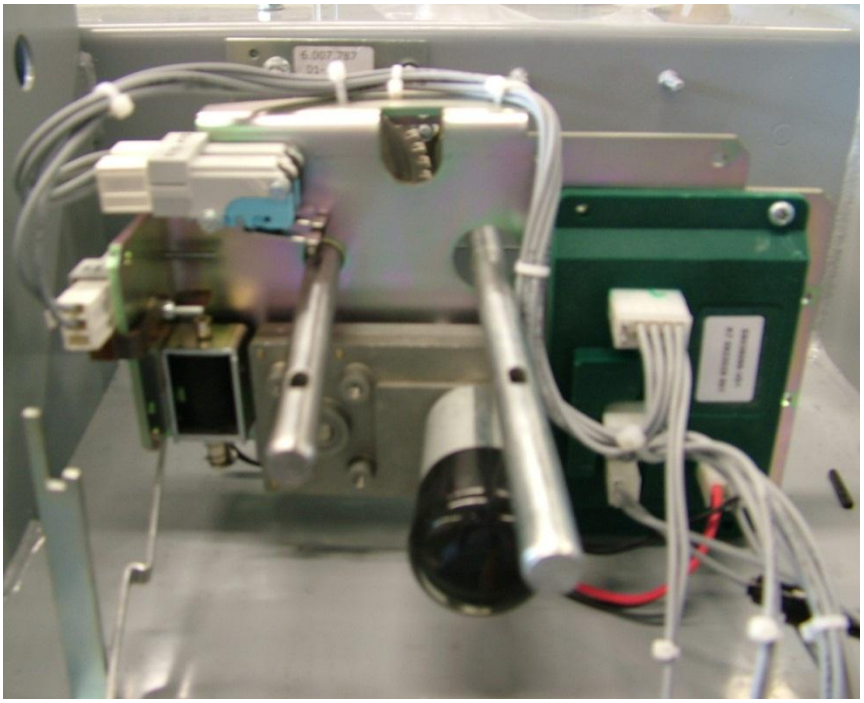
Installation instructions Xiria
Remote Control: signalling, tripping and closing units



Powering Business Worldwide

Administrative data
Issue number: B
Date of issue: 1-06-2010

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Table of contents

1 Remote signalling

1.1 Preparation remote signalling

Use the “Materials required” chapter to determine which materials are required to install the remote signalling. For this purpose, the following must first be determined.

Determine the release of the installations to be modified.

Determine on how many installations one or more panels must be equipped with remote signalling and if 3- or 4 -panel installations are involved.

Determine on which side an opening must be made to feed wiring into the installation.
This can be left, right or left and right.

Determine how many panels must be modified.

In case of trip indicator option: a transformer panel must be checked to see if it is equipped with a trip indicator.
If it is, it must be checked to see if it is a trip indicator with auxiliary contacts.

General warning: when front module disassembly is needed keep the cable compartment door closed.

1.2 Materials required for installing remote signalling

Wiring diagram: R34S30.291

For each panel:
1x/panel, auxiliary switch set 6034292

If cable panel (no SEG relay) in panel.
2x/panel m6 082.304 panel washer.

If transformer panel (SEG relay fitted) is equipped with a trip indicator without auxiliary contacts
1x/panel bracket for trip indicator plugs 665.988.

If 3-panel installation
1x/installation wiring duct 665.310
3x/installation rivet 4.8x8 665.725

If 3-panel installation and existing installation <= release 2.0
1x/installation guard secondary 665.090.

If 4-panel installation
1x/installation wiring duct 665.434.
4x/installation rivet 4.8x8 665.725.

If 4-panel installation and existing installation <= release 2.0
1x/installation guard secondary 665.432.

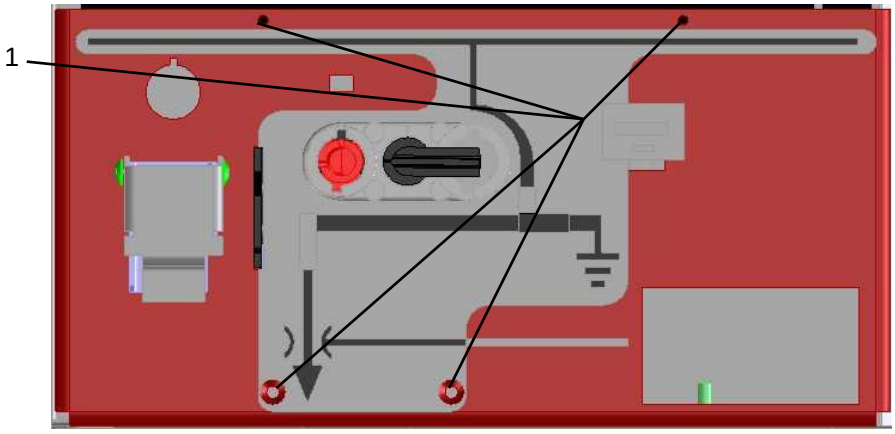
If cable feed through left and existing installation <= release 2.0
1x/installation profile left 665.121.
1x/installation cover plate 665.912
2x m5x8 071.818 screws

If cable feed through right and existing installation <= release 2.0
1x/installation profile right 665.122.
1x/installation cover plate 665.912.
2x m5x8 071.818 screws

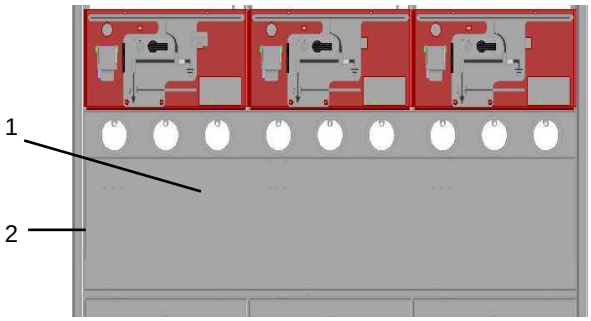
If installation <= release 2.0
1x/installation rating plate

1.3 Instructions for installing remote signalling

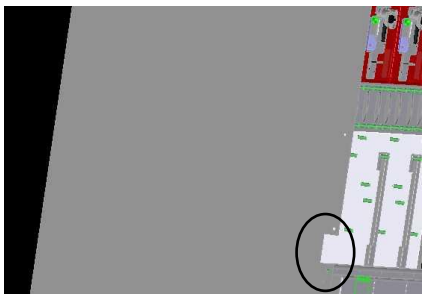
It is preferable to modify the relevant panels before they are installed. You must, however, always work safely. See also the XIRIA manual.

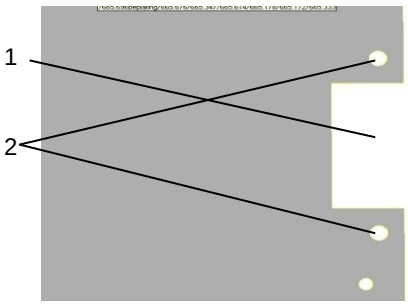


Remove the screws (1) from the panels to be modified.

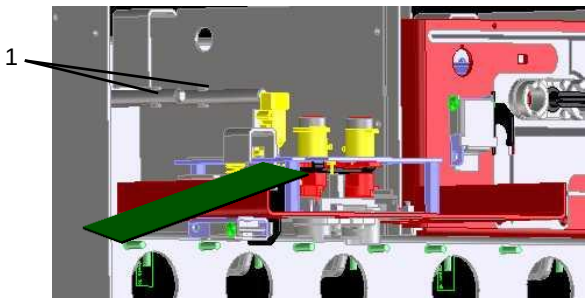


Remove the secondary cover (1). Determine on which side the cable is to be fed in and remove the side post (2)* on this side (now, the top cover of the installation must also be lifted).

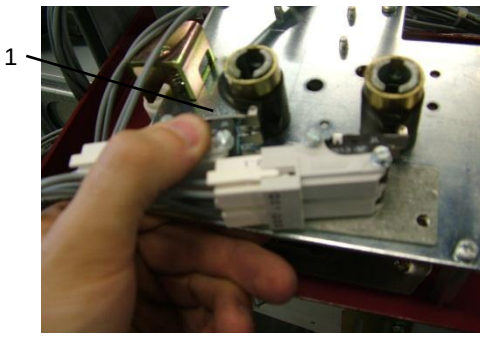




Make a cut-out (1)* and two holes of diameter 6 (2)*. Here, the new side post can serve as a jig.

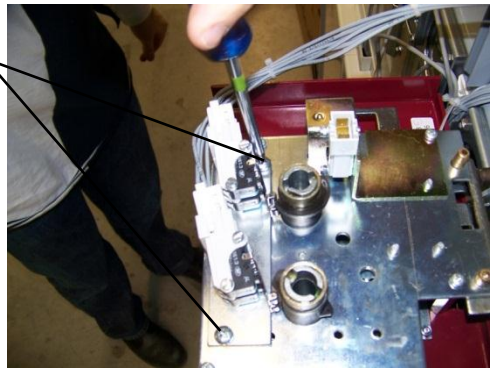


Slide the front panel forwards, tilt it 90 ° and support it. Make sure that the keys (1) of the drive shafts are not lost!

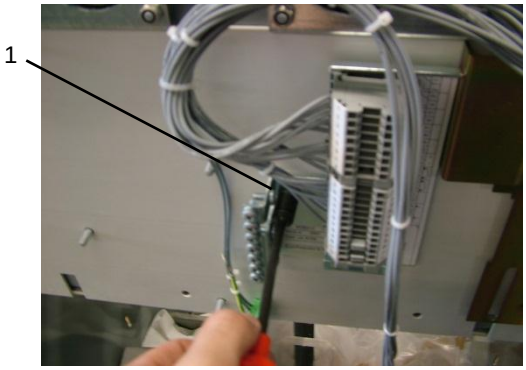


Place the microswitch set as shown in the picture

Remote signalling



Fix the plate by the two M5x10 screws (1)

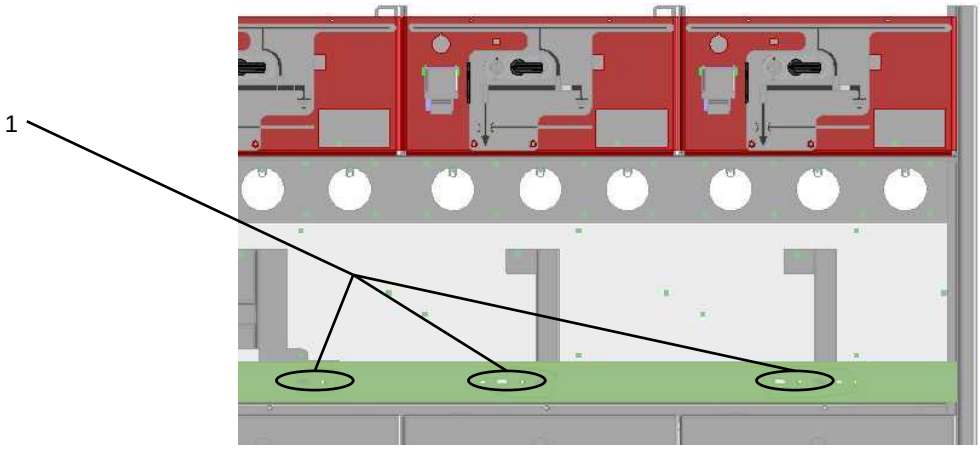


Place the brace on the front plate and secure it with the M6 nut

Slide the front panel back in place and screw it tight.

