ENERGY EFFICIENCY

# EVD-1360 HEAT PUMP TRAINING SET

## GENERAL EXPLANATION

This training set is designed to show the operation of the heat pump in water-water, water-to-air, water-to-soil (fan coil) unit.

## EXPERIMENTS

1. Calculation of the heating performance coefficient (COP) of the ground source heat pump
2. Calculation of the heating performance coefficient (COP) of the water source heat pump
3. Calculation of the heating performance coefficient (COP) of the air source heat pump

## OPTIONAL FEATURES

- Touch LCD Display
- USB Computer Connection
- Computer Control

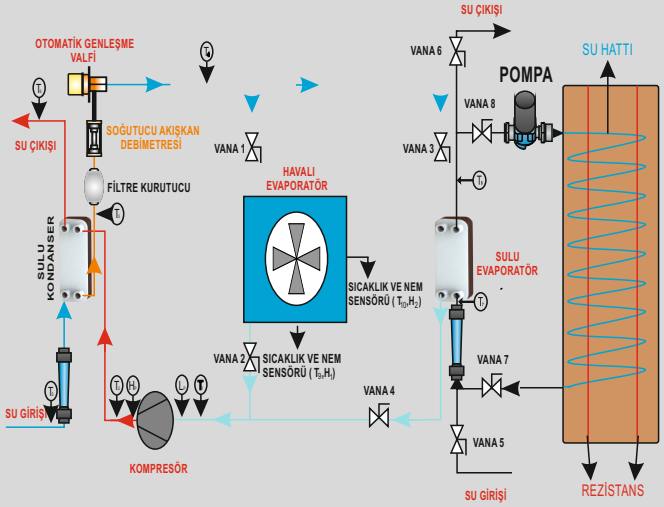
## PACKAGE INCLUDED

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

## TECHNICAL SPECIFICATION

Heat pumps are devices that can transfer heat from a low temperature environment to a higher temperature environment. The heat pump transfers heat from the natural source environment to the energetic source environment when heating. When examined as a thermodynamic process, heat pump; "Reverse Carnot Cycle" is a working refrigerant with the principle that it consists of 5 important building elements:

- Refrigerant (performs heat transfer)
- Compressor (compresses the vapor phase fluid)
- Condenser (condensate vapor-based fluid to liquid phase)
- Expansion valve (reduces pressure and temperature)
- Evaporator (converts liquid-based fluid to vapor phase)




## TECHNICAL DETAILS

- Hermetic compressor
- Fan with evaporator
- Fan cooled lamellar water-cooled condenser
- Condenser air inlet-outlet temperature measurements
- Graduated circulation pump
- Soil unit