

# Mobile Air Conditioning Trainers

Educational Training Equipment for the 21st Century

Bulletin 232E

## H-ACT-1 Air Conditioning System Trainer

### Purpose

The Hampden **Model H-ACT-1** Air Conditioning System Trainer is based on R-410A refrigerant. R-410A is an efficient and environmentally friendly refrigerant. The **Model H-ACT-1** is designed to provide the student with a thorough understanding of the systems used in residential and commercial applications. The system components are panel mounted and provide easy access for testing and troubleshooting. When specified, the trainer can be supplied with an integral fault package comprised of ten electrical faults, mounted in a locking box on the rear of the trainer. Also available is a panel mounted meter package that permits monitoring of the system voltage, current and watts, and a digital temperature package with thermocouples to display the system temperatures at critical locations.

### Description

The Hampden **Model H-ACT-1** Air Conditioning System Trainer contains three types of liquid control devices, a capillary tube, thermostatic expansion valve, and hand expansion valve. A reversing valve is included so that the system may be run as a heat pump. R-410A works at a higher pressure than past refrigerants, so all of the system's fittings have been brazed. The trainer includes sight glasses and pressure gauges at the inlet and outlet of the evaporator and condenser, thermometer wells, temperature and pressure controls, receiver, filter dryer, and accumulator. It is factory charged with R-410A refrigerant. Furnished complete with operating instructions, experiment and teacher manuals.

The components are mounted to a steel panel and completely piped and wired. All components are clearly identified by legends. The panel is mounted to a mobile cart with four (4) casters, two with brakes.

### Options\*

- **H-ACT-1-CDL** Computer Data Logging Package
- **H-ACT-DMP** Digital Meter Package
- **H-ACT-FP-10E** Fault Package, electrical
- **H-ACT-TC** Digital Temperature Module with thermocouples
- **H-RST-DMB** Digital Manifold with Bluetooth

\*Options must be specified at time of order.

### POWER REQUIRED:

Input: 220VAC - 1Ø - 3W - 60Hz

R-410A is a replacement for R-22 and is an EPA approved refrigerant

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**Model H-ACT-1 Air Conditioning System Trainer**  
(Shown with DMP Option and H-RST-DMB Option)  
Dimensions: 76"H x 64"W x 31"D  
Shipping Weight: 885 lbs.

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

**Hampden**  
ENGINEERING CORPORATION