# TROUBLESHOOTING PLC CIRCUITS 2
SIMULATION

Troubleshooting PLC Circuits 2 (PLC2) is the second of three simulations designed to provide all the information and techniques necessary to troubleshoot systems that include PLCs. This simulation builds on the basic PLC circuit by adding sequential logic to the programming, so that outputs are controlled by a specific sequence of input events.

PLCs are commonly used in automation systems in industrial and manufacturing settings.

THE SIMULATION **FEATURES**

- **Use of sequential logic** — pressing pushbuttons in the correct sequence will turn on the green light and turn off the red light

- **A variety of components**, including lights, pushbuttons, a power supply, fuses, a circuit breaker, relays, a PLC CPU, an 8-channel digital input module and an 8-channel digital output module

- Detailed **3D environment**

- **Adaptive learning** that assesses users' skill level and customizes the program to the individual's performance

- Conformance to **NEMA standards**

- **North American** and **International** versions

ACTIVITIES **INCLUDED**
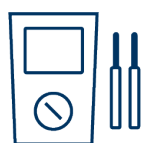
Multimeter workout

In this simulation, your professionals will use the multimeter to identify many problems in the electromechanical part of the circuit, such as opens, shorts, module failures and issues with neutral wires. In addition, they will solve problems both internal and external to the PLC modules.

Interfacing with the Laptop

Your professionals will be able to work with a virtual laptop, connecting it to the circuit, loading programs, choosing the proper mode and downloading programs to the PLC as required.

Interpreting Ladder Diagrams

Users will anticipate how a circuit will operate according to a given ladder program. They will be able to determine whether the sequence of events specified matches the sequence of events in the ladder program, and if it does not, either load the appropriate program or change the counter or timer settings until it does.