



State Electric Supply Company provides a complete product and services offering for all industrial applications. We are a full-line Electrical, Datacom, Power Transmission, and Utility distributor, and we can supply your product needs to maintain, modernize and optimize your plant wide facilities and equipment.

# **Applications**



Industrial Automation



Controls and Panel Building



Motors, Gears and Bearings



Industrial Networks



**Facility Lighting** 

# **Products**











All lines listed may not be available at all locations. Lines are subject to change and additional lines may be available.

**LOCAL • KNOWLEDGEABLE • TECHNICAL SUPPORT** 

**Training** 

We offer several Industrial Automation training classes. These classes are conducted in our Roanoke training facility, or at your facility. Contact your local branch location for course dates.

#### **Arc Flash Awareness**

#### Agenda

Article 110: Safety Manual
Article 120: Lock Out Tag Out

Article 130: Working on or near Electrical Hazards

Understanding Known Electrical Hazards

Limited Approach Boundary

Restricted Boundary

Arc Flash Boundary

**PPE Class Requirements** 

Hazardous Risk Assessment

#### **Basic Controls**

#### Agenda

Reading Drawings, One-Line and Schematics

Basic AC and DC Circuits

Explanation of DI, DO, AI, AO, RO, Pulse Related to Control Devices

Understanding Relays

In-Depth Look at Motor Starters, Applications and Sizing OL Units

In-Depth Look into Properly Sizing IEC Contactors

Basics of Solide State Relays

Limit Switch Wiring, Mounting, Types and Application

Proximity Switches (Indusction and Capacitance) Wiring, Types and Applications

Photo Switches Wiring, Mounting, Types and Applications

**Binary Numbers** 

Basic Process Control, Control Loop, Transducer,

Transmitter and Control Drawing

# **Eaton HMAX Certified Start-Up**

This class is for electricians, technicians, HVAC technicians and others who desire to be certified to perform Eaton HMAX CSU to receive a 3 year warranty on the VFD.

#### **Basic VFD**

#### Agenda

VFD Proper Installation

VFD Power Structure

VFD Rectifier

VFD DC Buss

VFD Inverter

VFD Control

VFD Applications

VFD Energy Saving Topics

VFD Troubleshooting

VFD Safety Issues

VFD Issues: Harmonics, Reflective Wave, Commond

Mode Current, Motor Bearings

VFD Line Reactors, Filters, Cable, Sine Filters

**Basic Motor Operational Topics** 

## **VFD Programming**

#### Agenda

VFD Configuration

VFD Parameter Layout

VFD Wizards

VFD Marco's

VFD Control Modes

VFD Control Wiring to Programming Relationships

Various Application Programming

Specific Applications on Request

#### **PLC 100**

#### Agenda

PLC Theory

**PLC Layout** 

**PLC Wiring** 

**PLC Basic Programming** 

**PLC Troubleshooting** 

**PLC Program Documentation** 

# Industrial Solution Technical Specialists

We have Technical Specialists on staff to assist you with applications of Drives, PLC's, HMI's, control systems, instrumentation, industrial networks, motors, bearings, gears, repair services and system wide troubleshooting.

# **Contact a Location Nearest You**

## Christiansburg

390 Arbor Drive Christiansburg, VA 24073 540.382.6415

## Covington

348 North Monroe Avenue Covington, VA 24426 540.965.5200

#### Roanoke

3105 Shenandoah Ave., NW Roanoke, VA 24017 540.343.3800

#### Wytheville

225 North 11th Street Wytheville, VA 24382 276.228.3191