings will close after the time expires.
- Adjustable range: **1-60s**

Factory setting – **6s**

10.3.3. INL / INR control signals memory

Parameter name in the TCONF configuration application:
Passage memory

- **OFF:** Reception of other control signals from both directions is blocked during passage. Another control signal may be received after finishing the passage during closing of wings.
- **Single passage:** It is possible to receive one control signal from any direction into memory immediately after previous passage or during passage.
- **Unlimited memory:** It is possible to receive unlimited number of control signals from both directions immediately after previous passage or during passage.

Factory setting – **Unlimited memory**

10.3.4. Wings closing delay

Parameter name in the TCONF configuration application:
Timeout for closing – standard passage
Timeout for closing – automatic passage

- The delay time for closing the turnstile wings after authorized passage and after a passage in permanently released direction can be set independently.
- Adjustable range: **0-5s**.

Factory setting – standard passage – **0s**
Factory setting – automatic passage – **1s**

10.3.5. EMERGENCY

Parameter name in the TCONF configuration application:
Emergency

- Enabling or disabling EMERGENCY function.
- **ON** - the EMERGENCY function can be activated by all control systems including power supply failure.
- **OFF** - the EMERGENCY function cannot be activated by any control system.
- Adjustable range: **OFF, ON**

Factory setting – **ON**

10.3.6. Impact emergency

Parameter name in the TCONF configuration application:
Impact emergency
Brake intensity in the basic position

The following functions may be set:

OFF
- The impact emergency function is deactivated.

Emergency
- After exceeding the set force, wings will open in given direction and remain in open position (impact emergency system).
- Reset of the pressure panic function may be performed only by activating and deactivating the EMERGENCY control signal, or by cancelling the EMERGENCY state using Touch panel, Easy::Touch or T-MON application.

Motor push-trough
- After exceeding the set force, wings will open in given direction and remain in open position for the time of passage (Push Through pressure system).
- Turnstile wings will close after leaving the turnstile.

Factory setting – **OFF**

The force necessary to push the wings can be set by the *Braking intensity in home position* parameter.
Adjustable range: **Maximum, High, Middle** and **Low intensity**

Factory setting – **Low intensity** (this parameter matters only after the Push Through function is activated)

10.3.7. Direction of wings opening in the EMERGENCY mode and optical mode

Parameter name in the TCONF configuration application:
Opening direction in the EMERGENCY mode
Opening direction in the optical mode

- The direction of opening the turnstile wings in the EMERGENCY and optical modes may be set separately.

  CCW direction
  CW direction

Factory setting – **CCW** (if not specified when ordering the turnstile)

10.3.8. Direction of wings opening in the PUSH THROUGH / LOW RESISTANT mode

Parameter name in the TCONF configuration application:
Direction of opening in the PUSH THROUGH / LOW RESISTANT mode

Low Resistant

- Function extending the Push Through function.
- Wings produce adjustable pressure applied against a person who is trying to force through.
- Turnstile wings will close at the moment when the person forces his/her way through the turnstile or stops pushing the wings.
- Adjustable push through direction.

  The force necessary to push the wings can be set by the *Braking intensity in home position* parameter. Adjustable range: **Maximum, High, Middle** and **Low intensity**

Factory setting – **Low intensity** (this parameter matters only after the Push Through – Low Resistant function is activated)

The function Push Through / Low Resistant may be set for both directions in the following combinations:

	Direction of turnstile wings opening	
	CCW (INL)	**CW** (INR)
1	Push Through	✗
2	✗	Push Through
3	Push Through	Push Through
4	Low Resistant	✗
5	✗	Low Resistant
6	Low Resistant	Low Resistant
7	Push Through	Low Resistant
8	Low Resistant	Push Through

Factory setting – **Push Through CCW** (this parameter matters only after the Push Through function is activated)

10.3.9. Detection of persons

Parameter name in the TCONF configuration application:
Tailgating – person width
Tailgating - distance between persons

- Person width - This parameter defines minimum detectable width of person.
- Distance between persons - This parameter defines minimum detectable distance between persons.
- Adjustable range: **20 – 1000**.

Factory setting - person width **100** / distance between persons **200**

10.4. SIGNALING FUNCTIONS

10.4.1. BUZZER Acoustic signaling

Parameter name in the TCONF configuration application:
Type of standard acoustic signalization
Type of warning acoustic signalization

- Turnstile is equipped with two buzzers with different levels of volume.
- This parameter enables separate setting of acoustic signaling during passage and during alarm.
- Setting range and tone types:

Type of signalization	Type of tone	Tone frequency
Off	deactivated	✗
1.25Hz	intermittent	1.25Hz
1.75Hz	intermittent	1.75Hz
2.5Hz	intermittent	2.5Hz
5Hz	intermittent	5Hz
Continuous tone	permanent - uninterrupted	✗

- Both buzzers are factory equipped with a stick-on foil, which reduces their volume. If it's necessary to increase the volume, you must remove the foil.

Factory setting - Type of standard acoustic signalization – **1.75Hz**
Factory setting - Type of warning acoustic signalization – **Continuous tone**

10.4.2. WAV Player Acoustic signaling

Parameter name in the TCONF configuration application:
Wav player - volume of standard acoustic signalization
Wav player - volume of warning acoustic signalization

- Wav player is a separate module that serves for playing of sound files saved in the built-in memory card.
- The volume of the acoustic signaling during passage and during an alarm can be set independently.
- Any sounds can be saved to the memory card using the WAV Player Config software application.
- Adjustable range: **OFF, 1 - 7**.

Factory setting - Volume of standard acoustic signalization – **OFF**
Factory setting - Volume of warning acoustic signalization – **OFF**

10.4.3. Back Light, Wing Light, Lane Light and Digital Lane Light optical signaling

All signals can be set to preset animations in any chosen colours (see separate manual). In case of Back Light, the combination of colours is limited.

10.5. FUNCTIONS OF INPUT AND OUTPUT SIGNALS

10.5.1. Setting of control inputs

Parameter name in the TCONF configuration application:
IN L input
IN R input
ON / OFF input
EMERGENCY input

- This parameter sets the level for activation of INL, INR, ON/OFF, EMERGENCY inputs.

Normally open
Input is activated by connecting the GND level.

Normally closed
Input is activated by disconnecting the GND level.

Factory setting – All input signals are in the **Normally open** state

The EMERGENCY function is connected using the EMGI module. For correct function of the EMGI module, the EMERGENCY signal must be in the Normally open mode.

10.5.2. Setting of relay outputs

Parameter name in the TCONF configuration application:
ROT L (relay 1)
ROT R (relay 2)
BUSY (relay 3)
ALARM (relay 4)

- This parameter sets the NO (normally open) or NC (normally closed) output type.

Off
Output is inactive

Normally open
When the output is activated, the relay contact is switched

Normally closed
When the output is activated, the relay contact is opened

Factory setting – All output signals are in the **Normally open** state

10.6. IMPORTANT NOTICES

10.6.1. Adapting the turnstile to local fire regulations

In most cases the turnstile serves as an emergency fire exit during a fire alarm. The turnstile allows connection of all systems, FA, FAS, EPS through the EMGI module. When installing the turnstile, the module must be connected in accordance with the local fire regulations.

10.6.2. Recommended factory setting

Recommended factory setting (medium safety) optimizes detection of authorized and unauthorized persons. Regardless of this setting, persons may not be detected correctly in some cases. These are non-standard passages, such as:

- Passage in high speed
- Passage of persons in indiscreet distance
- Passage of persons passing next to each other
- Passage of a person carrying an atypical object or luggage
- When a person stops, turns or returns

The success rate of detecting passing persons in standard passages reaches up to 99.9% (1 false detection out of 1000). During passage of persons carrying objects such as a coat, luggage, umbrella, or during non-standard passages (fast walking, running, stopping, reversing, jumping) the detection success rate may be significantly reduced.

10.6.3. Passage of small persons

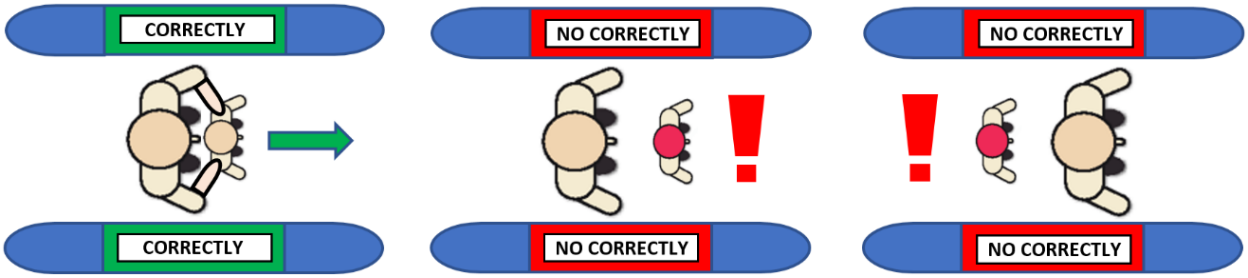
For correct detection, the minimum height of the passing person must be **1 meter**.

10.6.4. Passage of a child

- Due to the unpredictable behavior of children, the turnstile is not suitable for their independent passage.
- If the turnstile will also serve for independent passage of children, their height must be at least **1 meter** and their passage must be supervised by an adult.

10.6.5. Passage of an adult with a small child

- Turnstile can be safely passed through with a small child without its identification.
- Child's safety is ensured by the automatic **CHILD SAFE MODE** function.
- This function may not work reliably if the child acts disorderly or intentionally remains in the turnstile corridor.
- When passing through the turnstile, children must be in close contact with the adult.
- The correct and incorrect passages are shown on the figures below.



11. MAINTENANCE

11.1. MAINTENANCE OF THE TURNSTILE SURFACE

- In terms of comfort and perfect look, it is necessary to maintain general cleanliness of the whole device with cleaning agents intended for this purpose.
- It is necessary to treat the glass parts of the turnstile with general window cleaning products.
- Stainless surfaces should be treated with cleaning agents intended for this purpose. These products are recommended by the manufacturer:
    - RAPELLE - GLASS & STAINLESS-STEEL SEAL & PROTECT
    - KIM-TEC – EDELSTAHLREINIGERSPRAY (850001)
    - WÜRTH – EDELSTAHLPFLEGESPRAY (0893121)
    - WÜRTH – EDELSTAHLREINIGUNGSTUCH (089312130)
- The apertures of the optical sensors must be regularly cleaned with detergents intended for acrylic sheets. When using different products, there is a danger of scratching. The manufacturer recommends foam cleaning sprays for motorcycle helmet visors such as:
    - SHELL ADVANCE MOTORCYCLE HELMET & VISOR CLEANER SPRAY AEROSOL

No solvents, lyes and caustics must be used to clean any dirt. The turnstile must not come into contact with detergents containing chlorine.

The turnstile cannot be cleaned with pressure cleaners (pressure water)

11.2. MAINTENANCE OF THE MOTOR DRIVE UNIT

The technical solution of the motor drive unit requires no special care during operation due to its method of lubrication.

Manufacturer recommends to perform initialization (see *Putting the turnstile into operation*) after running-in of the drive unit or in case the turnstile does not operate correctly.

This can only be done by a COMINFO service department employee or worker, who possess the certificate of installation schooling from the COMINFO Company.

11.3. PROPHYLACTIC CHECK

It is necessary to perform a prophylactic check of the turnstile once a year to maintain the warranty, it consists of following procedures:

- Complete diagnostics of all electronic systems
- Inspection of the wiring and connection of all devices
- Inspection and tightening of all bolted connections
- Inspection and adjustment of drive mechanisms and checking the alignment
- Cleaning the interior of the turnstile
- Testing all the turnstile functions

Prophylactic check can only be done by a COMINFO service department employee or worker, who possess the certificate of installation schooling from the COMINFO Company.

