

PLC121 LAB 3.3: RELAY, CIRCUITS AND SOLENOIDS

Student Name: _____

Student ID: _____

LAB OUTCOMES:

Upon completion of this lab procedure, the student should be able to:

1. Wire a relay in both an AC and DC circuit
2. Wire a relay circuit controlling two indicator lights
3. Explain the difference between a N.O and N.C. contacts

LAB PROCESS:

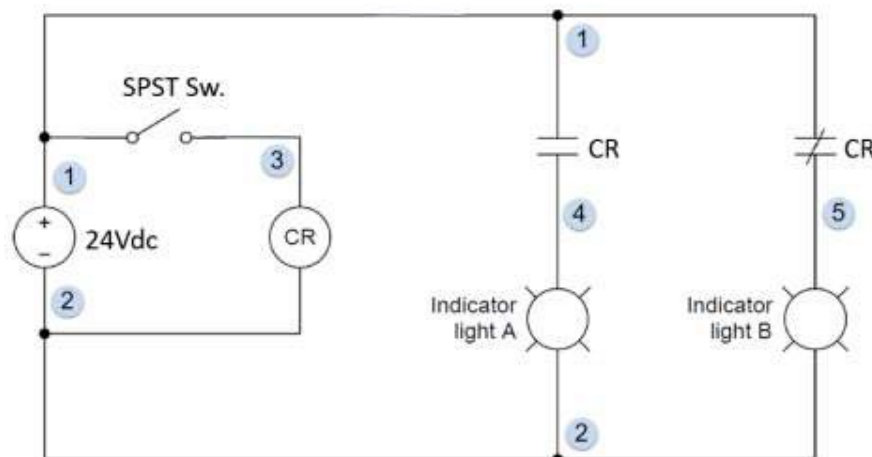
Open the AC/DC Training Unit. Setup the unit on its base, or lay flat on the work table.

Make sure all fault switches are in the 0 position.

Connect the power cord and turn off the power input switch to make sure the unit is not powered.

Part 1

Wire the following circuit on the AC/DC training system.

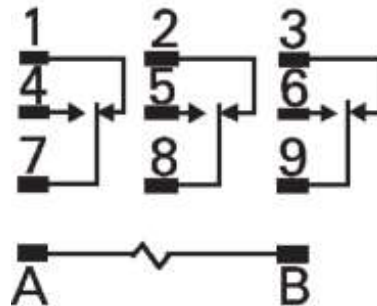


1. Explain how the NO and NC contacts work in this circuit.

2. Explain the voltage drop and each node specified by the instructor.

3. Explain which light is on when the relay is on, versus when it is off.

Part 2

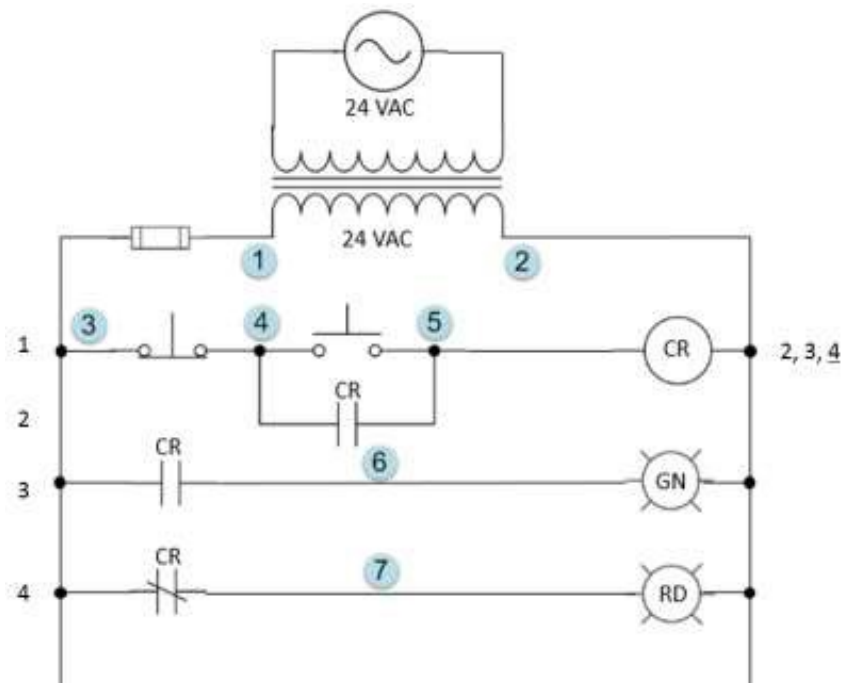


1. Identify the components below, and what is the continuity between numbers.

2. Correlate the diagram to the actual relay.

Part 3

Wire the electrical circuit as shown below:



1. Explain the operation of the circuit and purpose of each component.
2. Explain the voltage drops that should be measured on each electrical node if the relay is pulled in, and also when it is off.

The outcomes of this exercise (listed on page 1) specifies the skills that the Student must demonstrate to the Instructor. Once the Instructor is satisfied with the demonstration of Knowledge & Skills by the individual student, they will sign this document (for the student), then enter a 100% into the Hands-On Lab grade in Sakai.

I verify that this student has completed all of the requirements of this Hands-On Assessment:

Student Name: _____

Faculty Signature: _____ Date: _____

DOL DISCLAIMER:

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