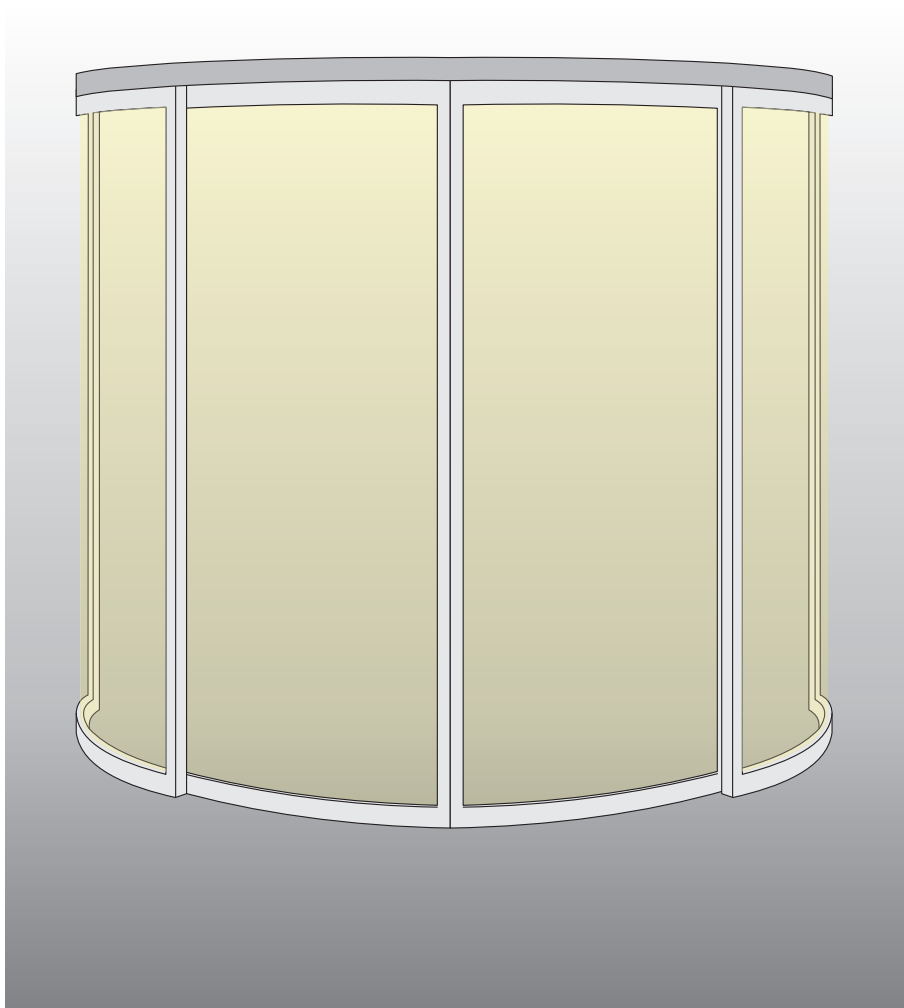


- Slimdrive SC**
- Slimdrive SC-FR 2M**



## Mounting and service instructions

**GB** Mat.-Nr. 116719

**DE** Mat.-Nr. 107687

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## Description of symbols



means "work to be done"



means "important information"



means "additional information"



marks text that has to be read and observed by all means!  
Non-observance may cause injury to persons or damage to property!



Danger to life through electric shock!

# 1 Safety notes

## Intended use

The **Slimdrive SC** and **Slimdrive SC-FR 2M** are only suitable for use

- in dry rooms
- in automatic door systems for horizontally moving door leaves
- in entrances and interior areas with pedestrian traffic in commercial plants and public areas

The **Slimdrive SC** and **Slimdrive SC-FR 2M** may not be used as a fire or smoke protection door.

The **Slimdrive SC-FR 2M** is approved for use in escape and rescue paths.

The **Slimdrive SC** may not be used as an escape and rescue path door.

## Safety precautions

- The described installation, maintenance and repair work must be performed by properly trained personnel by GEZE.
- The country-specific laws and regulations are to be observed during safety-related tests.
- GEZE shall not be liable for injuries or damage resulting from unauthorised modification of the equipment, and the approval for use in escape and rescue paths is voided when unauthorised changes are made (Slimdrive SC-FR 2M).
- GEZE is not liable if products from other manufacturers are used with GEZE equipment.
- Only original GEZE parts may be used for repair and maintenance work as well.
- The connection to the power supply must be made by a qualified electrician. Perform the power connection and equipment earth conductor test in accordance with VDE 0100 Part 610.
- Use a customer-accessible 10A overload cut-out as the line-side disconnecting device.
- Protect the display programme switch from unauthorised access.
- The detection field of the motion detector in the exiting direction must satisfy the AutSchR "Directive for automatic windows, doors and gates" (**Slimdrive SC-FR**)
- In accordance with the Machine Directive 98/37/EU, a danger analysis must be performed and the door system identified in accordance with the CE Identification Directive 93/68/EEC before commissioning the door system.
- Observe the latest versions of guidelines, standards and country-specific regulations, in particular:
  - BGR 232 "Guidelines for power-operated windows, doors and gates"
  - VDE 0100, part 610 "Installation of electric power plants with nominal voltages up to 1000 V"
  - DIN EN 60335-2-103 "Safety of electric devices for home use or similar purposes  
Special requirements for drives designed to move gates, doors and windows"
  - AutSchR "Guideline for automatic windows, doors and gates"
  - Accident-prevention regulations, especially BGV A1 "General Regulations" and BGV A2 "Electrical Installations and Devices"

## Safety-conscious working

- Secure workplace against unauthorised entry.
- Watch swinging area of long system parts.
- Never carry out work with a high safety risk (e.g. Installing the drive, hood or door leaf) while alone.
- Secure cover/drive shrouding against falling.
- Use only cables prescribed in the interconnection diagram. Lay screening in accordance with the connection diagram.
- Secure loose, internal drive cables with cable ties.
- Before working on the electrical system:
  - disconnect the drive from the 230 V mains network and check to ensure that it is not supplied with power.
  - disconnect the controller from the 24 V battery.
  - note that if an uninterruptible power supply (UPS) is used, the system will still be supplied with power despite the fact that the power supply is disconnected.
- Always use insulated wire-end ferrules for wire cores.
- Attach safety labels to glass door leaves (Id.no. 081476).
- Danger of injury by opened drive. Hair, clothing, cables etc. can be pulled in by rotating parts!
- Danger of injury by unsecured pinching, impact, shearing or drawing-in spots!
- Danger of injury by broken glass!
- Danger of injury by sharp edges in the drive!
- Danger of injury during installation by freely moving parts!