12. TROUBLESHOOTING

For quick removal of your turnstile's malfunction, it is necessary to fill out the *Claim Report Form* **when contacting the Service Department of the COMINFO Company. The report should indicate serial number of the turnstile in compliance with the production label, and a description of the malfunction. Along with the completed form, send a video which clearly shows the occurring malfunction. The** *CLAIM REPORT FORM* **can be found at the end of these Instructions.**

MALFUNCTION	POSSIBLE CAUSE	REMEDY	Solver (difficulty level)
Some of the turnstile wings do not finish to the end position and stop outside the home position.	Correct initialization was not completed	Reset the turnstile by turning the power supply off and on	**Customer**
Wings of the turnstile may be freely moved. Turnstile does not respond to control commands.	Turnstile without supply voltage.	Check the superior circuit breaker. In case of a turnstile with power supply of 24VDC or 230VAC, check also the circuit breaker located in the turnstile. Reset the turnstile by turning the circuit breaker off and on.	**Customer**
Wings of the turnstile are closed. Turnstile does not respond.	Malfunction of the superior identification system.	Contact the supplier of the superior system.	**Customer** / Supplier of the superior system
Wings of the turnstile are closed. Turnstile does not respond to control signals.	Control electronics error	Reset the turnstile by turning the power supply off and on.	**Customer**
Turnstile may be passed by several persons based on identification of one person.	Too long (>2s) control signal.	Shorten the signal to >=0.5s a <=1s	**Customer** / Supplier of the superior system
Turnstile remains open after a person passes through, or it closes with delay once a person passes through	Malfunction of optical sensors which monitor the turnstile passage	Clean the apertures, replace faulty sensors	**Customer** / COMINFO Service Department
Wings of the turnstile are opening and closing during passage, but it is possible to freely move a wing	Malfunction of the electronics or electromagnetic brake of the drive	Inspection of the electronics, cables and connectors.	COMINFO Service Department
Turnstile remains open after the passage while one of the wings is free and the other one is braked.	Mechanical fault of the electromagnetic brake of the braked wing.	Replace the drive unit.	COMINFO Service Department
Only one wing correctly opens during passage, while the other wing can be freely moved	Drive gearbox malfunction.	Replace the drive unit.	COMINFO Service Department

In case of a persisting malfunction, it is necessary to fill out the *CLAIM REPORT FORM* and send it to the address of the manufacturer. For quick removal of your malfunction, please describe it thoroughly as per the following example.

EXAMPLE - CLAIM REPORT FORM

Product label information:

Name – type:	EASYGATE SG-1000
Serial number:	0 9 0 0 1 2 3 4 5 6

Information on the control electronics (MLU 5):

Serial number:	5 4 3 0 0 0 4 6 7

Your request:

Wings of the turnstile are opening and closing during passage, but it is possible to freely move them.
We checked the power supply voltage.
After turning off and on the supply voltage initialization of the turnstile takes place, but the malfunction persists.
We are guessing an electrical malfunction of the brake on both turnstile wings as per the previous table.
We are attaching a video of initialization a malfunction simulation.

Customer:	Company Ltd		
Address:	11 Business Park, London SW12 9RT, United Kingdom		
Contact person:	Jack Smith	Telephone:	4420 7777 7777
E-mail:	jack@company.com	Date:	11. 1. 2022

CLAIM REPORT FORM

Product label information:

Name – type:

Serial number:

Information on the control electronics (MLU 5):

Serial number:

Your request:

Customer:

Address:

Contact person:

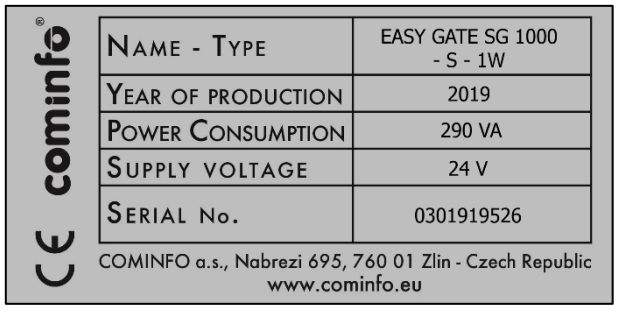
Telephone:

E-mail:

Date:

13. PRODUCT LABEL LOCATION

The product label is always placed in the interior side of the turnstile cabinet. Its placement is shown in the chapter *General description and basic dimensions*.

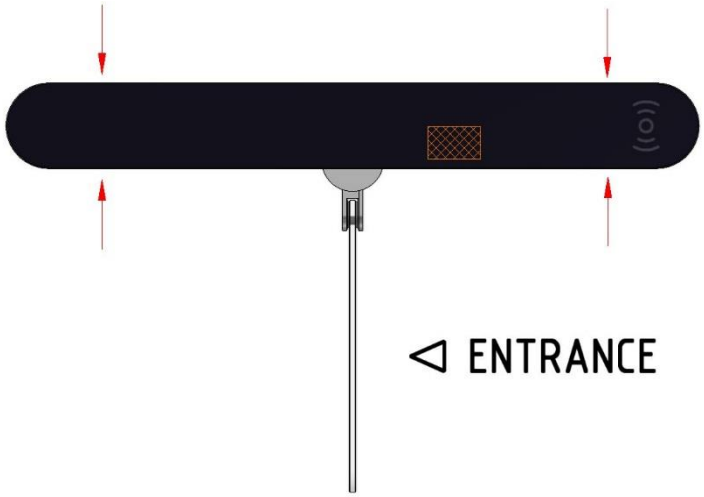


The nameplate can be accessed after removing the top cover.

BEFORE REMOVING THE TOP COVER, IT IS NECESSARY TO DISCONNECT THE TURNSTILE FROM POWER SUPPLY

Procedure for removing the cover:

- Remove four M4x8 bolts marked with red arrows in the figure.
- Carefully lift the top cover upwards.
- The label is located on the turnstile frame under the control electronics. The position is indicated by the hatched area on the figure.



- When returning the top cover back into position, pay increased attention not to damage the inner equipment.

14. DEVICE DIPOSAL

Entrust the device disposal to an expert company in compliance with the legislation effective at the time of the device disposal. Materials that are subject to regulations on handling hazardous materials were also used in the course of construction of the device.

Brief list of used materials:

- Steel of the class 11,12,14,17
- light alloys
- safety toughened glass
- tin bronze, copper, silver, zinc, lead
- plastics PA, PE, PVC
- surface finish by galvanization in alkaline bath, blackening, powder spraying with DRYLAC paints
- lubricating greases
- electric devices (motor drive unit and control electronics)

Electric devices (hereinafter referred to as "ED") also contain precious metals in low amounts. Production labels of EDs stated in this Instruction Manual contain, in accordance with the Act No. 185/2001 Coll. as amended, name of the producer and date of the ED launching. The producer (COMINFO a.s.) is registered in the list of manufacturers of electric devices kept by the Ministry of Environment via the Retela collective scheme where the user of any electric device may turn to dispose this electric device.

The turnstile is RoHS compliant. RoHS stands for Restriction of Hazardous Substances and affects the entire electronics industry as well as many electronic products.

15. PROHIBITED MANIPULATIONS

1. It is prohibited to anyhow interfere in the control electronics and self-perform a disassembly of the motor drive unit. These activities have to be entrusted exclusively to the technicians of the provider. All service reparations are performed within the warranty and post-warranty service exclusively by service technicians of the COMINFO a.s. company or workers, who possess the certificate of installation schooling from the COMINFO Company. In case of a breach of this condition in the course of the warranty period, the device operator loses the right for warranty service.

2. It is prohibited to use violence when manipulating the wings of the turnstile in their blocked position in an effort to enter the area with defined access rights.

3. It is prohibited to hang on the turnstile wings.

4. Device cannot be cleaned or treated with acids, lyes and other dangerous chemicals.

16. CERTIFICATIONS

The COMINFO a.s. company acquired a type certificate for the EASYGATE motor turnstiles from the TÜV SÜD Czech s.r.o. certifying authority.

COMINFO a.s. holds a management system certificate according to the ISO 9001:2000 certification.

It is possible to send CE–Declaration of Conformity on request.

The Declaration can be found also on the following link:
http://www.cominfo-trade.com/cz/produkty/certifikaty-a-pos/

Cominfo, a.s.
Nábřeží 695
760 01 Zlín – Prštné
Czech Republic

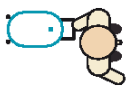
Hotline: +420 603 151 334
e-mail: cominfo@cominfo.cz

EasyGate - swing opening: LEGEND (page 7)

cominfo®

1 Authorized person

2 Person with luggage

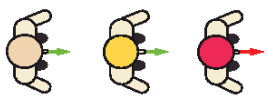


3 Unauthorized person

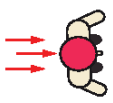
4 Badging of card - allowed

5 Badging of card - rejected

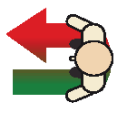
6 Moving person - standard walking speed



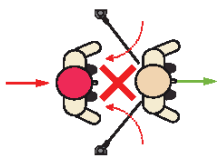
7 Moving person - fast walking speed



8 Turning person

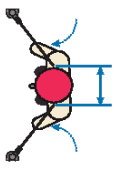


9 Danger of hitting of person by wing barriers

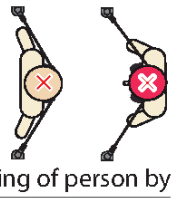


10 Dangerous hitting of person by wing barriers

11 Safety closing of wing barrier to prevent injury of head



12 Dangerous squeezing of person by wing barriers



13 Closed wing barriers

14 Initiation of opening of wing barriers

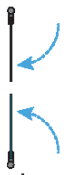
15 Opened wing barriers

16 Safe moving of wing barriers

17 Moving of wing barriers with dangerous of hitting the person

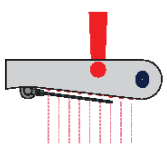
18 Stopped moving of wing barriers

19 Finished closing of wing barriers



20 Beams of optical sensors (S-beam)

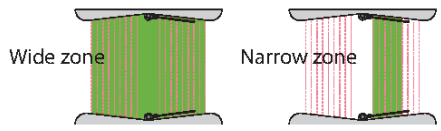
21 Detection of unauthorized person



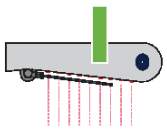
22 Accoustic alarm

23 Timeout of accoustic alarm

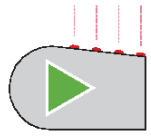
24 Safety zone



25 Short Safety zone activated



26 Free ENTRY (or EXIT) activated



27 Timeout in seconds (configurable)

Time Out = "x" s

EasyGate - swing opening: MAXIMAL SECURITY (page 1)

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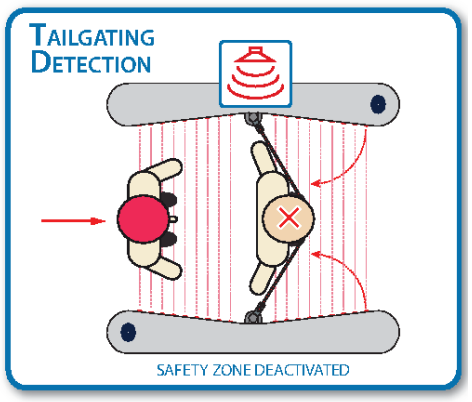
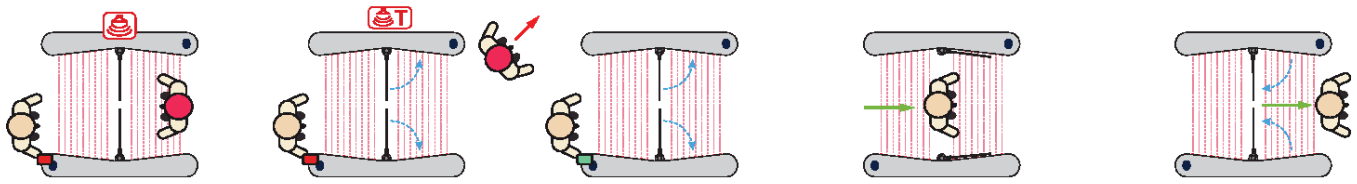