Before the following steps can be taken, it may be necessary to fasten the existing wiring differently.

Fasten the base plate (with cable terminals) on the existing studs (1) in the secondary cabinet.

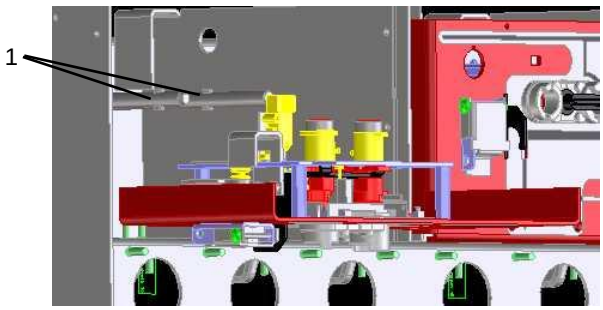


Assemble the cable duct with the rivets (1).

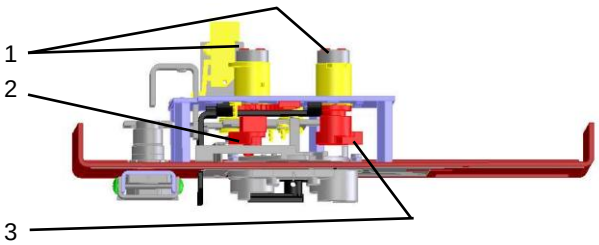
Assemble new side post(s)* acc. to 665.121 (left) and/or 665.122 (right).

Testing the remote signalling.

The remote signalling must be functionally tested acc. to diagram R34S30.285



Check if the drive rods are equipped with a key (1)**.



Check if the cut-outs in front of the keys are properly positioned (vertically) in bushes (1).
Cam (2) should point to the left and cam (3) to the right.
**

For release >=3.0, grooved shaft gives only one assembly possibility: position the front module cam (1 in last picture) in the right position

Assemble the new secondary cover acc. to 665.090 (if 3-panel installation) or acc. to 665.432 (if 4-panel installation)*. Provide cover with a new type plate. Finally, assemble the cover plate 665.912 on side post with two M5X8 screws to seal the hole for the cable feed through.

* Only required if the installation is release 2.0 or lower (older).
** Only required for (release 2.9.1 or lower)

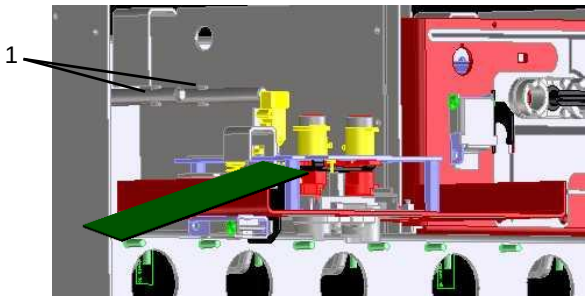
1.4 Instructions for Option Trip Indicator

For every panel to be equipped with trip indicator:

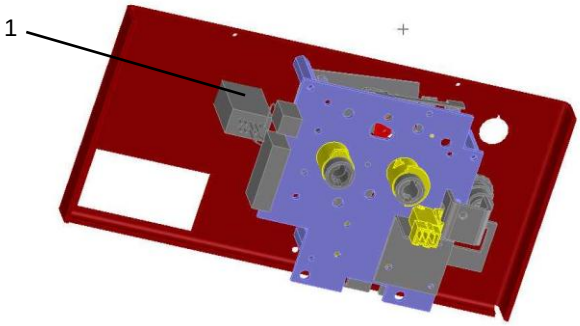
- Wire trip indicator E6037238
- Trip indicator E665246
- Bracket 665988 (optional)

Wiring diagram

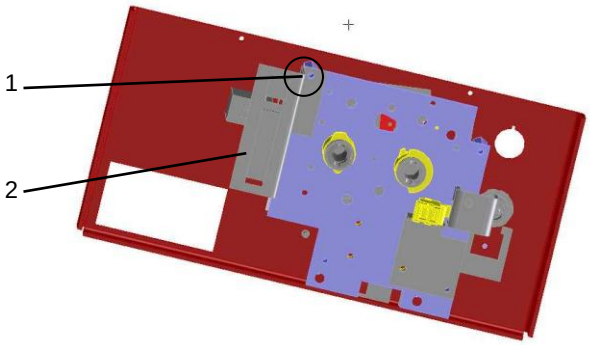
- R34S30.291



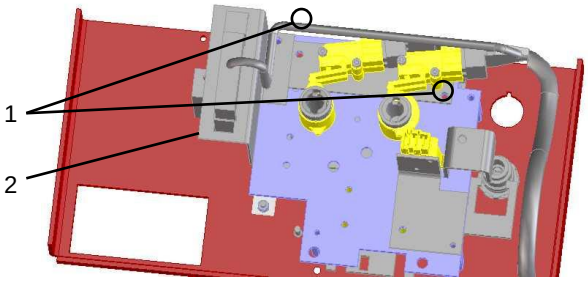
Slide the front panel forwards, tilt it 90° and support it. Make sure that the keys (1) of the drive shafts are not lost!



If the panel is equipped with an SEG relay and with a trip indicator without auxiliary contacts, they must be replaced by a trip indicator with auxiliary contacts (1).



If the panel is equipped with an SZ5H trip indicator, fasten bracket (2)* with the existing screw (1). Attention: Assembly is also possible without bracket by using a tie wrap to fasten the bundle to the front module.



Bundle the wiring to the signaling (1).

If the panel is equipped with an SZ5H trip indicator, the connectors can be connected so that they are fixed on bracket (2).

If the panel is equipped with a Horstmann short circuit detector, cut the 8-pole connector (4) from the cable and connect the wires to the detector acc. to diagram R34S30.291.

Reassembly the front module as shown in par. 1.3.

2 Remote control: Remote tripping via external relay

2.1 Preparation remote signalling

Use the “Materials required” chapter to determine which materials are required to install the remote signaling. For this purpose, the following must first be determined.

Determine the release of the installations to be modified.

Determine on how many installations one or more panels must be equipped with remote signaling and if 3- or 4-panel installations are involved.

Determine on which side an opening must be made to feed wiring into the installation.
This can be left, right or left and right.

Determine how many panels must be modified.

Attention: This option is only applicable for transformer panels. If the current installation is equipped with options higher than remote signaling (Remote trip or Remote trip + Remote closing options), then it will be necessary to use options Remote trip + signaling (paragraph 0 in this service manual) or remote trip + closing + signaling (paragraph 0 in this service manual).
Voltage Applicable is only working via a signal that is 24 V DC -30%/+10%,

2.2 Materials required for installing remote tripping via external relay

Wiring diagram: R34S30.291

For each panel:
1x/panel, Simple trip kit 6038198, for release <= 2.9.1 also 1x/panel micro switch set S2S6 665317

If 3-panel installation and existing installation <= release 2.0
1x/installation guard secondary 665.090.

If 4-panel installation
1x/installation wiring duct 665.434.
4x/installation rivet 4.8x8 665.725.

If 4-panel installation and existing installation <= release 2.0
1x/installation guard secondary 665.432.

If cable feed through left and existing installation <= release 2.0
1x/installation profile left 665.121.
1x/installation cover plate 665.912
2x m5x8 071.818 screws

If cable feed through right and existing installation <= release 2.0
1x/installation profile right 665.122.
1x/installation cover plate 665.912.
2x m5x8 071.818 screws

If installation <= release 2.0
1x/installation rating plate

2.3 Instructions for installing remote tripping via external relay

It is preferable to modify the relevant panels before they are installed. You must, however, always work safely. See also the XIRIA manual. The modification must be performed with a disconnected or earthed rail system and a disconnected or earthed cable. The switch must be switched off.

Remove the cover from the installation

For the following actions, see this document chapter 1.3

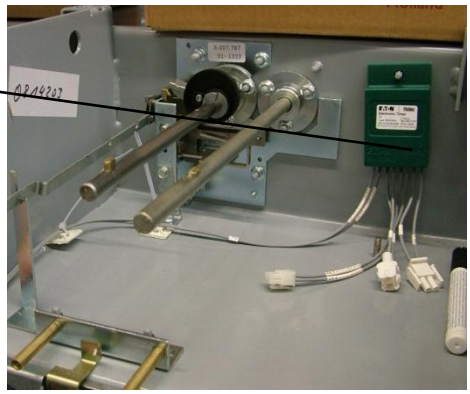
Remove front panel

Remove secondary cover

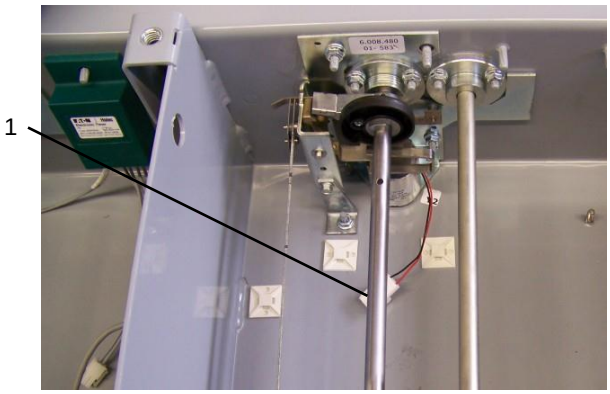
If the installation is older than release 2.1:

Remove side post(s).

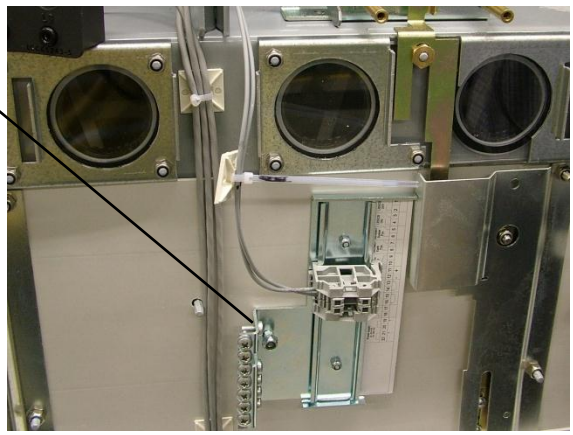
Make cut-out(s) in the tray.



