

Slimdrive EMD F-IS

EN Additional installation instructions

164990-01

GEZE




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1 Introduction

1.1 Symbols and illustrations

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

Symbol	Meaning
	means "important note" Information on avoiding material damage, improved understanding or optimising the workflows
	means "additional Information"
	Symbol for an action: This means you have to do something. ▶ If there are several actions to be taken, keep to the given order.

1.2 Product liability

In compliance with the liability of the manufacturer for his 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 his statutory liability.

1.3 Reference documents

Type	Name
Installation instructions	Slimdrive EMD / EMD-F
Wiring diagram	Slimdrive EMD / EMD-F
Cable plan	Slimdrive EMD / EMD-F

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

2 Fundamental safety precautions

2.1 Intended use


The door closing sequence control Slimdrive EMD F-IS has been designed for automatic control during the closing of double-leaf single-action swing doors. The components required supplement the Slimdrive EMD-F drive and must be installed according to these instructions.

The closing sequence control Slimdrive EMD F-IS

- is designated for use on fire and smoke protection doors.
- may be used on escape and rescue routes.
- must **not** be used for potentially explosive areas.

Any improper use such as permanent manual operation, as well as any modification to the product, is not permitted.

2.2 Safety notices

-  The description of the overall installation of the drive is not the subject of these instructions. This information can be found in the installation instructions Slimdrive EMD-F.
All the necessary safety notices for conversion or extension to a double-leaf version can be found on the following pages.

When installing the closing sequence control, the applicable standards must be observed, see the Slimdrive EMD / EMD-F installation instructions.

DIN EN 1158 is also applicable

3 Product description

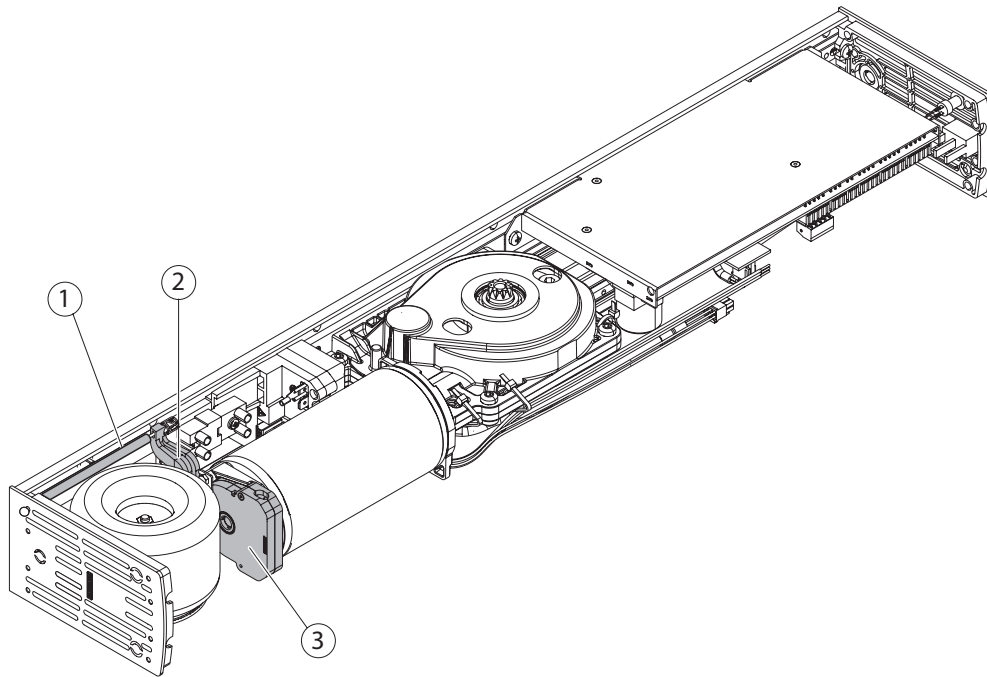
3.1 Areas of application



See installation instructions Slimdrive EMD-F for mechanical and electrical data.

