

PowerFlex 6000 Medium Voltage Drive Operation and Maintenance

OEM: Rockwell Automation • Duration: 3 Days (24 hrs) • Code: MV6000-LD

COURSE MODULES & TOPICS

Course Purpose

- Adopt proper safety measures while working on medium voltage equipment
- Recognize proper drive and motor operation
- Understand the significance of key parameters
- Troubleshoot drive malfunctions
- Remove and replace power components of the
- PowerFlex 6000G adjustable frequency AC drive

Objectives

- PowerFlex 6000G Drive Product Overview
- PowerFlex 6000G Drive Topology
- PowerFlex 6000G Power Cells
- Drive Component Identification - Discussion
- Power Cell Replacement Lab
- PowerFlex 6000G Control Power Distribution
- PowerFlex 6000G Drive Control System
- PowerFlex 6000G Drive HMI Operation
- Drive HMI Operation – Parameter Monitoring/ Editing Lab
- PowerFlex 6000G Drive HMI Operation – Recipes
- Recipes Lab
- PowerFlex 6000G Drive HMI Operation – Power Cell Parameters
- PowerFlex 6000G Drive Operation – Uploading Micro850® Controller Program Lab
- PowerFlex 6000G Drive Cooling
- Verifying Cooling and Temp Protection Lab
- PowerFlex 6000G Voltage and Current Monitoring
- Monitoring Variables Lab
- PowerFlex 6000G Preventative Maintenance
- Verifying Anybus Module Settings Lab
- Conducting a System Test Lab

Prerequisites

- Working knowledge of electricity, and knowledge of electrical and industrial safety (including PPE requirements and safe practices)
- Comprehensive knowledge of electrical principles and circuits
- Practical experience using a multimeter, ammeter, and oscilloscope

Student Materials

- Student Manual includes the key concepts, terms, definitions, and examples presented in this course
- Lab Book provides learning activities and hands-on practice

Course Agenda

Day 1

- PowerFlex 6000G Drive Product Overview
- PowerFlex 6000G Drive Topology
- PowerFlex 6000G Power Cells
- Drive Component Identification - Discussion
- Power Cell Replacement Lab
- PowerFlex 6000G Control Power Distribution

Day 2

- PowerFlex 6000G Drive Control System
- PowerFlex 6000G Drive HMI Operation
- Drive HMI Operation – Parameter Monitoring/ Editing Lab
- PowerFlex 6000G Drive HMI Operation – Recipes
- Recipes Lab
- PowerFlex 6000G Drive HMI Operation – Power Cell Parameters

Day 3

- PowerFlex 6000G Drive Operation – Uploading Micro850® Controller Program Lab
- PowerFlex 6000G Drive Cooling
- Verifying Cooling and Temp Protection Lab
- PowerFlex 6000G Voltage and Current Monitoring
- Monitoring Variables Lab
- PowerFlex 6000G Preventative Maintenance
- Verifying Anybus Module Settings Lab
- Conducting a System Test Lab