

US357

S4C+ Electrical Service

IRB 140, 1400, 2400, 4400, 6400, 6400R, 6600, 7600

The course is designed to teach students how to identify the electrical components, theory of operation, and introduce proper troubleshooting procedures on the S4C+ robot controller. Approximately 50% of the course is hands-on troubleshooting of actual robot system and controller.



Topics include:

- Theory of operation of the S4C+ robot controller
- Safety precautions used while troubleshooting the S4C+ robot controller electrical system
- Description of components in the S4C+ robot controller
- Principles of logical troubleshooting from power up through emergency stop loop and servo system
- Input/Output interfacing between the S4C+ robot controller and peripheral equipment

Course objectives

After successfully completing the course, the participant should be able to:

- Operate the S4C+ control panel and programming unit
- Read and interpret ABB circuit diagrams on the S4C+ robot controller
- Set up calibration and revolution counters
- Analyze and interpret system fault codes
- Diagnose and repair basic electrical faults
- Analyze servo-system data and make basic adjustments
- Diagnose and rectify stop conditions
- Repair and replacement of systems components
- Perform "Cold-Boot" procedure

Student profile

- Industrial electricians
- Electrical service technicians
- Engineers
- Supervisory personnel

Prerequisites

- Familiarity with use of electronic test equipment (voltmeter and oscilloscope)
- Basic understanding of digital electronics is helpful
- S4 robot programming US312 is recommended

Duration

Course duration is 4.5 days.

Customer Service – Robotics

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