

HL 109

Safety devices training panel



Learning objectives/experiments

- function of safety valves
- function and layout of a system of safety devices
- function of a thermal discharge safety device

Description

- **trainer on heating systems and plumbing**
- **function of safety devices**
- **tested pressure vessel**

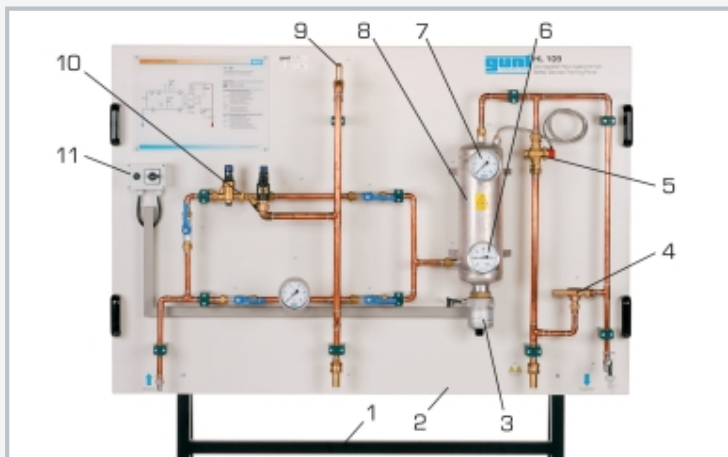
An electrically heated pressure vessel is mounted on the panel of the trainer.

The vessel can be filled via different pipe sections. One pipe section is equipped with a system of safety devices for protecting a sealed water heater. The pressure vessel is also equipped with a thermal discharge safety device that discharges to a blow-off pipe.

When the pressure or temperature level set is exceeded, the safety devices are tripped. Pressure and temperature in the system are displayed.

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Safety devices training panel



1 frame, 2 panel, 3 heater, 4 overpressure valve, 5 thermal discharge safety device, 6 spring tube manometer, 7 bimetallic thermometer, 8 pressure vessel, 9 safety valve, 10 system of safety devices, 11 switch cabinet for heater

Specification

- [1] trainer on heating systems and plumbing
- [2] pressure vessel
- [3] threaded heater element with switch cabinet
- [4] 2 spring tube manometers
- [5] 1 bimetallic thermometer
- [6] thermal discharge safety device
- [7] 1 system of safety devices with pressure reducing valve, shut-off valve, test connections and non-return valve, manometer connection and safety valve
- [8] 2 blow-off lines, 1 filler pipe, 1 drain

Technical data

Pressure vessel made of steel (1.4541)

- volume: approx. 5L
- max. operating pressure: 7,8bar

Threaded heater element

- power: 3kW
- protective system: IP 65

Thermal discharge safety device: actuated at 95°C
Setting range of pressure reducing valve: 1,5...6bar

Measuring ranges

- pressure: 0...10bar
- temperature: 0...120°C

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase

LxWxH: 1660x700x1850mm

Weight: approx. 105kg

Required for operation

water connection, drain

Scope of delivery

- 1 trainer
- 1 set of hoses
- 1 manual