K-230 EVAPORATIVE COOLING TRAINING SET

GENERAL EXPLANATION

This training set is designed to experimentally observe the basic principles of the evaporative cooling process.

EXPERIMENTS

1. Observation of the processes in the evaporative cooler
2. Calculation of evaporative coolant capacity
3. Calculation of efficiency value (COP) of the evaporative cooler
4. Effect of changes in water flow on cooling capacity
5. Effect of changes in air velocity on cooling capacity

DIMENSIONS

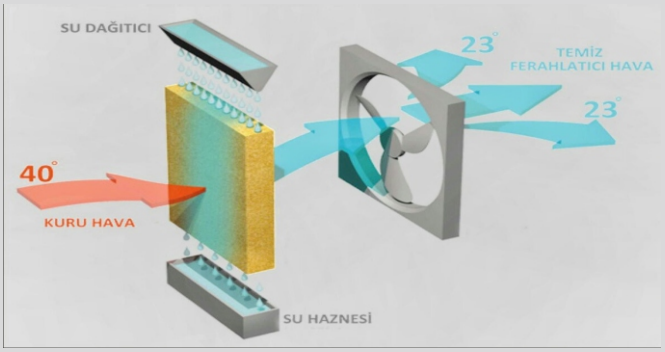
A x B x H : 800 x 600 x 1280 mm

OPTIONAL FEATURES

- Touch LCD Display
- USB Computer Connection
- Computer Control

TECHNICAL SPECIFICATION

Evaporation of dry and hot air from a wet surface is referred to as "evaporative cooling" when the temperature drops from the air to evaporate from the air. 100% external fresh air is used in the system. For this reason, it is also called natural cooling. In evaporative cooling, the heat required to evaporate water forms the basis for the removal from the environment. With the evaporation of water, latent heat is taken from the environment and the sensible heat remains the same. The system has a fan and water pump as mechanical parts. The water pump system sprays the water in the water reservoir onto the honeycomb surface where the water evaporates. Fresh air from outside is passed through this moist fiber by means of a fan. The air cools during this air pass. Because; the evaporation of water from the air evaporation heat is the result of the drop in temperature resulting from the coolness of the air is also cooled.



TECHNICAL DETAILS

- Fan speed control
- Tower fill
- Automatic water supply
- 4-point temperature sensors
- 2 point moisture sensors
- Air speed meter

PACKAGE INCLUDED

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