

H-ICS-8189 Process Control Trainer

Purpose

The **Model H-ICS-8189** Process Control Trainer was developed to provide hands-on training for industrial process automation.

Description

This trainer provides measurement and/or control of flow, level and pressure utilizing micro-processor based controls.

The system consists of a clear process level tank, reservoir tank, pump and other instrumentation mounted on or in a mobile bench.

Specifications

Plumbing:

All piping is clear PVC. Fittings are PVC.

Instrumentation:

- Yokogawa single- station controllers (2 req'd) with RS-485 (USB optional)
- Monarch paperless recorder with 6 input channels
- IDP10 Intelligent d/p cell transmitters (2 req'd), level/flow
- IGP10 Intelligent Electronic Gauge Pressure Transmitter
- Bauman Globe style control valve, A-O, with I/P valve positioner

Components:

- Main circuit breaker with ground fault interrupter protection
- Pump control switch
- Oil-less air compressor switch
- Oil-less air compressor rated 1.9 CFM at 100 psi complete with three gallon tank and regulator with gauges.
- Reservoir tank, 11 gallon with fill and drain ball valve with hose fitting
- Clear process tank, 5 gallon with fittings for overflow, manual load needle valve and level transmitter
- Pump, submersible rated 210 gph at 20' Head
- Three-way Valve with 50' dead time flow circuit



MODEL H-ICS-8189 Process Control Trainer
Dimensions: 75"W x 62"H x 30"D - Shipping Weight: 900 lbs

- Orifice plate assembly with flexible tube interface and quick-connect fittings
- Power cord, 8ft.
- Cord storage rack

Construction:

Mobile bench with doors and control panel. The bench is finished in instrument tan enamel and the control panel in instrument white enamel.

Casters:

Two stationary and two swivel with locks

Bench Top:

75" x 30" x 1 1/16". Unit consists of a 1/16" thick plastic laminate fastened to 1" thick medite.

Nomenclature:

- silkscreen with black KEM enamel

Fault Package:

- Fault Package providing 12 instructor controlled programmable faults with switches located in a locked compartment.

Services Required

Electrical: 120V AC 1Ø 60Hz

Water: Cold - normal cold water service

Drain: Floor

Options

MODEL H-ICS-8189-CC

Computer Workstation

MODEL H-ICS-8189-PO

Printer

MODEL H-ICS-8189T

Temperature Package complete with additional Yokogawa controller, electronic control valve, constant speed pump, heat exchanger, RTD thermocouple, electric heater with controls and accessory package.

MODEL H-ICS-8189-PLC

Programmable Logic Control consists of:

- H-ML-1100 Programmable Controller
- H-PLC-RS-LOGIC Programming and Documentation Software

All Hampden units are available for operation at any voltage or frequency



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