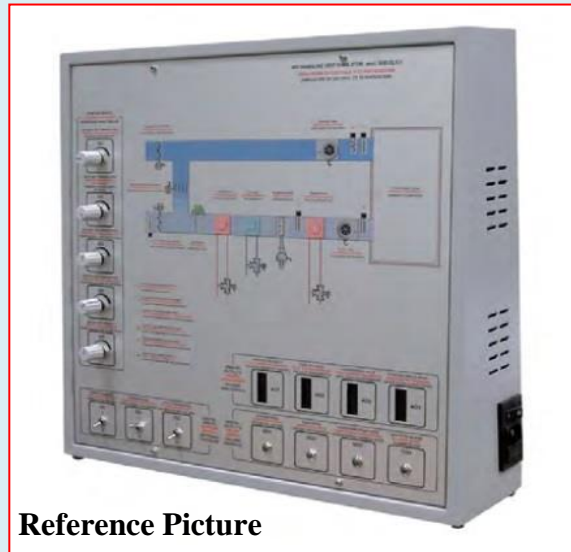




Air-Conditioning Control Unit Simulator

LT/EV

Country of origin China



Reference Picture

TRAINING PROGRAM:

Studying the transformation, the air undergoes when crossing the various sections of an air handling unit, with the aid of the psychrometric chart; these transformations are: sensible heating, adiabatic humidification, cooling and dehumidification, mixing

Assessing the air supply conditions to meet the thermo hygrometric needs of the room having to be air-conditioned; Thermal factor; Sizing the heat exchange batteries of an air handling unit; Analyzing the operation of temperature and humidity regulators for air-handling units; Proportional and ON/OFF control; Air dampers control according to temperature.

TECHNICAL SPECIFICATIONS:

Color panel reproducing the air-handling unit; Board for data acquisition and control of output signals to the actuators; Connection with PC via USB cable

5 potentiometers for simulating the following analog inputs: outdoor air temperature; pre-heating/cooling air temperature (dew point); supply air temperature; return air temperature; return air relative humidity

4 Barograph LEDs for simulating the following analog outputs: control signal for the motor of pre-heating battery; control signal for the motor of cooling/dehumidification.

Battery; control signal for the motor of post-heating battery; control signal for the motor of air dampers

3 switches for simulating the following digital inputs: system operation enabling; fans enabling; air filter clogged.

4 LEDs for simulating the following digital outputs: system status; fans status; humidifier pump status; air filter clogged alarm; Program for dimensioning the batteries of a single-duct air-handling unit; Program for the simulation of the air conditioning control.

System operation:

Development software that can be used to modify the application programs according to one's own needs.