dormakaba

KTV 3/4 FLEX Direct Revolving Door

Quick Start Guide

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* „Special equipment or options“ see p. 4

1 About this quick start guide

Scope of this guide

This quick start guide provides an overview of the operation and securing of the KTV revolving door. This quick start guide should be kept accessible to the staff at all times in addition to the operating instructions.

This quick start guide does not replace the operating instructions. The operating instructions must also be available and followed for any work carried out on the revolving door by the personnel.

Illustrations
The illustrations serve to provide a general understanding and may differ from the design of the revolving door that is actually delivered.

Target audience of this guide

Operator

The operator uses and operates the revolving door within the limits of the intended use.

The facility operator will inform the operator of the following information, depending on which revolving door is involved:

- How to act in case of fire or a hazardous situation
- Function and operational modes of the revolving door
- Positioning and function of the operable safety equipment
- Operation of the revolving door
- Folding the door wing (revolving door with bookfold turnstile)
- Creating an emergency exit (revolving door with bookfold turnstile)
- Creating a transport opening (revolving door with foldable turnstile)
- Possible dangers of improper behavior

When needed, the operator has access to the key/code for the program switch of the revolving door and the key for the key switch of an electric night shield.

Special equipment or options

This quick start guide sometimes describes special equipment or options which may not be installed in the system. These are marked with a symbol (*). The details of what this system is equipped with can be found in the documents that have been supplied with it.

2 Safety

Automatic startup KTV P/S/A

WARNING!
Risk of injury due to automatic start-up of the revolving door!
The revolving door can set itself in motion automatically. If there are people in the revolving door, they may be at risk of injury.

- Never turn the revolving door on or off when people are in it.
- Release the emergency stop button only once there are no longer any people in the revolving door and the issue causing the emergency stop has been resolved.

Moving components

WARNING!
Entanglement, crushing, and cutting hazard during operation of the revolving door!
As the revolving door rotates, a danger of entanglement, crushing, and cutting may arise at the closing edges.

- Immediately activate the emergency stop if a person gets between the closing edges.
- Ensure that children do not play in or around the revolving door.
- Ensure that there are no persons in the revolving door before the emergency stop switch is unlocked and that the folded door wings are brought back into starting position.
  Reason: The revolving door automatically continues the current program setting after a time interval.

Weather conditions

WARNING!
Danger to life due to bad weather conditions!
Operating the revolving door under bad weather conditions (e.g. thunderstorm, lightning, tempest) may lead to life-threatening injury or death.

- Check weather conditions before operation.
- Immediately discontinue operation under bad weather conditions and lock the door as needed.
- Make sure that the revolving door can be operated safely under the given weather conditions.

3 Operating and locking device elements

3.1 Summary of control elements type P/S/A

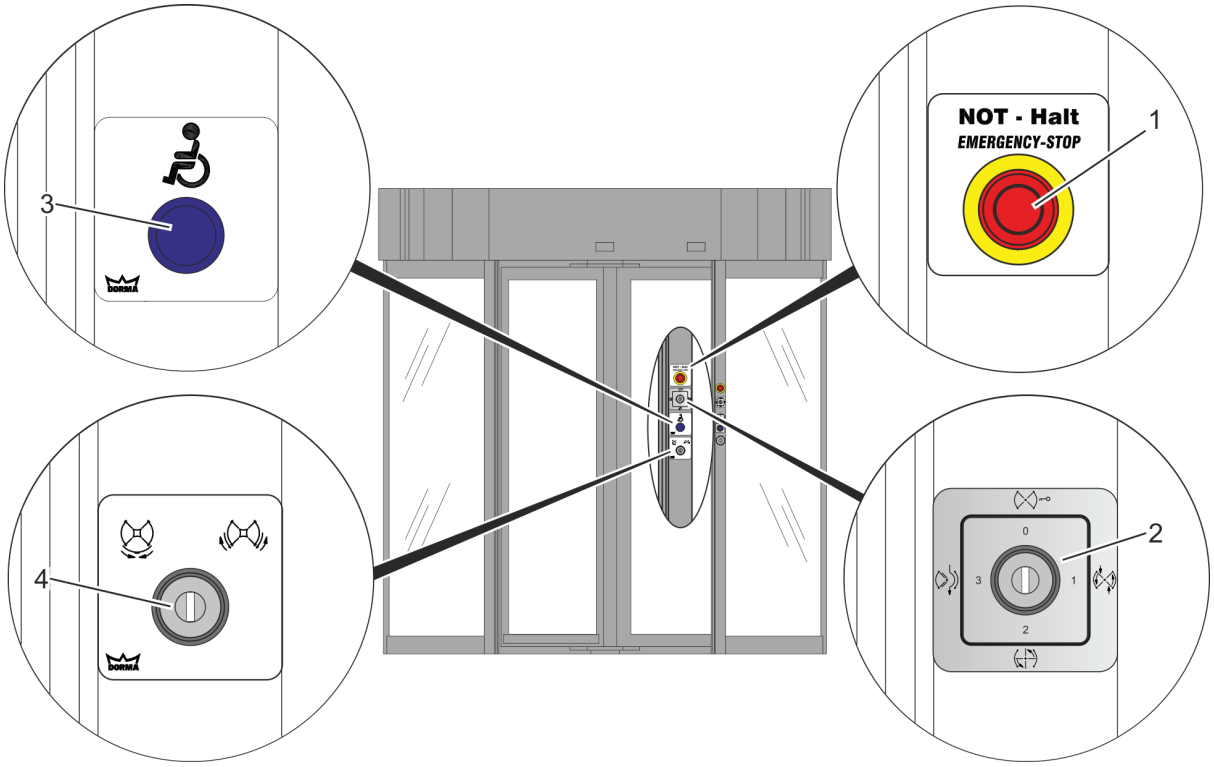


Fig. 1 Summary of control elements

1 Emergency stop switch (inside and outside*)
2 Program switch (inside)
3 Disabled access pushbutton * (inside and outside)
4 Dead man's switch for electric night shield* (inside, type P/S/A and M)

The availability of some of the described options depends on the type of revolving door you selected or on the chosen options. These functions / options are marked in the document with an asterisk (*).

Emergency stop button

An emergency stop switch is located in the building interior on the front jamb and, depending on the order option, also on the building exterior.

When the emergency stop is activated, the revolving door stops immediately and the drive is disengaged. It is then possible to turn the door wings manually.

The emergency stop switch is reset by pulling or turning. This depends on the type of the emergency stop switch. The revolving door then continues the current program setting.

Program switch

The program switch is located inside the building on the front jamb or mounted separately within sight of the revolving door. A key or code secures the program switch against unauthorized access.

A program switch with code entry will automatically lock itself 60 seconds after the last entry.

The following functions may be available with the program switch depending on order options:

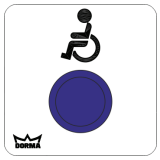
Program switch settings

	KTV P	KTV S	KTV A
OFF	The revolving door will stay in the locking position. Any internal lighting is switched off. If equipped with an electric door wing locking device, the revolving door stops in the locking position and locks the wings automatically. After a set period of time, the interior lighting will switch off.		
Automatic 1	The door is to be operated manually. The revolving door will be automatically rotated to the starting position as soon as it is no longer manually operated.	Motion sensors start the rotary movement of the door wings at a low speed. Acceleration to walking speed is achieved manually. The revolving door automatically stops in the starting position as soon as it is no longer manually operated and there are no more people in the detection range of the motion detector.	Motion detectors start the rotation of the door wing at walking pace. The revolving door automatically stops in the starting position once the set number of rotations have been completed and there are no more people in the detection range of the motion detector.
Automatic 2	The door rotates continuously at a low speed. It is manually accelerated to walking speed.	The door rotates continuously at a low speed. It is manually accelerated to walking speed.	The door rotates continuously at a low speed. Once people enter the detection range of the motion detector, the revolving door will be accelerated to walking speed for a fixed number of turns. The rotational movement is continued at a slow speed as soon as no more people are in the detection range of the motion detector.

