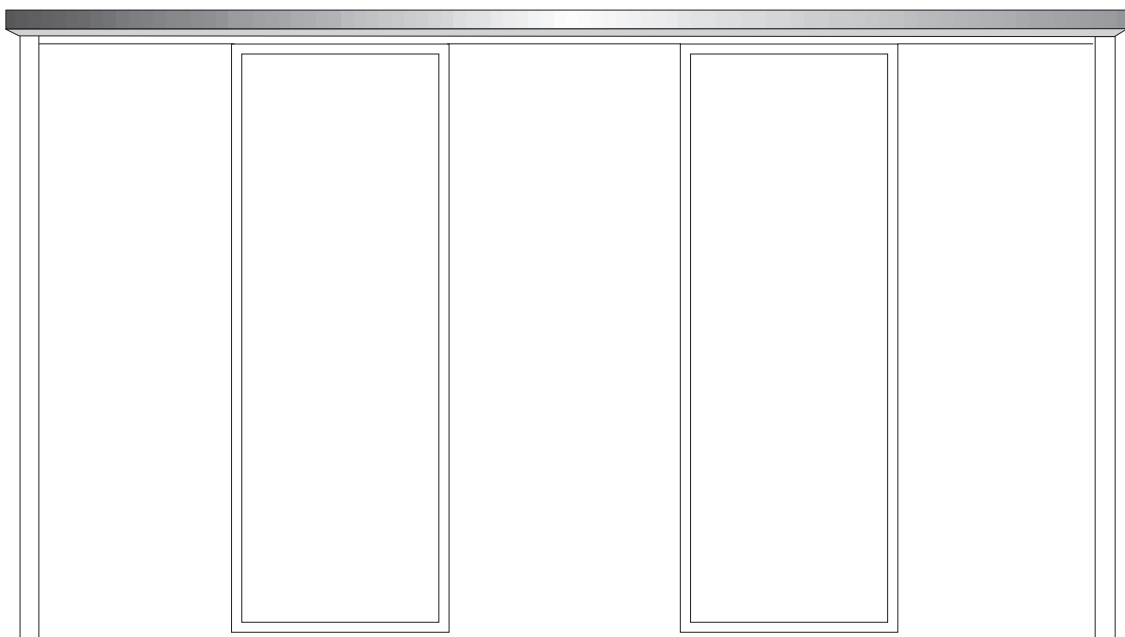




Powerdrive

Product family

EN Installation and service instructions

192477
2025-12_02

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Symbols and illustrations

Warning notices

In these instructions, warning notices are used to warn against material damage and injuries.

- ▶ Always read and follow these warnings.
- ▶ Follow all measures labelled with the warning symbol and warning word.

Warning symbol	Warning word	Meaning
	DANGER	Danger to persons. Non-compliance will result in death or serious injuries.
	WARNING	Danger to persons. Non-compliance can result in death or serious injuries.
	CAUTION	Danger to persons. Non-compliance can result in minor injuries.

Further symbols and illustrations

Important information and technical instructions are highlighted to explain correct operation.

Symbol	Meaning
	means "important note". Information to prevent property damage, to understand or optimise the operation sequences.
	means "additional Information"
	Symbol for an action: This means you must do something. ▶ If there are several actions to be taken, keep to the given order.

Revisions and validity

Version 02: valid for Powerdrive product family from year of manufacture 2021 onwards

Product liability

In accordance with the manufacturer's liability for its products as defined in the German "Product Liability Act", compliance with the information contained in this brochure (product information and intended use, misuse, product performance, product maintenance, obligations to provide information and instructions) must be ensured. Failure to comply releases the manufacturer from its statutory liability.

Reference documents

Type	Name
Wiring diagram	Automatic linear sliding doors Door control DCU1-NT/DCU1-2M-NT
Additional wiring diagram	Automatic sliding doors DCU1-2M-NT, door controller DCU1-2M-NT for automatic sliding doors on rescue routes, FR-variants DUO, LL, RWS
User manual	Automatic sliding door systems
Faults and corrective measures	DCU1-NT/DCU1-2M-NT electronic drive for automatic sliding doors
Cable plan	Automatic sliding door systems
Safety analysis	Automatic sliding doors
Pre-installation instructions	Powerdrive product family

These documents are subject to change. Use only the most recent version.

1 General safety notes

1.1 Intended use

The sliding door system is used for the automatic opening and closing of a building passage.

The sliding door system may only be used in a vertical installation position and in dry rooms within the permitted application area.

The sliding door system is designed for pedestrian traffic in buildings.

The sliding door system is not designed for the following uses:

- for industrial use
- for area of application which do not serve pedestrian traffic (such as garage doors)
- on mobile objects such as ships

The sliding door system may only be used:

- in the modes of operation provided for by GEZE
- with the components approved / released by GEZE
- with the software delivered by GEZE
- in the installation variants / types of installation documented by GEZE
- within the tested/approved area of application (climate / temperature / IP rating)

Any other use is considered improper and will lead to the cancellation of all liability and warranty claims against GEZE.

1.2 Safety notes

- Intervention and modifications which influence the safety technology and functionality of the sliding door system may only be carried out by GEZE.
- Problem-free and safe operation assumes proper transportation, proper set-up and installation, qualified operation and correct maintenance have taken place.
- The relevant accident prevention regulations and other generally recognised safety-related or health & safety rules must be kept.
- Only original accessories, original spare parts and accessories approved by GEZE guarantee problem-free function of the sliding door system
- The mandatory installation, maintenance and repair work must be performed by properly trained personnel authorised by GEZE.
- The country-specific laws and regulations are to be observed during safety-related tests.
- If unauthorised changes are made to the system, GEZE cannot be held liable in any way whatsoever for any resulting damage, and the statement of approval for use in escape and rescue routes is no longer valid.
- GEZE does not accept any warranty for combinations with third-party products.
- Only original GEZE parts may be used for repair and maintenance work.
- Connection to the mains voltage must be carried out by a qualified electrician or a qualified electrician for specified tasks. Perform the mains connection and protective conductor test in accordance with VDE 0100 Part 600.
- Use an on-site automatic circuit-breaker as the line-side disconnecting device. Its dimensioning is matched to the type, cross-section, type of laying and ambient conditions of the on-site power supply circuit. The automatic cut-out must have at least 4 A and may have max. 16 A.
- Protect the display programme switch against unauthorised access.
- In compliance with Machinery Directive 2006/42/EC, a risk analysis must be performed and the door system identified in accordance with CE Marking Directive 93/68/EEC before the door system is commissioned.
- Observe the latest versions of guidelines, standards and country-specific regulations, in particular:
 - DIN 18650: "Powered pedestrian doors"
 - VDE 0100, Part 600: "Installation of low-voltage systems"
 - EN 16005 : "Power operated pedestrian doorsets; safety in use; Requirements and test methods"
 - DIN EN 60335-1 "Safety of electrical devices for home use and similar purposes - Part 1: General requirements"
 - EN 60335-2-103 : "Household and similar electrical appliances - Safety, Particular requirements for drives for gates, doors and windows"
 - Relevant regulations must be used for the selection of suitable fasteners e.g. the guidelines for planning and executing the installation of windows and front doors for new buildings and refurbishment issued by RAL Gütergemeinschaft Fenster und Haustüren e.V. (RAL Quality Institute for Windows and Doors).
- Do not loosen screwed, electric earthing connections.



Install/fit the product in such a way that it can be easily accessed for any repairs and/or maintenance with relatively little effort and that any removal costs are not disproportionate to the value of the product.

1.3 Safety-conscious working

- Secure workplace against unauthorised entry.
- Watch the swivelling range of long system parts.
- Never carry out work with a high safety risk (e.g. installing the drive, drive cover or door leaf) while alone.
- Secure the cover/drive panels against falling.
- Secure non-fixed components to prevent them falling.
- Only use the cables specified in the wiring schematic. Connect the shields according to the wiring diagram.
- Secure loose internal drive cables with cable ties.
- Before working on the electrical system:
 - Disconnect the drive from the 230 V mains and secure it against being switched back on again. Check isolation from power supply.
 - Disconnect the control unit from the 24 V rechargeable battery.
- Note that if an Uninterruptible Power Supply (UPS) is used, the system will still be supplied with voltage despite the fact that the power supply is disconnected.
- Always use insulated wire end ferrules for wire cores.
- Make sure of sufficient lighting.
- Use safety glass.
- Attach safety stickers to glass leaves.
- Danger of injury with opened drive. Hair, clothing, cables, etc. can be drawn in by rotating parts!
- Danger of injury due to crushing, impact, shearing and drawing-in spots not being secured!
- Danger of injury due to glass breakage! Always only use safety glass.
- Danger of injury due to sharp edges on the drive and door leaf.
- Danger of injury during installation through freely moving parts!

1.4 Environmentally conscious working

- When disposing of the door system, separate the different materials and have them recycled.
- Do not dispose of batteries and rechargeable batteries with household waste.
- Comply with the statutory regulations when disposing of the door system and the batteries/rechargeable batteries.

1.5 Safety notes related to transportation and storage

- The door system and its parts are not built for hard impact or for falling from a height.
 - ▶ Do not throw, do not drop.
- Storage temperatures below -30°C and above $+60^{\circ}\text{C}$ may cause damage to the device.
- Protect against humidity.
- Use special glass transport devices (e.g. A-frames) for transporting glass.
- Separate several panes on a frame or during storage using intermediate layers (e.g. cork pads, paper or plastic cords).
- Always store glass in a vertical position on level and load-bearing ground. Use suitable material as a support (e.g. wooden slats).
- In the case of insulating glass, make sure that it is placed flush across the entire element thickness on at least 2 supports.
- During storage and support, safety devices must not cause any damage to the glass or edge seal of ISO glass and must be attached flat on the glass pane surface.
- Dry, well ventilated, closed, weather-proof and UV-protected rooms are suitable as storage areas.

1.6 Qualification

Observe country-specific regulations!

Applicable in Germany:

Companies which carry out the pre-mounting of sliding door drives for escape routes must be approved as an extended production facility by the testing institute which issued the type approval certificate.

2 About this document

2.1 Overview

These instructions describe the assembly of automatic sliding door systems from the Powerdrive product family without side screens.



The following drawings illustrate installation with ISO profile systems.