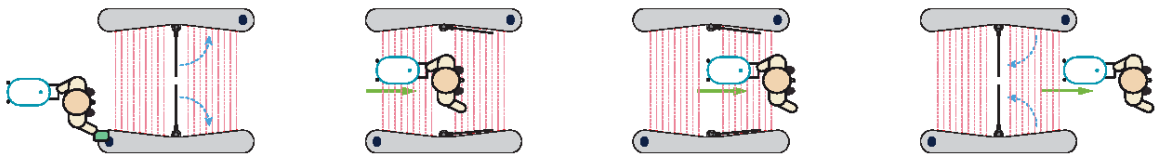
RISK OF INJURY

1



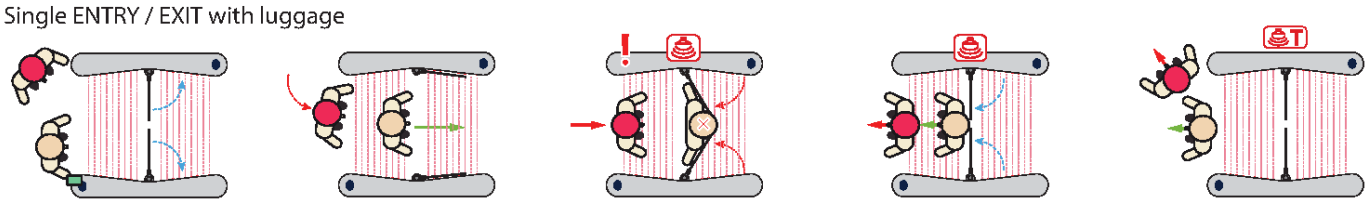
Single ENTRY / EXIT

2



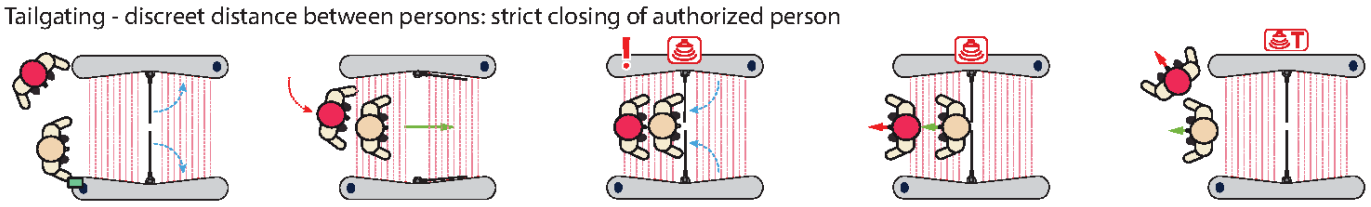
Single ENTRY / EXIT with luggage

3a



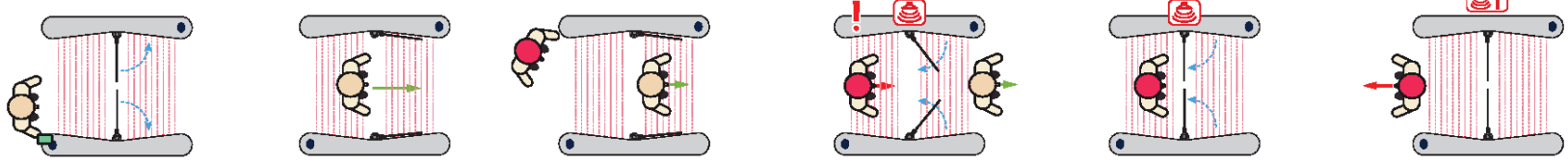
Tailgating - discreet distance between persons: strict closing of authorized person

3b



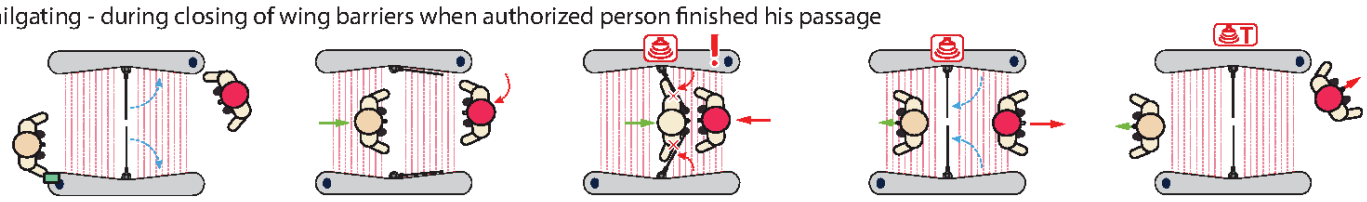
Tailgating - non-discreet (close) distance between persons: strict closing in front of authorized person

3c



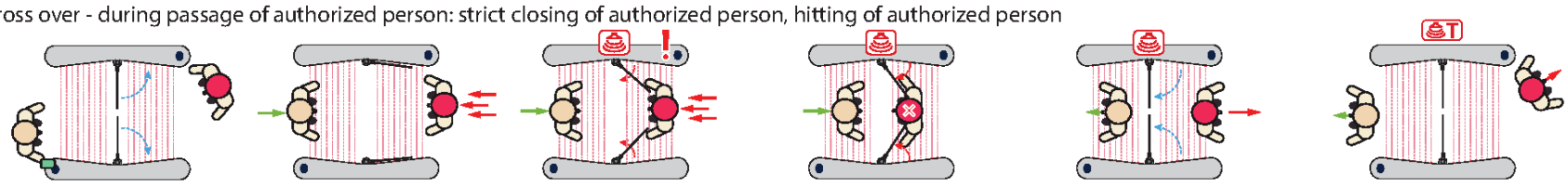
Tailgating - during closing of wing barriers when authorized person finished his passage

4a



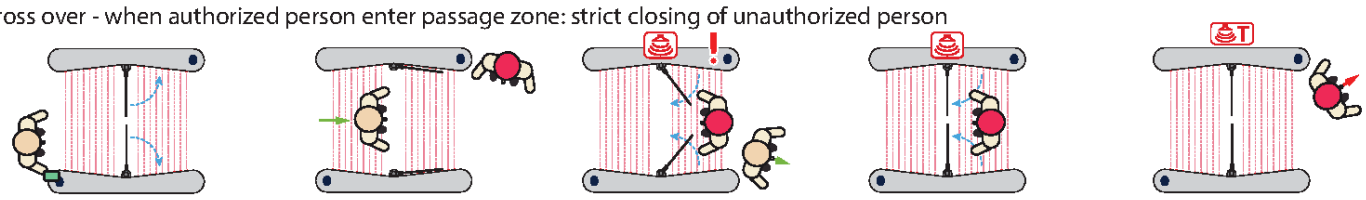
Cross over - during passage of authorized person: strict closing of authorized person, hitting of authorized person

4b



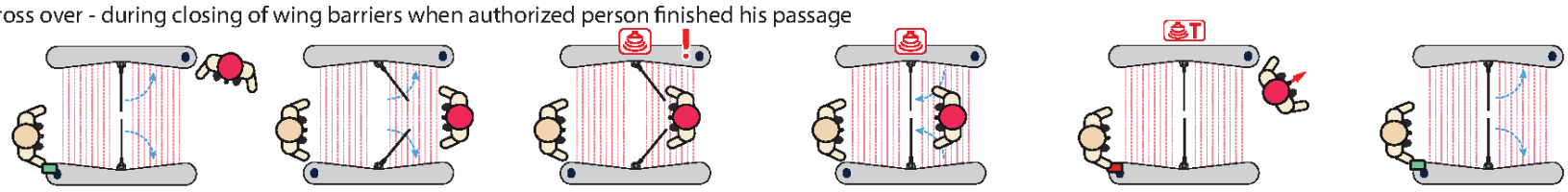
Cross over - when authorized person enter passage zone: strict closing of unauthorized person

4c



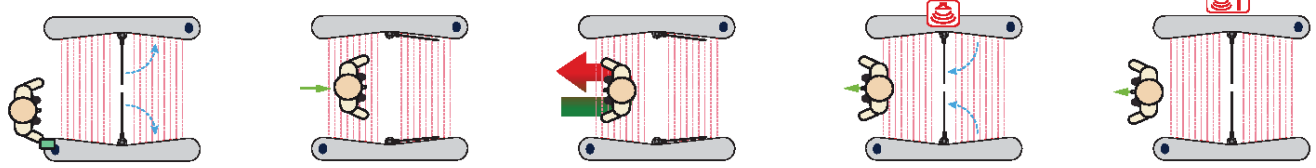
Cross over - during closing of wing barriers when authorized person finished his passage

4d



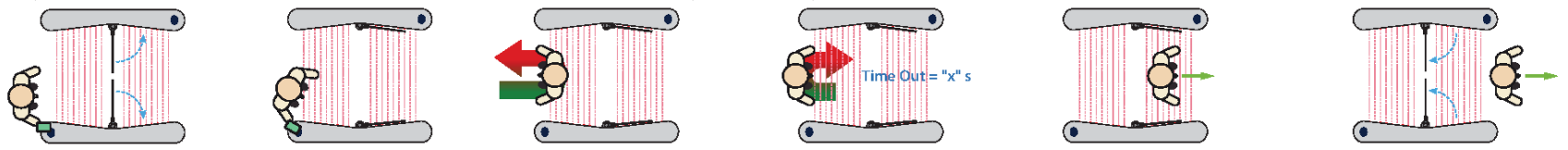
Cross over - when wing barrier is opening, before authorized person enter passage zone

5



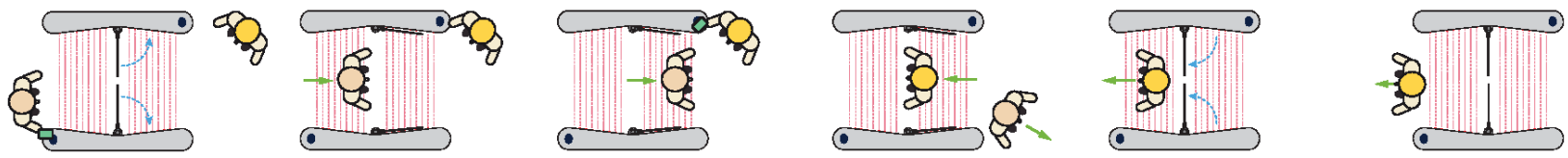
Passage of authorized person not completed - authorized person left passage zone: wing barriers are closed

6



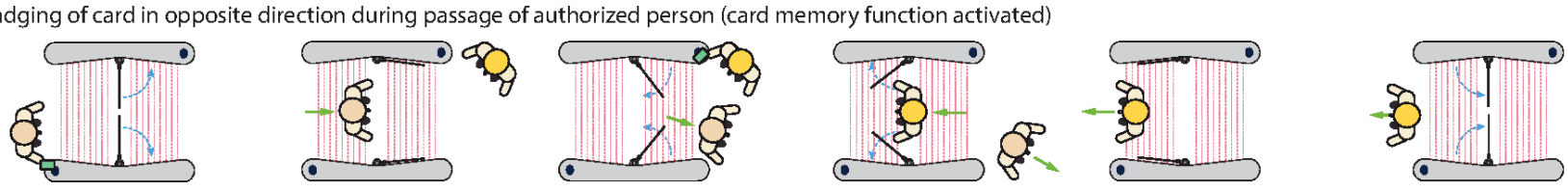
Passage of authorized person not completed - authorized person did not leave passage zone: it is possible to complete passage

7



Badging of card in opposite direction during passage of authorized person (card memory function activated)

