QD3 Quik-Drive Tap-Changer Motor Resistor Replacement Kit Number 5791844A01
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Contents

DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY ........................................... I

SAFETY FOR LIFE .................................................................................................................. III

SAFETY INFORMATION ......................................................................................................... III
  Safety instructions ............................................................................................................... iii

PRODUCT INFORMATION .................................................................................................. 1
  Introduction .......................................................................................................................... 1
  Read this manual first .......................................................................................................... 1
  Additional information ........................................................................................................ 1
  Acceptance and initial inspection ...................................................................................... 1
  Handling and storage .......................................................................................................... 1
  Standards ............................................................................................................................. 1
  Parts supplied ..................................................................................................................... 1
  Tools required .................................................................................................................... 1

PROCEDURE ......................................................................................................................... 1
  Resistor removal ................................................................................................................ 1

RESISTOR INSTALLATION .................................................................................................. 2
Safety for life

Eaton’s Cooper Power series products meet or exceed all applicable industry standards relating to product safety. We actively promote safe practices in the use and maintenance of our products through our service literature, instructional training programs, and the continuous efforts of all Eaton employees involved in product design, manufacture, marketing and service.

We strongly urge that you always follow all locally approved safety procedures and safety instructions when working around high-voltage lines and equipment and support our “Safety For Life” mission.

Safety information

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians who are familiar with this equipment should install, operate, and service it.

A competent technician has these qualifications:

• Is thoroughly familiar with these instructions.
• Is trained in industry-accepted high and low-voltage safe operating practices and procedures.
• Is trained and authorized to energize, de-energize, clear, and ground power distribution equipment.
• Is trained in the care and use of protective equipment such as arc flash clothing, safety glasses, face shield, hard hat, rubber gloves, clampstick, hotstick, etc.

Following is important safety information. For safe installation and operation of this equipment, be sure to read and understand all cautions and warnings.

Hazard Statement Definitions

This manual may contain four types of hazard statements:

⚠️ DANGER
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠️ WARNING
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠️ CAUTION
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

⚠️ CAUTION
Indicates a potentially hazardous situation which, if not avoided, may result in equipment damage only.

Safety instructions

Following are general caution and warning statements that apply to this equipment. Additional statements, related to specific tasks and procedures, are located throughout the manual.

⚠️ DANGER
Hazardous voltage. Contact with hazardous voltage will cause death or severe personal injury. Follow all locally approved safety procedures when working around high- and low-voltage lines and equipment.

⚠️ WARNING
Before installing, operating, maintaining, or testing this equipment, carefully read and understand the contents of this manual. Improper operation, handling or maintenance can result in death, severe personal injury, and equipment damage.

⚠️ WARNING
This equipment is not intended to protect human life. Follow all locally approved procedures and safety practices when installing or operating this equipment. Failure to comply can result in death, severe personal injury and equipment damage.

⚠️ WARNING
Power distribution and transmission equipment must be properly selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures. Failure to properly select, install or maintain power distribution and transmission equipment can result in death, severe personal injury, and equipment damage.
Product information

Introduction
Service Information MN225049EN provides the installation instruction for a replacement motor resistor for the QD3 Quik-Drive Tap Changer for an Eaton Cooper Power series voltage regulators.

Read this manual first
Read and understand the contents of this manual and follow all locally approved procedures and safety practices before installing or operating this equipment.

Additional information
These instructions cannot cover all details or variations in the equipment, procedures, or processes described nor provide directions for meeting every possible contingency during installation, operation, or maintenance. For additional information, contact your Eaton’s Cooper Power series product representative.

Acceptance and initial inspection
Each resistor kit is in good condition when accepted by the carrier for shipment. Upon receipt, inspect the shipping container for signs of damage. Unpack the resistor kit and inspect it thoroughly for damage incurred during shipment. If damaged is discovered, file a claim with the carrier immediately.

Handling and storage
Be careful during handling and storage of the resistor kit to minimize the possibility of damage. If the resistor kit is to be stored for any length of time prior to installation, provide a clean, dry storage area.

Standards
ISO 9001 Certified Quality Management System

Parts supplied

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
<th>Description</th>
<th>Qty</th>
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<tbody>
<tr>
<td>1</td>
<td>2291844A01</td>
<td>40 ohm, 100 W Resistor</td>
<td>1</td>
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Tools required

<table>
<thead>
<tr>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen Wrench 1/8 inch</td>
<td>1</td>
</tr>
<tr>
<td>243 Locktite</td>
<td>1</td>
</tr>
<tr>
<td>Needle Nose Pliers</td>
<td>1</td>
</tr>
</tbody>
</table>

Procedure

Resistor removal
1. Using a pair of needle nose pliers remove the push on connections from each end of the resistor. See Figure 2.

2. Use a 1/8 inch Allen wrench and remove the screw from one resistor mounting clips See Figure 3.
3. Remove the mounting clip from the resistor. See Figure 4.

4. Work the resistor off of the second mounting clip by rotating and pulling on the resistor.

**Resistor installation**

5. Push the new resistor onto the mounting clip that is fastened to the lower tap changer mounting bracket. The resistor terminals must be pointing upward. See Figure 5.

6. Press the loose mounting clip into the open end of the resistor. See Figure 6.

7. Place a drop of 243 Locktite on the mounting screw threads.

8. Fasten the resistor mounting clip to the tap changer base using the screw and tighten with a 1/8 inch Allen wrench. See Figure 7.
9. Replace the blue/red wire on each end of the resistor by pushing the terminals onto the resistor spade connectors. See Figure 8.

Figure 8. Resistor lead connections