

DEH-41417 Installation Instructions

EntelliGuard[®] G Circuit Breaker Accessories

Fixed Secondary Disconnect

Introduction

Fixed Secondary Disconnect (Breaker Mounted):

Fixed breakers are always supplied with a secondary disconnect (auxiliary connection block) suitable for 39 connection points (terminal A). When the number of factory installed accessories exceeds the available number of connection points needed, a 2nd connection block is automatically added (terminal B). For cases where the accessories are mounted in the field, an additional auxiliary connection block can be added to provide 39 more additional connections.

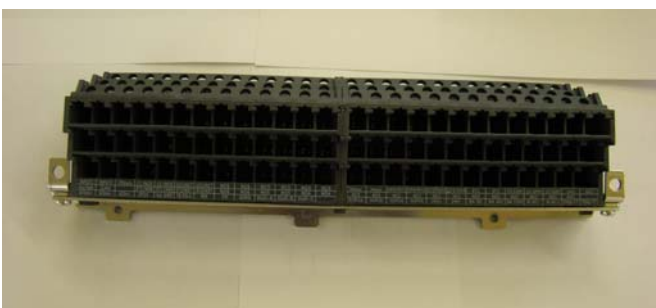




Figure 1. SD Two-Block Kit

Catalog No	Description
GSDFTR1	Aux, Disconnect Top Fixed 39 terminal
GSDFTR2	Aux, Disconnect Top Fixed 78 terminal

 **WARNING:** Before installing any accessories, turn the breaker OFF, disconnect it from all voltage sources and discharge the closing

 **AVERTISSEMENT:** Avant d'installer tout accessoire, mettre le disjoncteur en position OFF, le déconnecter de toute tension d'alimentation, et décharger les ressorts

Use the following procedure to install Fixed Secondary Disconnect accessory into the circuit breaker.

1. 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.
2. 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.

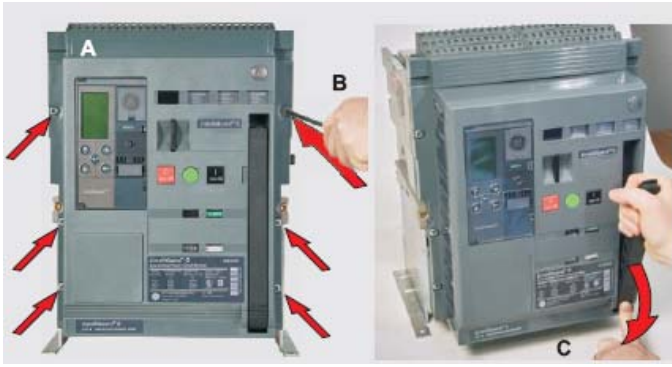


Figure 1. (A) Front Cover (B) Screw Removal (C) Handle Rotation

3. Remove all the coils (refer to DEH41411.)

4. Remove all the equipment wiring and accessories wiring from the secondary disconnect.

5. Remove the 3 nuts as shown in fig 2.

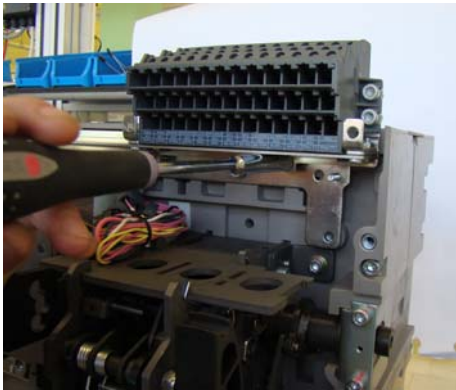


Figure 2. Nut Removal

6. Replace the one block assembly with the 2-block assembly as shown in fig 3.

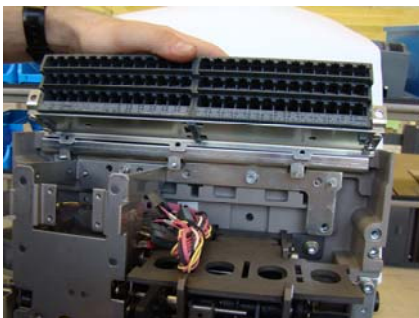


Figure 3. SD assembly

7. Assemble back the 3 nuts as shown in fig 4.

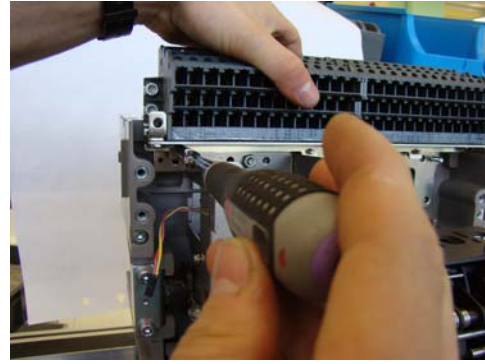


Figure 4. Nuts assembly

8. Complete the SD Wiring.

9. Assemble back all the coil accessories (refer to DEH41411).

10. 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. 5



Figure 5.

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

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

Secondary Disconnect Wiring Table:

Block A layout

A1 MOTOR	A2 MOTOR	A3 SPR/ RTC	A4 SPR/ RTC	A5 ST1	A6 ST1	A7 UV1	A8 UV1	A9 CC COM	A10 CC IMM	A11 CC CMD	A12 ST2/UV2	A13 ST2/UV2
A14 NC3	A15 NC3	A16 NC2	A17 NC2	A18 NC1	A19 NC1	A20 NO3	A21 NO3	A22 NO2	A23 NO2	A24 NO1	A25 NO1	A26
A27 O/P1a	A28 O/P1b	A29 O/P2 a	A30 O/P2b	A31 24V+	A32 24V-	A33 BA NC	A34 BA NO	A35 BA COM	A36 N RC-	A37 N RC+	A38 Eleg- CT	A39 Eleg- CT

Block B layout

B1 INPUT1	B2 INPUT2	B3 I/P com	B4 ST1 NO / NC8	B5 ST1 NO / NC8	B6 UV1 NO / NC7	B7 UV1 NO / NC7	B8 NC6	B9 NC6	B10 NC5	B11 NC5	B12 NC4	B13 NC4
B14	B15	B16	B17 CC NO/ NO8	B18 CC NO/ NO8	B19 ST2/UV2 NO /NO7	B20 ST2/UV2 NO /NO7	B21 NO6	B22 NO6	B23 NO5	B24 NO5	B25 NO4	B26 NO4
B27 ZSI OUT+	B28 ZSI OUT+	B29 ZSI IN+	B30 ZSI IN-	B31 Iso GND	B32 5V Iso	B33 Tx_EN_1	B34 RX	B35 TX	B36 GND	B37 Volt-A	B38 Volt-B	B39 Volt-C

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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