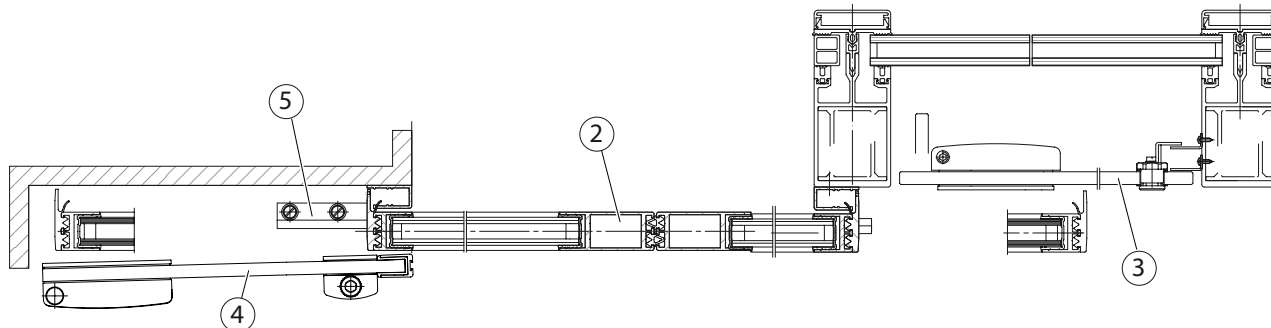
The following profiles are also possible in combination with the Powerdrive product family:

- ESG-clamp fitting
- Wooden moving leaf
- Framed moving leaf

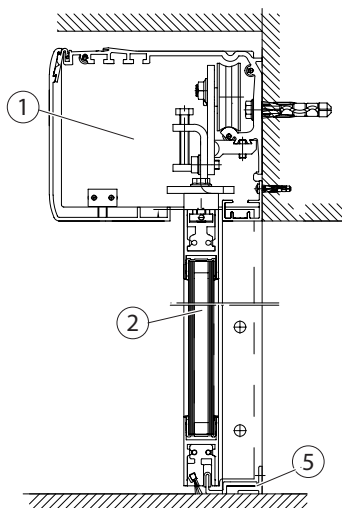
Wall mounting Powerdrive PL (front view)



View from above (Powerdrive PL with ISO profiles)



View from the side (Powerdrive PL with ISO profiles on the wall)



- 1 Drive of the sliding door system
- 2 Moving leaf
- 3 Safety leaf
- 4 Protective leaf
- 5 Floor guide

3 Overview

3.1 Diagrams

Number	Type	Name
70506-0-001	Drive drawing	Powerdrive PL/FR drives
70506-ep01	Installation plan	Powerdrive PL/FR ISO glass fitting
70506-ep03	Installation plan	Powerdrive PL/FR ESG glass fitting
70506-ep09	Installation plan	Powerdrive PL/FR wooden leaves
70506-ep10	Installation plan	Powerdrive PL/PL-FR & hook bolt lock
70506-ep15	Installation plan	Powerdrive PL/PL-FR ISO & floor lock
70506-ep19	Installation plan	Powerdrive PL/PL-FR ISO & Lock M
70484-ep04	Installation plan	Safety leaf for sliding door drives
70715-1-0159	Assembly group drawing	Continuous floor guide
70506-2-0240	Component drawing	Cover version 200×90×6500
70506-2-0238	Component drawing	Cover version 150×90×6500
70506-2-0218	Component drawing	Cover, made to measure 200×105/90
70506-2-0217	Component drawing	Cover, made to measure 150×105/90
70499-2-0247	Component drawing	Track, perforated
70485-2-0200	Component drawing	Track, made to measure PL 2-leaf
70485-2-0251	Component drawing	Track, made to measure PL 1-leaf
70715-9-9872	Installation drawing	ISO leaf Lock M aluminium secondary closing edge
70715-9-9873	Installation drawing	ISO leaf Lock M rubber secondary closing edge
70715-9-9874	Installation drawing	ISO leaf Lock M aluminium secondary closing edge with existing side screen under track
70709-9-0994	Installation drawing	Toughened safety glass leaf
70715-9-9850 Sheet 1	Installation drawing	ISO leaf aluminium secondary closing edge
70715-9-9850 Sheet 2	Installation drawing	ISO leaf rubber secondary closing edge
70715-9-9851 Sheet 1	Installation drawing	ISO leaf aluminium secondary closing edge with existing side screen under track



The diagrams are subject to change without notice. Use only the most recent version.

3.2 Tools and aids

Tool	Size
Tape measure	
Marking pen	
Torque spanner	
Allen key	2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm
Open-ended spanner	8 mm, 10 mm, 13 mm, 15 mm
Screwdriver set	Slotted up to 6 mm, cross recess PH2 and PZ2
Side-cutting pliers	
Crimping pliers for cables	
Wire stripper	
Multimeter	
Plastic bottle as tip safeguard	
Display programme switch/service terminal ST220/myGEZE Connects	

3.3 Torques

The torques are given at the respective installation step.

3.4 Components and assembly groups

See the ep-drawing for the required installation situation and drive drawings.

4 Installation



WARNING!

Risk of fatal injury due to electric shock!

- ▶ Do not loosen screwed, electric earthing connections.



- ▶ Secure workplace against unauthorised entry.
- ▶ Always work with a second person.
- ▶ Use a stepladder or stepstool with test seal.
- ▶ Keep inside area of track clean.

4.1 Preparations to be made on-site



- ▶ Check the preparations made on-site by the customer to ensure proper installation:
 - Type and load capacity of the façade construction or suspending frame
 - Flatness of the installation surface
 - Flatness of the finished floor level
 - Cable plan requirements

4.2 Mounting the track

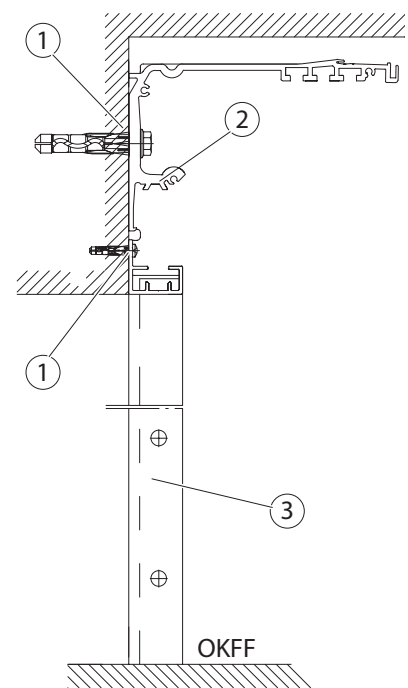
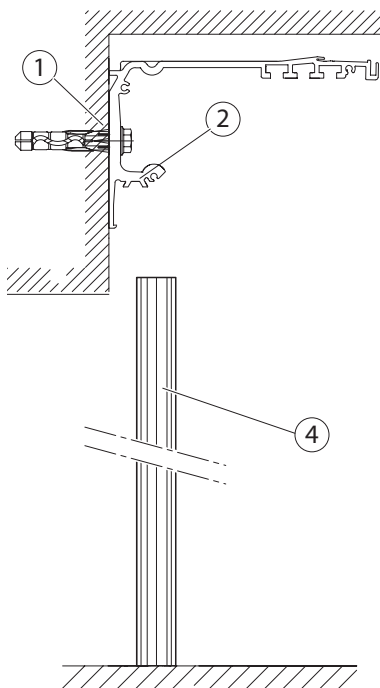


- ▶ Protect the running surface from damage.

4.2.1 Screw on the track.

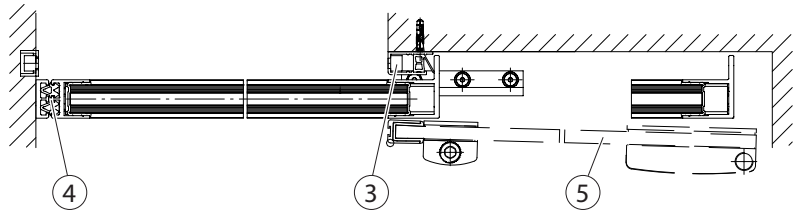
View from the side

- ▶ Determine the installation height of the track (2). Take unevenness of wall and floor into account.
 - ▶ Align the track horizontally.
 - ▶ Mark the fastening drill holes (1) (upper row of drill holes on the track).
 - ▶ Remove the track.
 - ▶ Drill the holes (1) for fixing.
 - ▶ Screw the track (2) in place.
 - ▶ Install the sealing profiles (3).
 - ▶ Press rubber seal into the draught sealing profiles.
- With 1-leaf door systems:
- ▶ Install the wall strips (4).



View from above

- 1 Fastening drill holes
- 2 Track
- 3 Sealing strip
- 4 Wall strip
- 5 Protective leaf



4.3 Mounting the floor guide



- The selection of floor guide depends on the on-site conditions. One of the following floor guide options must be used.
- For further information see the respective installation drawing, Chapter 3.1.

4.3.1 Fitting the angled floor guide for floor installation (Option)

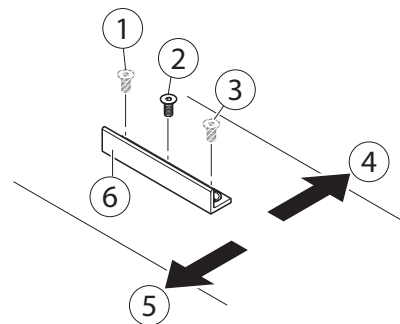
Angled floor guide with moving leaf left hand slide to open

- ▶ Screw the angled floor guide (6) in place using 2 suitable counter-sunk screws (1) and (2).

Angled floor guide with moving leaf right hand slide to open

- ▶ Screw the angled floor guide (6) in place using 2 suitable counter-sunk screws (3) and (2).

