

GENERAL EXPLANATION

This training set is designed to introduce basic functions of a basic air conditioning unit and to apply basic psychrometric operations.

EXPERIMENTS

1. Experiment of basic air conditioning process
2. Summer climate experiment
3. Winter climate practice

DIMENSIONS

A x B x H : 1650 x 550 x 1235 mm

OPTIONAL FEATURES

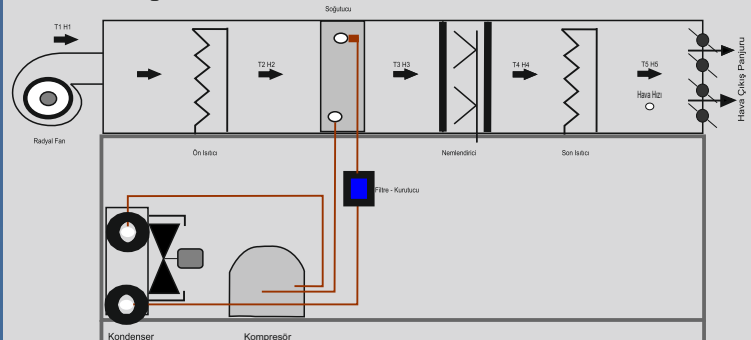
- Touch LCD Display
- USB Computer Connection
- Computer Control

PACKAGE INCLUDED

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

TECHNICAL SPECIFICATION

The training set has a cooling group, resistors for heating operations and a humidification unit. The amount of air used is adjusted by means of an adjustable radial fan. The air channel system has a cross-sectional area of about 0.10 m^2 . The air sucked from the atmosphere first enters a variable speed centrifugal fan and then through the duct system. During the heating process, the humidification unit is activated to increase the humidity content. In heating process, the heating elements are switched on, the preheating resistance power is 1 kW and the last heating resistance power is 0.5 kW. The air is heated by these resistances. Information from temperature and humidity sensors can be viewed on the LCD screen. If the cooled and humidified air is going to pass through the system, the cooling system will be activated and the air passing through the 3 channels will be cooled by the cooling group and the channel evaporator. As the cool and dry air passes through the duct, the humidity and temperature sensors in this section measure. If air desired to be reheated, the last heating resistors must be switched on. The conditioned air is measured by an air speed meter (anemometer) before the air is released into the atmosphere.



TECHNICAL DETAILS

- Hermetic reciprocating compressor
- Forced air cooled condenser
- Air-cooled evaporator
- Aqueous humidifying pads
- Radial fan
- Digital temperature measurement from 5 different points
- Digital relative humidity measurement from 5 different points
- Anemometer