



GENERAL EXPLANATION

This training set is designed to experimentally show the basic functions and elements of split air conditioners.

EXPERIMENTS

1. Operation of split air conditioner in summer
2. Operation of split air conditioner in winter
3. Operating the split air conditioner in ventilation mode
4. Operating the split air conditioner in dehumidification mode
5. Automatic operation of the split air conditioner
6. Introduction of the split air conditioner control circuit
7. Introducing the indoor unit card of the split air conditioner
8. Adding potential relay and start capacitor to split air conditioner

DIMENSIONS

A x B x H : 880 x 640 x 1500 mm

OPTIONAL FEATURES

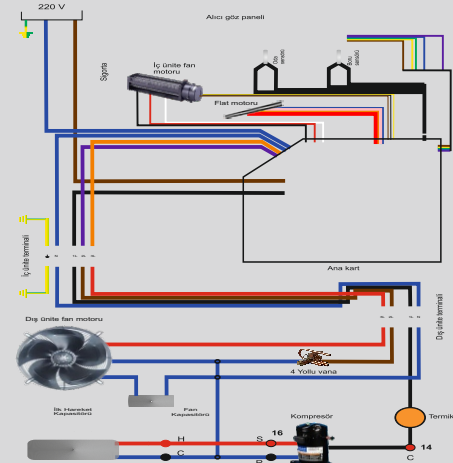
- Touch LCD Display
- USB Computer Connection
- Computer Control

PACKAGE INCLUDED

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

TECHNICAL SPECIFICATION

The working method of the air conditioner is to vaporize the fluid under a certain pressure at the desired temperature and to return it to the liquid state again in the vapor state. The liquid material is transformed into gas phase by absorbing heat with pressure, also called phase change. The gas used as the cycle material is absorbed and compressed by means of a compressor and liquefied. The working principle describes the second law of thermodynamics. Thanks to the special chemical compounds used in the climate, this phase transformation property is utilized by providing evaporation. A closed loop system is used to re-condense the evaporated fluid to form a loop. In the related compounds, there are refrigerants which have modifying properties at relatively low temperatures. The air conditioners also include fans that move hot air over the cooling coils. As the hot air flows over the cooler, the low-pressure evaporator coils absorb heat from the coolant and gaseous transition from the liquid is observed. To keep the cooling efficient, the air conditioner turns the refrigerant back into a liquid. To do this, under high pressure, the compressor gas is introduced and the process brings undesirable heat to the well. All the extra heat generated by the compression of the gas is then discharged in the open air by means of a second coil group and a second fan, called capacitor rolls. The gas cools down, returns to a liquid and the process starts again.



TECHNICAL DETAILS

- Digital temperature measurement from 4 different points
- Split air conditioner indoor unit
- Split air conditioner outdoor unit
- Compressor
- Low-high pressure indicators
- Digital ammeter