

ControlLogix®/RSLogix™ 5000

Kinetix® 6000 Maintenance and Troubleshooting Course Description

COURSE AGENDA

Day 1

- Locating Kinetix 6000 Components
- Checking Kinetix 6000 Connections
- Interpreting Kinetix 6000 Indicators
- Analyzing Fault Codes in a Kinetix 6000 System
- Interpreting Motion State Instructions in an RSLogix 5000 Project

Day 2

- Interpreting Motion Move Instructions in an RSLogix 5000 Project
- Integrated Practice: Troubleshooting a Kinetix 6000 System
- Testing and Tuning Axes in an RSLogix 5000 Project
- Replacing a Kinetix 6000 Drive



COURSE NUMBER: CCN200

Course Purpose

This course is intended to provide you with the skills required to diagnose common problems on a Kinetix 6000 system. During class, you will practice operating and troubleshooting the system through hands-on exercises using RSLogix™ 5000 software.

Building upon the skills developed in the *Fundamentals of Motion Control* (CCN130) course, you will learn how to maintain and troubleshoot a multi-axis motion control system. You will practice identifying faults related to hardware and software by employing methods such as fault code tables, system LEDs, and other status indicators.

Upon completion of this course, you will be able to apply maintenance and troubleshooting techniques to diagnose and correct common problems on a Kinetix 6000 system.

Who Should Attend

Individuals who need to maintain and troubleshoot Kinetix 6000 motion control systems should attend this course.

Prerequisites

To successfully complete this course, the following prerequisites are required:

- Ability to perform basic Microsoft® Windows® tasks
- Completion of the *Motion Control Fundamentals* course (Course No. CCN130) or equivalent knowledge of or experience with drives, feedback devices, and velocity and position loop systems
- Completion of the *RSLogix 5000 Level 1: ControlLogix System Fundamentals* course (Course No. CCP146) or equivalent knowledge of or experience with the ControlLogix platform and basic ladder logic

Technology Requirements

All technology is provided for student use in the classroom by Rockwell Automation. It is not necessary for students to bring any technology with them when attending this course.

Student Materials

To enhance and facilitate your learning experience, the following materials are provided as part of the course package:

- *Student Manual*, which contains the key concepts, definitions, and examples presented in the course and includes the hands-on exercises.
- *Kinetix 6000 Multi-Axis Servo Drives User Manual*, which provides detailed instructions for mounting, wiring, and troubleshooting your Kinetix 6000 drives.
- *RSLogix 5000 and Logix5000 Motion Control Procedures Guide*, which provides the procedures for performing motion control tasks in a Logix5000 system using RSLogix 5000 software and RSLinx software.
- *Logix5000 Documentation Reference Guide*. This searchable, electronic resource contains relevant technical publications and is a quick and efficient on-the-job resource.

Hands-On Practice

Hands-on practice is an integral part of learning and this course offers extensive hands-on opportunities.

Throughout the exercises, you will use a workstation containing real and simulated devices to practice the tasks and concepts involved in maintaining and troubleshooting a Kinetix 6000 system.

After learning maintenance and troubleshooting techniques, you will learn how to interpret RSLogix 5000 projects for motion applications, understand fault routines, and test and tune a new system.

Next Learning Level

Once you have mastered the skills covered in this course, you will be prepared to attend other Rockwell Automation courses depending on your needs. If you need to learn motion programming, you can attend *RSLogix 5000 Level 4: Motion Programming Using Ladder Logic* (Course No. CCN142). If you need to learn to troubleshoot a ControlLogix system, the appropriate course to attend is *RSLogix 5000 Level 3: ControlLogix Maintenance and Troubleshooting* (Course No. CCP153)

Course Length

This is a two-day course.

Course Number

The course number is CCN200.



IACET CEUs

CEUs Awarded: 1.4

To Register

To register for this or any other Rockwell Automation training course, contact your local authorized Allen-Bradley Distributor or your local Sales/Support office for a complete listing of courses, descriptions, prices, and schedules.

You can also access course information via the Web at <http://www.rockwellautomation.com/training>

All trademarks and registered trademarks are property of their respective companies.

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846