### Inspection of installed system:

Measures for security and prevention of pinching, impact, shearing or drawing-in spots:

- Check the function of the safety sensors and motion detectors.
- The detection field of the motion detector in exiting direction must cover the opening width x 1.5 m in front of the door.
- The motion detector in exiting direction (see AutSchR) must detect people moving faster than 0.1 m/s.
- Check earth connection to all metal parts which can be touched.

### Environmentally-conscious working

When disposing of the door system, separate the different materials and have them recycled.

Do not dispose of batteries and storage cells with household garbage.

Comply with the statutory regulations when disposing of the door system and the batteries and storage cells.

## 2 Overview

### 2.1 Drawings

Number	Type	Name
70489-EP08	Installation drawing	Slimdrive SC-FR 2M
70498-9-9850	Wiring diagram	Slimdrive SC-FR 2M
70498-9-9851	Cable plans	Slimdrive SC-FR 2M
70498-9-9804	Table of faults	Trouble-shooting and fault elimination
70489-0-031	Lay-out plans	Drive Slimdrive SC-FR 2M with crossed toothed belts
70489-0-027	Lay-out plans	Drive Slimdrive SC-FR 2M with double deflection
70489-0-005	Lay-out plans	Door leaf of insulating glass (laminated glass) right
70489-0-006	Lay-out plans	Door leaf of insulating glass (laminated glass) left



The plans are subject to alterations. Only use the latest version.

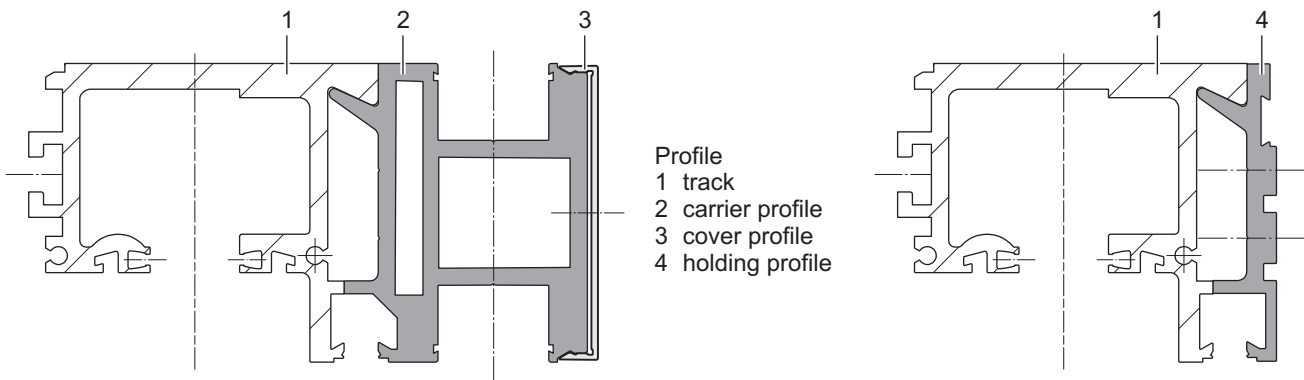
### 2.2 Tools

Tool	Size
Measuring tape	
Marker pen	
Torque wrench	
Allen key	2 mm, 2,5 mm, 3 mm, 5 mm, 6 mm
Open-ended wrench	8 mm, 10 mm, 13 mm
Set of screw drivers	up to 6 mm
Pin punch	3 mm with bit length = 60 mm
Diagonal cutting pliers	
Crimping pliers for electric cables	
Cable stripping tool	
Multimeter	
Stop watch	