- 1 Countersunk screw for moving leaf left hand slide to open
- 2 Countersunk screw
- 3 Countersunk screw for moving leaf right hand slide to open
- 4 outside
- 5 inside
- 6 Angled floor guide

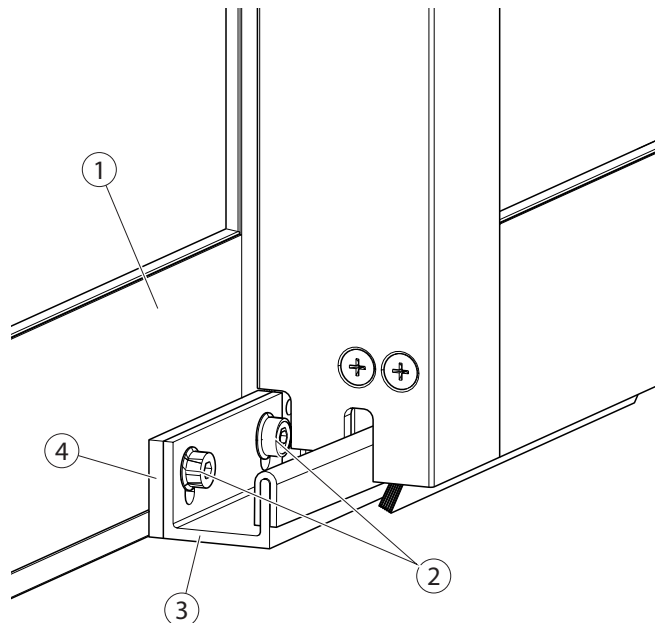


4.3.2 Angled floor guide, wall mounting (Option)

- ▶ Screw the floor guide (3) to the side screen (1) using two screws (2), if necessary via a spacer plate (4) (torque 5 Nm).
- ▶ If there is no side screen, assemble the floor guide to the wall using suitable attachment material.

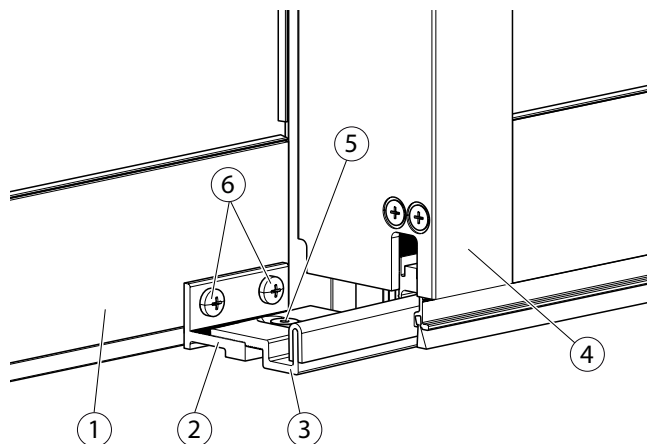


The spacer plate (4) is available separately.



4.3.3 Adjustable angled floor guide wall mounting (Option)

- ▶ Screw the mounting bracket (2) onto the side panel (1) with two screws (6) (tightening torque 10 Nm).
- ▶ Align the moving leaf (4) and thereby the adjusting angle (3).
- ▶ Tighten the screw (5).
- ▶ If there is no fixed panel available, mount the floor guide on the wall using suitable attachment material.



4.3.4 Continuous floor guide (Option)



- See the component drawing "Continuous floor guide" on how to install the continuous floor guide.
- For further information see the respective installation diagrams, Chapter 3.1.

4.4 Installing the moving leaf

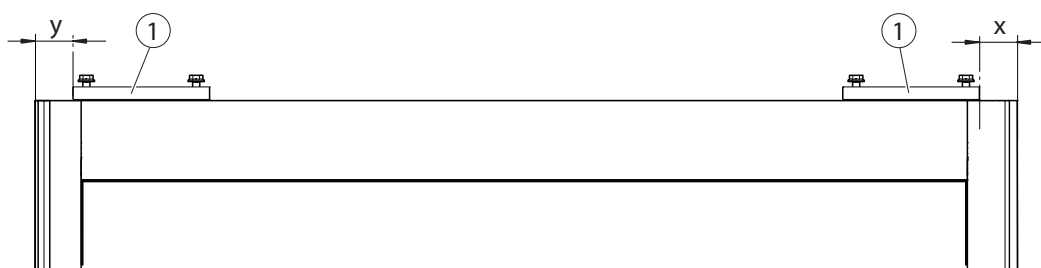
4.4.1 Install the spacer adapters on the moving leaf



- The door suspension plates are installed during glazing of the moving leaves. In case of subsequent installation of the door suspension plates, the frames of the door moving leaves may have to be dismantled.
- ▶ Observe the assembly drawings for the moving leaves.



- See installation drawing for the moving leaf for the position of the spacer adapters (1).



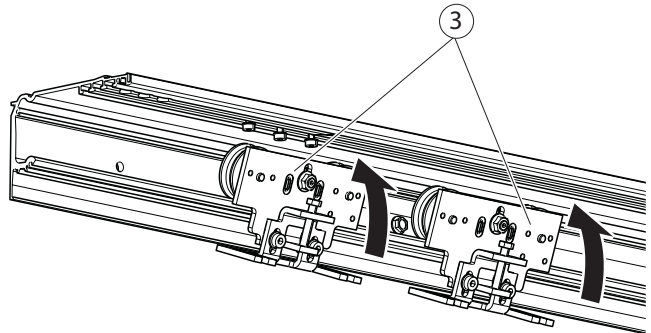
4.4.2 Inserting roller carriage into the track

**CAUTION!**

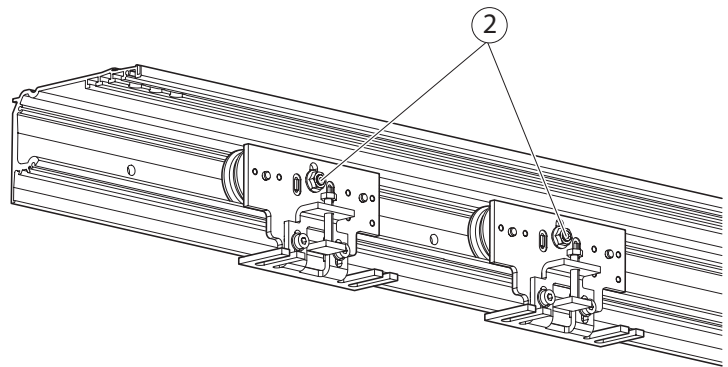
Risk of injury from falling roller carriages!

- ▶ Ensure that the counter-rollers are correctly positioned when inserting the roller carriages.

- ▶ Pivot the roller carriage (1) into the track from the front.



- ▶ Undo locknut (3).
- ▶ Push the counter-roller (2) upwards.
- ▶ Tighten the locking nut.



4.4.3 Fitting the moving leaves

**WARNING!**

Danger of injury caused by moving leaf falling over!

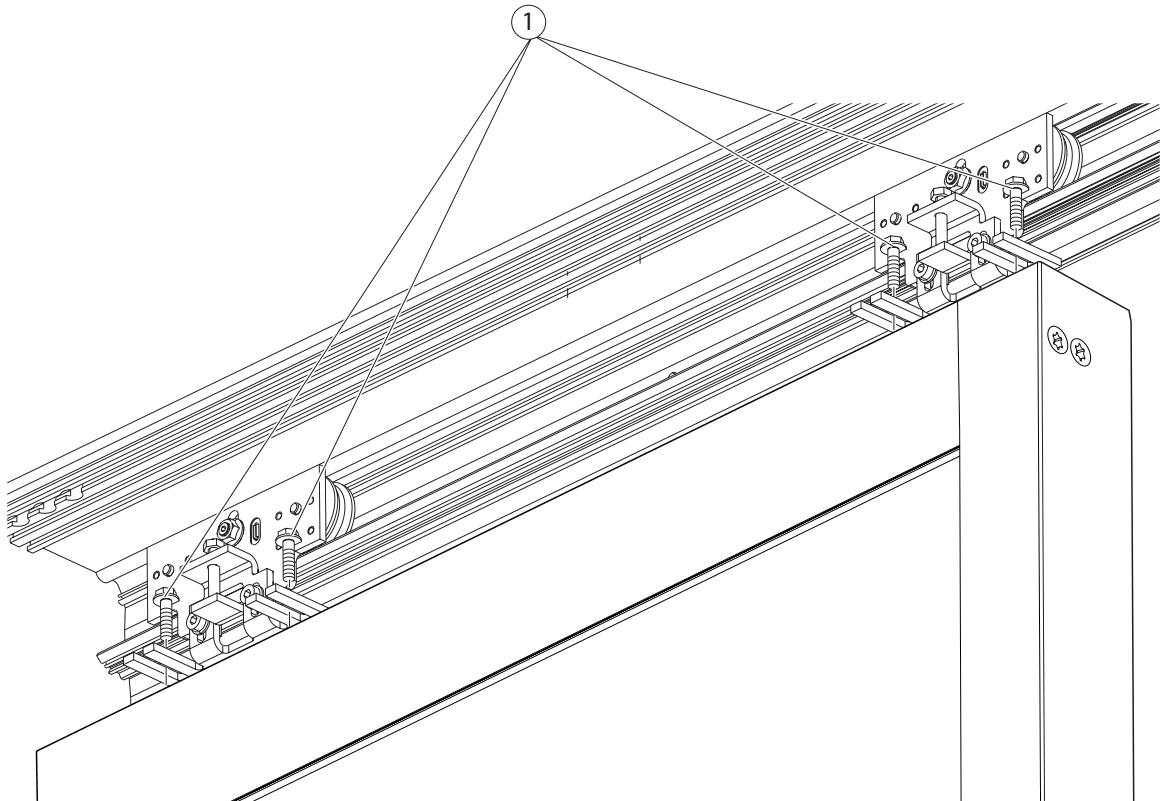
The moving leaves are very heavy.

- At least 2 people should work together to set up the moving leaves.

**WARNING!**

Danger of injury due to glass breakage!

- At least 2 people should work together to set up the moving leaves.



- Screw the moving leaf to the roller carriage using 4 suspension bolts (1). Tighten the screws slightly.

4.4.4 Adjusting the moving leaves

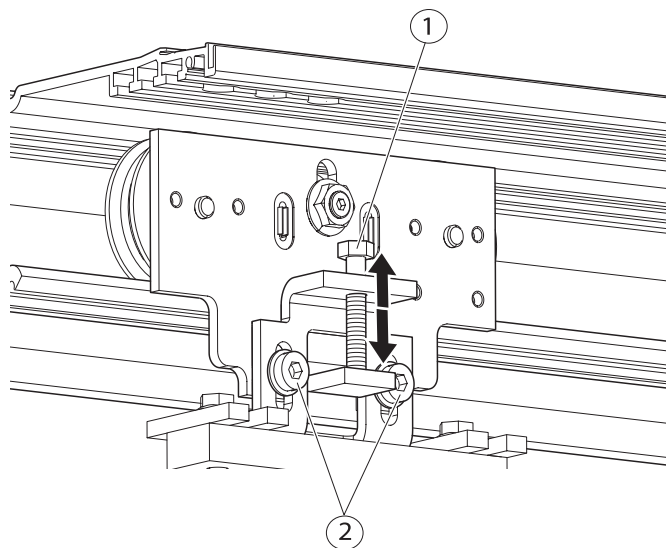
**WARNING!****Danger of crushing!****The moving leaves are still unsecured and move easily.**

- ▶ Ensure that the moving leaves are not moved accidentally or by unauthorised persons!

