PLC TRAINER

CE123

Uses an industry-standard PLC to control the PLC process using ladder logic programming running on a PC. For use with the PLC Process (CE111).

KEY FEATURES

- Self-contained, benchtop unit
- Industrial-standard programmable logic controller (PLC) upgraded for educational use
- Includes PLC software to program the controller, and ready-made programs to match experiments given in the user guide
- Introduces ladder logic programming
- Works with TecQuipment's PLC Process (CE111) to show students how to control a common industrial process, but in safe conditions
- Uses an industry-standard controller to give students realistic industrial experience
- Includes manual override switches to introduce faults for fault-finding training

TECQUIPMENT LTD, BONSALL STREET, LONG EATON, NOTTINGHAM NG10 2AN, UK
TECQUIPMENT.COM +44 115 972 2611 SALES@TECQUIPMENT.COM

TECQUIPMENT

PLC TRAINER

CE123

DESCRIPTION

The PLC Trainer shows students how to use a programmable logic controller. It also works with TecQuipment's PLC Process (CE111) to help students study how to use programmable logic controllers to control a process.

The clearly labelled front panel has all the input and output connections. Each input and output includes a socket and three push-button switches. One switch connects or disconnects the connection. The other two set the connection as permanently high or low to override the controller. This allows students to do some manual control, or add faults to see what effect it has on the process. Indicators show the status of the controller inputs and outputs.

A socket on the front panel connects to a suitable computer (not included). The user must install the software (included) onto their computer so they can program the controller to suit their needs. TecQuipment supplies programs to match the experiments in the user guide (included).

The software introduces students to the features of a controller program. These features include:

- Normally open and closed contacts
- Timers
- Counters
- Shift registers
- Ladder logic

NOTE: The user guide includes experiments that show the student how to use a programmable logic controller. You must use the PLC Trainer with the PLC Process (CE111) for experiments in process control.

You must not connect the inputs and outputs of the PLC Trainer to equipment other than the PLC Process.

STANDARD FEATURES

- Supplied with comprehensive user guide
- Five-year warranty
- Made in accordance with the latest European Union directives
- ISO9001 certified manufacturer

LEARNING OUTCOMES

- Simple programming
- Ladder logic operations
- Timers, counters and monitoring
- Editing and adding comments in a PLC program
- Special ladder logic instructions

AVAILABLE EXPERIMENT MODULE

- PLC Process (CE111)

ESSENTIAL SERVICES

ELECTRICAL SUPPLY:

240/110 VAC, 1 A, 50/60 Hz, with earth

Other voltages and frequencies available to special order

BENCH SPACE NEEDED:

CE123 only: 600 mm x 400 mm

With the CE111: 1600 mm x 600 mm

COMPUTER

Suitable computer with a spare serial communications connection (not included) for CE2000 Software

OPERATING CONDITIONS

OPERATING ENVIRONMENT:

Laboratory

STORAGE TEMPERATURE RANGE:

–25°C to +55°C (packed)

OPERATING TEMPERATURE RANGE:

+5°C to +40°C

OPERATING RELATIVE HUMIDITY RANGE:

80% at temperatures < 31°C decreasing linearly to 50% at 40°C

SOUND LEVELS

Less than 70 dB(A)

SPECIFICATIONS

PLC TRAINER

CE123

TecQuipment is committed to a programme of continuous improvement; hence we reserve the right to alter the design and product specifcation without prior notice.

NETT DIMENSIONS AND WEIGHT:

545 mm x 330 mm x 140 mm and 6 kg

APPROXIMATE PACKED DIMENSIONS AND WEIGHT:

0.16 m^3 and 10 kg

INPUTS:

Eight (X0 to X7) buffered transistor inputs

OUTPUTS:

Six (Y0 to Y5) open collector transistor outputs

OVERRIDE SWITCHES:

24 on the input and 18 on the output

TECQUIPMENT LTD, BONSALL STREET, LONG EATON, NOTTINGHAM NG10 2AN, UK
TECQUIPMENT.COM +44 115 972 2611 SALES@TECQUIPMENT.COM

TECQUIPMENT