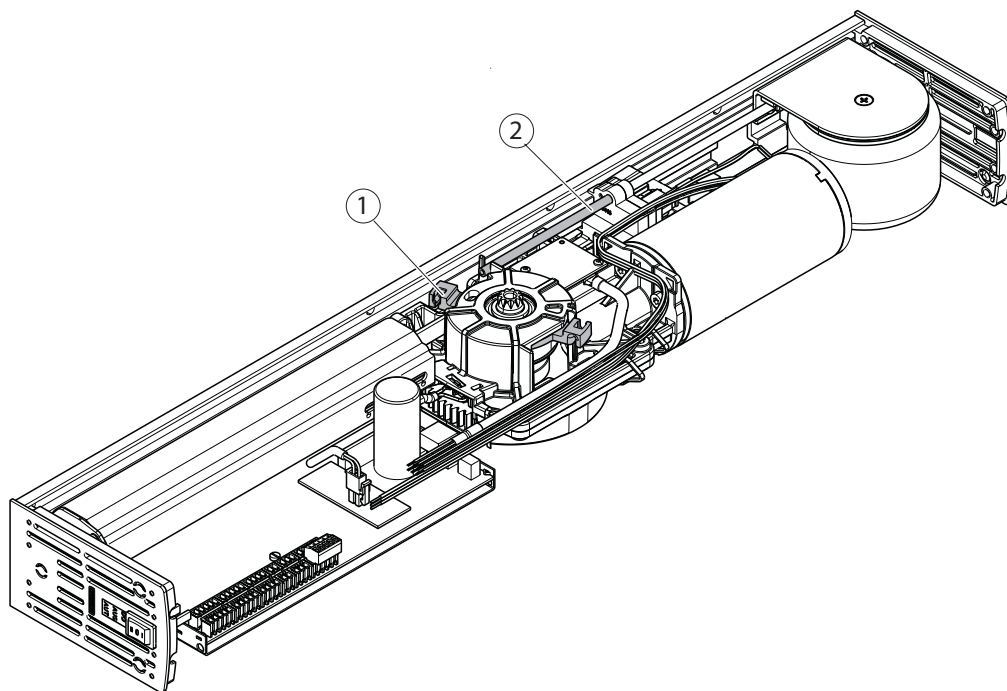
3.2 Basic structure and extension

3.2.1 Drive Slimdrive EMD F-IS – active leaf transom installation hinge side



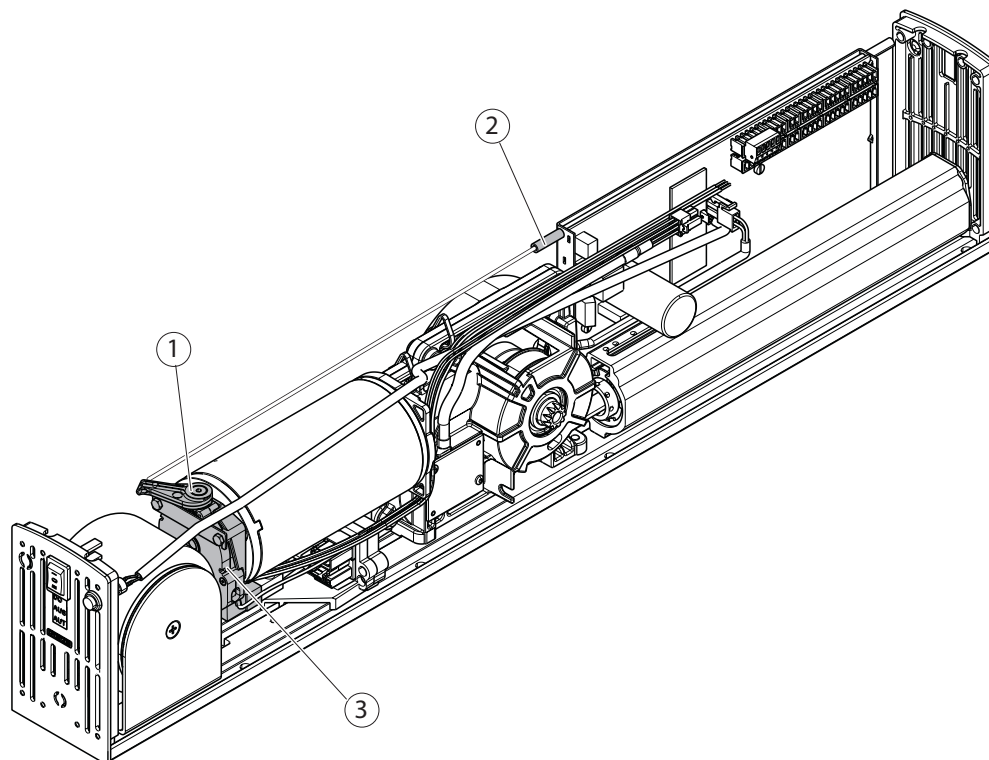
- 1 Wire rope guide
- 2 Ventilation lever brake K-BS
- 3 IS-brake

3.2.2 Drive Slimdrive EMD F-IS – passive leaf transom installation hinge side



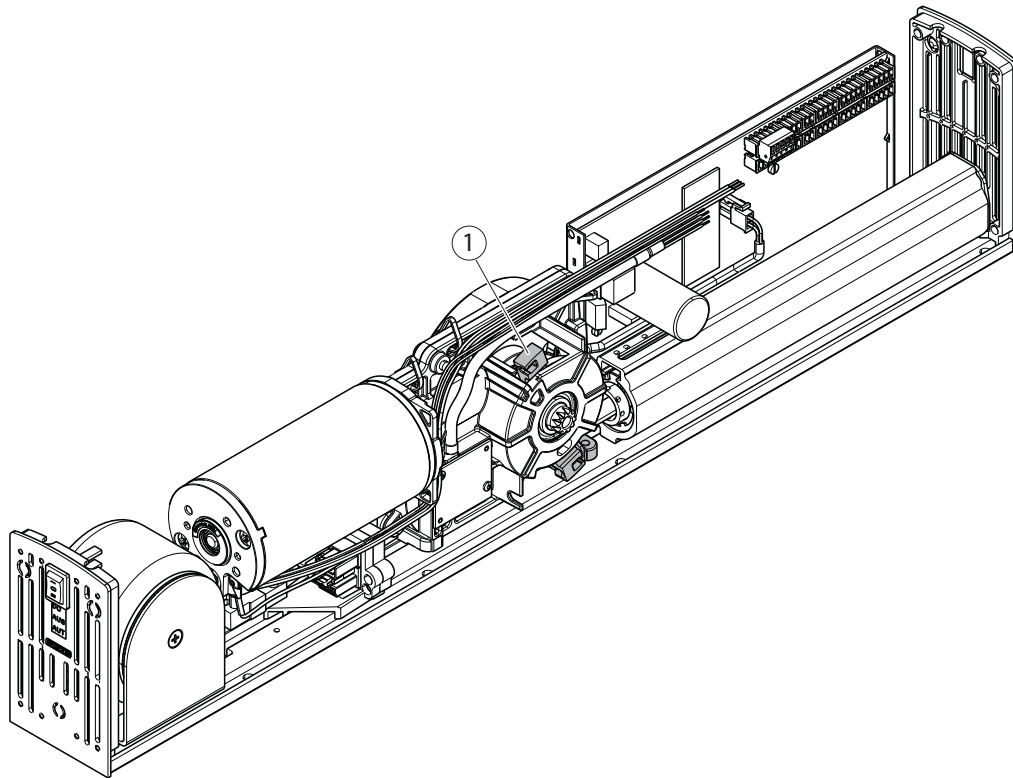
- 1 Trip rocker
- 2 Wire rope guide

3.2.3 Drive Slimdrive EMD F-IS – active leaf transom installation opposite hinge side



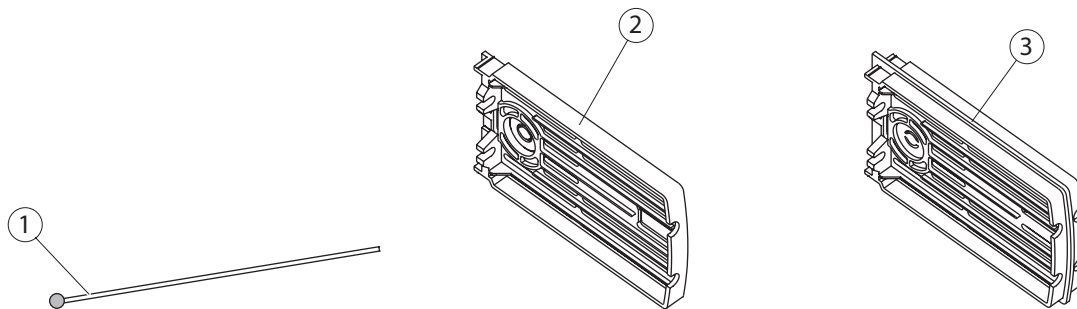
- 1 Ventilation lever brake K-BGS
- 2 Wire rope guide
- 3 IS-brake

3.2.4 Drive Slimdrive EMD F-IS – passive leaf transom installation opposite hinge side



- 1 Trip rocker

3.2.5 Accessories



- 1 Wire rope
- 2 Side panel for continuous cover
- 3 Side panel for intermediate cover kit

For other accessories see installation instructions Slimdrive EMD-F.

