

PLC127 LAB 2.1: ALLEN BRADLEY SLC-500 SEARCH FUNCTION

Student Name: _____

Student ID: _____

LAB OUTCOMES:

1. Demonstrate how to search for addresses and instructions in a program
2. Demonstrate how to navigate to a rung in a specific program file in the PLC program
3. Demonstrate how to interpret and navigate through a program using cross reference data
4. Determine the symbol and descriptions of PLC addresses
5. Demonstrate how to interpret the I/O configuration
6. Determine the processor type and processor name of a PLC program
7. Determine / change the value in a data table address in a PLC program

LAB PROCESS:

Rockwell created a demonstration program that it ships with the RSLogix500 software named **IC500DMO.ACH** (which was originally a DOS based file). Import this project into RSLogix500, open it offline and answer the following questions.

Part 1

1. Download **IC500DMO.ACH** from the Sakai site.
2. Import the project into RSLogix500, and open it while offline.

Questions

1. How many ladder files are there in this project?

2. How many rings are in each ladder file in the **IC500DMO** project?

3. What rung will the OTE for B3:3/3 be found on?

What is the symbol for the B3:3/3 address?

What address would this bit be if it was displayed in the following format: B3/25?

4. What rung will the OTE of O:3/2 be found on?

What is the symbol for this address?

How many XIC and XIO instructions of this address are used in the program?

5. What is the address for the output with the symbol of HEAT_OFF?

What rung will this output be found on?

6. What rung will the user find the TON of T4:24 on?

What is the dwell time of this timer?

What does this timer do?

7. What PLC instruction will be found on rung 3:6?

8. What is the value found in T14:6.PRE
9. List the cross-reference information for O:3/7
10. What tow conditions will turn on the OTE for O:3/7?
11. What type of output instruction is found on rung 2:59?

What does the instruction do?

12. How many input modules would be found on the I/O rack that **IC500DMO** controls?

What slots are they in?

How many I/O points do they have?

13. How many output modules would be found on the I/O rack that IC500DMO controls?

What slots are they in?

How many I/O points do they have?

14. What is the symbol for T4:5?

What is the description for T4:5?

15. Turn off the symbols and descriptions while viewing the program

16. What is the symbol for B16/7?

What rung is the OTE in for this address?

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: _____

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