Program switch settings

	KTV P	KTV S	KTV A
Summer	The revolving door stops at its starting position and the drive is unlocked. The door wings can be rotated manually. If foldable wings have been installed, the wings can be folded to the side in this program switch setting (for example, for ventilation).		
Night / bank (Optional)*	not available	not available	The revolving door is locked in its locking position by the electric locking device. Access to the revolving door is controlled using a door opener, card reader, etc. When an authorized person tries to open the door, the interior lighting will turn on and the revolving door will rotate for a preset number of revolutions. The revolving door will then return to its locking position and lock the entry. After a specified time, the interior lighting will switch off.

Disabled pushbutton*



When triggered, the disabled access pushbutton reduces the current speed of the revolving door to (for example) give users of wheelchairs or walkers more time for safe passage through the revolving door.

The disabled access pushbutton can be used in the program settings "Automatic 1," "Automatic 2," "Night/Bank," and "Off."

After one full revolution at the reduced speed, the revolving door will resume operation at normal walking speed.

Dead man's switch for electric night shield*

The external switch is a dead man's switch with three switch positions (open, locked, and neutral). With this optional control element the night shield is electrically unlocked/locked or opened/closed in the side pockets.

3.2 KTV M controls

The revolving door KTV M does not have its own controls, since it is a manual revolving door and is moved only by manually pushing the door wing. Using the optional speed limiter*, the door can be protected against excessive load. In this case, there is an RJ-45 jack at the inner doorjamb. It is used exclusively for maintenance by a service technician.

3.3 Locking device elements*

Rod lock

The rod lock is located in the outer vertical section of the door wing. The door is locked and unlocked with a square key. The locking device mechanism is finally secured against unauthorized operation with the lock (Fig. 2/1.2) located under the square drive hole (Fig. 2/1.1).

For revolving doors with folding wings, two locking devices must always be locked / unlocked.

When using an electromechanical rod locking device, the KTV automatically moves into the locking position and locks the revolving door as soon as it is switched off via the program switch (5.9 Closing and locking the revolving door electrically*, p. 16).

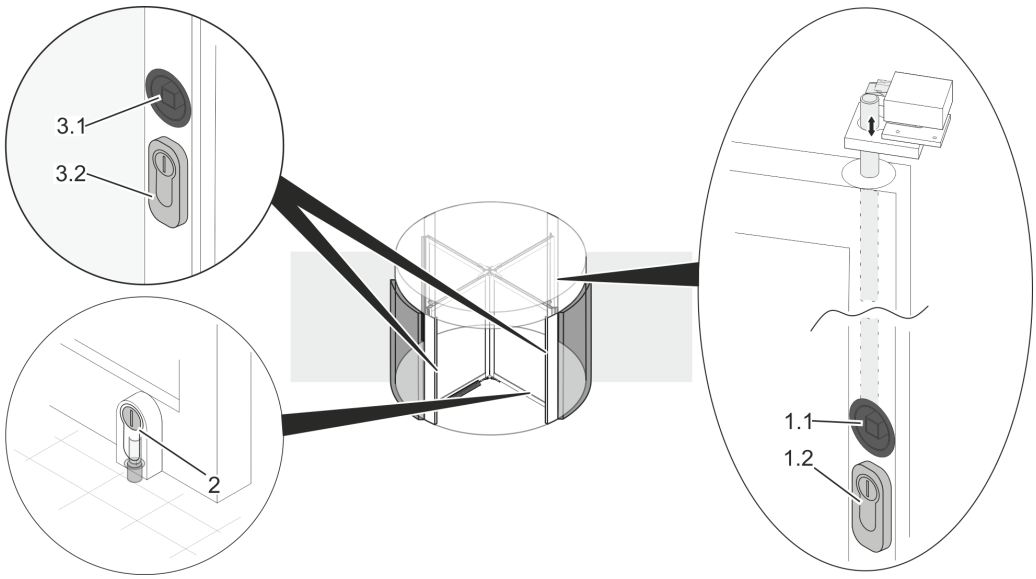


Fig. 2 Overview of closing and locking device elements

Floor locking device

If a floor locking device has been installed, a locking cylinder will be located at the lower part of the door wing (Fig. 2/2).

A bolt in a ground sleeve is extended or retracted through the lock cylinder.

Night shield

There is a locking device mechanism (Fig. 2/3.1) located on the inner vertical section of the night shield. With it, the wing of the night shield can be locked or unlocked in the fully open and closed position using a square key.

The locking device mechanism is finally secured against unauthorized operation in both positions with the lock (Fig. 2/3.2) located under the square drive hole.

4 In case of emergency

4.1 Trigger emergency stop

Deactivated safety equipment

WARNING!
Risk of injury due to deactivated safety equipment!
After the emergency stop is activated, the drive is unlocked. The safety devices are no longer in operation. This can cause serious injuries if attempts are made to turn it manually.

- Before turning it manually, check to make sure that no one could be injured.
- If people have been locked into the revolving door, carefully turn it until the people are able to come out.
- When turning it manually, make sure that there are no limbs between the closing edges.

Personnel

- Operator

1. Press the emergency stop button (Fig. 3) at the entrance or exit.
   » The revolving door will stop. The drive will be disengaged and the door wings can then be turned manually.
2. **WARNING!**
   Risk of injury due to inactive safety equipment!

   Carefully turn the door wing by hand to free people, including those with injuries, if any.

