

Installation Instructions

DCNHE400 Series

Part Number: DCNHE400MFXX-B, DCNHE400MFXX-F, DCNHE400NFXX-B, DCNHE400NFXX-F



Description

The DCNHE400 Series high-voltage DC contactor, rated for 400A continuous current (500A with 400MCM cable) and 1000V maximum contact voltage, is designed for industrial and electric vehicle (EV) applications such as battery power supply, charging pile, motor control, circuit insulation, circuit protection, and safety devices for industrial machinery.

Featuring non-polarized, sealed contacts and a double-coil design, the DCNHE400 Series industrial and EV contactor supports reliable operation in electrical systems regardless of polarity and can be mounted in any orientation.

With internal-thread and stud terminal types, 12V and 24V coil voltage ratings, and the availability of mechanically linked auxiliary contacts, the DCNHE400 Series contactor relay offers versatile installation and operation, accommodating a wide range of system requirements.

Web Resources

Download 2D print, installation guide and technical resources at: littelfuse.com/DCNHE400

Order Information:

See datasheet for part numbers and descriptions.

Installation

Assemble the relay in the following sequence:

Step 1. Prepare the Work Area - It is always advisable when working with electricity to take caution and turn off any power unit you may encounter while installing any electrical device.

Step 2. Mount the Contactor - Mount the contactor using the mounting hardware that is supplied with the contactor or the recommended fasteners.

Step 3. Prepare the Wiring and Connect the Control Wires - Strip all the wires that will be connected to the control coil and the contactor terminations with a wire stripper. Remove approximately ½ inch of the wire's insulation to expose the bare copper wire. Connect the control wires to the coil solenoid first, red and black wires on contactor. When installing the wires, be sure that a good electrical connection is made by using an appropriate electrical connector. Do not allow any loose strands to short against any equipment and cause electrical damage.

Step 4. Connecting the Switched Auxiliary Contact Wires - If an Auxiliary Contact is provided, connect the low power Line feed wire to one of the white wires and the low power Load output wire to the remaining white wire. When installing the wires, be sure that a good electrical connection is made. Do not allow any loose strands to short against any equipment and cause electrical damage.

Step 5. Connecting the Switched Power Wires - Verify the switched contacts are open, no continuity between terminals "A1" and "A2". Using the hardware that is supplied with the contactor or the recommended fasteners, connect the Line power feed wire to the contactor terminal marked "A1". Connect the Load power output wire to the contactor terminal marked "A2". As with the control wires, be sure that a good electrical connection is made. Do not allow any loose strands to short against any equipment and cause electrical damage.

Step by step images shown in Figure 2 on page 2.



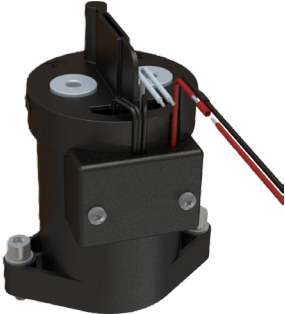

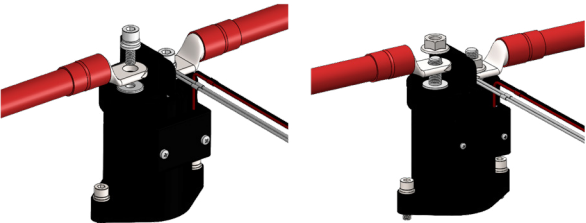
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DCNHE400NFXX-F



Expertise Applied | Answers Delivered

<p>STEP 1</p>	 <p>DANGER</p> <p>Electrical Hazard Turn Off Power Before Servicing</p>	<p>Prepare the Work Area - It is always advisable when working with electricity to take caution and turn off any power unit you may encounter while installing any electrical device.</p>
<p>STEP 2</p>		<p>Mount the Contactor - Mount the contactor using the mountin hardware that is supplied with the contactor or the recommended fasteners.</p>
<p>STEP 3</p>		<p>Prepare the Wiring and Connect the Control Wires - Strip all the wires that will be connected to the control coil and the contactor terminations with a wire stripper. Remove approximately ½ inch of the wire’s insulation to expose the bare copper wire. Connect the control wires to the coil solenoid first, red and black wires on contactor. When installing the wires, be sure that a good electrical connection is made by using an appropriate electrical connector. Do not allow any loose strands to short against any equipment and cause electrical damage.</p>
<p>STEP 4</p>		<p>Connecting the Switched Auxiliary Contact Wires - If an Auxiliary Contact is provided, connect the low power Line feed wire to one of the white wires and the low power Load output wire to the remaining white wire. When installing the wires, be sure that a good electrical connection is made. Do not allow any loose strands to short against any equipment and cause electrical damage.</p>
<p>STEP 5</p>		<p>Connecting the Switched Power Wires - Verify the switched contacts are open, no continuity between terminals “A1” and “A2”. Using the hardware that is supplied with the contactor or the recommended fasteners, connect the Line power feed wire to the contactor terminal marked “A1”. Connect the Load power output wire to the contactor terminal marked “A2”. As with the control wires, be sure that a good electrical connection is made. Do not allow any loose strands to short against any equipment and cause electrical damage.</p>

Specifications, descriptions and illustrative material in this literature are as accurate as known at the time of publication, and are subject to changes without notice. Visit littelfuse.com for the most up-to-date technical information.