

Drives

PowerFlex 755T
Maintenance & Troubleshooting



Course Number

CCA225-LD2

Course Purpose

This skill-building course introduces concepts and techniques that will assist you in successfully maintaining and troubleshooting a PowerFlex® 755T drive. You will learn how to recognize PowerFlex 755T drive hardware and properly wire the drive. You will also learn to diagnose specific faults.

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

- The A6 LCD HIM
- Connected Components Workbench™ software
- Studio 5000 Software

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

This three and a half day can be taken as a stand-alone course, or it can be taken in conjunction with other courses in the PowerFlex curriculum for further skills development.

COURSE AGENDA

DAY 1

- PowerFlex 755T products overview
- PowerFlex 755T Catalog number explanation
- AFE - Active Front End Theory of Operation vs Six Pulse technology
- PowerFlex 755T frame 5-7 and frame 8-15
- PowerFlex 755T LCL filters
- PowerFlex 755T Insulated Gate Bipolar Transistor and LCL filters

DAY 2

- PowerFlex 755T Ports
- PowerFlex 755T HIM Autotune
- Feedback Loss Action
- PowerFlex 755T parameters for two AC line sources
- Energy Pause Capability & PowerFlex DC Pre-charge
- PowerFlex 755T Tracking Notch Filters
- Fault and Alarms Codes on the PowerFlex 755T drives

DAY 3

- Periodic inspection
- Predictive maintenance
- Power core modules overview
- Sensorless Vector Control startup
- Load Observer & Adaptive Tuning theory

DAY 4

- Emergency Override
- Integrating the PowerFlex 755T drive in Studio5000 Logix Designer project

WHO SHOULD ATTEND

Individuals responsible for maintaining and troubleshooting PowerFlex 755T-Series 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).
- Completion of the AC/DC Motors and Drives Fundamentals course (Course No. CCA101) or Fundamentals of AC and DC Motors and Drives or equivalent experience
- Completion of the Studio 5000 Logix Designer Level 1: ControlLogix System Fundamentals (CCP146)
- Previous experience with PowerFlex 750-Series **is required**.

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
- Lab Book:
 - Provides learning activities and hands-on practice
- 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 by working with the PowerFlex 755T Frame 5 and Frame 8 drive. Exercises focus on the skills introduced in each lesson and allow students to replace PowerFlex 755T-Series drive components and troubleshoot faults and alarms. The PowerFlex 55T-Series drive workstation introduces real-world maintaining and troubleshooting situations into a classroom setting.

COURSE LENGTH





This is a three and a half day course.

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>

To be respectful of the environment, Rockwell Automation is transitioning some of its training courses to a paperless format. Students are asked to complete downloads and bring personal devices to these classes. A full list of digital/paperless courses is currently available through your local distributor.

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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

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