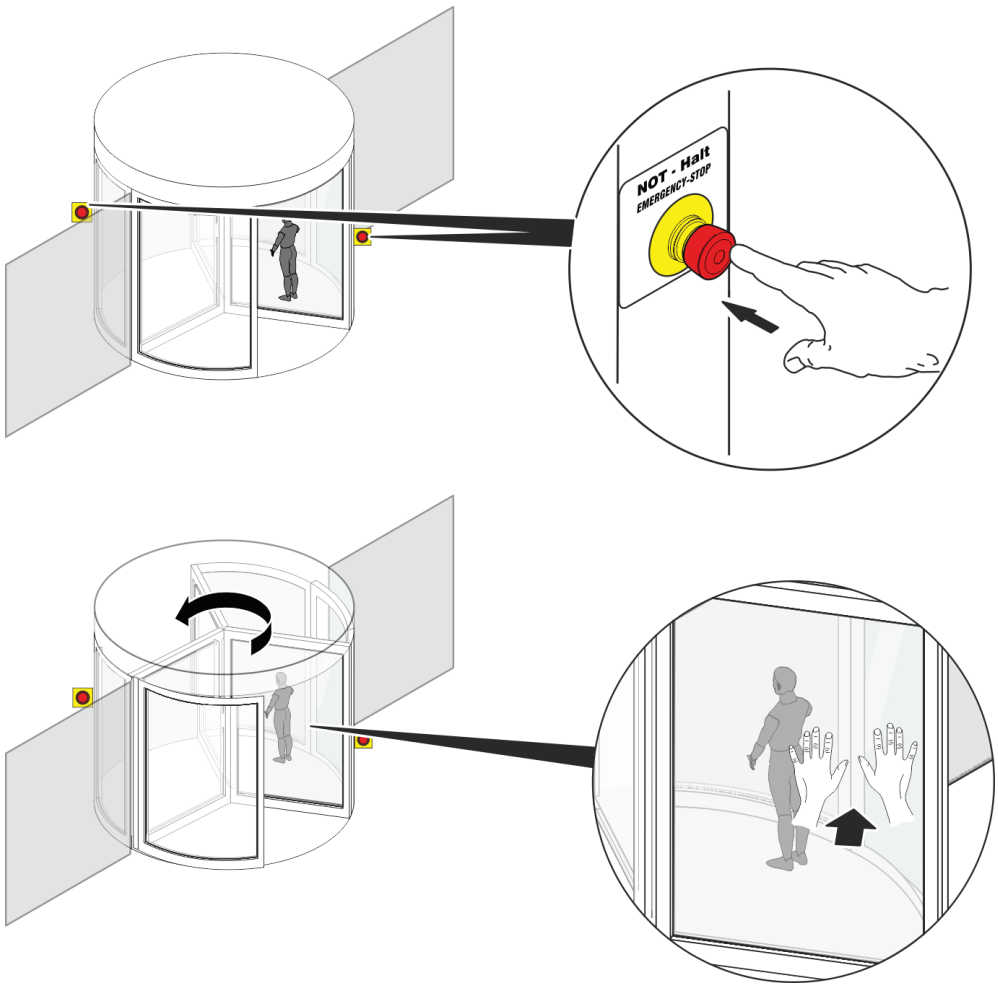


Fig. 3 **In case of emergency**

4.2 Start-up after emergency stop

Personnel

- Operator

Requirements

- The danger is over
- No persons are in or near the revolving door

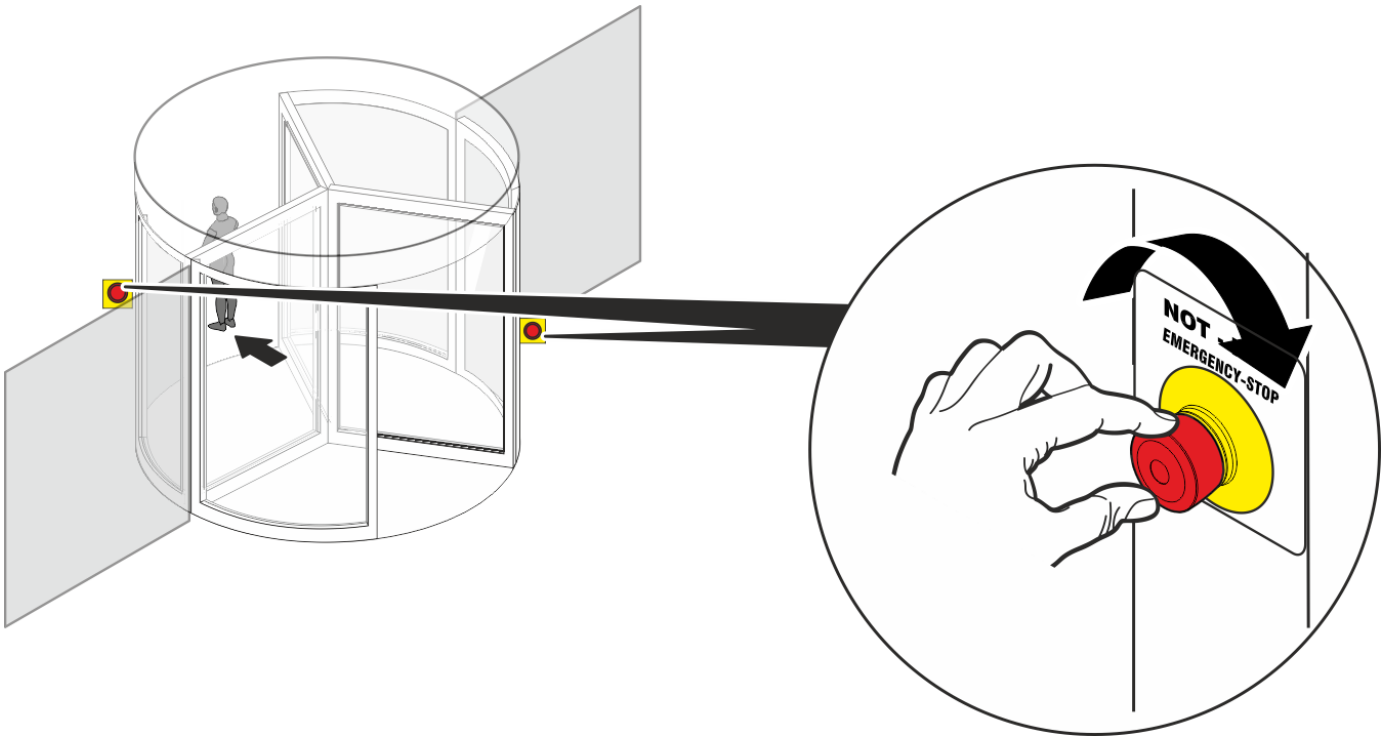


Fig. 4 Procedure after an emergency stop

1. Reset the emergency stop switch by turning or pulling, depending on the type of the emergency stop switch.
   » The revolving door will continue with the current program settings.

5 Locking the revolving door

5.1 Locking with a rod locking device*

Personnel

- Operator

Special tool

- Key/code for program switch
- Square key and key for locking cylinder

Requirements

- No persons are in or near the revolving door
- The program switch is set to the "Off"

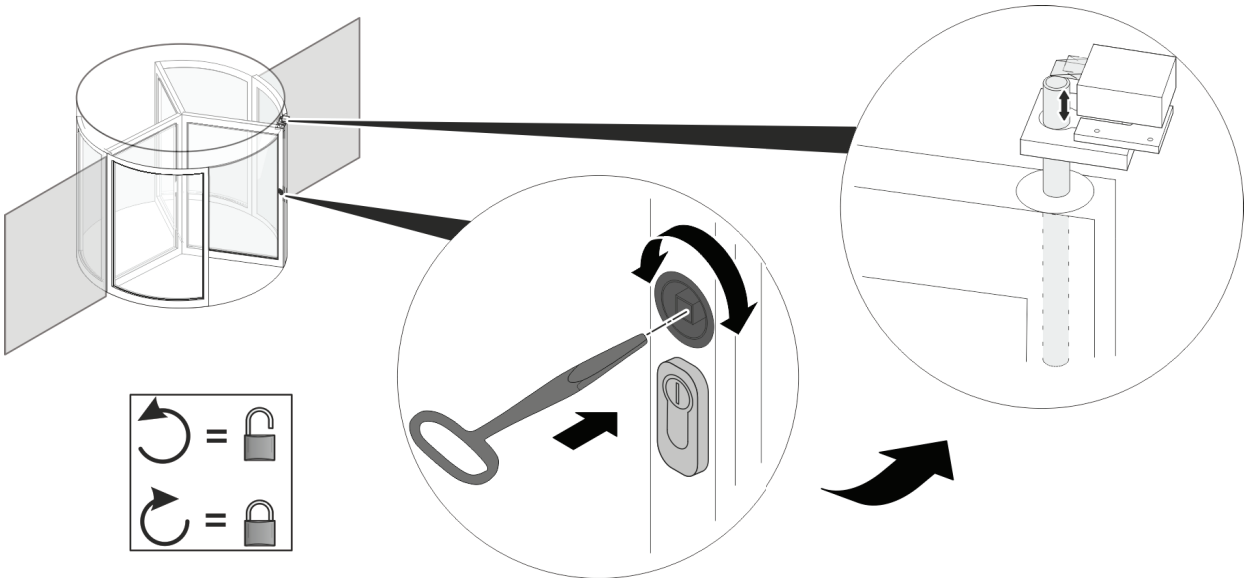


Fig. 5 Locking with a rod locking device

1. Turn the door wing into the locking position.
2. Unlock the operating mechanism of the rod lock with the key / lock (locking cylinder) (Fig. 5).
3. Lock the locking bar with the square key (Fig. 5).
   » The rod locking device moves up and locks the door wing.
4. Again lock the operating mechanism of the rod locking device with the key / lock (locking cylinder).
5. If the door wings are foldable, lock the second door wing in the same manner.

