# COOLING SYSTEMS

# S-813 ELECTRICAL INPUT TYPE REFRIGERATION TRAINING SET



#### **GENERAL EXPLANATION**

This training set is used for the applications of the cooling technique courses and for the laboratory lessons.

#### **EXPERIMENTS**

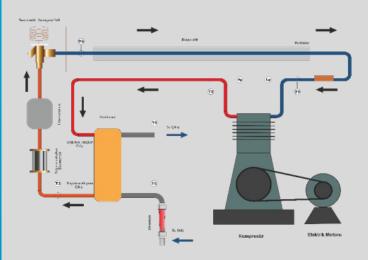
- 1. Steam compression cooling application and pH diagram drawing experiment
- 2. Experiment to establish an energy balance for the cooling system
- 3. Experiment to examine changes in the cooling load of the cooler depending on different evaporation temperatures
- 4. Investigation of changes in cooling efficiency coefficient (COP) depending on different evaporation and condensation temperatures
- 5. Experimental study of heating effect coefficient (COP) at different condensation temperatures
- 6. Examine the amount of heat given to the cooling water depending on the variation in condensation temperature
- 7. Experiment to examine the effect of different compression ratios on compressor volumetric efficiency
- 8. Experimental investigation of the characteristics of the thermostatic expansion valve
- 9. Determination of the thermal conductivity value of the condenser cooling coil

#### **DIMENSIONS**

A x B x H: 1200 x 580 x 1500 mm

## **TECHNICAL SPECIFICATION**

In this training set, the compressor is driven externally by electric motor and plate condenser is used. The p-h diagram of the R134-a refrigerant can be examined.



# **TECHNICAL DETAILS**

- Open type externally driven compressor
- Nested plate condenser
- Evaporator unit
- Electric evaporator resistance
- Thermostatic expansion valve
- Combined pressure switch
- Tork meter
- Digital revolution indicator
- Digital multimeter
- Digital temperature measurement from 6 different points

### **OPTIONAL FEATURES**

- Touch LCD Display
- USB Computer Connection
- Computer Control

#### **PACKAGE INCLUDED**

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