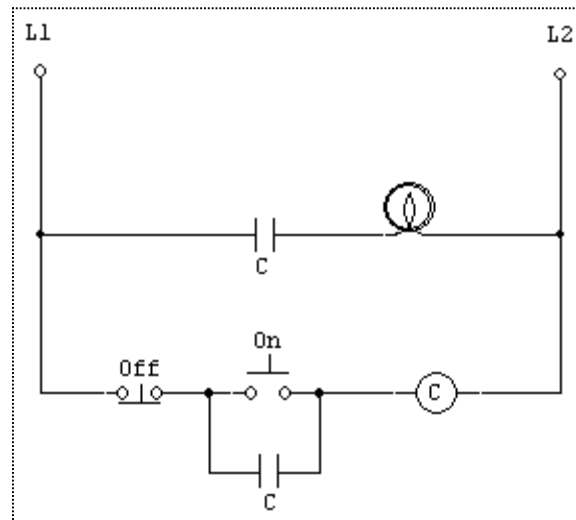


ET 350L
Lab 12
AC Relays, Relay Logic Ladder Diagrams

1. The following circuit is to be used to control a light bulb and then a motor.



2. Begin by first connecting the contactor circuit.. Connect the circuit to the variac and set the variac to a lower and safer voltage.
3. After you are confident that the contactor circuit is correct, increase the voltage to 120 VAC.
4. What is the current in the contactor circuit?
5. Complete the circuit by connecting the load, in this case, a light bulb; operate the circuit.
6. Replace the light bulb with a 120 VAC motor; either a capacitor start motor or shaded pole motor. Operate the circuit.
7. What is the current in the motor circuit?
8. Redraw and modify the circuit so as to add a light bulb to turn on with the motor as warning light.
9. Comment on the use of relays in control of motors and lights.