

## FIXING INSTRUCTIONS

### Technical Data EMF

Operating voltage:	24 V DC
Power input:	1,4 W (GSR EMF2 = 2,8 W)
Rated for continuous duty:	100 % ED
Release torque:	approx. 25 - 65 Nm at an opening angle of 90° (dependent upon the strength setting of the door closer)
Door opening angle:	max. 130°

The unit is controlled by an external RMZ smoke detector

### Approval certification

The G - SR has been approved by the State Material Testing Authority, Dortmund, for use on double (two-leaf) fire/smoke check doors in Germany.

A separate approval certificate is required in conjunction with the fire/smoke check door concerned (e.g. where DIN standards apply) – check local regulations.

### Abbreviations

<b>G</b>	= Active leaf
<b>S</b>	= Inactive leaf
<b>GSR</b>	= Slide channel-type door co-ordinator
<b>GSR EMF1</b>	= with electro-mechanical hold-open for the inactive leaf
<b>GSR EMF2</b>	= with electro-mechanical hold-open for the inactive and active leaves
<b>GSR EMF1G</b>	= with electro-mechanical hold-open for the active leaf

**The slide channels are non-handed, i.e. suitable for LH and RH doors.**

The following describes the fixing process for a left-handed (ISO 6) active leaf. The procedure for a right-handed (ISO 5) active leaf should be adapted accordingly.

### 1a Door width >1350 mm

Drill the fixing points for the closer body and slide channel in accordance with the template or the dimensioned drawing.

Drill fixing points for the cover mounting plate. For models with electro-mechanical hold-open, wire-in the power supply from the smoke detector.

### 1b Door width 1220 - 1350 mm

Installation is only possible with the G - SR-VK cover set for narrow doors (shorter arm).

Drill the fixing points for the closer body and slide channel in accordance with the template or the dimensioned drawing.

The holes marked with a "+" on the template should be used for the slide channels.

For models with electro-mechanical hold-open, wire-in the power supply from the smoke detector.

**2** To fix the inactive leaf slide channel, proceed as indicated in steps ① - ③

**3** To fix the active leaf slide channel, proceed as indicated pictorially in steps ① - ③

Fit the closer body and arm in accordance with the TS 93 B fixing instructions, and adjust both door closers as required

**4** Measure dimension X ①.  
Shorten connecting rod to X – 47 mm ②.

**5** Open both door leaves ① ②.  
Ensure that the adjustment sleeve has been fully wound in ③.  
Insert the connecting rod into the adjustment sleeve of the active leaf slide channel ④, and then place in the plastic slider of the inactive leaf slide channel ⑤.

**6** Close both door leaves ① ②.  
Unwind the adjustment sleeve by hand ③ until pin drops out ④. In this process, ensure that the clamping plate remains perpendicular (90°) to the clamping rod ④.  
Secure adjustment sleeve ⑤.  
Note: The pin retains the closing mechanism in its neutral position without clamping and can be discarded once the system has been installed.



**The clamping rod will only operate smoothly if the clamping plate has been properly adjusted. Only then will the active leaf swing freely with the inactive leaf closed.**

### Functional checks:

Open both door leaves and then hold the inactive leaf in its open position.

The active leaf must then stay open at any angle.

Allow the inactive leaf to close.

The active leaf should close automatically once the inactive leaf has reached its closed position.

**For G - SR without electro-mechanical hold-open (EMF), skip to step 10**

- 7** Install interconnecting cabling supplied ① (shortening as necessary)  
Ensure that the cable does not come into contact with any moving parts and that it is not caught inside the connecting rod.

Connect the cable as follows:  
EMF - inactive leaf ②

24 V DC - from RMZ smoke detector or smoke detector by others ③

E = Limit switch - this releases the inactive leaf when the active leaf is pulled off/released from its hold-open position.

## **8 Setting the hold-open point**

### **GSR-EMF 1**

The hold-open point of the inactive leaf is adjustable between approx. 80° and 130°. The active leaf is held open by the door co-ordinator.

### **GSR-EMF 1G**

The hold-open point of the active leaf is adjustable between approx. 80° and 130° (inactive leaf cannot be held open).

### **GSR-EMF 2**

Both hold-open points can be adjusted independently of one another between approx. 80° and 130°.

Switch on power supply (24 V DC).  
Open door leaves and engage hold-open ① .  
Loosen screws ②.  
Open door to required hold-open angle and secure ③.  
Re-tighten screws ④.



**The door cannot be opened beyond the hold-open point; fix a door stop at this position ⑤.**

## **9 Setting the pull-off force**

Adjust the pull-off force to suit the door width and size of door closer.  
EN 1155 states that the release torque at 90° door opening angle should be between 40 and 120 Nm.



**If the pull-off force is set too high, damage might occur at the hinges and the fixings of the door closer system.**

### **Functional checks:**

#### **GSR EMF 1, GSR EMF 2:**

Open both door leaves and engage hold-open.  
Then pull the active leaf closed.  
The inactive leaf must be automatically released and closed.  
The active leaf should also close automatically once the inactive leaf has reached its closed position.

#### **GSR-EMF 1, GSR-EMF 1G, GSR-EMF 2:**

Open active leaf and engage hold-open.  
Open inactive leaf and engage hold-open (not EMF 1G).  
Interrupt the power supply and ensure that the hold open mechanisms are released.  
The active leaf should also close automatically once the inactive leaf has reached its closed position.

- 10** Clip on end cap trims.  
Break out marked recess in the cover and clip cover into position. Ensure that the cover provides a flush closure with the end cap trims.

- 11** Determine the required length of centre cover and saw to size.  
Clip on cover and plastic jointing elements.

For remainder of the installation, see fixing instructions for TS 93 B.

### **FINAL INSPECTION AND MAINTENANCE**

 See instruction sheet relating to the use and application of hold-open systems.

### **FURTHER INFORMATION**

 See guidelines for hold-open systems published by the Institute for Building Technology, Berlin<sup>1)</sup>, or equivalent national guidelines.

<sup>1)</sup> Some documents are only printed in German as they refer exclusively to the German market.