4 Types of installation

4.1 Use of the roller lever types depending on the type of installation

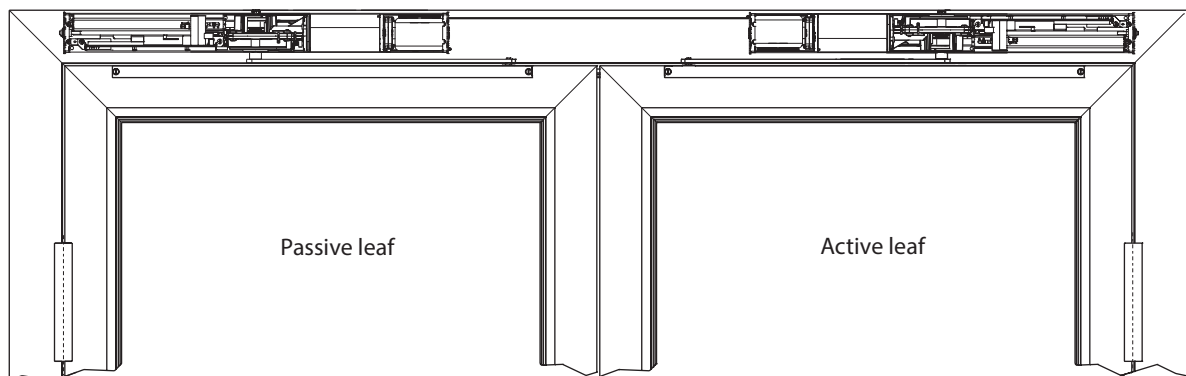


Also heed the marking on the roller lever.

Type of installation	Installation side	Roller lever
Transom installation hinge side	DIN left	Standard
	DIN right	Standard
Transom installation opposite hinge side	DIN left	Door leaf DIN left
	DIN right	Door leaf DIN right

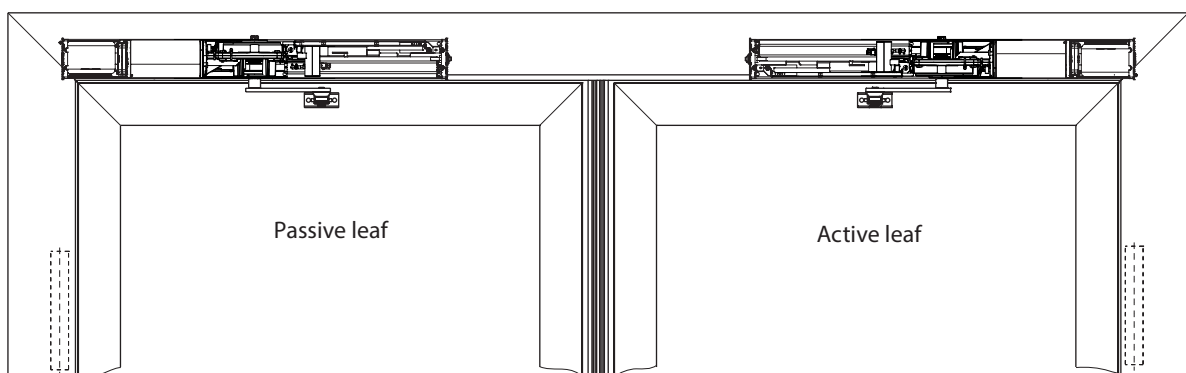
4.2 Type of installation transom installation hinge side

With this type of installation, only roller guide rail and lever can be used. Details about permissible reveal depth, door overlap and installation holes can be found in the Slimdrive EMD-F installation instructions.



4.3 Type of installation transom installation opposite hinge side

With this type of installation, both link arms as well as roller guide rail and lever can be used. Details about permissible reveal depth, door overlap and installation holes can be found in the Slimdrive EMD-F installation instructions.



Door leaf installation with mechanical, integrated closing sequence control is not possible.

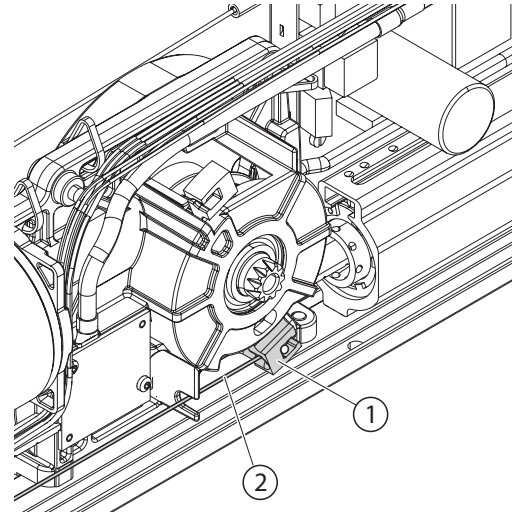
4.4 Installation of the drives and IS connection of active and passive leaves



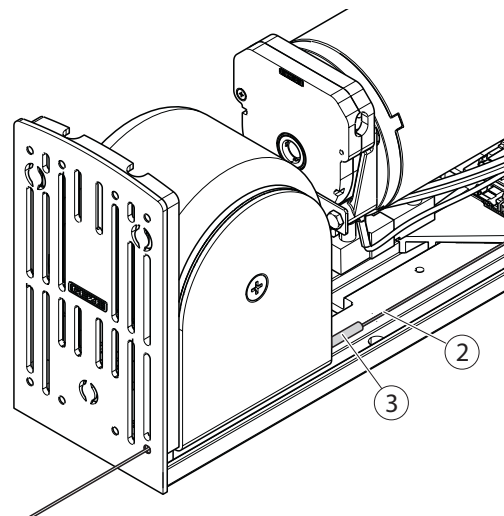
Installation of the drives and levers see Slimdrive EMD-F installation instructions.