8



Badging of card in opposite direction when passage of authorized person finished (card memory function activated)

EasyGate - swing opening: LOW SAFETY (page 2)

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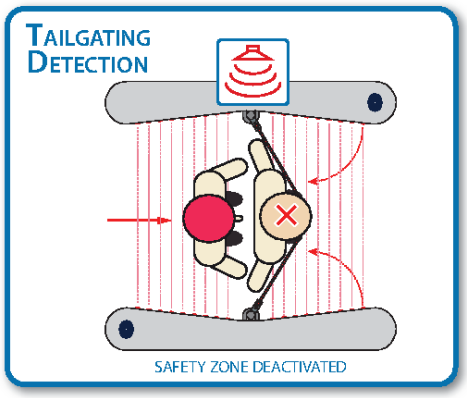
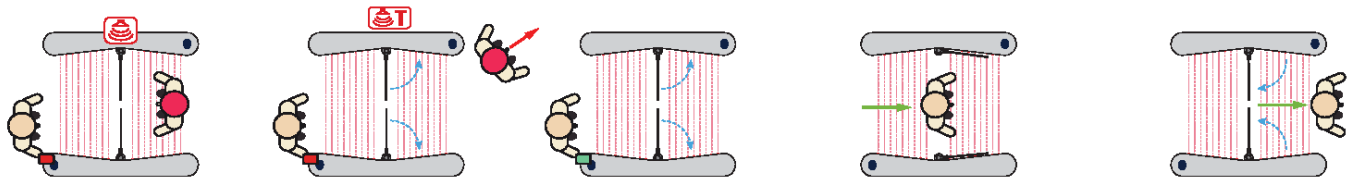


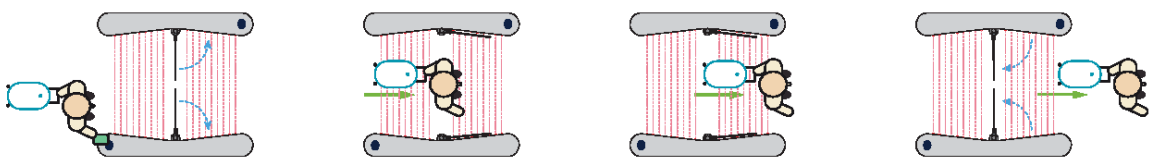
RISK OF INJURY

1



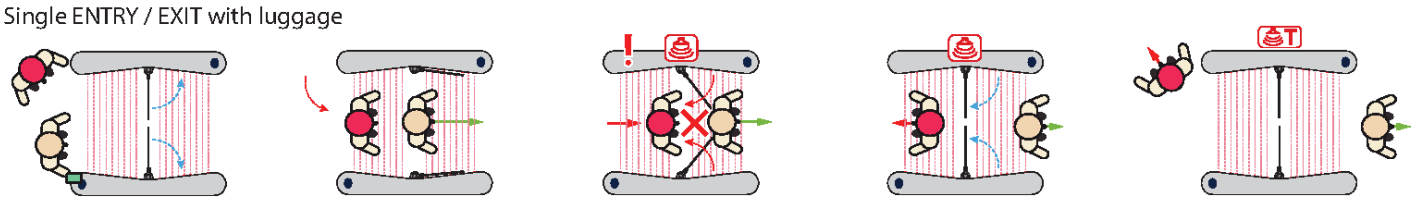
Single ENTRY / EXIT

2



Single ENTRY / EXIT with luggage

3a

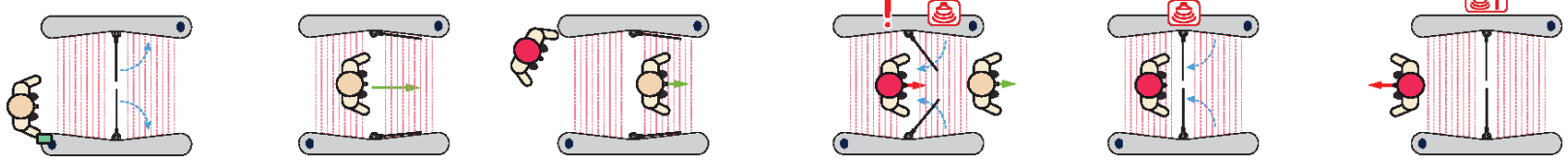


Tailgating - discreet distance between persons: strict closing behind authorized person

3b

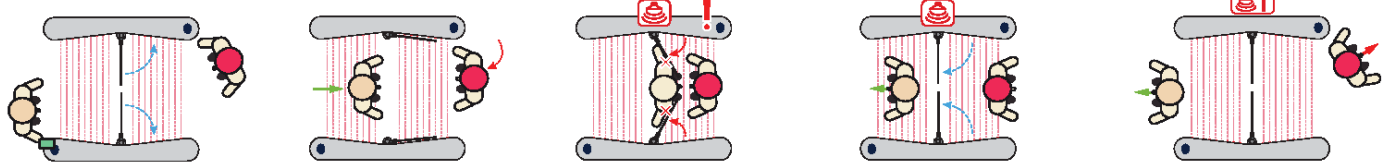
Tailgating - non-discreet (close) distance between persons: strict closing of authorized person

3c



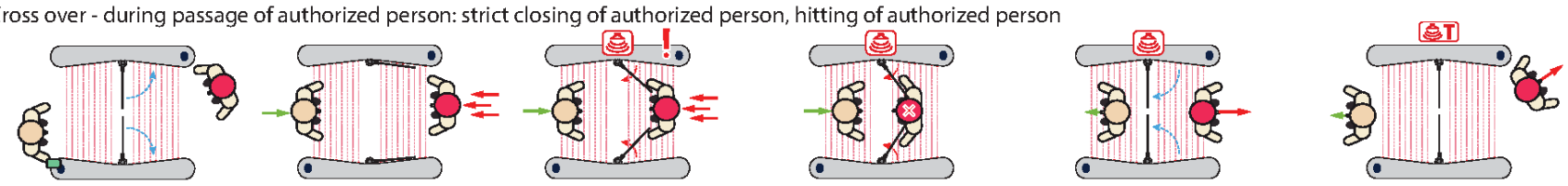
Tailgating - during closing of wing barriers when authorized person finished his passage

4a



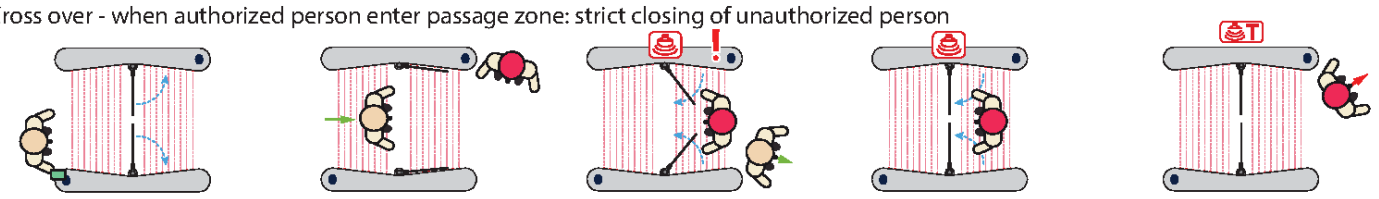
Cross over - during passage of authorized person: strict closing of authorized person, hitting of authorized person

4b



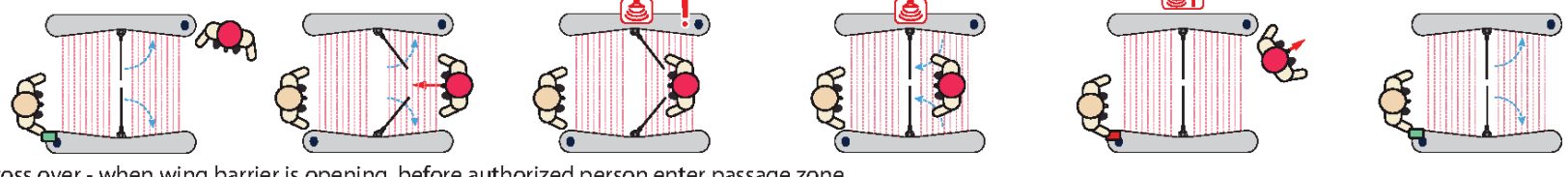
Cross over - when authorized person enter passage zone: strict closing of unauthorized person

4c



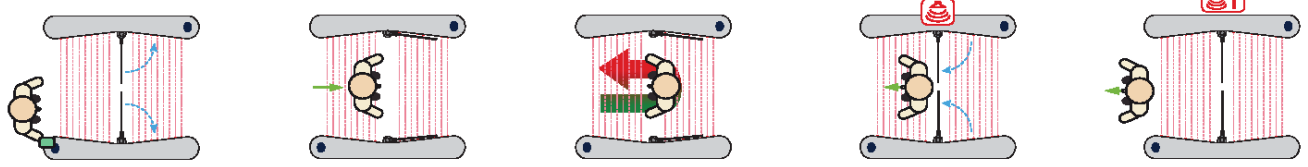
Cross over - during closing of wing barriers when authorized person finished his passage

4d



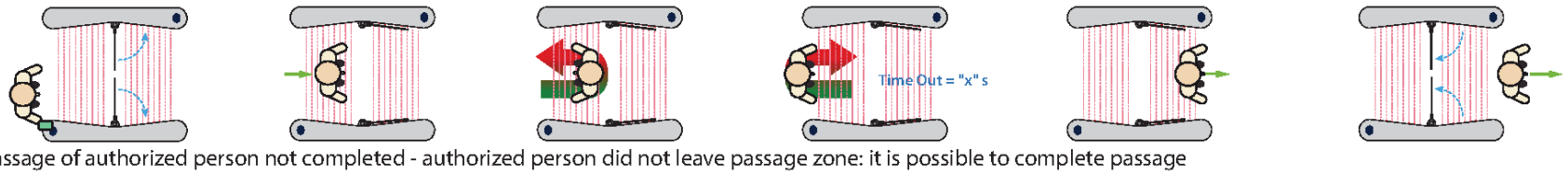
Cross over - when wing barrier is opening, before authorized person enter passage zone

5



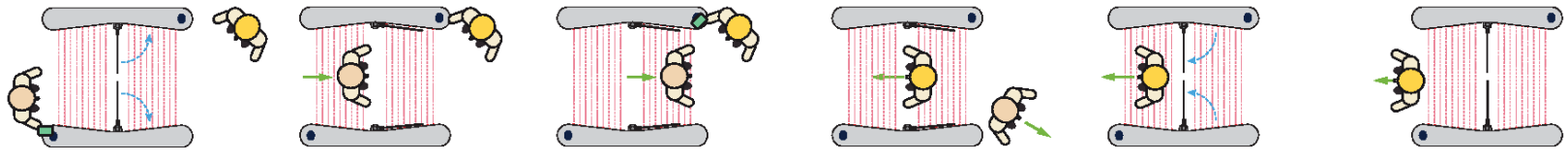
Passage of authorized person not completed - authorized person left passage zone: wing barriers are closed

6



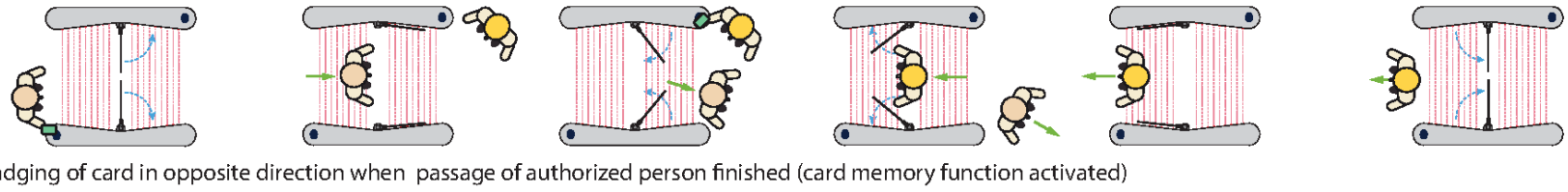
Passage of authorized person not completed - authorized person did not leave passage zone: it is possible to complete passage

