

	MRAPR-9v	MRAPR-12v
contact rating, current	8 amps max	8 amps max
contact rating, voltage	30 v max	30 v max
coil operating voltage	8-14 v AC or DC	10-17 v AC or DC
coil resistance	200 $\Omega$	360 $\Omega$

© 2017 Azatrax, [www.azatrax.com](http://www.azatrax.com)

### How a relay works:

The essential parts of a relay are its coil and its contacts.

**Coil:** Fine wire wrapped around an iron core. It is an electro-magnet.

**Contacts:** A movable electrical switch similar to a push button that makes or breaks an electrical connection. This is a 'double pole' relay so it has two sets of contacts. They are electrically independent so they can switch two separate circuits.

When the coil is not powered (off), each common (C) terminal is connected to its Normally Closed (NC) terminal. All Normally Open (NO) terminals are disconnected (open).

When the coil is energized with the proper voltage, the contacts move. Each C terminal is connected to its NO terminal and the NC terminals are disconnected. When coil voltage is removed the contacts return to their 'off' positions.

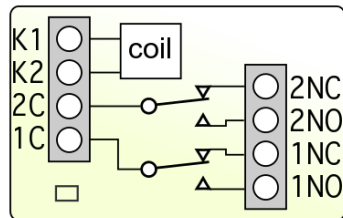


fig. 1: coil de-energized (off)

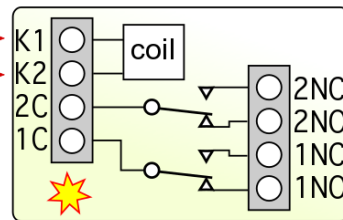


fig. 2: coil energized (on)