## 2.3 Torques

see lay-out plans

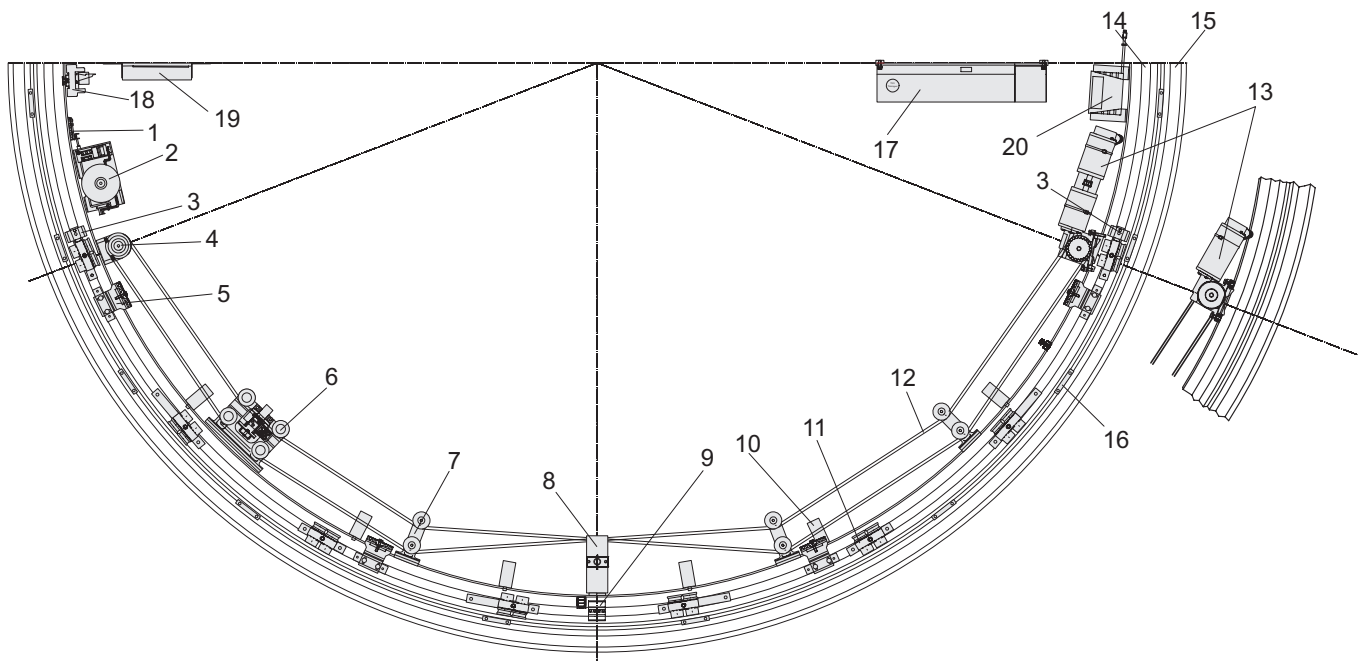
## 2.4 Structural components



Profiles with free support

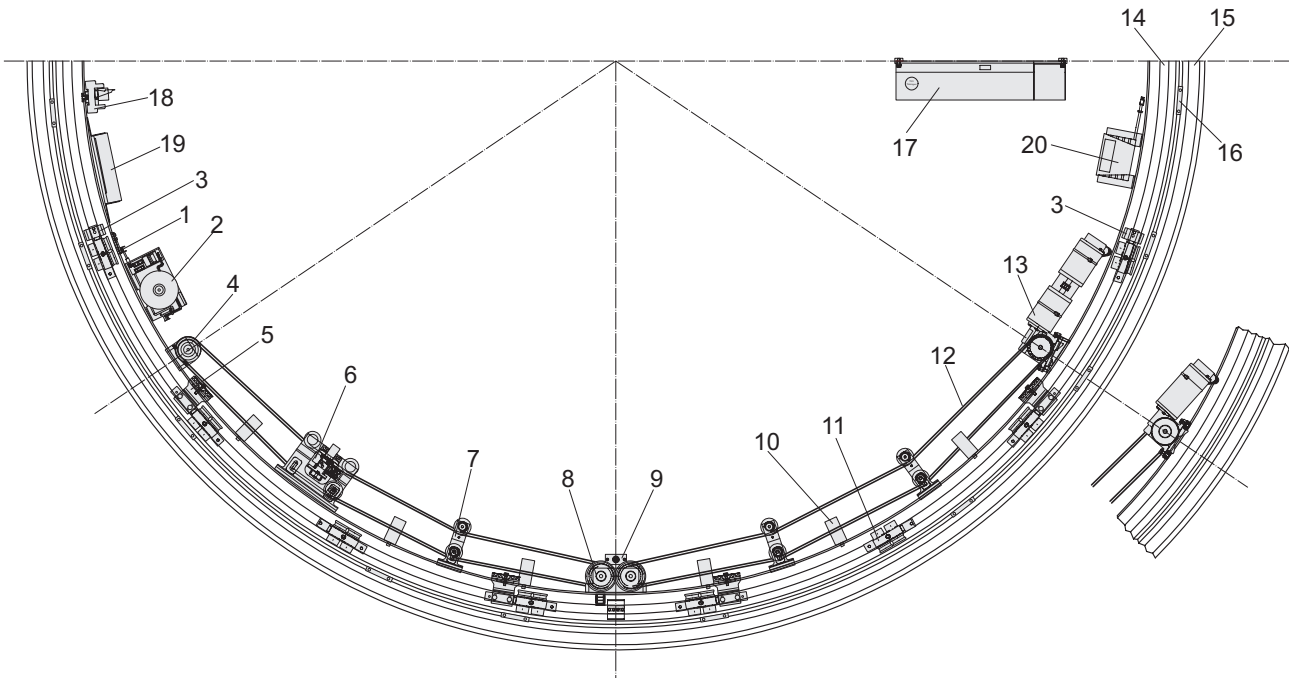
Profiles for post/rail structures

### Structural components Slimdrive SC-FR 2M, double-leaf with crossed toothed belts



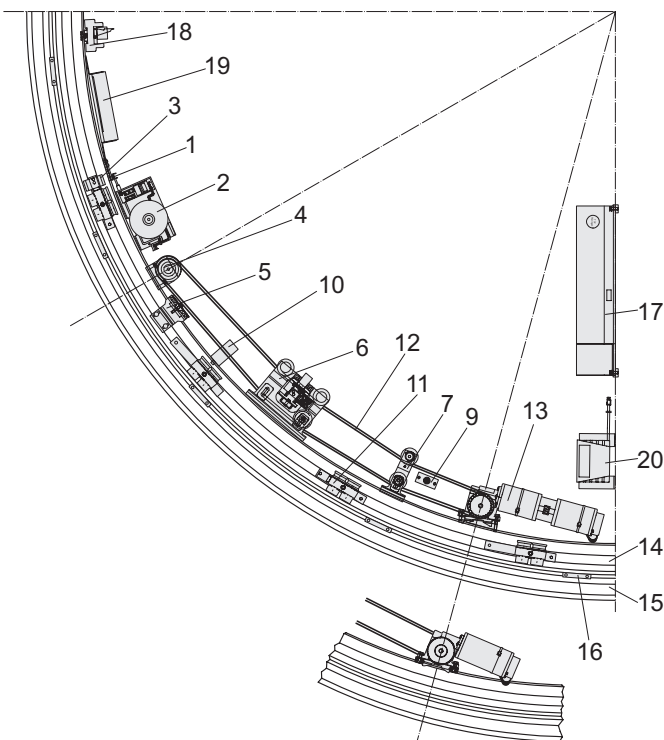
- |                             |                               |
|-----------------------------|-------------------------------|
| 1 grounding connector       | 11 roller carriage            |
| 2 transformer               | 12 toothed belt               |
| 3 stop buffer               | 13 drive motor DCU1 / DCU1-2M |
| 4 deflection pulley         | 14 track                      |
| 5 driver short              | 15 carrier profile            |
| 6 locking device 24 V       | 16 clamping strip             |
| 7 roller support            | 17 control                    |
| 8 partition plate           | 18 relay for SIS              |
| 9 safety sensor CLOSE (SIS) | 19 controller for SIS         |
| 10 cable support            | 20 accumulator                |

**Structural components Slimdrive SC-FR 2M, double-leaf with double deflection**



- |    |                           |    |                            |
|----|---------------------------|----|----------------------------|
| 1  | grounding connector       | 11 | roller carriage            |
| 2  | transformer               | 12 | toothed belt               |
| 3  | stop buffer               | 13 | drive motor DCU1 / DCU1-2M |
| 4  | deflection pulley         | 14 | track                      |
| 5  | driver short              | 15 | carrier profile            |
| 6  | locking device 24 V       | 16 | clamping strip             |
| 7  | roller support            | 17 | control                    |
| 8  | double deflection         | 18 | relay for SIS              |
| 9  | safety sensor CLOSE (SIS) | 19 | controller for SIS         |
| 10 | cable support             | 20 | accumulator                |

**Structural components Slimdrive SC-FR 2M, single-leaf (right-hand closing)**



- |    |                            |
|----|----------------------------|
| 1  | grounding connector        |
| 2  | transformer                |
| 3  | stop buffer                |
| 4  | deflection pulley          |
| 5  | driver, short              |
| 6  | locking device 24 V        |
| 7  | roller support             |
| 9  | safety sensor CLOSE (SIS)  |
| 10 | cable support              |
| 11 | roller carrier             |
| 12 | toothed belt               |
| 13 | drive motor DCU1 / DCU1-2M |
| 14 | track                      |
| 15 | carrier profile            |
| 16 | clamping profile           |
| 17 | control                    |
| 18 | relay for SIS              |
| 19 | controller for SIS         |
| 20 | accumulator                |

### **Periphery**

- floor guide area
- safety sensor CLOSE (SIS) (e.g. light barriers, light curtains)
- contact maker AUTHORISED (KB) for authorised opening (e.g. key-operated switch)
- motion detector INTERIOR, contact maker EXTERIOR (KA)
- display programme switch
- key-operated button for display programme switch
- emergency OFF switch (option)
- main switch (option)

## 2.5 Functional test

During the functional test the following completely fitted components of the drive are tested:

- control
- motor and incremental decoder
- accumulator
- locking device 24 V
- transformer



The components are not tested individually.



