S800-RSU-H

2CCC413020M0202

Remote Switching Unit for S800
High Performance Miniature Circuit Breakers

This document contains instructions for the installation and operation of S800 accessories manufactured by ABB.
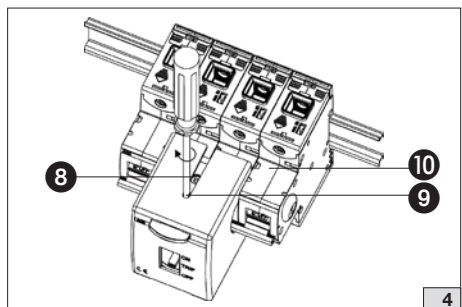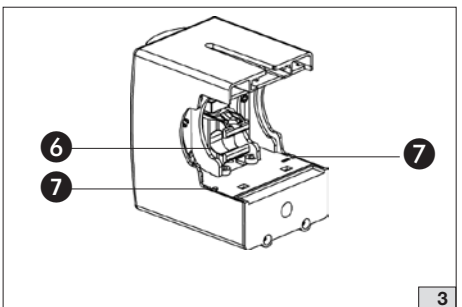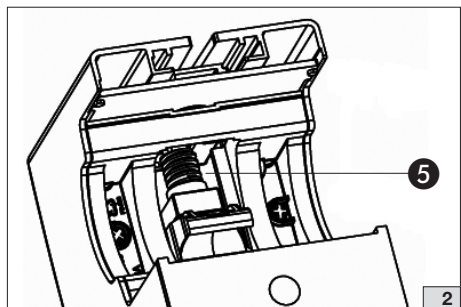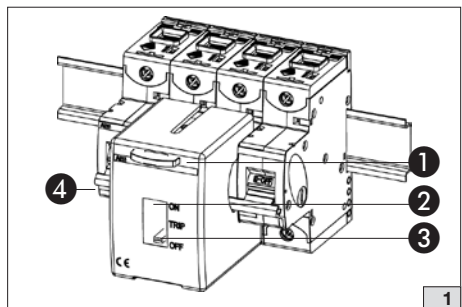
Before installing this equipment, read this instruction carefully. These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to ABB. The remote switching unit is a sealed unit with no user serviceable parts inside. Opening or modifications will void warranty.

Please download at www.abb.com:

Functional description for S800-RSU (2CCC413022M02XX)

⚠ WARNING
HAZARD OF ELECTRIC SHOCK, INJURY, BURN OR EXPLOSION
• Make sure ALL electrical power supplies are «OFF» before installing or removing any devices.
• The breaker or accessories MUST be installed and serviced by QUALIFIED personnel.
• Always use properly rated voltage sensing device to confirm the power is off.
• All devices, doors and covers must be replaced before switching on the power to this equipment

Copper (Cu) wiring only
Rated voltage: 24VDC

⚠ WARNING
HAZARD OF EQUIPMENT DAMAGE
• Snapping the RSU on and off the S800 must be done by hand only.
• The lock slide must be operated by hand only.
• Do not move the lock slide during switching operation
• S800-RSU is for the use of Microfit plugs and AWG20 wire only (not included in delivery

Product Description

S800-RSU is for the use on S800 High Performance Circuit Breakers only. For use with linear voltage regulated or switched power supplies only.
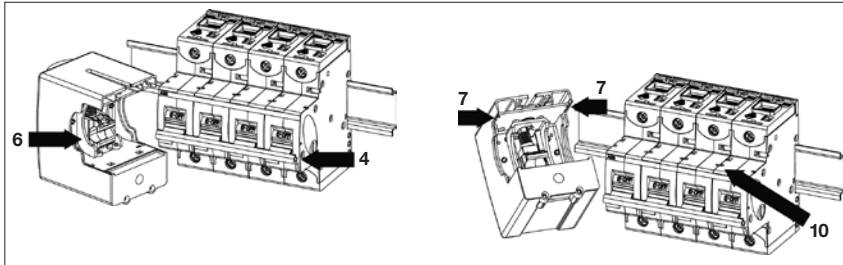
Part description

1 Lock slide

2 Window

3 Position indicator

4 MCB lever

5 Spindle

6 Actuator

7 Positioning pins

8 Allen head fixation screw

9 Spindle access

10 S800 housing slots

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Mounting RSU

Mount and wire the S800 as described in the breaker's manual.

Unpack the RSU and inspect it for any shipping damage.

Make sure that the RSU (6) and the S800 (4) are in OFF position. Therefore, check the RSU position indicator through the front window. If the position indicator (3) is not in the OFF position, please see chapter 12 manual operation of this instruction.