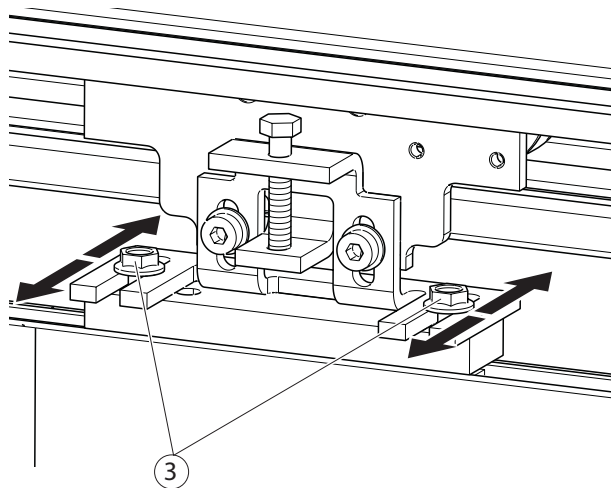


- ▶ Observe the applicable standards and guidelines on crushing, shearing and drawing-in spots.

- ▶ Loosen the 2 screws (2) on the roller carriage.
- ▶ Adjust the height adjusting screw (1) so that the moving leaves are aligned flush. Ensure the same level and parallel closing edges when doing so.
- ▶ Re-tighten 2 screws (2) (torque approx. 40 Nm).

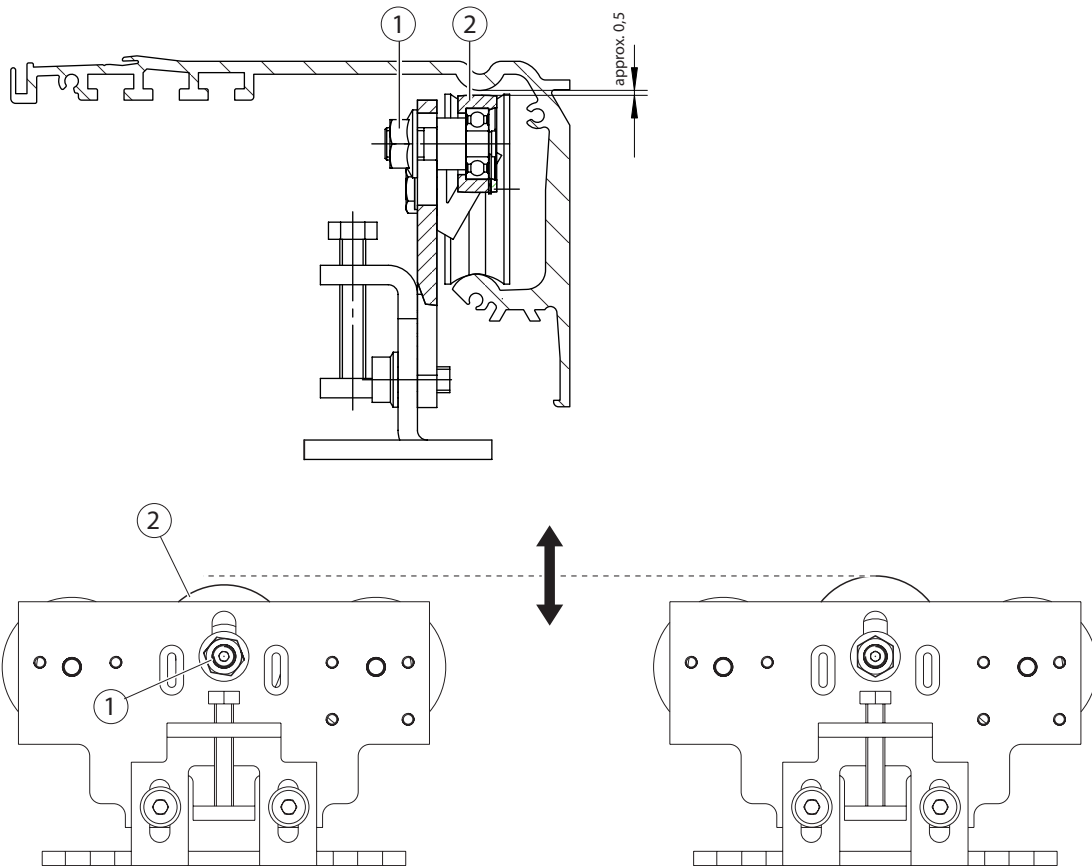


- ▶ Loosen adjustment screws (3).
- ▶ Adjust the position of the moving leaf.
- ▶ Tighten screws (3) (torque 15 Nm) after adjustment.



4.4.5 Adjust the counter-roller

The counter-roller (2) must have a vertical clearance of approx. 0.5 mm to the track (corresponds to approx. the thickness of 4 sheets of copy paper).



- ▶ Undo locknut (1).
- ▶ Move the counter-roller (2) until there is a clearance of approx. 0,5 mm to the track.
- ▶ Retighten the locking nut (1) (torque 30 Nm).

4.4.6 Installing the driver



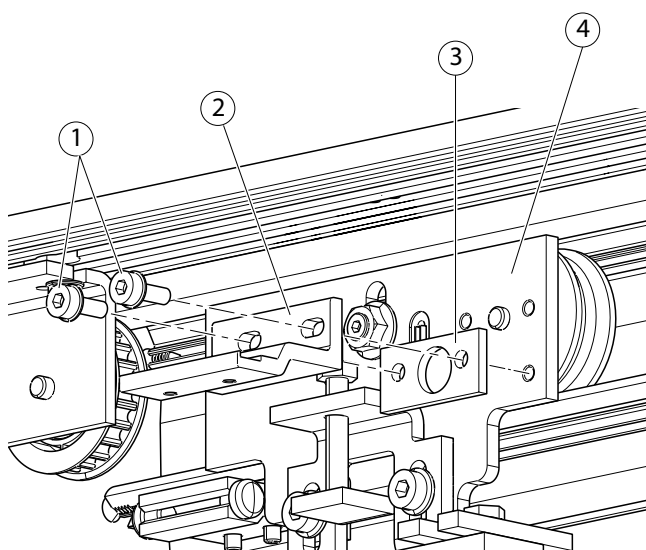
- Drivers must not touch any obstacle over the entire travel path.
- See the drive drawing for the precise position of the driver.

1-leaf



- ▶ Mount the driver for 1-leaf door systems in the following positions:
 - Right hand slide to open:
Driver position at the bottom on the side of the main closing edge
 - Left hand slide to open:
Driver position at the top on the side of the secondary closing edge
- Detailed information can be found on the drive drawing.

- ▶ Screw the driver (2) and plate (3) to the roller carriage (4) using 2 screws (1) (torque 6 Nm).

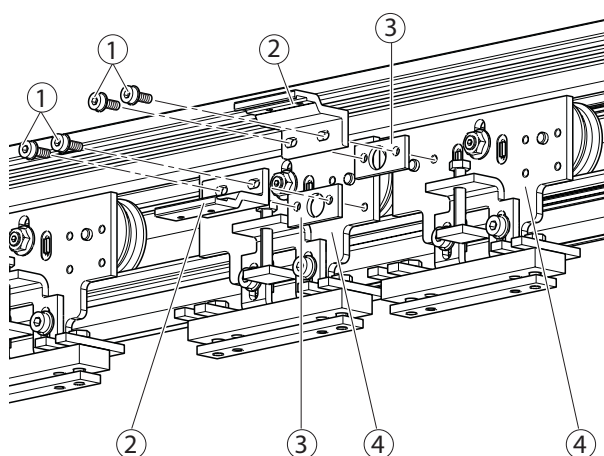


Double leaf



- ▶ Mount the driver for 2-leaf door systems to the two inner roller carriages. Detailed information can be found on the drive drawing.

- ▶ Use the screws (1) to fix the driver (2) and the plates (3) to the roller carriages (4). Do **not** tighten the screws (1) yet.



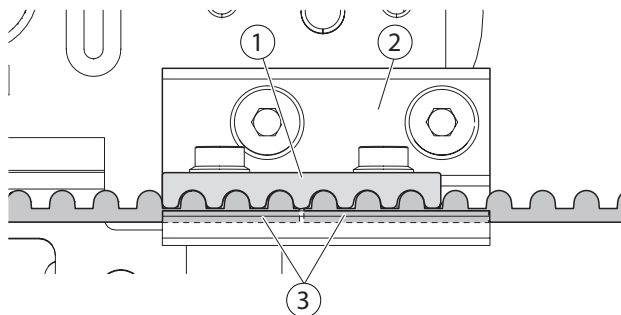
4.5 Mounting the drive components

4.5.1 Fitting the toothed belt

- ▶ Cut the toothed belt to length.
 - ▶ Place the toothed belt on the motor pulley and deflection pulley.
- If toothed belt locking is present:
- ▶ Thread the toothed belt into the toothed belt locking.

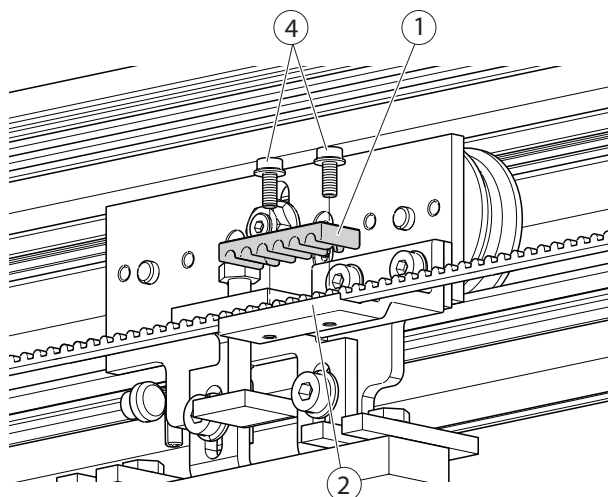
4.5.2 Fitting the tooth belt to the driver

- ▶ Place the toothed belt coupler (1) on the timing belt ends (3) (3 teeth per belt end).