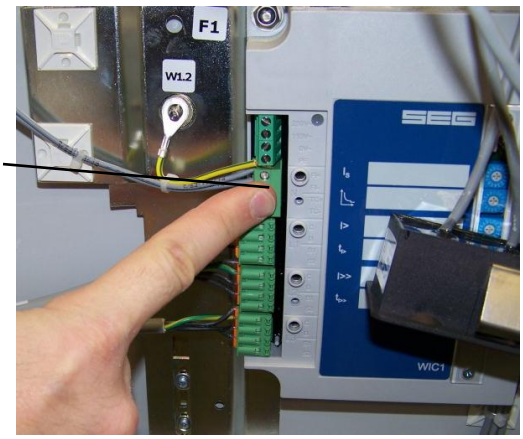
Insert the timer in the enclosure (1). use the M6 flange nut with a 8 mm washer to secure it (1). Connect S2-S6 to the microswitches in the front module (instructions par. 4.3). For releases <=2.9.1, Short circuit the S6 connector without connecting it to the microswitch (e.g.: use a Wago 222-413)



Connect the connector: Y2 (1) to the trip coil ,

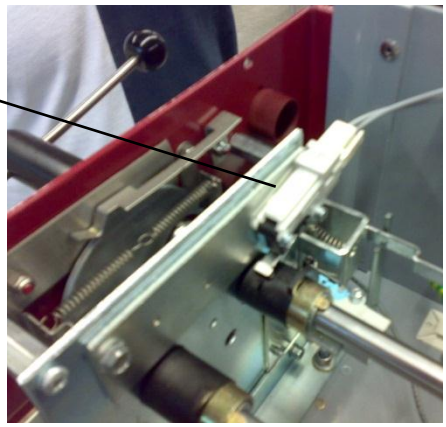


Place the brace on the front module and secure it using the M6 self locking nut



Connect the green F1 connector to the WIC relay

Remote control: Remote tripping via external relay



Place the brace on the front module and secure it using the 2x M5 screws

For the following actions, see this document par. 1.3

Assemble successively cable duct, side post(s).

Check secondary (functionally) according to Diagram R34S30.291

Assemble Secondary cover and cover installation.

3 Remote control: remote tripping + Signalling option

3.1 Preparation installation of remote control / remote tripping

Determine if the panels to be modified are equipped with remote signalling. If so, remove the old signalling unit.
If the panel is equipped with a trip indicator, it is necessary then to use also a new wire for trip indicator option and a brace, follow then paragraph 1.4 for the materials needed and the installation procedure.

Determine the release of the installations to be modified

Determine how many panels must be modified and which panels are involved (circuit breaker or load-break switch panels).

Determine which panels are equipped with tripping and which panels are equipped with complete motor operation including tripping.

3.2 Materials needed for remote control / remote tripping + signaling unit

Wiring diagram: R34S30.291

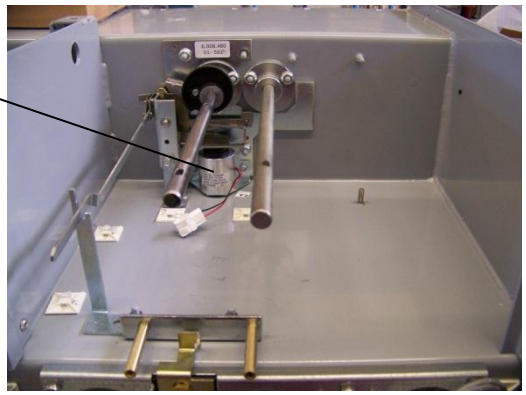
For every panel to be modified:
For transformer panel: Remote control (trip+signaling) unit 6038210 + micro switch set S2-S6 665317 for release <= 2.9.1
For transformer panel: Remote control (trip+signaling) unit 6038210 for release > 2.9.1
For cable panel: Remote control (trip+signaling) unit 6038206 + disengaging device 6008480

For the installation of the micro switches signalling unit please refer to the paragraph 1.3.

3.3 Instructions for installing remote control / remote tripping + signalling

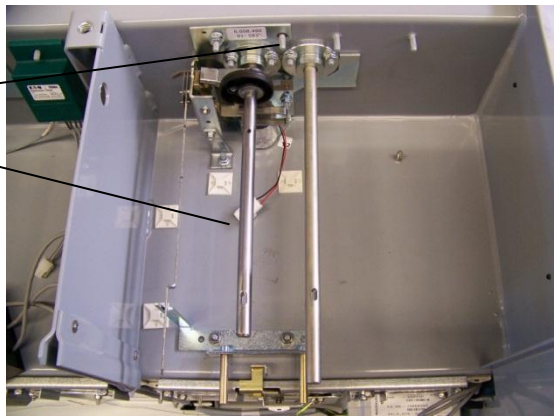
It is preferable to modify the relevant panels before they are installed. You must, however, always work safely. See also the XIRIA manual!
The modification must be performed with a disconnected or earthed rail system and a disconnected or earthed cable. The switch must be switched off.

Remove the cover from the installation
For the following actions, see this document chapter 1.3
Remove front panel
Remove secondary cover
If the installation is older than release 2.1:
Remove side post(s).
Make cut-out(s) in the tray.

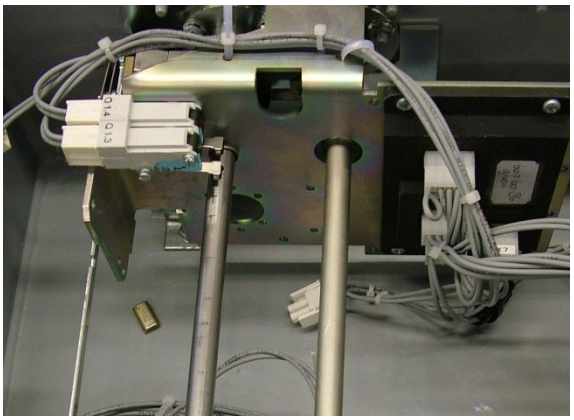


For cable panel installation, remove the Disengaging device used and replace it with pn 6008480 that includes the trip coil

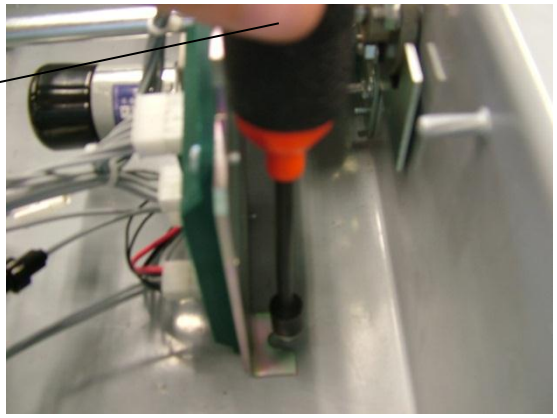
Removing the disengaging device, Pay attention to the disassembly and reassembly of pawl: use a wooden block to sustain the shaft during extraction and insertion of the two pins



Remove Nut (1)

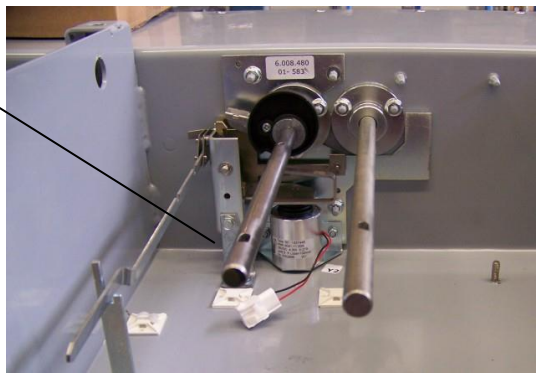


Insert the bearing plate. During this operation check that all wires are far from loaded point and move the Y2 connector of the trip coil in front of it (2 of previous picture)

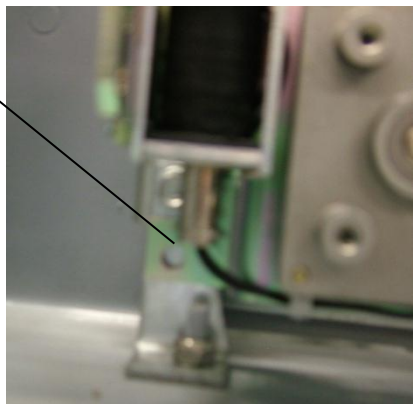


Fasten Nut (1)

Fasten Nut (1)

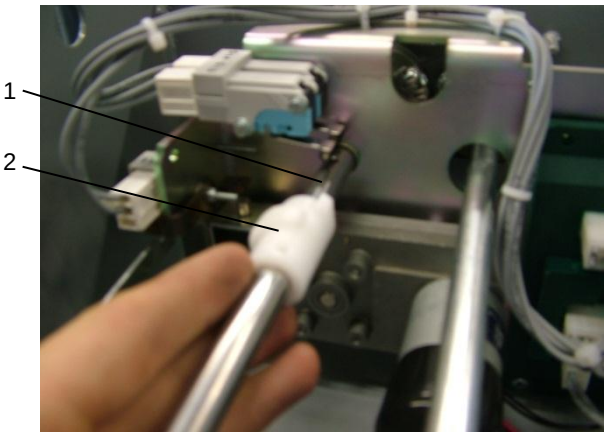


For release older than 2.8, drill a hole with ∅ 4.7 mm on brace 1 and secure the plate with a M5x10 screw. Position of the hole is given by the bearing plate as shown in following picture.

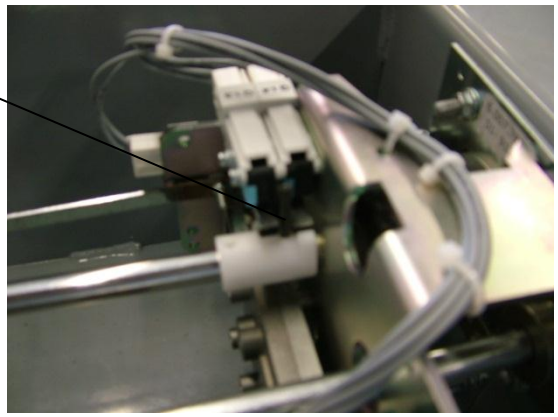


Hole position (1). Use bearing plate as a jig

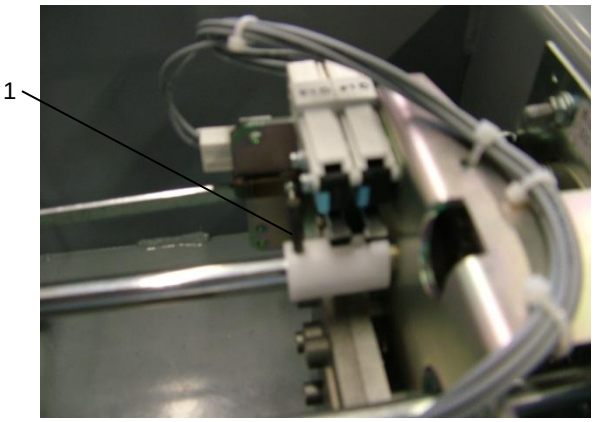
For transformer panel, place timer as shown, use the M6 flange nut with a 8 mm washer to secure it (1)



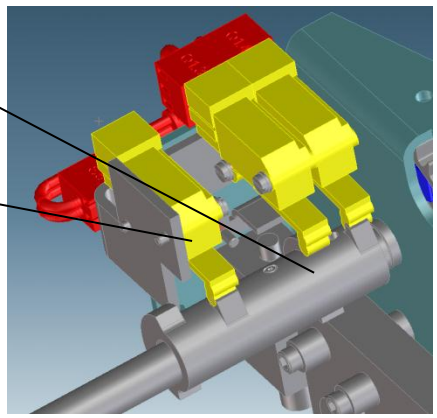
Insert the cam drive on the main shaft. Orientation: make sure the short cam (1) is closer to the bearing plate and top oriented and long cam (2) is closer to the front module. Next two pictures to define position of the fixing pin



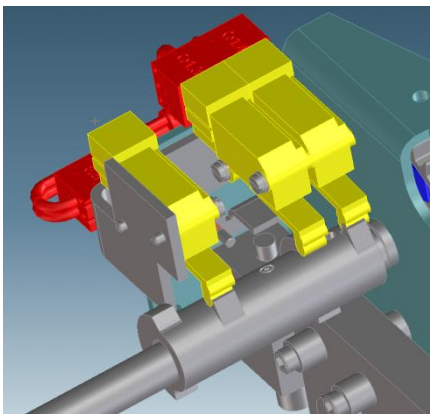
For release <= 2.9.1, the pin has to be inserted between the two micro switches. Be careful with their assembly



For release >=3.0, insert the pin out of the two micro switches. For all releases use the wooden block to sustain the shaft during the assembly of the pin.

