

DEH-41415 Installation Instructions

EntelliGuard® G Circuit Breaker Accessories

Auxiliary Switch

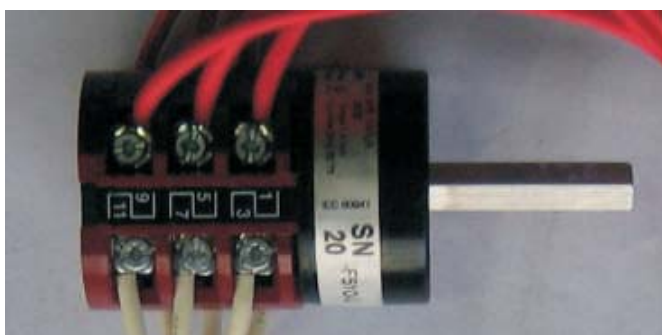
Introduction

Auxiliary Switch:

Auxiliary contacts indicate the position of the Circuit Breaker main contacts. These contacts operate simultaneously with the breakers main contacts. Default breaker configuration consists of 3 normally open (NO) and 3 normally closed (NC) contacts. The STD Auxiliary switch (GAUX3R) can be replaced with any of the following configurations to increase the number of available contacts.

- Power rated contacts 8 NO & 8 NC (GAUX6R)
- Power rated contacts 3 NO & 3 NC plus Low Signal rated contacts 2 NO & 2 NC (GAUX5R)
- Power rated contacts 4 NO & 4 NC plus Low Signal rated contacts 4 NO & 4 NC (GAUX8R)

See Wiring Diagram on last page for Power Rated and Low Signal Connections



	WARNING: Before installing any accessories, turn the breaker OFF, disconnect it from all voltage sources, and discharge the closing springs.
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	AVERTISSEMENT: Avant d'installer tout accessoire, mettre le disjoncteur en position OFF, le déconnecter de toute tension d'alimentation, et décharger les ressorts d'armement
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Table 1. Auxiliary switch ratings

AC Ratings		
AC	220/240V	10A
	110/120V	15A

DC Ratings		
DC	240V	5A (6 contacts in series)
	125V	10A (3 contacts in series)
	24V	15A

Note:

The following Aux options are not available when a Side Mounted Disconnect or Coil Signaling Contacts are installed in the breaker

- Power rated contacts 4 NO & 4 NC plus Low Signal rated contacts 4 NO & 4 NC (GAUX8R)

Power rated contacts 8 NO & 8 NC (GAUX6R)

Use the following procedure to install the Auxiliary Switch accessory into the circuit breaker.

1. Verify that the rating on the Auxiliary Switch identification plate matches the voltage rating required for the application, as listed in Table 1.

2. Side mounted Breakers are limited to maximum 5 NO & 5 NC contacts.

3. Verify Secondary Disconnect Block B is present.

4. Turn the breaker off and discharge the closing springs by depressing the OFF and ON buttons in the sequence OFF-ON-OFF. Verify that the breaker OFF-ON indicator shows OFF on a green background and that the charge indicator shows DISCHARGE on a white background. If installing in a draw-out type breaker remove breaker from adaptor (cassette) before continuing.

5. Loosen the 6 screws on front cover (fascia) using a posidrive screw driver as shown in Fig 1.B Rotate the charging handle down and slide the front cover over the handle to remove the front cover as shown in Fig. 1.C.



Figure 1. (A) Front Cover (B) Screw Removal (C) Handle Rotation

6. Unplug the existing Auxiliary switch connector plugs from the secondary disconnect as shown in Fig. 2.

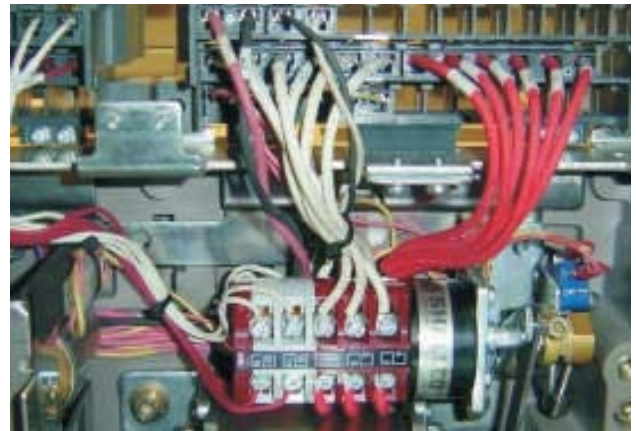


Figure 2. Unplug the existing connectors.

7. Remove the e-ring from the Auxiliary switch link to the mechanism as shown in Fig. 3.



Figure 3. E-ring removal

8. Remove the existing M5 nut & M6 screw from the assembly as shown in Fig. 4.



Figure 4. Remove the Screw & nut

9. Remove the existing Auxiliary switch assembly from the housing as shown in Fig. 5.



Figure 5. Remove the existing Auxiliary switch assembly

10. Insert the new Auxiliary switch assembly on the housing as shown in Fig. 6.



Figure 6. Assemble the Auxiliary switch

11. Assemble back the screw and nuts as explained in step 6.

12. Assemble the e-ring between the Auxiliary switch link and the mechanism link as shown in Fig. 7.



Figure 7. E-ring assembly

13. Plug the connectors from the Auxiliary switch into the secondary disconnect terminals marked as A14, A15 etc (refer wiring diagram for all wiring points) in the respective terminals as shown in Fig. 8.