4.4.1 Transom installation hinge side

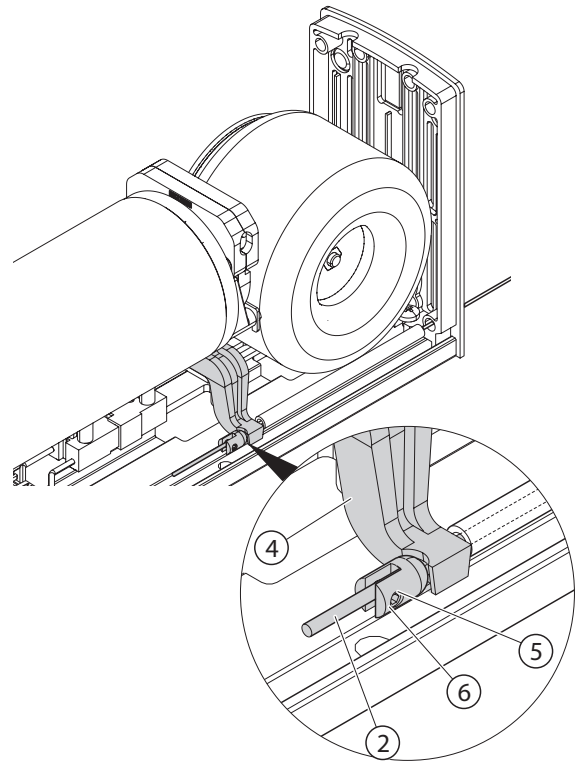
- ▶ Move active leaf to open position.
- ▶ Fix the passive leaf with approx. 30° door angle.
- ▶ Hook the wire rope (2) with the spherical button in the trigger rocker (1) of the passive leaf drive.



- ▶ Lay the wire rope (2) from the passive leaf drive through the slots in the side panels and the wire rope guides (3) to the IS-brake on the active leaf drive.

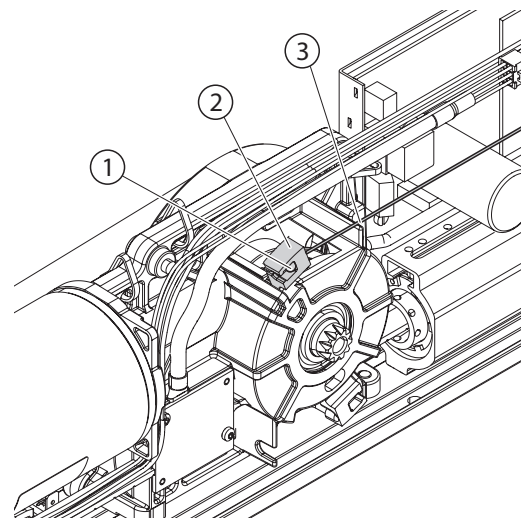


- ▶ Connect the wire rope (2) with the wire rope tightener (5) and headless pin (6) to the ventilation lever (4) so that the rope is taut but the ventilation lever is not yet deflected.
- ▶ Shorten the projecting wire rope to a suitable length. Note the correct wire rope setting (see "Correct wire rope setting" on page 11).

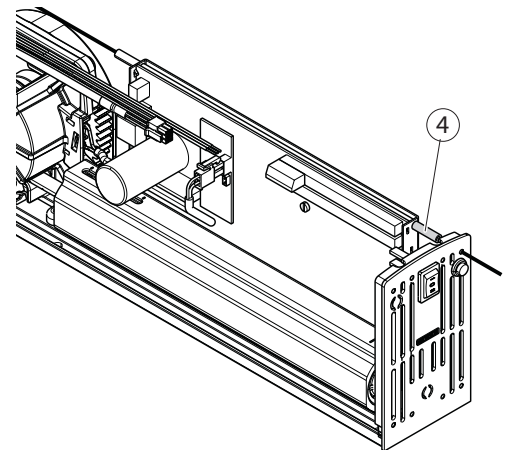


4.4.2 Transom installation opposite hinge side

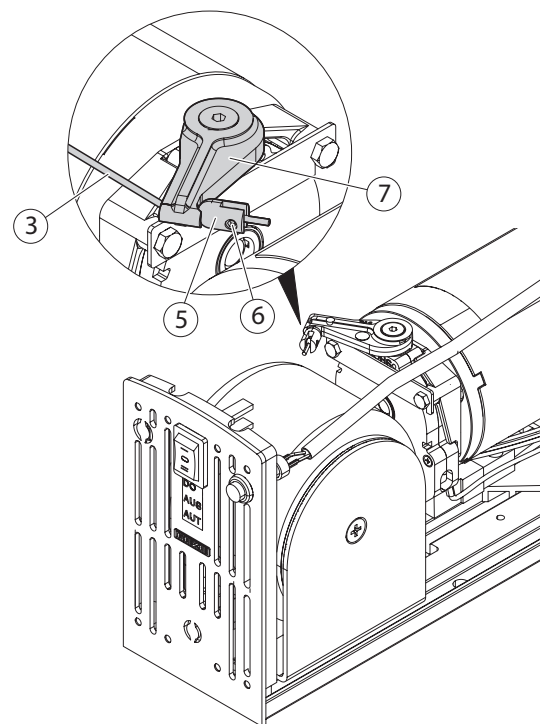
- ▶ Move active leaf to open position.
- ▶ Fix the fixed leaf with approx. 10° door angle.
- ▶ Hook the wire rope (3) with the spherical button (1) in the trip rocker (2) of the passive leaf drive.



- ▶ Lay the wire rope from the passive leaf drive through the slots in the side panels and the wire rope guides (4) to the IS-brake on the active leaf drive.