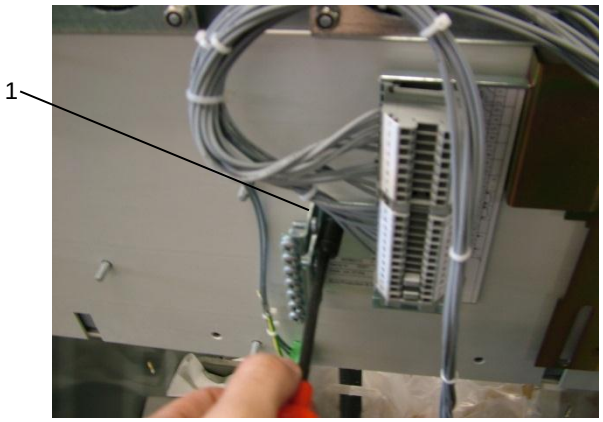


Pay attention: For transformer panel, set up is as shown in the picture with longer cam (1) and contact Q1.6 (2)

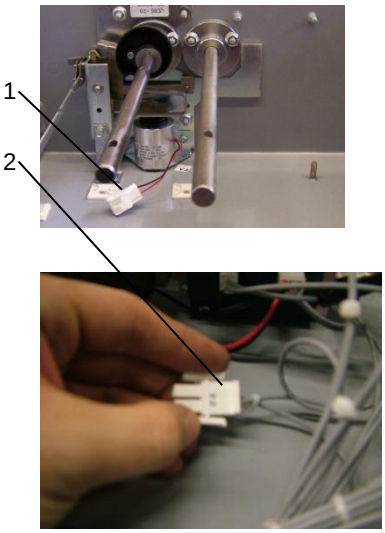


For transformer panel: pay attention to both orientation of cam drive and pin insertion

Remote control: remote tripping + Signalling option

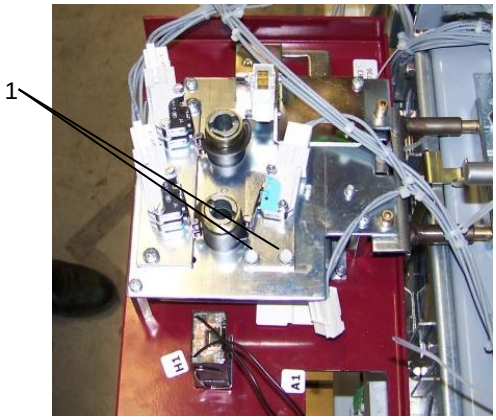


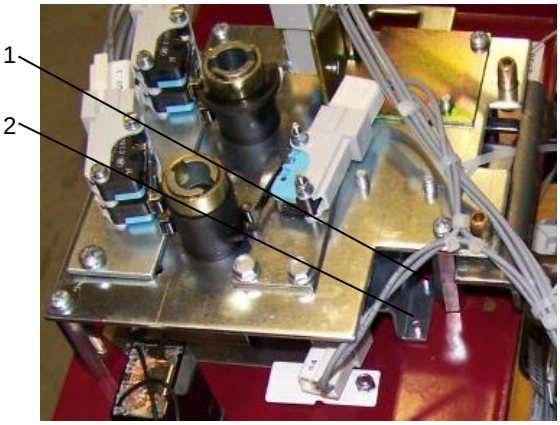
Fasten the brace with Wago connectors using an M6 nut on the front plate (1)



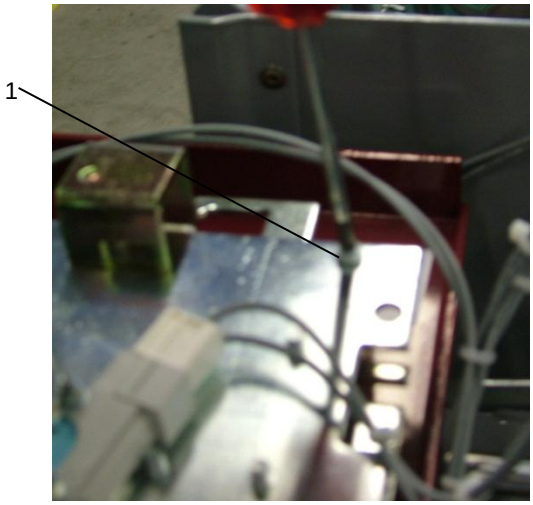
Connect the trip coil (1) to the controller via the connectors Y2 (2)

Connect signaling micro switches set as shown in par. 1.3

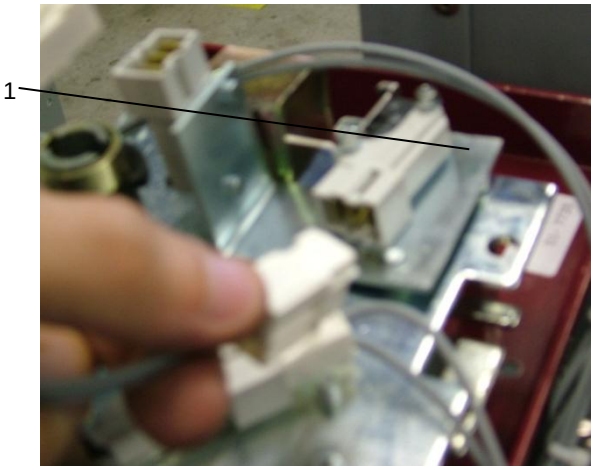




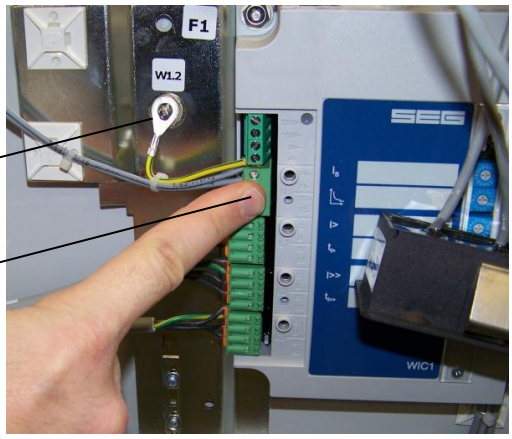
Insert and fasten Q2.3 micro switch using 2x M5x10



Insert S4 micro switch using a M4 nut on position (2)

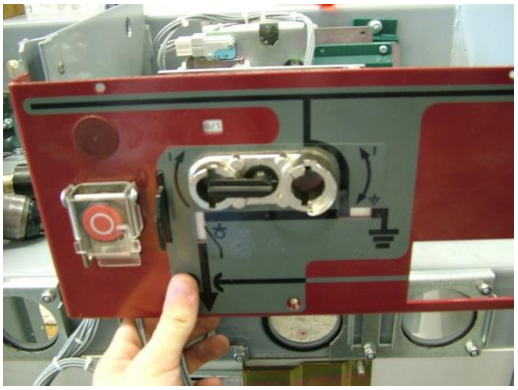


Remove the M4 screw (1) and the micro switch set fixed there. The screw will be used later to secure the new S2-S6 Brace (For transformer panel release >=3.0 keep the brace with S2-S6 micro switch and just connect the new connectors)



For Transformer panel only: remove the old connector F1 by replacing it with the new one included in the wiring bundle.

Insert S2-S6 micro switch set (included in cable panel kit, spare part in transformer cable kit) securing it with M4 screw previously disassembled. For release <= 2.9.1 Short circuit the connector S6 (e.g.: use a Wago 222-413)



Reposition the front module; follow the instructions explained in 1.3. ATTENTION: before the assembly of the front module pay attention to wirings: avoid sharp edges, use stickers to follow enclosure surface path and tie wraps to keep them tight. Wires X5:2<>S1:14 and X5:6<>S1:13 must be finished with shrinking sleeve acc. to art. no.: 027.372

For the following actions, see this document par. 1.3

Assemble successively cable duct, side post(s).

Check secondary (functionally) according to Diagram R34S30.291

Assemble Secondary cover and cover installation.

4 Remote control: remote tripping + Closing + Signalling option

4.1 Preparation installation of remote control / remote tripping + closing + signalling

Determine if the panels to be modified are equipped with old remote options. If so, remove the old remote unit.
If the panel is equipped with a trip indicator, it is necessary then to use also a new wire for trip indicator option and a brace, follow then paragraph 1.4 for the materials needed and the installation procedure.

Determine the release of the installations to be modified

Determine how many panels must be modified and which panels are involved (circuit breaker or load-break switch panels).

Determine which panels are equipped with tripping and which panels are equipped with complete motor operation including tripping.

For each panel to be modified, determine if the following options are provided:
- Trip indicator.
- Ammeter.
- Short circuit indicator.

