# **TU-9250 HVAC CONTROLS TRAINING SYSTEM**

This training unit is designed to show the sequence of operation of a residential heating and cooling system. Built as a tabletop unit with 12 modular panels, it functions as a working model so the instructor can teach the basic principles of heating and cooling controls, complete with all the elements.

For the heating system, the unit includes a working model of a furnace burner, so the student gains familiarity of the operation of an entire furnace system.

The air conditioning portion of this system is simulated with the compressor contactor, high-pressure and low-pressure controls, and the compressor panel, with direct wiring or plug and play options.

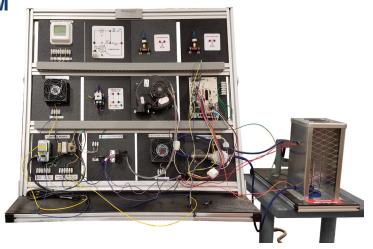
### **Specifications**

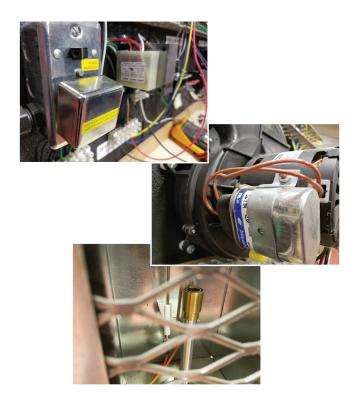
Electrical requirements: 120VAC; 60Hz; 15A

Overall size: 45" L x 24" W x 39" H

#### **Features**

- 120VAC with transformer supplying 24VAC low voltage
- The unit comes standard with 12 panels
- Wiring harnesses provided
- Fuel source is a customer-supplied standard propane canister
- Operations manual included with electrical configurations





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## TU-9250: Suggested 3 courses totaling 54 credit hours

Subscription includes Instructor's selection of any 5 courses in catalog. Add more courses by request.

- 1. 111 Electrical DC Theory Plus
- 2. 112 Electrical AC Theory Plus
- 3. 113 Electrical Common Components





Shipping Weight: 450 lbs.
Shipping Dimensions: 48" L x 48" W x 48" H

### TU-9250 HVAC CONTROLS TRAINING SYSTEM

See details on all 12 of the panels in this training unit at www.iConnectTraining.com/Panels. See a few examples of the individual panels below:

#### **PART NUMBER**

#### **PHOTO**

#### **DESCRIPTION**

3009130



**Combustion Blower Panel:** This 2-stage fan operation demonstrates airflow to the burner section of a furnace. 120VAC

3009131



**Control Module Panel:** This unit is common for furnace applications. Once power is applied to the board, it will start the combustion blower motor, which will activate the pressure switch, so that the panel will get the "go signal" to start the burner.

3009132



**Control Power Panel:** This demonstrates how power is supplied to both furnace and air conditioning systems. Includes a fused surface switch, a 24-volt transformer, and is direct wired to both 120-volt and 24-volt control systems.

3009134



**High/Low Pressure Safety Panel:** This is used in the safety circuit of a furnace operation, to sense pressure created from the combustion blower through a pitot tube. If it fails to register pressure, it will shut the system down.

3009135 (Panel)





**Combination Gas Valve Panel and Burner:** This 2-stage gas valve receives a signal from the Control Board. Once there is a call for heating, the igniter is started, and gas is supplied to the burner for ignition. Includes Gas Valve panel and Burner Assembly with cage and regulator. Safety Note: the regulator provided has low-, medium- and high-pressure settings; it is recommended to operate only on low pressure in this application. The recommended 1-pound propane tank can be purchased by user at any local hardware supply.

# **CUT-AWAYS**

iConnect Training's new line of cutaways provide students with an understanding of how HVAC components are assembled and how they function. (Models pictured here range from the small sight glass moisture indicator to a hermetic compressor, a filter drier, and a reversing valve.)

