

# Solid State Controllers

Educational Training Equipment for the 21st Century

Bulletin 257-1K

## Thyristor & Power Electronics Trainers



**MODEL H-R-SCR-1A**  
Dimensions: 21"H x 32"W x 12"D  
Shipping weight: 220 lbs



**MODEL H-R-SCR-2**  
Dimensions: 21"H x 32"W x 12"D  
Shipping weight: 229 lbs

The **Model H-R-SCR-3** Power Electronics System has been designed to be used together with the **H-R-SCR-2** Power Electronics System, acquiring the AC power and processed DC voltages needed for the experiments from the Trivoltage Power Supply Module H-R-SCR-2D, as well as expanding the capabilities of the **H-R-SCR-2**. The **Model H-R-SCR-3** is designed to demonstrate the following: Smoothing Inductors, High-Speed Switching Devices, Signal Converter, P.I.D. Control Panel, IGBT and MOSFET Drivers.

The **Model H-R-SCR-3** comes complete with interconnection patch cords and shunt cords. Input power is 120V AC, 1Ø, 60Hz, 10 Amps.

A dual trace triggered 20MHz oscilloscope and a 3Ø AC Motor are *OPTIONAL* recommended accessories for the **Model H-R-SCR-3**.



**MODEL H-R-SCR-3**  
Dimensions: 21"H x 32"W x 12"D  
Shipping weight: 229 lbs

## H-SCR-104 4-Quadrant DC Speed Controller

The Hampden **Model H-SCR-104** Four Quadrant DC Speed Controller is a full-wave regenerative drive capable of operating DC, PM or Shunt motors (such as Hampden Series 100 Fractional Horsepower motors) in a bidirectional mode. Its 4-quadrant operation provides forward and reverse torque in both speed directions. This allows the control to maintain constant speed with overhauling loads and provide rapid instant reversing and controlled braking. Because of its excellent controllability and response time, the **Model H-SCR-104** can replace servos in many applications. The control is factory set for armature feedback, which provides up to 1% load regulation over a motor base speed of 50:1. However, tachometer feedback is also available if superior regulation is required. The **Model H-SCR-104** offers both speed control and torque control.

Fifteen test points available on the front of the trainer permit analysis of circuit operation while five fault switches provide troubleshooting experience. An operation manual is also provided.

Input power is 120V AC, 1Ø, 60Hz, 15 Amps.



**MODEL SCR-104**  
Dimensions 15"H x 19"W x 9"D  
Shipping Weight: 100 lbs

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

**Hampden**  
ENGINEERING CORPORATION

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