

# Residential Mini-Split Heat Pump | Multimedia Courseware

**Introduction to Residential Mini-Split Heat Pump Systems - WX19174-AA01EEN-E1**

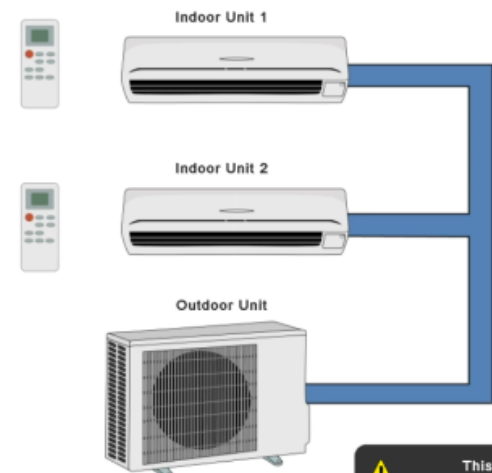
Objective 4: Describe the Components of a Mini-Split Heat Pump System

**Mini-Split Systems**

Mini-split **heat pump** systems are made up of one or more indoor units connected to an outdoor unit.

Refrigerant flows through tubing from an outdoor unit to each indoor unit, enabling direct **heat transfer** in each room where an indoor unit is located. This **configuration** eliminates the need for air-handling ducts.

Mini-splits are more efficient than forced air systems, but they are more complex.



Click here to see the outdoor unit pumping refrigerant to the indoor units.

This page is interactive. Click anywhere to hide the instructions.

AMATROL Page 24 of 53

## Residential Mini-Split Heat Pump Learning System: M19174

Amatrol's Residential Mini-Split Heat Pump Learning System teaches the critical hands-on skills HVACR technicians need to succeed when working with residential ductless ("mini-split") HVAC systems. Learners will learn about real equipment, such as: a heat pump condenser, evaporator unit, thermostat, panel-mounted gauges, and condensate pump.

Amatrol's interactive multimedia eLearning curriculum covers a wide variety of fundamental residential mini-split system topics, including: remote controller adjustments, heating and cooling modes, LED indicators, communication between units, and system troubleshooting.

### In-Depth Curriculum

#### Interactive Multimedia eLearning Curriculum

Amatrol's curriculum features a highly-interactive, multimedia format that includes stunning 3D graphics and videos, voiceovers of all text, and interactive quizzes and exercises designed to appeal to learners with different learning styles. The T7031 curriculum teaches learners the fundamentals of refrigerant recovery and charging. For example, learners will study relevant topics, such as leak detection, pressure and temperature measurement, refrigerant recovery and recycling, and refrigerant charging.

The combination of theoretical knowledge and hands-on skills solidifies understanding and creates a strong basis for pursuing more advanced skills. For example, learners using these systems can expect to learn critical hands-on skills, including:

- Using a refrigerant pressure-temperature chart
- Using soap to check for refrigerant system leaks
- Using a compound gauge to measure refrigeration system pressure

- Removing a service valve core
- Using the superheat method to determine refrigeration system charge

## **Additional Info**

---

## **Additional Requirements**

- Computer: [See requirements](#)
- 

### **Address**

**Amatrol  
2400 Centennial Blvd  
Jeffersonville, IN 47130**

### **Contacts**

**email: [contact@amatrol.com](mailto:contact@amatrol.com)  
phone: (800) 264 8285**