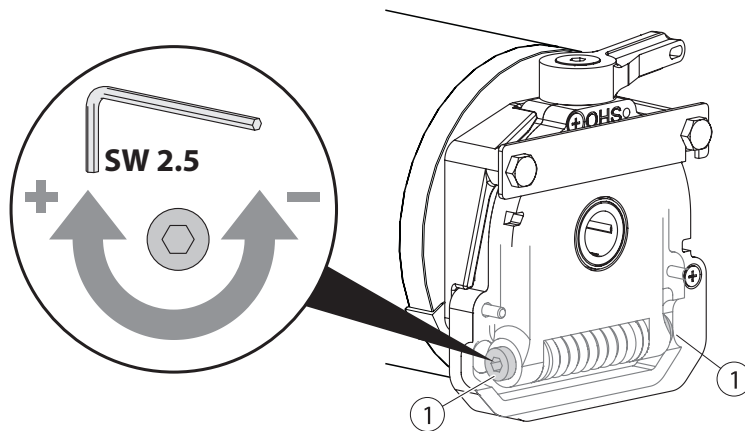


- ▶ Connect the wire rope (3) with the wire rope tightener (5) and headless pin (6) to the ventilation lever (7) so that the rope is taut but the ventilation lever is not yet deflected.
- ▶ Tighten headless pin (hexagon socket 1.5 mm) in the wire rope tightener (5). The wire rope is attached.
- ▶ Shorten the projecting wire rope to a suitable length. Note the correct wire rope setting (see "Correct wire rope setting" on page 11).



Correct wire rope setting

- The rope must be slightly tensioned in the given door position, but must not actuate the ventilation lever.
- The ventilation lever must return to its starting position when opening the passive leaf and must not lock in a self-locking position.



- ▶ Set the retaining action of the IS brake with the Allen screws (1).

4.4.3 Function check

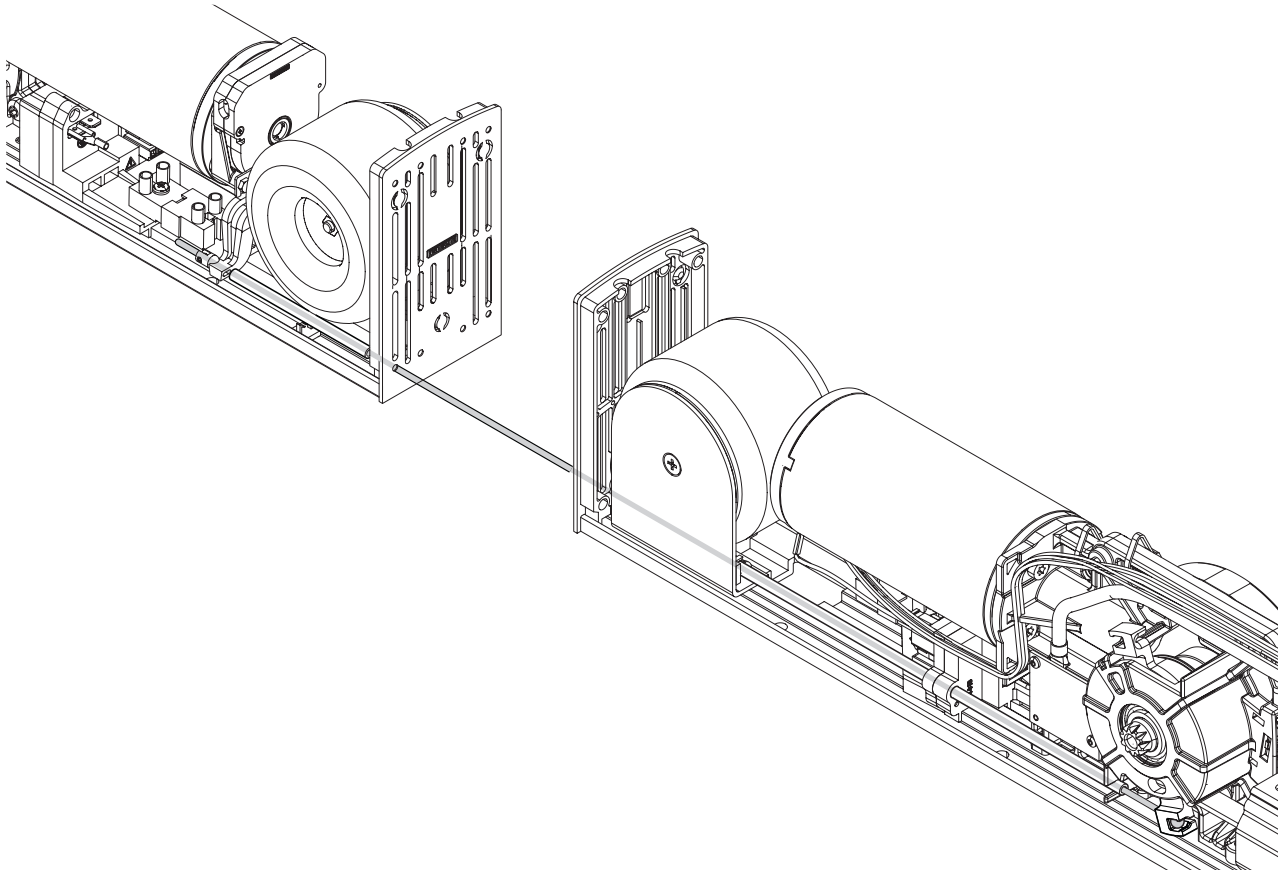
- ▶ Open active leaf to door angle of 90°.
 - ▶ Open passive leaf to door angle of 30°.
 - ▶ Allow passive leaf to close.
- From a door angle of approx. 5–10° for the passive leaf, the active leaf must start to close.
- ▶ Open the passive leaf again to approx. 30°, the active leaf then has to stop again.
 - ▶ Use a suitable measuring instrument to check the retaining action of the door.

Further test requirements: see national/international standards and regulations.

