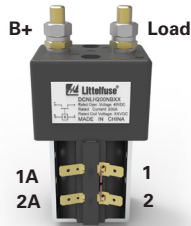


# Wiring Instructions

## DCNLH Series



### Description

The DCNLH contactor series uses a bi-stable (latching) activation coil. This means that once activated the contactor stays in either the on or off position until it is specially driven out of that position. In this case, that is accomplished by reversing the direction of current through the coil. When in the open or closed position the coil does not consume any energy.

### Option #1:

#### 12 and 24V Coils - Single reversing switch with the option of bidirectional TVS diode

This option uses a **Momentary On – Off – Momentary On** power reversing switch. Do not use a non-momentary reversing switch as this may damage the coil. This configuration also allows for the option of adding a bidirectional TVS diode for coil suppression.

<b>Switches:</b>	<b>Cole Hersee:</b> 58311-18, 55046, 55046-04	<b>Bidirectional TVS diodes:</b>	<b>12V:</b> 1.5KE30CA
	<b>Carling Technologies:</b> L30D1CNN1-A7700-000, TIG05M-6S-BL-NBL, 6G053-73		<b>24V:</b> 1.5KE62CA

### Option #2:

#### 12, 24, 48, and 60V Coils - Single DPDT switch with the option of bidirectional TVS diode

This option uses a **Momentary On – Off – Momentary On** switch. Do not use a non-momentary switch as this may damage the coil. This requires some additional wiring to the basic switch. This configuration also allows for the option of adding a bidirectional TVS diode for coil suppression. The best ways to attach the diodes to the contactor are to put female .250 spade terminals on the diode or to solder the diode directly to terminals A1 and A2.

In this configuration, it requires wire jumpers attached to the switch from pin 3 to pin 4 and from pin 6 to pin 1.

<b>Switches:</b>	<b>12 &amp; 24V</b>	<b>Bidirectional TVS diodes:</b>	<b>12V:</b> 1.5KE30CA
	<b>Cole Hersee:</b> 58311-04, 55033-01, 55054, 55065-02		<b>24V:</b> 1.5KE62CA
	<b>Carling Technologies:</b> VLDASOB- AZB11- 000, 6GM5M-78		<b>48V:</b> 1.5KE120CA
	<b>48 &amp; 60V</b>		<b>60V:</b> 1.5KE160CA
	<b>C&amp;K:</b> PT205-S-Q-Q, PT205-S-S-Q		

### Option #3:

#### 12, 24, 48, and 60V Coils - Two DPST switches (separate On and Off switches)

This option uses two **Off – Momentary On** switch. Do not use a non-momentary switch as this may damage the coil.

Wiring can also be accomplished with a DPDT On – Momentary On switch by simply not connecting terminals 1 & 4 on the switch.

<b>Switches:</b>	<b>12 &amp; 24V</b>
	<b>Carling Technologies:</b> VBDASOB-AZB00-000, 6GK5B-78
	<b>48 &amp; 60V</b>
	<b>C&amp;K:</b> PT208-S-Q-Q, PT208-S-S-Q