7



Badging of card in opposite direction during passage of authorized person (card memory function activated)

8



Badging of card in opposite direction when passage of authorized person finished (card memory function activated)

EasyGate - swing opening: MIDDLE SAFETY (page 3)

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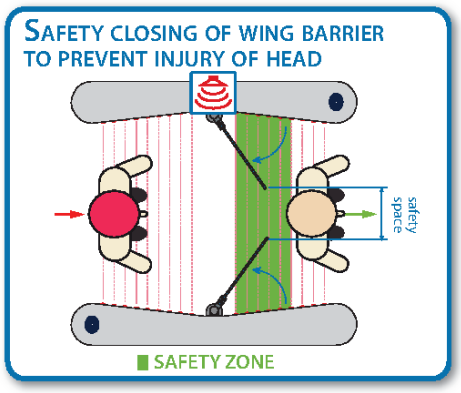
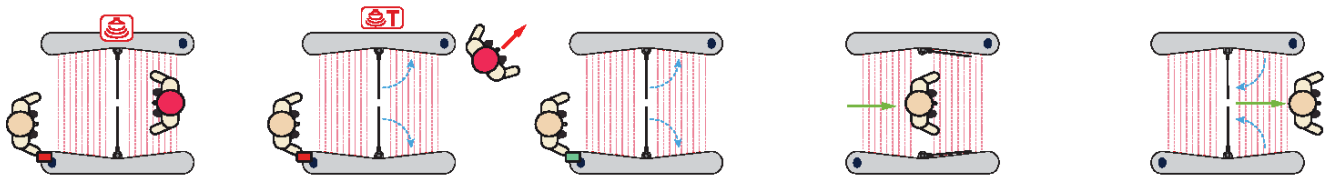
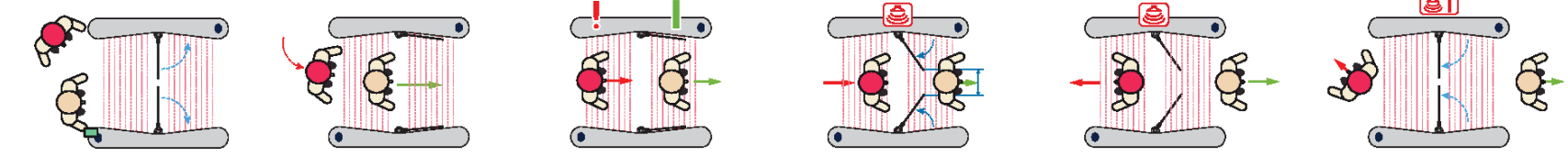


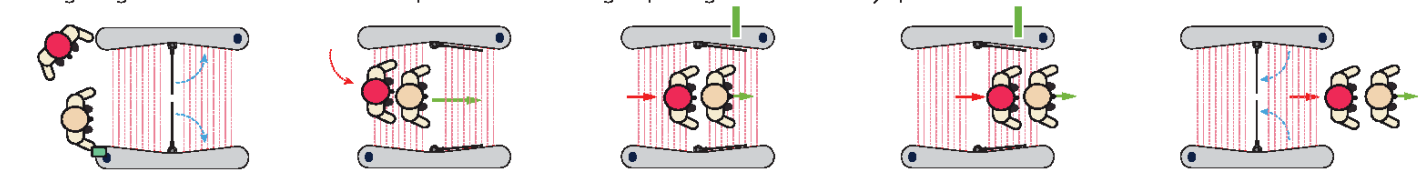
1 Single ENTRY / EXIT



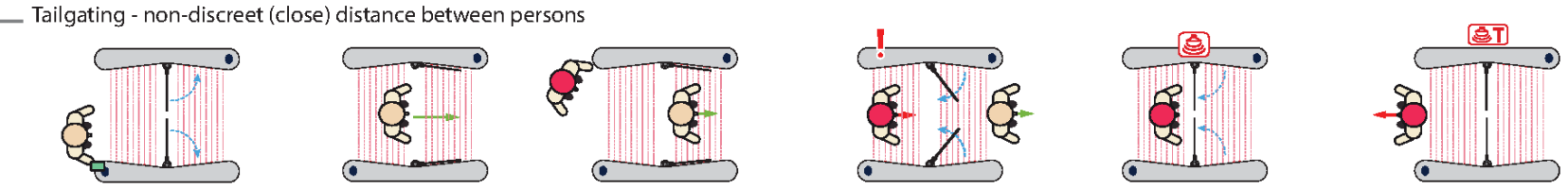
2 Single ENTRY / EXIT with luggageSingle ENTRY / EXIT with luggage



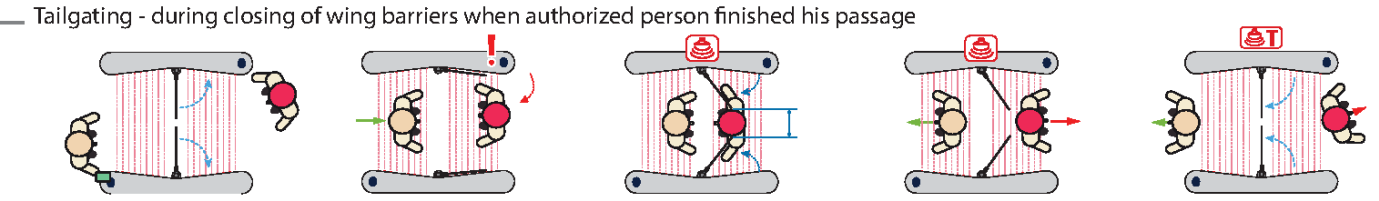
3a Tailgating - discreet distance between persons: decreasing of passage width to safety space



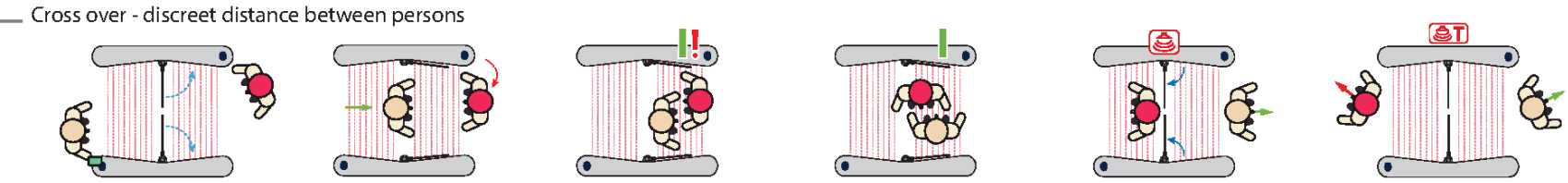
3b Tailgating - non-discreet (close) distance between persons



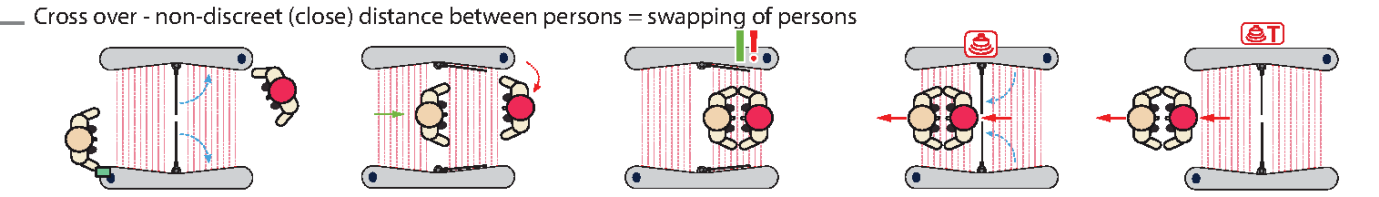
3c Tailgating - during closing of wing barriers when authorized person finished his passage



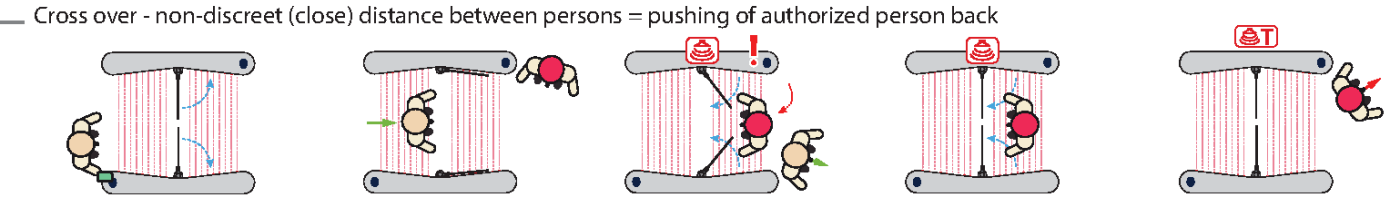
4a Cross over - discreet distance between persons



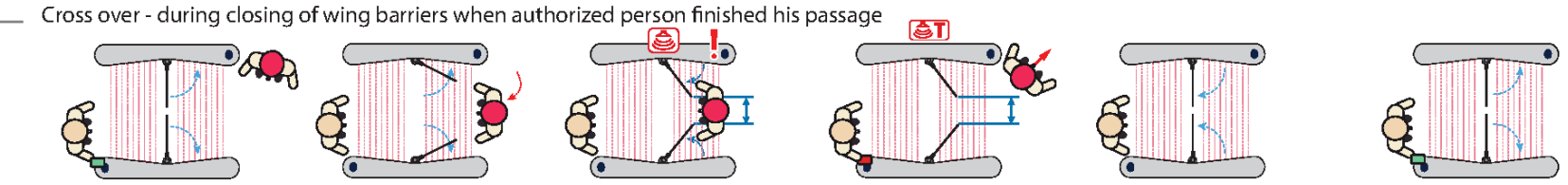
4b Cross over - non-discreet (close) distance between persons = swapping of persons



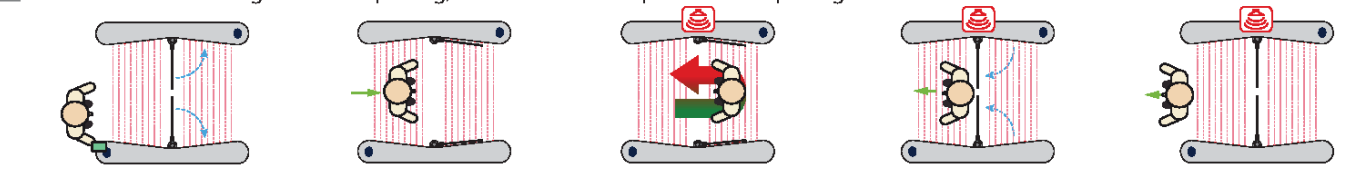
4c Cross over - non-discreet (close) distance between persons = pushing of authorized person back



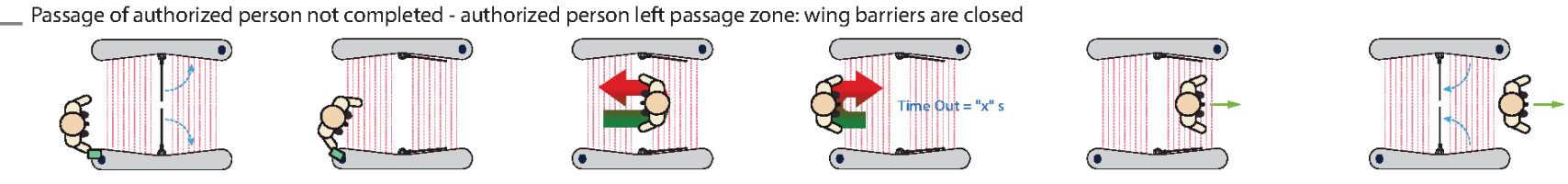
4d Cross over - during closing of wing barriers when authorized person finished his passage