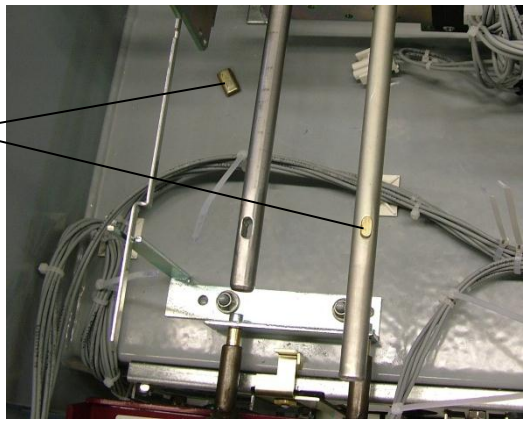
In case together with the remote tripping + closing + signalling unit a local Push In button has to be installed and release version is <2.2, then it might be necessary to change the front module: Pick the right option among the following table and follow warning 1-2-3:

	6019898	**6020174**	**6019877**
Trip indicator	Yes	Yes	N.A.
Ammeter	Yes	No	N.A.
Short cct. Indicator	N.A.	N.A.	Yes
Circuit breaker	Yes	Yes	No
Load-break switch	No	No	Yes

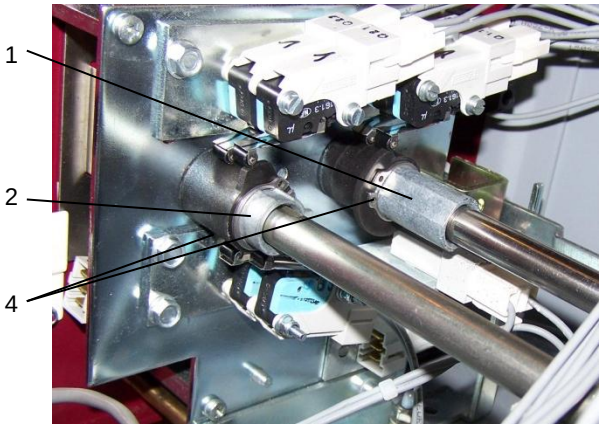
Warning 1: All releases >3.0 are fully interchangeable with the aforementioned front modules part numbers. Remove the cap and install the Push In Button according to 569.900 and 569.901 or equivalent E6042915+E6042906
Warning 2: For release <=2.9.1 but >2.2, front module is provided already with hole for Push In button. Remove the cap and install the Push In Button according to 569.900 and 569.901 or equivalent E6042915+E6042906. If front module must be replaced for other reasons, then follow warning 3.
Warning 3: For all Releases <2.9.1 front module must be adapted with different bushings. In this case the parts ordered for the modification (6019898, 6020174, 6019877) have to be modified by using older bushings (with same length). Insert in the order the specification: "To assembly with older Samac parts"

	Flag # in following pictures	**Release <=2.9.1**	**Release >2.9.1**
Shaft switch (Samac)	1	665053	6007833
Shaft earth (Samac)	2	665052	6007834
Bushing	3	665622 2x	Not present
Seeger	4	Not present	6019846 2x
Bearing bush	Not visible	665103 2x	6038514 2x
Keys	6	665671 2x	Not present

All Xiria with release <=2.9.1 have the front module as shown in the picture (bushing with same length)



Shafts used in Xiria <=2.9.1 with keys



Xiria release > 2.9.1 have the front module as shown in the picture (different length bushings)

Shafts used in Xiria >2.9.1 in both switch and earth command

4.2 Materials required for installing remote control / remote tripping + closing + signaling unit

Wiring diagram: R34S30.291

For every panel to be modified:
For transformer panel: Remote control tripping + closing + signalling unit 6038213, if release is <=2.9.1 also S2-S6 micro switch set 665317 is needed
For cable panel: Remote control tripping + closing + signaling unit 6038212 + disengaging device 6008480
For release <2.2 front module for Push in button options required (follow instructions at 4.1).
For release <2.1 disengaging device 6008480
For all releases, if a push in button must be provided also parts E569900 + E569901 or equivalent E6042915+E6042906

For the installation of the micro switches signaling unit please refer to the paragraph 1.3.

4.3 Instructions for installing remote control / remote tripping + closing + signaling

It is preferable to modify the relevant panels before they are installed. You must, however, always work safely. See also the XIRIA manual!
The modification must be performed with a disconnected or earthed rail system and a disconnected or earthed cable. The switch must be switched off.

Remove the cover from the installation

For the following actions, see this document chapter 1.3

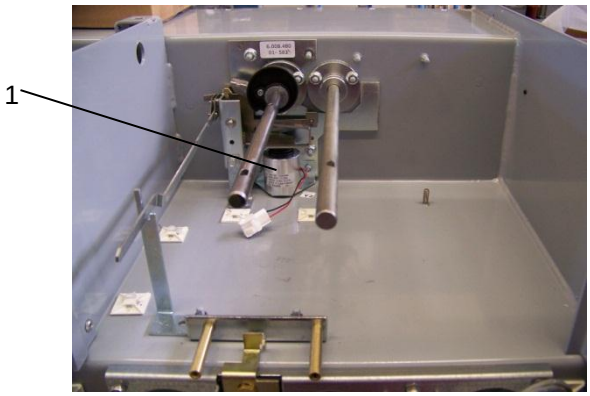
Remove front panel

Remove secondary cover

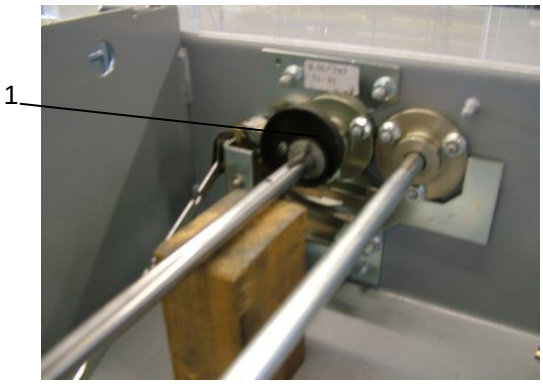
If the installation is older than release 2.1:

Remove side post(s).

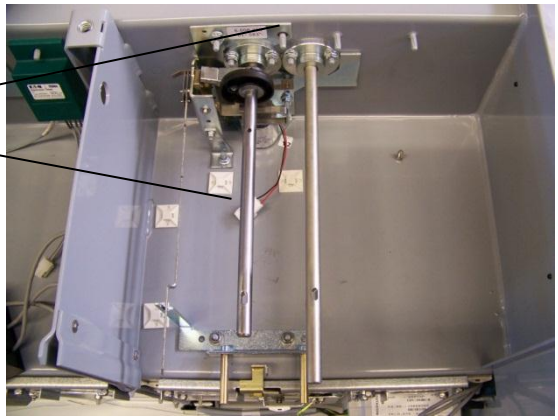
Make cut-out(s) in the tray.



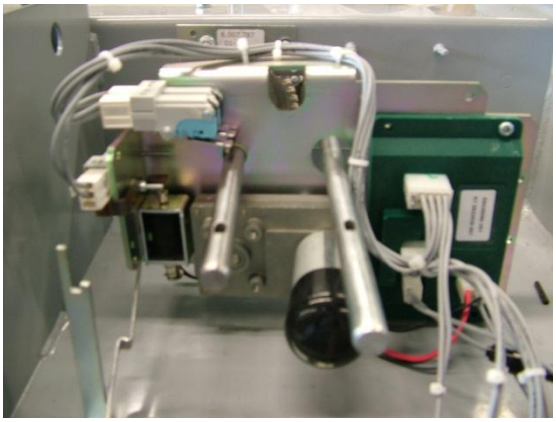
For Installation with release older than 2.1 and for cable panels, remove the Disengaging device used and replace it with pn 6008480 that includes the trip coil.



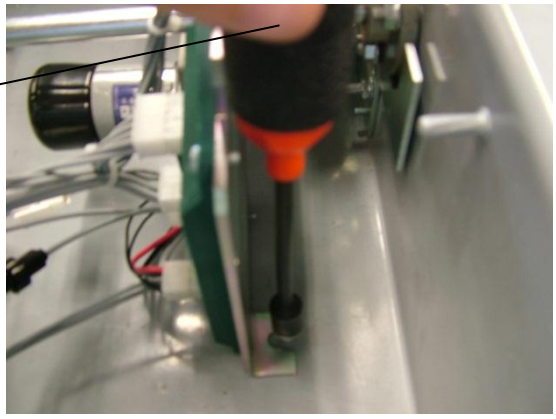
For Installation with release older than 2.1, Pay attention to the disassembly and reassembly of pawl: use a wooden block to sustain the shaft during extraction and insertion of the two pins



Remove Nut (1)

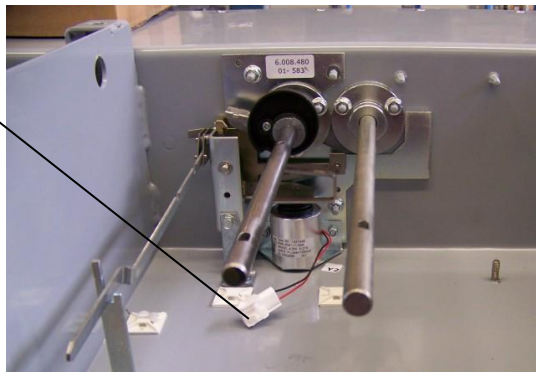


Insert the bearing plate. During this operation check that all wires are far loaded point and move the Y2 connector of the trip coil in front of it (2 of previous picture)

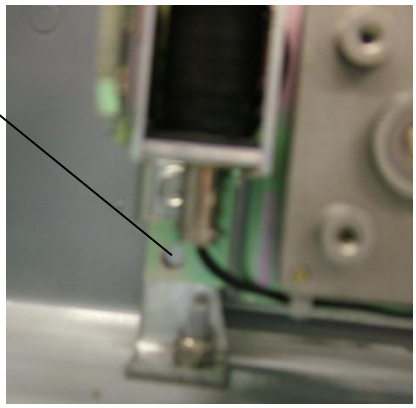


Fasten Nut (1)

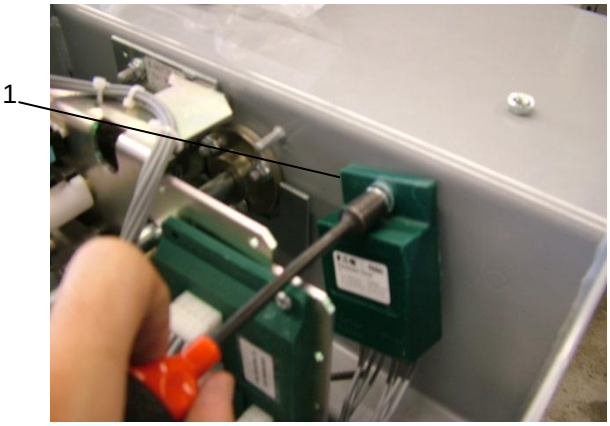
Fasten Nut (1)



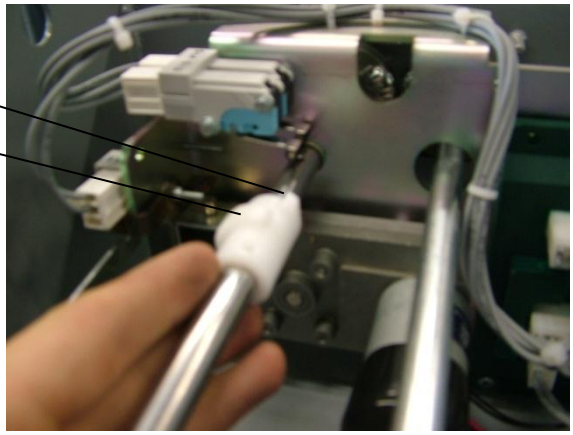
For release older than 2.8, drill a hole with ∅ 4.7 mm on brace 1 and secure the plate with a M5x10 screw. Position of the hole is given by the bearing plate as shown in following picture.



