# **Drives**

PowerFlex 70 Maintenance and Troubleshooting Course Description

## COURSE AGENDA

- Replacing and Rewiring Drive Hardware
- Configuring Drive Parameters Using the LCD HIM
- Configuring Drive Parameters Using DriveExplorer Software
- Configuring Drive Parameters Using DriveExecutive Software
- Uploading and Downloading Drive Data
- Troubleshooting and Clearing Drive Alarms
- Clearing Drive Faults
- Troubleshooting Drive Load and Environmental Faults
- Troubleshooting Drive Equipment Malfunctions
- Integrated Practice: Maintaining and Troubleshooting a PowerFlex 70 Drive



## COURSE NUMBER: CCA159-LD

### Course Purpose

This skill-building course introduces concepts and techniques that will assist you in successfully maintaining and troubleshooting a PowerFlex 70 AC drive. You will learn how to recognize PowerFlex 70 drive hardware and properly wire the drive. You will also learn to diagnose specific load-related, environmental, and equipment faults.

Throughout the course, you will use the LCD HIM, DriveExplorer<sup>™</sup> software, and DriveExecutive<sup>™</sup> software to clear faults and alarms. After each demonstration, you will be given an application-based exercise that offers extensive hands-on practice using a PowerFlex 70 drive.

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### Who Should Attend

Individuals responsible for maintaining and troubleshooting PowerFlex 70 drives should take this course.

### Prerequisites

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

- Working knowledge of electricity, and knowledge of electrical and industrial safety (including PPE requirements and safe practices).
- Ability to perform basic Microsoft® Windows® tasks
- Completion of the AC/DC Motors and Drives Fundamentals course (Course No. CCA101) or Fundamentals of AC and DC Motors and Drives Webbased training (ePass/WBT1PACK) or equivalent experience

### **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 each student's learning experience, the following materials are provided:

- *Student Manual*, which contains the key concepts, definitions, and examples presented in the course and includes the hands-on exercises.
- PowerFlex 70 Enhanced Control Documentation Reference Guide, which contains information from several PowerFlex<sup>™</sup> technical publications including the PowerFlex 70 Adjustable Frequency AC Drive User Manual.

#### Hands-On Practice

Hands-on practice is an integral part of learning, and this course offers extensive hands-on opportunities. An inclass workstation allows students to work with PowerFlex 70 drive components and troubleshoot faults and alarms. The PowerFlex 70 drive workstation introduces real-world maintaining and troubleshooting situations into a classroom setting.

### Next Learning Level

Once you have mastered the skills covered in this course, you can attend other Rockwell Automation PowerFlex family (including 700 and 750-Series drives) training courses. One example of such a course is the *PowerFlex 700 Vector Control Configuration and Startup* course (CCA161).

### Course Length

This is a one-day course.

#### **Course** Number

The course number is CCA159-LD

#### 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 <u>http://www.rockwellautomation.com/training</u>

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