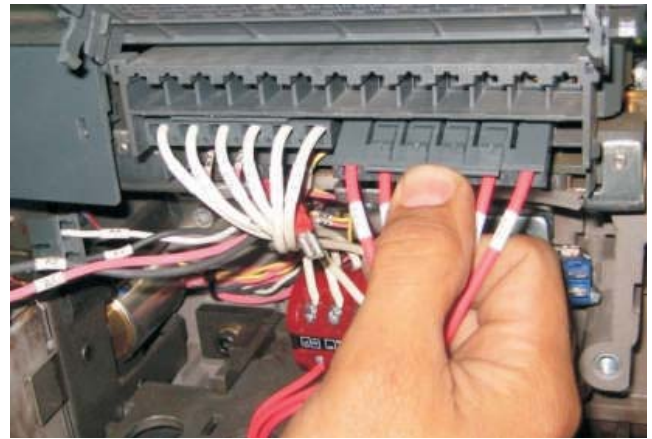


Figure 8. Connector's assembly

9. To reinstall the cover, rotate the charging handle down and slide the front cover over the handle to assemble the front cover to housing as shown in Fig. 9.



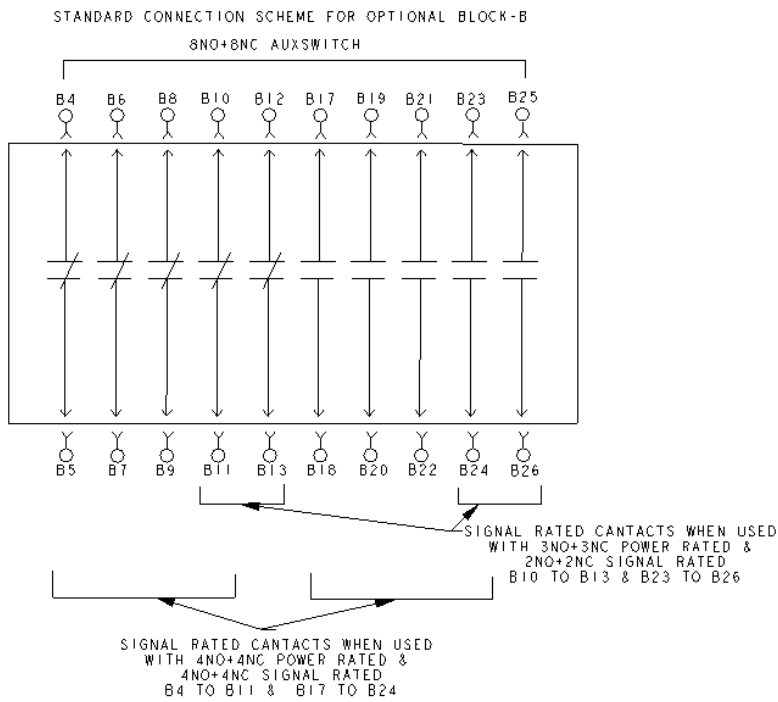
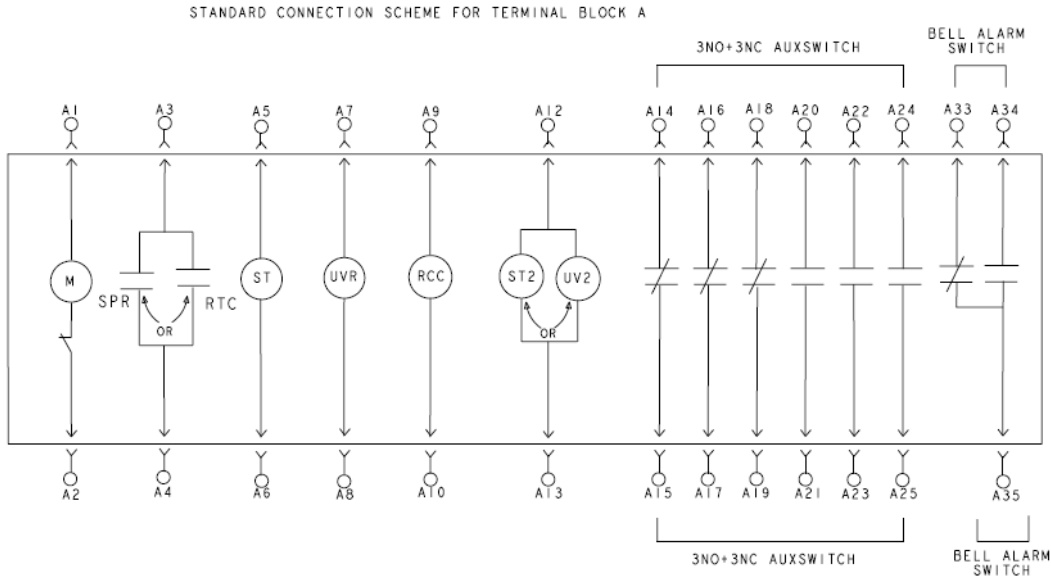
Figure 9.

10. Ensure the fascia is aligned properly with the trip unit and the pad lock features of the breaker.

11. Fasten the 6 mounting screws of fascia with the housing using a pozidrive screwdriver. Apply torque of 6 Nm (4.42 ft-lbs).

Reference:

Auxiliary Switch Connection Scheme:



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 the ABB Inc.

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