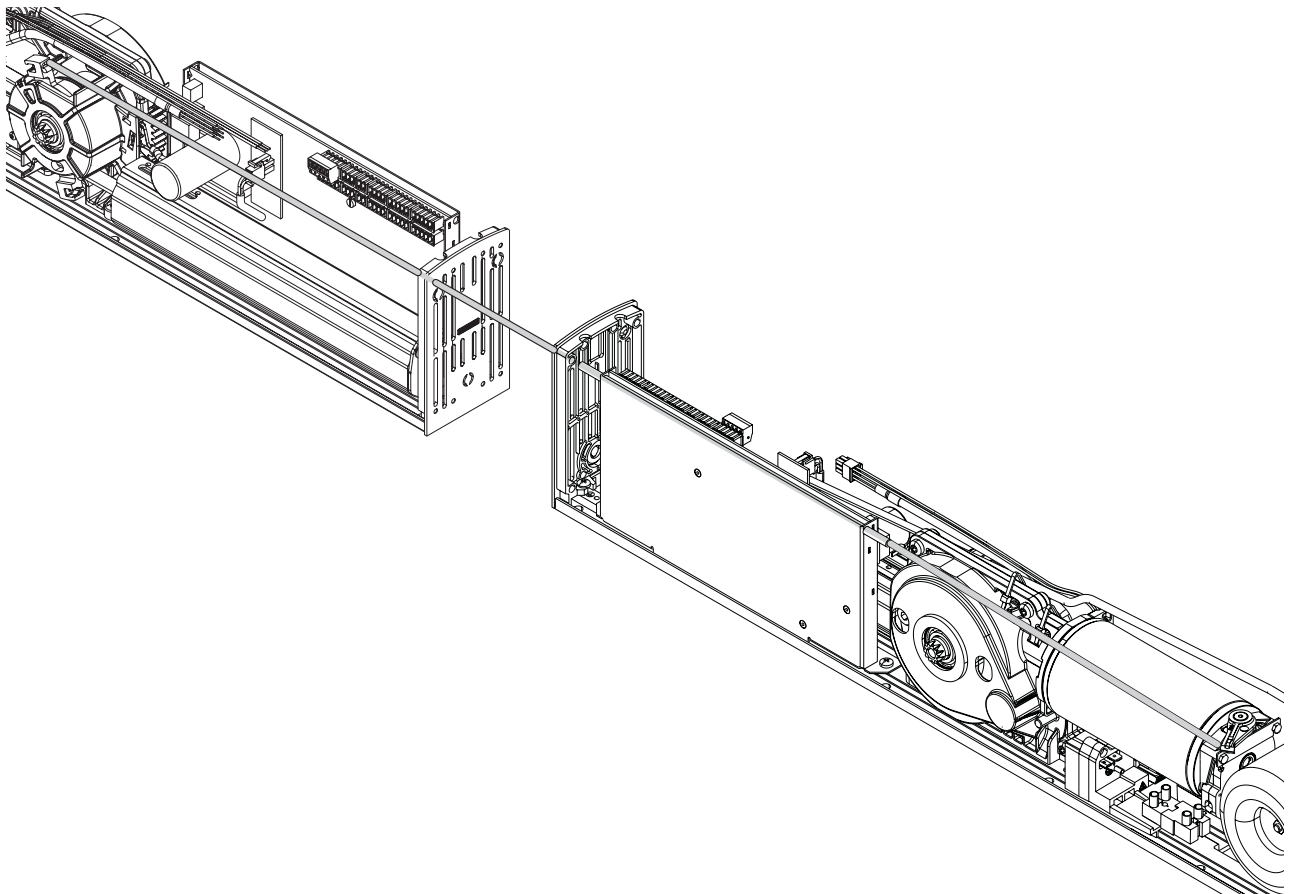


- See the wiring diagram Slimdrive EMD-F for the electrical connection between the active and passive leaves.
- ▶ During installation, take care that there is no cable in the range of movement of the ventilation lever.
- ▶ Make sure the cables are secured sufficiently well.

4.4.4 Type of installation transom installation hinge side



4.4.5 Type of installation transom installation opposite hinge side

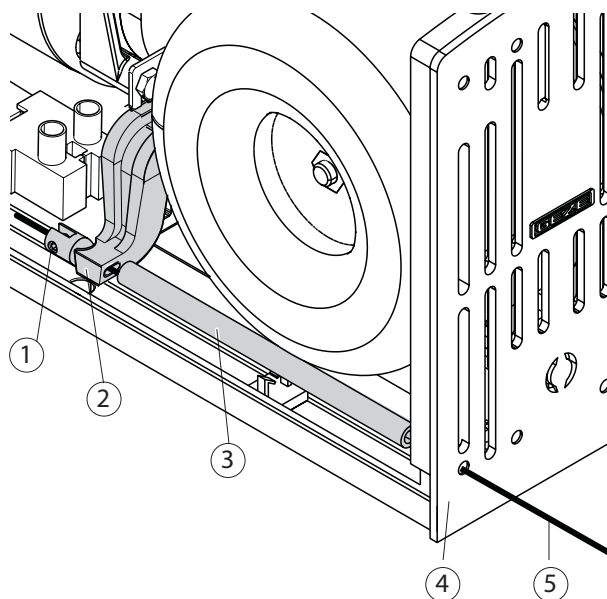


4.5 Replace brake unit on the active leaf drive

4.5.1 Drive for transom installation hinge side

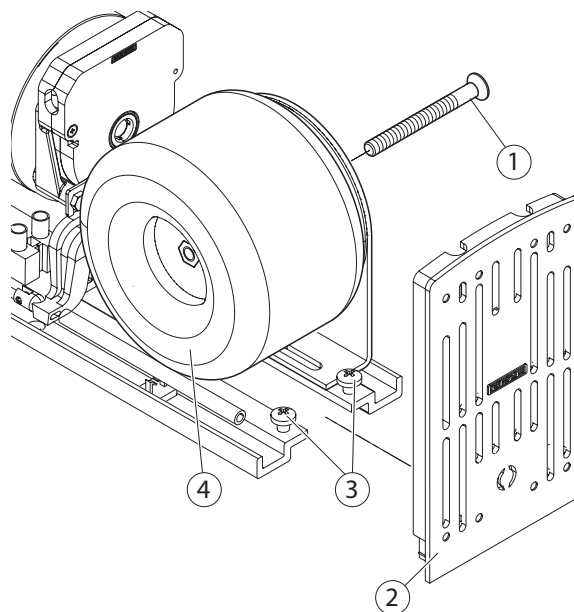
Loosen the wire rope attachment in the ventilation lever

- ▶ Loosen headless pin (1) with an Allen key SW 1.5 mm in the wire rope tightener.
- ▶ Remove wire rope (5) from the wire rope tightener, ventilation lever (2), wire rope guide (3) and side panel (4).