5.2 Unlocking with a rod locking device

Personnel

- Operator

Requirements

- The program switch is unlocked with a key / code
- All emergency stop switches are unlocked by turning or pulling, depending on the type of the emergency stop switch
- No persons are in or near the revolving door

1. Unlock operating mechanism with the key.
2. Unlock the locking rod with the square key.
3. Again lock operating mechanism with the key.
4. If necessary, unlock the second locking rod in the same way.

5.3 Locking with a floor locking device*

Personnel

- Operator

Special tool

- Key/code for program switch
- Key for the floor locking device

Requirements

- No persons are in or near the revolving door
- The program switch is set to the "Off"

5.4 Unlocking with a floor locking device

Personnel

- Operator

Requirements

- The program switch is unlocked with a key / code
- All emergency stop switches are unlocked by turning or pulling, depending on the type of the emergency stop switch
- No persons are in or near the revolving door

1. Unlock floor locking device at the door wing with the key. For this purpose unlock the locking cylinder (Fig. 6) with two full revolutions.

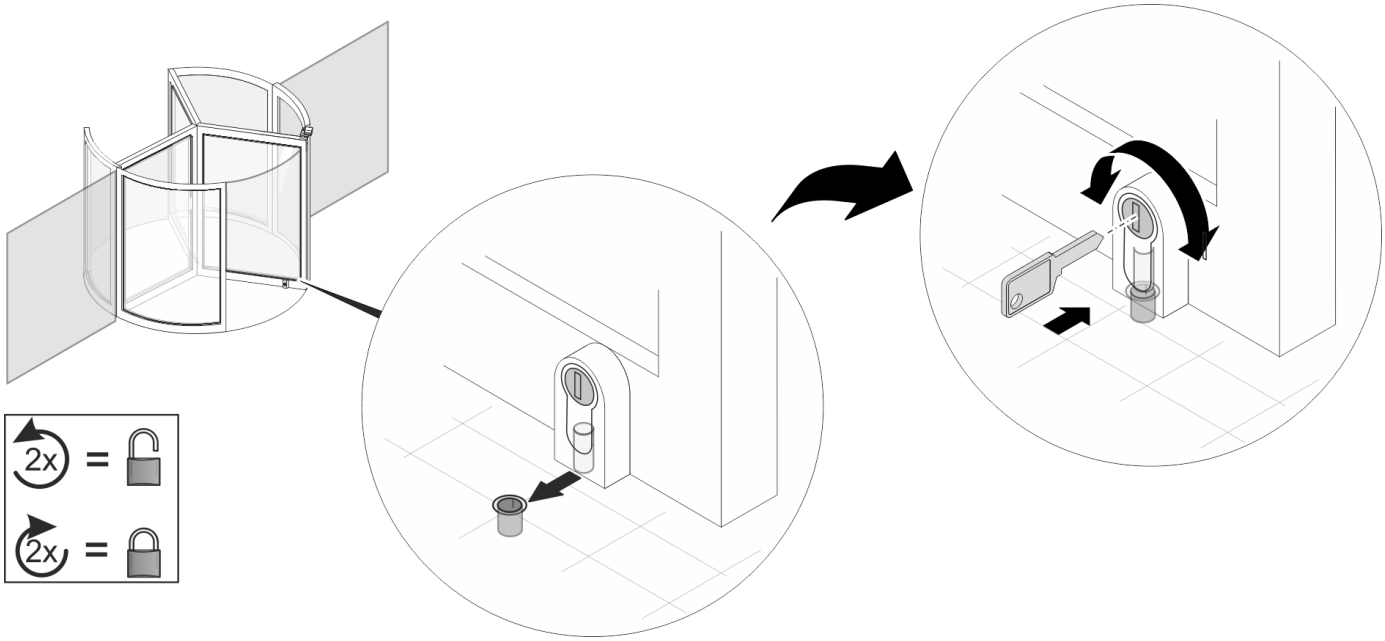


Fig. 6 Floor locking device

1. Align the door wing with floor locking device with the floor sleeve in the floor. (Fig. 6/middle).
2. Lock the floor locking device on the door wing with key. For this purpose lock the locking cylinder (Fig. 6/ right) with two full revolutions.

5.5 Closing and locking the manual night shield*

Personnel

- Operator

Special tool

- Key/code for program switch
- Square key and key for locking cylinder

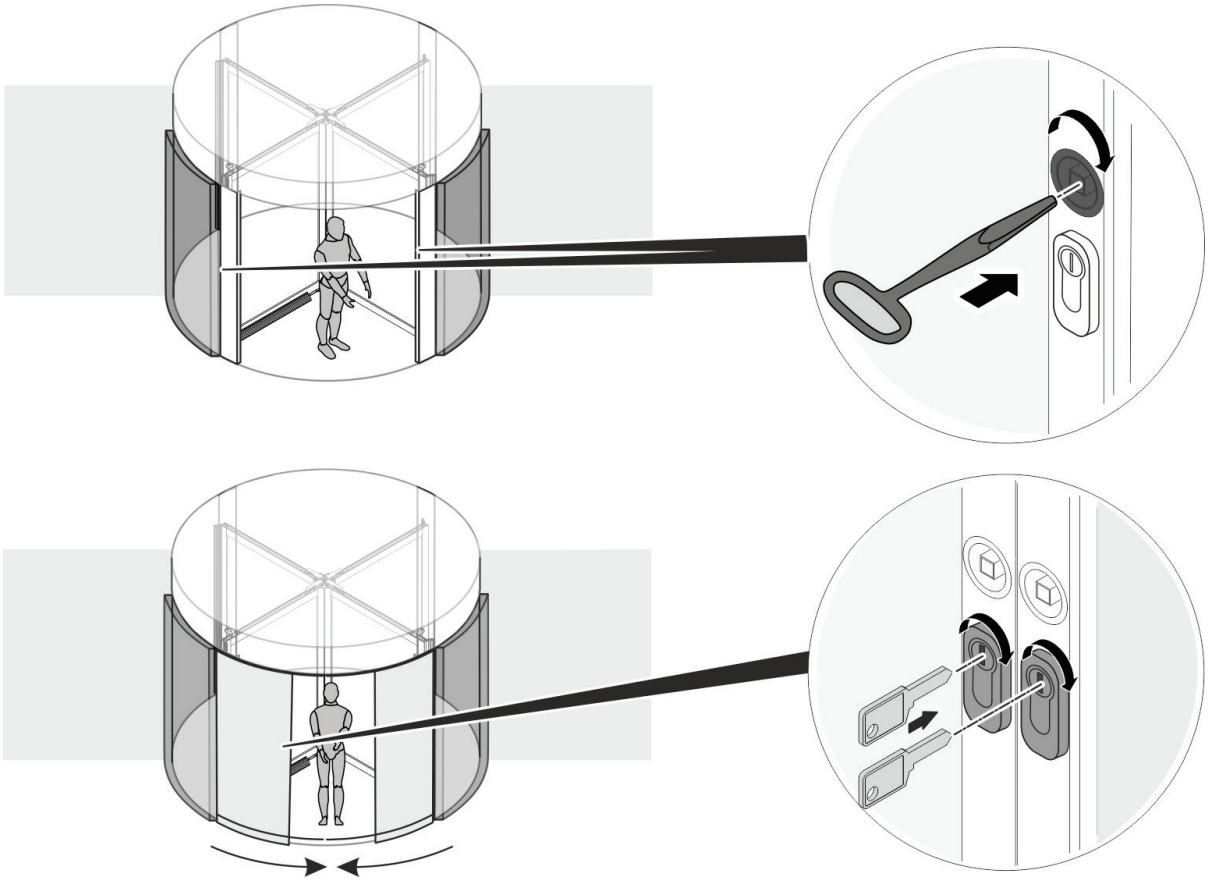


Fig. 7 **Unlock night shield elements, slide together and lock**

1.
> For three-wing doors, only one night shield element will be available.