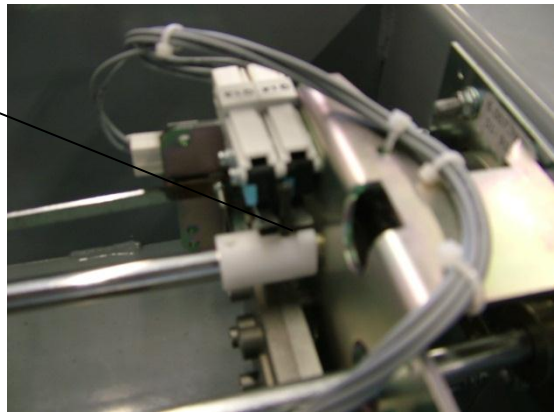
Hole position (1). Use the bearing plate as a jig



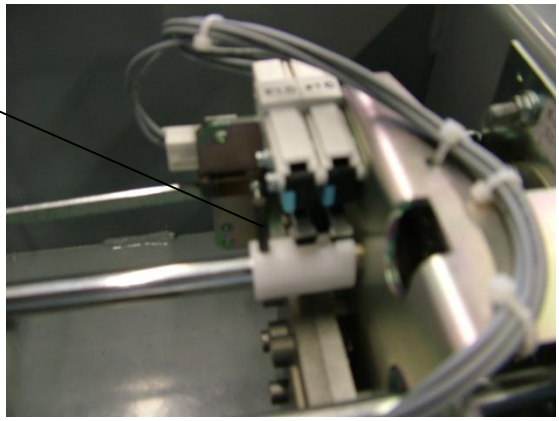
For transformer panel, place timer as shown, use the M6 flange nut with a 8 mm washer to secure it (1)



Insert the cam drive on the main shaft. Orientation: make sure the short cam (1) is closer to the bearing plate and top oriented and long cam (2) is closer to the front module. Next two pictures to define position of the fixing pin

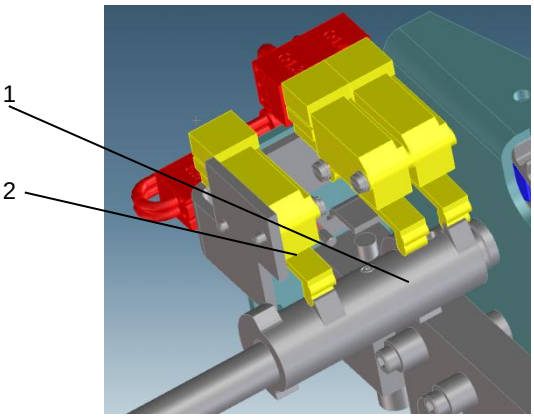


For release <=2.9.1, the pin has to be inserted between the two micro switches. Be careful with their assembly

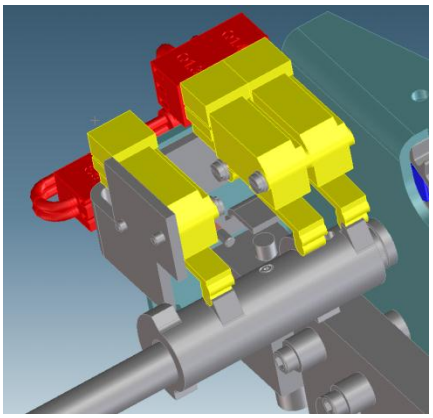


For release > 3.0, insert the pin out of the two micro switches For both releases use the wooden block to sustain the shaft during the assembly of the pin.

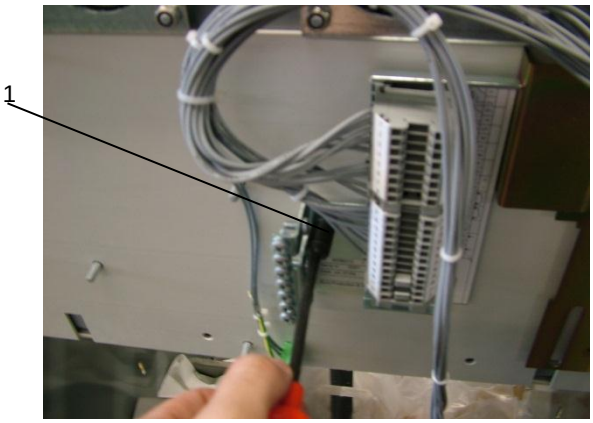
Remote control: remote tripping + Closing + Signalling option



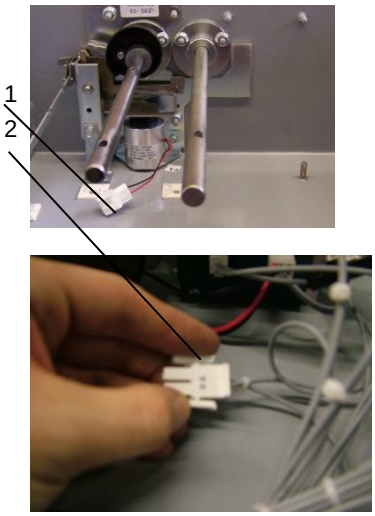
Pay attention: For transformer panel, set up is as shown in the picture with longer cam (1) and contact Q1.6 (2)



For transformer panel: pay attention to both orientation of cam drive and pin insertion

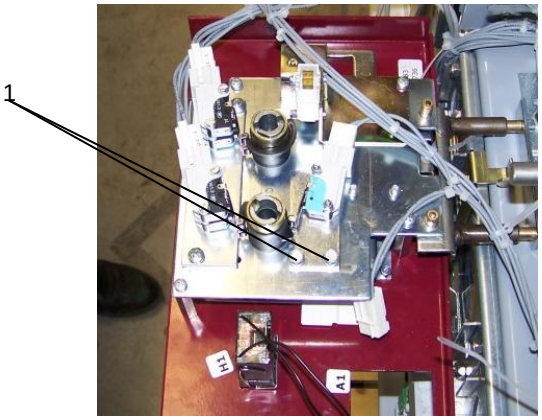


Fasten the brace with Wago connectors using an M6 nut on the front plate (1)

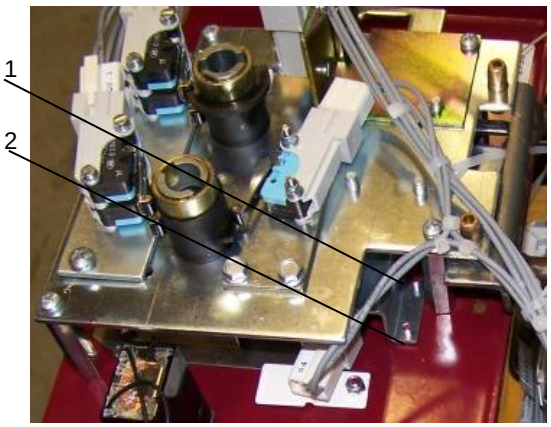


Connect the trip coil (1) to the controller via the connectors Y2 (2)

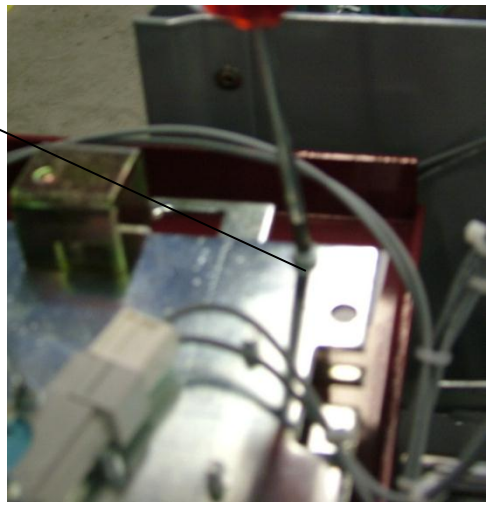
Connect signaling micro switches set as shown in 1.3



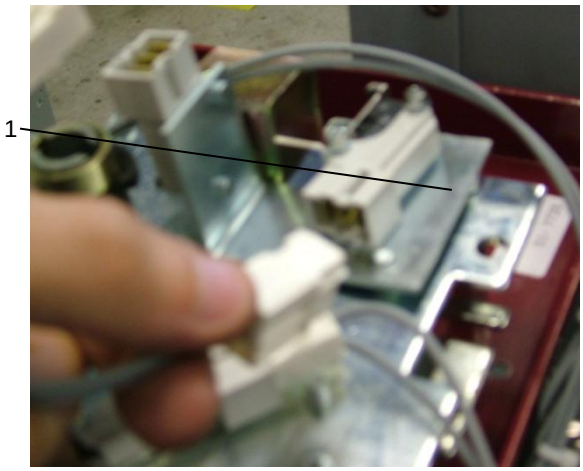
Insert and fasten Q2.3 micro switch using 2x M5x10



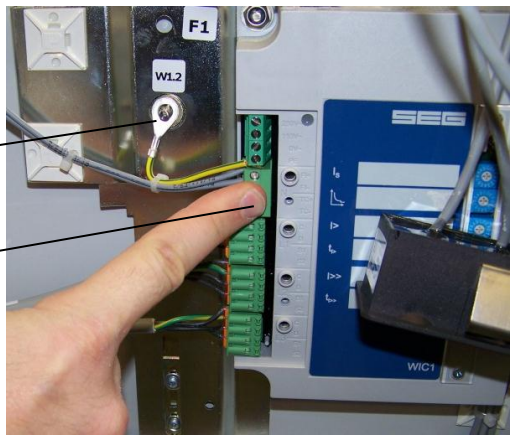
Insert S4 micro switch using a M4 nut on position (2)



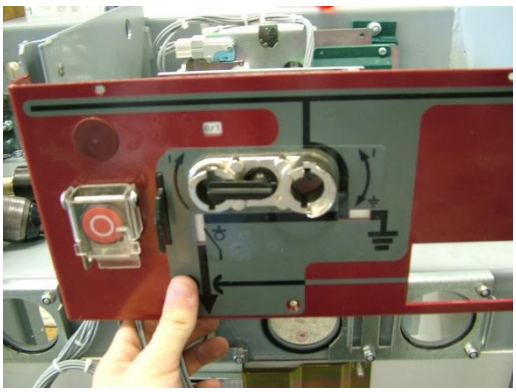
Remove the M4 screw (1) and the micro switch set fixed there. The screw will be used later to secure the new S2-S6 Brace (For transformer panel release >=3.0 keep the brace with S2-S6 micro switch and just connect the new connectors)



Insert S2-S6 micro switch set (included in cable panel kit, spare part in transformer cable kit) securing it with M4 screw previously disassembled. For release <= 2.9.1 Short circuit the connector S6 (e.g. using connector Wago 222-413)



For Transformer panel only: remove the old connector F1 by replacing it with the new one included in the wiring bundle.



Reposition the front module; follow the instructions explained in 1.3. ATTENTION: before the assembly of the front module pay attention to wirings: avoid sharp edges, use stickers to follow enclosure surface path and tie wraps to keep them tight. Wires X5:2<>S1:14 and X5:6<>S1:13 must be finished with shrinking sleeve acc. to art. no.: 027.372

For the following actions, see this document chapter 1.3

Assemble successively cable duct, side post(s).

