TII Technical Education Systems

Teaching Technology for Tomorrow.

Electro-Mechanical

650A-ADCS
Ancillary Device Control System

An Electro-Mechanical Programmable Logic Controller Application Training System

TThe 650A-ADCS Ancillary Device Control System is a desktop sized application training system for demonstrating control of real world electro-mechanical inputs and outputs typically found in an industrial environment.

The 650A-ADCS can be controlled by TII's series of PLC training systems, other PLCs using banana jack electrical interconnections, or as a stand-alone training system using the built-in 24 VDC internal power supply and switches.

With the included student and instructor courseware package, students will gain hands-on experience controlling the operation of an assortment of electro-mechanical input and output devices. All devices are operated at a safe 24 VDC.

Practice exercises for stand-alone mode or PLC operation begin with basic control concepts for a single device progressing to more comprehensive process sequencing activities involving multiple devices and the entire training system.

SPECIFICATIONS

The 650A-ADCS training system is mounted upright on a metal frame with extended front tray and stainless steel front panel for easy learner access to hardware and convenient interfacing
to TII PLC training systems. All front panel features have been silkscreened for easy identification.

All components are mounted to the front control panel. Component access is through banana jacks. This system design flexibility enables the user to easily interface the 650A-ADCS with other control devices.

Control of the panel devices is accomplished in two ways: electrical circuits constructed to connect devices to the 650A-ADCS internal power source; or ladder logic programmed and electrical circuits constructed to connect devices to TII's MB650 or CM184 PLC training system power source. Interconnections are made through use of wire cross- patches connected to the jacks for each device. A set of cross patches are included with the training system.

Control Panel:

- Thermostat
- Two relays
- Four solenoids (two each of two types)
- Horn
- Electromechanical linear actuator drive system
- Reversible motor
- Built-in power supply @ 24 VDC
- Three-digit thumbwheel
- Two removable push button switch assemblies
- Industrial grade limit switch
- Four toggle switches
- Eight lights

CURRICULUM:

The Ancillary Device Control System curriculum includes both instructor and student manuals. These outline twenty- three student activities:

- System Familiarization
- Stand-Alone Mode
    - Internal Power Supply
    - Motor
    - Relay/Motor
    - Solenoid
    - Toggle/Solenoid
    - Relay/Solenoid
    - Thermostat/Light
    - Thumbwheel/Light
    - Thumbwheel/Solenoid
    - Limit Switch/Actuator
- PLC Dependent Mode
    - Switch/Light
    - Switch/Light/Motor
    - Switch/Light/Relay/Motor
    - Switch/Light/Solenoid
    - Switch/Light/Toggle/Solenoid
    - Switch/Light/Relay/Solenoid
    - Switch/Light/Thermostat
    - Switch/Light/Thumbwheel
    - Switch/Light/Thumbwheel/Solenoid
    - Switch/Light/Relay/Limit/ Actuator
- Challenger Activities
    - Problem 1
    - Problem 2
    - Problem 3

Dimensions: 20 in. W x 15 in. H x 14 in. D Shipping Weight: 50 lbs.

For more information, customer service, or technical assistance please call 800-451-2169

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