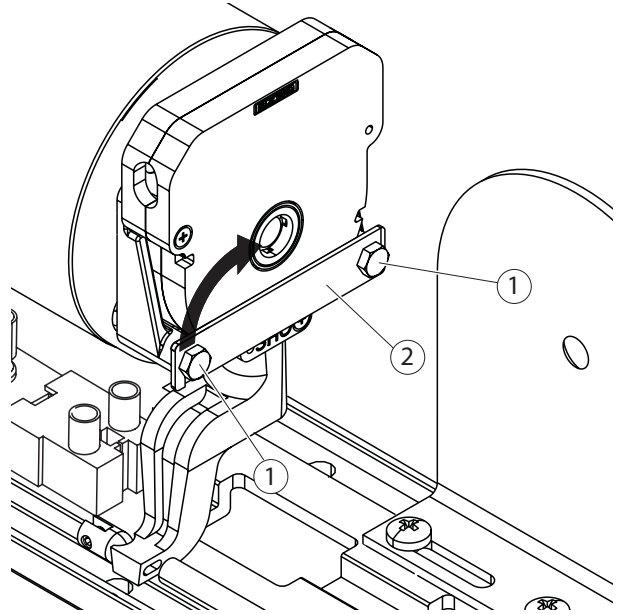
Dismantle side panel and transformer

- ▶ Loosen 2 screws (3).
- ▶ Remove side panel (2) from transformer.
- ▶ Unscrew the screws (1).
- ▶ Remove transformer (4) and position so that the transformer's weight does not excessively pull on the connection cable.

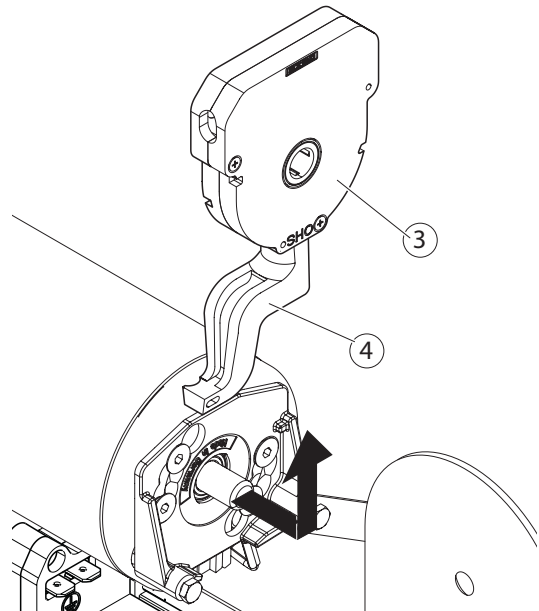


Dismantle brake unit

- ▶ Loosen hex screws SW 5.5 mm (1) on the retaining plate (2).
- ▶ Turn retaining plate (2) to one side.



- ▶ Remove brake unit (3) with ventilation lever (4) from the motor shaft.

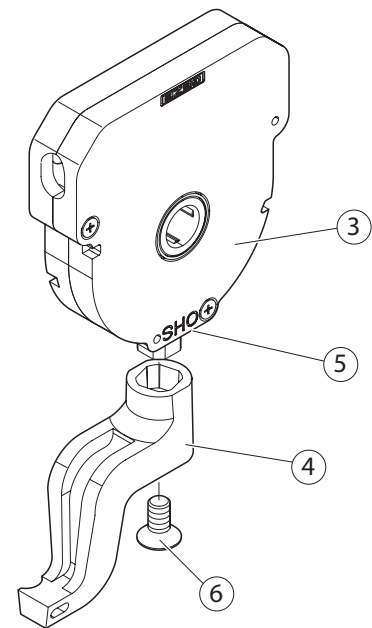


- ▶ Loosen M4 countersunk screw (6) with Allen key SW 2.5 mm and remove ventilation lever (4) from the brake unit (3).
- ▶ Fit the ventilation lever (4) in the correct position with M4 countersunk screw (6) on the new brake unit. Tightening torque 2.5 Nm
- ▶ Insert new brake unit (3) in the correct position on the motor shaft.
- ▶ The label "OHS" (5) must be visible on the housing.
- ▶ Turn the retaining plate (2) back, tighten hex screws (1) with 1 Nm.



For assembly of transformer and side panel, check the fastening and laying of the connection cable are secure.

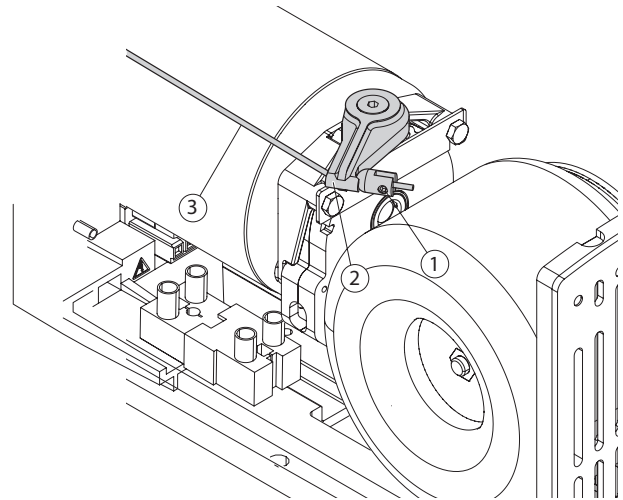
- ▶ Assemble transformer and side panel. Tightening torque 2.5 Nm.
- ▶ Check wire rope for damage, replace wire rope if necessary.
- ▶ Thread wire rope through side panel, wire rope guide, ventilation lever and wire rope tightener.
- ▶ Fasten wire rope tightener to the wire rope. For setting of the wire rope and the mechanism for integrated closing sequence control, see chapter 4.4.1.



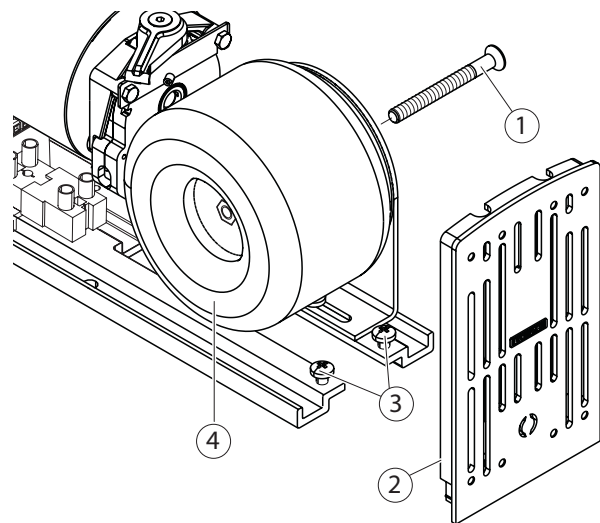
4.5.2 Drive for transom installation opposite hinge side

Loosen the wire rope attachment in the ventilation lever

- ▶ Loosen headless pin (1) with an Allen key SW 1.5 mm in the wire rope tightener.
- ▶ Pull wire rope (3) out of the wire rope tensioner, ventilation lever (2) and side panel.