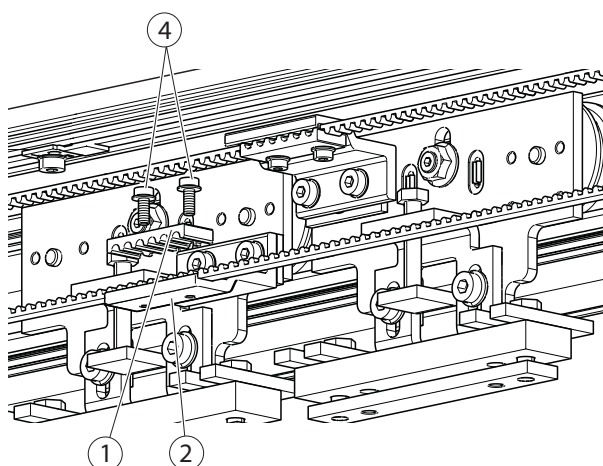
1-leaf

- ▶ Screw the toothed belt coupler (1) to the driver (2) using screws (4) (torque 6 Nm).



Double leaf

- ▶ Assemble both ends of the toothed belt (3) to the toothed belt coupler (1) on the driver (2) using a screw (4) (torque 6 Nm).



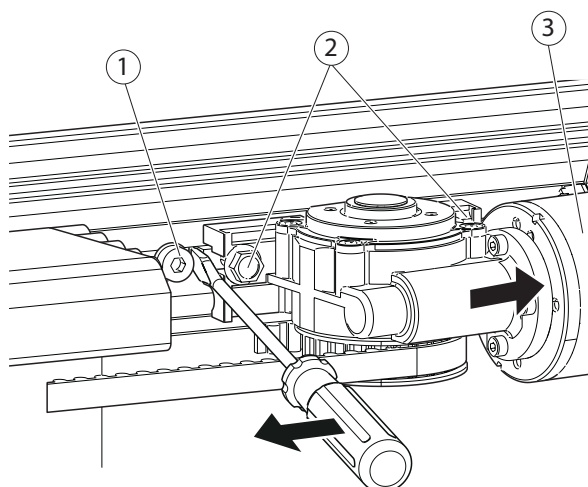
The second toothed belt coupler is only assembled after the closing position has been adjusted.

4.5.3 Tensioning the toothed belt

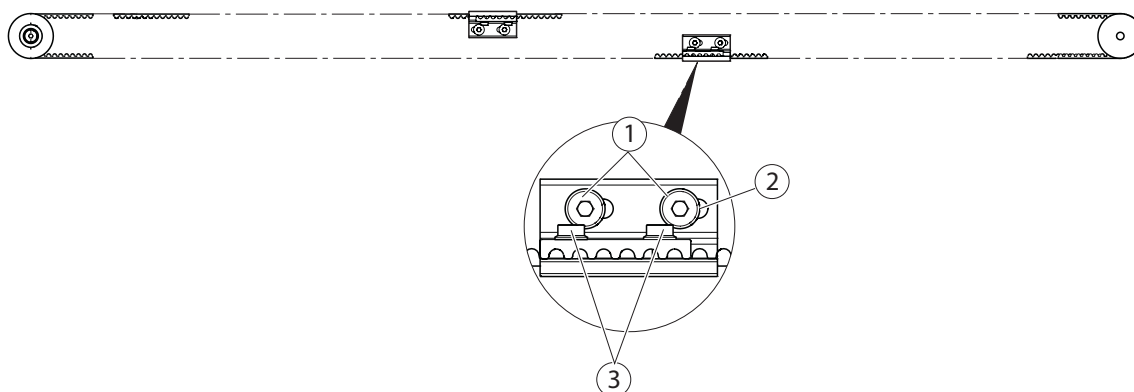


- ▶ The toothed belt must be pre-tensioned with $300\text{ N} \pm 35\text{ N}$ (see drive drawing).

- ▶ Undo 2 screws (2).
- ▶ Slide the motor gear unit (3) to the right by hand.
- ▶ Undo the screw (1) and move the sliding block in such a way that a slot-head screwdriver can be pushed between the sliding block and the motor gear unit.
- ▶ Tighten the screw (1) (torque 10 Nm).
- ▶ Push the slot-head screwdriver into the gap and lever it until the tooth belt is pre-tensioned.
- ▶ Tighten 2 screws (2) (torque 15 Nm).



4.5.4 Setting the closing position

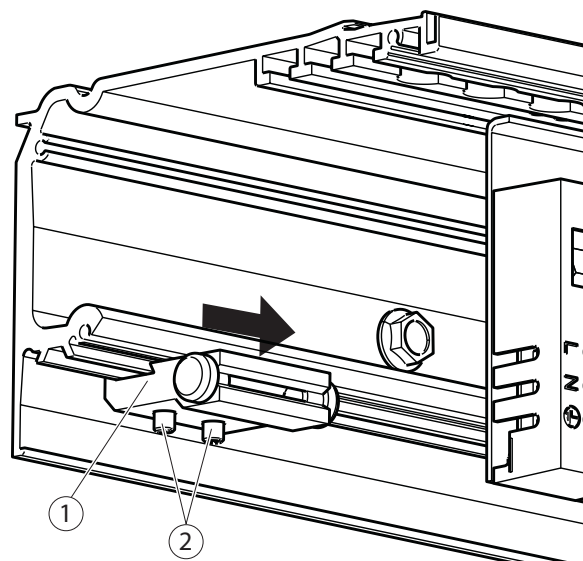


For 2-leaf door systems:

- ▶ Slide the moving leaf to the closed position.
- ▶ Assemble the second toothed belt coupler with screws (3) on the driver (torque 6 Nm).
- ▶ Use the oblong holes (2) to finely adjust the position in the direction of displacement.
- ▶ Tighten the screws (1) on both toothed belt couplers when the exact closing position has been set (torque 6 Nm).

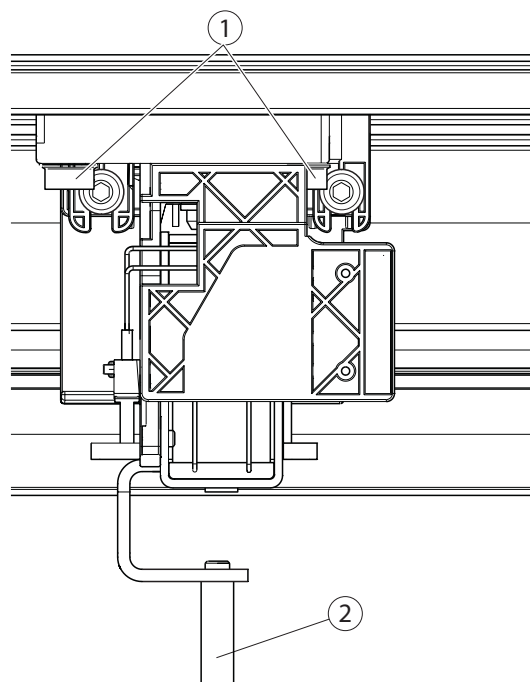
4.5.5 Setting the stop buffer

- ▶ Undo the setscrews (2) on the stop buffer (1).
- ▶ Slide the moving leaf to the open position.
- ▶ Slide the stop buffer on the roller carriages.
- ▶ Tighten the setscrews (2) using the Allen key (torque 3 Nm).



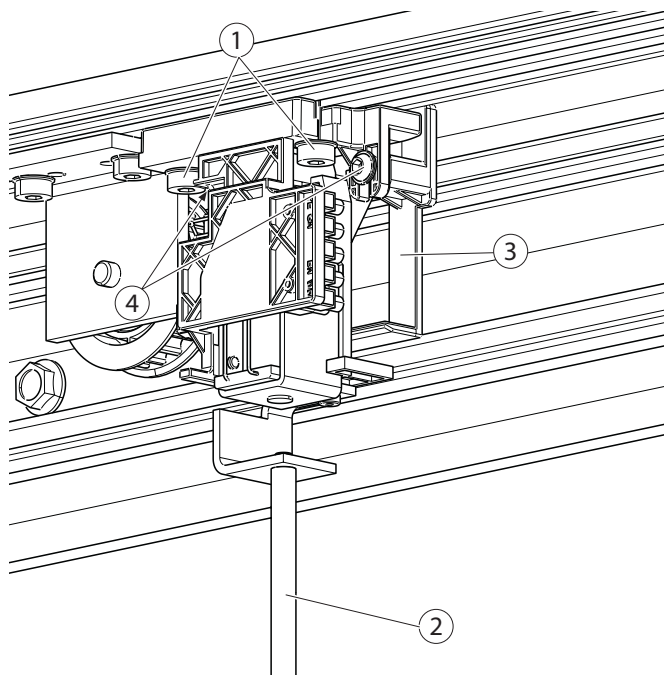
4.5.6 Position the toothed belt locking mechanism (Option)

- ▶ Close the moving leaves.
- ▶ Loosen the screws (1) at the toothed belt locking mechanism (Option).
- ▶ Align the locking device.



Following installation, the locking pin (2) must be positioned in the hole in the cover in such a way that the locking mechanism can be locked and unlocked.

- ▶ If necessary enlarge the drill hole.
- ▶ Tighten screws (1).
- ▶ Adjust the locking guide (3) so that the toothed belt neither touches nor has too much clearance. To do this, loosen 2 screws (4), move the locking guide (3) and re-tighten the screws (4) (torque 5 Nm).



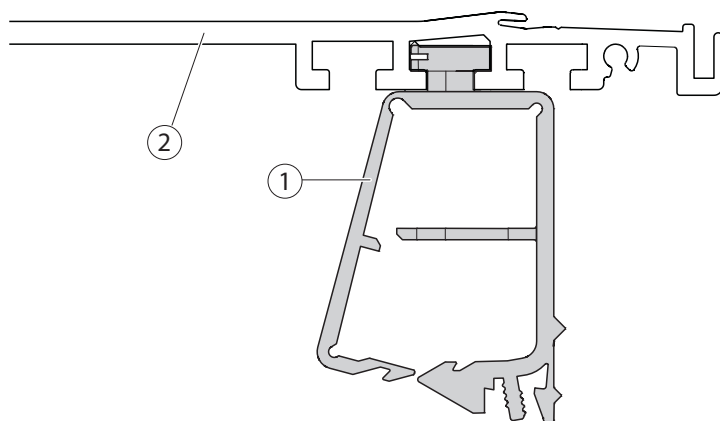
! The driver must not come into contact with the toothed belt locking mechanism (Option) during operation.

