Installation/removal instructions for Series NRX drawout cassette primary adapters

⚠️ WARNING

1. ONLY QUALIFIED ELECTRICAL PERSONNEL SHOULD BE PERMITTED TO WORK ON THE EQUIPMENT.

2. ALWAYS DE-ENERGIZE PRIMARY AND SECONDARY CIRCUITS IF A CIRCUIT BREAKER CANNOT BE REMOVED TO A SAFE WORK LOCATION.

3. DRAWOUT CIRCUIT BREAKERS SHOULD BE LEVERED (RACKED) OUT TO THE DISCONNECT POSITION.

4. ALL CIRCUIT BREAKERS SHOULD BE SWITCHED TO THE OFF POSITION AND MECHANISM SPRINGS DISCHARGED.

FAILURE TO FOLLOW THESE STEPS FOR ALL PROCEDURES DESCRIBED IN THIS INSTRUCTION LEAFLET COULD RESULT IN DEATH, BODILY INJURY, OR PROPERTY DAMAGE.

⚠️ WARNING

THE INSTRUCTIONS CONTAINED IN THIS IL AND ON PRODUCT LABELS HAVE TO BE FOLLOWED. OBSERVE THE FIVE SAFETY RULES:

- DISCONNECTING
- ENSURE THAT DEVICES CANNOT BE ACCIDENTALLY RESTARTED
- VERIFY ISOLATION FROM THE SUPPLY
- EARTHING AND SHORT-CIRCUITING
- COVERING OR PROVIDING BARRIERS TO ADJACENT LIVE PARTS

DISCONNECT THE EQUIPMENT FROM THE SUPPLY. USE ONLY AUTHORIZED SPARE PARTS IN THE REPAIR OF THE EQUIPMENT. THE SPECIFIED MAINTENANCE INTERVALS AS WELL AS THE INSTRUCTIONS FOR REPAIR AND EXCHANGE MUST BE STRICTLY ADHERED TO PREVENT INJURY TO PERSONNEL AND DAMAGE TO THE SWITCHBOARD.
General information

Standard flat primary terminal pads with tapped holes on the rear of a drawout cassette provide for a variety of primary connection configurations (Figure 1). Dove tail shaped mounting slots are provided for mounting Eaton interphase barriers that can be ordered separately (Figure 2). Refer to IL01301021E for more information about interphase barriers.

Note: Available interphase barriers provide minimum clearance. Customer is responsible for providing adequate insulation for their application.

![Figure 1. Drawout cassette (rear view)](image1)

![Figure 2. Interphase barrier kit catalog number 3DBAR/4DBAR](image2)

Different types of primary adapters are available for rear and front bus connections. See Table 1.

Rear-mounted connections

⚠️ CAUTION

When making bolted connections to the equipment or to the adapters themselves, all which have pre-tapped holes, it is important not to exceed the recommended torque values. In addition, any connection hardware used should be the exact length required and not extend out past the mounting hole. Failure to follow these requirements could result in equipment damage and/or failure.

⚠️ IMPORTANT

It is recommended that appropriate interphase barriers be installed between inside and outside primary terminals with all rear-connected configurations to ensure insulation integrity. If interphase barriers are ordered from Eaton, installation instructions are provided with the barriers (IL01301021E).

Universal bus adapter kit installation

Proceed with the following three steps.

Step 1

Bolt a universal bus adapter to the vertically positioned mounting holes of a primary terminal pad for a horizontal bus connection or to the horizontally positioned mounting holes for a vertical bus connection as shown using the hardware provided. Torque the bolted connection to 10 ft-lb (13.6 N·m) using a torque wrench.

![Figure 3. Step 1](image3)
Table 1. List of available adapters

<table>
<thead>
<tr>
<th>List number</th>
<th>Connector</th>
<th>Number of poles</th>
<th>UL 489</th>
<th>UL 1066</th>
<th>IEC 60947-2</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Universal bus adapter—short</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2</td>
<td>Universal bus adapter—long</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Universal bus adapter—three hole, thick</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Rear connect adapter extensions—short (horizontal holes)</td>
<td>3</td>
<td>Future</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>4</td>
<td>Future</td>
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<tr>
<td>5</td>
<td>Rear connect adapter extensions—long (vertical holes)</td>
<td>3</td>
<td>Future</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Future</td>
<td></td>
<td></td>
</tr>
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<td>Straight frontal access extensions</td>
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<td>4</td>
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</table>

Step 2
Complete all six adapter connections (eight for four-pole) in a similar fashion. The line and load adapters can be mounted in horizontal or vertical orientations as shown.

Step 3
Reverse the procedure just described to remove the adapters.

Rear connect long adapter extension kit installation

This drawout cassette configuration uses long copper extensions that bolt to the rear primary terminal pads. The long adapter extension comes with vertical holes for making the required connections (Figure 5).

Use the hardware provided with the kit and torque bolted connections to 10 ft-lb (13.6 N-m).
Rear connect short adapter extension kit installation

This drawout cassette configuration uses short copper extensions that bolt to the rear primary terminal pads (Figure 6). The short adapter extension comes with horizontal holes for making the required connections.

Use the hardware provided with kit and torque bolted connections to 10 ft-lb (13.6 N·m).

Front connect configuration

Front connect extension kit installation

This drawout cassette configuration uses straight bus extensions that bolt to the rear primary terminal pads. These adapters mount flush with the cassette and allow front access to these connections (Figure 7).

Use the hardware provided with kit and torque bolted connections to 10 ft-lb (13.6 N·m).

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