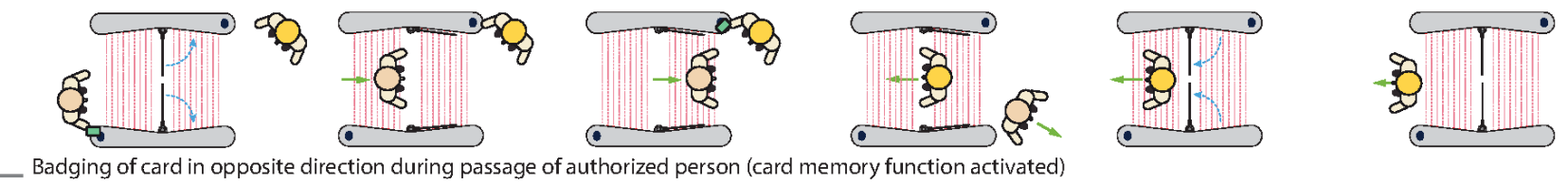
4e Cross over - when wing barrier is opening, before authorized person enter passage zone



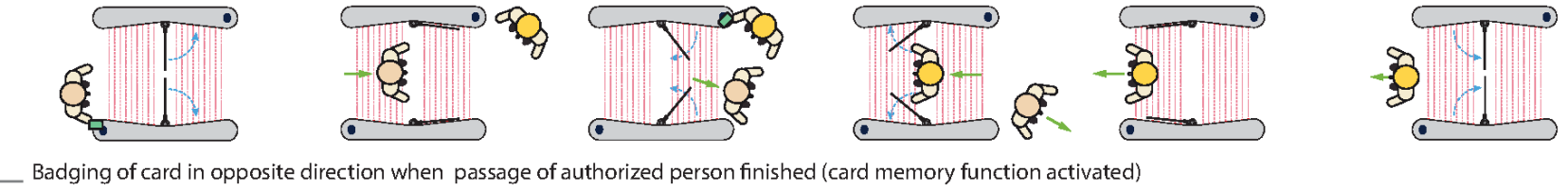
5 Passage of authorized person not completed - authorized person left passage zone: wing barriers are closed



6 Passage of authorized person not completed - authorized person did not leave passage zone: it is possible to complete passage



7 Badging of card in opposite direction during passage of authorized person (card memory function activated)



8 Badging of card in opposite direction when passage of authorized person finished (card memory function activated)

EasyGate - swing opening: HIGH SAFETY (page 4)

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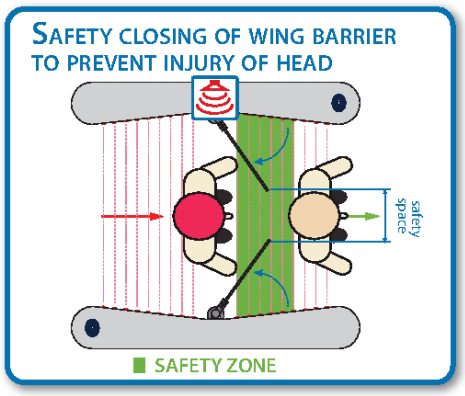
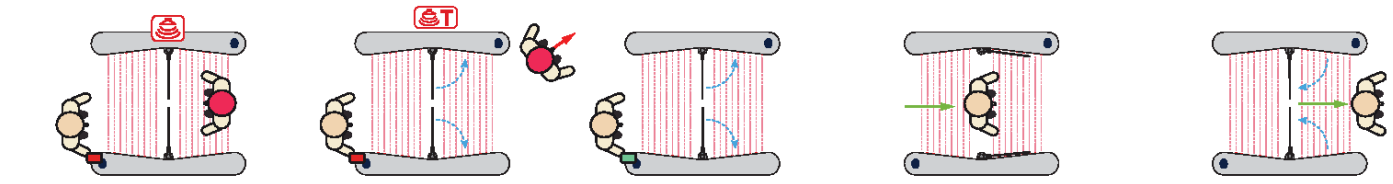
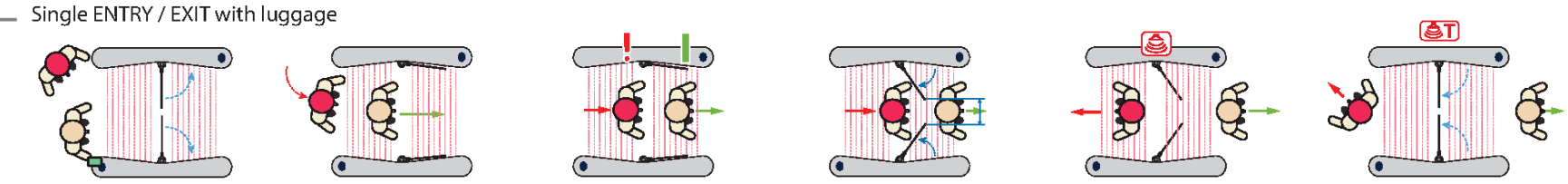


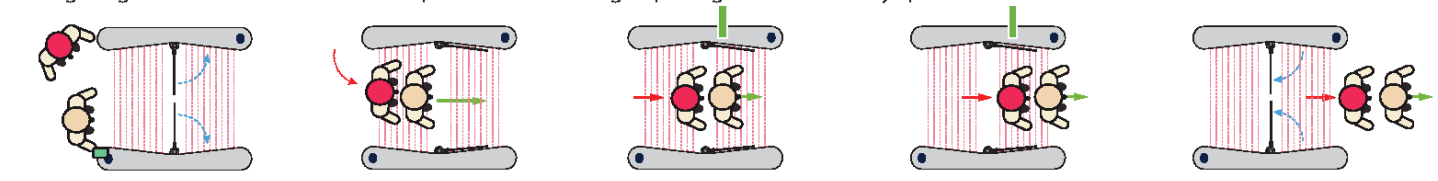
1 Single ENTRY / EXIT



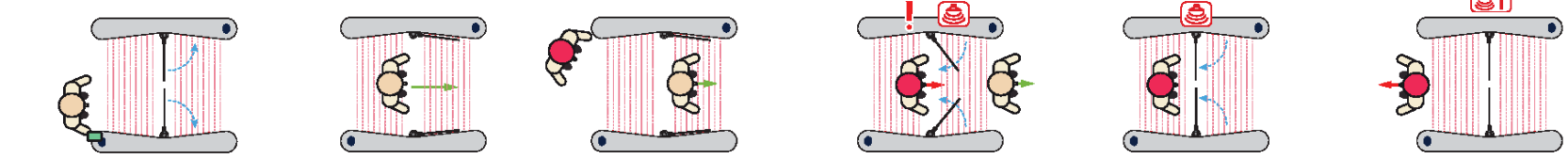
2 Single ENTRY / EXIT with luggage



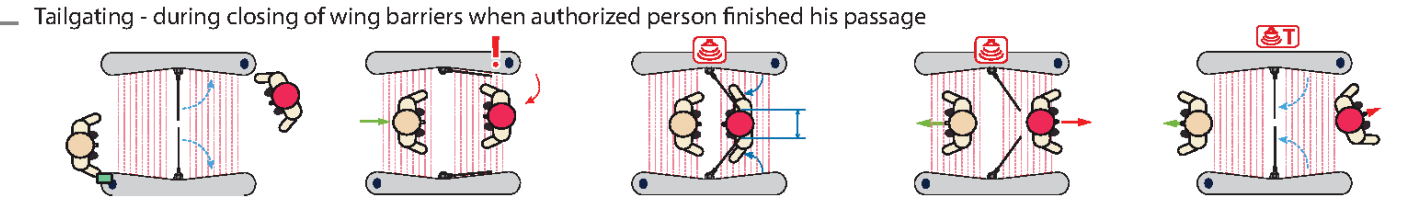
3a Tailgating - discreet distance between persons: decreasing of passage width to safety space



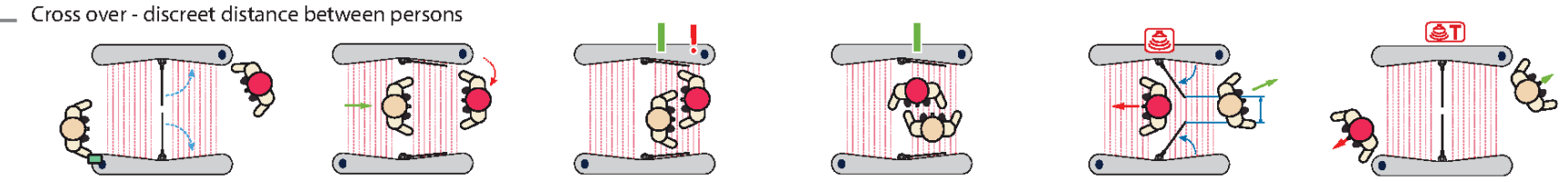
3b Tailgating - non-discreet (close) distance between persons



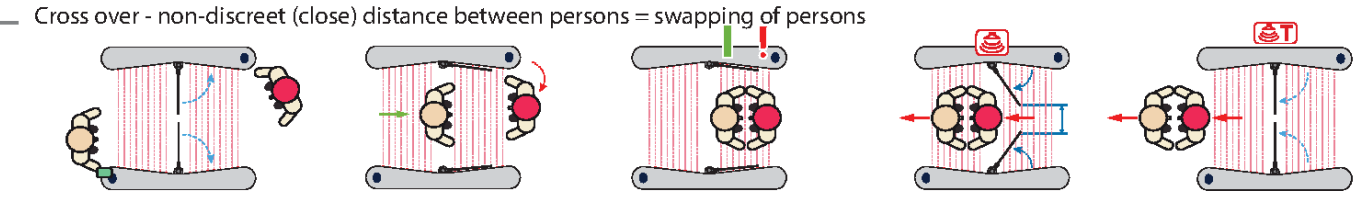
3c Tailgating - during closing of wing barriers when authorized person finished his passage



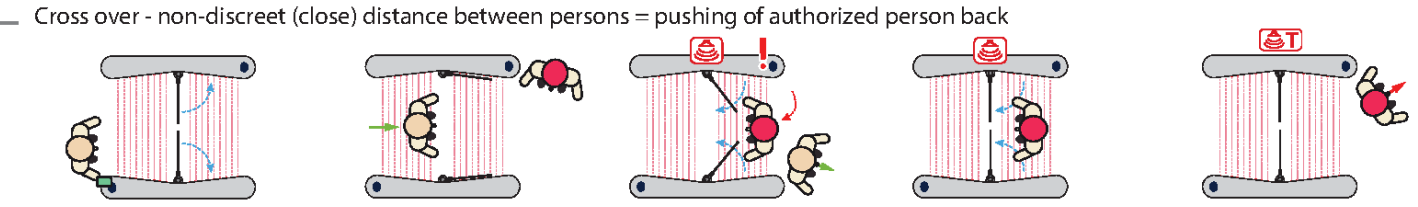
4a Cross over - discreet distance between persons



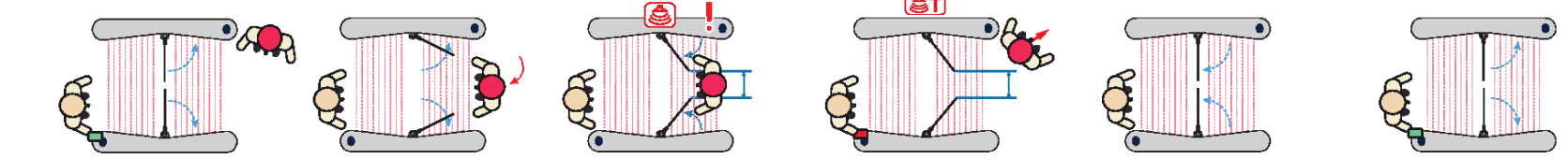
4b Cross over - non-discreet (close) distance between persons = swapping of persons



