Course Number: DRV215

Course name: PowerFlex 750-Series Configuration, Startup, Maintenance, and Troubleshooting

Course Purpose:

Upon completion of this course, given a wired PowerFlex® 750-Series drive (PowerFlex 753 or PowerFlex 755) and AC motor, you will be able to install the drive correctly, start it up, and configure drive parameters to meet application-specific needs. The course also introduces concepts and techniques that will assist you in successfully maintaining and troubleshooting the drive, recognizing PowerFlex 750-Series drive hardware, and diagnosing specific faults.

Throughout the course, you will have the chance to use a variety of hardware and software tools, including:

- The A6 LCD HIM
- Connected Components Workbench™ software
- DriveExecutive™ software

After each demonstration, you will be given exercises that offer extensive hands-on practice using a PowerFlex 753 or PowerFlex 755 drive.

This three-day course can be taken as a standalone course, or it can be taken in conjunction with other courses in the PowerFlex 7-Class curriculum to broaden skills development further.

Course Agenda

Day 1

- Locating PowerFlex 750-Series Drive Hardware
- Verifying the PowerFlex 750-Series Drive Installation Environment
- Verifying PowerFlex 750-Series Drive Wiring and Grounding
- Locating and Modifying PowerFlex 750-Series Data Using the A6 HIM

Day 2

- Configuring EtherNet/IP Communications for a PowerFlex 750-Series Drive

- Locating and Modifying PowerFlex 750-Series Data Using Drive Software
- Starting Up a PowerFlex 750-Series Drive
- Interpreting PowerFlex 750-Series Control Block Diagrams
- Controlling PowerFlex 750-Series Drive Operation

Day 3

- Clearing PowerFlex 750-Series Drive Alarms and Faults
- Performing Predictive Maintenance Using PowerFlex 750- Series Parameters
- Troubleshooting PowerFlex 750-Series Load and Environmental Faults
- Troubleshooting PowerFlex 750-Series Equipment Malfunctions
- Integrated Practice - Maintaining and Troubleshooting a PowerFlex 750-Series Drive

Who Should Attend

This course is intended for individuals who need to configure and start up and are responsible for maintaining and troubleshooting PowerFlex 750-Series drives.

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)
- Completion of the AC/DC Motors and Drives Fundamentals course (Course No. CCA101) or equivalent experience
- Previous experience with PowerFlex 700 Vector Control and/or PowerFlex 700S drives is recommended but not required.

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 the students' learning experiences, the following materials are provided as part of the course package:

- Student Manual

    - Includes the key concepts, definitions, examples, and activities presented in this course.
- Lab Book
    - Provides learning activities and hands-on practice. Solutions are included after each exercise for immediate feedback.
- PowerFlex 750-Series AC Drives Programming Manual:
    - Source of drive parameters and other key data.
    - Contains frequently referenced programming documentation
- PowerFlex 750-Series AC Drives Installation Instructions:
    - Provides steps for installing and wiring drives.
    - Contains frequently referenced installation data

Hands-on Practice

Throughout this course, you will have the opportunity to practice the skills you have learned through a variety of hands-on exercises using either an ABT-TDPF753CLS or ABT-TDPF755CLS workstation. Exercises focus on the skills introduced in each lesson and allow students to replace PowerFlex 750-Series drive components and troubleshoot faults and alarms. The PowerFlex 750-Series drive workstation introduces real-world maintenance and troubleshooting situations in a classroom setting.