**Unplug accumulator after functional test and do not plug in before commissioning.**

### Preconditions



#### Danger to life through electric shock!

- ⇒ Electric installations (230 V) must only be carried through by authorised electricians.
- ⇒ It is urgently recommended to connect a residual current circuit breaker in line side.



#### Danger to life through electric shock!

- ⇒ Connect grounding wires to all exposed metal parts and check the connections.

- The electric and mechanical assembly is completed.
- Motor, control, transformer, accumulator and locking device are fitted and connected.
- The control has not yet been initialised with the function "learning".
- The display programme switch is connected.
- The toothed belt lock (option) must be locked (bolts lock completely into the toothed belt).
- The shoot bolt lock (option) must be unlocked (locking bolt completely retracted).

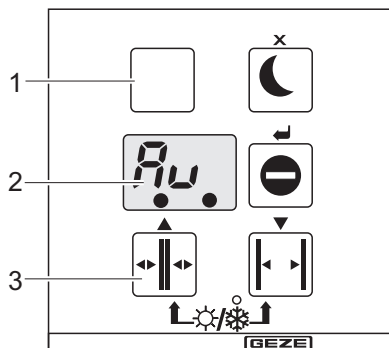


If a shoot bolt lock is installed, parameter  $r_{\text{t}} = 04$  in the 4<sup>th</sup> menu must be set prior to starting the function test.

### Procedure



**Only use display programme switch DCU1 (Id.no. 103940)!**



- 1 service button
- 2 display
- 3 automatic button

Press the service button (1), the automatic button (3) and the key-operated switch simultaneously. The functional test begins.



If an error occurs during the functional test, the test is aborted and the error displayed.

The functional test can arbitrarily often be accomplished.

The individual test steps are not displayed on the display programme switch in ascending order.



Display on the display programme switch	Component tested	Reaction of the drive
	Locking device	Locking device unlocks
	Motor	The motor turns about 20 cm in open direction and then 20 cm in close direction
	Locking device	Locking device locked
	Accumulator	Checks whether an accumulator is connected
		Accumulator has not been recognised
		Accumulator has been recognised* (if an accumulator is connected, it is mandatory that the accumulator is recognised)

Key ↵ press



\* It is verified whether an accumulator is connected but not the state of charge of the accumulator.

If an error occurs during the functional test, the test is aborted and the error displayed.  
(see list of the error messages).

### 3 Assembly

#### 3.1 Checking of the preparatory works to be provided by the customer



- ⇒ In order to grant proper assembly, the preparatory works provided by the customer must be checked as follows:
- type and load-bearing capacity of the facade construction or
  - the substructure, levelness of the mounting area
  - requirements of the cable plan

#### 3.2 Fitting



- ⇒ Secure workplace against unauthorised access.
- ⇒ Never work alone.
- ⇒ Use stepladder or step stool.
- ⇒ Keep inner surface of tracks clean.

## Fitting profiles

### for post/rail construction:

1. Fit floor guide (see installation drawing).
2. Align holding profile with lower edge of rail (see installation drawing).
3. Drill bore holes in accordance with the local conditions.
4. Screw on holding profile (see installation drawing).
5. Prepare cable route in accordance with the local conditions, e.g. no holding profile at the marked position.
6. Fit sealing strip in accordance with the local conditions (see installation drawing).
7. Brace track above the clamping strip by means of carrier profiles so that the track is no longer subject to torsion:
  - insert clamping strip between the carrier profile and the track.
  - post/rail structure: position inner clamping strip and further clamping strips in between.
  - wall and ceiling installation: position inner clamping strips as required.
8. Connect cable for safety sensor CLOSE (SIS).
9. Lay cable for exterior motion detector: drill holding profile at a suitable position and draw in cable (see wiring diagram).
10. Fit covering panels.

### for self-supporting beams:

1. Fit floor guide (see installation drawing).
2. Fit wall rail (see installation drawing).
3. Put side parts onto floor ring (see installation drawing).
4. Fit drive with holding profile onto side parts.
5. Prepare cable routing in accordance with the local conditions, e.g.:
  - No holding profile for the beam at the marked position.
6. Connect cable for safety sensor (SIS).
7. Lay cable for the exterior motion detector: drill holding profile for beam at a suitable position and draw in cable (see wiring diagram).
8. Fit covering panels.



### **Danger of injury!**

Any unsecured components may dislodge and fall down.

⇒ The running track must be clamped completely.

## Hanging the door leaf



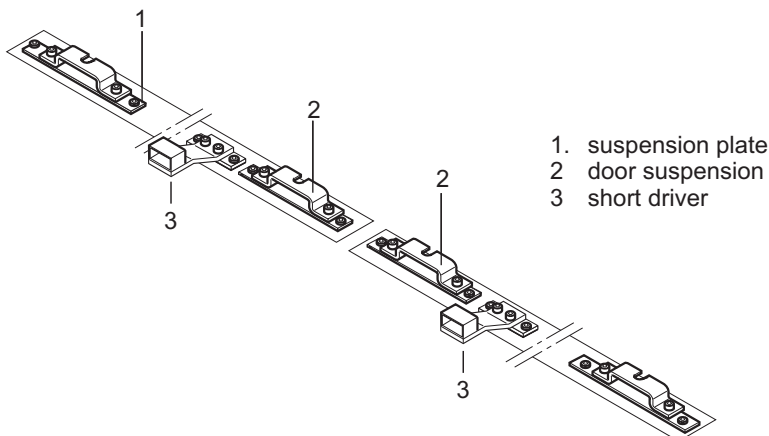
### Danger of injury through glass breakage!

