

Purpose:

The main purpose of this exercise is to propagate or broaden your general knowledge about Programmable Logic Controllers (PLC's). The exercise will touch upon what type of PLC's are available and where their usage is applicable.

Part 1:

Browse the web for different PLC manufacturers (fx. Siemens, Allan-Bradley, ABB) and try to find one or several PLC systems that is capable of controlling a system containing the following parts:

- 4 digital inputs
- 2 actuators (analog outputs)
- 1 network interface for communication

Create a brief description of the system(s) you have found and attach this as well as the datasheet or specification sheet to your hand-in.

Part 2:

A system that controls the different cycles of a washing machine is to be designed. The system should take care of heating the water, pumping water into the drum, turning the drum and drain the drum in appropriate ways for the different wash cycles.

Create a diagram that shows the actions of a typical wash cycle and explain what should trigger a shift from one action to the next.

Explain whether or not you think a PLC would be appropriate to use for this task.

Hand-in

The hand-in should include answers to the above questions and links to datasheets for the found PLC system. The assignment should be delivered on DTU-Inside in the appropriate exercise