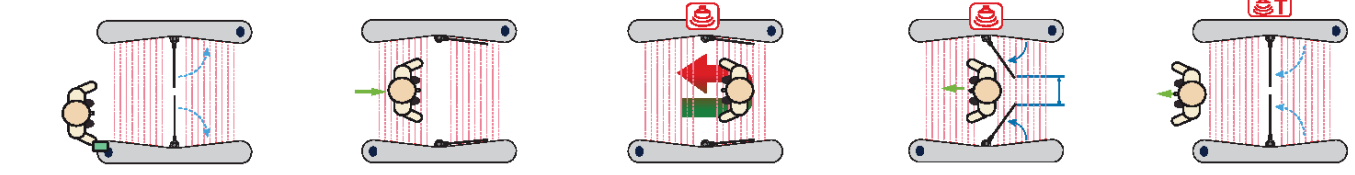
4c Cross over - non-discreet (close) distance between persons = pushing of authorized person back



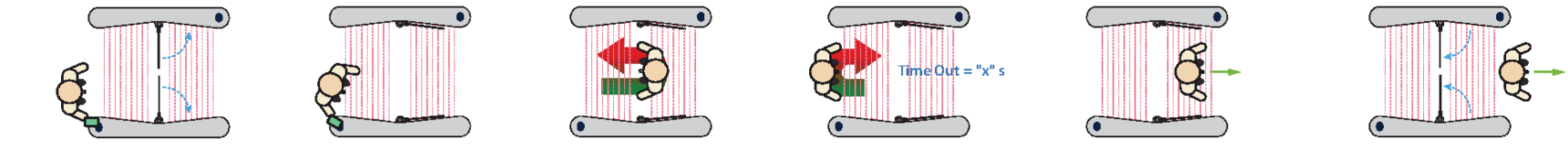
4d Cross over - during closing of wing barriers when authorized person finished his passage



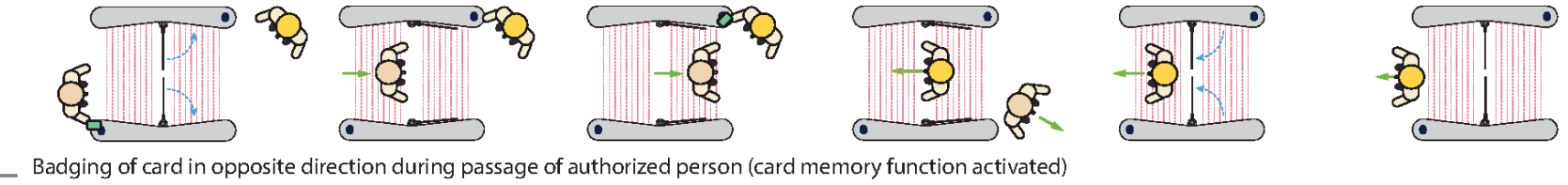
4e Cross over - when wing barrier is opening, before authorized person enter passage zone



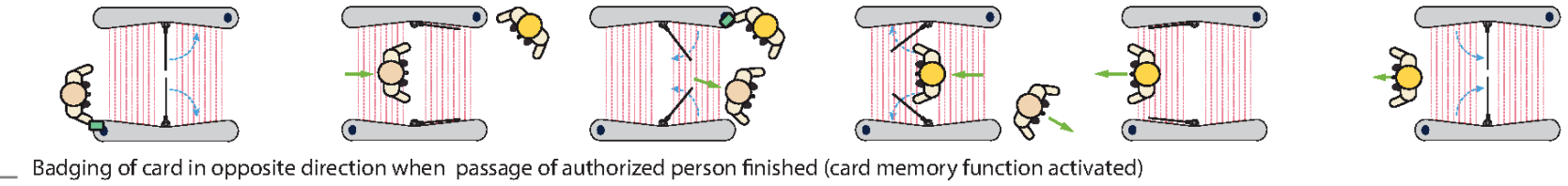
5 Passage of authorized person not completed - authorized person left passage zone: wing barriers are closed to safety space and then closed



6 Passage of authorized person not completed - authorized person did not leave passage zone: it is possible to complete passage



7 Badging of card in opposite direction during passage of authorized person (card memory function activated)



8 Badging of card in opposite direction when passage of authorized person finished (card memory function activated)

EasyGate - swing opening: MAXIMAL SAFETY (page 5)

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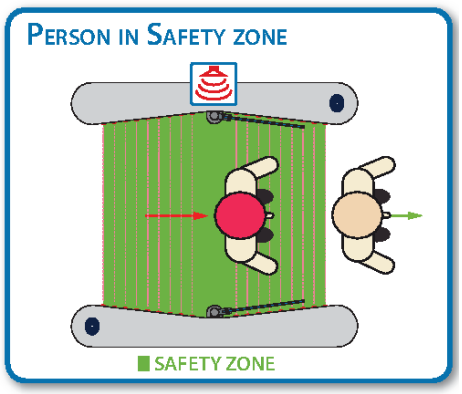

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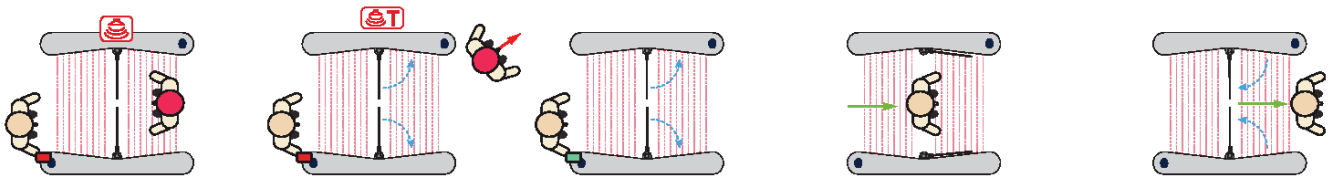
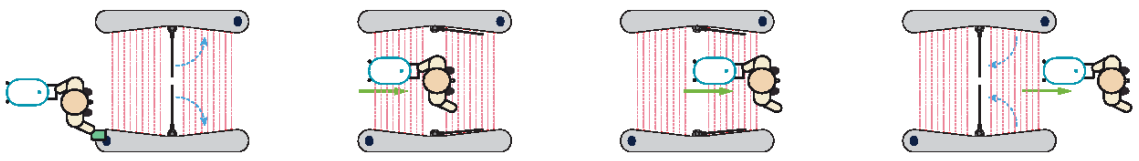
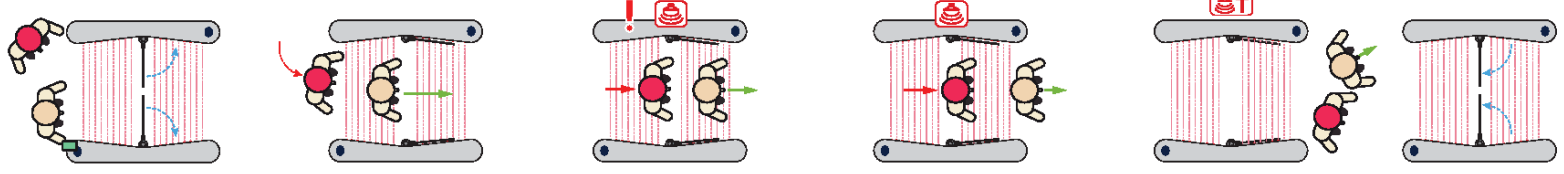
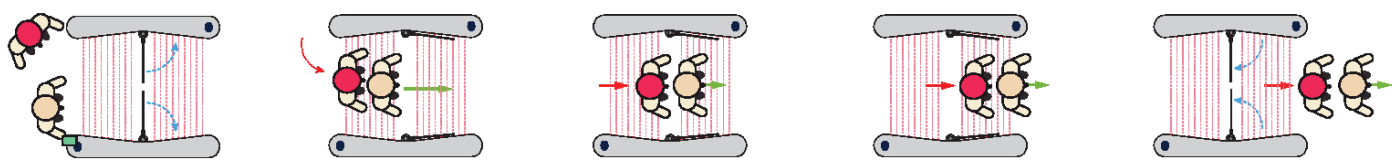
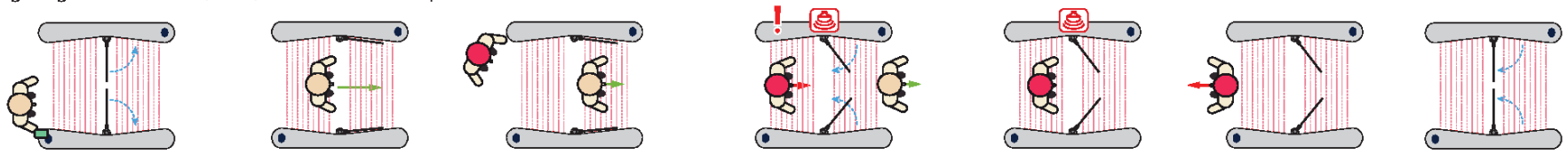
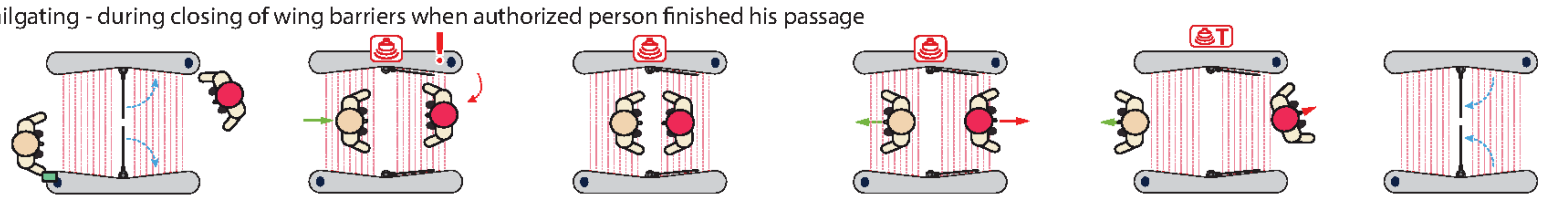

