PLC Auftrag

<https://moodle.bbbaden.ch/mod/glossary/view.php?id=25818>

1. What are the components of the basic equipment of a PLC?

PS( Power Supply), CPU, inputs or outputs, Bus-Connection

1. What types of PLCs are available on the market?

Compact PLCs, Modular PLC, Slot PLC( Industry PC)

1. What is an optocoupler and what is its function in an output module of a PLC?

Galvanic separation, It is a Device with is used to transfer Data between 2 galvanic separated circuits. It’s used to Protect the SPS from a short-circuit.

1. A PLC works cyclic. What does that mean?

It works step by step it start with the first instruction to the last instruction and start again

Read the inputs > process the Programm > process the messages > Self-diagnostic > write the outputs

1. Explain the term "cycle time" of a PLC?

It the time witch the plc need to complete all instructions one time.

1. Explain the term "process image"?

There are saved the inputs outputs with their state on/off

1. What is the "reaction time" of a PLC?

Time it need to process an instruction its maximum 2 times the Cycle time

1. The processing of a statement in a PLC takes approx. 0,5 [\mu](https://moodle.bbbaden.ch/filter/tex/displaytex.php?texexp=%5Cmu)s. How many times will an application program including 1000 statements be processed in one second?

2000 statements

1. What is the function of a diode in the input module of a PLC?

reverse polarity protection

1. Which component has a similar function as a bit memory?

Flag (merker)