

DCNEV150 SERIES HIGH CURRENT HIGH VOLTAGE DC CONTACTOR RELAY



Description

High current and high voltage DC contactor relays for electric vehicle applications such as 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. 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

Web Resources

Download 2D print and technical resources at:
littelfuse.com/DCNEV150

Ordering Information

| PART NUMBER | DESCRIPTION | COIL VOLTAGE 12-24V DC | AUXILIARY CONTACT SPST-NO | BOTTOM MOUNT | NON-POLARIZED TERMINALS |
|--------------|--|---------------------------|------------------------------|-----------------|----------------------------|
| DCNEV150-M | High Voltage DC Contactor Relay Bottom Mount with Polar Load Terminals | ● | | ● | |
| DCNEV150-MA | High Voltage DC Contactor Relay Bottom Mount with Auxiliary Circuit with Polar Load Terminals | ● | ● | ● | |
| DCNEV150-MAN | High Voltage DC Contactor Relay Bottom Mount With Auxiliary Circuit & Non-Polar Load Terminals | ● | ● | ● | ● |
| DCNEV150-MN | High Voltage DC Contactor Relay Bottom Mount with Non-Polar Load Terminals | ● | | ● | ● |

* Box Packaging Available

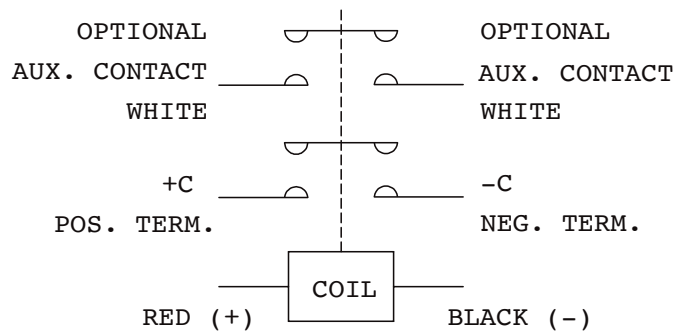
Specifications Overview

| | |
|---------------------------------|------------------------------------|
| Amperage: | 150A 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: | SPST NO |
| Working Voltage: | 9-36V DC |
| Max Coil Inrush Current: | 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

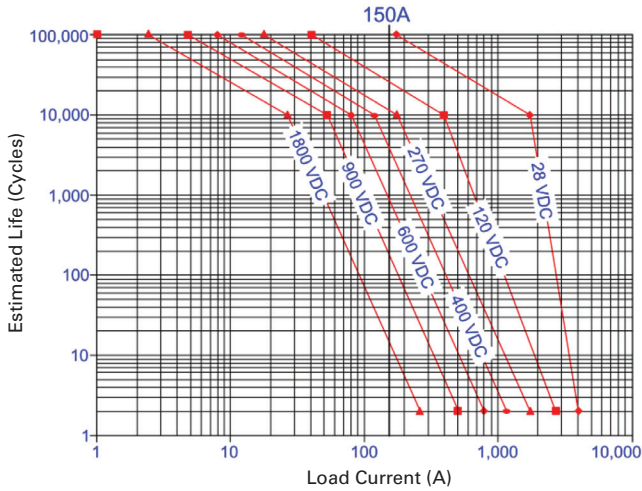
- High current (150A) and high voltage (900V) contactor for EV Applications
- Compact structure, helping reduce noise when turned on
- Coil Economizer greatly reduces coil power and heating
- Sealed IP67, gas-filled relay which mitigates arcing
- No mounting orientation restrictions