Single ENTRY / EXIT

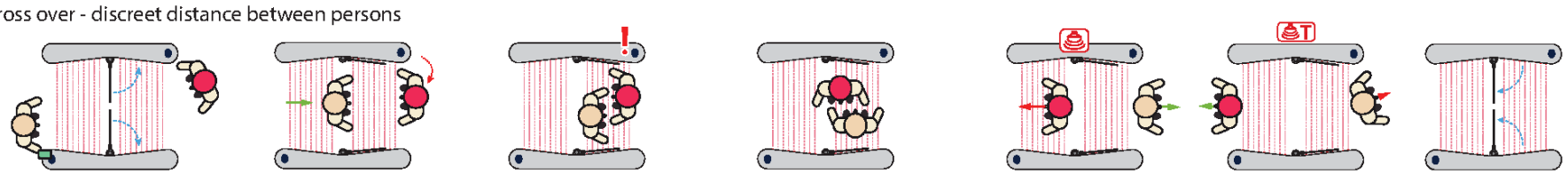
2

Single ENTRY / EXIT with luggage

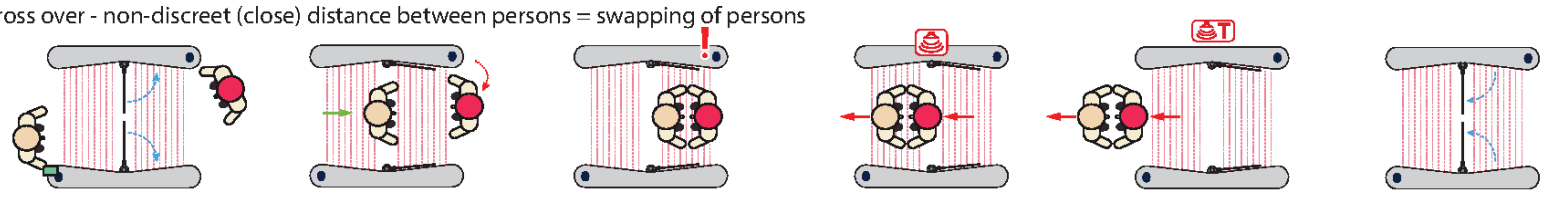
3a

Tailgating - discreet distance between persons

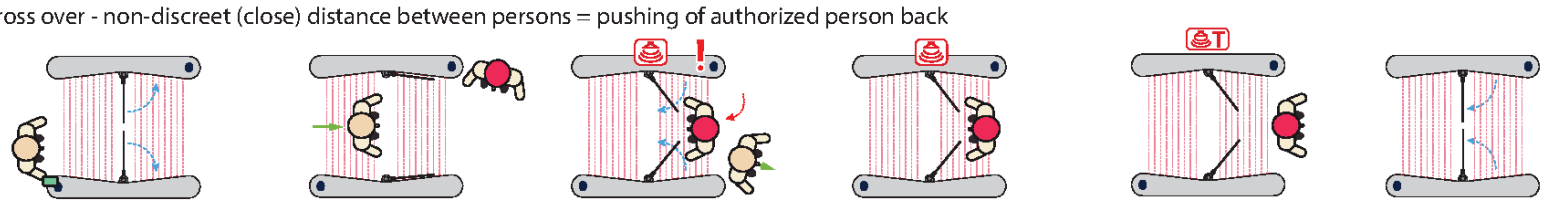
3b

Tailgating - non-discreet (close) distance between persons

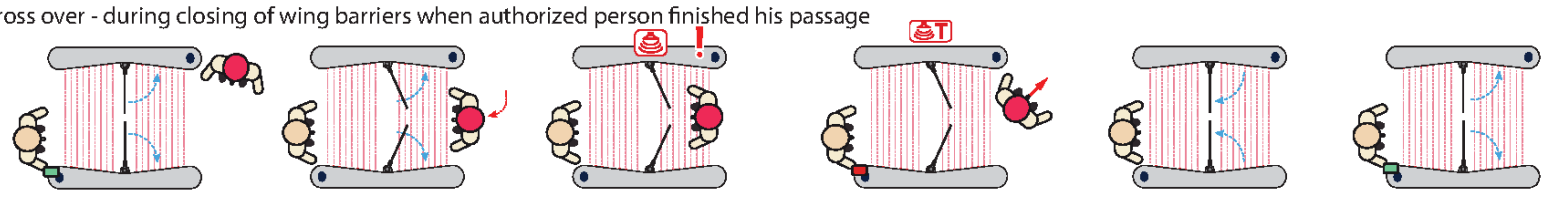
3c

Tailgating - during closing of wing barriers when authorized person finished his passage

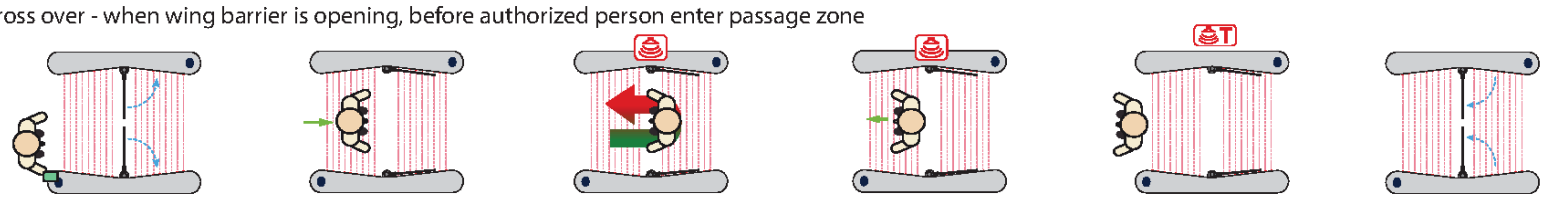
4a

Cross over - discreet distance between persons

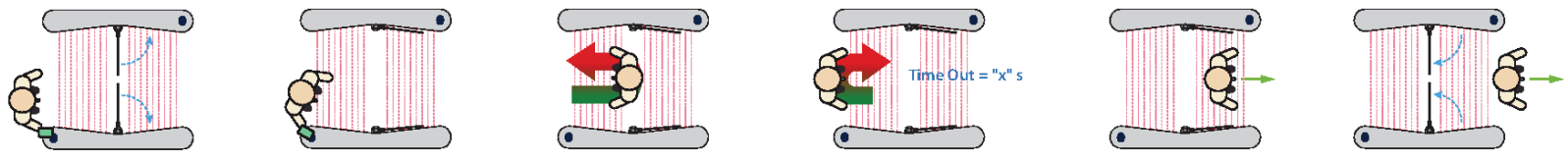
4b

Cross over - non-discreet (close) distance between persons = swapping of persons

4c

Cross over - non-discreet (close) distance between persons = pushing of authorized person back

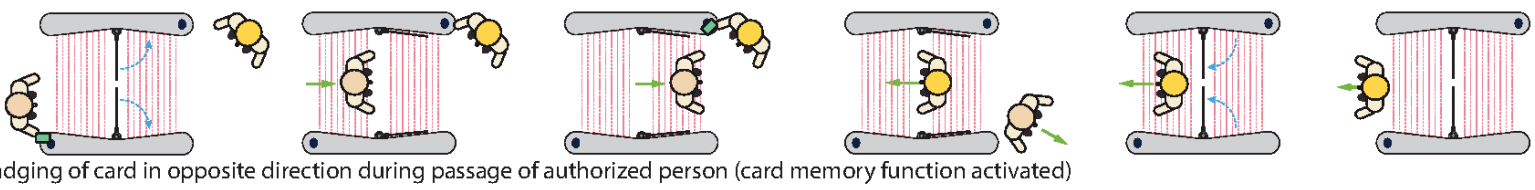
4d

Cross over - during closing of wing barriers when authorized person finished his passage

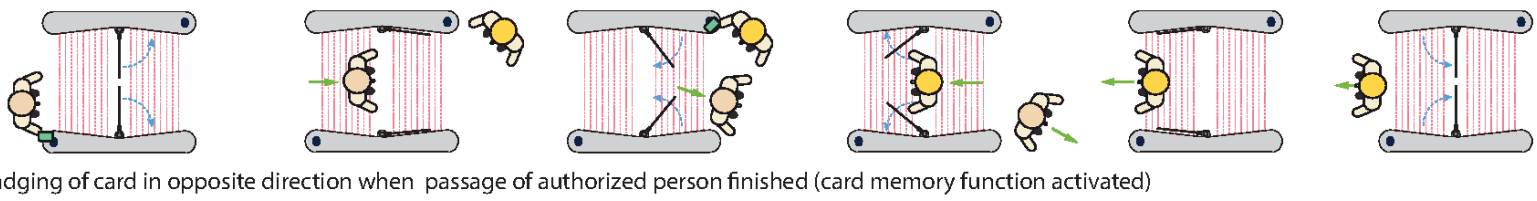
4e

Cross over - when wing barrier is opening, before authorized person enter passage zone

5

Passage of authorized person not completed - authorized person left passage zone: wing barriers are closed

6


Passage of authorized person not completed - authorized person did not leave passage zone: it is possible to complete passage

7

Badging of card in opposite direction during passage of authorized person (card memory function activated)

8

Badging of card in opposite direction when passage of authorized person finished (card memory function activated)

Free passage (Free Entry or Free Exit) (page 6)

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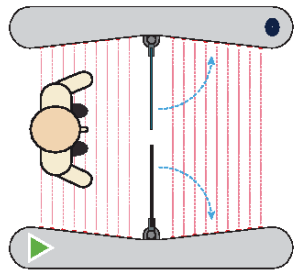
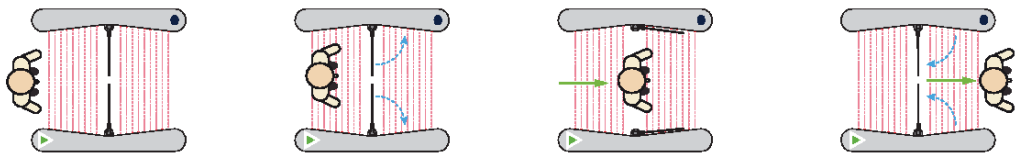
AUTOMATIC OPENING IN FREE DIRECTION

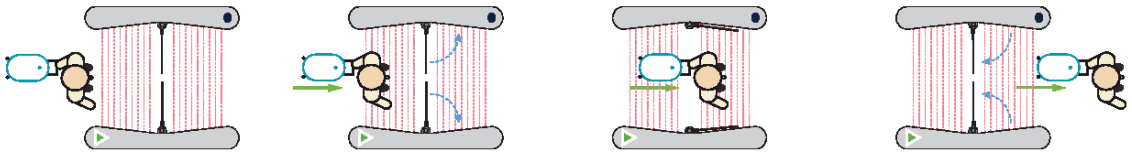


1a



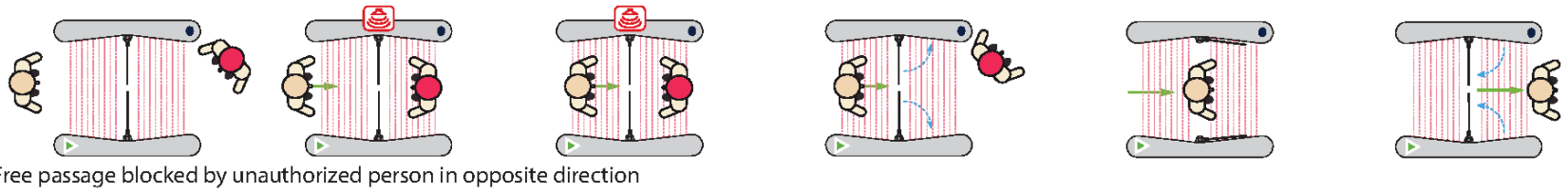
Free passage (Free Entry or Free Exit)

2



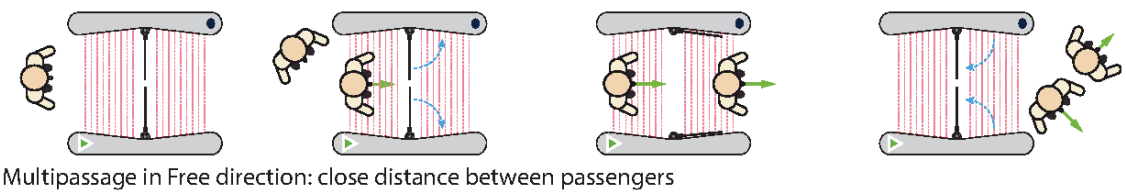
Free passage (Free Entry or Free Exit) with luggage

3



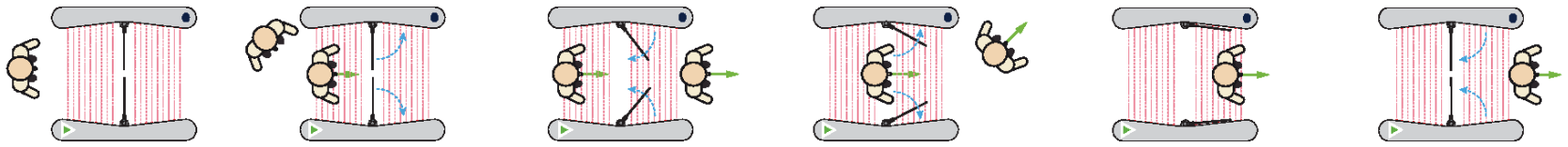
Free passage blocked by unauthorized person in opposite direction

4



Multipassage in Free direction: close distance between passengers

5



Multipassage in Free direction with closing of wing barriers between passages: long distance between passengers