



2080 Nelson Miller Parkway  
Suite 200  
Louisville, KY 40223-3172  
Phone: 502-244-7313  
Fax: 502-244-7317

## **JOB DESCRIPTION: Controls Engineer**

### **Summary**

Participate in electrical control design and commissioning. Follow Alliant Technologies' standards in electrical controls design, PLC programming and commissioning.

### **Essential Duties and Responsibilities**

- Understand project schedule and objectives.
- Understand project requirements by studying project specifications, customer requirements, and performance standards.
- Follow Alliant's standards in electrical controls design, PLC programming and commissioning.
- Contribute to team effort by participating in assigned engineering activities.
- Communicate with project engineer and/or project manager regarding progress or problems related to the project.
- Confirm product performance by conducting verification tests.
- Ensure quality on all engineering deliverables.
- Keep standardization high and constantly improve processes.
- Keep current with technology.
- Any other task as directed by management.

### **Responsibility and Authority**

- Responsibility: Noted above. Complete assigned tasks on time and within allocated budget while maintaining high output quality, customer satisfaction, engineering process, engineering quality.
- Authority: Engineering technical decisions within spec compliance and Alliant's standards.

### **Qualifications**

- B.S. Electrical Engineering or equivalent combination of education and experience.
- Strong analytical, verbal, and written communications skills.

### **Experience**

- 0-5 years controls experience.
- Experience designing controls systems, commissioning, and troubleshooting PLC industrial control systems (e.g. Rockwell, Square D, and Siemens) and their industrial networks (e.g. ControlNet, DeviceNet, Modbus, Profibus, and Ethernet).
- Competency with field installation supervision, monitoring Electrical installation subcontractors, and closing of jobs.



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### Alliant Technologies Job Demands

**Position:** Controls Engineer

Physical & Mental Demands	Extent			
	Continuous Over 70%	Frequent	Occasional	Rarely
<b>Physical Demands</b>				
Standing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climbing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bending	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Crouching	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pushing/Pulling	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Carrying	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lifting/Lowering 1-15 lbs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15-30 lbs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30-50 lbs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Over 50 lbs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fine Hand/Eye Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Color Discrimination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hearing Acuity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Mental Demands</b>				
	Continuous Over 70%	Frequent	Occasional	Rarely
Concentration on detail	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attention span 1+ hours on a task	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to remember multiple tasks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oral communication	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Written communication	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Working Conditions</b>				
	Continuous Over 70%	Frequent	Occasional	Rarely
Exposure to toxins, cytotoxins, poisons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exposure to extreme heat, cold, temp fluctuations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposure to hazardous chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Exposure to radiation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (Specify: )	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Sensory Requirements</b>				
	Is Crucial	Is useful		
See	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Distinguish colors	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Hear/Listen	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Taste	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Smell	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Touch	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Speech	<input checked="" type="checkbox"/>	<input type="checkbox"/>		



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Mental Effort	Work Environment
<p>Check all functions performed on a daily basis...</p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Reading</li><li><input checked="" type="checkbox"/> Basic arithmetic</li><li><input type="checkbox"/> Advanced mathematics</li><li><input type="checkbox"/> Weighing/measuring</li><li><input checked="" type="checkbox"/> Visualizing conclusions</li><li><input type="checkbox"/> Analyzing data</li><li><input checked="" type="checkbox"/> Searching for solutions</li><li><input checked="" type="checkbox"/> Creating methodologies</li><li><input checked="" type="checkbox"/> Conducting research</li><li><input type="checkbox"/> Managing resources</li><li><input type="checkbox"/> Evaluating performance of others</li></ul>	<p>% of time spent:</p> <p><u>90</u>      Indoors <u>10</u>      Outdoors</p> <p>The air is:</p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Clean/Normal/Average</li><li><input checked="" type="checkbox"/> Dusty/Dirty</li><li><input checked="" type="checkbox"/> Wet/Humid</li><li><input type="checkbox"/> Affected by smoke, fumes, etc.</li></ul> <p>You work on a surface that is:</p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Level    <input type="checkbox"/> Uneven</li><li><input type="checkbox"/> Sloping   <input type="checkbox"/> Slippery</li></ul> <p>Noise level is:</p> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Normal   <input type="checkbox"/> Loud</li></ul>