! ▶ After the toothed belt has been installed, check (click) the switching points of the indicator switches of the toothed belt locking mechanism (Option). Adjust by bending the actuator levers, if necessary.

4.6 Installing cable guides

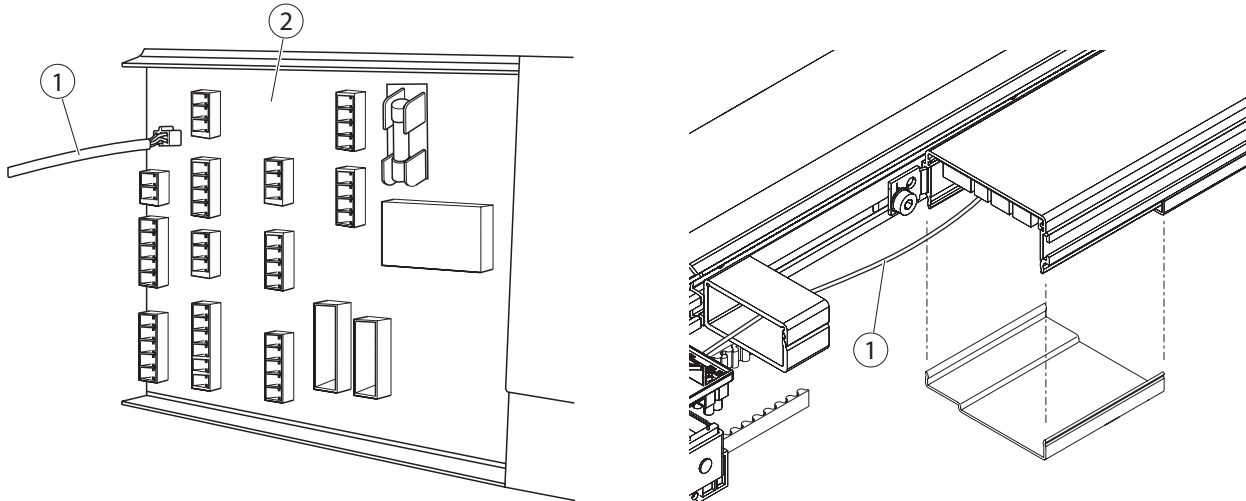
! **Cables can be cut!**

- ▶ Lay cables in such a way that there are no cables near the moving parts.
Cable guide spacing approx. 200 mm.



- ▶ Fix the cable guide (1) on the track (2).

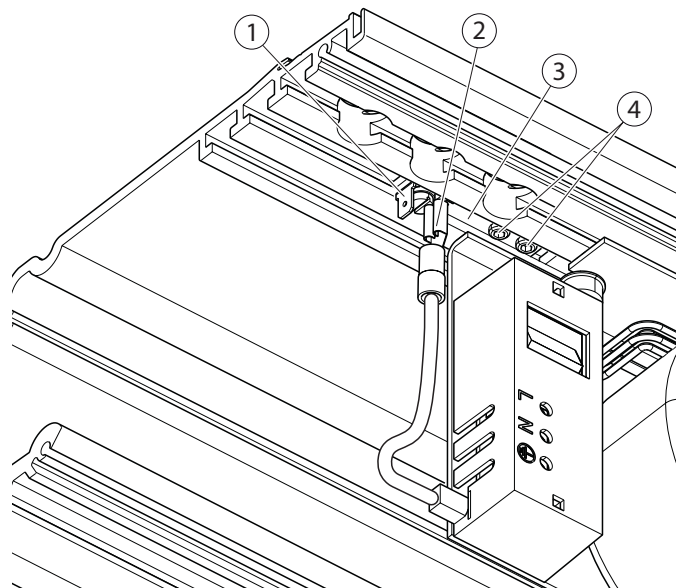
4.7 Connecting the toothed belt locking mechanism (Option) and control unit



- ▶ Plug the cable toothed belt locking (Option) (1) in at the control unit (2).
- ▶ Route cable for the toothed belt locking mechanism (Option).

4.8 Connect the transformer earthing

- ▶ Connect the transformer's earth cable (2) to the flat plug (1).



5 Production test and commissioning

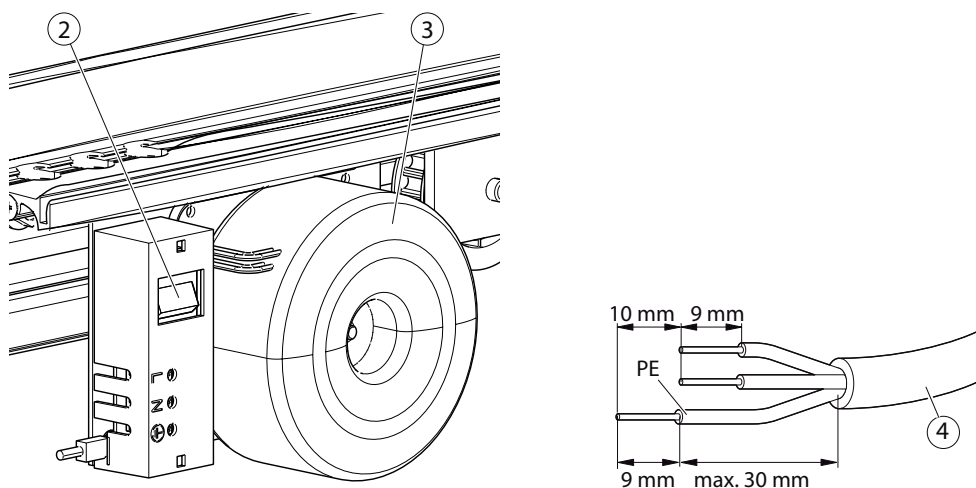
5.1 Connecting the drive



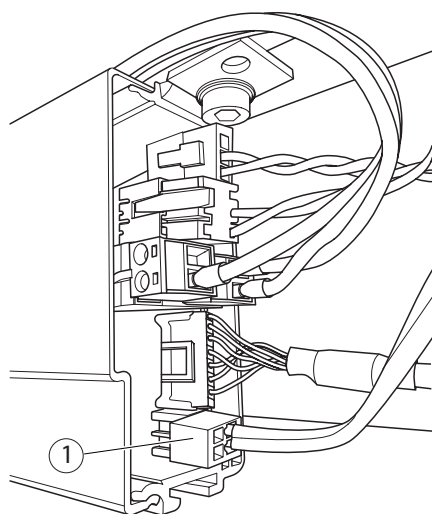
WARNING!

Risk of fatal injury due to electric shock!

- ▶ The electrical system (230 V) may only be connected and disconnected by a qualified electrician or a qualified electrician for specified tasks.
 - ▶ Carry out mains connection and earth conductor test in accordance with VDE 0100 Part 600.
-
- ▶ Strip insulation from the power supply circuit (4) max. 40 mm.



- ▶ Strip the mains cable (4).
 - Insulation stripping length 40 mm
 - Stripping length 9 mm
 - PE line lead 10 mm
- ▶ Connect the drive to the 230 V mains network.
- ▶ Switch the main switch (2) on at the transformer (3).
- ▶ Insert the rechargeable battery connector (1) at the control unit.



- ▶ Carry out the production test as described in the wiring diagram "Automatic sliding doors DCU1-NT/DCU1-2M-NT".

5.2 Installing the drive cover



WARNING!

Danger of injury!

People can be injured when handling the cover.

- ▶ Always make sure two people handle the drive cover.

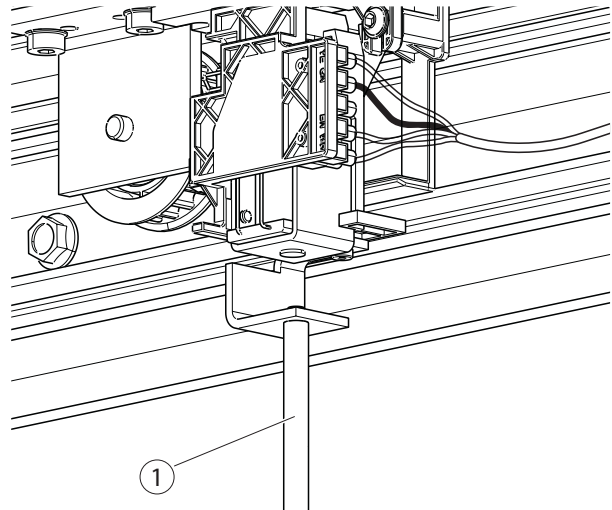


WARNING!

Danger of injury from falling cover!

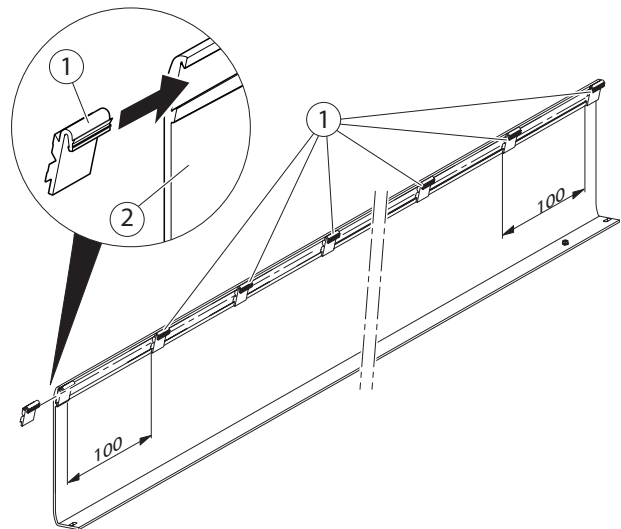
- ▶ Make sure that the cover is attached along the entire length of the track.
- ▶ Let go of the drive cover carefully and check whether it has been hooked in safely.

- ▶ Unscrew the locking pin (1) from the tooth belt locking mechanism (Option).



5.2.1 Mounting the cover fixing

- Regardless of the drive length, one cover fixing (1) must be assembled at each end of the cover, and another must be assembled at a distance of 100 mm.
- A total of seven cover fixings must be assembled for drive lengths up to 3000 mm.
- A total of ten cover fixings must be assembled for drive lengths of 3000 mm or more.

