

### GENERAL EXPLANATION

This training set is prepared for the application of air-water heat pumps.

### EXPERIMENTS

1. Calculation of the efficiency (performance) coefficient
2. Experiment of preparing heat pump efficiency curves using different sources and temperatures
3. Comparison of ideal and practical cycles on the p-h diagram and experiment of determining the energy balances for the condenser and compressor
4. Drawing heat pump efficiency curves based on R-134A characteristics at various condensation temperatures
5. Experiments to compare ideal and practical cycles on the p-h diagram
6. Experiments on the effect of compressor compression ratio on volumetric efficiency

### DIMENSIONS

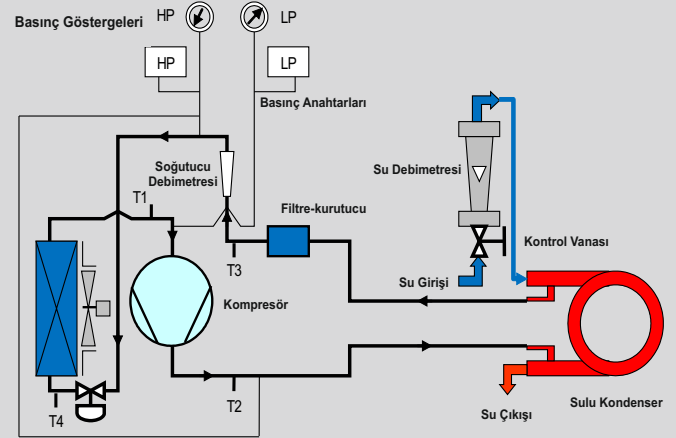
A x B x H : 1100 x 680 x 1380 mm

### OPTIONAL FEATURES

- Touch LCD Display
- USB Computer Connection
- Computer Control

### TECHNICAL SPECIFICATION

The heat pump is a thermodynamic cycle designed to perform heating and cooling functions. The aim is to achieve heat transfer from a low temperature environment to a high temperature atmosphere, in other words, to reverse the heat transfer direction. The heat pump basically consists of condenser, expansion valve, evaporator and compressor elements.



### TECHNICAL DETAILS

- Hermetic reciprocating compressor
- Forced air winged evaporator
- Evaporator fan axial fan
- Water condenser with nested pipe
- Rotameter type water flowmeter
- Digital temperature measurement from 6 different points

### PACKAGE INCLUDED

Device, device cover, 1 printed experiment report, circuit diagram and product catalog