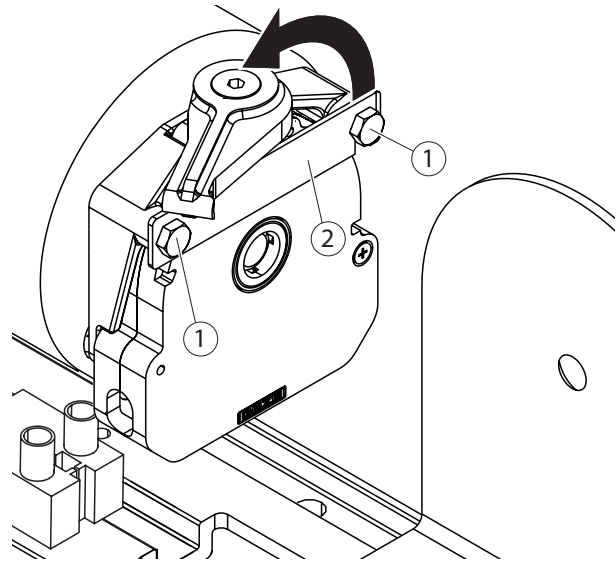
**Dismantle side panel and transformer**

- ▶ Loosen 2 screws (3).
- ▶ Remove side panel (2) from transformer.
- ▶ Unscrew the screws (1).
- ▶ Remove transformer (4) and position so that the transformer's weight does not excessively pull on the connection cable.

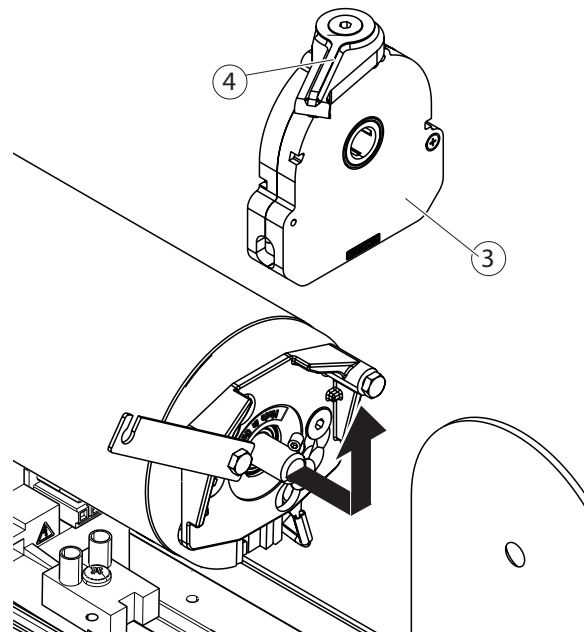


Dismantle brake unit

- ▶ Loosen hex screws SW 5.5 mm (1) on the retaining plate (2).
- ▶ Turn retaining plate (2) to one side.



- ▶ Remove brake unit (3) with ventilation lever (4) from the motor shaft.

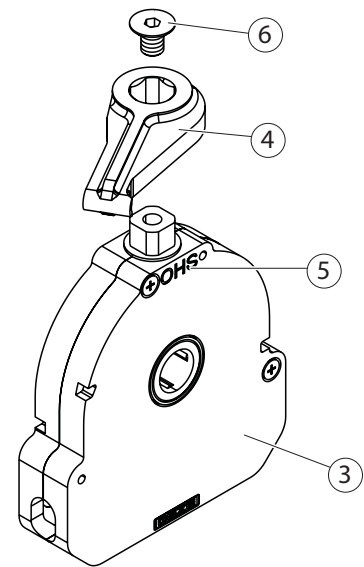


- ▶ Loosen M4 countersunk screw (6) with Allen key SW 2.5 mm and remove ventilation lever (4) from the brake unit (3).
- ▶ Fit the ventilation lever (4) in the correct position with M4 countersunk screw (6) on the new brake unit.
- ▶ Tightening torque 2.5 Nm
- ▶ Insert new brake unit (3) in the correct position on the motor shaft.
- ▶ The label "OHS" (5) must be visible on the housing.
- ▶ Turn the retaining plate (2) back, tighten hex screws (1) with 1 Nm.





For assembly of transformer and side panel, check the fastening and laying of the connection cable are secure.

- ▶ Assemble transformer and side panel.
- ▶ Tightening torque 2.5 Nm.
- ▶ Check wire rope for damage, replace wire rope if necessary.
- ▶ Thread wire rope through side panel, wire rope guide, ventilation lever and wire rope tightener.
- ▶ Fasten wire rope tightener to the wire rope.
- ▶ For setting of the wire rope and the mechanism for integrated closing sequence control, see chapter 4.4.1.



5 CE mark according to EN 1158

The Slimdrive EMD F-IS has the following classification according to EN 1158:1997 + A1:2002:

	 Reinhold-Vöster-Str. 21-29 D-71229 Leonberg	16					
0672-CPR-0109	EN 1158:1997 + A1:2002	3	8	6 3	1	1	3
ID 168079							

- ▶ Affix the CE mark sticker on the inside of the cover.

6 Identification plate

See installation instructions Slimdrive EMD-F for marking and entries on the identification plate.

7 Commissioning

See installation instructions and wiring diagram Slimdrive EMD-F for electrical connection, spring force setting and teaching process.

8 Service and maintenance

8.1 Maintenance requirements

The maintenance work on the closing sequence control must be carried out by an expert during the maintenance cycle of the Slimdrive EMD and Slimdrive EMD-F drives.

See installation instructions Slimdrive EMD-F for maintenance instructions.

8.2 Additional service work for Slimdrive EMD F-IS systems



Danger of mechanical damage to IS trigger parts.

- ▶ Before dismantling or unhooking the link arms or roller lever, loosen wire cable coupling first.

- Check the condition of the wire rope for any damage to the sheathing.
- Measure the retaining action of the IS brake in the range of the waiting position of the active leaf, if necessary increase the retaining action, see "Correct wire rope setting" on page 11. The wire rope must be replaced if necessary.

8.3 Troubleshooting

For troubleshooting and fault elimination see the fault table in the wiring diagram, "Fault messages" section.

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