

Installation Instructions

DCNHF60 Series

Part Number: DCNHF60NG12-F & DCNHF60NG24-F & DCNHF60NG48-F



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Description

The DCNHF60 Series high-voltage DC contactor relay is designed for electric vehicle and industrial high-voltage DC applications that require flexible system integration. Rated for 60A continuous current and up to 1000V DC, it is well suited for battery power supply systems, charging piles, motor control, circuit isolation, circuit protection, and industrial safety devices.

Featuring SPST normally open (NO) circuitry with non-polarized contacts, the DCNHF60 Series contactor supports bidirectional current switching to accommodate a wide range of electrical systems. Its compact structure helps reduce operational noise, while a durable housing provides reliable performance in demanding automotive and industrial environments.

The DCNHF60 Series is equipped with internal-thread terminals for secure connections and simplified integration. Multiple coil voltage options (12V DC, 24V DC, and 48V DC) are available to support a variety of EV and industrial control requirements.

Web Resources

Download 2D print, installation guide and technical resources at: littelfuse.com/DCNHF60

Ordering Information

PART NUMBER	RATED CURRENT(A)	POLARIZED	AUX. CONTACT	COIL VOLTAGE(V DC)	MOUNTING	POWER CONNECTION
DCNHF60NG12-F	60	No	No	12	Bottom	Internal Thread
DCNHF60NG24-F	60	No	No	24	Bottom	Internal Thread
DCNHF60NG48-F	60	No	No	48	Bottom	Internal Thread

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 1/2 inch of the wire's insulation to expose the bare copper wire. Connect the control wires to the coil solenoid first, red and black connect 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 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.


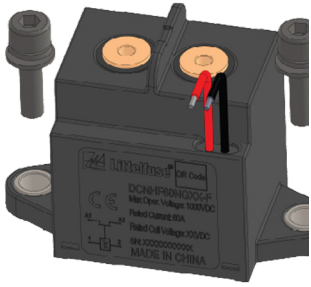
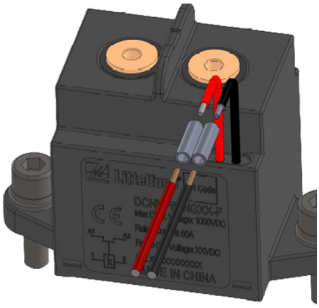
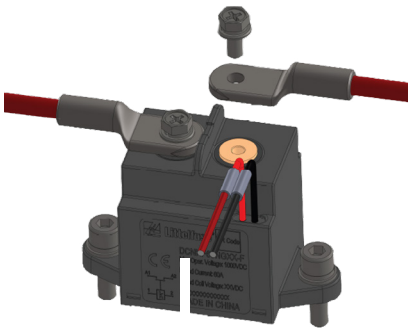
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<p>STEP 1</p>	 <p>DANGER</p> <p>Electrical Hazard Turn Off Power Before Servicing</p>	<p>Prepare the Work Area - It is always advisable when working with electricity to take caution and turn off any power unit you may encounter while installing any 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 1/2 inch of the wire's insulation to expose the bare copper wire. Connect the control wires to the coil solenoid first, red and black connect 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 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.