NEW

TU-450 ADVANCED HEAT PUMP TROUBLESHOOTING TRAINING UNIT

Teach real-world experience in refrigerant diagnostics, troubleshooting wiring, piping, airflow, and controls of a working residential/light commercial heat pump system. This advanced unit incorporates over 40 real-world faults that can be triggered at the flip of a switch, allowing students to diagnose issues on a live operating heat pump system.

Specifications

Electrical requirements: 240 VAC; 60 Hz; 30A; 4-wire

Refrigerant: R-454B

Overall Size: 75" L x 33" W x 90" H

Features

- **Fault Simulation**
  - Over 40 electrical and mechanical faults, including bad capacitor, failed contactor, low refrigerant, bad TXV, restricted filter dryer, inefficient compressor, blower faults, and more
  - Heat strip and defrost control faults
  - Adjustable airflow restriction
  - Manually adjustable outdoor air flow
  - Faults are built into components for realistic troubleshooting practice
  - Instructor's manual featuring step-by-step troubleshooting guides and hands-on lab exercises for every fault scenario
- **Hands-On HVAC Fundamentals**
  - Observe and analyze the complete **heat pump refrigeration cycle**
  - Demonstrate **under-charge and over-charge conditions**
  - Teach refrigerant diagnostics with real-time data using the iConnect Training Digital Kit
  - Evaluate blower motor operations, airflow, and static pressure
  - Teach supplemental heat theory, testing, and diagnostics
- **Learning Outcomes**
  - Heat pump sequence of operation
  - Defrost cycle and controls
  - Component testing and proper multimeter use
  - Safety and A2L mitigation controls
- **Design Benefits**
  - Real-life, visible components with accessible wiring and piping
  - Integrated data points for **pressure, temperature, and electrical readings**

- Includes digital equipment kit with (2) Temperature Pipe Clamps, (2) Humidity/Temperature Probes, (2) Pressure Probes, (1) Wireless HDMI Display Adapter, (1) Manometer, (1) Bluetooth Multimeter and a tablet pre-loaded with the custom iConnect Training app

See page 36 for more information on the iConnect Training Digital Equipment Kit.

Additional e-Learning curriculum available, contact us for more information.

Shipping Weight: 900 lbs.
Shipping Dimensions: 84" L x 48" W x 80" H

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