Snap the RSU on the S800 by hand. Therefore, make sure that the MCB lever (4) is fully covered by the RSU actuator (6) and that the RSU positioning pins (7) fit in the S800 housing slots (10).
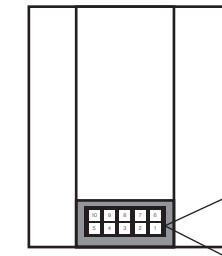
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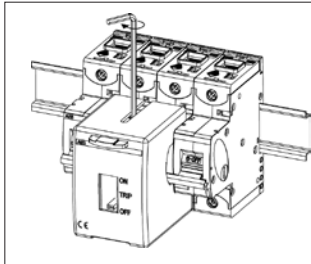
A two pole S800 MCB is fully covered by the RSU.

For the use on three or four pole S800 MCB, please mount the RSU on pole two and three.

Check the proper position of the RSU and fix it using a 3 mm/0.12 inch Allen wrench (tightening torque 3 Nm/26 in.lbs).

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Wiring RSU

Only use proper configurated supply and control cables AWG20 and Microfit plugs for RSU's Molex female connector Part No. 0430451018. Cables and plug are not included in the delivery. Maximum cable length: 10 m/32 feet 9.7 inch

10	9	8	7	6
5	4	3	2	1

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Pin assignment:

Supply voltage:
Pin 1 +24 V d.c.: Supply voltage
Pin 6 GND: Supply voltage, ground

Inputs:
Pin 2 iOn: Control input "ON"
Pin 7 iOff: Control input "OFF"
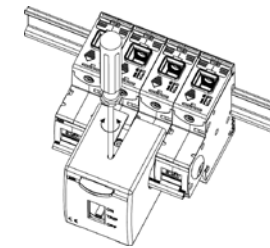Pin 3 iGND: Control supply voltage, ground

Outputs:
Pin 4 oOn: Feedback output "ON"
Pin 10 oOff: Feedback output "OFF"
Pin 5 oTrip: Feedback output "TRIP"
Pin 8 +VoIN: Output supply voltage
Pin 9 oGND: Output supply voltage, ground

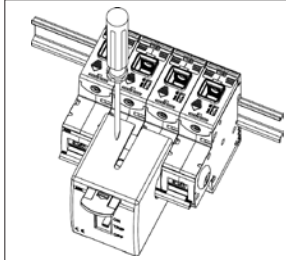Connections 3, 6 and 9 are internally connected.

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Locking RSU

This picture shows an unlocked RSU. Spindle for manual breaker operation and Allen head screw for demounting are accessible.
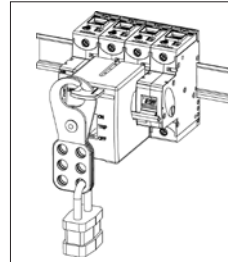
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Locking RSU

This picture shows a locked RSU. The lock slide covers the Allen head screw and the spindle slot and thereby prevents manual operation and demounting of the RSU. RSU is fully locked and cannot operate the S800. For locking the RSU, fully pull out the lock slide.
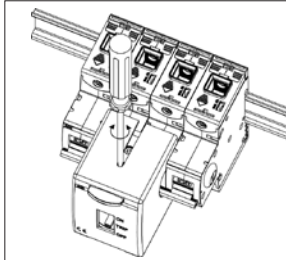
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Protect locking with a padlock with max. 4 mm/0.15 inch diameter of the shackle. When using a hasp, make sure that it is mounted on the left side of the RSU not covering the position indicator marking.

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Manual operation

If the RSU is mounted properly, manual ON-switching of S800 cannot be carried out using the lever but by turning the spindle with a screw driver as shown in the picture. Please mind that the breaker can be switched OFF by hand at any time using the lever or the spindle. For safety reasons, RSU is not able to carry out remote commands during manual operation and 10 seconds afterwards.

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Switching performance

Number of switching attempts before blocking:

15 minutes lock after three switching attempts leading to reset or trip within one minute without supply voltage interrupt.

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Locked or blocked RSU:

One minute lock if RSU locking or blocking situation is detected.

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Manual switch-off:

If manual use is detected, inputs will be deactivated for 10 seconds. Outputs remain unchanged. If spindle is being turned more than once, all outputs become active until next command is accepted. Intuitive manual switch-off via lever is possible.

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Manual switch-on:

If manual use is detected, inputs will be deactivated for 10 seconds. Outputs remain unchanged. If spindle is being turned more than once, all outputs become active until next command is accepted. Intuitive manual switch-on via lever is not possible.

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