⇒ Never fit a door leaf alone



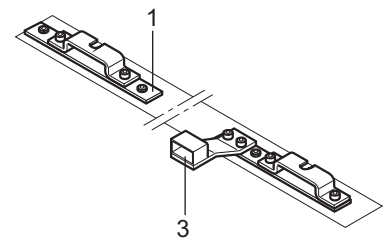
- In order to be able to fit the door leaf to the drive, the door suspensions (2) must be fitted to the door leaves.
- The door suspensions are fitted when glazing the door leaves. If the door suspensions are retrofitted, the door frames must be disassembled (see mounting instructions for door leaves).
- If crossed toothed belts are used, the driver must not go beyond the internal roller supports during closing process since this will lead to inadmissible high tension of the toothed belt.

1. Fit 2 door hinges (2) each to each door leaf (refer to the installation drawing and the layout plan).
2. Fit driver to the leaf
  - mind distance between driver/suspension
  - only use short drivers for all leaves

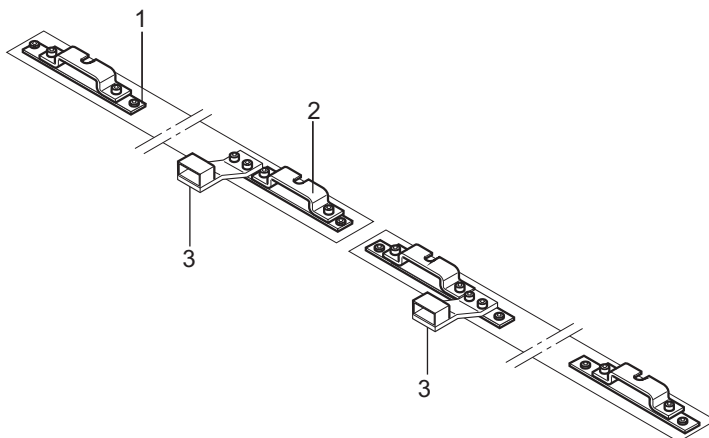


1. suspension plate  
2. door suspension  
3. short driver

Door suspension for double-leaf door with crossed toothed belt



Door suspension for single-leaf door, right-hand closing (door suspension for single-leaf door, left-hand closing laterally reversed)



Door suspension for double leaf door with double deflection

3. Remove transit straps of roller carriage.
4. Hang door leaf in roller carriage:  
Hang door suspensions into the hanger bolts of two of the roller carriages from the front.
5. Secure door leaf using counter nuts.

## Aligning the door leaves



### **Danger of trapping!**

The door leaves are still unsecured and can easily be moved.

⇒ Make sure that the door leaves cannot be moved unintentionally or by unauthorised persons.



**The driver must not bump into the roller suspension!**



**It must be possible to move the door leaves by exerting a force of maximum 100 N.**

**If a higher effort is required to move the door leaf, the door leaf is stiff and has to be adjusted (see section 6.1).**



If crossed toothed belts are employed, the driver must not go beyond the internal roller supports during closing process since this will lead to inadmissible high tension of the toothed belts.

1. Adjust parallel position and height of the door leaf by adjusting the hexagonal hanger bolts:
  - ensure that each door leaf can be easily operated.
  - align door leaves flush with each other. Make sure that they have the same height and parallel closing edges.
  - Secure door leaves with hexagon nuts against the hanger bolts.
2. Secure door leaf against leaving the track at the sides:
  - Fix stop buffer to the left door leaf behind the left roller carriage.
3. Adjust stop buffer for the right roller carriage at the right door leaf.

### **Fit height adjustment**

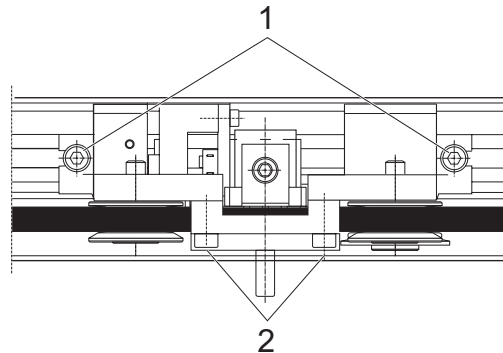
1. Insert brush into the height adjustment strip (refer to layout plan).
2. Insert height adjustment strip into the door leaf (refer to layout plan).
3. Fit floor guide (refer to layout plan).
4. Check door leaf for ease of operation.

### **Connect door leaf with system**

1. Close door leaf and align centrally.
2. Move the toothed belt until the lock of the toothed belt and the driver overlap.
3. Connect driver and toothed belt lock.

### Positioning the locking device 24 V

1. Close door leaf (refer to layout plan).



2. Release screws (1) and (2) at the locking device.
3. Align locking unit with the toothed belt.  
After assembly, the locking pin must be positioned above the drill hole in such a way so that it moves freely.
4. Tighten screws (1).
5. Align the guide of the locking device so that there is play on both sides.
6. Tighten screws (2).



**The driver must not bump into the locking device!**

### Adjusting the stop buffer

1. Move the door leaf to the desired open position.
2. Fix left and right stop buffer.

### Fitting the safety devices

- For mechanical installation refer to layout plan
- Fit motion detectors
- For electrical installation refer to wiring diagram

### Fitting the switches/buttons

- For mechanical installation refer to layout plan
- For electrical installation refer to wiring diagram

### Fitting the display programme switch

- For electrical installation see wiring diagram

### Fitting the key-operated switch

- The key-operated switch can be used to lock/unlock the display programme switch
- For electrical installation please refer to the wiring diagram



**For Slimdrive SC-FR 2M, the key-operated button is mandatory!**

**For Slimdrive SL, the key-operated button can be installed as an option.**

## 3.3 Commissioning



### Danger to life through electric shock!

- ➔ Electric installations (230 V) must only be carried through by authorised electricians.
- ➔ The mains connection as well as the protective earth test should be carried out in accordance with VDE 0100 part 610.

### Connecting cables

1. Disconnect the system from 230 V network.
2. Neatly lay the cables in accordance with the cable layout plan:  
Use cable ties.
3. Make connections at the control in accordance with the wiring diagram.



**When using flexible cable, the end sleeve for strands should be insulated.**

4. Prior to commissioning remove the cables from the pathway of leaves and remove the driver and secure with cable ties.



**The accumulator must be completely charged.**



### Starting the learning function

**Only use the display programme switch DCU1 (Id.no. 103940)!**

1. Plug the display programme switch into the control.
2. Clear the sensing range of all sensors.



### Danger of trapping!

The door leaves move, all safety devices of the doors are switched off.

