

MOTOR PROTECTION PRINCIPLES & RELAYING

TRNG-MOTR

WITH THE MM300, M60, 239, 269 PLUS,
369, SR469, & SPM

WHAT WILL I LEARN FROM THIS COURSE?

This course addresses the training requirements of electrical maintenance staff responsible for MM300, 239, 269 Plus, 369, M60 and SR469 Motor Management Relays. Through a combination of lectures and practical Lab exercises, the class will learn how to correctly configure, monitor and troubleshoot these GE Multilin motor protection relays.

PREREQUISITES

- Basic understanding of electrical circuits
- GE Multilin Product Maintenance CD would be an asset

COURSE DURATION

3 Days

WHO SHOULD ATTEND?

Plant electrical maintenance personnel who are responsible for the installation, testing and maintenance of many different models of GE Multilin motor management relays will benefit most from this course.

TUITION

\$ 1,800 US*

CEU CREDITS OFFERED

2.1 Credits

AGENDA

This class includes fully equipped Hands-On Lab exercises with equipment provided for each pair of students.

Day 1

Motor protection theory

- Introduction
- Motor theory
- Current Transformer selection
- Motor Thermal Modeling
- Additional protective elements
 - Short Circuit protection
 - Ground Fault and Ground Fault detection
 - Phase Current Differential
 - Single Phase protection
 - Undervoltage protection
 - Overvoltage protection
 - Motor status detection
 - Mechanical Jam detection
 - Loss of Load detection
 - Acceleration timer
 - Starts per hour
 - Time between starts
- Class Settings calculation examples
- Typical Application

Day 2

SR469 Motor Protection System

- Introduction
- Hardware overview
- Mechanical installation
- Draw-Out procedure
- Wiring procedures
- EnerVista™ SR469 Setup Software

- Settings configuration Hands-On Labs
- Metering
- Hands-On programming Lab
- Protection element testing Lab
- Communications
- Motor Settings auto-configurator
- Fault Diagnostics

369 Motor Management Relay

- Introduction
- Hardware overview
- Mechanical installation
- Wiring procedures
- EnerVista™ 369 Setup Software
- Settings configuration Labs
- Metering
- Hands-On programming Lab
- Protection element testing Lab
- Communications
- Fault Diagnostics
- Motor Start/Stop Health Report

239 Motor Protection System

- Hardware overview
- Mechanical installation
- Wiring procedures
- EnerVista™ 239 Setup Software
- Settings configuration Labs
- Metering
- Hands-On programming Lab
- Protection element Testing Lab

Day 3

269 Plus Motor Protection System

- Introduction
- Hardware overview
- Mechanical installation
- Draw-Out options
- Wiring procedures
- EnerVista™ 269 Plus Setup Software
- Settings configuration Labs
- Hands-On programming Lab

SPM Synchronous Motor Protection System

- Introduction
- Hardware overview
- Mechanical installation
- Wiring procedures
- Settings configuration

MM300 Motor Management System

- Introduction
- Hardware overview
- Mechanical installation
- Wiring procedures
- Settings configuration

M60 Motor Protection System

- Introduction
- User Interface
- Typical Wiring

25% off the price of the training CD when purchased with the in-class course