



Title: **8 Pin Relay, Unwired**

Job: 4

Course: Intro to Automation

Unit: Manual Motor Control

CLO: 2

Name \_\_\_\_\_

Grade \_\_\_\_\_

Date \_\_\_\_\_

## Objectives

1. Student shall identify the components of a standard eight-pin relay.
2. Student shall contrast the difference between “normally-open” contacts and “normally-closed” contacts.
3. Student shall compare resistance measures between “normally-open” and “normally-closed” contacts.

## Assessment

Students shall demonstrate a comprehension of the objectives listed above by scoring a minimum of 75% on this Job. Grading shall be based on instructor evaluation.

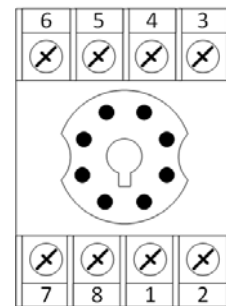
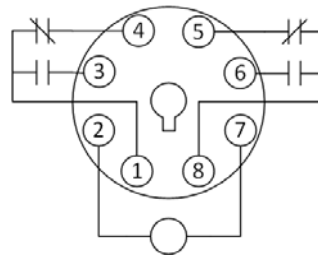
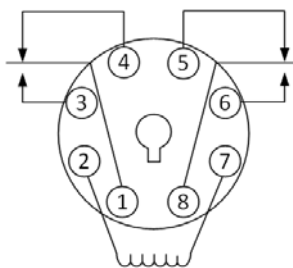
## Devices

Outputs		
Device	Description	Symbol
Eight-Pin Relay	Control Relay	CR1

## Instructions

Examine an 8-pin relay. Notice the diagrams on the left and middle are given from the perspective of viewing the pins from the bottom of the relay. The relay base, the diagram to the right, however is a mirror image of the other two. The base diagram is from the top perspective. With an un-wired 8-pin relay inserted in the base and a multi-meter, answer the following questions.

## Diagram



1. Which terminal pairs are considered “normally open”? \_\_\_\_\_
2. Which terminal pairs are considered “normally closed”? \_\_\_\_\_
3. Which terminal pair is designated for the “coil”? \_\_\_\_\_
4. Which two pins are considered “common” pins? \_\_\_\_\_

With a multi-meter, measure the resistance of the terminal pairs you answered for each of the above questions.

5. Resistance value of the "normally open" pairs from question 1? \_\_\_\_\_
6. Resistance value of the "normally closed" pairs from question 2? \_\_\_\_\_
7. Resistance value of the "coil" pair from question 3? \_\_\_\_\_
8. Resistance value between the two "common" pins from question 4? \_\_\_\_\_
9. The relay is a 24VDC relay. What does that indicate?
10. Is it possible to connect the contacts of this relay to an AC source or a different DC voltage?
11. Is there a limit to the amperage that this relay can handle? If so, what is the limit?
12. Viewing the pinout of the 8-pin relay, what is the relationship between pins 1,3,4 and pins 5,6,8?
13. Is it possible to have pins 1,3,4 at one source and potential and have pins 5,6,8 on a different source and/or potential? If so, why?
14. Place the leads of a multimeter to measure continuity across pins 1 and 3 of the relay. Press the greenish blue button on the front of the relay. What is the result?
15. Keep the leads of a multimeter to measure continuity across pins 1 and 3 of the relay. Lift the manual gate on the front of the relay. What is the result?