

## ZM6123 Absorption Refrigeration Trainer



### I Introduction

This trainer has been designed to study the absorption refrigeration cycle. The heat coming from electric resistors vaporizes the ammonia contained in the solution of the generator. Ammonia vapour condenses in the exchanger and passes into the evaporator where it evaporates at low temperature. The ammonia vapour coming from the evaporator and the water coming from the generator are combined again in the absorber and close the cycle passing into the generator. The circulation of fluids occurs by natural convection. 36 Students can experience in using log P-1/T and concentration / enthalpy charts of the solution, besides trying to assess the system output thanks to a set of instruments supplied with the equipment. Supply software which can monitor voltage, current, frequency, power, power factor, pressure, flow, etc, they can be displayed on PC in real time, and can print report.

### II Training Program

Plotting the absorption refrigeration cycle on log P-1/T chart, with temperature measurements detected along the circuit.

Transferring these values onto the concentration/enthalpy chart and assessing the heat quantity exchanged in the boiler, in the condenser, in the absorber and in the evaporator.

Calculating the average flow rate of the circulating solution

Data acquisition and calculation of the system output versus the temperature attained in the boiler

### Supplied with:

English General Refrigeration Manual  
English Experimental Handbook

#### Note :

Due to keeping innovation, the specification and Machine pictures or color are subject to alteration without notice!