Specifications Overview

- **Amperage:** 250A Continuous Carry
- **Housing:** Nylon UL 94-V0
- **Voltage Rating:** 900V
- **Output Connectors:** M8 x 1.25 High Current Connections
- **Connectors:** Wire Leads for Control Circuit
- **Ingress Protections:** IP67
- **Operating Temperature:** -40°C to 85°C
- **Circuitry:**
  - **A, N, P:** SPST NO
  - **B:** SPST NC
- **Voltage:**
  - **M:** 12-24V DC Nominal, 9-36V DC Working
  - **F:** 72V DC Nominal, 48-95V DC Working
  - **G:** 48-72V DC Nominal, 32-95V DC Working
- **Max Coil Inrush Current:** 0.7-3.8A
- **Mounting:** #10 with Compression Limiters
- **Size:** Reference Dimensions on Page 2
- **Mounting Bolt Torque:** 1.7-3.3 Nm (15-30 in-lb)
- **Contact Torque:** 8.8-11 Nm (80-100 in-lb)
- **Terminals:** M8 Silver Plated Copper
- **Approvals:** UL File No. E510407

Features and Benefits

- High current (250A) and high voltage (900V) contactor for EV applications
- Compact structure, helping reduce noise when turned on
- Coil Economizer greatly reduces coil power and heating
- Sealed IP67, gas-filled relay which mitigates arcing
- No mounting orientation restrictions

Web Resources

Download 2D print and technical resources at: littelfuse.com/DCNEV250

Description

High current and high voltage DC contactor relays for electric vehicle applications such as charging station, battery power supply, DC power control, circuit protection, and other switch controls. Can also be used in uninterruptible power supply and other electronic control systems. Are available with polarized and non-polarized contacts to best suit electrical systems' polarity. The Coil Economizer greatly reduces coil power and heating after the contactor is energized. Once the contactor is energized, it takes minimal coil power to keep the contacts closed due to Pulse Width Modulation (PWM) reducing the average power delivered by pulsing the electrical signal.

Applications

- Battery Electric Vehicles
- Hybrid Electric Vehicles
- Material Handling
- Electric Maintenance and Transport Vehicles
- Industrial Applications

Ordering Information

Please see page 2 for more information
## Ordering Information

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>COIL VOLTAGE 12-24V DC</th>
<th>COIL VOLTAGE 72V DC</th>
<th>COIL VOLTAGE 48-72V DC</th>
<th>BOTTOM MOUNT</th>
<th>AUXILIARY CONTACT SPST-NO</th>
<th>AUXILIARY CONTACT SPST-NC</th>
<th>NON-POLARIZED TERMINALS</th>
<th>POTTED PCB</th>
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* Box Packaging Available
DCNEV250 SERIES HIGH CURRENT HIGH VOLTAGE DC CONTACOR

Estimated Make Break Chart

Capacitive Make Test Curve

Dimensions in MM

Electrical Diagram

- Optional Aux. Contact
- Length: 390
- Coil wires
- Length: 390
- (2) M8 x 1.25 Screw Terminals
- φ58.2
- Length: 2.29
- (2) φ5.8
- Length: 2.23
- 80.7
- Length: 2.86
- 72.6
- Length: 2.59
- 65.7
- Length: 2.70
- 68.5
- Length: 2.21
- 56.1
- Length: 1.50
- 12.7
- Length: 1.8
- 80.7

- Optional Aux. Contact
- White
- +C
- Pos. Term.
- RED (+)
- Coil
- Neg. Term.
- Black (-)
- -C
- Optional Aux. Contact
- White