

Instruction Bulletin

DC Lighting Contactor Class 8903 Type L Form Y48, Series D

Retain for future use.

INTRODUCTION

This bulletin describes the Class 8903 Type L Form Y48, Series D DC Lighting Contactor.

⚠ DANGER

HAZARDOUS VOLTAGE

- Disconnect all power supplying this equipment before working on it.
- Ensure that the resistor housing assembly voltage rating matches the coil voltage rating.
- Do not connect relay coils in series.

Failure to follow these instructions will result in death or serious injury.

Table 1: Coil Voltage Range

DC Supply	Rated Coil Voltage
5% maximum ripple	+10%, -20%
Ripple greater than 5%	±10%

COIL VOLTAGE MODIFICATION

Table 2: Replacement Parts

Voltage	Coil No.	Resistor Housing Assembly No.
24	31071-412-23	31165-004-50
32	31071-412-26	31165-004-51
48	31071-412-32	31165-004-52
115/125	31071-412-44	31165-004-53
230/250	31071-412-53	31165-004-54

Both the coil and the resistor housing assembly are stamped with the rated voltage, *which must correspond to the voltage applied to the relay*. When converting the device to operate on a different supply voltage, you must change both the coil and the resistor housing assembly. Table 2 lists replacement part numbers.

1. Loosen the two screws A of the overlapping contact shown in Figure 1. Free both wires leading to the coil and both wires leading to the resistor housing assembly.
2. Loosen the captive screw and remove the magnet coil/armature assembly.
3. Install the new coil. Replace the magnet coil/armature assembly and retighten the captive screw.
4. To change the resistor housing assembly:
 - a. Loosen the three screws on the back that attach the resistor housing assembly to the relay base.
 - b. Remove the resistor housing assembly.
 - c. Attach the new resistor housing assembly to the base with the three screws, making sure that the wires on the resistor housing assembly are not pinched.
5. Route the coil and the resistor housing assembly wires as shown in Figure 1. Connect the wires to the overlapping contacts by retightening screws A.

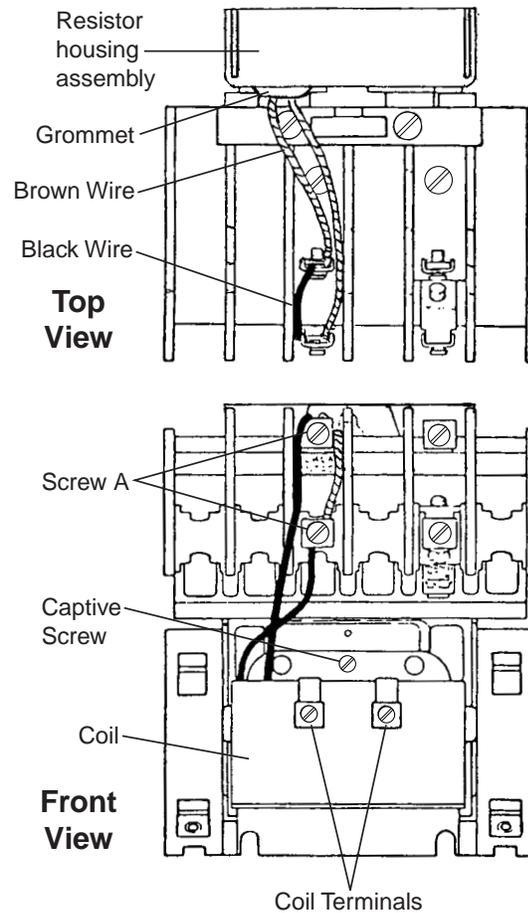


Figure 1: Coil Voltage Modification

CONTACT CONVERSION

The contacts convert readily from normally open (N.O.) to normally closed (N.C.), as shown in Figure 2.

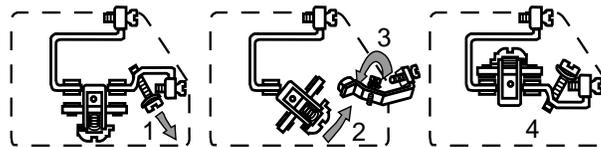


Figure 2: Contact Conversion

1. Remove the front stationary contact.
2. Rotate the movable contact finger with a screwdriver.
3. Invert the front stationary contact.
4. Replace the front stationary contact.

The "N.O." or "N.C." on the moveable contact assembly, together with the pointer on the front stationary contact, indicate whether the contact is open or closed.

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