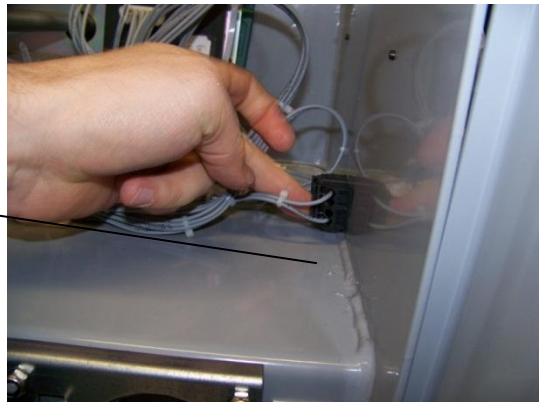
Check secondary (functionally) according to Diagram R34S30.291

Assemble Secondary cover and cover installation.

4.4 Options power supply unit remote control / remote tripping + closing + signaling unit

If customer intend to use complete remote control option (remote tripping + closing + signaling), the input voltage must be 24 V DC + 10%/-30%, for different values a power supply unit must be provided. Two options are available:

- High range option: Input 100→240 V AC or 100→353 V DC pn E6033857
- Low range option: Input 36→60 V AC or 36→72 V DC pn E6033858



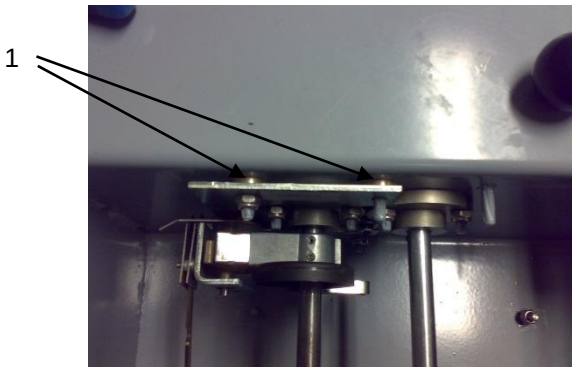
Disconnect the IN cables (1) from the connector (1) (wires X1:19<>U10/L1; X1:21<>U10/N'), connect them to the IN side of the Power supply unit.

Disconnect OUT cables from the connector and connect them as follows: X:6:1<-> F/2 to +24 V pin and X6:3 <-> U10/N' to N pin

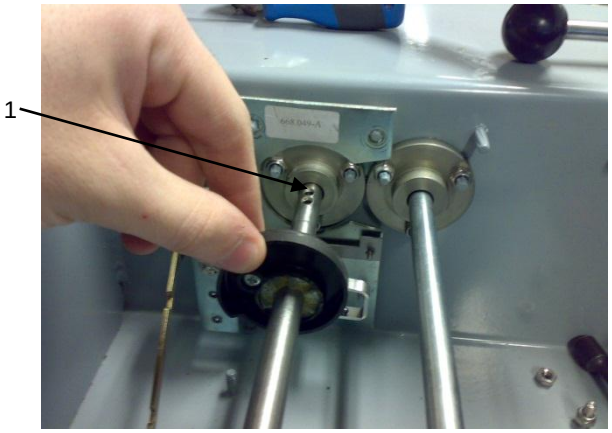
Input side (1), Output side (2) of the power supply unit

5 Appendix: Replacing of disengaging device

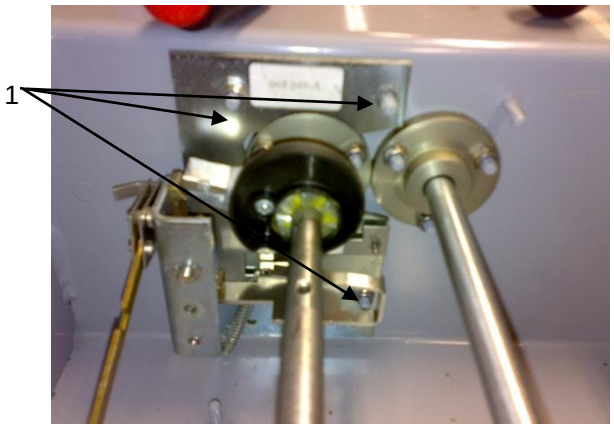
During the assembly of the remote control, it might be needed to replace the Disengaging device (it can be either for the absence of trip coil or for the presence of bushings to support disengaging device in older releases). It is preferable to modify the relevant panels before they are installed. You must, however, always work safely.
The modification must be performed with a disconnected or earthed rail system and a disconnected or earthed cable. The switch must be switched off.



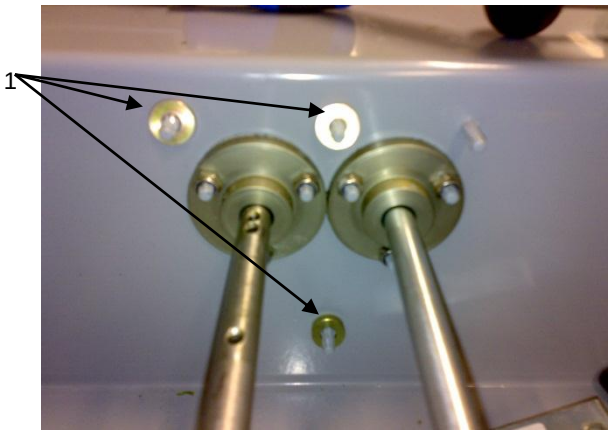
In version <=2.7, bushings are used behind the disengaging device: they must be removed



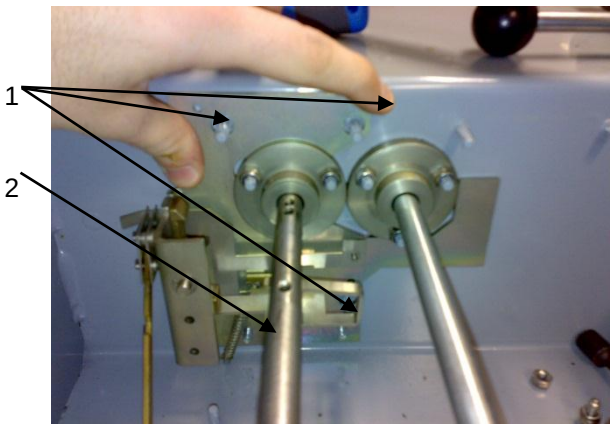
Remove the pawl by extracting the two pins. Always support the shaft with a wooden block underneath while hitting the pins



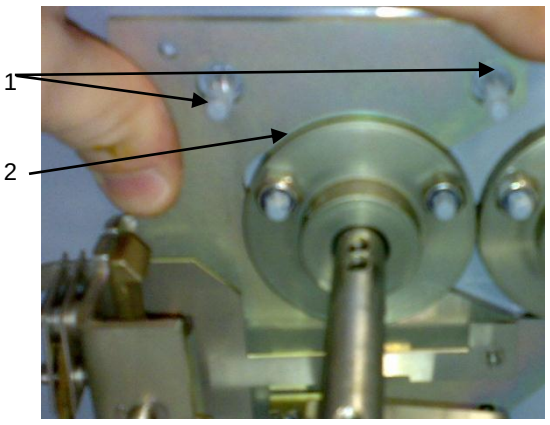
Remove the 3 screws in the picture and remove the disengaging device



Remove the three bushings in the picture



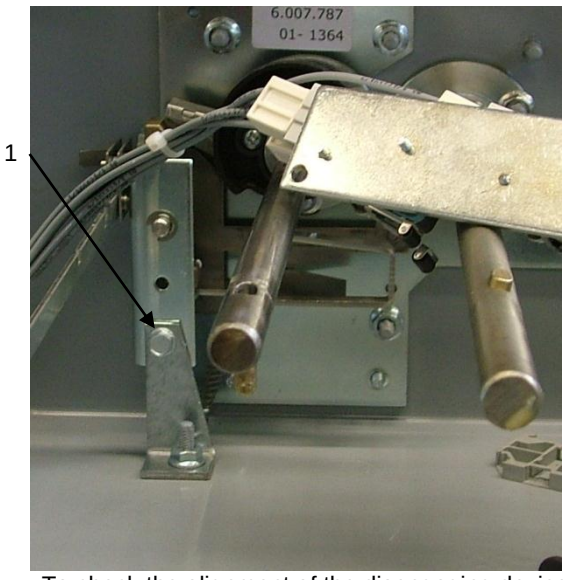
Pay attention! When inserting the new disengaging device, make sure that it is correctly aligned around the main shaft (2 in the picture)



To align the disengaging device, make sure that the holes (1) are concentric with the studs and the same for the hole for the bearing housing (2). Assembly the new disengaging device by using 3x flangenut 582436

Appendix: Replacing of disengaging device

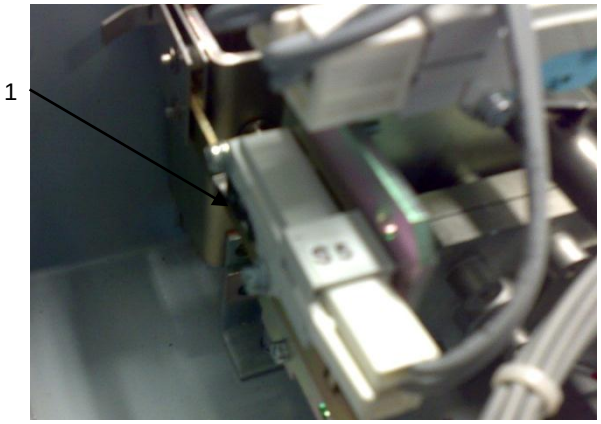
After positioning the Disengaging device, assembly the brace 665740 with a flange nut 582436 (2). Make sure the hole for the screw (1) is perfectly aligned, if not, correct the alignment of the disengaging device again using the latter two steps



To check the alignment of the disengaging device, make sure that the hole in the brace 665740(1) is aligned with the hole in the disengaging device. Make sure that local tripping and closing are possible via switching 3x locally (via push off button and handle)

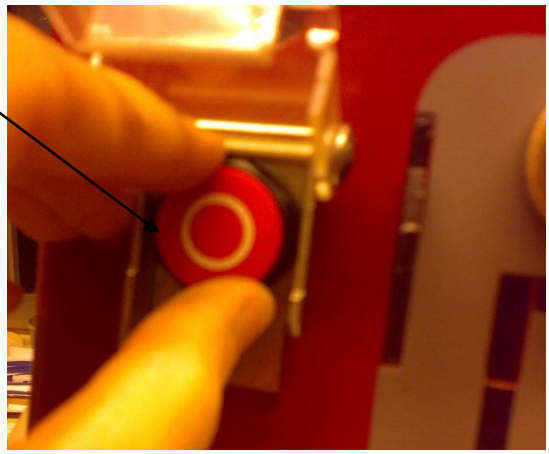
After the assembly follow the procedure explained in the early mentioned points for the assembly of the chosen remote option. For option complete remote control (signaling + tripping + closing) and signaling + tripping it might be needed to calibrate the push off button. In case of the latter, read the following instructions

When disengaging device is changed and the remote option is ready with front module in position, check that the Clearance of the push off button is about 1 mm (when pushing the button, 1 mm must be almost force free)

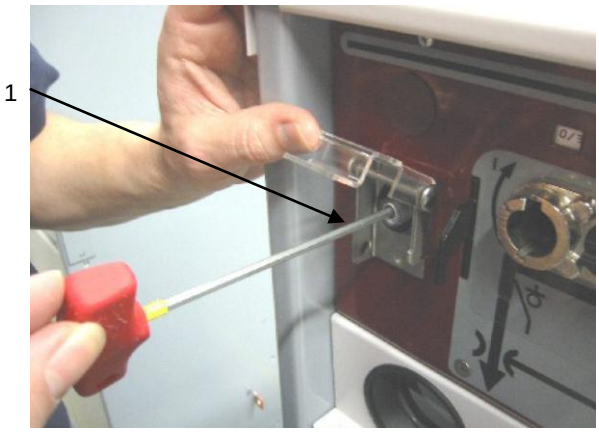


Furthermore, When checking the clearance of the push button, microswitch S5 must not be engaged.

