DCNLEV50 SERIES HIGH CURRENT HIGH VOLTAGE DC CONTACTOR RELAY

Specifications Overview

- **Amperage:** 50A Continuous Carry
- **Housing:** Nylon UL 94-V0
- **Voltage Rating:** 900V
- **Output Connectors:** M5 Bolt and Lockwasher Connections
- **Connectors:** Wire Leads for Control Circuit
- **Ingress Protections:** IP67
- **Operating Temperature:** -40 to 85°C
- **Circuitry:** SPST NO
- **Voltage:**
  - B: 12V DC Nominal, 8-16V DC Working
  - C: 24V DC Nominal, 16-28V DC Working
  - E: 48V DC Nominal, 33-52V DC Working
- **Max Coil Inrush Current:**
  - B: 461mA Max to Coil
  - C: 250mA Max to Coil
  - E: 122mA Max to Coil
- **Mounting:** M4 with Compression Limiters
- **Size:** 46mm x 58mm x 41mm
- **Mounting Bolt Torque:** 2.3 Nm (20 in-lb)
- **Contact Torque:** 3.4 - 4.5 Nm (30 - 40 in-lb)
- **Terminals:** M5 Silver Plated Copper
- **Approvals:** UL File No. E510407

**Description**

High current and high voltage DC contactor relays for electric vehicle applications such as charging station, battery power supply, motor control, circuit protection, and other switch controls. Can also be used in uninterruptible power supply and industrial machinery. Are available with polarized and non-polarized contacts to best suit electrical systems’ polarity.

**Features and Benefits**

- High current (50A) and high voltage (900V) contactor for EV applications
- Compact structure, helping reduce noise when turned on
- Sealed IP67, gas-filled relay which mitigates arcing
- No mounting orientation restrictions

**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

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**Web Resources**

Download 2D print and technical resources at: littelfuse.com/DCNLEV50

**Electrical Diagram**

```
+A1  POS. TERM.▲

COIL

WHITE

-A2  NEG. TERM.▲

OPTIONAL

AUX. CONTACT  BLACK

OPTIONAL

AUX. CONTACT  BLACK
```

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Rev: 010220-A
### Ordering Information

<table>
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<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>COIL VOLTAGE 12V DC</th>
<th>COIL VOLTAGE 24V DC</th>
<th>COIL VOLTAGE 48V DC</th>
<th>AUXILIARY CONTACT SPST-NO</th>
<th>BOTTOM MOUNT</th>
<th>SIDE MOUNT</th>
<th>NON-POLARIZED TERMINALS</th>
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* Box Packaging Available
DCNLEV50 SERIES HIGH CURRENT HIGH VOLTAGE DC CONTACOR RELAY

Dimensions in MM

Side Mount

Bottom Mount

OPTIONAL AUX CONTACT LENGTH: 380

COIL WIRES LENGTH: 380

(2) M5 CONTACT TERMINALS

(2) Ø4.6

Ø39.9 1.57

54.0 2.13

46.2 1.82