

Product Name : " FULL SCALE AIR CONDITIONING TRAINER "
Product Code : " R.A.C 22 "



Description :

FULL SCALE AIR CONDITIONING TRAINER:-

AIM:-

- Layout and maintenance of a ventilation and air conditioning system
- Principles of air conditioning a room
- Explanation of the components: filter, heater, cooler, humidifier, condenser, controller, flaps, outlets
- Function of safety devices
- Effect of cooler, heater and humidifier on the air condition at the outlet

INTRODUCTION:-

Air conditioners and refrigerators work the same way. Instead of cooling just the small, insulated space inside of a refrigerator, an air conditioner cools a room, a whole house, or an entire business.

The experimental set-up constitutes a real air conditioning system. The performance of the system is sufficient to air condition a laboratory room.

The air conditioning system contains a filter insert, a blower with electronically controlled speed, a direct evaporator, an electric heating coil and a humidification section. The following functions are available: Heating / cooling and humidifying / dehumidifying. For these purposes the components can be controlled either individually in manual mode or by a central PLC climatic controller in automatic mode. The climatic controller allows temperature and humidity to be controlled independently. The timer program allows values to be varied

through the day or through the week, as in real life. Pressure loss can be measured in each section of the duct. All popular components such as filters, heaters / coolers, louvered flaps, outlets, examination flaps and fire dampers are fitted and can be explained. A standard connection spigot permits a link to an external ventilation system, so that an existing room can be air-conditioned. Because of the heat it dissipates, the condenser is not installed in the room to be air-conditioned.

The well-structured instructional material outlines the technological fundamentals and provides a step-by-step guide through the experiments.

TECHNICAL SPECIFICATION:-

The experimental set-up constitutes a real air conditioning system. The performance of the system is sufficient to air condition a laboratory room.

Specification

1. Mobile experimentation stands air conditioner.
2. System with condenser / direct evaporator as cooler, multi-stage heater.
3. Ventilation duct of galvanized sheet metal with viewing windows.
4. Duct with typical elements: filter, ceiling outlet, louvered flap, ventilation grille, air damper.
5. Duct cross-section: lower: w x h: 630x630mm, upper: w x h: 358x358mm.
6. External standard connection spigot.

FEATURES:

- Complete ventilation and air conditioning system for laboratory use.
- Highly relevant practical experience thanks to full scale and use of commercially-available components.
- Can be connected to external ventilation systems