- ➔ Step back from the path of travel of the doors.



### Risk of injury when the drive is open!

It is possible that revolving parts entrap hair, pieces of clothing or cable etc.!

- ➔ When working with the drive open, watch out for any turning parts.

3. Connect system to the 230 V network.  
At the first start-up, the control jumps to the learning function (see section 5.3) and the display programme switch displays **LE**. Then the display will show **5E** for a DCU1 control system (**5E** = standard door) or **FE** for a DCU1-2M control system (**FE** = escape door) and after that the number of the version, e.g. **14** for version 1 revision 4.

If the control had already been in operation, start the learning mode by selecting **LE** in the service



**In order to be able to carry out the learning function properly, the door panels must be closed.**

4. Close door leaves.
5. Press ↵ key:
  - the door leaves open and close again.
  - the operating parameters are collected and saved.
  - The learning programme will run in accordance with section 5.3.
6. If the display programme switch indicates **I6** move the door leaves by hand to a reduced opening and



**With the Slimdrive SF-FR 2M, a reduced opening width is only permitted if the reduced opening width is larger than the required width of the escape route (see section 5.3).**

- The door leaves will open and close again.

If the programme switch indicates **LE** or **AU** the learning programme has been completed and the door is

### Checking the function

1. Switch of the system.
2. Switch the system back on.
3. Set the display programme switch to “AUTOMATIC”  
Self-testing will run automatically.
4. Check the function of components and periphery:
  - safety sensor (SIS):  
if the light barrier/light curtain is interrupted, the door should not close after it has been activated.  
The door will close slowly after 4 minutes, issuing an error message.
  - Safety sensor OPEN (SIO):  
e.g. check the function and the sensing range of the fixed field sensor.
  - Contact maker INTERIOR (KB)
  - Contact maker AUTHORISED (KB)
  - Contact maker EXTERIOR (KA)
  - Use the diagnostic function in the service mode (section 5.4) to check whether the control system has learnt the function of all connected components and safety devices.
  - Check the locking function and adjust if necessary (section 4.2).
5. If the system does not function, check the voltages supply.  
Also refer to “Errors and troubleshooting” as well as to the error table.

## Setting the motion detector INTERIOR:

### Slimdrive SC-FR 2M:



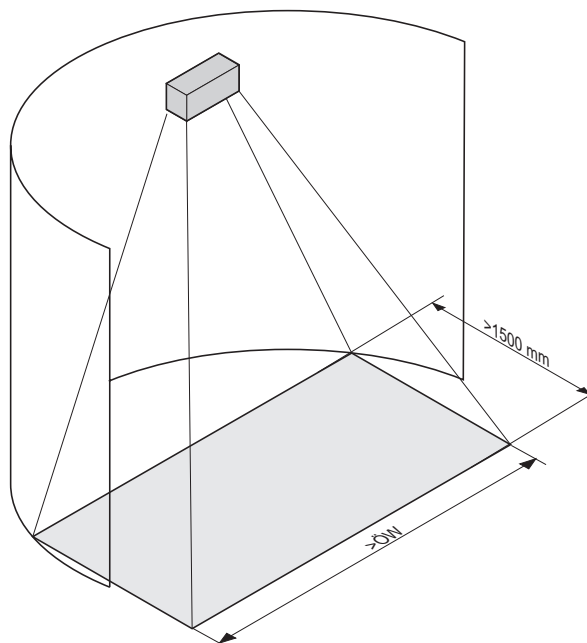
- Motion detectors for interior areas must be able to detect persons walking with a speed of at least 0.1 m/s (AutSchR).
- Depending on the opening width, it may be necessary to install two self-monitoring motion detectors INTERIOR in order to cover the prescribed detection area.
- When adjusting the motion detectors make sure that the entire opening range (see drawing) is covered.  
Adjust the sensitivity of the sensor and the detection range accordingly.

### Slimdrive SC



- The motion detector(s) should be adjusted to ensure that the sensing range extends over the whole opening width of the door and up to 1.5 m in front of the door. If the opening width exceeds 2 m, we recommend the installation of two motion detectors.
- Motion detectors INTERIOR should be able to detect persons walking with a speed of at least 0.1 m/s.

Motion detector with self-monitoring radar, e.g. RK 31-S



Test the effective sensing range near the floor after adjustment of the motion detector(s).

### Entering details into the user manual

➡ Please enter the fitted options into the user manual for the system operator.



### 3.4 Disassembly



**There is a risk of damage to the height adjusting ledge!**

- ⇒ Pull out the height adjustable ledge before unhinging the door.
- ⇒ Do not put the door onto the height adjustable ledge.



**Risk of trapping and impact injury!**

- ⇒ Secure the door leaves against unintentional movement.
- ⇒ Unplug the accumulator.



**Danger to life through electric shock!**

- ⇒ Separate the electric system from the 230 V network prior to working on the system.

For disassembly proceed in the reverse order from assembly.

## 4 Service mode


### 4.1 Operation

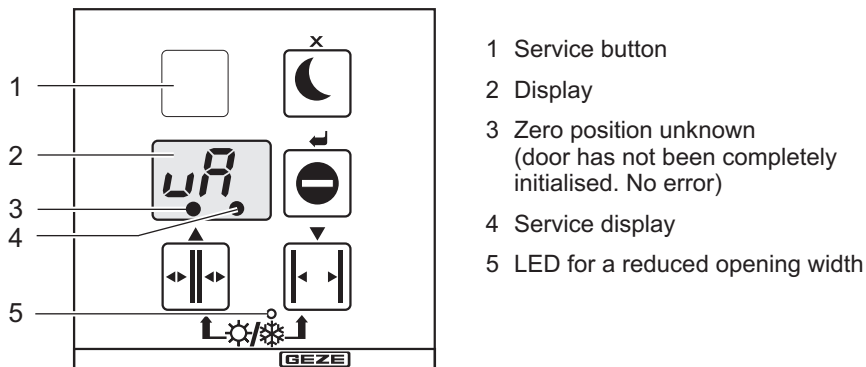


Accessing the service mode:

- access only via the display programme switch DCU (mat. no. 103940)
- no access while system is in 'night time' operating mode
- operation only possible when the key switch is activated (applies to DCU1-2M)

Switching the service mode on and off

⇒ Simultaneously press the service key (1) and the  button



- 1 Service button
- 2 Display
- 3 Zero position unknown  
(door has not been completely initialised. No error)
- 4 Service display
- 5 LED for a reduced opening width

If no button is pressed for five minutes, the control system reverts to the normal operating mode. Exception: in the learning mode, in the diagnostic mode and when the motor has been released.