   Enter the revolving door from the inside. Turn the door wings by hand until the night shield elements are accessible.
2. Unlock operating mechanism of the rod locking device(s) with the key.
3. Unlock night shield elements with square key (5.7/ top).
4. Push night shield element(s) together as far as it (they) will go.
5. Lock locking device bars with square key.
6. Again lock the operating mechanism of the rod locking device(s) in the closed position with the key.

5.6 Opening the manual night shield*

Personnel

- Operator

Special tool

- Key/code for program switch
- Square key and key for locking cylinder

1. Unlock operating mechanism with the key.
2. Unlock rod locking device.
3. Slide night shield elements into the side pockets and lock again.
4. Finally, lock the operating mechanism again with the key.

5.7 Closing the electric night shield* and locking with the dead man's switch

Personnel

- Operator

Special tool

- Key/code for program switch
- Key for dead man's switch

Requirements

- The program switch is unlocked with a key / code
- All emergency stop switches are unlocked by turning or pulling, depending on the type of the emergency stop switch
- No persons are in or near the revolving door

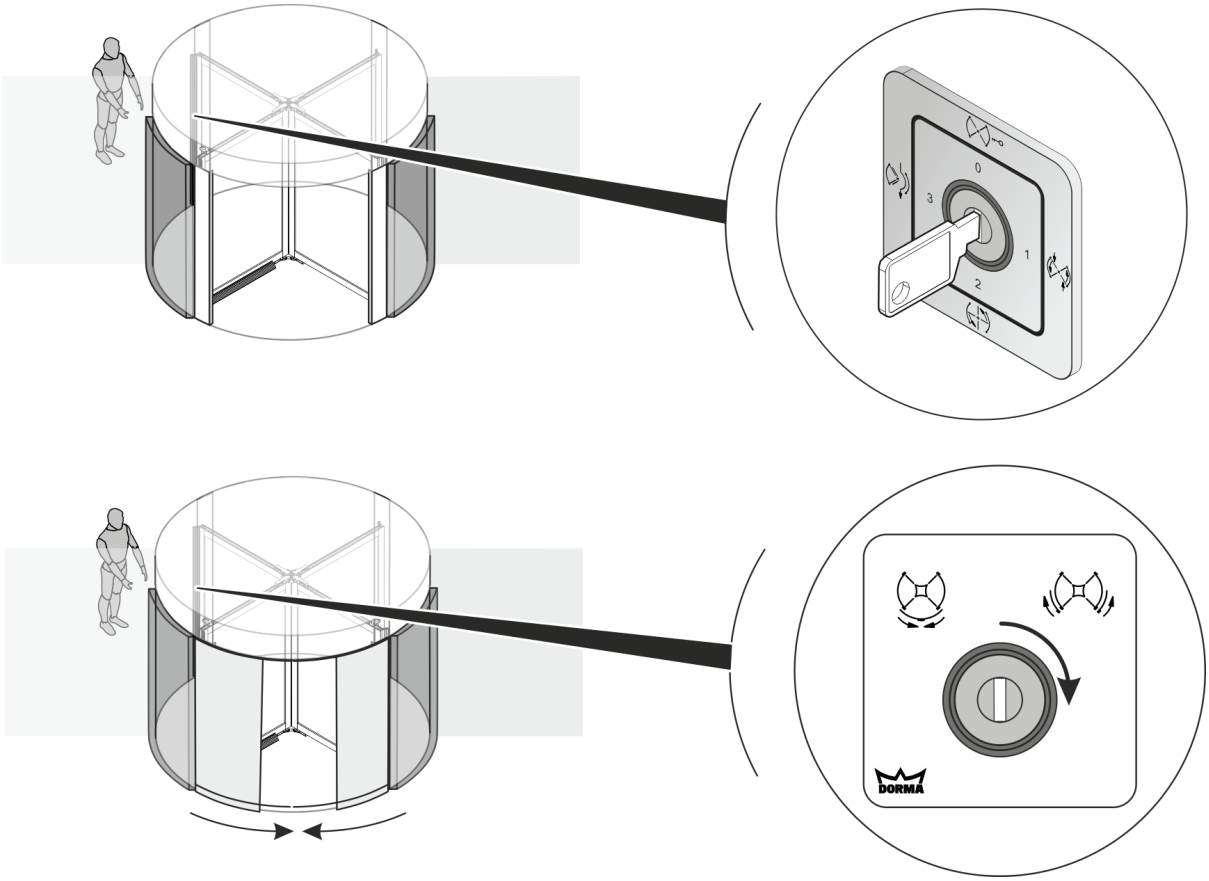


Fig. 8 **Electric night shield with dead man's switch**

1.

WARNING!
Risk of injury due to improper switching off!

Turn the program switch to the "Off" position (5.9/top).

2.

WARNING!
Risk of injury due to improper locking!

Turn the dead man's switch to the "Lock" position and hold it there (5.9/bottom).

» An installed electric night shield will close and lock the entrance to the revolving door.

3. Once the night shield is closed and locked, release the external switch.

» The dead man's switch will spring automatically back to its neutral position. The night shield will have been put in place.

4. Pull the key out of the program switch and the dead man's switch.

5.8 Opening the electric night shield*

Personnel

- Operator

Special tool

- Key/code for program switch
- Square key and key for locking cylinder

1. Turn the dead man's switch to the "Open" position and hold it until the night shield is fully opened.

1.

5.9 Closing and locking the revolving door electrically*

WARNING!
Risk of injury due to improper switching off of KTV P/S/A!
A P/S/A type revolving door will move on its own while being switched off. If there are people in the revolving door when this happens, they may be at risk of injury.

- Before switching the door off, make sure that no one is in the revolving door.

Personnel

- Operator

Special tool

- Key/code for program switch

Requirements

- The program switch is unlocked with a key / code
- All emergency stop switches are unlocked by turning or pulling, depending on the type of the emergency stop switch
- No persons are in or near the revolving door

