

# HL 620

## Domestic heating system control training panel



### Learning objectives/experiments

- operation of a modern heating controller
- temperature setting
- operating characteristics

### Description

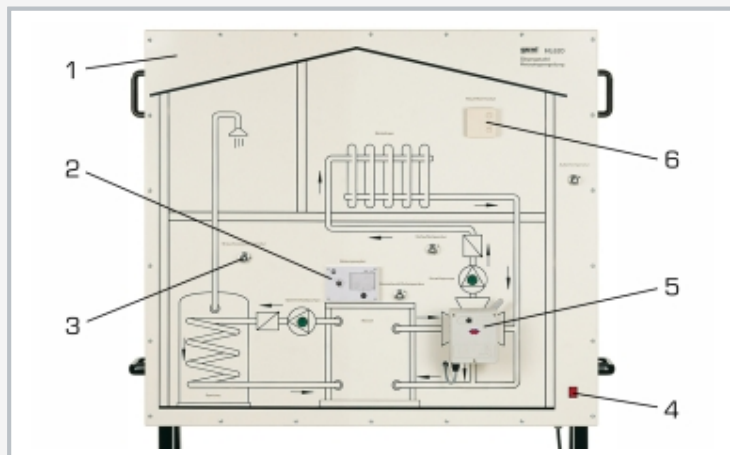
- **heating controller, controlled by atmospheric conditions**
- **fast system response to temperature modifications**

The trainer clearly demonstrates the function of a heating controller. The electronic controller, room thermostat and mixing valve are real components. The water, indoor and outdoor temperatures are set using potentiometers. Lights indicate the function of the pumps and the boiler.

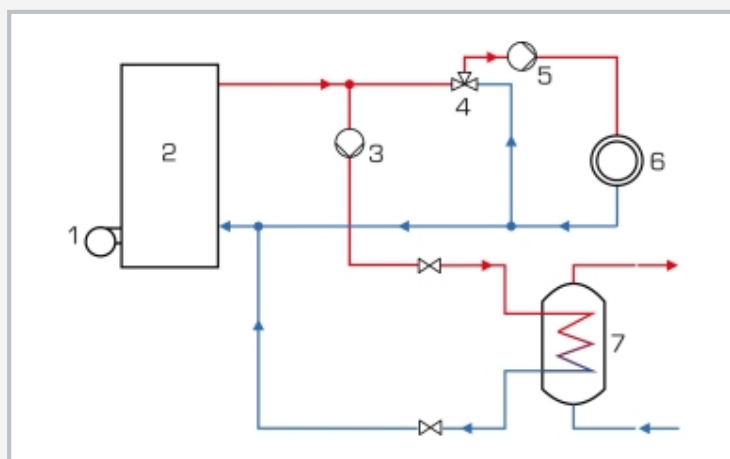
The components are clearly laid out on the process schematic to show their relationships. The system reacts rapidly because the temperature parameters are manually set by potentiometers.

# HL 620

## Domestic heating system control training panel



1 panel with graphically displayed components: boiler, domestic water tank, pumps, return valves, 3-way mixing valve, radiator, 2 heating controller, 3 potentiometer, 4 main switch, 5 servo motor, 6 room thermostat



Process schematic: 1 burner, 2 boiler, 3 pump, 4 3-way mixing valve, 5 pump, 6 radiator, 7 service water tank; red: hot water, blue: cold water

### Specification

- [1] trainer for digital heating control
- [2] actual components: servo motor, room thermostat with temperature sensor, heating controller
- [3] 4 rotary potentiometers for adjustment of temperature setpoint
- [4] simulation of: pumps, domestic water tank, radiator, 3-way mixing valve and return valve; symbolically represented on panel

### Technical data

Servo motor for 3-way mixing valve  
 ■ manual or automatic operation

Adjustable temperature setpoints

- outdoor
- boiler outlet
- feed flow (heating circuit)
- domestic water

Digital heating controller

- controlled by atmospheric conditions

Measuring ranges

- temperature: -20...60°C

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase, 120V, 60Hz, 1 phase

UL/CSA optional

LxWxH: 1400x700x1850mm

Weight: approx. 75kg

### Scope of delivery

- 1 trainer
- 1 manual