### Operating the service mode



Service mode starts with first function in 1. menu (funktion *uA*).

The service mode consists of 4 menus, which are subdivided into individual functions. Within these functions several different settings are possible.

After each change the door leaves will open and close.

In the service mode the door will retain the current operating mode and will open and close accordingly.

Exception: functions *LE* and *Fa*.

In the service mode the display programme switch buttons are assigned as follows:

Button	Explanation
▲	change to the previous function/setting or increase value
▼	change to the next function/setting or decrease value
↵	confirm function and change to the settings/ adopt setting and return to the current menu
x	bought and return to the 1. menu (funktion <i>uA</i> )

### 4.2 Functions

The functions of the service mode are described in the wiring diagram.

### 4.3 Learning function



#### Close the door leaves before starting the learning mode

The door will find its running parameters with the help of the learning function in the service mode.

The display programme switch will indicate the following steps:

Display	Explanation	Possible settings
<i>L0</i>	Start learning programme	—
<i>L1</i>	Checking incremental decoder	—
<i>L2</i>	Checking locking	—
<i>L3</i>	Learning opening width	—
<i>L4</i>	Determining door weight and friction	—
<i>L5</i>	Setting the reduced opening width	Move door to desired position Press ↵ button This setting will be adopted - or - automatic adoption after 30 seconds
<i>L7</i>	End of learning process	↵ This setting will be adopted
<i>EL</i>	Errors during learning (see section 7.2)	



The settings will not be displayed in ascending order.

#### Learning a reduced position for escape doors (DCU1-2M)

The learning programme offers the option of learning a reduced opening width.



**For learning a reduced opening width the system operator has to produce written evidence of the mandatory width of the escape route. Learning a reduced opening width is only permitted if this document has been produced. The adjusted reduced opening width must be at least the width of the mandatory width of the escape route. A copy of the document is to be appended to the service/inspection book.**

**The reduced opening width must not be less than 60% of the opening width. The control system cannot learn any reduced width position smaller than that.**

1. Before starting the learning programme, fit a jumper at the control system between terminals 2 and 6.
2. When the display programme switch indicates *L5* move the door to the desired position of the reduced opening width.
3. Press the ↵ button to adopt the position of the door.
4. Press the ↵ button to end the learning programme.
5. The jumper between terminals 2 and 6 must be removed again.

Checking:

1. Change the programme to "Automatic" *RU*.
2. Put the door into the operating mode for winter by simultaneously pressing the buttons and .
3. Activate the door or set to 'reduced permanently open' and then check the position by measuring with a tape measure.

#### Cancelling learning process

- ⇒ Simultaneously press the service key and the button.

#### 4.4 Interlock or draught-proof system via a programme switch (only for DCU 1)

The functions interlock or draught-proof system is only available for standard sliding doors (DCU 1).  
**These functions are not admitted for sliding doors on escape routes (DCU 1-2M).**

Interlock system: Two sliding doors use the same programme switch.  
One of the doors can only open if the other one is closed.

Draught-proof system: Two sliding doors use the same programme switch.



The programme switch only displays the error messages of the master door.



- **If both systems are in operation, connect the voltage supply to the interior door only.**
- **When commissioning the exterior door, supply the display programme switch with the voltage of the exterior door.**

##### **Commissioning the interlock or draught-proof system:**

1. Take interior door (master) into operation. The exterior door (slave) is dead.
2. Switch off interior door.
3. Take exterior door (slave) into operation. The interior door is dead.
4. Set the value  
*01* for an interlock system or  
*02* for a draught-proof system  
in the menu *SL*
5. Check whether the menu *SL* at the interior door displays the value *00*.
6. Switch off the system and take both systems into operation simultaneously.

## 5 Servicing and Maintenance

### 5.1 Mechanical Service



**There is a risk of injury if the cover falls down**

- ⇒ Always work with two persons when fitting the cover or taking it off.
- ⇒ When taking the cover off, carefully lower it to the ground at the securing bracket.
- ⇒ When fitting the cover back on, ensure that it engages fully in the push fit mechanism.



**There is a danger to life due to electric shock!**

- ⇒ Disconnect the system from the 230 volt network before carrying out work on the electrical installation.



**Risk of trapping!**

- ⇒ Secure the door panels against unintentional movement.
- ⇒ Unplug the accumulator.



**Risk of injury when the door is open!**

There are rotating parts which can entrap hair, parts of clothing, cable etc.!

- ⇒ Always watch out for turning parts when working with the drive open.



- **Keep the inside part of the running track clean.**
- **On each side of the toothed belt lock at least three teeth must be engaged.**

#### Checking the toothed belt tension



**A too high tension of the toothed belt may result in heavy operation of the door.**



If crossed toothed belts are used, adjust the height of the partition plate in such a way that both toothed belts fit to the partition plate with the same tension.

1. Start operating the door.  
When braking in the open position direction, the tension of the toothed belt must not lift off or skip the motor cog wheel.
2. If the toothed belt lifts off or skips, the tension of the toothed belt should be increased:
  - Mark the motor position at the running track.
  - Move the motor to the right in 1 mm increments.

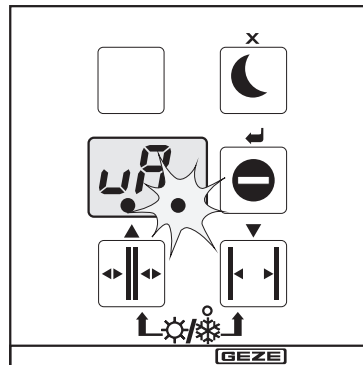
## 5.2 Maintenance



**Always let the door go through a new learning process after completing the maintenance works (see section 4.3).**



Slimdrive SC and Slimdrive SC-FR 2M require the specified maintenance to be carried out at least once a year by a qualified technician – or when the service display lights up on the display programme switch (see picture below).



1. Provide and update the inspection documents.
2. Open the menu item *SR* of the 2. service menu and check the number of open movements (*CO*), the operating hours (*HO*) and the number of self-tests (*FO*<sup>1)</sup> and record these in the maintenance manual..