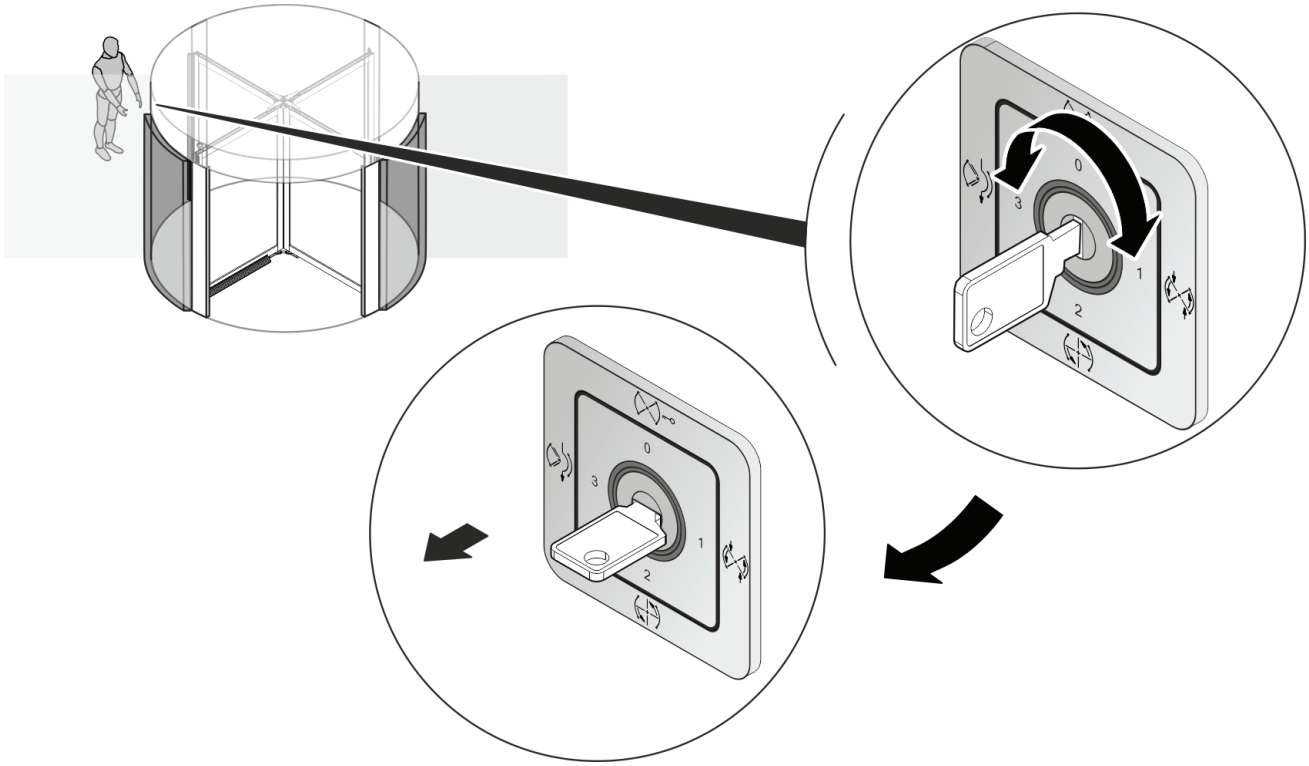


Fig. 9 **Select the program and pull the key**

1. Switch off the revolving door with the program switch (Fig. 9).
   » The revolving door rotates automatically into the locking position and the door wings are locked.
2. Pull the key out of the program switch.

6 Unlocking and switching on the revolving door

WARNING!
Risk of injury when changing the program of the revolving door!
If there are people in the revolving door when the program is changed, they may be injured by the revolving door when it changes its behavior.

- Ensure that there are no people in the revolving door before changing the program.

Personnel

- Operator

Special tool

- Key/code for program switch

Requirements

- All manual locks are unlocked
- The program switch is unlocked with a key / code
- All emergency stop switches are unlocked by turning or pulling, depending on the type of the emergency stop switch
- No persons are in or near the revolving door

1. Select the desired program using key / code (Fig. 10) (Program switch, p. 5).
   » The revolving door will execute the selected program.
2. Pull the key out of the program switch.

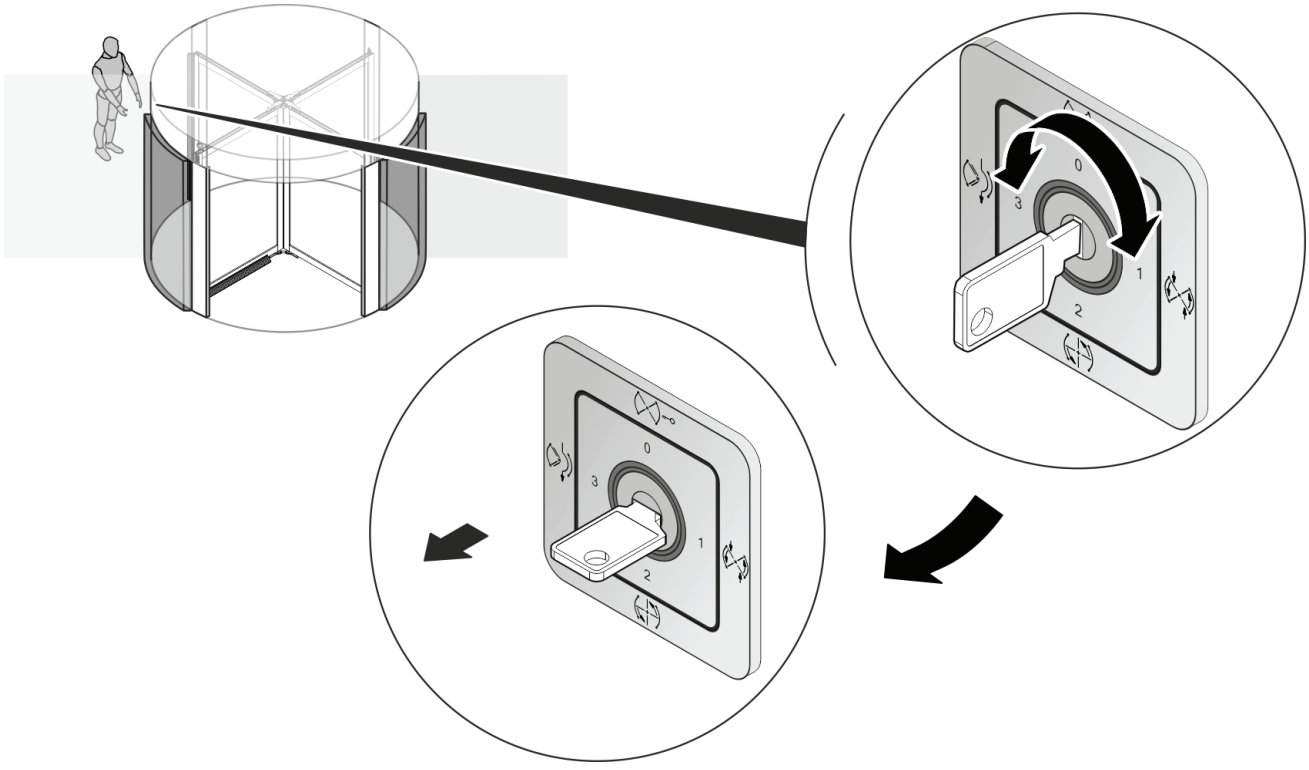


Fig. 10 **Select program and pull the key**

7 Using a transport opening*

7.1 Creating a transport opening

Personnel

- Operator

Special tool

- Key/code for program switch
- Allen key 5 mm

Requirements:

- The program switch is unlocked with a key/code.
- There are no persons near or in the revolving door.
- All emergency stop switches are unlocked by turning or pulling, depending on the type of the emergency stop switch.

1. Set program switch in the position.
   » The revolving door will stop rotating and the drive will be disengaged. The door wings can be turned manually.

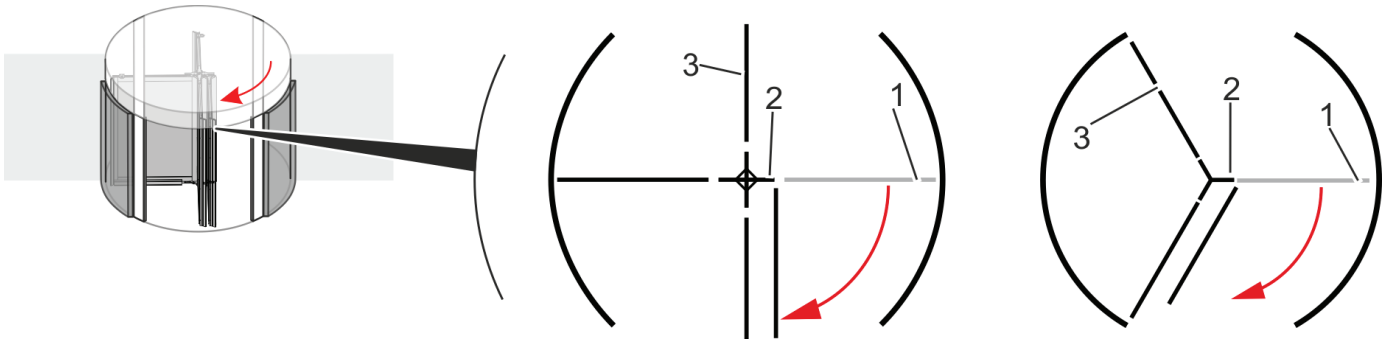


Fig. 11 Releasing the door wing (four and three wings)

2. **WARNING!**
   Risk of injury due to deactivated safety equipment!

