# **Series 400 Laboratory Accessories**

**Bulletin 427C** 

Educational Training Equipment for the 21st Century

# **MODEL HBT-450 Bench Turret**

The Hampden **MODEL HBT-450** Bench Turret is constructed of #14 gauge steel, complete with circuit breaker switch and pilot light plus four external and four internal 120-volt AC outlets. Shown with typical eight module arrangement of power supplies and meters. Locking covers are available.



#### **MODEL HBT-450**

Dimensions: 9-1/2" H x 39-1/2" W x 9-1/2" D Shipping weight (as shown): 100 lbs. (Shown with optional instrument panels)

# MODEL HBT-466 DC Volt-Ammeter

The **MODEL HBT-466** has a 3-1/2" mirrored scale and a taut-band movement. It is capable of the simultaneous monitoring of voltage and current in separate parts of a circuit without changing connections. The unit is protected by means of diodes and a thermal magnetic circuit breaker. The meter may be housed in the Hampden **MODEL HBT-450** Turret shown above or in a portable housing as shown at right.

Voltage ranges; 0-3/10/30/100/300 volts

## Current ranges:

0-0.1/1/10 mA; 0-0.1/1/3 A

#### Sensitivity:

Voltage ranges: 10,000 ohms/volt

Accuracy:

±2% of full scale deflection

#### Accessories: Furnished complete with:

2-sets of 2 alligator-banana leads (4 ft, red and black)



 $\begin{array}{l} \textbf{MODEL HBT-450} \\ \textbf{Dimensions: 7" H x 5" W x 4-3/4" D} \\ \textbf{Shipping weight: 5 lbs.} \end{array}$ 

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



# **Series 400 Laboratory Accessories**

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HBT-473-B

**AC/DC** Power Supply

## Purpose

The **MODEL HBT-473-B** supplies variable AC and DC power to electronics laboratories work stations for the performance of educational experiments, particularly those involving transistors and other solid state devices.

# Description

The **MODEL HBT-473-B** AC/DC Power Supply contains two AC supplies, one a fixed 6.3 volt, and the other a dual-range variable supply; plus two independently variable DC supplies, one of which has an adjustable current limit. Output receptacles, except the 0-120V single receptacle, are color coded Hampden HR-1S type. The **MODEL HBT-473-B**, may be enclosed in the **MODEL HBT-450** Turret shown on the other side of this sheet, or in a portable housing shown above . Also available configured on a 6-3/4" H x 18-3/4" W panel for mounting in Hampden Elevated or Low-profile Turrets described in Bulletin 422.

## **Specifications**

#### Construction

#### Panel:

#12 gauge steel finished in light blue-gray enamel and black silk-screened nomenclature.

Case:

#14 gauge steel finished in dark gray texture (portable model only).

### Variable Voltage and Current Supply

Output:

0-40V DC, 0-0.25 Amp isolated

- Ripple:
- Less than 1.0MV RMS
- Regulation:

0.2% load voltage

line regulation: 0.2% for  $\pm 10\%$  line variation Controls:

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Voltage adjust, 0-40V DC, infinite resolution
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#### RESET Hampden® 0 O 2 AMPS O 2 AMPS 1 AMP ENGINEERING CORPORATION EAST LONGMEADOW, MASS MODEL HBT-473-B OWER 0-40/120V.AC 0-40V.DC 0-40V.DC $(\cdot)$ 62 PS ADJ 0-40V.DC 0. 0-120V.AC 0-40V.AC 6.3V.AC 2-AMPS 0-40V.DC GND 0 0 0 1-AMP

MODEL HBT-473-B AC/DC Power Supply in portable case Dimensions: 7-1/2" H x 9-3/4" W x 9" D Shipping weight: 25 lbs.

Protection: Current limiting adjust, 0-0.25 Amp, infinite resolution.

#### Variable Voltage Supply

Output:

- 0-40V DC, 1 amp isolated
- Ripple: Less than 1.0mV
- Regulation:

0.2% load voltage

line regulation: 0.2% for ±10% line variation Control: Voltage adjust, 0-40V DC, infinite resolution.

Protection: Current limiting

## **AC Power Supplies**

### Output:

- 0-40V AC at 2A, transformer isolated.
- 0-120V AC at 1A.
- Control:
- Voltage adjust, common to both AC supplies. Protection:
- 0-40V AC supply, 2A reset type circuit breaker. 0-120V AC supply, 1A reset type circuit breaker.

#### Filament Supply

Output:

- Fixed 6.3V AC at 2A, transformer isolated. Protection:
  - 2A reset type circuit breaker on transformer secondary.

#### General

Input:

120VAC, 60Hz, 2A max. through 3-wire #18 neoprene-covered cord. Panel is energized by means of a circuit breaker with pilot light to indicate availability of power.

Output Receptacles:

Hampden HR-1SS Safety socket receptacles color-coded, except 0-120VAC which shall be single receptacle.

#### Accessories:

Two sets of two (one red and one black) Hampden PC-4S safety cords, 4 ft. long, having a stacking banana plug on one end and a hooded alligator clip on the other end.

Specify Model MODEL HBT-473-B (Flush) MODEL HBT-473-B-P (Portable)

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