**If crossed toothed belts are used, the toothed belt must be replaced after 500 000 cycles.**

Tested item	Activity	Comments
Running track	Check for cleanliness	Clean running track if necessary
Roller carriage	Check for wear on the running rollers	Remove rubbed off parts if necessary
Floor guide rail	Check that it does not jam	Clean area of floor guide rail if necessary
Brushes (floor guide)	Check for dirt and hardness	Clean or replace as necessary
Door leaves	Check for ease of operation	See section 6.1
Toothed belts	Check for damage and wear; check tension Check for damage on the locking mechanism	Replace toothed belt if necessary Tension toothed belt if necessary Replace toothed belt if necessary
Locking mechanism	Check for correct function	Reposition locking mechanism if necessary (see section 3.2)
Accumulator	Check the voltage of the accumulator	Replace accumulator if necessary
Screws	Check for tightness	Tighten screws if necessary (for correct torque refer to layout plan)
Components and peripherals	Check for correct function	Replace component if necessary (refer to section 6.1)
Cables	Check for damage and proper fixing	Replace cable or fix back into place if necessary
Partition plate (if crossed toothed belts are used)	Check for damage and dirt Check for correct fixing	Replace or clean partition plate if necessary Fix and adjust partition plate correctly

## 6 Troubleshooting



### Danger to life through electric shock!

- ⇒ Separate the electric system from the 230 V network prior to working on the system.



### Risk of trapping!

- ⇒ Secure the door leaves against unintentional movement.
- ⇒ Unplug the accumulator.



### Risk of injury when the drive is open!

It is possible that revolving parts entrap hair, pieces of clothing or cable etc.!

- ⇒ When working with the drive open, watch out for any turning parts.

### 6.1 Mechanical faults

Cause	Remedy
Running track bent	<ul style="list-style-type: none"> <li>– Replace running track and</li> <li>– Check the substrate</li> </ul>
Door panel does not move freely	<ul style="list-style-type: none"> <li>– Check door leaf (see below)</li> </ul>
Roller carriage jamming or, defective, a high degree of wear on running rollers	<ul style="list-style-type: none"> <li>– Verify that the toothed belt are at right angles at the driver</li> <li>– Verify that toothed belts are parallel</li> <li>– Replace roller carriage (see below)</li> </ul>
Toothed belt damaged	<ul style="list-style-type: none"> <li>– Replace toothed belt</li> </ul>
Component defective	<ul style="list-style-type: none"> <li>– Replace component (see below)</li> </ul>
Locking drive defective	<ul style="list-style-type: none"> <li>– Replace drive unit</li> </ul>
Driver slips at the roller holder	<div style="display: flex; align-items: center;"> <ul style="list-style-type: none"> <li>– Adjust hook properly</li> <li>– Check belt tension!</li> </ul> </div>

#### Check the door leaf

1. Release driver from toothed belt lock.
2. Move door leaf and check for ease of operation.  
If the door does not move easily, reduce the toothed belt tension if necessary.  
**Attention:** The toothed belt may not lift up or skip, see 5.1.  
During testing the door leaf can be separated from the toothed belt.
3. If the door moves easily:  
Check geared motor and replace if necessary.

### Replace roller carriage

1. Detach driver from toothed belt lock.
2. Loosen counter nut at the suspension bolt of roller carriage.
3. Hang out door leaf.
4. Take off buffer from running track
5. Release roller carriage.
6. Insert roller carriage in the reverse order. For the correct torques refer to the layout plan.

### Replace component

1. When fixed with sliding block and slot insert:  
release the screw of the sliding block and move the sliding block sideways.
2. When fixed with sliding block and hole:  
undo and remove the fixing screws.
3. When fixed with sliding block, threaded pin and hole:  
release screw and threaded pin and move the sliding block sideways.
4. Take the component out and replace it.
5. Insert the new component in the reverse order. For the correct torques refer to the layout plan.

## 6.2 Electrical faults

Any current error messages are briefly displayed on the display programme switch during operation in cycles of approximately 10 seconds. In addition, the messages are listed in the error archives  $E_r$  and  $\alpha E$ . If the point lights up in the lefthand half of the display on the display programme switch, the system has not been able to fully initialise itself.

Either there is an obstacle in the pathway or the system is jamming inside.

The point will disappear as soon as the door has been opened and closed completely.



For troubleshooting and finding errors please refer to the error table.

If there is a fault and no error is indicated or the display programme switch is out of action:

- Check that the mains voltage is connected.
- Check the cables and cable connections.
- Check the fuses in the control system and the transformer and replace if necessary (see below).

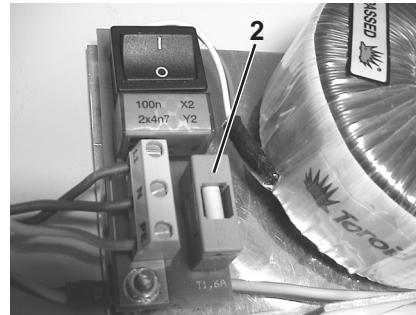
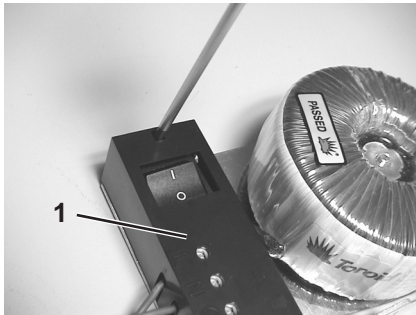


## Replacing the fuse in the transformer



**Danger to life through electric shock!**

⇒ Disconnect the complete system from the 230 V network prior to removing the cover of the printed circuit board.



1. Push a suitable screwdriver into the opening of the pcb cover (1) above the switch.
2. Using the point of the screwdriver, carefully push the front of the pcb cover upwards. (This disengages the cover from the snap-on lock).
3. Remove the cover.
4. Pull the fuse holder (2) towards the front and replace the defective fuse.
5. Put the fuse holder back into place.
6. Put the pcb cover back into place and snap on.



**Make sure that no cables are trapped when replacing the cover.**

## Error message

The list of the error messages is included in the wiring diagram. For finding errors and for error descriptions please also refer to the list 'Errors and troubleshooting for V1.0 DCU1-2M control'.

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**Produktbezeichnung:**  
(Product identifier,  
Désignation du produit)

**automatische Schiebetürantriebe**  
(automatic sliding door drives,  
systèmes automatiques pour porte coulissante)

**GEZE Slimdrive SC, GEZE Slimdrive SC-FR 2M**

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**Erklärung** (Declaration, Déclaration):

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EMV-Richtlinie 89/336/EWG in der Fassung 93/31/EWG  
(EMV Directive, Directive CEM)

Niederspannungsrichtlinie 73/23/EWG in der Fassung (93/68/EWG.

(Low Voltage Directive in the version, Directive relative à la basse tension, version).

**Europäische Normen** (European Standards, normes européennes):

EN 55011

EN 61000-6-2

EN 60335-1

EN 60950



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