   Carefully align the door wing by hand, as shown in Fig. 11.

3. Release the stop on the foldable wing (Fig. 11/1) by inserting the Allen key into the handle at the top and bottom bracket (Fig. 11/2) and turning the handle to the side.
4. **CAUTION!**
   Pinch hazard due to improper use!

   Have one person hold the foldable door wing at the entrance (Fig. 11/3).
5. Move the door wing (Fig. 11/1) in the direction indicated by the arrow, as shown in Fig. 11.
   » The transport opening has been created.

7.2 Resetting the transport opening

Personnel

- Operator

Special tool

- Key/code for program switch

Requirements

- At least two people must be present.

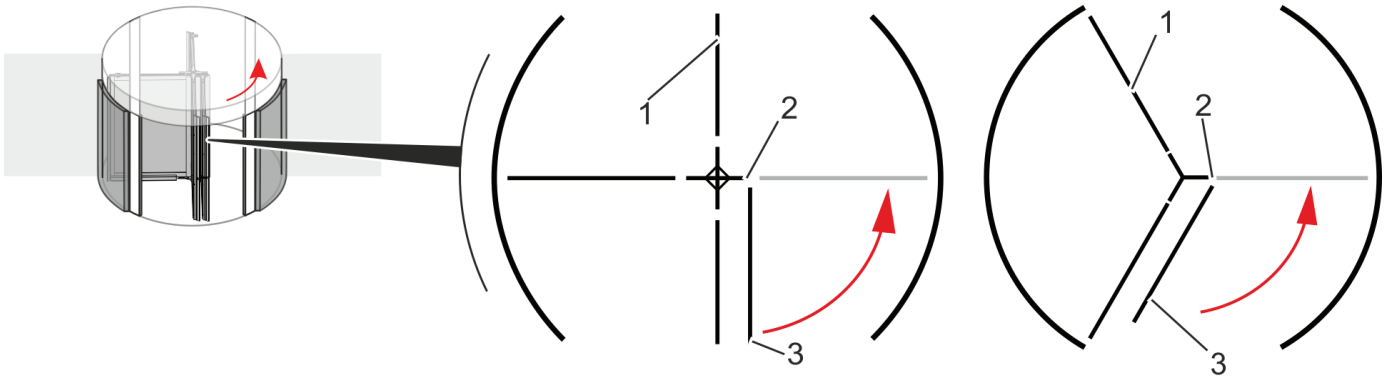


Fig. 12 Releasing the door wing (four and three wings)

1. **CAUTION!**
   Pinch hazard due to improper use!

   Have one person hold the door wing at the entrance (Fig. 12/1).
2. Move the foldable door wing (Fig. 12/3) in the direction indicated by the arrow, as shown in Fig. 12.

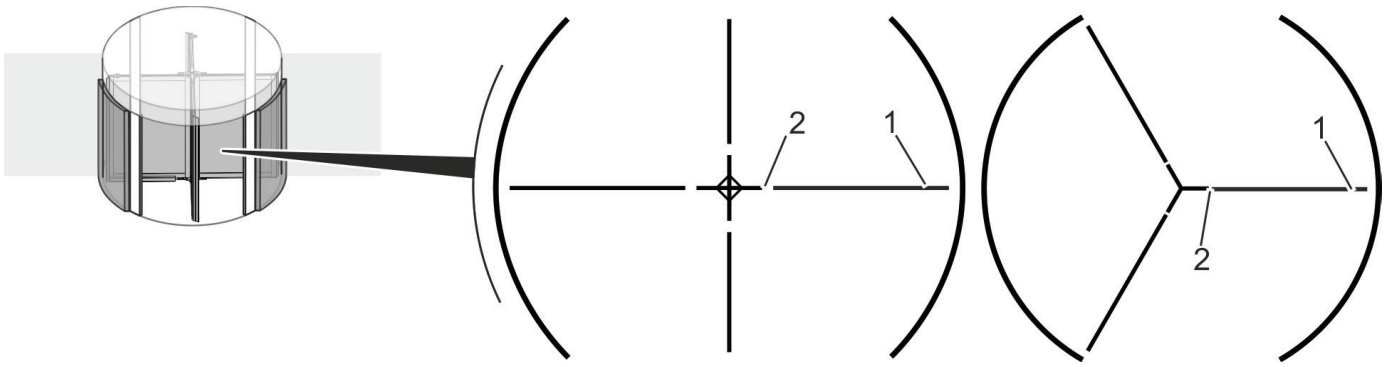


Fig. 13 Door wing in starting position (four and three wings)

3. Turn back the knob on the fitting (Fig. 13/2) in order to roll back the foldable wing (Fig. 13/1).
   » The door wings are in the starting position (Fig. 13).

8 Opening as escape route*

8.1 Creating an escape route

Personnel

- Operator

Special tool

- Key/code for program switch

WARNING!
Danger to life from a locked revolving door with bookfold turnstile in an escape route!
If a locked revolving door with bookfold turnstile is locked or blocked, it cannot be used as an emergency exit. This may result in injury or death.

- Always keep free and never block the entrance and exit operated with a revolving door with bookfold turnstile.
- Make sure that the revolving door is not locked and is operated in one of the following program switch settings: "Summer," "Automatic 1" or "Automatic 2."

Emergency exit in operation
The following description explains how an emergency exit opening, e.g. for ventilation, can be manually created. In an actual emergency, for example if a group of people who want to leave the building as quickly as possible rush the door and push against the door wings, the wings will also fold to the side. The drive is stopped in this case and the wings are unlocked.

Requirements

- The program switch is unlocked with a key/code.
- A second person must be present.
- There are no persons near or in the revolving door.

1. **CAUTION!**
Risk of injury due to improper program change!

   Set program switch to the position.
   » The revolving door stops in the starting position and releases the drive. The door wings can be turned manually.

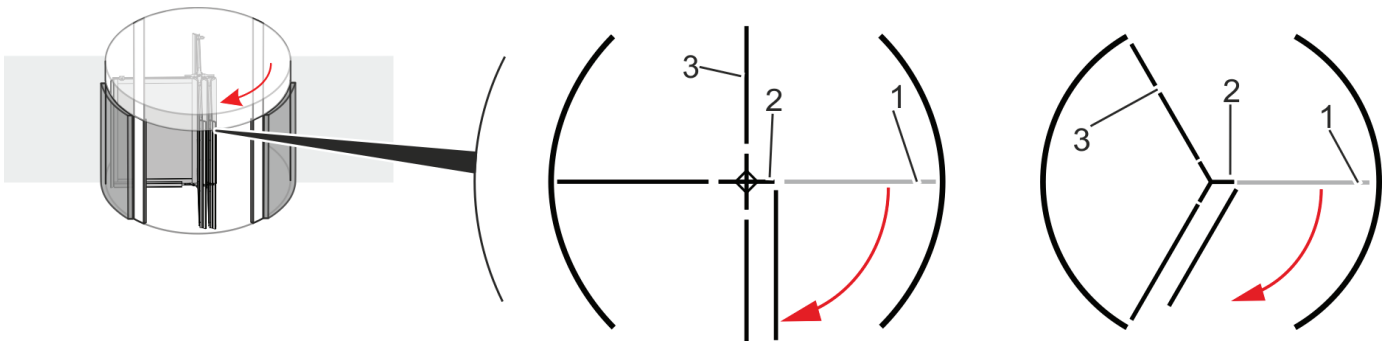


Fig. 14 **Folding the wings to the side (four and three wings)**

2. **WARNING!**
Risk of crushed limbs at the closing edges!

