

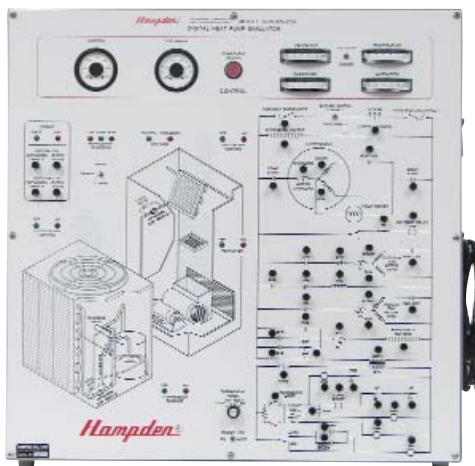
## H-DHPS-CSI Digital Heat Pump Simulator

### Purpose

The Hampden Computer Simulated Instruction Modules are designed to demonstrate the principles of operation and troubleshooting of various types of systems. These "modules" provide a complete aid for the teacher who desires to teach appliance analysis and troubleshooting.

### Description

Each module's front panel displays both a complete schematic and pictorial of the system. All functions operate as on the actual equipment and present the student with realistic problem situations that would be very difficult for the instructor to create. Both mechanical and electrical problems are simulated. Pushbuttons are used to "replace" suspected defective parts. Simulator includes H-LTCS Laptop Computer.



### Standard Features

- Schematic and pictorial test points
- Specification chart
- Improper equipment use warning
- Component isolate switch
- Service switch disconnect/connect
- Malfunction indication
- Windows Digital control system

### Options

#### MODEL H-CSI-CS

Pentium™ Desktop Computer System

#### MODEL H-CAI-PO

Printer to provide the instructor with a color hard copy of the students' progress.

### Model H-DHPS-CSI

The Hampden **Model H-DHPS-CSI** Digital Heat Pump Simulator demonstrates the principles of operation and troubleshooting techniques used on a modern large capacity heat pump.

#### Additional Features:

- Gas Suction and Discharge Pressures
- Two-step Indoor Thermostat
- Outdoor Building Thermostat
- Dynamic Temperature Variation, Adjustable Outdoor Temperature
- Ohmmeter/Line Voltage Interlock
- Outdoor Coil Thermostat
- Supply Air Temperature Monitor
- Light Identified Motor/Relay Action
- Active Inside Temperature Indicator
- Refrigerant (CHARGE) Control
- Two Different Motor Types
- High Pressure Cut-out Switch

#### Typical Malfunctions:

- Defective winding T1 transformer
- Compressor winding open
- Broken lug terminal on HPCO
- Contactor contacts CR3 corroded
- Compressor winding shorted to case
- Indoor fan motor overload defective
- Fan switch common arm broken
- Control switch lug 2 broken
- Heater No. 1 open
- Defective breaker
- Indoor air filter dirty
- Reversing valve relay coil open
- Cooling thermostat lead broken
- Heater relay armature jammed
- Outdoor thermostat does not close
- Defrost thermostat No. 2 pitted
- Contactor relay coil open
- Indoor fan relay coil shorted
- Outdoor fan motor run winding broken
- Indoor coil metering device clogged

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

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