If one of the two points are not satisfied, then a calibration of the push off button is needed



To calibrate the push button, disassembly the push off button turning counterclockwise as shown in the picture (in case of high torque, a wrench or pliers can also be used)



Unscrew counterclockwise if clearance was lower than prescribed, screw clockwise if clearance was higher than expected.

For the following actions, see this document chapter 1.3

Check secondary (functionally) according to Diagram R34S30.291

Assemble Secondary cover and cover installation.

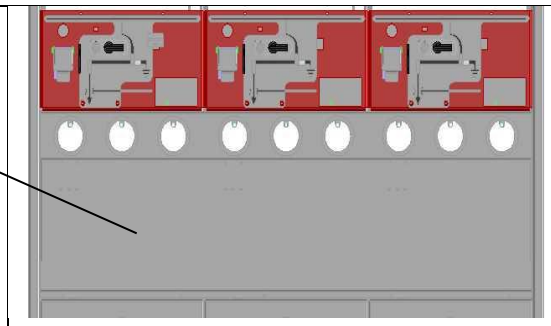
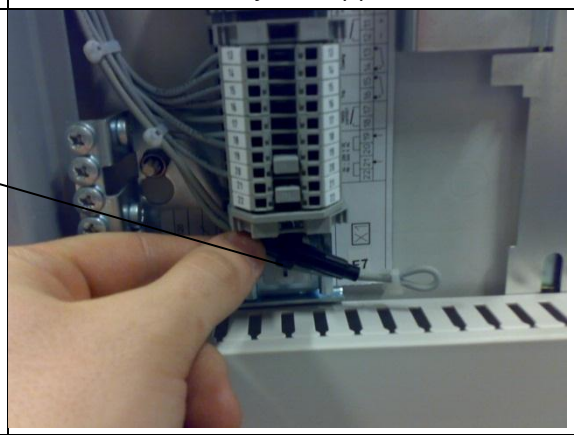
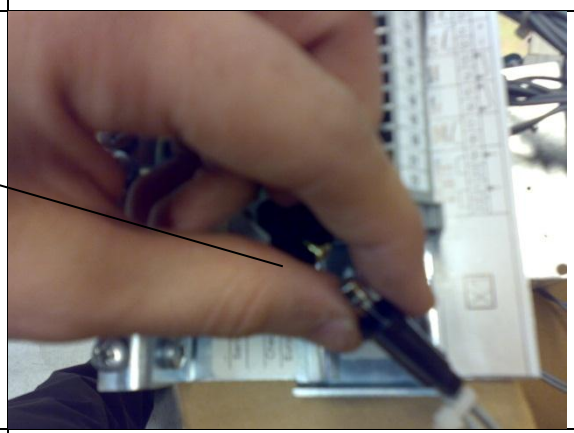
6 Appendix: Replacing of fuse

6.1 Part specs

Fuse must be a 3 A, medium time delay glass tube 5x20mm (e.g.: Cooper Bussman GMC 3A)

6.2 Modification steps

Fuse is available in option Remote control trip and higher. It is placed in the secondary compartment on the Auxiliary contacts clamp. A needed reminder is that you must, however, always work safely.
The modification must be performed with a disconnected or earthed rail system and a disconnected or earthed cable. The switch must be switched off.

			
	Remove the secondary cover (1).		Secondary compartment will look as in the picture
			
	Find Black fuse holder (1).		Open fuse holder by compressing ends and rotating at the same time
			
	After verifying the fuse status, replace the old fuse with a new one as shown in the picture		
	For the following actions, see this document chapter 1.3 Check secondary (functionally) according to Diagram R34S30.291 Assemble Secondary cover and cover installation.		

7 Appendix: Troubleshooting Hints

Following an incomplete list of possible issues during the installation.

What	Possible Reason	Solution
Remote closing doesn't work	Voltage supply incorrect	Supply +24V DC if directed connected to X1:19 and X1:21, check that voltage to external power supply (if applicable) is according specifications
Remote closing/tripping doesn't work	Fuse	Replace the fuse in the wiring bundle (3A)
Remote closing doesn't work	S5 micro switch is triggered	Calibrate the push off button following instructions at chapter 5 and check again. Contact our service if the problem persists
Remote closing doesn't work	Micro switch Q1.3 is not triggered	Check the correct functionality of Q1.3 micro switch. Contact our service if the problem persists
Remote closing doesn't work	Micro switch Q1.4 is triggered	Check the correct functionality of Q1.4 micro switch. Contact our service if the problem persists
Remote closing/tripping doesn't work	Indicator in wrong position	Turn the position indicator in remote position (towards bottom)
Remote closing/tripping doesn't work	Disconnector in earth position	Close disconnector to busbar position
Remote closing/tripping doesn't work	Earth lock in	Remove earth lock
Remote closing/tripping doesn't work	Door out of position	Close the cable compartment door
Remote tripping doesn't work	Micro switch Q1.3 is triggered	Check the correct functionality of Q1.3 micro switch. Contact our service if the problem persists
Remote tripping doesn't work	Micro switch Q1.4 is not triggered	Check the correct functionality of Q1.4 micro switch. Contact our service if the problem persists
External tripping via external relay not possible	Voltage supply not correct	Tripping via external relay is only possible with a voltage of 24 V DC.
Signalling Doesn't work	Micro switches are not triggered	Check the correct functionality of Q1.1, Q1.2, Q2.1, Q2.2 micro switches. Contact our service if the problem persists

8 Appendix: Material needed table

In following table, note that the materials listed are related to panels without any previous remote control option installed. Use the table by checking the release of the panel and the option to be installed. Order than the parts listed.

Option Signalling:

For all releases:

- 6034292 remote control signaling unit
- 3 Panels: 1x wiring duct 665310; 3x installation rivets 665725 (Only if no remote option is available on the installation)
- 4 Panels: 1x wiring 665434; 4x installation rivets 665725 (Only if no remote option is available on the installation)

Please follow chapter1 for installation instructions.
Additional materials needed for particular releases:

Release	Parts to be ordered (intended for both transformer and cable panel unless otherwise specified)
<= 2.0	• If cable feeds will be from the left: 1x installation profile left 665121 • If cable feeds will be from the right: 1x installation profile right 665122 • If 3 panels: 1x installation guard secondary 665090 • If 4 panels: 1x installation guard secondary 665432 • 1x Installation cover plate 665912 • 2x screws m5x8 071818

Option Trip indicator:

Material listed is only needed
For all releases:

- E6037238 Wire trip indicator

If trip indicator is not in place or it is equipped without auxiliary contacts:

- E665246 Trip Indicator SZ5H

Please follow chapter 1.4 for installation instructions.

Option Tripping via external relay:

For all releases:

- 6038198 simple trip kit
- 3 Panels: 1x wiring duct 665310; 3x installation rivets 665725 (Only if no remote option is available on the installation)
- 4 Panels: 1x wiring 665434; 4x installation rivets 665725 (Only if no remote option is available on the installation)

Please follow chapter 2 for installation instructions.
Additional materials needed for particular releases, please note that for lower release also notes specified for following notes are applicable:

Release	Parts to be ordered (intended for both transformer and cable panel unless otherwise specified)
<= 2.0	• If cable feeds will be from the left: 1x installation profile left 665121 • If cable feeds will be from the right: 1x installation profile right 665122 • If 3 panels: 1x installation guard secondary 665090 • If 4 panels: 1x installation guard secondary 665432 • 1x Installation cover plate 665912 • 2x screws m5x8 071818
<=2.9.1	• Micro switch set S2-S6 665317 • Terminal for 1 mm^2 flexible wire (e.g. Wago 222-413)

Option Tripping + Signalling:

For all releases:

- Cable panels 1x trip and signaling unit for LBS 6038206
- Cable panels 1x Disengaging device 6008480+ 3x flange nut 582436
- Transformer panels 1x trip and signaling unit for CB 6038210
- 1x brace 665740
- 3 Panels: 1x wiring duct 665310; 3x installation rivets 665725 (Only if no remote option is available on the installation)
- 4 Panels: 1x wiring 665434; 4x installation rivets 665725 (Only if no remote option is available on the installation)

Please follow chapter 0 for installation instructions.
Additional materials needed for particular releases, please note that for lower release also notes specified for following notes are applicable:

Release	Parts to be ordered (intended for both transformer and cable panel unless otherwise specified)
<= 2.0	• If cable feeds will be from the left: 1x installation profile left 665121 • If cable feeds will be from the right: 1x installation profile right 665122 • If 3 panels: 1x installation guard secondary 665090 • If 4 panels: 1x installation guard secondary 665432 • 1x Installation cover plate 665912 • 2x screws m5x8 071818
<=2.7	• If Transformer panels: 1x Disengaging device 6008480+ 3x flange nut 582436
<=2.9.1	• Transformer panel: Micro switch set S2-S6 665317 • Terminal for 1 mm^2 flexible wire (for instance from Wago catalogue 222-413)

Option Tripping + Signalling + Closing:

For all releases:

- Cable panels 1x trip and signaling unit for LBS 6038212 trip and signaling unit for LBS
- Cable panels 1x Disengaging device 6008480 + 3x flange nut 582436
- Transformer panels 1x trip and signaling unit for CB 6038213
- 1x brace 665740
- If selected as an option: push in button E569900 and E569901
- 3 Panels: 1x wiring duct 665310; 3x installation rivets 665725 (Only if no remote option is available on the installation)
- 4 Panels: 1x wiring 665434; 4x installation rivets 665725 (Only if no remote option is available on the installation)
- If power supply is selected: E6033857 for high range and E6033858 for low range

Please follow chapter 0 for installation instructions. Determine whether also a new front module is needed by checking the table provided in 4.1
Additional materials needed for particular releases, please not that for lower release also notes specified for following notes are applicable:

Release	Parts to be ordered
<= 2.0	• If cable feeds will be from the left: 1x installation profile left 665121 • If cable feeds will be from the right: 1x installation profile right 665122 • If 3 panels: 1x installation guard secondary 665090 • If 4 panels: 1x installation guard secondary 665432 • 1x Installation cover plate 665912 • 2x screws m5x8 071818
<=2.7	• If Transformer panels: 1x Disengaging device 6008480 + 3x flange nut 582436
<=2.9.1	• Transformer panels 1x micro switch set S2-S6 665317 • 1x Terminal for 1 mm^2 flexible wire (for instance from Wago catalogue 222-413)

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