Carefully orient the wing manually (Fig. 14/1), as shown in Fig. 14.

3. **WARNING!**
Risk of injury if door is held onto inappropriately!

Have one person hold the lower door wing at the entrance (Fig. 14/3).

4. 1. Push the door wing (Fig. 14/1) in short bursts.
   » The door wing folds to the side.

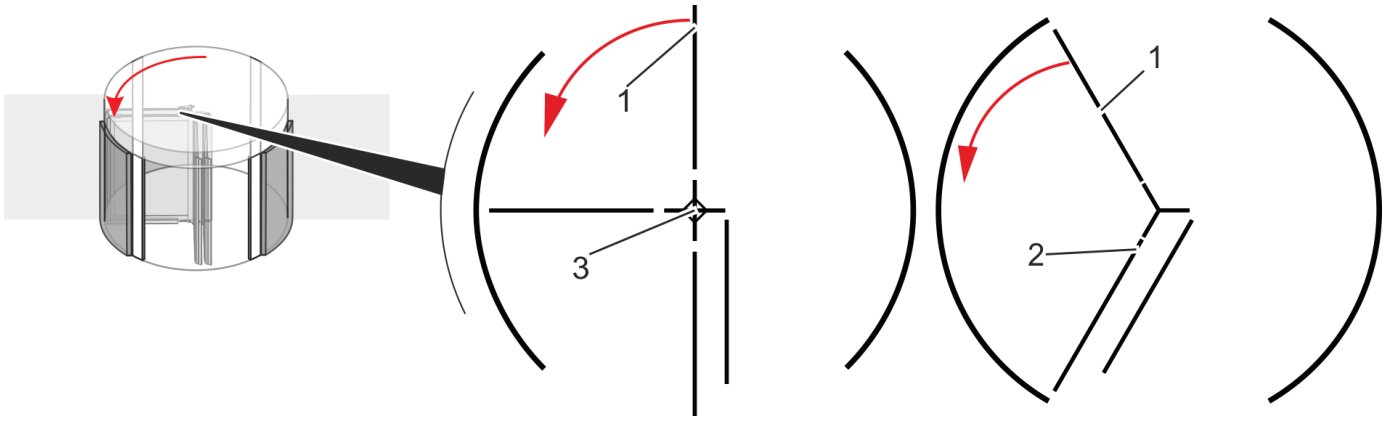


Fig. 15 **Folding the next door wing to the side (four and three wings)**

5. Have one person hold the lower door wing (Fig. 15/2) so that the next wing (Fig. 15/1) can be folded back.
6. Push the wing (Fig. 15/1) in short bursts.
7. Fold the other wings to the side by repeating steps 2-6.

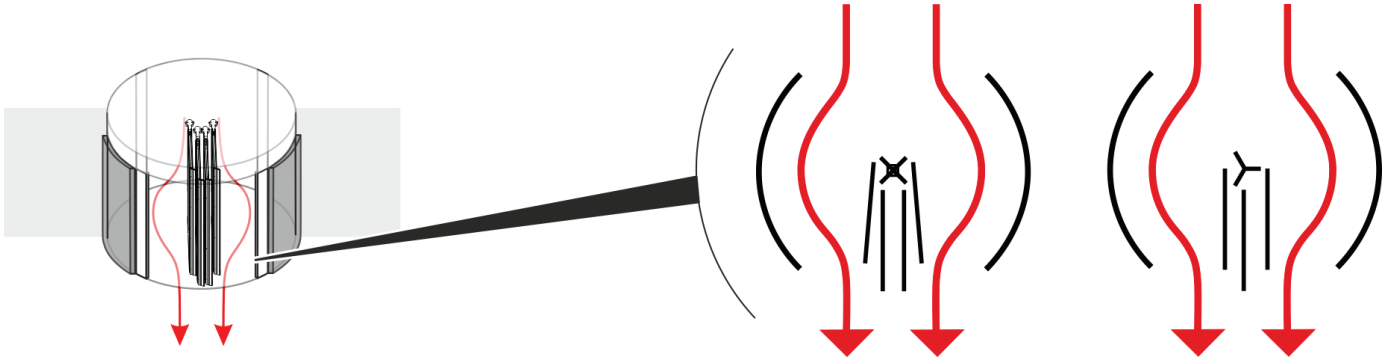


Fig. 16 **Emergency exit position (4 and 3 wings)**

8. Orient the folded door wings (Fig. 16) at the exit, as shown in Fig. 16.
   » The revolving door can be used as an emergency exit (Fig. 16).

8.2 Closing the escape route

Personnel

- Operator

Requirements

- At least two people must be present.

The procedure described below applies for revolving doors with three and four door wings.

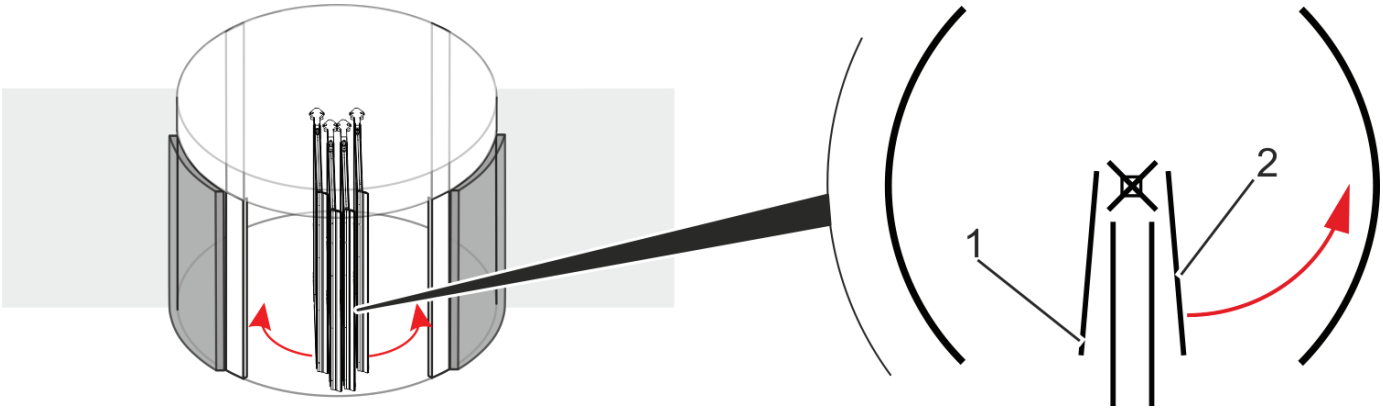


Fig. 17 Folding the door wing back

1. **WARNING!**
   Risk of injury if door is held onto inappropriately!

   Have one person hold the folded wing on the opposite side (Fig. 17/1).
2. **WARNING!**
   Risk of crushed limbs at the closing edges!

   Pull the folded wing (Fig. 17/2) until the wing snaps in.
3. Fold other wings back to their starting position as necessary by following steps 1-2.

Fig. 18 Door wings in the starting position

» The escape route is reset (Fig. 18/1).

9 Cleaning plan

Interval	Cleaning work	Requirement
Daily	• Clean the floor • Clean the floor or shoe cleaning mats • Remove heavily soiled mats and clean the mat acceptor grooves	Emergency stop button is pressed (only for a KTV P/S/A revolving door type)
Weekly	• Vacuum off door wing brushes • Clean heavily soiled door wing brushes with commercial hair shampoo • Clean glass surfaces with industry standard glass cleaner • Wipe off rust-free surfaces with industry-standard cleaner for stainless steel surfaces and a soft cleaning cloth • Wipe off powder-coated and anodized surfaces with an industry-standard cleaning agent and a cleaning cloth	

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