

Heat Pump Trainer

Educational Training Equipment for the 21st Century

Bulletin 237-107G

H-RST-12 Heat Pump Trainer

Purpose

The Hampden **Model H-RST-12** Heat Pump Trainer provides the student with an introduction to the principle components of heat pump systems.

For practical electrical troubleshooting, the instructor has the ability to insert eighteen commonly found electrical faults such as: defective capacitor, motor, and timer. The instructor may also insert three mechanical faults such as two defective thermal expansion valves (faulted filter and faulted rods) and defective filter-drier.

Specifications

Compressor: Hermetic, 1/3HP

Condenser: Water cooled with flowmeter, pressure regulator, pressure gauge, two ball valves and two hose fittings.

Evaporator: Forced Air cooled

Environmental Chamber: Steel with clear Lexan removable or hinged panels and emergency heater

Thermostats: Digital programmable and digital non-programmable heat pump

Metering Devices: Capillary tube, 2 required

Thermostatic Expansion Valve, 2 required

Accessories:

- Sight glass with moisture indicator
- Check valves, 4 required
- Filter drier - dual
- Liquid receiver with isolation valves
- Dual pressure controller
- Reversing valve, 4-way Electric Suction Accumulator
- Pressure Gauge
- Compound Gauge
- Defrost Timer
- Fan Limit Control
- Valves, 7 required

Control Panel:

- Main circuit breaker
- Defrost timer switch
- Low voltage transformer with fuse
- Thermostat selector switch
- Temperature meter Digital Type-T
- Thermocouple, Type-T, 10-required
- Thermocouple Selector Switch
- Light, Power On
- Wattmeter, Analog

Panel: 14-gauge enclosure finished in instrument tan enamel with a 12-gauge panel finished in instrument white enamel.

Carrier: Mobile with locking storage and control panel

Cabinet Top: Medite wood core covered with antique white plastic laminate with black plastic trim

Casters: Four 3" swivel casters, two with locks

Power Cord: 8-foot 3/c power cord with plug and cord holder

Courseware:

- Correlated student manual
- Correlated instructor's manual with fault guide, pre and post tests

Input: 120V AC, single-phase, 60Hz (available for operation on any voltage or frequency)

Refrigerant: R-134a



MODEL H-RST-12
(Shown with H-RST-DMB Option)
Dimensions: 75"H x 48"W x 30"D
Shipping Weight: 850 lbs.

Accessories:

- Thermometer, wet bulb
- Psychrometer, hand
- Condensate graduate

Options

- Computer Data Logging is available, specify **Model H-RST-12-CDL** (must be specified at time of original order)
- **H-RST-DMB** Digital Manifold with Bluetooth

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



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