



# Interactive Learning CD

# Motor Protection

## With the 469



**GE Multilin**

Power Management  
Lentronics

*Innovative technology • Superior quality • Exceptional service*

[www.GEindustrial.com/Multilin](http://www.GEindustrial.com/Multilin)



## Expert training on motor protection with the 469

GE Multilin's new Motor Protection with the 469 Interactive Learning CD combines a comprehensive primer on motor protection theory and practice with detailed tutorials on the application of the 469 relay. The course leverages over one hundred years of General Electric's motor protection experience, offering valuable information for those who are new to motor protection, as well as those with years of experience.

### Multimedia makes learning easy

The CD is an ideal complement to GE Multilin's instructor-led classes, and provides complete instruction on the 469 when classroom-based learning is not practical. Course content is delivered through an engaging combination of interactive multimedia, graphics, animations and narration that bring the learning process to life. In addition to the interactive content, the CD includes periodic tests and tutorials to help students apply their new skills and measure their progress.



Students are immersed in a rich multimedia environment that facilitates learning.

### Interactive Learning modules help build knowledge

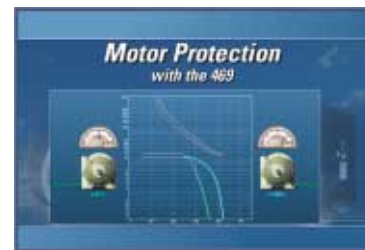
The interactive learning starts with Motor Theory. Basic and abstract concepts critical for a true understanding of motor theory are presented in a unique format that allows students to quickly grasp the material. Building on this understanding, the course then progresses through Motor Thermal Modeling.

The interactive instruction will aid students in quickly mastering this challenging topic, from standard and custom overload curve selection to unbalanced biasing. The course then steps students through a complete review of additional Motor Protective Elements such as the mandatory Short Circuit Element and the optional Acceleration Timer and the role each plays in providing a complete motor protection solution.

Having gained a strong comprehension of Motor Theory and protective elements, students are then guided step by step through the installation, wiring and configuration of the SR469 motor management relay including software monitoring and diagnostic tools. Both senior protection engineers and those new to this field will benefit from both the material and the unique method of presentation.

### Module I - Overview

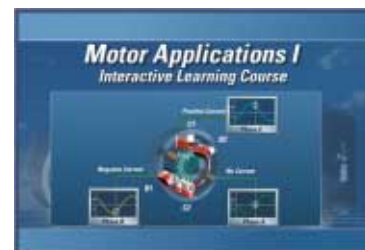
- Introduction to the course
- How to use the Interactive Learning Interface



Students are introduced to the course and CD navigation.

### Module II - Motor Theory

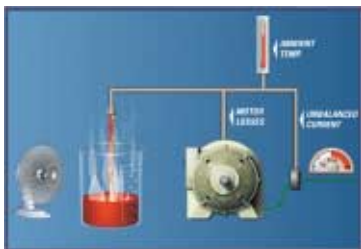
- Principles of magnetism and electromagnetism
- Basic construction of AC motors
- Operations of synchronous AC motors
- Operations of induction motors
- Operation of synchronous machines



Motor theory fundamentals provide a foundation on motor construction and operation.

## Module III - Thermal Modeling

- Common motor terminology
- Motor thermal limit curves
- Current transformer selection
- Motor thermal modeling principles
- The 5 key Motor Thermal Modeling Elements



Students learn key attributes of thermal modelling.

## Module IV - Protection

- Short circuit
- Ground fault
- Differential
- Single phase
- Undercurrent
- Under & Over Voltage
- Mechanical jam



Understanding protection principles helps students prepare for real-world applications.

## Module V - 469 Setup

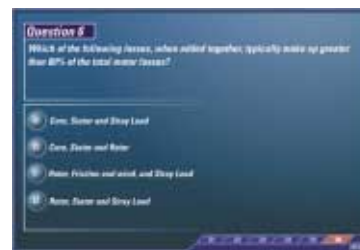
- Hardware tutorials covering Installation, Panel features, Display, LEDs and Keypad
- Wiring Inputs
- Wiring Outputs
- Software Installation & Setup



The CD provides detailed lessons on installation and configuration.

## Refine your knowledge with tutorials and tests

The CD features tutorials and tests that allow students to directly apply their new knowledge. Each learning module features a test with a combination of true/false and multiple-choice questions, ranging in levels of difficulty. When a question is answered incorrectly, students learn the correct answer through a detailed explanation.



Tests and tutorials provide feedback on learning progress.

## Interactive training is convenient and economical for everyone

The Motor Protection with the 469 CD is a great complement to instructor-led training that provides an invaluable reference tool for 469 users. The CD provides students with an opportunity to study at their own pace and on their own schedule without incurring travel and living expenses.

## Start learning today!

GE Multilin has made it easy to start learning today. Simply call, fax, email or click for more information:

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# Interactive Learning CD

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