# AIR CONDITIONING

# K-250 AUTOMOTIVE AIR CONDITIONING TRAINING SET



# **GENERAL EXPLANATION**

This training set is designed to show the basic functions and working principles of automotive air conditioners.

### **EXPERIMENTS**

- 1. Operation of the automotive climate system
- 2. Display of the cooling cycle on the pH diagram
- 3. Increase of pressurization line pressure
- 4. Suction line pressure drop

#### **DIMENSIONS**

A x B x H : 1120 x 670 x 1150 mm

# **OPTIONEL FEATURES**

- Touch LCD Display
- USB Computer Connection
- Computer Control

#### **TECHNICAL SPECIFICATION**

The air conditioning system needs to be compressed and cooled to convert refrigerant gas into liquid. The compressor compresses the refrigerant to the condenser. As the pressure and temperature increase, the refrigerant passes through the condenser and becomes liquid at an average temperature of 60 ° C. The high pressurized liquid refrigerant passes through the expansion valve, a large volume, and the pressure drops. The liquid refrigerant gas evaporates in the evaporator and collects heat from the evaporator. The evaporator surface and its periphery cools to -10 ° C to -18 ° C. This coolant is blown into the car with the evaporator fan controlled by the driver. This event; is repeated as the refrigerant gas is converted from vapor to liquid again.

## **TECHNICAL DETAILS**

- Piston compressor
- Auto air conditioning condenser
- Auto air conditioner evaporator
- 6 point temperature sensors
- Low-high pressure manometer

#### **PACKAGE INCLUDED**

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