Electrical Diagram

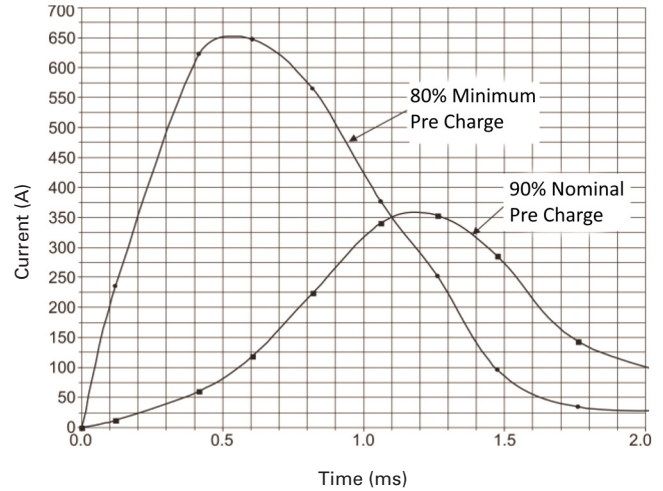


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Estimated Make Break Chart



Capacitive Make Test Curve

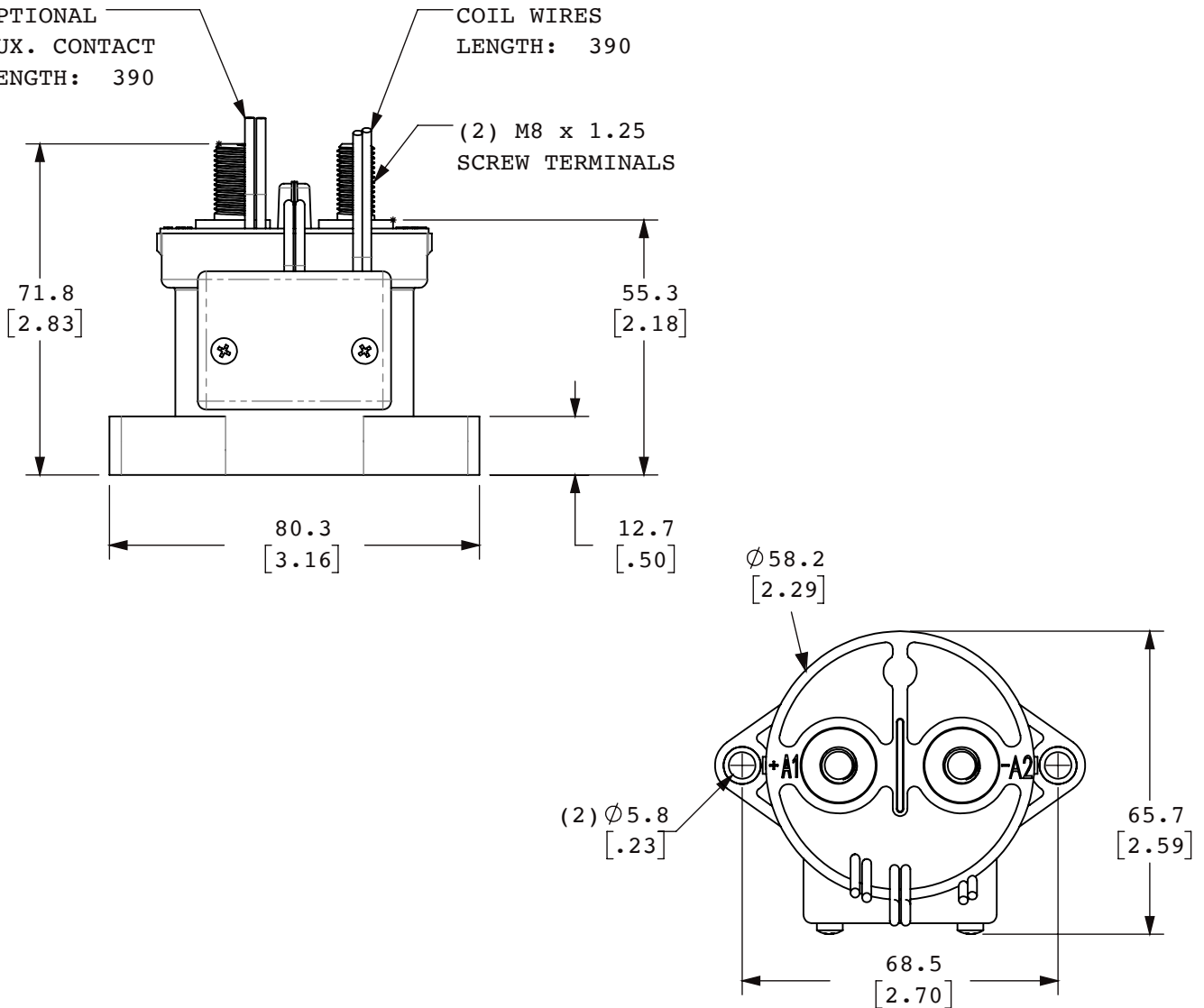


Dimensions in MM

OPTIONAL
AUX. CONTACT
LENGTH: 390

COIL WIRES
LENGTH: 390

(2) M8 x 1.25
SCREW TERMINALS



Mouser Electronics

Authorized Distributor

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