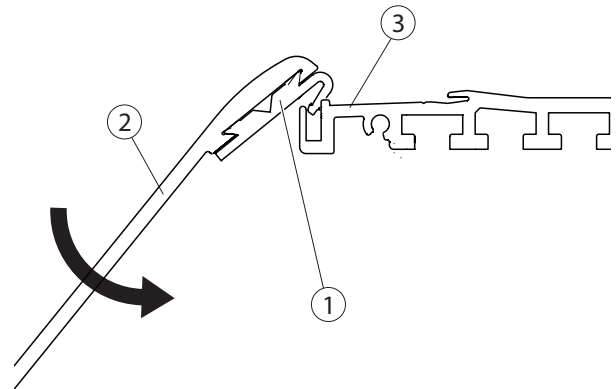


5.2.2 Attaching the cover

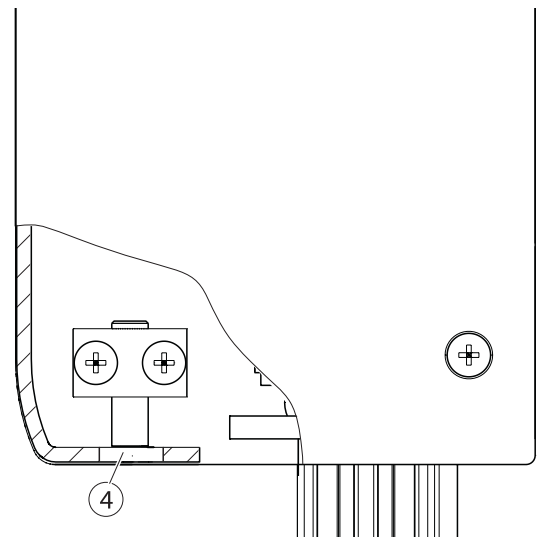
- Hook the cover (2) with cover fixing (1) on the track (3).



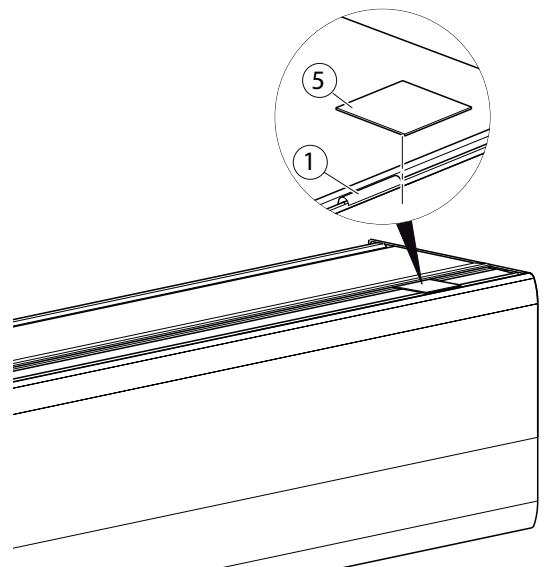
When opening, the cover must not be turned upwards more than 90°. See Chapter 6.1.1 on how to remove the cover.



- Swivel the cover downwards and screw it into the set screws (4).

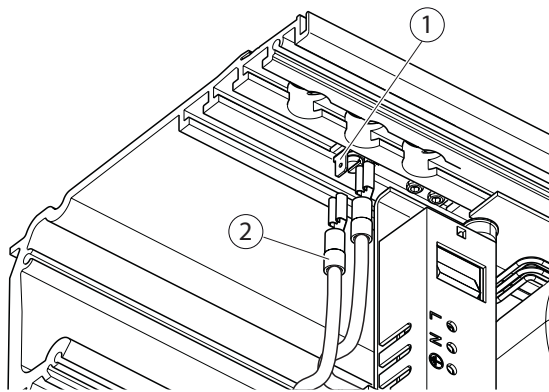


- Place leaf springs (5) on the outside of the cover fixings (1): one leaf spring on each of the two outermost cover fixings.



- Screw the locking pin for toothed belt locking (Option) in again.

5.2.3 Connecting cover earthing



- ▶ Connect the drive cover earthing cable (2) with the second plug-in connection of the device flat plug (1).

5.3 Mounting the safety devices



For information about connection and parameter setting of the safety sensors, and the inputs and outputs and on commissioning, please refer to the wiring diagram.

- ▶ Install safety and activation equipment.
 - ▶ Route cables properly in cable ducts.
- For electrical installation, see wiring diagram.

5.4 Installing operating elements/switches/push buttons

For electrical installation, see wiring diagram.



- ▶ Install the operating elements in such a way that users cannot stand in hazardous areas.

5.5 Commissioning the door system



For information about connection and parameter setting of the safety sensors, and the inputs and outputs and on commissioning, please refer to the wiring diagram.

5.5.1 Creating log book

- ▶ Carry out a safety analysis.
- ▶ Record installed options in the safety analysis for the operator.

5.6 Dismantling



WARNING!

Danger of injury!

People can be injured when handling the cover.

- ▶ Always make sure two people handle the drive cover.



CAUTION!

Danger of injury due to impact and crushing!

- ▶ Secure the moving leaves against unintentional movement.
- ▶ Disconnect the rechargeable battery.

Dismantling is done in the reverse order of installation.

6 Service and maintenance

6.1 Mechanical service

6.1.1 Removing the cover

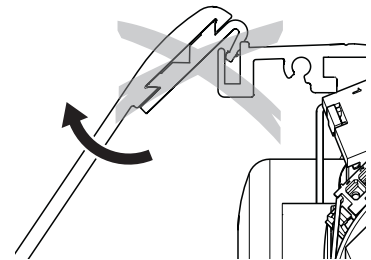


Before opening the cover, check the following:

- Are the leaf springs and cover fixings correctly positioned (see sections 5.2.1 and 5.2.2)?
- Do the cover fixings look correct (see also chapter 6.2)?

The cover can be opened upwards to a maximum of 90° for minor maintenance work.

The cover must be removed for major maintenance work.



- ▶ Remove the leaf springs (5, chapter 5.2.2) via the cover fixings.
- ▶ Loosen the set screws (cover retainer) (4, chapter 5.2.2) and swing the cover open until it can be removed.
- ▶ Press the cover upwards out of the track.
- ▶ Disconnect the earthing cable and sensors.
- ▶ Place the cover securely on the track or floor.



- ▶ Protect the decorative surface from scratches using suitable measures.

6.1.2 Checking tooth belt tension

- ▶ Put the door into operation.
The toothed belt must not lift up from the motor gear or skip when braking and accelerating.
- ▶ If the tooth belt lifts or skips, set the tooth belt tension to $300 \text{ N} \pm 35 \text{ N}$.

6.1.3 Tensioning the toothed belt

See chapter 4.5.3.

6.2 Maintenance



CAUTION!

Danger of injury due to impact and crushing!

- ▶ Secure door leaves against accidental movement.
- ▶ Disconnect rechargeable battery.
- ▶ Disconnect mains voltage.



- Only genuine spare parts may be used.
- To ensure the functional ability, the wear parts of the sliding door system must be checked at every maintenance and replaced if necessary.



- The prescribed maintenance work on the sliding door system must be done by an expert:
 - at least once a year
 - or
 - when the service indicator on the programme switch lights up (see wiring diagram).
- Depending on the configuration, not all the wear parts listed are present.
- ▶ Provide test documents and keep them up-to-date.



The following table shows the recommended replacement intervals for spare and wear parts. The information is based on the manufacturer's recommendations under normal conditions; depending on the operating environment and application, shorter intervals may be necessary.

Wear parts present	Manufacturer's recommended replacement interval
Rechargeable battery	2 years
Roller carriage/track and track-supporting rollers	1.5 million cycles or 5 years
Cleaning and sealing brushes in the door system	2 million cycles or 5 years
Sealing rubbers	2 million cycles or 5 years
Toothed belt	2 million cycles or 5 years
Floor guide	1 million cycles
Deflection pulleys	2 million cycles or 5 years
Rubber cable	200,000 cycles or 1 year
Deflector for rubber cable	200,000 cycles or 1 year
Cleaning brush at the roller carriage	1 year
End buffer	2 million cycles or 5 years
Wire rope telescopic door	In case of wear or damage
Locking device	In case of wear or damage
Spare part	Manufacturer's recommended replacement interval
Motor gear unit	2 million cycles or 5 years
Cover fixing	In the event of damage



After completing the maintenance work, always execute the learning function for the door.

Maintenance work

Testing facility	Action	Comments
Track	Check for cracks	► Replace the track
	Check for cleanliness	► Clean the track
Roller carriage	Check the abrasion of the track rollers	► Remove the abrasion
	Check brushes	► Remove roller carriage. ► Replace the brushes if necessary (see Chapter 7.1.4)
Floor guide area	Check for jarring-free function	► Clean floor guide area
Floor guide area (brushes)	Check for soiling and hardness	► Clean or replace
Moving leaf	Check for smooth movement	► See chapter 7.1.1
Toothed belt	Check for wear & tear and damage	► If necessary, replace the tooth belt (see Chapter 4.5.1)
	Check tension	► If necessary, tighten the tooth belt (see Chapter 4.5.6)
	Check tooth belt locking mechanism (Option) for damage	► Re-position the tooth belt locking mechanism (Option) if necessary (see Chapter 4.5.6)
Toothed belt locking mechanism (Option)	Check function	► Re-position the tooth belt locking mechanism (Option) (see Chapter 4.5.6)
Screws	Check for tight fit	► Tighten the screws if (refer to drive drawing for torques)
Assembly groups and peripherals	Check for correct function	► Replace assembly group
Cables	Check for damage and correct fastening	► Fasten or replace cables
Cover fixing	Check for cracks and fading	► Replace cover fixings. Document the replacement of the cover fixings
	Check for damage e.g. brittle plastic	
	Check whether a year or more has passed since the last maintenance.	

7 Troubleshooting

7.1 Mechanical faults

Cause	Remedy
Track bent	▶ Replace the track ▶ Check the installation surface
Moving leaf stiff	▶ Check the moving leaf (see Chapter 7.1.1)
Roller carriage jammed or defective, high abrasion on the track rollers	▶ Replace the track roller (see Chapter 7.1.3), clean the track
Toothed belt damaged	▶ Replace the toothed belt
Cover fixing faulty	▶ Replace cover fixing (see Chapter 5.2.1).

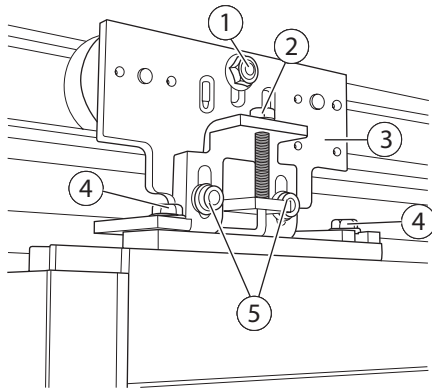
7.1.1 Check moving leaf

- ▶ Disconnect the moving leaf from the tooth belt using the toothed belt locking.
- ▶ Move the moving leaf and check for ease of movement.

If moving leaves move easily:

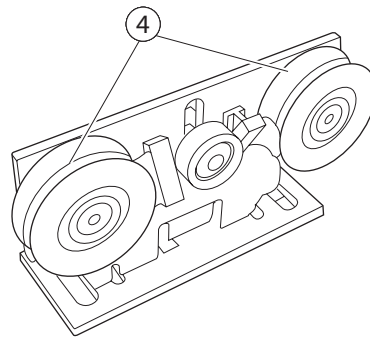
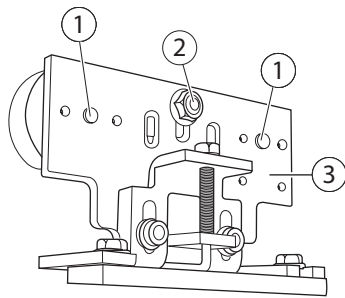
- ▶ Check the motor gear unit and deflection pulley and replace if necessary.

7.1.2 Replacing roller carriage



- ▶ Secure moving leaf against falling.
- ▶ Separate driver from roller carriage (3) if necessary.
- ▶ Undo the nut (1) of the counter-roller and slide the counter-roller downwards.
- ▶ Loosen the 2 screws (5) and lower the moving leaf using the height adjusting screw (2) until it touches the ground.
- ▶ Screw the 2 screws (5) out completely.
- ▶ Tilt the moving leaf carefully until the roller carriage can be accessed freely.
- ▶ Screw the 2 screws (4) off.
- ▶ Replace the roller carriage (3) and screw tight using the screws (4). Observe wall clearance.
- ▶ Realign the moving leaf in the vertical and horizontal positions.
- ▶ Screw the 2 screws (5) in, but do not tighten them yet.
- ▶ Use the height adjusting screw (2) to set the moving leaf to the correct height.
- ▶ Tighten the 2 screws (5) with approx. 40 Nm.
- ▶ Set counter-roller (see chapter 4.4.5).

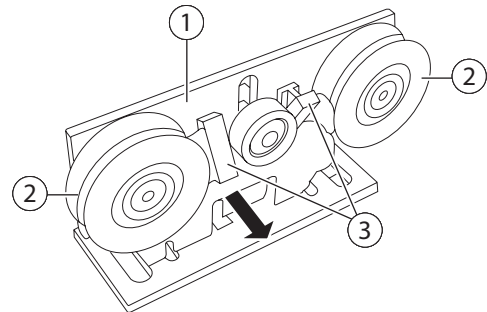
7.1.3 Replacing track rollers



- ▶ Remove the roller carriage (3), see Chapter 7.1.2.
- ▶ Screw the pivots (1) of the track rollers off.
- ▶ Screw the screw (2) off.
- ▶ Replace track rollers (4) (torque 20 Nm).
- ▶ Reinstall roller carriage in reverse order.

7.1.4 Replacing brushes

- ▶ Secure moving leaf against falling.
- ▶ If necessary, detach the moving leaf and tilt it as described in chapter 7.1.2.
- ▶ Pull brushes (3) out of pulley holder (1).
- ▶ Clean rollers (2) and insert new brushes.
- ▶ Hook the moving leaf in again and adjust it.
- ▶ Set counter-roller (see chapter 4.4.5).



7.2 Electrical faults



- ▶ For read-out instructions and a list of fault messages, see wiring diagram.

7.2.1 Replacing fuse in transformer



DANGER!

Risk of fatal injury due to electric shock!

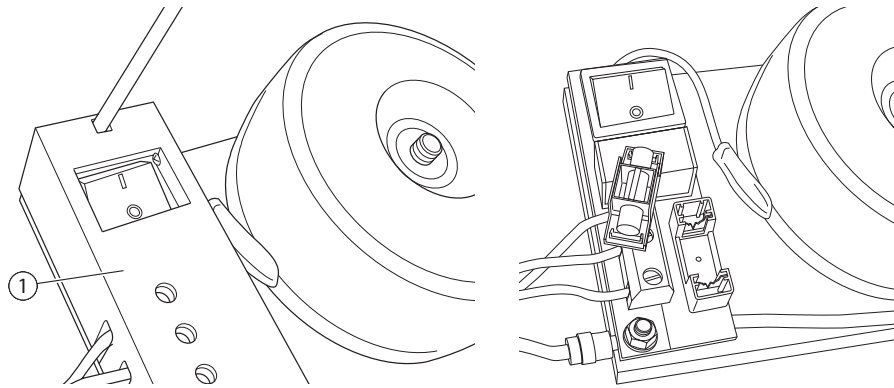
If the main switch on the transformer is activated, the fuse is still energised since it is upstream of the main switch.

The mains voltage 230/115 V must be disconnected from the mains upstream of the fuse.

- ▶ Disconnect the door system from the 230/115 V mains supply on site before removing the PCB cover (1) and secure against being switched back on again.



- ▶ You will find the fuse value on the wiring diagram.



- ▶ Insert a suitable screwdriver into the opening of the PCB cover (1) above the switch.
- ▶ Carefully press the end wall of the PCB cover upward with the tip of the screwdriver. This releases the snap catch.
- ▶ Remove the PCB cover (1).
- ▶ Pull the fuse holder forwards and off and replace the defective fuse.
- ▶ Attach the fuse holder.



- ▶ Do not trap the cable when setting the cover in place.

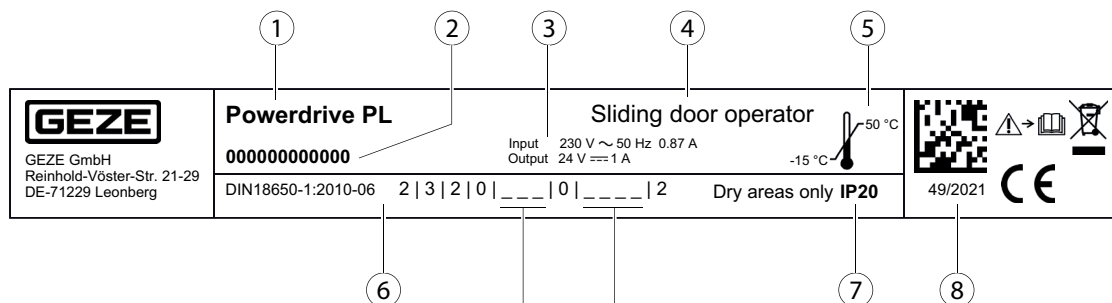
- ▶ Set the PCB cover (1) in place and clip on.

8 Drive nameplate



Only relevant in Germany and within the scope of validity of DIN 18650-1.

► Supplement classification code on the nameplate.



Safety devices on the drive (fifth character)

A distinction is made between three classes in terms of safety requirements:

- 1: Power limitation;
- 2: Connection to external safety systems approved by the drive manufacturer;
- 3: Low-energy mode.

Note: You may select multiple classes.

Safety at automatic door system – version/installation (seventh character)

A distinction is made between five classes of safety devices on door leaves:

- 0: No safety devices;
- 1: With sufficiently dimensioned safety distances
- 2: With protection against crushing, shearing and drawing-in of fingers;
- 3: With built-in turning fitting unit;
- 4: With sensor-controlled protective devices.

Note: You may select multiple classes.

- 1 Product name
- 2 Serial number
- 3 Electr. data
- 4 Machine category
- 5 Ambient temperature
- 6 Only relevant in Germany and within the scope of validity of DIN 18650-1: Classification code
- 7 IP rating
- 8 Date of manufacture

9 Inspection of the installed door system

9.1 Protective measures to prevent and protect from hazardous areas

- ▶ Check protective earth connection to all metal parts that can be touched.
- ▶ Perform a safety analysis (risk analysis).
- ▶ Check the function of safety sensors and movement detectors.

9.2 Powerdrive product family assembly checklist

No.	Test	in	On page	Completed
1	Are all cables for the Powerdrive assembly laid correctly?	–	–	
2	Track mounted?	4.2	8	
3	Angled floor guide assembled?			
	▫ Angled floor guide floor mounting (Option)	4.3.1	9	
	▫ Angled floor guide, wall mounting (Option)	4.3.3	10	
4	Continuous floor guide assembled (Option)?	4.3.4	10	
5	Moving leaf installed?	4.4	10	
6	Drive components installed?	4.5	16	
7	Tooth belt mounted?	4.5.1	16	
8	Toothed belt locking mechanism (Option) and control unit connected?	4.7	20	
9	Safety devices mounted?	5.3	24	
10	Switches/push buttons installed and correctly connected?	5.4	24	
11	Programme switch installed?	5.4	24	
12	Transformer earthing installed?	4.8	20	
13	230/115 V connection established?	5.1	21	
14	Cover earthing connected?	5.2.3	24	
15	Cover fixing mounted?	5.2.1	22	
16	Safety analysis carried out?	–	–	
17	Deviations of the door system checked in accordance with safety analysis?	–	–	
18	Are all components mounted in accordance with the following instructions:	–	–	
19	▫ Pre-installation instructions Powerdrive product family	–	–	
20	▫ Powerdrive installation instructions – girder section and side screen	–	–	
21	▫ Pre-mounting instructions profile system leaves and side panel	–	–	
22	▫ Installation instructions protective leaf for sliding door drives	–	–	
23	▫ Installation instructions safety leaf	–	–	
24	Drive identification plate supplemented?	8	30	
	Notes:			
	▫ Only relevant for Germany and within the scope of validity of DIN 18650-1.			
	▫ The identification plate may only be attached to the drive when installation has been checked for correct implementation using the checklist in accordance with GEZE specifications.			

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